

GUHRING



THREADING



POWER





Dr. Jörg Gühring

President



Oliver Gühring

Sales and Marketing
Director

7000

Employees
world-wide



3500

Employees
Germany



Internal training and further
programme of education



International knowledge transfer thanks
to world-wide exchange programme for
employees



Dietmar Pfränger

R&D, Logistics, Technical and
Production Director



Bernd Schatz

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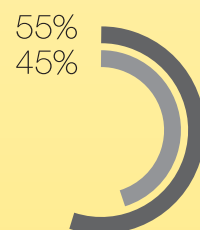
Core segment
tools

50000

Standard tools

2000

Tool types



■ Standard tools
■ Special tools

Everything from one supplier – comprehensive and global

With a global network of manufacturing sites Guhring develops and produces precision tools for all the important markets. Users from the automotive industry, the aerospace industry or the machine tool and general industry rely on the trend-setting tools manufactured world-wide at the highest level to uniform quality standards.

28

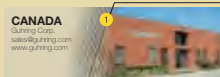
PRODUCTION CENTRES

46

SUBSIDIARIES

47

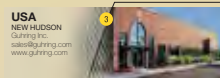
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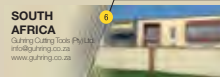
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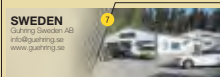
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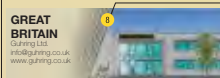
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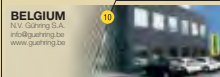
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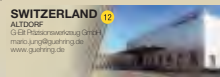
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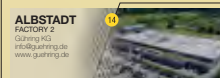
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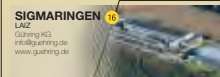
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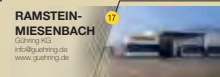
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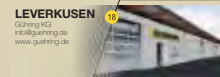
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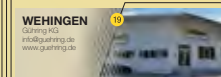
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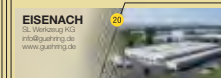
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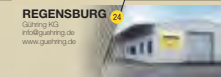
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With innovative technologies Guhring meets specific customer requirements from process proposal to series application of the precision tools – flexibly, promptly, globally. For this, experts are in action internationally looking after customers on site. Production, service and contact persons are available from one supplier world-wide.

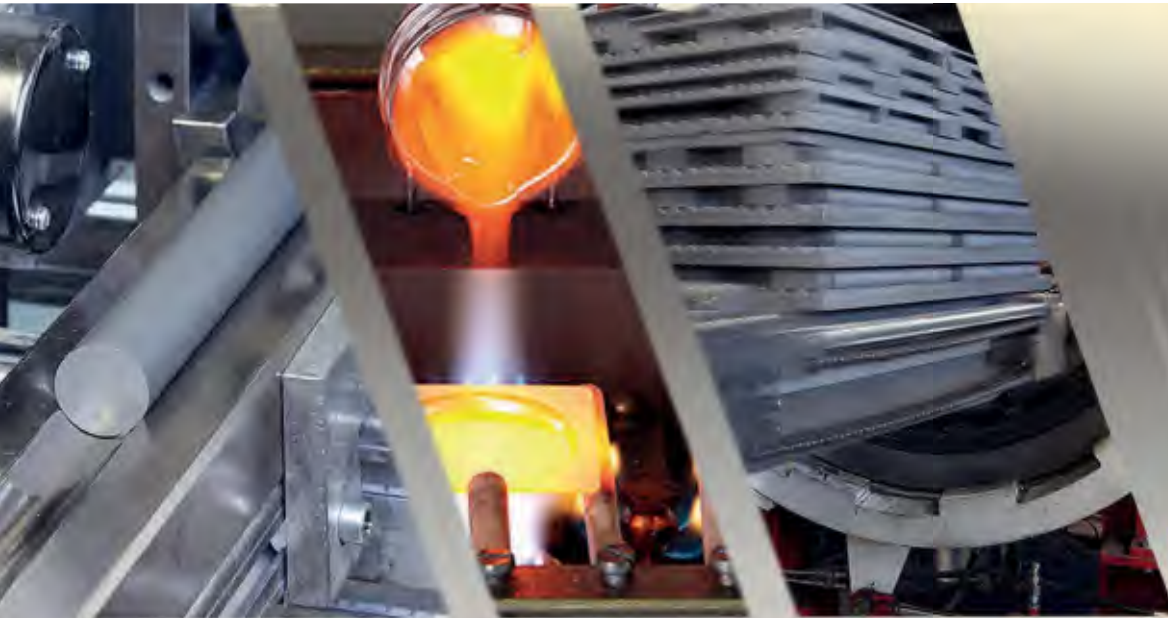
Own carbide production

Own machine construction

Own coating plants

Highest quality standards world-wide



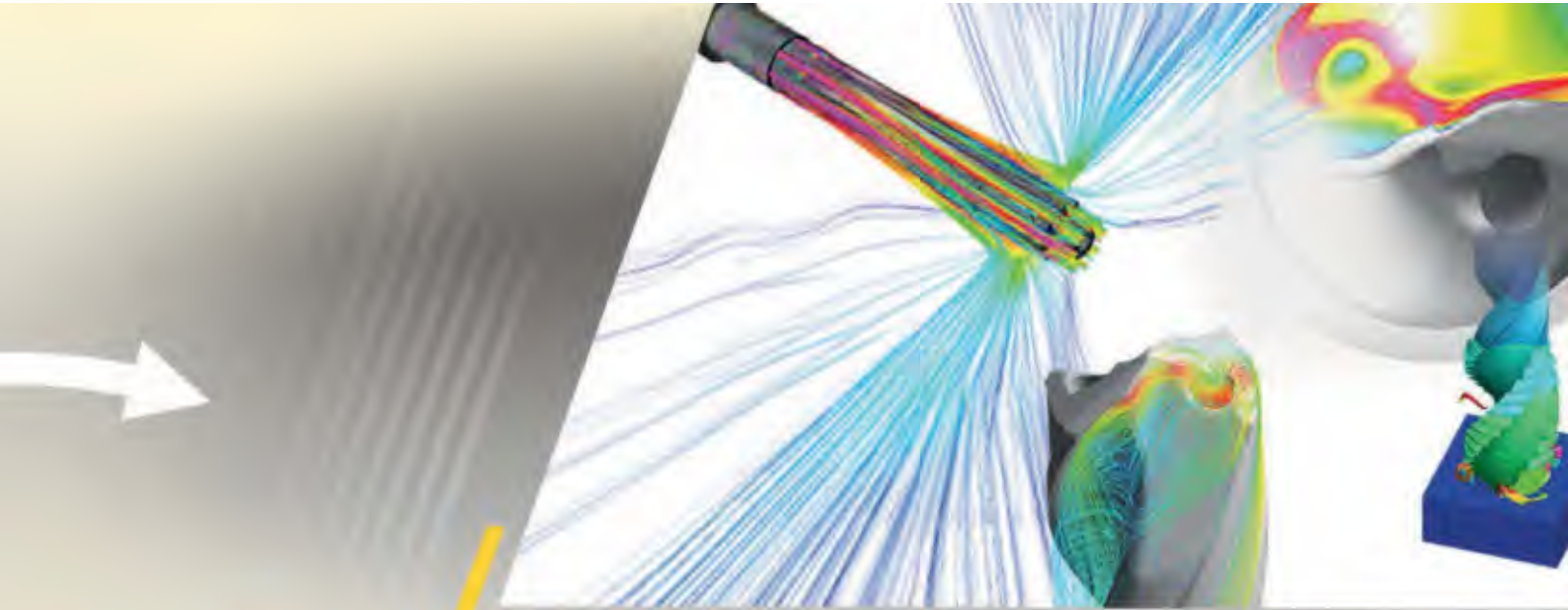


TOOL MATERIALS
Own carbide production

Optimal co-ordination of
all tool parameters thanks
to own R&D sectors

MACHINE & EQUIPMENT DIVISION
Own machine tool and equipment divisions





GEOMETRIES

Own R&D for tool development



COATINGS

Own coating systems and
own coating development



EVERYTHING FROM ONE SUPPLIER

Greater variety for your production with our Power threading tool range

A close-up of a thread milling cutter, a cylindrical tool with multiple cutting edges, shown against a background of a hand holding a workpiece.

❖ Thread milling cutters

A close-up of a micro-thread mill, a small, precision-ground tool with a single cutting edge, shown against a background of a hand holding a workpiece.

❖ Micro-thread mill

A close-up of a GÜHROSync tool, a complex, multi-part tool with a central cutting edge, shown against a background of a hand holding a workpiece.

❖ GÜHROSync



❖ Taps



❖ Fluteless taps



❖ Micro-fluteless taps

SIRIUS®

NEW



MACHINES LONGER

ESPECIALLY WITH STAINLESS STEELS, THE PROBLEM
SOLVER WITH HIGH WEAR-RESISTANCE



Further information regarding our Sirius-coating can be found using the QR-code or
directly at www.guehring.de/download

Guhring no. 4218 can be found on page 38

The new VA taps

NEW

*Strong helix for high process reliability, combi-
coating for longer tool life*

Guhring no. 393 can be found on page 244



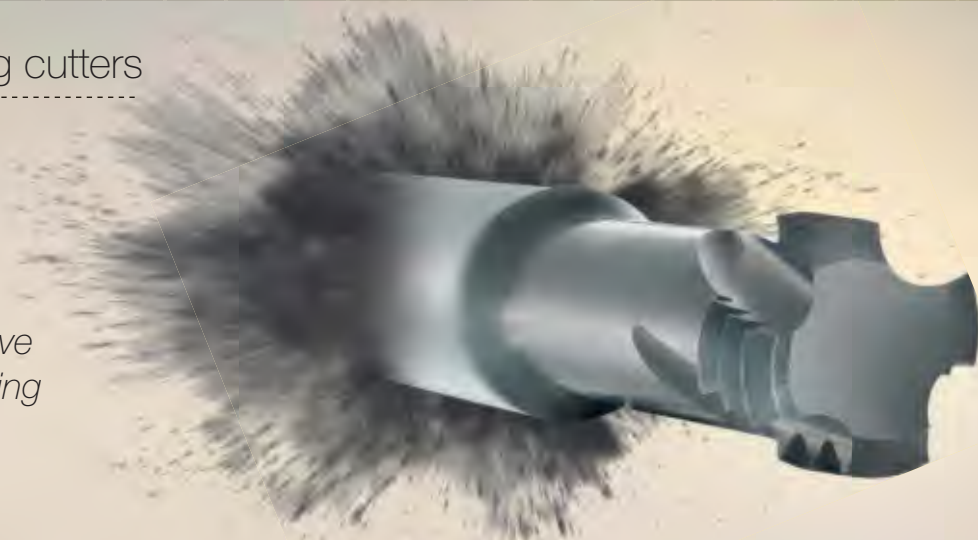
New Thread milling cutters

NEW

Special carbide, innovative geometry and ideal coating for the perfect tool

Guhring no. 4227 can be found on page 703

Hard machining > 45 HRC



New Thread milling cutters with clamping surface

NEW

Now with HB shank for secure clamping

Guhring no. 3556 can be found on page 209



Economical and process reliable production with threading tools from Guhring

NEW

New Micro-thread milling cutters

Perfection in the detail for micro-threads

Guhring no. 4226 M1.6 can be found on page 215
Guhring no. 4225 M1.8 can be found on page 217



Size ratio 1:1





LOCATION
LAIZ



LOCATION
TREUEN



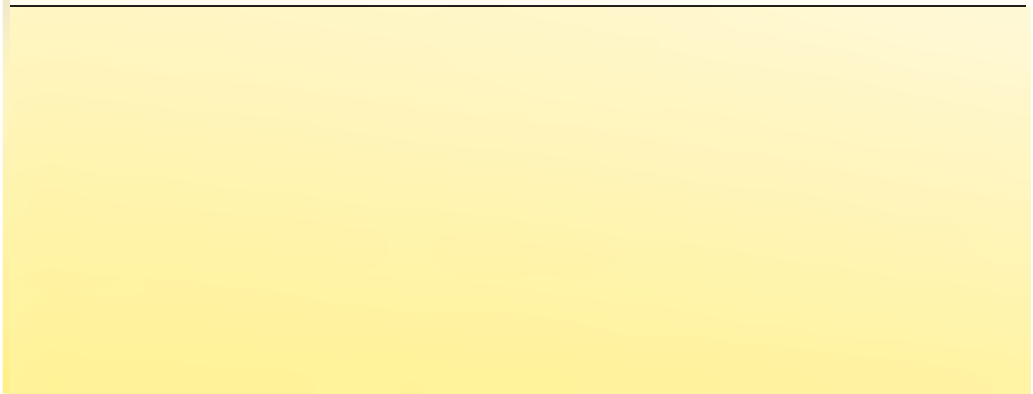
GUHRING
PRODUCTION
LOCATIONS
THREADING TOOLS





PICTOGRAMS

AT A GLANCE



ISO code

P	Steel, high-alloyed steel
M	Stainless steel
K	Grey cast iron, spher, graphite/mall. cast iron
N	Aluminium and other non-ferrous metals
S	Special, super and titanium alloys
H	Hardened steel and chilled cast iron

On the following price and programme pages you will find for every tool recommendations regarding suitability for the application groups and details of max. tensile strength and hardness:

- optimal suitability
- limited suitability

Pictograms

Tool material	HSS		HSS-E		HSS-E-PM						
	High-speed steel										
	VHM										
	Finest grain solid carbide (carbide-UF)										
Thread depth	1,5xD	2xD	2,5xD	3xD							
Tolerance on Ø	2B	2BX	3B	3BX	4HX	6H	6HX	6GX	2a	6g	
	ISO1/4H	ISO2/6H	ISO3/6G								
Thread type											
	Through holes			Blind holes		Through holes and blind holes					
Cutting direction											
	right			left							
Internal coolant											
	with IC			without IC							
Form	A	B	C	C(K)	D	E					
Description	V			M			F				
	First tap			Second tap			Bottoming tap				
Standard	DIN 352	DIN 371	DIN 376	DIN 374	DIN 371/376	DIN 2189	DIN 5156				
	to DIN										
											
	to Gühring Standard										
Type	N	NR40	H	HR15	VA	AI	GG	TiNi			

Coatings

-  bright
-  steam tempered
-  nitrided
-  TiAlN
-  TiCN
-  Carbo
-  AlCrN
-  TiN
-  MolyGlide
-  Sirius

SELECT AND ORDER

PRODUCT PAGE

All data at a glance!

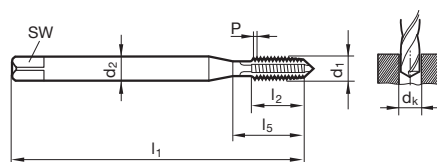
Machine taps for ISO metric threads



P	•	Cutting data page 21
M	•	
K	○	
N	○	
S	○	
H	○	

Application recommendation:

- optimal suitability
- limited suitability



DIN 2184-1 DIN 371/DIN 376

Article no.

4218

Article No.

2
Nominal
size

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000

When ordering please always state the **die Article No. and the nominal size**,
i.e.: machine taps for ISO metric threads for nominal size M5 = **4218 5,000**

For our latest prices, please refer to our separate price list.

Re-production – even in part – is not permitted.

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Printed in Germany

Gühring KG

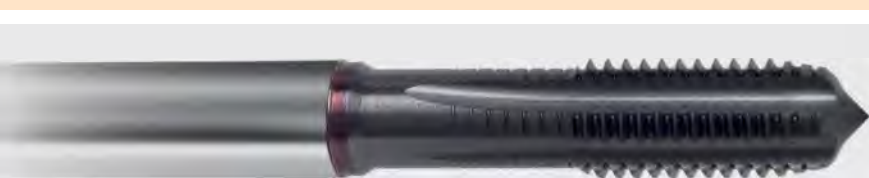
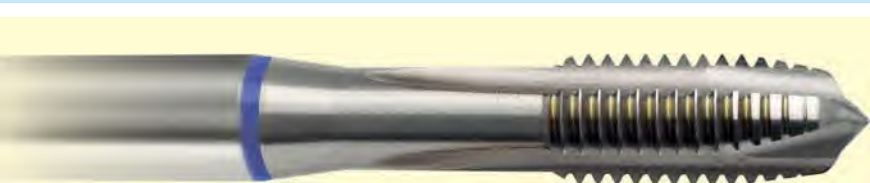
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Steel

Quickfinder	from page 10
Taps	from page 18
Fluteless taps.....	from page 26
Thread milling cutters	from page 28

Stainless steel

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Taps	from page 228
Fluteless taps.....	from page 232
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Grey cast iron, spheroidal/malleable cast iron

Quickfinder	from page 338
Taps	from page 348
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Thread milling cutters	from page 354

Aluminium, non-ferrous metals, plastics

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Fluteless taps.....	from page 466
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Special-, super- and Ti-alloys

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Hardened steel

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Hand taps	from page 721

Tapping chucks	from page 735

Technical section	from page 773

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STEEL

Steel



General steels with tensile strengths from 500 to 1200 N/mm²,
tool steels, heat-treatable steels, high speed steels

P STEEL

M

ISO 2/6H

ISO 3/6G

MF

ISO 2/6H

ISO 3/6G

≤ 800 N/mm²

No 1

M2 - M30
Art.-No. 4218
from page 38

No 1

M6x0,75 - M24x1,5
Art.-No. 4219
from page 90

No 1

M1 - M10
Art.-No. 803/815
from page 30/31

M1,4 - M20
Art.-No. 837/845
from page 37

M3x0,35 - M40x1,5
Art.-No. 827
from page 91

No 1

M6x0,75 - M20x1,5
Art.-No. 316
from page 93

≤ 1000 N/mm²

No 1

M2 - M30
Art.-No. 4218
from page 38

No 1

M6x0,75 - M24x1,5
Art.-No. 4219
from page 90

No 1

M2 - M36
Art.-No. 2876/2877
from page 33

M2 - M10
Art.-No. 2990
from page 41

M5x0,5 - M50x1,5
Art.-No. 2879
from page 94

≤ 1200 N/mm²

No 1

M2 - M30
Art.-No. 4218
from page 38

No 1

M6x0,75 - M24x1,5
Art.-No. 4219
from page 90

M2 - M24
Art.-No. 2941/2942
from page 43

M3x0,35 - M24x1,5
Art.-No. 2943
from page 97

No 1 ideal tool

QUICKFINDER

UNC

2B

UNF

2B

G

-



T H R O U G H H O L E

No 1

G1/16 - G1
Art.-No. 4220
from page 134



HSS-E, Sirius, form B

No 1

Nr. 1 - 1 1/2
Art.-No. 873/878
from page 117

No 1

Nr. 3 - 1 1/4
Art.-No. 908
from page 125

G1/16 - G2
Art.-No. 962
from page 132



HSS-E, bright, form B

No 1

G1/16 - G1
Art.-No. 4220
from page 134



HSS-E, Sirius, form B

No 1

Nr. 4 - 1
Art.-No. 2881/2883
from page 118

No 1

Nr. 6 - 1
Art.-No. 2885
from page 130

G1/8 - G2
Art.-No. 2887
from page 140



HSS-E, steam tempered, form B

No 1

G1/16 - G1
Art.-No. 4220
from page 134



HSS-E, Sirius, form B



HSS-E, nitrided, form B

P STEEL

M

ISO 2/6H

ISO 3/6G

MF

ISO 2/6H

ISO 3/6G

≤ 800 N/mm²

No 1

M2 - M30
Art.-No. 393
from page 71

No 1

M6x0,75 - M24x1,5
Art.-No. 394
from page 115

No 1

M2 - M30
Art.-No. 810/822
from page 60

M3 - M24
Art.-No. 844/848
from page 61

M3x0,35 - M30x2
Art.-No. 834
from page 105

≤ 1000 N/mm²

No 1

M2 - M30
Art.-No. 393
from page 71

No 1

M6x0,75 - M24x1,5
Art.-No. 394
from page 115

No 1

M2 - M36
Art.-No. 836/826
from page 66

M2 - M20
Art.-No. 2994
from page 73

M5x0,5 - M30x2
Art.-No. 2853
from page 107

No 1

M8x1 - M20x1,5
Art.-No. 2999
from page 108

≤ 1200 N/mm²

No 1

M2 - M30
Art.-No. 393
from page 71

No 1

M6x0,75 - M24x1,5
Art.-No. 394
from page 115

No 1

M2 - M30
Art.-No. 2850/2851
from page 81

M2 - M10
Art.-No. 2985
from page 84

M6x0,75 - M24x1,5
Art.-No. 2852
from page 114

No 1

M8x1 - M20x1,5
Art.-No. 2988
from page 116

No 1 ideal tool

QUICKFINDER

UNC

2B

UNF

2B

G

-



B L I N D H O L E

No 1

G1/16 - G1
Art.-No. 395
from page 139



HSS-E, TiAlN, form C

No 1

Nr. 2 - 1
Art.-No. 876/881
from page 122

No 1

Nr. 3 - 1
Art.-No. 911
from page 128

No 1

G1/16 - G1
Art.-No. 395
from page 139



HSS-E, TiAlN, form C

No 1

Nr.2 - 1
Art.-No. 2855/2857
from page 123

No 1

Nr.10 - 7/8
Art.-No. 2859
from page 129

No 1

G1/16 - G1
Art.-No. 395
from page 139



HSS-E, TiAlN, form C



HSS-E, steam tempered, form C

P STEEL

without lubrication

M

6HX

6GX

No 1

M1 - M20
Art.-No. 921/925
from page 149

No 1

M2 - M10
Art.-No. 920
from page 150

MF

6HX

6GX

No 1

M8x1 - M20x1,5
Art.-No. 929
from page 165

No 1

M8x1 - M18x1,5
Art.-No. 928
from page 168

with lubrication

M3 - M39

Art.-No. 919/923
from page 152

No 1

M3 - M20
Art.-No. 918/922
from page 153

M6x0,75 - M24x1,5
Art.-No. 1275/927
from page 169

No 1

M8x1 - M20x1,5
Art.-No. 1277/926
from page 172

No 1

M3 - M39
Art.-No. 2012/2013
from page 152

No 1

M6x0,75 - M20x1,5
Art.-No. 2008
from page 170

with internal cooling

No 1

M3 - M20
Art.-No. 1270/1271
from page 159

No 1

M5 - M10
Art.-No. 1713
from page 160

No 1

M8x1 - M24x1,5
Art.-No. 1272/1273
from page 178

No 1

M8x1 - M24x1,5
Art.-No. 1715/1716
from page 179

No 1

M3 - M20
Art.-No. 1725/1727
from page 159

No 1

M3 - M20
Art.-No. 1726/1728
from page 161

No 1

M8x1 - M24x1,5
Art.-No. 1729/1731
from page 178

No 1

M8x1 - M24x1,5
Art.-No. 1730/1732
from page 179

No 1

M3 - M20
Art.-No. 1972/1931
from page 163

No 1

M10x1 - M24x1,5
Art.-No. 1581
from page 181

No 1 ideal tool

QUICKFINDER

UNC

2BX

UNF

2BX

G

-

T H R O U G H H O L E
B L I N D H O L E

No 1

Nr. 4 - 7/8
Art.-No. 2273/2274
from page 182

No 1

Nr. 4 - 1
Art.-No. 1283/2275
from page 183

No 1

G1/16 - G1 1/4
Art.-No. 966
from page 184

HSS-E, TiN, form C

No 1

Nr. 4 - 7/8
Art.-No. 1582/1583
from page 182

No 1

Nr. 4 - 1
Art.-No. 1584/1585
from page 183

No 1

G1/16 - G1 1/4
Art.-No. 1586
from page 184

HSS-E, TiN, form C



HSS-E, TiCN, form C

FORM C



HSS-E-PM, TiCN, form C

FORM E



HSS-E-PM, TiN, form E

SOLID CARBIDE



Solid carbide, TiCN, form C



STEEL

M

UNIVERSAL

MF

UNIVERSAL

1.5xD

No 1

M3 - M20
Art.-No. 3525
from page 188

No 1

M4x0,5 - M16x1,5
Art.-No. 3527
from page 191

2xD

No 1

M3 - M20
Art.-No. 3526
from page 189

No 1

M4x0,5 - M16x1,5
Art.-No. 3528
from page 192

2.5xD

No 1

M3 - M20
Art.-No. 3759
from page 190

No 1

M4x0,5 - M16x1,5
Art.-No. 3762
from page 193

3xD

No 1

M1,6 - M16
Art.-No. 4226
from page 215

universal

No 1

Ø8x0,5 - Ø20xP3,5
Art.-No. 3541
from page 209

No 1

Ø8x0,5 - Ø20xP3,5
Art.-No. 3541
from page 209

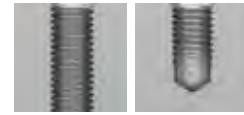
No 1 ideal
tool

QUICKFINDER

UNC
UNIVERSAL

UNF
UNIVERSAL

G
-



T H R O U G H H O L E
B L I N D H O L E

No 1

1/4 - 1/2
Art.-No. 3516
from page 195

No 1

1/4 - 1/2
Art.-No. 3518
from page 198

No 1

1/8 - 3/8
Art.-No. 3514
from page 202



Solid carbide, TiCN

No 1

1/4 - 1/2
Art.-No. 3517
from page 196

No 1

1/4 - 1/2
Art.-No. 3519
from page 199

No 1

1/8 - 3/8
Art.-No. 3515
from page 203



Solid carbide, TiCN



Solid carbide, TiCN



Solid carbide, TiCN

No 1

Ø10xUN24 - Ø20xUN7
Art.-No. 3595
from page 211

No 1

Ø10xUN24 - Ø20xUN7
Art.-No. 3595
from page 211

No 1

Ø10xG19 - Ø20xG11
Art.-No. 3542
from page 212



Solid carbide, TiCN



STEEL



THROUGH HOLES

Thread depth

 $\leq 1,5 \times D$

Tool material

HSS-E

Type/form

N/C

N/C

N/C

N/D

NR28/D

N/-

Surface

○

○

○

○

○

○

Coolant delivery

☒

☒

☒

☒

☒

☒

Shank tolerance

h9

h9

h9

h9

h9

h9



Thread type

Tolerance

Article no. / page

M

4H

6H

995
53806/818
50/51801/813
491839
87851
85

6HX

6G

795
52

MF

6H

830
100

6HX

6G

829
100

UNC

2B

1977
121

2BX

UNF

2B

1987
126

2BX

G

963
133

BSW

NPT

973
146

NPTF

EG M

6H Mod.

MJ

4HX

MJF

4HX

UNJC

3BX

UNJF

3BX

PG

979
147

Suitable lubricant

○/●/△

○/●/△

○/●/△

○/●/△

○/●/△

○/●/△

= No 1

○ = Air

● = Neat oil

● = Soluble oil

△ = Paste

□ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min					
P	Structural and free cutting steels, heat-treatable steels, unalloyed	≤ 800 N/mm ²	S235JR	1.0037	6	6	6	6	6	6
			C15	1.0401						
			11SMnPb30	1.0718						
	Free-cutting steels, Unalloyed case hardened steels, Nitriding steels	800 - 1000 N/mm ²	S355J2	1.0577	-	4	-	-	-	-
			C60	1.0601						
			31CrMo12	1.8515						
	Alloyed heat-treatable steels, tool steels, high speed steels	800 - 1200 N/mm ²	42CrMo4	1.7225	-	-	-	-	-	-
			36CrNiMo4	1.6511						
			X36CrMo17	1.2316						
			HS 6-5-2	1.3343						

[illegible][illegible]



STEEL



THROUGH HOLES

Thread depth

 $\leq 3 \times D$

Tool material

HSS-E

HSS-E-PM

Type/form

N/B

N/B

N/B

N/B

N/B

N/B

Surface

S

A+M

A+M

S

C

Coolant delivery

☒

☒

☒

radial

☒

☒

Shank tolerance

h9

h9

h9

h9

h9

h9

Thread type

Tolerance

Article no. / page

M

4H

6H

2876/2877
33313/315
33

6HX

2990
412991
41

6G

6H

2879
942878
94

6HX

1285/1286
39

6G

2993
93

2B

2881/2883
118

2BX

2B

2885
130

2BX

G

2887
1402886
140

BSW

NPT

NPTF

EG M

6H Mod.

1010
144

MJ

4HX

MJF

4HX

UNJC

3BX

UNJF

3BX

PG

Suitable lubricant

○ = Air

● = Neat oil

● = Soluble oil

△ = Paste

☐ = Minimal quantity lubrication (MQL)

= No 1

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min					
P	Structural and free cutting steels, heat-treatable steels, unalloyed	≤800 N/mm ²	S235JR	1.0037	12	15	15	15	20	20
			C15	1.0401						
			11SMnPb30	1.0718						
	Free-cutting steels, Unalloyed case hardened steels, Nitriding steels	800 - 1000 N/mm ²	S355J2	1.0577	10	12	12	12	15	15
			C60	1.0601						
			31CrMo12	1.8515						
	Alloyed heat-treatable steels, tool steels, high speed steels	800 - 1200 N/mm ²	42CrMo4	1.7225	6	8	8	8	10	10
			36CrNiMo4	1.6511						
			X36CrMo17	1.2316						
HS 6-5-2			1.3343							


 $\leq 3 \times D$

Solid carbide	HSS-E						HSS-E-PM			HSS-E
N/B	H/B	H/B	H/B	H/B	H/B	H AZ/B	H/B	H/B	H/B	N/B
h6	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9
Article no. / page										
	804/816 43	733/734 43	2941/2942 43		1914/1915 43	791/849 44	875 46	57/58 47	1575/1576 47	
942 42										4218 38
	2465 45			2710 45						
	828 97		2943 97							
943/944 95/96										4219 90
				2983 99						
										4220 134
				980 147						

Recommended cutting speed v_c m/min

40	-	-	-	-	-	-	-	-	-	25
30	6	6	6	6	6	6	8	10	10	20
25	10	10	10	12	12	10	12	15	15	15



STEEL



BLIND HOLES

Thread depth

 $\leq 1.5 \times D$

Tool material

HSS-E

Type/form

N/C

N/C

N/C

NR15/C

NR15/C

NR15/C

NR15/C

NR15/C

Surface

○

○

○

○

○

●

●

○

Coolant delivery

☒

☒

☒

☒

☒

☒

☒

axial

Shank tolerance

h9

h9

h9

h9

h9

h9

h9

h9



Thread type

Tolerance

Article no. / page

M

4H

6H

995
53806/818
50/51992
58809/821
57946/949
57913/916
571891/1898
59

6HX

6G

795
52799
52

MF

6H

830
100833
1022838
1021971
1021905
104

6HX

6G

829
100

UNC

2B

1977
1211978
1192839/2840
120

2BX

UNF

2B

1987
1261988
1272841
127

2BX

G

963
133964
1352842
138

BSW

NPT

973
146

NPTF

EG M

6H Mod.

MJ

4HX

MJF

4HX

UNJC

3BX

UNJF

3BX

PG

979
147

Suitable lubricant

○/●/△

○/●/△

○/●/△

○/●/△

○/●/△

○/●/△

○/●/△

○/●/△

= No 1

○ = Air

● = Neat oil

● = Soluble oil

△ = Paste

□ = Minimal quantity lubrication (MQL)

Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min							
P	Structural and free cutting steels, heat-treatable steels, unalloyed	S235JR	1.0037	6	6	6	8	8	8	10	8
		C15	1.0401								
		11SMnPb30	1.0718								
	Free-cutting steels, Unalloyed case hardened steels, Nitriding steels	S355J2	1.0577	-	-	-	-	-	-	-	-
		C60	1.0601								
		31CrMo12	1.8515								
	Alloyed heat-treatable steels, tool steels, high speed steels	42CrMo4	1.7225	-	-	-	-	-	-	-	-
		36CrNiMo4	1.6511								
		X36CrMo17	1.2316								
		HS 6-5-2	1.3343								



$\leq 1.5 \times D$					$\leq 2 \times D$					$\leq 3 \times D$				
HSS-E			HSS-E-PM		HSS-E		HSS-E-PM			HSS-E				
NR15/C	NR15/C	NR15/E	HR15/C	HR15/C	H/C	H/C	H/C	H/E	HR15/C	NR40/C	NR40/C	NR40/C	NR40/C	NR40/C
axial					axial	axial	axial	axial	axial					
h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9
Article no. / page														
2436/2437 59	4154 48	4155 48	872/935 76	1577/1578 76						993 65	888 88	810/822 60	783/784 60	914/917 60
					778 79	779 80	302/297 78	1091/4165 78	1188/1194 77					
												844/848 61		
	4156 103	4157 103	874 112							1970 106		834 105	2843 105	852 105
							1090 113	1007 113	1200 112					
												876/881 122	2844/2845 122	
												911 128	2846 128	
		4158 135										965 136	2849 136	
													2847/2848 143	

Recommended cutting speed v_c m/min

10	15	15	-	-	-	-	-	-	-	8	8	8	8	12
-	10	10	-	-	15	15	15	15	12	-	-	-	-	-
-	8	8	4	6	12	12	12	12	10	-	-	-	-	-



STEEL



BLIND HOLES

Thread depth

 $\leq 3 \times D$

Tool material

HSS-E

Type/form

NR40/C

NL40/C

NR40/C

NR40/C

NR40/C

NR40/E

NR40/C

NR40/C

Surface



Coolant delivery



axial

axial



Shank tolerance

h9

h9

h9

h9

h9

h9

h9

h9



LH spiral



Thread type

Tolerance

Article no. / page

M

4H

1252/1254
60786/787
621893
632438/2439
64889/890
662790/2791
69836/826
662440/2441
66

6H

6HX

6G

MF

6H

6HX

6G

UNC

2B

2BX

UNF

2B

2BX

G

BSW

NPT

NPTF

EG M

6H Mod.

MJ

4HX

MJF

4HX

UNJC

3BX

UNJF

3BX

PG

Suitable lubricant



○ = Air

● = Neat oil

● = Soluble oil

△ = Paste

□ = Minimal quantity lubrication (MQL)

= No 1

Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min							
P	Structural and free cutting steels, heat-treatable steels, unalloyed	S235JR	1.0037	12	8	8	12	10	10	10	15
		C15	1.0401								
		11SMnPb30	1.0718								
	Free-cutting steels, Unalloyed case hardened steels, Nitriding steels	S355J2	1.0577	-	-	-	-	8	8	8	10
		C60	1.0601								
		31CrMo12	1.8515								
	Alloyed heat-treatable steels, tool steels, high speed steels	42CrMo4	1.7225	-	-	-	-	4	4	6	8
		36CrNiMo4	1.6511								
		X36CrMo17	1.2316								
		HS 6-5-2	1.3343								


 $\leq 3 \times D$

HSS-E		HSS-E-PM				HSS-E						HSS-E-PM		HSS-E
NR40/C	NR40/C	NR40/C	NR40/C	NR50/C	NR50/C	HR40/C	HR40/C	HR40/C	HR40/C	HR40/C	HR40/C	VAR50/C	VAR50/C	VAR45/C
					axial						axial		axial	
h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h6	h6	h9
Article no. / page														
174/196 70		1288/1289 72	1290 73	767/1098 74	1152/1293 74	811/823 81	947/950 81	2850/2851 81	361/362 82	1916/1917 82	1894/1901 83			
	4153 67											761/763 75	1139/1142 75	393 71
								2985 84	2986 84					
273 109		1292 109		1100 110	1294 110	835 114	2940 114	2852 114						
												764 111	1144 111	394 115
								2988 116	2989 116					
1837 124														
1838 131														
937 141												4159 138		395 139

Recommended cutting speed v_c m/min

15	15	15	15	15	20	-	-	-	-	-	-	15	20	20
10	10	10	10	12	15	-	-	-	-	-	-	12	15	15
8	8	8	8	8	10	6	6	6	8	10	6	8	10	10


STEEL

THROUGH HOLES
AND BLIND HOLES

Thread depth

 $\leq 1,5xD$
 $\leq 3xD$

Tool material

HSS-E

HSS-E-PM

Solid carbide

HSS-E

Type/form

N/C

N/C

N/C

N/C

N/C

N/C

Surface

S

S

S

S

C

P

Coolant delivery

☑

☑

axial

☑

☑

☑

Shank tolerance

h9

h9

h6

h9

h9

h9



Thread type

Tolerance

Article no. / page

M

4H

921/925
149

1255/1256
149

2518
151

919/923
152

2012/2013
152

1587/1589
152

6HX

6G

6GX

6HX

6G

6GX

2B

2BX

2B

2BX

G

BSW

NPT

NPTF

EG M

MJ

MJF

UNJC

UNJF

PG

6H

6HX

6G

6GX

6HX

6G

6GX

2B

2BX

2B

2BX

G

BSW

NPT

NPTF

EG M

MJ

MJF

UNJC

UNJF

PG

Suitable lubricant

○ = Air

● = Neat oil

● = Soluble oil

△ = Paste

□ = Minimal quantity lubrication (MQL)

= No 1

Group of materials

Tensile strength

Material example

Material no.

Recommended cutting speed vc m/min

Structural and free cutting steels, heat-treatable steels, unalloyed

 ≤ 800 N/mm²

S235JR

1.0037

C15

1.0401

11SMnPb30

1.0718

12

15

35

15

15

15

Free-cutting steels, Unalloyed case hardened steels, Nitriding steels

800 - 1000 N/mm²

S355J2

1.0577

C60

1.0601

31CrMo12

1.8515

12

15

35

15

15

15

Alloyed heat-treatable steels, tool steels, high speed steels

800 - 1200 N/mm²

42CrMo4

1.7225

36CrNiMo4

1.6511

X36CrMo17

1.2316

HS 6-5-2

1.3343

10

12

25

12

12

12

[illegible]



STEEL



THROUGH HOLES
AND BLIND HOLES

Thread depth	≤2xD				≤2,5xD		≤1,5xD		
Tool material		Solid carbide							
Type	TM SP	TM SP	TM SP	TM SP	TM SP	TM SP	TMC SP	TMC SP	
Surface									
Coolant delivery			axial	axial	axial	axial	axial	axial	
Shank form	HA	HB	HA	HB	HA	HB	HA	HA	
Spiral	27°	27°	27°	27°	27°	27°	10°	10°	
									
Thread type	Article no. / page								
M	4132 186	4133 186	3737 186	3743 186	3735 187	3740 187	3525 188	3543 188	
MF			3737 186	3743 186			3527 191	3545 191	
UNC			4134 194	4135 194			3516 195	3534 195	
UNF			4136 197	4137 197			3518 198	3536 198	
G			3745 200	3748 200	3746 201	3750 201	3514 202	3529 202	
BSW									
NPT			3753 205	3754 205			3520 206	3538 206	
NPTF			3756 207	3757 207			3521 208	3539 208	
EG M	EG-threads can be produced with every thread milling cutter type and dimension								
MJ									
MJF									
UNJC									
UNJF									
PG									
Suitable lubricant									

= **No 1**

- = Air
- = Neat oil
- ◐ = Soluble oil
- △ = Paste
- = Minimal quantity lubrication (MQL)

Group of materials	Tensile strength	Material example	Material no.	Application recommendations							
P	Structural and free cutting steels, heat-treatable steels, unalloyed	S235JR	1.0037								
		C15	1.0401	++	++	++	++	++	++	++	++
		11SMnPb30	1.0718								
	Free-cutting steels, Unalloyed case hardened steels, Nitriding steels	S355J2	1.0577								
		C60	1.0601	++	++	++	++	++	++	++	++
		31CrMo12	1.8515								
	Alloyed heat-treatable steels, tool steels, high speed steels	42CrMo4	1.7225								
		36CrNiMo4	1.6511	+	+	+	+	+	+	++	++
		X36CrMo17	1.2316								
		HS 6-5-2	1.3343								



Steel

≤2xD		≤2,5xD		universal				≤3xD	
Solid carbide									
TMC SP	TMC SP	TMC SP	TMC SP	TMU SP	TMU SP	TMU SP	TMU SP	MTM 3 SP	MTM 1 SP
									
axial	axial	axial	axial	axial	axial	axial	axial		
HA	HB	HA	HB	HA	HB	HA	HB	HA	HA
10°	10°	27°	27°	15°	15°	15°	15°	15°	15°
									
Article no. / page									
3526 189	3544 189	3759 190	3760 190	3541 209	3556 209	4162 210	4163 210	4226 215	4225 217
3528 192	3546 192	3762 193	3763 193	3541 209	3556 209	4162 210	4163 210		4225 217
3517 196	3535 196			3595 211	3596 211				
3519 199	3537 199			3595 211	3596 211				
3515 203	3533 203	3765 204	3766 204	3542 212	3557 212	3542 212	3557 212	4228 216	
				3768 213	3769 213				
				3772 214	3773 214				
EG-threads can be produced with every thread milling cutter type and dimension									
									

Application recommendations									
++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++



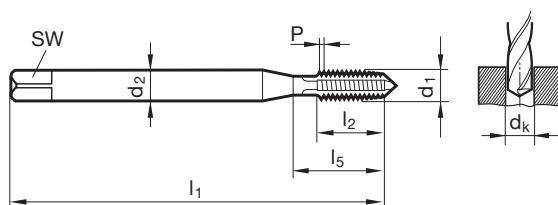
Machine taps for ISO metric threads



P ≤ 800 Cutting data page 19

M	
K	
N	
S	
H	

Tool material	HSS-E			
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H	ISO2/6H
Surface	○	S	●	C
Type	N	N	N	N
Form	B	B	B	B
Internal cooling				



DIN 2184-1 DIN 371

Article no. **803** **912** **945** **1246**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1	0.250	2.500	2.100	0.75	40.000	5.500	
M 1.2	0.250	2.500	2.100	0.95	40.000	5.500	
M 1.4	0.300	2.500	2.100	1.10	40.000	7.000	
M 1.6	0.350	2.500	2.100	1.25	40.000	8.000	
M 1.7	0.350	2.500	2.100	1.35	40.000	8.000	
M 1.8	0.350	2.500	2.100	1.45	40.000	8.000	
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	9.000	14.500
M 2.3	0.400	2.800	2.100	1.90	45.000	9.000	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M7	1.000	7.000	5.500	6.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000



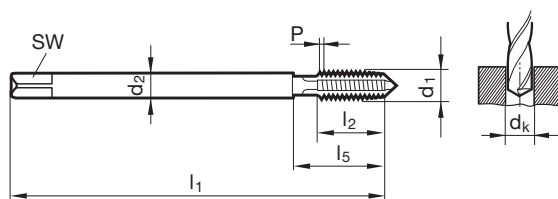
Machine taps for ISO metric threads



Cutting data page 19

P	≤ 800
M	
K	
N	
S	
H	

Tool material	HSS-E			
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H	ISO2/6H
Surface	○	●	●	●
Type	N	N	N	N
Form	B	B	B	B
Internal cooling	✗	✗	✗	✗



DIN 2184-1 DIN 376

Article no. 815 915 948 1249

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M 1.6	0.350	1.200		1.25	40.000	8.000	
M 1.8	0.350	1.200		1.45	40.000	8.000	
M2	0.400	1.400		1.60	45.000	8.000	13.500
M 2.2	0.450	1.600		1.75	45.000	9.000	14.500
M 2.3	0.400	1.600		1.90	45.000	9.000	14.500
M 2.5	0.450	1.800		2.05	50.000	9.000	14.500
M 2.6	0.450	1.800		2.15	50.000	9.000	14.500
M3	0.500	2.200		2.50	56.000	10.000	18.000
M 3.5	0.600	2.500	2.100	2.90	56.000	12.000	20.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M7	1.000	5.500	4.300	6.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M27	3.000	20.000	16.000	24.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000
M33	3.500	25.000	20.000	29.50	180.000	40.000	91.000
M36	4.000	28.000	22.000	32.00	200.000	50.000	102.000
M39	4.000	32.000	24.000	35.00	200.000	50.000	107.000
M42	4.500	32.000	24.000	37.50	200.000	56.000	112.000
M45	4.500	36.000	29.000	40.50	220.000	58.000	117.000
M48	5.000	36.000	29.000	43.00	250.000	65.000	127.000
M52	5.000	40.000	32.000	47.00	250.000	65.000	128.000

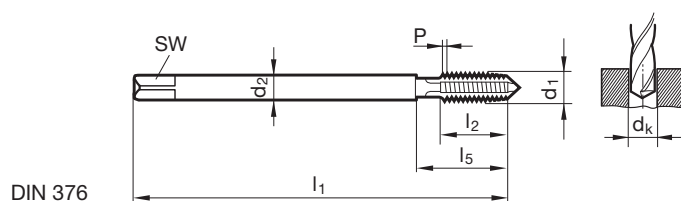
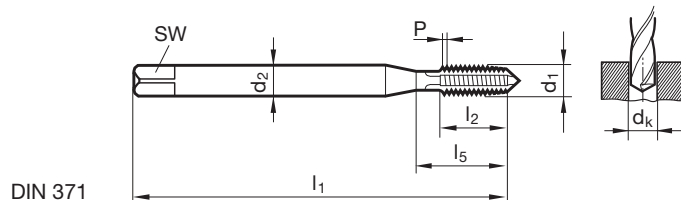
Machine taps for ISO metric threads



P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 19

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N-LH
Form	B
Internal cooling	



DIN 2184-1 DIN 371

Article no.

789

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

790

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000



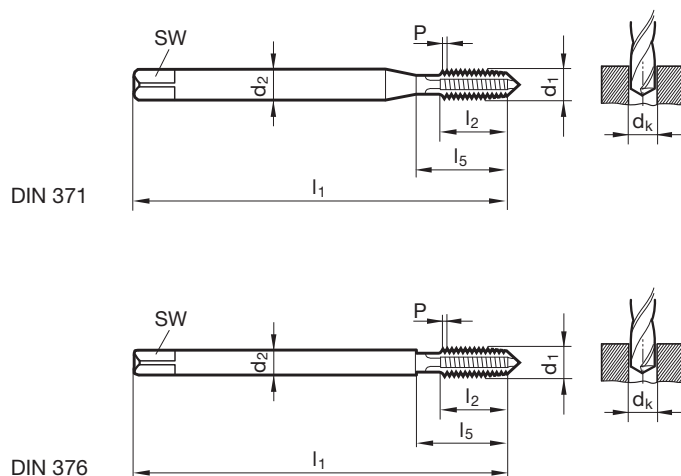
Machine taps for ISO metric threads



P	≤ 1000
M	○
K	
N	
S	
H	

Cutting data page 20

Tool material	HSS-E		
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H
Surface	S	A+M	
Type	N	N	N
Form	B	B	B
Internal cooling			



DIN 2184-1 DIN 371

Article no.

313

2427

2876

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

315

2428

2877

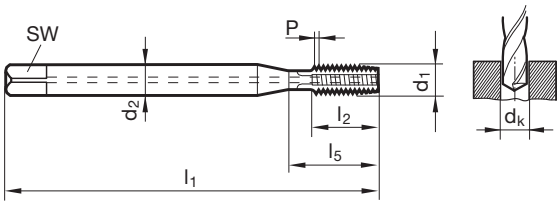
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M27	3.000	20.000	16.000	24.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000
M36	4.000	28.000	22.000	32.00	200.000	50.000	102.000

Oil feed taps for ISO metric threads



P	≤ 1000	Cutting data page 20
M	○	
K		
N		
S		
H		

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	A + M
Type	N
Form	B
Internal cooling	



DIN 2184-1 DIN 371	Article no.	2517

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000



Machine taps for ISO metric threads

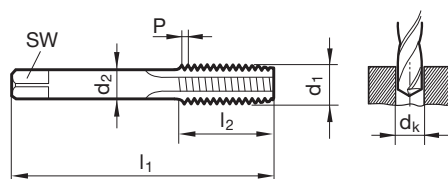


P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 19

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N
Form	B
Internal cooling	

Steel



DIN 2184-2 DIN 352

Article no.

991

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	36.000	8.000	
M 2.2	0.450	2.800	2.100	1.75	36.000	9.000	
M 2.3	0.400	2.800	2.100	1.90	36.000	9.000	
M 2.5	0.450	2.800	2.100	2.05	40.000	9.000	
M 2.6	0.450	2.800	2.100	2.15	40.000	9.000	
M3	0.500	3.500	2.700	2.50	40.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	45.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	45.000	12.000	21.000
M 4.5	0.750	6.000	4.900	3.70	50.000	14.000	24.000
M5	0.800	6.000	4.900	4.20	50.000	14.000	24.000
M6	1.000	6.000	4.900	5.00	56.000	16.000	27.000
M7	1.000	6.000	4.900	6.00	56.000	16.000	32.000
M8	1.250	6.000	4.900	6.80	63.000	17.000	32.000
M9	1.250	7.000	5.500	7.80	63.000	17.000	32.000
M10	1.500	7.000	5.500	8.50	70.000	20.000	36.000
M11	1.500	8.000	6.200	9.50	70.000	20.000	36.000
M12	1.750	9.000	7.000	10.20	75.000	24.000	40.000
M14	2.000	11.000	9.000	12.00	80.000	26.000	42.000
M16	2.000	12.000	9.000	14.00	80.000	26.000	45.000
M18	2.500	14.000	11.000	15.50	95.000	30.000	50.000
M20	2.500	16.000	12.000	17.50	95.000	32.000	50.000
M22	2.500	18.000	14.500	19.50	100.000	32.000	50.000
M24	3.000	18.000	14.500	21.00	110.000	36.000	60.000

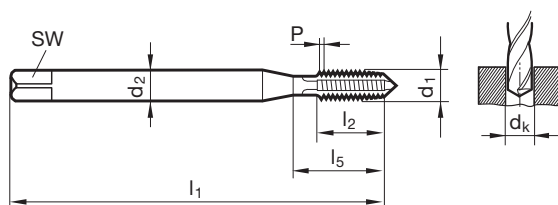
Machine taps for ISO metric threads



P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 19

Tool material	HSS-E
Tolerance on Ø	ISO1/4H
Surface	○
Type	N
Form	B
Internal cooling	



DIN 2184-1 DIN 371

Article no.

794

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M7	1.000	7.000	5.500	6.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000



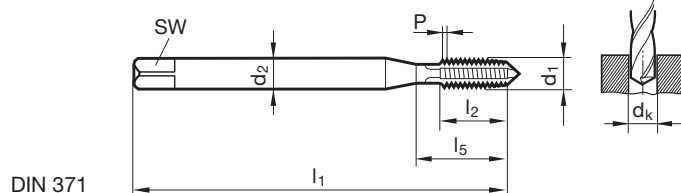
Machine taps for ISO metric threads



Cutting data page 19

P	≤ 800
M	
K	
N	
S	
H	

Tool material	HSS-E
Tolerance on Ø	ISO3/6G
Surface	○
Type	N
Form	B
Internal cooling	



DIN 2184-1 DIN 371

Article no.

837

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M 1.4	0.300	2.500	2.100	1.10	40.000	7.000	
M 1.6	0.350	2.500	2.100	1.25	40.000	8.000	
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	9.000	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

845

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	1.400	1.250	1.60	45.000	8.000	13.500
M3	0.500	2.200	1.800	2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000

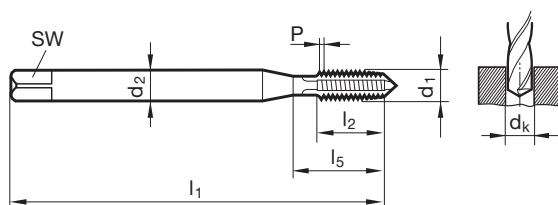
Machine taps for ISO metric threads



Cutting data page 21

P	•
M	•
K	○
N	○
S	○
H	

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	S
Type	N
Form	B
Internal cooling	

NEW

DIN 2184-1 DIN 371/DIN 376

Article no.

4218

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000



Machine taps for ISO metric threads



P	≤ 1000
M	○
K	
N	
S	
H	

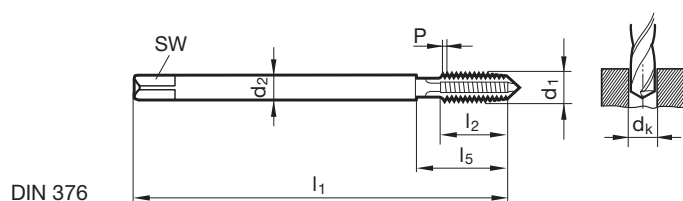
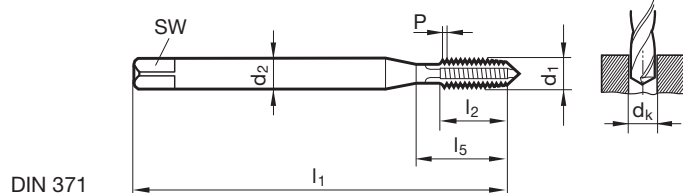
Cutting data page 20

Tool material **HSS-E-PM**

Tolerance on Ø ISO2/6H

Surface **S**Type **N**Form **B**

Internal cooling

**DIN 2184-1 DIN 371**

Article no.

1285

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

1286

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000

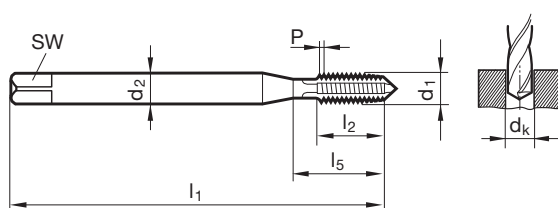
Machine taps for ISO metric threads



P	≤ 1000
M	○
K	
N	
S	
H	

Cutting data page 20

Tool material	HSS-E-PM
Tolerance on Ø	ISO2/6H
Surface	Ⓢ
Type	N
Form	B
Internal cooling	



DIN 2184-1 DIN 371

Article no.

1287

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000



Machine taps for ISO metric threads



P	≤ 1000
M	○
K	
N	
S	
H	

Cutting data page 20

Tool material

HSS-E

Tolerance on Ø

ISO3/6G

ISO3/6G

Surface



S

Type

N

N

Form

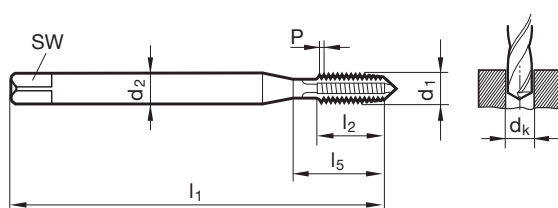
B

B

Internal cooling



Steel



DIN 2184-1 DIN 371

Article no.

2990

2991

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

Machine taps for ISO metric threads



P ≤ 1000

Cutting data page 21

M

K

N

S

H

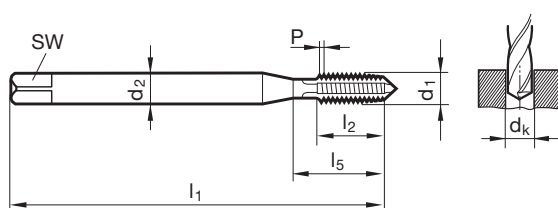
Tool material Solid carbide

Tolerance on Ø 6HX

Surface C

Type N

Form B

Internal cooling 


DIN 2184-1 ~DIN 371

Article no.

942

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	12.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	15.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	19.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	22.500	39.000
M12	1.750	12.000	9.000	10.20	110.000	26.500	49.000



Machine taps for ISO metric threads



P	≤ 1200
M	
K	
N	
S	
H	

Cutting data page 21

Tool material

HSS-E

Tolerance on Ø

ISO2/6H

ISO2/6H

ISO2/6H

ISO2/6H

Surface



Type

H

H

H

H

Form

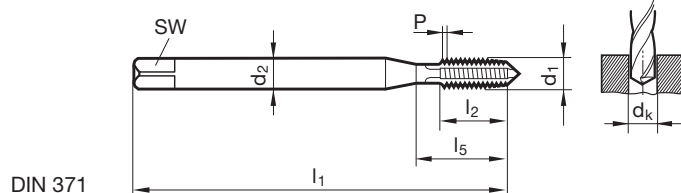
B

B

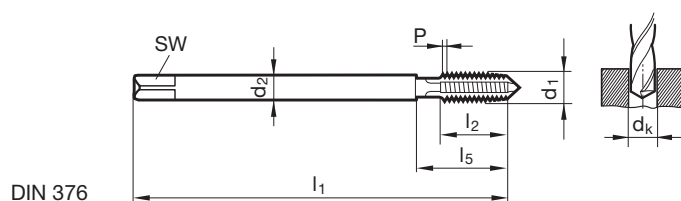
B

B

Internal cooling



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

733

804

1914

2941

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	9.000	14.500
M 2.3	0.400	2.800	2.100	1.90	45.000	9.000	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

734

816

1915

2942

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000

Machine taps for ISO metric threads



P ≤ 1200

Cutting data page 21

M

K

N

S

H

Tool material

HSS-E

Tolerance on Ø

ISO2/6H

Surface

○

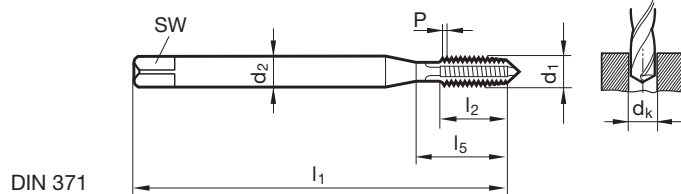
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H AZ

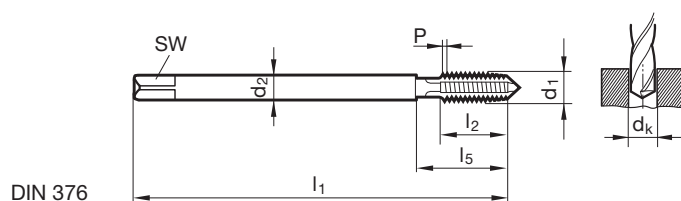
Form

B

Internal cooling



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

791

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	9.000	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

849

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000



Machine taps for ISO metric threads



P	≤ 1200
M	
K	
N	
S	
H	

Cutting data page 21

Tool material

HSS-E

Tolerance on Ø

ISO3/6G

ISO3/6G

Surface



S

Type

H

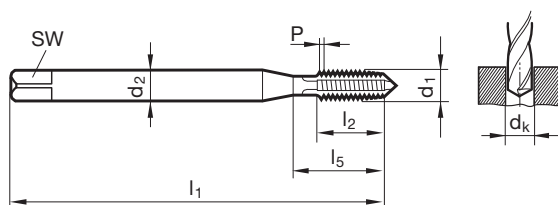
H

Form

B

B

Internal cooling



DIN 2184-1 DIN 371

Article no.

2465

2710

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

Machine taps for ISO metric threads



P ≤ 1200 Cutting data page 21

M	
K	
N	
S	
H	

Tool material **HSS-E-PM**

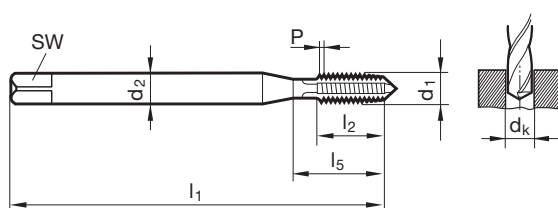
Tolerance on Ø ISO2/6H

Surface ○

Type H

Form B

Internal cooling 



DIN 2184-1 DIN 371

Article no.

875

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000



Machine taps for ISO metric threads



Cutting data page 21

P	≤ 1200
M	
K	
N	
S	
H	

Tool material

HSS-E-PM

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface

S

A

Type

H

H

Form

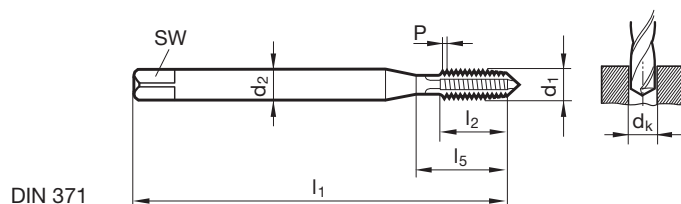
B

B

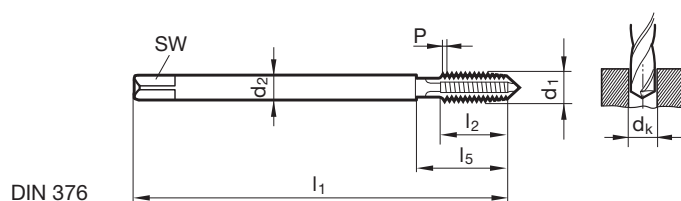
Internal cooling

X

X



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

57

1575

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

58

1576

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000

Machine taps for ISO metric threads


P ≤ 1000 Cutting data page 23

M	○
K	○
N	○
S	○
H	○

Tool material

HSS-E

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface

C

C

Type

N R15

N R15

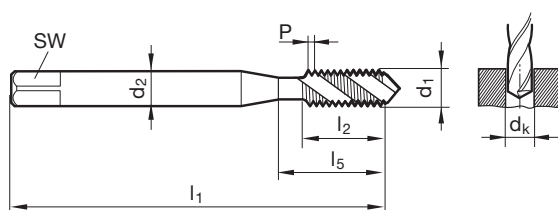
Form

C

E

Internal cooling




DIN 2184-1 DIN 371/DIN 376

Article no.

4154
4155

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000



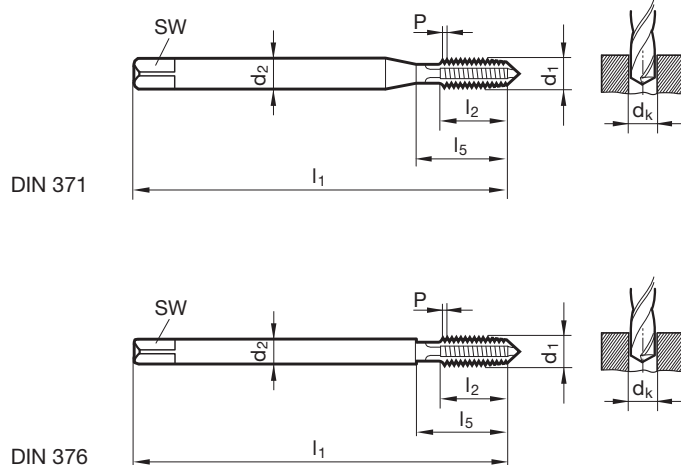
Machine taps for ISO metric threads



P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 18

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N
Form	D
Internal cooling	



DIN 2184-1 DIN 371

Article no.

801

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	9.000	14.500
M 2.3	0.400	2.800	2.100	1.90	45.000	9.000	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

813

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	1.400		1.60	45.000	8.000	13.500
M 2.3	0.400	1.600	1.250	1.90	45.000	9.000	14.500
M 2.5	0.450	1.800		2.05	50.000	9.000	14.500
M 2.6	0.450	1.800	1.400	2.15	50.000	9.000	14.500
M3	0.500	2.200		2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	32.000	62.000
M27	3.000	20.000	16.000	24.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000

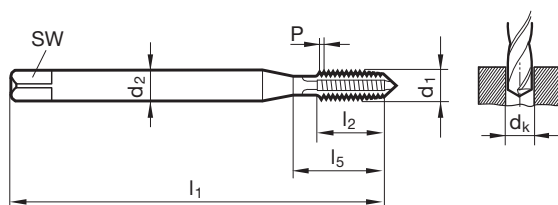
Machine taps for ISO metric threads



P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 18/22

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N
Form	C
Internal cooling	



DIN 2184-1 DIN 371

Article no.

806

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1	0.250	2.500	2.100	0.75	40.000	5.500	
M 1.2	0.250	2.500	2.100	0.95	40.000	5.500	
M 1.4	0.300	2.500	2.100	1.10	40.000	7.000	
M 1.6	0.350	2.500	2.100	1.25	40.000	4.500	
M 1.7	0.350	2.500	2.100	1.35	40.000	4.500	
M 1.8	0.350	2.500	2.100	1.45	40.000	4.500	
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.3	0.400	2.800	2.100	1.90	45.000	4.500	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000



Machine taps for ISO metric threads

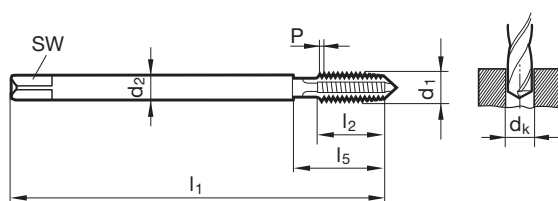


P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 18/22

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N
Form	C
Internal cooling	

Steel



DIN 2184-1 DIN 376

Article no.

818

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M 1.6	0.350	1.200		1.25	40.000	4.500	
M 1.7	0.350	1.200		1.35	40.000	4.500	
M2	0.400	1.400		1.60	45.000	4.500	13.500
M 2.5	0.450	1.800		2.05	50.000	5.000	14.500
M 2.6	0.450	1.800		2.15	50.000	5.000	14.500
M3	0.500	2.200		2.50	56.000	6.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	7.500	21.000
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	27.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M27	3.000	20.000	16.000	24.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000
M36	4.000	28.000	22.000	32.00	200.000	40.000	102.000
M42	4.500	32.000	24.000	37.50	200.000	45.000	112.000
M48	5.000	36.000	29.000	43.00	250.000	50.000	127.000

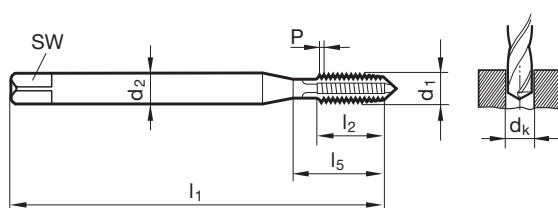
Machine taps for ISO metric threads



P ≤ 800 Cutting data page 18/22

M	
K	
N	
S	
H	

Tool material	HSS-E	
Tolerance on Ø	ISO3/6G	ISO3/6G
Surface	○	○
Type	N	N R15
Form	C	C
Internal cooling		



DIN 2184-1 DIN 371

Article no.

795

799

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	5.000	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000



Machine taps for ISO metric threads

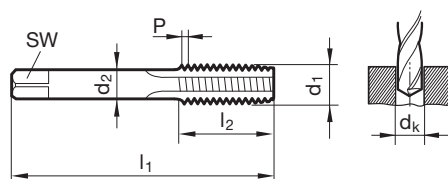


P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 18/22

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N
Form	C
Internal cooling	

Steel



DIN 2184-2 DIN 352

Article no.

995

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M 2.2	0.450	2.800	2.100	1.75	36.000	9.000	
M 2.3	0.400	2.800	2.100	1.90	36.000	9.000	
M 2.5	0.450	2.800	2.100	2.05	40.000	9.000	
M3	0.500	3.500	2.700	2.50	40.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	45.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	45.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	50.000	8.500	24.000
M6	1.000	6.000	4.900	5.00	56.000	11.000	27.000
M8	1.250	6.000	4.900	6.80	63.000	14.000	32.000
M10	1.500	7.000	5.500	8.50	70.000	16.000	36.000
M12	1.750	9.000	7.000	10.20	75.000	18.500	40.000
M16	2.000	12.000	9.000	14.00	80.000	20.000	45.000

Machine taps for ISO metric threads



P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 19

Tool material

HSS-E

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface



Type

N

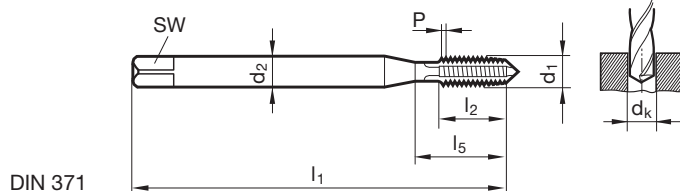
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Form

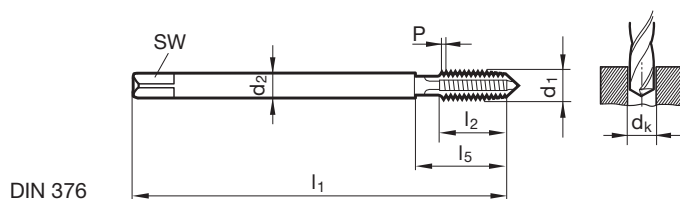
B

B

Internal cooling



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

838

839

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M 1.2	0.250	2.500	2.100	0.95	40.000	5.500	
M 1.4	0.300	2.500	2.100	1.10	40.000	7.000	
M 1.6	0.350	2.500	2.100	1.25	40.000	8.000	
M 1.7	0.350	2.500	2.100	1.35	40.000	8.000	
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	9.000	14.500
M 2.3	0.400	2.800	2.100	1.90	45.000	9.000	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M7	1.000	7.000	5.500	6.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

846

847

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200	1.800	2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000



Machine taps for ISO metric threads

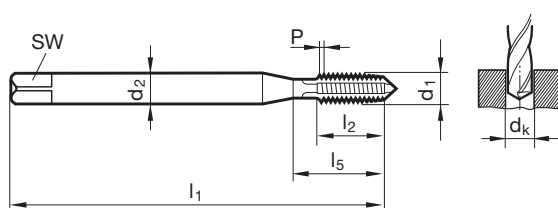


P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 19

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N
Form	B
Internal cooling	

Steel



DIN 2184-1 DIN 371

Article no.

802

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

Machine taps for ISO metric threads



P ≤ 800 Cutting data page 19

M	
K	
N	
S	
H	

Tool material

HSS-E

Tolerance on Ø

ISO3/6G

ISO3/6G

ISO3/6G

Surface



Type

N

N

N

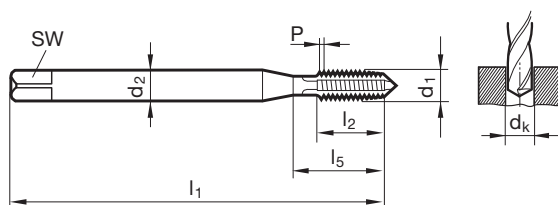
Form

B

B

B

Internal cooling



DIN 2184-1 DIN 371

Article no.

869

796

797

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M7	1.000	7.000	5.500	6.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000



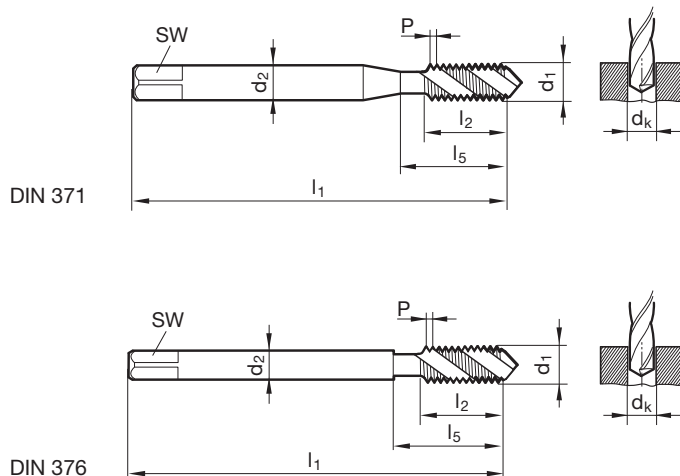
Machine taps for ISO metric threads



P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 22

Tool material	HSS-E		
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H
Surface	○	●	●
Type	N R15	N R15	N R15
Form	C	C	C
Internal cooling			



DIN 2184-1 DIN 371

Article no. 809 913 946

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	5.000	14.500
M 2.3	0.400	2.800	2.100	1.90	45.000	4.500	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no. 821 916 949

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	6.000	18.000
M 3.5	0.600	2.500	2.100	2.90	56.000	7.000	20.000
M4	0.700	2.800	2.100	3.30	63.000	7.500	21.000
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000

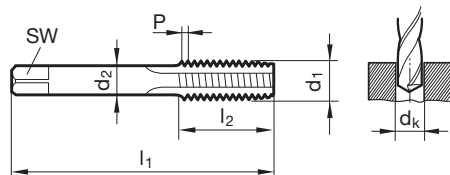
Machine taps for ISO metric threads



P ≤ 800 Cutting data page 22

M	
K	
N	
S	
H	

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N R15
Form	C
Internal cooling	



DIN 2184-2 DIN 352

Article no.

992

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	40.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	45.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	50.000	8.500	24.000
M6	1.000	6.000	4.900	5.00	56.000	11.000	27.000
M7	1.000	6.000	4.900	6.00	56.000	11.000	32.000
M8	1.250	6.000	4.900	6.80	63.000	14.000	32.000
M10	1.500	7.000	5.500	8.50	70.000	16.000	36.000
M12	1.750	9.000	7.000	10.20	75.000	18.500	40.000
M14	2.000	11.000	9.000	12.00	80.000	20.000	42.000
M16	2.000	12.000	9.000	14.00	80.000	20.000	45.000
M20	2.500	16.000	12.000	17.50	95.000	25.000	50.000



Oil feed taps for ISO metric threads



Cutting data page 22/23

P	≤ 800
M	
K	
N	
S	
H	

Tool material

HSS-E

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface



S

Type

N R15

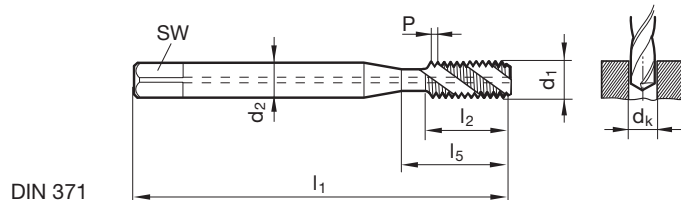
N R15

Form

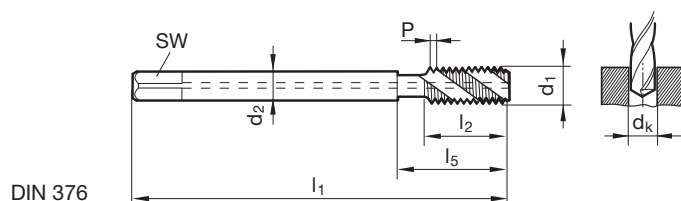
C

C

Internal cooling



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

1891

2436

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

1898

2437

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000

Machine taps for ISO metric threads



P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 22/23

Tool material

HSS-E

Tolerance on Ø ISO2/6H ISO2/6H ISO2/6H ISO2/6H

Surface



Type

N R40

N R40

N R40

N R40

Form

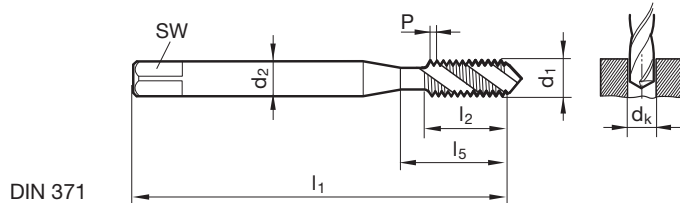
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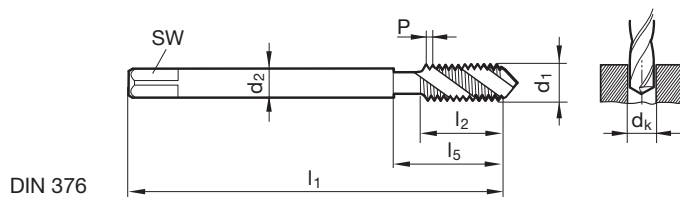
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C

Internal cooling



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

783

810

914

1252

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	5.000	14.500
M 2.3	0.400	2.800	2.100	1.90	45.000	4.500	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

784

822

917

1254

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	6.000	18.000
M 3.5	0.600	2.500	2.100	2.90	56.000	7.000	20.000
M4	0.700	2.800	2.100	3.30	63.000	7.500	21.000
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M7	1.000	5.500	4.300	6.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	27.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M27	3.000	20.000	16.000	24.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000



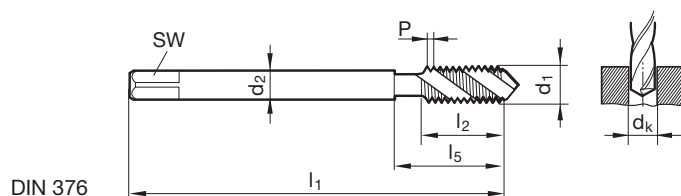
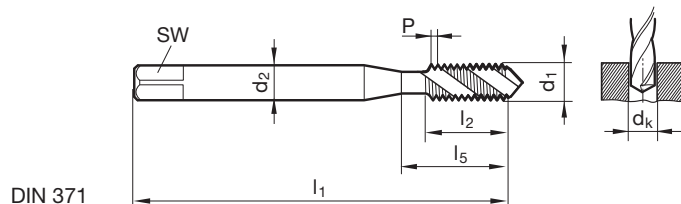
Machine taps for ISO metric threads



P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 23

Tool material	HSS-E
Tolerance on Ø	ISO3/6G
Surface	○
Type	N R40
Form	C
Internal cooling	



DIN 2184-1 DIN 371

Article no.

844

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

848

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200	1.800	2.50	56.000	6.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	7.500	21.000
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M7	1.000	5.500	4.300	6.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000

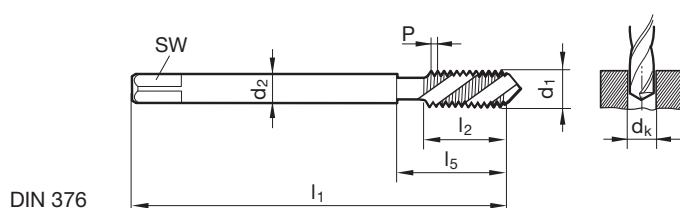
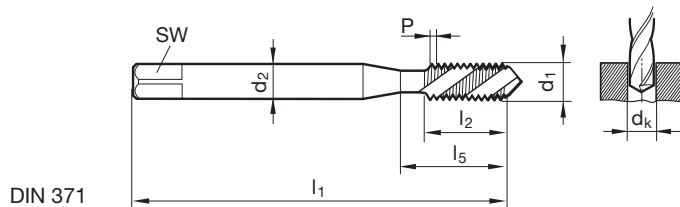
Machine taps for ISO metric threads



P ≤ 800 Cutting data page 24

M	
K	
N	
S	
H	

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N L40-LH
Form	C
Internal cooling	

**DIN 2184-1 DIN 371**

Article no.

786

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

787

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000



Oil feed taps for ISO metric threads

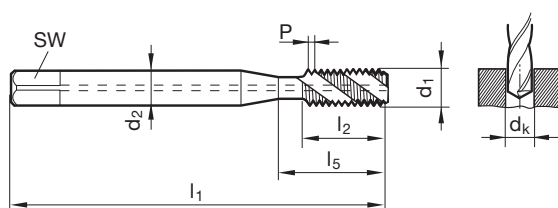


P ≤ 800 Cutting data page 24

M	
K	
N	
S	
H	

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N R40
Form	C
Internal cooling	

Steel



DIN 2184-1 DIN 371

Article no.

1893

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

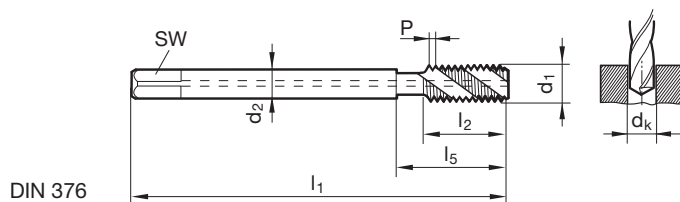
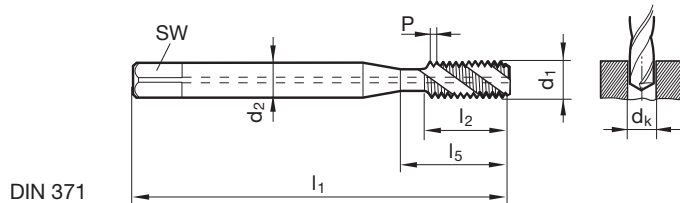
Oil feed taps for ISO metric threads



P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 24

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	S
Type	N R40
Form	C
Internal cooling	



DIN 2184-1 DIN 371

Article no.

2438

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

2439

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000



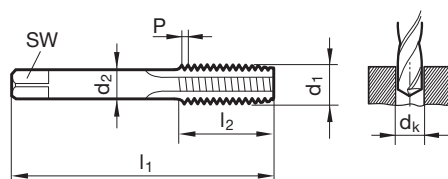
Machine taps for ISO metric threads



P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 23

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N R40
Form	C
Internal cooling	



DIN 2184-2 DIN 352

Article no.

993

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	36.000	8.000	
M 2.5	0.450	2.800	2.100	2.05	40.000	9.000	
M3	0.500	3.500	2.700	2.50	40.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	45.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	45.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	50.000	8.500	24.000
M6	1.000	6.000	4.900	5.00	56.000	11.000	27.000
M8	1.250	6.000	4.900	6.80	63.000	14.000	32.000
M10	1.500	7.000	5.500	8.50	70.000	16.000	36.000
M12	1.750	9.000	7.000	10.20	75.000	18.500	40.000
M16	2.000	12.000	9.000	14.00	80.000	20.000	45.000
M18	2.500	14.000	11.000	15.50	95.000	25.000	50.000
M20	2.500	16.000	12.000	17.50	95.000	25.000	50.000
M22	2.500	18.000	14.500	19.50	100.000	27.000	50.000

Machine taps for ISO metric threads



P	≤ 1000
M	○
K	○
N	○
S	○
H	○

Cutting data page 24

Tool material

HSS-E

Tolerance on Ø

ISO2/6H

ISO2/6H

ISO2/6H

ISO2/6H

Surface



Type

N R40

N R40

N R40

N R40

Form

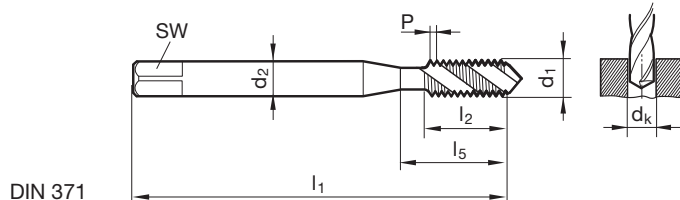
C

C

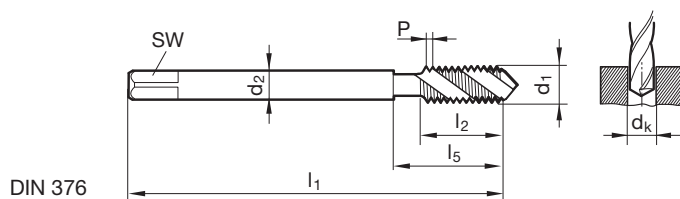
C

C

Internal cooling



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

836

889

2425

2440

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	5.000	14.500
M 2.3	0.400	2.800	2.100	1.90	45.000	4.500	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

826

890

2426

2441

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	6.000	18.000
M 3.5	0.600	2.500	2.100	2.90	56.000	7.000	20.000
M4	0.700	2.800	2.100	3.30	63.000	7.500	21.000
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M7	1.000	5.500	4.300	6.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	27.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M27	3.000	20.000	16.000	24.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000
M36	4.000	28.000	22.000	32.00	200.000	40.000	102.000



Machine taps for ISO metric threads



P ≤ 1000

Cutting data page 25

M ○

K ○

N

S

H

Tool material **HSS-E**

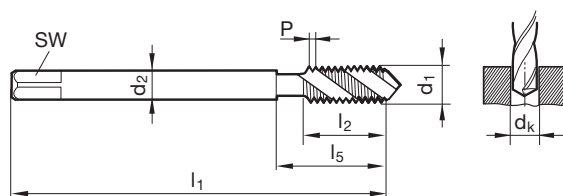
Tolerance on Ø 6HX

Surface **S**

Type N R40

Form C

Internal cooling



Company std. Company std.

Article no.

4153

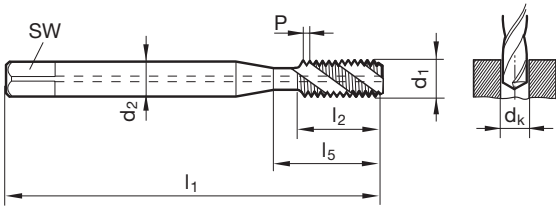
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	112.000	6.000	18.000
M4	0.700	2.800	2.100	3.30	112.000	7.500	77.000
M5	0.800	3.500	2.700	4.20	125.000	8.500	90.000
M6	1.000	4.500	3.400	5.00	125.000	11.000	90.000
M8	1.250	6.000	4.900	6.80	140.000	14.000	97.000
M10	1.500	7.000	5.500	8.50	160.000	16.000	117.000
M12	1.750	9.000	7.000	10.20	180.000	18.500	133.000
M16	2.000	12.000	9.000	14.00	220.000	20.000	168.000
M20	2.500	16.000	12.000	17.50	280.000	25.000	225.000

Oil feed taps for ISO metric threads



P	≤ 1000
M	○
K	○
N	
S	
H	

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	A+M
Type	N R40
Form	C
Internal cooling	



DIN 2184-1 DIN 371	Article no.	2514

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000



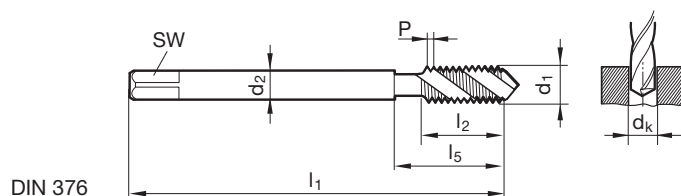
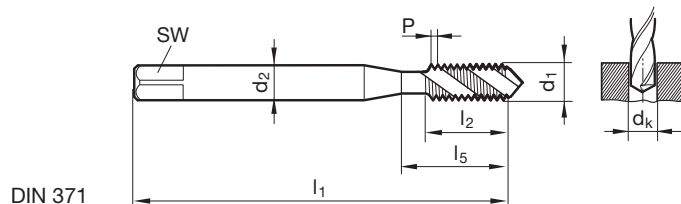
Machine taps for ISO metric threads



P ≤ 1000 Cutting data page 24

M	○
K	○
N	○
S	○
H	○

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N R40
Form	E
Internal cooling	



DIN 2184-1 DIN 371

Article no.

2790

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

2791

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M4	0.700	2.800	2.100	3.30	63.000	7.500	21.000
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000

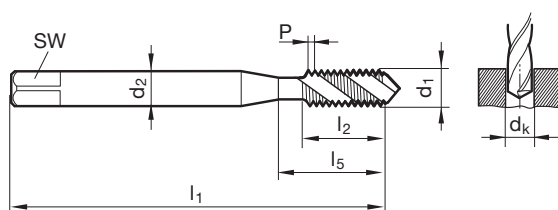
Machine taps for ISO metric threads



P ≤ 1000 Cutting data page 25

M	○
K	○
N	
S	
H	

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	S
Type	N R40
Form	C
Internal cooling	



DIN 2184-1 DIN 371

Article no.

174

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

196

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000



Machine taps for ISO metric threads

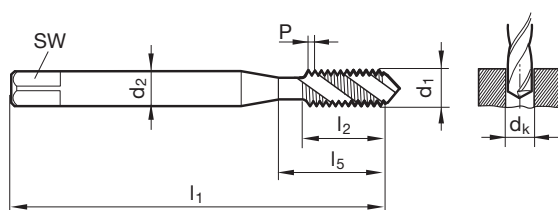


Cutting data page 25

P	•
M	•
K	○
N	○
S	○
H	

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	A
Type	VA R45
Form	C
Internal cooling	

NEW



DIN 2184-1 DIN 371/DIN 376

Article no.

393

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000

Machine taps for ISO metric threads



P	≤ 1000
M	○
K	○
N	
S	
H	

Cutting data page 25

Tool material **HSS-E-PM**

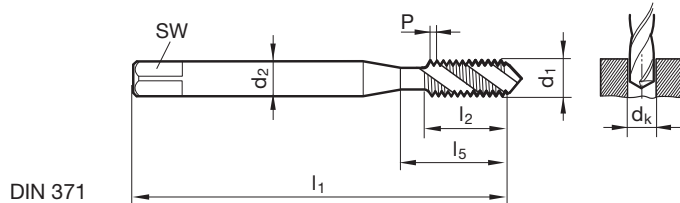
Tolerance on Ø ISO2/6H

Surface **S**

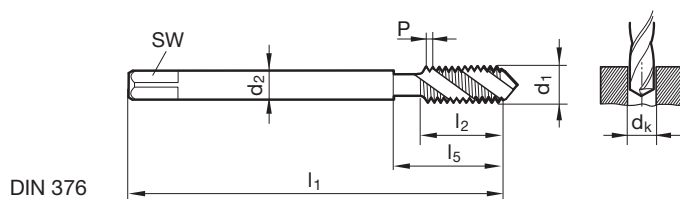
Type N R40

Form C

Internal cooling



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

1288

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

1289

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000



Machine taps for ISO metric threads

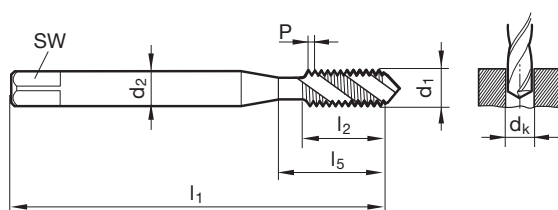


P	≤ 1000
M	○
K	○
N	○
S	○
H	○

Cutting data page 24/25

Tool material	HSS-E-PM	HSS-E	
Tolerance on Ø	ISO2/6H	ISO3/6G	ISO3/6G
Surface	C	C	S
Type	N R40	N R40	N R40
Form	C	C	C
Internal cooling			

Steel



DIN 2184-1 DIN 371

Article no.

1290

2994

2995

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000

Machine taps for ISO metric threads



Cutting data page 25

P	•
M	•
K	○
N	•
S	○
H	

Tool material

HSS-E-PM

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface

S

C

Type

N R50

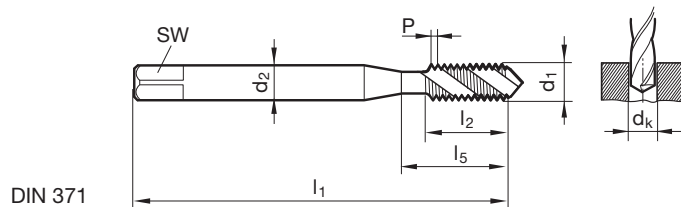
N R50

Form

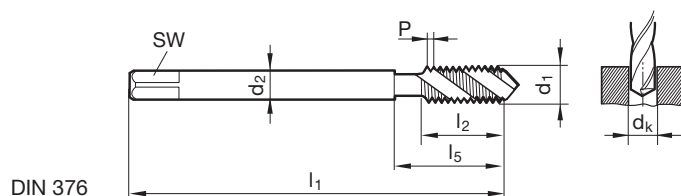
C

C

Internal cooling



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

767

1152

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

1098

1293

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000



Machine taps for ISO metric threads



Cutting data page 25

P	•
M	•
K	○
N	•
S	○
H	

Tool material

HSS-E-PM

Tolerance on Ø

6HX

6HX

Surface

S

C

Type

VA R50

VA R50

Form

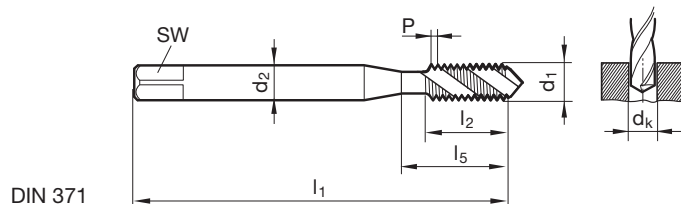
C

C

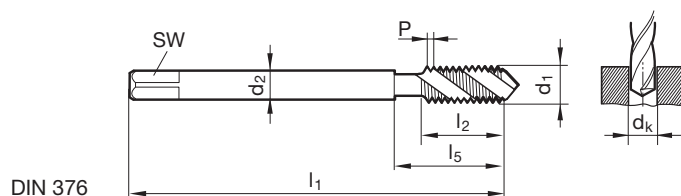
Internal cooling

X

X



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

761

1139

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	2.500	18.000
M4	0.700	4.500	3.400	3.30	63.000	3.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	4.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	5.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	6.300	35.000
M10	1.500	10.000	8.000	8.50	100.000	7.500	39.000

DIN 2184-1 DIN 376

Article no.

763

1142

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	8.800	63.000
M14	2.000	11.000	9.000	12.00	110.000	10.000	58.000
M16	2.000	12.000	9.000	14.00	110.000	10.000	58.000
M20	2.500	16.000	12.000	17.50	140.000	12.500	85.000

Machine taps for ISO metric threads



P	≤ 1200
M	
K	
N	
S	
H	

Cutting data page 23

Tool material

HSS-E-PM

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface



Type

H R15

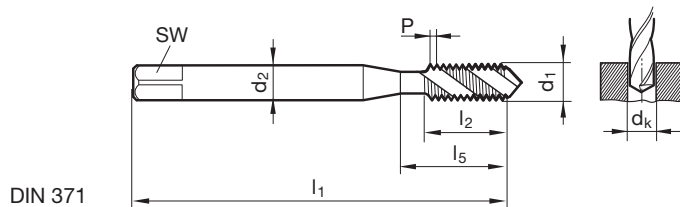
H R15

Form

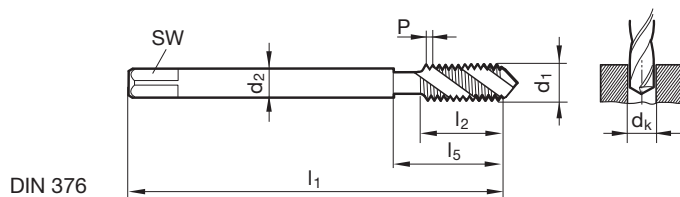
C

C

Internal cooling



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

872

1577

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

935

1578

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000



Oil feed taps for ISO metric threads



P	≤ 1200
M	
K	
N	
S	
H	

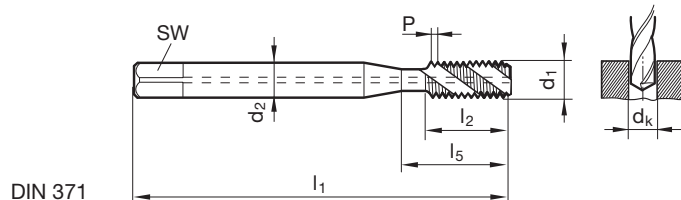
Cutting data page 23

Tool material **HSS-E-PM**

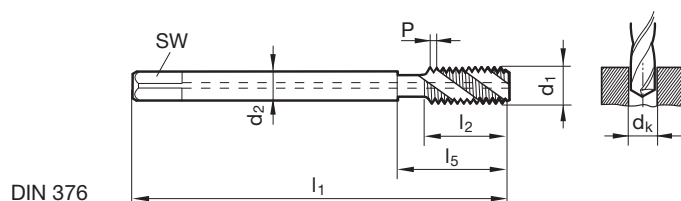
Tolerance on Ø 6HX

Surface **C**Type **H R15**Form **C**

Internal cooling



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

1188

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

1194

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	27.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000

Oil feed taps for ISO metric threads



P ≤ 1200 Cutting data page 23

M	
K	•
N	≥ 7
S	
H	

Tool material

HSS-E-PM

Tolerance on Ø

6HX

6HX

Surface

C

C

Type

H

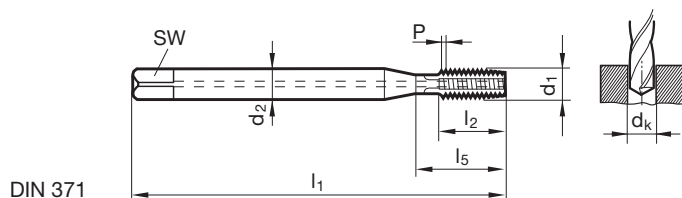
H

Form

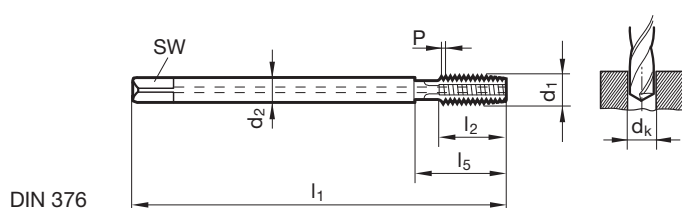
C

E

Internal cooling



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

302

1091

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

297

4165

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000



Oil feed taps for ISO metric threads



P ≤ 1200 Cutting data page 23

M	
K	•
N	≥ 7
S	
H	

Tool material **HSS-E**

Tolerance on Ø 6HX

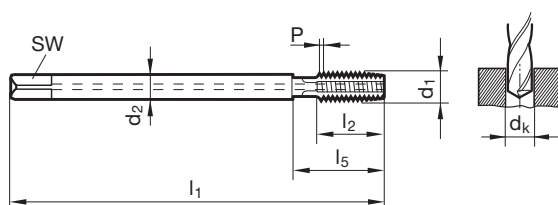
Surface **C**

Type **H**

Form **C**

Internal cooling 

Steel



DIN 2184-1 DIN 376

Article no.

778

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M27	3.000	20.000	16.000	24.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000
M33	3.500	25.000	20.000	29.50	180.000	40.000	91.000
M36	4.000	28.000	22.000	32.00	200.000	50.000	102.000
M39	4.000	32.000	24.000	35.00	200.000	50.000	107.000

Oil feed taps for ISO metric threads

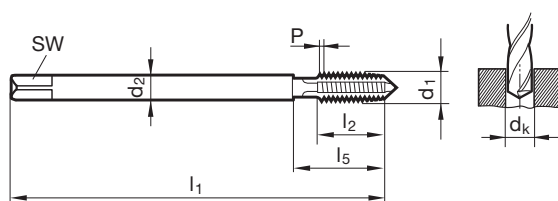


P ≤ 1200 Cutting data page 23

M	
K	•
N	≥ 7
S	
H	

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	C
Type	H
Form	C
Internal cooling	

NEW



Company std. ~DIN 376

Article no.

779

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M16	2.000	12.000	9.000	14.00	160.000	26.000	100.000
M20	2.500	16.000	12.000	17.50	180.000	32.000	120.000
M24	3.000	18.000	14.500	21.00	200.000	36.000	120.000
M27	3.000	20.000	16.000	24.00	225.000	36.000	145.000
M30	3.500	22.000	18.000	26.50	250.000	40.000	160.000
M33	3.500	25.000	20.000	29.50	275.000	40.000	170.000
M36	4.000	28.000	22.000	32.00	300.000	50.000	180.000
M39	4.000	32.000	24.000	35.00	325.000	50.000	210.000



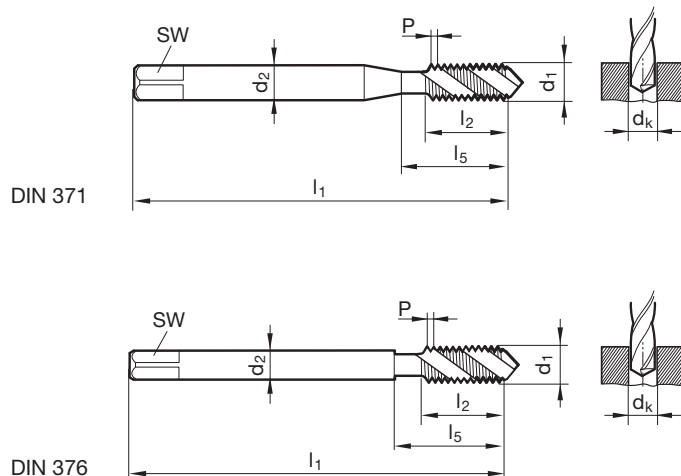
Machine taps for ISO metric threads



P	≤ 1200
M	
K	
N	
S	
H	

Cutting data page 25

Tool material	HSS-E		
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H
Surface			
Type	H R40	H R40	H R40
Form	C	C	C
Internal cooling			



DIN 2184-1 DIN 371

Article no.

811

947

2850

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.3	0.400	2.800	2.100	1.90	45.000	4.500	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M7	1.000	7.000	5.500	6.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

823

950

2851

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	6.000	18.000
M 3.5	0.600	2.500	2.100	2.90	56.000	7.000	20.000
M4	0.700	2.800	2.100	3.30	63.000	7.500	21.000
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	27.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000

Machine taps for ISO metric threads



P	≤ 1200
M	
K	
N	
S	
H	

Cutting data page 25

Tool material

HSS-E

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface

S

C

Type

H R40

H R40

Form

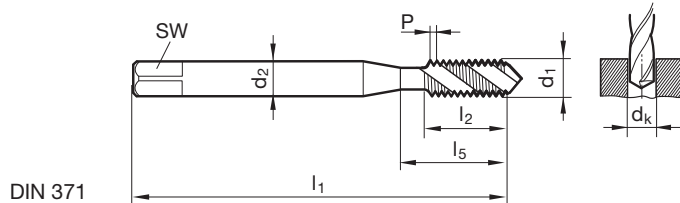
C

C

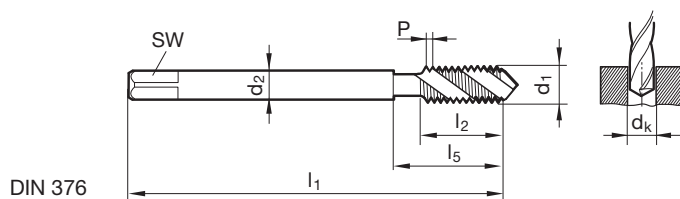
Internal cooling

X

X



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

361

1916

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M7	1.000	7.000	5.500	6.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

362

1917

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	6.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	7.500	21.000
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	27.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000



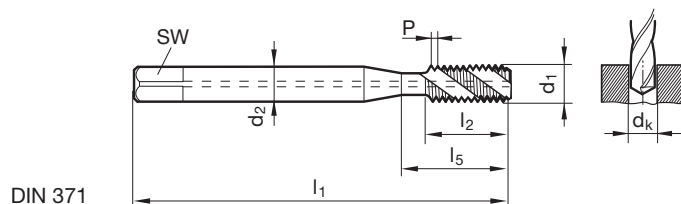
Oil feed taps for ISO metric threads



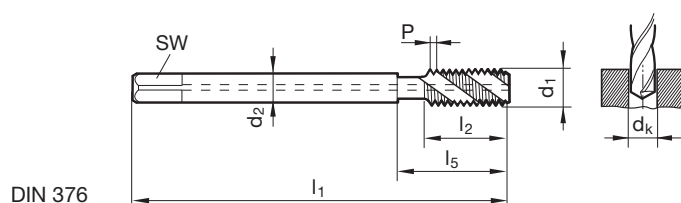
P	≤ 1200
M	
K	
N	
S	
H	

Cutting data page 25

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	H R40
Form	C
Internal cooling	



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

1894

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

1901

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000

Machine taps for ISO metric threads



P ≤ 1200 Cutting data page 25

M	
K	
N	
S	
H	

Tool material

HSS-E

Tolerance on Ø

ISO3/6G

ISO3/6G

Surface


S

Type

H R40

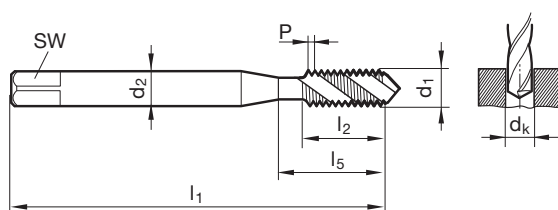
H R40

Form

C

C

Internal cooling



DIN 2184-1 DIN 371

Article no.

2985

2986

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000



Machine nut taps for ISO metric threads

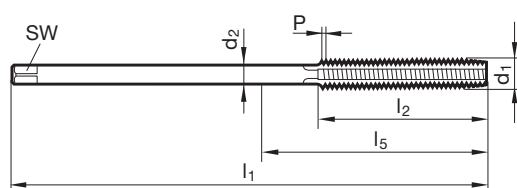


P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 18

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N
Form	
Internal cooling	

Steel



DIN 357 DIN 357

Article no.

851

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	70.000	22.000	30.000
M4	0.700	2.800	2.100	3.30	90.000	25.000	33.000
M5	0.800	3.500	2.700	4.20	100.000	28.000	38.000
M6	1.000	4.500	3.400	5.00	110.000	32.000	44.000
M8	1.250	6.000	4.900	6.80	125.000	40.000	61.000
M10	1.500	7.000	5.500	8.50	140.000	45.000	85.000
M12	1.750	9.000	7.000	10.20	180.000	50.000	120.000
M16	2.000	12.000	9.000	14.00	200.000	63.000	145.000
M20	2.500	16.000	12.000	17.50	250.000	70.000	170.000
M30	3.500	22.000	18.000	26.50	315.000	100.000	230.000

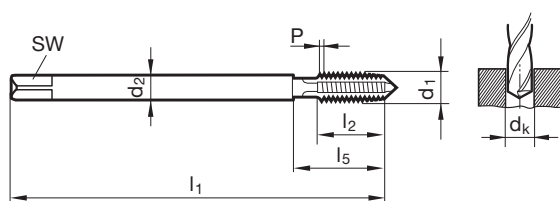
Machine taps for ISO metric threads



P ≤ 800 Cutting data page 19

M	
K	
N	
S	
H	

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N
Form	B
Internal cooling	



Company std. Company std.

Article no.

998

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	70.000	18.000	35.000
M4	0.700	2.800	2.100	3.30	90.000	22.000	55.000
M5	0.800	3.500	2.700	4.20	100.000	24.000	65.000
M6	1.000	4.500	3.400	5.00	110.000	25.000	75.000
M8	1.250	6.000	4.900	6.80	125.000	28.000	68.000
M10	1.500	7.000	5.500	8.50	140.000	30.000	80.000
M12	1.750	9.000	7.000	10.20	180.000	35.000	115.000
M14	2.000	11.000	9.000	12.00	200.000	35.000	125.000
M16	2.000	12.000	9.000	14.00	200.000	40.000	130.000
M20	2.500	16.000	12.000	17.50	250.000	45.000	165.000



Machine combination drill taps for ISO metric threads

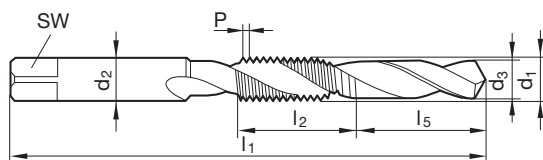


P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 18

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N
Form	D
Internal cooling	

Steel



Company std. Company std.

Article no.

1839

d1	P	d2	d3	SW	l1	l5	l2	Code no.
	mm	mm	mm	mm	mm	mm	mm	
M3	0.500	3.500	2.500	2.700	62.000	11.000	12.000	3.000
M4	0.700	4.500	3.300	3.400	66.000	10.000	16.000	4.000
M5	0.800	6.000	4.200	4.900	75.000	12.000	18.000	5.000
M6	1.000	6.000	5.000	4.900	81.000	14.000	20.000	6.000
M8	1.250	6.000	6.800	4.900	93.000	20.000	12.000	8.000
M10	1.500	7.000	8.500	5.500	99.000	22.000	14.000	10.000
M12	1.750	9.000	10.200	7.000	106.000	25.000	16.000	12.000

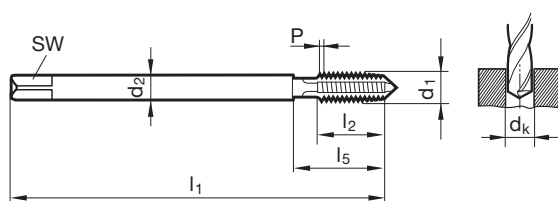
Machine taps for ISO metric threads



P ≤ 800 Cutting data page 23

M	
K	
N	
S	
H	

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N R40
Form	C
Internal cooling	



Company std. Company std.

Article no.

888

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	90.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	125.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	140.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	160.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	180.000	14.000	
M10	1.500	7.000	5.500	8.50	200.000	16.000	140.000
M12	1.750	9.000	7.000	10.20	220.000	18.500	160.000
M14	2.000	11.000	9.000	12.00	220.000	20.000	160.000
M16	2.000	12.000	9.000	14.00	220.000	20.000	16.000
M20	2.500	16.000	12.000	17.50	280.000	25.000	220.000



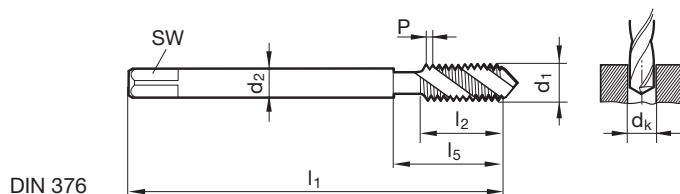
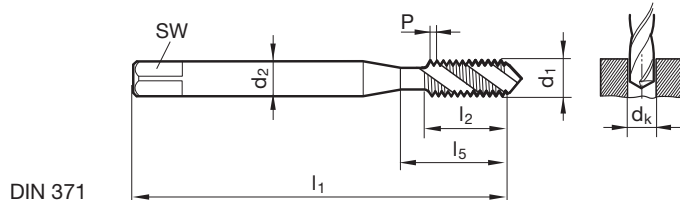
Machine taps for ISO metric threads



Cutting data page 19

P	≤ 800
M	
K	
N	
S	
H	

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N L15
Form	D
Internal cooling	



DIN 2184-1 DIN 371

Article no.

808

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

820

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200	1.800	2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000

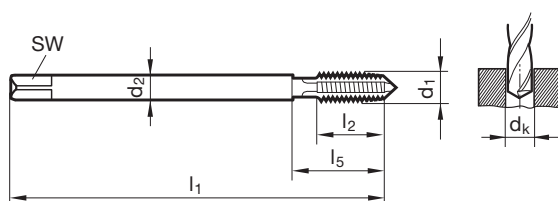
Machine taps for ISO metric fine threads



Cutting data page 21

P	•
M	•
K	○
N	○
S	○
H	

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	S
Type	N
Form	B
Internal cooling	

NEW**DIN 2184-1 DIN 374**

Article no.

4219

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M 8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007



Machine taps for ISO metric fine threads

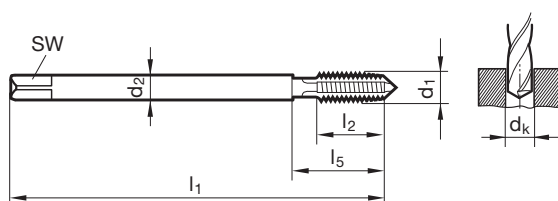


Cutting data page 19

P	≤ 800
M	
K	
N	
S	
H	

Tool material	HSS-E		
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H
Surface	○	●	●
Type	N	N	N
Form	B	B	B
Internal cooling			

Steel



DIN 2184-1 DIN 374

Article no.

827

832

2888

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 3 X0.35	2.200		2.65	56.000	7.000	18.000	3.002
M 3.5 X0.35	2.500	2.100	3.15	56.000	8.000	20.000	3.502
M 4 X0.5	2.800	2.100	3.50	63.000	8.000	21.000	4.003
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M 6 X0.5	4.500	3.400	5.50	80.000	13.000	30.000	6.003
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 6 X0.75	4.500	3.400	5.20	100.000	13.000	30.000	6.004
M 7 X0.75	5.500	4.300	6.20	80.000	13.000	30.000	7.004
M 8 X0.5	6.000	4.900	7.50	80.000	14.000	30.000	8.003
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M9 x 1	7.000	5.500	8.00	90.000	16.000	35.000	9.005
M10 X0.75	7.000	5.500	9.20	90.000	16.000	35.000	10.004
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M10 x 1	7.000	5.500	9.00	90.000	17.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	20.000	39.000	10.006
M11 x 1	8.000	6.200	10.00	90.000	20.000	33.000	11.005
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.00	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	12.80	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M15 x 1	12.000	9.000	14.00	100.000	20.000	40.000	15.005
M15 X1.5	12.000	9.000	13.50	100.000	20.000	44.000	15.007
M16 x 1	12.000	9.000	15.00	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 x 1	14.000	11.000	17.00	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M18 x 2	14.000	11.000	16.00	125.000	30.000	58.000	18.008
M20 x 1	16.000	12.000	19.00	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M20 x 2	16.000	12.000	18.00	140.000	32.000	60.000	20.008
M22 X1.5	18.000	14.500	20.50	125.000	25.000	44.000	22.007
M22 x 2	18.000	14.500	20.00	140.000	32.000	62.000	22.008
M24 x 1	18.000	14.500	23.00	140.000	28.000	48.000	24.005



DIN 2184-1 DIN 374

Article no.

827

832

2888

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	28.000	48.000	24.008
M26 X1.5	18.000	14.500	24.50	140.000	28.000	50.000	26.007
M27 X1.5	20.000	16.000	25.50	140.000	28.000	53.000	27.007
M27 x 2	20.000	16.000	25.00	140.000	28.000	53.000	27.008
M28 X1.5	20.000	16.000	26.50	140.000	28.000	53.000	28.007
M30 X1.5	22.000	18.000	28.50	150.000	28.000	53.000	30.007
M30 x 2	22.000	18.000	28.00	150.000	28.000	53.000	30.008
M32 X1.5	22.000	18.000	30.50	150.000	28.000	53.000	32.007
M33 X1.5	25.000	20.000	31.50	160.000	30.000	56.000	33.007
M35 X1.5	28.000	22.000	33.50	170.000	30.000	56.000	35.007
M36 X1.5	28.000	22.000	34.50	170.000	30.000	56.000	36.007
M38 X1.5	28.000	22.000	36.50	170.000	30.000	56.000	38.007
M40 X1.5	32.000	24.000	38.50	170.000	30.000	57.000	40.007



Machine taps for ISO metric fine threads

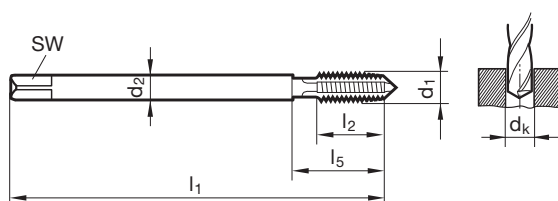


P	≤ 1000
M	○
K	
N	
S	
H	

Cutting data page 19/20

Tool material	HSS-E	
Tolerance on Ø	ISO3/6G	ISO3/6G
Surface	S	○
Type	N	N
Form	B	B
Internal cooling		

Steel



DIN 2184-1 DIN 374

Article no.

2993

316

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007

Machine taps for ISO metric fine threads



P	≤ 1000
M	○
K	
N	
S	
H	

Cutting data page 20

Tool material

HSS-E

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface

A + M

●

Type

N

N

Form

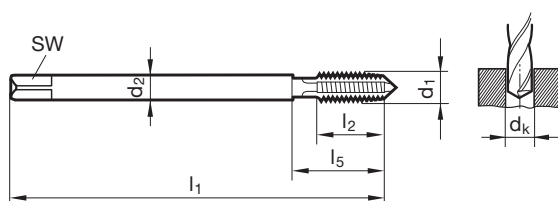
B

B

Internal cooling

✗

✗



DIN 2184-1 DIN 374

Article no.

2878

2879

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	28.000	48.000	24.008
M26 X1.5	18.000	14.500	24.50	140.000	28.000	50.000	26.007
M27 X1.5	20.000	16.000	25.50	140.000	28.000	53.000	27.007
M27 x 2	20.000	16.000	25.00	140.000	28.000	53.000	27.008
M28 X1.5	20.000	16.000	26.50	140.000	28.000	53.000	28.007
M30 X1.5	22.000	18.000	28.50	150.000	28.000	53.000	30.007
M30 x 2	22.000	18.000	28.00	150.000	28.000	53.000	30.008
M32 X1.5	22.000	18.000	30.50	150.000	28.000	53.000	32.007
M36 X1.5	28.000	22.000	34.50	170.000	30.000	56.000	36.007
M40 X1.5	32.000	24.000	38.50	170.000	30.000	57.000	40.007
M42 X1.5	32.000	24.000	40.50	170.000	30.000	57.000	42.007
M45 X1.5	36.000	29.000	43.50	180.000	32.000	60.000	45.007
M48 X1.5	36.000	29.000	46.50	190.000	32.000	60.000	48.007
M50 X1.5	36.000	29.000	48.50	190.000	32.000	60.000	50.007



Machine taps for ISO metric fine threads



P	≤ 1000
M	
K	
N	
S	
H	

Cutting data page 21

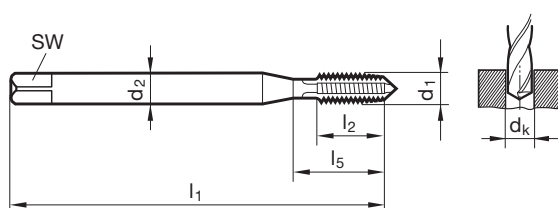
Tool material **Solid carbide**

Tolerance on Ø 6HX

Surface 

Type N

Form B

Internal cooling 

DIN 2184-1 ~DIN 371

Article no.

943

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	6.000	4.900	4.50	70.000	7.500	25.000	5.003
M 6 X0.5	6.000	4.900	5.50	80.000	7.500	30.000	6.003
M 6 X0.75	6.000	4.900	5.20	80.000	11.500	30.000	6.004
M 8 x 1	8.000	6.200	7.00	90.000	15.000	35.000	8.005
M10 x 1	10.000	8.000	9.00	90.000	15.000	35.000	10.005
M10 X1.25	10.000	8.000	8.80	100.000	19.000	39.000	10.006
M12 x 1	12.000	9.000	11.00	100.000	15.000	40.000	12.005
M12 X1.25	12.000	9.000	10.80	100.000	19.000	40.000	12.006
M12 X1.5	12.000	9.000	10.50	100.000	22.500	40.000	12.007

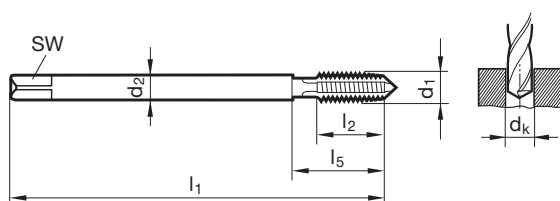
Machine taps for ISO metric fine threads



P	≤ 1000
M	
K	
N	
S	
H	

Cutting data page 21

Tool material	Solid carbide
Tolerance on Ø	6HX
Surface	
Type	N
Form	B
Internal cooling	



DIN 2184-1 DIN 374

Article no.

944

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M14 X1.25	11.000	9.000	12.80	100.000	19.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	22.500	40.000	14.007
M16 x 1	12.000	9.000	15.00	100.000	15.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	22.500	44.000	16.007



Machine taps for ISO metric fine threads



P ≤ 1200 Cutting data page 21

M	
K	
N	
S	
H	

Tool material

HSS-E

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface



Type

H

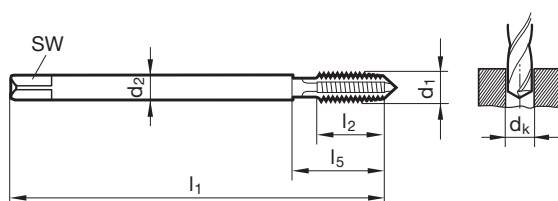
H

Form

B

B

Internal cooling



DIN 2184-1 DIN 374

Article no.

828

2943

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 3 X0.35	2.200		2.65	56.000	7.000	18.000	3.002
M 4 X0.5	2.800	2.100	3.50	63.000	8.000	21.000	4.003
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M 6 X0.5	4.500	3.400	5.50	80.000	13.000	30.000	6.003
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M 8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007

Machine taps for ISO metric fine threads



P	≤ 1000
M	•
K	
N	
S	
H	

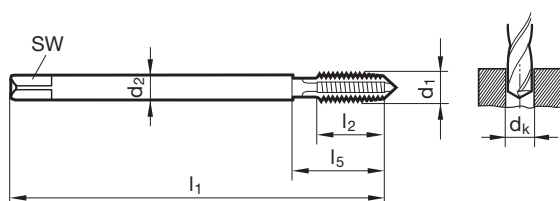
Cutting data page 20

Tool material **HSS-E-PM**

Tolerance on Ø ISO2/6H

Surface **S**Type **N**Form **B**

Internal cooling



DIN 2184-1 DIN 374

Article no.

1291

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.25	11.000	9.000	12.80	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	28.000	48.000	24.008



Machine taps for ISO metric fine threads

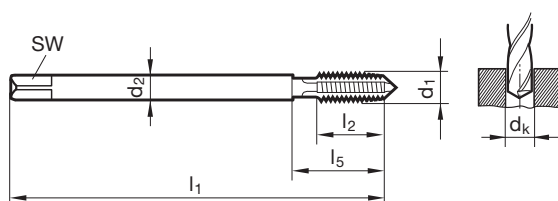


P	≤ 1200
M	
K	
N	
S	
H	

Cutting data page 21

Tool material	HSS-E
Tolerance on Ø	ISO3/6G
Surface	S
Type	H
Form	B
Internal cooling	

Steel



DIN 2184-1 DIN 374

Article no.

2983

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007

Machine taps for ISO metric fine threads



P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 18/22

Tool material

HSS-E

Tolerance on Ø

ISO2/6H

ISO3/6G

Surface



Type

N

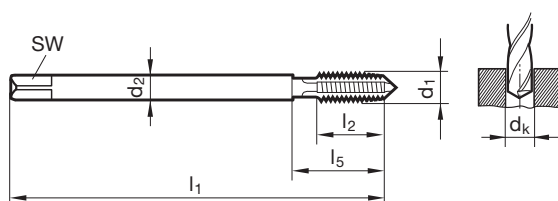
N

Form

C

C

Internal cooling



DIN 2184-1 DIN 374

Article no.

830

829

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 3 X0.35	2.200		2.65	56.000	4.000	18.000	3.002
M 3.5 X0.35	2.500	2.100	3.15	56.000	4.000	20.000	3.502
M 4 X0.5	2.800	2.100	3.50	63.000	5.000	21.000	4.003
M 5 X0.5	3.500	2.700	4.50	70.000	5.000	25.000	5.003
M 6 X0.5	4.500	3.400	5.50	80.000	5.000	30.000	6.003
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 7 X0.75	5.500	4.300	6.20	80.000	8.000	30.000	7.004
M 8 X0.5	6.000	4.900	7.50	80.000	8.000	30.000	8.003
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M9 x 1	7.000	5.500	8.00	90.000	11.000	35.000	9.005
M10 X0.75	7.000	5.500	9.20	90.000	11.000	35.000	10.004
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M11 x 1	8.000	6.200	10.00	90.000	11.000	33.000	11.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 x 1	11.000	9.000	13.00	100.000	11.000	40.000	14.005
M14 X1.25	11.000	9.000	12.80	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M15 x 1	12.000	9.000	14.00	100.000	11.000	40.000	15.005
M16 x 1	12.000	9.000	15.00	100.000	11.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 x 1	14.000	11.000	17.00	110.000	12.000	44.000	18.005
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M18 x 2	14.000	11.000	16.00	125.000	20.000	58.000	18.008
M20 x 1	16.000	12.000	19.00	125.000	12.000	44.000	20.005
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M20 x 2	16.000	12.000	18.00	140.000	20.000	60.000	20.008
M22 x 1	18.000	14.500	21.00	125.000	12.000	44.000	22.005
M22 X1.5	18.000	14.500	20.50	125.000	16.000	44.000	22.007
M22 x 2	18.000	14.500	20.00	140.000	22.000	62.000	22.008
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	22.000	48.000	24.008
M25 X1.5	18.000	14.500	23.50	140.000	20.000	50.000	25.007



DIN 2184-1 DIN 374

Article no.

830

829

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M26 X1.5	18.000	14.500	24.50	140.000	20.000	50.000	26.007
M27 x 2	20.000	16.000	25.00	140.000	20.000	53.000	27.008
M28 X1.5	20.000	16.000	26.50	140.000	20.000	53.000	28.007
M30 X1.5	22.000	18.000	28.50	150.000	20.000	53.000	30.007
M30 x 2	22.000	18.000	28.00	150.000	20.000	53.000	30.008
M32 X1.5	22.000	18.000	30.50	150.000	25.000	53.000	32.007
M35 X1.5	28.000	22.000	33.50	170.000	25.000	56.000	35.007
M36 X1.5	28.000	22.000	34.50	170.000	25.000	56.000	36.007
M38 X1.5	28.000	22.000	36.50	170.000	25.000	56.000	38.007
M40 X1.5	32.000	24.000	38.50	170.000	25.000	57.000	40.007
M50 X1.5	36.000	29.000	48.50	190.000	27.000	60.000	50.007
M63 X1.5	50.000	39.000	61.50	275.000	25.000	62.000	63.007

Steel

Machine taps for ISO metric fine threads



P ≤ 800 Cutting data page 22

M	
K	
N	
S	
H	

Tool material

HSS-E

Tolerance on Ø

ISO2/6H

ISO2/6H

ISO2/6H

Surface



Type

N R15

N R15

N R15

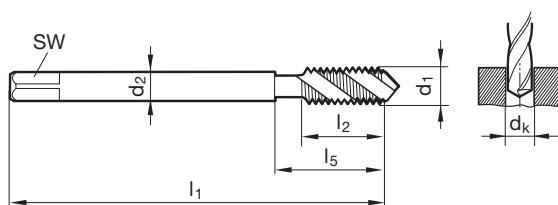
Form

C

C

C

Internal cooling



DIN 2184-1 DIN 374

Article no.

833

1971

2838

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 4 X0.5	2.800	2.100	3.50	63.000	5.000	21.000	4.003
M 5 X0.5	3.500	2.700	4.50	70.000	5.000	25.000	5.003
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 x 1	11.000	9.000	13.00	100.000	11.000	40.000	14.005
M14 X1.25	11.000	9.000	12.80	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 x 1	12.000	9.000	15.00	100.000	11.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 x 1	16.000	12.000	19.00	125.000	12.000	44.000	20.005
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	16.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	22.000	48.000	24.008
M27 X1.5	20.000	16.000	25.50	140.000	20.000	53.000	27.007
M27 x 2	20.000	16.000	25.00	140.000	20.000	53.000	27.008
M30 X1.5	22.000	18.000	28.50	150.000	20.000	53.000	30.007
M30 x 2	22.000	18.000	28.00	150.000	20.000	53.000	30.008



Machine taps for ISO metric fine threads



P ≤ 1000

Cutting data page 23

M ○

K ○

N

S

H

Tool material

HSS-E

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface

C

C

Type

N R15

N R15

Form

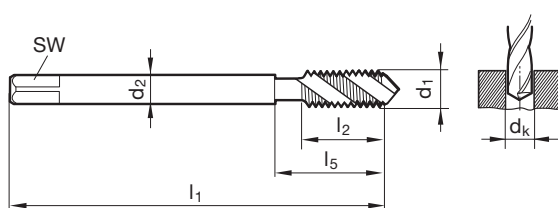
C

E

Internal cooling

X

X



DIN 2184-1 DIN 374

Article no.

4156

4157

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007

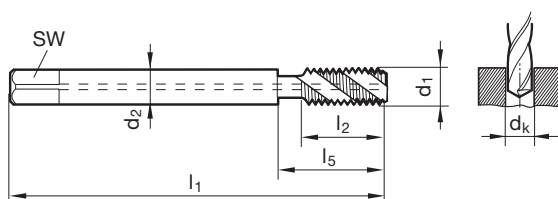
Oil feed taps for ISO metric fine threads



P ≤ 800 Cutting data page 22

M	
K	
N	
S	
H	

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N R15
Form	C
Internal cooling	



DIN 2184-1 DIN 374

Article no.

1905

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	3.500	2.700	4.50	70.000	5.000	25.000	5.003
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M 8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 x 1	11.000	9.000	13.00	100.000	11.000	40.000	14.005
M14 X1.25	11.000	9.000	12.80	100.000	15.000	40.000	14.006
M16 x 1	12.000	9.000	15.00	100.000	11.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 x 1	14.000	11.000	17.00	110.000	12.000	44.000	18.005
M20 x 1	16.000	12.000	19.00	125.000	12.000	44.000	20.005
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007



Machine taps for ISO metric fine threads

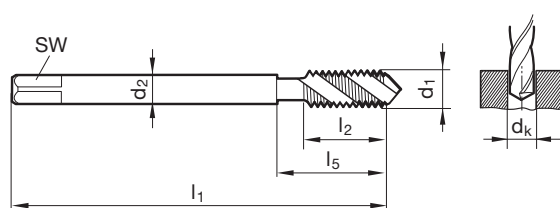


P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 23

Tool material	HSS-E		
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H
Surface	○	●	●
Type	N R40	N R40	N R40
Form	C	C	C
Internal cooling			

Steel



DIN 2184-1 DIN 374

Article no.

834

852

2843

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 3 X0.35	2.200		2.65	56.000	4.000	18.000	3.002
M 3.5 X0.35	2.500	2.100	3.15	56.000	4.000	20.000	3.502
M 4 X0.5	2.800	2.100	3.50	63.000	5.000	21.000	4.003
M 5 X0.5	3.500	2.700	4.50	70.000	5.000	25.000	5.003
M 6 X0.5	4.500	3.400	5.50	80.000	5.000	30.000	6.003
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 8 X0.5	6.000	4.900	7.50	80.000	8.000	30.000	8.003
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M 8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 X0.75	7.000	5.500	9.20	90.000	11.000	35.000	10.004
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 x 1	11.000	9.000	13.00	100.000	11.000	40.000	14.005
M14 X1.25	11.000	9.000	12.80	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 x 1	12.000	9.000	15.00	100.000	11.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 x 1	14.000	11.000	17.00	110.000	12.000	44.000	18.005
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 x 1	16.000	12.000	19.00	125.000	12.000	44.000	20.005
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	16.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	22.000	48.000	24.008
M26 X1.5	18.000	14.500	24.50	140.000	20.000	50.000	26.007
M27 X1.5	20.000	16.000	25.50	140.000	20.000	53.000	27.007
M27 x 2	20.000	16.000	25.00	140.000	20.000	53.000	27.008
M28 X1.5	20.000	16.000	26.50	140.000	20.000	53.000	28.007
M30 X1.5	22.000	18.000	28.50	150.000	20.000	53.000	30.007
M30 x 2	22.000	18.000	28.00	150.000	20.000	53.000	30.008

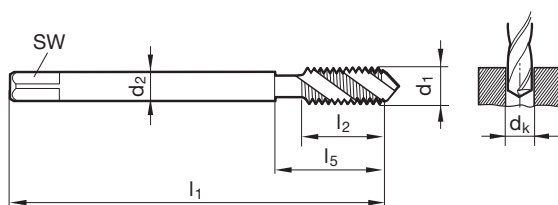
Machine taps for ISO metric fine threads



P ≤ 800 Cutting data page 23

M	
K	
N	
S	
H	

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N R40
Form	C
Internal cooling	



DIN 2184-2 DIN 2181

Article no.

1970

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	6.000	4.900	5.20	56.000	8.000	27.000	6.004
M 8 X0.5	6.000	4.900	7.50	56.000	8.000	30.000	8.003
M 8 X0.75	6.000	4.900	7.20	56.000	8.000	30.000	8.004
M 8 x 1	6.000	4.900	7.00	63.000	11.000	30.000	8.005
M10 X0.75	7.000	5.500	9.20	63.000	11.000	32.000	10.004
M10 x 1	7.000	5.500	9.00	63.000	11.000	32.000	10.005
M11 x 1	8.000	6.200	10.00	63.000	11.000	33.000	11.005
M12 x 1	9.000	7.000	11.00	70.000	11.000	35.000	12.005
M12 X1.5	9.000	7.000	10.50	70.000	16.000	35.000	12.007



Machine taps for ISO metric fine threads



P ≤ 1000

Cutting data page 24

M ○

K ○

N ○

S

H

Tool material

HSS-E

Tolerance on Ø

ISO2/6H

ISO2/6H

ISO2/6H

Surface



Type

N R40

N R40

N R40

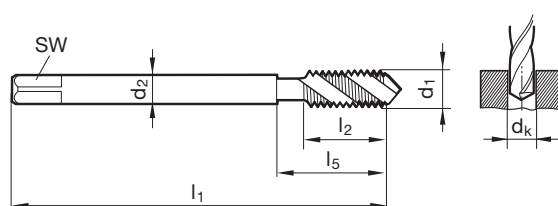
Form

C

C

E

Internal cooling



DIN 2184-1 DIN 374

Article no.

2424

2853

2792

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	3.500	2.700	4.50	70.000	5.000	25.000	5.003
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M 8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 x 1	11.000	9.000	13.00	100.000	11.000	40.000	14.005
M14 X1.25	11.000	9.000	12.80	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 x 1	12.000	9.000	15.00	100.000	11.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 x 1	14.000	11.000	17.00	110.000	12.000	44.000	18.005
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	16.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	22.000	48.000	24.008
M26 X1.5	18.000	14.500	24.50	140.000	20.000	50.000	26.007
M27 X1.5	20.000	16.000	25.50	140.000	20.000	53.000	27.007
M27 x 2	20.000	16.000	25.00	140.000	20.000	53.000	27.008
M28 X1.5	20.000	16.000	26.50	140.000	20.000	53.000	28.007
M30 X1.5	22.000	18.000	28.50	150.000	20.000	53.000	30.007
M30 x 2	22.000	18.000	28.00	150.000	20.000	53.000	30.008

Machine taps for ISO metric fine threads



P	≤ 1000
M	○
K	○
N	
S	
H	

Cutting data page 24

Tool material

HSS-E

Tolerance on Ø

ISO3/6G

ISO3/6G

ISO3/6G

Surface

S

○

●

Type

N R40

N R40

N R40

Form

C

C

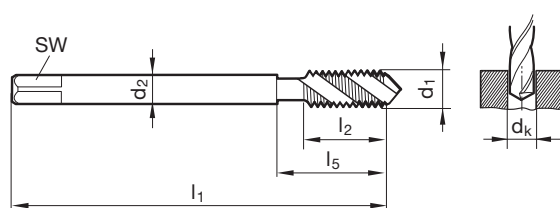
C

Internal cooling

✗

✗

✗



DIN 2184-1 DIN 374

Article no.

1049

2998

2999

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007



Machine taps for ISO metric fine threads



P ≤ 1000

Cutting data page 25

M ○

K ○

N

S

H

Tool material

HSS-E

HSS-E-PM

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface

S

S

Type

N R40

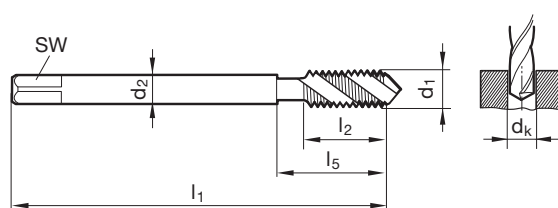
N R40

Form

C

C

Internal cooling



DIN 2184-1 DIN 374

Article no.

273

1292

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.25	11.000	9.000	12.80	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	16.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	22.000	48.000	24.008

Machine taps for ISO metric fine threads



Cutting data page 25

P	•
M	•
K	○
N	○
S	○
H	

Tool material

HSS-E-PM

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface

S**C**

Type

N R50

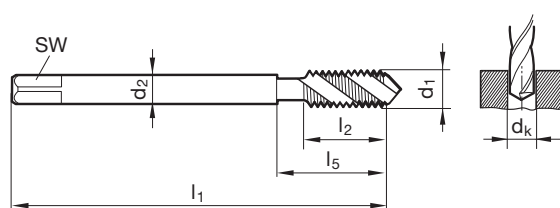
N R50

Form

C

C

Internal cooling

**DIN 2184-1 DIN 374**

Article no.

1100**1294**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007



Machine taps for ISO metric fine threads



Cutting data page 25

P	•
M	•
K	○
N	•
S	○
H	

Tool material

HSS-E-PM

Tolerance on Ø

6HX

6HX

Surface

S

C

Type

VA R50

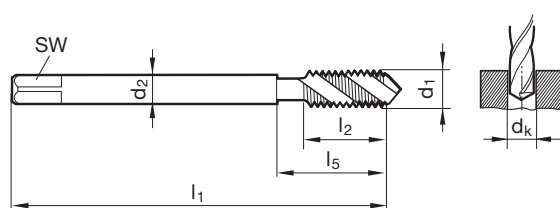
VA R50

Form

C

C

Internal cooling



DIN 2184-1 DIN 374

Article no.

764

1144

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	5.000	44.000	8.005
M8 x 1	6.000	4.900	7.00	90.000	5.000	47.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	5.000	47.000	10.005
M10 x 1	7.000	5.500	9.00	90.000	5.000	44.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	5.000	53.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	7.500	53.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	7.500	48.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	7.500	48.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	7.500	58.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	7.500	70.000	20.007

Machine taps for ISO metric fine threads



P	≤ 1200
M	
K	
N	
S	
H	

Cutting data page 23

Tool material

HSS-E-PM

Tolerance on Ø

ISO2/6H

6HX

Surface



Type

H R15

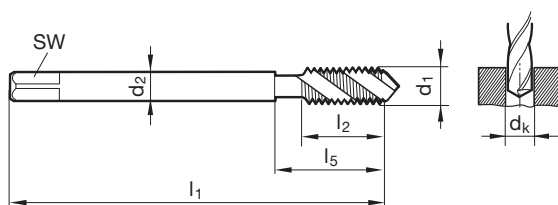
H R15

Form

C

C

Internal cooling



DIN 2184-1 DIN 374

Article no.

874

1200

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M 8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M 9 x 1	7.000	5.500	8.00	90.000	11.000	35.000	9.005
M 10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M 12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M 12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M 12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M 14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M 16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M 18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M 20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M 24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007



Oil feed taps for ISO metric fine threads



P ≤ 1200 Cutting data page 23

M	
K	•
N	≥ 7
S	
H	

Tool material

HSS-E-PM

Tolerance on Ø

6HX

6HX

Surface

C

C

Type

H

H

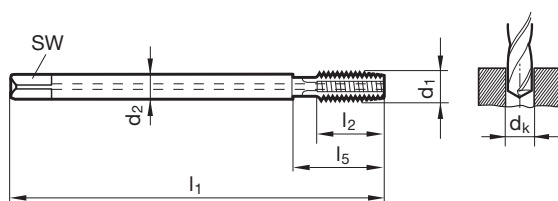
Form

E

C

Internal cooling

Steel



DIN 2184-1 DIN 374

Article no.

1007

1090

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M 6 X0.5	4.500	3.400	5.50	80.000	13.000	30.000	6.003
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M9 x 1	7.000	5.500	8.00	90.000	16.000	35.000	9.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.00	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	12.80	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.00	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007

Machine taps for ISO metric fine threads



P	≤ 1200
M	
K	
N	
S	
H	

Cutting data page 25

Tool material

HSS-E

Tolerance on Ø

ISO2/6H

ISO2/6H

ISO2/6H

Surface



Type

H R40

H R40

H R40

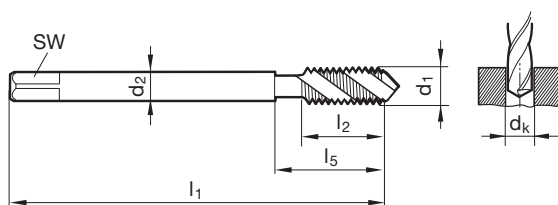
Form

C

C

C

Internal cooling



DIN 2184-1 DIN 374

Article no.

835

2852

2940

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M 8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	16.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007



Machine taps for ISO metric fine threads

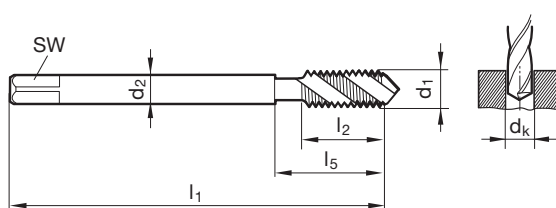


Cutting data page 25

P	•
M	•
K	○
N	○
S	○
H	

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	A
Type	VA R45
Form	C
Internal cooling	

NEW



DIN 2184-1 DIN 374

Article no.

394

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M 8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007

Machine taps for ISO metric fine threads



P	≤ 1200
M	
K	
N	
S	
H	

Cutting data page 25

Tool material

HSS-E

Tolerance on Ø

ISO3/6G

ISO3/6G

Surface

S

S

Type

H R40

H R40

Form

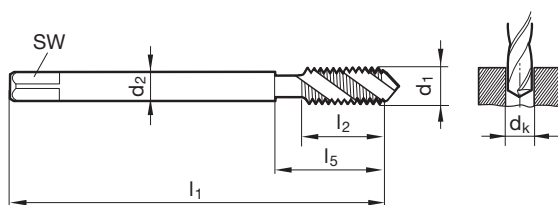
C

C

Internal cooling

X

X



DIN 2184-1 DIN 374

Article no.

2989

2988

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007



Machine taps for UNC-threads



Cutting data page 19

P	≤ 800
M	
K	
N	
S	
H	

Tool material

HSS-E

Tolerance on Ø

2B

2B

Surface



Type

N

N

Form

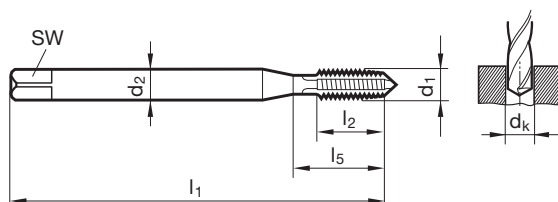
B

B

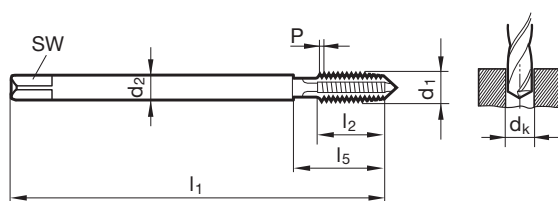
Internal cooling



~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371

Article no.

873

2889

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
1 - 64	2.800	2.100	1.55	45.000	8.000		1.854
2 - 56	2.800	2.100	1.85	45.000	9.000	14.500	2.184
3 - 48	2.800	2.100	2.10	50.000	9.000	14.500	2.515
4 - 40	3.500	2.700	2.35	56.000	11.000	18.000	2.845
5 - 40	3.500	2.700	2.65	56.000	11.000	18.000	3.175
6 - 32	4.000	3.000	2.85	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376

Article no.

878

2890

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	9.40	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	25.000	49.000	12.700
9/16 - 12	11.000	9.000	12.20	110.000	28.000	53.000	14.288
5/8 - 11	12.000	9.000	13.50	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	33.000	62.000	19.050
7/8 - 9	18.000	14.500	19.50	140.000	35.000	62.000	22.225
1 - 8	18.000	14.500	22.25	160.000	38.000	73.000	25.400
1 1/8 - 7	22.000	18.000	25.00	180.000	44.000	85.000	28.575
1 1/4 - 7	22.000	18.000	28.00	180.000	44.000	85.000	31.750
1 1/2 - 6	28.000	22.000	34.00	200.000	50.000	102.000	38.100

Machine taps for UNC-threads



P	≤ 1000
M	○
K	
N	
S	
H	

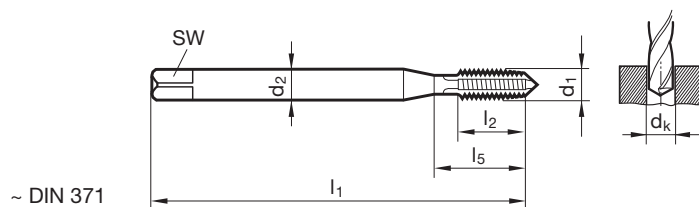
Cutting data page 20

Tool material **HSS-E**Tolerance on Ø **2B**

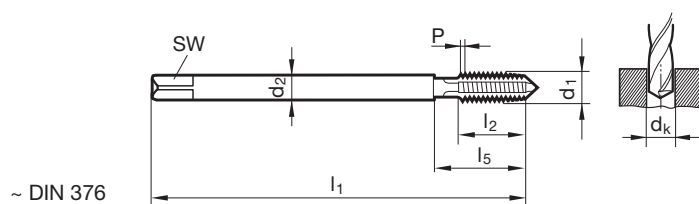
Surface

Type **N**Form **B**

Internal cooling



~ DIN 371



~ DIN 376

**DIN 2184-1 ~DIN 371**

Article no.

2881

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.35	56.000	11.000	18.000	2.845
5 - 40	3.500	2.700	2.65	56.000	11.000	18.000	3.175
6 - 32	4.000	3.000	2.85	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376

Article no.

2883

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	9.40	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	25.000	49.000	12.700
5/8 - 11	12.000	9.000	13.50	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	33.000	62.000	19.050
7/8 - 9	18.000	14.500	19.50	140.000	35.000	62.000	22.225
1 - 8	18.000	14.500	22.25	160.000	38.000	73.000	25.400



Machine taps for UNC-threads

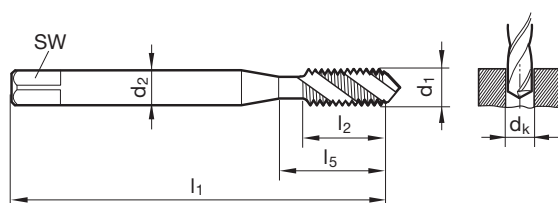


P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 22

Tool material	HSS-E
Tolerance on Ø	2B
Surface	○
Type	N R15
Form	C
Internal cooling	

Steel



DIN 2184-1 ~DIN 371

Article no.

1978

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.35	56.000	7.000	18.000	2.845
6 - 32	4.000	3.000	2.85	56.000	8.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	8.000	21.000	4.166
12 - 24	6.000	4.900	4.50	80.000	11.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	13.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	14.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	16.000	39.000	9.525

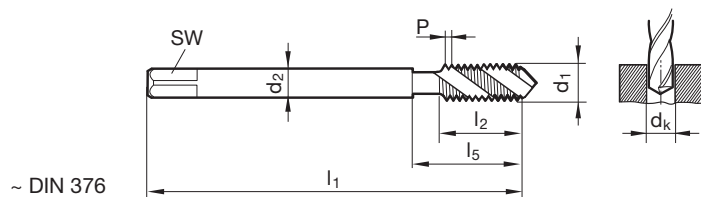
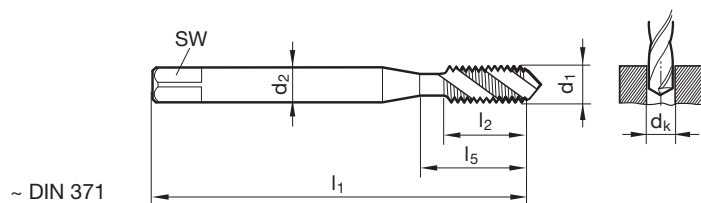
Machine taps for UNC-threads



P ≤ 800 Cutting data page 22

M	
K	
N	
S	
H	

Tool material	HSS-E
Tolerance on Ø	2B
Surface	●
Type	N R15
Form	C
Internal cooling	

**DIN 2184-1 ~DIN 371**

Article no.

2839

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.35	56.000	7.000	18.000	2.845
6 - 32	4.000	3.000	2.85	56.000	8.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	8.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	11.000	25.000	4.826

DIN 2184-1 ~DIN 376

Article no.

2840

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
1/2 - 13	9.000	7.000	10.80	110.000	20.000	49.000	12.700
7/8 - 9	18.000	14.500	19.50	140.000	28.000	62.000	22.225
1 - 8	18.000	14.500	22.25	160.000	32.000	73.000	25.400



Machine taps for UNC-threads



P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 18/22

Tool material **HSS-E**

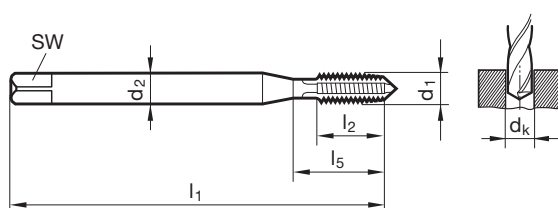
Tolerance on Ø 2B

Surface ○

Type N

Form C

Internal cooling



DIN 2184-1 ~DIN 371

Article no.

1977

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
3 - 48	2.800	2.100	2.10	50.000	6.000	14.500	2.515
4 - 40	3.500	2.700	2.35	56.000	7.000	18.000	2.845
5 - 40	3.500	2.700	2.65	56.000	7.000	18.000	3.175
6 - 32	4.000	3.000	2.85	56.000	8.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	8.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	11.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	11.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	13.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	14.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	16.000	39.000	9.525

Machine taps for UNC-threads



P ≤ 800 Cutting data page 23

M	
K	
N	
S	
H	

Tool material

HSS-E

Tolerance on Ø

2B

2B

Surface



Type

N R40

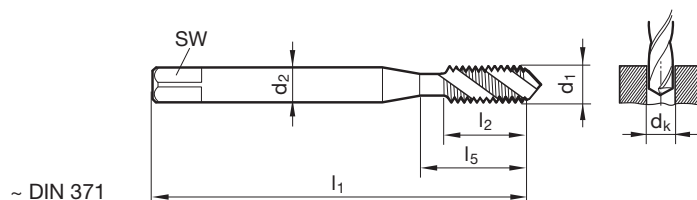
N R40

Form

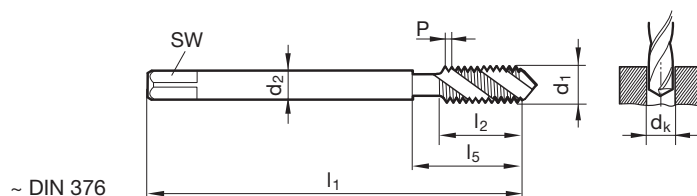
C

C

Internal cooling



~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371

Article no.

876

2844

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
2 - 56	2.800	2.100	1.85	45.000	5.000	14.500	2.184
3 - 48	2.800	2.100	2.10	50.000	6.000	14.500	2.515
4 - 40	3.500	2.700	2.35	56.000	7.000	18.000	2.845
5 - 40	3.500	2.700	2.65	56.000	7.000	18.000	3.175
6 - 32	4.000	3.000	2.85	56.000	8.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	8.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	11.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	11.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	13.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	14.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	16.000	39.000	9.525

DIN 2184-1 ~DIN 376

Article no.

881

2845

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	9.40	100.000	18.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	20.000	49.000	12.700
9/16 - 12	11.000	9.000	12.20	110.000	21.000	53.000	14.288
5/8 - 11	12.000	9.000	13.50	110.000	24.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	25.000	62.000	19.050
7/8 - 9	18.000	14.500	19.50	140.000	28.000	62.000	22.225
1 - 8	18.000	14.500	22.25	160.000	32.000	73.000	25.400



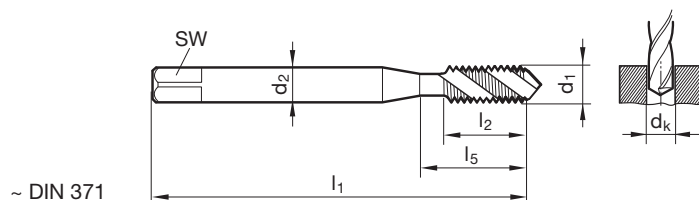
Machine taps for UNC-threads



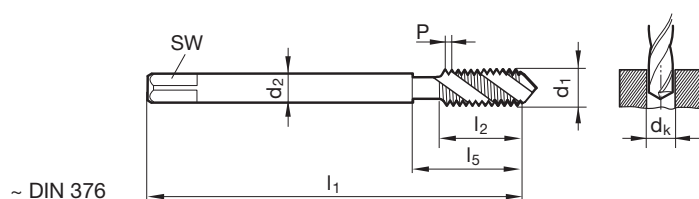
P	≤ 1000
M	○
K	○
N	○
S	○
H	○

Cutting data page 24

Tool material	HSS-E	
Tolerance on Ø	2B	2B
Surface	○	●
Type	N R40	N R40
Form	C	C
Internal cooling		



~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371

Article no.

2854

2855

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
2 - 56	2.800	2.100	1.85	45.000	5.000	14.500	2.184
4 - 40	3.500	2.700	2.35	56.000	7.000	18.000	2.845
5 - 40	3.500	2.700	2.65	56.000	7.000	18.000	3.175
6 - 32	4.000	3.000	2.85	56.000	8.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	8.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	11.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	11.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	13.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	14.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	16.000	39.000	9.525

DIN 2184-1 ~DIN 376

Article no.

2856

2857

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	9.40	100.000	18.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	20.000	49.000	12.700
9/16 - 12	11.000	9.000	12.20	110.000	21.000	53.000	14.288
5/8 - 11	12.000	9.000	13.50	110.000	24.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	25.000	62.000	19.050
7/8 - 9	18.000	14.500	19.50	140.000	28.000	62.000	22.225
1 - 8	18.000	14.500	22.25	160.000	32.000	73.000	25.400



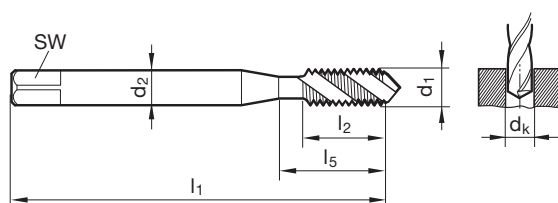
Machine taps for UNC-threads



P	≤ 1000
M	○
K	○
N	
S	
H	

Cutting data page 25

Tool material	HSS-E
Tolerance on Ø	2B
Surface	S
Type	N R40
Form	C
Internal cooling	



DIN 2184-1 ~DIN 371

Article no.

1837

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 24	6.000	4.900	3.90	70.000	11.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	11.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	13.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	14.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	16.000	39.000	9.525



Machine taps for UNF-threads



Cutting data page 19

P	≤ 800
M	
K	
N	
S	
H	

Tool material

HSS-E

Tolerance on Ø

2B

2B

Surface



Type

N

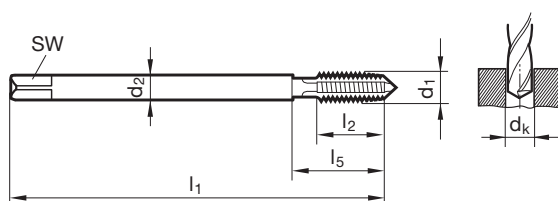
N

Form

B

B

Internal cooling



DIN 2184-1 ~DIN 374

Article no.

908

2891

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
3 - 56	1.800		2.15	50.000	9.000	14.500	2.515
4 - 48	2.200		2.40	56.000	10.000	18.000	2.845
5 - 44	2.500	2.100	2.70	56.000	10.000	18.000	3.175
6 - 40	2.500	2.100	2.95	56.000	11.000	20.000	3.505
8 - 36	2.800	2.100	3.50	63.000	12.000	21.000	4.166
10 - 32	3.500	2.700	4.10	70.000	14.000	25.000	4.826
12 - 28	4.000	3.000	4.60	80.000	16.000	30.000	5.486
1/4 - 28	4.500	3.400	5.50	80.000	16.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	18.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	18.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	20.000	40.000	12.700
9/16 - 18	11.000	9.000	12.90	100.000	22.000	40.000	14.288
5/8 - 18	12.000	9.000	14.50	100.000	22.000	44.000	15.875
3/4 - 16	14.000	11.000	17.50	110.000	25.000	44.000	19.050
7/8 - 14	18.000	14.500	20.40	125.000	25.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	28.000	50.000	25.400
1 1/8 - 12	22.000	18.000	26.50	150.000	28.000	53.000	28.575
1 1/4 - 12	22.000	18.000	29.50	150.000	28.000	53.000	31.750

Machine taps for UNF-threads



P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 18/22

Tool material **HSS-E**

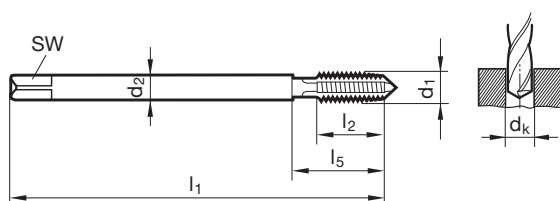
Tolerance on Ø 2B

Surface ○

Type N

Form C

Internal cooling



DIN 2184-1 ~DIN 374

Article no.

1987

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
3 - 56	1.800	1.400	2.15	50.000	5.000	14.500	2.515
4 - 48	2.200	1.800	2.40	56.000	6.000	18.000	2.845
5 - 44	2.500	2.100	2.70	56.000	6.000	18.000	3.175
6 - 40	2.500	2.100	2.95	56.000	6.500	20.000	3.505
8 - 36	2.800	2.100	3.50	63.000	7.000	21.000	4.166
10 - 32	3.500	2.700	4.10	70.000	8.500	25.000	4.826
12 - 28	4.000	3.000	4.60	80.000	9.000	30.000	5.486
1/4 - 28	4.500	3.400	5.50	80.000	9.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	11.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	11.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	13.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	13.000	40.000	12.700
9/16 - 18	11.000	9.000	12.90	100.000	14.000	40.000	14.288
5/8 - 18	12.000	9.000	14.50	100.000	15.000	44.000	15.875
3/4 - 16	14.000	11.000	17.50	110.000	16.000	44.000	19.050
7/8 - 14	18.000	14.500	20.40	125.000	19.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	22.000	50.000	25.400



Machine taps for UNF-threads



P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 22

Tool material

HSS-E

Tolerance on Ø

2B

2B

Surface

○

●

Type

N R15

N R15

Form

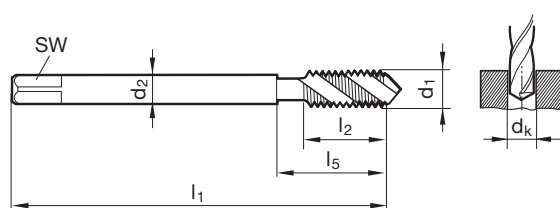
C

C

Internal cooling

✗

✗



DIN 2184-1 ~DIN 374

Article no.

1988

2841

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
3 - 56	1.800	1.400	2.15	50.000	5.000	14.500	2.515
6 - 40	2.500	2.100	2.95	56.000	6.500	20.000	3.505
8 - 36	2.800	2.100	3.50	63.000	7.000	21.000	4.166
10 - 32	3.500	2.700	4.10	70.000	8.500	25.000	4.826
1/4 - 28	4.500	3.400	5.50	80.000	9.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	11.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	11.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	13.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	13.000	40.000	12.700
9/16 - 18	11.000	9.000	12.90	100.000	14.000	40.000	14.288
5/8 - 18	12.000	9.000	14.50	100.000	15.000	44.000	15.875
3/4 - 16	14.000	11.000	17.50	110.000	16.000	44.000	19.050
1 - 12	18.000	14.500	23.25	140.000	22.000	50.000	25.400

Machine taps for UNF-threads



P ≤ 800 Cutting data page 23

M	
K	
N	
S	
H	

Tool material

HSS-E

Tolerance on Ø

2B

2B

Surface



Type

N R40

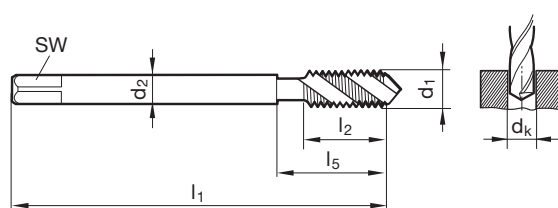
N R40

Form

C

C

Internal cooling



DIN 2184-1 ~DIN 374

Article no.

911

2846

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
3 - 56	1.800	1.400	2.15	50.000	5.000	14.500	2.515
4 - 48	2.200	1.800	2.40	56.000	6.000	18.000	2.845
5 - 44	2.500	2.100	2.70	56.000	6.000	18.000	3.175
6 - 40	2.500	2.100	2.95	56.000	6.500	20.000	3.505
8 - 36	2.800	2.100	3.50	63.000	7.000	21.000	4.166
10 - 32	3.500	2.700	4.10	70.000	8.500	25.000	4.826
12 - 28	4.000	3.000	4.60	80.000	9.000	30.000	5.486
1/4 - 28	4.500	3.400	5.50	80.000	9.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	11.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	11.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	13.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	13.000	40.000	12.700
9/16 - 18	11.000	9.000	12.90	100.000	14.000	40.000	14.288
5/8 - 18	12.000	9.000	14.50	100.000	15.000	44.000	15.875
3/4 - 16	14.000	11.000	17.50	110.000	16.000	44.000	19.050
7/8 - 14	18.000	14.500	20.40	125.000	19.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	22.000	50.000	25.400



Machine taps for UNF-threads



P ≤ 1000

Cutting data page 24

M ○

K ○

N ○

S ○

H ○

Tool material **HSS-E**

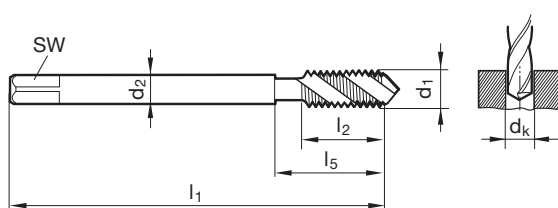
Tolerance on Ø 2B

Surface ○

Type N R40

Form C

Internal cooling



DIN 2184-1 ~DIN 374

Article no.

2859

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 32	3.500	2.700	4.10	70.000	8.500	25.000	4.826
12 - 28	4.000	3.000	4.60	80.000	9.000	30.000	5.486
1/4 - 28	4.500	3.400	5.50	80.000	9.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	11.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	11.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	13.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	13.000	40.000	12.700
5/8 - 18	12.000	9.000	14.50	100.000	15.000	44.000	15.875
7/8 - 14	18.000	14.500	20.40	125.000	19.000	44.000	22.225



Machine taps for UNF-threads



Cutting data page 20

P	≤ 1000
M	○
K	
N	
S	
H	

Tool material **HSS-E**

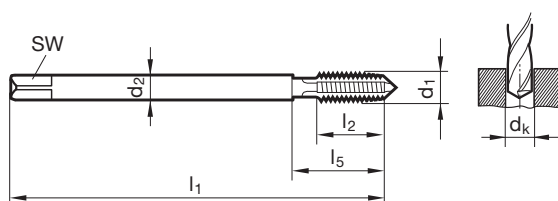
Tolerance on Ø 2B

Surface

Type N

Form B

Internal cooling



DIN 2184-1 ~DIN 374

Article no.

2885

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
6 - 40	2.500	2.100	2.95	56.000	11.000	20.000	3.505
10 - 32	3.500	2.700	4.10	70.000	14.000	25.000	4.826
1/4 - 28	4.500	3.400	5.50	80.000	16.000	30.000	6.350
3/8 - 24	7.000	5.500	8.50	90.000	18.000	35.000	9.525
5/8 - 18	12.000	9.000	14.50	100.000	22.000	44.000	15.875
7/8 - 14	18.000	14.500	20.40	125.000	25.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	28.000	50.000	25.400



Machine taps for UNF-threads



P ≤ 1000

Cutting data page 25

M ○

K ○

N

S

H

Tool material **HSS-E**

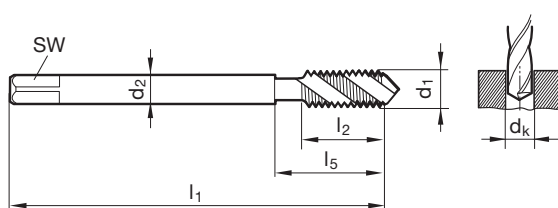
Tolerance on Ø 2B

Surface **S**

Type N R40

Form C

Internal cooling



DIN 2184-1 ~DIN 374

Article no.

1838

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 32	3.500	2.700	4.10	70.000	8.500	25.000	4.826
12 - 28	4.000	3.000	4.60	80.000	9.000	30.000	5.486
1/4 - 28	4.500	3.400	5.50	80.000	9.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	11.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	11.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	13.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	13.000	40.000	12.700
5/8 - 18	12.000	9.000	14.50	100.000	15.000	44.000	15.875
7/8 - 14	18.000	14.500	20.40	125.000	19.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	22.000	50.000	25.400

Machine taps for BSP-threads



P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 19

Tool material

HSS-E

Tolerance on Ø

Surface



Type

N

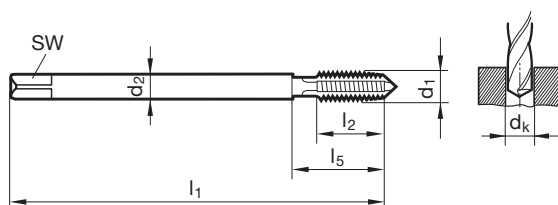
N

Form

B

B

Internal cooling



DIN 2184-1 DIN 5156

Article no.

962

2894

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	25.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	25.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	28.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	28.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	30.000	56.000	33.249
G1 1/4	11.000	32.000	24.000	39.50	170.000	30.000	57.000	41.910
G1 3/8	11.000	36.000	29.000	41.75	180.000	32.000	60.000	44.323
G1 1/2	11.000	36.000	29.000	45.25	190.000	32.000	60.000	47.803
G2	11.000	45.000	35.000	57.00	220.000	40.000	95.000	59.614



Machine taps for BSP-threads



P ≤ 800

Cutting data page 18/22

M

K

N

S

H

Tool material

HSS-E

Tolerance on Ø

Surface



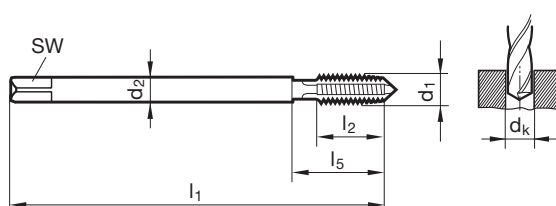
Type

N

Form

C

Internal cooling



DIN 2184-1 DIN 5156

Article no.

963

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	11.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	14.000	44.000	16.662
G1/2	14	16.000	12.000	19.00	125.000	18.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	18.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	20.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	22.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	24.000	56.000	33.249
G1 1/8	11.000	28.000	22.000	35.50	170.000	24.000	56.000	37.897
G1 1/4	11.000	32.000	24.000	39.50	170.000	25.000	57.000	41.910
G1 3/8	11.000	36.000	29.000	41.75	180.000	27.000	60.000	44.323
G1 1/2	11.000	36.000	29.000	45.25	190.000	27.000	60.000	47.803
G1 3/4	11.000	40.000	32.000	51.00	190.000	27.000	93.000	53.746
G2	11.000	45.000	35.000	57.00	220.000	32.000	95.000	59.614

Machine taps for BSP-threads

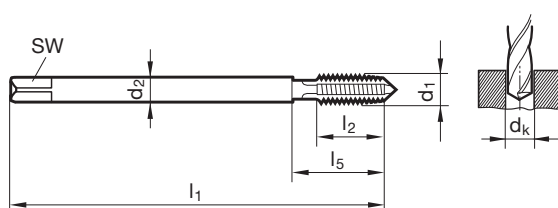


Cutting data page 21

P	•
M	•
K	○
N	○
S	○
H	

Tool material	HSS-E
Tolerance on Ø	X
Surface	S
Type	N
Form	B
Internal cooling	

NEW



DIN 2184-1 DIN 5156

Article no.

4220

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	25.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	25.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	28.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	28.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	30.000	56.000	33.249



Machine taps for BSP-threads



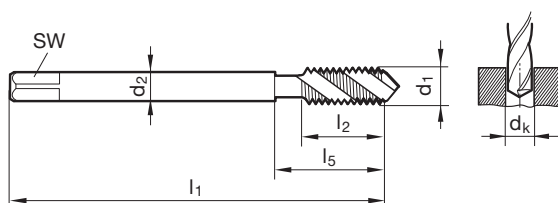
P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 22/23

Tool material **HSS-E**

Tolerance on Ø

Surface	○	●	● ^c
Type	N R15	N R15	N R15
Form	C	C	E
Internal cooling			



DIN 2184-1 DIN 5156

Article no.

964

2842

4158

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	11.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	14.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	18.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	18.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	20.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	22.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	24.000	56.000	33.249

Machine taps for BSP-threads



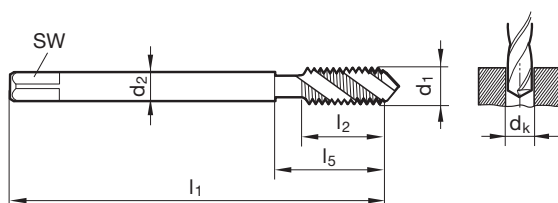
P ≤ 800 Cutting data page 23

M	
K	
N	
S	
H	

Tool material **HSS-E**

Tolerance on Ø

Surface	○	●
Type	N R40	N R40
Form	C	C
Internal cooling		



DIN 2184-1 DIN 5156

Article no.

965

2849

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	11.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	14.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	18.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	18.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	20.000	53.000	26.441
G1	11.000	25.000	20.000	30.75	160.000	24.000	56.000	33.249
G1 1/4	11.000	32.000	24.000	39.50	170.000	25.000	57.000	41.910
G1 1/2	11.000	36.000	29.000	45.25	190.000	27.000	60.000	47.803



Machine taps for BSP-threads



P ≤ 1000

Cutting data page 24

M ○

K ○

N ○

S

H

Tool material

HSS-E

Tolerance on Ø

Surface



Type

N R40

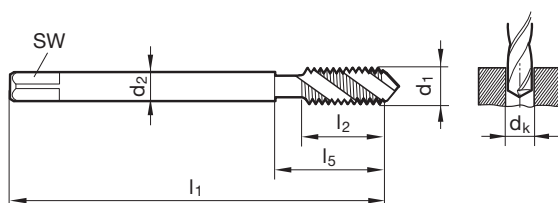
N R40

Form

C

C

Internal cooling



DIN 2184-1 DIN 5156

Article no.

2860

2861

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/8	28.000	7.000	5.500	8.80	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	14.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	18.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	18.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	20.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	22.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	24.000	56.000	33.249
G1 1/8	11.000	28.000	22.000	35.50	170.000	24.000	56.000	37.897
G1 1/4	11.000	32.000	24.000	39.50	170.000	25.000	57.000	41.910
G1 1/2	11.000	36.000	29.000	45.25	190.000	27.000	60.000	47.803
G2	11.000	45.000	35.000	57.00	220.000	32.000	95.000	59.614

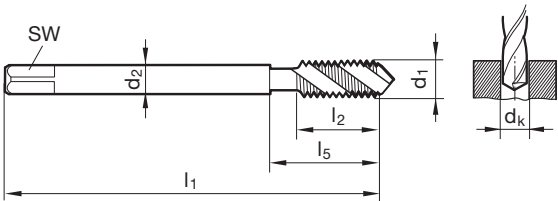
Machine taps for BSP-threads



P	•
M	•
K	○
N	•
S	○
H	

Cutting data page 25

Tool material	HSS-E-PM
Tolerance on Ø	
Surface	S
Type	VA R50
Form	C
Internal cooling	



DIN 2184-1 DIN 5156

Article no. 4159

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	4.500	47.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	4.500	47.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	6.700	48.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	6.700	48.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	9.100	70.000	20.955



Machine taps for BSP-threads

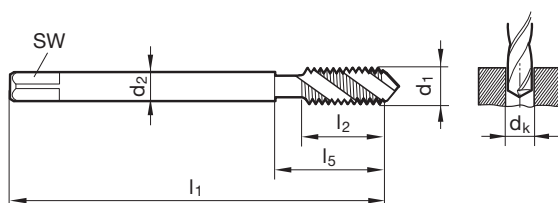


Cutting data page 25

P	•
M	•
K	○
N	○
S	○
H	

Tool material	HSS-E
Tolerance on Ø	X
Surface	A
Type	VA R45
Form	C
Internal cooling	

NEW



DIN 2184-1 DIN 5156

Article no.

395

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	11.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	14.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	18.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	18.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	20.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	22.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	24.000	56.000	33.249

Machine taps for BSP-threads



P	≤ 1000
M	○
K	
N	
S	
H	

Cutting data page 20

Tool material

HSS-E

Tolerance on Ø

Surface

A + M

N

Type

N

N

Form

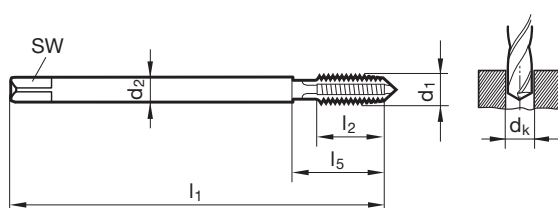
B

B

Internal cooling

X

X



DIN 2184-1 DIN 5156

Article no.

2886

2887

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/8	28.000	7.000	5.500	8.80	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	25.000	44.000	20.955
G3/4	14.000	20.000	16.000	24.50	140.000	28.000	53.000	26.441
G1	11.000	25.000	20.000	30.75	160.000	30.000	56.000	33.249
G1 1/4	11.000	32.000	24.000	39.50	170.000	30.000	57.000	41.910
G1 1/2	11.000	36.000	29.000	45.25	190.000	32.000	60.000	47.803
G2	11.000	45.000	35.000	57.00	220.000	40.000	95.000	59.614



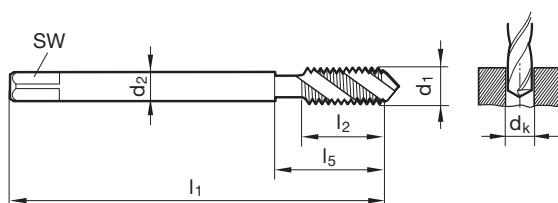
Machine taps for BSP-threads



Cutting data page 25

P	≤ 1000
M	○
K	○
N	
S	
H	

Tool material	HSS-E
Tolerance on Ø	
Surface	S
Type	N R40
Form	C
Internal cooling	



DIN 2184-1 DIN 5156

Article no.

937

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/8	28.000	7.000	5.500	8.80	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	14.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	18.000	44.000	20.955
G3/4	14.000	20.000	16.000	24.50	140.000	20.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	22.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	24.000	56.000	33.249

Machine taps for BSW-threads



Cutting data page 19

P	≤ 800
M	
K	
N	
S	
H	

Tool material **HSS-E**

Tolerance on Ø

Surface



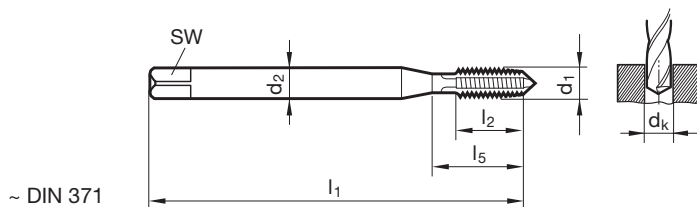
Type

N

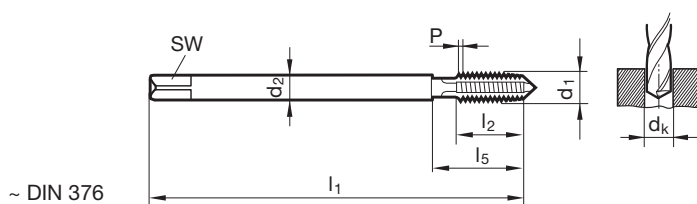
Form

B

Internal cooling



~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371

Article no.

2892

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
W1/8	40.000	3.500	2.700	2.50	56.000	11.000	18.000	3.175
W5/32	32.000	4.500	3.400	3.20	63.000	12.000	21.000	3.969
W3/16	24.000	6.000	4.900	3.60	70.000	14.000	25.000	4.762
W1/4	20.000	7.000	5.500	5.10	80.000	16.000	30.000	6.350
W5/16	18.000	8.000	6.200	6.50	90.000	18.000	35.000	7.938
W3/8	16.000	10.000	8.000	7.90	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376

Article no.

2893

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
W7/16	14.000	8.000	6.200	9.20	100.000	22.000	42.000	11.113
W1/2	12.000	9.000	7.000	10.50	110.000	25.000	49.000	12.700
W9/16	12.000	11.000	9.000	12.00	110.000	28.000	53.000	14.287
W5/8	11.000	12.000	9.000	13.50	110.000	30.000	53.000	15.876
W3/4	10.000	14.000	11.000	16.25	125.000	33.000	62.000	19.051
W7/8	9.000	18.000	14.500	19.25	140.000	35.000	62.000	22.226
W1	8.000	18.000	14.500	22.00	160.000	38.000	73.000	25.401



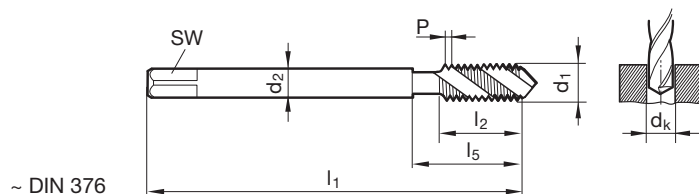
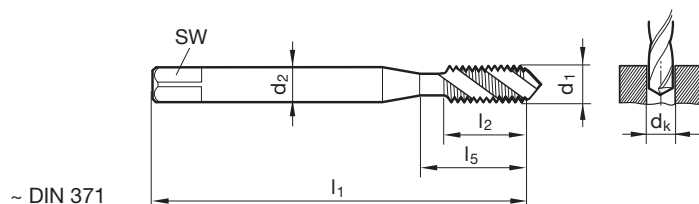
Machine taps for BSW-threads



P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 23

Tool material	HSS-E
Tolerance on Ø	
Surface	●
Type	N R40
Form	C
Internal cooling	☒



DIN 2184-1 ~DIN 371

Article no.

2847

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
W1/8	40.000	3.500	2.700	2.50	56.000	7.000	18.000	3.175
W3/16	24.000	6.000	4.900	3.60	70.000	11.000	25.000	4.762
W1/4	20.000	7.000	5.500	5.10	80.000	13.000	30.000	6.350
W5/16	18.000	8.000	6.200	6.50	90.000	14.000	35.000	7.938
W3/8	16.000	10.000	8.000	7.90	100.000	16.000	39.000	9.525

DIN 2184-1 ~DIN 376

Article no.

2848

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
W3/8	16.000	7.000	5.500	7.90	100.000	16.000	39.000	9.525
W7/16	14.000	8.000	6.200	9.20	100.000	18.000	42.000	11.113
W1/2	12.000	9.000	7.000	10.50	110.000	20.000	49.000	12.700
W5/8	11.000	12.000	9.000	13.50	110.000	24.000	53.000	15.876
W3/4	10.000	14.000	11.000	16.25	125.000	25.000	62.000	19.051
W7/8	9.000	18.000	14.500	19.25	140.000	28.000	62.000	22.226
W1	8.000	18.000	14.500	22.00	160.000	32.000	73.000	25.401

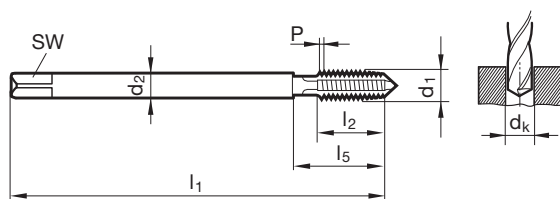
Machine taps for EG-threads



P	≤ 1000
M	○
K	
N	
S	
H	

Cutting data page 20

Tool material	HSS-E
Tolerance on Ø	6H mod
Surface	S
Type	N
Form	B
Internal cooling	



DIN 40435 DIN 40435

Article no.

1010

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
EG M4	0.700	6.000	4.900	4.20	70.000	12.000	25.000
EG M5	0.800	6.000	4.900	5.25	80.000	14.000	30.000
EG M6	1.000	8.000	6.200	6.30	90.000	17.000	35.000
EG M8	1.250	10.000	8.000	8.40	100.000	20.000	39.000
EG M10	1.500	9.000	7.000	10.50	100.000	20.000	40.000
EG M12	1.750	11.000	9.000	12.50	110.000	28.000	53.000
EG M14	2.000	12.000	9.000	14.50	110.000	26.000	54.000
EG M16	2.000	14.000	11.000	16.50	125.000	33.000	62.000



Machine taps for EG-threads

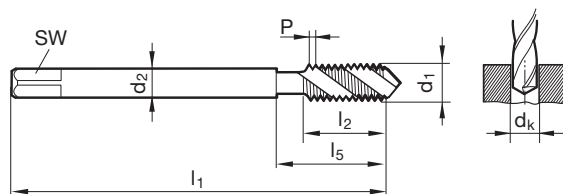


P	≤ 1000
M	○
K	○
N	
S	
H	

Cutting data page 24

Tool material	HSS-E
Tolerance on Ø	6H mod
Surface	S
Type	N R40
Form	C
Internal cooling	

Steel



DIN 40435 DIN 40435

Article no.

1011

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
EG M4	0.700	6.000	4.900	4.20	70.000	7.500	25.000
EG M5	0.800	6.000	4.900	5.25	80.000	8.500	30.000
EG M6	1.000	8.000	6.200	6.30	90.000	11.000	35.000
EG M8	1.250	10.000	8.000	8.40	100.000	14.000	39.000
EG M10	1.500	9.000	7.000	10.50	100.000	16.000	40.000
EG M12	1.750	11.000	9.000	12.50	110.000	18.500	53.000
EG M14	2.000	12.000	9.000	14.50	110.000	20.000	54.000
EG M16	2.000	14.000	11.000	16.50	125.000	20.000	62.000

Machine taps for NPT-threads



P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 18/22

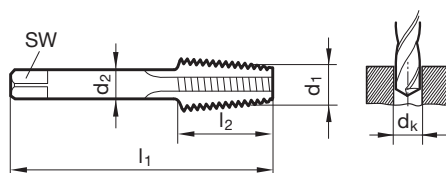
Tool material **HSS-E**

Tolerance on Ø

Surface ○

Type **N**Form **C**

Internal cooling



Company std. Company std.

Article no.

973

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
1/16	27.000	6.000	4.900	6.15	56.000	14.000	27.000	8.190
1/8	27.000	7.000	5.500	8.40	63.000	15.000	29.000	10.620
1/4	18.000	11.000	9.000	11.10	63.000	21.000	33.000	14.140
3/8	18.000	12.000	9.000	14.30	70.000	21.000	35.000	17.570
1/2	14.000	16.000	12.000	17.90	80.000	27.000	41.000	21.900
3/4	14.000	20.000	16.000	23.30	100.000	27.000	42.000	27.230
1	11.500	25.000	20.000	29.00	110.000	32.000	53.000	34.180
1 1/4	11.500	32.000	24.000	37.70	125.000	33.000	54.500	42.900
1 1/2	11.500	36.000	29.000	43.70	140.000	33.000	56.000	48.940
2	11.500	36.000	29.000	55.60	160.000	33.000	63.000	61.000



Machine taps for PG-threads



P	≤ 800
M	
K	
N	
S	
H	

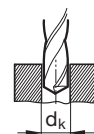
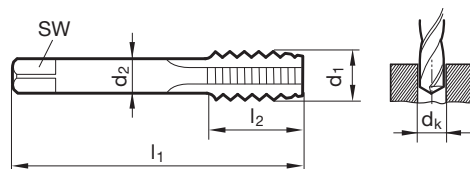
Cutting data page 18-22

Tool material **HSS-E**

Tolerance on Ø

Surface	○	○
Type	N	N
Form	B	C
Internal cooling	✗	✗

Steel



DIN 2184-2 DIN 40432

Article no.

980

979

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
PG7	20.000	9.000	7.000	11.40	70.000	22.000	35.000	12.500
PG9	18.000	12.000	9.000	14.00	70.000	22.000	35.000	15.200
PG11	18.000	14.000	11.000	17.30	80.000	22.000	40.000	18.600
PG13.5	18.000	16.000	12.000	19.00	80.000	22.000	40.000	20.400
PG16	18.000	18.000	14.500	21.30	80.000	22.000	40.000	22.500
PG21	16.000	22.000	18.000	26.90	90.000	22.000	42.000	28.300
PG29	16.000	28.000	22.000	35.50	100.000	25.000	45.000	37.000



FLUTELESS TAPS





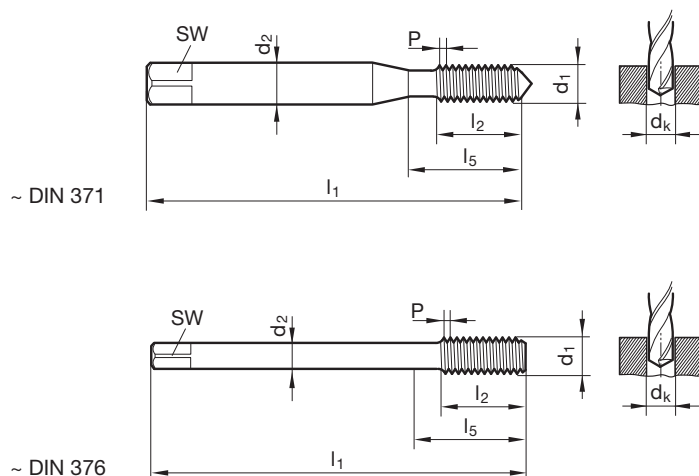
Fluteless machine taps for ISO metric threads



Cutting data page 26

P	•
M	•
K	
N	○
S	
H	

Tool material	HSS-E-PM	HSS-E	HSS-E-PM
Tolerance on Ø	6GX	6HX	6HX
Surface	S	S	S
Type	N	N	N
Form	C	C	C
Internal cooling			



DIN 2174 ~DIN 371

Article no.

903

921

1255

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1	0.250	2.500	2.100	0.90	40.000	4.000	
M 1.2	0.250	2.500	2.100	1.10	40.000	4.800	
M 1.4	0.300	2.500	2.100	1.25	40.000	5.600	
M 1.6	0.350	2.500	2.100	1.45	40.000	6.400	
M 1.7	0.350	2.500	2.100	1.55	40.000	6.800	
M 1.8	0.350	2.500	2.100	1.65	40.000	7.300	
M2	0.400	2.800	2.100	1.85	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.30	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

952

925

1256

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000



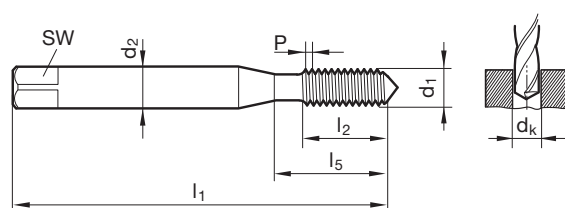
Fluteless machine taps for ISO metric threads



Cutting data page 26

P	•
M	•
K	
N	○
S	
H	

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 371

Article no.

920

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.85	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.30	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 26

P	•
M	•
K	
N	≥ 7
S	○
H	

Tool material **Solid carbide**

Tolerance on Ø 6HX

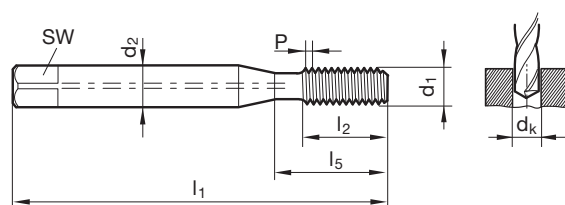
Surface **S**

Type N

Form C

Internal cooling

Steel



DIN 2174 ~DIN 371/~DIN 376

Article no.

2518

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

Fluteless machine taps for ISO metric threads



Cutting data page 26

P	•
M	•
K	
N	○
S	○
H	

Tool material

HSS-E

Tolerance on Ø

6HX

6HX

6HX

Surface

S

P

C

Type

N

N

N

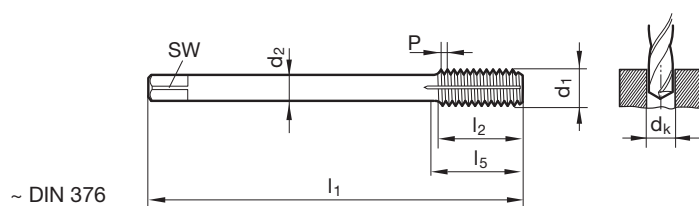
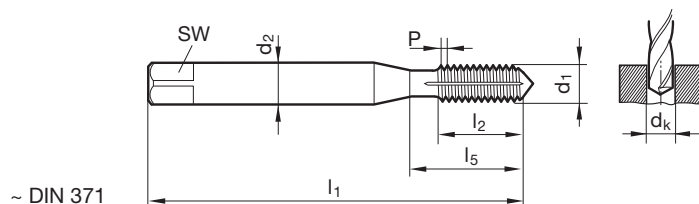
Form

C

C

C

Internal cooling



DIN 2174 ~DIN 371

Article no.

919

1587

2012

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

923

1589

2013

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M6	1.000	4.500	3.400	5.55	80.000	16.000	30.000
M8	1.250	6.000	4.900	7.40	90.000	17.000	35.000
M10	1.500	7.000	5.500	9.30	100.000	20.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000
M22	2.500	18.000	14.500	20.90	140.000	32.000	62.000
M24	3.000	18.000	14.500	22.70	160.000	36.000	73.000
M27	3.000	20.000	16.000	25.70	160.000	36.000	73.000
M30	3.500	22.000	18.000	28.50	180.000	40.000	85.000
M33	3.500	25.000	20.000	31.50	180.000	40.000	91.000
M36	4.000	28.000	22.000	34.30	200.000	50.000	102.000
M39	4.000	32.000	24.000	37.30	200.000	50.000	107.000



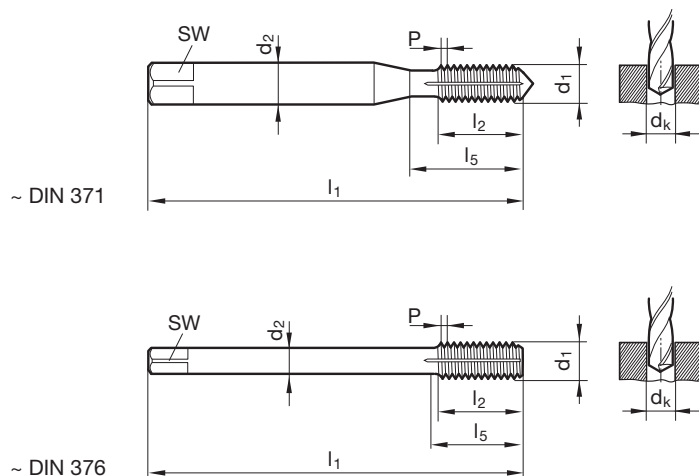
Fluteless machine taps for ISO metric threads



Cutting data page 26/27

P	•
M	•
K	
N	○
S	○
H	

Tool material	HSS-E		HSS-E-PM
Tolerance on Ø	6GX	6GX	6GX
Surface	S	P	P
Type	N	N	N
Form	C	C	C
Internal cooling			



DIN 2174 ~DIN 371

Article no.

918

1588

1705

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

922

1590

1708

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M6	1.000	4.500	3.400	5.55	80.000	16.000	30.000
M8	1.250	6.000	4.900	7.40	90.000	17.000	35.000
M10	1.500	7.000	5.500	9.30	100.000	20.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Fluteless machine taps for ISO metric threads



Cutting data page 27

P	•
M	•
K	•
N	○
S	○
H	

Tool material **HSS-E-PM**

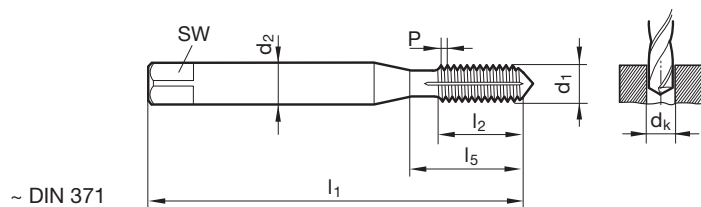
Tolerance on Ø 6HX

Surface **S**

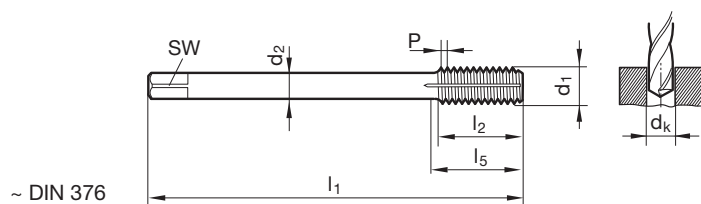
Type N

Form C

Internal cooling



~ DIN 371



~ DIN 376

**DIN 2174 ~DIN 371**

Article no.

322

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376

Article no.

339

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000



Fluteless machine taps for ISO metric threads



Cutting data page 27

P	•
M	•
K	•
N	○
S	○
H	

Tool material

HSS-E-PM

Tolerance on Ø

6HX

6HX

Surface

S

P

Type

N

N

Form

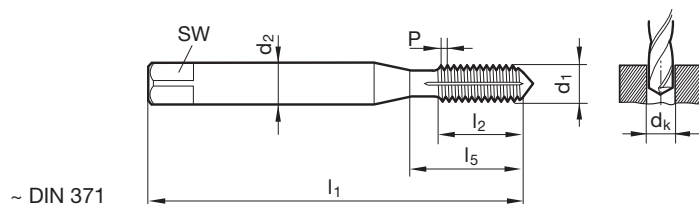
C

C

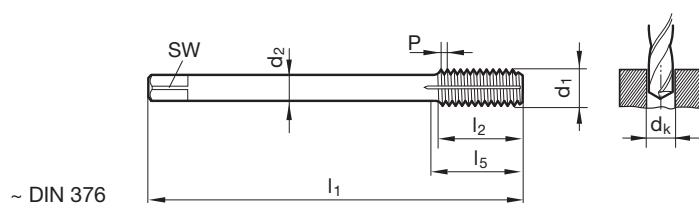
Internal cooling

X

X



~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371

Article no.

1266

1599

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

1267

1707

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Oil feed fluteless taps f. ISO metric threads



Cutting data page 27

P	•
M	•
K	
N	○
S	○
H	

Tool material

HSS-E

Tolerance on Ø

6HX

6GX

6HX

Surface

S

S

C

Type

N

N

N

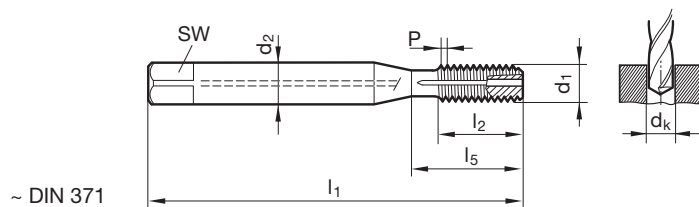
Form

C

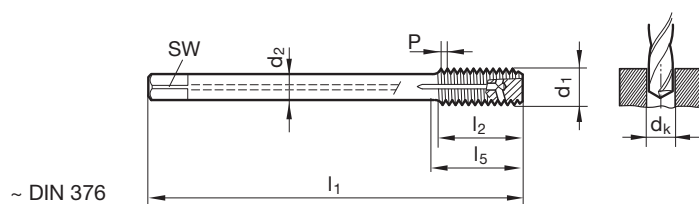
C

C

Internal cooling



~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371

Article no.

2442

2443

2446

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376

Article no.

2444

2445

2448

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000



Oil feed fluteless taps f. ISO metric threads

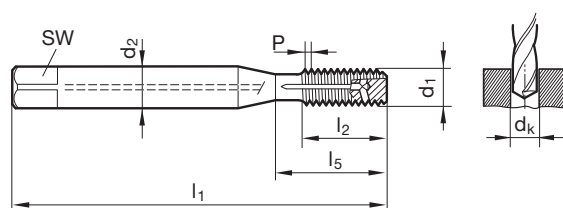


Cutting data page 27

P	•
M	•
K	
N	≥ 7
S	○
H	

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	Ⓢ
Type	N
Form	C
Internal cooling	

Steel



DIN 2174 ~DIN 371

Article no.

2447

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

Oil feed fluteless taps f. ISO metric threads



Cutting data page 27

P	•
M	•
K	
N	○
S	○
H	

Tool material **HSS-E-PM**

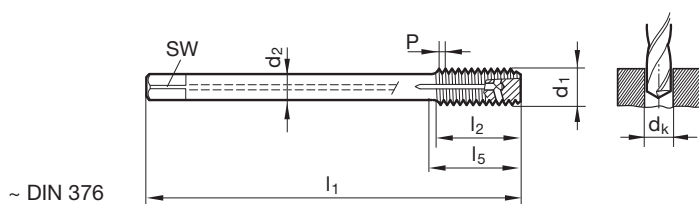
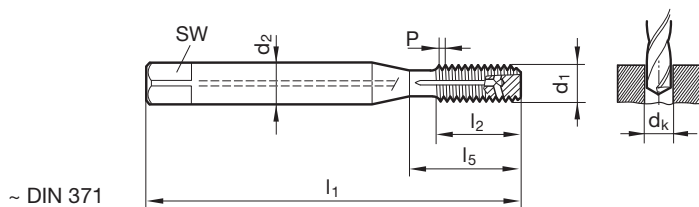
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



DIN 2174 ~DIN 371

Article no.

323

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376

Article no.

342

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 27

P	•
M	•
K	
N	≥ 7
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

6HX

6HX

6HX

Surface

C

A

S

Type

N

N

N

Form

C

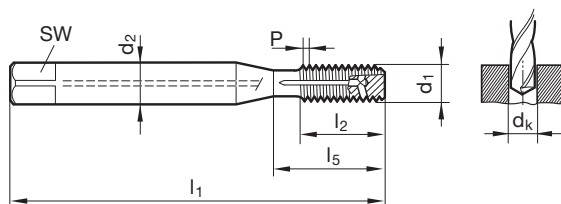
C

E

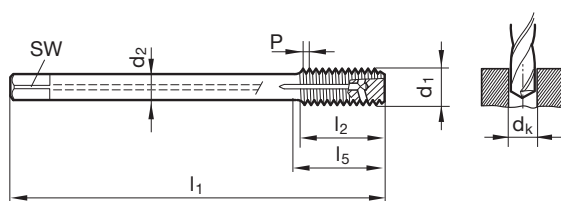
Internal cooling



~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371

Article no.

1270

1717

1725

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

1271

1719

1727

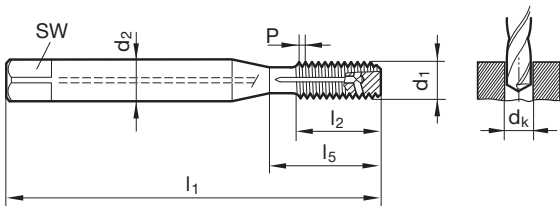
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Oil feed fluteless taps f. ISO metric threads



P	•	Cutting data page 27
M	•	
K		
N	≥ 7	
S	•	
H		

Tool material	HSS-E-PM
Tolerance on Ø	6GX
Surface	Ⓢ
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 371	Article no.	1713

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 27

P	•
M	•
K	
N	
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

6GX

6GX

Surface

A

S

Type

N

N

Form

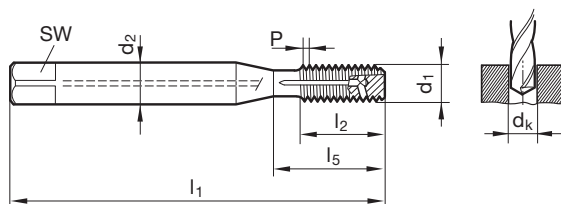
C

E

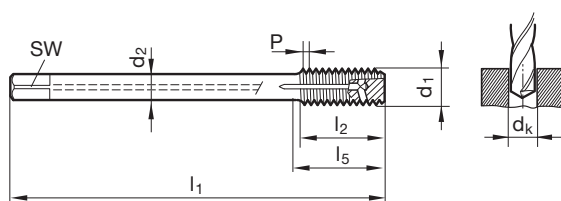
Internal cooling



~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371

Article no.

1718

1726

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

1720

1728

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

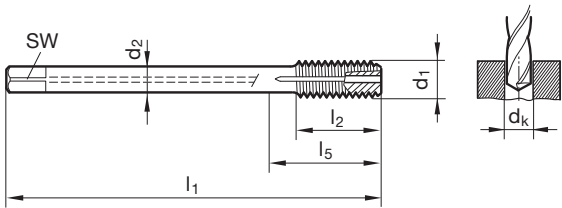
Oil feed fluteless taps f. ISO metric threads



P	•
M	•
K	
N	○
S	○
H	

Cutting data page 27

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	



Company std.	Company std.	Article no.	4143

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	112.000	6.000	18.000
M4	0.700	2.800	2.100	3.70	112.000	7.500	77.000
M5	0.800	3.500	2.700	4.65	125.000	8.500	90.000
M6	1.000	4.500	3.400	5.55	125.000	11.000	90.000
M8	1.250	6.000	4.900	7.40	140.000	14.000	97.000
M10	1.500	7.000	5.500	9.30	160.000	16.000	117.000
M12	1.750	9.000	7.000	11.20	180.000	18.500	133.000
M16	2.000	12.000	9.000	15.10	220.000	20.000	168.000
M20	2.500	16.000	12.000	18.90	280.000	25.000	225.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 27

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material **Solid carbide**

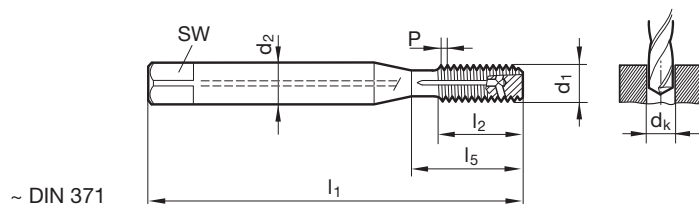
Tolerance on Ø 6HX

Surface

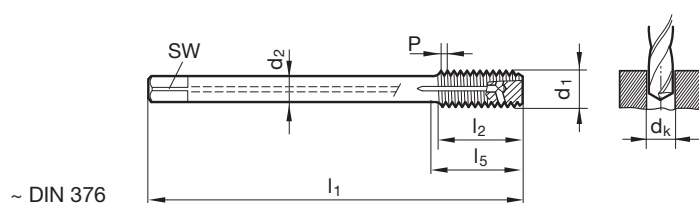
Type N

Form C

Internal cooling



~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371

Article no.

1972

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376

Article no.

1931

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	25.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	25.000	62.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 27

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material **Solid carbide**

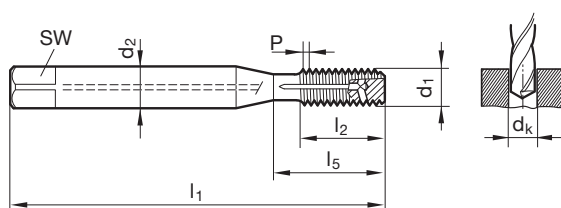
Tolerance on Ø 6HX

Surface

Type N

Form E

Internal cooling



DIN 2174 ~DIN 371

Article no.

1927

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000



Fluteless machine taps for ISO metric fine threads

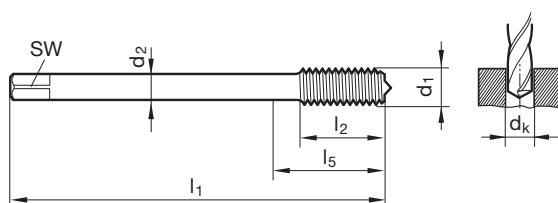


Cutting data page 26

P	•
M	•
K	•
N	○
S	•
H	•

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

Steel



DIN 2174 ~DIN 374

Article no.

929

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007

Fluteless machine taps for ISO metric fine threads



Cutting data page 26

P	•
M	•
K	•
N	○
S	•
H	•

Tool material **HSS-E-PM**

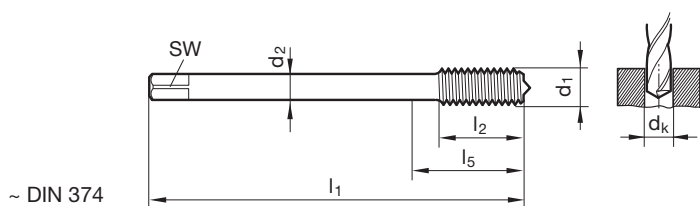
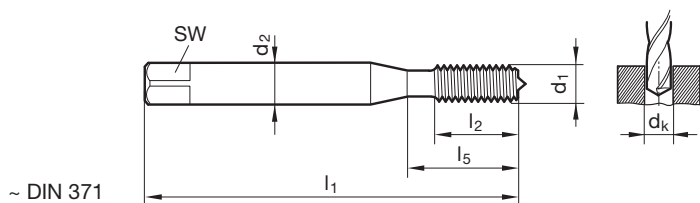
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling

**DIN 2174 ~DIN 371**

Article no.

1257

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M9 x 1	9.000	7.000	8.55	90.000	16.000	35.000	9.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374

Article no.

1258

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.55	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	23.10	140.000	28.000	48.000	24.008



Fluteless machine taps for ISO metric fine threads



Cutting data page 26

P	•
M	•
K	
N	○
S	
H	

Tool material **HSS-E-PM**

Tolerance on Ø 6GX

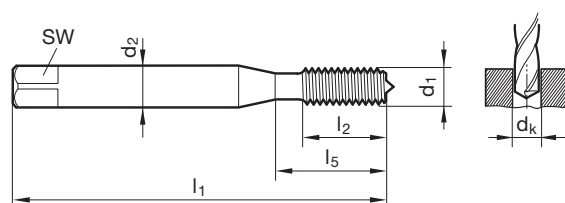
Surface **S**

Type N

Form C

Internal cooling

Steel



DIN 2174 ~DIN 371

Article no.

1740

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

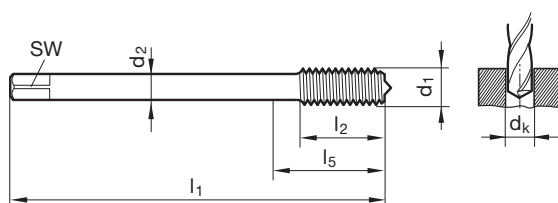
Fluteless machine taps for ISO metric fine threads



Cutting data page 26

P	•
M	•
K	
N	○
S	
H	

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 374

Article no.

928

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007



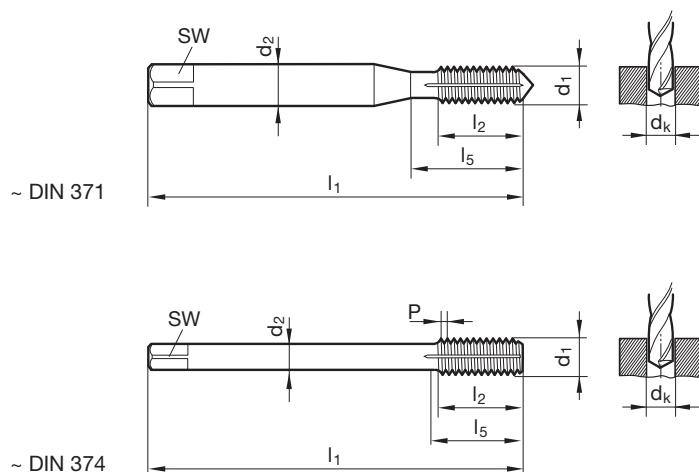
Fluteless machine taps for ISO metric fine threads



Cutting data page 26

P	•
M	•
K	•
N	○
S	○
H	○

Tool material	HSS-E	
Tolerance on Ø	6HX	6HX
Surface	S	P
Type	N	N
Form	C	C
Internal cooling		



DIN 2174 ~DIN 371

Article no.

1275

1591

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	6.000	4.900	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	8.000	6.200	7.65	80.000	14.000	30.000	8.004
M 8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374

Article no.

927

1593

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.65	80.000	14.000	30.000	8.004
M 8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	9.40	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	21.30	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

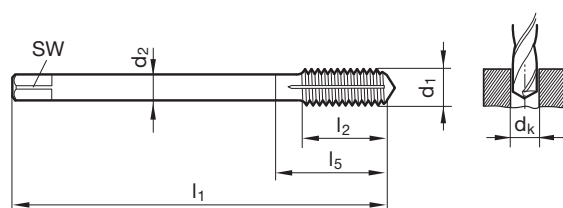
Fluteless machine taps for ISO metric fine threads



Cutting data page 26

P	•
M	•
K	
N	≥ 7
S	○
H	

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	C
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 374

Article no.

2008

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.65	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 X1.25	7.000	5.500	9.40	100.000	20.000	39.000	10.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007



Fluteless machine taps for ISO metric fine threads

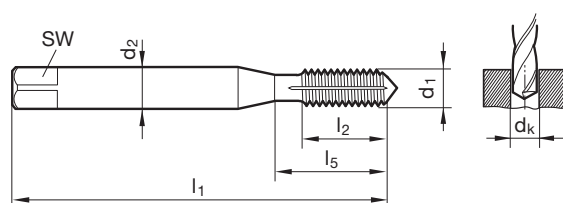


Cutting data page 26

P	•
M	
K	
N	
S	
H	

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	P
Type	N
Form	C
Internal cooling	

Steel



DIN 2174 ~DIN 371

Article no.

1592

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

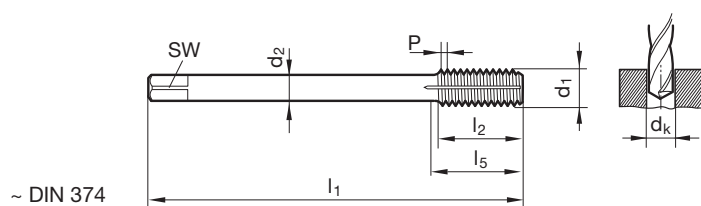
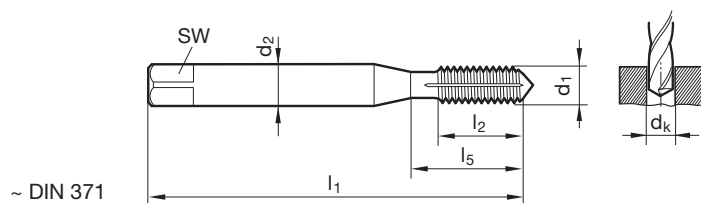
Fluteless machine taps for ISO metric fine threads



Cutting data page 26

P	•
M	•
K	
N	○
S	○
H	

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 371

Article no.

1277

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374

Article no.

926

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.55	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007



Fluteless machine taps for ISO metric fine threads



Cutting data page 26

P	•
M	•
K	
N	○
S	○
H	

Tool material **HSS-E-PM**

Tolerance on Ø 6HX

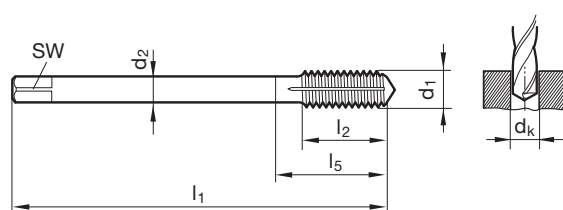
Surface **S**

Type N

Form C

Internal cooling

Steel



DIN 2174 ~DIN 374

Article no.

333

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	16.000	44.000	20.007

Fluteless machine taps for ISO metric fine threads

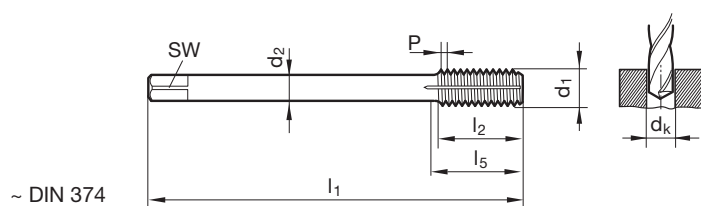
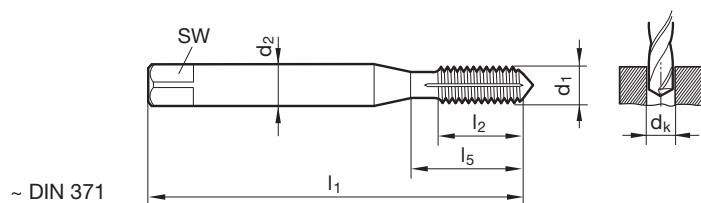


Cutting data page 27

P	•
M	•
K	•
N	○
S	○
H	

Tool material **HSS-E-PM**Tolerance on Ø **6HX**Surface **S**Type **N**Form **C**

Internal cooling

**DIN 2174 ~DIN 371**

Article no.

1268

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374

Article no.

1269

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 x 2	18.000	14.500	23.10	140.000	28.000	48.000	24.008



Fluteless machine taps for ISO metric fine threads



Cutting data page 27

P	•
M	
K	
N	
S	
H	

Tool material **HSS-E-PM**

Tolerance on Ø 6HX

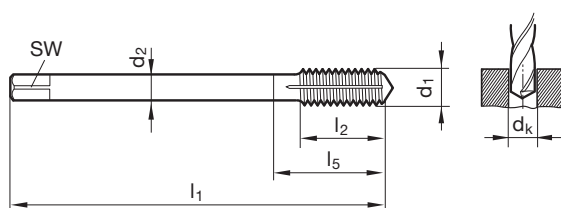
Surface **P**

Type N

Form C

Internal cooling

Steel



DIN 2174 ~DIN 374

Article no.

1711

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

Fluteless machine taps for ISO metric fine threads



Cutting data page 27

P	•
M	
K	
N	
S	
H	

Tool material **HSS-E-PM**

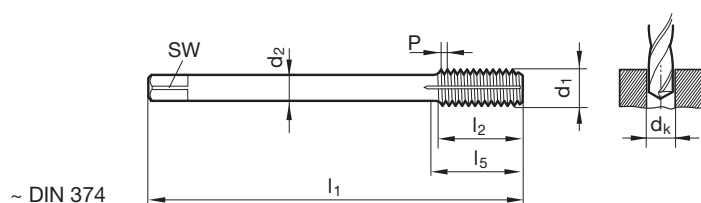
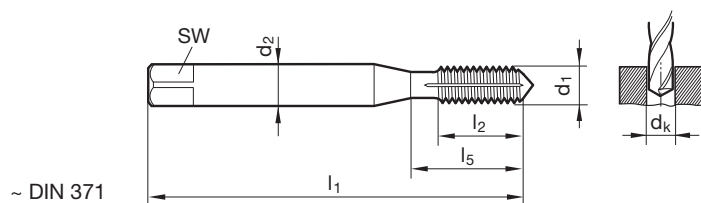
Tolerance on Ø 6GX

Surface **P**

Type N

Form C

Internal cooling

**DIN 2174 ~DIN 371**

Article no.

1710

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374

Article no.

1712

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007



Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 27

P	•
M	•
K	•
N	○
S	○
H	

Tool material **HSS-E-PM**

Tolerance on Ø 6HX

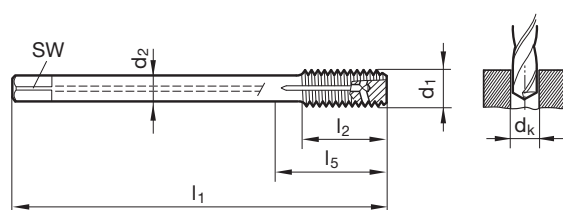
Surface **S**

Type N

Form C

Internal cooling

Steel



DIN 2174 ~DIN 374

Article no.

338

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007

Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 27

P	•
M	•
K	
N	≥ 7
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

6HX

6HX

6HX

Surface

C

A

S

Type

N

N

N

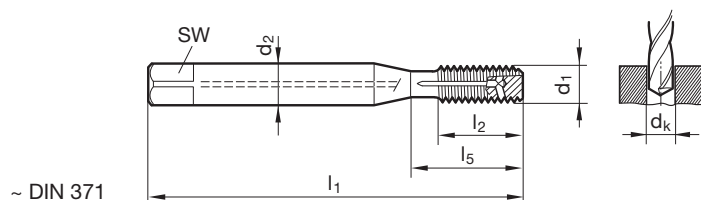
Form

C

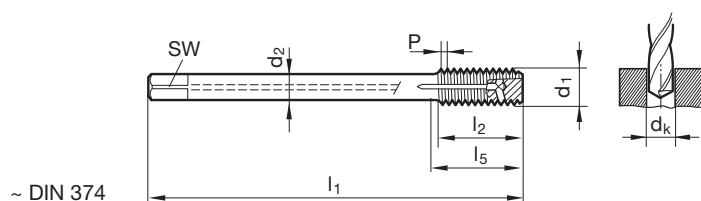
C

E

Internal cooling



~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371

Article no.

1272

1721

1729

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M9 x 1	9.000	7.000	8.55	90.000	16.000	35.000	9.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374

Article no.

1273

1723

1731

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	21.30	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007



Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 27

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

6GX

6GX

Surface

C

S

Type

N

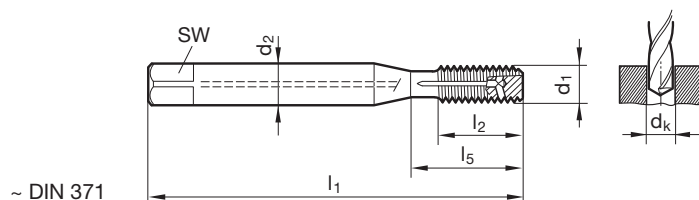
N

Form

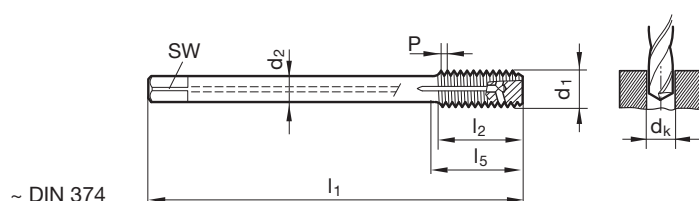
C

E

Internal cooling



~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371

Article no.

1715

1730

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374

Article no.

1716

1732

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

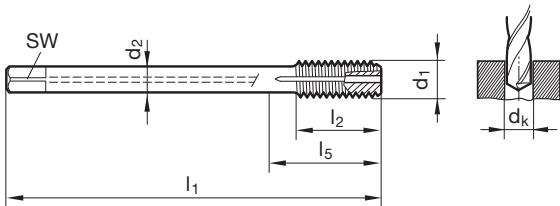
Oil feed fluteless taps f. ISO metric fine threads



P	•
M	•
K	
N	○
S	○
H	

Cutting data page 27

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	



Company std.	Company std.	Article no.	4145

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	140.000	14.000	97.000	8.005
M10 x 1	7.000	5.500	9.55	160.000	16.000	117.000	10.005
M10 X1.25	7.000	5.500	9.40	160.000	16.000	117.000	10.006
M12 x 1	9.000	7.000	11.55	180.000	18.500	133.000	12.005
M12 X1.5	9.000	7.000	11.30	180.000	18.500	133.000	12.007
M14 X1.5	11.000	9.000	13.30	220.000	20.000	168.000	14.007
M16 X1.5	12.000	9.000	15.30	220.000	20.000	168.000	16.007



Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 27

P	•
M	•
K	
N	≥ 7
S	•
H	

Tool material **Solid carbide**

Tolerance on Ø 6HX

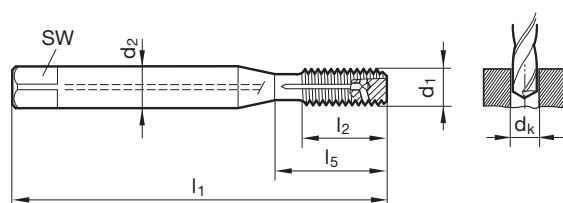
Surface

Type N

Form C

Internal cooling

Steel



DIN 2174 ~DIN 371/~DIN 376

Article no.

1581

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10.000	8.000	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	15.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	15.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	15.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	15.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	15.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	15.000	48.000	24.007

Fluteless machine taps for UNC-threads



Cutting data page 26

P	•
M	•
K	
N	○
S	
H	

Tool material

HSS-E

Tolerance on Ø

2BX

2BX

Surface

S

S

Type

N

N

Form

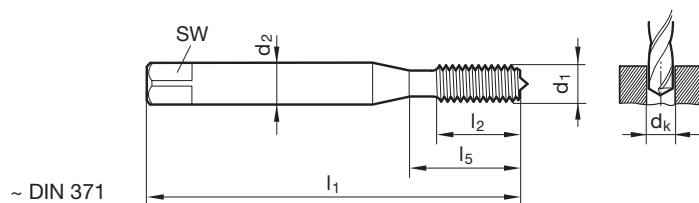
C

C

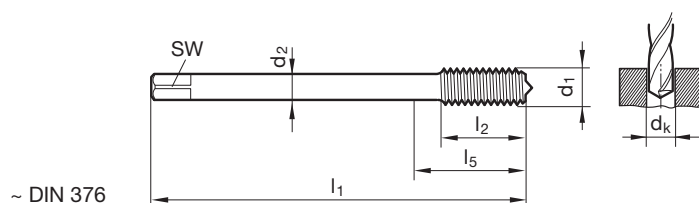
Internal cooling

✗

✗



~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371

Article no.

2273

1582

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.55	56.000	11.000	18.000	2.845
5 - 40	3.500	2.700	2.90	56.000	11.000	18.000	3.175
6 - 32	4.000	3.000	3.15	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.80	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	4.35	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	5.00	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.75	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	7.30	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.80	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376

Article no.

2274

1583

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	10.30	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	11.80	110.000	25.000	49.000	12.700
9/16 - 12	11.000	9.000	13.30	110.000	28.000	53.000	14.288
5/8 - 11	12.000	9.000	14.80	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	17.90	125.000	33.000	62.000	19.050
7/8 - 9	18.000	14.500	21.00	140.000	35.000	62.000	22.225



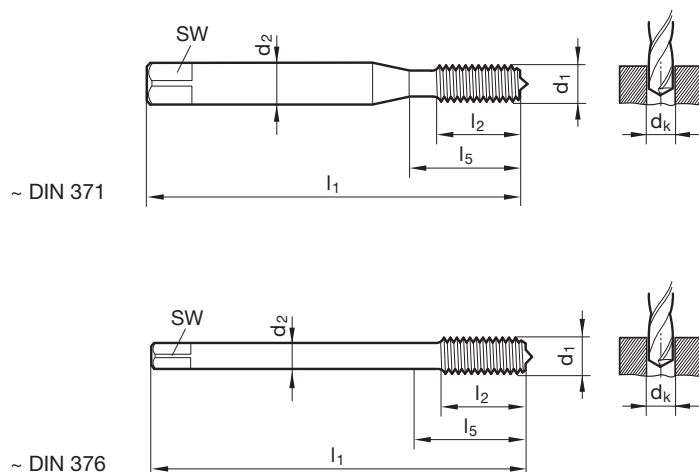
Fluteless machine taps for UNF-threads



Cutting data page 26

P	•
M	•
K	
N	○
S	
H	

Tool material	HSS-E	
Tolerance on Ø	2BX	2BX
Surface	S	S
Type	N	N
Form	C	C
Internal cooling		



DIN 2184-1 ~DIN 371

Article no.

1283

1584

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 48	3.500	2.700	2.60	56.000	10.000	18.000	2.845
5 - 44	3.500	2.700	2.90	56.000	10.000	18.000	3.175
6 - 40	4.000	3.000	3.20	56.000	11.000	20.000	3.505
8 - 36	4.500	3.400	3.85	63.000	12.000	21.000	4.166
10 - 32	6.000	4.900	4.45	70.000	14.000	25.000	4.826
12 - 28	6.000	4.900	5.10	80.000	16.000	30.000	5.486
1/4 - 28	7.000	5.500	5.95	80.000	16.000	30.000	6.350
5/16 - 24	8.000	6.200	7.45	90.000	18.000	35.000	7.938
3/8 - 24	10.000	8.000	9.05	90.000	18.000	35.000	9.525

DIN 2184-1 ~DIN 374

Article no.

2275

1585

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 32	3.500	2.700	4.45	70.000	14.000	25.000	4.826
12 - 28	4.000	3.000	5.10	80.000	16.000	30.000	5.486
1/4 - 28	4.500	3.400	5.95	80.000	16.000	30.000	6.350
5/16 - 24	6.000	4.900	7.45	90.000	18.000	35.000	7.938
3/8 - 24	7.000	5.500	9.05	90.000	18.000	35.000	9.525
7/16 - 20	8.000	6.200	10.55	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	12.10	100.000	20.000	40.000	12.700
9/16 - 18	11.000	9.000	13.65	100.000	22.000	40.000	14.288
5/8 - 18	12.000	9.000	15.25	100.000	22.000	44.000	15.875
3/4 - 16	14.000	11.000	18.35	110.000	25.000	44.000	19.050
7/8 - 14	18.000	14.500	21.40	125.000	25.000	44.000	22.225
1 - 12	18.000	14.500	24.45	140.000	28.000	50.000	25.400



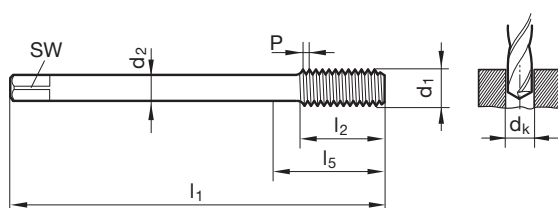
Fluteless machine taps for BSP-threads



Cutting data page 26

P	•
M	•
K	
N	○
S	
H	

Tool material	HSS-E	
Tolerance on Ø	X	X
Surface	S	S
Type	N	N
Form	C	C
Internal cooling		



DIN 2184-1 DIN 2189

Article no.

966

1586

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	7.30	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	9.30	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	12.50	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	16.00	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	20.00	125.000	25.000	44.000	20.955
G3/4	14.000	20.000	16.000	25.50	140.000	28.000	53.000	26.441
G1	11.000	25.000	20.000	32.00	160.000	30.000	56.000	33.249
G1 1/4	11.000	32.000	24.000	40.75	170.000	30.000	57.000	41.910



THREAD MILLING CUTTERS



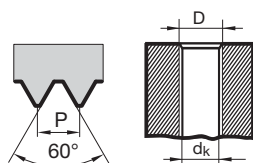
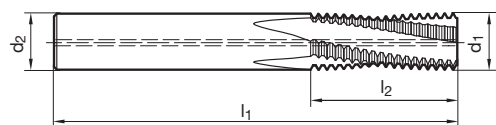
Thread milling cutters without chamfer for ISO metric threads



Cutting data page 28

P	•
M	○
K	•
N	•
S	○
H	≤55

Tool material	Solid carbide			
Surface				
Type	TM SP	TM SP	TM SP	TM SP
Internal cooling				
Shank form	HA	HB	HA	HB



Company std.

Article no. 3737 3743 4132 4133

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	13.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	18.100	3	8.000
M8 x 1	1.000	6.400	8.000	7.00	62.000	17.500	3	8.005
M10	1.500	7.950	10.000	8.50	74.000	21.800	3	10.000
M10 x 1	1.000	7.950	10.000	9.00	74.000	21.500	3	10.005
M10 X1.25	1.250	7.950	10.000	8.80	74.000	21.900	3	10.006
M12	1.750	9.950	10.000	10.20	74.000	25.400	4	12.000
M12 X1.5	1.500	9.950	10.000	10.50	74.000	26.300	4	12.007
M14	2.000	11.200	12.000	12.00	90.000	31.000	4	14.000
M14 X1.5	1.500	11.200	12.000	12.50	90.000	30.800	4	14.007
M16	2.000	12.800	14.000	14.00	90.000	35.000	4	16.000
M16 X1.5	1.500	12.800	14.000	14.50	90.000	33.800	4	16.007
M20	2.500	14.950	16.000	17.50	102.000	41.300	4	20.000
M20 X1.5	1.500	14.950	16.000	18.50	102.000	42.800	4	20.007



Thread milling cutters without chamfer for ISO metric threads



Cutting data page 28

P	•
M	○
K	•
N	•
S	○
H	≤55

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

Internal cooling

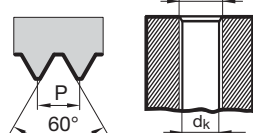
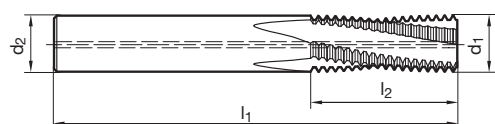


Shank form

HA

HB

NEW



Company std.

Article no.

3735

3740

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	16.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	21.900	3	8.000
M10	1.500	7.950	10.000	8.50	74.000	26.300	3	10.000
M12	1.750	9.950	10.000	10.20	74.000	32.400	4	12.000
M14	2.000	11.200	12.000	12.00	90.000	37.000	4	14.000
M16	2.000	12.800	14.000	14.00	90.000	43.000	4	16.000
M20	2.500	14.950	16.000	17.50	102.000	48.800	4	20.000

Thread milling cutters with chamfer for ISO metric threads



Cutting data page 28

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

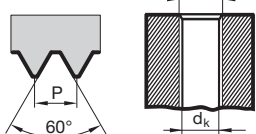
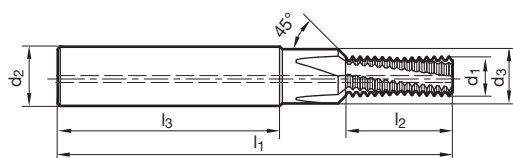


Shank form

HA

HB

NEW



Company std.

Article no.

3525

3543

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	5.300	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	7.400	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	9.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	10.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	13.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	17.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	20.100	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	25.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	27.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	33.800	4	20.000



Thread milling cutters with chamfer for ISO metric threads



Cutting data page 29

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface

C

C

Type

TMC SP

TMC SP

Internal cooling

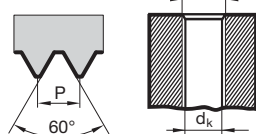
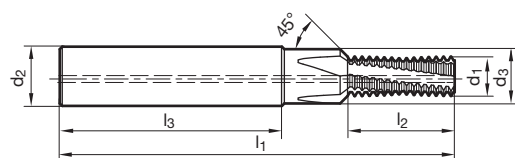


Shank form

HA

HB

NEW



Company std.

Article no.

3526

3544

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	6.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	8.800	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	10.800	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	13.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	18.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	21.800	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	25.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	31.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	35.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	41.300	4	20.000

Thread milling cutters with chamfer for ISO metric threads



Cutting data page 29

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface

C

C

Type

TMC SP

TMC SP

Internal cooling

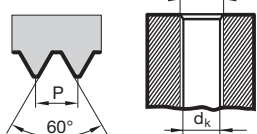
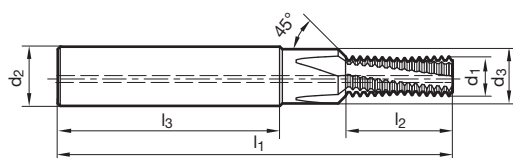


Shank form

HA

HB

NEW



Company std.

Article no.

3759

3760

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	7.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	35.600	10.900	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	13.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	16.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	21.900	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	26.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	32.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	37.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	43.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	48.800	4	20.000



Thread milling cutters with chamfer for ISO metric fine threads



Cutting data page 28

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

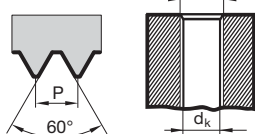
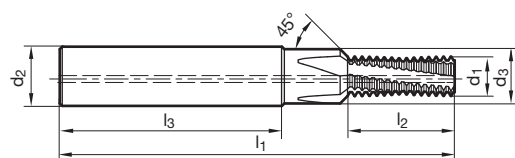


Shank form

HA

HB

NEW



Company std.

Article no.

3527

3545

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	7.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	8.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	9.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	10.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	13.100	3	8.004
M 8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	13.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	16.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	16.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	19.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	20.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	23.300	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	26.300	4	16.007

Thread milling cutters with chamfer for ISO metric fine threads



Cutting data page 29

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

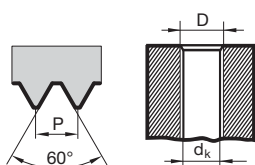
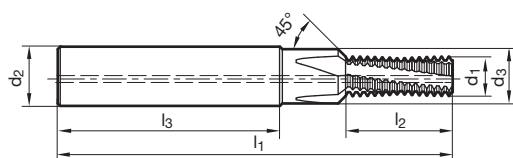


Shank form

HA

HB

NEW



Company std.

Article no.

3528

3546

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	8.800	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	10.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	12.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	13.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	16.900	3	8.004
M 8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	17.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	21.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	21.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	25.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	26.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	30.800	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	33.800	4	16.007



Thread milling cutters with chamfer for ISO metric fine threads



Cutting data page 29

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface

C

C

Type

TMC SP

TMC SP

Internal cooling

C

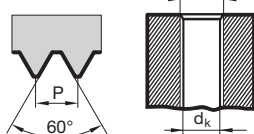
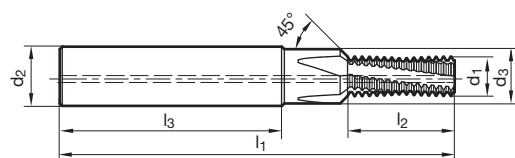
C

Shank form

HA

HB

NEW



Company std.

Article no.

3762

3763

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	10.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	12.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	15.300	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	15.400	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	20.600	3	8.004
M 8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	20.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	25.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	25.600	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	30.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	30.800	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	38.300	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	41.300	4	16.007

Thread milling cutters without chamfer for UNC-threads



Cutting data page 28

P	•
M	○
K	•
N	•
S	○
H	≤55

Tool material

Solid carbide

Surface

C

C

Type

TM SP

TM SP

Internal cooling

C

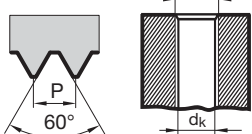
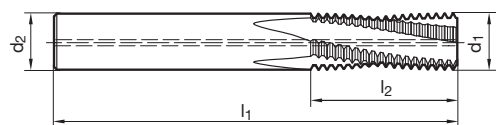
C

Shank form

HA

HB

NEW



Company std.

Article no.

4134

4135

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 24	3.400	6.000	3.90	54.000	11.100	3	4.826
12 - 24	4.100	6.000	4.50	54.000	12.200	3	5.486
1/4 - 20	4.700	6.000	5.10	54.000	14.600	3	6.350
5/16 - 18	6.100	8.000	6.60	64.000	17.600	3	7.938
3/8 - 16	7.600	8.000	8.00	64.000	21.400	3	9.525
7/16 - 14	9.000	10.000	9.40	74.000	24.500	3	11.113
1/2 - 13	9.950	10.000	10.80	74.000	28.300	4	12.700
9/16 - 12	11.400	12.000	12.20	90.000	30.700	4	14.288
5/8 - 11	12.700	14.000	13.50	90.000	35.800	4	15.875



Thread milling cutters with chamfer for UNC-threads



P	•	Cutting data page 28
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material

Solid carbide

Surface

C

C

Type

TMC SP

TMC SP

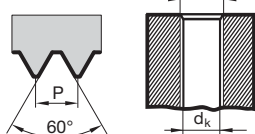
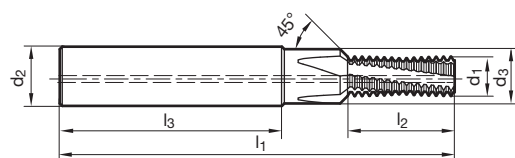
Internal cooling

Shank form

HA

HB

NEW



Company std.

Article no.

3516

3534

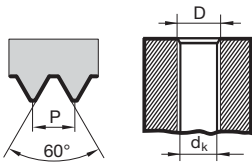
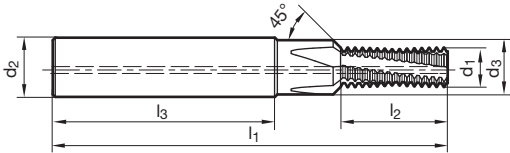
D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	12.100	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	14.800	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	16.700	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	19.000	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	22.500	4	12.700

Thread milling cutters with chamfer for UNC-threads



P	•	Cutting data page 29
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB



Company std.

Article no. 3517 3535

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	14.600	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	17.600	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	21.400	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	24.500	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	28.300	4	12.700



Thread milling cutters without chamfer for UNF-threads



Cutting data page 28

P	•
M	○
K	•
N	•
S	○
H	≤55

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

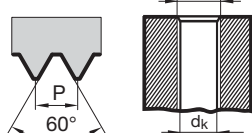
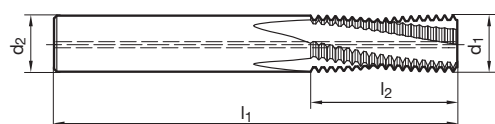
Internal cooling



Shank form

HA

HB



Company std.

Article no.

4136

4137

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 32	3.800	6.000	4.10	54.000	11.500	3	4.826
12 - 28	4.300	6.000	4.60	54.000	12.200	3	5.486
1/4 - 28	5.100	6.000	5.50	54.000	14.100	3	6.350
5/16 - 24	6.300	8.000	6.90	64.000	17.500	3	7.938
3/8 - 24	7.800	8.000	8.50	64.000	20.600	3	9.525
7/16 - 20	9.400	10.000	9.90	74.000	24.800	3	11.113
1/2 - 20	9.950	10.000	11.50	74.000	27.300	4	12.700
9/16 - 18	11.400	12.000	12.90	90.000	30.300	4	14.288
5/8 - 18	12.700	14.000	14.50	90.000	33.200	4	15.875

Thread milling cutters with chamfer for UNF-threads



Cutting data page 28

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

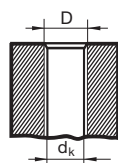
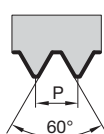
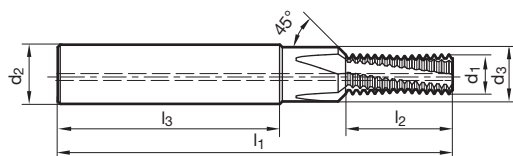


Shank form

HA

HB

NEW



Company std.

Article no.

3518

3536

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	11.300	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	13.200	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	16.400	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	18.400	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	21.000	4	12.700



Thread milling cutters with chamfer for UNF-threads



P	•	Cutting data page 29
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

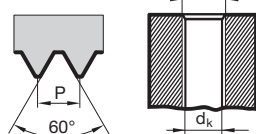
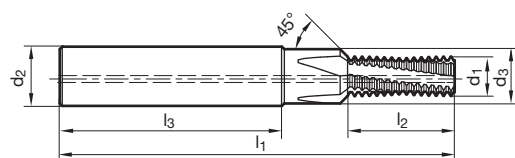
Internal cooling



Shank form

HA

HB



Company std.

Article no.

3519

3537

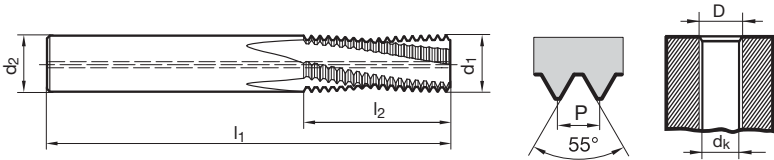
D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	14.100	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	17.500	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	20.600	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	24.800	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	27.300	4	12.700

Thread milling cutters without chamfer for BSP-threads



P	•	Cutting data page 28
M	○	
K	•	
N	•	
S	○	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB



Company std.

Article no. 3745 3748

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	21.300	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	28.700	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	35.400	4	16.662



Thread milling cutters without chamfer for BSP-threads



Cutting data page 28

P	•
M	○
K	•
N	•
S	○
H	≤55

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

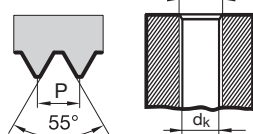
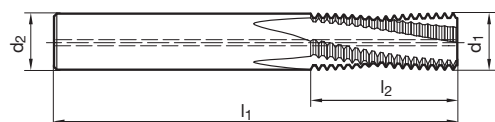
Internal cooling



Shank form

HA

HB



Company std.

Article no.

3746

3750

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	24.900	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	35.400	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	43.500	4	16.662

Thread milling cutters with chamfer for BSP-threads



Cutting data page 28

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

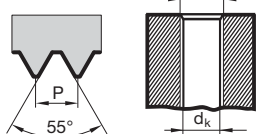
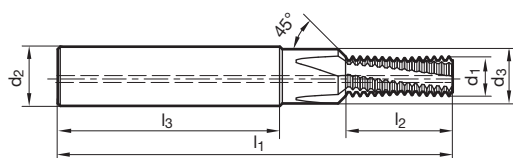


Shank form

HA

HB

NEW



Company std.

Article no.

3514

3529

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	15.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	22.100	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	27.400	4	16.662



Thread milling cutters with chamfer for BSP-threads



Cutting data page 29

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

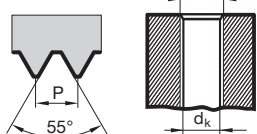
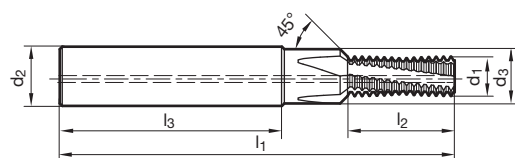


Shank form

HA

HB

NEW



Company std.

Article no.

3515

3533

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	21.300	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	28.700	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	35.400	4	16.662

Thread milling cutters with chamfer for BSP-threads



Cutting data page 29

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

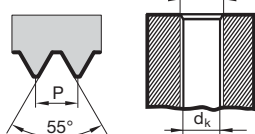
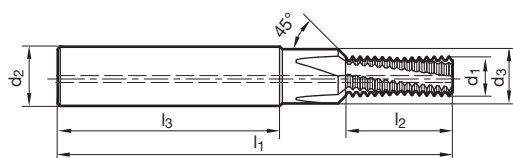


Shank form

HA

HB

NEW



Company std.

Article no.

3765

3766

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	24.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	35.400	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	43.500	4	16.662



Thread milling cutters without chamfer for NPT-threads



Cutting data page 28

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface

C

C

Type

TM SP

TM SP

Internal cooling

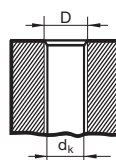
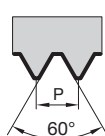
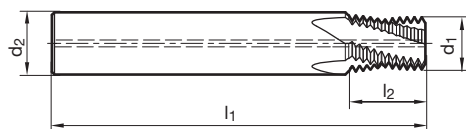


Shank form

HA

HB

NEW



Company std.

Article no.

3753

3754

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570

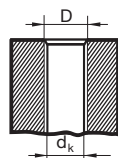
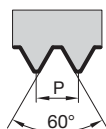
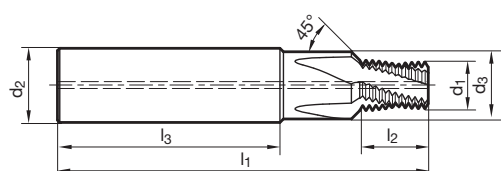
Thread milling cutters with chamfer for NPT-threads



P	•	Cutting data page 28
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3520

3538

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570



Thread milling cutters without chamfer for NPTF-threads



Cutting data page 28

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface

C

C

Type

TM SP

TM SP

Internal cooling

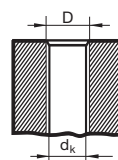
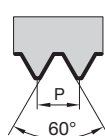
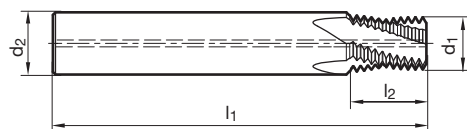


Shank form

HA

HB

NEW



Company std.

Article no.

3756

3757

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570

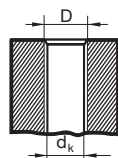
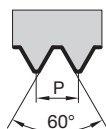
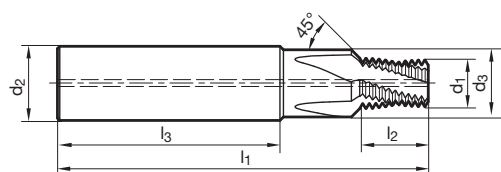
Thread milling cutters with chamfer for NPTF-threads



P	•	Cutting data page 28
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3521

3539

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570



Universal thread milling cutters for ISO metric threads



Cutting data page 29

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMU SP

TMU SP

Internal cooling

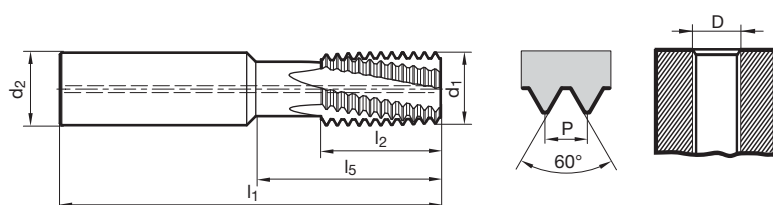


Shank form

HA

HB

NEW



Company std.

Article no.

3541

3556

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 10	7.950	8.000	64.000		20.000	4	8.050
1.000	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.100
1.250	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.125
1.500	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.150
1.000	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.150
1.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.100
1.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.200
3.000	≥ 24	17.950	18.000	102.000	50.000	33.000	5	18.300
1.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.100
1.500	≥ 26	19.950	20.000	105.000	50.000	33.000	5	20.150
2.000	≥ 27	19.950	20.000	105.000	50.000	33.000	5	20.200
2.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.250
3.000	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.300
3.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.350

External thread milling cutters



Cutting data page 29

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface

C

C

Type

TMU SP

TMU SP

Internal cooling

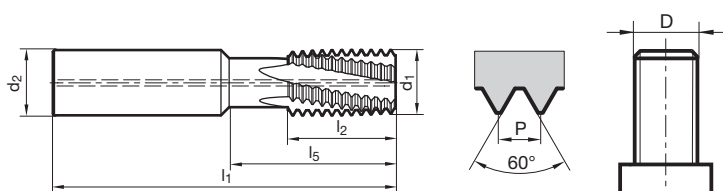


Shank form

HA

HB

NEW



Company std.

Article no.

4162

4163

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 3	9.950	10.000	70.000	25.000	16.000	4	10.050
0.750	≥ 5	9.950	10.000	70.000	25.000	16.000	4	10.075
1.000	≥ 6	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 8	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 10	11.950	12.000	80.000	31.000	20.000	4	12.150
1.500	≥ 10	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 14	15.950	16.000	90.000	40.000	25.000	5	16.200
2.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.250
3.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.300



Universal thread milling cutters for UN-threads



Cutting data page 29

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMU UN

TMU UN

Internal cooling

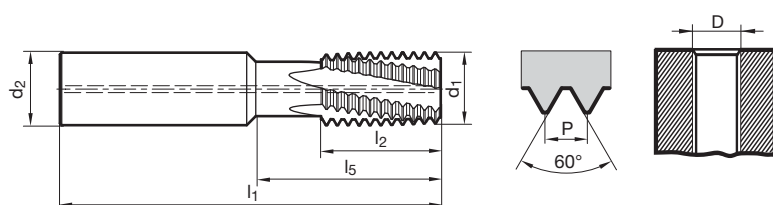


Shank form

HA

HB

NEW



Company std.

Article no.

3595

3596

P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
10.000	≥ 3/4	11.950	12.000	80.000	31.000	20.000	4	12.100
16.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.160
18.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.180
20.000	≥ 11/16	11.950	12.000	80.000	31.000	20.000	4	12.200
24.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.240
12.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.120
14.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.140
16.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.160
18.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.180
20.000	≥ 13/16	15.950	16.000	90.000	40.000	25.000	5	16.200
7.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.070
8.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.080
12.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.120
14.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.140
16.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.160

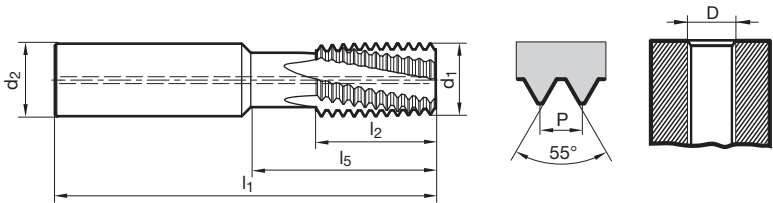
Universal thread milling cutters for BSP-threads



P	•	Cutting data page 29
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3542

3557

P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
19.000	≥ 1/4	9.950	10.000	70.000	25.000	16.000	4	10.190
14.000	≥ 1/2	15.950	16.000	90.000	40.000	25.000	5	16.140
11.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.110



Universal thread milling cutters for NPT-threads



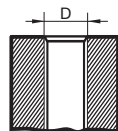
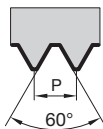
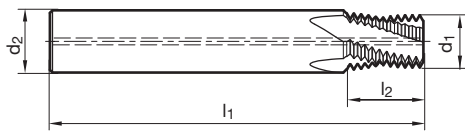
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 29

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW

Steel



Company std.

Article no.

3768

3769

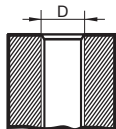
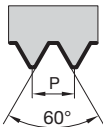
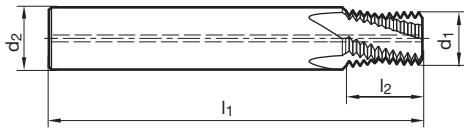
P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

Universal thread milling cutters for NPTF-threads



P	•	Cutting data page 29
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB



Company std.

Article no. **3772** **3773**

P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180



Micro-thread milling cutters



Cutting data page 29

P	•
M	•
K	•
N	•
S	•
H	

Tool material

Solid carbide

Surface

C

Type

SP M

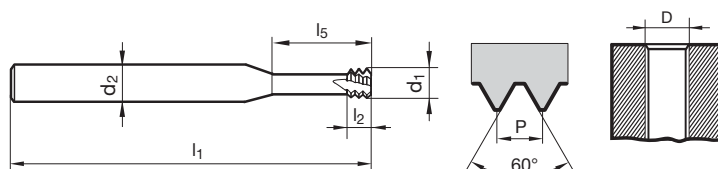
Threads

3,0

Shank form

HA

NEW



Company std.

Article no.

4226

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M 1.6	0.350	1.200	3.000	39.000	1.100	4.800	3	1.600
M 1.8	0.350	1.400	3.000	39.000	1.100	5.400	3	1.800
M2	0.400	1.550	3.000	39.000	1.200	6.000	4	2.000
M 2.5	0.450	1.950	3.000	39.000	1.400	7.500	4	2.500
M3	0.500	2.400	6.000	58.000	1.500	9.500	4	3.000
M 3.5	0.600	2.800	6.000	58.000	1.800	11.000	4	3.500
M4	0.700	3.200	6.000	58.000	2.100	12.500	4	4.000
M5	0.800	4.000	6.000	58.000	2.400	16.000	4	5.000
M6	1.000	4.800	6.000	58.000	3.000	20.000	4	6.000
M8	1.250	5.950	6.000	58.000	3.800	24.000	4	8.000
M10	1.500	7.800	8.000	73.000	4.500	33.000	4	10.000
M12	1.750	9.000	10.000	84.000	5.300	38.000	4	12.000
M16	2.000	11.800	10.000	84.000	6.000	35.000	5	16.000

Micro-thread milling cutters



Cutting data page 29

P	•
M	•
K	•
N	•
S	•
H	

Tool material

Solid carbide

Surface

Ⓒ

Type

SP G

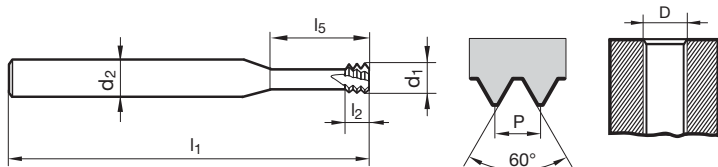
Threads

3,0

Shank form

HA

NEW



Company std.

Article no.

4228

D	P	d1	d2	l1	l2	l5	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	6.200	8.000	64.000	2.700	19.500	4	9.728
G3/8	19.000	9.950	10.000	73.000	4.000	25.000	4	16.662
G7/8	14.000	11.950	12.000	84.000	5.400	37.000	4	30.201
G2	11.000	15.950	16.000	105.000	6.900	44.000	5	59.614



Micro-thread milling cutters



Cutting data page 29

P	•
M	•
K	•
N	•
S	•
H	

Tool material

Solid carbide

Surface



Type

SP M/MF

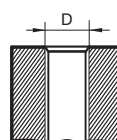
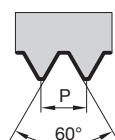
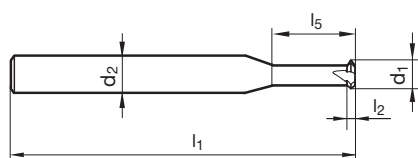
Threads

1,0

Shank form

HA

NEW



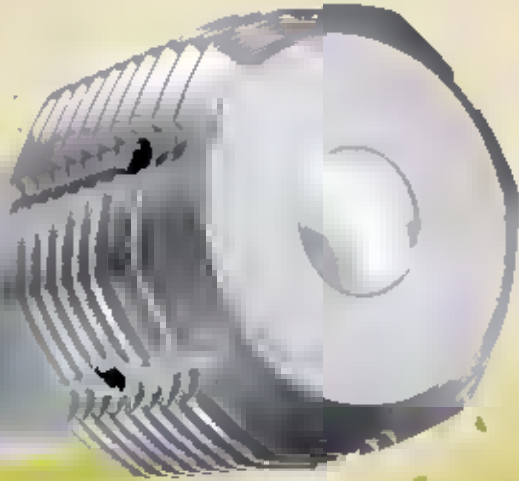
Company std.

Article no.

4225

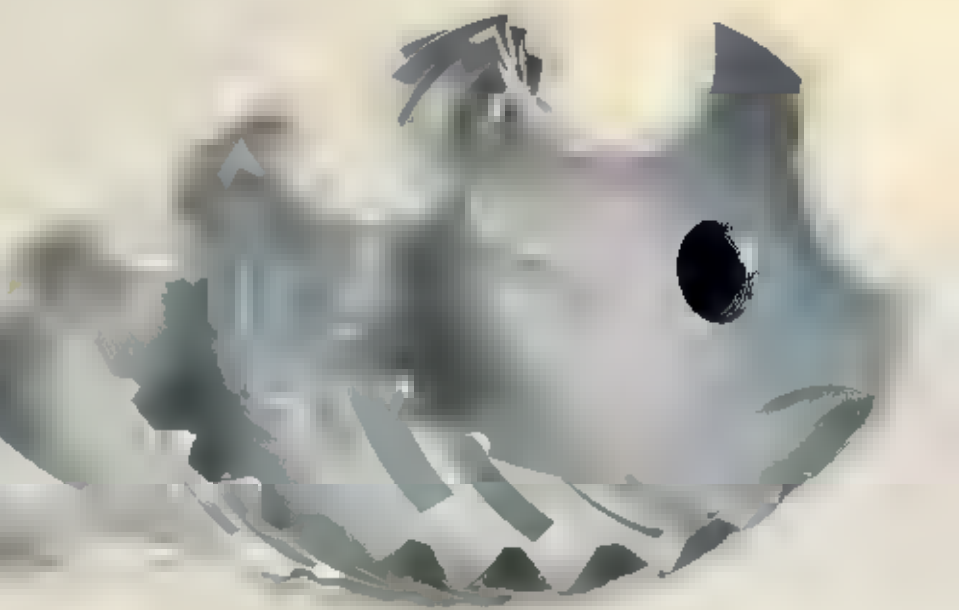
D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M1.4 - M1.8	0.350	1.050	3.000	39.000	0.400	3.800	3	1.800
M2 - M2.4	0.400	1.500	3.000	39.000	0.400	7.000	3	2.400
M2.5 - M3	0.500	2.000	3.000	39.000	0.500	9.000	4	3.000
M3.5 - M4.5	0.750	2.800	6.000	58.000	0.800	14.000	4	4.500
M5 - M7	1.000	4.000	6.000	58.000	1.000	19.000	4	7.000
M8 - M10	1.500	6.400	8.000	64.000	1.500	24.000	5	10.000

STA



INLESS STEEL

Stainless steel



Stainless and acid-resistant steels, sulphured,
austenitic and martensitic steels



STAINLESS STEEL

M

ISO 2/6H

ISO 3/6G

MF

ISO 2/6H

ISO 3/6G

No 1

M2 - M30
Art.-No. 4218
from page 239

No 1

M6x0,75 - M24x2
Art.-No. 4219
from page 248

M2 - M30
Art.-No. 2869/2870
from page 236

M3x0,35 - M24x1,5
Art.-No. 2871
from page 257

No 1

ideal
tool



QUICKFINDER

UNC

2B

UNF

2B

G

-



THROUGH HOLE

Stainless steel

No 1

G1/16 - G1
Art.-No. 4220
from page 264



HSS-E, Sirius, form B

No 1

No. 4 - 1
Art.-No. 2872/2873
from page 258

No 1

No. 4 - 1
Art.-No. 2874
from page 260

G1/16 - G1
Art.-No. 2875
from page 263



HSS-E, steam tempered, form B



STAINLESS STEEL

M

ISO 2/6H

ISO 3/6G

MF

ISO 2/6H

ISO 3/6G

No 1

M2 - M30
Art.-No. 393
from page 244

No 1

M6x0,75 - M24x1,5
Art.-No. 394
from page 252

No 1

M3 - M30
Art.-No. 2862/2863
from page 243

No 1

M3x0,35 - M24x1,5
Art.-No. 2864
from page 251

No 1

M3 - M20
Art.-No. 761/763
from page 247

No 1

M8x1 - M20x1,5
Art.-No. 764
from page 255

No 1

M3 - M20
Art.-No. 1139/1142
from page 247

No 1

M8x1 - M20x1,5
Art.-No. 1144
from page 255

No 1 ideal tool



QUICKFINDER

UNC

2B

UNF

2B

G

-



B L I N D H O L E

Stainless steel

No 1

G1/16 - G1
Art.-No. 395
from page 267



HSS-E, TiAlN, form C

No 1

No. 2 - 7/8
Art.-No. 2865/2866
from page 259

No 1

No. 10 - 1
Art.-No. 2868
from page 262

G1/16 - G1 1/2
Art.-No. 968
from page 265



HSS-E, steam tempered, form C

No 1

G1/16 - G1/2
Art.-No. 4159
from page 266



HSS-E-PM, TiN, form C

FOR
SYNCHRO MACHINING
SHANK TOLERANCE h6



HSS-E-PM, TiCN, form C



STAINLESS STEEL

without lubrication

M**6HX****6GX****No 1**

M1 - M20
Art.-No. 921/925
from page 271

No 1

M2 - M10
Art.-No. 920
from page 272

MF**6HX****6GX****No 1**

M8x1 - M20x1,5
Art.-No. 929
from page 286

No 1

M8x1 - M18x1,5
Art.-No. 928
from page 290

with lubrication

No 1

M3 - M39
Art.-No. 919/923
from page 274

M3 - M39
Art.-No. 918/922
from page 274

M6x0,75 - M24x1,5
Art.-No. 1275/927
from page 288

No 1

M8x1 - M20x1,5
Art.-No. 1277/926
from page 292

No 1

M3 - M39
Art.-No. 2012/2013
from page 274

No 1

M6x0,75 - M20x1,5
Art.-No. 2008
from page 291

with internal cooling

No 1

M3 - M20
Art.-No. 1270/1271
from page 280

No 1

M5 - M10
Art.-No. 1713
from page 281

No 1

M8x1 - M24x1,5
Art.-No. 1272/1273
from page 296

No 1

M8x1 - M24x1,5
Art.-No. 1715/1716
from page 297

No 1

M3 - M20
Art.-No. 1725/1727
from page 280

No 1

M3 - M20
Art.-No. 1726/1728
from page 282

No 1

M8x1 - M24x1,5
Art.-No. 1729/1731
from page 296

No 1

M8x1 - M24x1,5
Art.-No. 1730/1732
from page 297

No 1

M3 - M20
Art.-No. 1972/1931
from page 284

No 1

M10x1 - M24x1,5
Art.-No. 1581
from page 299

No 1 ideal tool



QUICKFINDER

UNC

2BX

UNF

2BX

G

-



THROUGH HOLE
BLIND HOLE

Stainless steel

No 1

Nr. 4 - 7/8
Art.-No. 2273/2274
from page 300

No 1

Nr. 4 - 1
Art.-No. 1283/2275
from page 301

No 1

G1/16 - G1 1/4
Art.-No. 966
from page 302



HSS-E, TiN, form C

No 1

Nr. 4 - 7/8
Art.-No. 1582/1583
from page 300

No 1

Nr. 4 - 1
Art.-No. 1584/1585
from page 301

No 1

G1/16 - G1 1/4
Art.-No. 1586
from page 302



HSS-E, TiN, form C



HSS-E, TiCN, form C

FORM C



HSS-E-PM, TiCN, form C

FORM E



HSS-E-PM, TiN, form E

SOLID CARBIDE



Solid carbide, TiCN, form C



STAINLESS STEEL

M

UNIVERSAL

MF

UNIVERSAL

1.5xD

No 1

M3 - M20
Art.-No. 3525
from page 306

No 1

M4x0,5 - M16x1,5
Art.-No. 3527
from page 309

2xD

No 1

M3 - M20
Art.-No. 3526
from page 307

No 1

M4x0,5 - M16x1,5
Art.-No. 3528
from page 310

2.5xD

No 1

M3 - M20
Art.-No. 3759
from page 308

No 1

M4x0,5 - M16x1,5
Art.-No. 3762
from page 311

3xD

No 1

M1,6 - M16
Art.-No. 4226
from page 333

universal

No 1

Ø8x0,5 - Ø30xP3,5
Art.-No. 3541
from page 327

No 1

Ø8x0,5 - Ø30xP3,5
Art.-No. 3541
from page 327

No 1 ideal tool

QUICKFINDER

UNC
UNIVERSAL

UNF
UNIVERSAL

G
-



T H R O U G H H O L E
B L I N D H O L E

No 1

1/4 - 1/2
Art.-No. 3516
from page 313

No 1

1/4 - 1/2
Art.-No. 3518
from page 316

No 1

1/8 - 3/8
Art.-No. 3514
from page 320



Solid carbide, TiCN

No 1

1/4 - 1/2
Art.-No. 3517
from page 314

No 1

1/4 - 1/2
Art.-No. 3519
from page 317

No 1

1/8 - 3/8
Art.-No. 3515
from page 321



Solid carbide, TiCN



Solid carbide, TiCN



Solid carbide, TiCN

No 1

Ø10xUN24 - Ø20xUN7
Art.-No. 3595
from page 329

No 1

Ø10xUN24 - Ø20xUN7
Art.-No. 3595
from page 329

No 1

Ø10xG19 - Ø20xG11
Art.-No. 3542
from page 330



Solid carbide, TiCN



COMPASS



 STAINLESS STEEL	Thread depth		≤1,5xD					
	Tool material		HSS-E			HSS-E-PM		
	Type/form		VA/B	VA/B	VA/B	VA AZ/B	N/B	VA/B
	Surface							
	Coolant delivery							
	Shank tolerance		h9	h9	h9	h9	h9	h9
 THROUGH HOLES								
	Thread type	Tolerance	Article no. / page					
	M	4H						
		6H	1870/1872 236	2869/2870 236	2086/2087 236	1871/792 240	877/879 237	1002 238
		6HX					4218 239	
		6G						
	MF	6H	1873 256	2871 257	1001 257		887 256	1291 248
		6HX					4219 248	
		6G						
	UNC	2B	1980/1985 258	2872/2873 258				
		2BX						
	UNF	2B	1990 260	2874 260				
		2BX						
	G		967 263	2875 263			4220 264	
	BSW							
	NPT							
	NPTF							
	EG M	6H Mod.						
	MJ	4HX						
	MJF	4HX						
	UNJC	3BX						
	UNJF	3BX						
	PG							
	Soluble oil							

= No 1

-  = Air
 = Neat oil
 = Soluble oil
 = Paste
 = Minimal quantity lubrication (MQL)

Group of materials		Tensile strength	Material ex-ample	Material no.	Recommended cutting speed vc m/min					
M	Stainless steels, sulphured, austenitic	≤1000 N/mm ²	X5CrNi18-10	1.4301	8	8	10	8	10	8
			X6CrNiTi18-10	1.4571						
			X8CrNiS18-9	1.4305						
	Stainless- and acidresistant steels, martensitic	≤1000 N/mm ²	X17CrNi16-2	1.4057	6	6	8	6	12	6
			X90CrMoV18	1.4112						
			X2CrTi12	1.4512						
	Duplex and Super Duplex	≤1300 N/mm ²	X2CrNiMoN22-5-3	1.4462	-	-	-	-	10	-
			X2CrNiMoN25-7-4	1.4410						
			X2CrNiMoCuWN25-7-4	1.4501						



STAINLESS STEEL

Thread depth

 $\leq 1,5 \times D$

Tool material

HSS-E

Type/form

VA R15 / C

VA R15 / C

VA R25 / C

VA R25 / C

NR15 / C

NR15 / C

Tool material



Coolant delivery



Shank tolerance

h9

h9

h9

h9

h9

h9



BLIND HOLES



Thread type

Tolerance

Article no. / page

M

4H

843/785
2412896/2895
2414154
2424155
242

6H

6HX

6G

MF

6H

1874
2492897
2494156
2504157
250

6HX

6G

UNC

2B

2BX

UNF

2B

1991
2612898
261

2BX

G

BSW

NPT

NPTF

EG M

6H Mod.

MJ

4HX

MJF

4HX

UNJC

3BX

UNJF

3BX

PG

Suitable lubricant

○ / ● / △

○ / ● / △

○ / ● / △

○ / ● / △

○ / ● / △

○ / ● / △

○ = Air

● = Neat oil

● = Soluble oil

△ = Paste

□ = Minimal quantity lubrication (MQL)

= No 1

Group of materials		Tensile strength	Material ex-ample	Material no.	Recommended cutting speed vc m/min					
M	Stainless steels, sulphured, austenitic	≤ 1000 N/mm ²	X5CrNi18-10	1.4301	6	8	6	8	8	8
			X6CrNiTi18-10	1.4571						
			X8CrNiS18-9	1.4305						
	Stainless- and acidresistant steels, martensitic	≤ 1000 N/mm ²	X17CrNi16-2	1.4057	4	6	4	6	6	6
			X90CrMoV18	1.4112						
			X2CrTi12	1.4512						
	Duplex and Super Duplex	≤ 1300 N/mm ²	X2CrNiMoN22-5-3	1.4462	-	-	-	-	-	-
			X2CrNiMoN25-7-4	1.4410						
			X2CrNiMoCuWN25-7-4	1.4501						


 $\leq 3 \times D$

HSS-E				HSS-E-PM					
NR40 / C	NR40 / C	NR40 / C	VA R45/C	NR40 / C	NR40 / C	NR50 / C	NR50 / C	VA R50/C	VA R50/C
		axial					axial		axial
h9	h9	h9	h9	h9	h9	h9	h9	h6	h6
Article no. / page									
814/825 243	2862/2863 243	1892/1899 243		909/910 246	59/60 246	767/1098 245	1152/1293 245		
			393 244					761/763 247	1139/1142 247
	2864 251			936 253	1004 253	1100 254	1294 254		
			394 252					764 255	1144 255
1981/1986 259	2865/2866 259								
2867 262	2868 262								
	968 265		395 267	939 265				4159 266	

Stainless steel

Recommended cutting speed vc m/min

6	6	6	15	8	10	10	10	12	12
4	4	4	10	6	6	6	6	8	8
-	-	-	6	-	-	-	-	-	-



STAINLESS STEEL



THROUGH HOLES
AND BLIND HOLES

Thread depth

1.5xD

Tool material

HSS-E

HSS-E-PM

Solid carbide

Type/form

N / C

N / C

N / C

Tool material

S

S

S

Coolant delivery

☑

☑

axial

Shank tolerance

h9

h9

h6



Thread type

Tolerance

Article no. / page

M

4H

6H

6HX

6GX

921/925

271

920

272

1255/1256

271

903/952

271

2518

273

MF

6H

6HX

6GX

929

286

928

290

1257/1258

287

1740

289

UNC

2BX

3BX

2273/2274

300

UNF

2BX

3BX

1283/2275

301

G

966

302

BSW

NPT

NPTF

EG M

6H Mod.

MJ

4HX

MJF

4HX

UNJC

3BX

UNJF

3BX

PG

Suitable lubricant

○/●/△

○/●/△

○/●/△

= No 1

○ = Air

● = Neat oil

● = Soluble oil

△ = Paste

□ = Minimal quantity lubrication (MQL)

Group of materials	Tensile strength	Material ex-ample	Material no.	Recommended cutting speed vc m/min		
M	Stainless steels, sulphured, austenitic	X5CrNi18-10	1.4301	4	4	15
		X6CrNiTi18-10	1.4571			
		X8CrNiS18-9	1.4305			
	Stainless- and acidresistant steels, martensitic	X17CrNi16-2	1.4057	4	4	12
		X90CrMoV18	1.4112			
		X2CrTi12	1.4512			
	Duplex and Super Duplex	X2CrNiMoN22-5-3	1.4462	-	-	-
		X2CrNiMoN25-7-4	1.4410			
		X2CrNiMoCuWN25-7-4	1.4501			

Stainless steel

GÜHRING

 STAINLESS STEEL	Thread depth	≤2xD				≤2,5xD		≤1,5xD	
	Tool material		Solid carbide						
	Type	TM SP	TM SP	TM SP	TM SP	TM SP	TM SP	TMC SP	TMC SP
	Surface								
	Coolant delivery			axial	axial	axial	axial	axial	axial
	Shank form	HA	HB	HA	HB	HA	HB	HA	HA
	Spiral	27°	27°	27°	27°	27°	27°	10°	10°
	 THROUGH HOLES AND BLIND HOLES								
	Thread type		Article no. / page						
	M	4132 304	4133 304	3737 304	3743 304	3735 305	3740 305	3525 306	3543 306
	MF			3737 304	3743 304			3527 309	3545 309
	UNC			4134 312	4135 312			3516 313	3534 313
	UNF			4136 315	4137 315			3518 316	3536 316
	G			3745 318	3748 318	3746 319	3750 319	3514 320	3529 320
	BSW								
	NPT			3753 323	3754 323			3520 324	3538 324
	NPTF			3756 325	3757 325			3521 326	3539 326
	EG M	EG-threads can be produced with every thread milling cutter type and dimension							
	MJ								
	MJF								
	UNJC								
	UNJF								
	PG								
	Suitable lubricant								

= No 1

- = Air
- = Neat oil
- ◐ = Soluble oil
- △ = Paste
- = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material ex-ample	Material no.	Application recommendations							
M	Stainless steels, sulphured, austenitic	≤1000 N/mm ²	X5CrNi18-10	1.4301								
			X6CrNiTi18-10	1.4571	+	+	+	+	+	+	++	++
			X8CrNiS18-9	1.4305								
	Stainless- and acidresistant steels, martensitic	≤1000 N/mm ²	X17CrNi16-2	1.4057								
			X90CrMoV18	1.4112	+	+	+	+	+	+	++	++
			X2CrTi12	1.4512								
	Duplex and Super Duplex	≤1300 N/mm ²	X2CrNiMoN22-5-3	1.4462								
			X2CrNiMoN25-7-4	1.4410	+	+	+	+	+	+	++	++
			X2CrNiMoCuWN25-7-4	1.4501								



Stainless steel

≤2xD		≤2,5xD		universal				≤3xD	
Solid carbide									
TMC SP	TMC SP	TMC SP	TMC SP	TMU SP	TMU SP	TMU SP	TMU SP	MTM 3 SP	MTM 1 SP
									
axial	axial	axial	axial	axial	axial	axial	axial		
HA	HB	HA	HB	HA	HB	HA	HB	HA	HA
10°	10°	27°	27°	15°	15°	15°	15°	15°	15°
									
Article no. / page									
3526 307	3544 307	3759 308	3760 308	3541 327	3556 327	4162 328	4163 328	4226 333	4225 335
3528 310	3546 310	3762 311	3763 311	3541 327	3556 327	4162 328	4163 328		4225 335
3517 314	3535 314			3595 329	3596 329				
3519 317	3537 317			3595 329	3596 329				
3515 321	3533 321	3765 322	3766 322	3542 330	3557 330			4228 334	
				3768 331	3769 331				
				3772 332	3773 332				
EG-threads can be produced with every thread milling cutter type and dimension									
									

Application recommendations									
++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++

Machine taps for ISO metric threads

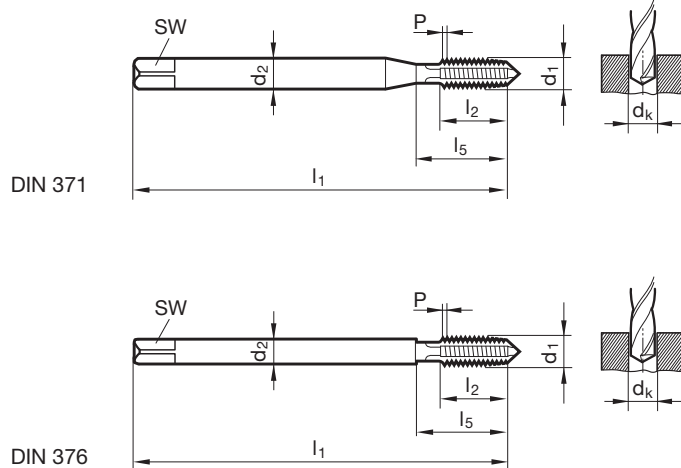


P ≤ 1000 Cutting data page 229

M	•
K	
N	•
S	
H	

Stainless steel

Tool material	HSS-E		
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H
Surface	○	●	●
Type	N	N	VA
Form	B	B	B
Internal cooling			



DIN 2184-1 DIN 371

Article no.

1870

2086

2869

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

1872

2087

2870

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000



Machine taps for ISO metric threads



P	≤ 1000
M	•
K	
N	○
S	
H	

Cutting data page 229

Tool material **HSS-E-PM**

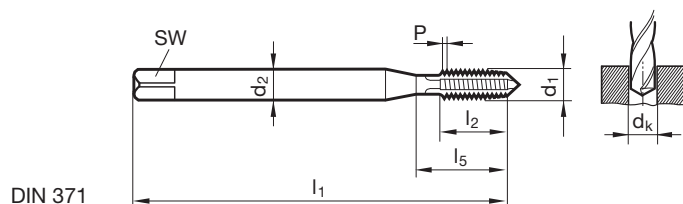
Tolerance on Ø ISO2/6H

Surface ○

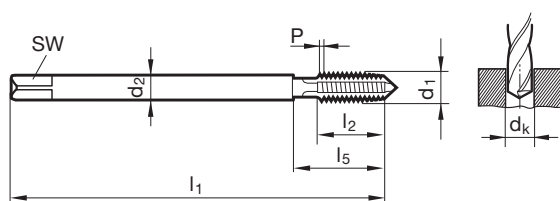
Type N

Form B

Internal cooling



DIN 371



DIN 376



Stainless steel

DIN 2184-1 DIN 371

Article no.

877

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

879

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000

Machine taps for ISO metric threads



P	≤ 1000
M	•
K	
N	
S	
H	

Cutting data page 229

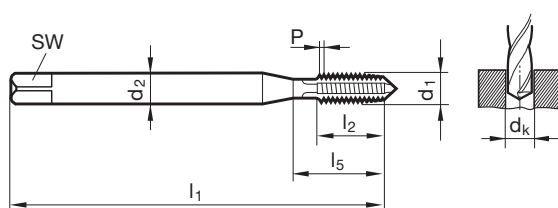
Stainless steel

Tool material **HSS-E-PM**

Tolerance on Ø ISO2/6H

Surface **S**Type **N**Form **B**

Internal cooling



DIN 2184-1 DIN 371/DIN 376

Article no.

1002

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000



Machine taps for ISO metric threads



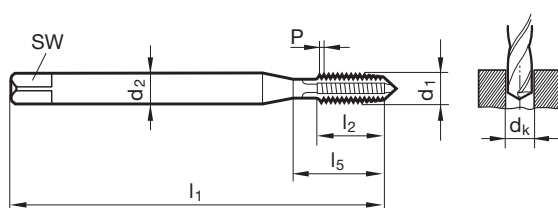
Cutting data page 229

P	•
M	•
K	○
N	○
S	○
H	

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	S
Type	N
Form	B
Internal cooling	

NEW

Stainless steel



DIN 2184-1 DIN 371/DIN 376

Article no.

4218

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000

Machine taps for ISO metric threads

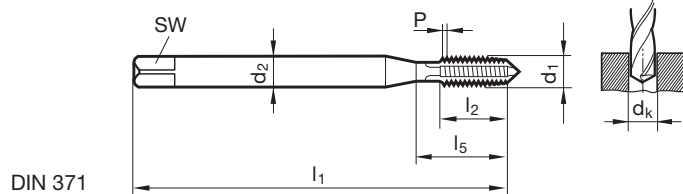


P	≤ 1000
M	•
K	
N	○
S	
H	

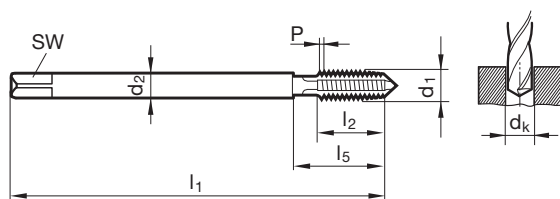
Cutting data page 229

Stainless steel

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	VA AZ
Form	B
Internal cooling	



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

1871

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

792

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000



Machine taps for ISO metric threads



P	
M	•
K	
N	
S	
H	

Cutting data page 230

Tool material

HSS-E

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface



S

Type

VA R15

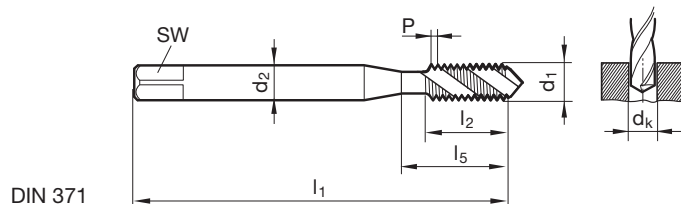
VA R15

Form

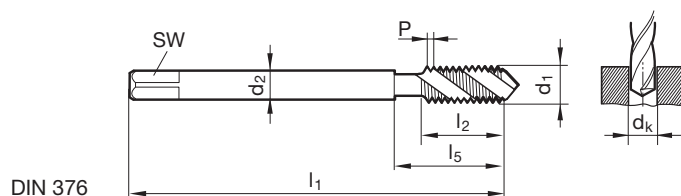
C

C

Internal cooling



DIN 371



DIN 376



Stainless steel

DIN 2184-1 DIN 371

Article no.

843

2896

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

785

2895

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	27.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000

Machine taps for ISO metric threads



P ≤ 1000

Cutting data page 230

M ○

K ○

N ○

S ○

H ○

Stainless steel

Tool material

HSS-E

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface

C

C

Type

N R15

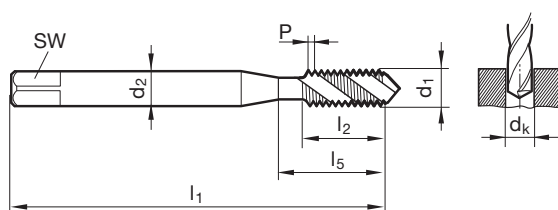
N R15

Form

C

E

Internal cooling



DIN 2184-1 DIN 371/DIN 376

Article no.

4154

4155

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000



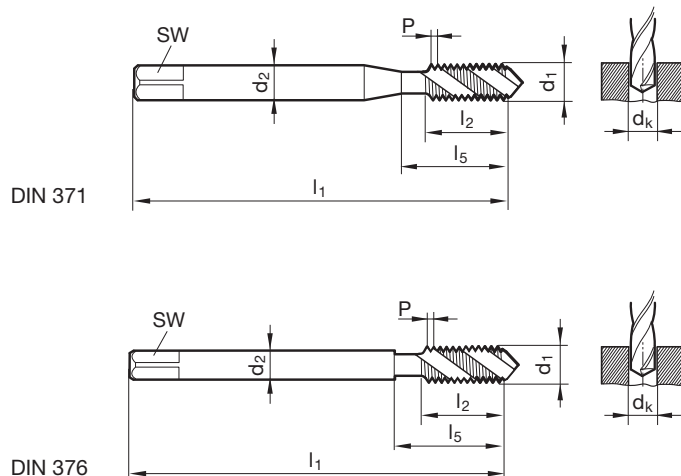
Machine taps for ISO metric threads



P	
M	•
K	
N	•
S	
H	

Cutting data page 231

Tool material	HSS-E		
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H
Surface			
Type	VA R40	VA R40	VA R40
Form	C	C	C
Internal cooling			



Stainless steel

DIN 2184-1 DIN 371

Article no.

814

1892

2862

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

825

1899

2863

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	27.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000

Machine taps for ISO metric threads



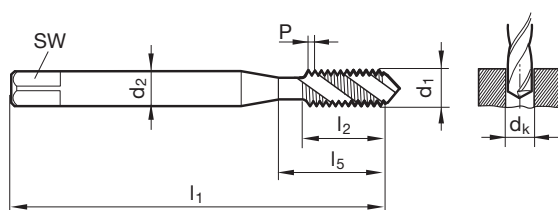
Cutting data page 231

Stainless steel

P	•
M	•
K	○
N	○
S	○
H	

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	A
Type	VA R45
Form	C
Internal cooling	

NEW



DIN 2184-1 DIN 371/DIN 376

Article no.

393

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000



Machine taps for ISO metric threads



Cutting data page 231

P	•
M	•
K	○
N	•
S	○
H	

Tool material

HSS-E-PM

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface

S

C

Type

N R50

N R50

Form

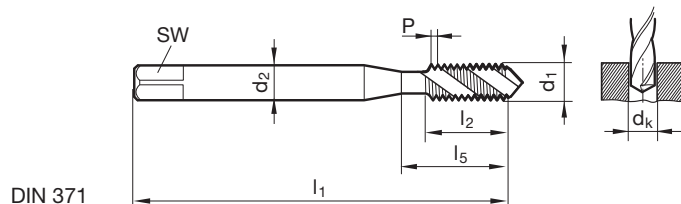
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C

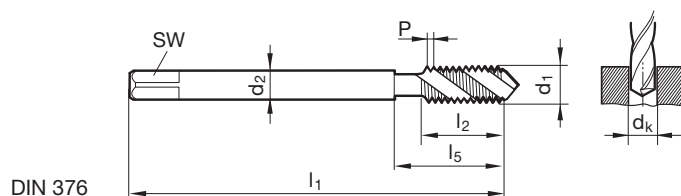
Internal cooling

X

X



DIN 371



DIN 376



Stainless steel

DIN 2184-1 DIN 371

Article no.

767

1152

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

1098

1293

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000

Machine taps for ISO metric threads



Cutting data page 231

Stainless steel

P	
M	•
K	
N	
S	
H	

Tool material

HSS-E-PM

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface

S

○

Type

VA R40

VA R40

Form

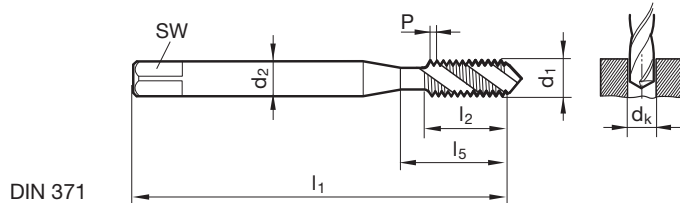
C

C

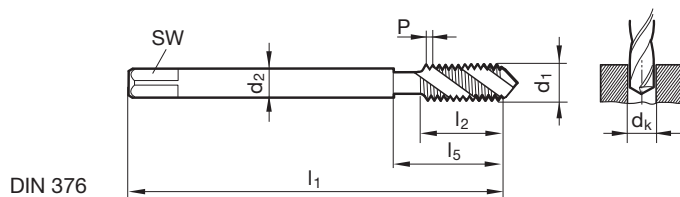
Internal cooling

✗

✗



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

59

909

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

60

910

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000



Machine taps for ISO metric threads



Cutting data page 231

P	•
M	•
K	○
N	•
S	○
H	

Tool material **HSS-E-PM**

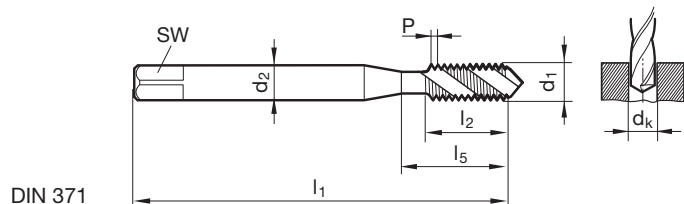
Tolerance on Ø 6HX 6HX

Surface **S** **C**

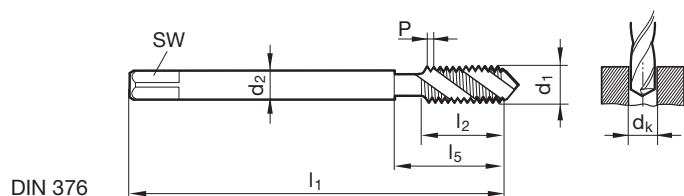
Type VA R50 VA R50

Form C C

Internal cooling



DIN 371



DIN 376



Stainless steel

DIN 2184-1 DIN 371

Article no.

761

1139

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	2.500	18.000
M4	0.700	4.500	3.400	3.30	63.000	3.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	4.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	5.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	6.300	35.000
M10	1.500	10.000	8.000	8.50	100.000	7.500	39.000

DIN 2184-1 DIN 376

Article no.

763

1142

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	8.800	63.000
M14	2.000	11.000	9.000	12.00	110.000	10.000	58.000
M16	2.000	12.000	9.000	14.00	110.000	10.000	58.000
M20	2.500	16.000	12.000	17.50	140.000	12.500	85.000

Machine taps for ISO metric fine threads



P	≤ 1000
M	•
K	
N	
S	
H	

Cutting data page 229

Stainless steel

Tool material

HSS-E-PM

HSS-E

Tolerance on Ø

ISO2/6H

6HX

Surface

S

S

Type

N

N

Form

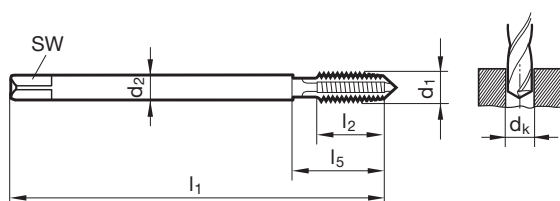
B

B

Internal cooling



NEW



DIN 2184-1 DIN 374

Article no.

1291

4219

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.25	11.000	9.000	12.80	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	28.000	48.000	24.008



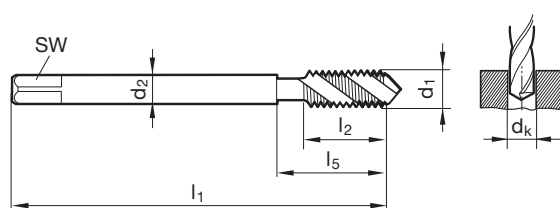
Machine taps for ISO metric fine threads



P	
M	•
K	
N	
S	
H	

Cutting data page 230

Tool material	HSS-E	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface		
Type	VA R15	VA R15
Form	C	C
Internal cooling		



DIN 2184-1 DIN 374

Article no.

1874

2897

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 4 X0.5	2.800	2.100	3.50	63.000	5.000	21.000	4.003
M 5 X0.5	3.500	2.700	4.50	70.000	5.000	25.000	5.003
M 6 X0.5	4.500	3.400	5.50	80.000	5.000	30.000	6.003
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M20 x 2	16.000	12.000	18.00	140.000	20.000	60.000	20.008
M22 X1.5	18.000	14.500	20.50	125.000	16.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007

Stainless steel

Machine taps for ISO metric fine threads



P ≤ 1000

Cutting data page 230

M ○

K ○

N ○

S ○

H ○

Stainless steel

Tool material

HSS-E

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface

C

C

Type

N R15

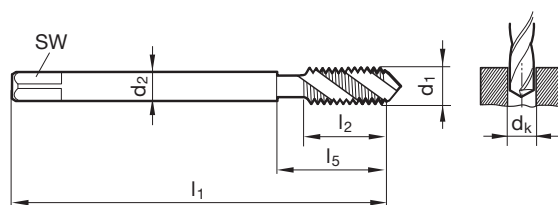
N R15

Form

C

E

Internal cooling



DIN 2184-1 DIN 374

Article no.

4156

4157

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007



Machine taps for ISO metric fine threads

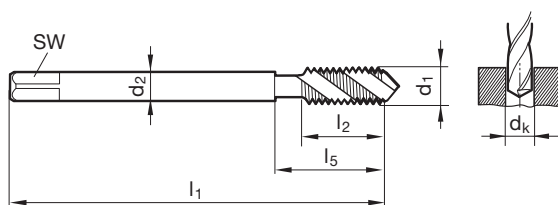


Cutting data page 231

P	
M	•
K	
N	
S	
H	

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	●
Type	VA R40
Form	C
Internal cooling	

Stainless steel



DIN 2184-1 DIN 374

Article no.

2864

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 3 X0.35	2.200		2.65	56.000	4.000	18.000	3.002
M 4 X0.5	2.800	2.100	3.50	63.000	5.000	21.000	4.003
M 5 X0.5	3.500	2.700	4.50	70.000	5.000	25.000	5.003
M 6 X0.5	4.500	3.400	5.50	80.000	5.000	30.000	6.003
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 8 X0.5	6.000	4.900	7.50	80.000	8.000	30.000	8.003
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M 8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	16.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007

Machine taps for ISO metric fine threads

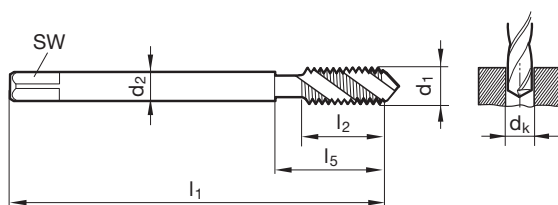


Cutting data page 231

Stainless steel

P	•
M	•
K	○
N	○
S	○
H	

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	A
Type	VA R45
Form	C
Internal cooling	

NEW**DIN 2184-1 DIN 374**

Article no.

394

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M 8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007



Machine taps for ISO metric fine threads

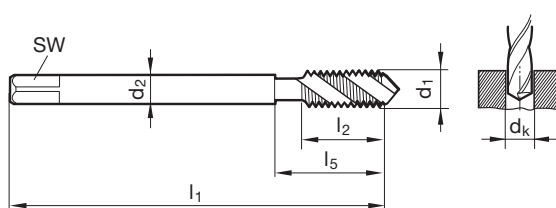


Cutting data page 231

P	
M	•
K	
N	•
S	
H	

Tool material	HSS-E-PM	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	○	Ⓢ
Type	VA R40	VA R40
Form	C	C
Internal cooling		

Stainless steel



DIN 2184-1 DIN 374

Article no.

936

1004

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007

Machine taps for ISO metric fine threads



Cutting data page 231

Stainless steel

P	•
M	•
K	○
N	○
S	○
H	

Tool material

HSS-E-PM

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface

S

C

Type

N R50

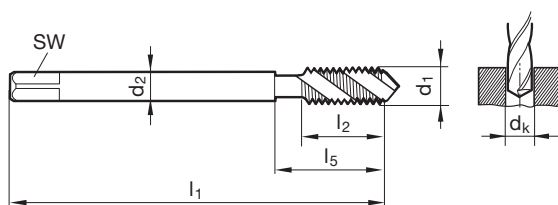
N R50

Form

C

C

Internal cooling



DIN 2184-1 DIN 374

Article no.

1100

1294

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007



Machine taps for ISO metric fine threads



Cutting data page 231

P	•
M	•
K	○
N	•
S	○
H	

Tool material **HSS-E-PM**

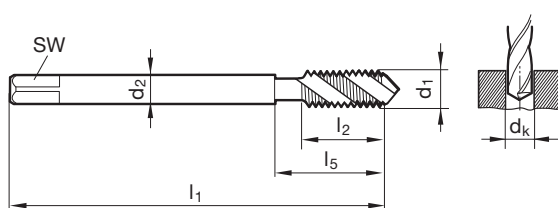
Tolerance on Ø 6HX 6HX

Surface **S** **C**

Type VA R50 VA R50

Form C C

Internal cooling



Stainless steel

DIN 2184-1 DIN 374

Article no.

764

1144

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	5.000	44.000	8.005
M8 x 1	6.000	4.900	7.00	90.000	5.000	47.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	5.000	47.000	10.005
M10 x 1	7.000	5.500	9.00	90.000	5.000	44.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	5.000	53.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	7.500	53.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	7.500	48.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	7.500	48.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	7.500	58.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	7.500	70.000	20.007

Machine taps for ISO metric fine threads



P	≤ 1000
M	•
K	
N	•
S	
H	

Cutting data page 229

Stainless steel

Tool material

HSS-E-PM

HSS-E

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface



Type

N

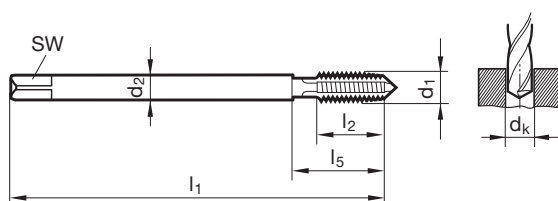
N

Form

B

B

Internal cooling



DIN 2184-1 DIN 374

Article no.

887

1873

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 7 X0.75	5.500	4.300	6.20	80.000	13.000	30.000	7.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	28.000	48.000	24.008



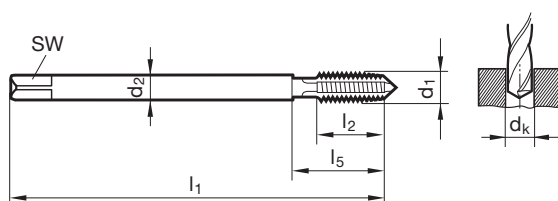
Machine taps for ISO metric fine threads



P	≤ 1000
M	•
K	
N	
S	
H	

Cutting data page 229

Tool material	HSS-E	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface		
Type	N	N
Form	B	B
Internal cooling		



DIN 2184-1 DIN 374

Article no.

1001

2871

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 3 X0.35	2.200		2.65	56.000	7.000	18.000	3.002
M 4 X0.5	2.800	2.100	3.50	63.000	8.000	21.000	4.003
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M 8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007

Stainless steel

Machine taps for UNC-threads



P	≤ 1000
M	•
K	
N	•
S	
H	

Cutting data page 229

Stainless steel

Tool material

HSS-E

Tolerance on Ø

2B

2B

Surface



Type

N

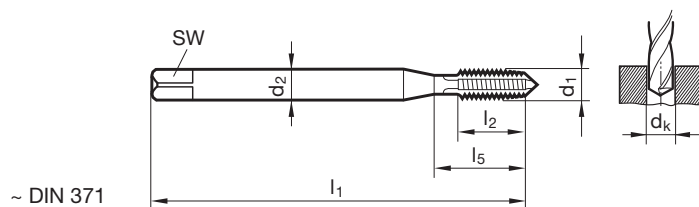
VA

Form

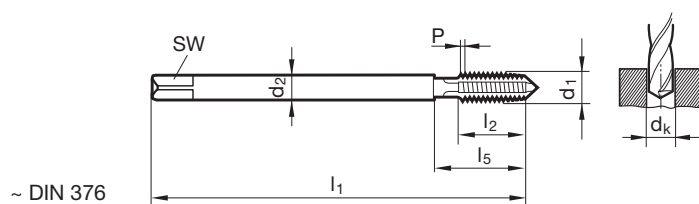
B

B

Internal cooling



~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371

Article no.

1980

2872

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.35	56.000	11.000	18.000	2.845
5 - 40	3.500	2.700	2.65	56.000	11.000	18.000	3.175
6 - 32	4.000	3.000	2.85	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376

Article no.

1985

2873

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
1/2 - 13	9.000	7.000	10.80	110.000	25.000	49.000	12.700
9/16 - 12	11.000	9.000	12.20	110.000	28.000	53.000	14.288
5/8 - 11	12.000	9.000	13.50	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	33.000	62.000	19.050
7/8 - 9	18.000	14.500	19.50	140.000	35.000	62.000	22.225
1 - 8	18.000	14.500	22.25	160.000	38.000	73.000	25.400



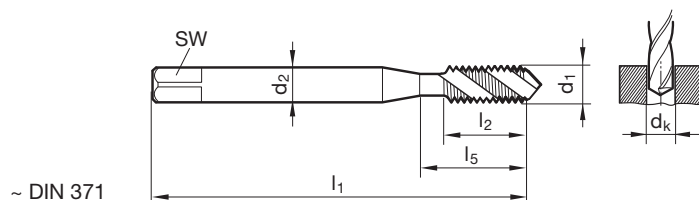
Machine taps for UNC-threads



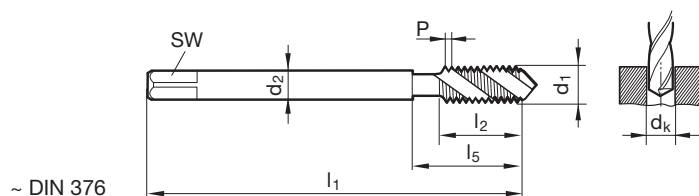
P	
M	•
K	
N	•
S	
H	

Cutting data page 231

Tool material	HSS-E	
Tolerance on Ø	2B	2B
Surface	○	●
Type	VA R40	VA R40
Form	C	C
Internal cooling		



~ DIN 371



~ DIN 376



Stainless steel

DIN 2184-1 ~DIN 371

Article no.

1981

2865

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
2 - 56	2.800	2.100	1.85	45.000	5.000	14.500	2.184
4 - 40	3.500	2.700	2.35	56.000	7.000	18.000	2.845
5 - 40	3.500	2.700	2.65	56.000	7.000	18.000	3.175
6 - 32	4.000	3.000	2.85	56.000	8.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	8.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	11.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	11.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	13.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	14.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	16.000	39.000	9.525

DIN 2184-1 ~DIN 376

Article no.

1986

2866

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	9.40	100.000	18.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	20.000	49.000	12.700
9/16 - 12	11.000	9.000	12.20	110.000	21.000	53.000	14.288
5/8 - 11	12.000	9.000	13.50	110.000	24.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	25.000	62.000	19.050
7/8 - 9	18.000	14.500	19.50	140.000	28.000	62.000	22.225

Machine taps for UNF-threads



P	≤ 1000
M	•
K	
N	•
S	
H	

Cutting data page 229

Stainless steel

Tool material

HSS-E

Tolerance on Ø

2B

2B

Surface



Type

N

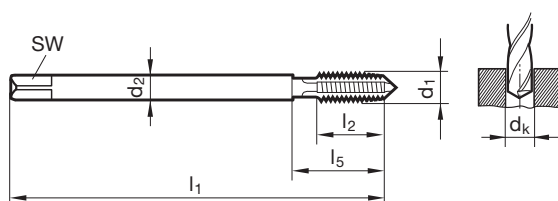
VA

Form

B

B

Internal cooling



DIN 2184-1 ~DIN 374

Article no.

1990

2874

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 48	2.200		2.40	56.000	10.000	18.000	2.845
6 - 40	2.500	2.100	2.95	56.000	11.000	20.000	3.505
10 - 32	3.500	2.700	4.10	70.000	14.000	25.000	4.826
12 - 28	4.000	3.000	4.60	80.000	16.000	30.000	5.486
1/4 - 28	4.500	3.400	5.50	80.000	16.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	18.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	18.000	35.000	9.525
5/8 - 18	12.000	9.000	14.50	100.000	22.000	44.000	15.875
7/8 - 14	18.000	14.500	20.40	125.000	25.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	28.000	50.000	25.400



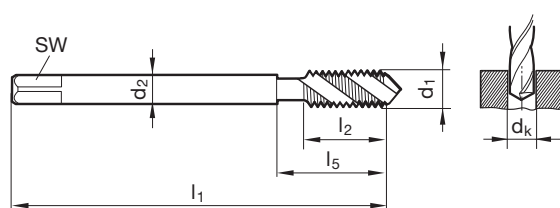
Machine taps for UNF-threads



P	
M	•
K	
N	
S	
H	

Cutting data page 230

Tool material	HSS-E	
Tolerance on Ø	2B	2B
Surface	●	●S
Type	VA R15	VA R15
Form	C	C
Internal cooling		



DIN 2184-1 ~DIN 374

Article no.

1991

2898

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
5 - 44	2.500	2.100	2.70	56.000	6.000	18.000	3.175
6 - 40	2.500	2.100	2.95	56.000	6.500	20.000	3.505
10 - 32	3.500	2.700	4.10	70.000	8.500	25.000	4.826
1/4 - 28	4.500	3.400	5.50	80.000	9.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	11.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	11.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	13.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	13.000	40.000	12.700
5/8 - 18	12.000	9.000	14.50	100.000	15.000	44.000	15.875
7/8 - 14	18.000	14.500	20.40	125.000	19.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	22.000	50.000	25.400

Stainless steel

Machine taps for UNF-threads



Cutting data page 231

Stainless steel

P	
M	•
K	
N	•
S	
H	

Tool material

HSS-E

Tolerance on Ø

2B

2B

Surface



Type

VA R40

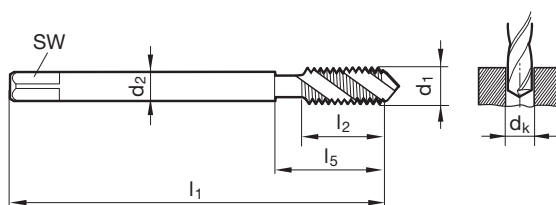
VA R40

Form

C

C

Internal cooling



DIN 2184-1 ~DIN 374

Article no.

2867

2868

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 32	3.500	2.700	4.10	70.000	8.500	25.000	4.826
1/4 - 28	4.500	3.400	5.50	80.000	9.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	11.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	11.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	13.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	13.000	40.000	12.700
5/8 - 18	12.000	9.000	14.50	100.000	15.000	44.000	15.875
7/8 - 14	18.000	14.500	20.40	125.000	19.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	22.000	50.000	25.400



Machine taps for BSP-threads



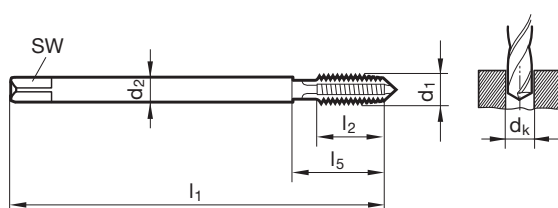
P ≤ 1000 Cutting data page 229

M	•
K	
N	•
S	
H	

Tool material **HSS-E**

Tolerance on Ø

Surface	○	●
Type	N	VA
Form	B	B
Internal cooling		



DIN 2184-1 DIN 5156

Article no.

967

2875

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	25.000	44.000	20.955
G3/4	14.000	20.000	16.000	24.50	140.000	28.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	28.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	30.000	56.000	33.249

Stainless steel

Machine taps for BSP-threads



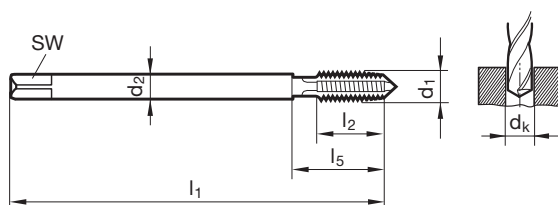
Cutting data page 229

Stainless steel

P	•
M	•
K	○
N	○
S	○
H	

Tool material	HSS-E
Tolerance on Ø	X
Surface	S
Type	N
Form	B
Internal cooling	

NEW



DIN 2184-1 DIN 5156

Article no.

4220

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	25.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	25.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	28.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	28.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	30.000	56.000	33.249



Machine taps for BSP-threads



Cutting data page 231

P	
M	•
K	
N	•
S	
H	

Tool material

HSS-E-PM

HSS-E

Tolerance on Ø

Surface



Type

VA R40

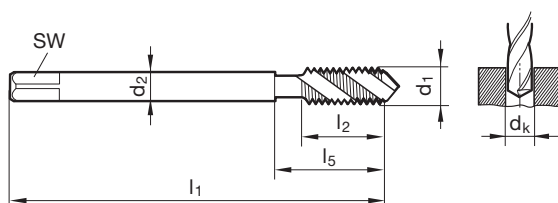
VA R40

Form

C

C

Internal cooling



DIN 2184-1 DIN 5156

Article no.

939

968

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	11.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	14.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	18.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	18.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	20.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	22.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	24.000	56.000	33.249
G1 1/8	11.000	28.000	22.000	35.50	170.000	24.000	56.000	37.897
G1 1/4	11.000	32.000	24.000	39.50	170.000	25.000	57.000	41.910
G1 3/8	11.000	36.000	29.000	41.75	180.000	27.000	60.000	44.323
G1 1/2	11.000	36.000	29.000	45.25	190.000	27.000	60.000	47.803

Stainless steel



Machine taps for BSP-threads

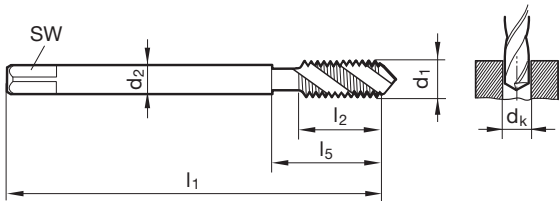


P	•
M	•
K	○
N	•
S	○
H	

Cutting data page 231

Stainless steel

Tool material	HSS-E-PM
Tolerance on Ø	
Surface	S
Type	VA R50
Form	C
Internal cooling	



DIN 2184-1 DIN 5156	Article no.	4159

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	4.500	47.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	4.500	47.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	6.700	48.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	6.700	48.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	9.100	70.000	20.955



Machine taps for BSP-threads



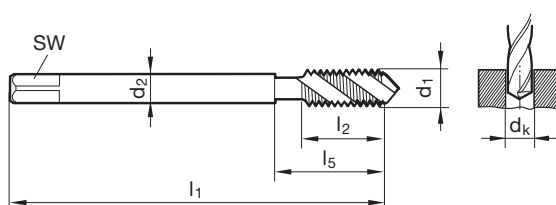
Cutting data page 231

P	•
M	•
K	○
N	○
S	○
H	

Tool material	HSS-E
Tolerance on Ø	X
Surface	A
Type	VA R45
Form	C
Internal cooling	

NEW

Stainless steel



DIN 2184-1 DIN 5156

Article no.

395

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	11.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	14.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	18.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	18.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	20.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	22.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	24.000	56.000	33.249

Machine taps for NPT-threads



Cutting data page 230

Stainless steel

P	
M	•
K	○
N	○
S	
H	

Tool material

HSS-E

Tolerance on Ø

Surface



S

Type

N

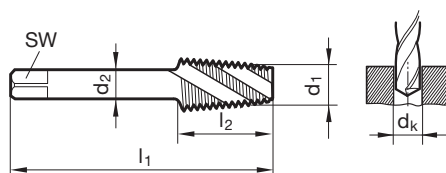
N

Form

C

C

Internal cooling



Company std. Company std.

Article no.

1087

1088

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
1/16	27.000	8.000	6.200	6.25	90.000	14.000	27.000	8.190
1/8	27.000	11.000	9.000	8.50	90.000	15.000	29.000	10.620
1/4	18.000	14.000	11.000	11.20	100.000	21.000	40.000	14.140
3/8	18.000	16.000	12.000	14.40	110.000	21.000	35.000	17.570
1/2	14.000	18.000	14.500	18.00	125.000	27.000	44.000	21.900
3/4	14.000	22.000	18.000	23.40	140.000	27.000	52.000	27.230
1	11.500	25.000	20.000	29.10	170.000	32.000	53.000	34.180



Machine taps for NPTF-threads



Cutting data page 230

P	
M	•
K	○
N	○
S	
H	

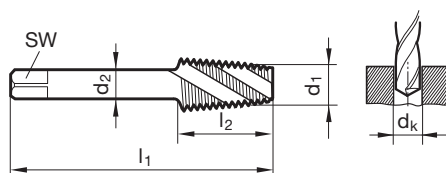
Tool material **HSS-E**

Tolerance on Ø

Surface **S**Type **N**Form **C**

Internal cooling

Stainless steel



Company std. Company std.

Article no.

4127

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
1/16	27.000	8.000	6.200	6.25	90.000	14.000	27.000	8.190
1/8	27.000	11.000	9.000	8.50	90.000	15.000	29.000	10.620
1/4	18.000	14.000	11.000	11.20	100.000	21.000	40.000	14.140
3/8	18.000	16.000	12.000	14.40	110.000	21.000	35.000	17.570
1/2	14.000	18.000	14.500	18.00	125.000	27.000	44.000	21.900
3/4	14.000	22.000	18.000	23.40	140.000	27.000	52.000	27.230
1	11.500	25.000	20.000	29.10	170.000	32.000	53.000	34.180



FLUTELESS TAPS





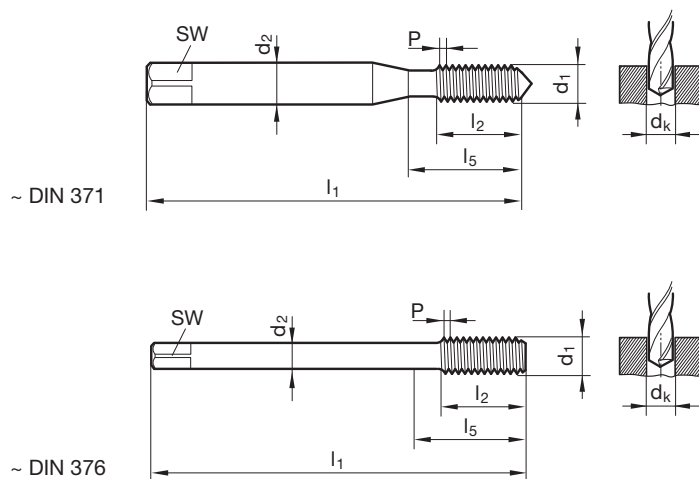
Fluteless machine taps for ISO metric threads



Cutting data page 232

P	•
M	•
K	
N	○
S	
H	

Tool material	HSS-E-PM	HSS-E	HSS-E-PM
Tolerance on Ø	6GX	6HX	6HX
Surface	S	S	S
Type	N	N	N
Form	C	C	C
Internal cooling			



Stainless steel

DIN 2174 ~DIN 371

Article no.

903

921

1255

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1	0.250	2.500	2.100	0.90	40.000	4.000	
M 1.2	0.250	2.500	2.100	1.10	40.000	4.800	
M 1.4	0.300	2.500	2.100	1.25	40.000	5.600	
M 1.6	0.350	2.500	2.100	1.45	40.000	6.400	
M 1.7	0.350	2.500	2.100	1.55	40.000	6.800	
M 1.8	0.350	2.500	2.100	1.65	40.000	7.300	
M2	0.400	2.800	2.100	1.85	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.30	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

952

925

1256

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Fluteless machine taps for ISO metric threads



Cutting data page 232

Stainless steel

P	•
M	•
K	
N	○
S	
H	

Tool material **HSS-E**

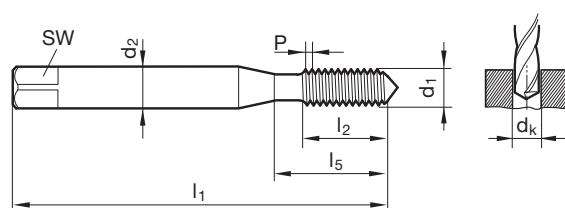
Tolerance on Ø 6GX

Surface **S**

Type N

Form C

Internal cooling



DIN 2174 ~DIN 371

Article no.

920

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.85	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.30	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 232

P	•
M	•
K	
N	≥ 7
S	○
H	

Tool material **Solid carbide**

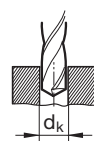
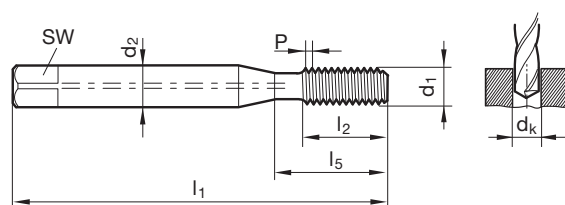
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



Stainless steel

DIN 2174 ~DIN 371/~DIN 376

Article no.

2518

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

Fluteless machine taps for ISO metric threads

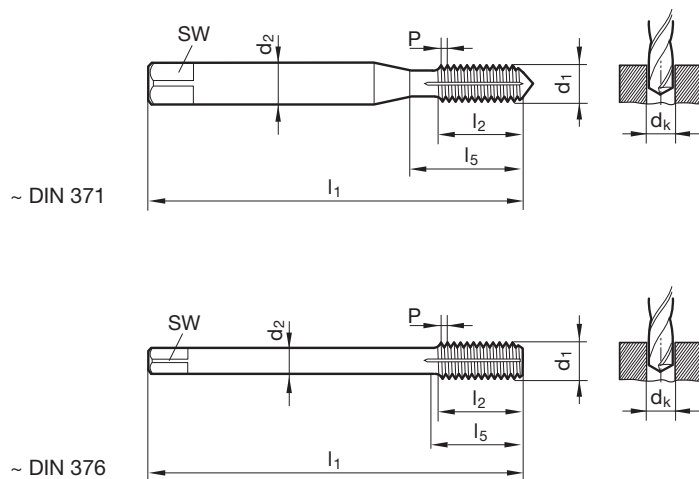


Cutting data page 233

Stainless steel

P	•
M	•
K	•
N	○
S	○
H	○

Tool material	HSS-E		
Tolerance on Ø	6GX	6HX	6HX
Surface	S	S	C
Type	N	N	N
Form	C	C	C
Internal cooling			



DIN 2174 ~DIN 371

Article no.

918

919

2012

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

922

923

2013

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M6	1.000	4.500	3.400	5.55	80.000	16.000	30.000
M8	1.250	6.000	4.900	7.40	90.000	17.000	35.000
M10	1.500	7.000	5.500	9.30	100.000	20.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000
M22	2.500	18.000	14.500	20.90	140.000	32.000	62.000
M24	3.000	18.000	14.500	22.70	160.000	36.000	73.000
M27	3.000	20.000	16.000	25.70	160.000	36.000	73.000
M30	3.500	22.000	18.000	28.50	180.000	40.000	85.000
M33	3.500	25.000	20.000	31.50	180.000	40.000	91.000
M36	4.000	28.000	22.000	34.30	200.000	50.000	102.000
M39	4.000	32.000	24.000	37.30	200.000	50.000	107.000



Fluteless machine taps for ISO metric threads



Cutting data page 233

P	•
M	•
K	•
N	○
S	○
H	

Tool material **HSS-E-PM**

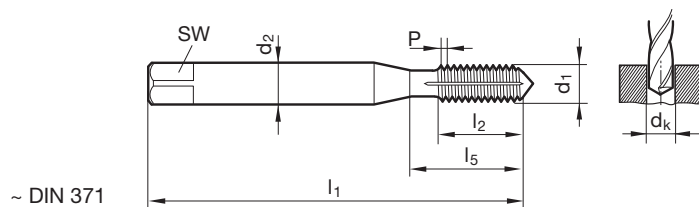
Tolerance on Ø 6HX

Surface **S**

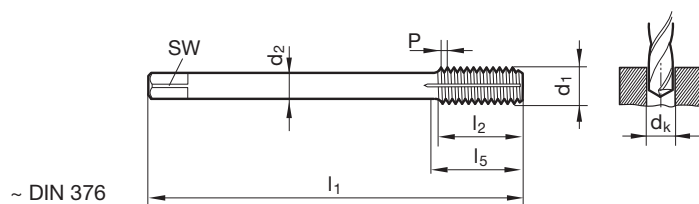
Type N

Form C

Internal cooling



~ DIN 371



~ DIN 376



Stainless steel

DIN 2174 ~DIN 371

Article no.

322

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376

Article no.

339

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

Fluteless machine taps for ISO metric threads



Cutting data page 233

Stainless steel

P	•
M	•
K	•
N	○
S	○
H	

Tool material **HSS-E-PM**

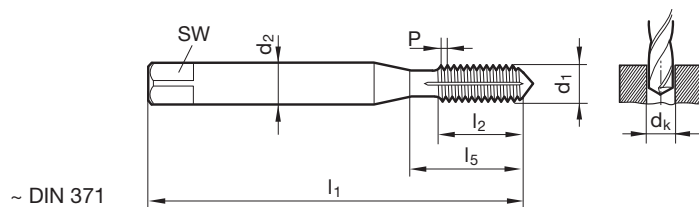
Tolerance on Ø 6HX

Surface **S**

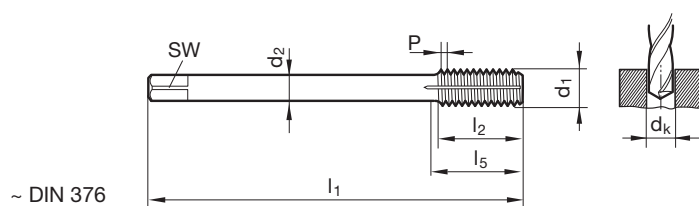
Type N

Form C

Internal cooling



~ DIN 371



~ DIN 376

**DIN 2174 ~DIN 371**

Article no.

1266

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

1267

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 233

P	•
M	•
K	
N	○
S	○
H	

Tool material

HSS-E

Tolerance on Ø

6HX

6GX

6HX

Surface

S

S

C

Type

N

N

N

Form

C

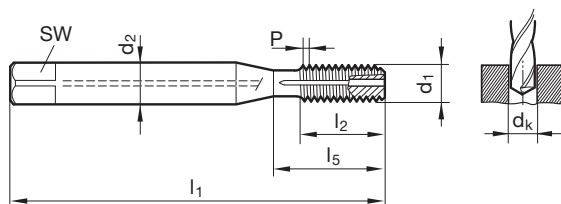
C

C

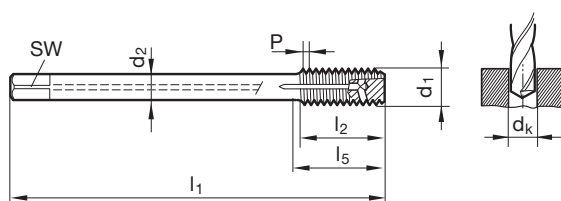
Internal cooling



~ DIN 371



~ DIN 376



Stainless steel

DIN 2174 ~DIN 371

Article no.

2442

2443

2446

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376

Article no.

2444

2445

2448

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

Oil feed fluteless taps f. ISO metric threads



Cutting data page 233

Stainless steel

P	•
M	•
K	
N	≥ 7
S	○
H	

Tool material **HSS-E**

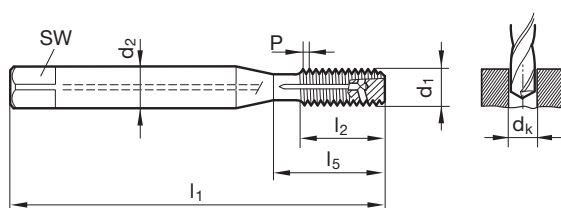
Tolerance on Ø 6GX

Surface

Type N

Form C

Internal cooling



DIN 2174 ~DIN 371

Article no.

2447

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 233

P	•
M	•
K	•
N	○
S	○
H	

Tool material **HSS-E-PM**

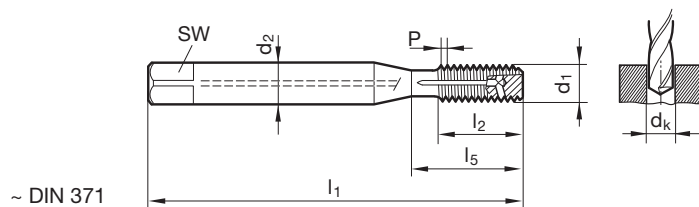
Tolerance on Ø 6HX

Surface **S**

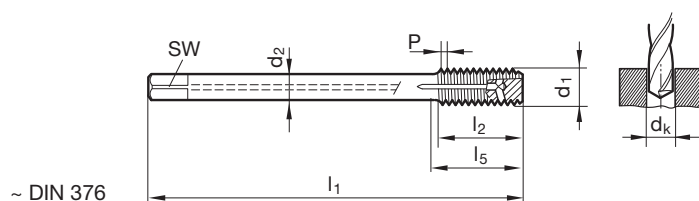
Type N

Form C

Internal cooling



~ DIN 371



~ DIN 376



Stainless steel

DIN 2174 ~DIN 371

Article no.

323

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376

Article no.

342

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

Oil feed fluteless taps f. ISO metric threads



Cutting data page 233

Stainless steel

P	•
M	•
K	
N	≥ 7
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

6HX

6HX

6HX

Surface

C

A

S

Type

N

N

N

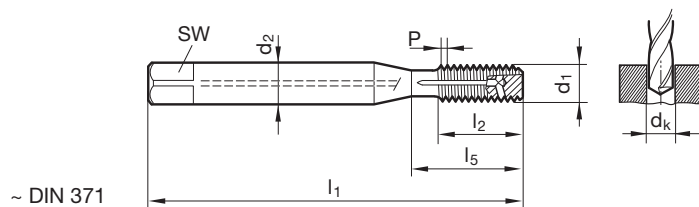
Form

C

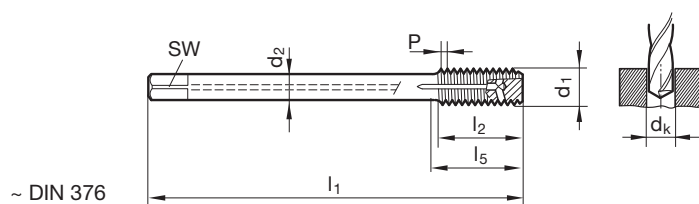
C

E

Internal cooling



~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371

Article no.

1270

1717

1725

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

1271

1719

1727

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 233

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material **HSS-E-PM**

Tolerance on Ø 6GX

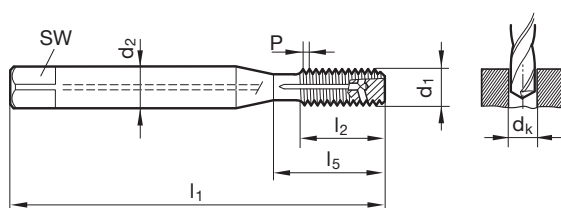
Surface

Type N

Form C

Internal cooling

Stainless steel



DIN 2174 ~DIN 371

Article no.

1713

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

Oil feed fluteless taps f. ISO metric threads



Cutting data page 233

Stainless steel

P	•
M	•
K	
N	
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

6GX

6GX

Surface

A

S

Type

N

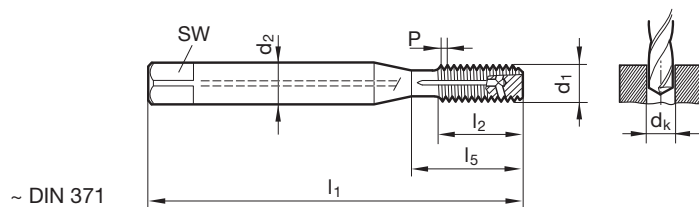
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Form

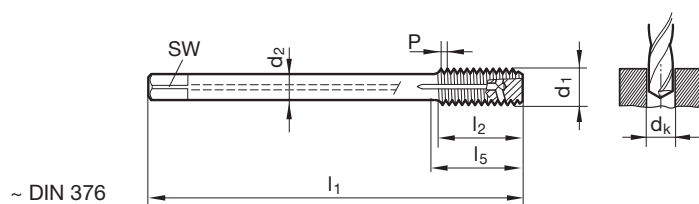
C

E

Internal cooling



~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371

Article no.

1718

1726

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

1720

1728

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 233

P	•
M	•
K	
N	○
S	○
H	

Tool material **HSS-E-PM**

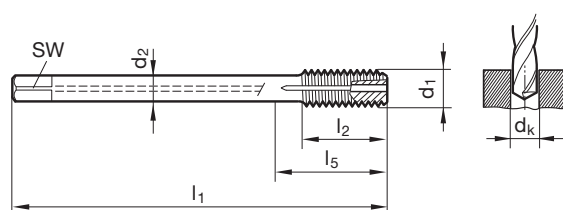
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



Stainless steel

Company std. Company std.

Article no.

4143

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	112.000	6.000	18.000
M4	0.700	2.800	2.100	3.70	112.000	7.500	77.000
M5	0.800	3.500	2.700	4.65	125.000	8.500	90.000
M6	1.000	4.500	3.400	5.55	125.000	11.000	90.000
M8	1.250	6.000	4.900	7.40	140.000	14.000	97.000
M10	1.500	7.000	5.500	9.30	160.000	16.000	117.000
M12	1.750	9.000	7.000	11.20	180.000	18.500	133.000
M16	2.000	12.000	9.000	15.10	220.000	20.000	168.000
M20	2.500	16.000	12.000	18.90	280.000	25.000	225.000

Oil feed fluteless taps f. ISO metric threads



Cutting data page 233

Stainless steel

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material **Solid carbide**

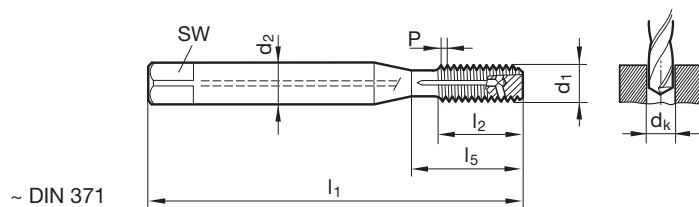
Tolerance on Ø 6HX

Surface

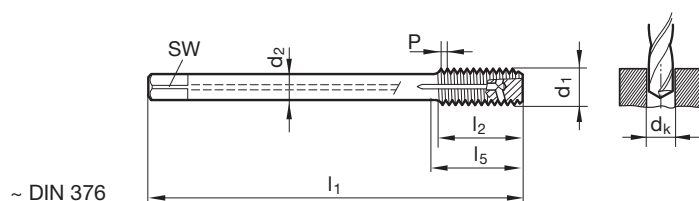
Type N

Form C

Internal cooling



~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371

Article no.

1972

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376

Article no.

1931

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	25.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	25.000	62.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 233

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material **Solid carbide**

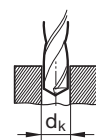
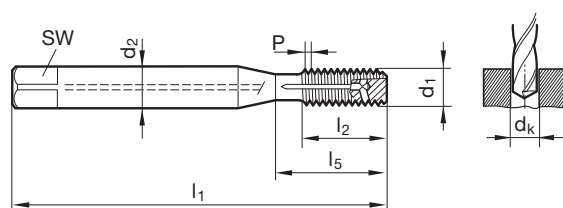
Tolerance on Ø 6HX

Surface **C**

Type N

Form E

Internal cooling



Stainless steel

DIN 2174 ~DIN 371

Article no.

1927

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

Fluteless machine taps for ISO metric fine threads



Cutting data page 232

Stainless steel

P	•
M	•
K	
N	○
S	
H	

Tool material **HSS-E**

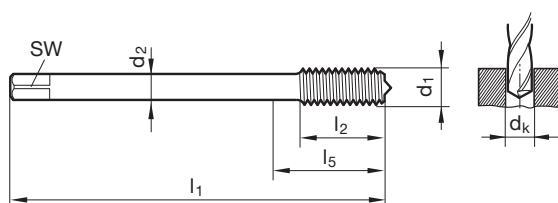
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



DIN 2174 ~DIN 374

Article no.

929

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007



Fluteless machine taps for ISO metric fine threads



Cutting data page 232

P	•
M	•
K	•
N	○
S	•
H	•

Tool material **HSS-E-PM**

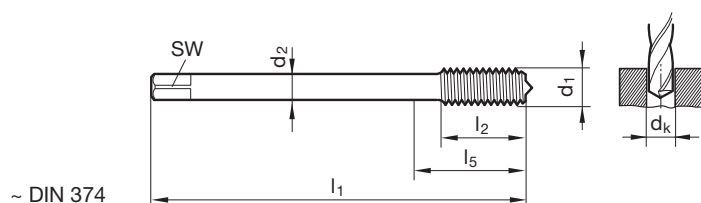
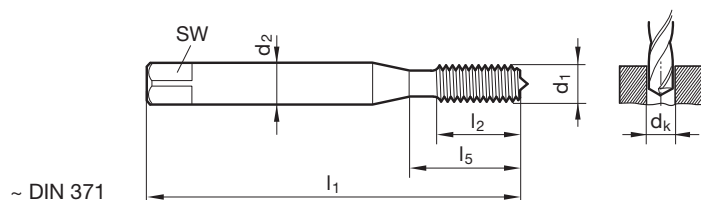
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



Stainless steel

DIN 2174 ~DIN 371

Article no.

1257

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M9 x 1	9.000	7.000	8.55	90.000	16.000	35.000	9.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374

Article no.

1258

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.55	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	23.10	140.000	28.000	48.000	24.008

Fluteless machine taps for ISO metric fine threads

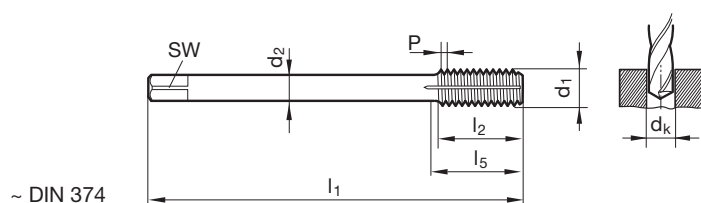
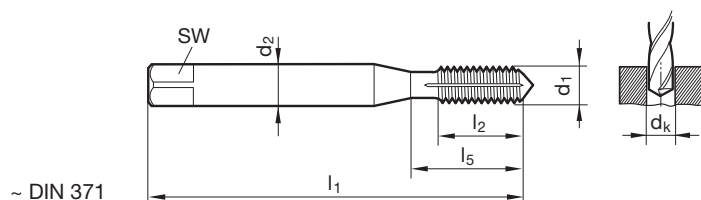


Cutting data page 233

Stainless steel

P	•
M	•
K	•
N	○
S	○
H	○

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 371

Article no.

1275

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	6.000	4.900	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	8.000	6.200	7.65	80.000	14.000	30.000	8.004
M 8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374

Article no.

927

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.65	80.000	14.000	30.000	8.004
M 8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	9.40	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	21.30	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007



Fluteless machine taps for ISO metric fine threads



Cutting data page 232

P	•
M	•
K	
N	○
S	
H	

Tool material **HSS-E-PM**

Tolerance on Ø 6GX

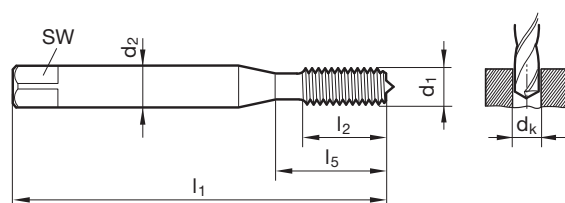
Surface **S**

Type N

Form C

Internal cooling 

Stainless steel



DIN 2174 ~DIN 371

Article no.

1740

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006



Fluteless machine taps for ISO metric fine threads

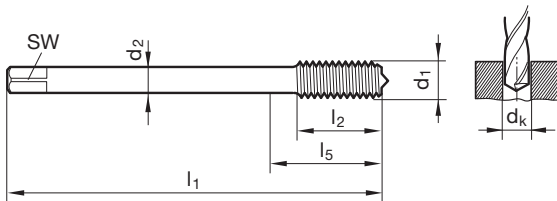


P	•
M	•
K	
N	○
S	
H	

Cutting data page 232

Stainless steel

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 374	Article no.	928

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007



Fluteless machine taps for ISO metric fine threads



Cutting data page 233

P	•
M	•
K	
N	≥ 7
S	○
H	

Tool material **HSS-E**

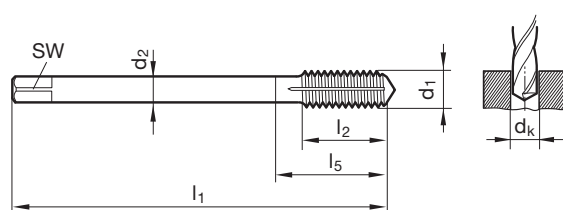
Tolerance on Ø 6HX

Surface **C**

Type N

Form C

Internal cooling



DIN 2174 ~DIN 374

Article no.

2008

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.65	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 X1.25	7.000	5.500	9.40	100.000	20.000	39.000	10.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007

Stainless steel

Fluteless machine taps for ISO metric fine threads

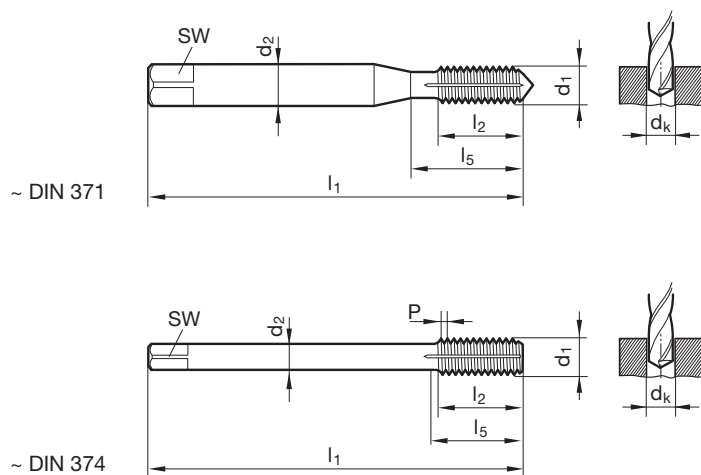


Cutting data page 233

Stainless steel

P	•
M	•
K	•
N	○
S	○
H	○

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 371

Article no.

1277

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374

Article no.

926

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.55	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007



Fluteless machine taps for ISO metric fine threads



Cutting data page 233

P	•
M	•
K	•
N	○
S	○
H	

Tool material **HSS-E-PM**

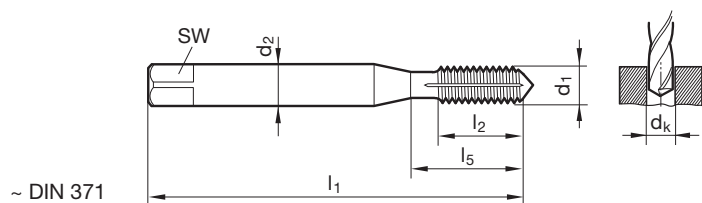
Tolerance on Ø 6HX

Surface **S**

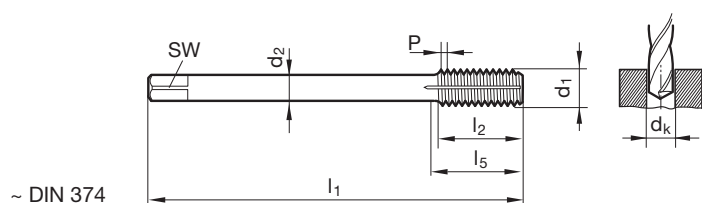
Type N

Form C

Internal cooling



~ DIN 371



~ DIN 374



Stainless steel

DIN 2174 ~DIN 371

Article no.

1268

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374

Article no.

1269

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 x 2	18.000	14.500	23.10	140.000	28.000	48.000	24.008

Fluteless machine taps for ISO metric fine threads



Cutting data page 233

Stainless steel

P	•
M	•
K	
N	○
S	○
H	

Tool material **HSS-E-PM**

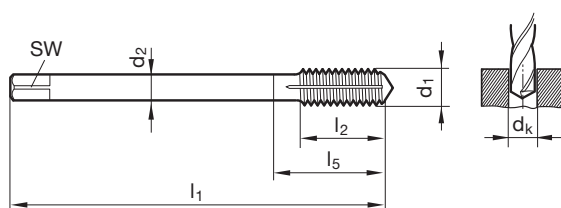
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



DIN 2174 ~DIN 374

Article no.

333

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	16.000	44.000	20.007



Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 233

P	•
M	•
K	
N	○
S	○
H	

Tool material **HSS-E-PM**

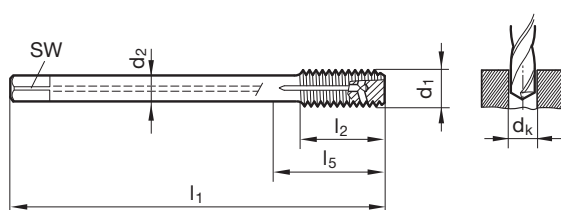
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



Stainless steel

DIN 2174 ~DIN 374

Article no.

338

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007

Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 233

Stainless steel

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

6HX

6HX

6HX

Surface

C

A

S

Type

N

N

N

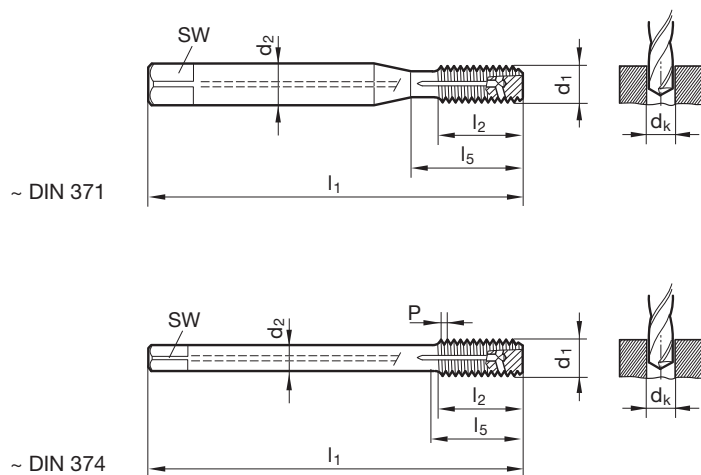
Form

C

C

E

Internal cooling



DIN 2174 ~DIN 371

Article no.

1272

1721

1729

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M9 x 1	9.000	7.000	8.55	90.000	16.000	35.000	9.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374

Article no.

1273

1723

1731

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	21.30	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007



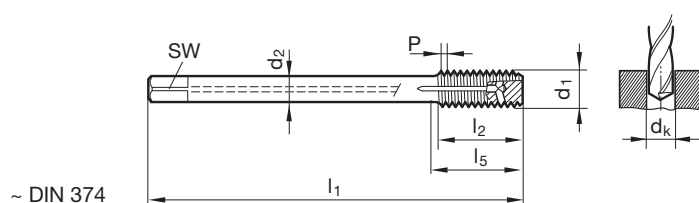
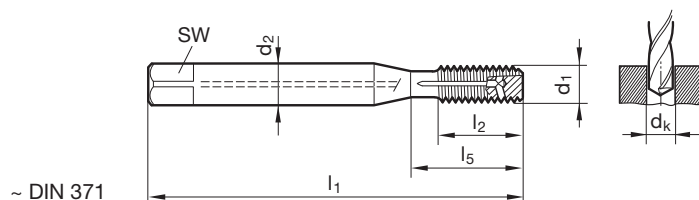
Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 233

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material	HSS-E-PM	
Tolerance on Ø	6GX	6GX
Surface		
Type	N	N
Form	C	E
Internal cooling		



Stainless steel

DIN 2174 ~DIN 371

Article no.

1715

1730

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374

Article no.

1716

1732

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 233

Stainless steel

P	•
M	•
K	•
N	○
S	○
H	

Tool material **HSS-E-PM**

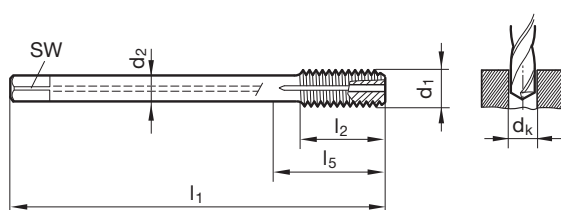
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



Company std. Company std.

Article no.

4145

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	140.000	14.000	97.000	8.005
M10 x 1	7.000	5.500	9.55	160.000	16.000	117.000	10.005
M10 X1.25	7.000	5.500	9.40	160.000	16.000	117.000	10.006
M12 x 1	9.000	7.000	11.55	180.000	18.500	133.000	12.005
M12 X1.5	9.000	7.000	11.30	180.000	18.500	133.000	12.007
M14 X1.5	11.000	9.000	13.30	220.000	20.000	168.000	14.007
M16 X1.5	12.000	9.000	15.30	220.000	20.000	168.000	16.007



Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 233

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material **Solid carbide**

Tolerance on Ø 6HX

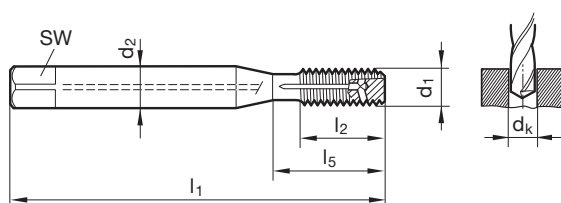
Surface **C**

Type N

Form C

Internal cooling

Stainless steel



DIN 2174 ~DIN 371/~DIN 376

Article no.

1581

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10.000	8.000	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	15.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	15.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	15.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	15.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	15.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	15.000	48.000	24.007

Fluteless machine taps for UNC-threads



Cutting data page 232/233

Stainless steel

P	•
M	•
K	•
N	○
S	•
H	•

Tool material

HSS-E

Tolerance on Ø

2BX

2BX

Surface

S

S

Type

N

N

Form

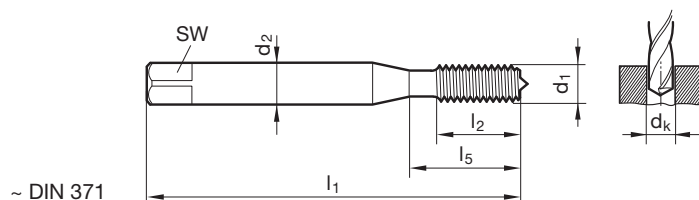
C

C

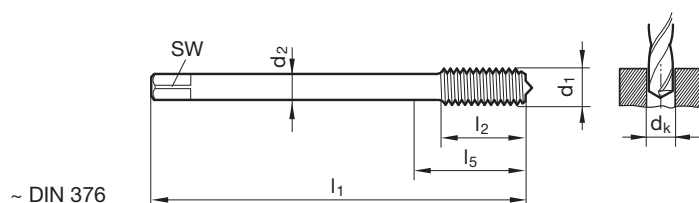
Internal cooling

✗

✗



~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371

Article no.

2273

1582

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.55	56.000	11.000	18.000	2.845
5 - 40	3.500	2.700	2.90	56.000	11.000	18.000	3.175
6 - 32	4.000	3.000	3.15	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.80	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	4.35	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	5.00	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.75	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	7.30	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.80	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376

Article no.

2274

1583

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	10.30	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	11.80	110.000	25.000	49.000	12.700
9/16 - 12	11.000	9.000	13.30	110.000	28.000	53.000	14.288
5/8 - 11	12.000	9.000	14.80	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	17.90	125.000	33.000	62.000	19.050
7/8 - 9	18.000	14.500	21.00	140.000	35.000	62.000	22.225



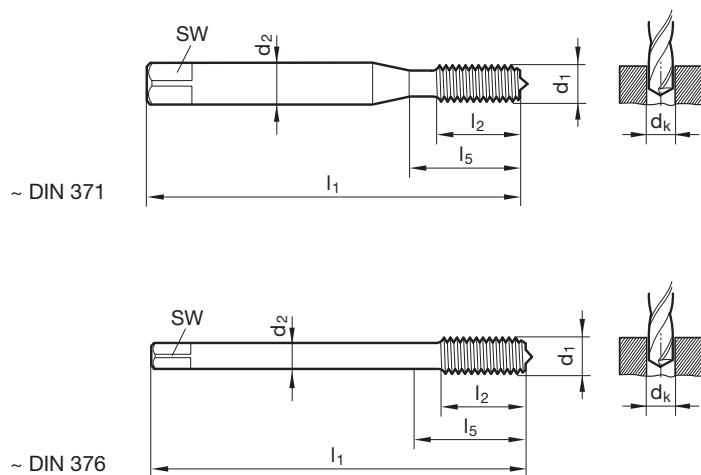
Fluteless machine taps for UNF-threads



P	•
M	•
K	
N	○
S	
H	

Cutting data page 232/233

Tool material	HSS-E	
Tolerance on Ø	2BX	2BX
Surface	S	S
Type	N	N
Form	C	C
Internal cooling		



Stainless steel

DIN 2184-1 ~DIN 371

Article no.

1283

1584

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 48	3.500	2.700	2.60	56.000	10.000	18.000	2.845
5 - 44	3.500	2.700	2.90	56.000	10.000	18.000	3.175
6 - 40	4.000	3.000	3.20	56.000	11.000	20.000	3.505
8 - 36	4.500	3.400	3.85	63.000	12.000	21.000	4.166
10 - 32	6.000	4.900	4.45	70.000	14.000	25.000	4.826
12 - 28	6.000	4.900	5.10	80.000	16.000	30.000	5.486
1/4 - 28	7.000	5.500	5.95	80.000	16.000	30.000	6.350
5/16 - 24	8.000	6.200	7.45	90.000	18.000	35.000	7.938
3/8 - 24	10.000	8.000	9.05	90.000	18.000	35.000	9.525

DIN 2184-1 ~DIN 374

Article no.

2275

1585

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 32	3.500	2.700	4.45	70.000	14.000	25.000	4.826
12 - 28	4.000	3.000	5.10	80.000	16.000	30.000	5.486
1/4 - 28	4.500	3.400	5.95	80.000	16.000	30.000	6.350
5/16 - 24	6.000	4.900	7.45	90.000	18.000	35.000	7.938
3/8 - 24	7.000	5.500	9.05	90.000	18.000	35.000	9.525
7/16 - 20	8.000	6.200	10.55	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	12.10	100.000	20.000	40.000	12.700
9/16 - 18	11.000	9.000	13.65	100.000	22.000	40.000	14.288
5/8 - 18	12.000	9.000	15.25	100.000	22.000	44.000	15.875
3/4 - 16	14.000	11.000	18.35	110.000	25.000	44.000	19.050
7/8 - 14	18.000	14.500	21.40	125.000	25.000	44.000	22.225
1 - 12	18.000	14.500	24.45	140.000	28.000	50.000	25.400

Fluteless machine taps for BSP-threads

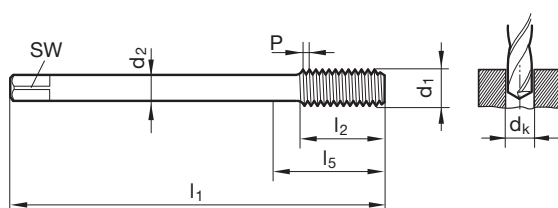


Cutting data page 232/233

Stainless steel

P	•
M	•
K	
N	○
S	
H	

Tool material	HSS-E	
Tolerance on Ø	X	X
Surface	S	S
Type	N	N
Form	C	C
Internal cooling		



DIN 2184-1 DIN 2189

Article no.

966

1586

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	7.30	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	9.30	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	12.50	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	16.00	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	20.00	125.000	25.000	44.000	20.955
G3/4	14.000	20.000	16.000	25.50	140.000	28.000	53.000	26.441
G1	11.000	25.000	20.000	32.00	160.000	30.000	56.000	33.249
G1 1/4	11.000	32.000	24.000	40.75	170.000	30.000	57.000	41.910



THREAD MILLING CUTTERS



Thread milling cutters without chamfer for ISO metric threads

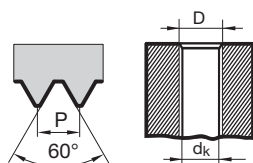
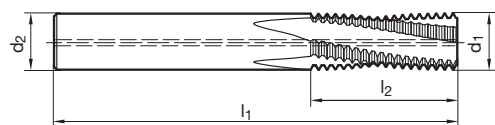


Cutting data page 234

Stainless steel

P	•
M	○
K	•
N	•
S	○
H	≤55

Tool material	Solid carbide			
Surface				
Type	TM SP	TM SP	TM SP	TM SP
Internal cooling				
Shank form	HA	HB	HA	HB



Company std.

Article no. 3737 3743 4132 4133

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	13.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	18.100	3	8.000
M8 x 1	1.000	6.400	8.000	7.00	62.000	17.500	3	8.005
M10	1.500	7.950	10.000	8.50	74.000	21.800	3	10.000
M10 x 1	1.000	7.950	10.000	9.00	74.000	21.500	3	10.005
M10 X1.25	1.250	7.950	10.000	8.80	74.000	21.900	3	10.006
M12	1.750	9.950	10.000	10.20	74.000	25.400	4	12.000
M12 X1.5	1.500	9.950	10.000	10.50	74.000	26.300	4	12.007
M14	2.000	11.200	12.000	12.00	90.000	31.000	4	14.000
M14 X1.5	1.500	11.200	12.000	12.50	90.000	30.800	4	14.007
M16	2.000	12.800	14.000	14.00	90.000	35.000	4	16.000
M16 X1.5	1.500	12.800	14.000	14.50	90.000	33.800	4	16.007
M20	2.500	14.950	16.000	17.50	102.000	41.300	4	20.000
M20 X1.5	1.500	14.950	16.000	18.50	102.000	42.800	4	20.007



Thread milling cutters without chamfer for ISO metric threads



P	•	Cutting data page 234
M	○	
K	•	
N	•	
S	○	
H	≤55	

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

Internal cooling



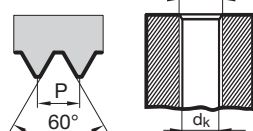
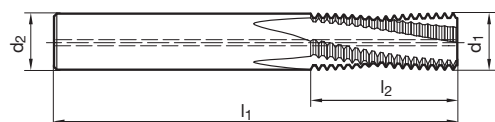
Shank form

HA

HB

NEW

Stainless steel



Company std.

Article no.

3735

3740

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	16.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	21.900	3	8.000
M10	1.500	7.950	10.000	8.50	74.000	26.300	3	10.000
M12	1.750	9.950	10.000	10.20	74.000	32.400	4	12.000
M14	2.000	11.200	12.000	12.00	90.000	37.000	4	14.000
M16	2.000	12.800	14.000	14.00	90.000	43.000	4	16.000
M20	2.500	14.950	16.000	17.50	102.000	48.800	4	20.000

Thread milling cutters with chamfer for ISO metric threads



P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 234

Stainless steel

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

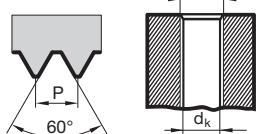
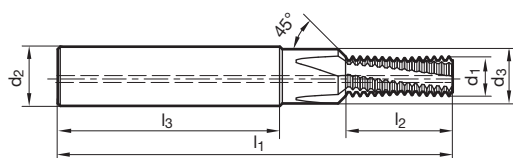


Shank form

HA

HB

NEW



Company std.

Article no.

3525

3543

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	5.300	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	7.400	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	9.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	10.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	13.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	17.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	20.100	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	25.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	27.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	33.800	4	20.000



Thread milling cutters with chamfer for ISO metric threads



Cutting data page 235

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling



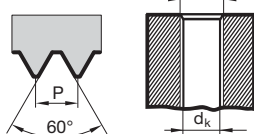
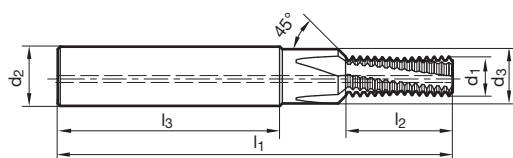
Shank form

HA

HB

NEW

Stainless steel



Company std.

Article no.

3526

3544

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	6.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	8.800	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	10.800	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	13.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	18.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	21.800	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	25.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	31.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	35.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	41.300	4	20.000

Thread milling cutters with chamfer for ISO metric threads



Cutting data page 235

Stainless steel

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface

C

C

Type

TMC SP

TMC SP

Internal cooling

C

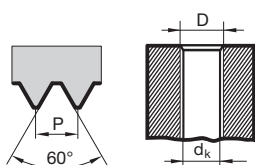
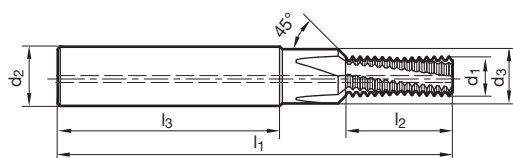
C

Shank form

HA

HB

NEW



Company std.

Article no.

3759

3760

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	7.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	35.600	10.900	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	13.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	16.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	21.900	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	26.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	32.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	37.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	43.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	48.800	4	20.000



Thread milling cutters with chamfer for ISO metric fine threads

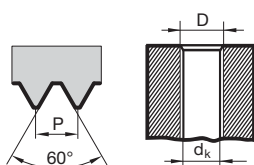
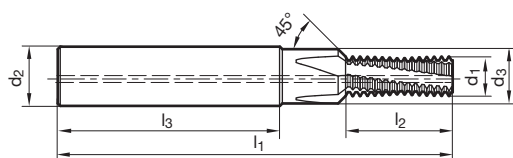


P	•	Cutting data page 234
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW

Stainless steel



Company std.

Article no.

3527

3545

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	7.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	8.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	9.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	10.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	13.100	3	8.004
M 8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	13.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	16.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	16.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	19.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	20.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	23.300	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	26.300	4	16.007

Thread milling cutters with chamfer for ISO metric fine threads



Cutting data page 235

Stainless steel

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface

C

C

Type

TMC SP

TMC SP

Internal cooling

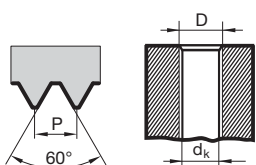
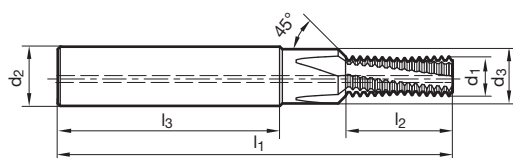


Shank form

HA

HB

NEW



Company std.

Article no.

3528

3546

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	8.800	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	10.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	12.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	13.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	16.900	3	8.004
M 8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	17.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	21.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	21.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	25.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	26.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	30.800	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	33.800	4	16.007



Thread milling cutters with chamfer for ISO metric fine threads

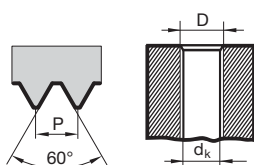
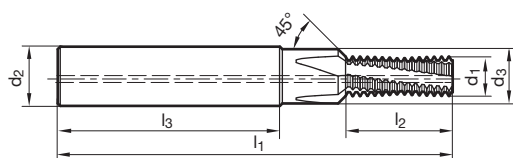


P	•	Cutting data page 235
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW

Stainless steel



Company std.

Article no.

3762

3763

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	10.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	12.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	15.300	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	15.400	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	20.600	3	8.004
M 8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	20.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	25.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	25.600	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	30.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	30.800	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	38.300	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	41.300	4	16.007

Thread milling cutters without chamfer for UNC-threads



Cutting data page 234

Stainless steel

P	•
M	○
K	•
N	•
S	○
H	≤55

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

Internal cooling

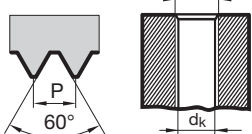
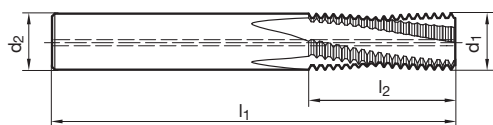


Shank form

HA

HB

NEW



Company std.

Article no.

4134

4135

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 24	3.400	6.000	3.90	54.000	11.100	3	4.826
12 - 24	4.100	6.000	4.50	54.000	12.200	3	5.486
1/4 - 20	4.700	6.000	5.10	54.000	14.600	3	6.350
5/16 - 18	6.100	8.000	6.60	64.000	17.600	3	7.938
3/8 - 16	7.600	8.000	8.00	64.000	21.400	3	9.525
7/16 - 14	9.000	10.000	9.40	74.000	24.500	3	11.113
1/2 - 13	9.950	10.000	10.80	74.000	28.300	4	12.700
9/16 - 12	11.400	12.000	12.20	90.000	30.700	4	14.288
5/8 - 11	12.700	14.000	13.50	90.000	35.800	4	15.875



Thread milling cutters with chamfer for UNC-threads



P	•	Cutting data page 234
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material **Solid carbide**Surface **C** **C**

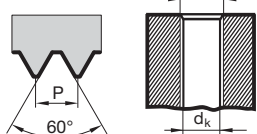
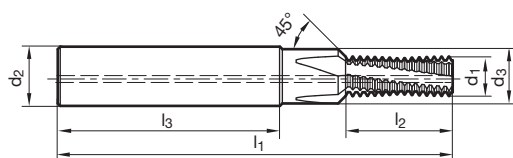
Type TMC SP TMC SP

Internal cooling  

Shank form HA HB

NEW

Stainless steel



Company std.

Article no.

3516

3534

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	12.100	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	14.800	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	16.700	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	19.000	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	22.500	4	12.700

Thread milling cutters with chamfer for UNC-threads



P • Cutting data page 235

M	•
K	•
N	•
S	•
H	≤55

Stainless steel

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

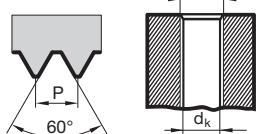
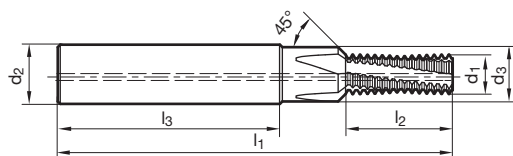


Shank form

HA

HB

NEW



Company std.

Article no.

3517

3535

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	14.600	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	17.600	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	21.400	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	24.500	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	28.300	4	12.700



Thread milling cutters without chamfer for UNF-threads



Cutting data page 234

P	•
M	○
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

Internal cooling



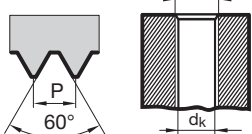
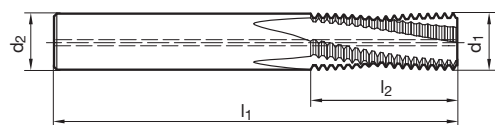
Shank form

HA

HB

NEW

Stainless steel



Company std.

Article no.

4136

4137

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 32	3.800	6.000	4.10	54.000	11.500	3	4.826
12 - 28	4.300	6.000	4.60	54.000	12.200	3	5.486
1/4 - 28	5.100	6.000	5.50	54.000	14.100	3	6.350
5/16 - 24	6.300	8.000	6.90	64.000	17.500	3	7.938
3/8 - 24	7.800	8.000	8.50	64.000	20.600	3	9.525
7/16 - 20	9.400	10.000	9.90	74.000	24.800	3	11.113
1/2 - 20	9.950	10.000	11.50	74.000	27.300	4	12.700
9/16 - 18	11.400	12.000	12.90	90.000	30.300	4	14.288
5/8 - 18	12.700	14.000	14.50	90.000	33.200	4	15.875

Thread milling cutters with chamfer for UNF-threads



P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 234

Stainless steel

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

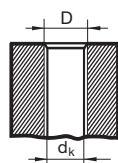
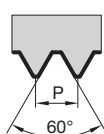
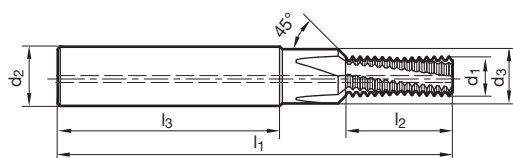


Shank form

HA

HB

NEW



Company std.

Article no.

3518

3536

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	11.300	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	13.200	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	16.400	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	18.400	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	21.000	4	12.700



Thread milling cutters with chamfer for UNF-threads



P	•	Cutting data page 235
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material **Solid carbide**Surface **C** **C**

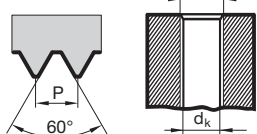
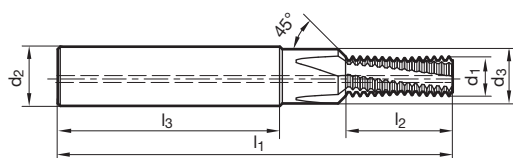
Type TMC SP TMC SP

Internal cooling

Shank form HA HB

NEW

Stainless steel



Company std.

Article no.

3519

3537

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	14.100	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	17.500	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	20.600	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	24.800	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	27.300	4	12.700

Thread milling cutters without chamfer for BSP-threads



P • Cutting data page 234

M	○
K	•
N	•
S	○
H	≤55

Stainless steel

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

Internal cooling

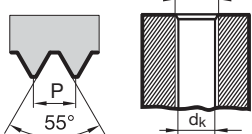
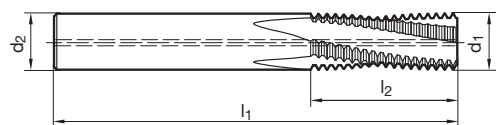


Shank form

HA

HB

NEW



Company std.

Article no.

3745

3748

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	21.300	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	28.700	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	35.400	4	16.662



Thread milling cutters without chamfer for BSP-threads

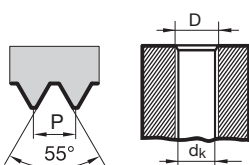
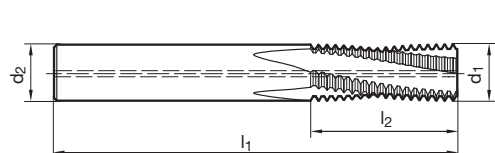


P	•	Cutting data page 234
M	○	
K	•	
N	•	
S	○	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW

Stainless steel



Company std.

Article no.

3746

3750

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	24.900	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	35.400	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	43.500	4	16.662

Thread milling cutters with chamfer for BSP-threads



P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 234

Stainless steel

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

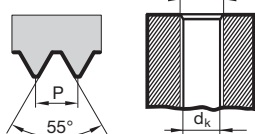
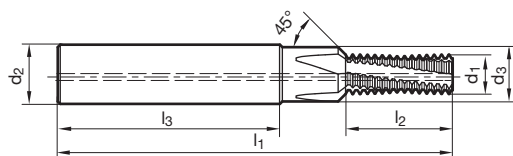


Shank form

HA

HB

NEW



Company std.

Article no.

3514

3529

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	15.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	22.100	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	27.400	4	16.662



Thread milling cutters with chamfer for BSP-threads



Cutting data page 235

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling



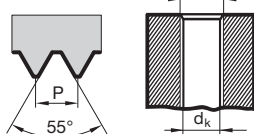
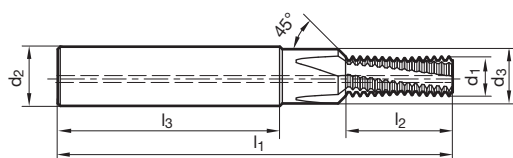
Shank form

HA

HB

NEW

Stainless steel



Company std.

Article no.

3515

3533

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	21.300	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	28.700	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	35.400	4	16.662

Thread milling cutters with chamfer for BSP-threads



P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 235

Stainless steel

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

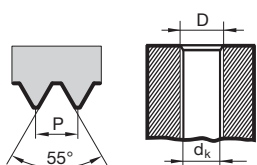
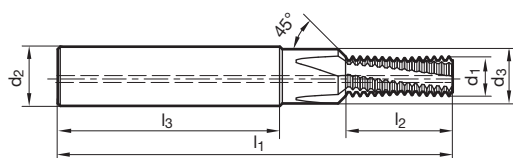


Shank form

HA

HB

NEW



Company std.

Article no.

3765

3766

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	24.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	35.400	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	43.500	4	16.662



Thread milling cutters without chamfer for NPT-threads



Cutting data page 234

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

Internal cooling



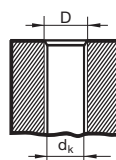
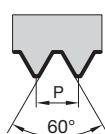
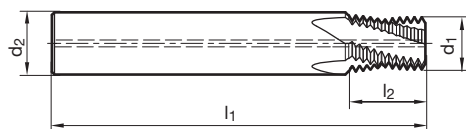
Shank form

HA

HB

NEW

Stainless steel



Company std.

Article no.

3753

3754

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570



Thread milling cutters with chamfer for NPT-threads

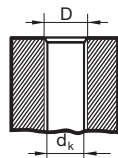
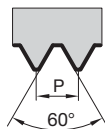
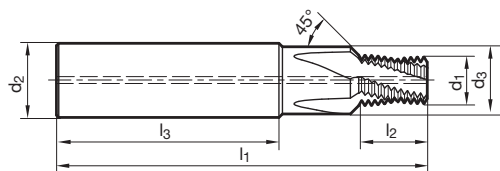


P	•	Cutting data page 234
M	•	
K	•	
N	•	
S	•	
H	≤55	

Stainless steel

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3520

3538

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570



Thread milling cutters without chamfer for NPTF-threads



Cutting data page 234

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

Internal cooling



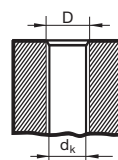
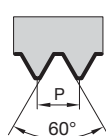
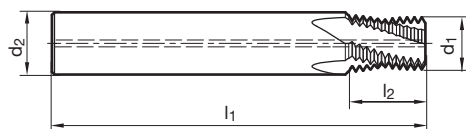
Shank form

HA

HB

NEW

Stainless steel



Company std.

Article no.

3756

3757

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570



Thread milling cutters with chamfer for NPTF-threads

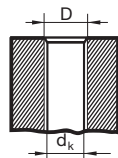
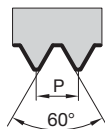
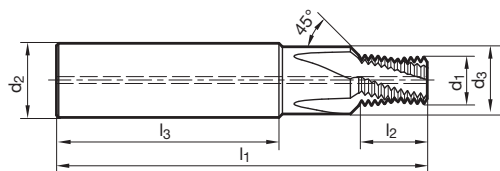


P	•	Cutting data page 234
M	•	
K	•	
N	•	
S	•	
H	≤55	

Stainless steel

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3521

3539

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570



Universal thread milling cutters for ISO metric threads



Cutting data page 235

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface

C

C

Type

TMU SP

TMU SP

Internal cooling



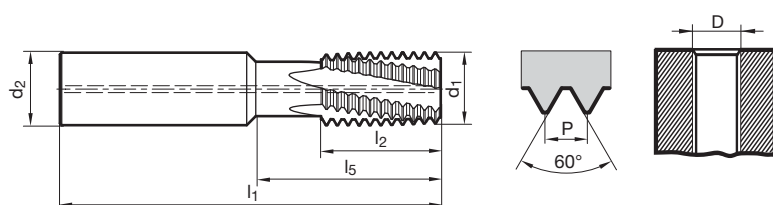
Shank form

HA

HB

NEW

Stainless steel



Company std.

Article no.

3541

3556

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 10	7.950	8.000	64.000		20.000	4	8.050
1.000	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.100
1.250	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.125
1.500	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.150
1.000	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.150
1.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.100
1.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.200
3.000	≥ 24	17.950	18.000	102.000	50.000	33.000	5	18.300
1.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.100
1.500	≥ 26	19.950	20.000	105.000	50.000	33.000	5	20.150
2.000	≥ 27	19.950	20.000	105.000	50.000	33.000	5	20.200
2.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.250
3.000	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.300
3.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.350

External thread milling cutters



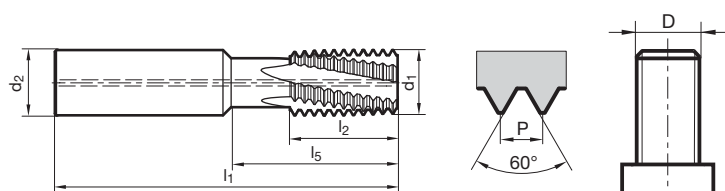
Cutting data page 235

Stainless steel

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material	Solid carbide	
Surface		
Type	TMU SP	TMU SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

4162

4163

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 3	9.950	10.000	70.000	25.000	16.000	4	10.050
0.750	≥ 5	9.950	10.000	70.000	25.000	16.000	4	10.075
1.000	≥ 6	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 8	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 10	11.950	12.000	80.000	31.000	20.000	4	12.150
1.500	≥ 10	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 14	15.950	16.000	90.000	40.000	25.000	5	16.200
2.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.250
3.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.300



Universal thread milling cutters for UN-threads



Cutting data page 235

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMU UN

TMU UN

Internal cooling



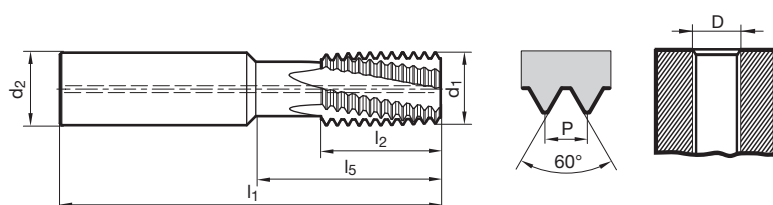
Shank form

HA

HB

NEW

Stainless steel



Company std.

Article no.

3595

3596

P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
10.000	≥ 3/4	11.950	12.000	80.000	31.000	20.000	4	12.100
16.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.160
18.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.180
20.000	≥ 11/16	11.950	12.000	80.000	31.000	20.000	4	12.200
24.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.240
12.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.120
14.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.140
16.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.160
18.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.180
20.000	≥ 13/16	15.950	16.000	90.000	40.000	25.000	5	16.200
7.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.070
8.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.080
12.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.120
14.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.140
16.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.160



Universal thread milling cutters for BSP-threads

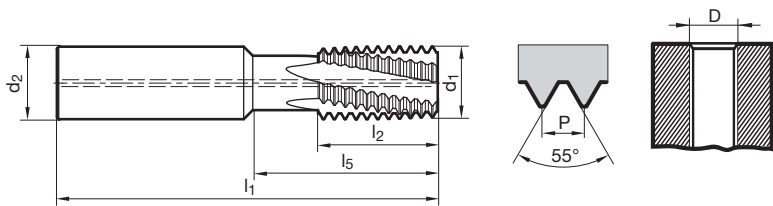


P	•	Cutting data page 235
M	•	
K	•	
N	•	
S	•	
H	≤55	

Stainless steel

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3542

3557

P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
19.000	≥ 1/4	9.950	10.000	70.000	25.000	16.000	4	10.190
14.000	≥ 1/2	15.950	16.000	90.000	40.000	25.000	5	16.140
11.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.110



Universal thread milling cutters for NPT-threads



Cutting data page 235

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

Internal cooling



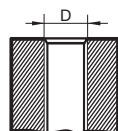
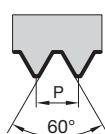
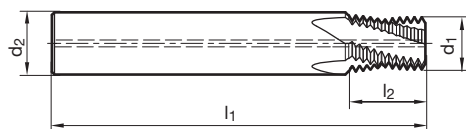
Shank form

HA

HB

NEW

Stainless steel



Company std.

Article no.

3768

3769

P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180



Universal thread milling cutters for NPTF-threads



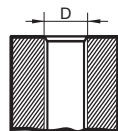
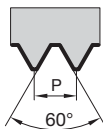
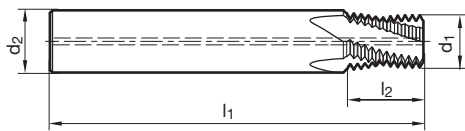
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 235

Stainless steel

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3772

3773

P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180



Micro-thread milling cutters



Cutting data page 234

P	•
M	•
K	•
N	•
S	•
H	

Tool material

Solid carbide

Surface



Type

SP M

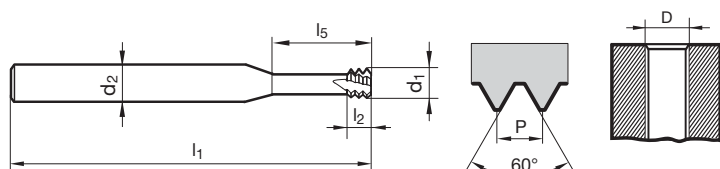
Threads

3,0

Shank form

HA

NEW



Stainless steel

Company std.

Article no.

4226

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M 1.6	0.350	1.200	3.000	39.000	1.100	4.800	3	1.600
M 1.8	0.350	1.400	3.000	39.000	1.100	5.400	3	1.800
M2	0.400	1.550	3.000	39.000	1.200	6.000	4	2.000
M 2.5	0.450	1.950	3.000	39.000	1.400	7.500	4	2.500
M3	0.500	2.400	6.000	58.000	1.500	9.500	4	3.000
M 3.5	0.600	2.800	6.000	58.000	1.800	11.000	4	3.500
M4	0.700	3.200	6.000	58.000	2.100	12.500	4	4.000
M5	0.800	4.000	6.000	58.000	2.400	16.000	4	5.000
M6	1.000	4.800	6.000	58.000	3.000	20.000	4	6.000
M8	1.250	5.950	6.000	58.000	3.800	24.000	4	8.000
M10	1.500	7.800	8.000	73.000	4.500	33.000	4	10.000
M12	1.750	9.000	10.000	84.000	5.300	38.000	4	12.000
M16	2.000	11.800	10.000	84.000	6.000	35.000	5	16.000



Micro-thread milling cutters

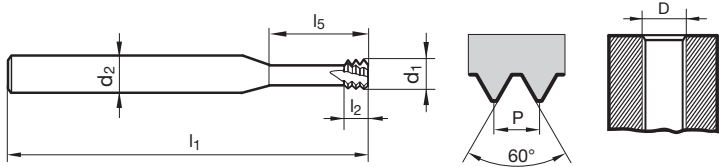


P	•
M	•
K	•
N	•
S	•
H	

Cutting data page 235

Stainless steel

Tool material	Solid carbide
Surface	C
Type	SP G
Threads	3,0
Shank form	HA



Company std.	Article no.	4228

D	P	d1	d2	l1	l2	l5	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	6.200	8.000	64.000	2.700	19.500	4	9.728
G3/8	19.000	9.950	10.000	73.000	4.000	25.000	4	16.662
G7/8	14.000	11.950	12.000	84.000	5.400	37.000	4	30.201
G2	11.000	15.950	16.000	105.000	6.900	44.000	5	59.614



Micro-thread milling cutters



Cutting data page 235

P	•
M	•
K	•
N	•
S	•
H	

Tool material

Solid carbide

Surface



Type

SP M/MF

Threads

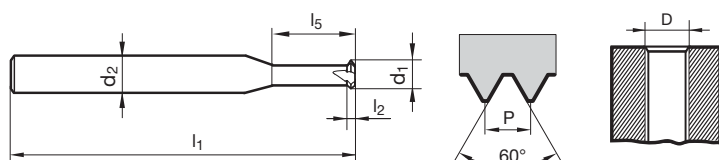
1,0

Shank form

HA



Stainless steel



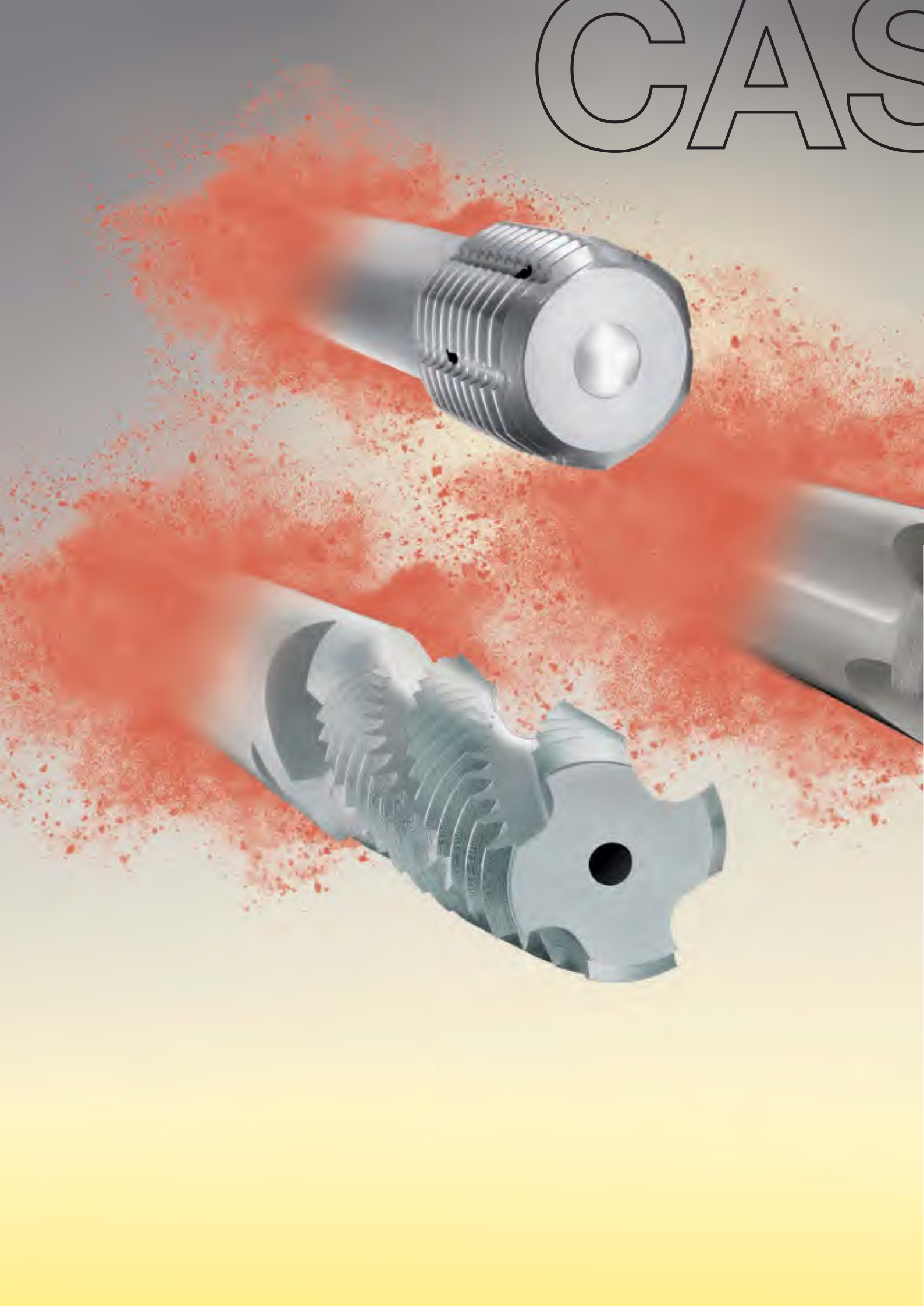
Company std.

Article no.

4225

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M1.4 - M1.8	0.350	1.050	3.000	39.000	0.400	3.800	3	1.800
M2 - M2.4	0.400	1.500	3.000	39.000	0.400	7.000	3	2.400
M2.5 - M3	0.500	2.000	3.000	39.000	0.500	9.000	4	3.000
M3.5 - M4.5	0.750	2.800	6.000	58.000	0.800	14.000	4	4.500
M5 - M7	1.000	4.000	6.000	58.000	1.000	19.000	4	7.000
M8 - M10	1.500	6.400	8.000	64.000	1.500	24.000	5	10.000

CAS



CAST IRON

GREY CAST IRON/
SPHEROIDAL GRAPHITE
IRON/
MALLEABLE CAST IRON

Grey cast iron, spheroidal and malleable cast iron



Cast iron such as grey cast iron (EN-GJL-250),
spheroidal graphite iron, malleable cast iron
and abrasive special cast alloys



CAST IRON

M

ISO 2/6H

ISO 3/6G

MF

ISO 2/6H

ISO 3/6G

without internal cooling

No 1

M3 - M30
Art.-No. 1918/1919
from page 356

No 1

M4x0,5 - M30x1,5
Art.-No. 169
from page 365

M3 - M30

Art.-No. 807/819
from page 356

M4x0,5 - M30x1,5

Art.-No. 831
from page 365

with internal cooling

No 1

M3 - M10
Art.-No. 2311
from page 364

No 1

M3 - M20
Art.-No. 1858/1859
from page 362

M5x0,5 - M20x1,5
Art.-No. 1861/1860
from page 368

No 1

ideal
tool



QUICKFINDER

UNC

2B

UNF

2B

G

-



THROUGH HOLE



HSS-E, TiAlN, form C

No 1

No. 2 - 3/4
Art.-No. 1979/1984
from page 370

No 1

No. 4 - 1
Art.-No. 1989
from page 372

No 1

G1/16 - G2
Art.-No. 961
from page 374



HSS-E, nitrided, form C

SOLID CARBIDE



Solid carbide, TiAlN, form C

SOLID CARBIDE



Solid carbide, bright, form C

Grey cast iron, spheroidal and malleable cast iron



CAST IRON

M

ISO 2/6H

ISO 3/6G

MF

ISO 2/6H

ISO 3/6G

without internal cooling

No 1

M3 - M30
Art.-No. 1918/1919
from page 356

No 1

M4x0,5 - M30x1,5
Art.-No. 169
from page 365

M3 - M30

Art.-No. 807/819
from page 356

M4x0,5 - M30x1,5

Art.-No. 831
from page 365

No 1

M5 - M20
Art.-No. 318/319
from page 358

No 1

M8x1 - M24x1,5
Art.-No. 347
from page 366

No 1

M5 - M10
Art.-No. 2506
from page 363

No 1

M3 - M20
Art.-No. 969/1883
from page 362

M5x0,5 - M20x1,5
Art.-No. 972/974
from page 368

with internal cooling

No 1

ideal
tool



QUICKFINDER

UNC

2B

UNF

2B

G

-



B L I N D H O L E



HSS-E, TiAlN, form C

No 1

No. 2 - 3/4
Art.-No. 1979/1984
from page 370

No 1

No. 4 - 1
Art.-No. 1989
from page 372

G1/16 - G2
Art.-No. 961
from page 374



HSS-E, nitrided, form C

No 1

No. 10 - 7/8
Art.-No. 1085/1086
from page 371

No 1

No. 10 - 7/8
Art.-No. 1082
from page 373



HSS-E, TiAlN, form C

SOLID CARBIDE



Solid carbide, TiAlN, form C

SOLID CARBIDE



Solid carbide, bright, form C

Grey cast iron, spheroidal and malleable cast iron



CAST IRON

without lubrication

M**6HX****6GX****No 1**

M1 - M20
Art.-No. 921/925
from page 376

No 1

M2 - M10
Art.-No. 920
from page 377

MF**6HX****6GX****No 1**

M8x1 - M20x1,5
Art.-No. 929
from page 391

No 1

M8x1 - M18x1,5
Art.-No. 928
from page 393

with lubrication

M3 - M39

Art.-No. 919/923
from page 379

No 1

M3 - M39
Art.-No. 918/922
from page 379

M6x0,75 - M24x1,5
Art.-No. 1275/927
from page 395

No 1

M8x1 - M20x1,5
Art.-No. 1277/926
from page 397

No 1

M3 - M39
Art.-No. 2012/2013
from page 379

No 1

M6x0,75 - M20x1,5
Art.-No. 2008
from page 396

with internal cooling

No 1

M3 - M20
Art.-No. 1270/1271
from page 385

No 1

M5 - M10
Art.-No. 1713
from page 386

No 1

M8x1 - M24x1,5
Art.-No. 1272/1273
from page 401

No 1

M8x1 - M24x1,5
Art.-No. 1715/1716
from page 402

No 1

M3 - M20
Art.-No. 1725/1727
from page 385

No 1

M3 - M20
Art.-No. 1726/1728
from page 387

No 1

M8x1 - M24x1,5
Art.-No. 1729/1731
from page 401

No 1

M8x1 - M24x1,5
Art.-No. 1730/1732
from page 402

No 1

M3 - M20
Art.-No. 1972/1931
from page 389

No 1

M10x1 - M24x1,5
Art.-No. 1581
from page 404

No 1 ideal
tool



QUICKFINDER

UNC

2BX

UNF

2BX

G

-



THROUGH HOLE
BLIND HOLE

No 1

Nr. 4 - 7/8
Art.-No. 2273/2274
from page 405

No 1

Nr. 4 - 1
Art.-No. 1283/2275
from page 406

No 1

G1/16 - G1 1/4
Art.-No. 966
from page 407



HSS-E, TiN, form C

No 1

Nr. 4 - 7/8
Art.-No. 1582/1583
from page 405

No 1

Nr. 4 - 1
Art.-No. 1584/1585
from page 406

No 1

G1/16 - G3/4
Art.-No. 1586
from page 408



HSS-E, TiN, form C



HSS-E, TiCN, form C

FORM C



HSS-E-PM, TiCN, form C

FORM E



HSS-E-PM, TiN, form E

SOLID CARBIDE



Solid carbide, TiCN, form C

Grey cast iron, spheroidal and malleable cast iron



CAST IRON

M

UNIVERSAL

MF

UNIVERSAL

1.5xD

No 1

M3 - M20
Art.-No. 3525
from page 413

No 1

M4x0,5 - M16x1,5
Art.-No. 3527
from page 416

2xD

No 1

M3 - M20
Art.-No. 3526
from page 414

No 1

M4x0,5 - M16x1,5
Art.-No. 3528
from page 417

2.5xD

No 1

M3 - M20
Art.-No. 3759
from page 415

No 1

M4x0,5 - M16x1,5
Art.-No. 3762
from page 418

3xD

No 1

M1,6 - M16
Art.-No. 4226
from page 440

universal

No 1

Ø8xP0,5 - Ø20xP3,5
Art.-No. 3541
from page 434

No 1

Ø8xP0,5 - Ø20xP3,5
Art.-No. 3541
from page 434

No 1 ideal tool



QUICKFINDER

UNC
UNIVERSAL

UNF
UNIVERSAL

G
-



T H R O U G H H O L E
B L I N D H O L E

No 1

1/4 - 1/2
Art.-No. 3516
from page 420

No 1

1/4 - 1/2
Art.-No. 3518
from page 423

No 1

1/8 - 3/8
Art.-No. 3514
from page 429



Solid carbide, TiCN

No 1

1/4 - 1/2
Art.-No. 3517
from page 421

No 1

1/4 - 1/2
Art.-No. 3519
from page 424

No 1

1/8 - 3/8
Art.-No. 3515
from page 430



Solid carbide, TiCN



Solid carbide, TiCN



Solid carbide, TiCN

No 1

Ø10xUN24 - Ø20xUN7
Art.-No. 3595
from page 436

No 1

Ø10xUN24 - Ø20xUN7
Art.-No. 3595
from page 436

No 1

Ø10xG19 - Ø20xG11
Art.-No. 3542
from page 437



Solid carbide, TiCN

Grey cast iron, spheroidal and malleable cast iron



CAST IRON

M

UNIVERSAL

MF

UNIVERSAL

1.5xD

No 1

M3 - M16
Art.-No. 3777
from page 443

No 1

M4x0,5 - M16x1,5
Art.-No. 3789
from page 446

M3 - M16
Art.-No. 3776
from page 443

M4x0,5 - M16x1,5
Art.-No. 3788
from page 446

No 1

M3 - M16
Art.-No. 3781
from page 444

No 1

M4x0,5 - M16x1,5
Art.-No. 3793
from page 447

M3 - M16
Art.-No. 3780
from page 444

M4x0,5 - M16x1,5
Art.-No. 3792
from page 447

2xD

No 1

M3 - M16
Art.-No. 3785
from page 445

2.5xD

M3 - M16
Art.-No. 3784
from page 445

No 1 ideal tool



QUICKFINDER

UNC
UNIVERSAL

UNF
UNIVERSAL

G
-



T H R O U G H H O L E
B L I N D H O L E



Solid carbide, TiCN



Solid carbide, TiCN

No 1

1/4 - 5/8
Art.-No. 4139
from page 448

No 1

1/4 - 5/8
Art.-No. 4141
from page 449



Solid carbide, TiCN



Solid carbide, TiCN



Solid carbide, TiCN



Solid carbide, TiCN

Grey cast iron, spheroidal and malleable cast iron



COMPASS



 GREY CAST IRON, SPHEROIDAL/MALL. CAST IRON	Thread depth		$\leq 3 \times D$					
	Tool material		HSS-E				Solid carbide	
	Type/form		GG/C	GG/C	GGT/C	GG/C	H/C	H/C
	Surface							
	Coolant delivery						radial	radial
	Shank tolerance		h9	h9	h9	h9	h6	h6
 THROUGH HOLES								
	Thread type	Tolerance	Article no. / page					
	M	4H						
		6H			1875/1876 357			
		6HX	807/819 356	930/931 356		1918/1919 356	1858/1859 362	2311 364
		6G						
	MF	6H						
		6HX	831 365	932 365		169 365	1861/1860 368	
		6G						
	UNC	2B	1979/1984 370					
		2BX						
	UNF	2B	1989 372					
		2BX						
	G		961 374					
	BSW							
	NPT							
	NPTF							
	EG M	6H Mod.						
	MJ	4HX						
	MJF	4HX						
	UNJC	3BX						
	UNJF	3BX						
	PG							
	Suitable lubricant							

No 1

- = Air
 ● = Neat oil
 ● = Soluble oil
 △ = Paste
 □ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material ex-ample	Material no.	Recommended cutting speed vc m/min					
K	Cast Iron	300 HB	EN-GJL-150	0.6015	15	20	20	25	45	45
			EN-GJL-250	0.6025						
			EN-GJL-300	0.6030						
	Spheroidal graphite iron and malleable cast iron	350 HB	EN-GJS-400-15	0.7040	10	15	15	20	35	35
			EN-GJS-600-3	0.7060						
			EN-GJS-700-2	0.7070						
K	ADI GGV	1000 N/mm ²	EN-GJS1000-5		8	12	12	15	30	30
		350 HB	EN-GJV250							
			EN-GJV400							

Grey cast iron, spheroidal and malleable cast iron



**GREY CAST IRON,
SPHEROIDAL/MALL.
CAST IRON**



BLIND HOLES

Thread depth		$\leq 3 \times D$					
Tool material		HSS-E					
Type/form		GG/C	GG/C	GGT/C	GG/C	GG/C	GGT/C
Surface		●	●	●	●	●	●
Coolant delivery		☒	☒	☒	☒	axial	axial
Shank tolerance		h9	h9	h9	h9	h9	h9
Thread type	Tolerance	Article no. / page					
M	4H						
	6H			1875/1876 357			
	6HX	807/819 356	930/931 356		1918/1919 356	1890/1897 358	318/319 358
	6G						
MF	6H						
	6HX	831 365	932 365		169 365	1904 366	347 366
	6G						
UNC	2B	1979/1984 370					1085/1086 371
	2BX						
UNF	2B	1989 372					1082 373
	2BX						
G		961 374					
BSW							
NPT							
NPTF							
EG M	6H Mod.						
MJ	4HX						
MJF	4HX						
UNJC	3BX						
UNJF	3BX						
PG							
Suitable lubricant		○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

No 1

- = Air
● = Neat oil
● = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

Group of materials	Tensile strength	Material ex-ample	Material no.	Recommended cutting speed vc m/min					
K	Cast Iron	EN-GJL-150	0.6015	15	20	20	25	15	25
		EN-GJL-250	0.6025						
		EN-GJL-300	0.6030						
	Spheroidal graphite iron and malleable cast iron	EN-GJS-400-15	0.7040	10	15	15	20	10	20
		EN-GJS-600-3	0.7060						
		EN-GJS-700-2	0.7070						
	ADI GGV	EN-GJS1000-5		8	12	12	15	8	15
		EN-GJV250 EN-GJV400							



$\leq 3 \times D$						
HSS-E-PM					VHM	
H/C	H/C	H/C	H/E	H/C	H/C	H/E
axial	axial	axial	axial	axial	axial	axial
h9	h9	h9	h9	h6	h6	h6
Article no. / page						
778 360	779 361	302/297 359	1091/4165 359	969/1883 362	2506 363	1008 364
		1090 367	1007 367	972/974 368		1009 369

Grey cast iron, spheroidal and malleable cast iron

Recommended cutting speed v_c m/min						
25	25	30	30	45	45	45
20	20	20	20	35	35	35
15	15	15	15	30	30	30



**GREY CAST IRON,
SPHEROIDAL/MALL.
CAST IRON**



**THROUGH HOLES
AND BLIND HOLES**

Thread depth	$\leq 1,5 \times D$			$\leq 3 \times D$	
Tool material	HSS-E	HSS-E-PM	VHM	HSS-E	
Type/form	N/C	N/C	N/C	N/C	N/C
Surface					
Coolant delivery			axial		
Shank tolerance	h9	h9	h6	h9	h9



Thread type	Tolerance	Article no. / page				
M	4H					
	6H					
	6HX	921/925 376	1255/1256 376	2518 378	919/923 379	2012/2013 379
	6GX	920 377	903/952 376		918/922 379	
MF	6H					
	6HX	929 391	1257/1258 394		1275/927 395	2008 396
	6GX	928 393	1740 392		1277/926 397	
UNC	2B					
	2BX	2273/2274 405			1582/1583 405	
UNF	2B					
	2BX	1283/2275 406			1584/1585 406	
G		966 407			1586 408	
BSW						
NPT						
NPTF						
EG M	6H Mod.					
MJ	4HX					
MJF	4HX					
UNJC	3BX					
UNJF	3BX					
PG						
Suitable lubricant						

No 1

- = Air
- = Neat oil
- = Soluble oil
- △ = Paste
- = Minimal quantity lubrication (MQL)

Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min				
K	Cast Iron	300 HB	EN-GJL-150	0.6015	-	-	-	-
			EN-GJL-250	0.6025	-	-	-	-
			EN-GJL-300	0.6030	-	-	-	-
	Spheroidal graphite iron and malleable cast iron	350 HB	EN-GJS-400-15	0.7040	-	-	-	-
			EN-GJS-600-3	0.7060	15	15	40	15
			EN-GJS-700-2	0.7070	15	15	40	15
					15	15	40	15
	ADI GGV	1000 N/mm ²	EN-GJS1000-5		15	15	40	15
		350 HB	EN-GJV250		-	-	-	-
			EN-GJV400		-	-	-	-



$\leq 3 \times D$										
HSS-E		HSS-E-PM							VHM	
N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/E	N/C	N/E
										
axial	radial			radial	axial	radial	radial	axial	radial	radial
h9	h9	h9	h9	h9	h9	h9	h9	h9	h6	h6
										
Article no. / page										
2442/2444 382	2446/2448 382	322/339 380	1266/1267 381	323/342 384	4143 388	1270/1271 385	1717/1719 385	1725/1727 385	1972/1931 389	1927 390
2443/2445 382	2447 383					1713 386	1718/1720 387	1726/1728 387		
		333 399	1268/1269 398	338 400	4145 403	1272/1273 401	1721/1723 401	1729/1731 401	1581 404	
						1715/1716 402		1730/1732 402		
										

Grey cast iron, spheroidal and malleable cast iron

Recommended cutting speed v_c m/min										
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
15	20	15	15	15	15	25	25	15	40	40
15	20	15	15	15	15	20	20	15	40	40
-	-	-	-	-	-	-	-	-	-	-



**GREY CAST IRON,
SPHEROIDAL/MALL.
CAST IRON**



**THROUGH HOLES
AND BLIND HOLES**

Thread depth	≤2xD				≤2,5xD		≤1,5xD		
Tool material		Solid carbide							
Type	TM SP	TM SP	TM SP	TM SP	TM SP	TM SP	TMC SP	TMC SP	
Surface									
Coolant delivery			axial	axial	axial	axial	axial	axial	
Shank form	HA	HB	HA	HB	HA	HB	HA	HA	
Spiral	27°	27°	27°	27°	27°	27°	10°	10°	
Thread type	Article no. / page								
M	4132 411	4133 411	3737 410	3743 410	3735 412	3740 412	3525 413	3543 413	
MF			3737 410	3743 410			3527 416	3545 416	
UNC			4134 419	4135 419			3516 420	3534 420	
UNF			4136 422	4137 422			3518 423	3536 423	
G			3745 427	3748 427	3746 428	3750 428	3514 429	3529 429	
BSW									
NPT			3753 425	3754 425			3520 426	3538 426	
NPTF			3756 432	3757 432			3521 433	3539 433	
EG M	EG-threads can be produced with every thread milling cutter type and dimension								
MJ									
MJF									
UNJC									
UNJF									
PG									
Suitable lubricant									

No 1

- = Air
- = Neat oil
- ◐ = Soluble oil
- △ = Paste
- = Minimal quantity lubrication (MQL)

Group of materials	Hardness	Material example	Material no.	Application recommendations								
K	Cast Iron	300 HB	EN-GJL-150	0.6015								
			EN-GJL-250	0.6025	++	++	++	++	++	++	++	++
			EN-GJL-300	0.6030								
	Spheroidal graphite iron and malleable cast iron	350 HB	EN-GJS-400-15	0.7040								
			EN-GJS-600-3	0.7060	++	++	++	++	++	++	++	++
			EN-GJS-700-2	0.7070								
	ADI GGV	1000 N/mm²	EN-GJS1000-5									
		350 HB	EN-GJV250		++	++	++	++	++	++	++	++
			EN-GJV400									



≤2xD		≤2,5xD		universal				≤3xD		≤1,5xD		≤2xD		≤2,5xD	
Solid carbide															
TMC SP	TMC SP	TMC SP	TMC SP	TMU SP	TMU SP	TMU SP	TMU SP	MTM 3 SP	MTM 1 SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP
															
axial	axial	axial	axial	axial	axial	axial	axial				radial		radial		radial
HA	HB	HA	HB	HA	HB	HA	HB	HA	HA	HA	HA	HA	HA	HA	HA
10°	10°	27°	27°	15°	15°	15°	15°	15°	15°	27°	27°	27°	27°	27°	27°
															
Article no. / page															
3526 414	3544 414	3759 415	3760 415	3541 434	3556 434	4162 435	4163 435	4226 440	4225 442	3776 443	3777 443	3780 444	3781 444	3784 445	3785 445
3528 417	3546 417	3762 418	3763 418	3541 434	3556 434	4162 435	4163 435		4225 442	3788 446	3789 446	3792 447	3793 447		
3517 421	3535 421			3595 436	3596 436								4139 448		
3519 424	3537 424			3595 436	3596 436								4141 449		
3515 430	3533 430	3765 431	3766 431	3542 437	3557 437	3542 437	3557 437	4228 441							
				3768 438	3769 438										
				3772 439	3773 439										
EG-threads can be produced with every thread milling cutter type and dimension															
															

Grey cast iron, spheroidal and malleable cast iron

Application recommendations															
++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++

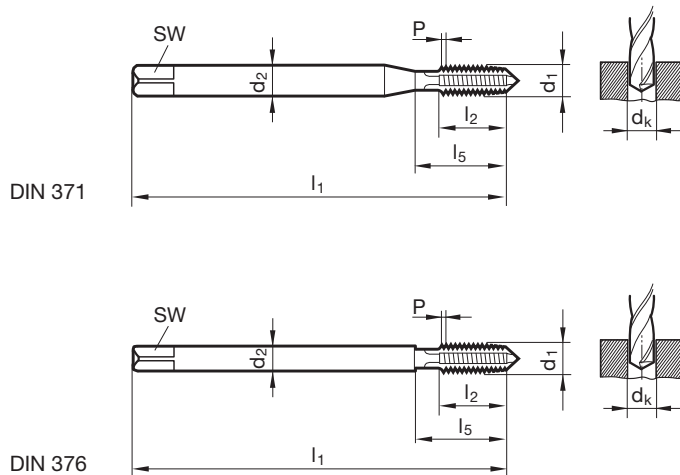
Machine taps for ISO metric threads



Cutting data page 349/350

P	
M	
K	•
N	
S	
H	

Tool material	HSS-E		
Tolerance on Ø	6HX	6HX	6HX
Surface	●	●	●
Type	GG	GG	GG
Form	C	C	C
Internal cooling	✗	✗	✗



DIN 2184-1 DIN 371

Article no. 807 1918 930

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no. 819 1919 931

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M27	3.000	20.000	16.000	24.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000



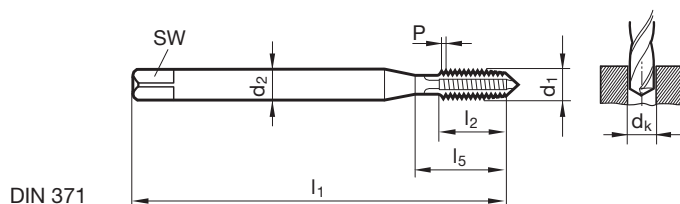
Machine taps for ISO metric threads



Cutting data page 349/350

P	
M	
K	•
N	
S	
H	

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	S
Type	GGT
Form	C
Internal cooling	



Grey cast iron, spherical and malleable cast iron

DIN 2184-1 DIN 371

Article no.

1875

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

1876

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000

Oil feed taps for ISO metric threads



Cutting data page 350

P	
M	
K	•
N	
S	
H	

Tool material

HSS-E

Tolerance on Ø

6HX

6HX

Surface



Type

GG

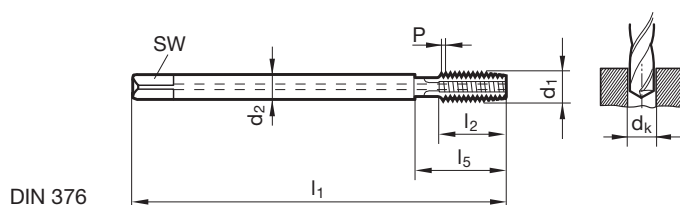
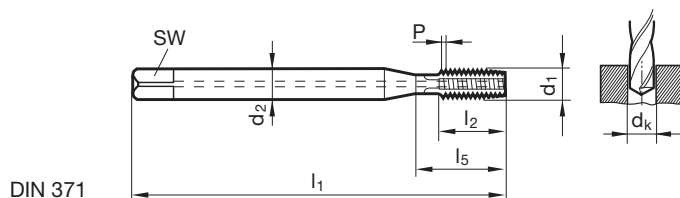
GG

Form

C

C

Internal cooling



DIN 2184-1 DIN 371

Article no.

1890

318

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

1897

319

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000



Oil feed taps for ISO metric threads



P ≤ 1200 Cutting data page 351

M	
K	•
N	≥ 7
S	
H	

Tool material

HSS-E-PM

Tolerance on Ø

6HX

6HX

Surface



Type

H

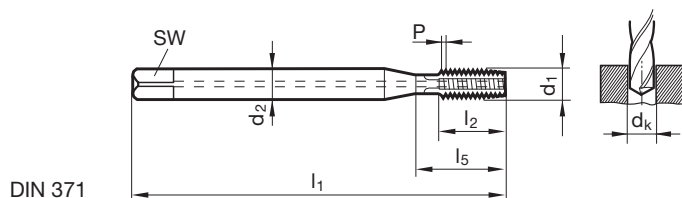
H

Form

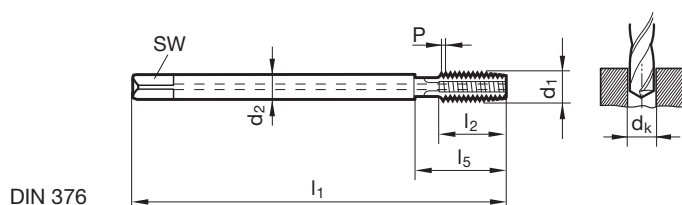
C

E

Internal cooling



DIN 371



DIN 376



Grey cast iron, spherical
cast and malleable cast
iron

DIN 2184-1 DIN 371

Article no.

302

1091

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

297

4165

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000

Oil feed taps for ISO metric threads



P ≤ 1200 Cutting data page 351

M	
K	•
N	≥ 7
S	
H	

Tool material **HSS-E**

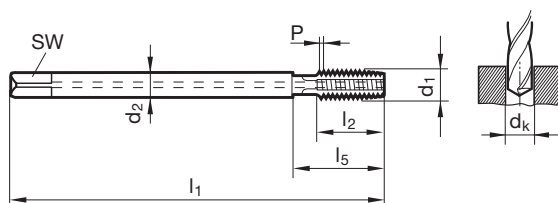
Tolerance on Ø 6HX

Surface

Type H

Form C

Internal cooling



DIN 2184-1 DIN 376

Article no.

778

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M27	3.000	20.000	16.000	24.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000
M33	3.500	25.000	20.000	29.50	180.000	40.000	91.000
M36	4.000	28.000	22.000	32.00	200.000	50.000	102.000
M39	4.000	32.000	24.000	35.00	200.000	50.000	107.000

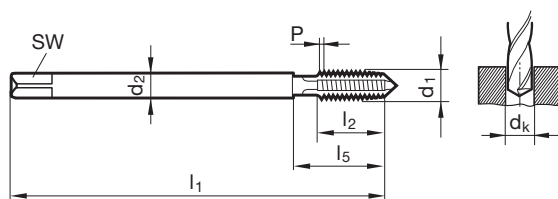
Oil feed taps for ISO metric threads



P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

Cutting data page 351

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	C
Type	H
Form	C
Internal cooling	

NEW

Company std. ~DIN 376

Article no.

779

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M16	2.000	12.000	9.000	14.00	160.000	26.000	100.000
M20	2.500	16.000	12.000	17.50	180.000	32.000	120.000
M24	3.000	18.000	14.500	21.00	200.000	36.000	120.000
M27	3.000	20.000	16.000	24.00	225.000	36.000	145.000
M30	3.500	22.000	18.000	26.50	250.000	40.000	160.000
M33	3.500	25.000	20.000	29.50	275.000	40.000	170.000
M36	4.000	28.000	22.000	32.00	300.000	50.000	180.000
M39	4.000	32.000	24.000	35.00	325.000	50.000	210.000

Grey cast iron, spherical and malleable cast iron

Oil feed taps for ISO metric threads



Cutting data page 349/351

P	
M	
K	•
N	≥ 7
S	
H	

Tool material

Solid carbide

Tolerance on Ø

6HX

6HX

Surface



Type

H

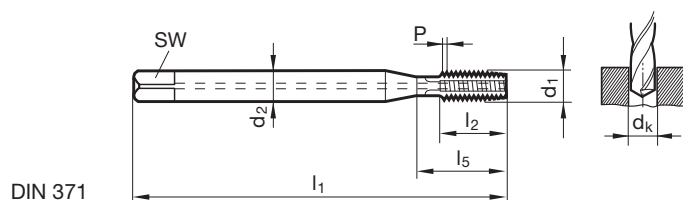
H

Form

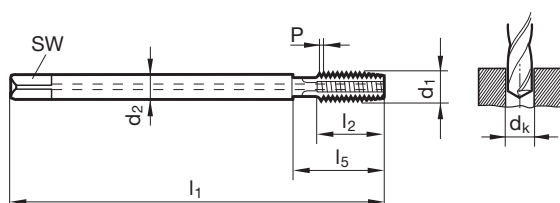
C

C

Internal cooling



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

969

1858

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	8.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	10.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	10.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	12.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	16.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	18.000	39.000

DIN 2184-1 DIN 376

Article no.

1883

1859

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	22.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	22.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	22.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	24.000	45.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	45.000



Oil feed taps for ISO metric threads



P	
M	
K	•
N	
S	
H	

Cutting data page 351

Tool material **Solid carbide**

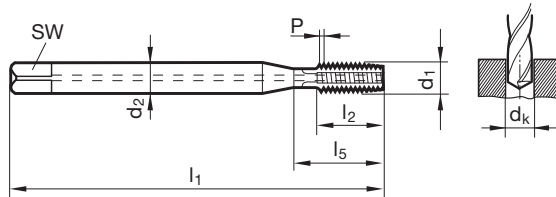
Tolerance on Ø 6HX

Surface **A**

Type H

Form C

Internal cooling



Grey cast iron, spherical and malleable cast iron

DIN 2184-1 DIN 371

Article no.

2506

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	10.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	12.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	16.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	18.000	39.000

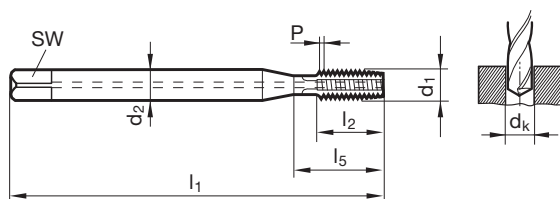
Oil feed taps for ISO metric threads



P	
M	
K	•
N	
S	
H	

Cutting data page 349/351

Tool material	Solid carbide		
Tolerance on Ø	6HX	6HX	6HX
Surface	A	○	A
Type	H	H	N R15
Form	C	E	C
Internal cooling			



DIN 2184-1 DIN 371

Article no.

2311

1008

2510

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	8.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	10.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	10.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	12.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	16.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	18.000	39.000



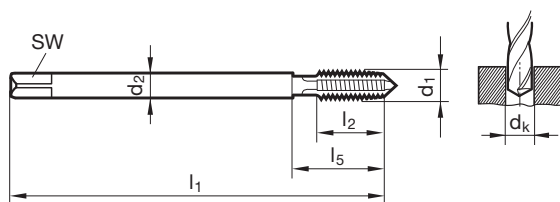
Machine taps for ISO metric fine threads



Cutting data page 349/350

P	
M	
K	•
N	
S	
H	

Tool material	HSS-E		
Tolerance on Ø	6HX	6HX	6HX
Surface	●	●	●
Type	GG	GG	GG
Form	C	C	C
Internal cooling	✗	✗	✗



Grey cast iron, spherical and malleable cast iron

DIN 2184-1 DIN 374

Article no. 831 932 169

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 4 X0.5	2.800	2.100	3.50	63.000	8.000	21.000	4.003
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M 8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.25	11.000	9.000	12.80	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007
M30 X1.5	22.000	18.000	28.50	150.000	28.000	53.000	30.007

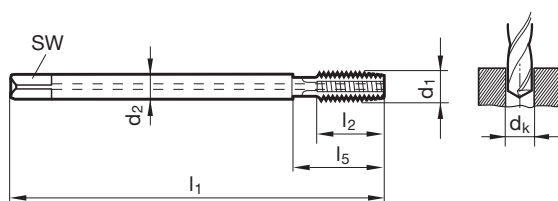
Oil feed taps for ISO metric fine threads



P	
M	
K	•
N	
S	
H	

Cutting data page 350/351

Tool material	HSS-E	
Tolerance on Ø	6HX	6HX
Surface		
Type	GG	GG
Form	C	C
Internal cooling		



DIN 2184-1 DIN 374

Article no.

1904

347

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007



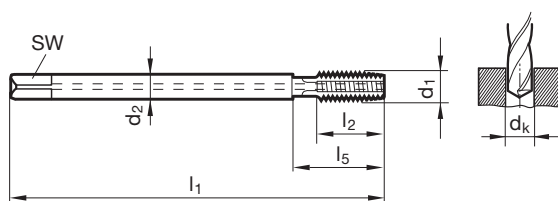
Oil feed taps for ISO metric fine threads



P ≤ 1200 Cutting data page 351

M	
K	•
N	≥ 7
S	
H	

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface		
Type	H	H
Form	C	E
Internal cooling		



Grey cast iron, spherical and malleable cast iron

DIN 2184-1 DIN 374

Article no.

1090

1007

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M 6 X0.5	4.500	3.400	5.50	80.000	13.000	30.000	6.003
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M9 x 1	7.000	5.500	8.00	90.000	16.000	35.000	9.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.00	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	12.80	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.00	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007

Oil feed taps for ISO metric fine threads



Cutting data page 349/351

P	
M	
K	•
N	≥ 7
S	
H	

Tool material

Solid carbide

Tolerance on Ø

6HX

6HX

Surface



Type

H

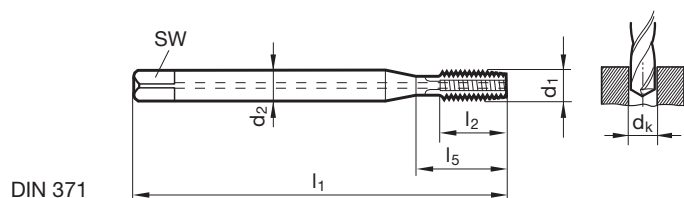
H

Form

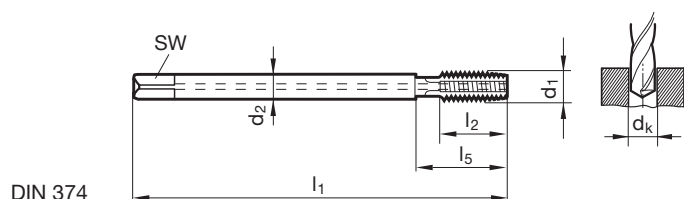
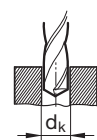
C

C

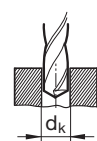
Internal cooling



DIN 371



DIN 374



DIN 2184-1 DIN 371

Article no.

972

1861

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	6.000	4.900	4.50	70.000	10.000	25.000	5.003
M8 x 1	8.000	6.200	7.00	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.00	90.000	18.000	35.000	10.005

DIN 2184-1 DIN 374

Article no.

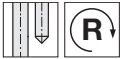
974

1860

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 X1.5	9.000	7.000	10.50	100.000	22.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	22.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	24.000	45.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	45.000	20.007



Oil feed taps for ISO metric fine threads



Cutting data page 351

P	
M	
K	•
N	≥ 7
S	
H	

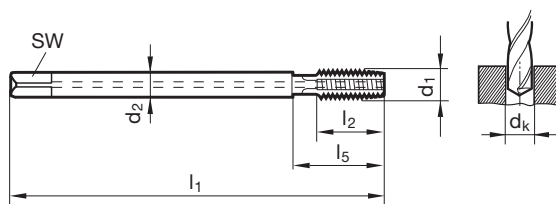
Tool material **Solid carbide**

Tolerance on Ø 6HX

Surface ○

Type H

Form E

Internal cooling 

Grey cast iron, spherical and malleable cast iron

DIN 2184-1 ~DIN 371/~DIN 374

Article no.

1009

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10.000	8.000	9.00	90.000	18.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	22.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	22.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	22.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007

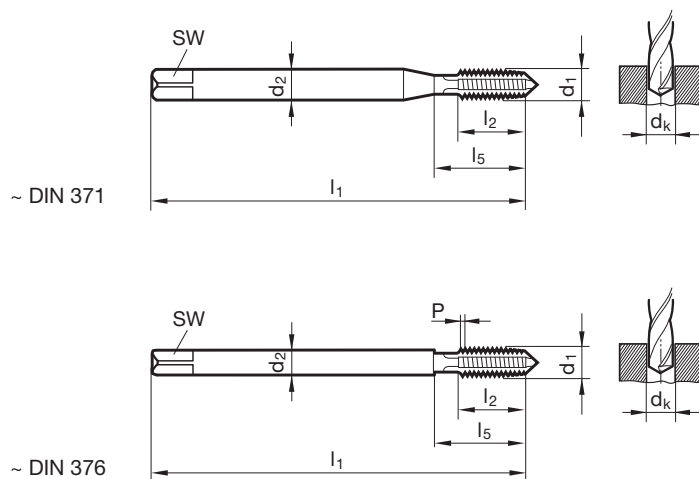
Machine taps for UNC-threads



Cutting data page 349/350

P	
M	
K	•
N	
S	
H	

Tool material	HSS-E
Tolerance on Ø	2B
Surface	●
Type	GG
Form	C
Internal cooling	



DIN 2184-1 ~DIN 371

Article no.

1979

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
2 - 56	2.800	2.100	1.85	45.000	9.000	14.500	2.184
3 - 48	2.800	2.100	2.10	50.000	9.000	14.500	2.515
5 - 40	3.500	2.700	2.65	56.000	11.000	18.000	3.175
8 - 32	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376

Article no.

1984

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	9.40	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	25.000	49.000	12.700
9/16 - 12	11.000	9.000	12.20	110.000	28.000	53.000	14.288
5/8 - 11	12.000	9.000	13.50	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	33.000	62.000	19.050



Oil feed taps for UNC threads



P	
M	
K	•
N	
S	
H	

Cutting data page 350

Tool material **HSS-E**

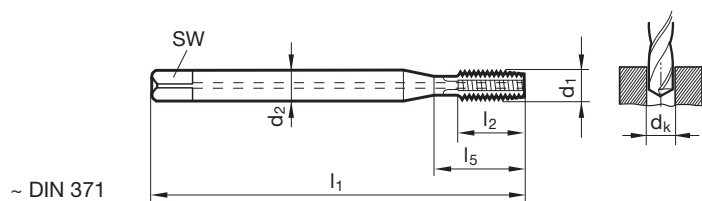
Tolerance on Ø 2B

Surface **A**

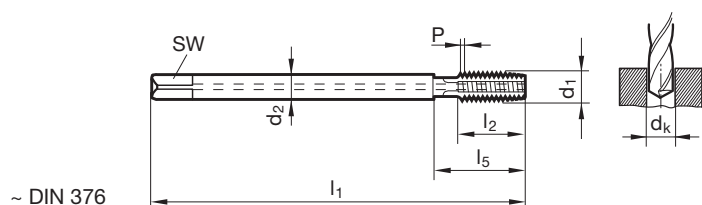
Type GG

Form C

Internal cooling



~ DIN 371



~ DIN 376



Grey cast iron, spherical and malleable cast iron

DIN 2184-1 ~DIN 371

Article no.

1085

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376

Article no.

1086

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	9.40	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	25.000	49.000	12.700
5/8 - 11	12.000	9.000	13.50	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	33.000	62.000	19.050
7/8 - 9	18.000	14.500	19.50	140.000	35.000	62.000	22.225

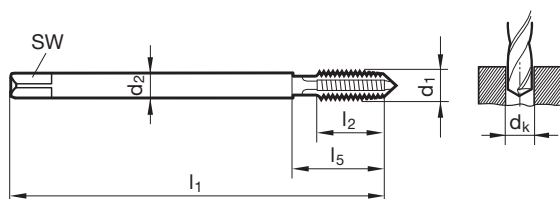
Machine taps for UNF-threads



Cutting data page 349/350

P	
M	
K	•
N	
S	
H	

Tool material	HSS-E
Tolerance on Ø	2B
Surface	●
Type	GG
Form	C
Internal cooling	



DIN 2184-1 ~DIN 374

Article no.

1989

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 48	2.200		2.40	56.000	10.000	18.000	2.845
8 - 36	2.800	2.100	3.50	63.000	12.000	21.000	4.166
1/4 - 28	4.500	3.400	5.50	80.000	16.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	18.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	18.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	20.000	40.000	12.700
9/16 - 18	11.000	9.000	12.90	100.000	22.000	40.000	14.288
3/4 - 16	14.000	11.000	17.50	110.000	25.000	44.000	19.050
7/8 - 14	18.000	14.500	20.40	125.000	25.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	28.000	50.000	25.400



Oil feed taps for UNF threads



Cutting data page 350

P	
M	
K	•
N	
S	
H	

Tool material **HSS-E**

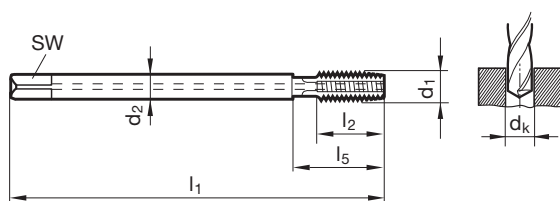
Tolerance on Ø 2B

Surface **A**

Type GG

Form C

Internal cooling



Grey cast iron, spherical and malleable cast iron

DIN 2184-1 ~DIN 374

Article no.

1082

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 32	3.500	2.700	4.10	70.000	14.000	25.000	4.826
12 - 28	4.000	3.000	4.60	80.000	16.000	30.000	5.486
1/4 - 28	4.500	3.400	5.50	80.000	16.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	18.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	18.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	20.000	40.000	12.700
5/8 - 18	12.000	9.000	14.50	100.000	22.000	44.000	15.875
3/4 - 16	14.000	11.000	17.50	110.000	25.000	44.000	19.050
7/8 - 14	18.000	14.500	20.40	125.000	25.000	44.000	22.225

Machine taps for BSP-threads



Cutting data page 349/350

P	
M	
K	•
N	
S	
H	

Tool material **HSS-E**

Tolerance on Ø

Surface



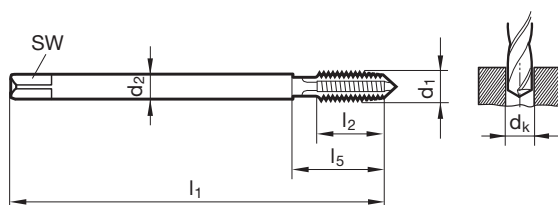
Type

GG

Form

C

Internal cooling

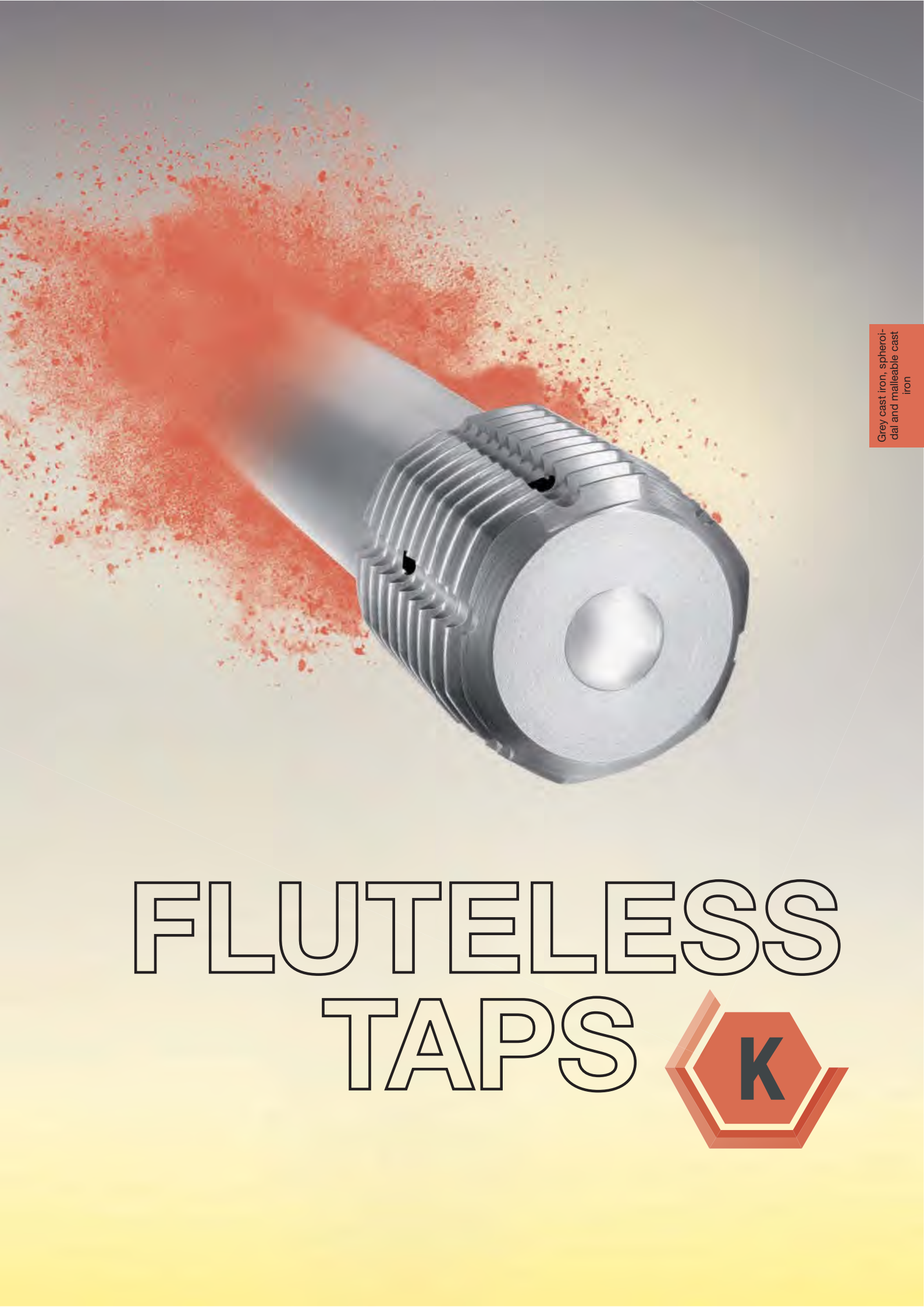


DIN 2184-1 DIN 5156

Article no.

961

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
G1/16	6.000	4.900	6.80	90.000	18.000	30.000	7.723
G1/8	7.000	5.500	8.80	90.000	18.000	35.000	9.728
G1/4	11.000	9.000	11.80	100.000	20.000	40.000	13.157
G3/8	12.000	9.000	15.25	100.000	22.000	44.000	16.662
G1/2	16.000	12.000	19.00	125.000	25.000	44.000	20.955
G5/8	18.000	14.500	21.00	125.000	25.000	48.000	22.911
G3/4	20.000	16.000	24.50	140.000	28.000	53.000	26.441
G7/8	22.000	18.000	28.25	150.000	28.000	53.000	30.201
G1	25.000	20.000	30.75	160.000	30.000	56.000	33.249
G1 1/8	28.000	22.000	35.50	170.000	30.000	56.000	37.897
G1 1/4	32.000	24.000	39.50	170.000	30.000	57.000	41.910
G1 3/8	36.000	29.000	41.75	180.000	32.000	60.000	44.323
G1 1/2	36.000	29.000	45.25	190.000	32.000	60.000	47.803
G1 3/4	40.000	32.000	51.00	190.000	40.000	93.000	53.746
G2	45.000	35.000	57.00	220.000	40.000	95.000	59.614



Grey cast iron, spheroidal and malleable cast iron

FLUTELESS TAPS



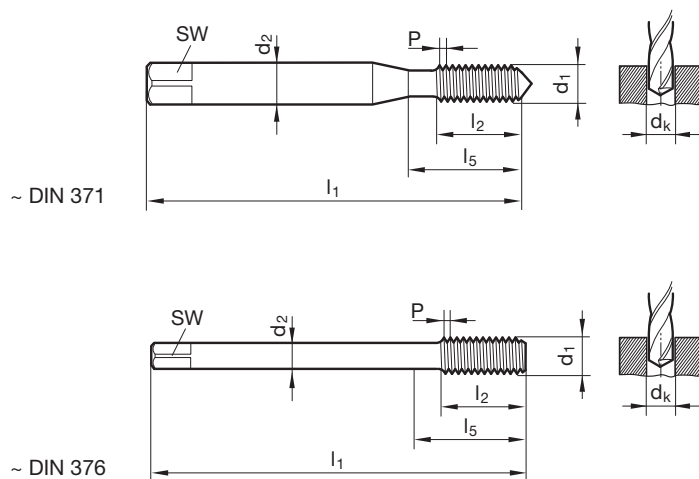
Fluteless machine taps for ISO metric threads



Cutting data page 352

P	•
M	•
K	
N	○
S	
H	

Tool material	HSS-E-PM	HSS-E	HSS-E-PM
Tolerance on Ø	6GX	6HX	6HX
Surface	S	S	S
Type	N	N	N
Form	C	C	C
Internal cooling			



DIN 2174 ~DIN 371

Article no.

903

921

1255

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1	0.250	2.500	2.100	0.90	40.000	4.000	
M 1.2	0.250	2.500	2.100	1.10	40.000	4.800	
M 1.4	0.300	2.500	2.100	1.25	40.000	5.600	
M 1.6	0.350	2.500	2.100	1.45	40.000	6.400	
M 1.7	0.350	2.500	2.100	1.55	40.000	6.800	
M 1.8	0.350	2.500	2.100	1.65	40.000	7.300	
M2	0.400	2.800	2.100	1.85	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.30	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

952

925

1256

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000



Fluteless machine taps for ISO metric threads



Cutting data page 352

P	•
M	•
K	
N	○
S	
H	

Tool material **HSS-E**

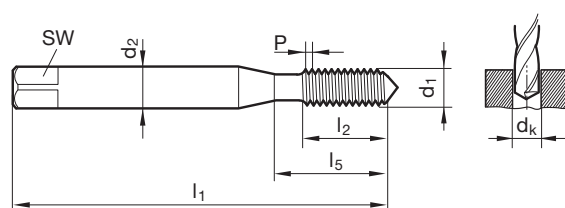
Tolerance on Ø 6GX

Surface **S**

Type N

Form C

Internal cooling



Grey cast iron, spherical and malleable cast iron

DIN 2174 ~DIN 371

Article no.

920

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.85	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.30	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

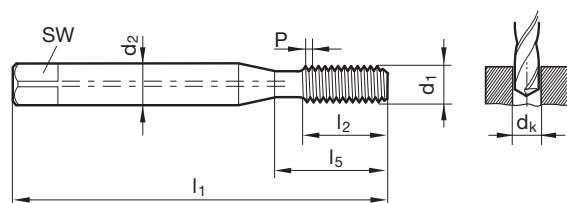
Oil feed fluteless taps f. ISO metric threads



P	•
M	•
K	
N	≥ 7
S	○
H	

Cutting data page 352

Tool material	Solid carbide
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 371/~DIN 376

Article no.

2518

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000



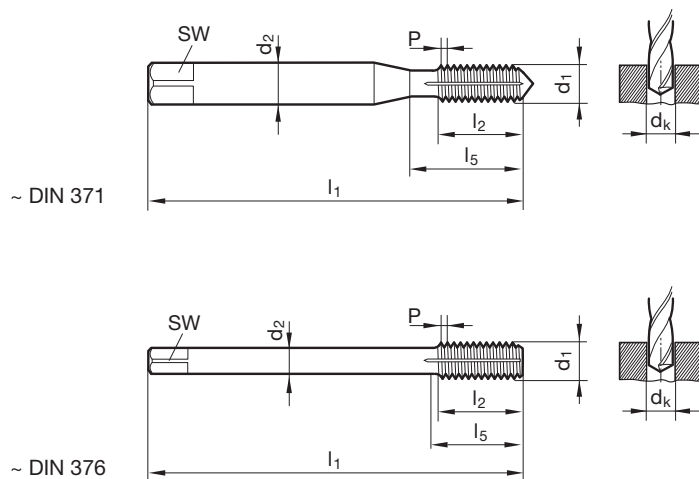
Fluteless machine taps for ISO metric threads



P	•
M	•
K	
N	○
S	○
H	

Cutting data page 352

Tool material	HSS-E		
Tolerance on Ø	6GX	6HX	6HX
Surface	S	S	C
Type	N	N	N
Form	C	C	C
Internal cooling			



Grey cast iron, spherical and malleable cast iron

DIN 2174 ~DIN 371

Article no.

918

919

2012

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

922

923

2013

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M6	1.000	4.500	3.400	5.55	80.000	16.000	30.000
M8	1.250	6.000	4.900	7.40	90.000	17.000	35.000
M10	1.500	7.000	5.500	9.30	100.000	20.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000
M22	2.500	18.000	14.500	20.90	140.000	32.000	62.000
M24	3.000	18.000	14.500	22.70	160.000	36.000	73.000
M27	3.000	20.000	16.000	25.70	160.000	36.000	73.000
M30	3.500	22.000	18.000	28.50	180.000	40.000	85.000
M33	3.500	25.000	20.000	31.50	180.000	40.000	91.000
M36	4.000	28.000	22.000	34.30	200.000	50.000	102.000
M39	4.000	32.000	24.000	37.30	200.000	50.000	107.000

Fluteless machine taps for ISO metric threads



Cutting data page 353

P	•
M	•
K	
N	○
S	○
H	

Tool material **HSS-E-PM**

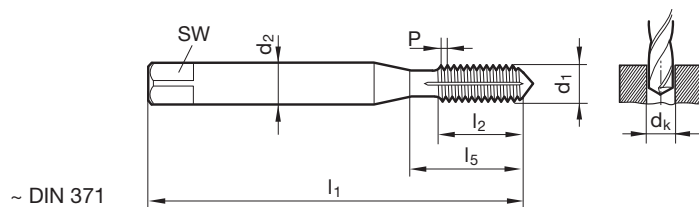
Tolerance on Ø 6HX

Surface **S**

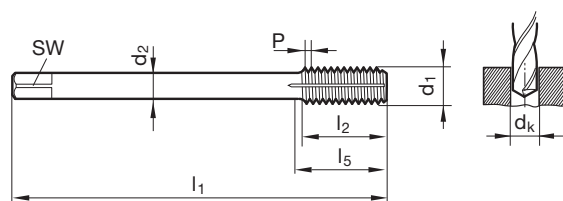
Type N

Form C

Internal cooling



~ DIN 376



DIN 2174 ~DIN 371

Article no.

322

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376

Article no.

339

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000



Fluteless machine taps for ISO metric threads



Cutting data page 353

P	•
M	•
K	•
N	○
S	○
H	

Tool material **HSS-E-PM**

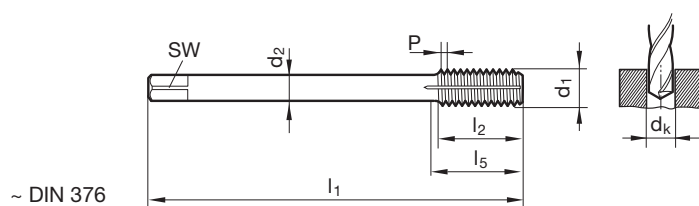
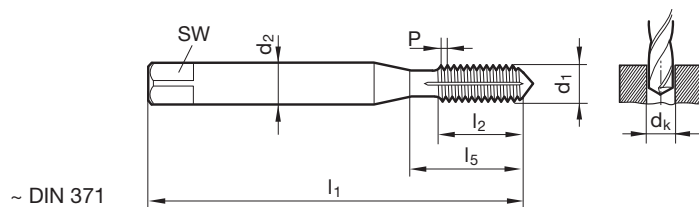
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



Grey cast iron, spherical and malleable cast iron

DIN 2174 ~DIN 371

Article no.

1266

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

1267

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Oil feed fluteless taps f. ISO metric threads



P	•
M	•
K	
N	○
S	○
H	

Cutting data page 353

Tool material

HSS-E

Tolerance on Ø

6HX

6GX

6HX

Surface

S

S

C

Type

N

N

N

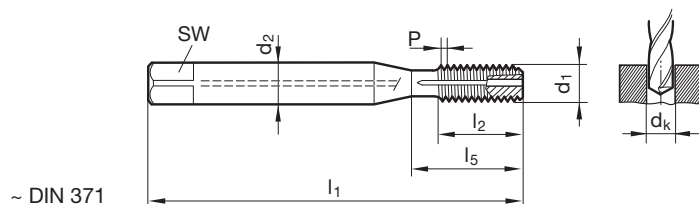
Form

C

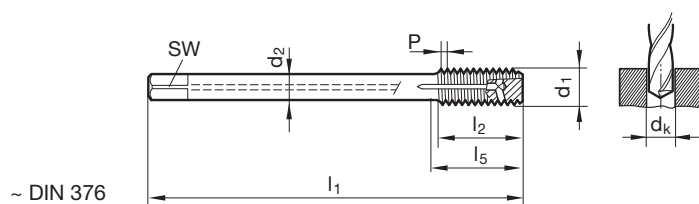
C

C

Internal cooling



~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371

Article no.

2442

2443

2446

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376

Article no.

2444

2445

2448

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000



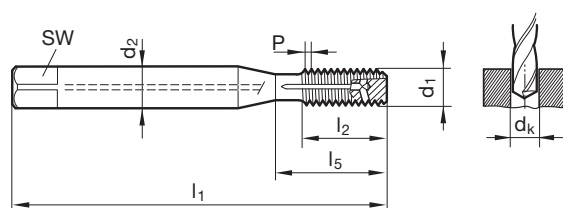
Oil feed fluteless taps f. ISO metric threads



P	•
M	•
K	
N	≥ 7
S	○
H	

Cutting data page 353

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	C
Type	N
Form	C
Internal cooling	



Grey cast iron, spherical and malleable cast iron

DIN 2174 ~DIN 371

Article no.

2447

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

Oil feed fluteless taps f. ISO metric threads



Cutting data page 353

P	•
M	•
K	
N	○
S	○
H	

Tool material **HSS-E-PM**

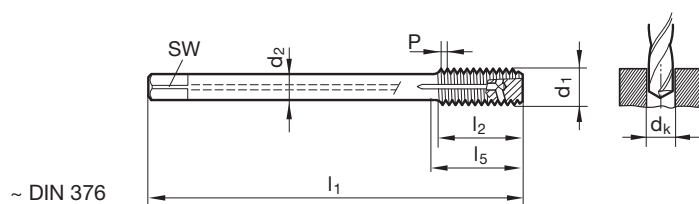
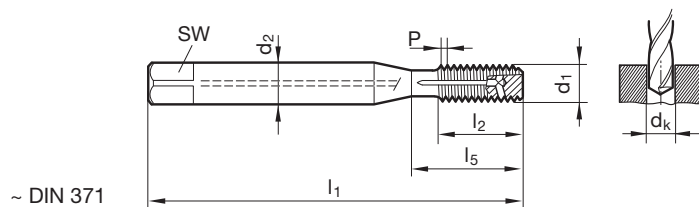
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



DIN 2174 ~DIN 371

Article no.

323

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376

Article no.

342

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000



Oil feed fluteless taps f. ISO metric threads



P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 353

Tool material

HSS-E-PM

Tolerance on Ø

6HX

6HX

6HX

Surface

C

A

S

Type

N

N

N

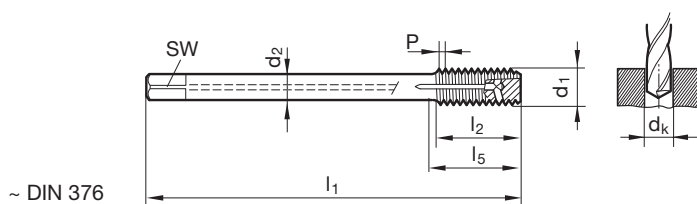
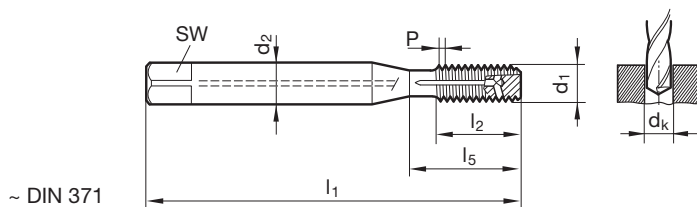
Form

C

C

E

Internal cooling



Grey cast iron, spherical and malleable cast iron

DIN 2174 ~DIN 371

Article no.

1270

1717

1725

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

1271

1719

1727

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000



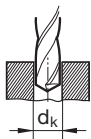
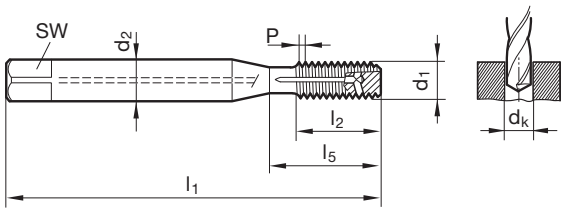
Oil feed fluteless taps f. ISO metric threads



P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 353

Tool material	HSS-E-PM
Tolerance on Ø	6GX
Surface	Ⓢ
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 371	Article no.	1713

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 353

P	•
M	•
K	
N	
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

6GX

6GX

Surface

A

S

Type

N

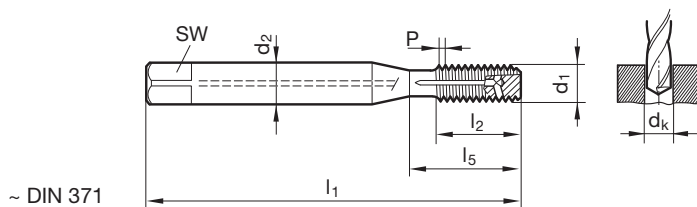
N

Form

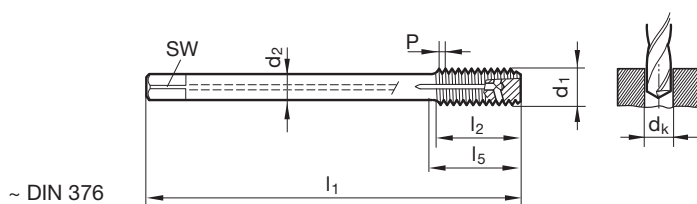
C

E

Internal cooling



~ DIN 371



~ DIN 376



Grey cast iron, spherical and malleable cast iron

DIN 2174 ~DIN 371

Article no.

1718

1726

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

1720

1728

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000



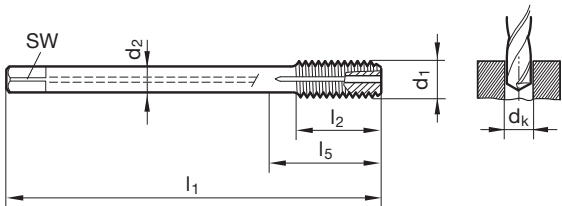
Oil feed fluteless taps f. ISO metric threads



P	•
M	•
K	
N	○
S	○
H	

Cutting data page 353

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	



Company std. Company std.	Article no.	4143

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	112.000	6.000	18.000
M4	0.700	2.800	2.100	3.70	112.000	7.500	77.000
M5	0.800	3.500	2.700	4.65	125.000	8.500	90.000
M6	1.000	4.500	3.400	5.55	125.000	11.000	90.000
M8	1.250	6.000	4.900	7.40	140.000	14.000	97.000
M10	1.500	7.000	5.500	9.30	160.000	16.000	117.000
M12	1.750	9.000	7.000	11.20	180.000	18.500	133.000
M16	2.000	12.000	9.000	15.10	220.000	20.000	168.000
M20	2.500	16.000	12.000	18.90	280.000	25.000	225.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 353

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material **Solid carbide**

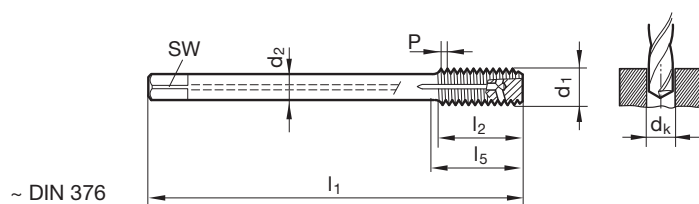
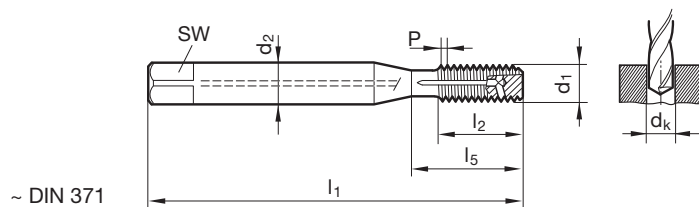
Tolerance on Ø 6HX

Surface

Type N

Form C

Internal cooling



Grey cast iron, spherical and malleable cast iron

DIN 2174 ~DIN 371

Article no.

1972

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376

Article no.

1931

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	25.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	25.000	62.000



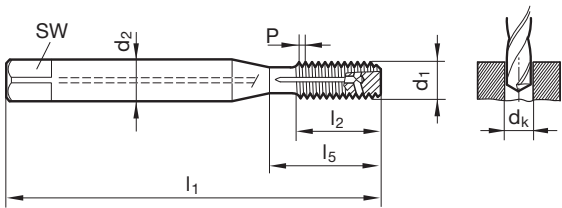
Oil feed fluteless taps f. ISO metric threads



P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 353

Tool material	Solid carbide
Tolerance on Ø	6HX
Surface	C
Type	N
Form	E
Internal cooling	

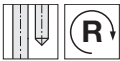


DIN 2174 ~DIN 371	Article no.	1927

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000



Fluteless machine taps for ISO metric fine threads



P	•
M	•
K	
N	○
S	
H	

Cutting data page 352

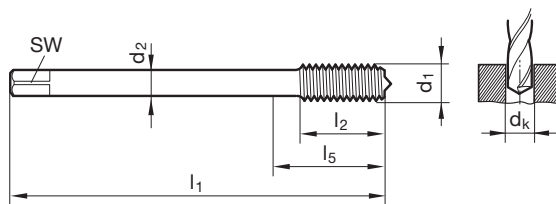
Tool material **HSS-E**

Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling 

Grey cast iron, spherical and malleable cast iron

DIN 2174 ~DIN 374

Article no.

929

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007



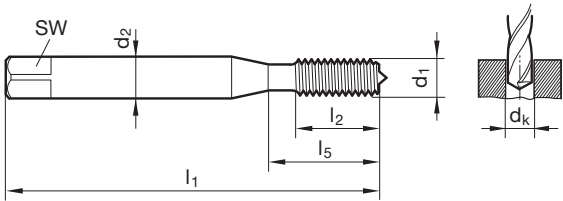
Fluteless machine taps for ISO metric fine threads



P	•
M	•
K	
N	○
S	
H	

Cutting data page 352

Tool material	HSS-E-PM
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	



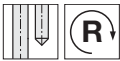
DIN 2174 ~DIN 371	Article no.	1740

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

Grey cast iron, spherical and malleable cast iron



Fluteless machine taps for ISO metric fine threads



Cutting data page 352

P	•
M	•
K	
N	○
S	
H	

Tool material **HSS-E**

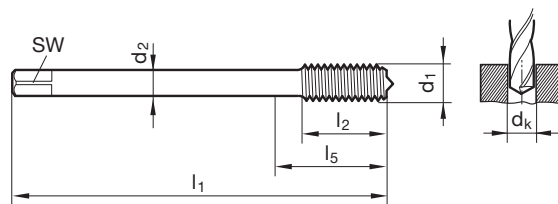
Tolerance on Ø 6GX

Surface **S**

Type N

Form C

Internal cooling



Grey cast iron, spherical and malleable cast iron

DIN 2174 ~DIN 374

Article no.

928

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007

Fluteless machine taps for ISO metric fine threads



Cutting data page 352

P	•
M	•
K	
N	○
S	
H	

Tool material **HSS-E-PM**

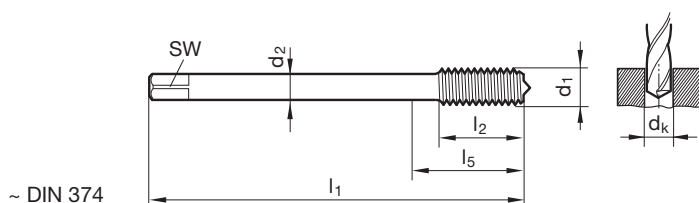
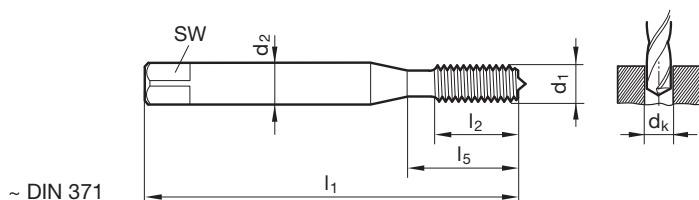
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



DIN 2174 ~DIN 371

Article no.

1257

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M9 x 1	9.000	7.000	8.55	90.000	16.000	35.000	9.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374

Article no.

1258

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.55	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	23.10	140.000	28.000	48.000	24.008



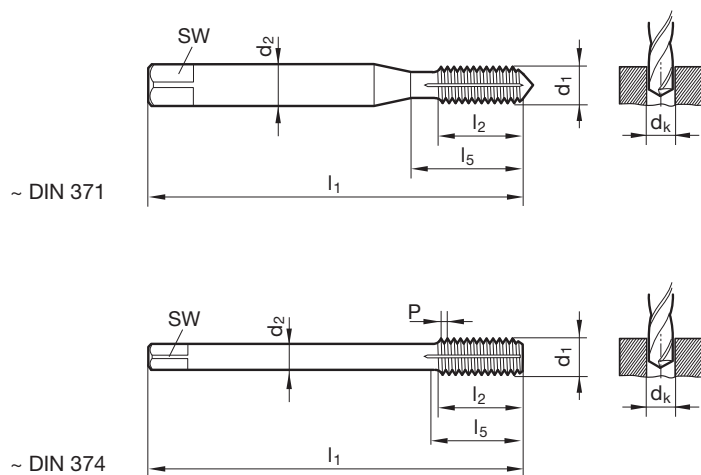
Fluteless machine taps for ISO metric fine threads



P	•
M	•
K	•
N	○
S	○
H	•

Cutting data page 352

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	



Grey cast iron, spherical and malleable cast iron

DIN 2174 ~DIN 371

Article no.

1275

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	6.000	4.900	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	8.000	6.200	7.65	80.000	14.000	30.000	8.004
M 8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374

Article no.

927

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.65	80.000	14.000	30.000	8.004
M 8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	9.40	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	21.30	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

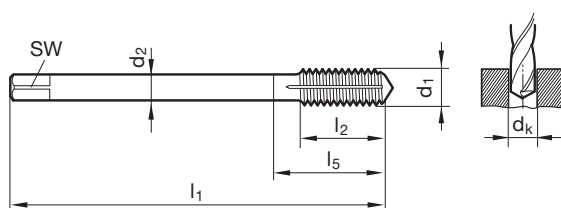
Fluteless machine taps for ISO metric fine threads



Cutting data page 352

P	•
M	•
K	
N	≥ 7
S	○
H	

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	C
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 374

Article no.

2008

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.65	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 X1.25	7.000	5.500	9.40	100.000	20.000	39.000	10.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007



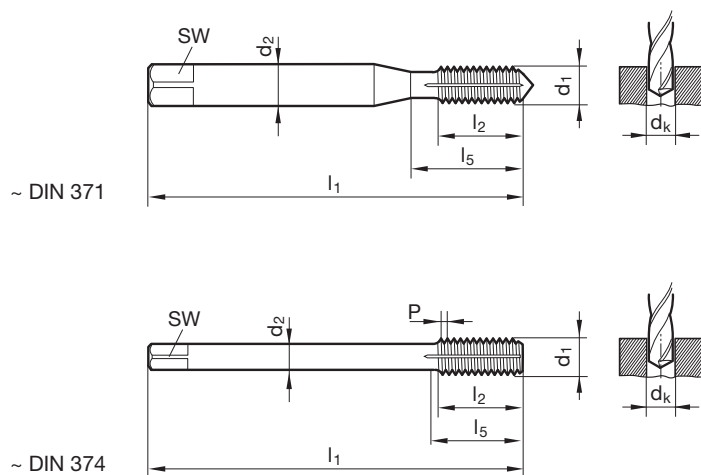
Fluteless machine taps for ISO metric fine threads



Cutting data page 352

P	•
M	•
K	
N	○
S	○
H	

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	



Grey cast iron, spherical and malleable cast iron

DIN 2174 ~DIN 371

Article no.

1277

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374

Article no.

926

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.55	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007

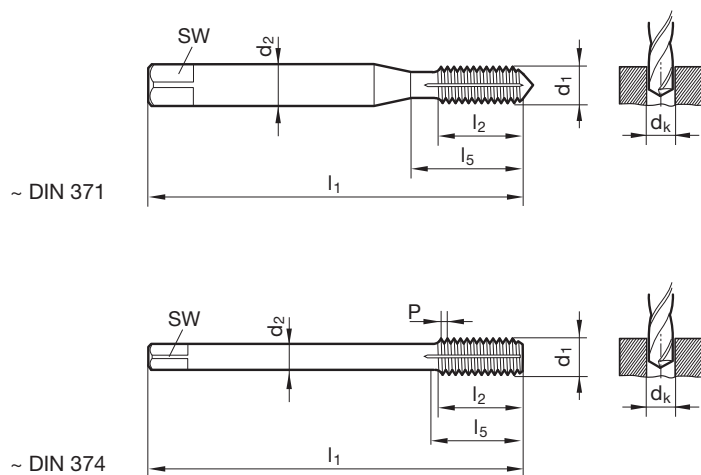
Fluteless machine taps for ISO metric fine threads



Cutting data page 353

P	•
M	•
K	•
N	○
S	○
H	

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 371

Article no.

1268

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374

Article no.

1269

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 x 2	18.000	14.500	23.10	140.000	28.000	48.000	24.008



Fluteless machine taps for ISO metric fine threads



P	•
M	•
K	•
N	○
S	○
H	

Cutting data page 353

Tool material **HSS-E-PM**

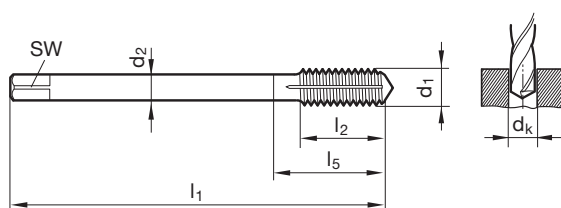
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



Grey cast iron, spherical and malleable cast iron

DIN 2174 ~DIN 374

Article no.

333

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	16.000	44.000	20.007



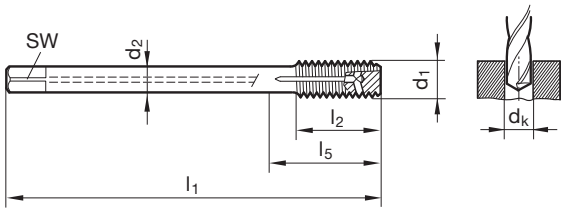
Oil feed fluteless taps f. ISO metric fine threads



P	•
M	•
K	
N	○
S	○
H	

Cutting data page 353

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 374	Article no.	338

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007



Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 353

P	•
M	•
K	
N	≥ 7
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

6HX

6HX

6HX

Surface

C

A

S

Type

N

N

N

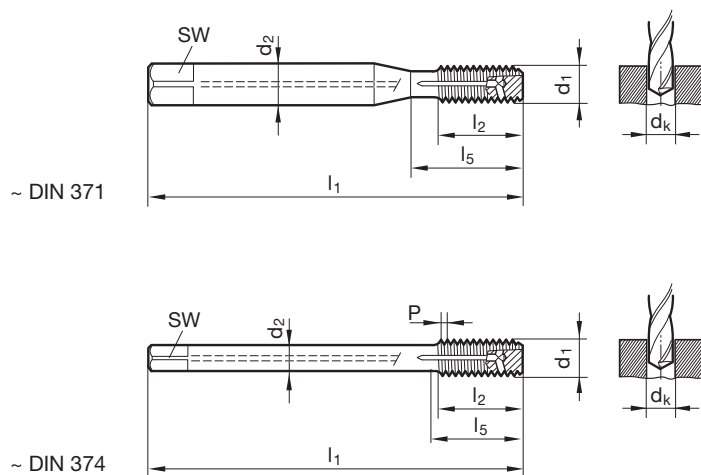
Form

C

C

E

Internal cooling



Grey cast iron, spherical and malleable cast iron

DIN 2174 ~DIN 371

Article no.

1272

1721

1729

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M9 x 1	9.000	7.000	8.55	90.000	16.000	35.000	9.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374

Article no.

1273

1723

1731

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	21.30	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

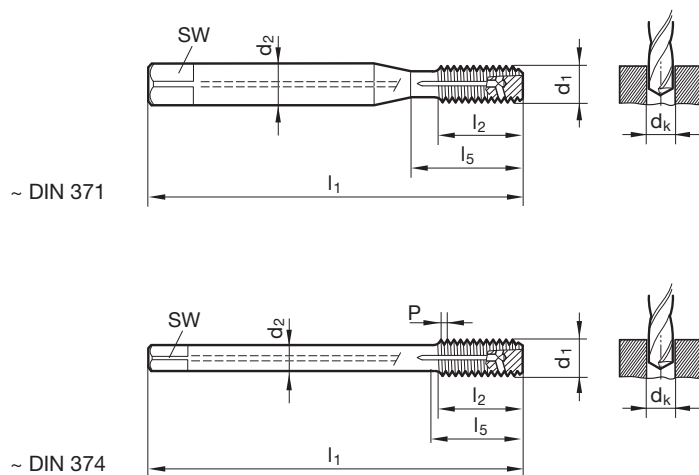
Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 353

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material	HSS-E-PM	
Tolerance on Ø	6GX	6GX
Surface		
Type	N	N
Form	C	E
Internal cooling		



DIN 2174 ~DIN 371

Article no.

1715

1730

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374

Article no.

1716

1732

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007



Oil feed fluteless taps f. ISO metric fine threads



P	•
M	•
K	
N	○
S	○
H	

Cutting data page 353

Tool material **HSS-E-PM**

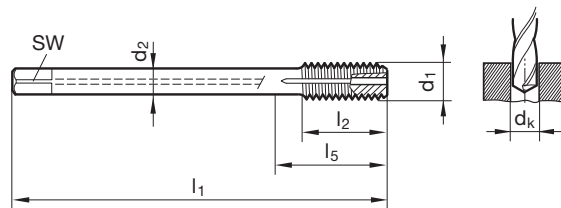
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



Grey cast iron, spherical and malleable cast iron

Company std. Company std.

Article no.

4145

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	140.000	14.000	97.000	8.005
M10 x 1	7.000	5.500	9.55	160.000	16.000	117.000	10.005
M10 X1.25	7.000	5.500	9.40	160.000	16.000	117.000	10.006
M12 x 1	9.000	7.000	11.55	180.000	18.500	133.000	12.005
M12 X1.5	9.000	7.000	11.30	180.000	18.500	133.000	12.007
M14 X1.5	11.000	9.000	13.30	220.000	20.000	168.000	14.007
M16 X1.5	12.000	9.000	15.30	220.000	20.000	168.000	16.007

Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 353

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material **Solid carbide**

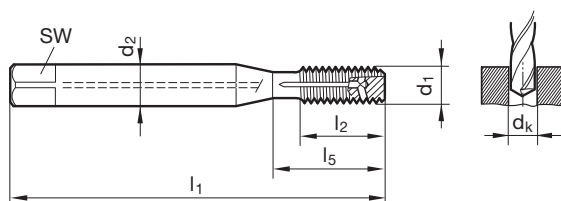
Tolerance on Ø 6HX

Surface

Type N

Form C

Internal cooling



DIN 2174 ~DIN 371/~DIN 376

Article no.

1581

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10.000	8.000	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	15.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	15.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	15.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	15.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	15.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	15.000	48.000	24.007



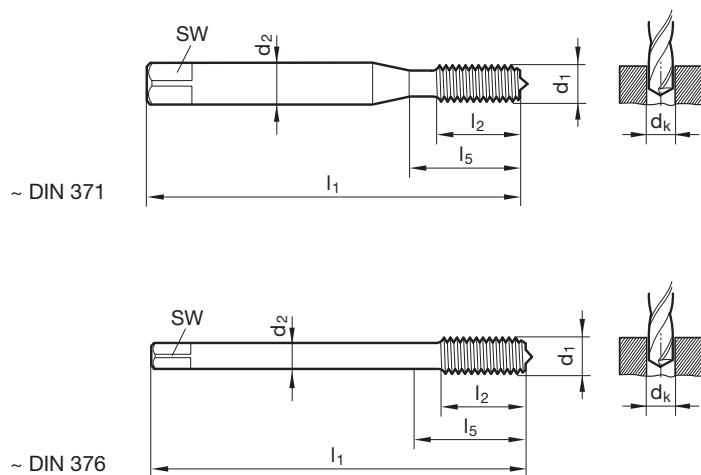
Fluteless machine taps for UNC-threads



P	•
M	•
K	
N	○
S	
H	

Cutting data page 352

Tool material	HSS-E	
Tolerance on Ø	2BX	2BX
Surface	S	S
Type	N	N
Form	C	C
Internal cooling		



Grey cast iron, spherical and malleable cast iron

DIN 2184-1 ~DIN 371

Article no.

2273

1582

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.55	56.000	11.000	18.000	2.845
5 - 40	3.500	2.700	2.90	56.000	11.000	18.000	3.175
6 - 32	4.000	3.000	3.15	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.80	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	4.35	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	5.00	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.75	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	7.30	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.80	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376

Article no.

2274

1583

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	10.30	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	11.80	110.000	25.000	49.000	12.700
9/16 - 12	11.000	9.000	13.30	110.000	28.000	53.000	14.288
5/8 - 11	12.000	9.000	14.80	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	17.90	125.000	33.000	62.000	19.050
7/8 - 9	18.000	14.500	21.00	140.000	35.000	62.000	22.225

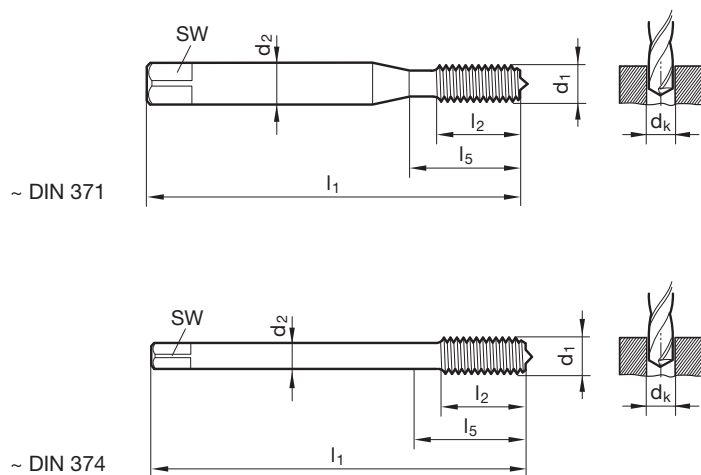
Fluteless machine taps for UNF-threads



P	•
M	•
K	
N	○
S	
H	

Cutting data page 352

Tool material	HSS-E	
Tolerance on Ø	2BX	2BX
Surface	S	S
Type	N	N
Form	C	C
Internal cooling		



DIN 2184-1 ~DIN 371

Article no.

1283

1584

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 48	3.500	2.700	2.60	56.000	10.000	18.000	2.845
5 - 44	3.500	2.700	2.90	56.000	10.000	18.000	3.175
6 - 40	4.000	3.000	3.20	56.000	11.000	20.000	3.505
8 - 36	4.500	3.400	3.85	63.000	12.000	21.000	4.166
10 - 32	6.000	4.900	4.45	70.000	14.000	25.000	4.826
12 - 28	6.000	4.900	5.10	80.000	16.000	30.000	5.486
1/4 - 28	7.000	5.500	5.95	80.000	16.000	30.000	6.350
5/16 - 24	8.000	6.200	7.45	90.000	18.000	35.000	7.938
3/8 - 24	10.000	8.000	9.05	90.000	18.000	35.000	9.525

DIN 2184-1 ~DIN 374

Article no.

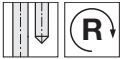
2275

1585

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
10 - 32	0.794	3.500	2.700	4.45	70.000	14.000	25.000
1/4 - 28	0.907	4.500	3.400	5.95	80.000	16.000	30.000
12 - 28	0.907	4.000	3.000	5.10	80.000	16.000	30.000
3/8 - 24	1.058	7.000	5.500	9.05	90.000	18.000	35.000
5/16 - 24	1.058	6.000	4.900	7.45	90.000	18.000	35.000
1/2 - 20	1.270	9.000	7.000	12.10	100.000	20.000	40.000
5/8 - 18	1.411	12.000	9.000	15.25	100.000	22.000	44.000
7/16 - 20	1.270	8.000	6.200	10.55	100.000	22.000	42.000
9/16 - 18	1.411	11.000	9.000	13.65	100.000	22.000	40.000
3/4 - 16	1.587	14.000	11.000	18.35	110.000	25.000	44.000
7/8 - 14	1.814	18.000	14.500	21.40	125.000	25.000	44.000
1 - 12	2.117	18.000	14.500	24.45	140.000	28.000	50.000



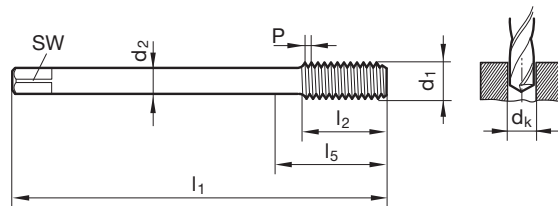
Fluteless machine taps for BSP-threads



P	•
M	•
K	
N	○
S	
H	

Cutting data page 352

Tool material	HSS-E
Tolerance on Ø	X
Surface	S
Type	N
Form	C
Internal cooling	



Grey cast iron, spherical and malleable cast iron

DIN 2184-1 DIN 2189

Article no.

966

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	7.30	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	9.30	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	12.50	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	16.00	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	20.00	125.000	25.000	44.000	20.955
G3/4	14.000	20.000	16.000	25.50	140.000	28.000	53.000	26.441
G1	11.000	25.000	20.000	32.00	160.000	30.000	56.000	33.249
G1 1/4	11.000	32.000	24.000	40.75	170.000	30.000	57.000	41.910



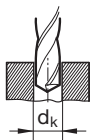
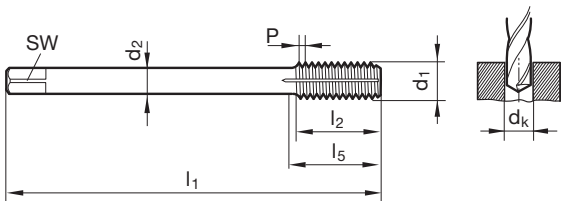
Fluteless machine taps for BSP-threads



P	•
M	•
K	
N	○
S	○
H	

Cutting data page 352

Tool material	HSS-E
Tolerance on Ø	X
Surface	S
Type	N
Form	C
Internal cooling	



DIN 2184-1 DIN 2189	Article no.	1586

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	7.30	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	9.30	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	12.50	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	16.00	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	20.00	125.000	25.000	44.000	20.955
G3/4	14.000	20.000	16.000	25.50	140.000	28.000	53.000	26.441



Grey cast iron, spheroidal and malleable cast iron

THREAD MILLING CUTTERS



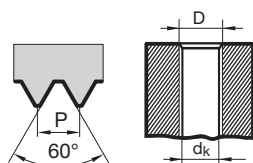
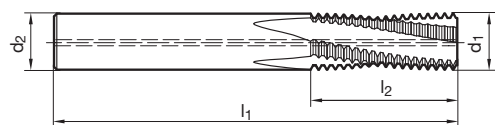
Thread milling cutters without chamfer for ISO metric threads



P	•	Cutting data page 354
M	○	
K	•	
N	•	
S	○	
H	≤55	

Tool material	Solid carbide		
Surface			
Type	TM SP	TM SP	TM SP
Internal cooling			
Shank form	HA	HB	HA

NEW



Company std.

Article no.

3737

3743

3734

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	13.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	18.100	3	8.000
M8 x 1	1.000	6.400	8.000	7.00	62.000	17.500	3	8.005
M10	1.500	7.950	10.000	8.50	74.000	21.800	3	10.000
M10 x 1	1.000	7.950	10.000	9.00	74.000	21.500	3	10.005
M10 X1.25	1.250	7.950	10.000	8.80	74.000	21.900	3	10.006
M12	1.750	9.950	10.000	10.20	74.000	25.400	4	12.000
M12 X1.5	1.500	9.950	10.000	10.50	74.000	26.300	4	12.007
M14	2.000	11.200	12.000	12.00	90.000	31.000	4	14.000
M14 X1.5	1.500	11.200	12.000	12.50	90.000	30.800	4	14.007
M16	2.000	12.800	14.000	14.00	90.000	35.000	4	16.000
M16 X1.5	1.500	12.800	14.000	14.50	90.000	33.800	4	16.007
M20	2.500	14.950	16.000	17.50	102.000	41.300	4	20.000
M20 X1.5	1.500	14.950	16.000	18.50	102.000	42.800	4	20.007



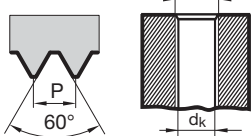
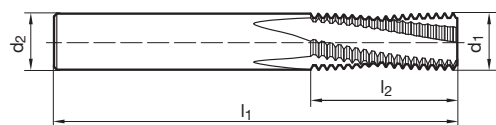
Thread milling cutters without chamfer for ISO metric threads



P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 354

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB



Grey cast iron, spherical and malleable cast iron

Company std.

Article no.

4132

4133

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	13.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	18.100	3	8.000
M10	1.500	7.950	10.000	8.50	74.000	21.800	3	10.000
M12	1.750	9.950	10.000	10.20	74.000	25.400	4	12.000
M14	2.000	11.200	12.000	12.00	90.000	31.000	4	14.000
M16	2.000	12.800	14.000	14.00	90.000	35.000	4	16.000
M20	2.500	14.950	16.000	17.50	102.000	41.300	4	20.000

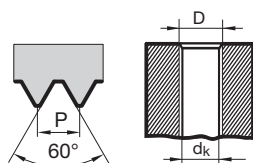
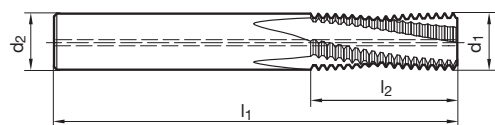
Thread milling cutters without chamfer for ISO metric threads



P	•	Cutting data page 354
M	○	
K	•	
N	•	
S	○	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3735

3740

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	16.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	21.900	3	8.000
M10	1.500	7.950	10.000	8.50	74.000	26.300	3	10.000
M12	1.750	9.950	10.000	10.20	74.000	32.400	4	12.000
M14	2.000	11.200	12.000	12.00	90.000	37.000	4	14.000
M16	2.000	12.800	14.000	14.00	90.000	43.000	4	16.000
M20	2.500	14.950	16.000	17.50	102.000	48.800	4	20.000



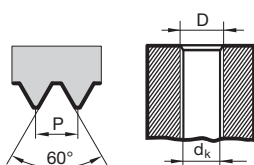
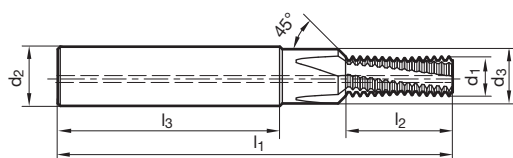
Thread milling cutters with chamfer for ISO metric threads



P	•	Cutting data page 354
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide		
Surface			
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA

NEW



Grey cast iron, spherical and malleable cast iron

Company std.

Article no. 3525 3543 3510

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	5.300	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	7.400	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	9.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	10.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	13.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	17.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	20.100	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	25.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	27.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	33.800	4	20.000

Thread milling cutters with chamfer for ISO metric threads

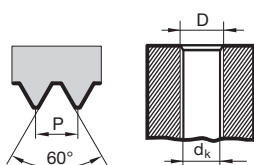
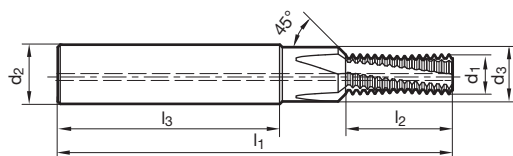


Cutting data page 355

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material	Solid carbide		
Surface			
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA

NEW



Company std.

Article no.

3526

3544

3511

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	6.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	8.800	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	10.800	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	13.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	18.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	21.800	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	25.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	31.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	35.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	41.300	4	20.000



Thread milling cutters with chamfer for ISO metric threads

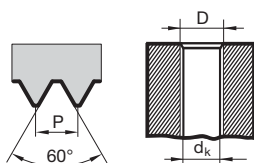
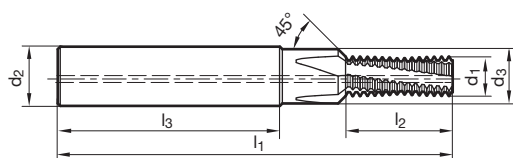


P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Grey cast iron, spherical and malleable cast iron

Company std.

Article no.

3759

3760

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	7.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	35.600	10.900	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	13.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	16.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	21.900	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	26.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	32.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	37.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	43.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	48.800	4	20.000

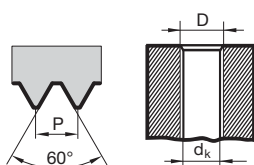
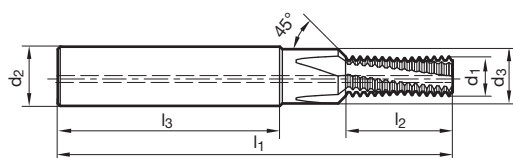
Thread milling cutters with chamfer for ISO metric fine threads



P	•	Cutting data page 354
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide		
Surface			
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA

NEW



Company std.

Article no.

3527

3545

3512

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	7.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	8.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	9.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	10.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	13.100	3	8.004
M 8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	13.500	3	8.005
M 10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	16.500	4	10.005
M 10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	16.900	4	10.006
M 12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	19.500	4	12.005
M 12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	20.300	4	12.007
M 14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	23.300	4	14.007
M 16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	26.300	4	16.007



Thread milling cutters with chamfer for ISO metric fine threads

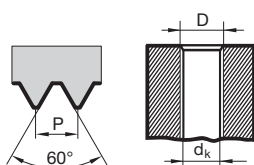
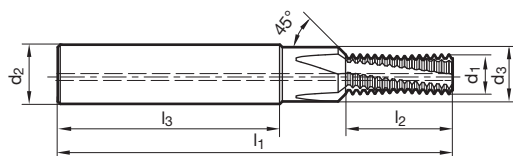


P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355

Tool material	Solid carbide		
Surface			
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA

NEW



Grey cast iron, spherical and malleable cast iron

Company std.

Article no.

3528

3546

3513

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	8.800	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	10.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	12.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	13.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	16.900	3	8.004
M 8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	17.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	21.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	21.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	25.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	26.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	30.800	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	33.800	4	16.007

Thread milling cutters with chamfer for ISO metric fine threads



P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355

Tool material

Solid carbide

Surface

C

C

Type

TMC SP

TMC SP

Internal cooling

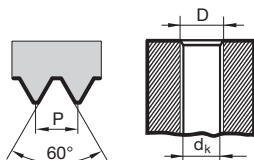
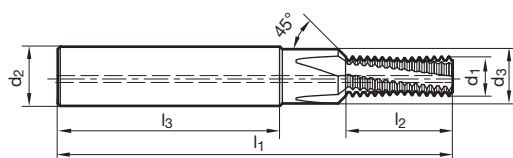


Shank form

HA

HB

NEW



Company std.

Article no.

3762

3763

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	10.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	12.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	15.300	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	15.400	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	20.600	3	8.004
M 8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	20.500	3	8.005
M 10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	25.500	4	10.005
M 10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	25.600	4	10.006
M 12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	30.500	4	12.005
M 12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	30.800	4	12.007
M 14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	38.300	4	14.007
M 16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	41.300	4	16.007



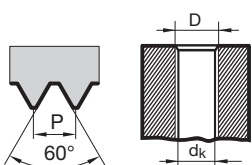
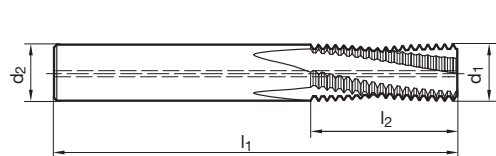
Thread milling cutters without chamfer for UNC-threads



P	•	Cutting data page 354
M	○	
K	•	
N	•	
S	○	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW



Grey cast iron, spherical and malleable cast iron

Company std.

Article no.

4134

4135

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 24	3.400	6.000	3.90	54.000	11.100	3	4.826
12 - 24	4.100	6.000	4.50	54.000	12.200	3	5.486
1/4 - 20	4.700	6.000	5.10	54.000	14.600	3	6.350
5/16 - 18	6.100	8.000	6.60	64.000	17.600	3	7.938
3/8 - 16	7.600	8.000	8.00	64.000	21.400	3	9.525
7/16 - 14	9.000	10.000	9.40	74.000	24.500	3	11.113
1/2 - 13	9.950	10.000	10.80	74.000	28.300	4	12.700
9/16 - 12	11.400	12.000	12.20	90.000	30.700	4	14.288
5/8 - 11	12.700	14.000	13.50	90.000	35.800	4	15.875

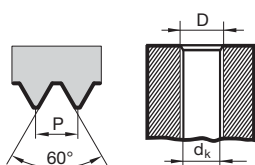
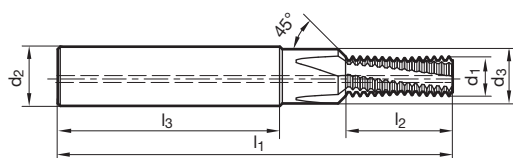
Thread milling cutters with chamfer for UNC-threads



P	•	Cutting data page 354
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3516

3534

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	12.100	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	14.800	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	16.700	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	19.000	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	22.500	4	12.700



Thread milling cutters with chamfer for UNC-threads



P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

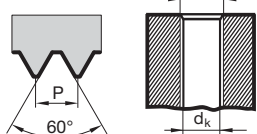
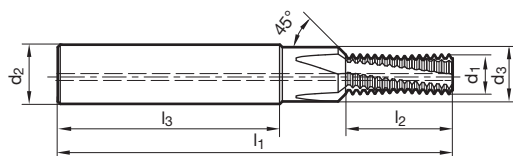


Shank form

HA

HB

NEW



Grey cast iron, spherical and malleable cast iron

Company std.

Article no.

3517

3535

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	14.600	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	17.600	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	21.400	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	24.500	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	28.300	4	12.700

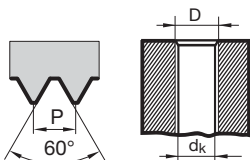
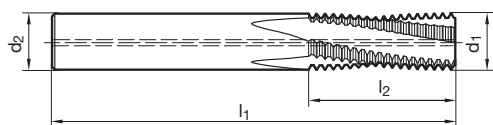
Thread milling cutters without chamfer for UNF-threads



P	•	Cutting data page 354
M	○	
K	•	
N	•	
S	○	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

4136

4137

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 32	3.800	6.000	4.10	54.000	11.500	3	4.826
12 - 28	4.300	6.000	4.60	54.000	12.200	3	5.486
1/4 - 28	5.100	6.000	5.50	54.000	14.100	3	6.350
5/16 - 24	6.300	8.000	6.90	64.000	17.500	3	7.938
3/8 - 24	7.800	8.000	8.50	64.000	20.600	3	9.525
7/16 - 20	9.400	10.000	9.90	74.000	24.800	3	11.113
1/2 - 20	9.950	10.000	11.50	74.000	27.300	4	12.700
9/16 - 18	11.400	12.000	12.90	90.000	30.300	4	14.288
5/8 - 18	12.700	14.000	14.50	90.000	33.200	4	15.875



Thread milling cutters with chamfer for UNF-threads



P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 354

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

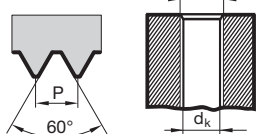
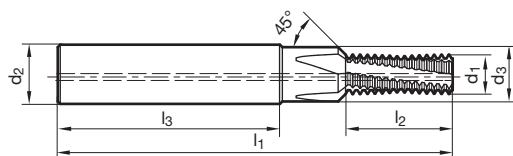


Shank form

HA

HB

NEW



Grey cast iron, spherical and malleable cast iron

Company std.

Article no.

3518

3536

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	11.300	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	13.200	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	16.400	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	18.400	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	21.000	4	12.700

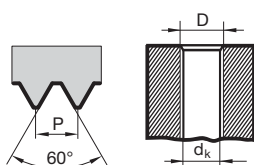
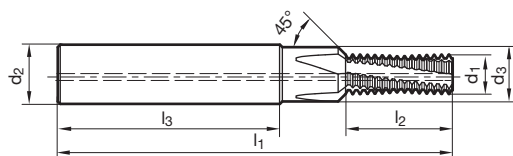
Thread milling cutters with chamfer for UNF-threads



P	•	Cutting data page 355
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3519

3537

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	14.100	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	17.500	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	20.600	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	24.800	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	27.300	4	12.700



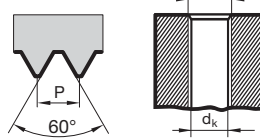
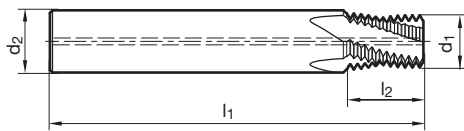
Thread milling cutters without chamfer for NPT-threads



P	•	Cutting data page 354
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW



Grey cast iron, spherical and malleable cast iron

Company std.

Article no.

3753

3754

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570



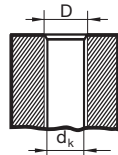
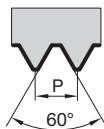
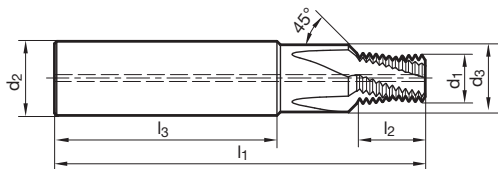
Thread milling cutters with chamfer for NPT-threads



P	•	Cutting data page 354
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3520

3538

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570



Thread milling cutters without chamfer for BSP-threads



P	•	Cutting data page 354
M	○	
K	•	
N	•	
S	○	
H	≤55	

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

Internal cooling

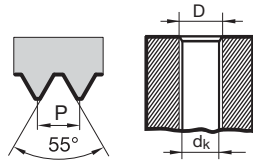
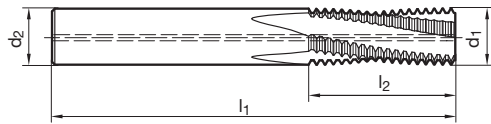


Shank form

HA

HB

NEW



Grey cast iron, spherical and malleable cast iron

Company std.

Article no.

3745

3748

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	21.300	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	28.700	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	35.400	4	16.662

Thread milling cutters without chamfer for BSP-threads



P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 354

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

Internal cooling

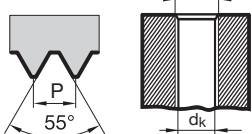
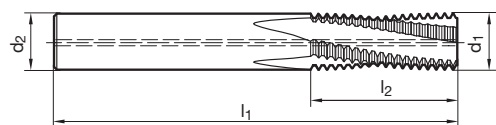


Shank form

HA

HB

NEW



Company std.

Article no.

3746

3750

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	24.900	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	35.400	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	43.500	4	16.662



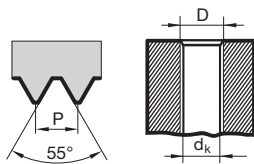
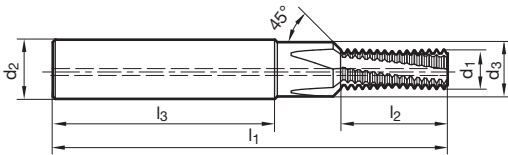
Thread milling cutters with chamfer for BSP-threads



P	•	Cutting data page 354
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Grey cast iron, spherical and malleable cast iron

Company std.

Article no.

3514

3529

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	15.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	22.100	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	27.400	4	16.662

Thread milling cutters with chamfer for BSP-threads



P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

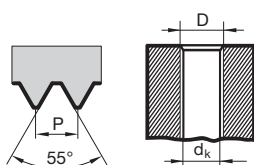
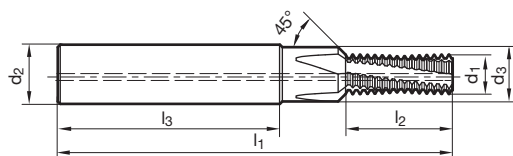


Shank form

HA

HB

NEW



Company std.

Article no.

3515

3533

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	21.300	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	28.700	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	35.400	4	16.662



Thread milling cutters with chamfer for BSP-threads



P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

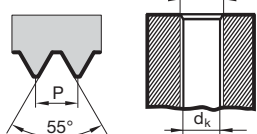
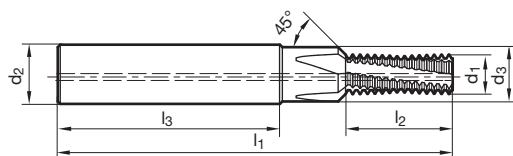


Shank form

HA

HB

NEW



Grey cast iron, spherical and malleable cast iron

Company std.

Article no.

3765

3766

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	24.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	35.400	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	43.500	4	16.662



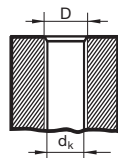
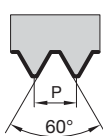
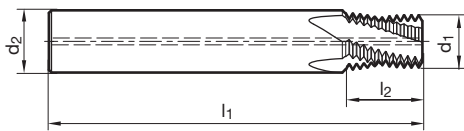
Thread milling cutters without chamfer for NPTF-threads



P	•	Cutting data page 354
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.	Article no.	3756	3757

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570



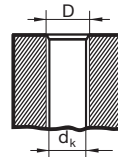
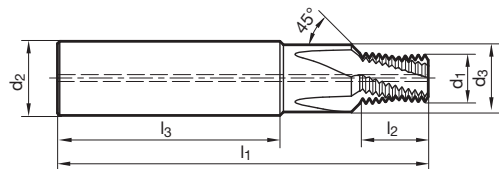
Thread milling cutters with chamfer for NPTF-threads



P	•	Cutting data page 354
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3521

3539

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570

Grey cast iron, spherical and malleable cast iron

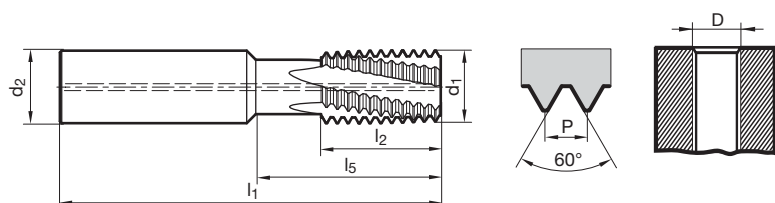
Universal thread milling cutters for ISO metric threads



P	•	Cutting data page 355
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide		
Surface			
Type	TMU SP	TMU SP	TMU SP
Internal cooling			
Shank form	HA	HB	HA

NEW



Company std.

Article no. 3541 3556 3523

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 10	7.950	8.000	64.000		20.000	4	8.050
1.000	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.100
1.250	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.125
1.500	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.150
1.000	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.150
1.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.100
1.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.200
3.000	≥ 24	17.950	18.000	102.000	50.000	33.000	5	18.300
1.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.100
1.500	≥ 26	19.950	20.000	105.000	50.000	33.000	5	20.150
2.000	≥ 27	19.950	20.000	105.000	50.000	33.000	5	20.200
2.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.250
3.000	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.300
3.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.350



External thread milling cutters



P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355

Tool material

Solid carbide

Surface

C

C

Type

TMU SP

TMU SP

Internal cooling

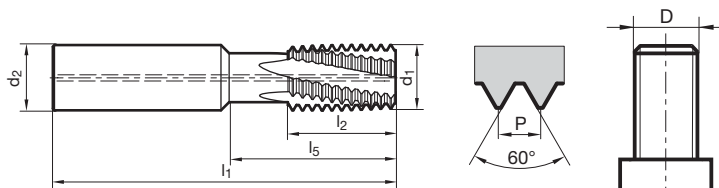


Shank form

HA

HB

NEW



Grey cast iron, spherical and malleable cast iron

Company std.

Article no.

4162

4163

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 3	9.950	10.000	70.000	25.000	16.000	4	10.050
0.750	≥ 5	9.950	10.000	70.000	25.000	16.000	4	10.075
1.000	≥ 6	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 8	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 10	11.950	12.000	80.000	31.000	20.000	4	12.150
1.500	≥ 10	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 14	15.950	16.000	90.000	40.000	25.000	5	16.200
2.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.250
3.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.300

Universal thread milling cutters for UN-threads



P	•	Cutting data page 355
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material

Solid carbide

Surface



Type

TMU UN

TMU UN

Internal cooling

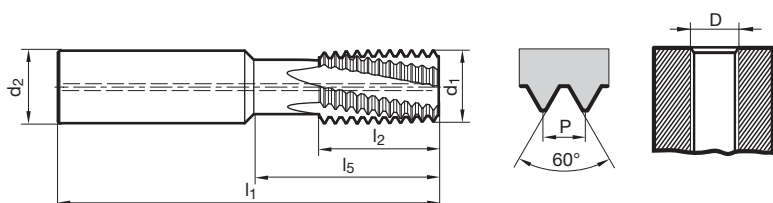


Shank form

HA

HB

NEW



Company std.

Article no.

3595

3596

P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
10.000	≥ 3/4	11.950	12.000	80.000	31.000	20.000	4	12.100
16.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.160
18.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.180
20.000	≥ 11/16	11.950	12.000	80.000	31.000	20.000	4	12.200
24.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.240
12.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.120
14.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.140
16.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.160
18.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.180
20.000	≥ 13/16	15.950	16.000	90.000	40.000	25.000	5	16.200
7.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.070
8.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.080
12.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.120
14.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.140
16.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.160



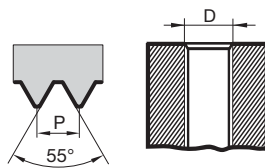
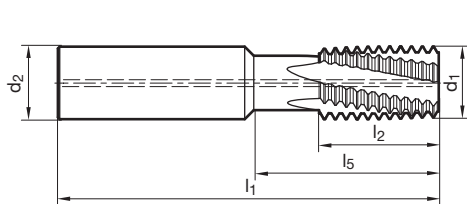
Universal thread milling cutters for BSP-threads



P	•	Cutting data page 355
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide		
Surface			
Type	TM SP	TM SP	TM SP
Internal cooling			
Shank form	HA	HB	HA

NEW



Grey cast iron, spherical and malleable cast iron

Company std.

Article no. 3542 3557 3524

P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
19.000	≥ 1/4	9.950	10.000	70.000	25.000	16.000	4	10.190
14.000	≥ 1/2	15.950	16.000	90.000	40.000	25.000	5	16.140
11.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.110



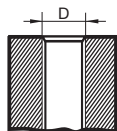
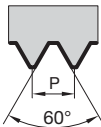
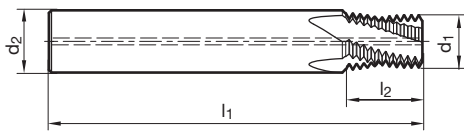
Universal thread milling cutters for NPT-threads



P	•	Cutting data page 355
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3768

3769

P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180



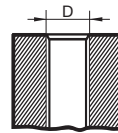
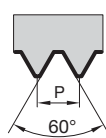
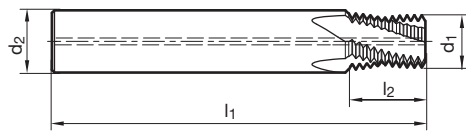
Universal thread milling cutters for NPTF-threads



P	•	Cutting data page 355
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW



Grey cast iron, spherical and malleable cast iron

Company std.

Article no.

3772

3773

P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

Micro-thread milling cutters



P	•
M	•
K	•
N	•
S	•
H	

Cutting data page 355

Tool material **Solid carbide**

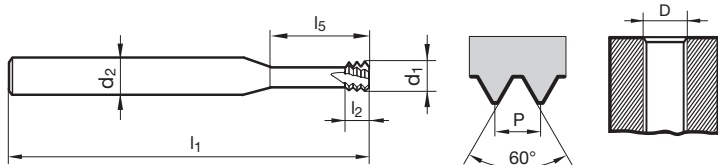
Surface **C**

Type **SP M**

Threads **3,0**

Shank form **HA**

NEW



Company std.

Article no.

4226

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M 1.6	0.350	1.200	3.000	39.000	1.100	4.800	3	1.600
M 1.8	0.350	1.400	3.000	39.000	1.100	5.400	3	1.800
M2	0.400	1.550	3.000	39.000	1.200	6.000	4	2.000
M 2.5	0.450	1.950	3.000	39.000	1.400	7.500	4	2.500
M3	0.500	2.400	6.000	58.000	1.500	9.500	4	3.000
M 3.5	0.600	2.800	6.000	58.000	1.800	11.000	4	3.500
M4	0.700	3.200	6.000	58.000	2.100	12.500	4	4.000
M5	0.800	4.000	6.000	58.000	2.400	16.000	4	5.000
M6	1.000	4.800	6.000	58.000	3.000	20.000	4	6.000
M8	1.250	5.950	6.000	58.000	3.800	24.000	4	8.000
M10	1.500	7.800	8.000	73.000	4.500	33.000	4	10.000
M12	1.750	9.000	10.000	84.000	5.300	38.000	4	12.000
M16	2.000	11.800	10.000	84.000	6.000	35.000	5	16.000



Micro-thread milling cutters



Cutting data page 355

P	•
M	•
K	•
N	•
S	•
H	

Tool material

Solid carbide

Surface



Type

SP G

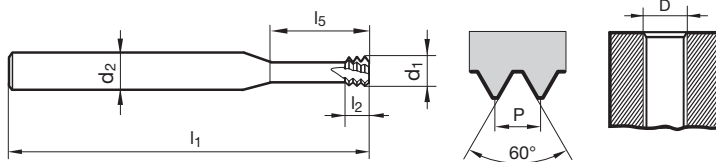
Threads

3,0

Shank form

HA

NEW



Company std.

Article no.

4228

D	P	d1	d2	l1	l2	l5	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	6.200	8.000	64.000	2.700	19.500	4	9.728
G3/8	19.000	9.950	10.000	73.000	4.000	25.000	4	16.662
G7/8	14.000	11.950	12.000	84.000	5.400	37.000	4	30.201
G2	11.000	15.950	16.000	105.000	6.900	44.000	5	59.614

Grey cast iron, spherical and malleable cast iron

Micro-thread milling cutters



P	•
M	•
K	•
N	•
S	•
H	

Cutting data page 355

Tool material **Solid carbide**

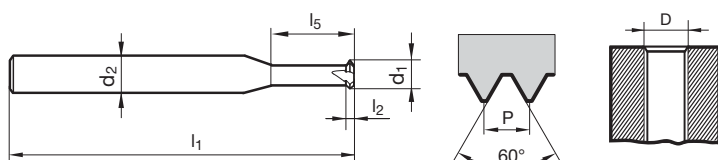
Surface **C**

Type **SP M/MF**

Threads **1,0**

Shank form **HA**

NEW



Company std.

Article no.

4225

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M1.4 - M1.8	0.350	1.050	3.000	39.000	0.400	3.800	3	1.800
M2 - M2.4	0.400	1.500	3.000	39.000	0.400	7.000	3	2.400
M2.5 - M3	0.500	2.000	3.000	39.000	0.500	9.000	4	3.000
M3.5 - M4.5	0.750	2.800	6.000	58.000	0.800	14.000	4	4.500
M5 - M7	1.000	4.000	6.000	58.000	1.000	19.000	4	7.000
M8 - M10	1.500	6.400	8.000	64.000	1.500	24.000	5	10.000



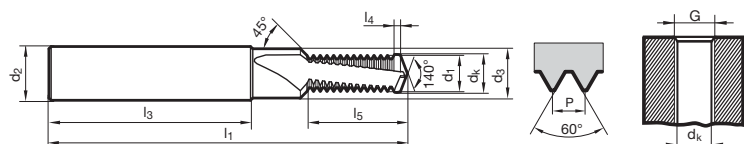
Drill thread milling cutters for ISO metric threads

1,5xD

P	
M	
K	○
N	●
S	
H	

Cutting data page 355

Tool material	Solid carbide			
Surface	○	○	⊙	⊙
Type	DTMC SP	DTMC SP	DTMC SP	DTMC SP
Internal cooling	✕	✕	✕	✕
Shank form	HA	HA	HA	HA



Grey cast iron, spherical and malleable cast iron

Company std.

Article no. 3774 3775 3776 3777

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.400	6.000	3.400	2.500	48.000	36.000	0.500	5.500	2	3.000
M4	0.700	3.200	6.000	4.500	3.300	48.000	36.000	0.700	6.900	2	4.000
M4	0.700	3.200	6.000	4.500	4.000	48.000	36.000	0.700	6.900	2	4.000
M5	0.800	4.000	6.000	5.500	4.200	54.000	36.000	0.800	8.800	2	5.000
M5	0.800	4.000	6.000	5.500	5.000	54.000	36.000	0.800	8.800	2	5.000
M6	1.000	4.750	8.000	6.600	5.000	62.000	36.000	1.000	10.900	2	6.000
M6	1.000	4.750	8.000	6.600	6.000	62.000	36.000	1.000	10.900	2	6.000
M8	1.250	6.350	10.000	9.000	6.800	74.000	40.000	1.250	13.700	2	8.000
M8	1.250	6.350	10.000	9.000	8.000	74.000	40.000	1.250	13.700	2	8.000
M10	1.500	7.950	12.000	11.000	10.000	80.000	45.000	1.500	18.000	2	10.000
M10	1.500	7.950	12.000	11.000	8.500	80.000	45.000	1.500	18.000	2	10.000
M12	1.750	9.950	14.000	13.500	10.200	90.000	45.000	1.500	20.900	2	12.000
M12	1.750	9.950	14.000	13.500	12.000	90.000	45.000	1.500	20.900	2	12.000
M14	2.000	11.200	16.000	15.500	12.000	102.000	48.000	1.500	23.700	2	14.000
M14	2.000	11.200	16.000	15.500	14.000	102.000	48.000	1.500	23.700	2	14.000
M16	2.000	13.200	18.000	17.500	16.000	102.000	48.000	1.500	26.000	2	16.000
M16	2.000	13.200	18.000	17.500	14.000	102.000	48.000	1.500	26.000	2	16.000

Drill thread milling cutters for ISO metric threads

2xD

P Cutting data page 355

P	
M	
K	○
N	●
S	
H	

Tool material

Solid carbide

Surface



Type

DTMC SP

DTMC SP

DTMC SP

DTMC SP

Internal cooling



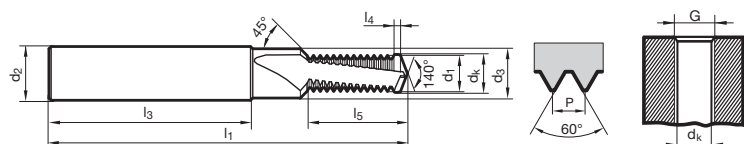
Shank form

HA

HA

HA

HA



Company std.

Article no.

3778

3779

3780

3781

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.400	6.000	3.400	2.500	48.000	36.000	0.500	7.000	2	3.000
M4	0.700	3.200	6.000	4.500	3.300	48.000	36.000	0.700	9.000	2	4.000
M4	0.700	3.200	6.000	4.500	4.000	48.000	36.000	0.700	9.000	2	4.000
M5	0.800	4.000	6.000	5.500	4.200	54.000	36.000	0.800	11.200	2	5.000
M5	0.800	4.000	6.000	5.500	5.000	54.000	36.000	0.800	11.200	2	5.000
M6	1.000	4.750	8.000	6.600	5.000	62.000	36.000	1.000	13.900	2	6.000
M6	1.000	4.750	8.000	6.600	6.000	62.000	36.000	1.000	13.900	2	6.000
M8	1.250	6.350	10.000	9.000	6.800	74.000	40.000	1.250	18.700	2	8.000
M8	1.250	6.350	10.000	9.000	8.000	74.000	40.000	1.250	18.700	2	8.000
M10	1.500	7.950	12.000	11.000	8.500	80.000	45.000	1.500	22.500	2	10.000
M10	1.500	7.950	12.000	11.000	10.000	80.000	45.000	1.500	22.500	2	10.000
M12	1.750	9.950	14.000	13.500	10.200	90.000	45.000	1.500	26.100	2	12.000
M12	1.750	9.950	14.000	13.500	12.000	90.000	45.000	1.500	26.100	2	12.000
M14	2.000	11.200	16.000	15.500	12.000	102.000	48.000	1.500	31.700	2	14.000
M14	2.000	11.200	16.000	15.500	14.000	102.000	48.000	1.500	31.700	2	14.000
M16	2.000	13.200	18.000	17.500	16.000	102.000	48.000	1.500	36.000	2	16.000
M16	2.000	13.200	18.000	17.500	14.000	102.000	48.000	1.500	36.000	2	16.000



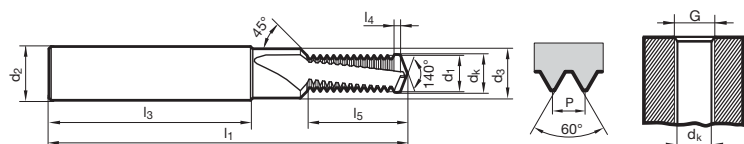
Drill thread milling cutters for ISO metric threads

2,5xD

P	
M	
K	○
N	●
S	
H	

Cutting data page 355

Tool material	Solid carbide			
Surface	○	○	Ⓢ	Ⓢ
Type	DTMC SP	DTMC SP	DTMC SP	DTMC SP
Internal cooling	✗	✗	✗	✗
Shank form	HA	HA	HA	HA



Grey cast iron, spherical and malleable cast iron

Company std.

Article no. 3782 3783 3784 3785

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.400	6.000	3.400	2.500	48.000	36.000	0.500	8.500	2	3.000
M4	0.700	3.200	6.000	4.500	3.300	48.000	36.000	0.700	11.100	2	4.000
M5	0.800	4.000	6.000	5.500	4.200	54.000	36.000	0.800	13.600	2	5.000
M6	1.000	4.750	8.000	6.600	5.000	62.000	36.000	1.000	16.900	2	6.000
M8	1.250	6.350	10.000	9.000	6.800	74.000	40.000	1.250	22.500	2	8.000
M10	1.500	7.950	12.000	11.000	8.500	80.000	45.000	1.500	27.000	2	10.000
M12	1.750	9.950	14.000	13.500	10.200	90.000	45.000	1.500	31.400	2	12.000
M14	2.000	11.200	16.000	15.500	12.000	102.000	48.000	1.500	39.700	2	14.000
M16	2.000	13.200	18.000	17.500	14.000	102.000	48.000	1.500	46.000	2	16.000

Drill thread milling cutters for ISO metric fine threads

1,5xD

P Cutting data page 355

P	
M	
K	○
N	●
S	
H	

Tool material

Solid carbide

Surface



Type

DTMC SP

DTMC SP

DTMC SP

Internal cooling

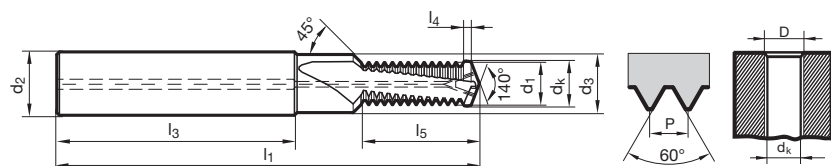


Shank form

HA

HA

HA



Company std.

Article no.

3787

3788

3789

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.200	6.000	4.500	3.500	48.000	36.000	0.500	6.600	2	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.500	54.000	36.000	0.500	8.300	2	5.003
M12 X 1.5	0.750	4.750	8.000	6.600	5.200	62.000	36.000	0.750	9.900	2	6.004
M 8 X0.75	0.750	6.350	10.000	9.000	7.200	74.000	40.000	0.750	14.100	2	8.004
M8 x 1	1.000	6.350	10.000	9.000	7.000	74.000	40.000	1.000	14.300	2	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.000	80.000	45.000	1.000	16.600	2	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.800	80.000	45.000	1.250	16.600	2	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.000	90.000	45.000	1.000	20.000	2	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.500	90.000	45.000	1.500	21.400	2	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.500	102.000	48.000	1.500	23.300	2	14.007
M16 X1.5	1.500	13.200	18.000	17.500	14.500	102.000	48.000	1.500	26.600	2	16.007



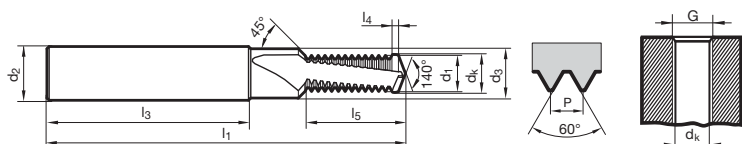
Drill thread milling cutters for ISO metric fine threads

2xD

P	
M	
K	○
N	●
S	
H	

Cutting data page 355

Tool material	Solid carbide			
Surface	○	○	●	●
Type	DTMC SP	DTMC SP	DTMC SP	DTMC SP
Internal cooling	✗	✗	✗	✗
Shank form	HA	HA	HA	HA



Grey cast iron, spherical and malleable cast iron

Company std.

Article no. 3790 3791 3792 3793

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.200	6.000	4.500	3.500	48.000	36.000	0.500	8.600	2	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.500	54.000	36.000	0.500	10.800	2	5.003
M12 X 1.5	0.750	4.750	8.000	6.600	5.200	62.000	36.000	0.750	12.900	2	6.004
M 8 X0.75	0.750	6.350	10.000	9.000	7.200	74.000	40.000	0.750	17.100	2	8.004
M8 x 1	1.000	6.350	10.000	9.000	7.000	74.000	40.000	1.000	17.300	2	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.000	80.000	45.000	1.000	21.600	2	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.800	80.000	45.000	1.250	21.600	2	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.000	90.000	45.000	1.000	26.000	2	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.500	90.000	45.000	1.500	27.400	2	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.500	102.000	48.000	1.500	30.800	2	14.007
M16 X1.5	1.500	13.200	18.000	17.500	14.500	102.000	48.000	1.500	34.100	2	16.007

Drill thread milling cutters for UNC-threads

2xD

P Cutting data page 355

P	
M	
K	•
N	•
S	
H	

Tool material

Solid carbide

Surface



Type

DTMC SP

DTMC SP

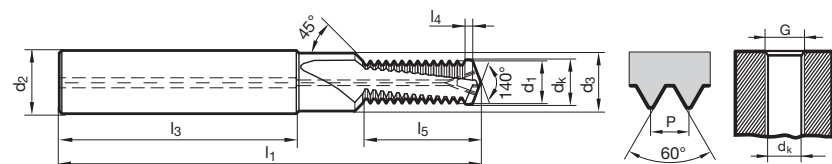
Internal cooling



Shank form

HA

HA



Company std.

Article no.

4138

4139

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	1.270	5.000	8.000	6.600	5.100	62.000	36.000	1.300	14.900	2	6.350
5/16 - 18	1.411	6.250	10.000	9.000	6.600	74.000	40.000	1.500	18.100	2	7.938
3/8 - 16	1.587	7.500	12.000	11.000	8.000	80.000	45.000	1.500	22.100	2	9.525
7/16 - 14	1.814	8.800	12.000	11.000	9.400	80.000	45.000	1.500	25.000	2	11.113
1/2 - 13	1.954	10.200	14.000	13.500	10.800	90.000	45.000	1.500	26.900	2	12.700
9/16 - 12	2.117	11.600	16.000	15.500	12.200	102.000	48.000	1.500	31.200	2	14.288
5/8 - 11	2.309	13.000	18.000	17.500	13.500	102.000	48.000	1.500	36.300	2	15.875



Drill thread milling cutters for UNF-threads

2xD

P	
M	
K	•
N	•
S	
H	

Cutting data page 355

Tool material

Solid carbide

Surface



Type

DTMC SP

DTMC SP

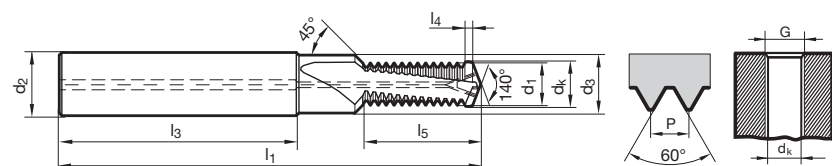
Internal cooling



Shank form

HA

HA



Grey cast iron, spherical and malleable cast iron

Company std.

Article no.

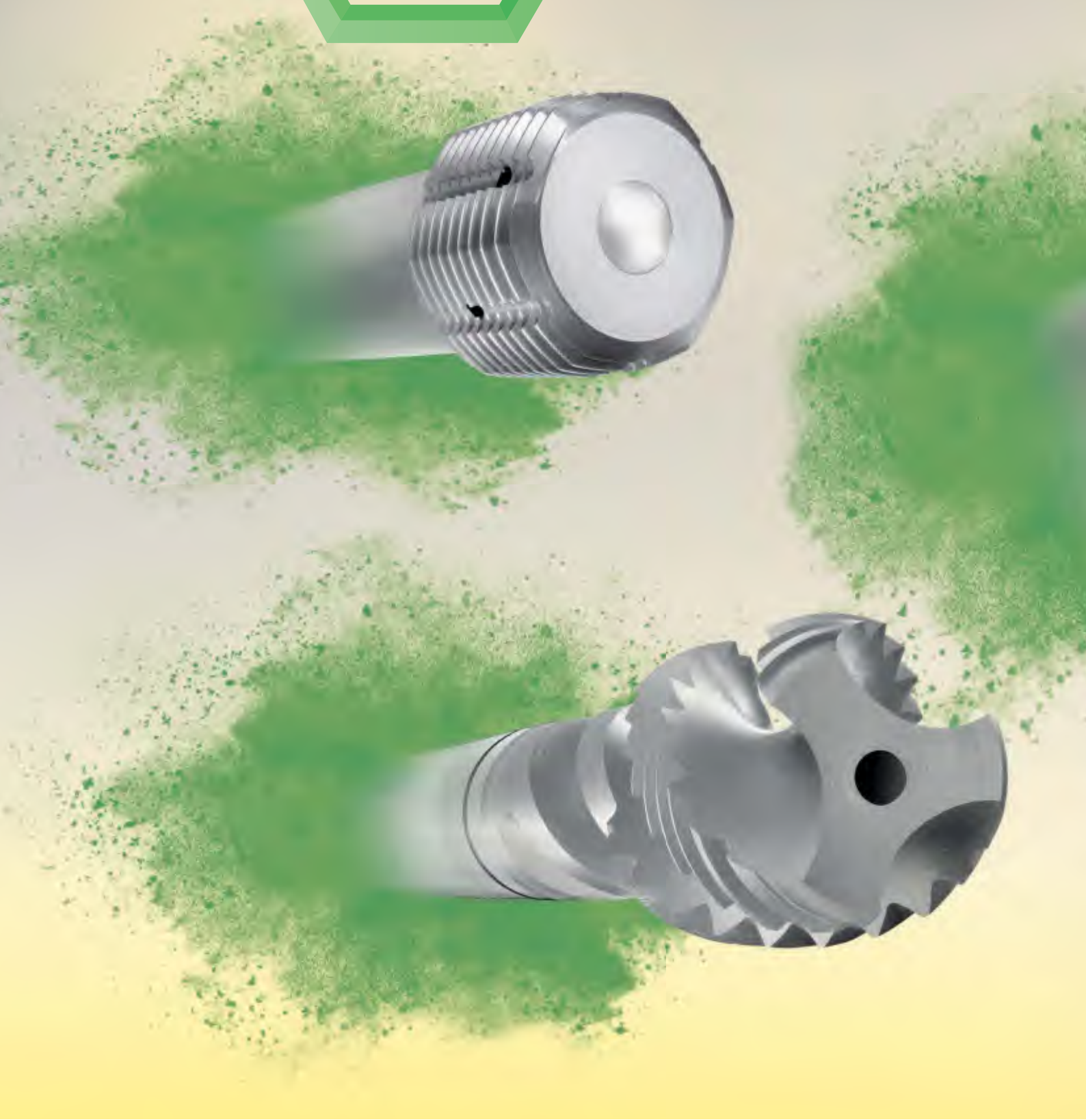
4140

4141

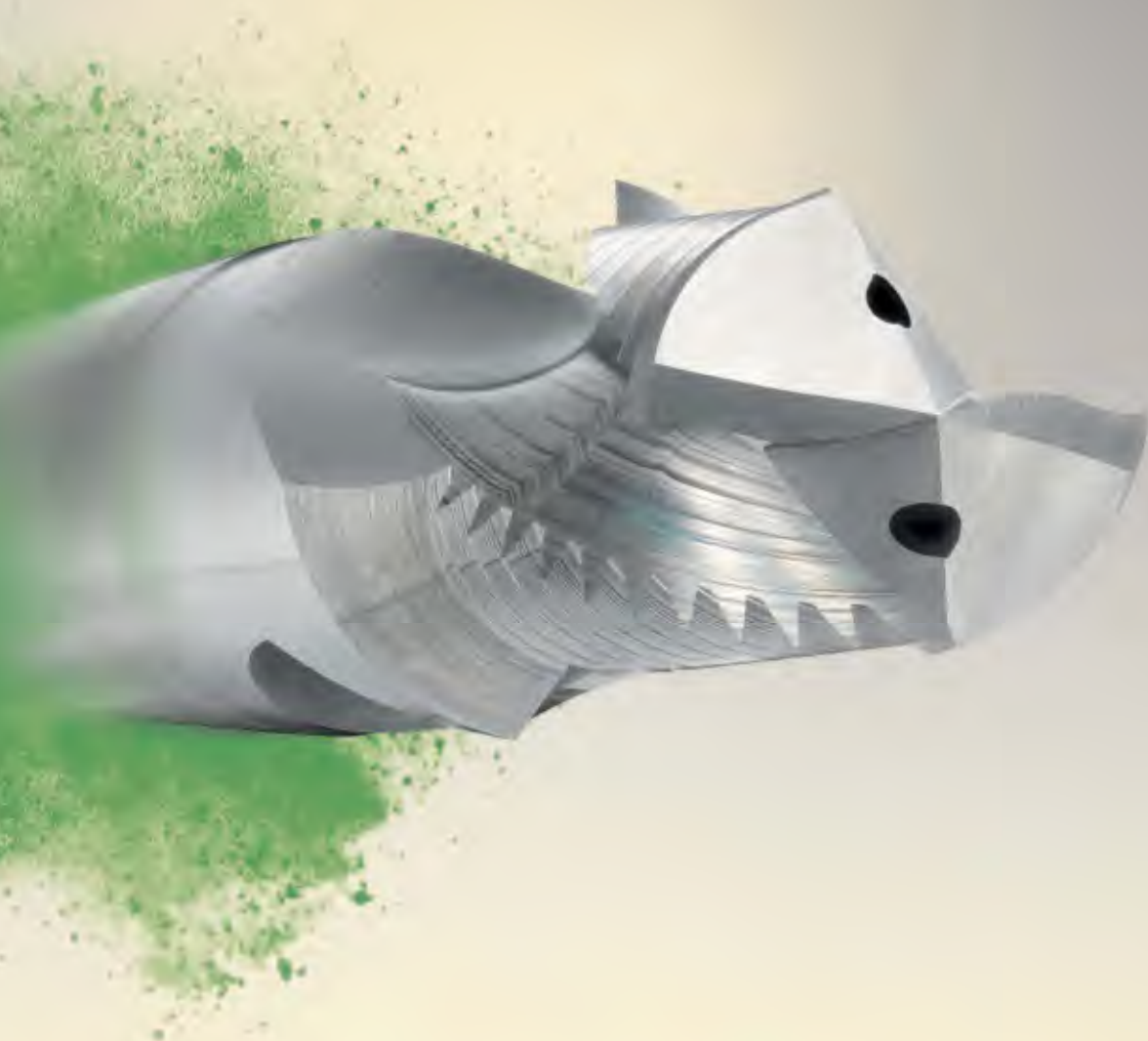
D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	0.907	5.000	8.000	6.600	5.500	62.000	36.000	1.000	12.800	2	6.350
5/16 - 24	1.058	6.250	10.000	9.000	6.900	74.000	40.000	1.100	18.200	2	7.938
3/8 - 24	1.058	7.950	12.000	11.000	8.500	80.000	45.000	1.100	20.600	2	9.525
7/16 - 20	1.270	9.500	12.000	11.000	9.900	80.000	45.000	1.300	24.700	2	11.113
1/2 - 20	1.270	10.200	14.000	13.500	11.500	90.000	45.000	1.300	27.500	2	12.700
9/16 - 18	1.411	11.600	16.000	15.500	12.900	102.000	48.000	1.500	30.600	2	14.288
5/8 - 18	1.411	13.000	18.000	17.500	14.500	102.000	48.000	1.500	33.700	2	15.875



Aluminium, wrought and cast alloys,
high-strength aluminium, copper alloys
and non-ferrous metals



ALU MINIUM



Aluminum, non-ferrous
metals and plastics

NON-FERROUS
METALS
PLASTICS



ALUMINIUM, NE, PLASTICS

M**MF****ISO 2/6H****ISO 3/6G****ISO 2/6H****ISO 3/6G**Aluminium
≤ 6% Si**No 1**M2 - M24
Art.-No. 805/817
from page 472

M2 - M30

Art.-No. 1870/1872
from page 473**No 1**M5x0,5 - M24x2
Art.-No. 1873
from page 487Aluminium
≥ 6% Si**No 1**M3 - M20
Art.-No. 1858/1859
from page 476**No 1**M5x0,5 - M20x1,5
Art.-No. 1861/1860
from page 491short chipping
NE-metals**No 1**M3 - M10
Art.-No. 800
from page 482**No 1**M3 - M10
Art.-No. 1084
from page 482**No 1**M3 - M20
Art.-No. 1858/1859
from page 476**No 1**M5x0,5 - M20x1,5
Art.-No. 1861/1860
from page 491**No 1**ideal
tool



QUICKFINDER

UNC

2B

UNF

2B

G

-



THROUGH HOLE



HSS-E, bright, form B

No 1

Nr. 4 - 1
Art.-No. 1980/1985
from page 498

No 1

Nr. 10 - 3/8
Art.-No. 1990
from page 500

No 1

G1/16 - G7/8
Art.-No. 967
from page 502



Form B, bright

SOLID CARBIDE



Solid carbide, bright, form C



HSS-E, bright, form E

SOLID CARBIDE



Solid carbide, bright, form C

Aluminum, non-ferrous
metals and plastics



ALUMINIUM, NE, PLASTICS

M

ISO 2/6H

ISO 3/6G

MF

ISO 2/6H

ISO 3/6G

Aluminium
≤ 6% Si

No 1

M1,6 - M24
Art.-No. 812/824
from page 474

M3 - M30
Art.-No. 814/825
from page 475

Aluminium
≥ 6% Si

No 1

M5 - M20
Art.-No. 302/297
from page 479

No 1

M5x0,5 - M16x1,5
Art.-No. 1090
from page 496

No 1

M3 - M20
Art.-No. 969/1883
from page 476

No 1

M5x0,5 - M20x1,5
Art.-No. 972/974
from page 491

short chipping
NE-metals

No 1

M3 - M10
Art.-No. 800
from page 482

No 1

M3 - M10
Art.-No. 1084
from page 482

No 1

M3 - M20
Art.-No. 969/1883
from page 476

No 1

M5x0,5 - M20x1,5
Art.-No. 972/974
from page 491

No 1

ideal
tool



QUICKFINDER

UNC

2B

UNF

2B

G

-



B L I N D H O L E



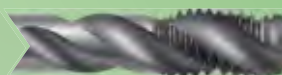
HSS-E, bright, form C

No 1

Nr. 2 - 7/8
Art.-No. 1981/1986
from page 499

No 1

Nr. 1/4 - 1
Art.-No. 2867
from page 501



HSS-E, bright, form C



HSS-E-PM, TiCN, form C

SOLID CARBIDE



Solid carbide, bright, form C



HSS-E, bright, form E

SOLID CARBIDE



Solid carbide, bright, form C

Aluminum, non-ferrous
metals and plastics



ALUMINIUM, NE, PLASTICS

M**ISO 2/6HX****ISO 3/6GX****MF****ISO 2/6HX****ISO 3/6GX**

without lubrication

No 1M1 - M20
Art.-No. 1347/1566
from page 506**No 1**M2 - M20
Art.-No. 1565/1567
from page 508**No 1**M8x1 - M10x1
Art.-No. 1568
from page 526**No 1**M8x1 - M24x1,5
Art.-No. 1569/1580
from page 529

M1 - M20

Art.-No. 921/925
from page 506

M2 - M10

Art.-No. 920
from page 507

M8x1 - M20x1,5

Art.-No. 929
from page 524

M8x1 - M18x1,5

Art.-No. 928
from page 528

with lubrication

M3 - M39

Art.-No. 919/923
from page 510**No 1**M3 - M39
Art.-No. 918/922
from page 510M6x0,75 - M24x1,5
Art.-No. 1275/927
from page 530**No 1**M8x1 - M20x1,5
Art.-No. 1277/926
from page 532**No 1**M3 - M39
Art.-No. 2012/2013
from page 510**No 1**M6x0,75 - M20x1,5
Art.-No. 2008
from page 531

with internal cooling

No 1M5 - M20
Art.-No. 2515
from page 517**No 1**M5 - M20
Art.-No. 4146
from page 520**No 1**M8x1 - M16x1,5
Art.-No. 4147
from page 537**No 1**M8x1 - M16x1,5
Art.-No. 4151
from page 539**No 1**M3 - M20
Art.-No. 1725/1727
from page 516**No 1**M3 - M20
Art.-No. 1726/1728
from page 519**No 1**M8x1 - M24x1,5
Art.-No. 1729/1731
from page 536**No 1**M8x1 - M24x1,5
Art.-No. 1730/1732
from page 538**No 1**M3 - M20
Art.-No. 1972/1931
from page 522**No 1**M10x1 - M24x1,5
Art.-No. 1581
from page 541**No 1** ideal
tool



QUICKFINDER

UNC

2BX

UNF

2BX

G

-



THROUGH HOLE
BLIND HOLE



HSS-E-PM, Carbo, form C

No 1

Nr. 4 - 7/8
Art.-No. 2273/2274
from page 542

No 1

Nr. 4 - 1
Art.-No. 1283/2275
from page 543

No 1

G1/16 - G1 1/4
Art.-No. 966
from page 544



HSS-E, TiN, form C

No 1

Nr. 4 - 7/8
Art.-No. 1582/1583
from page 542

No 1

Nr. 4 - 1
Art.-No. 1584/1585
from page 543

No 1

G1/16 - G3/4
Art.-No. 1586
from page 545



HSS-E, TiN, form C



HSS-E, TiCN, form C

FORM C

No 1

G1/16 - G1
Art.-No. 4152
from page 546



HSS-E, Carbo, form C

FORM E



HSS-E-PM, TiN, form E

SOLID CARBIDE



Solid carbide, TiAlN, form C

Aluminum, non-ferrous
metals and plastics



ALUMINIUM, NE, PLASTICS

M

UNIVERSAL

MF

UNIVERSAL

1.5xD

No 1

M3 - M20
Art.-No. 3510
from page 551

No 1

M4x0,5 - M16x1,5
Art.-No. 3512
from page 554

2xD

No 1

M3 - M20
Art.-No. 3511
from page 552

No 1

M4x0,5 - M16x1,5
Art.-No. 3513
from page 555

2.5xD

No 1

M3 - M20
Art.-No. 3759
from page 553

No 1

M4x0,5 - M16x1,5
Art.-No. 3762
from page 556

3xD

No 1

M1,6 - M16
Art.-No. 4226
from page 578

universal

No 1

Ø8xP0,5 - Ø20xP3,5
Art.-No. 3523
from page 572

No 1

Ø8xP0,5 - Ø20xP3,5
Art.-No. 3523
from page 572

No 1 ideal
tool



QUICKFINDER

UNC
UNIVERSAL

UNF
UNIVERSAL

G
-



T H R O U G H H O L E
B L I N D H O L E

No 1

1/4 - 1/2
Art.-No. 3516
from page 558

No 1

1/4 - 1/2
Art.-No. 3518
from page 561

No 1

1/8 - 3/8
Art.-No. 3514
from page 565



Solid carbide, bright

No 1

1/4 - 1/2
Art.-No. 3517
from page 559

No 1

1/4 - 1/2
Art.-No. 3519
from page 562

No 1

1/8 - 3/8
Art.-No. 3515
from page 566



Solid carbide, bright



Solid carbide, TiCN



Solid carbide, TiCN

No 1

Ø10xUN24 -
Ø20xUN7
Art.-No. 3595
from page 574

No 1

Ø10xUN24 -
Ø20xUN7
Art.-No. 3595
from page 574

No 1

Ø10xG19 -
Ø20xG11
Art.-No. 3542
from page 575



Solid carbide, bright

Aluminum, non-ferrous
metals and plastics



ALUMINIUM, NE, PLASTICS

M

UNIVERSAL

MF

UNIVERSAL

1.5xD

No 1

M3 - M16
Art.-No. 3775
from page 581

No 1

M4x0,5 - M16x1,5
Art.-No. 3787
from page 584

M3 - M16
Art.-No. 3774
from page 581

2xD

No 1

M3 - M16
Art.-No. 3779
from page 582

No 1

M4x0,5 - M16x1,5
Art.-No. 3791
from page 585

M3 - M16
Art.-No. 3778
from page 582

M4x0,5 - M16x1,5
Art.-No. 3790
from page 585

2.5xD

No 1

M3 - M16
Art.-No. 3783
from page 583

M3 - M16
Art.-No. 3782
from page 583

No 1 ideal tool



QUICKFINDER

UNC
UNIVERSAL

UNF
UNIVERSAL

G
-



T H R O U G H H O L E
B L I N D H O L E



Solid carbide, bright



Solid carbide, bright



Solid carbide, bright



Solid carbide, bright



Solid carbide, bright



Solid carbide, bright

Aluminum, non-ferrous
metals and plastics



COMPASS



 ALUMINIUM, NONFERROUS METALS, PLASTICS	Thread depth		≤3xD			
	Tool material		HSS-E			Solid carbide
	Type/form		AI / B	VA / B	MS / E	H / C
	Surface		○	○	○	○
	Coolant delivery		☒	☒	☒	radial
	Shank tolerance		h9	h9	h9	h9
 THROUGH HOLES						
						
	Thread type	Tolerance	Article no. / page			
	M	4H				
		6H	805/817 472	1870/1872 473	800 482	
		6HX			1858/1859 476	
		6G			1084 482	
	MF	6H		1873 487		
		6HX			1861/1860 491	975/976 495
		6G				
	UNC	2B		1980/1985 498		
		2BX				
	UNF	2B		1990 500		
		2BX				
	G			967 502		
	BSW					
	NPT					
	NPTF					
	EG M	6H Mod.				
	MJ	4HX				
	MJF	4HX				
	UNJC	3BX				
	UNJF	3BX				
	PG					
	Suitable lubricant		○/●/△	●/●/△	●/●/△	●/●/△

= No 1

- = Air
 ● = Neat oil
 ● = Soluble oil
 △ = Paste
 □ = Minimal quantity lubrication (MQL)

Aluminum, non-ferrous
metals and plastics

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min				
N	Aluminium and wrought alloys	≤450 N/mm ²	Al99,5H AlMgSi1 AlZn4,5Mg	3.0250 32315 3.4335	15	15	-	-	-
	Al cast alloys	≤600 N/mm ²	GD-AlSi5Cu1Mg GD-AlSi8Cu3 G-AlSi9Mg G-AlSi12	3.2134 3.2162 3.2373 3.2581	-	-	-	50	50
	Magnesium alloys	≤500 N/mm ²	GDMgAl8Zn1	3.5812.08	-	-	-	50	50
	Copper and copper alloys	long-chip-ping	CuZn20 CuZn37Pb0,5	2.0250 2.0332	15	15	-	-	-
			CuZn39Pb2 CuZn43Pb2	2.0380 2.0410	-	-	20	50	50
		short-chip-ping							
	Copper special alloys	≤1400 N/mm ²	Ampco		-	-	2	-	-


**ALUMINIUM,
NONFERROUS
METALS, PLASTICS**

BLIND HOLES

 Aluminium, non-ferrous
metals and plastics

Thread depth Tool material Type/form Surface Coolant delivery Shank tolerance	≤3xD			
	HSS-E			
	Al R45 / C	NR40 / C	MS / E	NAZ / E
				A + M
				axial
	h9	h9	h9	h9
Thread type	Tolerance		Article no. / page	
M	4H			
	6H	812/824 474	814/825 475	800 482
	6HX			
	6G			1084 482
MF	6H		936 488	
	6HX			
	6G			
UNC	2B		1981/1986 499	
	2BX			
UNF	2B		2867 501	
	2BX			
G			939 503	
BSW				
NPT				
NPTF				
EG M	6H Mod.			
MJ	4HX			
MJF	4HX			
UNJC	3BX			
UNJF	3BX			
PG				
Suitable lubricant				

= No 1

- = Air
 = Neat oil
 = Soluble oil
 = Paste
 = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min			
N	Aluminium and wrought alloys	≤450 N/mm ²	Al99,5H AlMgSi1 AlZn4,5Mg	3.0250 32315 3.4335	15	15	-	-
	Al cast alloys	≤600 N/mm ²	GD-AlSi5Cu1Mg GD-AlSi8Cu3 G-AlSi9Mg G-AlSi12	3.2134 3.2162 3.2373 3.2581	-	-	-	-
	Magnesium alloys	≤500 N/mm ²	GDMgAl8Zn1	3.5812.08	-	-	-	20
	Copper and copper alloys	long-chip-ping	CuZn20 CuZn37Pb0,5	2.0250 2.0332	15	15	-	-
			CuZn39Pb2 CuZn43Pb2	2.0380 2.0410	-	-	20	-
	Copper special alloys	≤1400 N/mm ²	Ampco		-	-	2	-

Aluminum, non-ferrous metals and plastics

GÜHRING

N ALUMINIUM, NONFERROUS METALS, PLASTICS	Thread depth		1.5xD			
	Tool material		HSS-E	HSS-E-PM		Solid carbide
	Type/form		N / C	N / C	N / C	N / C
	Surface		S	S	Cb	S
	Coolant delivery		☒	☒	☒	axial
	Shank tolerance		h9	h9	h9	h6
	THROUGH HOLES AND BLIND HOLES					
	Thread type	Tolerance	Article no. / page			
	M	4H				
		6H				
		6HX	921/925 506	1255/1256 506	1347/1556 506	2518 509
		6GX	920 507	903/952 508	1565/1567 508	
	MF	6H				
		6HX	929 524	1257/1258 525	1568 526	
		6GX	928 528	1740 527	1569/1580 529	
	UNC	2B				
		2BX	2273/2274 542			
	UNF	2B				
		2BX	1283/2275 543			
	G		966 544			
	BSW					
	NPT					
	NPTF					
	EG M	6H Mod.				
	MJ	4HX				
	MJF	4HX				
	UNJC	3BX				
	UNJF	3BX				
	PG					
	Suitable lubricant		☉/●/△	☉/●/△	☉/●/△	☉/●/△

= No 1

-  = Air
 = Neat oil
 = Soluble oil
 = Paste
 = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min			
N	Aluminium and wrought alloys	≤450 N/mm ²	Al99,5H AlMgSi1 AlZn4,5Mg	3.0250 32315 3.4335	20	20	30	45
	Al cast alloys	≤600 N/mm ²	GD-AlSi5Cu1Mg GD-AlSi8Cu3 G-AlSi9Mg G-AlSi12	3.2134 3.2162 3.2373 3.2581	20	20	30	45
	Magnesium alloys	≤500 N/mm ²	GDMgAl8Zn1	3.5812.08	-	-	-	-
	Copper and copper alloys	long-chip-ping	CuZn20 CuZn37Pb0,5	2.0250 2.0332	20	20	30	45
			CuZn39Pb2 CuZn43Pb2	2.0380 2.0410	-	-	-	-
		short-chip-ping						
	Copper special alloys	≤1400 N/mm ²	Ampco		-	-	-	-


 $\leq 3 \times D$

HSS-E					HSS-E-PM						Solid carbide	
N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / E	N / C	N / E
		axial	radial	axial			radial	axial	radial	axial	radial	radial
h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h6	h6
Article no. / page												
919/923 510	2012/2013 510	2442/2444 513	2446/2448 513	2515 517	322/339 511	1266/1267 512	323/342 515	4143 521	1270/1271 516	1725/1727 516	1972/1931 522	1927 523
918/922 510		2443/2445 513	2447 514	4146 520					1713 518	1726/1728 519		
1275/927 530	2008 531			4147 537	333 533	1268/1269 534	338 535	4145 540	1272/1273 536	1729/1731 536	1581 541	
1277/926 532				4151 539					1715/1716 538	1730/1732 538		
1582/1583 542												
1584/1585 543												
1586 545				4152 546								

 Aluminum, non-ferrous
metals and plastics
Recommended cutting speed v_c m/min

20	25	20	25	30	20	20	20	20	20	20	45	45
20	25	20	25	30	20	20	20	20	25	20	45	45
-	-	-	-	-	-	-	-	-	-	-	-	-
20	25	20	25	30	20	20	20	20	20	20	45	45
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-



**ALUMINIUM,
NONFERROUS
METALS, PLASTICS**



**THROUGH HOLES
AND BLIND HOLES**

Thread depth	≤2xD					≤2,5xD	
Tool material	Solid carbide						
Type	TM SP	TM SP	TM SP	TM SP	TM SP	TM SP	TM SP
Surface							
Coolant delivery			axial	axial	axial	axial	axial
Shank form	HA	HB	HA	HA	HB	HA	HB
Spiral	27°	27°	27°	27°	27°	27°	27°
Thread type	Article no. / page						
M	4132 549	4133 549	3734 548	3737 548	3743 548	3735 550	3740 550
MF			3734 548	3737 548	3743 548		
UNC				4134 557	4135 557		
UNF				4136 560	4137 560		
G				3745 563	3748 563	3746 564	3750 564
BSW							
NPT				3753 568	3754 568		
NPTF				3756 570	3757 570		
EG M	EG-threads can be produced with every thread milling cutter type and dimension						
MJ							
MJF							
UNJC							
UNJF							
PG							
Suitable lubricant							

= **No 1**

- = Air
- = Neat oil
- = Soluble oil
- △ = Paste
- = Minimal quantity lubrication (MQL)

Group of materials	Tensile strength	Material example	Material no.	Application recommendations						
N	Aluminium and wrought alloys	Al99,5H	3.0250							
		AlMgSi1	32315	+	+	++	+	+	+	+
		AlZn4,5Mg	3.4335							
	Al cast alloys	GD-AlSi5Cu1Mg	3.2134	+	+	++	+	+	+	+
		GD-AlSi8Cu3	3.2162							
		G-AlSi9Mg	3.2373	++	++	+	++	++	++	++
		G-AlSi12	3.2581							
	Magnesium alloys	GDMgAl8Zn1	3.5812.08	++	++	+	++	++	++	++
	Copper and copper alloys	CuZn20	2.0250	+	+	++	+	+	+	+
		CuZn37Pb0,5	2.0332							
		CuZn39Pb2	2.0380	+	+	++	+	+	+	+
	Copper special alloys	CuZn43Pb2	2.0410							
		Ampco		+	+	+	+	+	+	+



≤1,5xD			≤2xD			≤2,5xD	
Solid carbide							
TMC SP	TMC SP	TMC SP	TMC SP	TMC SP	TMC SP	TMC SP	TMC SP
axial	axial	axial	axial	axial	axial	axial	axial
HA	HA	HB	HA	HA	HB	HA	HB
10°	10°	10°	10°	10°	10°	27°	27°
Article no. / page							
3510	3525	3543	3511	3526	3544	3759	3760
551	551	551	552	552	552	553	553
3512	3527	3545	3513	3528	3546	3762	3763
554	554	554	555	555	555	556	556
	3516	3534		3517	3535		
	558	558		559	559		
	3518	3536		3519	3537		
	561	561		562	562		
	3514	3529		3515	3533	3765	3766
	565	565		566	566	567	567
	3520	3538					
	569	569					
	3521	3539					
	571	571					
EG-threads can be produced with every thread milling cutter type and dimension							

Aluminum, non-ferrous metals and plastics

Application recommendations							
++	+	+	++	+	+	+	+
++	+	+	++	+	+	+	+
+	++	++	+	++	++	++	++
+	++	++	+	++	++	++	++
++	+	+	++	+	+	+	+
++	+	+	++	+	+	+	+
+	+	+	+	+	+	+	+



**ALUMINIUM,
NONFERROUS
METALS, PLASTICS**



**THROUGH HOLES
AND BLIND HOLES**

Thread depth	universal					≤3xD	
Tool material	Solid carbide						
Type	TMU SP	TMU SP	TMU SP	TMU SP	TMU SP	MTM 3 SP	MTM 1 SP
Surface							
Coolant delivery	axial	axial	axial	axial	axial		
Shank form	HA	HA	HB	HA	HB	HA	HA
Spiral	15°	15°	15°	15°	15°	15°	15°
Thread type	Article no. / page						
M	3523 572	3541 572	3556 572	4162 573	4163 573	4226 578	4225 580
MF	3523 572	3541 572	3556 572	4162 573	4163 573		4225 580
UNC		3595 574	3596 574				
UNF		3595 574	3596 574				
G	3524 575	3542 575	3557 575	3542 575	3557 575	4228 579	
BSW							
NPT		3769 576	3768 576				
NPTF		3772 577	3773 577				
EG M	EG-threads can be produced with every thread milling cutter type and dimension						
MJ							
MJF							
UNJC							
UNJF							
PG							
Suitable lubricant							

= **No 1**

- = Air
- = Neat oil
- = Soluble oil
- △ = Paste
- = Minimal quantity lubrication (MQL)

Group of materials	Tensile strength	Material example	Material no.	Application recommendations						
N	Aluminium and wrought alloys	Al99,5H	3.0250							
		AlMgSi1	32315	++	+	+	+	+	++	++
		AlZn4,5Mg	3.4335							
	Al cast alloys	GD-AlSi5Cu1Mg	3.2134	++	+	+	+	+	++	++
		GD-AlSi8Cu3	3.2162							
		G-AlSi9Mg	3.2373	+	++	++	++	++	++	++
		G-AlSi12	3.2581							
	Magnesium alloys	GDMgAl8Zn1	3.5812.08	+	++	++	++	++	++	++
	Copper and copper alloys	CuZn20	2.0250	++	+	+	+	+	++	++
		CuZn37Pb0,5	2.0332							
		CuZn39Pb2	2.0380	++	+	+	+	+	++	++
	Copper special alloys	CuZn43Pb2	2.0410							
		Ampco		+	+	+	+	+	++	++



≤1,5xD				≤2xD				≤2,5xD			
Solid carbide											
DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP
	radial		radial		radial		radial		radial		radial
HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA
27°	27°	27°	27°	27°	27°	27°	27°	27°	27°	27°	27°
Article no. / page											
3774 581	3775 581	3776 581	3777 581	3778 582	3779 582	3780 582	3781 582	3782 583	3783 583	3784 583	3785 583
	3787 584	3788 584	3789 584	3790 585	3791 585	3792 585	3793 585				
				4138 586			4139 586				
				4140 587			4141 587				
EG-threads can be produced with every thread milling cutter type and dimension											

Aluminum, non-ferrous
metals and plastics

Application recommendations											
++	++	+	+	++	++	+	+	++	++	+	+
++	++	+	+	++	++	+	+	++	++	+	+
+	+	++	++	+	+	++	++	+	+	++	++
+	+	++	++	+	+	++	++	+	+	++	++
++	++	+	+	++	++	+	+	++	++	+	+
++	++	+	+	++	++	+	+	++	++	+	+
+	+	+	+	+	+	+	+	+	+	+	+

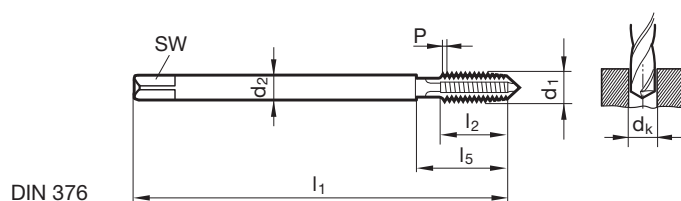
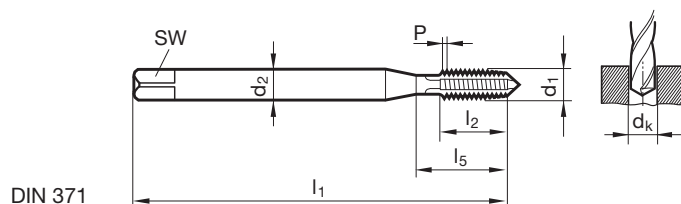
Machine taps for ISO metric threads



Cutting data page 463

P	
M	
K	
N	•
S	
H	

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	Al
Form	B
Internal cooling	



DIN 2184-1 DIN 371

Article no.

805

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	9.000	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

817

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000



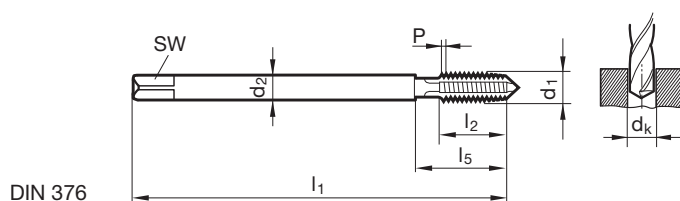
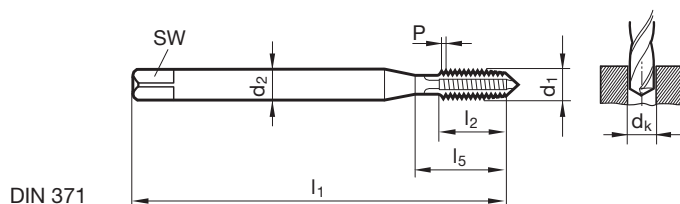
Machine taps for ISO metric threads



P	≤ 1000
M	•
K	
N	•
S	
H	

Cutting data page 463

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N
Form	B
Internal cooling	



Aluminum, non-ferrous metals and plastics

DIN 2184-1 DIN 371

Article no.

1870

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

1872

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000

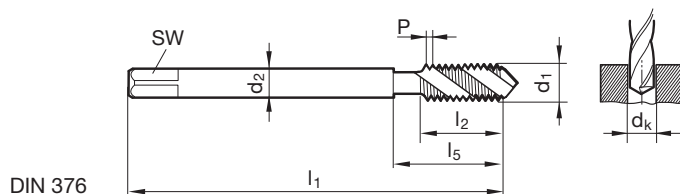
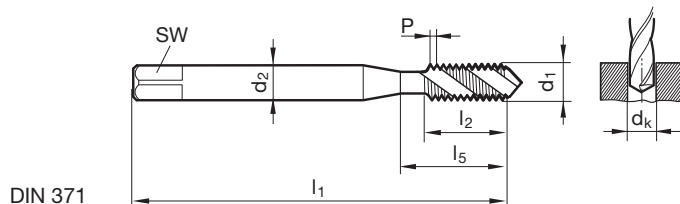
Machine taps for ISO metric threads



Cutting data page 464

P	
M	
K	
N	•
S	
H	

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	Al R45
Form	C
Internal cooling	



DIN 2184-1 DIN 371

Article no.

812

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M 1.6	0.350	2.500	2.100	1.25	40.000	4.500	
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	5.000	14.500
M 2.3	0.400	2.800	2.100	1.90	45.000	4.500	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

824

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	6.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	7.500	21.000
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000



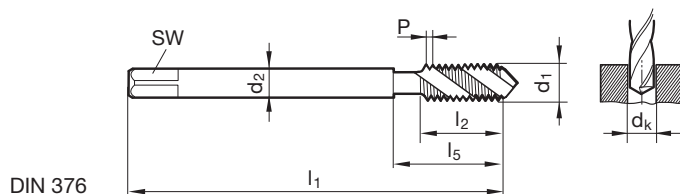
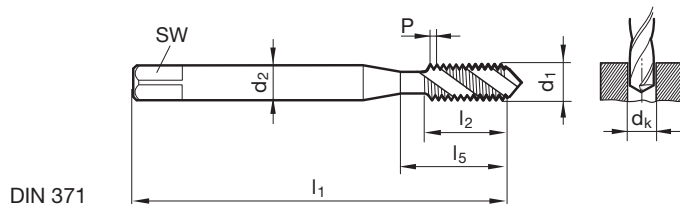
Machine taps for ISO metric threads



Cutting data page 464

P	
M	•
K	
N	•
S	
H	

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	VA R40
Form	C
Internal cooling	



Aluminum, non-ferrous metals and plastics

DIN 2184-1 DIN 371

Article no.

814

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

825

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	27.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000

Oil feed taps for ISO metric threads



P	
M	
K	•
N	≥ 7
S	
H	

Cutting data page 463/465

Tool material **Solid carbide**

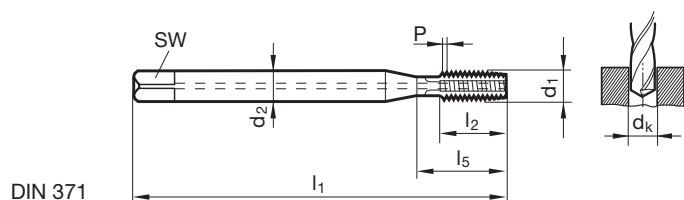
Tolerance on Ø 6HX 6HX

Surface ○ ○

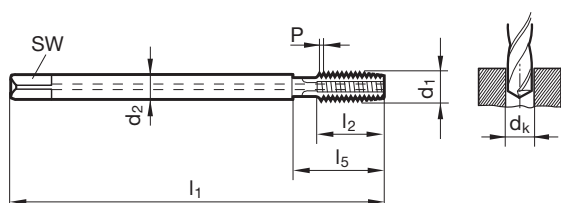
Type H H

Form C C

Internal cooling



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

969

1858

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	8.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	10.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	10.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	12.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	16.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	18.000	39.000

DIN 2184-1 DIN 376

Article no.

1883

1859

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	22.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	22.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	22.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	24.000	45.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	45.000



Oil feed taps for ISO metric threads



P	
M	
K	•
N	≥ 7
S	
H	

Cutting data page 465

Tool material **Solid carbide**

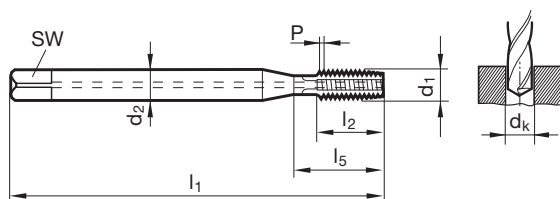
Tolerance on Ø 6HX

Surface ○

Type H

Form E

Internal cooling



DIN 2184-1 DIN 371

Article no.

1008

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	8.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	10.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	10.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	12.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	16.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	18.000	39.000

Aluminum, non-ferrous
metals and plastics

Oil feed taps for ISO metric threads



Cutting data page 465

P	
M	
K	○
N	≥ 7
S	
H	

Tool material **Solid carbide**

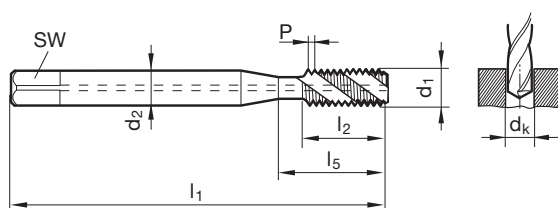
Tolerance on Ø 6HX

Surface ○

Type N R15

Form C

Internal cooling



DIN 2184-1 DIN 371

Article no.

971

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	8.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	10.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	10.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	12.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	16.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	18.000	39.000



Oil feed taps for ISO metric threads



P ≤ 1200 Cutting data page 465

M	
K	•
N	≥ 7
S	
H	

Tool material

HSS-E-PM

Tolerance on Ø

6HX

6HX

Surface



Type

H

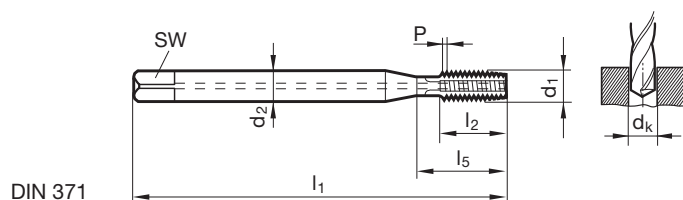
H

Form

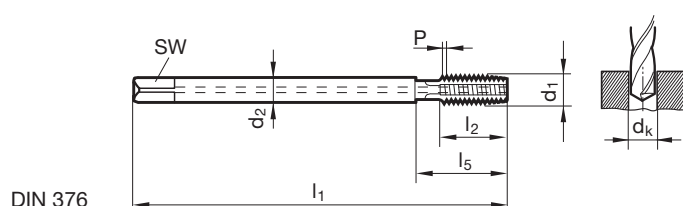
C

E

Internal cooling



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

302

1091

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376

Article no.

297

4165

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000

Aluminum, non-ferrous
metals and plastics

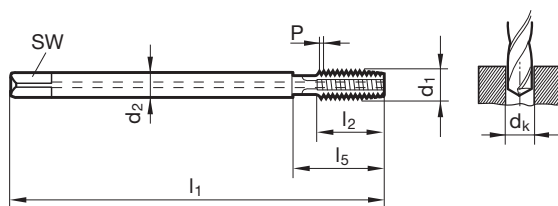
Oil feed taps for ISO metric threads



P ≤ 1200 Cutting data page 465

M	
K	•
N	≥ 7
S	
H	

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	C
Type	H
Form	C
Internal cooling	



DIN 2184-1 DIN 376

Article no.

778

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M27	3.000	20.000	16.000	24.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000
M33	3.500	25.000	20.000	29.50	180.000	40.000	91.000
M36	4.000	28.000	22.000	32.00	200.000	50.000	102.000
M39	4.000	32.000	24.000	35.00	200.000	50.000	107.000



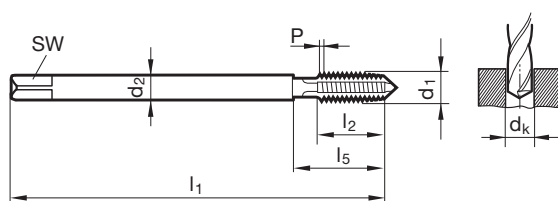
Oil feed taps for ISO metric threads



P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

Cutting data page 465

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	C
Type	H
Form	C
Internal cooling	

NEW

Company std.

Article no.

779

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M16	2.000	12.000	9.000	14.00	160.000	26.000	100.000
M20	2.500	16.000	12.000	17.50	180.000	32.000	120.000
M24	3.000	18.000	14.500	21.00	200.000	36.000	120.000
M27	3.000	20.000	16.000	24.00	225.000	36.000	145.000
M30	3.500	22.000	18.000	26.50	250.000	40.000	160.000
M33	3.500	25.000	20.000	29.50	275.000	40.000	170.000
M36	4.000	28.000	22.000	32.00	300.000	50.000	180.000
M39	4.000	32.000	24.000	35.00	325.000	50.000	210.000

Aluminum, non-ferrous
metals and plastics

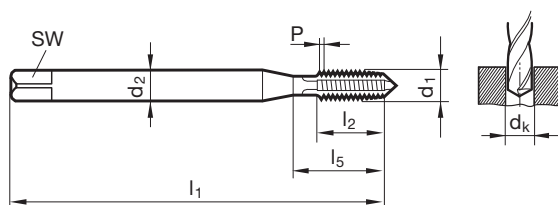
Machine taps for ISO metric threads



Cutting data page 463/464

P	
M	
K	○
N	≥ 7
S	
H	

Tool material	HSS-E	
Tolerance on Ø	ISO2/6H	ISO3/6G
Surface	○	○
Type	Ms	Ms
Form	E	E
Internal cooling		



DIN 2184-1 DIN 371

Article no.

800

1084

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

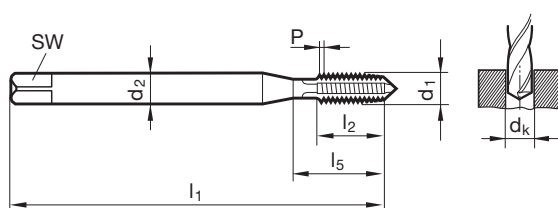


Machine taps for ISO metric threads



P	
M	
K	
N	○
S	
H	

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	●
Type	H AZ
Form	C
Internal cooling	



DIN 2184-1 DIN 371

Article no.

788

Aluminum, non-ferrous
metals and plastics

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	9.000	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

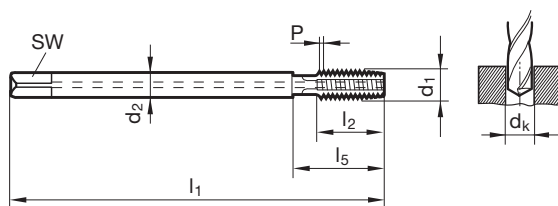
Oil feed taps for ISO metric threads



Cutting data page 464

P	
M	
K	
N	○
S	
H	

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	A + M
Type	N AZ
Form	E
Internal cooling	



DIN 2184-1 DIN 376

Article no.

2899

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000

Machine taps for ISO metric threads



P	•
M	•
K	○
N	•
S	○
H	

Cutting data page 465

Tool material

HSS-E-PM

Tolerance on Ø

ISO2/6H

ISO2/6H

Surface

S

C

Type

N R50

N R50

Form

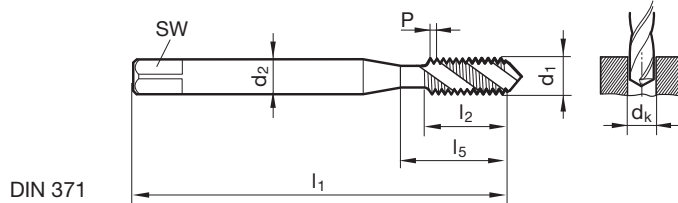
C

C

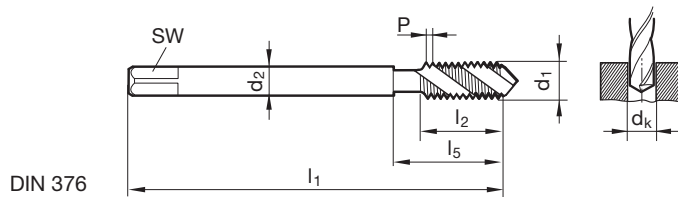
Internal cooling

X

X



DIN 371



DIN 376

Aluminum, non-ferrous
metals and plastics

DIN 2184-1 DIN 371

Article no.

767

1152

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376

Article no.

1098

1293

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000

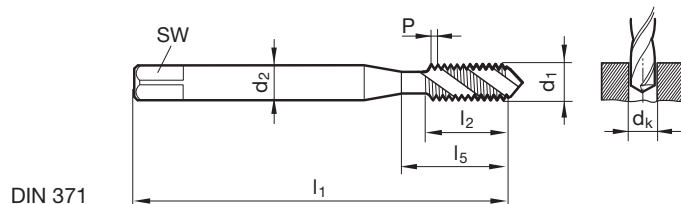
Machine taps for ISO metric threads



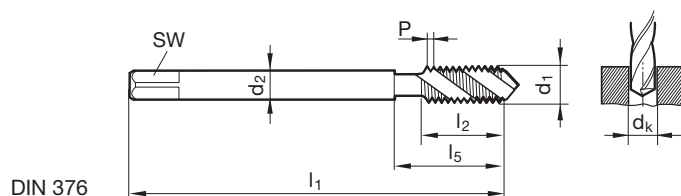
P	•
M	•
K	○
N	•
S	○
H	

Cutting data page 465

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface		
Type	VA R50	VA R50
Form	C	C
Internal cooling		



DIN 371



DIN 376



DIN 2184-1 DIN 371

Article no.

761

1139

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	2.500	18.000
M4	0.700	4.500	3.400	3.30	63.000	3.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	4.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	5.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	6.300	35.000
M10	1.500	10.000	8.000	8.50	100.000	7.500	39.000

DIN 2184-1 DIN 376

Article no.

763

1142

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	8.800	63.000
M14	2.000	11.000	9.000	12.00	110.000	10.000	58.000
M16	2.000	12.000	9.000	14.00	110.000	10.000	58.000
M20	2.500	16.000	12.000	17.50	140.000	12.500	85.000



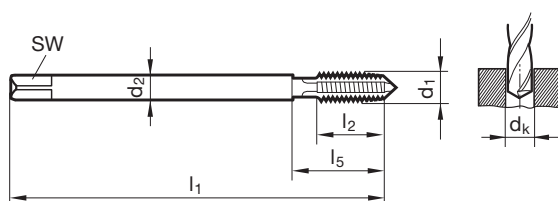
Machine taps for ISO metric fine threads



P	≤ 1000
M	•
K	
N	•
S	
H	

Cutting data page 463

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	N
Form	B
Internal cooling	



DIN 2184-1 DIN 374

Article no.

1873

Aluminum, non-ferrous
metals and plastics

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 7 X0.75	5.500	4.300	6.20	80.000	13.000	30.000	7.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	28.000	48.000	24.008

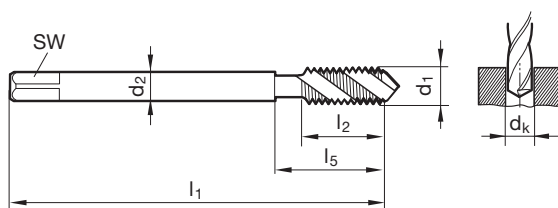
Machine taps for ISO metric fine threads



Cutting data page 464

P	
M	•
K	
N	•
S	
H	

Tool material	HSS-E-PM
Tolerance on Ø	ISO2/6H
Surface	○
Type	VA R40
Form	C
Internal cooling	



DIN 2184-1 DIN 374

Article no.

936

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007

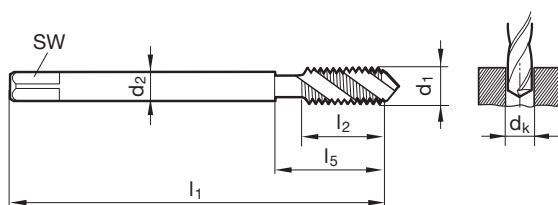
Machine taps for ISO metric fine threads



P	•
M	•
K	○
N	○
S	○
H	

Cutting data page 465

Tool material	HSS-E-PM	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	S	C
Type	N R50	N R50
Form	C	C
Internal cooling		



Aluminum, non-ferrous metals and plastics

DIN 2184-1 DIN 374

Article no.

1100

1294

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007

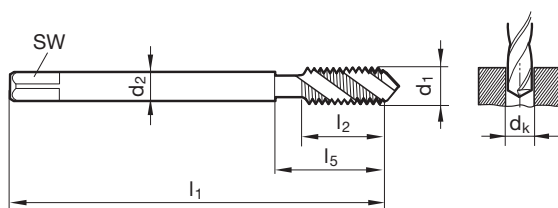
Machine taps for ISO metric fine threads



Cutting data page 465

P	•
M	•
K	○
N	•
S	○
H	

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface		
Type	VA R50	VA R50
Form	C	C
Internal cooling		



DIN 2184-1 DIN 374

Article no.

764

1144

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	5.000	44.000	8.005
M8 x 1	6.000	4.900	7.00	90.000	5.000	47.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	5.000	47.000	10.005
M10 x 1	7.000	5.500	9.00	90.000	5.000	44.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	5.000	53.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	7.500	53.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	7.500	48.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	7.500	48.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	7.500	58.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	7.500	70.000	20.007



Oil feed taps for ISO metric fine threads



Cutting data page 463/465

P	
M	
K	•
N	≥ 7
S	
H	

Tool material

Solid carbide

Tolerance on Ø

6HX

6HX

Surface



Type

H

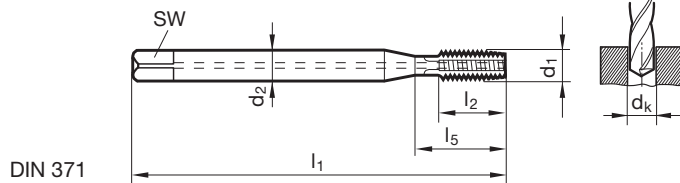
H

Form

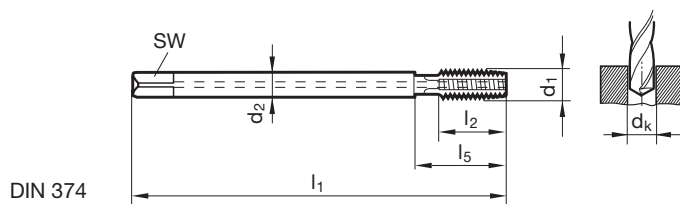
C

C

Internal cooling



DIN 371



DIN 374



DIN 2184-1 DIN 371

Article no.

972

1861

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	6.000	4.900	4.50	70.000	10.000	25.000	5.003
M 8 x 1	8.000	6.200	7.00	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.00	90.000	18.000	35.000	10.005

DIN 2184-1 DIN 374

Article no.

974

1860

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 X1.5	9.000	7.000	10.50	100.000	22.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	22.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	24.000	45.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	45.000	20.007

Aluminum, non-ferrous
metals and plastics

Oil feed taps for ISO metric fine threads



P	
M	
K	•
N	≥ 7
S	
H	

Cutting data page 465

Tool material **Solid carbide**

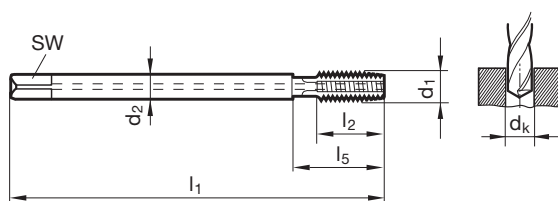
Tolerance on Ø 6HX

Surface ○

Type H

Form E

Internal cooling



DIN 2184-1 ~DIN 371/~DIN 374

Article no.

1009

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10.000	8.000	9.00	90.000	18.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	22.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	22.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	22.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007



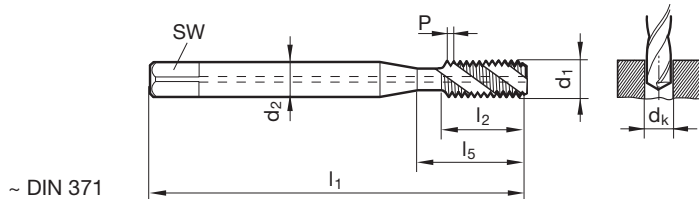
Oil feed taps for ISO metric fine threads



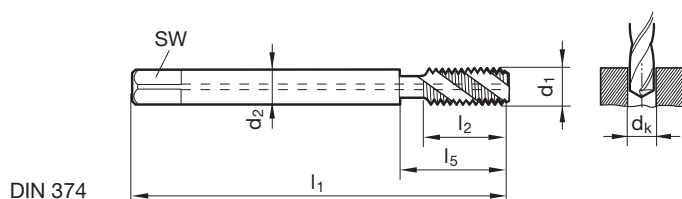
Cutting data page 465

P	
M	
K	○
N	≥ 7
S	
H	

Tool material	Solid carbide
Tolerance on Ø	6HX
Surface	○
Type	N R15
Form	C
Internal cooling	



~ DIN 371



DIN 374

Aluminum, non-ferrous
metals and plastics

DIN 2184-1 DIN 371

Article no.

977

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 4 X0.5	4.500	3.400	3.50	63.000	10.000	21.000	4.003
M 5 X0.5	6.000	4.900	4.50	70.000	10.000	25.000	5.003
M 6 X0.5	6.000	4.900	5.50	80.000	12.000	30.000	6.003
M8 x 1	8.000	6.200	7.00	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.00	90.000	18.000	35.000	10.005

DIN 2184-1 DIN 374

Article no.

978

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 X1.5	9.000	7.000	10.50	100.000	22.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	22.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	24.000	45.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	45.000	20.007

Oil feed taps for ISO metric threads



P	
M	
K	
N	≥ 7
S	
H	

Tool material **Solid carbide**

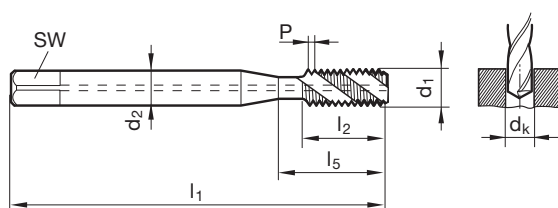
Tolerance on Ø 6HX

Surface **M**

Type N R15

Form C

Internal cooling



DIN 2184-1 DIN 371

Article no.

2516

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M5	6.000	4.900	4.20	70.000	10.000	25.000	5.000
M6	6.000	4.900	5.00	80.000	12.000	30.000	6.000
M8	8.000	6.200	6.80	90.000	16.000	35.000	8.000
M10	10.000	8.000	8.50	100.000	18.000	39.000	10.000



Oil feed taps for ISO metric fine threads



Cutting data page 463

P	
M	
K	
N	≥ 7
S	
H	

Tool material **Solid carbide**

Tolerance on Ø 6HX

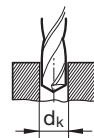
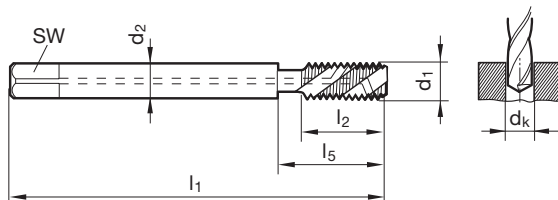
Surface ○

Type N L15

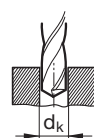
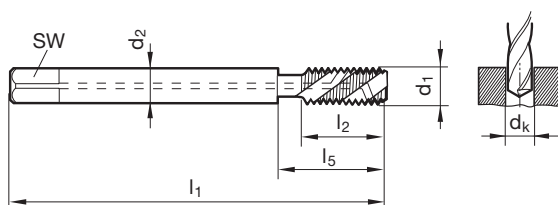
Form D

Internal cooling

~ DIN 371



DIN 374

Aluminum, non-ferrous
metals and plastics

DIN 2184-1 DIN 371

Article no.

975

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 4 X0.5	4.500	3.400	3.50	63.000	10.000	21.000	4.003
M 5 X0.5	6.000	4.900	4.50	70.000	10.000	25.000	5.003
M 6 X0.5	6.000	4.900	5.50	80.000	12.000	30.000	6.003
M8 x 1	8.000	6.200	7.00	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.00	90.000	18.000	35.000	10.005

DIN 2184-1 DIN 374

Article no.

976

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 X1.5	9.000	7.000	10.50	100.000	22.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	22.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	24.000	45.000	18.007

Oil feed taps for ISO metric fine threads



P ≤ 1200 Cutting data page 465

M	
K	•
N	≥ 7
S	
H	

Tool material **HSS-E-PM**

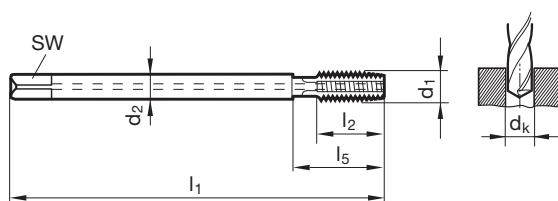
Tolerance on Ø 6HX

Surface

Type H

Form C

Internal cooling



DIN 2184-1 DIN 374

Article no.

1090

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M 6 X0.5	4.500	3.400	5.50	80.000	13.000	30.000	6.003
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007



Oil feed taps for ISO metric fine threads



P ≤ 1200 Cutting data page 465

M	
K	•
N	≥ 7
S	
H	

Tool material **HSS-E-PM**

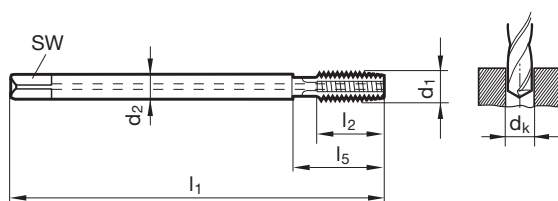
Tolerance on Ø 6HX

Surface

Type H

Form E

Internal cooling



DIN 2184-1 DIN 374

Article no.

1007

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M9 x 1	7.000	5.500	8.00	90.000	16.000	35.000	9.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.00	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	12.80	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.00	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007

Aluminum, non-ferrous
metals and plastics

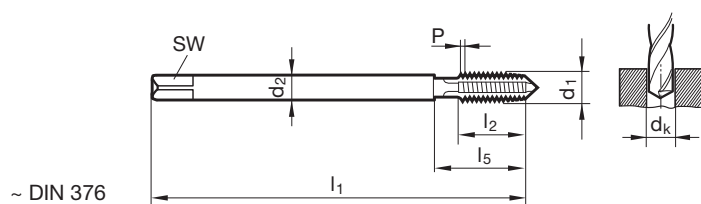
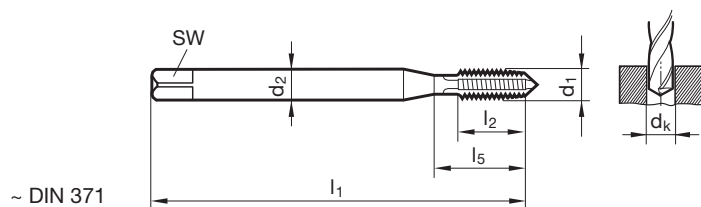
Machine taps for UNC-threads



P ≤ 1000 Cutting data page 463

M	•
K	
N	•
S	
H	

Tool material	HSS-E
Tolerance on Ø	2B
Surface	○
Type	N
Form	B
Internal cooling	

**DIN 2184-1 ~DIN 371**

Article no.

1980

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.35	56.000	11.000	18.000	2.845
6 - 32	4.000	3.000	2.85	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376

Article no.

1985

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
1/2 - 13	9.000	7.000	10.80	110.000	25.000	49.000	12.700
9/16 - 12	11.000	9.000	12.20	110.000	28.000	53.000	14.288
5/8 - 11	12.000	9.000	13.50	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	33.000	62.000	19.050
7/8 - 9	18.000	14.500	19.50	140.000	35.000	62.000	22.225
1 - 8	18.000	14.500	22.25	160.000	38.000	73.000	25.400



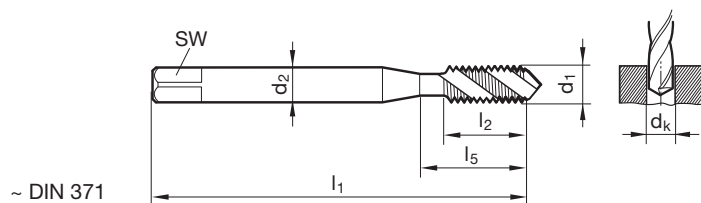
Machine taps for UNC-threads



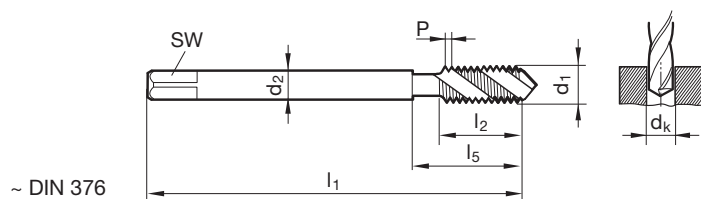
Cutting data page 464

P	
M	•
K	
N	•
S	
H	

Tool material	HSS-E
Tolerance on Ø	2B
Surface	○
Type	VA R40
Form	C
Internal cooling	



~ DIN 371



~ DIN 376

Aluminum, non-ferrous
metals and plastics

DIN 2184-1 ~DIN 371

Article no.

1981

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
2 - 56	2.800	2.100	1.85	45.000	5.000	14.500	2.184
4 - 40	3.500	2.700	2.35	56.000	7.000	18.000	2.845
5 - 40	3.500	2.700	2.65	56.000	7.000	18.000	3.175
6 - 32	4.000	3.000	2.85	56.000	8.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	8.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	11.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	11.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	13.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	14.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	16.000	39.000	9.525

DIN 2184-1 ~DIN 376

Article no.

1986

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	9.40	100.000	18.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	20.000	49.000	12.700
9/16 - 12	11.000	9.000	12.20	110.000	21.000	53.000	14.288
5/8 - 11	12.000	9.000	13.50	110.000	24.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	25.000	62.000	19.050
7/8 - 9	18.000	14.500	19.50	140.000	28.000	62.000	22.225

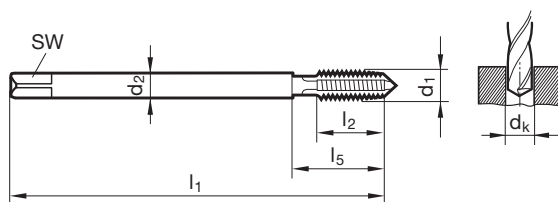
Machine taps for UNF-threads



P	≤ 1000
M	•
K	
N	•
S	
H	

Cutting data page 463

Tool material	HSS-E
Tolerance on Ø	2B
Surface	○
Type	N
Form	B
Internal cooling	



DIN 2184-1 ~DIN 374

Article no.

1990

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 32	3.500	2.700	4.10	70.000	14.000	25.000	4.826
1/4 - 28	4.500	3.400	5.50	80.000	16.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	18.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	18.000	35.000	9.525



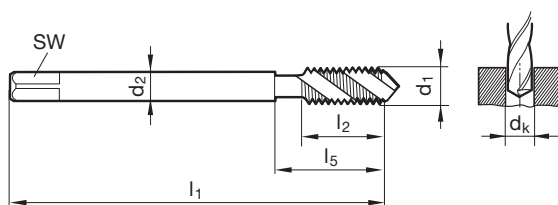
Machine taps for UNF-threads



Cutting data page 464

P	
M	•
K	
N	•
S	
H	

Tool material	HSS-E
Tolerance on Ø	2B
Surface	○
Type	VA R40
Form	C
Internal cooling	



DIN 2184-1 ~DIN 374

Article no.

2867

Aluminum, non-ferrous
metals and plastics

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
1/4 - 28	4.500	3.400	5.50	80.000	9.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	11.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	11.000	35.000	9.525
1/2 - 20	9.000	7.000	11.50	100.000	13.000	40.000	12.700
7/8 - 14	18.000	14.500	20.40	125.000	19.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	22.000	50.000	25.400

Machine taps for BSP-threads



Cutting data page 463

P	≤ 1000
M	•
K	
N	•
S	
H	

Tool material **HSS-E**

Tolerance on Ø

Surface



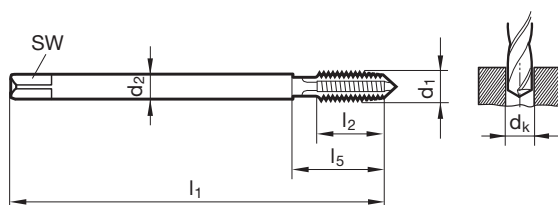
Type

N

Form

B

Internal cooling

**DIN 2184-1 DIN 5156**

Article no.

967

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	25.000	44.000	20.955
G3/4	14.000	20.000	16.000	24.50	140.000	28.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	28.000	53.000	30.201



Machine taps for BSP-threads



Cutting data page 464

P	
M	•
K	
N	•
S	
H	

Tool material **HSS-E-PM**

Tolerance on Ø

Surface



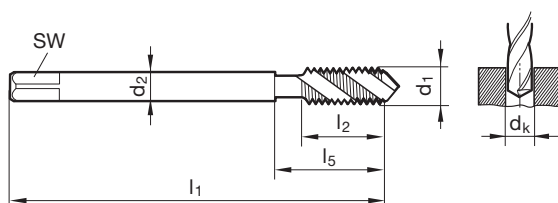
Type

VA R40

Form

C

Internal cooling

Aluminum, non-ferrous
metals and plastics

DIN 2184-1 DIN 5156

Article no.

939

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/8	28.000	7.000	5.500	8.80	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	14.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	18.000	44.000	20.955

Machine taps for BSP-threads



Cutting data page 465

P	•
M	•
K	○
N	•
S	○
H	

Tool material **HSS-E-PM**

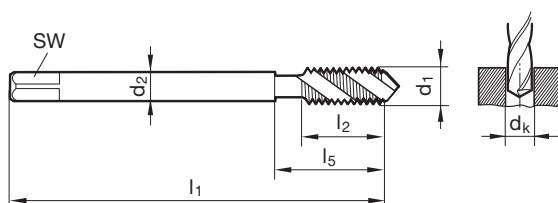
Tolerance on Ø

Surface **S**

Type VA R50

Form C

Internal cooling



DIN 2184-1 DIN 5156

Article no.

4159

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	4.500	47.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	4.500	47.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	6.700	48.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	6.700	48.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	9.100	70.000	20.955



Aluminum, non-ferrous
metals and plastics

FLUTELESS TAPS



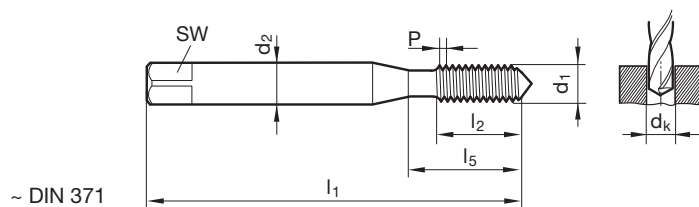
Fluteless machine taps for ISO metric threads



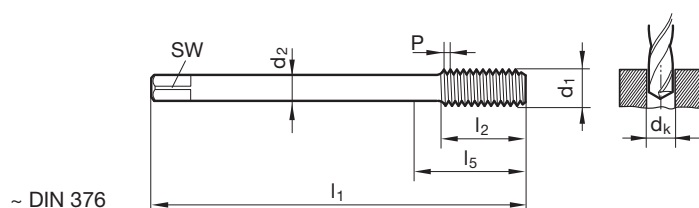
Cutting data page 466

P	•
M	•
K	
N	○
S	
H	

Tool material	HSS-E	HSS-E-PM	
Tolerance on Ø	6HX	6HX	6HX
Surface	S	S	Cb
Type	N	N	N
Form	C	C	C
Internal cooling			



~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371

Article no.

921

1255

1347

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1	0.250	2.500	2.100	0.90	40.000	4.000	
M 1.2	0.250	2.500	2.100	1.10	40.000	4.800	
M 1.4	0.300	2.500	2.100	1.25	40.000	5.600	
M 1.6	0.350	2.500	2.100	1.45	40.000	6.400	
M 1.7	0.350	2.500	2.100	1.55	40.000	6.800	
M 1.8	0.350	2.500	2.100	1.65	40.000	7.300	
M2	0.400	2.800	2.100	1.85	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.30	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

925

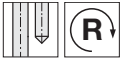
1256

1566

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000



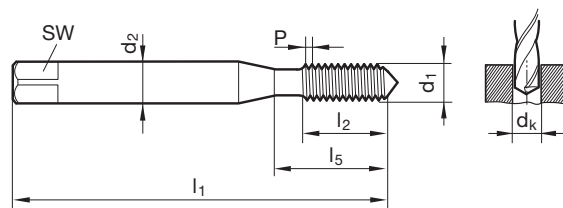
Fluteless machine taps for ISO metric threads



P	•
M	•
K	
N	○
S	
H	

Cutting data page 466

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 371

Article no.

920

Aluminum, non-ferrous
metals and plastics

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.85	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.30	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

Fluteless machine taps for ISO metric threads



P	•
M	•
K	
N	○
S	
H	

Cutting data page 466

Tool material

HSS-E-PM

Tolerance on Ø

6GX

6GX

Surface

S

Cb

Type

N

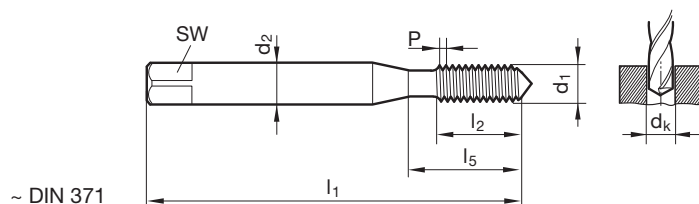
N

Form

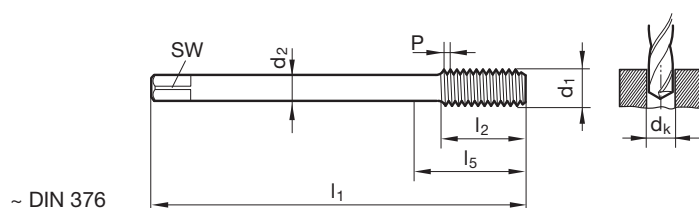
C

C

Internal cooling



~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371

Article no.

903

1565

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.85	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.30	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

952

1567

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 466

P	•
M	•
K	
N	≥ 7
S	○
H	

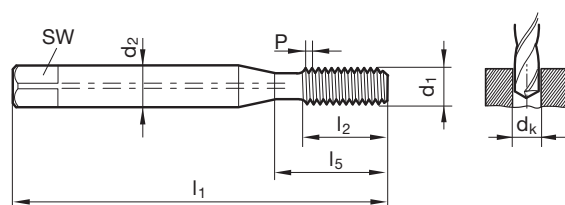
Tool material **Solid carbide**

Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling 

DIN 2174 ~DIN 371/~DIN 376

Article no.

2518

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

Aluminum, non-ferrous
metals and plastics

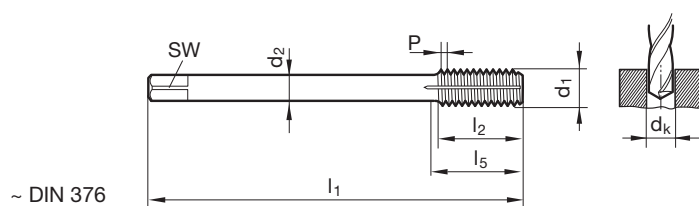
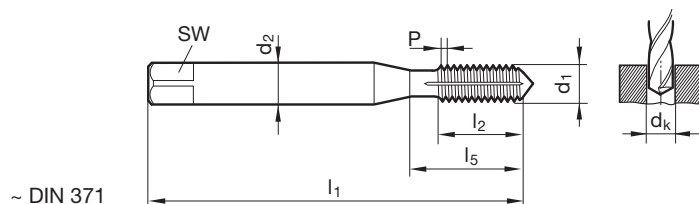
Fluteless machine taps for ISO metric threads



Cutting data page 467

P	•
M	•
K	
N	○
S	○
H	

Tool material	HSS-E		
Tolerance on Ø	6GX	6HX	6HX
Surface	S	S	C
Type	N	N	N
Form	C	C	C
Internal cooling			



DIN 2174 ~DIN 371

Article no.

918

919

2012

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

922

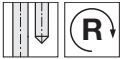
923

2013

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M6	1.000	4.500	3.400	5.55	80.000	16.000	30.000
M8	1.250	6.000	4.900	7.40	90.000	17.000	35.000
M10	1.500	7.000	5.500	9.30	100.000	20.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000
M22	2.500	18.000	14.500	20.90	140.000	32.000	62.000
M24	3.000	18.000	14.500	22.70	160.000	36.000	73.000
M27	3.000	20.000	16.000	25.70	160.000	36.000	73.000
M30	3.500	22.000	18.000	28.50	180.000	40.000	85.000
M33	3.500	25.000	20.000	31.50	180.000	40.000	91.000
M36	4.000	28.000	22.000	34.30	200.000	50.000	102.000
M39	4.000	32.000	24.000	37.30	200.000	50.000	107.000



Fluteless machine taps for ISO metric threads



Cutting data page 467

P	•
M	•
K	•
N	○
S	○
H	

Tool material **HSS-E-PM**

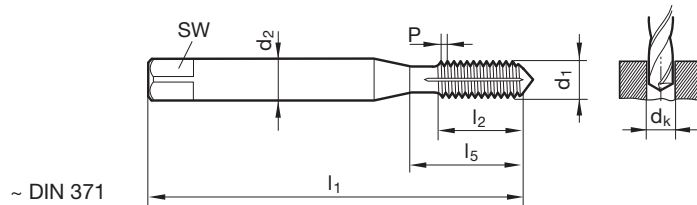
Tolerance on Ø 6HX

Surface **S**

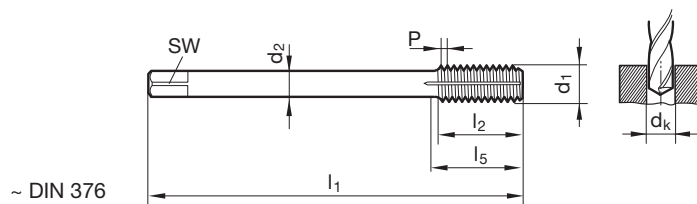
Type N

Form C

Internal cooling



~ DIN 371



~ DIN 376

Aluminum, non-ferrous
metals and plastics

DIN 2174 ~DIN 371

Article no.

322

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376

Article no.

339

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

Fluteless machine taps for ISO metric threads



Cutting data page 467

P	•
M	•
K	•
N	○
S	○
H	

Tool material **HSS-E-PM**

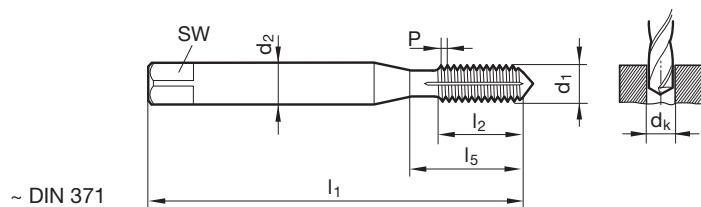
Tolerance on Ø 6HX

Surface **S**

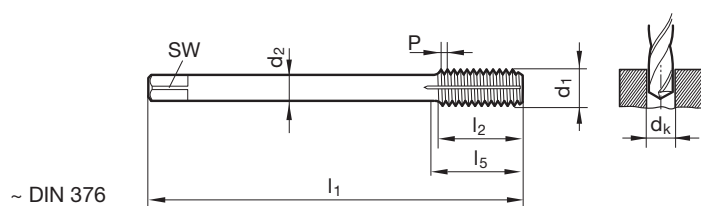
Type N

Form C

Internal cooling



~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371

Article no.

1266

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

1267

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 467

P	•
M	•
K	
N	○
S	○
H	

Tool material

HSS-E

Tolerance on Ø

6HX

6GX

6HX

Surface

S

S

C

Type

N

N

N

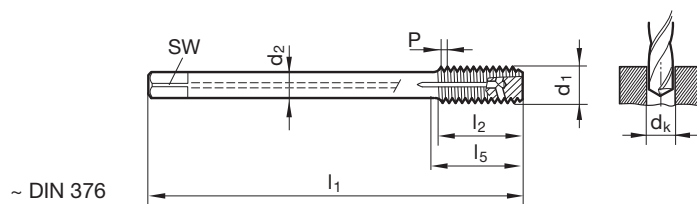
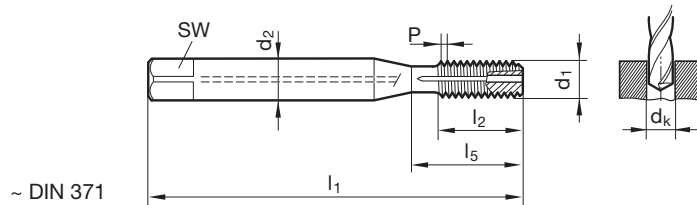
Form

C

C

C

Internal cooling



DIN 2174 ~DIN 371

Article no.

2442

2443

2446

Aluminum, non-ferrous metals and plastics

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376

Article no.

2444

2445

2448

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

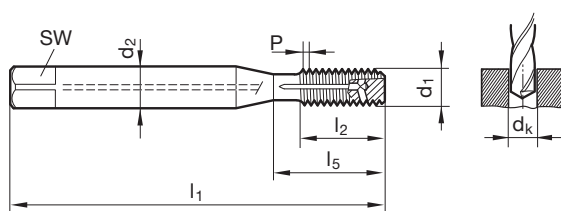
Oil feed fluteless taps f. ISO metric threads



Cutting data page 467

P	•
M	•
K	
N	≥ 7
S	○
H	

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	C
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 371

Article no.

2447

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 467

P	•
M	•
K	•
N	○
S	○
H	

Tool material **HSS-E-PM**

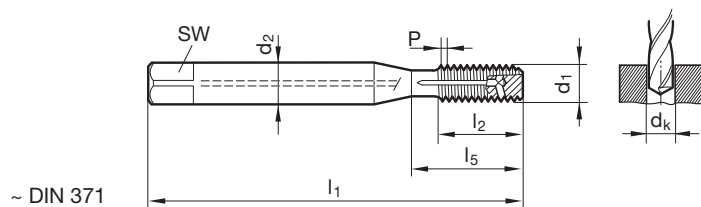
Tolerance on Ø 6HX

Surface **S**

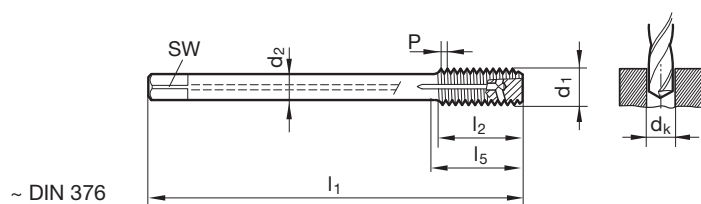
Type N

Form C

Internal cooling



~ DIN 371



~ DIN 376

Aluminum, non-ferrous
metals and plastics

DIN 2174 ~DIN 371

Article no.

323

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376

Article no.

342

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

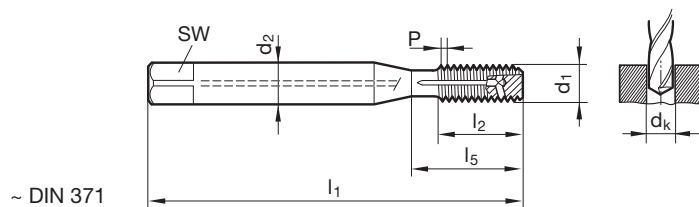
Oil feed fluteless taps f. ISO metric threads



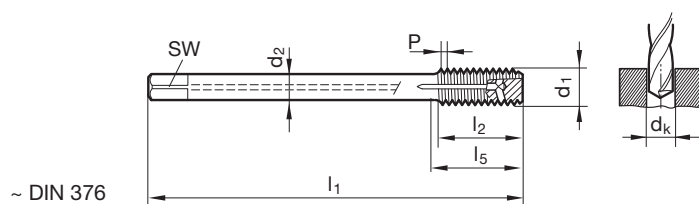
Cutting data page 467

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface		
Type	N	N
Form	C	E
Internal cooling		



~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371

Article no.

1270

1725

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

1271

1727

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000



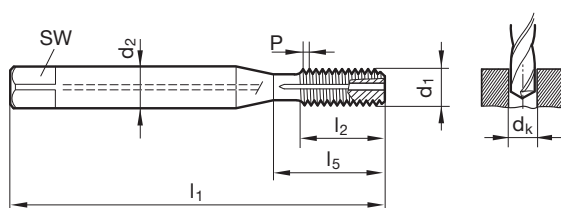
Oil feed fluteless taps f. ISO metric threads



Cutting data page 467

P	
M	
K	
N	•
S	
H	

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	Ⓒb
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 371/~DIN 376

Article no.

2515

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	25.000	62.000

Aluminum, non-ferrous
metals and plastics

Oil feed fluteless taps f. ISO metric threads



Cutting data page 467

P	•
M	•
K	
N	≥ 7
S	•
H	

Tool material **HSS-E-PM**

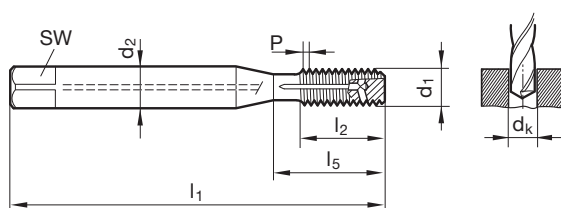
Tolerance on Ø 6GX

Surface

Type N

Form C

Internal cooling



DIN 2174 ~DIN 371

Article no.

1713

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 466

P	•
M	•
K	•
N	○
S	•
H	

Tool material **HSS-E-PM**

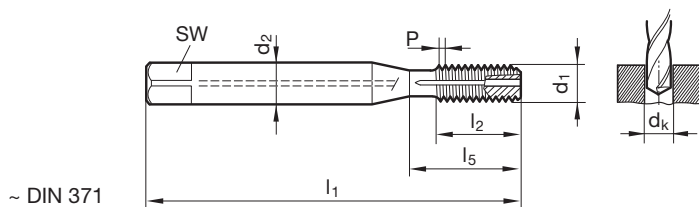
Tolerance on Ø 6GX

Surface **S**

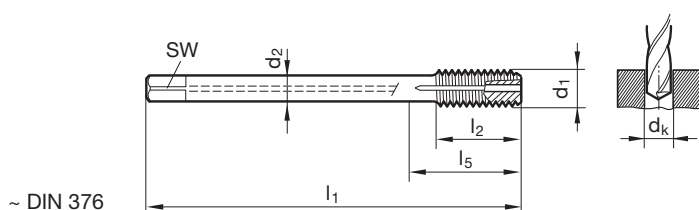
Type N

Form E

Internal cooling



~ DIN 371



~ DIN 376

Aluminum, non-ferrous
metals and plastics

DIN 2174 ~DIN 371

Article no.

1726

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

1728

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

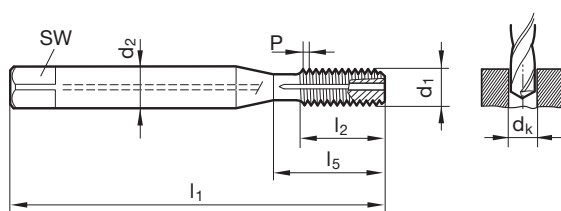
Oil feed fluteless taps f. ISO metric threads



P	
M	
K	
N	•
S	
H	

Cutting data page 467

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	Ⓢ
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 371/~DIN 376

Article no.

4146

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	25.000	62.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 467

P	•
M	•
K	
N	○
S	○
H	

Tool material **HSS-E-PM**

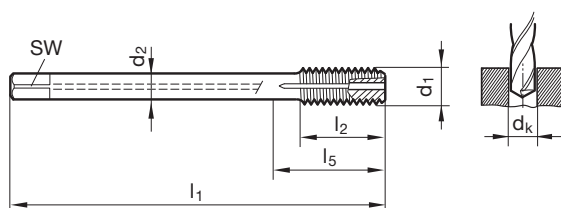
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



Company std. Company std.

Article no.

4143

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	112.000	6.000	18.000
M4	0.700	2.800	2.100	3.70	112.000	7.500	77.000
M5	0.800	3.500	2.700	4.65	125.000	8.500	90.000
M6	1.000	4.500	3.400	5.55	125.000	11.000	90.000
M8	1.250	6.000	4.900	7.40	140.000	14.000	97.000
M10	1.500	7.000	5.500	9.30	160.000	16.000	117.000
M12	1.750	9.000	7.000	11.20	180.000	18.500	133.000
M16	2.000	12.000	9.000	15.10	220.000	20.000	168.000
M20	2.500	16.000	12.000	18.90	280.000	25.000	225.000

Aluminum, non-ferrous
metals and plastics

Oil feed fluteless taps f. ISO metric threads



Cutting data page 467

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material **Solid carbide**

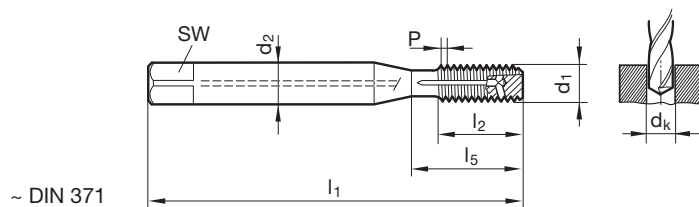
Tolerance on Ø 6HX

Surface

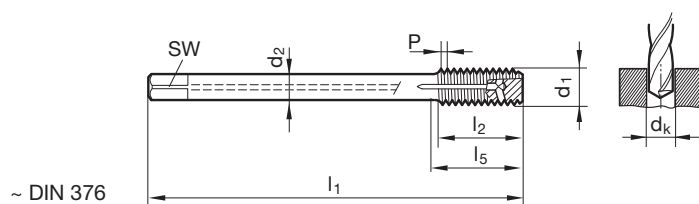
Type N

Form C

Internal cooling



~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371

Article no.

1972

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376

Article no.

1931

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	25.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	25.000	62.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 467

P	•
M	•
K	•
N	≥ 7
S	•
H	

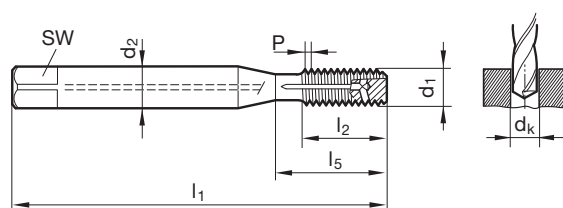
Tool material **Solid carbide**

Tolerance on Ø 6HX

Surface **C**

Type N

Form E

Internal cooling 

DIN 2174 ~DIN 371

Article no.

1927

Aluminum, non-ferrous
metals and plastics

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

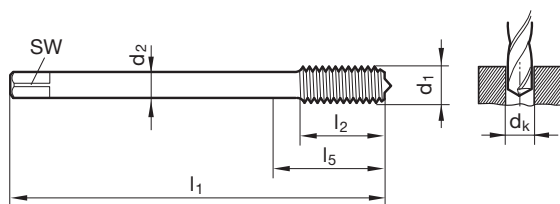
Fluteless machine taps for ISO metric fine threads



Cutting data page 466

P	•
M	•
K	
N	○
S	
H	

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 374

Article no.

929

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007



Fluteless machine taps for ISO metric fine threads



Cutting data page 466

P	•
M	•
K	•
N	○
S	•
H	•

Tool material **HSS-E-PM**

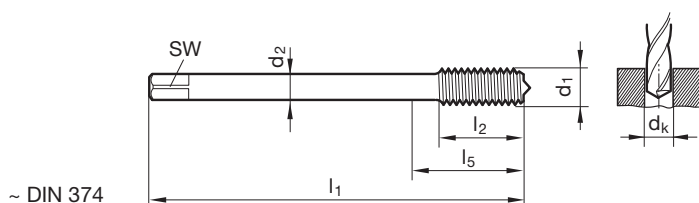
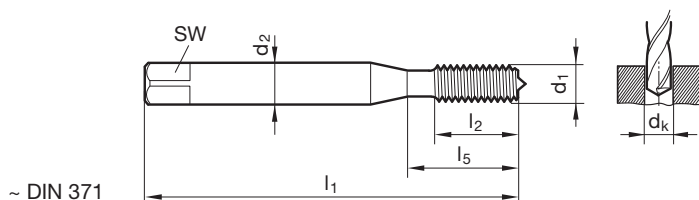
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



Aluminum, non-ferrous metals and plastics

DIN 2174 ~DIN 371

Article no.

1257

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M9 x 1	9.000	7.000	8.55	90.000	16.000	35.000	9.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374

Article no.

1258

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.55	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	23.10	140.000	28.000	48.000	24.008

Fluteless machine taps for ISO metric fine threads



Cutting data page 466

P	
M	
K	
N	•
S	
H	

Tool material **HSS-E-PM**

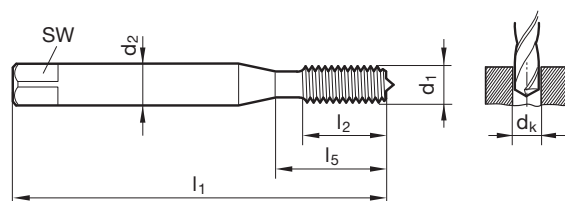
Tolerance on Ø 6HX

Surface **Ⓢ**

Type N

Form C

Internal cooling



DIN 2174 ~DIN 371

Article no.

1568

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005



Fluteless machine taps for ISO metric fine threads



Cutting data page 466

P	•
M	•
K	
N	○
S	
H	

Tool material **HSS-E-PM**

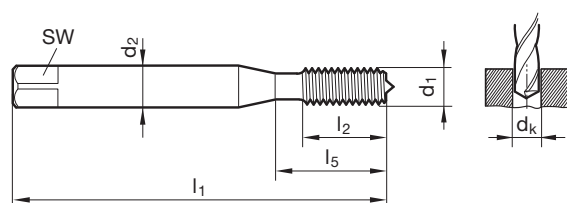
Tolerance on Ø 6GX

Surface **S**

Type N

Form C

Internal cooling



DIN 2174 ~DIN 371

Article no.

1740

Aluminum, non-ferrous
metals and plastics

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

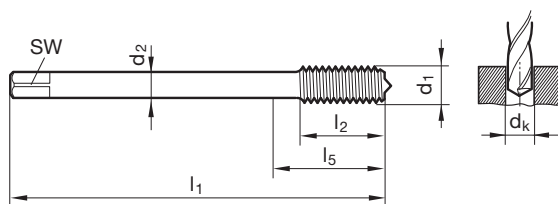
Fluteless machine taps for ISO metric fine threads



Cutting data page 466

P	•
M	•
K	
N	○
S	
H	

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 374

Article no.

928

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007



Fluteless machine taps for ISO metric fine threads



Cutting data page 466

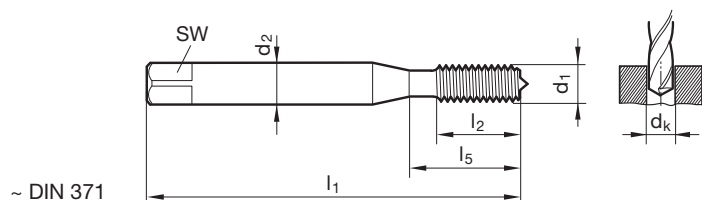
P	
M	
K	
N	•
S	
H	

Tool material **HSS-E-PM**

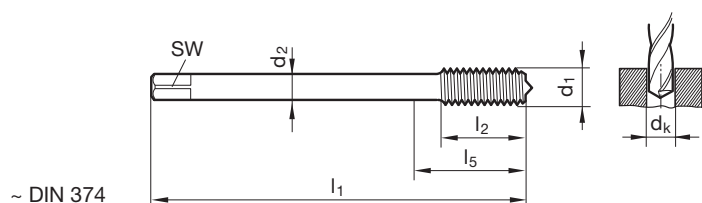
Tolerance on Ø 6GX

Surface **Ⓒb**Type **N**Form **C**

Internal cooling



~ DIN 371



~ DIN 374

Aluminum, non-ferrous
metals and plastics**DIN 2174 ~DIN 371**

Article no.

1569

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374

Article no.

1580

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

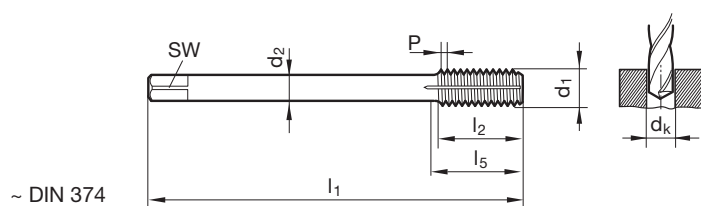
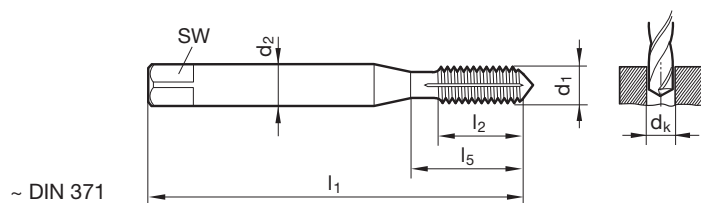
Fluteless machine taps for ISO metric fine threads



Cutting data page 467

P	•
M	•
K	•
N	○
S	○
H	

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 371

Article no.

1275

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	6.000	4.900	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	8.000	6.200	7.65	80.000	14.000	30.000	8.004
M 8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374

Article no.

927

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.65	80.000	14.000	30.000	8.004
M 8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	9.40	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	21.30	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007



Fluteless machine taps for ISO metric fine threads



Cutting data page 467

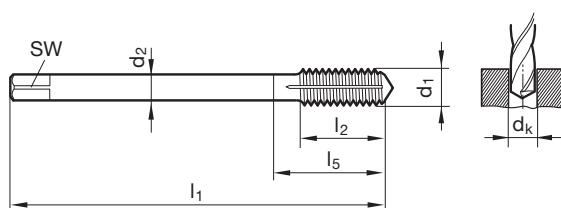
P	•
M	•
K	
N	≥ 7
S	○
H	

Tool material **HSS-E**

Tolerance on Ø 6HX

Surface **C**Type **N**Form **C**

Internal cooling



DIN 2174 ~DIN 374

Article no.

2008

Aluminum, non-ferrous
metals and plastics

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.65	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 X1.25	7.000	5.500	9.40	100.000	20.000	39.000	10.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007

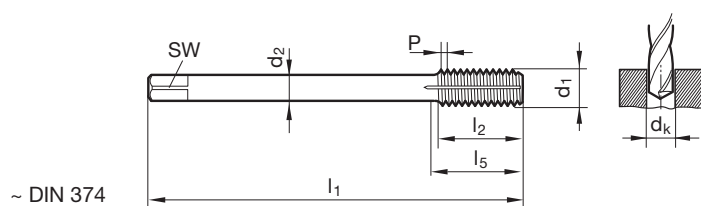
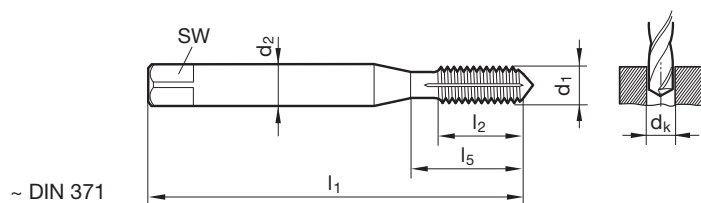
Fluteless machine taps for ISO metric fine threads



Cutting data page 467

P	•
M	•
K	•
N	○
S	○
H	

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 371

Article no.

1277

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374

Article no.

926

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.55	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007



Fluteless machine taps for ISO metric fine threads



Cutting data page 467

P	•
M	•
K	•
N	○
S	○
H	

Tool material **HSS-E-PM**

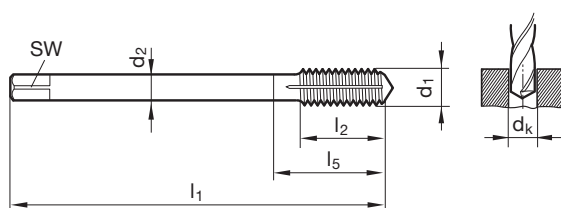
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



DIN 2174 ~DIN 374

Article no.

333

Aluminum, non-ferrous
metals and plastics

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	16.000	44.000	20.007

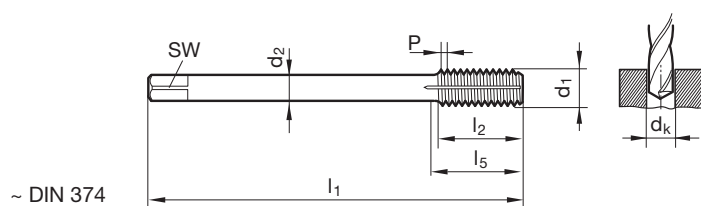
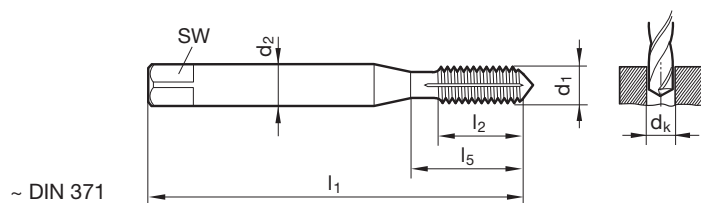
Fluteless machine taps for ISO metric fine threads



Cutting data page 467

P	•
M	•
K	•
N	○
S	○
H	

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

**DIN 2174 ~DIN 371**

Article no.

1268

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374

Article no.

1269

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 x 2	18.000	14.500	23.10	140.000	28.000	48.000	24.008



Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 467

P	•
M	•
K	•
N	○
S	○
H	

Tool material **HSS-E-PM**

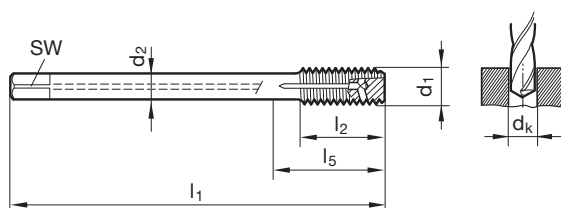
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



DIN 2174 ~DIN 374

Article no.

338

Aluminum, non-ferrous
metals and plastics

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007

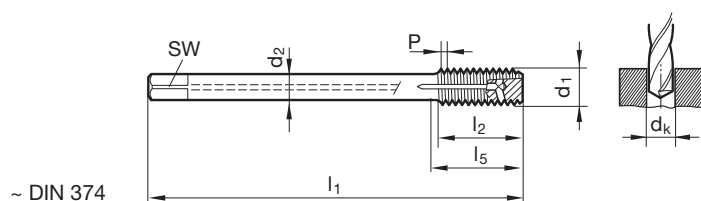
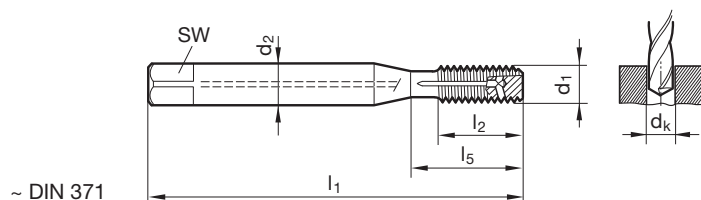
Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 467

P	•
M	•
K	
N	≥ 7
S	•
H	

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface		
Type	N	N
Form	C	E
Internal cooling		



DIN 2174 ~DIN 371

Article no.

1272

1729

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M9 x 1	9.000	7.000	8.55	90.000	16.000	35.000	9.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374

Article no.

1273

1731

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	21.30	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007



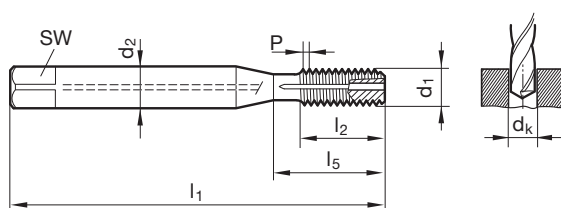
Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 467

P	
M	
K	
N	•
S	
H	

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	Ⓢ
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 371/~DIN 374

Article no.

4147

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	11.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	11.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.55	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007

Aluminum, non-ferrous
metals and plastics

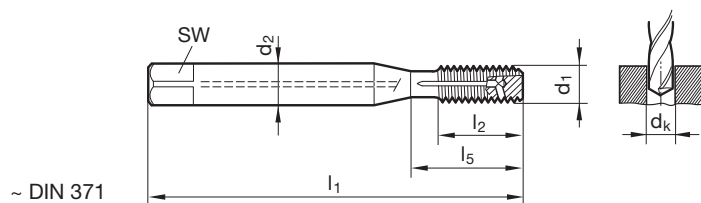
Oil feed fluteless taps f. ISO metric fine threads



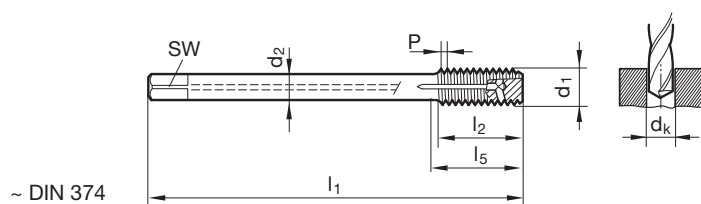
Cutting data page 467

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material	HSS-E-PM	
Tolerance on Ø	6GX	6GX
Surface		
Type	N	N
Form	C	E
Internal cooling		



~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371

Article no.

1715

1730

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374

Article no.

1716

1732

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007



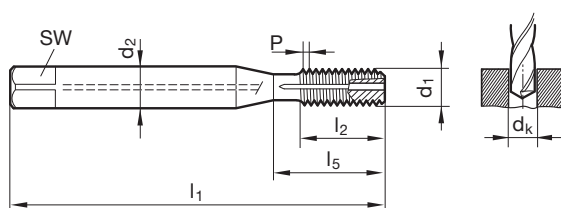
Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 467

P	
M	
K	
N	•
S	
H	

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	Ⓢ
Type	N
Form	C
Internal cooling	



DIN 2174 ~DIN 371/~DIN 374

Article no.

4151

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	11.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	11.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.55	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007

Aluminum, non-ferrous
metals and plastics

Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 467

P	•
M	•
K	
N	○
S	○
H	

Tool material **HSS-E-PM**

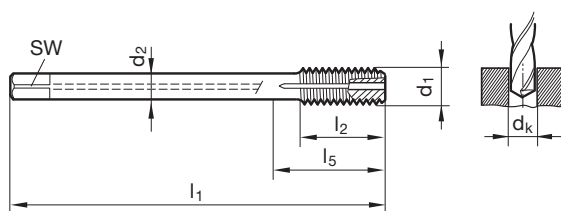
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



Company std.

Article no.

4145

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	140.000	14.000	97.000	8.005
M10 x 1	7.000	5.500	9.55	160.000	16.000	117.000	10.005
M10 X1.25	7.000	5.500	9.40	160.000	16.000	117.000	10.006
M12 x 1	9.000	7.000	11.55	180.000	18.500	133.000	12.005
M12 X1.5	9.000	7.000	11.30	180.000	18.500	133.000	12.007
M14 X1.5	11.000	9.000	13.30	220.000	20.000	168.000	14.007
M16 X1.5	12.000	9.000	15.30	220.000	20.000	168.000	16.007



Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 467

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material **Solid carbide**

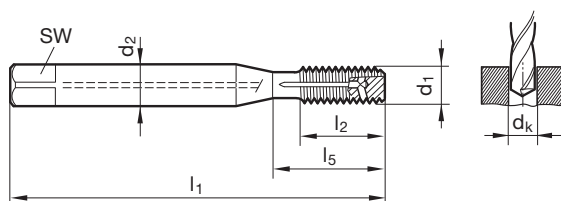
Tolerance on Ø 6HX

Surface **C**

Type N

Form C

Internal cooling



DIN 2174 ~DIN 371/~DIN 376

Article no.

1581

Aluminum, non-ferrous
metals and plastics

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10.000	8.000	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	15.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	15.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	15.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	15.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	15.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	15.000	48.000	24.007

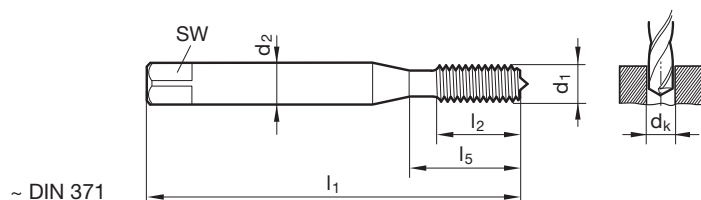
Fluteless machine taps for UNC-threads



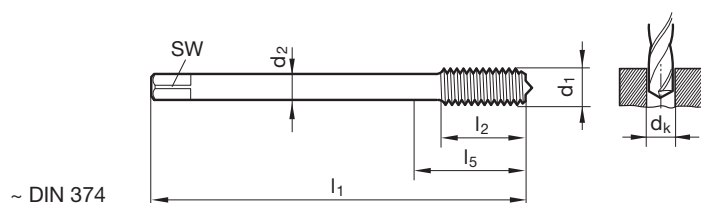
Cutting data page 466/467

P	•
M	•
K	
N	○
S	
H	

Tool material	HSS-E	
Tolerance on Ø	2BX	2BX
Surface	S	S
Type	N	N
Form	C	C
Internal cooling		



~ DIN 371



~ DIN 374



DIN 2184-1 ~DIN 371

Article no.

2273

1582

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.55	56.000	11.000	18.000	2.845
5 - 40	3.500	2.700	2.90	56.000	11.000	18.000	3.175
6 - 32	4.000	3.000	3.15	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.80	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	4.35	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	5.00	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.75	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	7.30	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.80	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376

Article no.

2274

1583

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	10.30	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	11.80	110.000	25.000	49.000	12.700
9/16 - 12	11.000	9.000	13.30	110.000	28.000	53.000	14.288
5/8 - 11	12.000	9.000	14.80	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	17.90	125.000	33.000	62.000	19.050
7/8 - 9	18.000	14.500	21.00	140.000	35.000	62.000	22.225



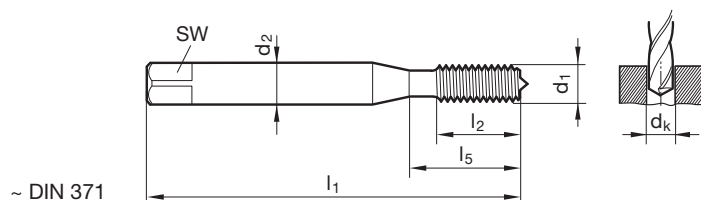
Fluteless machine taps for UNF-threads



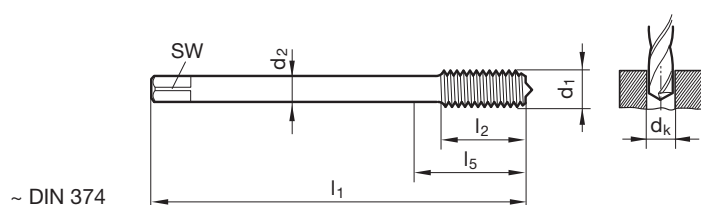
Cutting data page 466/467

P	•
M	•
K	
N	○
S	
H	

Tool material	HSS-E	
Tolerance on Ø	2BX	2BX
Surface	S	S
Type	N	N
Form	C	C
Internal cooling		



~ DIN 371



~ DIN 374



Aluminum, non-ferrous metals and plastics

DIN 2184-1 ~DIN 371

Article no.

1283

1584

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 48	3.500	2.700	2.60	56.000	10.000	18.000	2.845
5 - 44	3.500	2.700	2.90	56.000	10.000	18.000	3.175
6 - 40	4.000	3.000	3.20	56.000	11.000	20.000	3.505
8 - 36	4.500	3.400	3.85	63.000	12.000	21.000	4.166
10 - 32	6.000	4.900	4.45	70.000	14.000	25.000	4.826
12 - 28	6.000	4.900	5.10	80.000	16.000	30.000	5.486
1/4 - 28	7.000	5.500	5.95	80.000	16.000	30.000	6.350
5/16 - 24	8.000	6.200	7.45	90.000	18.000	35.000	7.938
3/8 - 24	10.000	8.000	9.05	90.000	18.000	35.000	9.525

DIN 2184-1 ~DIN 374

Article no.

1585

2275

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 32	3.500	2.700	4.45	70.000	14.000	25.000	4.826
12 - 28	4.000	3.000	5.10	80.000	16.000	30.000	5.486
1/4 - 28	4.500	3.400	5.95	80.000	16.000	30.000	6.350
5/16 - 24	6.000	4.900	7.45	90.000	18.000	35.000	7.938
3/8 - 24	7.000	5.500	9.05	90.000	18.000	35.000	9.525
7/16 - 20	8.000	6.200	10.55	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	12.10	100.000	20.000	40.000	12.700
9/16 - 18	11.000	9.000	13.65	100.000	22.000	40.000	14.288
5/8 - 18	12.000	9.000	15.25	100.000	22.000	44.000	15.875
3/4 - 16	14.000	11.000	18.35	110.000	25.000	44.000	19.050
7/8 - 14	18.000	14.500	21.40	125.000	25.000	44.000	22.225
1 - 12	18.000	14.500	24.45	140.000	28.000	50.000	25.400

Fluteless machine taps for BSP-threads



Cutting data page 466

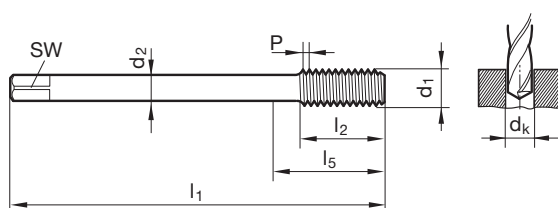
P	•
M	•
K	
N	○
S	
H	

Tool material **HSS-E**

Tolerance on Ø

Surface **S**Type **N**Form **C**

Internal cooling

**DIN 2184-1 DIN 2189**

Article no.

966

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	7.30	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	9.30	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	12.50	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	16.00	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	20.00	125.000	25.000	44.000	20.955
G3/4	14.000	20.000	16.000	25.50	140.000	28.000	53.000	26.441
G1	11.000	25.000	20.000	32.00	160.000	30.000	56.000	33.249
G1 1/4	11.000	32.000	24.000	40.75	170.000	30.000	57.000	41.910



Fluteless machine taps for BSP-threads



Cutting data page 467

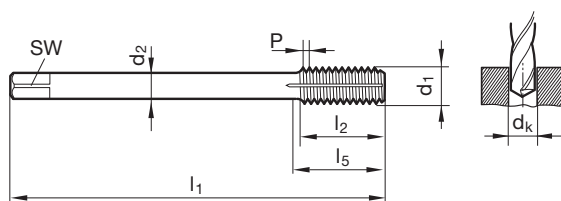
P	•
M	•
K	
N	○
S	○
H	

Tool material **HSS-E**

Tolerance on Ø

Surface **S**Type **N**Form **C**

Internal cooling



DIN 2184-1 DIN 2189

Article no.

1586

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	7.30	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	9.30	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	12.50	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	16.00	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	20.00	125.000	25.000	44.000	20.955
G3/4	14.000	20.000	16.000	25.50	140.000	28.000	53.000	26.441

Aluminum, non-ferrous
metals and plastics

Oil feed fluteless taps f. BSP-threads



Cutting data page 467

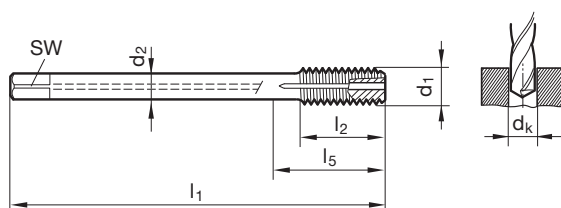
P	
M	
K	
N	•
S	
H	

Tool material **HSS-E**

Tolerance on Ø

Surface **Ⓢ**Type **N**Form **C**

Internal cooling

**DIN 2184-1 DIN 2189**

Article no.

4152

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	7.30	90.000	11.000	30.000	7.723
G1/8	28.000	7.000	5.500	9.30	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	12.50	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	16.00	100.000	14.000	44.000	16.662
G1/2	14.000	16.000	12.000	20.00	125.000	18.000	44.000	20.955
G3/4	14.000	20.000	16.000	25.50	140.000	20.000	53.000	26.441
G1	11.000	25.000	20.000	32.00	160.000	24.000	56.000	33.249



Aluminum, non-ferrous
metals and plastics

THREAD MILLING CUTTERS



Thread milling cutters without chamfer for ISO metric threads

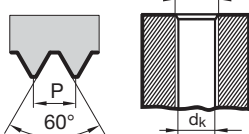
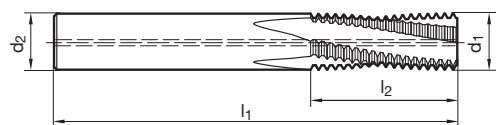


Cutting data page 468

P	•
M	○
K	•
N	•
S	○
H	≤55

Tool material	Solid carbide		
Surface			
Type	TM SP	TM SP	TM SP
Internal cooling			
Shank form	HA	HB	HA

NEW



Company std.

Article no.

3737

3743

3734

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	13.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	18.100	3	8.000
M8 x 1	1.000	6.400	8.000	7.00	62.000	17.500	3	8.005
M10	1.500	7.950	10.000	8.50	74.000	21.800	3	10.000
M10 x 1	1.000	7.950	10.000	9.00	74.000	21.500	3	10.005
M10 X1.25	1.250	7.950	10.000	8.80	74.000	21.900	3	10.006
M12	1.750	9.950	10.000	10.20	74.000	25.400	4	12.000
M12 X1.5	1.500	9.950	10.000	10.50	74.000	26.300	4	12.007
M14	2.000	11.200	12.000	12.00	90.000	31.000	4	14.000
M14 X1.5	1.500	11.200	12.000	12.50	90.000	30.800	4	14.007
M16	2.000	12.800	14.000	14.00	90.000	35.000	4	16.000
M16 X1.5	1.500	12.800	14.000	14.50	90.000	33.800	4	16.007
M20	2.500	14.950	16.000	17.50	102.000	41.300	4	20.000
M20 X1.5	1.500	14.950	16.000	18.50	102.000	42.800	4	20.007



Thread milling cutters without chamfer for ISO metric threads



Cutting data page 468

P	•
M	○
K	•
N	•
S	○
H	≤55

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

Internal cooling

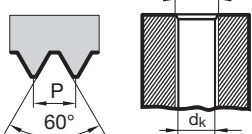
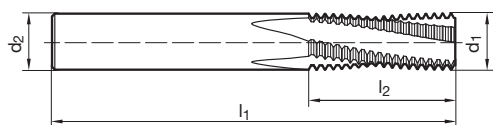


Shank form

HA

HB

NEW



Company std.

Article no.

4132

4133

Aluminum, non-ferrous
metals and plastics

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	13.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	18.100	3	8.000
M10	1.500	7.950	10.000	8.50	74.000	21.800	3	10.000
M12	1.750	9.950	10.000	10.20	74.000	25.400	4	12.000
M14	2.000	11.200	12.000	12.00	90.000	31.000	4	14.000
M16	2.000	12.800	14.000	14.00	90.000	35.000	4	16.000
M20	2.500	14.950	16.000	17.50	102.000	41.300	4	20.000

Thread milling cutters without chamfer for ISO metric threads



Cutting data page 468

P	•
M	○
K	•
N	•
S	○
H	≤55

Tool material

Solid carbide

Surface

C

C

Type

TM SP

TM SP

Internal cooling

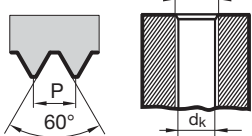
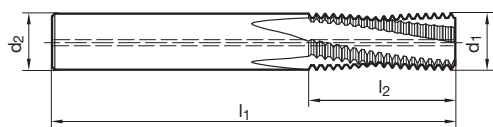


Shank form

HA

HB

NEW



Company std.

Article no.

3735

3740

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	16.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	21.900	3	8.000
M10	1.500	7.950	10.000	8.50	74.000	26.300	3	10.000
M12	1.750	9.950	10.000	10.20	74.000	32.400	4	12.000
M14	2.000	11.200	12.000	12.00	90.000	37.000	4	14.000
M16	2.000	12.800	14.000	14.00	90.000	43.000	4	16.000
M20	2.500	14.950	16.000	17.50	102.000	48.800	4	20.000



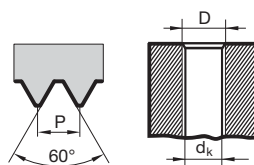
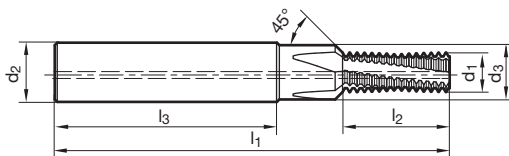
Thread milling cutters with chamfer for ISO metric threads



P	•	Cutting data page 469
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide		
Surface			
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA

NEW



Aluminum, non-ferrous metals and plastics

Company std.

Article no.

3525

3543

3510

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	5.300	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	7.400	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	9.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	10.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	13.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	17.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	20.100	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	25.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	27.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	33.800	4	20.000

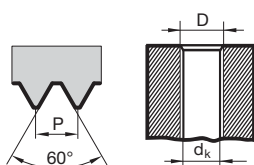
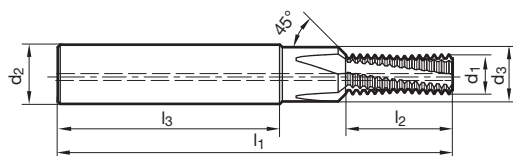
Thread milling cutters with chamfer for ISO metric threads



P	•	Cutting data page 469
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide		
Surface			
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA

NEW



Company std.

Article no.

3526

3544

3511

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	6.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	8.800	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	10.800	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	13.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	18.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	21.800	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	25.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	31.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	35.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	41.300	4	20.000



Thread milling cutters with chamfer for ISO metric threads



P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 469

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

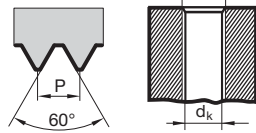
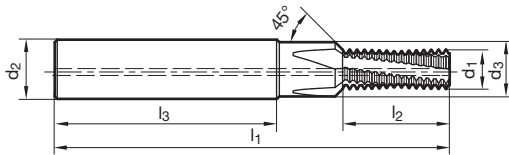


Shank form

HA

HB

NEW



Company std.

Article no.

3759

3760

Aluminum, non-ferrous metals and plastics

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	7.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	35.600	10.900	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	13.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	16.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	21.900	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	26.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	32.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	37.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	43.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	48.800	4	20.000

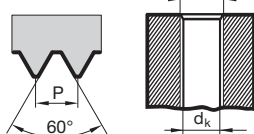
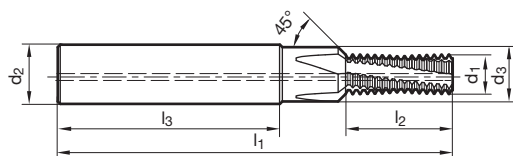
Thread milling cutters with chamfer for ISO metric fine threads



P	•	Cutting data page 469
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide		
Surface			
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA

NEW



Company std.

Article no.

3527

3545

3512

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	7.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	8.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	9.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	10.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	13.100	3	8.004
M 8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	13.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	16.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	16.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	19.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	20.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	23.300	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	26.300	4	16.007



Thread milling cutters with chamfer for ISO metric fine threads

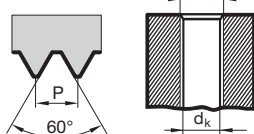
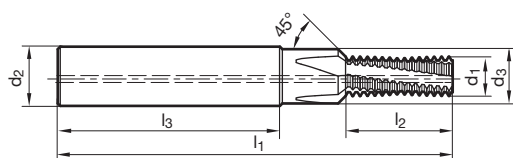


Cutting data page 469

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material	Solid carbide		
Surface			
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA

NEW



Aluminum, non-ferrous metals and plastics

Company std.

Article no.

3528

3546

3513

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	8.800	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	10.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	12.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	13.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	16.900	3	8.004
M 8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	17.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	21.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	21.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	25.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	26.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	30.800	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	33.800	4	16.007

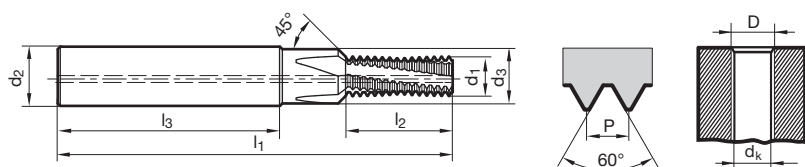
Thread milling cutters with chamfer for ISO metric fine threads



P	•	Cutting data page 469
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3762

3763

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	10.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	12.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	15.300	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	15.400	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	20.600	3	8.004
M 8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	20.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	25.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	25.600	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	30.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	30.800	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	38.300	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	41.300	4	16.007



Thread milling cutters without chamfer for UNC-threads



P	•	Cutting data page 468
M	○	
K	•	
N	•	
S	○	
H	≤55	

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

Internal cooling

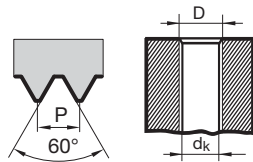
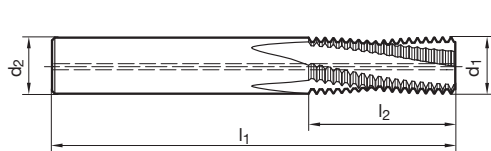


Shank form

HA

HB

NEW



Company std.

Article no.

4134

4135

Aluminum, non-ferrous
metals and plastics

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 24	3.400	6.000	3.90	54.000	11.100	3	4.826
12 - 24	4.100	6.000	4.50	54.000	12.200	3	5.486
1/4 - 20	4.700	6.000	5.10	54.000	14.600	3	6.350
5/16 - 18	6.100	8.000	6.60	64.000	17.600	3	7.938
3/8 - 16	7.600	8.000	8.00	64.000	21.400	3	9.525
7/16 - 14	9.000	10.000	9.40	74.000	24.500	3	11.113
1/2 - 13	9.950	10.000	10.80	74.000	28.300	4	12.700
9/16 - 12	11.400	12.000	12.20	90.000	30.700	4	14.288
5/8 - 11	12.700	14.000	13.50	90.000	35.800	4	15.875

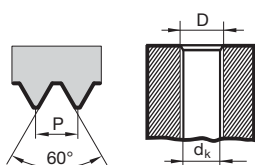
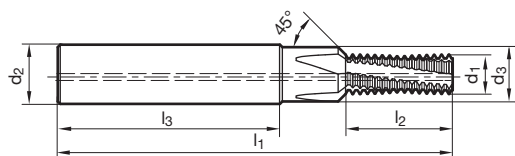
Thread milling cutters with chamfer for UNC-threads



P	•	Cutting data page 469
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3516

3534

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	12.100	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	14.800	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	16.700	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	19.000	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	22.500	4	12.700



Thread milling cutters with chamfer for UNC-threads



P	•	Cutting data page 469
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

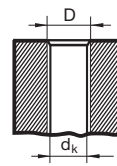
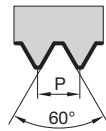
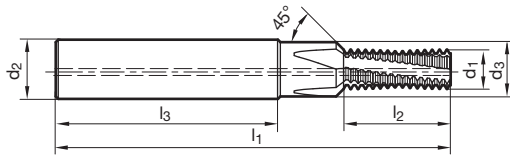


Shank form

HA

HB

NEW



Company std.

Article no.

3517

3535

Aluminum, non-ferrous metals and plastics

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	14.600	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	17.600	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	21.400	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	24.500	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	28.300	4	12.700

Thread milling cutters without chamfer for UNF-threads



Cutting data page 468

P	•
M	○
K	•
N	•
S	○
H	≤55

Tool material

Solid carbide

Surface

C

C

Type

TM SP

TM SP

Internal cooling

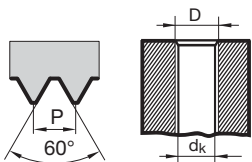
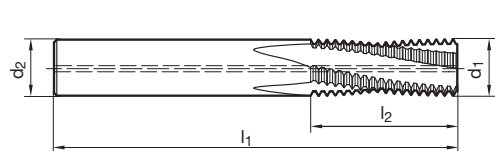


Shank form

HA

HB

NEW



Company std.

Article no.

4136

4137

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 32	3.800	6.000	4.10	54.000	11.500	3	4.826
12 - 28	4.300	6.000	4.60	54.000	12.200	3	5.486
1/4 - 28	5.100	6.000	5.50	54.000	14.100	3	6.350
5/16 - 24	6.300	8.000	6.90	64.000	17.500	3	7.938
3/8 - 24	7.800	8.000	8.50	64.000	20.600	3	9.525
7/16 - 20	9.400	10.000	9.90	74.000	24.800	3	11.113
1/2 - 20	9.950	10.000	11.50	74.000	27.300	4	12.700
9/16 - 18	11.400	12.000	12.90	90.000	30.300	4	14.288
5/8 - 18	12.700	14.000	14.50	90.000	33.200	4	15.875



Thread milling cutters with chamfer for UNF-threads



P	•	Cutting data page 469
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

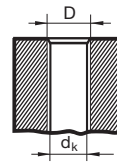
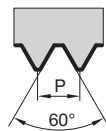
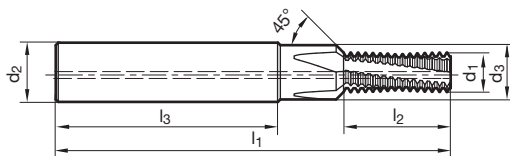
Internal cooling



Shank form

HA

HB



Aluminum, non-ferrous metals and plastics

Company std.

Article no.

3518

3536

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	11.300	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	13.200	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	16.400	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	18.400	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	21.000	4	12.700

Thread milling cutters with chamfer for UNF-threads



P • Cutting data page 469

M •

K •

N •

S •

H ≤55

Tool material

Solid carbide

Surface

C

C

Type

TMC SP

TMC SP

Internal cooling

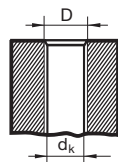
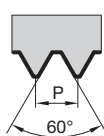
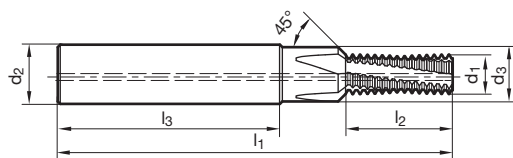


Shank form

HA

HB

NEW



Company std.

Article no.

3519

3537

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	14.100	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	17.500	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	20.600	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	24.800	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	27.300	4	12.700



Thread milling cutters without chamfer for BSP-threads



Cutting data page 468

P	•
M	○
K	•
N	•
S	○
H	≤55

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

Internal cooling

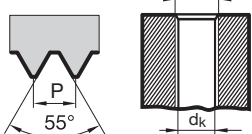
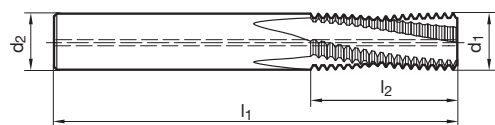


Shank form

HA

HB

NEW



Aluminum, non-ferrous metals and plastics

Company std.

Article no.

3745

3748

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	21.300	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	28.700	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	35.400	4	16.662

Thread milling cutters without chamfer for BSP-threads



P	•	Cutting data page 468
M	○	
K	•	
N	•	
S	○	
H	≤55	

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

Internal cooling

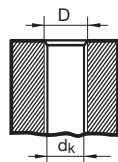
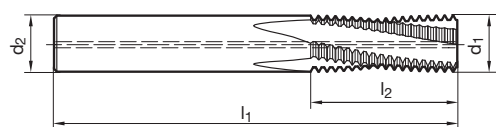


Shank form

HA

HB

NEW



Company std.

Article no.

3746

3750

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	24.900	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	35.400	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	43.500	4	16.662



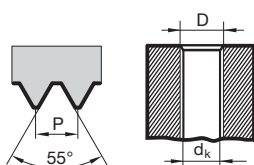
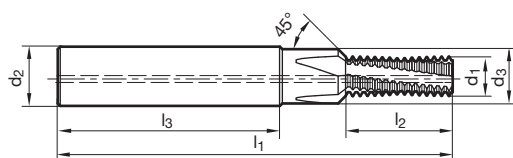
Thread milling cutters with chamfer for BSP-threads



P	•	Cutting data page 469
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Aluminum, non-ferrous metals and plastics

Company std.

Article no.

3514

3529

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	15.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	22.100	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	27.400	4	16.662

Thread milling cutters with chamfer for BSP-threads



P	•	Cutting data page 469
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material

Solid carbide

Surface

C

C

Type

TMC SP

TMC SP

Internal cooling

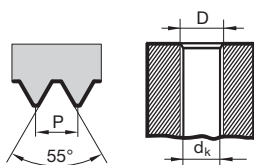
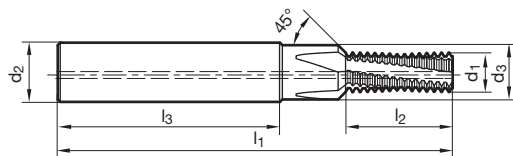


Shank form

HA

HB

NEW



Company std.

Article no.

3515

3533

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	21.300	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	28.700	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	35.400	4	16.662



Thread milling cutters with chamfer for BSP-threads



P	•	Cutting data page 469
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

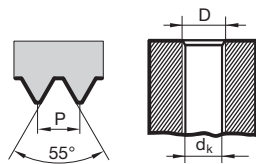
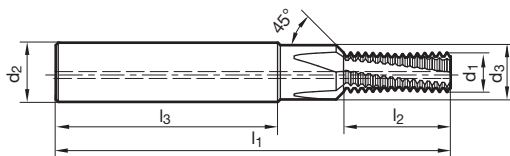


Shank form

HA

HB

NEW



Company std.

Article no.

3765

3766

Aluminum, non-ferrous
metals and plastics

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	24.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	35.400	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	43.500	4	16.662

Thread milling cutters without chamfer for NPT-threads



Cutting data page 468

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

Internal cooling

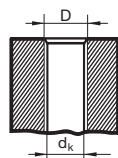
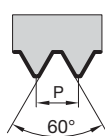
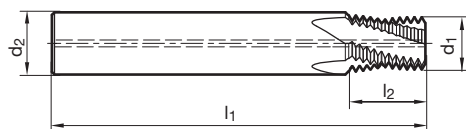


Shank form

HA

HB

NEW



Company std.

Article no.

3753

3754

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570



Thread milling cutters with chamfer for NPT-threads



P	•	Cutting data page 469
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

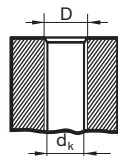
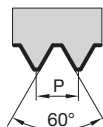
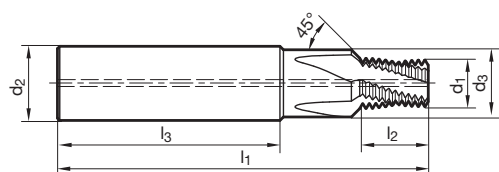


Shank form

HA

HB

NEW



Company std.

Article no.

3520

3538

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570

Aluminum, non-ferrous
metals and plastics

Thread milling cutters without chamfer for NPTF-threads



Cutting data page 468

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

Internal cooling

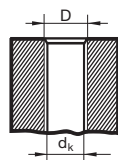
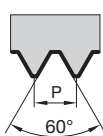
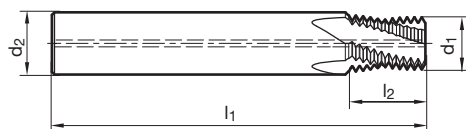


Shank form

HA

HB

NEW



Company std.

Article no.

3756

3757

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570



Thread milling cutters with chamfer for NPTF-threads



P	•	Cutting data page 469
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

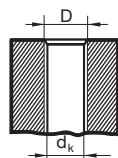
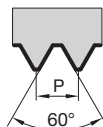
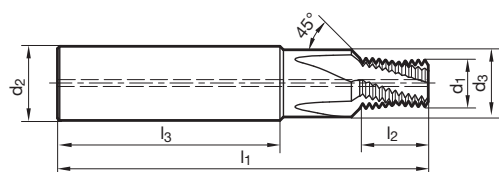


Shank form

HA

HB

NEW



Company std.

Article no.

3521

3539

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570

Aluminum, non-ferrous
metals and plastics

Universal thread milling cutters for ISO metric threads



Cutting data page 470

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface

C

C

○

Type

TMU SP

TMU SP

TMU SP

Internal cooling



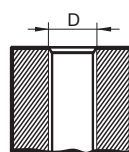
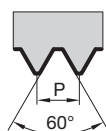
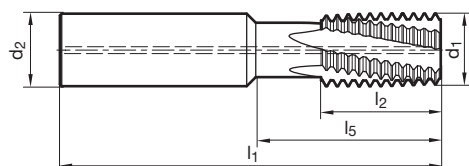
Shank form

HA

HB

HA

NEW



Company std.

Article no.

3541

3556

3523

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 10	7.950	8.000	64.000		20.000	4	8.050
1.000	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.100
1.250	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.125
1.500	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.150
1.000	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.150
1.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.100
1.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.200
3.000	≥ 24	17.950	18.000	102.000	50.000	33.000	5	18.300
1.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.100
1.500	≥ 26	19.950	20.000	105.000	50.000	33.000	5	20.150
2.000	≥ 27	19.950	20.000	105.000	50.000	33.000	5	20.200
2.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.250
3.000	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.300
3.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.350



External thread milling cutters



Cutting data page 470

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface

C

C

Type

TMU SP

TMU SP

Internal cooling

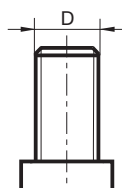
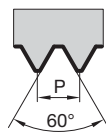
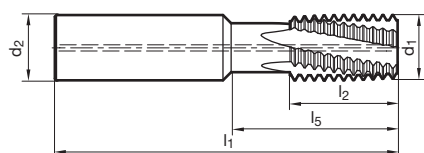


Shank form

HA

HB

NEW



Company std.

Article no.

4162

4163

Aluminum, non-ferrous
metals and plastics

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 3	9.950	10.000	70.000	25.000	16.000	4	10.050
0.750	≥ 5	9.950	10.000	70.000	25.000	16.000	4	10.075
1.000	≥ 6	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 8	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 10	11.950	12.000	80.000	31.000	20.000	4	12.150
1.500	≥ 10	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 14	15.950	16.000	90.000	40.000	25.000	5	16.200
2.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.250
3.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.300

Universal thread milling cutters for UN-threads



Cutting data page 470

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMU UN

TMU UN

Internal cooling

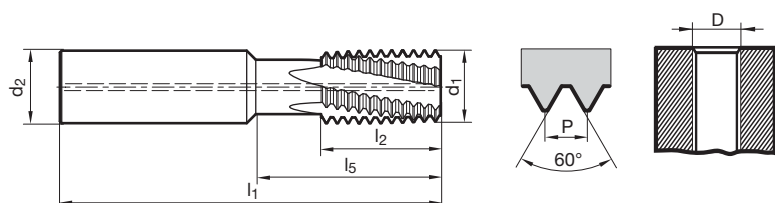


Shank form

HA

HB

NEW



Company std.

Article no.

3595

3596

P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
10.000	≥ 3/4	11.950	12.000	80.000	31.000	20.000	4	12.100
16.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.160
18.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.180
20.000	≥ 11/16	11.950	12.000	80.000	31.000	20.000	4	12.200
24.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.240
12.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.120
14.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.140
16.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.160
18.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.180
20.000	≥ 13/16	15.950	16.000	90.000	40.000	25.000	5	16.200
7.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.070
8.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.080
12.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.120
14.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.140
16.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.160



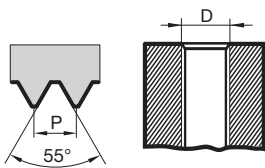
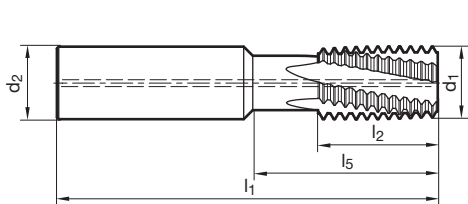
Universal thread milling cutters for BSP-threads



P	•	Cutting data page 470
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide		
Surface			
Type	TM SP	TM SP	TM SP
Internal cooling			
Shank form	HA	HB	HA

NEW



Company std.

Article no.

3542

3557

3524

Aluminum, non-ferrous metals and plastics

P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
19.000	≥ 1/4	9.950	10.000	70.000	25.000	16.000	4	10.190
14.000	≥ 1/2	15.950	16.000	90.000	40.000	25.000	5	16.140
11.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.110



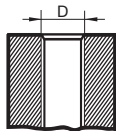
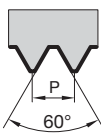
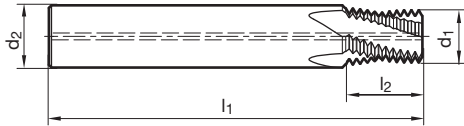
Universal thread milling cutters for NPT-threads



P	•	Cutting data page 470
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3768

3769

P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

Aluminum, non-ferrous metals and plastics



Universal thread milling cutters for NPTF-threads

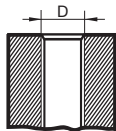
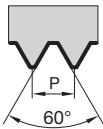
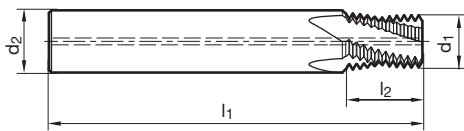


P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 470

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3772

3773

P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

Aluminum, non-ferrous
metals and plastics

Micro-thread milling cutters



Cutting data page 470

P	•
M	•
K	•
N	•
S	•
H	

Tool material

Solid carbide

Surface



Type

SP M

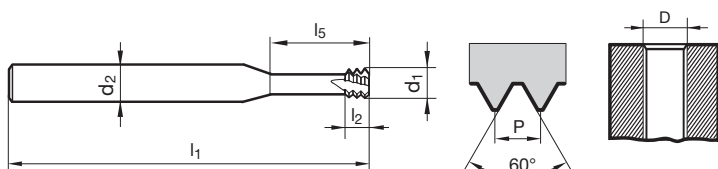
Threads

3,0

Shank form

HA

NEW



Company std.

Article no.

4226

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M 1.6	0.350	1.200	3.000	39.000	1.100	4.800	3	1.600
M 1.8	0.350	1.400	3.000	39.000	1.100	5.400	3	1.800
M2	0.400	1.550	3.000	39.000	1.200	6.000	4	2.000
M 2.5	0.450	1.950	3.000	39.000	1.400	7.500	4	2.500
M3	0.500	2.400	6.000	58.000	1.500	9.500	4	3.000
M 3.5	0.600	2.800	6.000	58.000	1.800	11.000	4	3.500
M4	0.700	3.200	6.000	58.000	2.100	12.500	4	4.000
M5	0.800	4.000	6.000	58.000	2.400	16.000	4	5.000
M6	1.000	4.800	6.000	58.000	3.000	20.000	4	6.000
M8	1.250	5.950	6.000	58.000	3.800	24.000	4	8.000
M10	1.500	7.800	8.000	73.000	4.500	33.000	4	10.000
M12	1.750	9.000	10.000	84.000	5.300	38.000	4	12.000
M16	2.000	11.800	10.000	84.000	6.000	35.000	5	16.000



Micro-thread milling cutters



Cutting data page 470

P	•
M	•
K	•
N	•
S	•
H	

Tool material

Solid carbide

Surface



Type

SP G

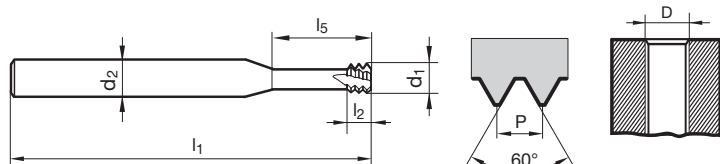
Threads

3,0

Shank form

HA

NEW



Company std.

Article no.

4228

D	P	d1	d2	l1	l2	l5	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	6.200	8.000	64.000	2.700	19.500	4	9.728
G3/8	19.000	9.950	10.000	73.000	4.000	25.000	4	16.662
G7/8	14.000	11.950	12.000	84.000	5.400	37.000	4	30.201
G2	11.000	15.950	16.000	105.000	6.900	44.000	5	59.614

Aluminum, non-ferrous
metals and plastics

Micro-thread milling cutters



Cutting data page 470

P	•
M	•
K	•
N	•
S	•
H	

Tool material **Solid carbide**

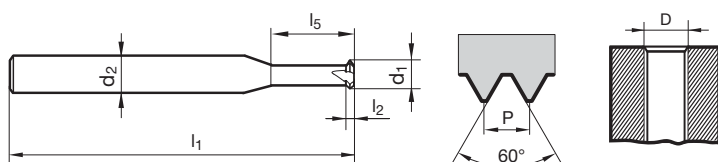
Surface

Type SP M/MF

Threads 1,0

Shank form HA

NEW



Company std.

Article no.

4225

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M1.4 - M1.8	0.350	1.050	3.000	39.000	0.400	3.800	3	1.800
M2 - M2.4	0.400	1.500	3.000	39.000	0.400	7.000	3	2.400
M2.5 - M3	0.500	2.000	3.000	39.000	0.500	9.000	4	3.000
M3.5 - M4.5	0.750	2.800	6.000	58.000	0.800	14.000	4	4.500
M5 - M7	1.000	4.000	6.000	58.000	1.000	19.000	4	7.000
M8 - M10	1.500	6.400	8.000	64.000	1.500	24.000	5	10.000



Drill thread milling cutters for ISO metric threads

1,5xD

P	
M	
K	○
N	●
S	
H	

Cutting data page 471

Tool material

Solid carbide

Surface



Type

DTMC SP

DTMC SP

DTMC SP

DTMC SP

Internal cooling



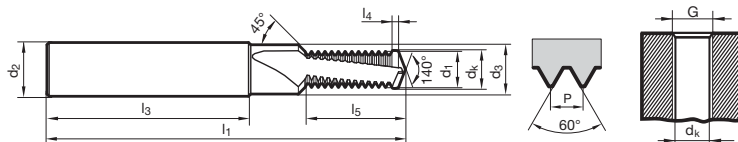
Shank form

HA

HA

HA

HA



Aluminum, non-ferrous metals and plastics

Company std.

Article no.

3774

3775

3776

3777

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.400	6.000	3.400	2.50	48.000	36.000	0.500	5.500	2	3.000
M4	0.700	3.200	6.000	4.500	3.30	48.000	36.000	0.700	6.900	2	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	0.800	8.800	2	5.000
M6	1.000	4.750	8.000	6.600	5.00	62.000	36.000	1.000	10.900	2	6.000
M8	1.250	6.350	10.000	9.000	6.80	74.000	40.000	1.250	13.700	2	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	1.500	18.000	2	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	1.500	20.900	2	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	1.500	23.700	2	14.000
M16	2.000	13.200	18.000	17.500	14.00	102.000	48.000	1.500	26.000	2	16.000

Drill thread milling cutters for ISO metric threads

2xD

Cutting data page 471

P	
M	
K	○
N	●
S	
H	

Tool material

Solid carbide

Surface



Type

DTMC SP

DTMC SP

DTMC SP

DTMC SP

Internal cooling



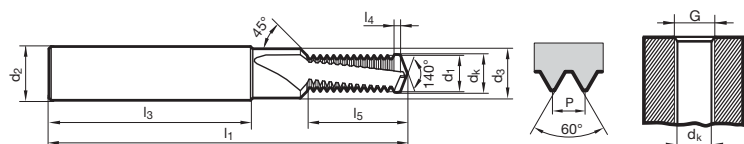
Shank form

HA

HA

HA

HA



Company std.

Article no.

3778

3779

3780

3781

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.400	6.000	3.400	2.50	48.000	36.000	0.500	7.000	2	3.000
M4	0.700	3.200	6.000	4.500	3.30	48.000	36.000	0.700	9.000	2	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	0.800	11.200	2	5.000
M6	1.000	4.750	8.000	6.600	5.00	62.000	36.000	1.000	13.900	2	6.000
M8	1.250	6.350	10.000	9.000	6.80	74.000	40.000	1.250	18.700	2	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	1.500	22.500	2	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	1.500	26.100	2	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	1.500	31.700	2	14.000
M16	2.000	13.200	18.000	17.500	14.00	102.000	48.000	1.500	36.000	2	16.000

Drill thread milling cutters for ISO metric threads

2,5xD

P	
M	
K	○
N	●
S	
H	

 Cutting data page 471

Tool material

Solid carbide

Surface



Type

DTMC SP

DTMC SP

DTMC SP

DTMC SP

Internal cooling



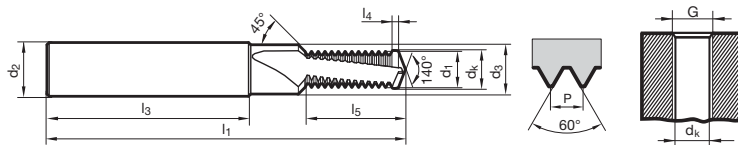
Shank form

HA

HA

HA

HA



Aluminum, non-ferrous metals and plastics

Company std.

Article no.

3782

3783

3784

3785

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.400	6.000	3.400	2.500	48.000	36.000	0.500	8.500	2	3.000
M4	0.700	3.200	6.000	4.500	3.300	48.000	36.000	0.700	11.100	2	4.000
M5	0.800	4.000	6.000	5.500	4.200	54.000	36.000	0.800	13.600	2	5.000
M6	1.000	4.750	8.000	6.600	5.000	62.000	36.000	1.000	16.900	2	6.000
M8	1.250	6.350	10.000	9.000	6.800	74.000	40.000	1.250	22.500	2	8.000
M10	1.500	7.950	12.000	11.000	8.500	80.000	45.000	1.500	27.000	2	10.000
M12	1.750	9.950	14.000	13.500	10.200	90.000	45.000	1.500	31.400	2	12.000
M14	2.000	11.200	16.000	15.500	12.000	102.000	48.000	1.500	39.700	2	14.000
M16	2.000	13.200	18.000	17.500	14.000	102.000	48.000	1.500	46.000	2	16.000

Drill thread milling cutters for ISO metric fine threads

1,5xD

Cutting data page 471

P	
M	
K	○
N	●
S	
H	

Tool material

Solid carbide

Surface



Type

DTMC SP

DTMC SP

DTMC SP

Internal cooling

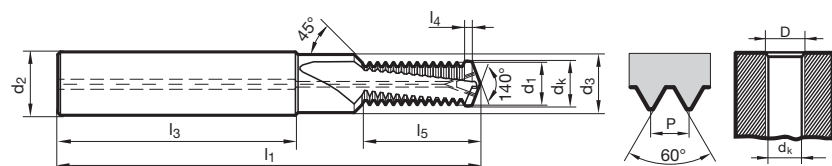


Shank form

HA

HA

HA



Company std.

Article no.

3787

3788

3789

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.200	6.000	4.500	3.500	48.000	36.000	0.500	6.600	2	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.500	54.000	36.000	0.500	8.300	2	5.003
M12 X 1.5	0.750	4.750	8.000	6.600	5.200	62.000	36.000	0.750	9.900	2	6.004
M 8 X0.75	0.750	6.350	10.000	9.000	7.200	74.000	40.000	0.750	14.100	2	8.004
M8 x 1	1.000	6.350	10.000	9.000	7.000	74.000	40.000	1.000	14.300	2	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.000	80.000	45.000	1.000	16.600	2	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.800	80.000	45.000	1.250	16.600	2	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.000	90.000	45.000	1.000	20.000	2	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.500	90.000	45.000	1.500	21.400	2	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.500	102.000	48.000	1.500	23.300	2	14.007
M16 X1.5	1.500	13.200	18.000	17.500	14.500	102.000	48.000	1.500	26.600	2	16.007



Drill thread milling cutters for ISO metric fine threads

2xD

P	
M	
K	○
N	●
S	
H	

Cutting data page 471

Tool material

Solid carbide

Surface



Type

DTMC SP

DTMC SP

DTMC SP

DTMC SP

Internal cooling



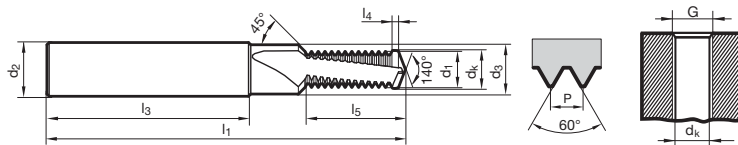
Shank form

HA

HA

HA

HA



Aluminum, non-ferrous metals and plastics

Company std.

Article no.

3790

3791

3792

3793

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.200	6.000	4.500	3.500	48.000	36.000	0.500	8.600	2	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.500	54.000	36.000	0.500	10.800	2	5.003
M12 X 1.5	0.750	4.750	8.000	6.600	5.200	62.000	36.000	0.750	12.900	2	6.004
M 8 X0.75	0.750	6.350	10.000	9.000	7.200	74.000	40.000	0.750	17.100	2	8.004
M8 x 1	1.000	6.350	10.000	9.000	7.000	74.000	40.000	1.000	17.300	2	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.000	80.000	45.000	1.000	21.600	2	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.800	80.000	45.000	1.250	21.600	2	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.000	90.000	45.000	1.000	26.000	2	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.500	90.000	45.000	1.500	27.400	2	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.500	102.000	48.000	1.500	30.800	2	14.007
M16 X1.5	1.500	13.200	18.000	17.500	14.500	102.000	48.000	1.500	34.100	2	16.007

Drill thread milling cutters for UNC-threads

2xD

Cutting data page 471

P	
M	
K	•
N	•
S	
H	

Tool material

Solid carbide

Surface



Type

DTMC SP

DTMC SP

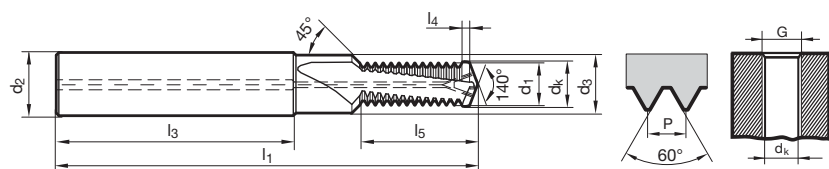
Internal cooling



Shank form

HA

HA



Company std.

Article no.

4138

4139

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	20.000	5.000	8.000	6.600	5.100	62.000	36.000	1.300	14.900	2	6.350
5/16 - 18	18.000	6.250	10.000	9.000	6.600	74.000	40.000	1.500	18.100	2	7.938
3/8 - 16	16.000	7.500	12.000	11.000	8.000	80.000	45.000	1.500	22.100	2	9.525
7/16 - 14	14.000	8.800	12.000	11.000	9.400	80.000	45.000	1.500	25.000	2	11.113
1/2 - 13	13.000	10.200	14.000	13.500	10.800	90.000	45.000	1.500	26.900	2	12.700
9/16 - 12	12.000	11.600	16.000	15.500	12.200	102.000	48.000	1.500	31.200	2	14.288
5/8 - 11	11.000	13.000	18.000	17.500	13.500	102.000	48.000	1.500	36.300	2	15.875



Drill thread milling cutters for UNF-threads

2xD

P	
M	
K	•
N	•
S	
H	

Cutting data page 471

Tool material

Solid carbide

Surface



Type

DTMC SP

DTMC SP

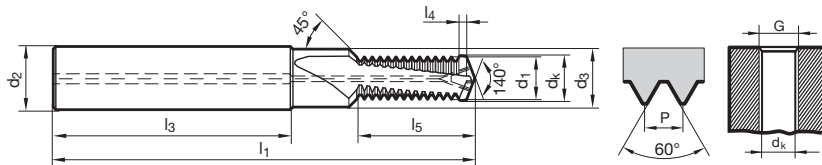
Internal cooling



Shank form

HA

HA



Company std.

Article no.

4140

4141

Aluminum, non-ferrous
metals and plastics

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	28.000	5.000	8.000	6.600	5.500	62.000	36.000	1.000	12.800	2	6.350
5/16 - 24	24.000	6.250	10.000	9.000	6.900	74.000	40.000	1.100	18.200	2	7.938
3/8 - 24	24.000	7.950	12.000	11.000	8.500	80.000	45.000	1.100	20.600	2	9.525
7/16 - 20	20.000	9.500	12.000	11.000	9.900	80.000	45.000	1.300	24.700	2	11.113
1/2 - 20	20.000	10.200	14.000	13.500	11.500	90.000	45.000	1.300	27.500	2	12.700
9/16 - 18	18.000	11.600	16.000	15.500	12.900	102.000	48.000	1.500	30.600	2	14.288
5/8 - 18	18.000	13.000	18.000	17.500	14.500	102.000	48.000	1.500	33.700	2	15.875



TITANIUM



Nickel, iron and cobalt based high temperature special alloys, titanium and titanium alloys



Special-, super- and
Ti-alloys

SPECIAL- SUPER- TI-ALLOYS



TITANIUM, SPECIAL ALLOYS

M

ISO 2/6H

ISO 3/6G

MF

ISO 2/6H

ISO 3/6G

No 1

M3 - M16
Art.-No. 2901
from page 602

No 1

M3x0,35 - M10x1,25
Art.-No. 2903
from page 606

No 1

M3 - M16
Art.-No. 2909
from page 604

No 1

M3x0,35 - M10x1,25
Art.-No. 2910
from page 608

No 1

M3 - M16
Art.-No. 2916
from page 602

No 1

M3x0,35 - M10x1,25
Art.-No. 2917
from page 606

No 1

M3 - M16
Art.-No. 2920
from page 604

No 1

M3x0,35 - M10x1,25
Art.-No. 2921
from page 608

No 1

ideal
tool

Titanium

Nickel



QUICKFINDER

UNC

2B

UNF

2B

G

-



THROUGH HOLE
BLIND HOLE

No 1

Nr. 6 - 3/8
Art.-No. 2905
from page 610



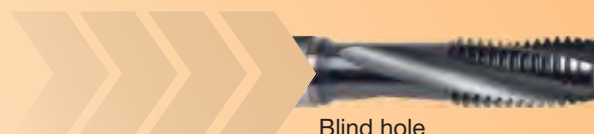
Through hole
HSS-E-PM, TiCN, form B

No 1

Nr. 4 - 5/8
Art.-No. 2912
from page 612

No 1

Nr. 4 - 5/8
Art.-No. 2914
from page 617



Blind hole
HSS-E-PM, TiCN, form C

No 1

Nr. 6 - 3/8
Art.-No. 2918
from page 610

No 1

Nr. 6 - 3/8
Art.-No. 2919
from page 614



Through hole
HSS-E-PM, TiAlN, form B

No 1

Nr. 4 - 5/8
Art.-No. 2922
from page 612

No 1

Nr. 4 - 5/8
Art.-No. 2923
from page 616



Blind hole
HSS-E-PM, TiAlN, form C

Special-, super- and
Ti-alloys



TITANIUM, SPECIAL ALLOYS

M

6HX

6GX

MF

6HX

6GX

No 1

M3 - M20
Art.-No. 1270/1271
from page 623

No 1

M5 - M10
Art.-No. 1713
from page 624

No 1

M8x1 - M24x1,5
Art.-No. 1272/1273
from page 632

No 1

M8x1 - M24x1,5
Art.-No. 1715/1716
from page 633

No 1

M3 - M20
Art.-No. 1725/1727
from page 623

No 1

M3 - M20
Art.-No. 1726/1728
from page 625

No 1

M8x1 - M24x1,5
Art.-No. 1729/1731
from page 632

No 1

M8x1 - M24x1,5
Art.-No. 1730/1732
from page 633

No 1

M3 - M20
Art.-No. 1972/1931
from page 627

No 1

M10x1 - M24x1,5
Art.-No. 1581
from page 635

No 1

M3 - M20
Art.-No. 1266/1267
from page 621

M8x1 - M24x2
Art.-No. 1268/1269
from page 630

No 1

ideal
tool

with internal cooling

with lubrication



QUICKFINDER

UNC

2BX

UNF

2BX

G

-



THROUGH HOLE
BLIND HOLE

FORM C



HSS-E-PM, TiCN, form C

FORM E



HSS-E-PM, TiN, form E

SOLID CARBIDE



Solid carbide, TiCN, form C



HSS-E, TiN, form C

Special-, super- and
Ti-alloys



TITANIUM, SPECIAL ALLOYS

M

UNIVERSAL

MF

UNIVERSAL

1.5xD

No 1

M3 - M20
Art.-No. 3525
from page 643

No 1

M4x0,5 - M16x1,5
Art.-No. 3527
from page 646

2xD

No 1

M3 - M20
Art.-No. 3526
from page 644

No 1

M4x0,5 - M16x1,5
Art.-No. 3528
from page 647

2.5xD

No 1

M3 - M20
Art.-No. 3759
from page 645

No 1

M4x0,5 - M16x1,5
Art.-No. 3762
from page 648

3xD

No 1

M1,6 - M16
Art.-No. 4226
from page 637

universal

No 1

Ø8xP0,5 - Ø30xP3,5
Art.-No. 3541
from page 664

No 1

Ø8xP0,5 - Ø30xP3,5
Art.-No. 3541
from page 664

No 1 ideal tool



QUICKFINDER

UNC
UNIVERSAL

UNF
UNIVERSAL

G
-



T H R O U G H H O L E
B L I N D H O L E

No 1

1/4 - 1/2
Art.-No. 3516
from page 650

No 1

1/4 - 1/2
Art.-No. 3518
from page 653

No 1

1/8 - 3/8
Art.-No. 3514
from page 657



Solid carbide, TiCN

No 1

1/4 - 1/2
Art.-No. 3517
from page 651

No 1

1/4 - 1/2
Art.-No. 3519
from page 654

No 1

1/8 - 3/8
Art.-No. 3515
from page 658



Solid carbide, TiCN



Solid carbide, TiCN



Solid carbide, TiCN

No 1

Ø10xUN24 - Ø20xUN16
Art.-No. 3595
from page 666

No 1

Ø10xUN24 - Ø20xUN16
Art.-No. 3595
from page 666

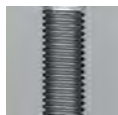
No 1

Ø10xG19 - Ø20xG11
Art.-No. 3542
from page 667



Solid carbide, TiCN

Special-, super- and
Ti-alloys


**SPECIAL-, SUPER-
AND TI-ALLOYS**

THROUGH HOLES

Thread depth

≤3xD

Tool material

HSS-E-PM

Type/form

TiNi/B

TiNi/B

Surface



Coolant delivery



Shank tolerance

h9

h9



Thread type

Tolerance

Article no. / page

M

4H

6H

6HX

MF

6H

6HX

6GX

UNC

2B

2BX

UNF

2B

2BX

G

BSW

NPT

NPTF

EG M

6H Mod.

MJ

4HX

MJF

4HX

UNJC

3BX

UNJF

3BX

PG

Suitable lubricant



= No 1

○ = Air

● = Neat oil

◐ = Soluble oil

△ = Paste

□ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min	
S	Titanium and Titanium alloys	≤ 1200 N/mm ²	Titanium	3.7025	4	4
			TiAl5Sn2	3.7115		
			TiAl6V4	3.7165		
	Nickel, cobalt, iron alloys	≤ 1400 N/mm ²	Hastelloy C4	2.4610	4	4
			Inconel 718	2.4668		
			Nimonic 105	2.4634		



 SPECIAL-, SUPER- AND TI-ALLOYS	Thread depth		≤3xD	
	Tool material		HSS-E-PM	
	Type/form		Ti R15/C	Ni R10/C (K)
	Surface			
	Coolant delivery			
	Shank tolerance		h9	h9
 BLIND HOLES				
	Thread type	Tolerance	Article no. / page	
	M	4H		
		6H		
		6HX	2909 604	2920 604
		6G		
	MF	6H		
		6HX	2910 608	2921 608
		6G		
	UNC	2B		
		2BX	2912 612	2922 612
	UNF	2B		
		2BX	2914 617	2923 616
	G			
	BSW			
	NPT			
	NPTF			
	EG M	6H Mod.		
	MJ	4HX	1061 605	1065 605
	MJF	4HX	1062 609	1066 609
	UNJC	3BX	1063 613	1067 613
	UNJF	3BX	1064 618	1068 618
	PG			
	Suitable lubricant		 /●/△	 /●/△

Special-, super- and
Ti-alloys

	Group of materials	Tensile strength	Material ex-ample	Material no.	Recommended cutting speed vc m/min	
S	Titanium and Titanium alloys	≤ 1200 N/mm²	Titanium	3.7025	4	-
			TiAl5Sn2	3.7115		
			TiAl6V4	3.7165		
	Nickel, cobalt, iron alloys	≤ 1400 N/mm²	Hastelloy C4	2.4610	-	4
			Inconel 718	2.4668		
			Nimonic 105	2.4634		



SPECIAL-, SUPER- AND TI-ALLOYS



THROUGH HOLES
AND BLIND HOLES

Thread depth

 $\leq 3 \times D$

Tool material

HSS-E-PM

Type/form

N/C

N/C

N/C

N/C

Surface

S

S

S

S

Coolant delivery

☒

☒

radial

axial

Shank tolerance

h9

h9

h9

h9



extra length

Thread type

Tolerance

Article no. / page

M

4H

6H

322/339
620

1266/1267
621

323/342
622

4143
626

6GX

MF

6H

333
629

1268/1269
630

338
631

4145
634

6GX

UNC

2B

2BX

UNF

2B

2BX

G

BSW

NPT

NPTF

EG M

6H Mod.

MJ

4HX

MJF

4HX

UNJC

3BX

UNJF

3BX

PG

Suitable lubricant

○/●/△

○/●/△

○/●/△/□

○/●/△

= No 1

○ = Air

● = Neat oil

● = Soluble oil

△ = Paste

□ = Minimal quantity lubrication (MQL)

Group of materials

Tensile
strength

Material
example

Material
no.

Recommended cutting speed vc m/min

S

Titanium and Titanium
alloys

 ≤ 1200
N/mm²

Titanium
TiAl5Sn2
TiAl6V4

3.7025
3.7115
3.7165

4

4

4

4

Nickel, cobalt, iron alloys

 ≤ 1400
N/mm²

Hastelloy C4
Inconel 718
Nimonic 105

2.4610
2.4668
2.4634

4

4

4

4

Special-, super- and Ti-alloys

GÜHRING



**SPECIAL-, SUPER-
AND TI-ALLOYS**



**THROUGH HOLES
AND BLIND HOLES**

Thread depth	≤2xD				≤2,5xD		≤1,5xD		
Tool material		Solid carbide							
Type	TM SP	TM SP	TM SP	TM SP	TM SP	TM SP	TMC SP	TMC SP	
Surface									
Coolant delivery			axial	axial	axial	axial	axial	axial	
Shank form	HA	HB	HA	HB	HA	HB	HA	HA	
Spiral	27°	27°	27°	27°	27°	27°	10°	10°	
									
Thread type	Article no. / page								
M	4132 641	4133 641	3737 640	3743 640	3735 642	3740 642	3525 643	3543 643	
MF			3737 640	3743 640			3527 646	3545 646	
UNC			4134 649	4135 649			3516 650	3534 650	
UNF			4136 652	4137 652			3518 653	3536 653	
G			3745 655	3748 655	3746 656	3750 656	3514 657	3529 657	
BSW									
NPT			3753 660	3754 660			3520 661	3538 661	
NPTF			3756 662	3757 662			3521 663	3539 663	
EG M	EG-threads can be produced with every thread milling cutter type and dimension								
MJ									
MJF									
UNJC									
UNJF									
PG									
Suitable lubricant									

= No 1

- = Air
- = Neat oil
- ◐ = Soluble oil
- △ = Paste
- = Minimal quantity lubrication (MQL)

Group of materials	Hardness	Material example	Material no.	Application recommendations							
S	≤ 1200 N/mm ²	Titanium	3.7025								
		TiAl5Sn2	3.7115	+	+	+	+	+	+	++	++
		TiAl6V4	3.7165								
	≤ 1400 N/mm ²	Hastelloy C4	2.4610								
		Inconel 718	2.4668	+	+	+	+	+	+	++	++
		Nimonic 105	2.4634								



≤2xD		≤2,5xD		universal				≤3xD	
Solid carbide									
TMC SP	TMC SP	TMC SP	TMC SP	TMU SP	TMU SP	TMU SP	TMU SP	MTM 3 SP	MTM 1 SP
									
axial	axial	axial	axial	axial	axial	axial	axial		
HA	HB	HA	HB	HA	HB	HA	HB	HA	HA
10°	10°	27°	27°	15°	15°	15°	15°	15°	15°
									
Article no. / page									
3526 644	3544 644	3759 645	3760 645	3541 664	3556 664	4162 665	4163 665	4226 637	4225 639
3528 647	3546 647	3762 648	3763 648	3541 664	3556 664	4162 665	4163 665		4225 639
3517 651	3535 651			3595 666	3596 666				
3519 654	3537 654			3595 666	3596 666				
3515 658	3533 658	3765 659	3766 659	3542 667	3557 667	3542 667	3557 667	4228 638	
				3768 668	3769 668				
				3772 669	3773 669				
EG-threads can be produced with every thread milling cutter type and dimension									
									

Special-, super- and Ti-alloys

Application recommendations									
++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++

Machine taps for ISO metric threads



Cutting data page 596

P	
M	
K	
N	
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

6HX

6HX

Surface

C

A

Type

TiNi

TiNi

Form

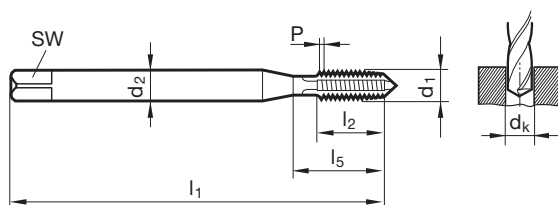
B

B

Internal cooling

X

X



DIN 2184-1 DIN 371/DIN 376

Article no.

2901

2916

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000



Machine taps for ISO metric threads



Cutting data page 596

P	
M	
K	
N	
S	•
H	

Tool material **HSS-E-PM**

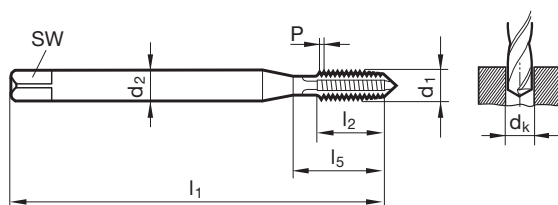
Tolerance on Ø 4HX

Surface

Type TiNi

Form B

Internal cooling



DIN 2184-1 DIN 371/DIN 376

Article no.

1057

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
MJ 3 X0.5	0.500	3.500	2.700	2.60	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.40	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.30	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.10	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.90	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.60	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.40	110.000	24.000	49.000
M16	2.000	12.000	9.000	14.20	110.000	26.000	54.000

Special-, super- and
Ti-alloys

Machine taps for ISO metric threads



Cutting data page 597

P	
M	
K	
N	
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

6HX

6HX

Surface

C

A

Type

Ti R15

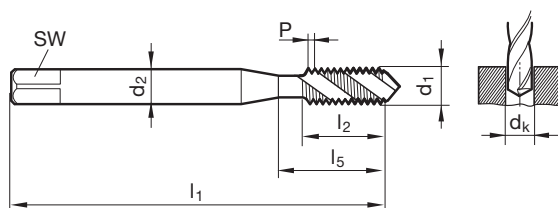
Ni R10

Form

C

C (K)

Internal cooling



DIN 2184-1 DIN 371/DIN 376

Article no.

2909

2920

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000



Machine taps for ISO metric threads



Cutting data page 597

P	
M	
K	
N	
S	•
H	

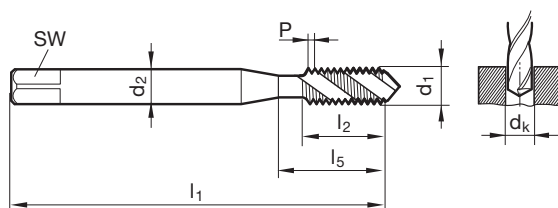
Tool material **HSS-E-PM**

Tolerance on Ø 4HX 4HX

Surface **C** **A**

Type Ti R15 Ni R10

Form C C (K)

Internal cooling  

DIN 2184-1 DIN 371/DIN 376

Article no.

1061

1065

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
MJ 3 X0.5	0.500	3.500	2.700	2.60	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.40	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.30	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.10	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.90	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.60	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.40	110.000	24.000	49.000
M16	2.000	12.000	9.000	14.20	110.000	26.000	54.000

Special-, super- and
Ti-alloys

Machine taps for ISO metric fine threads



Cutting data page 596

P	
M	
K	
N	
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

6HX

6HX

Surface

C

A

Type

TiNi

TiNi

Form

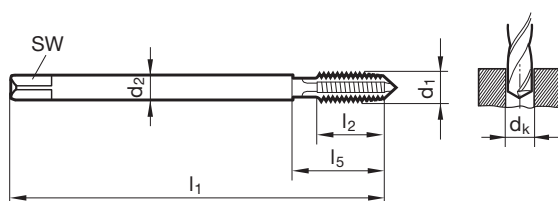
B

B

Internal cooling

X

X



DIN 2184-1 DIN 371

Article no.

2903

2917

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 3 X0.35	3.500	2.700	2.65	56.000	6.000	18.000	3.002
M 4 X0.5	4.500	3.400	3.50	63.000	7.500	21.000	4.003
M 5 X0.5	6.000	4.900	4.50	70.000	8.500	25.000	5.003
M 6 X0.5	6.000	4.900	5.50	80.000	11.000	30.000	6.003
M 6 X0.75	6.000	4.900	5.20	80.000	11.000	30.000	6.004
M 8 X0.5	8.000	6.200	7.50	80.000	14.000	30.000	8.003
M 8 X0.75	8.000	6.200	7.20	80.000	14.000	30.000	8.004
M 8 x 1	8.000	6.200	7.00	90.000	14.000	35.000	8.005
M10 x 1	10.000	8.000	9.00	90.000	20.000	35.000	10.005
M10 X1.25	10.000	8.000	8.80	100.000	20.000	39.000	10.006



Machine taps for ISO metric fine threads



Cutting data page 596

P	
M	
K	
N	
S	•
H	

Tool material **HSS-E-PM**

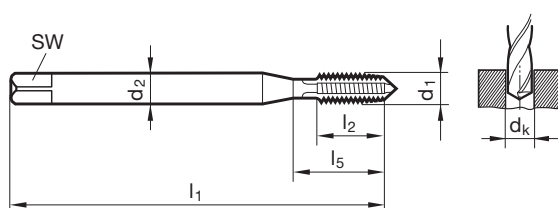
Tolerance on Ø 4HX

Surface

Type TiNi

Form B

Internal cooling



DIN 2184-1 DIN 371

Article no.

1058

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
MJ 6 X0.5	6.000	4.900	5.60	80.000	11.000	30.000	6.003
MJ 6 X0.75	6.000	4.900	5.40	80.000	11.000	30.000	6.004
MJ8 x 1	8.000	6.200	7.10	90.000	14.000	35.000	8.005
MJ10 x 1	10.000	8.000	9.10	90.000	20.000	35.000	10.005
MJ10 X1.25	10.000	8.000	8.90	100.000	20.000	39.000	10.006

Special-, super- and
Ti-alloys

Machine taps for ISO metric fine threads



Cutting data page 597

P	
M	
K	
N	
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

6HX

6HX

Surface

C

A

Type

Ti R15

Ni R10

Form

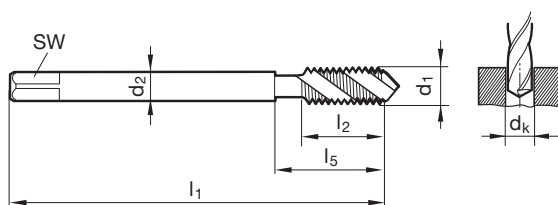
C

C (K)

Internal cooling

X

X



DIN 2184-1 DIN 371

Article no.

2910

2921

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 3 X0.35	3.500	2.700	2.65	56.000	6.000	18.000	3.002
M 4 X0.5	4.500	3.400	3.50	63.000	7.500	21.000	4.003
M 5 X0.5	6.000	4.900	4.50	70.000	8.500	25.000	5.003
M 6 X0.5	6.000	4.900	5.50	80.000	11.000	30.000	6.003
M 6 X0.75	6.000	4.900	5.20	80.000	11.000	30.000	6.004
M 8 X0.5	8.000	6.200	7.50	80.000	14.000	30.000	8.003
M 8 X0.75	8.000	6.200	7.20	80.000	14.000	30.000	8.004
M 8 x 1	8.000	6.200	7.00	90.000	14.000	35.000	8.005
M10 x 1	10.000	8.000	9.00	90.000	20.000	35.000	10.005
M10 X1.25	10.000	8.000	8.80	100.000	20.000	39.000	10.006



Machine taps for ISO metric fine threads



Cutting data page 597

P	
M	
K	
N	
S	•
H	

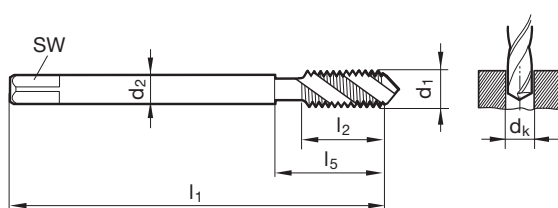
Tool material **HSS-E-PM**

Tolerance on Ø 4HX 4HX

Surface **C** **A**

Type Ti R15 Ni R10

Form C C (K)

Internal cooling  

DIN 2184-1 DIN 371

Article no.

1062

1066

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
MJ 6 X0.5	6.000	4.900	5.60	80.000	11.000	30.000	6.003
MJ 6 X0.75	6.000	4.900	5.40	80.000	11.000	30.000	6.004
MJ 8 X0.5	8.000	6.200	7.60	80.000	14.000	30.000	8.003
MJ 8 X0.75	8.000	6.200	7.40	80.000	14.000	30.000	8.004
MJ8 x 1	8.000	6.200	7.10	90.000	14.000	35.000	8.005
MJ10 x 1	10.000	8.000	9.10	90.000	16.000	35.000	10.005
MJ10 X1.25	10.000	8.000	8.90	100.000	16.000	39.000	10.006

Special-, super- and Ti-alloys

Machine taps for UNC-threads



Cutting data page 596

P	
M	
K	
N	
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

2BX

2BX

Surface

C

A

Type

TiNi

TiNi

Form

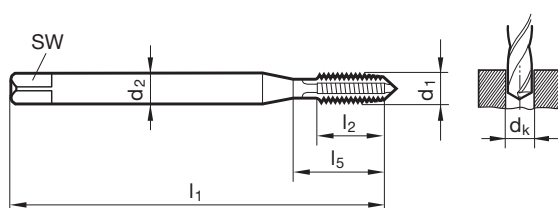
B

B

Internal cooling

X

X



DIN 2184-1 ~ DIN 371

Article no.

2905

2918

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
6 - 32	4.000	3.000	2.85	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525



Machine taps for UNC-threads

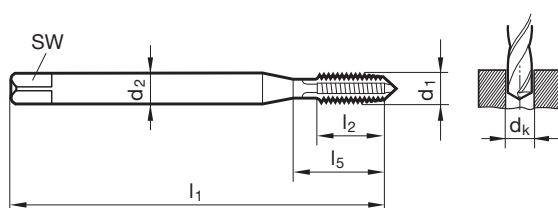


Cutting data page 596

P	
M	
K	
N	
S	•
H	

Tool material **HSS-E-PM**Tolerance on Ø **3BX**Surface **C**Type **TiNi**Form **B**

Internal cooling



DIN 2184-1 ~DIN 371/~DIN 376

Article no.

1059

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
6 - 32	4.000	3.000	2.85	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525
7/16 - 14	8.000	6.200	9.40	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	25.000	49.000	12.700
5/8 - 11	12.000	9.000	13.50	110.000	30.000	53.000	15.875

Special-, super- and
Ti-alloys

Machine taps for UNC-threads



Cutting data page 597

P	
M	
K	
N	
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

2BX

2BX

Surface



Type

Ti R15

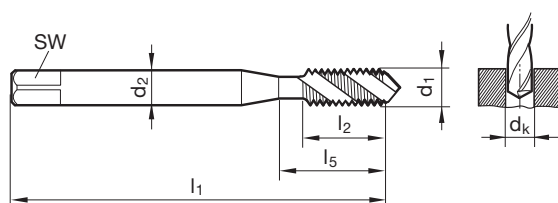
Ni R10

Form

C

C (K)

Internal cooling



DIN 2184-1 ~DIN 371/~DIN 376

Article no.

2912

2922

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.35	56.000	11.000	18.000	2.845
5 - 40	3.500	2.700	2.65	56.000	11.000	18.000	3.175
6 - 32	4.000	3.000	2.85	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525
7/16 - 14	8.000	6.200	9.40	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	25.000	49.000	12.700
5/8 - 11	12.000	9.000	13.50	110.000	30.000	53.000	15.875



Machine taps for UNC-threads



Cutting data page 597

P	
M	
K	
N	
S	•
H	

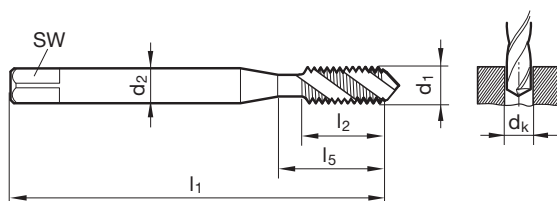
Tool material **HSS-E-PM**

Tolerance on Ø 3BX 3BX

Surface **C** **A**

Type Ti R15 Ni R10

Form C C (K)

Internal cooling  

DIN 2184-1 ~DIN 371/~DIN 376

Article no.

1063**1067**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
6 - 32	4.000	3.000	2.85	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525
7/16 - 14	8.000	6.200	9.40	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	25.000	49.000	12.700
5/8 - 11	12.000	9.000	13.50	110.000	30.000	53.000	15.875

Special-, super- and Ti-alloys

Machine taps for UNF-threads



Cutting data page 596

P	
M	
K	
N	
S	•
H	

Tool material **HSS-E-PM**

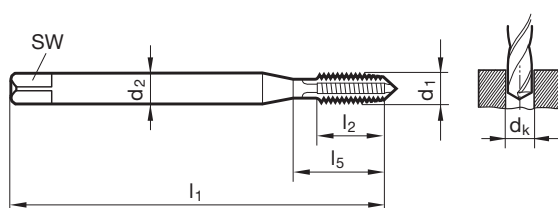
Tolerance on Ø 2BX

Surface **A**

Type TiNi

Form B

Internal cooling



DIN 2184-1 ~DIN 371

Article no.

2919

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
6 - 40	4.000	3.000	2.95	56.000	11.000	20.000	3.505
8 - 36	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 32	6.000	4.900	4.10	70.000	14.000	25.000	4.826
12 - 28	6.000	4.900	4.60	80.000	16.000	30.000	5.486
1/4 - 28	7.000	5.500	5.50	80.000	16.000	30.000	6.350
5/16 - 24	8.000	6.200	6.90	90.000	18.000	35.000	7.938
3/8 - 24	10.000	8.000	8.50	90.000	18.000	35.000	9.525

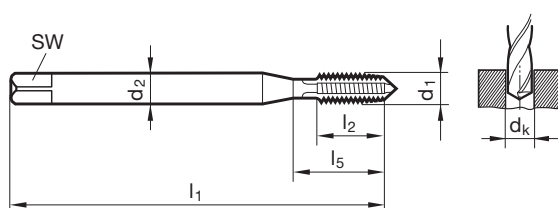


Machine taps for UNF-threads



Cutting data page 596

P	
M	
K	
N	
S	•
H	

Tool material **HSS-E-PM**Tolerance on Ø **3BX**Surface **C**Type **TiNi**Form **B**Internal cooling 

DIN 2184-1 ~DIN 371/~DIN 374

Article no.

1060

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
6 - 40	4.000	3.000	2.95	56.000	12.000	20.000	3.505
8 - 36	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 32	6.000	4.900	4.10	70.000	14.000	25.000	4.826
12 - 28	6.000	4.900	4.60	80.000	16.000	30.000	5.486
1/4 - 28	7.000	5.500	5.50	80.000	16.000	30.000	6.350
5/16 - 24	8.000	6.200	6.90	90.000	18.000	35.000	7.938
3/8 - 24	10.000	8.000	8.50	100.000	20.000	39.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	20.000	40.000	12.700
5/8 - 18	12.000	9.000	14.50	100.000	22.000	44.000	15.875

Special-, super- and
Ti-alloys

Machine taps for UNF-threads



Cutting data page 597

P	
M	
K	
N	
S	•
H	

Tool material **HSS-E-PM**

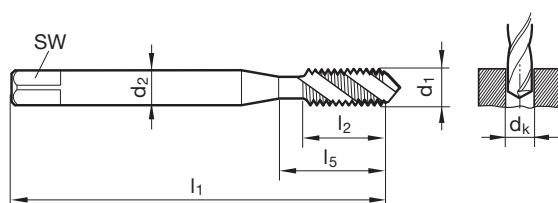
Tolerance on Ø 2BX

Surface **A**

Type Ni R10

Form C (K)

Internal cooling



DIN 2184-1 ~DIN 371/~DIN 374

Article no.

2923

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 48	3.500	2.700	2.40	56.000	10.000	18.000	2.845
5 - 44	3.500	2.700	2.70	56.000	10.000	18.000	3.175
6 - 40	4.000	3.000	2.95	56.000	11.000	20.000	3.505
8 - 36	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 32	6.000	4.900	4.10	70.000	14.000	25.000	4.826
12 - 28	6.000	4.900	4.60	80.000	16.000	30.000	5.486
1/4 - 28	7.000	5.500	5.50	80.000	16.000	30.000	6.350
5/16 - 24	8.000	6.200	6.90	90.000	18.000	35.000	7.938
3/8 - 24	10.000	8.000	8.50	90.000	18.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	20.000	40.000	12.700
5/8 - 18	12.000	9.000	14.50	100.000	22.000	44.000	15.875



Machine taps for UNF-threads



Cutting data page 597

P	
M	
K	
N	
S	•
H	

Tool material **HSS-E-PM**

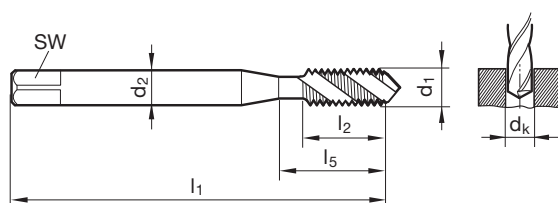
Tolerance on Ø 2BX

Surface

Type Ti R15

Form C

Internal cooling



DIN 2184-1 ~DIN 371/~DIN 374

Article no.

2914

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 48	3.500	2.700	2.40	56.000	10.000	18.000	2.845
5 - 44	3.500	2.700	2.70	56.000	10.000	18.000	3.175
6 - 40	4.000	3.000	2.95	56.000	11.000	20.000	3.505
8 - 36	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 32	6.000	4.900	4.10	70.000	14.000	25.000	4.826
12 - 28	6.000	4.900	4.60	80.000	16.000	30.000	5.486
1/4 - 28	7.000	5.500	5.50	80.000	16.000	30.000	6.350
5/16 - 24	8.000	6.200	6.90	90.000	18.000	35.000	7.938
3/8 - 24	10.000	8.000	8.50	90.000	18.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	20.000	40.000	12.700
5/8 - 18	12.000	9.000	14.50	100.000	22.000	44.000	15.875

Special-, super- and Ti-alloys

Machine taps for UNF-threads



Cutting data page 597

P	
M	
K	
N	
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

3BX

3BX

Surface

C

A

Type

Ti R15

Ni R10

Form

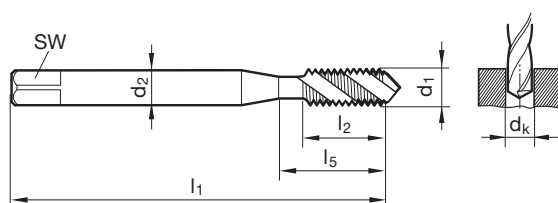
C

C (K)

Internal cooling

X

X



DIN 2184-1 ~DIN 371/~DIN 374

Article no.

1064

1068

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
6 - 40	4.000	3.000	2.95	56.000	12.000	20.000	3.505
8 - 36	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 32	6.000	4.900	4.10	70.000	14.000	25.000	4.826
12 - 28	6.000	4.900	4.60	80.000	16.000	30.000	5.486
1/4 - 28	7.000	5.500	5.50	80.000	16.000	30.000	6.350
5/16 - 24	8.000	6.200	6.90	90.000	18.000	35.000	7.938
3/8 - 24	10.000	8.000	8.50	100.000	20.000	39.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	20.000	40.000	12.700
5/8 - 18	12.000	9.000	14.50	100.000	22.000	44.000	15.875



Special-, super- and
Ti-alloys

FLUTELESS TAPS



Fluteless machine taps for ISO metric threads



Cutting data page 598

P	•
M	•
K	
N	○
S	○
H	

Tool material **HSS-E-PM**

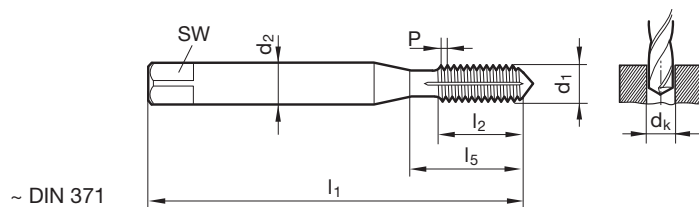
Tolerance on Ø 6HX

Surface **S**

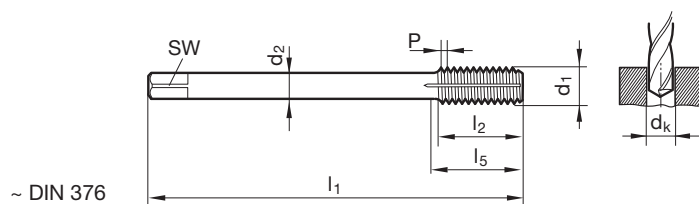
Type N

Form C

Internal cooling



~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371

Article no.

322

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376

Article no.

339

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000



Fluteless machine taps for ISO metric threads



Cutting data page 598

P	•
M	•
K	•
N	○
S	○
H	

Tool material **HSS-E-PM**

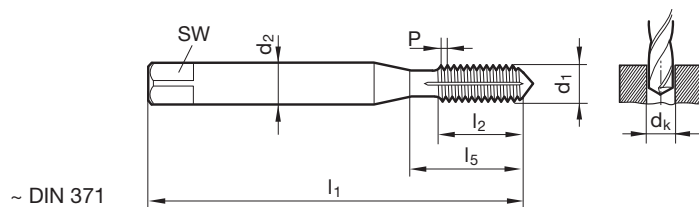
Tolerance on Ø 6HX

Surface **S**

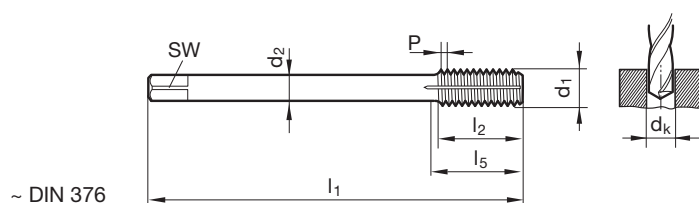
Type N

Form C

Internal cooling



~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371

Article no.

1266

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

1267

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Special-, super- and Ti-alloys

Oil feed fluteless taps f. ISO metric threads



Cutting data page 598

P	•
M	•
K	
N	○
S	○
H	

Tool material **HSS-E-PM**

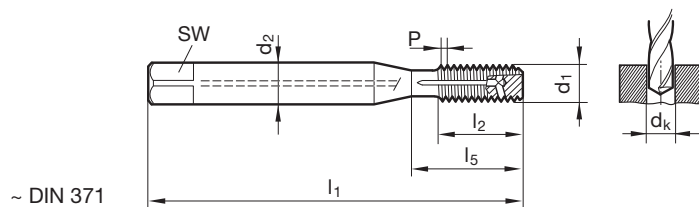
Tolerance on Ø 6HX

Surface **S**

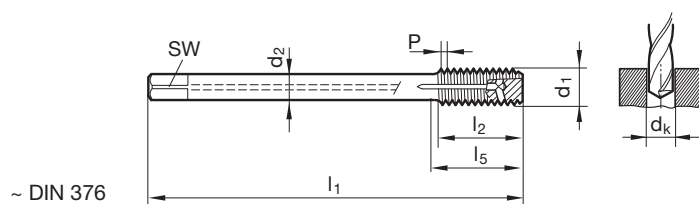
Type N

Form C

Internal cooling



~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371

Article no.

323

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376

Article no.

342

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 599

P	•
M	•
K	
N	≥ 7
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

6HX

6HX

6HX

Surface

C

A

S

Type

N

N

N

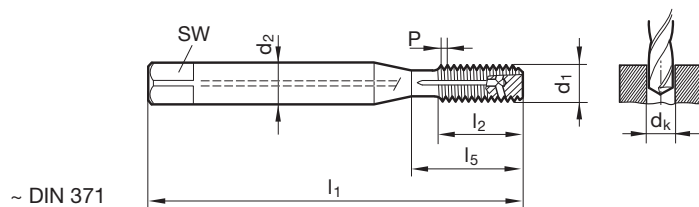
Form

C

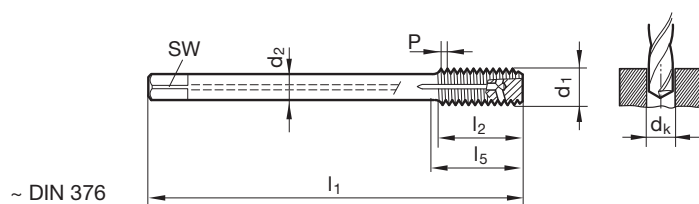
C

E

Internal cooling



~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371

Article no.

1270

1717

1725

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

1271

1719

1727

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Special-, super- and Ti-alloys

Oil feed fluteless taps f. ISO metric threads



Cutting data page 599

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material **HSS-E-PM**

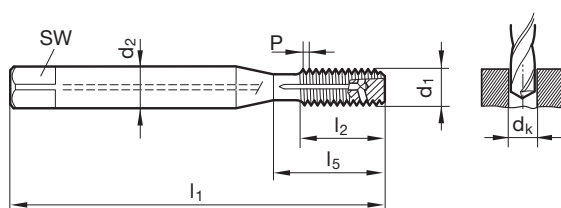
Tolerance on Ø 6GX

Surface

Type N

Form C

Internal cooling



DIN 2174 ~DIN 371

Article no.

1713

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 599

P	•
M	•
K	
N	
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

6GX

6GX

Surface

A

S

Type

N

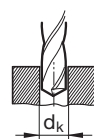
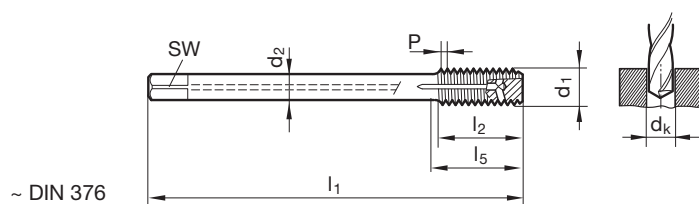
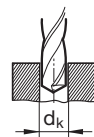
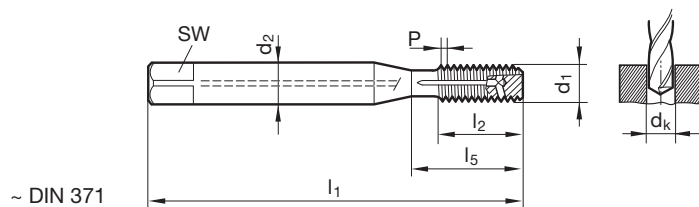
N

Form

C

E

Internal cooling



DIN 2174 ~DIN 371

Article no.

1718

1726

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376

Article no.

1720

1728

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Special-, super- and Ti-alloys

Oil feed fluteless taps f. ISO metric threads



Cutting data page 598

P	•
M	•
K	
N	○
S	○
H	

Tool material **HSS-E-PM**

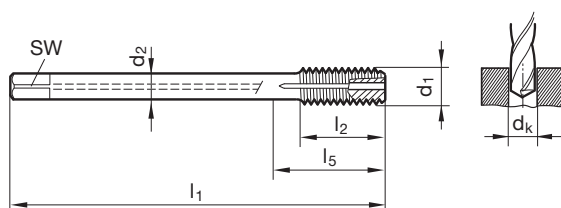
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



Company std. Company std.

Article no.

4143

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	112.000	6.000	18.000
M4	0.700	2.800	2.100	3.70	112.000	7.500	77.000
M5	0.800	3.500	2.700	4.65	125.000	8.500	90.000
M6	1.000	4.500	3.400	5.55	125.000	11.000	90.000
M8	1.250	6.000	4.900	7.40	140.000	14.000	97.000
M10	1.500	7.000	5.500	9.30	160.000	16.000	117.000
M12	1.750	9.000	7.000	11.20	180.000	18.500	133.000
M16	2.000	12.000	9.000	15.10	220.000	20.000	168.000
M20	2.500	16.000	12.000	18.90	280.000	25.000	225.000



Oil feed fluteless taps f. ISO metric threads



Cutting data page 599

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material **Solid carbide**

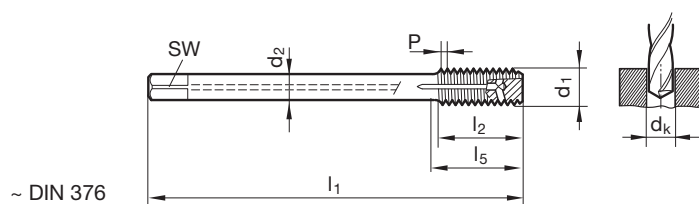
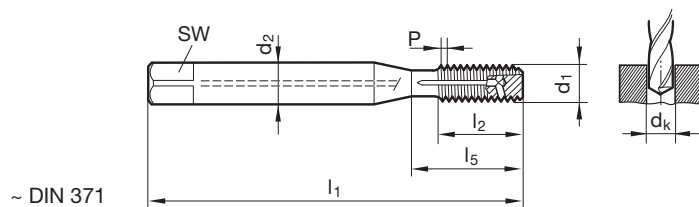
Tolerance on Ø 6HX

Surface

Type N

Form C

Internal cooling



DIN 2174 ~DIN 371

Article no.

1972

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376

Article no.

1931

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	25.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	25.000	62.000

Special-, super- and Ti-alloys

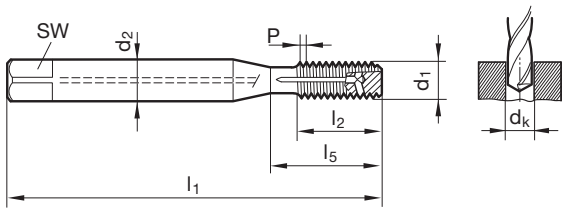


Oil feed fluteless taps f. ISO metric threads



P	•	Cutting data page 599
M	•	
K		
N	≥ 7	
S	•	
H		

Tool material	Solid carbide
Tolerance on Ø	6HX
Surface	C
Type	N
Form	E
Internal cooling	



DIN 2174 ~DIN 371	Article no.	1927

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

Special-, super- and
Ti-alloys



Fluteless machine taps for ISO metric fine threads



Cutting data page 598

P	•
M	•
K	•
N	○
S	○
H	

Tool material **HSS-E-PM**

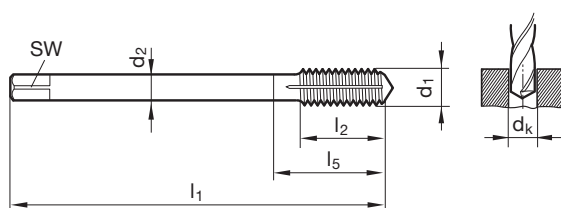
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



DIN 2174 ~DIN 374

Article no.

333

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	16.000	44.000	20.007

Special-, super- and Ti-alloys

Fluteless machine taps for ISO metric fine threads



Cutting data page 598

P	•
M	•
K	•
N	○
S	○
H	

Tool material **HSS-E-PM**

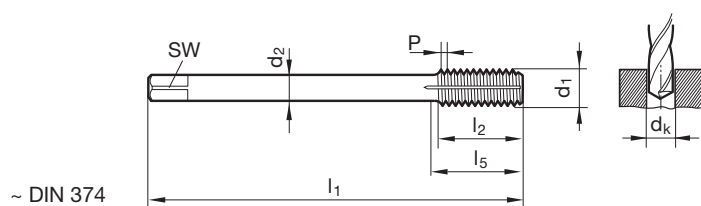
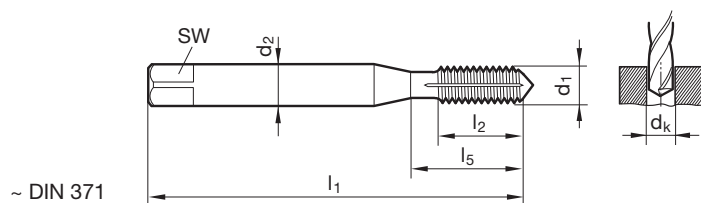
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling

**DIN 2174 ~DIN 371**

Article no.

1268

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374

Article no.

1269

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 x 2	18.000	14.500	23.10	140.000	28.000	48.000	24.008



Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 598

P	•
M	•
K	•
N	○
S	○
H	

Tool material **HSS-E-PM**

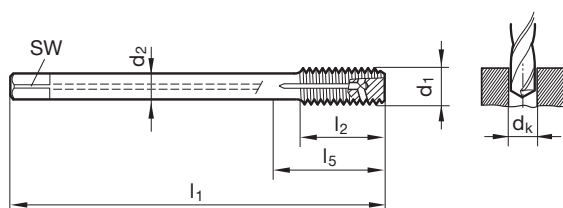
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



DIN 2174 ~DIN 374

Article no.

338

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007

Special-, super- and
Ti-alloys

Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 599

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

6HX

6HX

6HX

Surface

C

A

S

Type

N

N

N

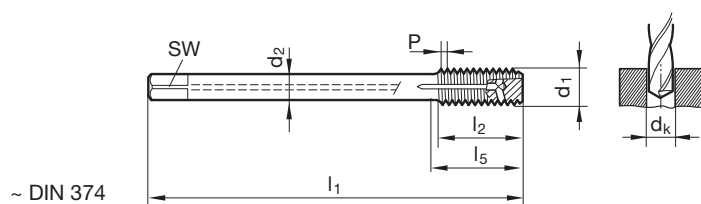
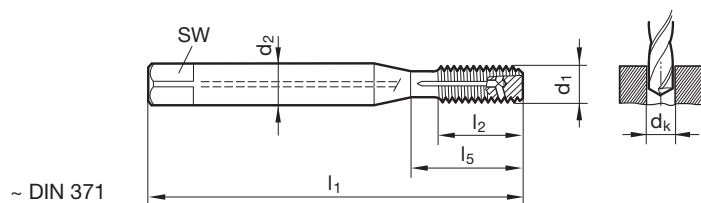
Form

C

C

E

Internal cooling



DIN 2174 ~DIN 371

Article no.

1272

1721

1729

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M9 x 1	9.000	7.000	8.55	90.000	16.000	35.000	9.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374

Article no.

1273

1723

1731

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	21.30	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007



Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 599

P	•
M	•
K	•
N	≥ 7
S	•
H	

Tool material

HSS-E-PM

Tolerance on Ø

6GX

6GX

Surface

C

S

Type

N

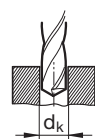
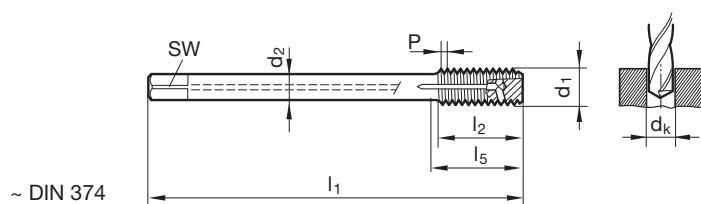
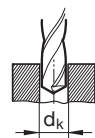
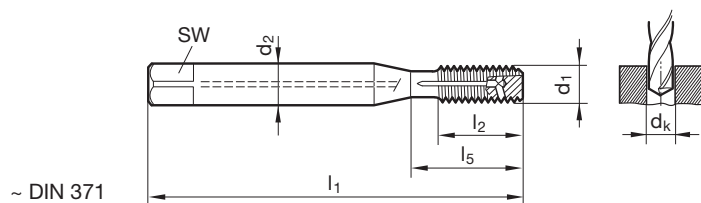
N

Form

C

E

Internal cooling



DIN 2174 ~DIN 371

Article no.

1715

1730

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374

Article no.

1716

1732

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

Special-, super- and
Ti-alloys

Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 598

P	•
M	•
K	
N	○
S	○
H	

Tool material **HSS-E-PM**

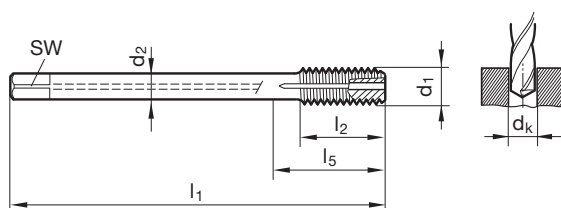
Tolerance on Ø 6HX

Surface **S**

Type N

Form C

Internal cooling



Company std. Company std.

Article no.

4145

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	140.000	14.000	97.000	8.005
M10 x 1	7.000	5.500	9.55	160.000	16.000	117.000	10.005
M10 X1.25	7.000	5.500	9.40	160.000	16.000	117.000	10.006
M12 x 1	9.000	7.000	11.55	180.000	18.500	133.000	12.005
M12 X1.5	9.000	7.000	11.30	180.000	18.500	133.000	12.007
M14 X1.5	11.000	9.000	13.30	220.000	20.000	168.000	14.007
M16 X1.5	12.000	9.000	15.30	220.000	20.000	168.000	16.007



Oil feed fluteless taps f. ISO metric fine threads



Cutting data page 599

P	•
M	•
K	•
N	≥ 7
S	•
H	

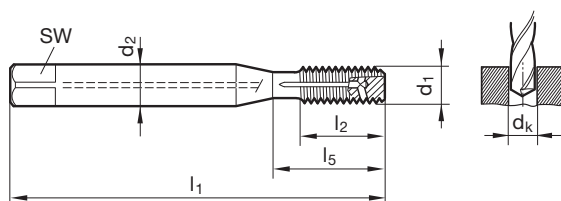
Tool material **Solid carbide**

Tolerance on Ø 6HX

Surface **C**

Type N

Form C

Internal cooling 

DIN 2174 ~DIN 371/~DIN 376

Article no.

1581

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10.000	8.000	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	15.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	15.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	15.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	15.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	15.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	15.000	48.000	24.007

Special-, super- and Ti-alloys



THREAD MILLING CUTTERS



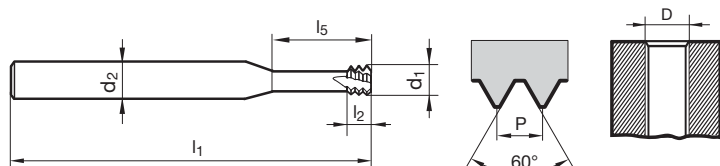


Micro-thread milling cutters



Cutting data page 601

P	•
M	•
K	•
N	•
S	•
H	

Tool material **Solid carbide**Surface **C**Type **SP M**Threads **3,0**Shank form **HA****NEW**

Company std.

Article no.

4226

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M 1.6	0.350	1.200	3.000	39.000	1.100	4.800	3	1.600
M 1.8	0.350	1.400	3.000	39.000	1.100	5.400	3	1.800
M2	0.400	1.550	3.000	39.000	1.200	6.000	4	2.000
M 2.5	0.450	1.950	3.000	39.000	1.400	7.500	4	2.500
M3	0.500	2.400	6.000	58.000	1.500	9.500	4	3.000
M 3.5	0.600	2.800	6.000	58.000	1.800	11.000	4	3.500
M4	0.700	3.200	6.000	58.000	2.100	12.500	4	4.000
M5	0.800	4.000	6.000	58.000	2.400	16.000	4	5.000
M6	1.000	4.800	6.000	58.000	3.000	20.000	4	6.000
M8	1.250	5.950	6.000	58.000	3.800	24.000	4	8.000
M10	1.500	7.800	8.000	73.000	4.500	33.000	4	10.000
M12	1.750	9.000	10.000	84.000	5.300	38.000	4	12.000
M16	2.000	11.800	10.000	84.000	6.000	35.000	5	16.000

Special-, super- and
Ti-alloys

Micro-thread milling cutters



Cutting data page 601

P	•
M	•
K	•
N	•
S	•
H	

Tool material

Solid carbide

Surface



Type

SP G

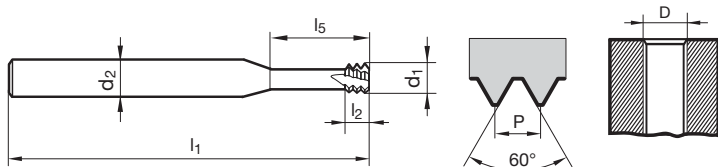
Threads

3,0

Shank form

HA

NEW



Company std.

Article no.

4228

D	P	d1	d2	l1	l2	l5	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	6.200	8.000	64.000	2.700	19.500	4	9.728
G3/8	19.000	9.950	10.000	73.000	4.000	25.000	4	16.662
G7/8	14.000	11.950	12.000	84.000	5.400	37.000	4	30.201
G2	11.000	15.950	16.000	105.000	6.900	44.000	5	59.614



Micro-thread milling cutters



Cutting data page 601

P	•
M	•
K	•
N	•
S	•
H	

Tool material

Solid carbide

Surface



Type

SP M/MF

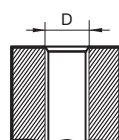
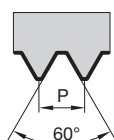
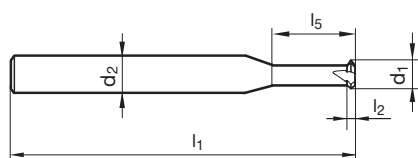
Threads

1,0

Shank form

HA

NEW



Company std.

Article no.

4225

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M1.4 - M1.8	0.350	1.050	3.000	39.000	0.400	3.800	3	1.800
M2 - M2.4	0.400	1.500	3.000	39.000	0.400	7.000	3	2.400
M2.5 - M3	0.500	2.000	3.000	39.000	0.500	9.000	4	3.000
M3.5 - M4.5	0.750	2.800	6.000	58.000	0.800	14.000	4	4.500
M5 - M7	1.000	4.000	6.000	58.000	1.000	19.000	4	7.000
M8 - M10	1.500	6.400	8.000	64.000	1.500	24.000	5	10.000

Special-, super- and Ti-alloys

Thread milling cutters without chamfer for ISO metric threads

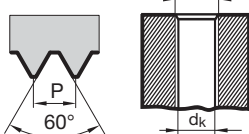
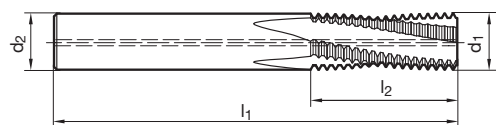


Cutting data page 600

P	•
M	○
K	•
N	•
S	○
H	≤55

Tool material	Solid carbide		
Surface			
Type	TM SP	TM SP	TM SP
Internal cooling			
Shank form	HA	HB	HA

NEW



Company std.

Article no.

3737

3743

3734

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	13.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	18.100	3	8.000
M8 x 1	1.000	6.400	8.000	7.00	62.000	17.500	3	8.005
M10	1.500	7.950	10.000	8.50	74.000	21.800	3	10.000
M10 x 1	1.000	7.950	10.000	9.00	74.000	21.500	3	10.005
M10 X1.25	1.250	7.950	10.000	8.80	74.000	21.900	3	10.006
M12	1.750	9.950	10.000	10.20	74.000	25.400	4	12.000
M12 X1.5	1.500	9.950	10.000	10.50	74.000	26.300	4	12.007
M14	2.000	11.200	12.000	12.00	90.000	31.000	4	14.000
M14 X1.5	1.500	11.200	12.000	12.50	90.000	30.800	4	14.007
M16	2.000	12.800	14.000	14.00	90.000	35.000	4	16.000
M16 X1.5	1.500	12.800	14.000	14.50	90.000	33.800	4	16.007
M20	2.500	14.950	16.000	17.50	102.000	41.300	4	20.000
M20 X1.5	1.500	14.950	16.000	18.50	102.000	42.800	4	20.007



Thread milling cutters without chamfer for ISO metric threads



Cutting data page 600

P	•
M	○
K	•
N	•
S	○
H	≤55

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

Internal cooling

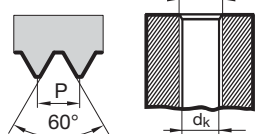
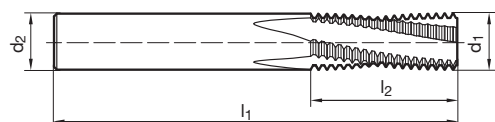


Shank form

HA

HB

NEW



Company std.

Article no.

4132

4133

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	13.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	18.100	3	8.000
M10	1.500	7.950	10.000	8.50	74.000	21.800	3	10.000
M12	1.750	9.950	10.000	10.20	74.000	25.400	4	12.000
M14	2.000	11.200	12.000	12.00	90.000	31.000	4	14.000
M16	2.000	12.800	14.000	14.00	90.000	35.000	4	16.000
M20	2.500	14.950	16.000	17.50	102.000	41.300	4	20.000

Special-, super- and Ti-alloys

Thread milling cutters without chamfer for ISO metric threads



Cutting data page 600

P	•
M	○
K	•
N	•
S	○
H	≤55

Tool material

Solid carbide

Surface

C

C

Type

TM SP

TM SP

Internal cooling

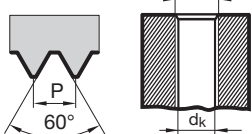
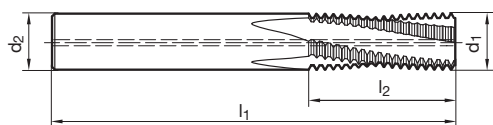


Shank form

HA

HB

NEW



Company std.

Article no.

3735

3740

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	16.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	21.900	3	8.000
M10	1.500	7.950	10.000	8.50	74.000	26.300	3	10.000
M12	1.750	9.950	10.000	10.20	74.000	32.400	4	12.000
M14	2.000	11.200	12.000	12.00	90.000	37.000	4	14.000
M16	2.000	12.800	14.000	14.00	90.000	43.000	4	16.000
M20	2.500	14.950	16.000	17.50	102.000	48.800	4	20.000



Thread milling cutters with chamfer for ISO metric threads

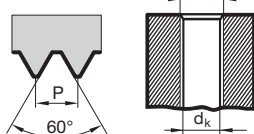
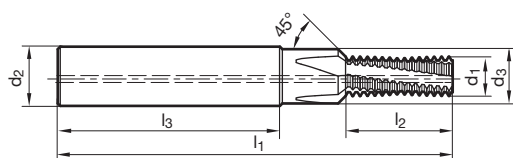


Cutting data page 600

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material	Solid carbide		
Surface			
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA

NEW



Company std.

Article no.

3525

3543

3510

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	5.300	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	7.400	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	9.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	10.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	13.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	17.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	20.100	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	25.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	27.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	33.800	4	20.000

Special-, super- and Ti-alloys

Thread milling cutters with chamfer for ISO metric threads



Cutting data page 601

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface

C

C

○

Type

TMC SP

TMC SP

TMC SP

Internal cooling



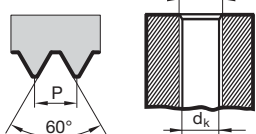
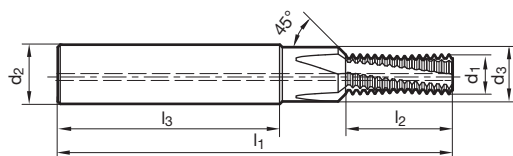
Shank form

HA

HB

HA

NEW



Company std.

Article no.

3526

3544

3511

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	6.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	8.800	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	10.800	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	13.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	18.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	21.800	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	25.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	31.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	35.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	41.300	4	20.000



Thread milling cutters with chamfer for ISO metric threads



Cutting data page 601

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface

C

C

Type

TMC SP

TMC SP

Internal cooling

C

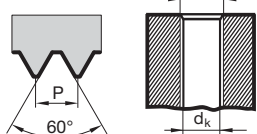
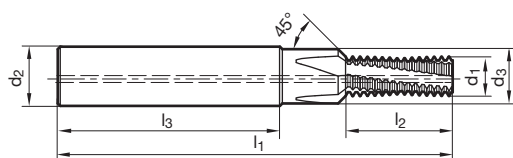
C

Shank form

HA

HB

NEW



Company std.

Article no.

3759

3760

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	7.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	35.600	10.900	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	13.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	16.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	21.900	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	26.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	32.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	37.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	43.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	48.800	4	20.000

Special-, super- and Ti-alloys

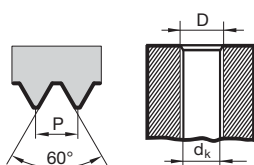
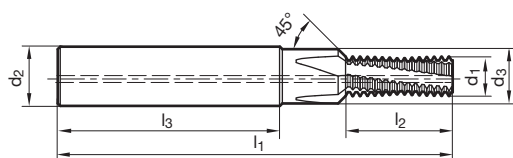
Thread milling cutters with chamfer for ISO metric fine threads



P	•	Cutting data page 600
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide		
Surface			
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA

NEW



Company std.

Article no.

3527

3545

3512

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	7.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	8.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	9.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	10.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	13.100	3	8.004
M 8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	13.500	3	8.005
M 10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	16.500	4	10.005
M 10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	16.900	4	10.006
M 12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	19.500	4	12.005
M 12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	20.300	4	12.007
M 14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	23.300	4	14.007
M 16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	26.300	4	16.007



Thread milling cutters with chamfer for ISO metric fine threads

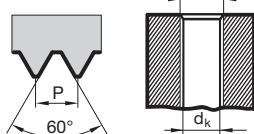
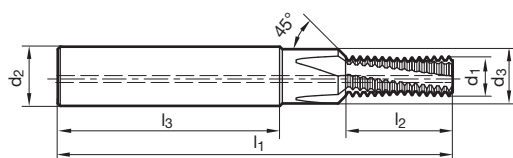


Cutting data page 601

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material	Solid carbide		
Surface			
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA

NEW



Company std.

Article no.

3528

3546

3513

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	8.800	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	10.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	12.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	13.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	16.900	3	8.004
M 8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	17.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	21.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	21.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	25.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	26.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	30.800	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	33.800	4	16.007

Special-, super- and Ti-alloys

Thread milling cutters with chamfer for ISO metric fine threads



P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 601

Tool material

Solid carbide

Surface

C

C

Type

TMC SP

TMC SP

Internal cooling

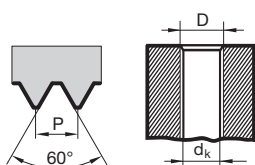
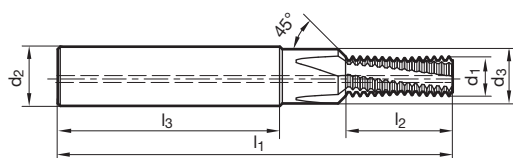


Shank form

HA

HB

NEW



Company std.

Article no.

3762

3763

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	10.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	12.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	15.300	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	15.400	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	20.600	3	8.004
M 8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	20.500	3	8.005
M 10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	25.500	4	10.005
M 10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	25.600	4	10.006
M 12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	30.500	4	12.005
M 12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	30.800	4	12.007
M 14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	38.300	4	14.007
M 16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	41.300	4	16.007



Thread milling cutters without chamfer for UNC-threads



Cutting data page 600

P	•
M	○
K	•
N	•
S	○
H	≤55

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

Internal cooling

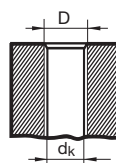
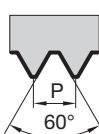
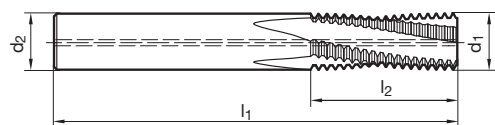


Shank form

HA

HB

NEW



Company std.

Article no.

4134

4135

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 24	3.400	6.000	3.90	54.000	11.100	3	4.826
12 - 24	4.100	6.000	4.50	54.000	12.200	3	5.486
1/4 - 20	4.700	6.000	5.10	54.000	14.600	3	6.350
5/16 - 18	6.100	8.000	6.60	64.000	17.600	3	7.938
3/8 - 16	7.600	8.000	8.00	64.000	21.400	3	9.525
7/16 - 14	9.000	10.000	9.40	74.000	24.500	3	11.113
1/2 - 13	9.950	10.000	10.80	74.000	28.300	4	12.700
9/16 - 12	11.400	12.000	12.20	90.000	30.700	4	14.288
5/8 - 11	12.700	14.000	13.50	90.000	35.800	4	15.875

Special-, super- and Ti-alloys

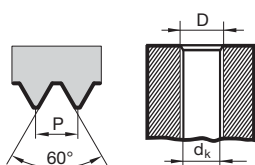
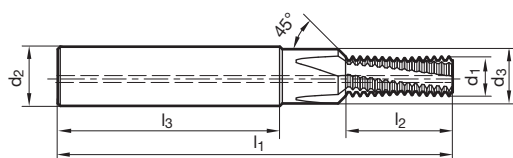
Thread milling cutters with chamfer for UNC-threads



P	•	Cutting data page 600
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3516

3534

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	12.100	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	14.800	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	16.700	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	19.000	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	22.500	4	12.700



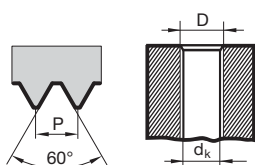
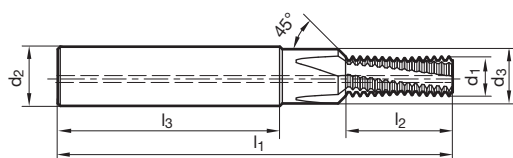
Thread milling cutters with chamfer for UNC-threads



P	•	Cutting data page 601
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3517

3535

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	14.600	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	17.600	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	21.400	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	24.500	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	28.300	4	12.700

Special-, super- and Ti-alloys

Thread milling cutters without chamfer for UNF-threads



Cutting data page 600

P	•
M	○
K	•
N	•
S	○
H	≤55

Tool material

Solid carbide

Surface

C

C

Type

TM SP

TM SP

Internal cooling

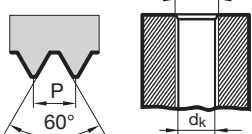
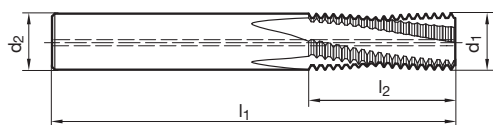


Shank form

HA

HB

NEW



Company std.

Article no.

4136

4137

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 32	3.800	6.000	4.10	54.000	11.500	3	4.826
12 - 28	4.300	6.000	4.60	54.000	12.200	3	5.486
1/4 - 28	5.100	6.000	5.50	54.000	14.100	3	6.350
5/16 - 24	6.300	8.000	6.90	64.000	17.500	3	7.938
3/8 - 24	7.800	8.000	8.50	64.000	20.600	3	9.525
7/16 - 20	9.400	10.000	9.90	74.000	24.800	3	11.113
1/2 - 20	9.950	10.000	11.50	74.000	27.300	4	12.700
9/16 - 18	11.400	12.000	12.90	90.000	30.300	4	14.288
5/8 - 18	12.700	14.000	14.50	90.000	33.200	4	15.875



Thread milling cutters with chamfer for UNF-threads



P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 600

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

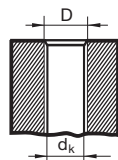
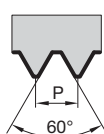
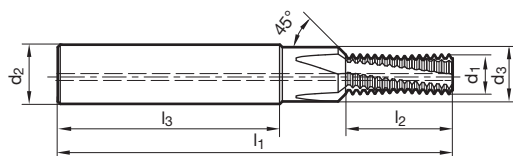


Shank form

HA

HB

NEW



Company std.

Article no.

3518

3536

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	11.300	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	13.200	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	16.400	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	18.400	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	21.000	4	12.700

Special-, super- and Ti-alloys

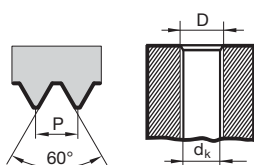
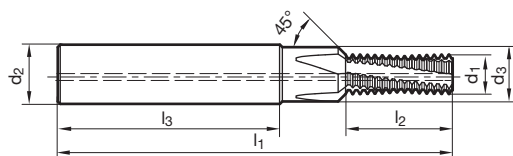
Thread milling cutters with chamfer for UNF-threads



P	•	Cutting data page 601
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3519

3537

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	14.100	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	17.500	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	20.600	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	24.800	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	27.300	4	12.700



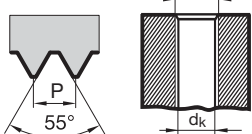
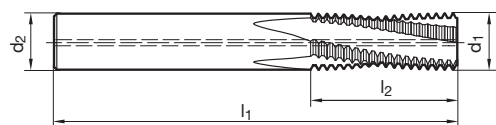
Thread milling cutters without chamfer for BSP-threads



P	•	Cutting data page 600
M	○	
K	•	
N	•	
S	○	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3745

3748

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	21.300	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	28.700	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	35.400	4	16.662

Special-, super- and
Ti-alloys

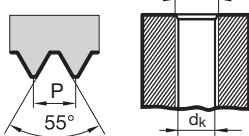
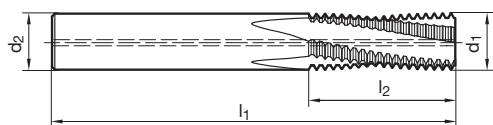
Thread milling cutters without chamfer for BSP-threads



P	•	Cutting data page 600
M	○	
K	•	
N	•	
S	○	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3746

3750

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	24.900	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	35.400	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	43.500	4	16.662



Thread milling cutters with chamfer for BSP-threads



P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 600

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

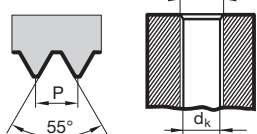
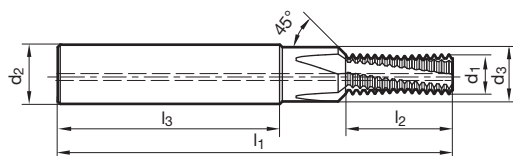


Shank form

HA

HB

NEW



Company std.

Article no.

3514

3529

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	15.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	22.100	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	27.400	4	16.662

Special-, super- and Ti-alloys

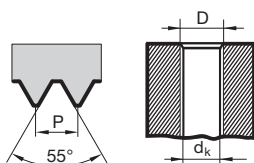
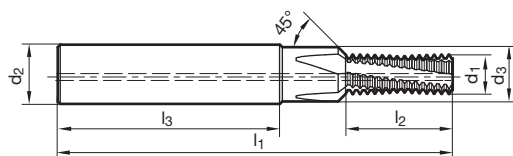
Thread milling cutters with chamfer for BSP-threads



P	•	Cutting data page 601
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3515

3533

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	21.300	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	28.700	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	35.400	4	16.662



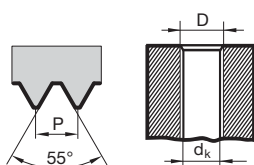
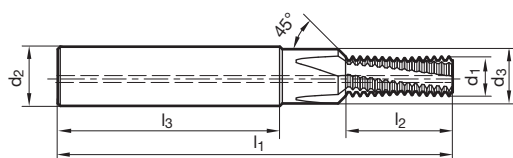
Thread milling cutters with chamfer for BSP-threads



P	•	Cutting data page 601
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3765

3766

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	24.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	35.400	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	43.500	4	16.662

Special-, super- and Ti-alloys

Thread milling cutters without chamfer for NPT-threads



Cutting data page 600

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface

C

C

Type

TM SP

TM SP

Internal cooling

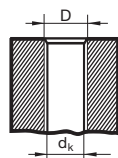
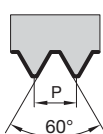
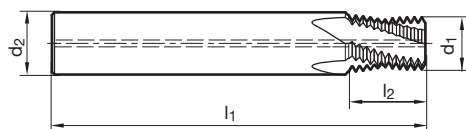


Shank form

HA

HB

NEW



Company std.

Article no.

3753

3754

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570



Thread milling cutters with chamfer for NPT-threads



Cutting data page 600

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

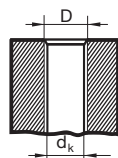
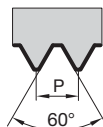
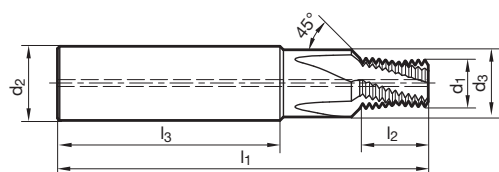


Shank form

HA

HB

NEW



Company std.

Article no.

3520

3538

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570

Special-, super- and Ti-alloys

Thread milling cutters without chamfer for NPTF-threads



Cutting data page 600

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TM SP

TM SP

Internal cooling

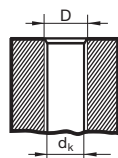
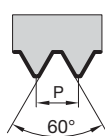
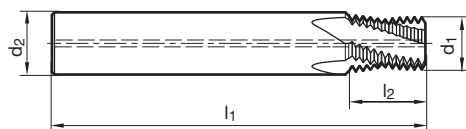


Shank form

HA

HB

NEW



Company std.

Article no.

3756

3757

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570



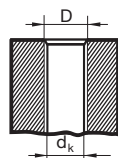
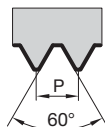
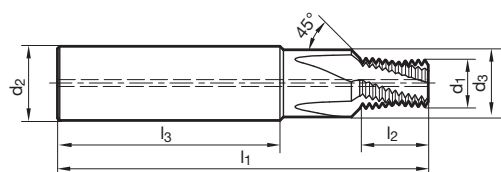
Thread milling cutters with chamfer for NPTF-threads



P	•	Cutting data page 600
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3521

3539

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570

Special-, super- and Ti-alloys

Universal thread milling cutters for ISO metric threads



Cutting data page 601

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface

C

C

○

Type

TMU SP

TMU SP

TMU SP

Internal cooling



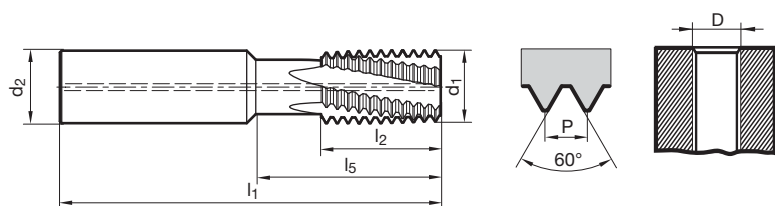
Shank form

HA

HB

HA

NEW



Company std.

Article no.

3541

3556

3523

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 10	7.950	8.000	64.000		20.000	4	8.050
1.000	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.100
1.250	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.125
1.500	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.150
1.000	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.150
1.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.100
1.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.200
3.000	≥ 24	17.950	18.000	102.000	50.000	33.000	5	18.300
1.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.100
1.500	≥ 26	19.950	20.000	105.000	50.000	33.000	5	20.150
2.000	≥ 27	19.950	20.000	105.000	50.000	33.000	5	20.200
2.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.250
3.000	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.300
3.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.350



External thread milling cutters



Cutting data page 601

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMU SP

TMU SP

Internal cooling

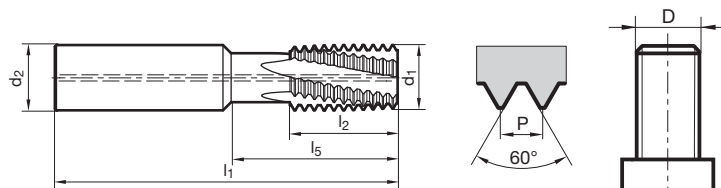


Shank form

HA

HB

NEW



Company std.

Article no.

4162

4163

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 3	9.950	10.000	70.000	25.000	16.000	4	10.050
0.750	≥ 5	9.950	10.000	70.000	25.000	16.000	4	10.075
1.000	≥ 6	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 8	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 10	11.950	12.000	80.000	31.000	20.000	4	12.150
1.500	≥ 10	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 14	15.950	16.000	90.000	40.000	25.000	5	16.200
2.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.250
3.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.300

Special-, super- and Ti-alloys

Universal thread milling cutters for UN-threads



Cutting data page 601

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMU UN

TMU UN

Internal cooling

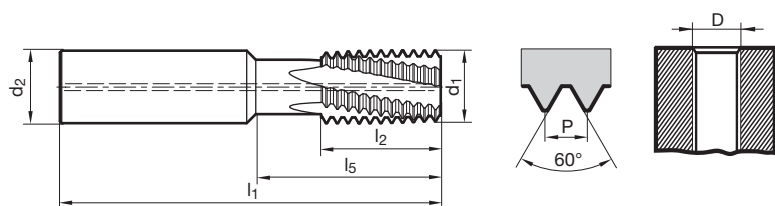


Shank form

HA

HB

NEW



Company std.

Article no.

3595

3596

P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
10.000	≥ 3/4	11.950	12.000	80.000	31.000	20.000	4	12.100
16.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.160
18.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.180
20.000	≥ 11/16	11.950	12.000	80.000	31.000	20.000	4	12.200
24.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.240
12.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.120
14.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.140
16.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.160
18.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.180
20.000	≥ 13/16	15.950	16.000	90.000	40.000	25.000	5	16.200
7.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.070
8.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.080
12.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.120
14.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.140
16.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.160



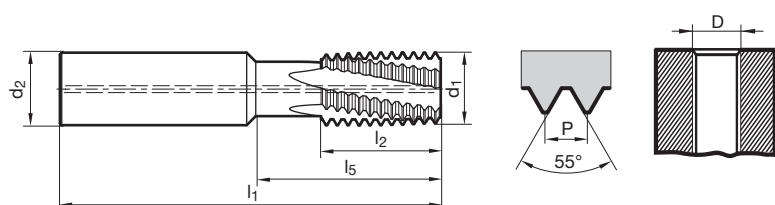
Universal thread milling cutters for BSP-threads



P	•	Cutting data page 601
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide		
Surface			
Type	TM SP	TM SP	TM SP
Internal cooling			
Shank form	HA	HB	HA

NEW



Company std.

Article no.

3542

3557

3524

P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
19.000	≥ 1/4	9.950	10.000	70.000	25.000	16.000	4	10.190
14.000	≥ 1/2	15.950	16.000	90.000	40.000	25.000	5	16.140
11.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.110

Special-, super- and Ti-alloys



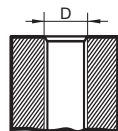
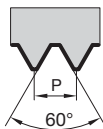
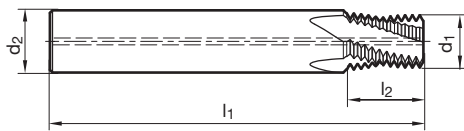
Universal thread milling cutters for NPT-threads



P	•	Cutting data page 601
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3768

3769

P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

Special-, super- and
Ti-alloys



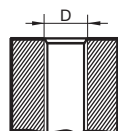
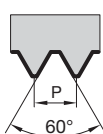
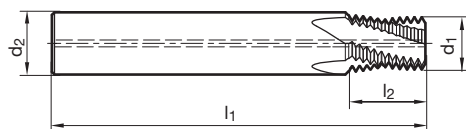
Universal thread milling cutters for NPTF-threads



P	•	Cutting data page 601
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3772

3773

P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

Special-, super- and Ti-alloys



HARD ENED

HARDENED STEEL

High tensile steels, hardened steels,
chilled cast iron





HARDENED STEEL

M

ISO2/6H

ISO3/6G

MF

ISO2/6H

ISO3/6G

45 – 55 HRC

No 1

M3 - M16
Art.-No. 1201
from page 680

No 1

M8x1 - M12x1,5
Art.-No. 4161
from page 682

55 – 62 HRC

No 1

M3 - M16
Art.-No. 2944
from page 681

No 1

M6x0,5 - M12x1,5
Art.-No. 1161
from page 683

Core hole drills

No 1

Art.-No. 1946
from page 677

No 1

Art.-No. 1946
from page 677

No 1 ideal tool



QUICKFINDER

UNC

2B

UNF

2B

G

-



THROUGH HOLE
BLIND HOLE



HSS-E-PM, TiCN, form D



Solid carbide, TiCN, form D



Solid carbide, TiAlN

Hardened steel



HARDENED STEEL

M

UNIVERSAL

MF

UNIVERSAL

No 1

M3 - M20
Art.-No. 3525
from page 685

No 1

M4x0,5 - M16x1,5
Art.-No. 3527
from page 687

No 1

M3 - M20
Art.-No. 3526
from page 686

No 1

M4x0,5 - M16x1,5
Art.-No. 3528
from page 688

No 1

M2 - M12
Art.-No. 4227
from page 703

No 1

Art.-No. 1946
from page 677

No 1

Art.-No. 1946
from page 677

No 1

ideal
tool

max. 55 HRC
1.5xD
2xD

max. 65 HRC
3xD

Core hole drills



QUICKFINDER

UNC
UNIVERSAL

UNF
UNIVERSAL

G
-



T H R O U G H H O L E
B L I N D H O L E

No 1

1/4 - 1/2
Art.-No. 3516
from page 689

No 1

1/4 - 1/2
Art.-No. 3518
from page 691

No 1

1/8 - 3/8
Art.-No. 3514
from page 693



Solid carbide, TiCN

No 1

1/4 - 1/2
Art.-No. 3517
from page 690

No 1

1/4 - 1/2
Art.-No. 3519
from page 692

No 1

1/8 - 3/8
Art.-No. 3515
from page 694



Solid carbide, TiCN



Solid carbide, TiCN



Solid carbide, TiAlN

Hardened steel



HARDENED STEEL



THROUGH HOLES

Thread depth

 $\leq 1,5xD$ $\leq 3xD$

Tool material

HSS-E

Solid carbide

Type/form

H/D

H/D

H

Surface



Coolant delivery



Shank tolerance

h9

h9

HA

45 ... 55 HRC

 ≤ 65 HRC

Core drill

Thread type

Tolerance

Article no. / page

M

4H

2944
6811946
677

6H

6HX

1201
6801946
677

6G

MF

6H

1161
6831946
677

6HX

4161
6821946
677

6G

UNC

2B

2BX

UNF

2B

2BX

G

BSW

NPT

NPTF

EG M

6H Mod.

MJ

4HX

MJF

4HX

UNJC

3BX

UNJF

3BX

PG

Suitable lubricant



= No 1

○ = Air

● = Neat oil

● = Soluble oil

△ = Paste

□ = Minimal quantity lubrication (MQL)

	Group of materials	Hardness	Material ex-ample	Material no.	Application recommendations		
H	High tensile steels, hard-ened steels	45 - 55 HRC	Hardox 500		3	-	
		55 - 62 HRC			-	2	



Special tapping size hole diameter for hard machining with Guhring no. 2944

Thread size	Tapping size hole Ø		Core diameter of int. thread			
			min.		max.	
	to DIN 336 mm	with Guh. no. 2944 mm	to DIN 336 mm	with Guh. no. 2944 mm	to DIN 336 mm	with Guh. no. 2944 mm
M3	2.50	2.60	2.495	2.559	2.599	2.699
M4	3.30	3.40	3.242	3.342	3.422	3.522
M5	4.20	4.30	4.134	4.234	4.334	4.434
M6	5.00	5.10	4.917	5.017	5.153	5.253
M8	6.80	6.90	6.647	6.747	6.912	7.012
M10	8.50	8.60	8.376	8.476	8.676	8.776
M12	10.20	10.40	10.106	10.206	10.441	10.541
M16	12.00	14.10	13.835	15.935	14.210	16.310

Special tapping size hole diameter for hard machining with Guhring no. 1161

Thread size	Tapping size hole Ø		Core diameter of int. thread			
			min.		max.	
	to DIN 336 mm	with Guh. no. 1161 mm	to DIN 336 mm	with Guh. no. 1161 mm	to DIN 336 mm	with Guh. no. 1161 mm
M6x0,5	5.50	5.60	5.459	5.559	5.599	5.699
M8x1	7.00	7.10	6.917	7.017	7.153	7.253
M10x1	9.00	9.10	8.917	9.017	9.153	9.253
M12x1	11.00	11.10	10.917	11.017	11.153	11.253
M12x1,5	10.50	10.60	10.376	10.476	10.676	10.776

Article no. **1946**

Tool material **Solid carbide**

Carbide grade **K**

Type **H**

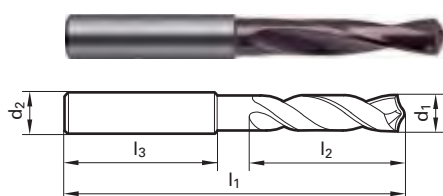
Surface finish **A**

DIN **DIN 6537**

Shank form **HA**

The Guhring drill for tapping size holes in hardened materials!

Guhring's hard drill enables the efficient and process reliable production of holes in hardened steels up to 62 HRC. Convex cutting edges give the tool its extremely high rigidity and ensure an optimal chip fracture. The flute profile is optimised for hard machining and evacuates the swarf safely from the hole. The Guhring hard drill is available as standard tool with straight shank to DIN 6535 HA in the diameter range from 2.6 to 14.1 mm.



d1	d2	l1	l2	l3
mm	mm	mm	mm	mm
2.600	6.000	62.00	20.00	36.00
3.000	6.000	62.00	20.00	36.00
3.400	6.000	62.00	20.00	36.00
4.000	6.000	66.00	24.00	36.00
4.300	6.000	66.00	24.00	36.00
5.000	6.000	66.00	28.00	36.00
5.100	6.000	66.00	28.00	36.00
5.600	6.000	66.00	28.00	36.00
6.000	6.000	66.00	28.00	36.00
6.900	8.000	79.00	34.00	36.00
7.100	8.000	79.00	34.00	36.00
8.000	8.000	79.00	41.00	36.00
8.600	10.000	89.00	47.00	40.00
9.100	10.000	89.00	47.00	40.00
10.000	10.000	89.00	47.00	40.00
10.400	12.000	102.00	55.00	45.00
10.600	12.000	102.00	55.00	45.00
11.100	12.000	102.00	55.00	45.00
12.000	12.000	102.00	55.00	45.00
14.100	16.000	115.00	65.00	48.00

Cutting rates at 3 x D with Guhring no. 1946

Hardness	HRC 40...48	HRC 48 ... 62
	40 m/min	30 m/min
	f (mm/rev):	f (mm/rev):
2.6	0.032	0.025
3.4	0.040	0.032
4.3	0.050	0.040
5.1	0.050	0.040
5.6	0.050	0.040
6.9	0.070	0.055
7.1	0.070	0.055
8.6	0.090	0.070
9.1	0.090	0.070
10.4	0.110	0.090
10.5	0.110	0.090
11.0	0.120	0.100
14.1	0.120	0.100

Hardened steel

 HARDENED STEEL	Thread depth	≤1,5xD	
	Tool material		
	Type	TMC SP	TMC SP
	Surface		
	Coolant delivery	axial	axial
	Shank form	HA	HA
	Spiral	10°	10°
 THROUGH HOLES AND BLIND HOLES			
Hardened steel	Thread type	Article no. / page	
	M	3525 685	3543 685
	MF	3527 687	3545 687
	UNC	3516 689	3534 689
	UNF	3518 691	3536 691
	G	3514 693	3529 693
	BSW		
	NPT	3520 695	3538 695
	NPTF	3521 696	3539 696
	EG M		
	MJ		
	MJF		
	UNJC		
	UNJF		
	PG		
	Suitable lubricant	 	 

= No 1

- = Air
- = Neat oil
- ◐ = Soluble oil
- △ = Paste
- = Minimal quantity lubrication (MQL)

	Group of materials	Hardness	Material example	Material no.	Application recommendations	
H	High tensile steels, hardened steels	45 - 55 HRC	Hardox 500		++	++
		55 - 62 HRC			-	-



≤2xD		universal				≤3xD	
Solid carbide							
TMC SP	TMC SP	TMU SP	TMU SP	TMU SP	TMU SP	MTM 3 SP	H
							
axial	axial	axial	axial	axial	axial		
HA	HB	HA	HB	HA	HB	HA	HA
10°	10°	15°	15°	15°	15°	15°	15°
				for external threads 	for external threads 		
Article no. / page							
3526 686	3544 686	3541 697	3556 697	4162 698	4163 698	4227 703	1946 677
3528 688	3546 688	3541 697	3556 697	4162 698	4163 698		1946 677
3517 690	3535 690	3595 699	3596 699				
3519 692	3537 692	3595 699	3596 699				
3515 694	3533 694	3542 700	3557 700	3542 700	3557 700		
		3768 701	3769 701				
		3772 702	3773 702				
EG-threads can be produced with every thread milling cutter type and dimension							
 	 	 	 	 	 		 

Hardened steel

Application recommendations							
++	++	+	+	+	+	++	++
-	-	-	-	-	-	++	++

Machine taps for ISO metric threads



Cutting data page 676

P	
M	
K	
N	
S	
H	45-55

Tool material **HSS-E-PM**

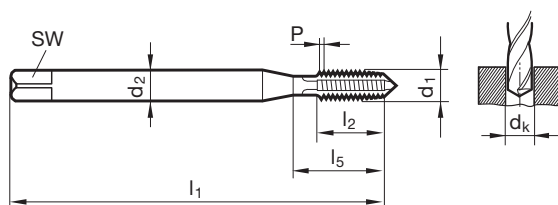
Tolerance on Ø 6HX

Surface

Type H

Form D

Internal cooling



DIN 2184-1 DIN 371

Article no.

1201

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.60	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.40	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.30	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.10	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.90	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.60	100.000	20.000	39.000
M12	1.750	12.000	9.000	10.40	110.000	24.000	49.000
M14	2.000	11.000	11.000	12.10	110.000	26.000	53.000
M16	2.000	12.000	12.000	14.10	110.000	26.000	54.000

Hardened steel



Machine taps for ISO metric threads



Cutting data page 676

P	
M	
K	
N	
S	
H	≤62

Tool material **Solid carbide**

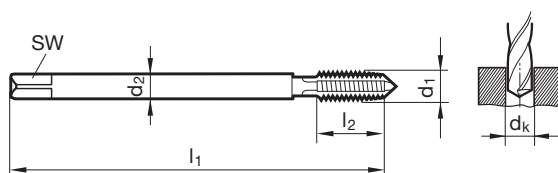
Tolerance on Ø ISO2/6H

Surface **C**

Type H

Form D

Internal cooling



Company std. ~DIN 371

Article no.

2944

d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.60	56.000	12.000
M4	0.700	4.500	3.400	3.40	63.000	14.000
M5	0.800	6.000	4.900	4.30	70.000	17.000
M6	1.000	6.000	4.900	5.10	80.000	20.000
M8	1.250	8.000	6.200	6.90	90.000	20.000
M10	1.500	10.000	8.000	8.60	100.000	24.000
M12	1.750	12.000	9.000	10.40	110.000	28.000
M16	2.000	16.000	12.000	14.10	110.000	40.000

Hardened steel



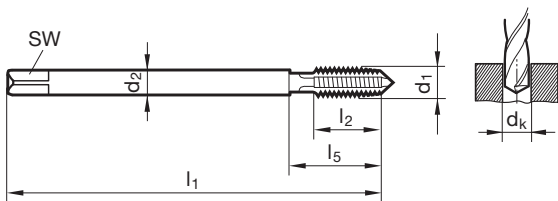
Machine taps for ISO metric fine threads



P	
M	
K	
N	
S	
H	45-55

Cutting data page 676

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	C
Type	H
Form	D
Internal cooling	



DIN 2184-1 DIN 371	Article no.	4161

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.10	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.10	90.000	16.000	35.000	10.005
M12 x 1	12.000	9.000	11.10	100.000	20.000	40.000	12.005
M12 X1.5	12.000	9.000	10.60	100.000	20.000	40.000	12.007

Hardened steel



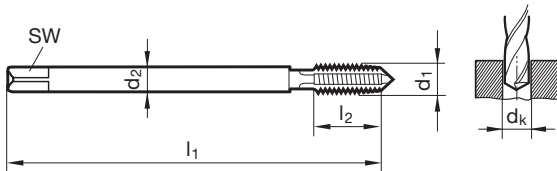
Machine taps for ISO metric fine threads



P	
M	
K	
N	
S	
H	≤62

Cutting data page 676

Tool material	Solid carbide
Tolerance on Ø	ISO2/6H
Surface	C
Type	H
Form	D
Internal cooling	



Company std. ~DIN 371

Article no.

1161

d1	d2	SW	dk	l1	l2	Code no.
	mm	mm	mm	mm	mm	
M 6 X0.5	6.000	4.900	5.60	80.000	15.000	6.003
M8 x 1	8.000	6.200	7.10	90.000	18.000	8.005
M10 x 1	10.000	8.000	9.10	90.000	22.000	10.005
M12 x 1	12.000	9.000	11.10	100.000	25.000	12.005
M12 X1.5	12.000	9.000	10.60	100.000	28.000	12.007

Hardened steel



THREAD MILLING CUTTERS





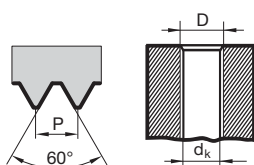
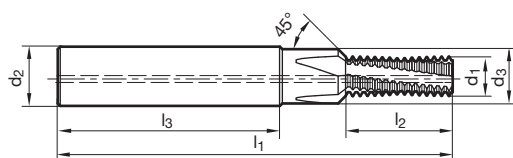
Thread milling cutters with chamfer for ISO metric threads



P	•	Cutting data page 678
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3525

3543

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	5.300	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	7.400	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	9.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	10.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	13.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	17.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	20.100	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	25.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	27.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	33.800	4	20.000

Hardened steel

Thread milling cutters with chamfer for ISO metric threads



Cutting data page 679

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

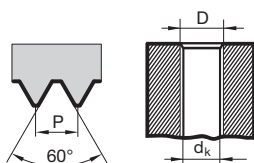
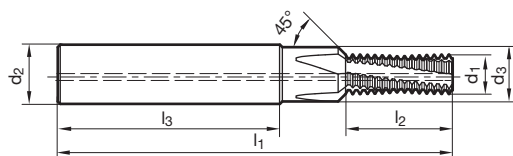


Shank form

HA

HB

NEW



Company std.

Article no.

3526

3544

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	6.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	8.800	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	10.800	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	13.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	18.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	21.800	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	25.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	31.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	35.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	41.300	4	20.000

Hardened steel



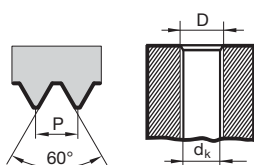
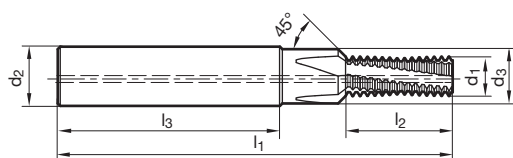
Thread milling cutters with chamfer for ISO metric fine threads



P	•	Cutting data page 678
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3527

3545

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	7.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	8.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	9.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	10.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	13.100	3	8.004
M 8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	13.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	16.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	16.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	19.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	20.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	23.300	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	26.300	4	16.007

Hardened steel

Thread milling cutters with chamfer for ISO metric fine threads



Cutting data page 679

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface

C

C

Type

TMC SP

TMC SP

Internal cooling

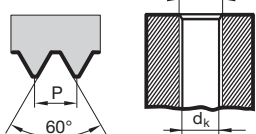
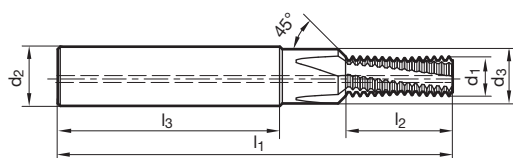


Shank form

HA

HB

NEW



Company std.

Article no.

3528

3546

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	8.800	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	10.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	12.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	13.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	16.900	3	8.004
M 8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	17.500	3	8.005
M 10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	21.500	4	10.005
M 10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	21.900	4	10.006
M 12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	25.500	4	12.005
M 12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	26.300	4	12.007
M 14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	30.800	4	14.007
M 16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	33.800	4	16.007

Hardened steel



Thread milling cutters with chamfer for UNC-threads



P	•	Cutting data page 678
M	•	
K	•	
N	•	
S	•	
H	≤55	

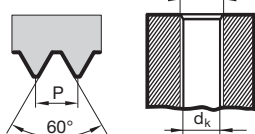
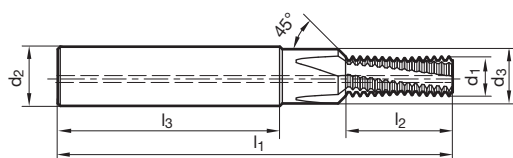
Tool material **Solid carbide**Surface **C** **C**

Type TMC SP TMC SP

Internal cooling  

Shank form HA HB

NEW



Company std.

Article no.

3516

3534

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	12.100	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	14.800	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	16.700	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	19.000	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	22.500	4	12.700

Hardened steel

Thread milling cutters with chamfer for UNC-threads



P • Cutting data page 679

M •

K •

N •

S •

H ≤55

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

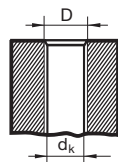
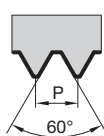
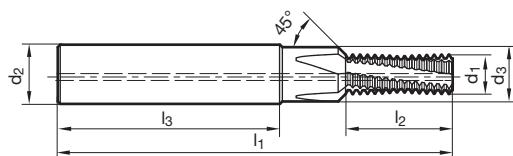


Shank form

HA

HB

NEW



Company std.

Article no.

3517

3535

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	14.600	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	17.600	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	21.400	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	24.500	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	28.300	4	12.700

Hardened steel



Thread milling cutters with chamfer for UNF-threads



P	•	Cutting data page 678
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material

Solid carbide

Surface



Type

TMC SP

TMC SP

Internal cooling

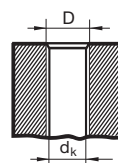
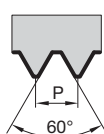
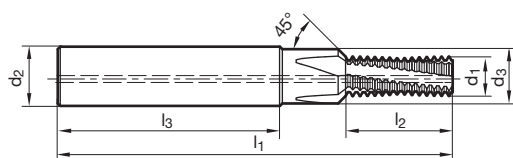


Shank form

HA

HB

NEW



Company std.

Article no.

3518

3536

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	11.300	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	13.200	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	16.400	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	18.400	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	21.000	4	12.700

Hardened steel

Thread milling cutters with chamfer for UNF-threads



P • Cutting data page 679

M •

K •

N •

S •

H ≤55

Tool material

Solid carbide

Surface

C

C

Type

TMC SP

TMC SP

Internal cooling

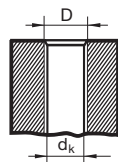
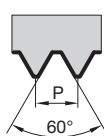
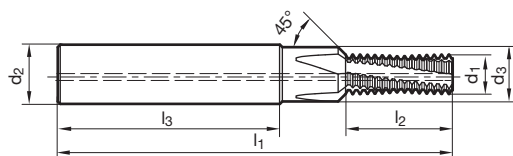


Shank form

HA

HB

NEW



Company std.

Article no.

3519

3537

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	14.100	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	17.500	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	20.600	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	24.800	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	27.300	4	12.700

Hardened steel



Thread milling cutters with chamfer for BSP-threads

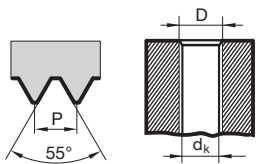
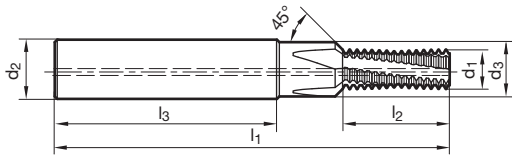


P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 678

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3514

3529

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	15.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	22.100	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	27.400	4	16.662

Hardened steel

Thread milling cutters with chamfer for BSP-threads



P • Cutting data page 679

M •

K •

N •

S •

H ≤55

Tool material

Solid carbide

Surface

C

C

Type

TMC SP

TMC SP

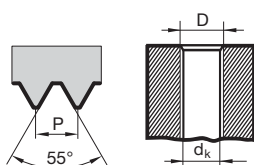
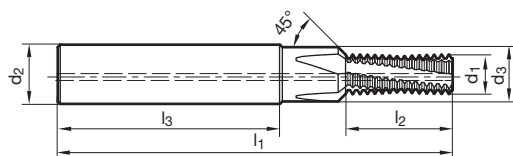
Internal cooling

Shank form

HA

HB

NEW



Company std.

Article no.

3515

3533

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	21.300	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	28.700	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	35.400	4	16.662



Thread milling cutters with chamfer for NPT-threads

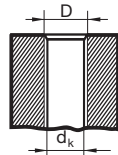
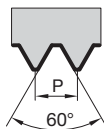
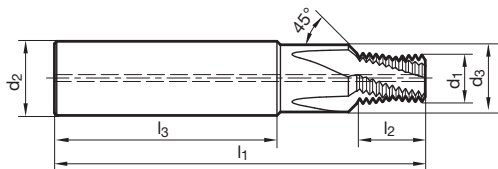


P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 678

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3520

3538

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570

Hardened steel



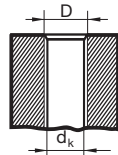
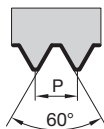
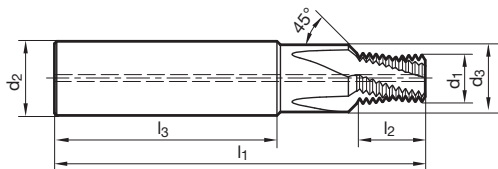
Thread milling cutters with chamfer for NPTF-threads



P	•	Cutting data page 678
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.

Article no.

3521

3539

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570

Hardened steel



Universal thread milling cutters for ISO metric threads



Cutting data page 679

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMU SP

TMU SP

Internal cooling

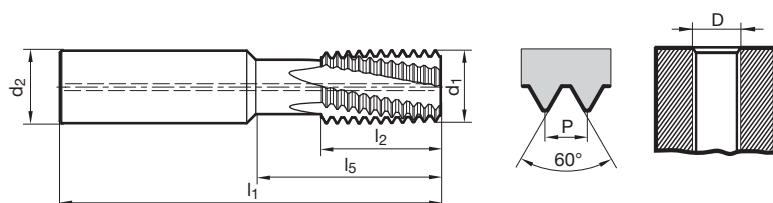


Shank form

HA

HB

NEW



Company std.

Article no.

3541

3556

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 10	7.950	8.000	64.000		20.000	4	8.050
1.000	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.100
1.250	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.125
1.500	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.150
1.000	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.150
1.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.100
1.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.200
3.000	≥ 24	17.950	18.000	102.000	50.000	33.000	5	18.300
1.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.100
1.500	≥ 26	19.950	20.000	105.000	50.000	33.000	5	20.150
2.000	≥ 27	19.950	20.000	105.000	50.000	33.000	5	20.200
2.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.250
3.000	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.300
3.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.350

Hardened steel

External thread milling cutters



Cutting data page 679

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMU SP

TMU SP

Internal cooling

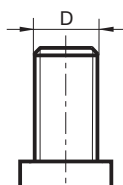
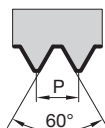
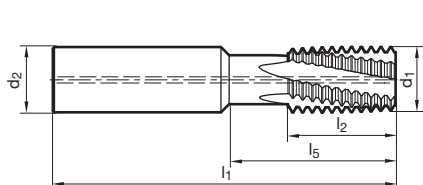


Shank form

HA

HB

NEW



Company std.

Article no.

4162

4163

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 3	9.950	10.000	70.000	25.000	16.000	4	10.050
0.750	≥ 5	9.950	10.000	70.000	25.000	16.000	4	10.075
1.000	≥ 6	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 8	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 10	11.950	12.000	80.000	31.000	20.000	4	12.150
1.500	≥ 10	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 14	15.950	16.000	90.000	40.000	25.000	5	16.200
2.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.250
3.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.300

Hardened steel



Universal thread milling cutters for UN-threads



Cutting data page 679

P	•
M	•
K	•
N	•
S	•
H	≤55

Tool material

Solid carbide

Surface



Type

TMU UN

TMU UN

Internal cooling

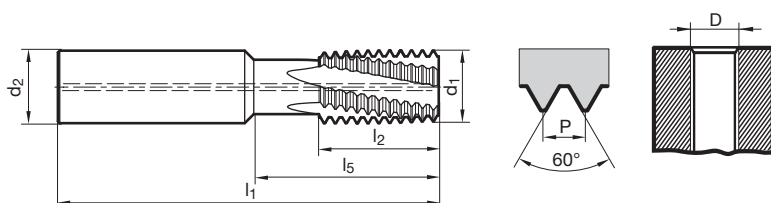


Shank form

HA

HB

NEW



Company std.

Article no.

3595

3596

P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
10.000	≥ 3/4	11.950	12.000	80.000	31.000	20.000	4	12.100
16.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.160
18.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.180
20.000	≥ 11/16	11.950	12.000	80.000	31.000	20.000	4	12.200
24.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.240
12.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.120
14.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.140
16.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.160
18.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.180
20.000	≥ 13/16	15.950	16.000	90.000	40.000	25.000	5	16.200
7.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.070
8.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.080
12.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.120
14.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.140
16.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.160

Hardened steel



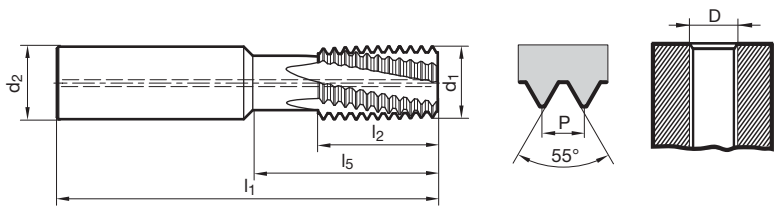
Universal thread milling cutters for BSP-threads



P	•	Cutting data page 679
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW



Company std.	Article no.	3542	3557

P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
19.000	≥ 1/4	9.950	10.000	70.000	25.000	16.000	4	10.190
14.000	≥ 1/2	15.950	16.000	90.000	40.000	25.000	5	16.140
11.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.110

Hardened steel



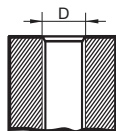
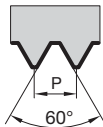
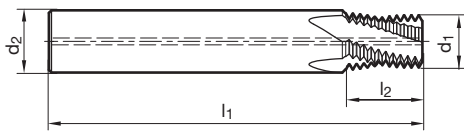
Universal thread milling cutters for NPT-threads



P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 679

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB



Company std.

Article no.

3768

3769

P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

Hardened steel

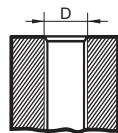
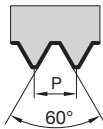
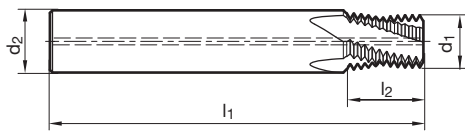


Universal thread milling cutters for NPTF-threads



P	•	Cutting data page 679
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface		
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB



Company std.	Article no.	3772	3773

P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

Hardened steel



Micro-thread milling cutters



Cutting data page 679

P	
M	
K	
N	
S	○
H	●

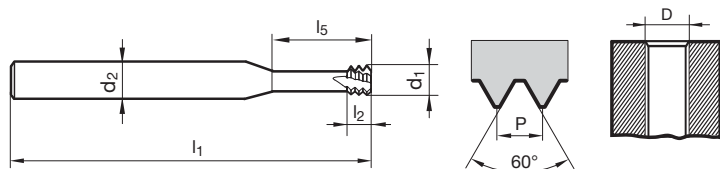
Tool material **Solid carbide**Surface **A**

Type SP M

Threads 3,0

Shank form HA

NEW



Company std.

Article no.

4227

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M2	0.400	1.550	3.000	39.000	1.200	6.000	4	2.000
M 2.5	0.450	1.950	3.000	39.000	1.400	7.500	4	2.500
M3	0.500	2.350	6.000	58.000	1.500	9.500	4	3.000
M4	0.700	3.100	6.000	58.000	2.100	12.500	4	4.000
M5	0.800	3.800	6.000	58.000	2.400	16.000	4	5.000
M6	1.000	4.800	6.000	58.000	3.000	20.000	4	6.000
M8	1.250	5.950	6.000	58.000	3.800	24.000	4	8.000
M10	1.500	7.800	8.000	64.000	4.500	23.000	4	10.000
M12	1.750	9.000	10.000	73.000	5.300	26.000	5	12.000

Hardened steel

HAND TAPS

DIES

Material group	Tens. strength MPa (N/mm ²)	Hardness HB	Cutting speed vc m/min	
			HSS	HSS-E
Structural steels	≤ 800	–	8 - 12	–
Free-cutting steels	≤ 1000	–	10 - 14	–
Unalloyed case hardened steels	≤ 750	–	6 - 10	–
Unalloyed heat-treatable steels	≤ 850	–	6 - 10	–
Alloyed case hardened steels	≥ 850 ... 1200	–	–	5 - 8
Alloyed heat-treatable steels	≥ 850 ... 1200	–	–	5 - 8
Alloyed tool steels	≤ 1000	–	–	5 - 8
High speed tool steels	≥ 650 ... 1000	–	–	5 - 8
Stainless- and acid-resistant steels, sulphured austenitic martensitic	≤ 850	–	–	4 - 6
	≤ 850	–	–	4 - 6
	≤ 850	–	–	4 - 6
Structural steels	≤ 800	–	8 - 12	–
Free-cutting steels	≤ 1000	–	10 - 14	–
Case hardened steels	≤ 1000	–	6 - 10	–
Heat-treatable steels	≤ 1200	–	6 - 10	–
Nitriding steels	≤ 1200	–	–	5 - 8
Spheroidal graphite iron	–	≤ 240	5 - 8	–
Aluminium and Al-alloys	≤ 400	–	10 - 20	–
Al wrought alloys	≤ 400	–	10 - 20	–
Al cast alloys ≤ 10 % Si > 10 % Si	≤ 600	–	10 - 15	–
	≤ 600	–	10 - 12	–
Cast iron	–	≤ 240	5 - 8	–
Spheroidal graphite iron	–	≤ 240	5 - 8	–
Malleable cast iron	–	< 300	5 - 8	–
Brass, short-chipping long-chipping	≤ 600	–	5 - 8	–
	≤ 600	–	20 - 30	–
Plastics	–	–	12 - 18	–
Magnesium-alloys	≤ 450	–	10 - 20	–
Titanium and Ti-alloys	≤ 1200	–	–	2 - 6
Ni-alloys	≤ 1200	–	–	2 - 6

Material group	Material example	Helix angle	Lubricant
Structural steels	St 37-2, St 50-2 etc.	17 - 22°	Cutting oil
Free-cutting steels	9 S Mn 28, 9 S MnPb 28 etc.	17 - 22°	Cutting oil
Case hardened steels	C 15, Ck 15, 16 MnCr 5 etc.	17 - 22°	Cutting oil, special cutting oil
Heat-treatable steels	C 35 Pb, C 45 etc.	13 - 18°	Cutting oil, special cutting oil
Stainless- and acidresistant steels	x12 CrMoS 17, x12 CrNiS 188 etc.	13 - 18°	Special cutting oil
Grey cast iron	GG 15, GG25	8 - 12°	Cutting oil, petroleum
Brass, short-chipping, Ms58	CuZn 39 Pb 2, CuZn 40 Pb 2	10 - 12°	Cutting oil
Brass, long-chipping, Ms60	CuZn 20, CuZn 37	3 - 7°	Cutting oil
Al-alloys, long-chipping	AlCuMg 1, AlMg 3 Si	23 - 28°	Special cutting oil, petroleum
Al-alloys, short-chipping	GD-AISI 8 Cu 3, GD AISi 12	13 - 18°	Special cutting oil, petroleum



Die nuts for ISO metric threads

Tool material **HSS**

Surface

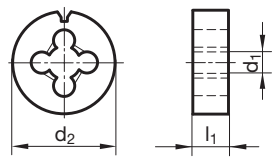


>M 2.6

Chamfer lead

1.75xP

P	≤ 1000
M	
K	•
N	•
S	
H	



Company std.

Article no.

121

d1	P	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	mm	
M3	0.500	16.000	5.000	2.92	3.010
M4	0.700	20.000	5.000	3.91	4.020
M5	0.800	16.000	5.000	4.90	5.010
M5	0.800	20.000	7.000	4.90	5.020
M6	1.000	16.000	5.000	5.88	6.010
M6	1.000	20.000	7.000	5.88	6.020
M8	1.250	25.000	9.000	7.87	8.000
M10	1.500	30.000	11.000	9.85	10.000
M12	1.750	38.000	14.000	11.83	12.000



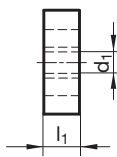
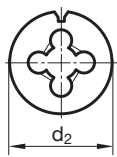
Die nuts for ISO metric threads

6g

B

P	≤ 1000
M	
K	•
N	•
S	
H	

Tool material	HSS
Surface	
	>M 2.6
Chamfer lead	1.75xP



Company std.

Article no.

125

d1	P	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	mm	
M2	0.400	16.000	3.500	1.94	2.000
M3	0.500	20.000	3.500	2.92	3.000
M5	0.800	20.000	7.000	4.90	5.000
M6	1.000	20.000	7.000	5.88	6.000
M8	1.250	25.000	9.000	7.87	8.000
M10	1.500	30.000	11.000	9.85	10.000



Dies for ISO metric threads



P ≤ 1000

M

K •

N •

S

H

Tool material

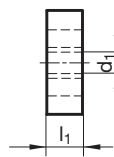
HSS

Surface



Chamfer lead

1.75xP

**DIN 382**

Article no.

139

d1	P	SW	L1	Workpiece Ø	Code no.
	mm	mm	mm	mm	
M5	0.800	18.000	7.000	4.90	5.000
M6	1.000	18.000	7.000	5.88	6.000
M8	1.250	21.000	9.000	7.87	8.000
M10	1.500	27.000	11.000	9.85	10.000
M12	1.750	36.000	14.000	11.83	12.000
M16	2.000	41.000	18.000	15.82	16.000
M20	2.500	41.000	18.000	19.79	20.000
M24	3.000	50.000	22.000	23.77	24.000
M52	5.000	85.000	36.000	51.66	52.000

Dies for ISO metric threads



P	≤ 1000
M	
K	•
N	•
S	
H	

Tool material

HSS

Surface

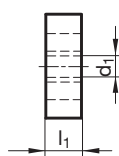
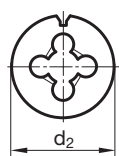


>M 2.6

Chamfer lead

1.75xP

1.75xP

**DIN EN 22568**

Article no.

151**153**

d1	P	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	mm	
M1	0.250	16.000	5.000	0.97	1.000
M 1.2	0.250	16.000	5.000	1.17	1.200
M 1.4	0.300	16.000	5.000	1.36	1.400
M 1.6	0.350	16.000	5.000	1.54	1.600
M2	0.400	16.000	5.000	1.94	2.000
M 2.3	0.400	16.000	5.000	2.25	2.300
M 2.5	0.450	16.000	5.000	2.43	2.500
M 2.6	0.450	16.000	5.000	2.54	2.600
M3	0.500	20.000	5.000	2.92	3.000
M 3.5	0.600	20.000	5.000	3.41	3.500
M4	0.700	20.000	5.000	3.91	4.000
M5	0.800	20.000	7.000	4.90	5.000
M6	1.000	20.000	7.000	5.88	6.000
M7	1.000	25.000	9.000	6.88	7.000
M8	1.250	25.000	9.000	7.87	8.000
M10	1.500	30.000	11.000	9.85	10.000
M12	1.750	38.000	14.000	11.83	12.000
M14	2.000	38.000	14.000	13.82	14.000
M16	2.000	45.000	18.000	15.82	16.000
M18	2.500	45.000	18.000	17.79	18.000
M20	2.500	45.000	18.000	19.79	20.000
M24	3.000	55.000	22.000	23.77	24.000
M30	3.500	65.000	25.000	29.73	30.000



Dies for ISO metric threads

Tool material **HSS**

Surface

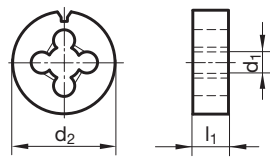


>M 2.6

Chamfer lead

1.75xP

P	≤ 1000
M	
K	•
N	•
S	
H	



DIN EN 22568

Article no.

152

d1	P	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	mm	
M3	0.500	20.000	5.000	2.92	3.000
M 3.5	0.600	20.000	5.000	3.41	3.500
M4	0.700	20.000	5.000	3.91	4.000
M5	0.800	20.000	7.000	4.90	5.000
M6	1.000	20.000	7.000	5.88	6.000
M7	1.000	25.000	9.000	6.88	7.000
M8	1.250	25.000	9.000	7.87	8.000
M9	1.250	25.000	9.000	8.87	9.000
M10	1.500	30.000	11.000	9.85	10.000
M12	1.750	38.000	14.000	11.83	12.000
M14	2.000	38.000	14.000	13.82	14.000
M16	2.000	45.000	18.000	15.82	16.000
M18	2.500	45.000	18.000	17.79	18.000
M20	2.500	45.000	18.000	19.79	20.000
M22	2.500	55.000	22.000	21.79	22.000
M24	3.000	55.000	22.000	23.77	24.000
M27	3.000	65.000	25.000	26.77	27.000
M30	3.500	65.000	25.000	29.73	30.000

Dies
Hand taps

Dies for ISO metric threads



P	≤ 1200
M	•
K	
N	
S	
H	

Tool material **HSS-E**

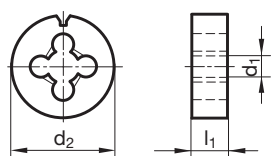
Surface



>M 2.6

Chamfer lead

1.75xP

**DIN EN 22568**

Article no.

130

d1	P	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	mm	
M2	0.400	16.000	3.500	1.94	2.000
M 2.2	0.450	16.000	3.500	2.13	2.200
M 2.5	0.450	16.000	5.000	2.43	2.500
M3	0.500	16.000	5.000	2.92	3.010
M3	0.500	20.000	5.000	2.92	3.020
M4	0.700	16.000	5.000	3.91	4.010
M4	0.700	20.000	5.000	3.91	4.020
M5	0.800	20.000	7.000	4.90	5.000
M6	1.000	20.000	7.000	5.88	6.000
M8	1.250	25.000	9.000	7.87	8.000
M10	1.500	30.000	11.000	9.85	10.000
M12	1.750	38.000	14.000	11.83	12.000
M14	2.000	38.000	14.000	13.82	14.000
M16	2.000	45.000	18.000	15.82	16.000
M20	2.500	45.000	18.000	19.79	20.000



Dies for ISO metric threads

6g		DIN EN 22568	B

P	≤ 1000
M	
K	•
N	•
S	
H	

Tool material **HSS**

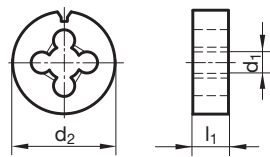
Surface



>M 2.6

Chamfer lead

1.75xP



DIN EN 22568

Article no.

156

d1	P	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	mm	
M3	0.500	20.000	5.000	2.92	3.000
M4	0.700	20.000	5.000	3.91	4.000
M5	0.800	20.000	7.000	4.90	5.000
M6	1.000	20.000	7.000	5.88	6.000
M8	1.250	25.000	9.000	7.87	8.000
M10	1.500	30.000	11.000	9.85	10.000
M12	1.750	38.000	14.000	11.83	12.000
M14	2.000	38.000	14.000	13.82	14.000
M16	2.000	45.000	18.000	15.82	16.000
M20	2.500	45.000	18.000	19.79	20.000

Dies for ISO metric fine threads



Tool material

HSS

Surface



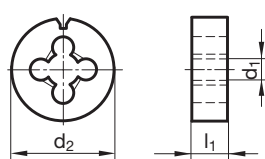
>M 2.6

Chamfer lead

1.75xP

1.75xP

P	≤ 1000
M	
K	•
N	•
S	
H	



DIN EN 22568

Article no.

161

162

d1	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	
M 3 X0.35	20.000	5.000	2.94	3.002
M 4 X0.5	20.000	5.000	3.92	4.003
M 5 X0.5	20.000	5.000	4.92	5.003
M 6 X0.5	20.000	5.000	5.92	6.003
M 6 X0.75	20.000	7.000	5.91	6.004
M 7 X0.5	25.000	9.000	6.92	7.003
M 7 X0.75	25.000	9.000	6.91	7.004
M 8 X0.5	25.000	9.000	7.92	8.003
M 8 X0.75	25.000	9.000	7.91	8.004
M8 x 1	25.000	9.000	7.88	8.005
M 9 X0.75	25.000	9.000	8.91	9.004
M9 x 1	25.000	9.000	8.88	9.005
M10 X0.75	30.000	11.000	9.91	10.004
M10 x 1	30.000	11.000	9.88	10.005
M10 X1.25	30.000	11.000	9.87	10.006
M11 x 1	30.000	11.000	10.88	11.005
M12 X0.75	38.000	10.000	11.91	12.004
M12 x 1	38.000	10.000	11.88	12.005
M12 X1.25	38.000	10.000	11.87	12.006
M12 X1.5	38.000	10.000	11.85	12.007
M13 x 1	38.000	10.000	12.88	13.005
M14 x 1	38.000	10.000	13.88	14.005
M14 X1.25	38.000	10.000	13.87	14.006
M14 X1.5	38.000	10.000	13.85	14.007
M15 x 1	38.000	10.000	14.88	15.005
M16 x 1	45.000	14.000	15.88	16.005
M16 X1.5	45.000	14.000	15.85	16.007
M17 x 1	45.000	14.000	16.88	17.005
M18 x 1	45.000	14.000	17.88	18.005
M18 X1.5	45.000	14.000	17.85	18.007
M20 x 1	45.000	14.000	19.88	20.005
M20 X1.5	45.000	14.000	19.85	20.007
M20 x 2	45.000	14.000	19.82	20.008
M22 x 1	55.000	16.000	21.88	22.005
M22 X1.5	55.000	16.000	21.85	22.007
M24 X1.5	55.000	16.000	23.85	24.007



DIN EN 22568

Article no.

161

162

d1	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	
M24 x 2	55.000	16.000	23.82	24.008
M25 X1.5	55.000	16.000	24.85	25.007
M26 X1.5	55.000	16.000	25.85	26.007
M27 X1.5	65.000	18.000	26.85	27.007
M27 x 2	65.000	18.000	26.82	27.008
M28 X1.5	65.000	18.000	27.85	28.007
M30 X1.5	65.000	18.000	29.85	30.007
M30 x 2	65.000	18.000	29.82	30.008

Dies for UNC-threads

2a



DIN EN 22568

B

P

≤ 1000

M

K

•

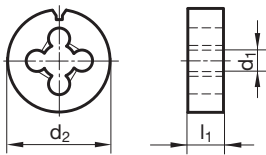
N

•

S

H

Tool material	HSS
Surface	
Chamfer lead	1.75xP



DIN EN 22568	Article no.	182

d1	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	
8 - 32	20.000	7.000	4.07	4.166
10 - 24	20.000	7.000	4.71	4.826
1/4 - 20	20.000	7.000	6.22	6.350
5/16 - 18	25.000	9.000	7.80	7.938
3/8 - 16	30.000	11.000	9.37	9.525
7/16 - 14	30.000	11.000	10.95	11.113
1/2 - 13	38.000	14.000	12.52	12.700
5/8 - 11	45.000	18.000	15.68	15.875
3/4 - 10	45.000	18.000	18.84	19.050



Dies for UNF-threads

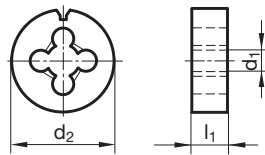
2a		DIN EN 22568	B

P	≤ 1000
M	
K	•
N	•
S	
H	

Tool material **HSS**

Surface

Chamfer lead 1.75xP



DIN EN 22568

Article no.

185

d1	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	
10 - 32	20.000	7.000	4.73	4.826
1/4 - 28	20.000	7.000	6.24	6.350
5/16 - 24	25.000	9.000	7.82	7.938
3/8 - 24	30.000	11.000	9.41	9.525
7/16 - 20	30.000	11.000	10.98	11.113
1/2 - 20	38.000	10.000	12.56	12.700
9/16 - 18	38.000	10.000	14.14	14.288
5/8 - 18	45.000	14.000	15.73	15.875
3/4 - 16	45.000	14.000	18.89	19.050
7/8 - 14	55.000	16.000	22.05	22.225

Dies for BSP-threads



P	≤ 1000
M	
K	•
N	•
S	
H	

Tool material

HSS

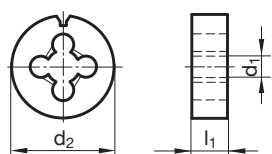
Surface



Chamfer lead

1.75xP

1.75xP

**DIN EN 24231**

Article no.

175**176**

d1	P	d2	l1	Workpiece Ø	Code no.
	G/inch	mm	mm	mm	
G1/8	28.000	30.000	11.000	9.62	9.728
G1/4	19.000	38.000	10.000	13.03	13.157
G3/8	19.000	45.000	14.000	16.54	16.662
G1/2	14.000	45.000	14.000	20.81	20.955
G5/8	14.000	55.000	16.000	22.77	22.911
G3/4	14.000	55.000	16.000	26.30	26.441
G1	11.000	65.000	18.000	33.07	33.249
G1 1/4	11.000	75.000	20.000	41.73	41.910
G1 1/2	11.000	90.000	22.000	47.62	47.803

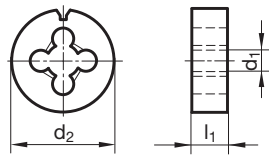


Dies for R-threads BSPT



P	≤ 1000
M	
K	•
N	•
S	
H	

Tool material	HSS
Surface	○
Chamfer lead	1.75xP



DIN EN 24230

Article no.

198

d1	P	d2	l1	Workpiece Ø	Code no.
	G/inch	mm	mm	mm	
R1/8	28	30.000	11.000	9.48	9.728
R1/4	19	38.000	14.000	12.78	13.157
R3/8	19	45.000	14.000	16.26	16.662
R1/2	14	45.000	18.000	20.44	20.955



Dies for NPT-threads

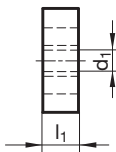
R

DIN EN 22568

B

P	≤ 1000
M	
K	•
N	•
S	
H	

Tool material	HSS
Surface	○
Chamfer lead	1.75xP



DIN EN 22568	Article no.	191

d1	P	d2	l1	Workpiece Ø	Code no.
	G/inch	mm	mm	mm	
1/8	27.000	30.000	11.000	9.93	10.620
1/4	18.000	38.000	14.000	13.18	14.140
3/8	18.000	45.000	14.000	16.60	17.570
1/2	14.000	45.000	18.000	20.63	21.900
3/4	14.000	55.000	22.000	25.95	27.230



Hand taps for ISO metric threads



P	≤ 800
M	
K	
N	○
S	
H	

Tool material

HSS

Surface



Type

N

N

N

N

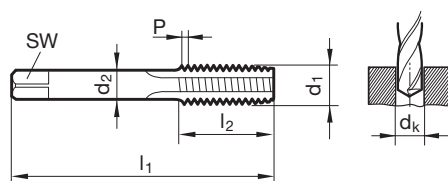
Description

Set

V

M

F

**DIN 352**

Article no.

861**862****863****864**

d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M1	0.250	2.500	2.100	0.75	32.000	5.500
M 1.1	0.250	2.500	2.100	0.85	32.000	5.500
M 1.2	0.250	2.500	2.100	0.95	32.000	5.500
M 1.4	0.300	2.500	2.100	1.10	32.000	7.000
M 1.6	0.350	2.500	2.100	1.25	32.000	8.000
M 1.7	0.350	2.500	2.100	1.35	32.000	8.000
M 1.8	0.350	2.500	2.100	1.45	32.000	8.000
M2	0.400	2.800	2.100	1.60	36.000	8.000
M 2.2	0.450	2.800	2.100	1.75	36.000	9.000
M 2.3	0.400	2.800	2.100	1.90	36.000	9.000
M 2.5	0.450	2.800	2.100	2.05	40.000	9.000
M 2.6	0.450	2.800	2.100	2.15	40.000	9.000
M3	0.500	3.500	2.700	2.50	40.000	10.000
M 3.5	0.600	4.000	3.000	2.90	45.000	12.000
M4	0.700	4.500	3.400	3.30	45.000	12.000
M 4.5	0.750	6.000	4.900	3.70	50.000	14.000
M5	0.800	6.000	4.900	4.20	50.000	14.000
M6	1.000	6.000	4.900	5.00	56.000	16.000
M7	1.000	6.000	4.900	6.00	56.000	16.000
M8	1.250	6.000	4.900	6.80	63.000	17.000
M9	1.250	7.000	5.500	7.80	63.000	17.000
M10	1.500	7.000	5.500	8.50	70.000	20.000
M11	1.500	8.000	6.200	9.50	70.000	20.000
M12	1.750	9.000	7.000	10.20	75.000	24.000
M14	2.000	11.000	9.000	12.00	80.000	26.000
M16	2.000	12.000	9.000	14.00	80.000	26.000
M18	2.500	14.000	11.000	15.50	95.000	30.000
M20	2.500	16.000	12.000	17.50	95.000	32.000
M22	2.500	18.000	14.500	19.50	100.000	32.000
M24	3.000	18.000	14.500	21.00	110.000	36.000
M27	3.000	20.000	16.000	24.00	110.000	36.000
M30	3.500	22.000	18.000	26.50	125.000	40.000
M36	4.000	28.000	22.000	32.00	150.000	50.000
M42	4.500	32.000	24.000	37.50	150.000	56.000
M45	4.500	36.000	29.000	40.50	160.000	58.000
M60	5.500	45.000	35.000	54.50	200.000	70.000

Dies
Hand taps



DIN 352	Article no.	861	862	863	864

d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M64	6.000	50.000	39.000	58.00	220.000	75.000
M68	6.000	50.000	39.000	62.00	220.000	75.000



Hand taps for ISO metric threads



P	≤ 800
M	
K	
N	○
S	
H	

Tool material

HSS

Surface



Type

N

N

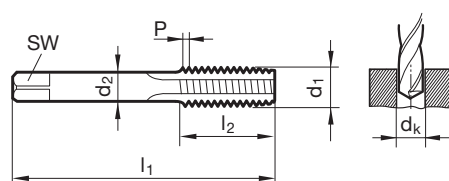
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Description

Set

V

F

**DIN 352**

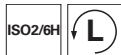
Article no.

882**883****864**

d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M1	0.250	2.500	2.100	0.75	32.000	5.500
M 1.1	0.250	2.500	2.100	0.85	32.000	5.500
M 1.2	0.250	2.500	2.100	0.95	32.000	5.500
M 1.4	0.300	2.500	2.100	1.10	32.000	7.000
M 1.6	0.350	2.500	2.100	1.25	32.000	8.000
M 1.7	0.350	2.500	2.100	1.35	32.000	8.000
M 1.8	0.350	2.500	2.100	1.45	32.000	8.000
M2	0.400	2.800	2.100	1.60	36.000	8.000
M 2.2	0.450	2.800	2.100	1.75	36.000	9.000
M 2.3	0.400	2.800	2.100	1.90	36.000	9.000
M 2.5	0.450	2.800	2.100	2.05	40.000	9.000
M 2.6	0.450	2.800	2.100	2.15	40.000	9.000
M3	0.500	3.500	2.700	2.50	40.000	10.000
M 3.5	0.600	4.000	3.000	2.90	45.000	12.000
M4	0.700	4.500	3.400	3.30	45.000	12.000
M 4.5	0.750	6.000	4.900	3.70	50.000	14.000
M5	0.800	6.000	4.900	4.20	50.000	14.000
M6	1.000	6.000	4.900	5.00	56.000	16.000
M7	1.000	6.000	4.900	6.00	56.000	16.000
M8	1.250	6.000	4.900	6.80	63.000	17.000
M9	1.250	7.000	5.500	7.80	63.000	17.000
M10	1.500	7.000	5.500	8.50	70.000	20.000
M11	1.500	8.000	6.200	9.50	70.000	20.000
M12	1.750	9.000	7.000	10.20	75.000	24.000
M14	2.000	11.000	9.000	12.00	80.000	26.000
M16	2.000	12.000	9.000	14.00	80.000	26.000
M18	2.500	14.000	11.000	15.50	95.000	30.000
M20	2.500	16.000	12.000	17.50	95.000	32.000
M22	2.500	18.000	14.500	19.50	100.000	32.000
M24	3.000	18.000	14.500	21.00	110.000	36.000
M27	3.000	20.000	16.000	24.00	110.000	36.000
M30	3.500	22.000	18.000	26.50	125.000	40.000
M36	4.000	28.000	22.000	32.00	150.000	50.000
M42	4.500	32.000	24.000	37.50	150.000	56.000
M45	4.500	36.000	29.000	40.50	160.000	58.000

Dies
Hand taps

Hand taps for ISO metric threads



P	≤ 800
M	
K	
N	○
S	
H	

Tool material

HSS

Surface



Type

N

N-LH

N-LH

N-LH

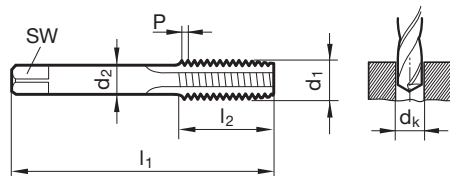
Description

Set

V

M

F



DIN 352

Article no.

904

905

906

907

d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	36.000	8.000
M 2.2	0.450	2.800	2.100	1.75	36.000	9.000
M 2.5	0.450	2.800	2.100	2.05	40.000	9.000
M3	0.500	3.500	2.700	2.50	40.000	10.000
M4	0.700	4.500	3.400	3.30	45.000	12.000
M5	0.800	6.000	4.900	4.20	50.000	14.000
M6	1.000	6.000	4.900	5.00	56.000	16.000
M8	1.250	6.000	4.900	6.80	63.000	17.000
M10	1.500	7.000	5.500	8.50	70.000	20.000
M12	1.750	9.000	7.000	10.20	75.000	24.000
M14	2.000	11.000	9.000	12.00	80.000	26.000
M16	2.000	12.000	9.000	14.00	80.000	26.000
M18	2.500	14.000	11.000	15.50	95.000	30.000



Hand taps for ISO metric threads



P	≤ 1000
M	•
K	•
N	•
S	
H	

Tool material

HSS-E

Surface



Type

VA

VA

VA

VA

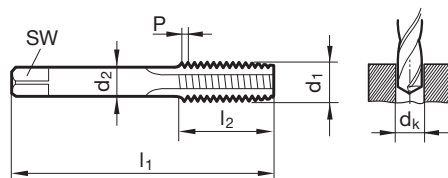
Description

Set

V

M

F



DIN 352

Article no.

853

854

855

856

d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	36.000	8.000
M 2.5	0.450	2.800	2.100	2.05	40.000	9.000
M3	0.500	3.500	2.700	2.50	40.000	10.000
M4	0.700	4.500	3.400	3.30	45.000	12.000
M5	0.800	6.000	4.900	4.20	50.000	14.000
M6	1.000	6.000	4.900	5.00	56.000	16.000
M8	1.250	6.000	4.900	6.80	63.000	17.000
M10	1.500	7.000	5.500	8.50	70.000	20.000
M12	1.750	9.000	7.000	10.20	75.000	24.000
M16	2.000	12.000	9.000	14.00	80.000	26.000
M20	2.500	16.000	12.000	17.50	95.000	32.000

Hand taps for ISO metric threads



P	•
M	•
K	•
N	•
S	
H	

Tool material

HSS-E

Surface



Type

H

H

H

H

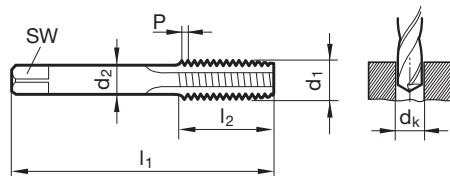
Description

Set

V

M

F



DIN 352

Article no.

857

858

859

860

d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	36.000	6.400
M2	0.400	2.800	2.100	1.60	36.000	8.000
M 2.5	0.450	2.800	2.100	2.05	40.000	7.000
M 2.5	0.450	2.800	2.100	2.05	40.000	9.000
M3	0.500	3.500	2.700	2.50	40.000	8.000
M3	0.500	3.500	2.700	2.50	40.000	10.000
M 3.5	0.600	4.000	3.000	2.90	45.000	12.000
M4	0.700	4.500	3.400	3.30	45.000	9.000
M4	0.700	4.500	3.400	3.30	45.000	12.000
M5	0.800	6.000	4.900	4.20	50.000	14.000
M5	0.800	6.000	4.900	4.20	50.000	11.000
M6	1.000	6.000	4.900	5.00	56.000	16.000
M6	1.000	6.000	4.900	5.00	56.000	12.000
M8	1.250	6.000	4.900	6.80	63.000	17.000
M8	1.250	6.000	4.900	6.80	63.000	11.000
M10	1.500	7.000	5.500	8.50	70.000	20.000
M10	1.500	7.000	5.500	8.50	70.000	14.000
M12	1.750	9.000	7.000	10.20	75.000	24.000
M12	1.750	9.000	7.000	10.20	75.000	18.000
M14	2.000	11.000	9.000	12.00	80.000	26.000
M14	2.000	11.000	9.000	12.00	80.000	19.000
M16	2.000	12.000	9.000	14.00	80.000	26.000
M16	2.000	12.000	9.000	14.00	80.000	18.000
M18	2.500	14.000	11.000	15.50	95.000	30.000
M18	2.500	14.000	11.000	15.50	95.000	21.000
M20	2.500	16.000	12.000	17.50	95.000	32.000
M20	2.500	16.000	12.000	17.50	95.000	22.000



Hand taps for ISO metric threads



P	•
M	•
K	•
N	•
S	
H	

Tool material

HSS-E-PM

Surface



Type

H

H

H

H

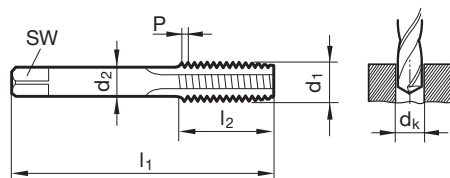
Description

Set

V

M

F



DIN 352

Article no.

1818

1819

1820

1821

d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	40.000	8.000
M3	0.500	3.500	2.700	2.50	40.000	10.000
M4	0.700	4.500	3.400	3.30	45.000	12.000
M4	0.700	4.500	3.400	3.30	45.000	9.000
M5	0.800	6.000	4.900	4.20	50.000	14.000
M5	0.800	6.000	4.900	4.20	50.000	11.000
M6	1.000	6.000	4.900	5.00	56.000	16.000
M6	1.000	6.000	4.900	5.00	56.000	12.000
M8	1.250	6.000	4.900	6.80	63.000	17.000
M8	1.250	6.000	4.900	6.80	63.000	11.000
M10	1.500	7.000	5.500	8.50	70.000	20.000
M10	1.500	7.000	5.500	8.50	70.000	14.000
M12	1.750	9.000	7.000	10.20	75.000	24.000
M12	1.750	9.000	7.000	10.20	75.000	18.000

Hand taps for ISO metric fine threads



P	≤ 800
M	
K	
N	○
S	
H	

Tool material

HSS

Surface



Type

N

N

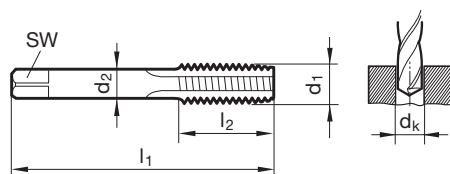
N

Description

Set

V

F



DIN 2181

Article no.

884

885

886

d1	d2	SW	dk	l1	l2	Code no.
	mm	mm	mm	mm	mm	
M 2 X0.25	2.800	2.100	1.75	36.000	8.000	2.001
M 2.2 X0.25	2.800	2.100	1.95	36.000	9.000	2.201
M 2.3 X0.25	2.800	2.100	2.05	36.000	9.000	2.301
M 2.6 X0.35	2.800	2.100	2.25	40.000	9.000	2.602
M 3 X0.35	3.500	2.700	2.65	40.000	8.000	3.002
M 4 X0.35	4.500	3.400	3.65	45.000	9.000	4.002
M 4 X0.5	4.500	3.400	3.50	45.000	9.000	4.003
M 5 X0.5	6.000	4.900	4.50	50.000	11.000	5.003
M 6 X0.5	6.000	4.900	5.50	56.000	12.000	6.003
M 6 X0.75	6.000	4.900	5.20	56.000	12.000	6.004
M 7 X0.75	6.000	4.900	6.20	56.000	14.000	7.004
M 8 X0.5	6.000	4.900	7.50	56.000	14.000	8.003
M 8 X0.75	6.000	4.900	7.20	56.000	14.000	8.004
M8 x 1	6.000	4.900	7.00	63.000	17.000	8.005
M9 x 1	7.000	5.500	8.00	63.000	17.000	9.005
M10 X0.75	7.000	5.500	9.20	63.000	18.000	10.004
M10 x 1	7.000	5.500	9.00	63.000	18.000	10.005
M10 X1.25	7.000	5.500	8.80	70.000	20.000	10.006
M11 x 1	8.000	6.200	10.00	63.000	18.000	11.005
M12 x 1	9.000	7.000	11.00	70.000	18.000	12.005
M12 X1.25	9.000	7.000	10.80	70.000	20.000	12.006
M12 X1.5	9.000	7.000	10.50	70.000	20.000	12.007
M14 x 1	11.000	9.000	13.00	70.000	20.000	14.005
M14 X1.25	11.000	9.000	12.80	70.000	20.000	14.006
M14 X1.5	11.000	9.000	12.50	70.000	20.000	14.007
M15 x 1	12.000	9.000	14.00	70.000	20.000	15.005
M15 X1.5	12.000	9.000	13.50	70.000	20.000	15.007
M16 x 1	12.000	9.000	15.00	70.000	20.000	16.005
M16 X1.5	12.000	9.000	14.50	70.000	20.000	16.007
M18 x 1	14.000	11.000	17.00	80.000	22.000	18.005
M18 X1.5	14.000	11.000	16.50	80.000	22.000	18.007
M18 x 2	14.000	11.000	16.00	80.000	22.000	18.008
M20 x 1	16.000	12.000	19.00	80.000	22.000	20.005
M20 X1.5	16.000	12.000	18.50	80.000	22.000	20.007
M20 x 2	16.000	12.000	18.00	80.000	22.000	20.008
M22 x 1	18.000	14.500	21.00	80.000	22.000	22.005



DIN 2181

Article no.

884

885

886

d1	d2	SW	dk	l1	l2	Code no.
	mm	mm	mm	mm	mm	
M22 X1.5	18.000	14.500	20.50	80.000	22.000	22.007
M22 x 2	18.000	14.500	20.00	80.000	22.000	22.008
M24 x 1	18.000	14.500	23.00	90.000	22.000	24.005
M24 X1.5	18.000	14.500	22.50	90.000	22.000	24.007
M24 x 2	18.000	14.500	22.00	90.000	22.000	24.008
M26 X1.5	18.000	14.500	24.50	90.000	22.000	26.007
M27 X1.5	20.000	16.000	25.50	90.000	22.000	27.007
M27 x 2	20.000	16.000	25.00	90.000	22.000	27.008
M30 x 1	22.000	18.000	29.00	90.000	22.000	30.005
M30 X1.5	22.000	18.000	28.50	90.000	22.000	30.007
M30 x 2	22.000	18.000	28.00	90.000	22.000	30.008
M32 X1.5	22.000	18.000	30.50	90.000	22.000	32.007
M34 X1.5	28.000	22.000	32.50	100.000	25.000	34.007
M35 X1.5	28.000	22.000	33.50	100.000	25.000	35.007
M36 X1.5	28.000	22.000	34.50	100.000	25.000	36.007
M38 X1.5	28.000	22.000	36.50	100.000	25.000	38.007
M45 X1.5	36.000	29.000	43.50	110.000	25.000	45.007
M52 X1.5	40.000	32.000	50.50	140.000	32.000	52.007

Hand taps for UNC-threads

2B



P ≤ 800

M

K

N ○

S

H

Tool material

HSS

Surface



Type

N

N

N

N

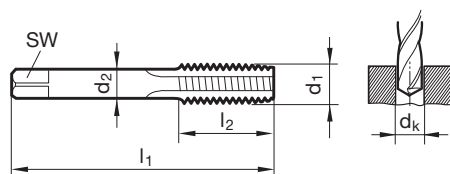
Description

Set

V

M

F



~DIN 352

Article no.

981

982

983

984

d1	d2	SW	dk	l1	l2	Code no.
	mm	mm	mm	mm	mm	
1 - 64	2.800	2.100	1.55	36.000	8.000	1.854
2 - 56	2.800	2.100	1.85	36.000	9.000	2.184
3 - 48	2.800	2.100	2.10	40.000	9.000	2.515
4 - 40	3.500	2.700	2.35	40.000	11.000	2.845
5 - 40	4.000	2.700	2.65	40.000	11.000	3.175
5 - 40	3.500	2.700	2.65	40.000	11.000	3.175
6 - 32	4.000	3.000	2.85	45.000	12.000	3.505
8 - 32	4.500	3.400	3.50	45.000	12.000	4.166
10 - 24	6.000	4.900	3.90	50.000	14.000	4.826
12 - 24	6.000	4.900	4.50	56.000	16.000	5.486
1/4 - 20	6.000	4.900	5.10	56.000	16.000	6.350
5/16 - 18	6.000	4.900	6.60	63.000	18.000	7.938
3/8 - 16	7.000	5.500	8.00	70.000	20.000	9.525
7/16 - 14	8.000	6.200	9.40	70.000	22.000	11.113
1/2 - 13	9.000	7.000	10.80	75.000	25.000	12.700
9/16 - 12	11.000	9.000	12.20	80.000	28.000	14.288
5/8 - 11	12.000	9.000	13.50	80.000	30.000	15.875
3/4 - 10	16.000	11.000	16.50	95.000	33.000	19.050
3/4 - 10	14.000	11.000	16.50	95.000	33.000	19.050
7/8 - 9	18.000	14.500	19.50	100.000	35.000	22.225
1 - 8	18.000	14.500	22.25	110.000	38.000	25.400
1 1/8 - 7	22.000	18.000	25.00	125.000	44.000	28.575
1 1/4 - 7	22.000	18.000	28.00	125.000	44.000	31.750
1 3/8 - 6	28.000	22.000	30.75	150.000	50.000	34.925
1 1/2 - 6	32.000	22.000	34.00	150.000	50.000	38.100
1 3/4 - 5	36.000	29.000	39.50	160.000	58.000	44.450
2 - 4 1/2	40.000	32.000	45.00	180.000	65.000	50.800



Hand taps for UNF-threads



P	≤ 800
M	
K	
N	○
S	
H	

Tool material

HSS

Surface



Type

N

N

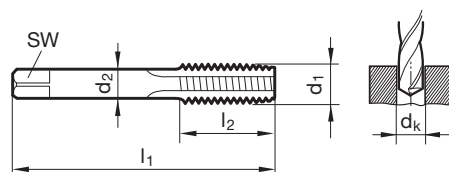
N

Description

Set

V

F



~DIN 2181

Article no.

985

986

987

d1	d2	SW	dk	l1	l2	Code no.
	mm	mm	mm	mm	mm	
1 - 72	2.800	2.100	1.55	36.000	8.000	1.854
2 - 64	2.800	2.100	1.85	36.000	9.000	2.184
3 - 56	2.800	2.100	2.15	40.000	9.000	2.515
4 - 48	3.500	2.700	2.40	40.000	8.000	2.845
5 - 44	3.500	2.700	2.70	40.000	8.000	3.175
5 - 44	4.000	2.700	2.70	40.000	8.000	3.175
6 - 40	4.000	3.000	2.95	45.000	9.000	3.505
8 - 36	4.500	3.400	3.50	45.000	10.000	4.166
8 - 36	4.500	3.400	3.50	45.000	12.000	4.166
10 - 32	6.000	4.900	4.10	50.000	14.000	4.826
12 - 28	6.000	4.900	4.60	56.000	16.000	5.486
1/4 - 28	6.000	4.900	5.50	56.000	17.000	6.350
5/16 - 24	6.000	4.900	6.90	63.000	17.000	7.938
3/8 - 24	7.000	5.500	8.50	63.000	18.000	9.525
7/16 - 20	8.000	6.200	9.90	70.000	20.000	11.113
7/16 - 20	8.000	6.200	9.90	70.000	18.000	11.113
1/2 - 20	9.000	7.000	11.50	70.000	20.000	12.700
9/16 - 18	11.000	9.000	12.90	70.000	20.000	14.288
5/8 - 18	12.000	9.000	14.50	70.000	20.000	15.875
3/4 - 16	16.000	11.000	17.50	80.000	22.000	19.050
3/4 - 16	14.000	11.000	17.50	80.000	22.000	19.050
7/8 - 14	18.000	14.500	20.40	80.000	22.000	22.225
1 - 12	18.000	14.500	23.25	90.000	22.000	25.400

Dies
Hand taps

Hand taps for BSW-threads



P	≤ 800
M	
K	
N	○
S	
H	

Tool material

HSS

Surface



Type

N

N

N

N

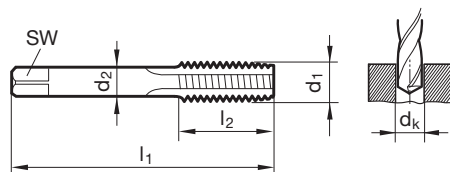
Description

Set

V

M

F



~DIN 352

Article no.

954

955

956

957

d1	P	d2	SW	dk	l1	l2	Code no.
	G/inch	mm	mm	mm	mm	mm	
W3/32	48.000	2.800	2.100	1.80	40.000	9.000	2.381
W1/8	40.000	3.500	2.700	2.50	40.000	11.000	3.175
W1/8	40.000	4.000	2.700	2.50	40.000	11.000	3.175
W5/32	32.000	4.500	3.400	3.20	45.000	12.000	3.969
W3/16	24.000	6.000	4.900	3.60	50.000	14.000	4.762
W7/32	24.000	6.000	4.900	4.50	56.000	16.000	5.556
W1/4	20.000	6.000	4.900	5.10	56.000	16.000	6.350
W5/16	18.000	6.000	4.900	6.50	63.000	18.000	7.938
W3/8	16.000	7.000	5.500	7.90	70.000	20.000	9.525
W7/16	14.000	8.000	6.200	9.20	70.000	22.000	11.113
W1/2	12.000	9.000	7.000	10.50	75.000	25.000	12.700
W9/16	12.000	11.000	9.000	12.00	80.000	28.000	14.287
W5/8	11.000	12.000	9.000	13.50	80.000	30.000	15.876
W3/4	10.000	16.000	11.000	16.25	95.000	33.000	19.051
W1	8.000	18.000	14.500	22.00	110.000	38.000	25.401
W1 1/2	6.000	32.000	22.000	33.50	150.000	50.000	38.101
W1 5/8	5.000	32.000	24.000	35.50	150.000	58.000	41.277
W1 3/4	5.000	36.000	29.000	39.00	160.000	58.000	44.452
W2	4.500	40.000	32.000	44.50	180.000	65.000	50.802

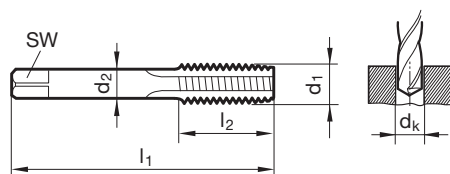


Hand taps for BSP-threads



P	≤ 800
M	
K	
N	o
S	
H	

Tool material	HSS		
Surface	○	○	○
Type	N	N	N
Description	Set	V	F



DIN 5157

Article no. 958 959 960

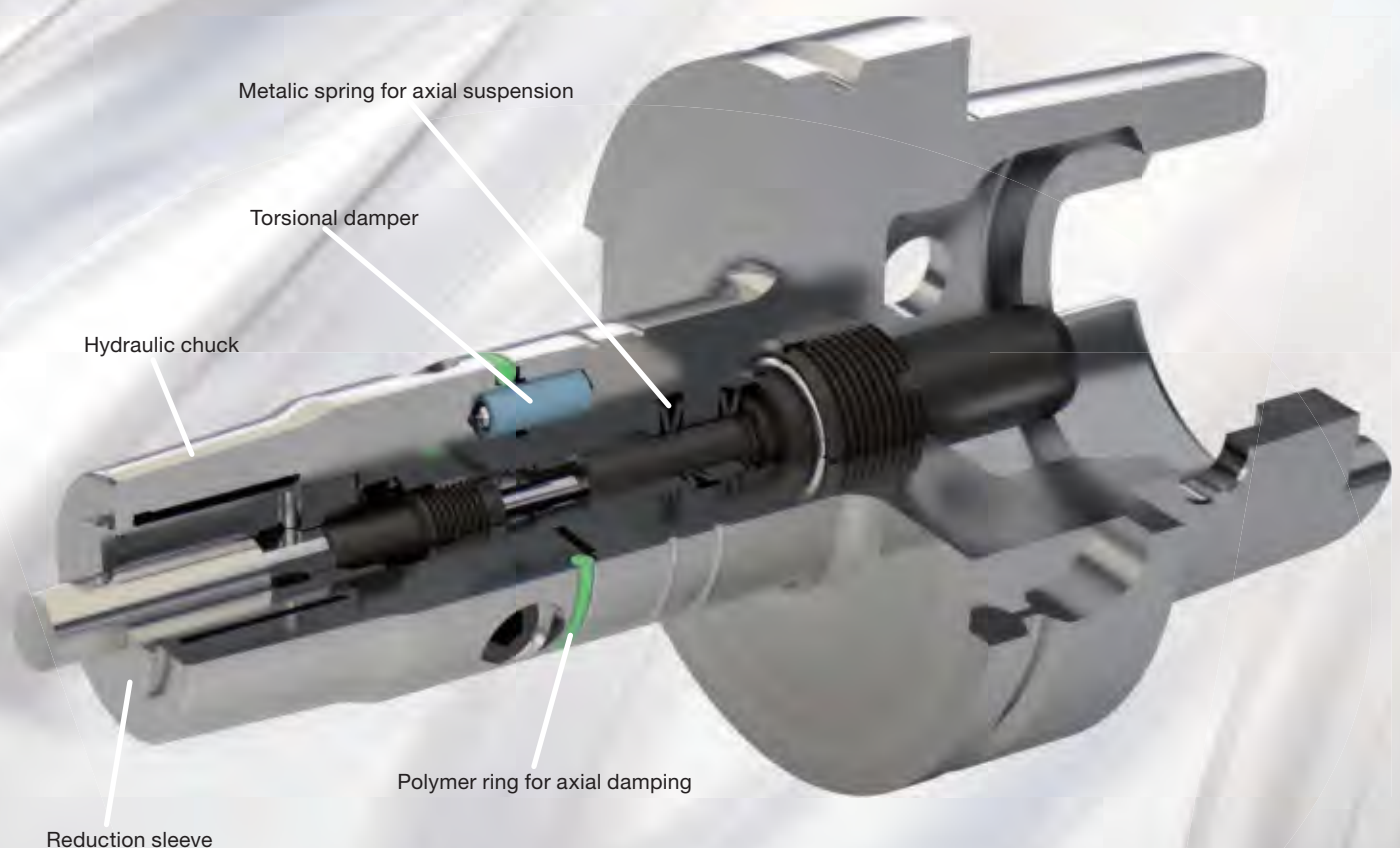
d1	P	d2	SW	dk	l1	l2	Code no.
	G/inch	mm	mm	mm	mm	mm	
G1/8	28.000	7.000	5.500	8.80	63.000	20.000	9.728
G1/8	28.000	7.000	5.500	8.80	63.000	18.000	9.728
G1/4	19.000	11.000	9.000	11.80	70.000	20.000	13.157
G3/8	19.000	12.000	9.000	15.25	70.000	20.000	16.662
G3/8	19.000	12.000	9.000	15.25	70.000	22.000	16.662
G1/2	14.000	16.000	12.000	19.00	80.000	22.000	20.955
G5/8	14.000	18.000	14.500	21.00	80.000	22.000	22.911
G3/4	14.000	20.000	16.000	24.50	90.000	22.000	26.441
G1	11.000	25.000	20.000	30.75	100.000	25.000	33.249
G1 1/4	11.000	32.000	24.000	39.50	125.000	40.000	41.910
G1 3/8	11.000	36.000	29.000	41.75	125.000	40.000	44.323
G1 1/2	11.000	36.000	29.000	45.25	140.000	40.000	47.803
G1 3/4	11.000	40.000	32.000	51.00	140.000	40.000	53.746
G2	11.000	45.000	35.000	57.00	160.000	40.000	59.614

TV
C

TAPPING CHUCKS

GUHROSYN

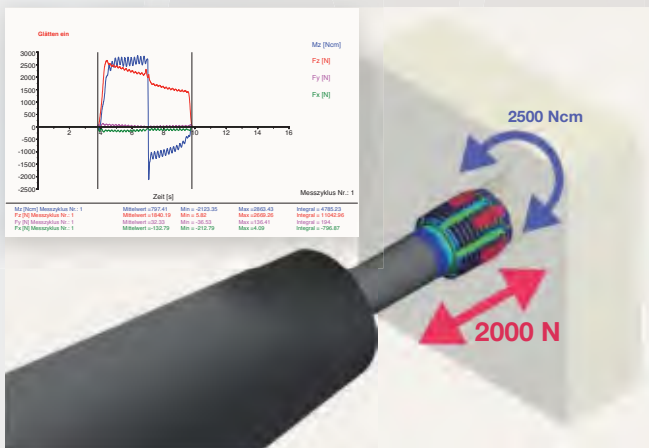
THE EASY WAY
TO THE PERFECT THREAD



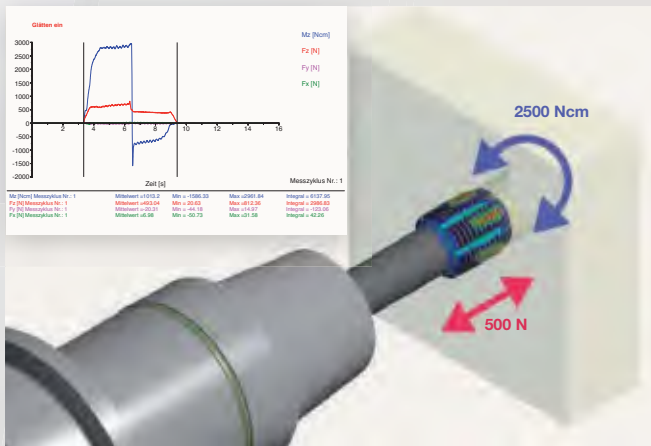
Intelligent design:

As well as the suspension and damping elements in the slender GUHROSyn chucks (for the reduction of axial and radial forces during the tapping process) there is also room for the delivery set for MQL or conventional cooling lubrication and the length setting screw.

The optimal combination of long-life metal spring and polymer damping elements considerably reduces axial and radial forces



Rigid chuck



GUHROSync

➔ **IMPROVED
TOOL LIFE**

➔ **IMPROVED THREAD
QUALITY**

➔ **GREATER PROCESS
RELIABILITY**



GUHRING

Made visible:
The spring symbol on the GUHROSync displays the effect of axial and radial force.



*REDUCTION OF AXIAL
AND RADIAL FORCES*



*COMPENSATES
SYNCHRONISATION ERRORS*



*QUICK AND ACCURATE
LENGTH SETTING OF TOOLS*



*MODULAR DESIGN
FOR DIFFERENT STANDARD
AND SPECIAL VERSIONS*



*LONGER
TOOL LIFE*



*REDUCED
CYCLE TIMES*



*IMPROVED
THREAD QUALITY*



*GREATER PROCESS
RELIABILITY*



THE BEST OF BOTH SYSTEMS

THE ADVANTAGES OF HYDRAULIC CHUCKS & SYNCHRO TAPPING CHUCKS IN ONE TOOL HOLDER



Tapping chucks

GUHROSync

 Synchro tapping chucks



Shrink fit chucks

4736 HSK-A

4726 TSG 3000 HSK-A

4758 HSK-C

4738 ISO taper

Hydraulic synchro tapping chucks with increased clamping force

4221 MAS-BT

4299 HSK-A

4267 HSK-C

4213 ISO taper

4949 Coolant delivery set HSK-A for conventional cooling



Hydraulic synchro tapping chucks

4601 HSK-A

4925 Pull studs for SK



Hydraulic synchro tapping chucks

4576 ISO taper

4927 Pull studs for MAS/BT



Hydraulic synchro tapping chucks

4577 MAS-BT

4525

Hydro-Ø 12 / Ø 20
Cylindrical hydraulic synchro tapping chucks Ø 20 with internal cooling

4364

Setting screws "face" synchro tapping chucks, with conventional int. cooling

4605 Reduction bush sealed

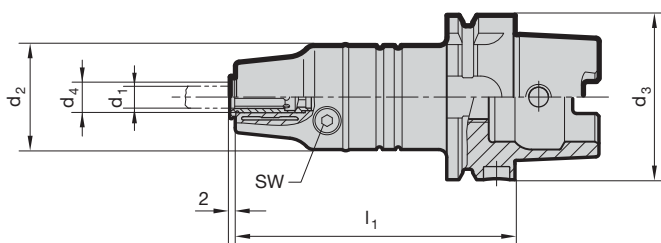
4606 GUHROJET reduction bush

Threading tool:
shank diameter x square



- HSK-A to ISO 12164-1/DIN 69893-1
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- suitable for internal cooling identifiable by black coloured ring
- coolant pressure up to max. 80 bar

- incl. hexagon clamping key
Article no. 4912
- incl. adjustment key for
adjustment screws
- order setting screw “face”
Article no. 4364 separately
- order reduction bushes
Article no. 4605 or 4606 separately
- for conventional cooling order coolant
delivery set Article no. 4949 separately

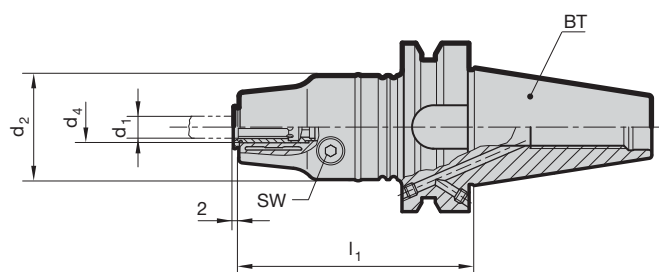


Article no. 4601

Tapping chucks

- MAS/BT30 to DIN ISO 7388-2 form JD without coolant supply over collar
- MAS/BT40 to DIN ISO 7388-2 form JD/JF (form AD/B)
- MAS/BT40 to JIS B 6339-2 form JD/JF (form AD/B)
- form B supplied with threaded pins in bores
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- suitable for internal cooling identifiable by black coloured ring
- coolant pressure up to max. 80 bar

- incl. hexagon clamping key
Article no. 4912
- incl. adjustment key for
adjustment screws
- order setting screw “face”
Article no. 4364 separately
- order reduction bushes
Article no. 4605 or 4606 separately
- order pull studs, Article no. 4927 or 4928
separately



Article no. 4577

Tapping chucks

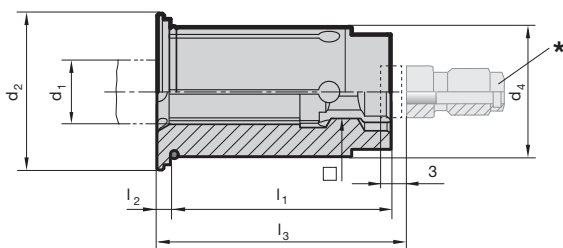


Product information

- for clamping taps with square shank in GUHROSynch synchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- face side closed, therefore coolant leak-proof for threading tools with IC
- positive drive
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- order setting screw "face"
Article no. 4364 separately
- order MQL setting screws
Article no. 4305 separately



Article no. **4605**

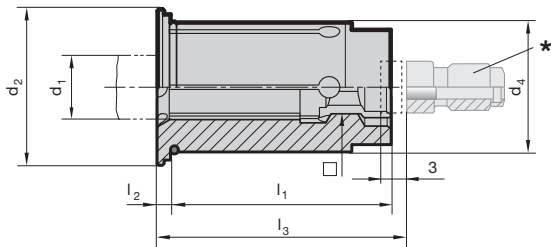
d ₄ mm	d ₁ mm	□ mm	Standard	d ₁ inch	□ inch	d ₂ mm	l ₁ mm	l ₂ mm	l ₃ mm	* for adjustment screw	for thread	Code no.
12.00	2.800	2.100	DIN	-	-	16.50	29.00	2.00	-	-	M2 / M4	2,812
12.00	3.500	2.700	DIN	-	-	16.50	29.00	2.00	-	-	M3 / M4.5 / M5	3,512
12.00	4.000	3.200	JIS	-	-	16.50	29.00	2.00	-	-	M3	4,012
12.00	4.500	3.400	DIN	-	-	16.50	29.00	2.00	26.00	4364 5.020	M4 / M6	4,512
12.00	4.928	3.861	ANSI	0.194	0.152	16.50	29.00	2.00	26.00	4364 5.020	10-24 & 10-32	4,912
12.00	5.000	4.000	JIS	-	-	16.50	29.00	2.00	26.00	4364 5.020	M4	5,012
12.00	5.500	4.500	JIS	-	-	16.50	29.00	2.00	26.00	4364 5.020	M5	5,512
12.00	5.588	4.191	ANSI	0.220	0.165	16.50	29.00	2.00	26.00	4364 5.020	12-24 & 12-28	15,512
12.00	6.000	4.500	JIS	-	-	16.50	29.00	2.00	26.00	4364 5.020	M6	16,012
12.00	6.000	4.900	DIN	-	-	16.50	29.00	2.00	26.00	4364 6.020	M4.5/M5/M6/M8	6,012
12.00	6.200	5.000	JIS	-	-	16.50	29.00	2.00	26.00	4364 6.020	M7 / M8	6,212
12.00	6.477	4.851	ANSI	0.255	0.191	16.50	29.00	2.00	26.00	4364 6.020	1/4-20 & 1/4-28	6,412
12.00	7.000	5.500	DIN / JIS	-	-	16.50	29.00	2.00	26.00	4364 7.020	M7 / M9 / M10	7,012
12.00	7.938	5.944	ANSI	0.3125	0.234	16.50	29.00	2.00	31.00	4364 7.020	1/16-27	7,912
12.00	8.000	6.200	DIN	-	-	16.50	29.00	2.00	31.00	4364 8.020	M8 / M11	8,012
12.00	8.000	6.500	JIS	-	-	16.50	29.00	2.00	31.00	4364 8.020	M11	18,012
12.00	8.077	6.045	ANSI	0.318	0.238	16.50	29.00	2.00	31.00	4364 7.020	5/16-18 & 5/16-24	28,012
12.00	8.204	6.147	ANSI	0.323	0.242	16.50	29.00	2.00	31.00	4364 7.020	7/16-14 & 7/16-20	8,212
12.00	8.500	6.500	JIS	-	-	16.50	29.00	2.00	31.00	4364 8.020	M12	8,512
12.00	9.000	7.000	DIN	-	-	16.50	29.00	2.00	32.00	4364 9.020	M9 / M12	9,012
12.00	9.322	6.985	ANSI	0.367	0.275	16.50	29.00	2.00	32.00	4364 9.020	1/2-13 & 1/2-20	9,312
12.00	9.677	7.264	ANSI	0.381	0.286	16.50	29.00	2.00	33.00	4364 9.020	3/8-16 & 3/8-24	9,612
12.00	10.000	8.000	DIN	-	-	16.50	29.00	2.00	36.00	4364 10.020	M10	10,012

**Product information**

- for clamping taps with square shank in GUHROSynch synchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- face side closed, therefore coolant leak-proof for threading tools with IC
- positive drive
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- order setting screw "face"
Article no. 4364 separately
- order MQL setting screws
Article no. 4305 separately

Article no. **4605**

d ₄ mm	d ₁ mm	□ mm	Standard	d ₁ inch	□ inch	d ₂ mm	l ₁ mm	l ₂ mm	l ₃ mm	* for adjustment screw	for thread	Code no.
20.00	6.000	4.500	JIS	-	-	24.10	34.00	2.00	26.00	4364 6.032	M6	26,020
20.00	6.000	4.900	DIN	-	-	24.10	34.00	2.00	26.00	4364 6.032	M4.5/M5/M6/M8	6,020
20.00	6.200	5.000	JIS	-	-	24.10	34.00	2.00	26.00	4364 6.032	M7 / M8	6,220
20.00	6.477	4.851	ANSI	0.255	0.191	24.10	34.00	2.00	26.00	4364 6.032	1/4-20 & 1/4-28	6,420
20.00	7.000	5.500	DIN / JIS	-	-	24.10	34.00	2.00	26.00	4364 7.032	M7 / M9 / M10	7,020
20.00	7.938	5.944	ANSI	0.3125	0.234	24.10	34.00	2.00	31.00	4364 7.032	1/16-27	7,920
20.00	8.000	6.200	DIN	-	-	24.10	34.00	2.00	31.00	4364 8.032	M8 / M11	8,020
20.00	8.000	6.500	JIS	-	-	24.10	34.00	2.00	31.00	4364 8.032	M11	18,020
20.00	8.077	6.045	ANSI	0.318	0.238	24.10	34.00	2.00	31.00	4364 8.032	5/16-18 & 5/16-24	28,020
20.00	8.204	6.147	ANSI	0.323	0.242	24.10	34.00	2.00	31.00	4364 8.032	7/16-14 & 7/16-20	8,220
20.00	8.500	6.500	JIS	-	-	24.10	34.00	2.00	31.00	4364 8.032	M12	8,520
20.00	9.000	7.000	DIN	-	-	24.10	34.00	2.00	32.00	4364 9.032	M9 / M12	9,020
20.00	9.322	6.985	ANSI	0.367	0.275	24.10	34.00	2.00	32.00	4364 8.032	1/2-13 & 1/2-20	9,320
20.00	9.677	7.264	ANSI	0.381	0.286	24.10	34.00	2.00	33.00	4364 9.032	3/8-16 & 3/8-24	9,620
20.00	10.000	8.000	DIN	-	-	24.10	34.00	2.00	36.00	4364 10.032	M10	10,020
20.00	10.500	8.000	JIS	-	-	24.10	34.00	2.00	36.00	4364 10.032	M14	10,520
20.00	10.897	8.179	ANSI	0.4290	0.3220	24.10	34.00	2.00	35.00	4364 10.032	9/16-12 & 9/16-18	10,820
20.00	11.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	4364 11.032	M14	11,020
20.00	12.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	4364 11.032	M12 / M16	12,020
20.00	12.192	9.144	ANSI	0.480	0.36	24.10	34.00	2.00	36.00	4364 11.032	5/8-11 & 5/8-18	12,120
20.00	12.500	10.000	JIS	-	-	24.10	34.00	2.00	38.00	4364 11.032	M16	12,520
20.00	13.000	10.000	JIS	-	-	24.10	34.00	2.00	38.00	4364 11.032	M17	13,020
20.00	14.000	11.000	DIN / JIS	-	-	24.10	34.00	2.00	39.00	4364 11.032	M18	14,020
20.00	14.288	10.693	ANSI	0.5625	0.421	24.10	34.00	2.00	38.00	4364 11.032	1/4-18	14,220
20.00	14.986	11.227	ANSI	0.590	0.442	24.10	34.00	2.00	39.00	4364 11.032	3/4-10 & 3/4-16	14,920
20.00	15.000	12.000	JIS	-	-	24.10	34.00	2.00	40.00	4364 16.032	M20	15,020
20.00	16.000	12.000	DIN	-	-	24.10	34.00	2.00	41.00	4364 16.032	M20	16,020

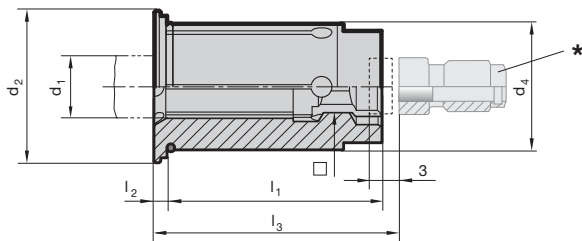


Product information

- for clamping taps with square shank in GÜHROSynch synchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- positive drive of reduction bush in Gührsync synchro chuck
- with coolant slots for peripheral cooling, therefore process and tool life improvement
- coiled swarf is consistently washed away
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- order MQL setting screws
Article no. 4305 separately
- order setting screw "face"
Article no. 4364 separately



GÜHROJET

Article no. 4606

d ₄ mm	d ₁ mm	□ mm	Standard	d ₁ inch	□ inch	d ₂ mm	l ₁ mm	l ₂ mm	l ₃ mm	* for adjustment screw	for thread	Code no.
12.00	2.800	2.100	DIN	-	-	16.50	29.00	2.00	-	-	M2 / M4	2.812
12.00	3.500	2.700	DIN	-	-	16.50	29.00	2.00	-	-	M3 / M4.5 / M5	3.512
12.00	4.000	3.200	JIS	-	-	16.50	29.00	2.00	-	-	M3	4.012
12.00	4.500	3.400	DIN	-	-	16.50	29.00	2.00	-	-	M4 / M6	4.512
12.00	4.928	3.861	ANSI	0.194	0.152	16.50	29.00	2.00	-	-	10-24 & 10-32	4.912
12.00	5.000	4.000	JIS	-	-	16.50	29.00	2.00	-	-	M4	5.012
12.00	5.500	4.500	JIS	-	-	16.50	29.00	2.00	-	-	M5	5.512
12.00	5.588	4.191	ANSI	0.220	0.165	16.50	29.00	2.00	-	-	12-24 & 12-28	15.512
12.00	6.000	4.500	JIS	-	-	16.50	29.00	2.00	26.00	6.020	M6	16.012
12.00	6.000	4.900	DIN	-	-	16.50	29.00	2.00	26.00	6.020	M4.5/M5/M6/M8	6.012
12.00	6.200	5.000	JIS	-	-	16.50	29.00	2.00	26.00	6.020	M7 / M8	6.212
12.00	6.477	4.851	ANSI	0.255	0.191	16.50	29.00	2.00	26.00	6.020	1/4-20 & 1/4-28	6.412
12.00	7.000	5.500	DIN / JIS	-	-	16.50	29.00	2.00	26.00	7.020	M7 / M9 / M10	7.012
12.00	7.938	5.944	ANSI	0.3125	0.234	16.50	29.00	2.00	31.00	7.020	1/16-27	7.912
12.00	8.000	6.200	DIN	-	-	16.50	29.00	2.00	31.00	8.020	M8 / M11	8.012
12.00	8.000	6.500	JIS	-	-	16.50	29.00	2.00	31.00	8.020	M11	18.012
12.00	8.077	6.045	ANSI	0.318	0.238	16.50	29.00	2.00	31.00	7.020	5/16-18 & 5/16-24	28.012
12.00	8.204	6.147	ANSI	0.323	0.242	16.50	29.00	2.00	31.00	8.020	7/16-14 & 7/16-20	8.212
12.00	8.500	6.500	JIS	-	-	16.50	29.00	2.00	31.00	8.020	M12	8.512
12.00	9.000	7.000	DIN	-	-	16.50	29.00	2.00	32.00	9.020	M9 / M12	9.012
12.00	9.322	6.985	ANSI	0.367	0.275	16.50	29.00	2.00	32.00	9.020	1/2-13 & 1/2-20	9.312
12.00	9.677	7.264	ANSI	0.381	0.286	16.50	29.00	2.00	33.00	9.020	3/8-16 & 3/8-24	9.612
12.00	10.000	8.000	DIN	-	-	16.50	29.00	2.00	36.00	10.020	M10	10.012

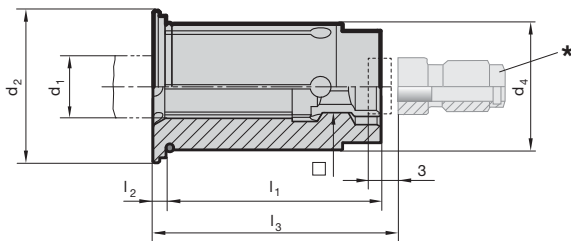


Product information

- for clamping taps with square shank in GÜHROSynch synchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- positive drive of reduction bush in Gührsync synchro chuck
- with coolant slots for peripheral cooling, therefore process and tool life improvement
- coiled swarf is consistently washed away
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- order MQL setting screws Article no. 4305 separately
- order setting screw "face" Article no. 4364 separately


GÜHROJET

Article no.

4606

d ₄ mm	d ₁ mm	□ mm	Standard	d ₁ inch	□ inch	d ₂ mm	l ₁ mm	l ₂ mm	l ₃ mm	* for adjustment screw	for thread	Code no.
20.00	6.000	4.500	JIS	-	-	24.10	34.00	2.00	26.00	6.032	M6	26,020
20.00	6.000	4.900	DIN	-	-	24.10	34.00	2.00	26.00	6.032	M4.5/M5/M6/M8	6,020
20.00	6.200	5.000	JIS	-	-	24.10	34.00	2.00	26.00	6.032	M7 / M8	6,220
20.00	6.477	4.851	ANSI	0.255	0.191	24.10	34.00	2.00	26.00	6.032	1/4-20 & 1/4-28	6,420
20.00	7.000	5.500	DIN / JIS	-	-	24.10	34.00	2.00	26.00	7.032	M7 / M9 / M10	7,020
20.00	7.938	5.944	ANSI	0.3125	0.234	24.10	34.00	2.00	31.00	7.032	1/16-27	7,920
20.00	8.000	6.200	DIN	-	-	24.10	34.00	2.00	31.00	8.032	M8 / M11	8,020
20.00	8.000	6.500	JIS	-	-	24.10	34.00	2.00	31.00	8.032	M11	18,020
20.00	8.077	6.045	ANSI	0.318	0.238	24.10	34.00	2.00	31.00	8.032	5/16-18 & 5/16-24	28,020
20.00	8.204	6.147	ANSI	0.323	0.242	24.10	34.00	2.00	31.00	8.032	7/16-14 & 7/16-20	8,220
20.00	8.500	6.500	JIS	-	-	24.10	34.00	2.00	31.00	8.032	M12	8,520
20.00	9.000	7.000	DIN	-	-	24.10	34.00	2.00	32.00	9.032	M9 / M12	9,020
20.00	9.322	6.985	ANSI	0.367	0.275	24.10	34.00	2.00	32.00	9.032	1/2-13 & 1/2-20	9,320
20.00	9.677	7.264	ANSI	0.381	0.286	24.10	34.00	2.00	33.00	9.032	3/8-16 & 3/8-24	9,620
20.00	10.000	8.000	DIN	-	-	24.10	34.00	2.00	36.00	10.032	M10	10,020
20.00	10.500	8.000	JIS	-	-	24.10	34.00	2.00	36.00	10.032	M14	10,520
20.00	10.897	8.179	ANSI	0.4290	0.3220	24.10	34.00	2.00	35.00	10.032	9/16-12 & 9/16-18	10,820
20.00	11.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	11.032	M14	11,020
20.00	12.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	11.032	M12 / M16	12,020
20.00	12.192	9.144	ANSI	0.480	0.36	24.10	34.00	2.00	36.00	11.032	5/8-11 & 5/8-18	12,120
20.00	12.500	10.000	JIS	-	-	24.10	34.00	2.00	38.00	11.032	M16	12,520
20.00	13.000	10.000	JIS	-	-	24.10	34.00	2.00	38.00	11.032	M17	13,020
20.00	14.000	11.000	DIN / JIS	-	-	24.10	34.00	2.00	39.00	14.032	M18	14,020
20.00	14.288	10.693	ANSI	0.5625	0.421	24.10	34.00	2.00	38.00	11.032	1/4-18	14,220
20.00	14.986	11.227	ANSI	0.590	0.442	24.10	34.00	2.00	39.00	11.032	3/4-10 & 3/4-16	14,920
20.00	15.000	12.000	JIS	-	-	24.10	34.00	2.00	40.00	16.032	M20	15,020
20.00	16.000	12.000	DIN	-	-	24.10	34.00	2.00	41.00	16.032	M20	16,020

Tapping chucks



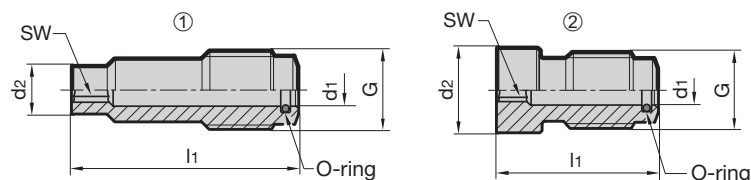
SETTING SCREWS "FACES" SYNCHRO TAPPING CHUCKS FOR INTERNAL COOLING

Product information

- for hydro-synchro tapping chucks
Article no. 4601, 4576, 4577 and 4525
- for synchro tapping chucks
Article no. 4326 and 4327
- for conventional internal cooling
- with facing stop for standard shank ends
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- with O-ring for secure seal



Article no. **4364**

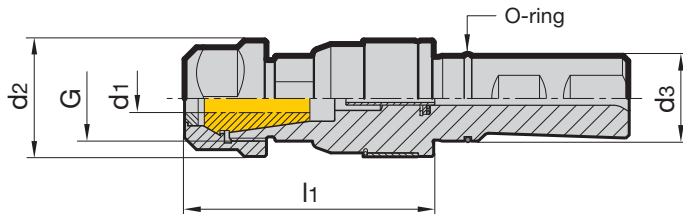
for nominal size	for tap shank-Ø x □	G	d ₁ mm	d ₂ mm	l ₁ mm	SW	O-ring	image	Code no.
ER20 / Hydro12	< Ø6	M8x1	3.6	3.3	28.0	2.0	3.5x1	1	5,020
ER20 / Hydro12	6x4.9	M8x1	3.6	4.8	26.0	2.5	3.5x1	1	6,020
ER20 / Hydro12	7x5.5	M8x1	3.6	5.4	25.8	2.5	3.5x1	1	7,020
ER20 / Hydro12	8x6.2	M8x1	3.6	6.1	20.9	2.5	3.5x1	1	8,020
ER20 / Hydro12	9x7	M8x1	3.6	6.9	20.3	2.5	3.5x1	1	9,020
ER20 / Hydro12	10x8	M8x1	3.6	7.8	15.8	2.5	3.5x1	2	10,020
ER20 / Hydro12	11x9	M8x1	3.6	8.8	14.8	2.5	3.5x1	2	11,020
ER32 / Hydro20	< Ø6	M10x1	4.1	3.3	33.0	2.0	4x1	1	5,032
ER32 / Hydro20	6x4.9	M10x1	4.1	4.8	34.0	3.0	4x1	1	6,032
ER32 / Hydro20	7x5.5	M10x1	4.1	5.4	33.8	3.0	4x1	1	7,032
ER32 / Hydro20	8x6.2	M10x1	4.1	6.1	28.8	3.0	4x1	1	8,032
ER32 / Hydro20	9x7	M10x1	4.1	6.9	28.3	3.0	4x1	1	9,032
ER32 / Hydro20	10x8	M10x1	4.1	7.8	23.8	3.0	4x1	1	10,032
ER32 / Hydro20	11x9 & 12x9	M10x1	4.1	8.8	22.9	3.0	4x1	1	11,032
ER32 / Hydro20	14x11	M10x1	4.1	10.8	20.7	3.0	4x1	2	14,032
ER32 / Hydro20	16x12	M10x1	4.1	11.8	19.7	3.0	4x1	2	16,032
ER32 / Hydro20	18x14.5 & 20x16	M10x1	4.1	14.3	18.0	3.0	4x1	2	18,032


Product information

- compensate synchronisation errors
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap, which can cause high frictional forces on the thread flanks
- length-setting screw allows 2 to 3 mm readjustment
- suitable for internal cooling
- max. coolant pressure up to 50 bar

Scope of delivery

- incl. sealed IC/ER clamping nut Article no. 4306 (*see torque)
- incl. adjustment key for adjustment screws
- order adjustment screws „plan“ Article no. 4364, tapping collet, Article no. 4308, sealing washer, Article no. 4335 and clamping key, Article no. 4913 separately


 Article no. **4326**

d ₃ ~DIN 1835 mm	nom. size	for thread	d ₁ mm	d ₂ mm	l ₁ mm	tension/ compr. mm	torque* Nm	G	kg	Code no.
25	ER20	M3.5-M14	4-11.0	34	73	0.15	40	M25x1.5	0.50	20,025
25	ER32	M3.5-M28	4-20.0	50	88	0.15	170	M40x1.5	1.30	32,025

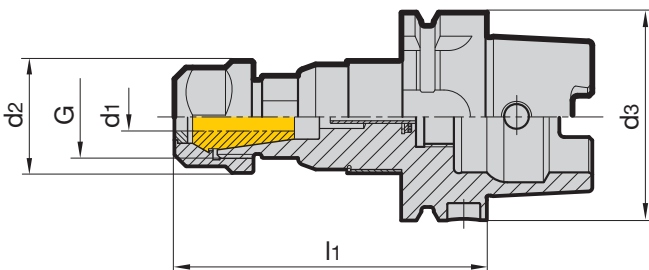
HSK-A SYNCHRO TAPPING CHUCKS

Product information

- compensate synchronisation errors
- guarantee high thread quality and optimal tool life with conventional taps
- minimal length compensation in tension and compression direction between synchronous spindle and tap reduces excessive thread flank friction
- reduces a possible increase in axial forces during the cutting cycle to a minimum
- length-setting screw allows 2 to 3 mm readjustment
- suitable for internal cooling
- max. coolant pressure up to 50 bar
- HSK-A to ISO 12164-1/DIN 69893-1

Scope of delivery

- incl. sealed IC/ER clamping nut Article no. 4306 (*see torque)
- incl. adjustment key for adjustment screws
- order adjustment screws „plan“ Article no. 4364, tapping collet, Article no. 4308, sealing washer, Article no. 4325 and clamping key, Article no. 4913 separately
- for conventional cooling order coolant supply set Article no. 4949 separately

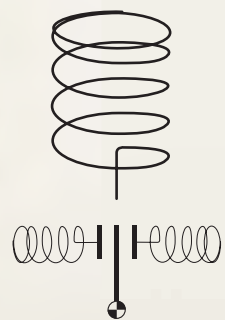

 Article no. **4327**

HSK-A d ₃ mm	nom. size	for thread	d ₁ mm	d ₂ mm	l ₁ mm	tension/ compr. mm	torque* Nm	G	kg	Code no.
63	ER20	M3.5-M14	4-11.0	34	95.5	0.15	40	M25x1.5	1.00	20,063
63	ER20	M3.5-M14	4-11.0	34	160.0	0.15	40	M25x1.5	1.50	20,163
63	ER32	M3.5-M28	4-20.0	50	109.0	0.15	170	M40x1.5	1.70	32,063
100	ER20	M3.5-M14	4-11.0	34	102.0	0.15	40	M25x1.5	2.50	20,100
100	ER32	M3.5-M28	4-20.0	50	115.5	0.15	170	M40x1.5	2.70	32,100

GUHROSync tapping chucks + VA taps

The easy way to the perfect thread

GUHROSync tapping chucks provide excellent chip evacuation and longer tool life thanks to optimal tool clamping in combination with VA taps.

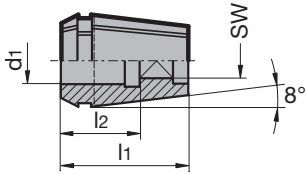


Made visible:
The spring symbol on the GUHROSync displays the effect of axial and radial force.

GUHROSync

**Product information**

- for clamping taps with square shank in synchro tapping chucks or collet holders
- smaller Ø4mm are clamped with collet, Article no. 4307 without sq. drive
- tightening torque see clamping nuts Article no. 4306

Article no. **4308**

nom. size	for shank Ø d1 mm	square SW	l1 mm	l2 mm	Code no.
ER16	4.5	3.4	27.5	18	4,516
ER16	5.5	4.3	27.5	18	5,516
ER16	6.0	4.9	27.5	18	6,016
ER16	7.0	5.5	27.5	18	7,016
ER16	8.0	6.2	27.5	22	8,016
ER20	4.0	3.0	31.5	15	4,020
ER20	4.5	3.4	31.5	18	4,520
ER20	5.5	4.3	31.5	18	5,520
ER20	6.0	4.9	31.5	18	6,020
ER20	7.0	5.5	31.5	18	7,020
ER20	8.0	6.2	31.5	22	8,020
ER20	9.0	7.0	31.5	22	9,020
ER20	10.0	8.0	31.5	25	10,020
ER20	11.0	9.0	31.5	25	11,020
ER25	4.5	3.4	34.0	18	4,525
ER25	5.5	4.3	34.0	18	5,525
ER25	6.0	4.9	34.0	18	6,025
ER25	7.0	5.5	34.0	18	7,025
ER25	8.0	6.2	34.0	22	8,025
ER25	9.0	7.0	34.0	22	9,025
ER25	10.0	8.0	34.0	25	10,025
ER25	11.0	9.0	34.0	25	11,025
ER25	12.0	9.0	34.0	25	12,025
ER32	4.0	3.0	40.0	15	4,032
ER32	4.5	3.4	40.0	18	4,532
ER32	5.5	4.3	40.0	18	5,532
ER32	6.0	4.9	40.0	18	6,032
ER32	7.0	5.5	40.0	18	7,032
ER32	8.0	6.2	40.0	22	8,032
ER32	9.0	7.0	40.0	22	9,032
ER32	10.0	8.0	40.0	25	10,032
ER32	11.0	9.0	40.0	25	11,032
ER32	12.0	9.0	40.0	25	12,032
ER32	14.0	11.0	40.0	25	14,032
ER32	16.0	12.0	40.0	25	16,032
ER32	18.0	14.5	40.0	25	18,032
ER32	20.0	16.0	40.0	28	20,032
ER40	7.0	5.5	46.0	18	7,040
ER40	8.0	6.2	46.0	22	8,040
ER40	9.0	7.0	46.0	22	9,040
ER40	10.0	8.0	46.0	25	10,040
ER40	11.0	9.0	46.0	25	11,040
ER40	12.0	9.0	46.0	25	12,040
ER40	14.0	11.0	46.0	25	14,040
ER40	16.0	12.0	46.0	25	16,040
ER40	18.0	14.5	46.0	25	18,040
ER40	20.0	16.0	46.0	28	20,040
ER40	22.0	18.0	46.0	28	22,040

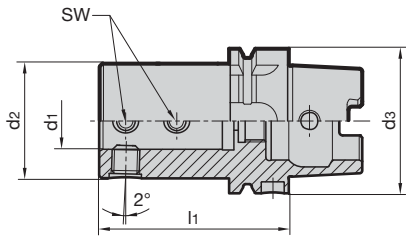


Product information

- for quick change chucks and synchro tapping chucks with straight shank (except Article no. 4342)
- HSK-A to ISO 12164-1/DIN 69893-1

Scope of delivery

- incl. clamping screws Article no. 4903, code no. 12,001
- order coolant delivery set Article no. 4949 separately

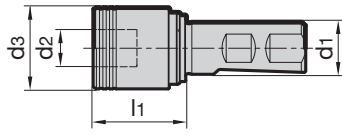


Article no.						4343
HSK-A d ₃	d ₁ mm	d ₂ mm	l ₁ mm	SW	kg	Code no.
50	25	50	80	6	0.89	25,050
63	25	50	82	6	1.26	25,063
80	25	50	87	6	3.10	25,080
100	25	50	89	6	4.08	25,100

QUICK CHANGE TAPPING CHUCKS WITHOUT INTERNAL COOLING

Product information

- quick change tapping chucks are provided with a ball guided length compensator that compensates any length difference between spindle feed and pitch of tap thread



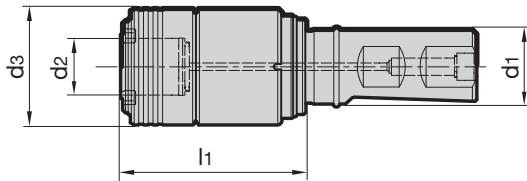
Article no.							4340
for thread	d ₁ mm	d ₂ mm	d ₃ mm	l ₁ mm	tension/ compression mm	kg	Code no.
M3-M12	25	19	36	39	± 7.5	0.4	19,025
M8-M20	25	31	53	63	±10.0	0.9	31,025

Tapping chucks



Product information

- quick change tapping chucks are provided with a ball guided length compensator that compensates any length difference between spindle feed and pitch of tap thread
- provided with internal coolant supply feeding the coolant through the chuck and adaptor into the shank of the tap.
All functional elements are sealed
- max. coolant pressure up to 50 bar

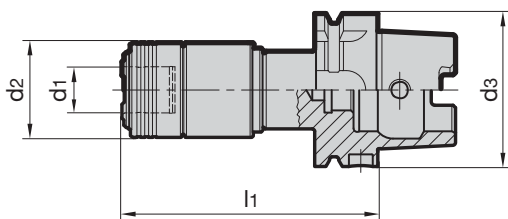


Article no. 4342							Code no.
for thread	d ₁ mm	d ₂ mm	d ₃ mm	l ₁ mm	tension/compression mm	kg	
M3-M12	25	19	39	62	7.5/7.5	0.6	19,025
M8-M20	25	31	60	88	10/10	1.0	31,025

HSK-A QUICK CHANGE TAPPING CHUCKS WITH INTERNAL COOLING

Product information

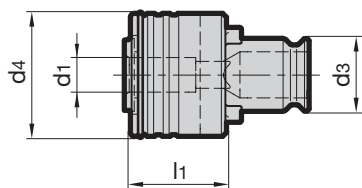
- quick change tapping chucks are provided with a ball guided length compensator that compensates any length difference between spindle feed and pitch of tap thread
- guarantee high thread quality and optimal tool life with conventional taps
- max. coolant pressure up to 50 bar.
- HSK-A to ISO 12164-1/DIN 69893-1



Article no. 4328							Code no.
HSK-A d ₃ mm	for thread	d ₁ mm	d ₂ mm	l ₁ mm	tension/compression ± mm	kg	
63	M3-M12	19	39	105	7.5	1.13	19,063
63	M8-M20	31	60	140	10.0	2.28	31,063

Tapping chucks

- with safety clutch
- suitable for HSS taps
- for solid carbide taps a clamping groove is required on the shank to provide additional drive
- suitable for internal coolant supply max. 50 bar

[illegible]

GUHRING MQL SYSTEMS

DELIVERING ONLY THE REQUIRED AMOUNT

As one of the pioneers of MQL technology we have an extensive knowledge of minimal quantity lubrication. Guhring standard MQL Chucks have been supplied a thousand fold throughout the world and are recognised by the automotive industry as ideal MQL solutions as either the one or two channel systems.

Higher cutting speeds and longer tool life are possible thanks to adapted cooling as well as highest surface qualities thanks to the pure lubricant. Workpieces and chips remain dry! Save the cost of de-greasing your workpieces as well as disposal of swarf and soluble oil.

1 MQL BY GÜHRING

Our products for the MQL 1-channel technology are identified by this symbol.

**Visual feature
of the 1-channel system**
is the gold coloured MQL
length setting screw.



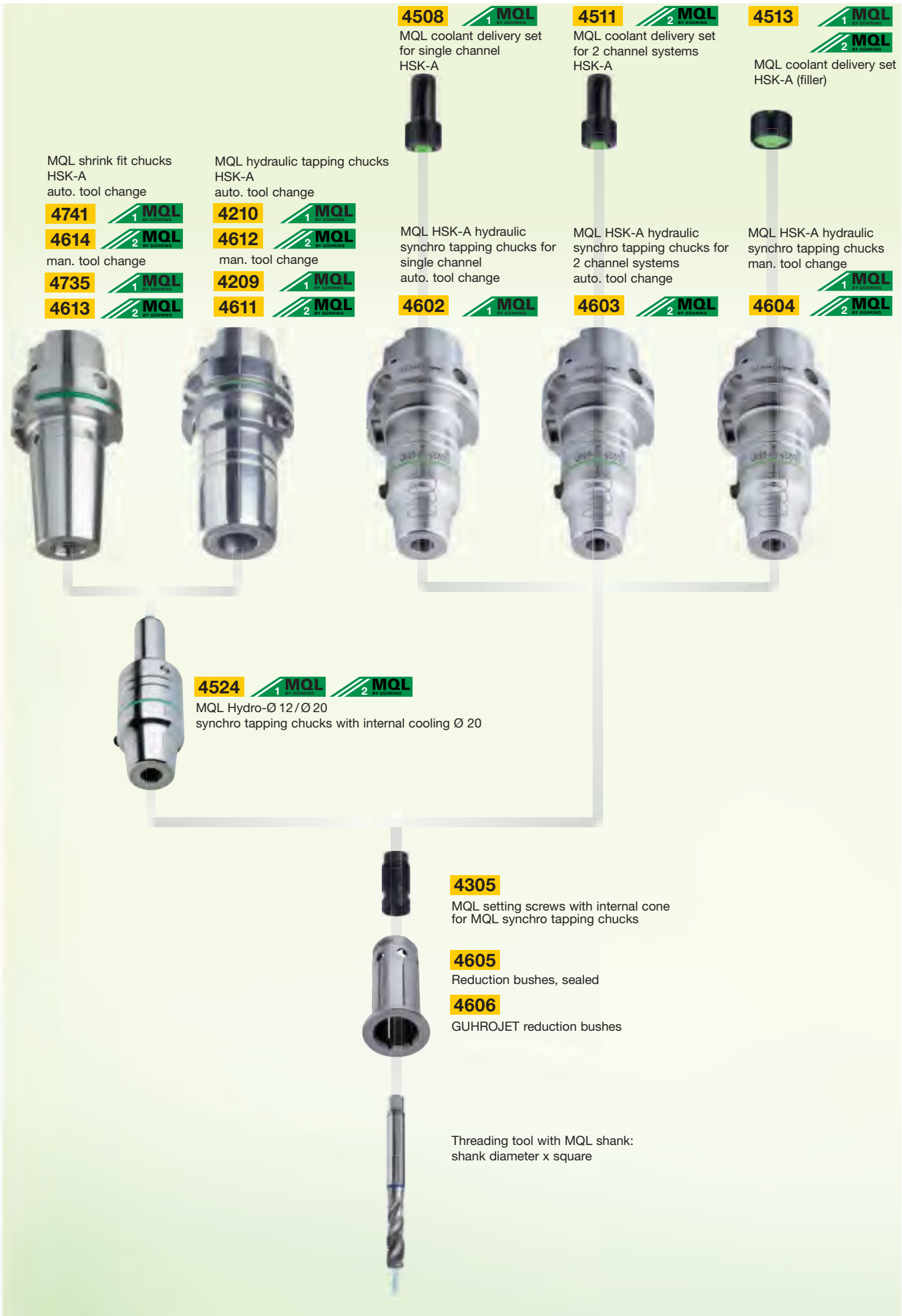
2 MQL BY GÜHRING

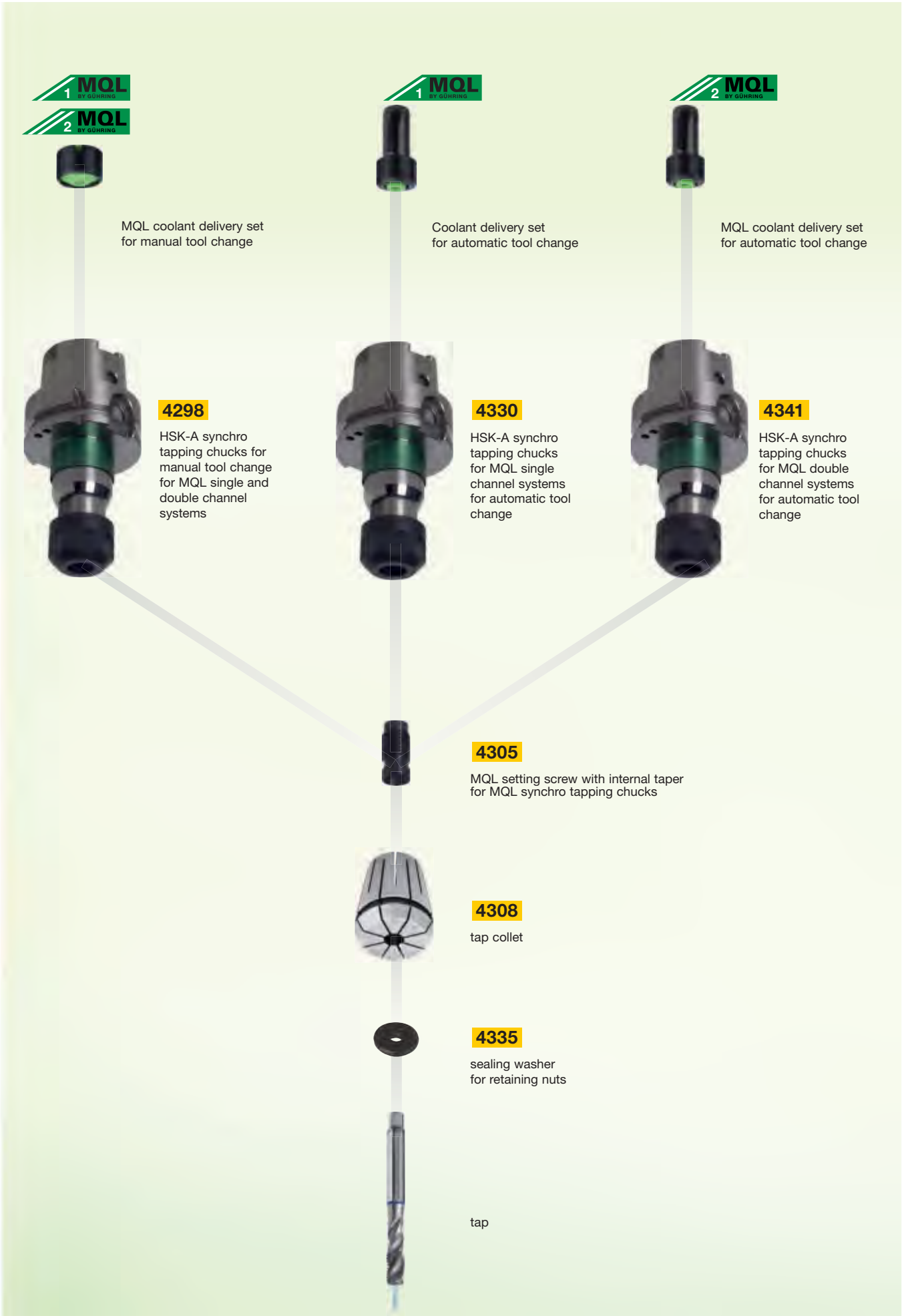
Our products for the MQL 2-channel technology are identified by this symbol.

**Visual feature
of the 2-channel system**
is the black coloured MQL
length setting screw.



Tapping chucks





- for MQL single channel systems
- MQL coolant pressure up to max. 16 bar
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- Guhring MQL identifiable by green coloured ring

- incl. hexagon clamping key
Article no. 4912
- incl. MQL coolant delivery set for
automatic tool change
Article no. 4508
- incl. adjustment key for
MQL adjustment screws
- order MQL adjustment screw
Article no. 4305 separately
- order reduction bushes Article no. 4605 or
4606 separately



Tapping chucks

- for MQL single and double channel systems
- MQL coolant pressure up to max. 16 bar
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- Guhring MQL identifiable by green coloured ring

- incl. hexagon clamping key
Article no. 4912
- incl. MQL coolant delivery set
for manual tool change (filler)
Article no. 4513
- incl. adjustment key for
MQL adjustment screws
- order MQL adjustment screw
Article no. 4305 separately
- order reduction bushes Article no. 4605 or
4606 separately

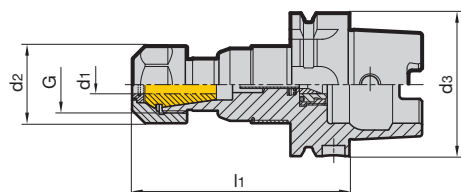
Article no. 4604



MQL SYNCHRO TAPPING CHUCKS HSK-A FOR MANUAL TOOL CHANGE

Product information

- for MQL single and double channel systems
- compensate synchronisation errors
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap, which can cause high frictional forces on the thread flanks and increase thread quality and tool life
- length-setting screw allows 2 to 3 mm readjustment
- MQL pressure up to max. 10 bar
- mounted MQL coolant supply pipe
- Guhring MQL identifiable by green coloured ring



Scope of delivery

- incl. MQL coolant delivery set for manual tool change (filler)
- incl. sealed IC/ER clamping nut Article no. 4306 (*see torque)
- incl. adjustment key for MQL adjustment screw
- order MQL adjustment screw Article no. 4305 separately
- order sealing washer Article no. 4335 separately
- order collet Article no. 4308 separately
- order chuck spanner Article no. 4913 for ER retaining nut separately



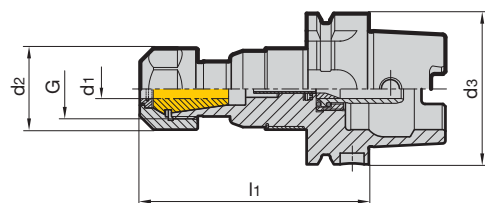
Article no. 4298

HSK-A d ₃	nom. size	for thread	G	d ₁ mm	d ₂ mm	l ₁ mm	tension/ compr. ± mm	torque* Nm	kg	Code no.
63	ER20	M3.5-M14	M25x1.5	4.5-11	34	95.5	0.15	40	1.00	20,063
63	ER32	M3.5-M28	M40x1.5	4.5-20	50	109.0	0.15	170	1.50	32,063

MQL 1-CHANNEL SYNCHRO TAPPING CHUCKS HSK-A FOR AUTOMATIC TOOL CHANGE

Product information

- for MQL single channel systems
- compensate synchronisation errors
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap, which can cause high frictional forces on the thread flanks and increase thread quality and tool life
- length-setting screw allows 2 to 3 mm readjustment
- MQL pressure up to max. 10 bar
- mounted MQL coolant supply pipe
- Guhring MQL identifiable by green coloured ring



Scope of delivery

- incl. MQL coolant delivery set for automatic tool change
- incl. sealed IC/ER clamping nut Article no. 4306 (*see torque)
- incl. adjustment key for MQL adjustment screw
- order MQL adjustment screw Article no. 4305 separately
- order sealing washer Article no. 4335 separately
- order collet Article no. 4308 separately
- order chuck spanner Article no. 4913 for ER retaining nut separately



Article no. 4330

HSK-A d ₃	nom. size	for thread	G	d ₁ mm	d ₂ mm	l ₁ mm	tension/ compr. ± mm	torque* Nm	kg	Code no.
63	ER20	M3.5-M14	M25x1.5	4.5-11	34	95.5	0.15	40	1.00	20,063
63	ER32	M3.5-M28	M40x1.5	4.5-20	50	109.0	0.15	170	1.50	32,063
100	ER20	M3.5-M14	M25x1.5	4.5-11	34	102.0	0.15	40	2.40	20,100
100	ER32	M3.5-M28	M40x1.5	4.5-20	50	115.5	0.15	170	3.00	32,100

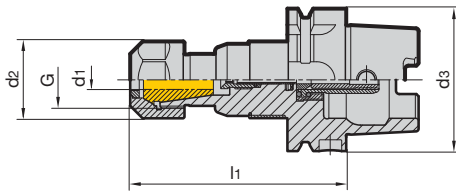


Product information

- for 2-channel-systems
- compensate synchronisation errors
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap, which can cause high frictional forces on the thread flanks and increase thread quality and tool life
- length-setting screw allows 2 to 3 mm readjustment
- MQL pressure up to max. 10 bar
- mounted MQL coolant supply pipe
- Guhring MQL identifiable by green coloured ring

Scope of delivery

- incl. MQL coolant delivery set for automatic tool change
- incl. sealed IC/ER clamping nut Article no. 4306 (*see torque)
- incl. adjustment key for MQL adjustment screw
- order MQL adjustment screw Article no. 4305 separately
- order sealing washer Article no. 4335 separately
- order collet Article no. 4308 separately
- order chuck spanner Article no. 4913 for ER retaining nut separately



Article no.										4341
HSK-A d ₃	nom. size	for thread	G	d ₁ mm	d ₂ mm	l ₁ mm	tension/ compr. ± mm	torque* Nm	kg	Code no.
63	ER20	M3.5-M14	M25x1.5	4.5-11	34	95.5	0.15	40	1.00	20,063
63	ER32	M3.5-M28	M40x1.5	4.5-20	50	109.0	0.15	170	1.50	32,063
100	ER20	M3.5-M14	M25x1.5	4.5-11	34	102.0	0.15	40	2.40	20,100
100	ER32	M3.5-M28	M40x1.5	4.5-20	50	115.5	0.15	170	3.00	32,100

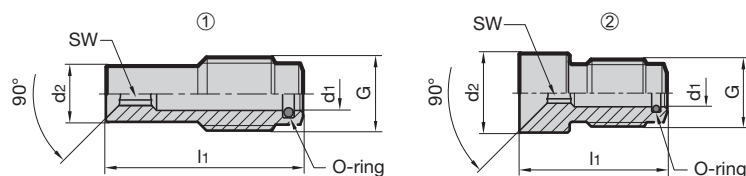


- MQL setting screws with internal cone
- for MQL single and double channel systems
- for MQL taps with external cone
- for MQL synchro tapping chucks

Article no. 4602, 4603 and 4604

- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

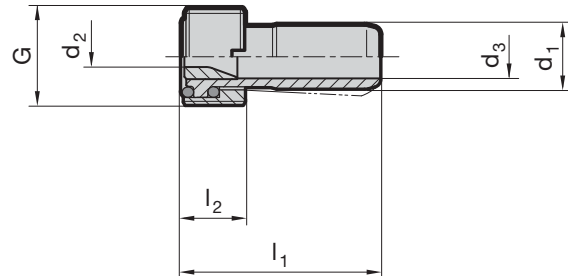
- with O-ring for secure seal

[illegible]



Product information

- to MQL standard
- version sim. to DIN 69895
- for MQL 1-channel systems
- for tool holders with automatic tool clamping
- dimensions d_2 and l_1 based on installed condition



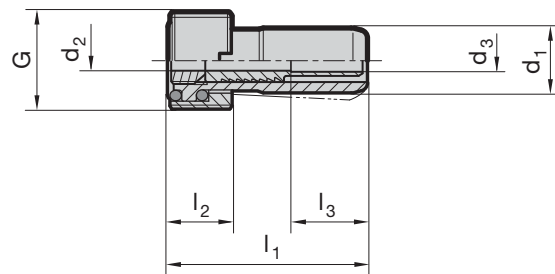
Article no. 4508

for HSK-A	d_1 mm	d_2 mm	d_3 mm	l_1 mm	l_2 mm	G	Code no.
32	6.00	3.00	4.00	26.00	5.50	M10x1	10,032
40	8.00	3.80	5.40	29.50	7.50	M12x1	12,040
50	10.00	3.80	6.40	33.00	9.50	M16x1	16,050
63	12.00	3.80	8.00	36.50	11.50	M18x1	18,063
80	14.00	3.80	10.00	40.00	13.50	M20x1.5	20,080
100	16.00	3.80	12.00	44.00	15.50	M24x1.5	24,100

MQL 2-CHANNEL COOLANT DELIVERY SET HSK-A

Product information

- to MQL standard
- version sim. to DIN 69895
- for MQL 2-channel systems
- for tool holders with automatic tool clamping
- „Crashsafe“ version similar to DIN 69090-2 neck design
- dimensions d_2 and l_1 based on installed condition

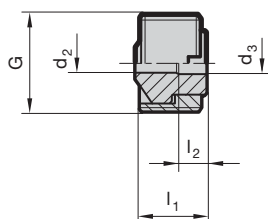


Article no. 4511

for HSK-A	d_1 mm	d_2 mm	d_3 mm	l_1 mm	l_2 mm	l_3 mm	G	Code no.
32	6.00	3.00	4.00	26.00	5.50	-	M10x1	10,032
40	8.00	3.80	5.40	29.50	7.50	-	M12x1	12,040
50	10.00	3.60	4.00	33.00	9.50	21.00	M16x1	16,050
63	12.00	3.60	4.00	36.50	11.50	13.80	M18x1	18,063
80	14.00	3.60	4.00	40.00	13.50	14.00	M20x1.5	20,080
100	16.00	3.60	4.00	44.00	15.50	14.00	M24x1.5	24,100

Tapping chucks

- to MQL standard
- for internal cooling MQL 1 and 2 channel systems
- for tool holders with manual tool clamping
- optimally sealed for MQL clamping set
- dimensions d_2 and l_1 based on installed condition



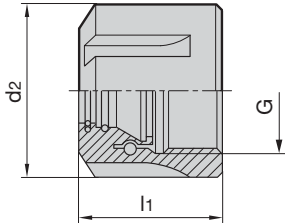
Tapping chucks

**Product information**

- for collets DIN ISO 15488
- for application with internal cooling IC/ER for sealing washer
- for increased clamping version ER or IC/ER with glide ring

Scope of delivery

- increased clamping force version: incl. glide ring
- version for internal cooling IC/ER: order sealing washer Article no. 4335 separately



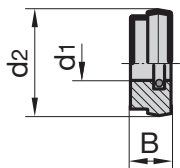
						Article no.	4306
for sealing washer no. 4335	with glide ring	nom. size	d ₂ mm	l ₁ mm	G	max. torque	Code no.
–	–	ER16 mini	22	18.4	M19x1.0	55	16,200
–	–	ER20 mini	28	19.0	M24x1.0	75	20,200
–	–	ER25 mini	35	20.0	M30x1.0	100	25,200
–	–	ER11 (4008E)	19	11.3	M14x0.75	25	11,000
–	–	ER16 (426E)	28	17.5	M22x1.5	55	16,000
–	–	ER20 (428E)	34	19.0	M25x1.5	75	20,000
–	–	ER25 (430E)	42	20.0	M32x1.5	100	25,000
–	–	ER32 (470E)	50	22.5	M40x1.5	140	32,000
–	–	ER40 (472E)	63	25.5	M50x1.5	200	40,000
x	–	IC/ER16 mini	22	22.0	M19x1.0	55	16,300
x	–	IC/ER20 mini	28	24.0	M24x1.0	75	20,300
x	–	IC/ER25 mini	35	25.0	M30x1.0	100	25,300
x	–	IC/ER16	28	22.5	M22x1.5	55	16,600
x	–	IC/ER20	34	24.0	M25x1.5	75	20,600
x	–	IC/ER25	42	25.0	M32x1.5	100	25,600
x	–	IC/ER32	50	27.5	M40x1.5	140	32,600
x	–	IC/ER40	63	30.5	M50x1.5	200	40,600
–	x	ER16	28	20.3	M22x1.5	55	16,400
–	x	ER20	34	21.8	M25x1.5	75	20,400
–	x	ER25	42	22.4	M32x1.5	100	25,400
–	x	ER32	50	25.0	M40x1.5	140	32,400
–	x	ER40	63	28.3	M50x1.5	200	40,400
x	x	IC/ER16	28	22.7	M22x1.5	55	16,500
x	x	IC/ER20	34	24.2	M25x1.5	75	20,500
x	x	IC/ER25	42	25.2	M32x1.5	100	25,500
x	x	IC/ER32	50	27.4	M40x1.5	140	32,500
x	x	IC/ER40	63	30.7	M50x1.5	200	40,500

**Product information**

- the application range of sealing washer, Article no. 4325, is from nom.-Ø d1 to the next dimension below, i.e. for Ø 6.3 mm (nom. size ER20) order sealing washer d1 = 6.5 mm (code no. 06,520)

Ordering example

Ø d1 = 3.5
 nom. size = ER 20
 Article no./Code no. = 4335 03,520

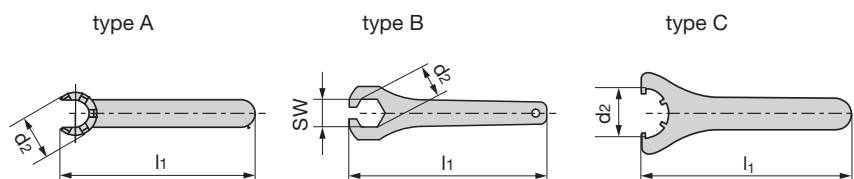


				Article no.	4335
nom. size	d1 mm	d2 mm	B mm	Code no.	
ER16	3.0...10 um 0.5 mm stg.	13	4	3,016 - 10,016	
ER20	3.0...13 um 0.5 mm stg.	16	4	3,020 - 13,020	
ER25	3.0...16 um 0.5 mm stg.	21	4	3,025 - 16,025	
ER32	3.0...20 um 0.5 mm stg.	27	4	3,032 - 20,032	
ER40	3.5...26 um 0.5 mm stg.	33.5	4	3,540 - 26,040	

CLAMPING KEY

Product information

- for clamping nuts
- Type A with special hook key for clamping nuts system DIN 6499 mini design
- Type B for clamping nuts with hexagonal design
- Type C for clamping nuts for external slots



					Article no.	4913
nom. size mm	type	l1 mm	for ER d2 mm	SW	Code no.	
ER16 mini	A	122	22	-	16,200	
ER20 mini	A	139	28	-	20,200	
ER25 mini	A	143	35	-	25,200	
ER11	B	141	19	17	11,000	
ER16	B	178	28	25	16,000	
ER16	C	161	32	-	16,032	
ER20	B	200	34	30	20,000	
ER20	C	183	35	-	20,100	
ER25	C	210	42	-	25,000	
ER32	C	250	50	-	32,000	
ER40	C	290	63	-	40,000	

GÜHRO Sync



TEC SS

HSCO
HSS-E

TiN

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9 S 20

ISO

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TECHNICAL SECTION

K20-K40

+34

H11

Co-Gehalt
[M-%]

Steigung
P

X 53
CrMnNiN
21 9

BT (min)

SCR 415 (H)

<700°

$9,3 \cdot 10^{-6}$

N7



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Tapping size holes for thread cutting

Std. ISO metric threads DIN 13					ISO metric fine threads DIN 13					UNC threads ASME B1.1				
nom. Ø	pitch P	tapping size hole Ø DIN 336 mm	core diameter of int. thread 6H*		nom. x Ø	pitch P	tapping size hole Ø DIN 336 mm	core diameter of int. thread 6H		nom. x Ø	pitch P	tapping size hole Ø DIN 336 mm	core diameter of int. thread 6H	
	mm		min. mm	max. mm		mm		min. mm	max. mm				min. mm	max. mm
M 1	0.25	0.75	0.729	0.785	M 2.5 x 0.35	2.15	2.121	2.221		M 22 x 1.50	20.50	20.376	20.676	
M 1.1	0.25	0.85	0.829	0.885	M 3.0 x 0.35	2.65	2.621	2.721		M 22 x 2.00	20.00	19.835	20.210	
M 1.2	0.25	0.95	0.929	0.985	M 3.5 x 0.35	3.15	3.121	3.221		M 24 x 1.00	23.00	22.917	23.153	
M 1.4	0.30	1.10	1.075	1.142	M 4.0 x 0.50	3.50	3.459	3.599		M 24 x 1.50	22.50	22.376	22.676	
M 1.6	0.35	1.25	1.221	1.321	M 4.5 x 0.50	4.00	3.959	4.099		M 24 x 2.00	22.00	21.835	22.210	
M 1.8	0.35	1.45	1.421	1.521	M 5.0 x 0.50	4.50	4.459	4.599		M 25 x 1.00	24.00	23.917	24.153	
M 2	0.40	1.60	1.567	1.679	M 5.5 x 0.50	5.00	4.959	5.099		M 25 x 1.50	23.50	23.376	23.676	
M 2.2	0.45	1.75	1.713	1.838	M 6.0 x 0.75	5.20	5.188	5.378		M 25 x 2.00	23.00	22.835	23.210	
M 2.5	0.45	2.05	2.013	2.138	M 7.0 x 0.75	6.20	6.188	6.378		M 27 x 1.00	26.00	25.917	26.153	
M 3	0.50	2.50	2.459	2.599	M 8.0 x 0.50	7.50	7.459	7.599		M 27 x 1.50	25.50	25.376	25.676	
M 3.5	0.60	2.90	2.850	3.010	M 8.0 x 0.75	7.20	7.188	7.378		M 27 x 2.00	25.00	24.835	25.210	
M 4	0.70	3.30	3.242	3.422	M 8.0 x 1.00	7.00	6.917	7.153		M 28 x 1.00	27.00	26.917	27.153	
M 4.5	0.75	3.70	3.688	3.878	M 9.0 x 0.75	8.20	8.188	8.378		M 28 x 1.50	26.50	26.376	26.676	
M 5	0.80	4.20	4.134	4.334	M 9.0 x 1.00	8.00	7.917	8.153		M 28 x 2.00	26.00	25.835	26.210	
M 6	1.00	5.00	4.917	5.153	M 10 x 0.75	9.20	9.188	9.378		M 30 x 1.00	29.00	28.917	29.153	
M 7	1.00	6.00	5.917	6.153	M 10 x 1.00	9.00	8.917	9.153		M 30 x 1.50	28.50	28.376	28.676	
M 8	1.25	6.80	6.647	6.912	M 10 x 1.25	8.80	8.647	8.912		M 30 x 2.00	28.00	27.835	28.210	
M 9	1.25	7.80	7.647	7.912	M 11 x 0.75	10.20	10.188	10.378		M 30 x 3.00	27.00	26.752	27.252	
M 10	1.50	8.50	8.376	8.676	M 11 x 1.00	10.00	9.917	10.153		M 32 x 1.50	30.50	30.376	30.676	
M 11	1.50	9.50	9.376	9.676	M 12 x 1.00	11.00	10.917	11.153		M 32 x 2.00	30.00	29.835	30.210	
M 12	1.75	10.20	10.106	10.441	M 12 x 1.25	10.80	10.647	10.912		M 33 x 1.50	31.50	31.376	31.676	
M 14	2.00	12.00	11.835	12.210	M 12 x 1.50	10.50	10.376	10.676		M 33 x 2.00	31.00	30.835	31.210	
M 16	2.00	14.00	13.835	14.210	M 14 x 1.00	13.00	12.917	13.153		M 33 x 3.00	30.00	29.752	30.252	
M 18	2.50	15.50	15.294	15.744	M 14 x 1.25	12.80	12.647	12.912		M 35 x 1.50	33.50	33.376	33.676	
M 20	2.50	17.50	17.294	17.744	M 14 x 1.50	12.50	12.376	12.676		M 36 x 1.50	34.50	34.376	34.676	
M 22	2.50	19.50	19.294	19.744	M 15 x 1.00	14.00	13.917	14.153						
M 24	3.00	21.00	20.752	21.252	M 15 x 1.50	13.50	13.376	13.676						
M 27	3.00	24.00	23.752	24.252	M 16 x 1.00	15.00	14.917	15.153						
M 30	3.50	26.50	26.211	26.771	M 16 x 1.25	14.80	14.647	14.912						
M 33	3.50	29.50	29.211	29.771	M 16 x 1.50	14.50	14.376	14.676						
M 36	4.00	32.00	31.670	32.270	M 17 x 1.00	16.00	15.917	16.153						
M 39	4.00	35.00	34.670	35.270	M 17 x 1.50	15.50	15.376	15.676						
M 42	4.50	37.50	37.129	37.799	M 18 x 1.00	17.00	16.917	17.153						
M 45	4.50	40.50	40.129	40.799	M 18 x 1.50	16.50	16.376	16.676						
M 48	5.00	43.00	42.587	43.297	M 20 x 1.00	19.00	18.917	19.153						
M 52	5.00	47.00	46.587	47.297	M 20 x 1.50	18.50	18.376	18.676						
M 56	5.50	50.50	50.046	50.796	M 20 x 2.00	18.00	17.835	18.210						
					M 22 x 1.00	21.00	20.917	21.153						

* M 1.1 up to M 1.4 tapping size hole of int. thread 5H

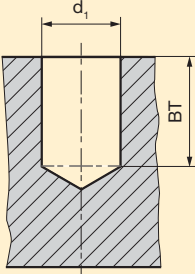
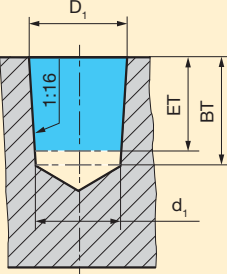
MJ threads DIN ISO 5855					UNC threads ISO 3161				UNF threads ISO 3161			
nom. Ø	x	pitch P	tapping size hole Ø DIN 336 mm	core diameter of int. thread 5H*	nom. Ø	threads	tapping size hole Ø DIN 336 mm	core diameter of int. thread 3B	nom. Ø	threads	tapping size hole Ø DIN 336 mm	core diameter of int. thread 3B
		mm		min. mm		per inch		min. mm		per inch		min. mm
MJ 3	x	0.50	2.60	2.513	Nr. 6	- 32	2.85	2.733	Nr. 6	- 40	3.00	2.888
MJ 4	x	0.70	3.40	3.318	Nr. 8	- 32	3.55	3.393	Nr. 8	- 36	3.60	3.480
MJ 5	x	0.80	4.30	4.221	Nr. 10	- 24	4.00	3.795	Nr. 10	- 32	4.20	4.054
MJ 6	x	0.50	5.55	5.513	Nr. 12	- 24	4.60	4.455	Nr. 12	- 28	4.75	4.602
MJ 6	x	0.75	5.35	5.269	1/4	- 20	5.30	5.113	1/4	- 28	5.60	5.466
MJ 6	x	1.00	5.10	5.026	5/16	- 18	6.75	6.563	5/16	- 24	7.00	6.906
MJ 8	x	0.50	7.55	7.513	3/8	- 16	8.20	7.978	3/8	- 24	8.60	8.494
MJ 8	x	0.75	7.35	7.269	7/16	- 14	9.60	9.346	7/16	- 20	10.00	9.876
MJ 8	x	1.00	7.10	7.026	1/2	- 13	11.00	10.798	1/2	- 20	11.60	11.463
MJ 8	x	1.25	6.90	6.782	9/16	- 12	12.40	12.228	9/16	- 18	13.00	12.913
MJ 10	x	1.00	9.10	9.026	5/8	- 11	13.80	13.627	5/8	- 18	14.60	14.501
MJ 10	x	1.25	8.90	8.782								
MJ 10	x	1.50	8.60	8.539								
MJ 12	x	1.75	10.40	10.295								
MJ 16	x	2.00	14.20	14.051								

* MJ3 x 0.50 up to MJ 5 x 0.80 tapping size hole of int. thread 6H



UNF threads ASME B1.1					BSW (Whitworth) threads BS84					(Whitworth) threads (DIN-ISO 228-1)					Steel armoured conduit threads to DIN 40430				
nom. threads Ø		tapping size hole Ø	core diameter of int. thread 2B		nom. threads Ø		tapping size hole Ø	core diameter of int. thread		nom. threads Ø		tapping size hole Ø	core diameter of int. thread		nom. threads Ø		tapping size hole Ø	core diameter of int. thread	
per inch		DIN 336 mm	min. mm	max. mm	inch		DIN 336 mm	min. mm	max. mm	inch		DIN 336 mm	min. mm	max. mm	per inch		DIN 336 mm	min. mm	max. mm
Nr.	1 - 72	1.55	1.473	1.610	W 1/16	60	1.20	1.045	1.230	G 1/16	28	6.80	6.561	6.843	Pg 7	20	11.40	11.280	11.430
Nr.	2 - 64	1.85	1.755	1.910	W 3/32	48	1.80	1.704	1.912	G 1/8	28	8.80	8.566	8.848	Pg 9	18	14.00	13.860	14.010
Nr.	3 - 56	2.15	2.024	2.197	W 1/8	40	2.50	2.362	2.591	G 1/4	19	11.80	11.445	11.890	Pg 11	18	17.30	17.260	17.410
Nr.	4 - 48	2.40	2.271	2.459	W 5/32	32	3.20	2.952	3.214	G 3/8	19	15.25	14.950	15.395	Pg 13.5	18	19.00	19.060	19.210
Nr.	5 - 44	2.70	2.550	2.741	W 3/16	24	3.60	3.407	3.745	G 1/2	14	19.00	18.631	19.172	Pg 16	18	21.30	21.160	21.310
Nr.	6 - 40	2.95	2.819	3.023	W 7/32	24	4.50	4.201	4.539	G 5/8	14	21.00	20.587	21.128	Pg 21	16	26.90	26.780	27.030
Nr.	8 - 36	3.50	3.404	3.607	W 1/4	20	5.10	4.724	5.156	G 3/4	14	24.50	24.117	24.658	Pg 29	16	35.50	35.480	35.730
Nr.	10 - 32	4.10	3.962	4.166	W 5/16	18	6.50	6.130	6.590	G 7/8	14	28.25	27.877	28.418	Pg 36	16	45.50	45.480	45.730
Nr.	12 - 28	4.60	4.496	4.724	W 3/8	16	7.90	7.492	7.987	G 1	11	30.75	30.291	30.931	Pg 42	16	52.50	52.480	52.730
	1/4 - 28	5.50	5.359	5.588	W 7/16	14	9.20	8.789	9.330	G 1 1/8	11	35.50	34.939	35.579	Pg 48	16	57.80	57.780	58.030
	5/16 - 24	6.90	6.782	7.036	W 1/2	12	10.50	9.989	10.591	G 1 1/4	11	39.50	38.952	39.592					
	3/8 - 24	8.50	8.382	8.636	W 9/16	12	12.00	11.577	12.179	G 1 1/2	11	45.25	44.845	45.485					
	7/16 - 20	9.90	9.728	10.033	W 5/8	11	13.50	12.918	13.558	G 1 3/4	11	51.00	50.788	51.428					
	1/2 - 20	11.50	11.328	11.608	W 3/4	10	16.25	15.797	16.483	G 2	11	57.00	56.656	57.296					
	9/16 - 18	12.90	12.751	13.081	W 7/8	9	19.25	18.611	19.353										
	5/8 - 18	14.50	14.351	14.681	W 1	8	22.00	21.334	22.147										
	3/4 - 16	17.50	17.323	17.678	W 1 1/8	7	24.50	23.928	24.832										
	7/8 - 14	20.40	20.269	20.650	W 1 1/4	7	27.75	27.103	28.007										
	1 - 12	23.25	23.114	23.571	W 1 3/8	6	30.50	29.504	30.528										
	1 1/8 - 12	26.50	26.289	26.746	W 1 1/2	6	33.50	32.679	33.703										
	1 1/4 - 12	29.50	29.464	29.921	W 1 5/8	5	35.50	34.769	35.963										
	1 3/8 - 12	32.75	32.639	33.096	W 1 3/4	5	39.00	37.944	39.138										
	1 1/2 - 12	36.00	35.814	36.271	W 2	4.5	44.50	43.571	44.877										

NPT ANSI B 2.1
American tapered pipe thread 1:16

Version A (avoid if possible)		Version B		nom. Ø	threads per inch	tapp. size hole Ø cylindrical (A) d ₁	tapp. size hole Ø conical (B) D ₁	cutting depth ET mm	cutting depth BT (min) mm
				1/16	- 27	6.15	6.39	9.29	10.7
				1/8	- 27	8.40	8.74	9.32	10.8
				1/4	- 18	11.10	11.36	13.52	15.6
				3/8	- 18	14.30	14.80	13.83	16.0
				1/2	- 14	17.90	18.32	18.07	20.8
				3/4	- 14	23.30	23.67	18.55	21.3
				1	- 11.5	29.00	29.69	22.29	25.6
				1 1/4	- 11.5	37.70	38.45	22.80	26.1
				1 1/2	- 11.5	43.70	44.52	22.80	26.1
				2	- 11.5	55.60	56.56	23.20	26.5
				2 1/2	- 8	66.30	67.62	31.75	36.3
				3	- 8	82.30	83.52	33.74	38.5

Metric/metric fine EG-threads (EG M14 x 1.25) for wire thread inserts DIN 8140					UNC (UNC-STI) EG-threads for wire thread inserts ASME B18.29.1					UNF (UNF-STI) EG-threads for wire thread inserts ASME B18.29.1				
nom. Ø	x pitch P	tapping size hole Ø DIN 336 mm	core diameter of int. thread min. mm	max. mm	nom. Ø	threads per inch	tapping size hole Ø DIN 336 mm	core diameter of int. thread min. mm	max. mm	nom. Ø	threads per inch	tapping size hole Ø DIN 336 mm	core diameter of int. thread min. mm	max. mm
EG M 4	0.70	4.20	4.152	4.292	EG Nr. 6	- 32	3.80	3.678	3.879	EG Nr. 6	- 40	3.70	3.644	3.818
EG M 5	0.80	5.25	5.174	5.334	EG Nr. 8	- 32	4.40	4.338	4.524	EG Nr. 8	- 36	4.40	4.321	4.498
EG M 6	1.00	6.30	6.217	6.407	EG Nr. 10	- 24	5.20	5.055	5.283	EG Nr. 10	- 32	5.10	4.999	5.184
EG M 8	1.25	8.40	8.271	8.483	EG Nr. 12	- 24	5.80	5.715	5.944	EG Nr. 12	- 28	5.70	5.682	5.809
EG M10	1.50	10.50	10.324	10.560	EG 1/4	- 20	6.70	6.624	6.868	EG 1/4	- 28	6.60	6.546	6.721
EG M12	1.75	12.50	12.379	12.644	EG 5/16	- 18	8.40	8.242	8.489	EG 5/16	- 24	8.25	8.166	8.352
EG M14 x 1.25		14.40	14.271	14.483	EG 3/8	- 16	10.00	9.868	10.127	EG 3/8	- 24	9.80	9.754	9.931
EG M16	2.00	16.50	16.433	16.733	EG 7/16	- 14	11.60	11.506	11.783	EG 7/16	- 20	11.50	11.389	11.585
					EG 1/2	- 13	13.30	13.122	13.393	EG 1/2	- 20	13.10	12.974	13.172
					EG 9/16	- 12	14.90	14.747	15.032	EG 9/16	- 18	14.70	14.592	14.798
					EG 5/8	- 11	16.50	16.375	16.673	EG 5/8	- 18	16.25	16.180	16.386



Recommended tapping size holes for thread forming

Std. ISO metric threads DIN 13					
nom. Ø	pitch	tapp. size hole Ø	tapp. size hole Ø		core Ø of int. thread 7H*
mm	mm	mm	min. mm	max. mm	mm
M1	0.25	0.90	0.89	0.92	0.729
M1.2	0.25	1.10	1.09	1.12	0.929
M1.4	0.30	1.28	1.27	1.30	1.075
M1.6	0.35	1.46	1.45	1.48	1.221
M1.7	0.35	1.56	1.55	1.58	1.321
M1.8	0.35	1.66	1.65	1.68	1.421
M 2	0.40	1.85	1.84	1.88	1.567
M 2.2	0.45	2.00	2.01	2.05	1.713
M 2.5	0.45	2.30	2.28	2.32	2.013
M 3	0.50	2.80	2.78	2.85	2.459
M 3.5	0.60	3.25	3.23	3.30	2.850
M 4	0.70	3.70	3.68	3.76	3.242
M 4.5	0.75	4.20			
M 5	0.80	4.65	4.62	4.71	4.134
M 6	1.00	5.55	5.52	5.62	4.917
M 7	1.00	6.55	6.52	6.62	5.917
M 8	1.25	7.40	7.36	7.47	6.647
M 9	1.25	8.40	8.36	8.47	7.647
M 10	1.50	9.30	9.26	9.38	8.376
M 11	1.50	10.30	10.26	10.38	9.376
M 12	1.75	11.20	11.15	11.29	10.106
M 14	2.00	13.10	13.05	13.20	11.835
M 16	2.00	15.10	15.05	15.20	13.835
M 18	2.50	16.90	16.83	17.02	15.294
M 20	2.50	18.90	18.83	19.02	17.294
M 22	2.50	20.90	20.83	21.02	19.294
M 24	3.00	22.70	22.62	22.80	20.752
M 27	3.00	25.70	25.62	25.80	23.752
M 30	3.50	28.50	28.40	28.60	26.211
M 33	3.50	31.50	31.40	31.60	29.211
M 36	4.00	34.30	34.17	34.40	31.670
M 39	4.00	37.30	37.17	37.40	34.670
M 42	4.50	40.10	39.95	40.20	37.129

* M 2 up to M 2.5 tapping size hole of int. thread 6H

ISO metric fine threads DIN 13									
nom. x Ø	pitch	tapp. size hole Ø	tapp. size hole Ø		core Ø of int. thread 7H*	nom. x Ø	pitch	tapp. size hole Ø	core Ø of int. thread 7H*
mm	mm	mm	min. mm	max. mm	mm	mm	mm	mm	mm
M 2.5 x 0.35	2.35	2.35	2.38	2.121	2.221	M 17 x 1.50	16.30	16.26	16.38
M 3 x 0.35	2.85	2.85	2.88	2.621	2.721	M 18 x 1.00	17.55	17.52	17.62
M 4 x 0.35	3.85	3.85	3.88	3.621	3.721	M 18 x 1.50	17.30	17.26	17.38
M 4 x 0.50	3.80	3.78	3.83	3.459	3.639	M 18 x 2.00	17.10	17.05	17.20
M 5 x 0.50	4.80	4.78	4.83	4.459	4.639	M 20 x 1.00	19.55	19.52	19.62
M 5.5 x 0.50	5.30	5.28	5.33	4.959	5.139	M 20 x 1.50	19.30	19.26	19.38
M 6 x 0.75	5.65	5.62	5.70	5.188	5.424	M 24 x 1.00	23.55	23.52	23.62
M 7 x 0.75	6.65	6.62	6.70	6.188	6.424	M 24 x 1.50	23.30	23.26	23.38
M 8 x 0.75	7.65	7.62	7.70	7.188	7.424	M 24 x 2.00	23.10	23.05	23.20
M 8 x 1.00	7.55	7.52	7.62	6.917	7.217	M 27 x 1.50	26.30	26.26	26.38
M 9 x 0.75	8.65	8.62	8.70	8.188	8.424	M 30 x 1.50	29.30	29.26	29.38
M 9 x 1.00	8.55	8.52	8.62	7.917	8.217	M 33 x 1.50	32.30	32.26	32.38
M 10 x 0.75	9.65	9.62	9.70	9.188	9.424	M 36 x 1.50	35.30	35.26	35.38
M 10 x 1.00	9.55	9.52	9.62	8.917	9.217	M 39 x 1.50	38.30	38.26	38.38
M 10 x 1.25	9.40	9.36	9.47	8.647	8.982	M 42 x 1.50	41.30	41.26	41.38
M 11 x 0.75	10.65	10.62	10.70	10.188	10.424				
M 11 x 1.00	10.55	10.52	10.62	9.917	10.217				
M 12 x 1.00	11.55	11.52	11.62	10.917	11.217				
M 12 x 1.25	11.40	11.36	11.47	10.647	10.982				
M 12 x 1.50	11.30	11.26	11.38	10.376	10.751				
M 14 x 1.00	13.55	13.52	13.62	12.917	13.217				
M 14 x 1.25	13.40	13.36	13.47	12.647	12.982				
M 14 x 1.50	13.30	13.26	13.38	12.376	12.751				
M 15 x 1.00	14.55	14.52	14.62	13.917	14.217				
M 15 x 1.50	14.30	14.26	14.38	13.376	13.751				
M 16 x 1.00	15.55	15.52	15.62	14.917	15.217				
M 16 x 1.50	15.30	15.26	15.38	14.376	14.751				
M 17 x 1.00	16.55	16.52	16.62	15.917	16.217				

* M 2.5 x 0.35 up to M 4 x 0.35 tapping size hole of int. thread 6H

Tapping size hole diameter tolerance zone for thread forming (to DIN 13, section 50)

Due to the tensile strength it is not necessary to adhere to the tapping size hole diameter tolerance class 6H; tolerance class 7H satisfies the requirement that the flank coverage of external and internal threads should not fall below 0.32 x P. In addition, formed threads generally possess a higher tensile strength in comparison to cut threads thanks to an uninterrupted grain flow and subsequent work hardening.

UNC-threads ASME B1.1					
nom. Ø	pitch	tapp. size hole Ø	tapp. size hole Ø		core Ø of int. thread 2B
	per inch	mm	min. mm	max. mm	mm
Nr. 1 - 64	1.68	1.67	1.70	1.425	1.580
Nr. 2 - 56	1.98	1.97	2.01	1.694	1.872
Nr. 3 - 48	2.28	2.27	2.32	1.941	2.146
Nr. 4 - 40	2.55	2.54	2.59	2.157	2.385
Nr. 5 - 40	2.90	2.89	2.94	2.487	2.698
Nr. 6 - 32	3.15	3.14	3.19	2.642	2.896
Nr. 8 - 32	3.80	3.78	3.82	3.302	3.531
Nr. 10 - 24	4.35	4.33	4.39	3.683	3.937
Nr. 12 - 24	5.00	4.97	5.03	4.343	4.597
1/4 - 20	5.75	5.72	5.80	4.978	5.258
5/16 - 18	7.30	7.26	7.37	6.401	6.731
3/8 - 16	8.80	8.77	8.88	7.798	8.153
7/16 - 14	10.30	10.27	10.37	9.144	9.550
1/2 - 13	11.80	11.77	11.88	10.592	11.024
9/16 - 12	13.30	13.28	13.39	11.989	12.446
5/8 - 11	14.80	14.78	14.90	13.386	13.868
3/4 - 10	17.90	17.85	17.97	16.307	16.840
7/8 - 9	21.00	20.95	21.10	19.177	19.761
1 - 8	24.00	23.95	24.12	21.971	22.606

UNF-threads ASME B1.1					
nom. Ø	pitch	tapp. size hole Ø	tapp. size hole Ø		core Ø of int. thread 2B
	per inch	mm	min. mm	max. mm	mm
Nr. 1 - 72	1.70	1.69	1.72	1.473	1.610
Nr. 2 - 64	2.00	1.99	2.03	1.755	1.910
Nr. 3 - 56	2.30	2.29	2.34	2.024	2.197
Nr. 4 - 48	2.60	2.59	2.63	2.271	2.459
Nr. 5 - 44	2.90	2.89	2.93	2.550	2.741
Nr. 6 - 40	3.20	3.19	3.24	2.819	3.023
Nr. 8 - 36	3.85	3.83	3.88	3.404	3.607
Nr. 10 - 32	4.45	4.43	4.49	3.962	4.166
Nr. 12 - 28	5.10	5.07	5.13	4.496	4.724
1/4 - 28	5.95	5.92	5.99	5.359	5.588
5/16 - 24	7.45	7.42	7.50	6.782	7.036
3/8 - 24	9.05	9.02	9.10	8.838	9.033
7/16 - 20	10.55	10.48	10.58	9.728	10.033
1/2 - 20	12.10	12.08	12.18	11.328	11.608
9/16 - 18	13.65	13.61	13.72	12.751	13.081
5/8 - 18	15.25	15.21	15.32	14.351	14.681
3/4 - 16	18.35	18.30	18.41	17.323	17.678
7/8 - 14	21.40	21.35	21.49	20.269	20.650
1 - 12	24.45	24.40	24.54	23.114	23.571

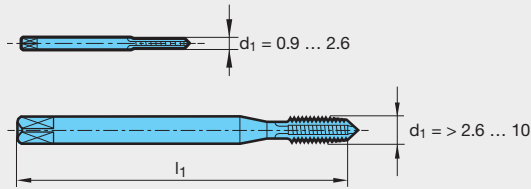
(Whitworth-) pipe thread G DIN EN ISO 228-1					
nom. Ø	pitch	tapp. size hole Ø	tapp. size hole Ø		core Ø of int. thread
inch	per inch	mm	min. mm	max. mm	mm
G 1/16 28	7.30	7.28	7.35	6.561	6.843
G 1/8 28	9.30	9.28	9.35	8.566	8.848
G 1/4 19	12.50	12.48	12.55	11.445	11.890
G 3/8 19	16.00	15.98	16.05	14.950	15.395
G 1/2 14	20.00	19.98	20.12	18.631	19.172
G 5/8 14	22.00	21.98	22.12	20.587	21.128
G 3/4 14	25.50	25.48	25.62	24.117	24.658
G 7/8 14	29.25	29.23	29.37	27.877	28.418
G 1 11	32.00	31.98	32.15	30.291	30.931
G 1 1/4 11	40.75	40.70	40.85	38.952	39.592



Characteristic features of the individual standards

DIN 371

in the master standard
DIN 2184-1



Standard for machine taps with reinforced shank for standard ISO metric threads and ISO metric fine threads. Long design. Shank design in accordance with diameter ranges shown above (mm).

DIN 376

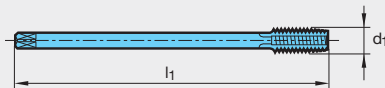
in the master standard
DIN 2184-1



Standard for machine taps with reduced shank for standard ISO metric threads. Long design. Diameter range $d_1 = 1.6 \dots 68$ mm ($\leq \text{Ø M3}$, shank without square).

DIN 374

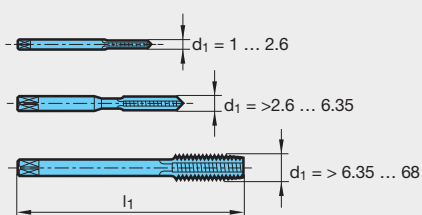
in the master standard
DIN 2184-1



Standard for machine taps with reduced shank for ISO metric fine threads. Long design. Diameter range $d_1 = 3 \dots 52$ mm.

DIN 352

in the master standard
DIN 2184-2



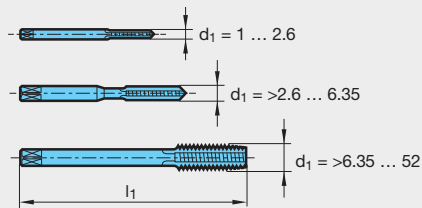
Standard for hand and machine taps for standard ISO metric threads. Short design. Shank design in accordance with diameter ranges shown opposite (mm).



Characteristic features of the individual standards

DIN 2181

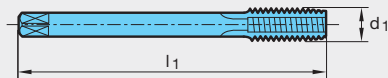
in the master standard
DIN 2184-2



Standard for hand and machine taps for standard ISO metric threads. Short design. Shank design in accordance with diameter ranges shown opposite (mm).

DIN 5156

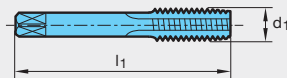
in the master standard
DIN 2184-1



Standard for machine taps for BSP threads to DIN ISO 228 and for BSW threads to DIN 2999. Long design.
Diameter ranges:
BSP threads G $\frac{1}{16}$ " ... G 4"
BSW threads W $\frac{1}{16}$ " ... W 4"

DIN 5157

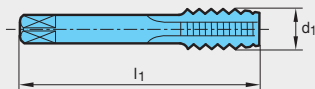
in the master standard
DIN 2184-2



Standard for machine taps for BSP threads to DIN ISO 228 and for BSW threads to DIN EN 10 226-1. Short design.
Diameter ranges:
BSP threads G $\frac{1}{16}$ " ... G 4"
BSW threads W $\frac{1}{16}$ " ... W 4"

DIN 40 432

in the master standard
DIN 2184-2

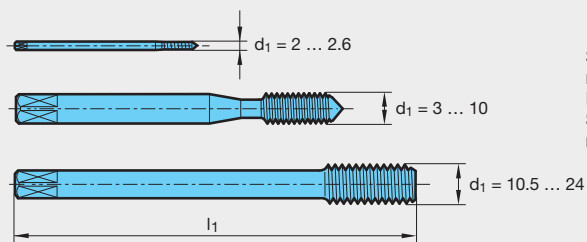


Standard for machine taps for steel armoured conduit threads to DIN 40 430. Short design.
Diameter range:
Pg 7 (12.5 mm) ... Pg 48 (59.3 mm)
Will be replaced by DIN 374 ISO 3 6G.



DIN 2174

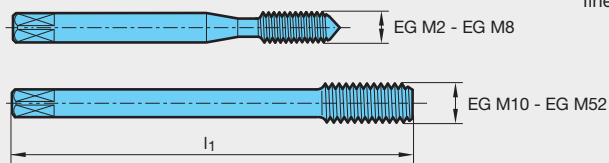
in the master standard
DIN 2184-1



Standard for fluteless taps for standard ISO metric threads and ISO metric fine threads. Long design. Shank design in accordance with diameter ranges shown opposite (mm).

DIN 40 435

in the master standard
DIN 2184-1

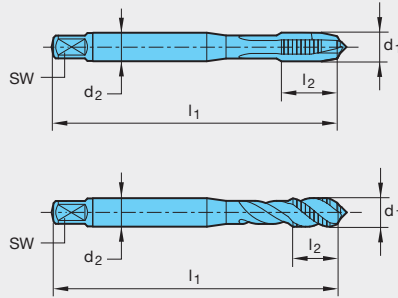


Standard for machine taps for tapped holes (EG) for wire thread inserts as in DIN 8140 for ISO metric threads. Standard thread tapped holes EG M2 to EG M52 and fine thread tapped holes EG M8 x1 to EG M48 x 3



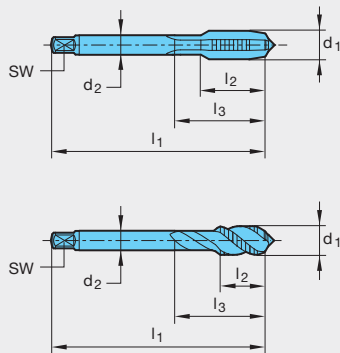
DIN - International Standards

DIN 2184-1 DIN 2184-2

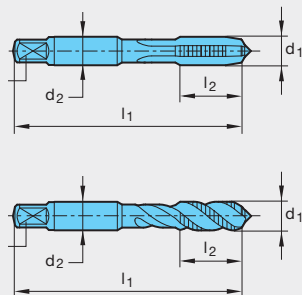


JIS B 4430

Japan Industrial Standard

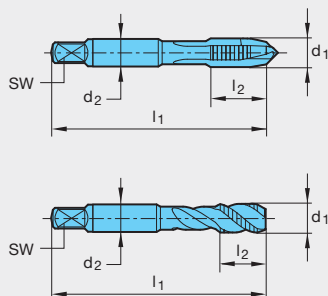


ISO 529



ASME B94.9

The American Society of
Mechanical Engineers





geometry drawing	Standard	application
M ISO-metric thread		
	DIN 13-1	General standard thread
UNC Unified National Coarse Thread		
	ASME B1.1	General UN standard thread
UNEF Unified National Extra Fine Thread		
	ASME B1.1	General UN Extra Fine Thread
G Cylindrical Pipe Thread without thread sealing connections		
	DIN EN ISO 228-1	Threads for pipes, pipe connections and fittings
TR ISO-metric trapezoidal thread		
	DIN 103	General, draw collets, rolling stock
W Cylindrical Whitworth Thread		
	DIN 477	Side connector and accessories for gas bottle valves
NPT American Standard Pipe Threads tapered for sealing		
	ANSI/ASME B1.20.1	pipe threads and fittings

geometry drawing	Standard	application
MF ISO-metric fine thread		
	DIN 13-2 to DIN 13-11	General fine thread
UNF Unified National Fine Thread		
	ASME B1.1 ISO-metric trapezoidal thread	General UN Fine Thread
UNS Unified Special Thread		
	ASME B1.1	General UN Special Thread
PG steel conduit thread		
	DIN 40430 cylindrical round thread	electrical engineering
S metric saw thread		
	DIN 513	when absorbing uni-directional forces
W Whitworth Taper Thread		
	DIN 477	Threaded connection in gas cylinder bottles for valves
NPTF American Standard Pipe Thread tapered for dry sealing		
	ANSI B1.20.3	pipe threads and fittings



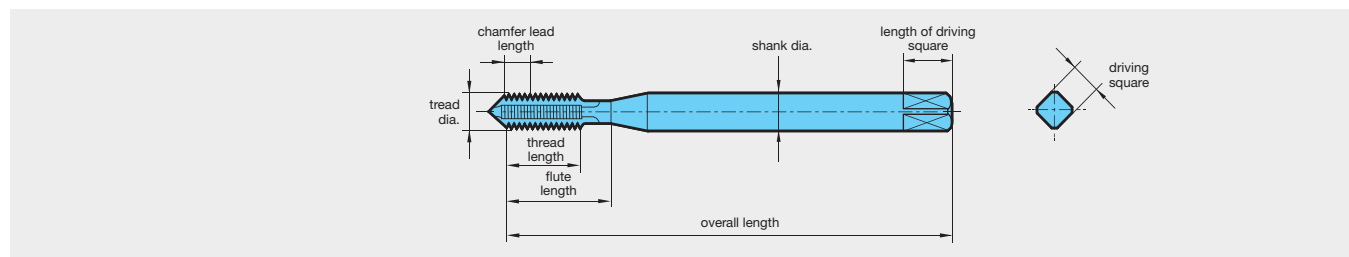
geometry drawing	Standard	application
BSW cylindrical Whitworth thread		
	B.S. 84 British Standard	Threads for pipes, pipe connections and fittings
BSP pipe thread cylindrical (identical to G)		
	B.S. 93 British Standard	Threads for pipes, pipe connections and fittings
R Whitworth pie thread tapered external thread		
	DIN EN 10226-1 (based on ISO 7-1) replacement for DIN 2999-1	External thread for pipe threads and fittings (for in the thread sealing connections)
Rc Whitworth pipe thread tapered internal thread		
	DIN ISO 10226-2 (hardly used in Europe, replaceable with pipe threads to ISO 7-1)	Internal thread for pipe threads and fittings (for in the thread sealing connections)
MJ thread metric thread		
	DIN ISO 5855-1	For the aero- space industry
Vg valve thread		
	DIN 7756	Valves for car tyres manifold block
MFS		
	DIN 8141	Interference fits in Aluminium-cast alloys

geometry drawing	Standard	application
BSF Whitworth fine thread cylindrical		
	B.S. 84 British Standard Fine	Threads for pipes, pipe con- nections and fittings
BSPT pipe thread tapered (identical to Rc)		
	B.S. 93 British Standard	Internal thread for pipe threads and fittings
Rp Whitworth pipe thread cylindrical internal thread		
	DIN EN 10226-1 (based on ISO 7-1) Replacement for DIN 2999-1	Internal thread for pipe threads and fittings (for in the thread sealing connections)
RD cylindrical round thread		
	DIN 405	General, load hook, mining, food industry
UNJ inch thread		
	ISO 3161	For the aero- space industry
MSG lock nut thread		
	Guhring standard	Self-locking thread transmission housing etc.

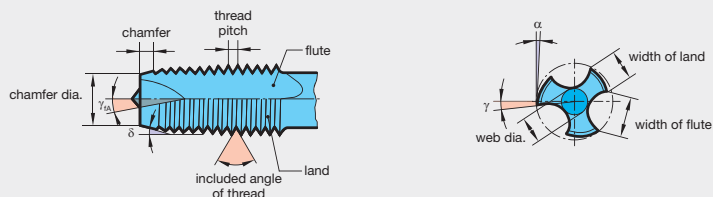
- external thread
- internal thread
- play



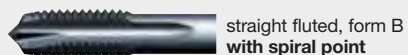
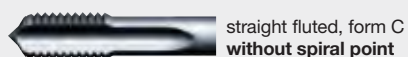
Definitions and angles, centres and flute forms



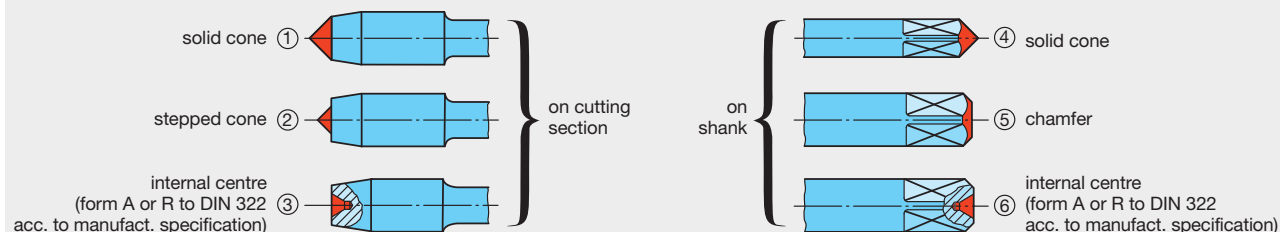
δ = try square
 γ_{fA} = spiral point angle
 α = clearance angle
 γ = rake angle



Flute forms



Types of centres (standard, to DIN 2197/DIN 2175)



Thread dia. range mm	Centre on cutting section		Centre on shank
	with chamfer forms A, C, D, E	with chamfer form B	
≤ 4.2	①	①	④⑤⑥
> 4.2 ... 5.6	①②	①	④⑤⑥
> 5.6 ... 10.0	①②③	①②③	④⑤⑥
> 10.0	③	③	⑥

Coolant duct geometries



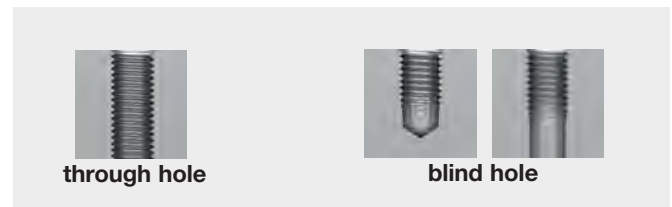


Chamfer forms, selection and application

When cutting internal threads, all the machining is carried out by the cutting teeth of the chamfer. Therefore, a decision on the best type of chamfer form has to be carefully made as both tool life and quality of thread are thereby greatly affected.

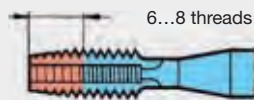
Generally speaking, the form and length of chamfer depend on the type of hole to be tapped. The tapping of through holes does not normally give rise to any difficulties whereas the production of blind holes can create certain problems associated with the need to evacuate swarf in the reverse direction to the feed, i.e. up to the flutes of the tap and then cut off such swarf when the tap is reversed out of the hole.

The length of chamfer is determined by taking into account various conflicting factors. To avoid overloading, premature bluntness and oversize threads the number of chamfer cutting threads must not be kept too low. A too long chamfer lead, however, increases the torque and thus the danger of breakage. The spiral point with form B ensures a chip removal always in the direction of feed.



Chamfer forms to DIN 2197

Form A



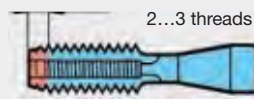
long, 6 - 8 threads
for short
through holes

Form B



medium, 3.5 - 5.5 threads,
with spiral point,
for all through holes
and deep tapping holes in medium
and long-chipping materials

Form C



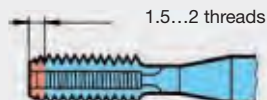
short, 2 - 3 threads
for blind holes
and generally for
aluminium, grey cast iron
and brass

Form D



medium, 3.5 - 5 threads
for short
through holes

Form E



extremely short, 1.5-2 threads,
for blind holes with
little run-out depth.

Form F



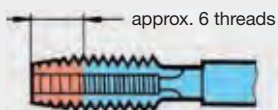
extremely short, 1-1.5 threads,
for blind holes with
little run-out depth.
Avoid use if possible.



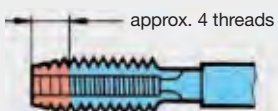
Chamfer forms, selection and application

Chamfer lead length for sets of 3 taps

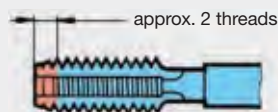
Form A
first tap



Form D
second tap

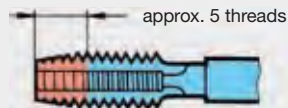


Form C
bottoming tap

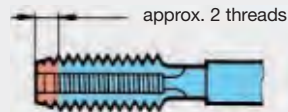


Chamfer lead length for sets of 2 taps

Form D
first tap



Form C
bottoming tap



Application recommendations

While in the first instance, the type of tapped hole required determines the chamfer, generally the tap geometry - i.e. form, number and direction of flutes, cutting angle, etc. - depend on the material to be machined and on the application. Basically, taps up to M16 for tapping ISO metric threads or for the engineering industry in general, have 3 flutes, and above this size 4 or more flutes.

Taps with left-hand flutes and taps with spiral points remove the chips in the cutting direction or direction of feed and are therefore especially suitable for tapping through holes. Taps with straight flutes and long chamfer lead (form D) also give good results.

As far as blind holes are concerned we recommend taps with right-hand spiral flutes or straight fluted taps with a short chamfer lead length. Tools with right-hand spiral flutes have the chip flow in the backward direction, i.e. up the flutes. The

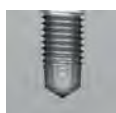
chamfer lead length is designed in such a way so that during the return movement chips do not jam and are reliably sheared off.

The tapping of aluminium, grey cast iron and brass requires taps with a short chamfer lead length, regardless of whether through or blind holes are required. In these materials a long chamfer lead length would act as a core drill with chip breaker grooves and would only drill the tapping size hole to the major diameter instead of cutting a thread.

Straight fluted taps without spiral point are general purpose tools and have the disadvantage of not showing optimum results in particular materials. It's well worth the effort to take the trouble of ascertaining the most suitable tool for any given metal-cutting task.



through hole



blind hole



Straight fluted tap
with spiral point



Right-hand spiral fluted
tap



Left-hand spiral
fluted tap

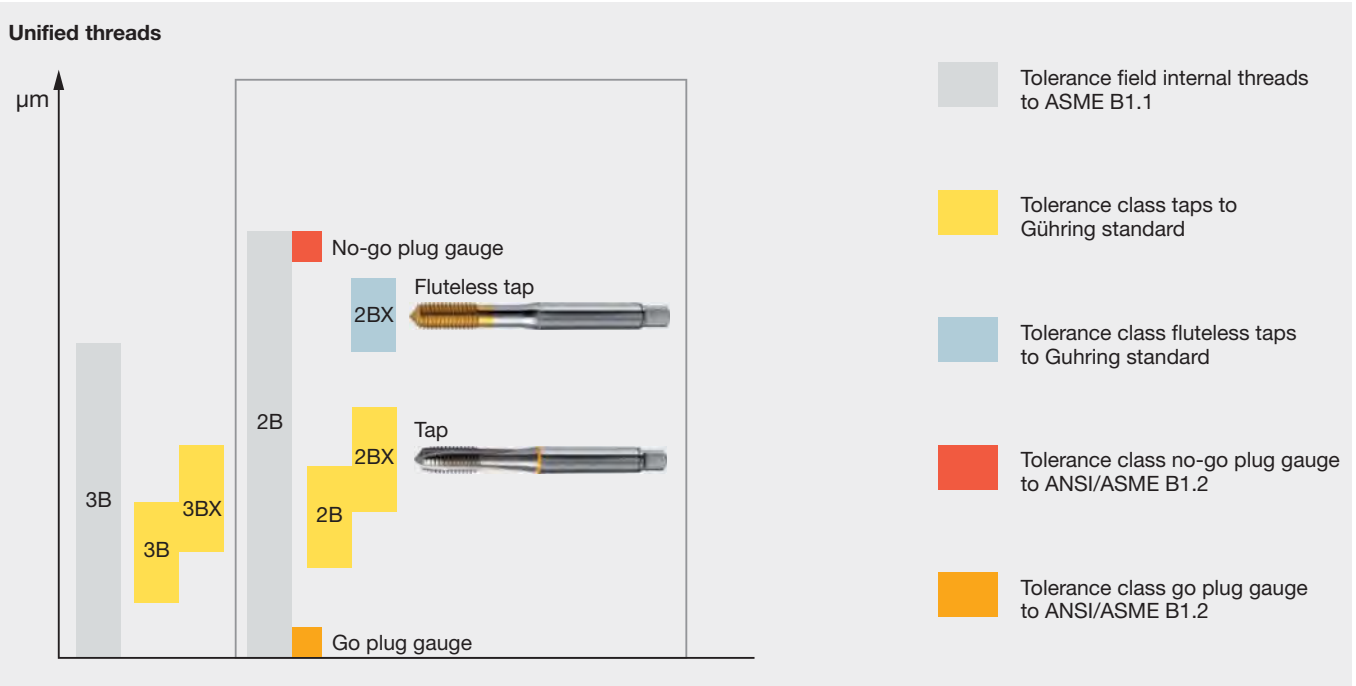
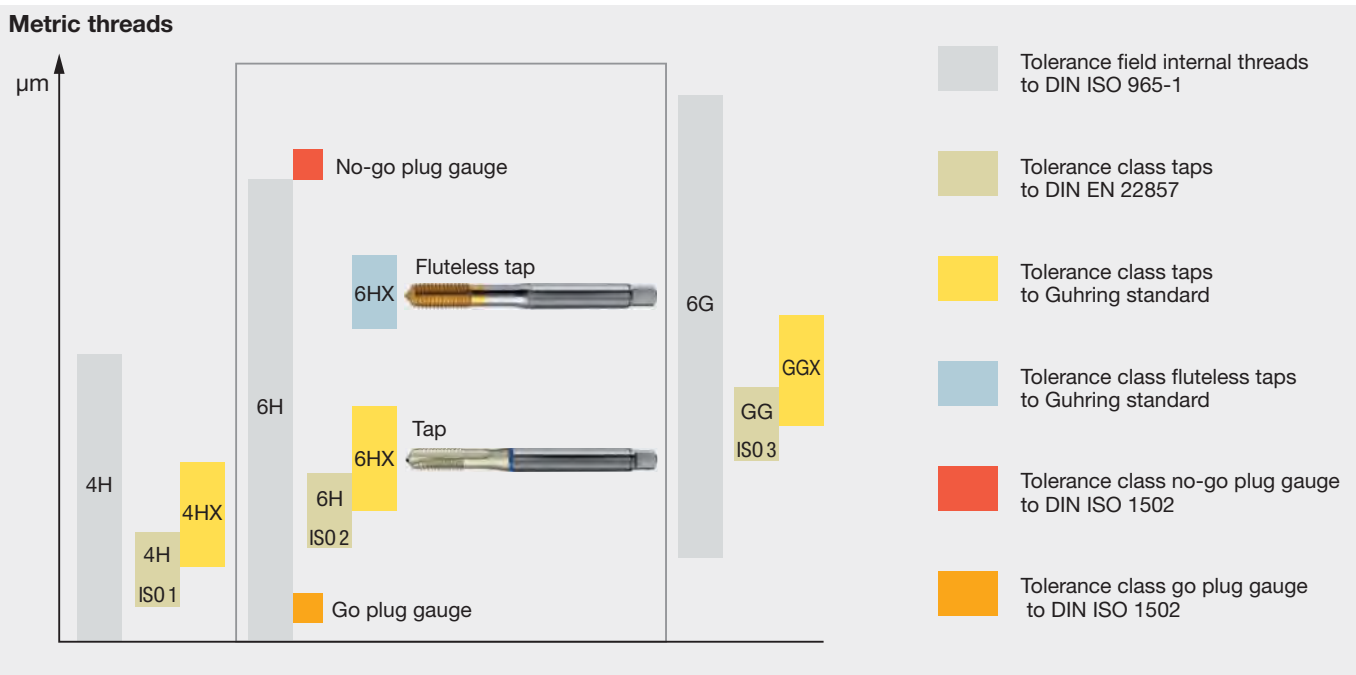


Straight fluted tap
with short chamfer lead



Straight fluted tap
with long chamfer lead

Tolerance fields
to DIN EN 22857





Taps for ISO metric threads DIN EN 22857 (extract)

Thread clearances and fits

Fits between internal and external threads are separated by a diagonal stroke, as for example 6H/6g (internal/external thread). The fit has to be selected in conjunction with the appropriate thread connection.

The tolerance zones of the tolerance classes fine, medium and coarse are allocated to three screw-in lengths short (S), normal (N) and long (L). Generally, the following rules apply for selecting a tolerance class:

Fine tolerance zone (S):

For precision threads, when only a small variation in the fit is permitted.

Medium tolerance zone (N):

General application

Coarse tolerance zone (L):

There are no special precision requirements and in cases where production difficulties may occur, e.g. thread production in hot-rolled rods, deep blind holes or plastic components.

Screw-in lengths

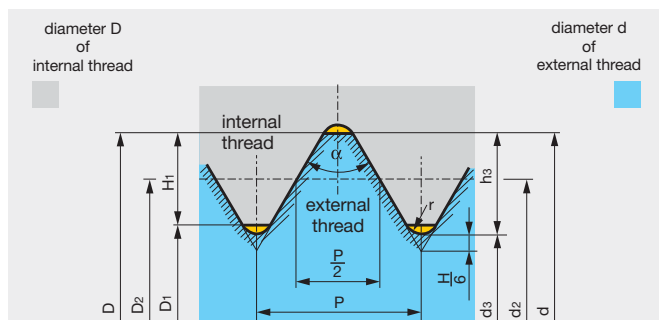
The quality of thread connection is also affected by the screw-in length. The ISO tolerance system was, especially as regards the pitch diameter, divided into three groups, i.e.

S	(Short)	= short screw-in length
N	(Normal)	= normal screw-in length
L	(Long)	= long screw-in length

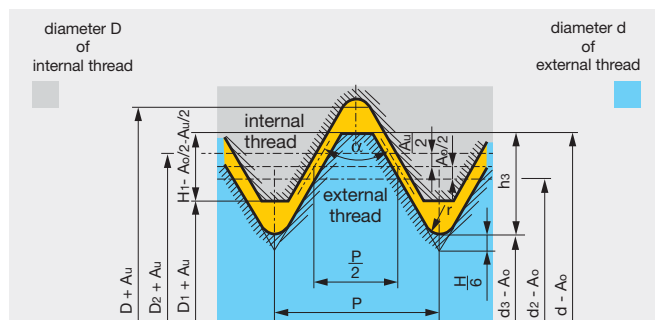
The following fit should be selected for normal screw-in length N:

To ensure a tighter fit of thread connections, we recommend for short screw-in lengths a narrower fit. As far as long screw-in lengths are concerned, fits with a larger tolerance must be used to compensate for pitch deviations.

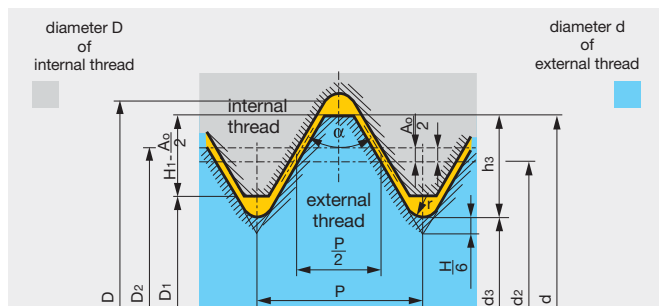
Thread fits with different flank clearance



Zero profile of thread fit without flank clearance (H/h-fit).



Thread fit with wide flank clearance (G/g-fit or G/e-fit) in external and internal thread.



Thread fit with narrow flank (H/g- or H/e-fit) by basic deviation of external thread.

Explanation of symbols

D	=	Ø nom. of internal thread
D ₁	=	Tapping size hole Ø of internal thread
D ₂	=	Basic pitch Ø of internal thread
d	=	Ø nom. of external thread
d ₂	=	Basic pitch Ø of external thread
d ₃	=	Tapping size hole Ø of external thread
P	=	Pitch
α	=	Included angle of thread
H	=	Height of peak to peak thread profile
A _o	=	Upper tolerance limit
A _u	=	Lower tolerance limit



Hard machining taps for hardened steel (45 - 55 HRC)

For tapping operations in materials with a tensile strength in excess of 1200 N/mm² we have developed a HSS-E-PM tap with TiCN coating.

The special design makes the process reliable production of threads in hard materials possible and provides excellent tool life.

Suitable for applications in the mold and die industry as well as for various machine or automotive components following heat treatment.

Recommended cutting speed $v_c = 2 - 8$ m/min dependent on the hardness of the component.



Process reliable thread production thanks to short chips

In order to achieve absolute process reliability and a long tool life in series production of high tensile strength steels (850-1250 N/mm²), as for example a crankshaft, short chips are essential. This is only possible in combination with bright flutes / corrections. For this, Guhring provides the ideal solution in the standard range with Guhring nos. 1188, 1194 and 1200.



Universal taps with coolant ducts for short-chipping materials (GG, Al, steel)

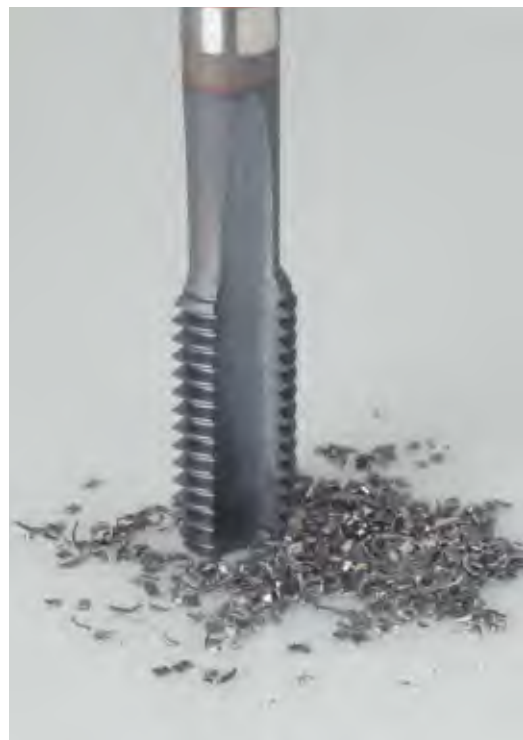
Usually, with a tap the chips are evacuated from a blind hole via the spiral flutes. Cast iron, AlSi-alloys, brass and copper alloys are short-chipping materials. Straight-fluted taps are applied for such materials. With taps with coolant ducts, the coolant evacuates the short chips from the blind hole.

Our new straight-fluted M taps (Guhring no. 4448) and MF taps (Guhring no. 4472) with coolant ducts are especially suitable for short-chipping materials.

Evacuating long chips from steel components via the spiral flutes is an increasing problem. Consequently, the aim is to produce short chips with straight-fluted taps and evacuate them from the blind hole with the cooling lubricant.

The tap with IC in the machine spindle achieves an improved tool life and surface quality of the thread.

Typical applications are the machining of gearboxes, cylinder blocks and heads, crankshafts, pump housings, hydraulic components etc.





Bright surface finish



Our high speed steel or own carbide production tools offer good basic characteristics for the machining of various materials.

Steam tempered surface finish



When steam tempering, the border zones of steel surfaces are chemically modified in the μm range, thereby developing a crystalline iron oxide coating (3-10 μm). These surfaces improve the reactional behaviour of the tools. Thanks to this surface transition the lubricant / coolant adheres better to the tool. This procedure is normally applied for the machining of carbon steel that tends to develop built up edges and cold welding at low cutting speeds. An additional nitriding of bright tools ensures an increased hardness of the surface thanks to the incorporation of nitrogen which also makes abrasive applications possible.

TiN-coating



Max. application temperature: < 600° C
Colour: Yellow gold
Hardness: 2300 HV0.05

The TiN-coating, introduced by Guhring in the early 1980's displays, especially in thread production, good performance characteristics, in this area it is applied as proven broad band coating.

TiCN-coating



Max. application temperature: < 600° C
Colour: Grey violet
Hardness: 3000 HV0.05

An additional incorporation of carbon increases the toughness and hardness of TiCN and possesses a lower friction coefficient than the TiN-coating. Thanks to its wear-resistance it is especially suitable for abrasive applications.



TiAlN-coating

Max. application temperature: < 800° C
Colour: Violet
Hardness: 3300 HV0.05



The classic TiAlN-coating provides higher hardness values and at the same time a better thermal resistance in comparison to the TiN and TiCN-coating, in addition it is very well suited for applications in cast iron and for the general machining of steel.

SIRIUS-coating

Max. application temperature: < 900° C
Colour: Pale gold
Hardness: 3400 HV0.05



Sirius is a multi-layer coating. Due to its TiAlN component it displays a higher wear resistance and at the same time a lower tendency to built up edges. It is especially suitable for the machining of through hole threads in stainless steel.

Carbo-coating

Max. application temperature: < 500° C
Colour: Grey black
Hardness: 5000 HV0.05



The carbon (CARBO) coating (ta-C) opens a broad field of application the range of non-ferrous metals. Carbo can be applied for tapping, fluteless tapping and for the machining of aluminium cast iron (<12% Si) and aluminium wrought alloys, copper, brass and bronze.

AlCrN-coating

Max. application temperature: < 1100° C
Colour: Grey blue
Hardness: 3200 HV0.05



AlCrN can be an alternative to the TiN-/TiCN-coating in the fluteless tapping of steels sector. The Ti free coating excels thanks to its excellent wear resistance and high oxidation hardness resistance.

	Tapping			Thread milling		Fluteless tapping		
	Carbide		HSS	Carbide		Carbide		HSS
	conventional	MQL		conventional	MQL	conventional	MQL	
C-steels	-	-	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN
Free-cutting steels	-	-	TiAlN	-	-	TiN	TiN	TiN
Mn-steels	-	-	TiN	-	-	-	-	-
Steel, low-alloyed	-	-	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN
	-	-	TiAlN	-	-	TiN	TiN	TiN
	-	-	TiN	-	-	-	-	AlCrN
Steel, alloyed	-	-	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN
	-	-	TiAlN	-	-	TiN	TiN	TiN
	-	-	TiN	-	-	-	-	AlCrN
Steel, hardened < 55 HRC	-	-	TiCN	TiAlN	TiAlN	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Steel, hardened 55-65 HRC	TiCN	-	-	TiAlN	TiAlN	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Steel, stainless and acid resistant	-	-	Sirius ¹ /TiAlN ²	TiCN	TiCN	TiCN	TiCN	TiCN
	-	-	TiN	-	-	TiN	-	TiN
	-	-	-	-	-	-	-	-
Cast iron	TiAlN	TiAlN	TiAlN	TiCN	TiCN	TiCN	TiCN	TiCN
	TiCN	-	TiCN	-	-	TiN	TiN	TiN
	-	-	TiN	-	-	-	-	-
Aluminium wrought alloys	bright	bright	bright	bright	bright	Carbo	Carbo	Carbo
	Carbo	Carbo	Carbo	-	-	-	-	-
	-	-	-	-	-	-	-	-
Aluminium cast alloys (< 12% silicon)	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN
	-	-	-	bright	bright	Carbo	Carbo	Carbo
	-	-	-	-	-	-	-	-
Aluminium cast alloys (≥ 12% silicon)	TiCN	TiCN	TiCN	TiCN	TiCN	-	-	-
	Cristall	-	-	Cristall	-	-	-	-
	-	-	-	-	-	-	-	-
Nickel based alloys (i.e. Inconel)	-	-	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN
	-	-	TiAlN	-	-	-	-	-
	-	-	-	-	-	-	-	-
Titanium / titanium alloys	-	-	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN
	-	-	TiAlN	-	-	-	-	-
Copper / bronze / brass	bright	bright	bright	bright	-	Carbo	Carbo	Carbo
	Carbo	Carbo	Carbo	-	-	-	-	-
Cobalt chrome alloys	bright	-	bright	TiCN	TiCN	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Precious metals	-	-	-	-	-	-	-	-
Ceramic	-	-	-	-	-	-	-	-
Plastics, non-reinforced	bright	-	bright	bright	bright	-	-	-
Plastics, fibre-reinforced	TiCN	TiCN	-	TiCN	TiCN	-	-	-
	-	-	-	-	-	-	-	-

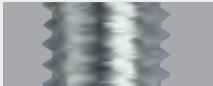
1... for through holes 2... for blind holes

Note:

The overview shows the general application recommendations for Guhring coatings. Prioritisation is from top to bottom.



Application problems with new taps

Problem	Possible causes	Solution
1. Thread surface not according to requirements 	- cutting edge geometry not suitable for the application - cutting speed too high - insufficient coolant (concentration and supply) - chip congestion - tapping size hole too small - with tough, hard materials loading on tool too much or pitch too steep - built-up edge - cold welding	- apply "correct" tap for the material to be machined - reduce cutting speed optimise lubrication - ensure suitable coolant and sufficient volume - apply suitable tap type - observe tapping size hole diameter specifications to DIN 336 or respective standards. Observe table for fluteless taps - apply hand tap sets - apply coated tap - improve coolant supply
2. Tool life insufficient	- surface hardening of tapping size hole - reasons listed under: "thread surface not according to requirements" - chip congestion	- check drill (cutting edge) for wear heat or surface treatment following thread production - reasons listed under: thread surface "not according to requirements" - apply correct tap
3. Tool breakage during advance or return 	- tapping size hole too small - teeth of chamfer lead overloaded - tap hits bottom of tapping size hole - lack of or incorrect chamfer of tapping size hole positional or angle error of tapping size hole - tool hardness not suitable for the application cutting edge geometry not suitable for the application	- observe tapping size hole dia. acc. to DIN 336 or respective standards - longer chamfer lead (blind or through hole) increase no. of teeth of chamfer lead by increasing no. of flutes apply tap sets - check hole depth apply tension/compression tap chuck - correct chamfer angle of tapping size hole ensure correct tool clamping apply floating tap holder check core drill - apply suitable tap for the individual application



Errors and difficulties with reground taps

Problem	Possible causes	Solution
1. Thread produced is too large	 burrs	 remove burrs
	 cutting edge geometry (chamfer lead, rake-, chamfer-, spiral point angle) not retained	 observe technical specifications when regrinding  observe regrinding instruction
2. Thread produced is too small	 worn section has not been reground correctly	 regrind again or apply new tool  observe max. regrinding limits
	 tap too small due to no. of regrinds	 max. regrinding limit reached  apply new tap
3. Thread produced not according to requirements	 burrs	 remove burrs
	 cutting edge geometry (chamfer lead, rake-, chamfer-, spiral point angle) not retained	 observe technical specifications when regrinding  observe regrinding instruction
	 peak-to-valley height of the reground tap too large	 regrind again or apply new tool  observe max. regrinding limits
	 cold welding at the flanks	 remove cold welding marks
4. Tool life insufficient	 cutting edge geometry (chamfer lead, rake-, chamfer-, spiral point angle) not retained	 check quality of grinding wheel  check coolant supply
	 loss of tap hardness due to heat development during the regrinding process	 check quality of grinding wheel  check coolant supply
	 loss of coating	 recoat  check coating of the material to be machined



Thread production by pressure deformation

Fluteless taps are used for the forming of internal threads without chip removal. In contrast to conventional tapping where material is cut from the workpiece, thread forming is a pressure deformation process without chip removal for the production of internal threads. During the process the material is cold formed without interrupting the grain flow.

According to DIN 8583, thread forming is described as “pressing the thread into the workpiece with a tool possessing a spiral working area”. The spiral threaded, polygonal portion of the fluteless tap is “screwed” into the pre-drilled workpiece with an appropriate constant feed rate equal to the thread pitch. Hereby the thread profile is pressed gradually via the forming lead into the material of the workpiece so to speak. Subsequently, the pressure in the deformation zone exceeds the compression limit, the workpiece becomes ductile and is deformed. The material yields radially, “flows” along the thread profile in the unoccupied base of the tool and forms the minor diameter of the nut thread. The flow process creates the process specific form pockets (claws).

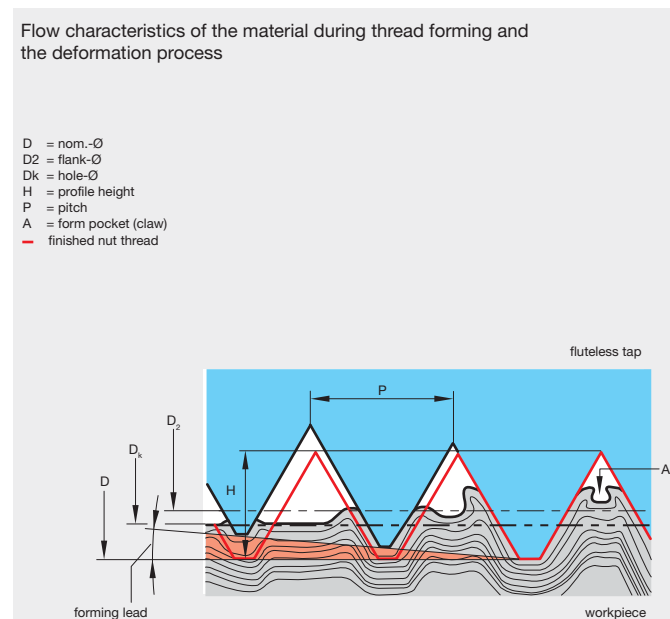
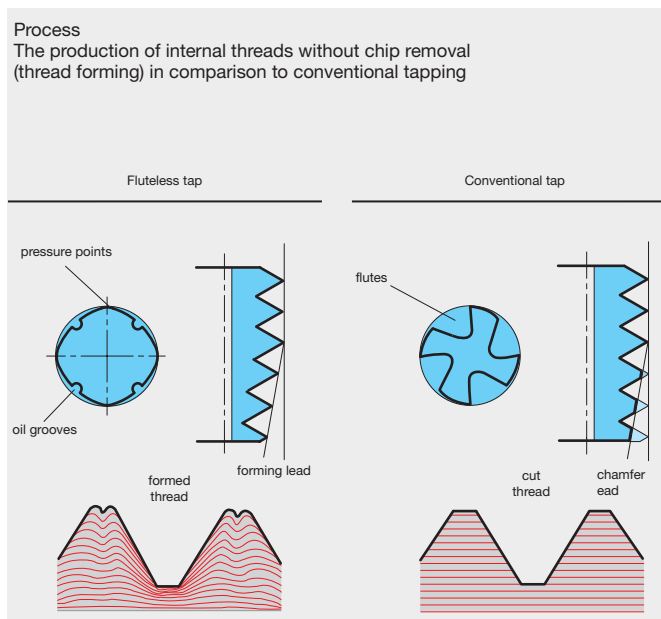
The tapping size hole diameter is heavily dependent on the formability of the material, the workpiece geometry and the required effective depth of the thread. In comparison to conventional tapping, a larger diameter tapping size hole should be selected. With a larger diameter tapping size hole the load on the tool is reduced whilst increasing the tool life. Thanks to the uninterrupted grain flow, the loading capacity of the thread remains sufficient with a 50% effective thread depth.

The partially formed crests of the thread with decreasing effective thread depth are a typical characteristic of threads produced by the thread forming process. With the flanks of the thread fully formed, they have no influence on the tensile strength of the thread. If necessary, the required deformation level of the thread should be determined by performing a test.

Lubrication is of significant importance. The lubrication prevents material from building up on the thread flanks and ensures that the necessary torque for the forming process is not too high. Therefore, under no circumstances should there ever be a break-down in lubrication! Preference should be given to lubricants such as cooling agents of oils containing graphite such as those used in rolling processes. Always follow the rule: “The better the lubrication the easier the thread forming process!”

It offers the following advantages:

- no chip formation.
- one tool for the production of threads in through and blind holes.
- application in wide range of materials.
- no cutting errors.
- pitch and angle of thread errors that can occur with thread cutting are eliminated.
- internal threads produced by thread forming possess a higher tensile strength particularly at the thread flanks thanks to the so-called “uninterrupted grain flow” and the cold forming process.
- the surface of the thread is improved.
- fluteless taps can be applied at higher speeds because the formability of many materials increases with the forming speed. This does not have a negative effect on the tool life.
- reduced danger of breakage through rigid design





“Profile“- Guhring’s new fluteless tap generation

Characteristics and advantages

Conventional fluteless taps, produced by a grinding process only, show traces of microscopic, very fine grinding marks on the surface of the tool. This also applies to the threaded portion of the tool required to perform the thread forming operation.

This surface topography (structure) has a negative effect on the friction between the tool and the material to be re-formed as well as on the herewith associated heat development, on the necessary torque and last but not least on the wear of the pressure points of the fluteless tap. In addition, the “grinding marks” encourage the build-up of the material to be re-formed in the thread flanks of the fluteless tap. This is also called cold welding.

Thanks to a special process to improve the surface topography (structure), Guhring’s new Profile fluteless taps no longer possess these “grinding marks”. This has been confirmed in research and tool life studies in varying materials under production conditions.

For the user, a longer tool life and increased cutting speeds are the benefits of this special process. The tool life can be increased considerably depending on the material to be machined and the application conditions. A 100% increase in tool life is not unusual.

The improved surface topography is not only of benefit to tools with bright finish. Particularly coated tools also benefit from the new process. Outer contour and forming lead greatly determine the performance of the fluteless tap. Numerous tests have shown that fluteless taps with optimal pressure point geometry and quantity achieve increased tool life and dimensional accuracy.

Further improvements in quality are achieved when the fluteless tap is produced completely in one setting and with one grinding wheel - set-up with a special roll. Pitch errors between the thread crests and former lead transition area do not occur as with the conventional grinding process.

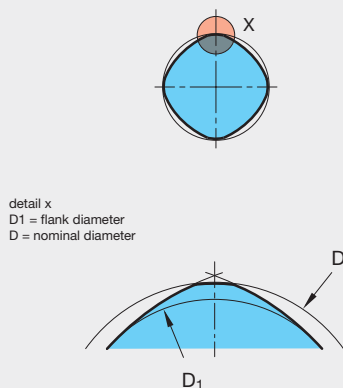


Surface of a conventional fluteless tap

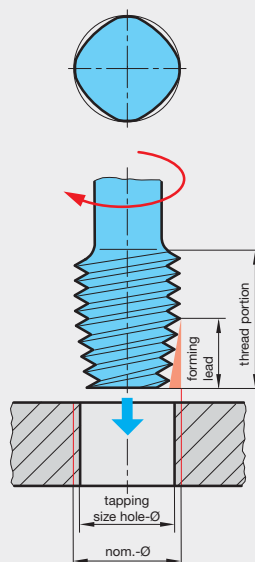


Optimised surface of a Guhring Profile fluteless tap

Cross section of fluteless tap



The principle



Types of tapping size hole

with fluteless taps without oil grooves
for thread depth $\leq 1 \times D$



for thread depth $\geq 1 \times D$



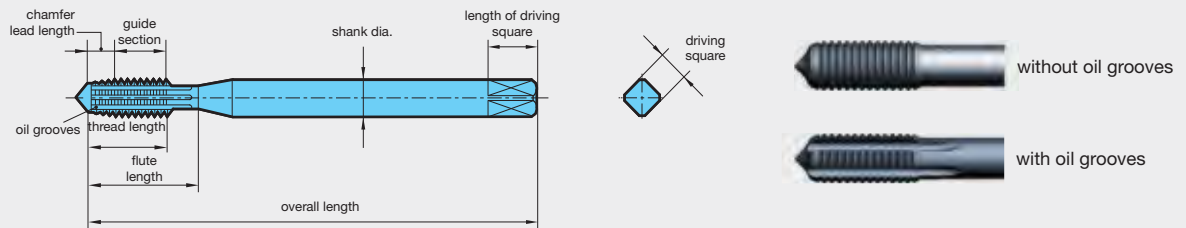
with fluteless taps with oil grooves
for all thread depths



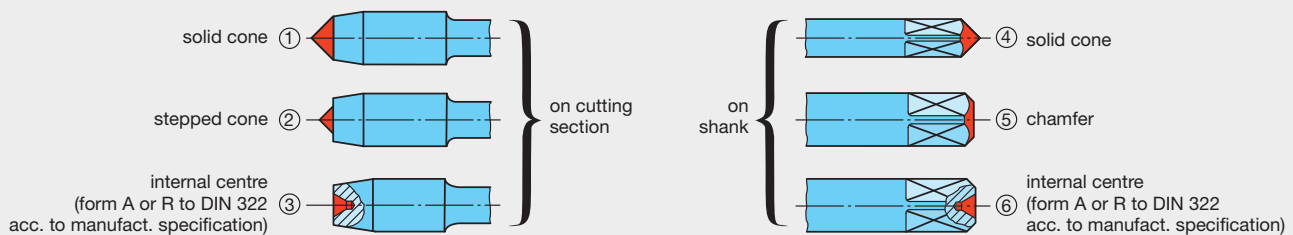


Definitions, angles, centres, thread tolerances and fits

Thread portion



Types of centres (standard, to DIN 2197/DIN 2175)



Thread dia. range mm	Centre on cutting section		Centre on shank
	with chamfer forms A, C, D, E	with chamfer form B	
≤ 5.6	①	①	④⑤⑥
> 5.6 ... 12.8	①②③	①②③	④⑤⑥
> 12.8	③	③	⑥

Thread tolerances and fits

Fits between internal and external threads are separated by a diagonal stroke, as for example 6H/6g (internal/external thread). The fit has to be selected in conjunction with the appropriate thread connection.

The tolerance zones of the tolerance classes fine, medium and coarse are allocated to three screw-in lengths short S), normal (N) and long (L). Generally, the following rules apply for selecting a tolerance class:

Fine tolerance zone (S):

For precision threads, when only a small variation in the fit is permitted.

Screw-in lengths

The quality of thread connection is also affected by the screw-in length. The ISO tolerance system was, especially as regards the pitch diameter, divided into three groups, i.e.

- S (Short) = short screw-in length
- N (Normal) = normal screw-in length
- L (Long) = long screw-in length

Medium tolerance zone (N):

General application

Coarse tolerance zone (L):

There are no special precision requirements and in cases where production difficulties may occur, e.g. thread production in hot-rolled rods, deep blind holes or plastic components.

The following fit should be selected for normal screw-in length N: To ensure a tighter fit of thread connections, we recommend for short screw-in lengths a narrower fit.



Tapping size hole diameter

With fluteless tapping, the tapping size hole diameter influences the distinction of the formed thread. A too small tapping size hole diameter results in an over-forming of the thread which must definitely be prevented because this can lead to tool

breakage. A too large tapping size hole is acceptable with certain tolerances because formed threads have a sufficient loading capacity from a 50% bearing depth.

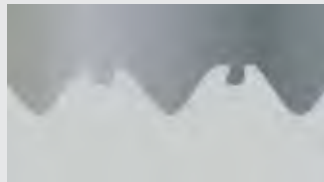
The thread M18x1.5 mm example clearly shows the influence of the tapping size hole diameter selection:

M 18 x 1.00	17.55	17.52	17.62	16.917	17.217
M 18 x 1.50	17.30	17.26	17.38	16.376	16.751
M 18 x 2.00	17.10	17.05	17.20	15.835	16.310

Pre-drilling Ø 17.1 mm



Pre-drilling Ø 17.3 mm

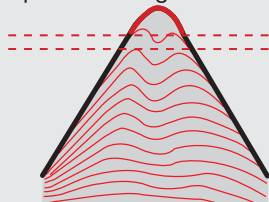


Pre-drilling Ø 17.4 mm



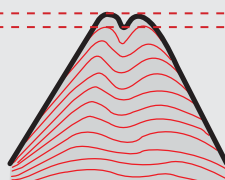
Tapping size hole diameter is too small:

- thread over-formed
- no form pocket (claw)
- profile too high



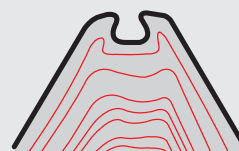
Optimal tapping size hole diameter:

- thread fully formed
- small form pocket (claw)
- optimal height of profile



Tapping size hole diameter is too large:

- thread not formed
- large form pocket (claw)
- height of profile too low

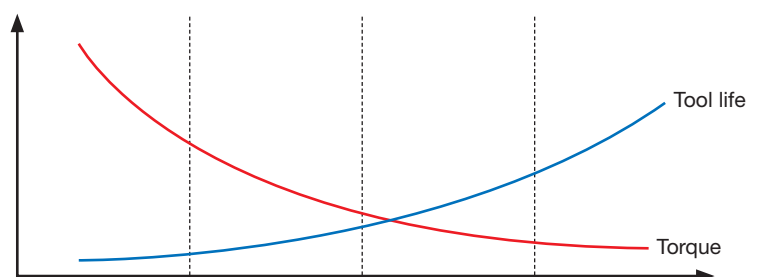


min.
max.

Tapping size hole diameter tolerance zone to DIN 13, part 50

Influence of the tapping size hole on tool life, torque and process reliability

The optimisation of the pre-drilling diameter is especially worthwhile in mass production. The larger it is, the longer the tool life and the less the required torque is. The graphic clearly shows the relationship

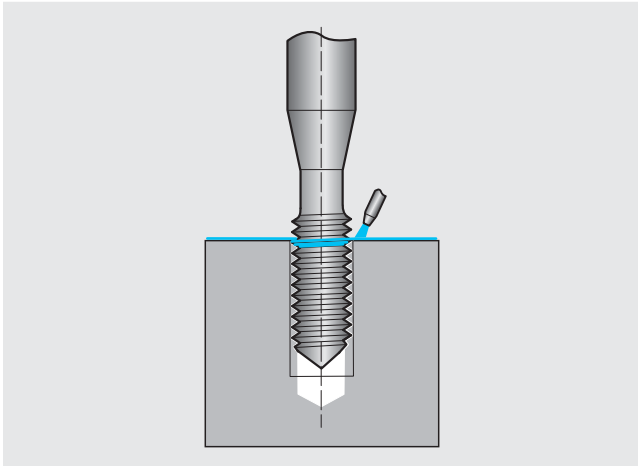




Lubrication for thread forming

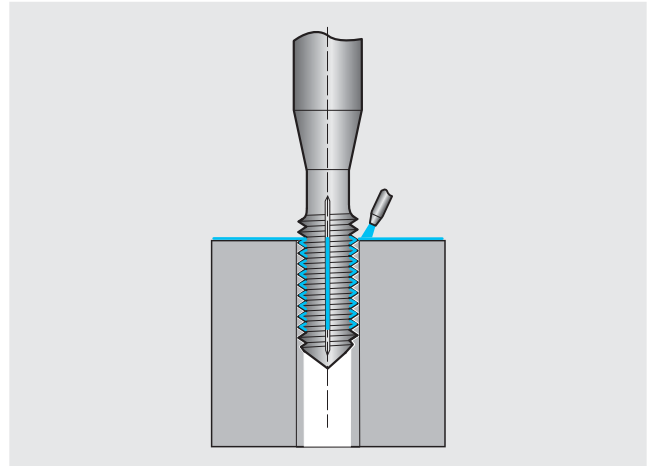
For tool design four different cases should be differentiated between

Vertical machining of a blind hole



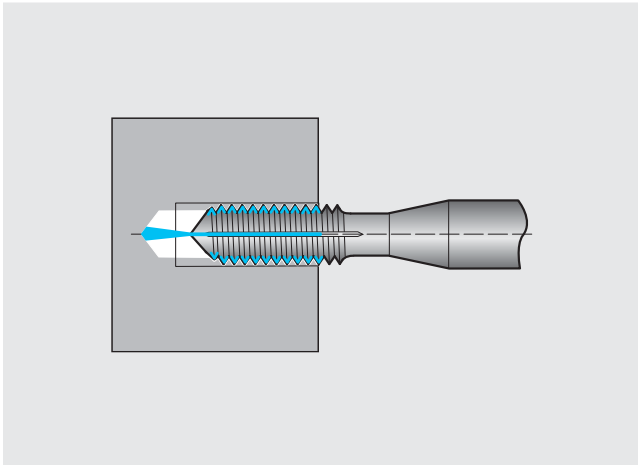
Lubrication grooves and internal coolant delivery is not necessary; external coolant delivery is sufficient (Axial coolant is recommended for very deep threads).

Vertical machining of a through hole ($> 1,5 \times D_N$)



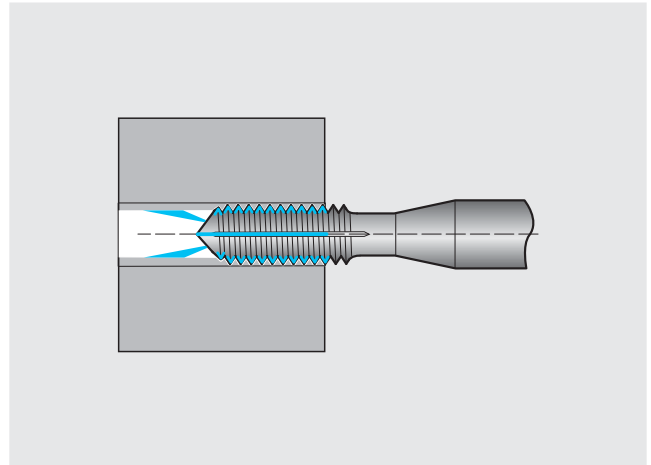
Lubrication grooves are required; internal coolant delivery is not necessary. Via the lubrication grooves the externally delivered coolant can advance to the form edges (Radial coolant is recommended for very deep threads).

Horizontal machining of blind hole



Lubrication grooves and internal coolant delivery is necessary. Axial coolant exit is sufficient.

Horizontal machining of through hole



Lubrication grooves are required. Internal coolant delivery with radial exit is recommended.

Cooling lubricants with fluteless taps

With fluteless taps the main task of the coolant is lubrication. The better the lubrication with the maximum concentration, the longer the tool life.

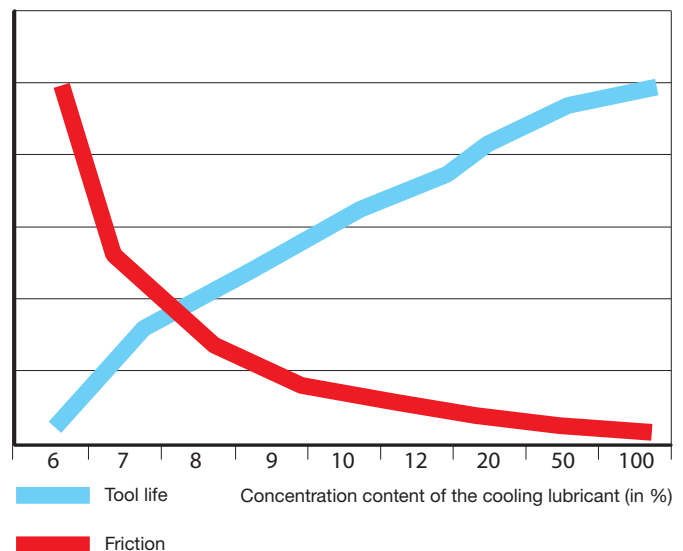
There are two different types of lubricant:

Oil based lubricants

These are mineral oils with the best lubricating characteristics. They reduce friction and achieve optimal life.

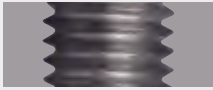
Soluble lubricants

These soluble lubricants are a concentrate thinned to an emulsion prior to the use with water. The concentration must not be below 6%. A content more than 12% is ideal in order to achieve a long life thanks to a good lubrication effect





Application problems with new fluteless taps

Problem	Possible causes	Solution
1 Thread produced is too small 	 Tapping size hole diameter too large	 Select correct tapping size hole diameter according to table
2 Thread overformed 	 Tapping size hole diameter too small	 Select correct tapping size hole diameter according to table
3 Thread surface not according to requirements 	 Cold welding on the tool  Lubricant with too little oil content	 Increase oil content in lubricant or apply neat oil  Increase oil content in lubricant or apply neat oil
4 Tool life insufficient	 Lubricant with too little oil content  Tapping size hole diameter too small  Cutting speed too high  Lubricant soiled	 Increase oil content in lubricant or apply neat oil  Select correct tapping size hole diameter according to table  Adjust cutting speed  Check filtration
5 Tool breakage 	 Lubricant with too little oil content  Tapping size hole diameter too small  Incorrect tool clamping	 Increase oil content in lubricant or apply neat oil  Select correct tapping size hole diameter according to table  Check tool clamping



What are the advantages of thread milling compared to tapping and fluteless tapping?

- Different materials can be machined with one tool (aluminium, steel, cast iron, stainless steel, titanium, Inconel, max. HRC 65 and much more)
- Various diameters and tolerances are possible with one tool (i.e. 6H+0.1, 7G, EG and much more).
- One tool for through and blind holes as well as right- and left-hand threads
- Thread depth possible up to the base of the hole ($0.5 \times P$).
- No axial cross-cutting
- Saving tool locations (type TMC, type DTMC).
- Problem-free chips because short milling chips are produced.
- Reduced tooling costs with the same pitch and large threads (type TMU)
- Short cycle times thanks to high cutting speed and feed rate.
- High process reliability even in the event of tool breakage as the thread milling cutter can be completely removed from the workpiece and the machine.
- High economic efficiency thanks to Guhring's re-grind and re-coating service.





The Guhring thread milling cutter types

TM SP – thread milling cutter w/o countersink step



- Simple and cost-efficient tool for the milling of internal threads
- 2-3 thread sizes with the same pitch can be produced over the specified nominal dimension
- Application in materials $\leq 1000 \text{ N/mm}^2$
- Available with or without internal cooling

Thread types: M, MF, UNC, UNF, G, NPT, NPTF

TMCP SP – Thread milling cutter with 45° countersinking step



- Countersinking and thread milling with only one tool
- Very smooth running and low lateral forces
- Designed for the application of difficult-to-machine materials also available w/o countersinking step
- 2-3 thread sizes with the same pitch can be produced over the specified nominal dimension
- Only available with internal cooling

Thread types: M, MF, UNC, UNF, G, NPT, NPTF

TMU SP – universal milling cutter with collar recess



- Universal application possibilities
- For various thread sizes with the same pitch, i.e. thread M30x1.5 with milling cutter $\varnothing 12 \times M1.5$, $\varnothing 16 \times M1.5$ or $\varnothing 20 \times M1.5$
- Only available with internal cooling

Thread types: M, MF, G, UN, NPT, NPTF and external thread M, MF, G

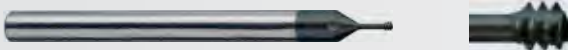
DTMC SP – drill/thread milling cutter with 2 cutting edges and 45° chamfer



- Drilling, countersinking and thread milling with only one tool
- Resulting in reduced machining times and tool costs as well as reduced space requirements
- Application only in aluminium, cast materials, brass and plastics
- Available with or without internal cooling

Thread types: M, MF, UNC, UNF

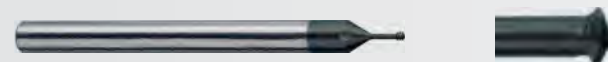
MTM 3 SP – micro-thread milling cutter (3-tooth type)



- Thread size and pitch are predetermined
- Excellent characteristics with high-tensile materials such as titanium, stainless steel etc.
- Suitable for the machining of hardened steel 45HRC-65HRC
- Threads up to 3xD
- Available with or without internal cooling

Thread types: M, MF, G, UNC, UNF, MJ, UNJC, UNJF

MTM 1 SP – micro-thread milling cutter (1-tooth type)

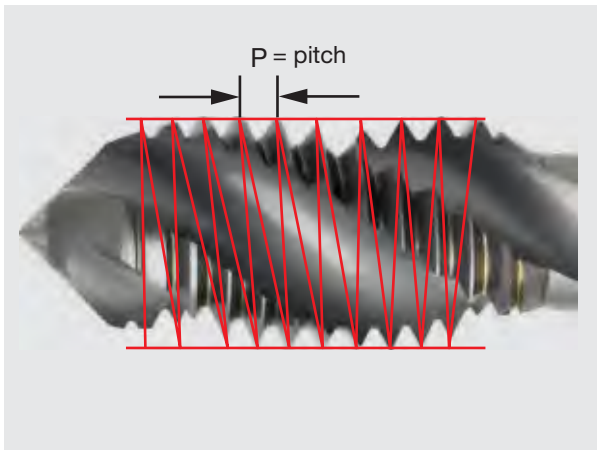


- Universal production of nominal thread diameters up to a maximum pitch
- Only available with internal cooling

Thread types: M, MF

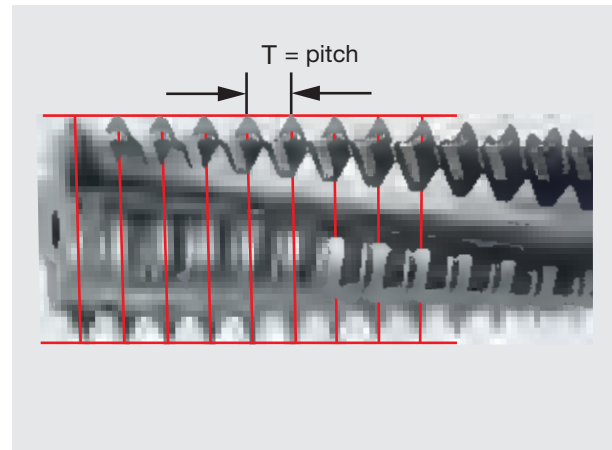


Taps/fluteless taps



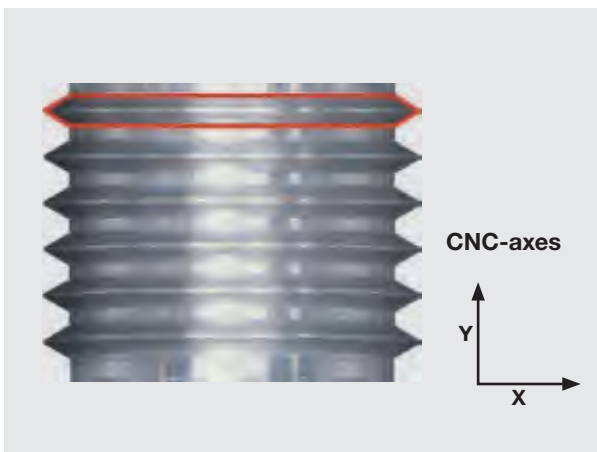
The red lines show the pitch angle of the thread that is ground into the tool. This means the pitch is cut into the workpiece by the tool.

Thread milling cutters

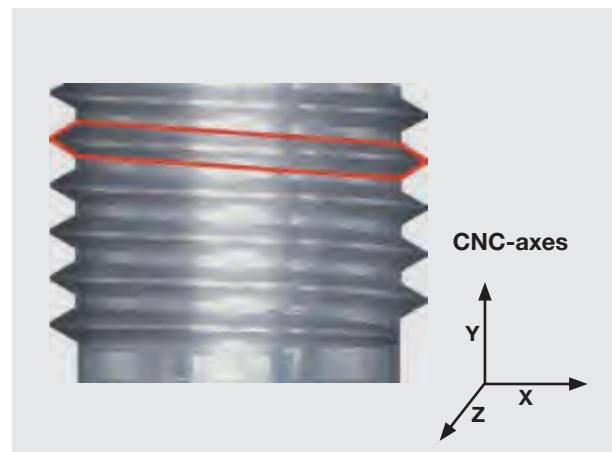


The red lines show that the tool does not possess a pitch angle. The pitch is produced by the Z-axis of a CNC machine.

Creation of the thread with thread milling



Thread profile without axial feed (Z-axis) of the machine. A groove profile is created without pitch. A functioning thread is not created



Through the additional programming of the Z-axis the necessary pitch is produced.

Note:

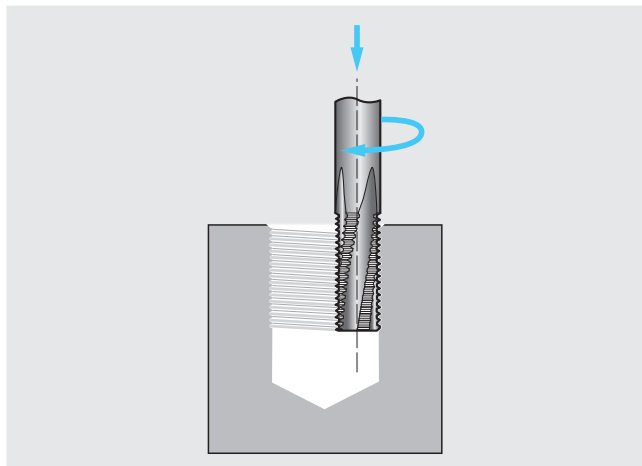
Due to diagonal milling in the pitch angle (**Z-axis**) the thread profile of the tool is **transferred onto the component distorted**.

The more the milling cutter diameter (80% of nom. Ø) approaches the nominal thread diameter and the higher the thread pitch the more pronounced the profile distortion is.



Reverse rotation milling

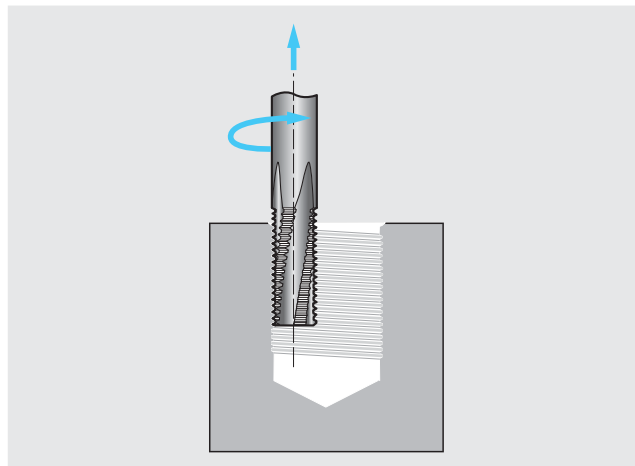
clockwise, with G02



Reverse rotation milling is preferentially applied for the machining of harder materials or to remedy taper threads.

Synchronous milling

anticlockwise, with G03

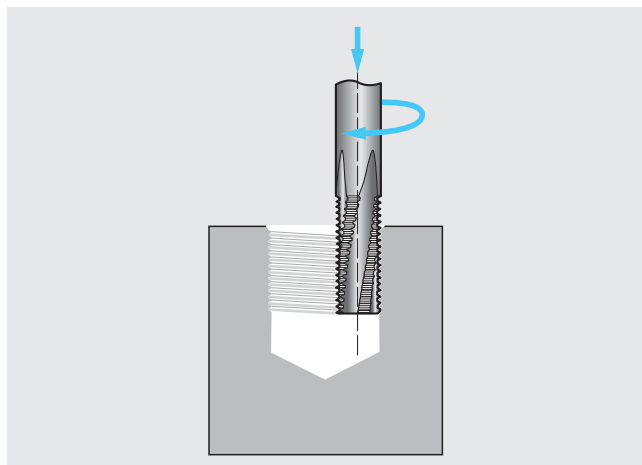


Synchronous milling is applied with thread depths smaller than $1.5 \times D$.
Advantage: A better surface finish is achieved.

Thread production with one tool

Right-hand thread

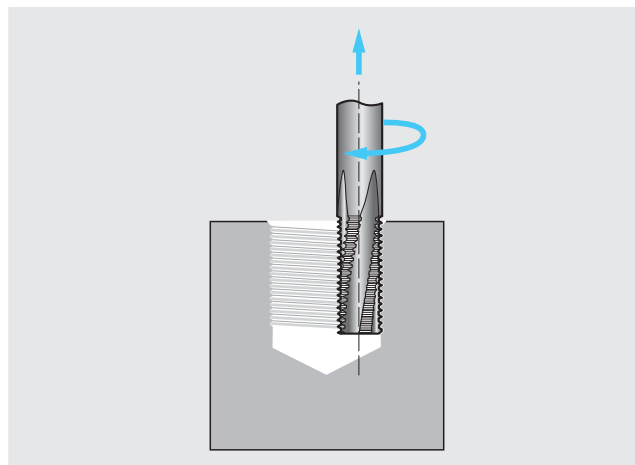
Reverse rotation milling



Tool rotates clockwise from top to bottom

Left-hand thread

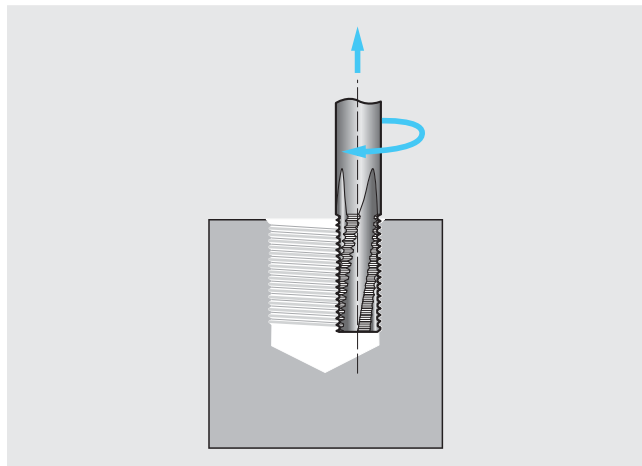
Reverse rotation milling



Tool rotates clockwise from bottom to top

Right-hand thread

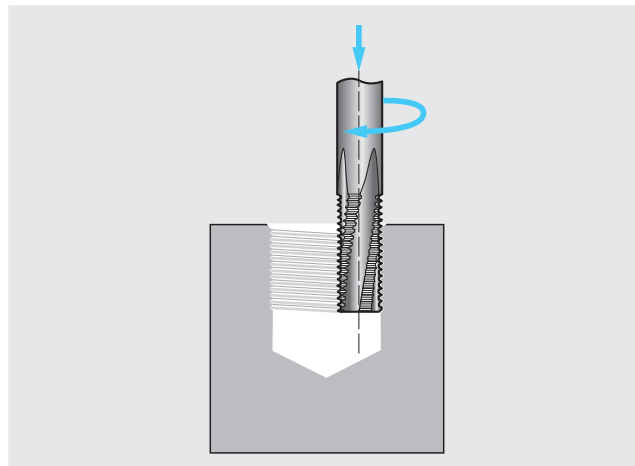
Synchronous milling



Tool rotates clockwise from bottom to top

Left-hand thread

Synchronous milling



Tool rotates clockwise from top to bottom



Illustration	Modification	Effect
	Cooling slots on shank	Targeted cooling, without weakening the tool cross-section in the cutting edge area
	Radial coolant exits	Targeted cooling with through hole threads
	Threads removed	Reduced cutting forces but longer machining time because two cycles are required
	De-burring cutting edge	Removing the incomplete threads at the thread run-in without additional operating step.
	First thread profile lengthened at the face	Chamfering a tapping size hole
	Grinding collar	Enables axial distribution of cuts – useful for deep threads

**Program specifications****Thread milling functions****G00** Rapid movement**G01** Feed**G02** Circular interpolation (clockwise)**G03** Circular interpolation (anti-clockwise)**G17** Layer selection x-y axis**G18** Layer selection z-x axis**G19** Layer selection y-z axis**G40** Cancel tool correction**G41** Tool path correction (left of contour)**G42** Tool path correction (right of contour)**G43** Tool length compensation (call-up)**G49** Tool length compensation (deselect)**G54** Work offset**G90** Absolute dimension**G91** Incremental dimension**M03** Spindle on (clockwise rotation)**M05** Spindle stop**M08** Coolant on**X** Axis**Y** Axis**Z** Axis**I** Thread pitch parallel to X-axis**J** Thread pitch parallel to Y-axis**S** Spindle speed**F** Feed**CNC internal thread milling**

1. Moving to start position

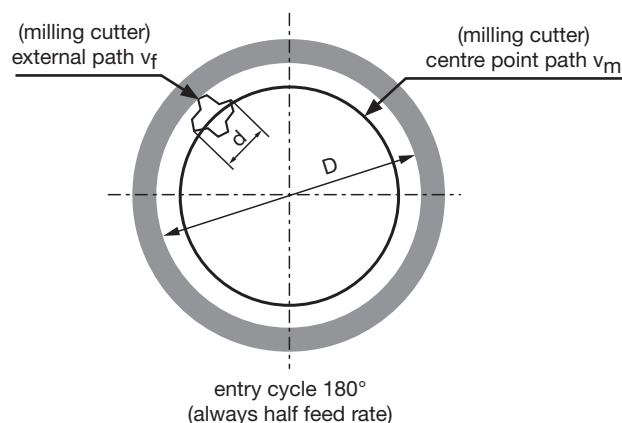
2. Moving to thread depth in bore

3. 180° descending loop to contour

4. 360° full circular movement of thread milling cutter

5. 180° exit loop to centre of bore

6. Rapid movement from bore to start position

**Formula of calculation**

$$v_c = \frac{d \cdot \pi \cdot n}{1000}$$

$$n = \frac{v_c \cdot 1000}{d \cdot \pi}$$

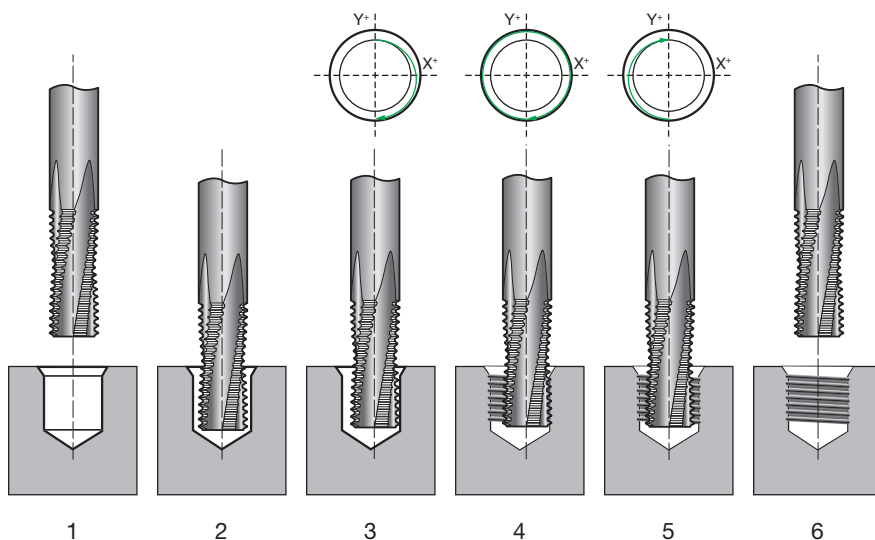
$$v_f = n \cdot Z \cdot f_z$$

$$v_m = \frac{v_f \cdot (D - d)}{D}$$

$$v_b = n \cdot f_b$$

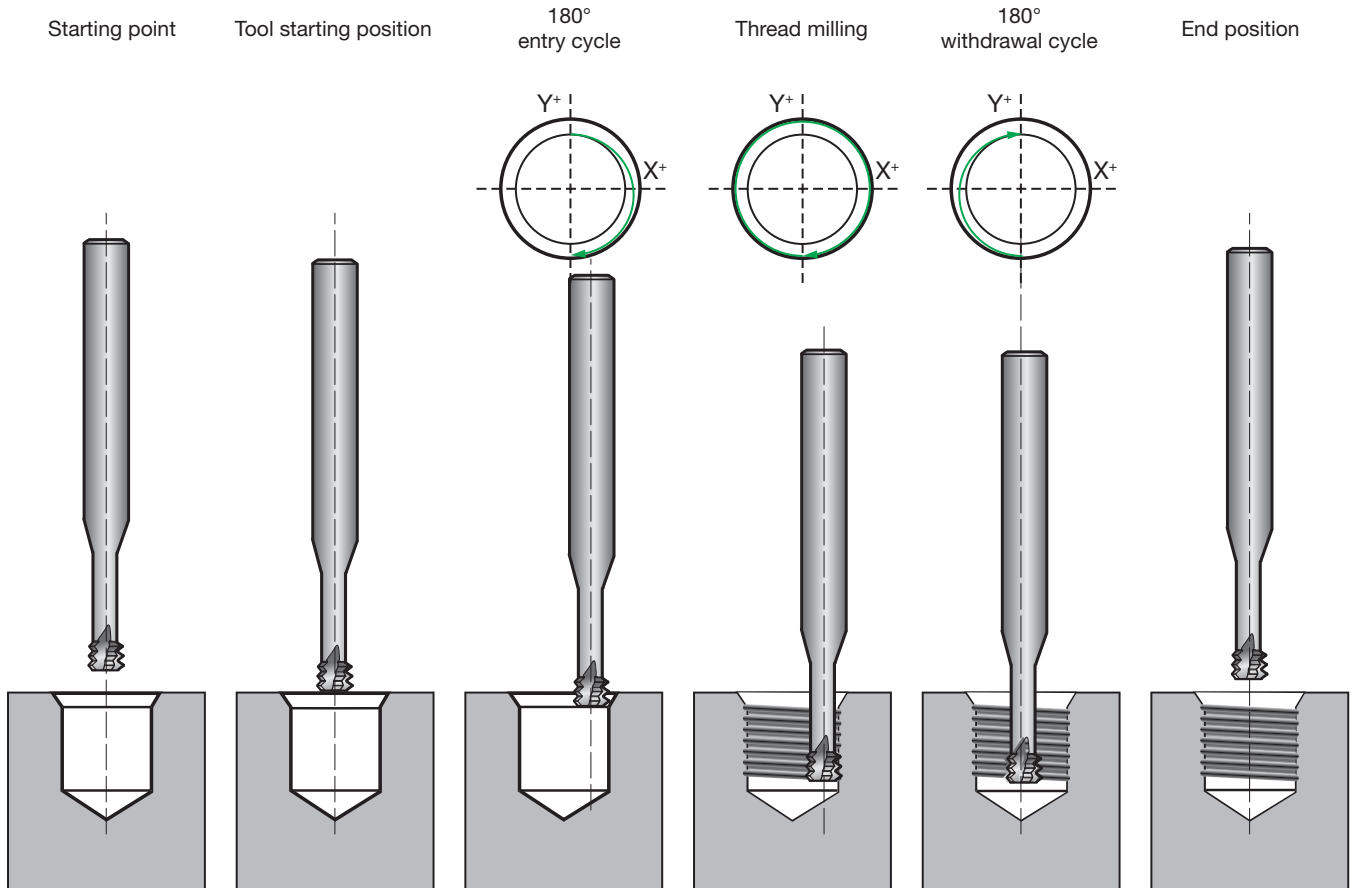
 v_c = cutting speed v_f = contour feed v_m = centre point path feed n = revolutions Z = number of teeth f_z = feed per tooth f_b = feed per drill per revolution* v_b = drill feed rate* D = Ø nom. of thread [mm] d = milling cutter nom. Ø [mm]

* for drill/thread milling





Programming process for micro-thread milling (right-hand thread in reverse rotation)



Possibilities to reduce radial forces

To reduce radial forces cut distribution can be undertaken:

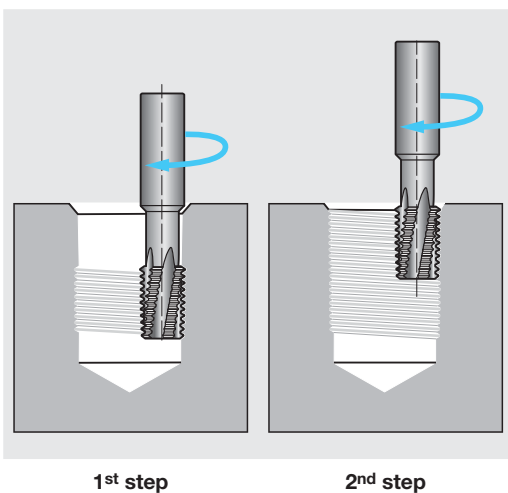
Advantage:

- for larger thread depths
- counteracts taper threads
- for unstable clamping conditions

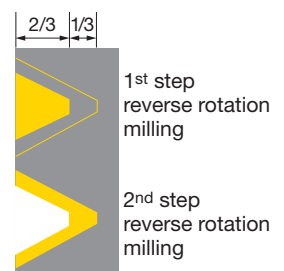
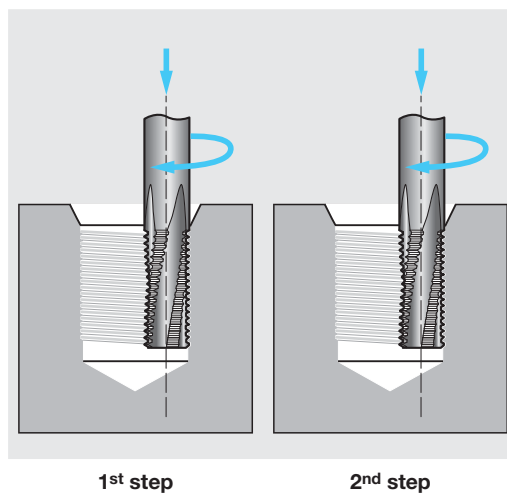
Disadvantage:

- increased tool wear
- longer production time

Axial distribution of cut



Radial distribution of cut



Technical section



Selecting the correct clamping chuck

Correct tool clamping also plays an essential role with thread milling. Thread milling cutters should as a rule be clamped as short as possible. A compact and mechanical clamping force is preferable. The error in concentricity should not exceed 0.02 millimetres.

Power chucks



max. permissible error in concentricity: 0.003 mm

A power chuck excels thanks to extremely accurate concentricity. The high clamping forces and optimal smooth running are a perfect prerequisite for the production of threads in all materials including a high pitch.

Side lock holders



max. permissible error in concentricity: 0.002 mm

A side lock holder for HB and HE shanks is a robust, cost-efficient clamping chuck with a maximum clamping force. The clamping surface prevents the tool twisting or being pulled out during machining. Therefore, side lock holders are suitable for the production in all materials including a high pitch.

Shrink fit chucks



max. permissible error in concentricity: 0.005 mm

A shrink fit chuck creates a rigid connection with the shrink fitted tool. Incorrect shrink fitting or older shrink fit chucks can result in the pulling out of the tool. Tool breakage and possible loss of the component would be the consequence. Therefore, the shrink fit chuck is only suitable for a thread pitch $< P=1.5$ mm.

Hydraulic chucks



max. permissible error in concentricity: 0.005 mm

A hydraulic chuck, similar to the shrink fit chuck, has only limited suitability for thread milling. Especially with high radial forces this clamping chuck reaches its limits. Therefore, the hydraulic chuck is recommended for softer materials such as aluminium and a thread pitch $< P=1.5$ mm.

Collet holders



max. permissible error in concentricity: 0.01 mm

Collet chucks are very well suited for micro-thread milling because only axial stresses are created. The low clamping forces only permit the milling of softer materials. Consequently, collet holders are not suitable for conventional thread milling.



Practical application of thread milling cutters

1.) Tool clamping:

good concentricity is important, therefore clamping as short and rigid as possible

2.) Enter tool data in machine memory

- 1.) Tool length from the front face, take drill/thread milling cutters (DTMC) from point.
- 2.) Measure tool radius with tool pre-setting equipment. General rule: measured radius - $0.022 \times \text{pitch}$ provides the input value in machine memory.

3.) Input of CNC program in control

(preferably integrated as sub-program at corresponding positions)

- a.) Call-up of a self-controlling cycle (procedures should be known)
- b.) Integration of data file from our threadmill-software (DIN or Haidenhain).

4.) Trial run over workpiece

- a) Tool length dimension in memory extending by an approximate value dependent on contact length (i.e. 30 mm) or offset zero point.
- b) Run program in single set, visual check of travel path.
- c) Allow program to run in automatic mode.

Attention:

With controls where it is not definitely clear what milling path is assigned it must be clarified if the feed is positioned on the external path v_f or at the centre path v_m . As a rule we specify the milling centre point path v_m .

5.) Application in workpiece

Re-set the tool extension or the zero point. Then allow the program to run in the workpiece the feed regulation must be 100% selected. Should the thread not be true to gauge, the tool radius requires correction in the tool memory:

Example:

- thread too tight: Radius correction - input
- thread too large: Radius correction + input





TM SP – Thread milling cutters without chamfer



Free
CNC programming
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Processing example type TM

Guhring no.:	3737 TiCN	Cutting speed [v_c]:	80 m/min
Thread size:	M10x(1)	Feed per tooth:	0.05 mm
Thread depth:	20 mm / blind hole	Processing sequence:	reverse rotation milling
Material:	St- 37	Processing time:	6.9 sec.

CNC program

N10 M6 T1	
N20 G90 G54 G00 X0 Y0	
N30 Z2 S3203 M3 M8	position over workpiece
N40 Z-18.70	position for thread depth
N50 G91	incremental
N60 G42 G01 X0 Y3.975 F50	radius compensation
N70 G02 X0 Y-9.005 I0 J-4.503 Z-0.150	entry cycle 180°
N80 G02 X0 Y0 I0 J5.030 Z-1.000 F101	thread pitch 360°
N90 G02 X0 Y9.005 I0 J4.503 Z-0.150	withdrawal cycle 180°
N100 G40 G01 X0 Y-3.975	radius compensation off
N110 G90	switch to absolute
N120 G00 Z2 M9	rapid movement to start position
N130 M30	



TMC SP – Thread milling cutters with 45° chamfer



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Processing example type TMC

Guhring no.:	3528 TiCN	Cutting speed [v_c]:	100 m/min
Thread size:	M12x(1.5)	Feed per tooth:	0.075 mm
Thread depth:	18 mm / blind hole	Processing sequence:	reverse rotation milling
Material:	42CrMo4	Processing time:	4.15 sec.

CNC program

N10 M6 T1	
N20 G90 G54 G00 X0 Y0	
N30 Z2 S1600 M3 M8	position over workpiece
N40 Z-26.20	position for 45° countersinking
N50 G01 Z-27.57 F85	chamfering 45°
N60 G00 Z-16.05 S3199	position for thread depth
N70 G91	incremental
N80 G42 G01 X0 Y4.975 F85	radius compensation
N90 G02 X0 Y-11.015 I0 J-5.508 Z-0.225	entry cycle 180°
N100 G02 X0 Y0 I0 J6.040 Z-1.5 F169	thread pitch 360°
N110 G02 X0 Y11.015 I0 J5.508 Z-0.225	withdrawal cycle 180°
N120 G40 G01 X0 Y-4.975	radius compensation off
N130 G90	switch to absolute
N140 G00 Z2 M9	rapid movement to start position
N150 M30	



TMU SP – Universal thread milling cutters



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CNC programming
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Processing example type TMU

Guhring no.:	3541 Ø 12xM1 TiCN	Cutting speed [v_c]:	60 m/min
Thread size:	M28x1	Feed per tooth:	0.05 mm
Thread depth:	12 mm / blind hole	Processing sequence:	reverse rotation milling
Material:	VA [1.4301]	Processing time:	28.96 sec.

CNC program

N10 M6 T1	
N20 G90 G54 G00 X0 Y0	
N30 Z2 S1598 M3 M8	position over workpiece
N40 Z-10.70	position for thread depth
N50 G91	incremental
N60 G42 G01 X0 Y5.975 F92	radius compensation
N70 G02 X0 Y-20.015 I0 J-10.008 Z-0.150	entry cycle 180°
N80 G02 X0 Y0 I0 J14.040 Z-1.000 F184	thread pitch 360°
N90 G02 X0 Y20.015 I0 J10.008 Z-0.150	withdrawal cycle 180°
N100 G40 G01 X0 Y-5.975	radius compensation off
N110 G90	switch to absolute
N120 G00 Z2 M9	rapid movement to start position
N130 M30	



DTMC SP – Drill thread milling cutters



Free
CNC programming
on request!



Processing example type DTMC

Guhring no.:	3779 bright	Cutting speed [v_c]:	230 m/min
Thread size:	M8x(1,25)	Drill feed:	0.1 mm / rev.
Thread depth:	15 mm / blind hole	Feed per tooth:	0.05 mm
Material:	AlSi 10%	Processing sequence:	reverse rotation milling
		Processing time:	3.44 sec.

CNC program

N10 M6 T1	
N20 G90 G54 G00 X0 Y0	
N30 Z2 S11529 M3 M8	position over workpiece
N40 G01 Z-1 F577	boring (improved centering)
N50 G01 Z-19.86 F1153	drilling to tapping size hole depth with 45° countersink
N60 G00 Z2 S11529	rapid movement from hole to flush out chips
N70 Z-13.38	position for thread depth
N80 G91	incremental
N90 G42 G01 X0 Y3.175 F122	radius compensation
N100 G02 X0 Y-7.205 I0 J-3.603 Z-0.188	entry cycle 180°
N110 G02 X0 Y0 I0 J4.030 Z-1.250 F245	thread pitch 360°
N120 G02 X0 Y7.205 I0 J3.603 Z-0.188	withdrawal cycle 180°
N130 G40 G01 X0 Y-3.175	radius compensation off
N140 G90	switch to absolute
N150 G00 Z2 M9	rapid movement to start position
N160 M30	



TMU SP – Universal thread milling cutters for external threads



Free
CNC programming
on request!



Programming example M14x1.5 – 6g (external thread)

Tool type:	TMU D12x20xM1.5-A TiCN Z=4 (tool-Ø 11.95 mm) (alternatively TMU D16x25xM1.5 A TiCN Z=5 can be applied)
Material:	38MnSiV5
Parameter:	v _c = 130 m/min, f _z = 0.06 (reverse rotation milling) v _f = 831 mm/min, v _m = 1548 mm/min
N10 M6 T1	
N20 G90 G54 G00 X0 Y0	
N30 Z2 S3463 M3 M8	travel centrally over bolt
N40 G91	incremental
N50 X7.033 Y11.99	starting position lateral to bolt
N60 G01 Z-14.5	travel to starting depth
N70 G42 G01 X0 Y-5.975	radius compensation
N80 G01 X-7.033 Y0.000 F774	linear approach path
N90 G03 X0.000 Y0.000 Z1.5 I0 J-6.015 F1548	thread pitch 360°
N100 G01 X-7.033 Y0.000	linear exit path
N110 G40 G01 X0.000 Y5.975	radius compensation off
N120 G90	switch to absolute
N130 G80 G00 Z2 M9	end position over bolt
N140 M30	



Type TM SP – für NPT threads (conical, taper 1:16)



Free
CNC programming
on request!



Programming example NPT 1/4-18: (conical, taper 1:16)

Tool type:	TM D 9.95x19,05xNPT18 IK (4-fluted)
Tool Ø:	d1 = 9.95 mm (measured on the first tooth)
Tool length:	Measured at the face
Tapping size Ø:	Ø 11.10 mm cylindrical (conical pre-machining preferred D1 = 11.36 mm / d1 = 11.10 mm)
Material:	16 Mn Cr 5
Parameter:	$v_c = 70$ m/min, $f_z = 0.05$ (reverse rotation milling) $v_f = 447$ mm/min, $v_m = 102$ mm/min

N10 M6 T1

N20 G90 G54 G00 X0.000 Y0.000

N30 Z2.000 S2239 M3 D1

position over workpiece

N40 G00 Z-10.016

drive tool into bore

N50 G91

incremental

N60 G42 G01 X0.000 Y4.975 F1000

radius compensation

N70 G02 X0.000 Y-11.432 I0.000 J-5.716 Z-0.212 F51

entry cycle 180°

N80 G02 X-6.457 Y6.457 I0.000 J6.457 Z-0.353 F102

1/4 thread, without correction

N90 G02 X6.445 Y6.445 I6.445 J0.000 Z-0.353

1/4 thread, with correction

N100 G02 X6.434 Y-6.434 I0.000 J-6.434 Z-0.353

1/4 thread, with correction

N110 G02 X-6.423 Y-6.423 I-6.423 J0.000 Z-0.353

1/4 thread, with correction

N120 G02 X0.000 Y11.387 I0.000 J5.694 Z-0.212

withdrawal cycle 180°

N130 G40 G01 X0.000 Y-4.975 F1000

radius compensation off

N140 G90

switch to absolute

N150 G53 G00 Z2.000

rapid movement to start position

N160 M30



MTM 3 SP Micro-thread milling cutters



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CNC programming
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Micro-thread milling cutters

Solid carbide micro-thread milling cutters have been specially developed for the production of threads in small holes:

- excellent characteristics in higher-strength materials (i.e. titanium alloys, stainless steels, ...)
- blind holes and through holes up to 3xD
- minimum cutting force
- very good thread quality
- short machining times
- also suitable for softer materials (e.g. aluminium or plastics)



Programming example: M3x(0.5) MTM 3 SP

Material:	TiAl6V4
Thread:	M3, depth 7.0 mm / blind hole
Tool:	MTM 3 SP M3x(0.5) tool Ø 2.4 mm Z=3
Parameter:	$v_c = 40$ m/min, $f_z = 0.025$ (reverse rotation milling) $v_f = 398$ mm/min, $v_m = 84$ mm/min

N10 M6 T1

N20 G90 G54 G00 X0 Y0

N30 Z2 S5305 M3 M8

N40 Z0.1

N50 G91

N60 G42 G01 X0 Y1.200 F42

N70 G02 X0 Y-2.720 I0 J-1.360 Z-0.075

N80 G02 X0 Y0 I0 J1.520 Z-0.500 F84

Number of repeats of set N80 =15

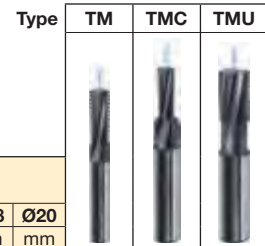
N90 G02 X0 Y2.720 I0 J1.360 Z-0.075

N100 G40 G01 X0 Y-1.200

N110 G90

N120 G00 Z2 M9

N130 M30



Application recommendations thread milling cutters

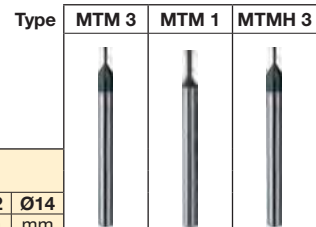
ISO	Material group	Cutting speed v _c (m/min)	Feed mm / per tooth fz for Ø (up-cut milling)																
			Milling part diameter																
			Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	Ø9	Ø10	Ø12	Ø14	Ø16	Ø18	Ø20			
			mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm				
P	Common structural steels	110	0.02	0.02	0.025	0.03	0.035	0.045	0.05	0.055	0.06	0.06	0.065	0.065	0.07	0.08	++	++	++
	Free-cutting steels																		
	Unalloyed case hardened steels																		
	Unalloyed heat-treatable steels																		
	Alloyed case hardened steels																		
M	Alloyed heat-treatable steels	90	0.015	0.015	0.02	0.025	0.03	0.035	0.04	0.045	0.05	0.05	0.05	0.055	0.06	0.07	+	++	++
	Alloyed tool steels																		
	Stainless and acid-resit. steel																		
K	Steels, sulfured	60	0.01	0.01	0.015	0.02	0.025	0.03	0.03	0.035	0.04	0.045	0.05	0.05	0.055	0.06	+	++	++
	austenitic																		
N	martensitic	120	0.02	0.02	0.025	0.03	0.035	0.045	0.05	0.055	0.06	0.06	0.065	0.07	0.08	0.1	++	++	++
	Grey cast iron, cast iron																		
S	Spher. graph. iron mall. cast iron	250	0.03	0.035	0.04	0.045	0.05	0.055	0.06	0.065	0.07	0.08	0.085	0.09	0.1	0.12	++	++	++
	Non-ferrous metals:																		
	Aluminium and other																		
H	non-ferrous met., copper alloys	350	0.03	0.04	0.045	0.05	0.055	0.055	0.06	0.07	0.075	0.085	0.09	0.1	0.12	0.15	++	++	++
	Plastics																		
H	Special alloys and Titanium	35	0.01	0.01	0.015	0.02	0.025	0.03	0.03	0.035	0.04	0.045	0.05	0.05	0.055	0.06	+	++	++
	Hardened steel [max. 55 HRC]		25	-	0.005	0.005	0.01	0.012	0.014	0.018	0.02	0.02	0.022	0.025	0.03	0.035	0.04	+	++

Note: In hardened steels up to max. 55HRC diameter must be programmed in 3 passes!



Application recommendations drill thread milling cutters 2xD, 2,5xD

ISO	Material group	Cutting speed v_c (m/min)	Feed mm / per tooth fz for Ø (up-cut milling)														
			Milling part diameter														
			M3		M4		M5		M6		M8		M10		M12		
		fb mm/U	fz mm	fb mm/U	fz mm	fb mm/U	fz mm	fb mm/U	fz mm	fb mm/U	fz mm	fb mm/U	fz mm	fb mm/U	fz mm		
K	Grey cast iron, cast iron Spher. graph. iron mall. cast iron	100	0.05	0.01	0.06	0.02	0.07	0.025	0.08	0.035	0.1	0.04	0.12	0.055	0.14	0.065	+
N	Non-ferrous metals: Aluminium and other	230	0.06	0.015	0.07	0.025	0.08	0.03	0.1	0.04	0.12	0.05	0.15	0.07	0.18	0.08	++
	non-ferrous met., copper alloys Plastics	300	0.07	0.02	0.08	0.03	0.09	0.04	0.12	0.05	0.13	0.06	0.18	0.09	0.2	0.12	++



Application recommendations micro-thread milling cutters

ISO	Material group	Cutting speed v _c (m/min)	Feed mm / per tooth fz for Ø (up-cut milling)																
			Milling part diameter																
			Ø1	Ø1.5	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	Ø9	Ø10	Ø12	Ø14				
			mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm					
P	Common structural steels	70 - 120	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.09	0.1	0.12	++	++	-	
	Free-cutting steels																		
	Unalloyed case hardened steels																		
	Unalloyed heat-treatable steels																		
	Alloyed case hardened steels																		
M	Alloyed heat-treatable steels	60-90	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.1	++	++	-	
	Alloyed tool steels																		
	Stainless and acid-resit. steel																		
	Steels, sulfured																		
	austenitic																		
K	Stainless and acid-resit. steel	40-80	0.02	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.07	++	++	-	
	martensitic		40-80	0.02	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.07	0.07	0.08	0.09	++	++	-	
S	Grey cast iron, cast iron	60-80	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.09	0.1	0.12	++	++	-	
	Spher. graph. iron mall. cast iron																		
N	Non-ferrous metals:	80 - 150	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.1	0.11	0.12	0.14	++	++	-	
	Aluminium and other																		
	non-ferrous met., copper alloys																		
H	Plastics	60 - 200	0.05	0.05	0.06	0.07	0.07	0.08	0.09	0.09	0.1	0.11	0.12	0.13	0.15	++	++	-	
	Special alloys and Titanium		20-40	0.02	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.06	0.06	0.07	++	++	+	
H	Hardened steel (max. 65 HRC)	40-50	0.01	0.02	0.02	0.03	0.03	0.035	0.035	0.04	0.045	0.045	0.05	0.055	0.06	-	-	++	



Application problems with new thread milling cutters

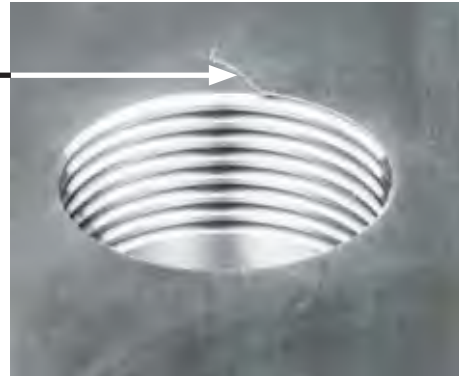
Problem	Possible causes	Solution
1. Thread produced is too large or too small 	Incorrect radius in CNC program and therefore milling of incorrect circle	Correct milling radius until thread is dimensionally correct
2. Thread not cylindrical 	- Feed rate too high - Synchronous milling path with long threads	- Reduce feed rate - Modify milling direction to opposite direction
3. Thread surface not according to requirements, chatter marks 	- Cutting speed too high - Insufficient tool or workpiece clamping	- Adjust cutting speed - Check tool and workpiece clamping
4. Tool breakage 	- CNC program error - Cutting rates too high	- Check CNC program - Adjust cutting rates
5. Tool life insufficient	- Cutting rates too high - Tool applied uncoated - Insufficient lubrication and chip evacuation	- Adjust cutting rates - Apply coated tool - Improve lubrication, coolant delivery via the spindle
6. Tool breakage with drill/milling cutter 	- Chip problems when drilling - Feed rates too high when drilling	- Apply tool with IC - Incorporate pecking cycles



Burr-free thread machining at the thread intake - no problem for Guhring's thread milling cutters

Problem:

Burr-formation at the thread entry



Solution:

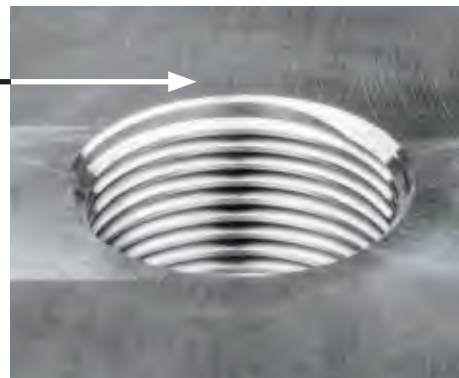
Special tool

with relief-ground de-burring edge



Result:

When thread milling to the relevant plunging depth the incomplete, burr afflicted thread entry is milled



Our technical know-how is at your disposal to develop special solutions at any time.



Special thread milling cutters

You cannot find a suitable tool in our diverse thread milling cutter range?

Then we are more than happy to provide a tool optimally adapted to your machining task as a special solution.

Please contact us!





Re-grinding and re-coating

Guhring provides a life-long re-grind and re-coating service for thread milling cutters.

By professionally re-grinding and re-coating with original geometries and original coatings

Guhring re-produces the 100 per cent tool efficiency.



Re-grind service

In our service centres, tools are re-ground on the front rake face according to the degree of wear.

According to width of wear marks the re-grind service is possible two or three times (from milling part diameter $d_1 > 5.0$ mm).

In order to re-define the milling portion diameter, the number of re-grinds is indicated by a notch on the end of the shank. This means every notch is assigned to a diameter and re-etched.



Re-coating

If a thread mill was enhanced with a coating, the tool is re-coated following the re-grind. This way, not only the wear- and corrosion-protection as well as the glide characteristics are re-produced but also the tool life prolonged.



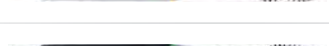
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CONTENTS

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
≤ 800							WN	N	D	ISO2/6H	HSS-E	○	M3 - M12	1839	18	87
≤ 800							WN	N	B	ISO2/6H	HSS-E	○	M3 - M20	998	19	86
≤ 800							WN	N R40	C	ISO2/6H	HSS-E	○	M3 - M20	888	23	88
≤ 1000	○	○					WN	N R40	C	6HX	HSS-E	Ⓢ	M3 - M20	4153	25	67
≤ 800							DIN 352	N	C	ISO2/6H	HSS-E	○	M2.2 - M16	995	22	53
≤ 800							DIN 352	N	B	ISO2/6H	HSS-E	○	M2 - M24	991	19	35
≤ 800							DIN 352	N R15	C	ISO2/6H	HSS-E	○	M3 - M20	992	22	58
≤ 800							DIN 352	N R40	C	ISO2/6H	HSS-E	○	M2 - M22	993	23	65
≤ 800							DIN 357	N		ISO2/6H	HSS-E	○	M3 - M30	851	18	85
		●					DIN 371	GGT	C	ISO2/6H	HSS-E	Ⓢ	M3 - M10	1875	349	357
≤ 800							DIN 371	N	C	ISO2/6H	HSS-E	○	M1 - M10	806	18	50
≤ 800							DIN 371	N	C	ISO3/6G	HSS-E	○	M2 - M10	795	22	52
≤ 800							DIN 371	N	D	ISO2/6H	HSS-E	○	M2 - M10	801	18	49
≤ 800							DIN 371	N	B	ISO1/4H	HSS-E	○	M2 - M10	794	18	36
≤ 1000	○						DIN 371	N	B	ISO2/6H	HSS-E	Ⓢ	M2 - M10	313	20	33
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	○	M2 - M10	802	19	55
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	○	M1 - M10	803	19	30
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	○	M1.2 - M10	838	19	54
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	○	M1.2 - M10	839	19	54
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	Ⓢ	M1 - M10	912	19	30
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	●	M1 - M10	945	19	30
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	●	M1 - M10	1246	19	30
≤ 1000	●	●					DIN 371	N	B	ISO2/6H	HSS-E	○	M2 - M10	1870	229	236
≤ 1000	●						DIN 371	N	B	ISO2/6H	HSS-E	Ⓢ	M2 - M10	2086	229	236



P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
						Machine taps for ISO metric threads										
≤ 1000	○						DIN 371	N	B	ISO2/6H	HSS-E	A	M2 - M10	2427	20	33
≤ 1000	○						DIN 371	N	B	ISO2/6H	HSS-E	A	M5 - M10	2517	20	34
≤ 1000	○						DIN 371	N	B	ISO2/6H	HSS-E		M2 - M10	2876	20	33
≤ 1000	●		○				DIN 371	N	B	ISO2/6H	HSS-E-PM	○	M2 - M10	877	229	237
≤ 1000	○						DIN 371	N	B	ISO2/6H	HSS-E-PM	S	M2 - M10	1285	20	39
≤ 1000	○						DIN 371	N	B	ISO2/6H	HSS-E-PM	C	M3 - M20	1287	20	40
≤ 800							DIN 371	N	B	ISO3/6G	HSS-E	○	M2 - M10	796	19	56
≤ 800							DIN 371	N	B	ISO3/6G	HSS-E	○	M2 - M10	797	19	56
≤ 800							DIN 371	N	B	ISO3/6G	HSS-E	○	M1.4 - M10	837	19	37
≤ 800							DIN 371	N	B	ISO3/6G	HSS-E	○	M2 - M10	869	19	56
≤ 1000	○						DIN 371	N	B	ISO3/6G	HSS-E		M2 - M10	2990	20	41
≤ 1000	○						DIN 371	N	B	ISO3/6G	HSS-E	S	M2 - M10	2991	20	41
≤ 800							DIN 371	N-LH	B	ISO2/6H	HSS-E	○	M3 - M10	789	19	32
≤ 800							DIN 371	N R15	C	ISO2/6H	HSS-E	○	M2 - M10	809	22	57
≤ 800							DIN 371	N R15	C	ISO2/6H	HSS-E	S	M2 - M10	913	22	57
≤ 800							DIN 371	N R15	C	ISO2/6H	HSS-E		M2 - M10	946	22	57
≤ 800							DIN 371	N R15	C	ISO2/6H	HSS-E	○	M5 - M10	1891	22	59
≤ 800							DIN 371	N R15	C	ISO2/6H	HSS-E	S	M5 - M10	2436	23	59
	○		≥ 7				DIN 371	N R15	C	6HX	VHM	○	M3 - M10	971	465	478
	●						DIN 371	N R15	C	6HX	VHM	A	M3 - M10	2510	-	364
≤ 800							DIN 371	N R15	C	ISO3/6G	HSS-E	○	M2 - M10	799	22	52
≤ 800							DIN 371	N L15	D	ISO2/6H	HSS-E	○	M3 - M10	808	19	89
≤ 1000	○	○	○				DIN 371	N R40	E	ISO2/6H	HSS-E	○	M3 - M10	2790	24	69
≤ 1000	○	○					DIN 371	N R40	C	ISO2/6H	HSS-E	S	M5 - M10	174	25	70

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
						Machine taps for ISO metric threads										
≤ 800							DIN 371	N R40	C	ISO2/6H	HSS-E		M2 - M10	783	23	60
≤ 800							DIN 371	N R40	C	ISO2/6H	HSS-E		M2 - M10	810	23	60
≤ 1000	○	○					DIN 371	N R40	C	ISO2/6H	HSS-E		M2 - M10	836	24	66
≤ 1000	○	○	○				DIN 371	N R40	C	ISO2/6H	HSS-E		M2 - M10	889	24	66
≤ 800							DIN 371	N R40	C	ISO2/6H	HSS-E	S	M2 - M10	914	23	60
≤ 800							DIN 371	N R40	C	ISO2/6H	HSS-E	C	M2 - M10	1252	24	60
≤ 800							DIN 371	N R40	C	ISO2/6H	HSS-E		M5 - M10	1893	24	63
≤ 1000	○	○					DIN 371	N R40	C	ISO2/6H	HSS-E	A	M2 - M10	2425	-	66
≤ 800							DIN 371	N R40	C	ISO2/6H	HSS-E	S	M5 - M10	2438	24	64
≤ 1000	○	○					DIN 371	N R40	C	ISO2/6H	HSS-E	S	M2 - M10	2440	24	66
≤ 1000	○	○					DIN 371	N R40	C	ISO2/6H	HSS-E	A	M5 - M10	2514	-	68
≤ 1000	○	○					DIN 371	N R40	C	ISO2/6H	HSS-E-PM	S	M2 - M10	1288	25	72
≤ 1000	○	○					DIN 371	N R40	C	ISO2/6H	HSS-E-PM	C	M2 - M20	1290	25	73
≤ 800							DIN 371	N R40	C	ISO3/6G	HSS-E		M3 - M10	844	23	61
≤ 1000	○	○					DIN 371	N R40	C	ISO3/6G	HSS-E		M2 - M20	2994	24	73
≤ 1000	○	○					DIN 371	N R40	C	ISO3/6G	HSS-E	S	M2 - M20	2995	24	73
≤ 800							DIN 371	N L40 LH	C	ISO2/6H	HSS-E		M3 - M10	786	24	62
• • ○ • ○							DIN 371	N R50	C	ISO2/6H	HSS-E-PM	S	M3 - M10	767	25	74
• • ○ • ○							DIN 371	N R50	C	ISO2/6H	HSS-E-PM	C	M3 - M10	1152	25	74
≤ 1200			•	≥ 7			DIN 371	H	E	6HX	HSS-E-PM	C	M5 - M10	1091	23	78
			•	≥ 7			DIN 371	H	E	6HX	VHM		M3 - M10	1008	351	364
≤ 1200			•	≥ 7			DIN 371	H	C	6HX	HSS-E-PM	C	M5 - M10	302	23	78
			•	≥ 7			DIN 371	H	C	6HX	VHM		M3 - M10	969	351	362
			•	≥ 7			DIN 371	H	C	6HX	VHM		M3 - M10	1858	349	362

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
Machine taps for ISO metric threads																
≤ 1200							DIN 371	HAZ	B	ISO2/6H	HSS-E	○	M2 - M10	791	21	44
≤ 1000	•						DIN 371	VA	B	ISO2/6H	HSS-E	●	M2 - M10	2869	229	236
	•						DIN 371	VA R15	C	ISO2/6H	HSS-E	●	M2 - M10	843	230	241
	•						DIN 371	VA R15	C	ISO2/6H	HSS-E	●	M2 - M10	2896	230	241
	•	•					DIN 371	VA R40	C	ISO2/6H	HSS-E	○	M3 - M10	814	231	243
	•	•					DIN 371	VA R40	C	ISO2/6H	HSS-E	○	M3 - M10	1892	231	243
	•						DIN 371	VA R40	C	ISO2/6H	HSS-E	●	M3 - M10	2862	231	243
	•						DIN 371	VA R40	C	ISO2/6H	HSS-E-PM	●	M3 - M10	59	231	246
	•	○					DIN 371	VA R40	C	ISO2/6H	HSS-E-PM	○	M3 - M10	909	231	246
	•	○	•	○			DIN 371	VA R50	C	6HX	HSS-E-PM	●	M3 - M10	761	25	75
	•	○	•	○			DIN 371	VA R50	C	6HX	HSS-E-PM	●	M3 - M10	1139	25	75
≤ 1000	•	○					DIN 371	VA AZ	B	ISO2/6H	HSS-E	○	M3 - M10	1871	229	240
		•					DIN 371	AI	B	ISO2/6H	HSS-E	○	M2 - M10	805	463	472
		•					DIN 371	AI R45	C	ISO2/6H	HSS-E	○	M1.6 - M10	812	464	474
		•					DIN 371	GG	C	6HX	HSS-E	●	M5 - M10	318	350	358
		•					DIN 371	GG	C	6HX	HSS-E	●	M3 - M10	807	349	356
		•					DIN 371	GG	C	6HX	HSS-E	●	M3 - M10	930	349	356
		•					DIN 371	GG	C	6HX	HSS-E	●	M5 - M10	1890	350	358
		•					DIN 371	GG	C	6HX	HSS-E	●	M3 - M10	1918	349	356
	○	≥ 7					DIN 371	Ms	E	ISO2/6H	HSS-E	○	M3 - M10	800	463	482
	○	≥ 7					DIN 371	Ms	E	ISO3/6G	HSS-E	○	M3 - M10	1084	463	482
≤ 1000							~DIN 371	N	B	6HX	VHM	●	M5 - M12	942	21	42
							~DIN 371	H	D	ISO2/6H	VHM	●	M3 - M16	2944	676	681
	•						DIN 376	GGT	C	ISO2/6H	HSS-E	●	M3 - M16	1876	349	357



P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
						Machine taps for ISO metric threads										
≤ 800							DIN 376	N	C	ISO2/6H	HSS-E	○	M1.6 - M48	818	22	51
≤ 800							DIN 376	N	D	ISO2/6H	HSS-E	○	M2 - M30	813	18	49
≤ 1000	○						DIN 376	N	B	ISO2/6H	HSS-E	Ⓢ	M3 - M36	315	20	33
≤ 800							DIN 376	N	B	ISO2/6H	HSS-E	○	M1.6 - M52	815	19	31
≤ 800							DIN 376	N	B	ISO2/6H	HSS-E	○	M3 - M16	846	19	54
≤ 800							DIN 376	N	B	ISO2/6H	HSS-E	○	M3 - M16	847	19	54
≤ 800							DIN 376	N	B	ISO2/6H	HSS-E	Ⓢ	M1.6 - M52	915	19	31
≤ 800							DIN 376	N	B	ISO2/6H	HSS-E	●	M1.6 - M52	948	19	31
≤ 800							DIN 376	N	B	ISO2/6H	HSS-E	●	M1.6 - M52	1249	19	31
≤ 1000	●		●				DIN 376	N	B	ISO2/6H	HSS-E	○	M3 - M30	1872	229	236
≤ 1000	○						DIN 376	N	B	ISO2/6H	HSS-E	●	M3 - M36	2428	20	33
≤ 1000	○						DIN 376	N	B	ISO2/6H	HSS-E	●	M3 - M36	2877	20	33
≤ 1000	●		○				DIN 376	N	B	ISO2/6H	HSS-E-PM	○	M12 - M20	879	229	237
≤ 1000	○						DIN 376	N	B	ISO2/6H	HSS-E-PM	Ⓢ	M12 - M20	1286	20	39
≤ 1000	●						DIN 376	N	B	6HX	HSS-E	Ⓢ	M3 - M30	2087	229	236
≤ 800							DIN 376	N	B	ISO3/6G	HSS-E	○	M2 - M20	845	19	37
≤ 800							DIN 376	N-LH	B	ISO2/6H	HSS-E	○	M12 - M20	790	19	32
≤ 800							DIN 376	N R15	C	ISO2/6H	HSS-E	○	M3 - M30	821	22	57
≤ 800							DIN 376	N R15	C	ISO2/6H	HSS-E	Ⓢ	M3 - M30	916	22	57
≤ 800							DIN 376	N R15	C	ISO2/6H	HSS-E	●	M3 - M30	949	22	57
≤ 800							DIN 376	N R15	C	ISO2/6H	HSS-E	○	M12 - M20	1898	22	59
≤ 800							DIN 376	N R15	C	ISO2/6H	HSS-E	Ⓢ	M12 - M20	2437	23	59
≤ 800							DIN 376	N L15	D	ISO2/6H	HSS-E	○	M3 - M16	820	19	89
≤ 1000	○	○	○				DIN 376	N R40	E	ISO2/6H	HSS-E	○	M4 - M16	2791	24	69

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
Machine taps for ISO metric threads																
≤ 1000	○	○					DIN 376	N R40	C	ISO2/6H	HSS-E	S	M5 - M30	196	25	70
≤ 800							DIN 376	N R40	C	ISO2/6H	HSS-E		M3 - M30	784	23	60
≤ 800							DIN 376	N R40	C	ISO2/6H	HSS-E	○	M3 - M30	822	23	60
≤ 1000	○	○					DIN 376	N R40	C	ISO2/6H	HSS-E	●	M3 - M36	826	24	66
≤ 1000	○	○	○				DIN 376	N R40	C	ISO2/6H	HSS-E	○	M3 - M36	890	24	66
≤ 800							DIN 376	N R40	C	ISO2/6H	HSS-E	S	M3 - M30	917	23	60
≤ 800							DIN 376	N R40	C	ISO2/6H	HSS-E	●	M3 - M30	1254	24	60
≤ 1000	○	○					DIN 376	N R40	C	ISO2/6H	HSS-E	A	M3 - M36	2426	-	66
≤ 800							DIN 376	N R40	C	ISO2/6H	HSS-E	S	M12 - M20	2439	24	64
≤ 1000	○	○					DIN 376	N R40	C	ISO2/6H	HSS-E-PM	S	M12 - M20	1289	25	72
≤ 1000	○	○					DIN 376	N R40	C	6HX	HSS-E	S	M3 - M36	2441	24	66
≤ 800							DIN 376	N R40	C	ISO3/6G	HSS-E	○	M3 - M24	848	23	61
≤ 800							DIN 376	N L40 LH	C	ISO2/6H	HSS-E	○	M12 - M20	787	24	62
●	●	○	○	○			DIN 376	N R50	C	ISO2/6H	HSS-E-PM	S	M12 - M20	1098	25	74
●	●	○	●	○			DIN 376	N R50	C	ISO2/6H	HSS-E-PM	●	M12 - M20	1293	25	74
			○				DIN 376	NAZ	E	ISO2/6H	HSS-E	A	M5 - M12	2899	464	484
≤ 1200	●	≥ 7					DIN 376	H	E	6HX	HSS-E-PM	●	M10 - M20	4165	351	359
≤ 1200	●	≥ 7					DIN 376	H	C	6HX	HSS-E	●	M16 - M39	778	23	79
≤ 1200	●	≥ 7					DIN 376	H	C	6HX	HSS-E-PM	●	M10 - M20	297	23	78
	●	≥ 7					DIN 376	H	C	6HX	VHM	○	M12 - M20	1859	349	362
	●	≥ 7					DIN 376	H	C	6HX	VHM	○	M12 - M20	1883	351	362
≤ 1200							DIN 376	H	B	ISO2/6H	HSS-E	●	M3 - M24	734	21	43
≤ 1200							DIN 376	H	B	ISO2/6H	HSS-E	○	M3 - M24	816	21	43
≤ 1200							DIN 376	H	B	ISO2/6H	HSS-E	●	M3 - M24	1915	21	43

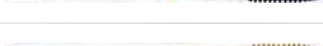


P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
						Machine taps for ISO metric threads										
≤ 1200							DIN 376	H	B	ISO2/6H	HSS-E	●	M3 - M24	2942	21	43
≤ 1200							DIN 376	H	B	ISO2/6H	HSS-E-PM	●	M12 - M30	58	21	47
≤ 1200							DIN 376	H	B	ISO2/6H	HSS-E-PM	●	M12 - M30	1576	21	47
≤ 1200							DIN 376	HR15	C	ISO2/6H	HSS-E-PM	○	M12 - M20	935	23	76
≤ 1200							DIN 376	HR15	C	ISO2/6H	HSS-E-PM	●	M12 - M20	1578	23	76
≤ 1200							DIN 376	HR15	C	6HX	HSS-E-PM	●	M12 - M24	1194	23	77
≤ 1200							DIN 376	HR40	C	ISO2/6H	HSS-E	●	M3 - M30	362	25	82
≤ 1200							DIN 376	HR40	C	ISO2/6H	HSS-E	○	M3 - M30	823	25	81
≤ 1200							DIN 376	HR40	C	ISO2/6H	HSS-E	●	M3 - M30	950	25	81
≤ 1200							DIN 376	HR40	C	ISO2/6H	HSS-E	○	M12 - M20	1901	25	83
≤ 1200							DIN 376	HR40	C	ISO2/6H	HSS-E	●	M3 - M30	1917	25	82
≤ 1200							DIN 376	HR40	C	ISO2/6H	HSS-E	●	M3 - M30	2851	25	81
≤ 1200							DIN 376	HAZ	B	ISO2/6H	HSS-E	○	M12 - M16	849	21	44
≤ 1000	●						DIN 376	VA	B	ISO2/6H	HSS-E	●	M3 - M30	2870	229	236
	●						DIN 376	VA R15	C	ISO2/6H	HSS-E	●	M12 - M24	785	230	241
	●						DIN 376	VA R15	C	ISO2/6H	HSS-E	●	M12 - M24	2895	230	241
	●	●					DIN 376	VA R40	C	ISO2/6H	HSS-E	○	M12 - M30	825	231	243
	●	●	●				DIN 376	VA R40	C	ISO2/6H	HSS-E	○	M12 - M30	1899	231	243
	●	●	●				DIN 376	VA R40	C	ISO2/6H	HSS-E	●	M12 - M30	2863	231	243
	●	●	●				DIN 376	VA R40	C	ISO2/6H	HSS-E-PM	●	M12 - M24	60	231	246
	●	●	●	●			DIN 376	VA R40	C	ISO2/6H	HSS-E-PM	○	M12 - M24	910	231	246
	●	●	○	●	○		DIN 376	VA R50	C	6HX	HSS-E-PM	●	M12 - M20	763	25	75
	●	●	○	●	○		DIN 376	VA R50	C	6HX	HSS-E-PM	●	M12 - M20	1142	25	75
≤ 1000	●	●	○				DIN 376	VA AZ	B	ISO2/6H	HSS-E	○	M12 - M16	792	229	240

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
Machine taps for ISO metric threads																
			•				DIN 376	Al	B	ISO2/6H	HSS-E	○	M12 - M24	817	463	472
			•				DIN 376	Al R45	C	ISO2/6H	HSS-E	○	M3 - M24	824	464	474
			•				DIN 376	GG	C	6HX	HSS-E	●	M12 - M20	319	350	358
			•				DIN 376	GG	C	6HX	HSS-E	●	M3 - M30	819	349	356
			•				DIN 376	GG	C	6HX	HSS-E	●	M3 - M30	931	349	356
			•				DIN 376	GG	C	6HX	HSS-E	●	M12 - M20	1897	350	358
			•				DIN 376	GG	C	6HX	HSS-E	●	M3 - M30	1919	349	356
			•				~DIN 376	H	C	6HX	HSS-E	●	M16 - M39	779	23	80
≤ 1200			•		≥ 7		DIN 371/376	N	B	ISO2/6H	HSS-E-PM	●	M2 - M12	1002	229	238
•	•	○	○	○			DIN 371/376	N	B	6HX	HSS-E	●	M2 - M30	4218	21	38
•	•	○	○	○			DIN 371/376	N R15	E	ISO2/6H	HSS-E	●	M3 - M20	4155	23	48
•	•	○	○	○			DIN 371/376	N R15	C	ISO2/6H	HSS-E	●	M3 - M20	4154	23	48
•	•	○	○	○			DIN 371/376	VA R45	C	6HX	HSS-E	●	M2 - M30	393	25	71
			•				DIN 371/376	Ti R15	C	4HX	HSS-E-PM	●	MJ3 x 0.5 - M16	1061	597	605
			•				DIN 371/376	Ti R15	C	6HX	HSS-E-PM	●	M3 - M16	2909	597	604
			•				DIN 371/376	Ni R10	C	4HX	HSS-E-PM	●	MJ3 x 0.5 - M16	1065	597	605
			•				DIN 371/376	Ni R10	C	6HX	HSS-E-PM	●	M3 - M16	2920	597	604
			•				DIN 371/376	Ti Ni	B	4HX	HSS-E-PM	●	MJ3 x 0.5 - M16	1057	596	603
			•				DIN 371/376	Ti Ni	B	6HX	HSS-E-PM	●	M3 - M16	2901	596	602
			•				DIN 371/376	Ti Ni	B	6HX	HSS-E-PM	●	M3 - M16	2916	596	602
Machine taps for ISO metric fine threads																
≤ 800							DIN 2180	N R40	C	ISO2/6H	HSS-E	○	M 6 X0.75 - M12 X1.5	1970	23	106
≤ 800							DIN 374	N	C	ISO2/6H	HSS-E	○	M 3 X0.35 - M63 X1.5	830	18	100
≤ 800							DIN 374	N	C	ISO3/6G	HSS-E	○	M 3 X0.35 - M63 X1.5	829	18	100



P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
						Machine taps for ISO metric fine threads										
≤ 800							DIN 374	N	B	ISO2/6H	HSS-E	○	M 3 X0.35 - M40 X1.5	827	19	91
≤ 800							DIN 374	N	B	ISO2/6H	HSS-E	Ⓢ	M 3 X0.35 - M40 X1.5	832	19	91
≤ 1000	○						DIN 374	N	B	ISO2/6H	HSS-E	Ⓢ+Ⓜ	M 5 X0.5 - M50 X1.5	2878	20	94
≤ 1000	○						DIN 374	N	B	ISO2/6H	HSS-E	●	M 5 X0.5 - M50 X1.5	2879	20	94
≤ 800							DIN 374	N	B	ISO2/6H	HSS-E	●	M 3 X0.35 - M40 X1.5	2888	19	91
≤ 1000	●						DIN 374	N	B	ISO2/6H	HSS-E-PM	Ⓢ	M 6 X0.75 - M24 X2	1291	20	98
●	●	○	○	○	○		DIN 374	N	B	6HX	HSS-E	Ⓢ	M 6 X0.75 - M24 X1.5	4219	21	90
≤ 1000							DIN 374	N	B	6HX	VHM	●	M14 X1.25 - M16 X1.5	944	21	96
≤ 800							DIN 374	N	B	ISO3/6G	HSS-E	○	M 6 X0.75 - M20 X1.5	316	19	93
≤ 1000	○						DIN 374	N	B	ISO3/6G	HSS-E	Ⓢ	M 6 X0.75 - M20 X1.5	2993	20	93
≤ 1000	○	○					DIN 374	N R15	E	ISO2/6H	HSS-E	●	M 8 X1 - M16 X1.5	4157	23	103
≤ 800							DIN 374	N R15	C	ISO2/6H	HSS-E	○	M 4 X0.5 - M30 X2	833	22	102
≤ 800							DIN 374	N R15	C	ISO2/6H	HSS-E	○	M 5 X0.5 - M20 X1.5	1905	22	104
≤ 800							DIN 374	N R15	C	ISO2/6H	HSS-E	Ⓢ	M 4 X0.5 - M30 X2	1971	22	102
≤ 800							DIN 374	N R15	C	ISO2/6H	HSS-E	●	M 4 X0.5 - M30 X2	2838	22	102
≤ 1000	○	○					DIN 374	N R15	C	ISO2/6H	HSS-E	●	M 8 X1 - M16 X1.5	4156	23	103
		○	≥ 7				DIN 374	N R15	C	6HX	VHM	○	M12 X1.5 - M20 X1.5	978	465	493
			≥ 7				DIN 374	N L15	D	6HX	VHM	○	M12 X1.5 - M18 X1.5	976	463	495
≤ 1000	○	○	○				DIN 374	N R40	E	ISO2/6H	HSS-E	○	M 5 X0.5 - M30 X2	2792	24	107
≤ 800							DIN 374	N R40	C	ISO2/6H	HSS-E	○	M 3 X0.35 - M30 X2	834	23	105
≤ 800							DIN 374	N R40	C	ISO2/6H	HSS-E	Ⓢ	M 3 X0.35 - M30 X2	852	23	105
≤ 1000	○	○	○				DIN 374	N R40	C	ISO2/6H	HSS-E	○	M 5 X0.5 - M30 X2	2424	24	107
≤ 800							DIN 374	N R40	C	ISO2/6H	HSS-E	●	M 3 X0.35 - M30 X2	2843	23	105
≤ 1000	○	○					DIN 374	N R40	C	ISO2/6H	HSS-E	●	M 5 X0.5 - M30 X2	2853	24	107

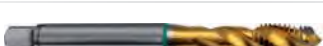
P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
						Machine taps for ISO metric fine threads										
≤ 1000	○	○					DIN 374	N R40	C	ISO2/6H	HSS-E-PM	S	M 6 X0.75 - M24 X2	1292	25	109
≤ 1000	○	○					DIN 374	N R40	C	ISO3/6G	HSS-E	S	M 8 X1 - M20 X1.5	1049	24	108
≤ 1000	○	○	○				DIN 374	N R40	C	ISO3/6G	HSS-E	○	M 8 X1 - M20 X1.5	2998	24	108
≤ 1000	○	○					DIN 374	N R40	C	ISO3/6G	HSS-E	●	M 8 X1 - M20 X1.5	2999	24	108
≤ 1000	○	○					DIN 374	N R40	C(K)	ISO2/6H	HSS-E	S	M 6 X0.75 - M24 X2	273	25	109
●	●	○	○	○			DIN 374	N R50	C	ISO2/6H	HSS-E-PM	S	M 8 X1 - M20 X1.5	1100	25	110
●	●	○	●	○			DIN 374	N R50	C	ISO2/6H	HSS-E-PM	●	M 8 X1 - M20 X1.5	1294	25	110
≤ 1200		●	≥ 7				DIN 374	H	E	6HX	HSS-E-PM	●	M 5 X0.5 - M16 X1.5	1007	23	113
		●	≥ 7				DIN 374	H	E	6HX	VHM	○	M10 X1 - M16 X1.5	1009	351	369
≤ 1200		●	≥ 7				DIN 374	H	C	6HX	HSS-E-PM	●	M 5 X0.5 - M16 X1.5	1090	23	113
		●	≥ 7				DIN 374	H	C	6HX	VHM	○	M12 X1.5 - M20 X1.5	974	351	368
		●	≥ 7				DIN 374	H	C	6HX	VHM	○	M12 X1.5 - M20 X1.5	1860	349	368
≤ 1200							DIN 374	H	B	ISO2/6H	HSS-E	○	M 3 X0.35 - M24 X1.5	828	21	97
≤ 1200							DIN 374	H	B	ISO2/6H	HSS-E	●	M 3 X0.35 - M24 X1.5	2943	21	97
≤ 1200							DIN 374	H	B	ISO3/6G	HSS-E	S	M 8 X1 - M20 X1.5	2983	21	99
≤ 1200							DIN 374	H R15	C	ISO2/6H	HSS-E-PM	○	M 6 X0.75 - M24 X1.5	874	23	112
≤ 1200							DIN 374	H R15	C	6HX	HSS-E-PM	●	M 6 X0.75 - M24 X1.5	1200	23	112
≤ 1200							DIN 374	H R40	C	ISO2/6H	HSS-E	○	M 6 X0.75 - M24 X1.5	835	25	114
≤ 1200							DIN 374	H R40	C	ISO2/6H	HSS-E	●	M 6 X0.75 - M24 X1.5	2852	25	114
≤ 1200							DIN 374	H R40	C	ISO2/6H	HSS-E	●	M 6 X0.75 - M24 X1.5	2940	25	114
≤ 1200							DIN 374	H R40	C	ISO3/6G	HSS-E	●	M 8 X1 - M20 X1.5	2988	25	116
≤ 1200							DIN 374	H R40	C	ISO3/6G	HSS-E	S	M 8 X1 - M20 X1.5	2989	25	116
≤ 1000	●						DIN 374	VA	B	ISO2/6H	HSS-E	S	M 3 X0.35 - M24 X1.5	1001	229	257
≤ 1000	●		●				DIN 374	VA	B	ISO2/6H	HSS-E	○	M 5 X0.5 - M24 X2	1873	229	256



P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
						Machine taps for ISO metric fine threads										
≤ 1000	•						DIN 374	VA	B	ISO2/6H	HSS-E	●	M 3 X0.35 - M24 X1.5	2871	229	257
≤ 1000	•						DIN 374	VA	B	ISO2/6H	HSS-E-PM	○	M 5 X0.5 - M24 X2	887	229	256
	•						DIN 374	VA R15	C	ISO2/6H	HSS-E	●	M 4 X0.5 - M24 X1.5	1874	230	249
	•						DIN 374	VA R15	C	ISO2/6H	HSS-E	● S	M 4 X0.5 - M24 X1.5	2897	230	249
	•						DIN 374	VA R40	C	ISO2/6H	HSS-E	●	M 3 X0.35 - M24 X1.5	2864	231	251
	•	•					DIN 374	VA R40	C	ISO2/6H	HSS-E-PM	○	M 8 X1 - M20 X1.5	936	231	253
	•						DIN 374	VA R40	C	ISO2/6H	HSS-E-PM	● S	M 8 X1 - M20 X1.5	1004	231	253
	•	•	○	○	○		DIN 374	VA R45	C	6HX	HSS-E	● A	M 6 X0.75 - M24 X1.5	394	25	115
	•	•	○	•	○		DIN 374	VA R50	C	6HX	HSS-E-PM	● S	M 8 X1 - M20 X1.5	764	25	111
	•	•	○	•	○		DIN 374	VA R50	C	6HX	HSS-E-PM	● C	M 8 X1 - M20 X1.5	1144	25	111
		•					DIN 374	GG	C	6HX	HSS-E	● A	M 4 X0.5 - M30 X1.5	169	349	365
		•					DIN 374	GG	C	6HX	HSS-E	● A	M 8 X1 - M24 X1.5	347	350	366
		•					DIN 374	GG	C	6HX	HSS-E	●	M 4 X0.5 - M30 X1.5	831	349	365
		•					DIN 374	GG	C	6HX	HSS-E	● S	M 4 X0.5 - M30 X1.5	932	349	365
		•					DIN 374	GG	C	6HX	HSS-E	●	M 8 X1 - M24 X1.5	1904	350	366
		○	≥ 7				DIN 371	N R15	C	6HX	VHM	○	M 4 X0.5 - M10 X1	977	465	493
			≥ 7				DIN 371	N R15	C	6HX	VHM	● M	M 5 - M10	2516	-	494
			≥ 7				DIN 371	N L15	D	6HX	VHM	○	M 4 X0.5 - M10 X1	975	463	495
		•	≥ 7				DIN 371	H	C	6HX	VHM	○	M 5 X0.5 - M10 X1	972	351	368
		•	≥ 7				DIN 371	H	C	6HX	VHM	○	M 5 X0.5 - M10 X1	1861	349	368
				45-55			DIN 371	H	D	6HX	HSS-E-PM	● C	M 8 X1 - M12 X1.5	4161	676	682
			•				DIN 371	Ti R15	C	4HX	HSS-E-PM	● C	MJ 6 X0.5 - MJ10 X1.25	1062	597	609
			•				DIN 371	Ti R15	C	6HX	HSS-E-PM	● C	M 3 X0.35 - M10 X1.25	2910	597	608
			•				DIN 371	Ni R10	C(K)	4HX	HSS-E-PM	● A	MJ 6 X0.5 - MJ10 X1.25	1066	597	609

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
							DIN 371	Ni R10	C(K)	6HX	HSS-E-PM	A	M 3 X0.35 - M10 X1.25	2921	597	608
							DIN 371	Ti Ni	B	4HX	HSS-E-PM	C	MJ 6 X0.5 - MJ10 X1.25	1058	596	607
							DIN 371	Ti Ni	B	6HX	HSS-E-PM	C	M 3 X0.35 - M10 X1.25	2903	596	606
							DIN 371	Ti Ni	B	6HX	HSS-E-PM	A	M 3 X0.35 - M10 X1.25	2917	596	606
≤ 1000							~DIN 371	N	B	6HX	VHM	C	M 5 X0.5 - M12 X1.5	943	21	95
					≤ 62		~DIN 371	H	D	ISO2/6H	VHM	C	M 6 X0.5 - M12 X1.5	1161	676	683

Machine taps for UNC-threads

≤ 800							~DIN 371	N	C	2B	HSS-E	○	3 - 48 - 3/8 - 16	1977	18	121
≤ 800							~DIN 371	N	B	2B	HSS-E	○	1 - 64 - 3/8 - 16	873	19	117
≤ 1000							~DIN 371	N	B	2B	HSS-E	○	4 - 40 - 3/8 - 16	1980	229	258
≤ 1000							~DIN 371	N	B	2B	HSS-E	●	4 - 40 - 3/8 - 16	2881	20	118
≤ 800							~DIN 371	N	B	2B	HSS-E	●	1 - 64 - 3/8 - 16	2889	19	117
≤ 800							~DIN 371	N R15	C	2B	HSS-E	○	4 - 40 - 3/8 - 16	1978	22	119
≤ 800							~DIN 371	N R15	C	2B	HSS-E	●	4 - 40 - 10 - 24	2839	22	120
≤ 800							~DIN 371	N R40	C	2B	HSS-E	○	2 - 56 - 3/8 - 16	876	23	122
≤ 1000							~DIN 371	N R40	C	2B	HSS-E	●	10 - 24 - 3/8 - 16	1837	25	124
≤ 800							~DIN 371	N R40	C	2B	HSS-E	●	2 - 56 - 3/8 - 16	2844	23	122
≤ 1000							~DIN 371	N R40	C	2B	HSS-E	○	2 - 56 - 3/8 - 16	2854	24	123
≤ 1000							~DIN 371	N R40	C	2B	HSS-E	●	2 - 56 - 3/8 - 16	2855	24	123
≤ 1000							~DIN 371	VA	B	2B	HSS-E	●	4 - 40 - 3/8 - 16	2872	229	258
							~DIN 371	VA R40	C	2B	HSS-E	○	2 - 56 - 3/8 - 16	1981	231	259
							~DIN 371	VA R40	C	2B	HSS-E	●	2 - 56 - 3/8 - 16	2865	231	259
							~DIN 371	GG	C	2B	HSS-E	A	10 - 24 - 3/8 - 16	1085	350	371
							~DIN 371	GG	C	2B	HSS-E	●	2 - 56 - 3/8 - 16	1979	349	370



P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
							~DIN 371	Ti Ni	B	2BX	HSS-E-PM	C	6 - 32 - 3/8 - 16	2905	596	610
							~DIN 371	Ti Ni	B	2BX	HSS-E-PM	A	6 - 32 - 3/8 - 16	2918	596	610
≤ 800							~DIN 376	N	B	2B	HSS-E	○	7/16 - 14 - 1 1/2 - 6	878	19	117
≤ 1000	•						~DIN 376	N	B	2B	HSS-E	○	1/2 - 13 - 1 - 8	1985	229	258
≤ 1000	○						~DIN 376	N	B	2B	HSS-E	●	7/16 - 14 - 1 - 8	2883	20	118
≤ 800							~DIN 376	N	B	2B	HSS-E	●	7/16 - 14 - 1 1/2 - 6	2890	19	117
≤ 800							~DIN 376	N R15	C	2B	HSS-E	●	1/2 - 13 - 1 - 8	2840	22	120
≤ 800							~DIN 376	N R40	C	2B	HSS-E	○	7/16 - 14 - 1 - 8	881	23	122
≤ 800							~DIN 376	N R40	C	2B	HSS-E	●	7/16 - 14 - 1 - 8	2845	23	122
≤ 1000	○	○	○				~DIN 376	N R40	C	2B	HSS-E	○	7/16 - 14 - 1 - 8	2856	24	123
≤ 1000	○	○					~DIN 376	N R40	C	2B	HSS-E	●	7/16 - 14 - 1 - 8	2857	24	123
≤ 1000	•						~DIN 376	VA	B	2B	HSS-E	●	1/2 - 13 - 1 - 8	2873	229	258
	•						~DIN 376	VA R40	C	2B	HSS-E	○	7/16 - 14 - 7/8 - 9	1986	231	259
	•						~DIN 376	VA R40	C	2B	HSS-E	●	7/16 - 14 - 7/8 - 9	2866	231	259
		•					~DIN 376	GG	C	2B	HSS-E	A	7/16 - 14 - 7/8 - 9	1086	350	371
		•					~DIN 376	GG	C	2B	HSS-E	●	7/16 - 14 - 3/4 - 10	1984	349	370
			•				~DIN 371/376	Ti R15	C	2BX	HSS-E-PM	C	4 - 40 - 5/8 - 11	2912	597	612
			•				~DIN 371/376	Ti R15	C	3BX	HSS-E-PM	C	6 - 32 - 5/8 - 11	1063	597	613
			•				~DIN 371/376	Ni R10	C	2BX	HSS-E-PM	A	4 - 40 - 5/8 - 11	2922	597	612
			•				~DIN 371/376	Ni R10	C	3BX	HSS-E-PM	A	6 - 32 - 5/8 - 11	1067	597	613
			•				~DIN 371/376	Ti Ni	B	3BX	HSS-E-PM	C	6 - 32 - 5/8 - 11	1059	596	611

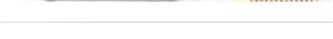
Machine taps for UNF-threads

≤ 800							~DIN 374	N	C	2B	HSS-E	○	3 - 56 - 1 - 12	1987	18	126
≤ 800							~DIN 374	N	B	2B	HSS-E	○	3 - 56 - 1 1/4 - 12	908	18	125

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
Machine taps for UNF-threads																
≤ 1000	•	•					~DIN 374	N	B	2B	HSS-E	○	10 - 32 - 3/8 - 24	1990	229	260
≤ 1000	○						~DIN 374	N	B	2B	HSS-E	●	6 - 40 - 1 - 12	2885	20	130
≤ 800							~DIN 374	N	B	2B	HSS-E	●	3 - 56 - 1 1/4 - 12	2891	19	125
≤ 800							~DIN 374	NR15	C	2B	HSS-E	○	3 - 56 - 1 - 12	1988	22	127
≤ 800							~DIN 374	NR15	C	2B	HSS-E	●	3 - 56 - 1 - 12	2841	22	127
≤ 800							~DIN 374	NR40	C	2B	HSS-E	○	3 - 56 - 1 - 12	911	23	128
≤ 1000	○	○					~DIN 374	NR40	C	2B	HSS-E	●	10 - 32 - 1 - 12	1838	25	131
≤ 800							~DIN 374	NR40	C	2B	HSS-E	●	3 - 56 - 1 - 12	2846	23	128
≤ 1000	○	○					~DIN 374	NR40	C	2B	HSS-E	●	10 - 32 - 7/8 - 14	2859	24	129
≤ 1000	•						~DIN 374	VA	B	2B	HSS-E	●	4 - 48 - 1 - 12	2874	229	260
	•						~DIN 374	VAR15	C	2B	HSS-E	●	5 - 44 - 1 - 12	1991	230	261
	•						~DIN 374	VAR15	C	2B	HSS-E	●	5 - 44 - 1 - 12	2898	230	261
	•	•					~DIN 374	VAR40	C	2B	HSS-E	○	1/4 - 28 - 1 - 12	2867	231	262
	•						~DIN 374	VAR40	C	2B	HSS-E	●	10 - 32 - 1 - 12	2868	231	262
		•					~DIN 374	GG	C	2B	HSS-E	●	10 - 32 - 7/8 - 14	1082	350	373
		•					~DIN 374	GG	C	2B	HSS-E	●	4 - 48 - 1 - 12	1989	349	372
			•				~DIN 371	Ti Ni	B	2BX	HSS-E-PM	●	6 - 40 - 3/8 - 24	2919	596	614
			•				~DIN 371-374	Ti R15	C	2BX	HSS-E-PM	●	4 - 48 - 5/8 - 18	2914	597	617
			•				~DIN 371-374	Ti R15	C	3BX	HSS-E-PM	●	6 - 40 - 5/8 - 18	1064	597	618
			•				~DIN 371-374	Ni R10	C	2BX	HSS-E-PM	●	4 - 48 - 5/8 - 18	2923	597	616
			•				~DIN 371-374	Ni R10	C	3BX	HSS-E-PM	●	6 - 40 - 5/8 - 18	1068	597	618
			•				~DIN 371-374	Ti Ni	B	3BX	HSS-E-PM	●	6 - 40 - 5/8 - 18	1060	596	615
	•						DIN 5156	GG	C		HSS-E	●	G1/16 - G2	961	349	374



P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
Machine taps for BSP-threads																
≤ 800							DIN 5156	N	C		HSS-E	○	G 1/16 - G2	963	18	133
≤ 800							DIN 5156	N	B		HSS-E	○	G 1/16 - G2	962	19	132
≤ 1000	•		•				DIN 5156	N	B		HSS-E	○	G 1/16 - G1	967	229	263
≤ 1000	○						DIN 5156	N	B		HSS-E	● A	G 1/8 - G2	2886	20	140
≤ 1000	○						DIN 5156	N	B		HSS-E	●	G 1/8 - G2	2887	20	140
≤ 800							DIN 5156	N	B		HSS-E	●	G 1/16 - G2	2894	19	132
•	•	•	○	○	○		DIN 5156	N	B		HSS-E	● S	G 1/16 - G1	4220	21	134
≤ 1000	○	○					DIN 5156	NR15	E		HSS-E	● C	G 1/16 - G1	4158	23	135
≤ 800							DIN 5156	NR15	C		HSS-E	○	G 1/16 - G1	964	22	135
≤ 800							DIN 5156	NR15	C		HSS-E	●	G 1/16 - G1	2842	22	135
≤ 1000	○	○					DIN 5156	NR40	C		HSS-E	● S	G 1/8 - G1	937	25	141
≤ 800							DIN 5156	NR40	C		HSS-E	○	G 1/16 - G1 1/2	965	23	136
≤ 800							DIN 5156	NR40	C		HSS-E	●	G 1/16 - G1 1/2	2849	23	136
≤ 1000	○	○	○				DIN 5156	NR40	C		HSS-E	○	G 1/8 - G2	2860	24	137
≤ 1000	○	○					DIN 5156	NR40	C		HSS-E	●	G 1/8 - G2	2861	24	137
≤ 1000	•						DIN 5156	VA	B		HSS-E	●	G 1/16 - G1	2875	229	263
•							DIN 5156	VA R40	C		HSS-E	●	G 1/16 - G1 1/2	968	231	265
•	•	•					DIN 5156	VA R40	C		HSS-E-PM	○	G 1/16 - G1 1/2	939	231	265
•	•	○	○	○	○		DIN 5156	VA R45	C		HSS-E	● A	G 1/16 - G1	395	25	139
•	•	○	•	○			DIN 5156	VA R50	C		HSS-E-PM	● S	G 1/16 - G1 1/2	4159	25	138
Machine taps for BSW-threads																
≤ 800							~DIN 371	N	B		HSS-E	●	W 1/8 - W 3/8	2892	19	142
≤ 800							~DIN 371	NR40	C		HSS-E	●	W 1/8 - W 3/8	2847	23	143
≤ 800							~DIN 376	N	B		HSS-E	●	W 7/16 - W1	2893	19	142

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
Machine taps for BSW-threads																
≤ 800							~DIN 376	N R40	C		HSS-E	○	W 3/8 - W1	2848	23	143
Machine taps for EG-threads																
≤ 1000	○						DIN 40435	N	B		HSS-E	Ⓢ	EG M 4 - EG M16	1010	20	144
≤ 1000	○	○					DIN 40435	N R40	C		HSS-E	Ⓢ	EG M 4 - EG M16	1011	24	145
Machine taps for NPT-threads																
≤ 800							WN	N	C		HSS-E	○	1/16 - 2	973	18	146
	●	○	○				WN	N	C		HSS-E	○	1/16 - 1	1087	230	268
	●	○	○				WN	N	C		HSS-E	Ⓢ	1/16 - 1	1088	230	268
Machine taps for NPTF-threads																
	●	○	○				WN	N	C		HSS-E	Ⓢ	1/16 - 1	4127	230	269
Machine taps for PG-threads																
≤ 800							DIN 40432	N	C		HSS-E	○	PG7 - PG29	979	18	147
≤ 800							DIN 40432	N	B		HSS-E	○	PG7 - PG29	980	19	147
Fluteless machine taps for ISO metric threads																
	●	●	○	○			~DIN 371	N	C	6HX	HSS-E-PM	Ⓢ	M 3 - M10	322	27	154
	●	●	○	○			~DIN 371	N	C	6HX	HSS-E-PM	Ⓢ	M 5 - M10	323	27	158
	●	●	○	○			~DIN 376	N	C	6HX	HSS-E-PM	Ⓢ	M12 - M16	339	27	154
	●	●	○	○			~DIN 376	N	C	6HX	HSS-E-PM	Ⓢ	M12 - M16	342	27	158
	●	●	○	○			~DIN 371	N	C	6HX	HSS-E	Ⓢ	M 3 - M10	919	26	152
	●	●	○	○			~DIN 371	N	C	6HX	HSS-E-PM	Ⓢ	M 3 - M10	1266	27	155
	●	●	○	○			~DIN 371	N	C	6GX	HSS-E	Ⓢ	M 3 - M10	918	26	153
	●	●	○	○			~DIN 371	N	C	6HX	HSS-E-PM	Ⓢ	M 1 - M10	1255	26	149
	●	●	○	○			~DIN 371	N	C	6GX	HSS-E-PM	Ⓢ	M 1 - M10	903	26	149
	●	●	○	○			~DIN 371	N	C	6GX	HSS-E	Ⓢ	M 2 - M10	920	26	150
	●	●	○	○			~DIN 371	N	C	6HX	HSS-E	Ⓢ	M 1 - M10	921	26	149



P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
•	•	•	•	•	•		~DIN 376	N	C	6HX	HSS-E	S	M 6 - M39	923	26	152
•	•	•	•	•	•		~DIN 376	N	C	6GX	HSS-E	S	M 6 - M39	922	26	153
•	•	•	•	•	•		~DIN 376	N	C	6HX	HSS-E	S	M 12 - M20	925	26	149
•	•	•	•	•	•		~DIN 376	N	C	6HX	HSS-E-PM	S	M 12 - M20	1256	26	149
•	•	•	•	•	•		~DIN 376	N	C	6GX	HSS-E-PM	S	M 12 - M20	952	26	149
•	•	•	•	•	•		~DIN 376	N	C	6HX	HSS-E-PM	S	M 12 - M20	1267	27	155
•	•	•	•	•	•		~DIN 371	N	C	6HX	HSS-E-PM	C	M 3 - M10	1270	27	159
•	•	•	•	•	•		~DIN 371	N	C	6GX	HSS-E-PM	C	M 5 - M10	1713	27	160
•	•	•	•	•	•		~DIN 376	N	C	6HX	HSS-E-PM	C	M 12 - M20	1271	27	159
•	•	•	•	•	•		~DIN 371	N	C	6HX	HSS-E-PM	Cb	M 1 - M10	1347	466	506
•	•	•	•	•	•		~DIN 371	N	C	6GX	HSS-E-PM	Cb	M 2 - M10	1565	466	508
•	•	•	•	•	•		~DIN 376	N	C	6HX	HSS-E-PM	Cb	M 12 - M20	1566	466	506
•	•	•	•	•	•		~DIN 376	N	C	6GX	HSS-E-PM	Cb	M 12 - M20	1567	466	508
•	•	•	•	•	•		~DIN 376	N	C	6HX	VHM	C	M 12 - M20	1931	27	163
•	•	•	•	•	•		~DIN 371	N	C	6HX	HSS-E	P	M 3 - M10	1587	26	152
•	•	•	•	•	•		~DIN 371	N	C	6HX	HSS-E-PM	P	M 3 - M10	1599	27	155
•	•	•	•	•	•		~DIN 371	N	C	6GX	HSS-E	P	M 3 - M10	1588	26	153
•	•	•	•	•	•		~DIN 371	N	C	6GX	HSS-E-PM	P	M 3 - M10	1705	27	153
•	•	•	•	•	•		~DIN 376	N	C	6HX	HSS-E	P	M 6 - M39	1589	26	152
•	•	•	•	•	•		~DIN 376	N	C	6HX	HSS-E-PM	P	M 12 - M20	1707	27	155
•	•	•	•	•	•		~DIN 376	N	C	6GX	HSS-E	P	M 6 - M20	1590	26	153
•	•	•	•	•	•		~DIN 376	N	C	6GX	HSS-E-PM	P	M 6 - M20	1708	27	153
•	•	•	•	•	•		~DIN 371	N	C	6HX	HSS-E-PM	A	M 3 - M10	1717	27	159
•	•	•	•	•	•		~DIN 371	N	C	6GX	HSS-E-PM	A	M 3 - M10	1718	27	161

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
•	•		•				~DIN 376	N	C	6HX	HSS-E-PM	A	M12 - M20	1719	27	159
•	•		•				~DIN 376	N	C	6GX	HSS-E-PM	A	M12 - M20	1720	27	161
•	•	○	○				~DIN 371	N	C	6HX	HSS-E	S	M 5 - M10	2442	27	156
•	•	○	○				~DIN 371	N	C	6GX	HSS-E	S	M 5 - M10	2443	27	156
•	•	○	○				~DIN 371	N	E	6HX	HSS-E-PM	S	M 3 - M10	1725	27	159
•	•	○	○				~DIN 371	N	E	6GX	HSS-E-PM	S	M 3 - M10	1726	27	161
•	•	○	○				~DIN 376	N	C	6HX	HSS-E	S	M12 - M16	2444	27	156
•	•	○	○				~DIN 376	N	C	6GX	HSS-E	S	M12 - M16	2445	27	156
•	•	○	○				~DIN 376	N	E	6HX	HSS-E-PM	S	M12 - M20	1727	27	159
•	•	○	○				~DIN 376	N	E	6GX	HSS-E-PM	S	M12 - M20	1728	27	161
•	•	≥7	•				~DIN 371	N	E	6HX	VHM	C	M 3 - M10	1927	27	164
•	•	≥7	•				~DIN 371	N	C	6HX	VHM	C	M 3 - M10	1972	27	163
•	•	≥7	○				~DIN 376	N	C	6HX	HSS-E	C	M 6 - M39	2013	26	152
•	•	≥7	○				~DIN 371	N	C	6HX	HSS-E	C	M 3 - M10	2012	26	152
•	•	≥7	○				~DIN 371	N	C	6HX	HSS-E	C	M 5 - M10	2446	27	156
•	•	≥7	○				~DIN 371	N	C	6GX	HSS-E	C	M 5 - M10	2447	27	157
•	•	≥7	○				~DIN 376	N	C	6HX	HSS-E	C	M12 - M16	2448	27	156
		•					~DIN 371/376	N	C	6HX	HSS-E	Cb	M 5 - M20	2515	467	517
•	•	≥7	○				~DIN 371/376	N	C	6HX	VHM	S	M 5 - M16	2518	26	151
•	•	○	○					N	C	6HX	HSS-E-PM	S	M 3 - M20	4143	27	162
		•					~DIN 371/376	N	C	6GX	HSS-E	Cb	M 5 - M20	4146	467	520

Fluteless machine taps for ISO metric fine threads

•	•	○	○				~DIN 374	N	C	6HX	HSS-E-PM	S	M 8 X1 - M20 X1.5	333	27	173
•	•	○	○				~DIN 374	N	C	6HX	HSS-E-PM	S	M 8 X1 - M16 X1.5	338	27	177



P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
•	•		○	○			~DIN 371	N	C	6HX	HSS-E	S	M 6 X0.75 - M10 X1.25	1275	26	169
•	•		○	○			~DIN 371	N	C	6GX	HSS-E	S	M 8 X1 - M10 X1	1277	26	172
•	•		○				~DIN 371	N	C	6HX	HSS-E-PM	S	M 8 X1 - M10 X1	1257	26	166
•	•		○				~DIN 371	N	C	6GX	HSS-E-PM	S	M 8 X1 - M10 X1.25	1740	26	167
•	•		○	○			~DIN 374	N	C	6HX	HSS-E	S	M 6 X0.75 - M24 X1.5	927	26	169
•	•		○	○			~DIN 374	N	C	6GX	HSS-E	S	M 8 X1 - M20 X1.5	926	26	172
•	•		○				~DIN 374	N	C	6HX	HSS-E	S	M 8 X1 - M20 X1.5	929	26	165
•	•		○				~DIN 374	N	C	6HX	HSS-E-PM	S	M12 X1 - M24 X2	1258	26	166
•	•		○				~DIN 374	N	C	6GX	HSS-E	S	M 8 X1 - M18 X1.5	928	26	168
•	•		○	○			~DIN 374	N	C	6HX	HSS-E-PM	S	M12 X1.25 - M24 X2	1269	27	174
•	•		○	○			~DIN 371	N	C	6HX	HSS-E-PM	S	M 8 X1 - M10 X1	1268	27	174
•	•		≥7	•			~DIN 371	N	C	6HX	HSS-E-PM	C	M 8 X1 - M10 X1.25	1272	27	178
•	•		≥7	•			~DIN 371	N	C	6GX	HSS-E-PM	C	M 8 X1 - M10 X1.25	1715	27	179
•	•		≥7	•			~DIN 374	N	C	6HX	HSS-E-PM	C	M12 X1 - M24 X1.5	1273	27	178
			•				~DIN 371	N	C	6HX	HSS-E-PM	Cb	M 8 X1 - M10 X1	1568	466	526
			•				~DIN 371	N	C	6GX	HSS-E-PM	Cb	M 8 X1 - M10 X1	1569	466	529
			•				~DIN 374	N	C	6GX	HSS-E-PM	Cb	M12 X1 - M24 X1.5	1580	466	529
•	•		≥7	•			~DIN 371/376	N	C	6HX	VHM	C	M10 X1 - M24 X1.5	1581	27	181
•							~DIN 374	N	C	6HX	HSS-E	P	M 6 X0.75 - M24 X1.5	1593	26	169
•							~DIN 374	N	C	6HX	HSS-E-PM	P	M12 X1 - M24 X1.5	1711	27	175
•							~DIN 374	N	C	6GX	HSS-E-PM	P	M12 X1 - M24 X1.5	1712	27	176
•							~DIN 371	N	C	6HX	HSS-E	P	M 6 X0.75 - M10 X1.25	1591	26	169
•							~DIN 371	N	C	6GX	HSS-E	P	M 8 X1 - M10 X1	1592	26	171
•							~DIN 371	N	C	6GX	HSS-E-PM	P	M 8 X1 - M10 X1	1710	27	176

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
Fluteless machine taps for ISO metric fine threads																
•	•	•	•	•	•		~DIN 374	N	C	6GX	HSS-E-PM	C	M12 X1 - M24 X1.5	1716	27	179
•	•	•	•	•	•		~DIN 371	N	C	6HX	HSS-E-PM	A	M 8 X1 - M10 X1.25	1721	27	178
•	•	•	•	•	•		~DIN 374	N	C	6HX	HSS-E-PM	A	M12 X1 - M24 X1.5	1723	27	178
•	•	•	•	•	•		~DIN 371	N	E	6HX	HSS-E-PM	S	M 8 X1 - M10 X1.25	1729	27	178
•	•	•	•	•	•		~DIN 371	N	E	6GX	HSS-E-PM	S	M 8 X1 - M10 X1.25	1730	27	179
•	•	•	•	•	•		~DIN 374	N	E	6HX	HSS-E-PM	S	M12 X1 - M24 X1.5	1731	27	178
•	•	•	•	•	•		~DIN 374	N	E	6GX	HSS-E-PM	S	M12 X1 - M24 X1.5	1732	27	179
•	•	•	•	•	•		~DIN 374	N	C	6HX	HSS-E	C	M 6 X0.75 - M20 X1.5	2008	26	170
•	•	•	•	•	•			N	C	6HX	HSS-E-PM	S	M 8 X1 - M16 X1.5	4145	27	180
•	•	•	•	•	•		~DIN 371-374	N	C	6HX	HSS-E	Cb	M 8 X1 - M16 X1.5	4147	467	537
•	•	•	•	•	•		~DIN 371-374	N	C	6GX	HSS-E	Cb	M 8 X1 - M16 X1.5	4151	467	539
Fluteless machine taps for UNC-threads																
•	•	•	•	•	•		~DIN 371	N	C	2BX	HSS-E	S	4 - 40 - 3/8 - 16	1582	26	182
•	•	•	•	•	•		~DIN 371	N	C	2BX	HSS-E	S	4 - 40 - 3/8 - 16	2273	26	182
•	•	•	•	•	•		~DIN 376	N	C	2BX	HSS-E	S	7/16 - 14 - 7/8 - 9	1583	26	182
•	•	•	•	•	•		~DIN 376	N	C	2BX	HSS-E	S	7/16 - 14 - 7/8 - 9	2274	26	182
Fluteless machine taps for UNF-threads																
•	•	•	•	•	•		~DIN 374	N	C	2BX	HSS-E	S	10 - 32 - 1 - 12	1585	26	183
•	•	•	•	•	•		~DIN 374	N	C	2BX	HSS-E	S	10 - 32 - 1 - 12	2275	26	183
•	•	•	•	•	•		~DIN 371	N	C	2BX	HSS-E	S	4 - 48 - 3/8 - 24	1283	26	183
•	•	•	•	•	•		~DIN 371	N	C	2BX	HSS-E	S	4 - 48 - 3/8 - 24	1584	26	183
Fluteless machine taps for BSP-threads																
•	•	•	•	•	•		DIN 2189	N	C		HSS-E	S	G 1/16 - G1 1/4	966	26	184
•	•	•	•	•	•		DIN 2189	N	C		HSS-E	S	G 1/16 - G 3/4	1586	26	184
•	•	•	•	•	•		DIN 2189	N	C		HSS-E	Cb	G 1/16 - G1	4152	467	546

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page

Thread milling cutters without chamfer for ISO metric threads

○	○	●	●				WN	TM SP			VHM	○	M 6 - M20 X1.5	3734	468	548
●	○	●	●	○	≤55		WN	TM SP			VHM	●	M 6 - M20	3735	28	187
●	○	●	●	○	≤55		WN	TM SP			VHM	●	M 6 - M20 X1.5	3737	28	186
●	○	●	●	○	≤55		WN	TM SP			VHM	●	M 6 - M20	3740	28	187
●	○	●	●	○	≤55		WN	TM SP			VHM	●	M 6 - M20 X1.5	3743	28	186
●	○	●	●	○	≤55		WN	TM SP			VHM	●	M 6 - M20	4132	28	186
●	○	●	●	○	≤55		WN	TM SP			VHM	●	M 6 - M20	4133	28	186
○	○	●	●	○			WN	TMC SP			VHM	○	M 3 - M20	3510	469	551
○	○	●	●	○			WN	TMC SP			VHM	○	M 3 - M20	3511	469	552
●	●	●	●	●	≤55		WN	TMC SP			VHM	●	M 3 - M20	3525	28	188
●	●	●	●	●	≤55		WN	TMC SP			VHM	●	M 3 - M20	3526	29	189
●	●	●	●	●	≤55		WN	TMC SP			VHM	●	M 3 - M20	3543	28	188
●	●	●	●	●	≤55		WN	TMC SP			VHM	●	M 3 - M20	3544	29	189
●	●	●	●	●	≤55		WN	TMC SP			VHM	●	M 3 - M20	3759	29	190
●	●	●	●	●	≤55		WN	TMC SP			VHM	●	M 3 - M20	3760	29	190

Thread milling cutters with chamfer for ISO metric fine threads

○	○	●	●	○			WN	TMC SP			VHM	○	M 4 X0.5 - M16 X1.5	3512	469	554
○	○	●	●				WN	TMC SP			VHM	○	M 4 X0.5 - M16 X1.5	3513	469	555
●	●	●	●	●	≤55		WN	TMC SP			VHM	●	M 4 X0.5 - M16 X1.5	3527	28	191
●	●	●	●	●	≤55		WN	TMC SP			VHM	●	M 4 X0.5 - M16 X1.5	3528	29	192
●	●	●	●	●	≤55		WN	TMC SP			VHM	●	M 4 X0.5 - M16 X1.5	3545	28	191
●	●	●	●	●	≤55		WN	TMC SP			VHM	●	M 4 X0.5 - M16 X1.5	3546	29	192
●	●	●	●	●	≤55		WN	TMC SP			VHM	●	M 4 X0.5 - M16 X1.5	3762	29	193
●	●	●	●	●	≤55		WN	TMC SP			VHM	●	M 4 X0.5 - M16 X1.5	3763	29	193

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
•	○	•	•	○	≤55		WN	TMC SP			VHM	C	10 - 24 - 5/8 - 11	4134	28	194
•	○	•	•	○	≤55		WN	TMC SP			VHM	C	10 - 24 - 5/8 - 11	4135	28	194
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/4 - 20 - 1/2 - 13	3516	28	195
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/4 - 20 - 1/2 - 13	3517	29	196
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/4 - 20 - 1/2 - 13	3534	28	195
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/4 - 20 - 1/2 - 13	3535	29	196

Thread milling cutters without chamfer for UNF-threads

•	○	•	•	○	≤55		WN	TMC SP			VHM	C	10 - 32 - 5/8 - 18	4136	28	197
•	○	•	•	○	≤55		WN	TMC SP			VHM	C	10 - 32 - 5/8 - 18	4137	28	197
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/4 - 28 - 1/2 - 20	3518	28	198
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/4 - 28 - 1/2 - 20	3519	29	199
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/4 - 28 - 1/2 - 20	3536	28	198
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/4 - 28 - 1/2 - 20	3537	29	199

Thread milling cutters without chamfer for BSP-threads

•	○	•	•	○	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3745	28	200
•	○	•	•	○	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3746	28	201
•	○	•	•	○	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3748	28	200
•	○	•	•	○	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3750	28	201
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3514	28	202
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3515	29	203
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3529	28	202
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3533	29	203
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3765	29	204
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3766	29	204

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
Thread milling cutters without chamfer for NPT-threads																
•	•	•	•	•	≤55		WN	TM SP			VHM	C	1/16 - 3/8	3753	28	205
•	•	•	•	•	≤55		WN	TM SP			VHM	C	1/16 - 3/8	3754	28	205
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/8 - 3/8	3520	28	206
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/8 - 3/8	3538	28	206
Thread milling cutters without chamfer for NPTF-threads																
•	•	•	•	•	≤55		WN	TM SP			VHM	C	1/16 - 3/8	3756	28	207
•	•	•	•	•	≤55		WN	TM SP			VHM	C	1/16 - 3/8	3757	28	207
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/8 - 3/8	3521	28	208
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/8 - 3/8	3539	28	208
Universal thread milling cutters for BSP-threads																
○	○	•	•	○			WN	TM SP	BSP		VHM	○	≥ 1/4 - ≥ 1	3524	470	575
•	•	•	•	•	≤55		WN	TM SP	BSP		VHM	C	≥ 1/4 - ≥ 1	3542	29	212
•	•	•	•	•	≤55		WN	TM SP	BSP		VHM	C	≥ 1/4 - ≥ 1	3557	29	212
•	•	•	•	•	≤55		WN	TM SP	NPT		VHM	C	≥ 1/2 - ≥ 1	3768	69	213
•	•	•	•	•	≤55		WN	TM SP	NPT		VHM	C	≥ 1/2 - ≥ 1	3769	69	213
•	•	•	•	•	≤55		WN	TM SP	NPTF		VHM	C	≥ 1/2 - ≥ 1	3772	29	214
•	•	•	•	•	≤55		WN	TM SP	NPTF		VHM	C	≥ 1/2 - ≥ 1	3773	29	214
○	○	•	•	○			WN	TMU SP	M		VHM	○	≥ 10 - ≥ 30	3523	470	572
•	•	•	•	•	≤55		WN	TMU SP	M		VHM	C	≥ 10 - ≥ 30	3541	29	209
•	•	•	•	•	≤55		WN	TMU SP	M		VHM	C	≥ 10 - ≥ 30	3556	29	209
•	•	•	•	•	≤55		WN	TMU SP	M		VHM	C	≥ 3 - ≥ 24	4162	29	210
•	•	•	•	•	≤55		WN	TMU SP	M		VHM	C	≥ 3 - ≥ 24	4163	29	210
•	•	•	•	•	≤55		WN	TMU UN	UN		VHM	C	≥ 1/2 - ≥ 1	3595	29	211
•	•	•	•	•	≤55		WN	TMU UN	UN		VHM	C	≥ 1/2 - ≥ 1	3596	29	211

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
•	•	•	•	•	•		WN	SP G	BSP		VHM	C	G 1/8 - G2	4228	29	216
•	•	•	•	•	•		WN	SP M	M		VHM	C	M 1.6 - M16	4226	29	215
•	•	•	•	•	•		WN	SP M	M		VHM	A	M 2 - M12	4227	679	703
•	•	•	•	•	•		WN	SP M/MF	M		VHM	C	M1.4 - M1.8 - M8 - M10	4225	29	217

Drill thread milling cutters for ISO metric threads

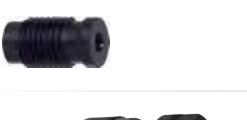
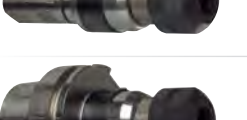
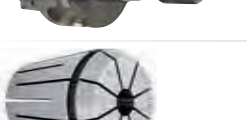
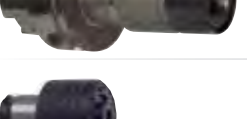
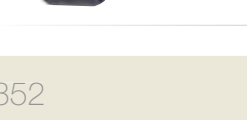
•	•	•	•	•	•		WN	DTMC SP	M		VHM	○	M3 - M16	3774	471	581
•	•	•	•	•	•		WN	DTMC SP	M		VHM	○	M3 - M16	3775	471	581
•	•	•	•	•	•		WN	DTMC SP	M		VHM	C	M3 - M16	3776	471	581
•	•	•	•	•	•		WN	DTMC SP	M		VHM	C	M3 - M16	3777	471	581
•	•	•	•	•	•		WN	DTMC SP	M		VHM	○	M3 - M16	3778	471	582
•	•	•	•	•	•		WN	DTMC SP	M		VHM	○	M3 - M16	3779	471	582
•	•	•	•	•	•		WN	DTMC SP	M		VHM	C	M3 - M16	3780	471	582
•	•	•	•	•	•		WN	DTMC SP	M		VHM	C	M3 - M16	3781	471	582
•	•	•	•	•	•		WN	DTMC SP	M		VHM	○	M3 - M16	3782	471	583
•	•	•	•	•	•		WN	DTMC SP	M		VHM	○	M3 - M16	3783	471	583
•	•	•	•	•	•		WN	DTMC SP	M		VHM	C	M3 - M16	3784	471	583
•	•	•	•	•	•		WN	DTMC SP	M		VHM	C	M3 - M16	3785	471	583
•	•	•	•	•	•		WN	DTMC SP	MF		VHM	○	M4 x 0.5 - M16 x 1.5	3787	471	584
•	•	•	•	•	•		WN	DTMC SP	MF		VHM	C	M4 x 0.5 - M16 x 1.5	3788	471	584
•	•	•	•	•	•		WN	DTMC SP	MF		VHM	C	M4 x 0.5 - M16 x 1.5	3789	471	584
•	•	•	•	•	•		WN	DTMC SP	MF		VHM	○	M4 x 0.5 - M16 x 1.5	3790	471	585
•	•	•	•	•	•		WN	DTMC SP	MF		VHM	○	M4 x 0.5 - M16 x 1.5	3791	471	585
•	•	•	•	•	•		WN	DTMC SP	MF		VHM	C	M4 x 0.5 - M16 x 1.5	3792	471	585
•	•	•	•	•	•		WN	DTMC SP	MF		VHM	C	M4 x 0.5 - M16 x 1.5	3793	471	585

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
Drill thread milling cutters for ISO metric threads																
	•	•					WN	DTMC SP	UNC		VHM	○	1/4 - 20 - 5/8 - 11	4138	471	586
	•	•					WN	DTMC SP	UNC		VHM	●	1/4 - 20 - 5/8 - 11	4139	471	586
	•	•					WN	DTMC SP	UNF		VHM	○	1/4 - 28 - 5/8 - 18	4140	471	587
	•	•					WN	DTMC SP	UNF		VHM	●	1/4 - 28 - 5/8 - 18	4141	471	587
Die nuts for ISO metric threads																
1000 ≤	•	•					WN		B	6g	HSS	○	M 3 - M12	121	706	707
1000 ≤	•	•					WN		B	6g	HSS	○	M 2 - M10	125	706	708
Dies for ISO metric threads																
1000 ≤	•	•					DIN EN 22568		B	6g	HSS	○	M 1 - M30	151	706	710
1000 ≤	•	•					DIN EN 22568		B	6g	HSS	○	M 3 - M30	152	706	711
1000 ≤	•	•					DIN EN 22568		B	6g	HSS	○	M 1 - M30	153	706	710
1000 ≤	•	•					DIN EN 22568		B	6g	HSS	○	M 3 - M20	156	706	713
1000 ≤	•	•					DIN 382			6g	HSS	○	M 5 - M52	139	706	709
1200 ≤	•						DIN EN 22568		B	6g	HSS-E	●	M 2 - M20	130	706	712
Dies for ISO metric fine threads																
1000 ≤	•	•					DIN EN 22568		B	6g	HSS	○	M 3 X0.35 - M30 X2	161	706	714
1000 ≤	•	•					DIN EN 22568		B	6g	HSS	○	M 3 X0.35 - M30 X2	162	706	714
Dies for UNC-threads																
1000 ≤	•	•					DIN EN 22568		B	2a	HSS	○	8 - 32 - 3/4 - 10	182	706	716
Dies for UNF-threads																
1000 ≤	•	•					DIN EN 22568		B	2a	HSS	○	10 - 32 - 7/8 - 14	185	706	717
Dies for BSP-threads																
1000 ≤	•	•					DIN EN 24231		B		HSS	○	G 1/8 - G1 1/2	175	706	718
1000 ≤	•	•					DIN EN 24231		B		HSS	○	G 1/8 - G1 1/2	176	706	718
Dies for R-threads BSPT																
1000 ≤	•	•					DIN EN 24230		B		HSS	○	R 1/8 - R 1/2	198	706	719

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
1000	•	•					DIN EN 22568	B			HSS	○	1/8 - 3/4	191	706	720
Dies for NPT-threads																
800	•	•	•	•			DIN 352	N		ISO2/6H	HSS	○	M 1 - M68	861		721
800	•	•	•	•			DIN 352	N	A	ISO2/6H	HSS	○	M 1 - M68	862		721
800	•	•	•	•			DIN 352	N	D	ISO2/6H	HSS	○	M 1 - M68	863		721
800	•	•	•	•			DIN 352	N	C	ISO2/6H	HSS	○	M 1 - M45	864		721
800	•	•	•	•			DIN 352	N		ISO2/6H	HSS	○	M 1 - M45	882		723
800	•	•	•	•			DIN 352	N	D	ISO2/6H	HSS	○	M 1 - M45	883		723
800	•	•	•	•			DIN 352	N		ISO2/6H	HSS	○	M 2 - M18	904		724
800	•	•	•	•			DIN 352	N-LH	A	ISO2/6H	HSS	○	M 2 - M18	905		724
800	•	•	•	•			DIN 352	N-LH	D	ISO2/6H	HSS	○	M 2 - M18	906		724
800	•	•	•	•			DIN 352	N-LH	C	ISO2/6H	HSS	○	M 2 - M18	907		724
•	•	•	•	•			DIN 352	H		ISO2/6H	HSS-E	●	M 2 - M20	857		726
•	•	•	•	•			DIN 352	H	A	ISO2/6H	HSS-E	●	M 2 - M20	858		726
•	•	•	•	•			DIN 352	H	D	ISO2/6H	HSS-E	●	M 2 - M20	859		726
•	•	•	•	•			DIN 352	H	C	ISO2/6H	HSS-E	●	M 2 - M20	860		726
1000	•	•	•	•			DIN 352	VA		ISO2/6H	HSS-E	○	M 2 - M20	853		725
1000	•	•	•	•			DIN 352	VA	A	ISO2/6H	HSS-E	○	M 2 - M20	854		725
1000	•	•	•	•			DIN 352	VA	D	ISO2/6H	HSS-E	○	M 2 - M20	855		725
1000	•	•	•	•			DIN 352	VA	C	ISO2/6H	HSS-E	○	M 2 - M20	856		725
•	•	•	•	•			DIN 352	H		ISO2/6H	HSS-E-PM	●	M 3 - M12	1818		727
•	•	•	•	•			DIN 352	H	A	ISO2/6H	HSS-E-PM	●	M 3 - M12	1819		727
•	•	•	•	•			DIN 352	H	D	ISO2/6H	HSS-E-PM	●	M 3 - M12	1820		727
•	•	•	•	•			DIN 352	H	C	ISO2/6H	HSS-E-PM	●	M 3 - M12	1821		727



P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
Hand taps for ISO metric fine threads																
800			o				DIN 2180	N		ISO2/6H	HSS	○	M 2 X0.25 - M52 X1.5	884		728
800			o				DIN 2180	N	D	ISO2/6H	HSS	○	M 2 X0.25 - M52 X1.5	885		728
800			o				DIN 2180	N	C	ISO2/6H	HSS	○	M 2 X0.25 - M52 X1.5	886		728
Hand taps for UNC-threads																
800			o				~DIN 352	N		2B	HSS	○	1 -64 - 2- 4 1/2	981		730
800			o				~DIN 352	N	A	2B	HSS	○	1 -64 - 2- 4 1/2	982		730
800			o				~DIN 352	N	D	2B	HSS	○	1 -64 - 2- 4 1/2	983		730
800			o				~DIN 352	N	C	2B	HSS	○	1 -64 - 2- 4 1/2	984		730
Hand taps for UNF-threads																
800			o				~DIN 2181	N		2B	HSS	○	1 -72 - 1 -12	985		731
800			o				~DIN 2181	N	D	2B	HSS	○	1 -72 - 1 -12	986		731
800			o				~DIN 2181	N	C	2B	HSS	○	1 -72 - 1 -12	987		731
Hand taps for BSW-threads																
800			o				~DIN 352	N			HSS	○	W 3/32 - W2	954		732
800			o				~DIN 352	N	A		HSS	○	W 3/32 - W2	955		732
800			o				~DIN 352	N	D		HSS	○	W 3/32 - W2	956		732
800			o				~DIN 352	N	C		HSS	○	W 3/32 - W2	957		732
Hand taps for BSP-threads																
800			o				DIN 5157	N			HSS	○	G 1/8 - G2	958		733
800			o				DIN 5157	N	D		HSS	○	G 1/8 - G2	959		733
800			o				DIN 5157	N	C		HSS	○	G 1/8 - G2	960		733

Tool illustration	Shank form	Clamping diameter (mm)	Guhring no.	Page
Synchro tapping chucks for internal cooling				
	HSK-A	HSK-A 63 - HSK-A 100	4601	742
	SK	SK 30 - SK 40	4576	743
	BT	BT 30 - BT 40	4577	744
	cyl.	20,000 - 25,000	4525	745
		12,000 / 20,000	4605	746
		12,000 / 20,000	4606	748
		ER20 - ER32	4364	750
	cyl.	25,000	4326	751
	HSK-A	HSK-A 63 - HSK-A 100	4327	751
		ER16 - ER40	4308	753
	HSK-A	HSK-A 50 - HSK-A 100	4343	754
		M3 - M20	4340	754
		M3 - M20	4342	755
	HSK-A	HSK-A 63	4328	755
		M3 - M20	4206	756



Tool illustration		Shank form	Clamping diameter (mm)	Guhring no.	Page
MQL tapping chucks					
	MQL HSK-A 1-channel hydraulic synchro tapping chucks (for auto. tool change)	HSK-A	HSK-A 63 - HSK-A 100	4602	760
	MQL HSK-A 2-channel hydraulic synchro tapping chucks (for auto. tool change)	HSK-A	HSK-A 63 - HSK-A 100	4603	761
	MQL HSK-A hydraulic synchro tapping chucks (for manual tool change)	HSK-A	HSK-A 63 - HSK-A 100	4604	762
	MQL hydraulic synchro tapping chucks with internal cooling	cyl.	20,000	4524	763
	MQL synchro tapping chucks HSK-A for manual tool change	HSK-A	HSK-A 63	4298	764
	MQL 1-channel synchro tapping chucks HSK-A for automatic tool change	HSK-A	HSK-A 63 - HSK-A 100	4330	764
	MQL 1-channel synchro tapping chucks HSK-A for automatic tool change	HSK-A	HSK-A 63 - HSK-A 100	4341	765
	MQL setting screws with internal cone for MQL synchro tapping chucks		ER20 - ER32	4305	766
	MQL 1-channel coolant delivery set HSK-A	HSK-A	HSK-A 32 - HSK-A 100	4508	767
	MQL 2-channel coolant delivery set HSK-A	HSK-A	HSK-A 32 - HSK-A 100	4511	767
	MQL coolant delivery set HSK-A (filler)	HSK-A	HSK-A 32 - HSK-A 100	4513	768
	Retaining nuts, system DIN ISO 15488		ER16 - ER40	4306	769
	Sealing washers		ER16 - ER40	4335	770
	Clamping key		ER16 mini - ER40	4913	770

Article no.	Page	Drilling depth	Standard	Description	Tool material	Type	Form
57	47		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	H	B
58	47		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	H	B
59	246		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	VA R40	C
60	246		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	VA R40	C
121	707			Die nuts for ISO metric threads	HSS		B
125	708			Die nuts for ISO metric threads	HSS		B
130	712			Dies for ISO metric threads	HSS-E		B
139	709			Dies for ISO metric threads	HSS		
151	710			Dies for ISO metric threads	HSS		B
152	711			Dies for ISO metric threads	HSS		B
153	710			Dies for ISO metric threads	HSS		B
156	713			Dies for ISO metric threads	HSS		B
161	714			Dies for ISO metric fine threads	HSS		B
162	714			Dies for ISO metric fine threads	HSS		B
169	365		DIN 374	Machine taps for ISO metric fine threads	HSS-E	GG	C
174	70		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C(K)
175	718			Dies for BSP-threads	HSS		B
176	718			Dies for BSP-threads	HSS		B
182	716			Dies for UNC-threads	HSS		B
185	717			Dies for UNF-threads	HSS		B
191	720			Dies for NPT-threads	HSS		B
196	70		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C(K)
198	719			Dies for R-threads BSPT	HSS		B
273	109		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	C(K)
297	78, 359, 479		DIN 376	Oil feed taps for ISO metric threads	HSS-E-PM	H	C
302	78, 359, 479		DIN 371	Oil feed taps for ISO metric threads	HSS-E-PM	H	C
313	33		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
315	33		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
316	93		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	B
318	358		DIN 371	Oil feed taps for ISO metric threads	HSS-E	GG	C
319	358		DIN 376	Oil feed taps for ISO metric threads	HSS-E	GG	C
322	154, 275, 380, 511, 620		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
323	158, 279, 384, 515, 622		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
333	173, 294, 399, 533, 629		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
338	177, 295, 400, 535, 631		~DIN 374	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	C
339	154, 275, 380, 511, 620		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
342	158, 279, 384, 515, 622		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
347	366		DIN 374	Oil feed taps for ISO metric fine threads	HSS-E	GG	C
361	82		DIN 371	Machine taps for ISO metric threads	HSS-E	H R40	C
362	82		DIN 376	Machine taps for ISO metric threads	HSS-E	H R40	C
393	71, 244		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E	VA R45	C
394	115, 252		DIN 374	Machine taps for ISO metric fine threads	HSS-E	VA R45	C
395	139, 267		DIN 5156	Machine taps for BSP-threads	HSS-E	VA R45	C
733	43		DIN 371	Machine taps for ISO metric threads	HSS-E	H	B
734	43		DIN 376	Machine taps for ISO metric threads	HSS-E	H	B
761	75, 247, 486		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	VA R50	C
763	75, 247, 486		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	VA R50	C
764	111, 255, 490		DIN 374	Machine taps for ISO metric fine threads	HSS-E-PM	VA R50	C
767	74, 245, 485		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	N R50	C
778	79, 360, 480		DIN 376	Oil feed taps for ISO metric threads	HSS-E	H	C
779	80, 361, 481			Oil feed taps for ISO metric threads	HSS-E	H	C
783	60		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
784	60		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C
785	241		DIN 376	Machine taps for ISO metric threads	HSS-E	VA R15	C
786	62		DIN 371	Machine taps for ISO metric threads	HSS-E	N L40-LH	C
787	62		DIN 376	Machine taps for ISO metric threads	HSS-E	N L40-LH	C
788	483		DIN 371	Machine taps for ISO metric threads	HSS-E	H AZ	C
789	32		DIN 371	Machine taps for ISO metric threads	HSS-E	N-LH	B
790	32		DIN 376	Machine taps for ISO metric threads	HSS-E	N-LH	B
791	44		DIN 371	Machine taps for ISO metric threads	HSS-E	H AZ	B
792	240		DIN 376	Machine taps for ISO metric threads	HSS-E	VA AZ	B
794	36		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
795	52		DIN 371	Machine taps for ISO metric threads	HSS-E	N	C
796	56		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
797	56		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
799	52		DIN 371	Machine taps for ISO metric threads	HSS-E	N R15	C
800	482		DIN 371	Machine taps for ISO metric threads	HSS-E	Ms	E
801	49		DIN 371	Machine taps for ISO metric threads	HSS-E	N	D
802	55		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
803	30		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
804	43		DIN 371	Machine taps for ISO metric threads	HSS-E	H	B
805	472		DIN 371	Machine taps for ISO metric threads	HSS-E	AI	B



Article no.	Page	Drilling depth	Standard	Description	Tool material	Type	Form
806	50		DIN 371	Machine taps for ISO metric threads	HSS-E	N	C
807	356		DIN 371	Machine taps for ISO metric threads	HSS-E	GG	C
808	89		DIN 371	Machine taps for ISO metric threads	HSS-E	N L15	D
809	57		DIN 371	Machine taps for ISO metric threads	HSS-E	N R15	C
810	60		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
811	81		DIN 371	Machine taps for ISO metric threads	HSS-E	H R40	C
812	474		DIN 371	Machine taps for ISO metric threads	HSS-E	AI R45	C
813	49		DIN 376	Machine taps for ISO metric threads	HSS-E	N	D
814	243, 475		DIN 371	Machine taps for ISO metric threads	HSS-E	VA R40	C
815	31		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
816	43		DIN 376	Machine taps for ISO metric threads	HSS-E	H	B
817	472		DIN 376	Machine taps for ISO metric threads	HSS-E	AI	B
818	51		DIN 376	Machine taps for ISO metric threads	HSS-E	N	C
819	356		DIN 376	Machine taps for ISO metric threads	HSS-E	GG	C
820	89		DIN 376	Machine taps for ISO metric threads	HSS-E	N L15	D
821	57		DIN 376	Machine taps for ISO metric threads	HSS-E	N R15	C
822	60		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C
823	81		DIN 376	Machine taps for ISO metric threads	HSS-E	H R40	C
824	474		DIN 376	Machine taps for ISO metric threads	HSS-E	AI R45	C
825	243, 475		DIN 376	Machine taps for ISO metric threads	HSS-E	VA R40	C
826	66		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C
827	91		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	B
828	97		DIN 374	Machine taps for ISO metric fine threads	HSS-E	H	B
829	100		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	C
830	100		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	C
831	365		DIN 374	Machine taps for ISO metric fine threads	HSS-E	GG	C
832	91		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	B
833	102		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R15	C
834	105		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	C
835	114		DIN 374	Machine taps for ISO metric fine threads	HSS-E	H R40	C
836	66		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
837	37		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
838	54		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
839	54		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
843	241		DIN 371	Machine taps for ISO metric threads	HSS-E	VA R15	C
844	61		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
845	37		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
846	54		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
847	54		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
848	61		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C
849	44		DIN 376	Machine taps for ISO metric threads	HSS-E	H AZ	B
851	85			Machine nut taps for ISO metric threads	HSS-E	N	
852	105		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	C
853	725		DIN 352	Hand taps for ISO metric threads	HSS-E	VA	
854	725		DIN 352	Hand taps for ISO metric threads	HSS-E	VA	A
855	725		DIN 352	Hand taps for ISO metric threads	HSS-E	VA	D
856	725		DIN 352	Hand taps for ISO metric threads	HSS-E	VA	C
857	726		DIN 352	Hand taps for ISO metric threads	HSS-E	H	
858	726		DIN 352	Hand taps for ISO metric threads	HSS-E	H	A
859	726		DIN 352	Hand taps for ISO metric threads	HSS-E	H	D
860	726		DIN 352	Hand taps for ISO metric threads	HSS-E	H	C
861	721		DIN 352	Hand taps for ISO metric threads	HSS	N	
862	721		DIN 352	Hand taps for ISO metric threads	HSS	N	A
863	721		DIN 352	Hand taps for ISO metric threads	HSS	N	D
864	721, 723		DIN 352	Hand taps for ISO metric threads	HSS	N	C
869	56		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
872	76		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	H R15	C
873	117		~DIN 371	Machine taps for UNC-threads	HSS-E	N	B
874	112		DIN 374	Machine taps for ISO metric fine threads	HSS-E-PM	H R15	C
875	46		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	H	B
876	122		~DIN 371	Machine taps for UNC-threads	HSS-E	N R40	C
877	237		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	VA	B
878	117		~DIN 376	Machine taps for UNC-threads	HSS-E	N	B
879	237		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	VA	B
881	122		~DIN 376	Machine taps for UNC-threads	HSS-E	N R40	C
882	723		DIN 352	Hand taps for ISO metric threads	HSS	N	
883	723		DIN 352	Hand taps for ISO metric threads	HSS	N	D
884	728		DIN 2181	Hand taps for ISO metric fine threads	HSS	N	
885	728		DIN 2181	Hand taps for ISO metric fine threads	HSS	N	D
886	728		DIN 2181	Hand taps for ISO metric fine threads	HSS	N	C
887	256		DIN 374	Machine taps for ISO metric fine threads	HSS-E-PM	VA	B
888	88			Machine taps for ISO metric threads	HSS-E	N R40	C

Article no.	Page	Drilling depth	Standard	Description	Tool material	Type	Form
889	66		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
890	66		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C
903	149, 271, 376, 508		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
904	724		DIN 352	Hand taps for ISO metric threads	HSS	N-LH	
905	724		DIN 352	Hand taps for ISO metric threads	HSS	N-LH	A
906	724		DIN 352	Hand taps for ISO metric threads	HSS	N-LH	D
907	724		DIN 352	Hand taps for ISO metric threads	HSS	N-LH	C
908	125		~DIN 374	Machine taps for UNF-threads	HSS-E	N	B
909	246		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	VA R40	C
910	246		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	VA R40	C
911	128		~DIN 374	Machine taps for UNF-threads	HSS-E	N R40	C
912	30		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
913	57		DIN 371	Machine taps for ISO metric threads	HSS-E	N R15	C
914	60		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
915	31		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
916	57		DIN 376	Machine taps for ISO metric threads	HSS-E	N R15	C
917	60		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C
918	153, 274, 379, 510		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E	N	C
919	152, 274, 379, 510		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E	N	C
920	150, 272, 377, 507		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E	N	C
921	149, 271, 376, 506		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E	N	C
922	153, 274, 379, 510		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E	N	C
923	152, 274, 379, 510		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
925	149, 271, 376, 506		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E	N	C
926	172, 292, 397, 532		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
927	169, 288, 395, 530		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
928	168, 290, 393, 528		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
929	165, 286, 391, 524		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
930	356		DIN 371	Machine taps for ISO metric threads	HSS-E	GG	C
931	356		DIN 376	Machine taps for ISO metric threads	HSS-E	GG	C
932	365		DIN 374	Machine taps for ISO metric fine threads	HSS-E	GG	C
935	76		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	H R15	C
936	253, 488		DIN 374	Machine taps for ISO metric fine threads	HSS-E-PM	VA R40	C
937	141		DIN 5156	Machine taps for BSP-threads	HSS-E	N R40	C(K)
939	265, 503		DIN 5156	Machine taps for BSP-threads	HSS-E-PM	VA R40	C
942	42		~DIN 371	Machine taps for ISO metric threads	Solid carbide	N	B
943	95		~DIN 371	Machine taps for ISO metric fine threads	Solid carbide	N	B
944	96		DIN 374	Machine taps for ISO metric fine threads	Solid carbide	N	B
945	30		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
946	57		DIN 371	Machine taps for ISO metric threads	HSS-E	N R15	C
947	81		DIN 371	Machine taps for ISO metric threads	HSS-E	H R40	C
948	31		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
949	57		DIN 376	Machine taps for ISO metric threads	HSS-E	N R15	C
950	81		DIN 376	Machine taps for ISO metric threads	HSS-E	H R40	C
952	149, 271, 376, 508		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
954	732		~DIN 352	Hand taps for BSW-threads	HSS	N	
955	732		~DIN 352	Hand taps for BSW-threads	HSS	N	A
956	732		~DIN 352	Hand taps for BSW-threads	HSS	N	D
957	732		~DIN 352	Hand taps for BSW-threads	HSS	N	C
958	733		DIN 5157	Hand taps for BSP-threads	HSS	N	
959	733		DIN 5157	Hand taps for BSP-threads	HSS	N	D
960	733		DIN 5157	Hand taps for BSP-threads	HSS	N	C
961	374		DIN 5156	Machine taps for BSP-threads	HSS-E	GG	C
962	132		DIN 5156	Machine taps for BSP-threads	HSS-E	N	B
963	133		DIN 5156	Machine taps for BSP-threads	HSS-E	N	C
964	135		DIN 5156	Machine taps for BSP-threads	HSS-E	N R15	C
965	136		DIN 5156	Machine taps for BSP-threads	HSS-E	N R40	C
966	184, 302, 407, 544		DIN 2189	Fluteless machine taps for BSP-threads	HSS-E	N	C
967	263, 502		DIN 5156	Machine taps for BSP-threads	HSS-E	VA	B
968	265		DIN 5156	Machine taps for BSP-threads	HSS-E	VA R40	C
969	362, 476		DIN 371	Oil feed taps for ISO metric threads	Solid carbide	H	C
971	478		DIN 371	Oil feed taps for ISO metric threads	Solid carbide	N R15	C
972	368, 491		DIN 371	Oil feed taps for ISO metric fine threads	Solid carbide	H	C
973	146			Machine taps for NPT-threads	HSS-E	N	C
974	368, 491		DIN 374	Oil feed taps for ISO metric fine threads	Solid carbide	H	C
975	495		DIN 371	Oil feed taps for ISO metric fine threads	Solid carbide	N L15	D
976	495		DIN 374	Oil feed taps for ISO metric fine threads	Solid carbide	N L15	D
977	493		DIN 371	Oil feed taps for ISO metric fine threads	Solid carbide	N R15	C
978	493		DIN 374	Oil feed taps for ISO metric fine threads	Solid carbide	N R15	C
979	147		DIN 40432	Machine taps for PG-threads	HSS-E	N	C
980	147		DIN 40432	Machine taps for PG-threads	HSS-E	N	B
981	730		~DIN 352	Hand taps for UNC-threads	HSS	N	



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982	730		~DIN 352	Hand taps for UNC-threads	HSS	N	A
983	730		~DIN 352	Hand taps for UNC-threads	HSS	N	D
984	730		~DIN 352	Hand taps for UNC-threads	HSS	N	C
985	731		~DIN 2181	Hand taps for UNF-threads	HSS	N	
986	731		~DIN 2181	Hand taps for UNF-threads	HSS	N	D
987	731		~DIN 2181	Hand taps for UNF-threads	HSS	N	C
991	35		DIN 352	Machine taps for ISO metric threads	HSS-E	N	B
992	58		DIN 352	Machine taps for ISO metric threads	HSS-E	N R15	C
993	65		DIN 352	Machine taps for ISO metric threads	HSS-E	N R40	C
995	53		DIN 352	Machine taps for ISO metric threads	HSS-E	N	C
998	86			Machine taps for ISO metric threads	HSS-E	N	B
1001	257		DIN 374	Machine taps for ISO metric fine threads	HSS-E	VA	B
1002	238		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	VA	B
1004	253		DIN 374	Machine taps for ISO metric fine threads	HSS-E-PM	VA R40	C
1007	113, 367, 497		DIN 374	Oil feed taps for ISO metric fine threads	HSS-E-PM	H	E
1008	364, 477		DIN 371	Oil feed taps for ISO metric threads	Solid carbide	H	E
1009	369, 492		DIN 374	Oil feed taps for ISO metric fine threads	Solid carbide	H	E
1010	144			Machine taps for EG-threads	HSS-E	N	B
1011	145			Machine taps for EG-threads	HSS-E	N R40	C
1049	108		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	C
1057	603		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E-PM	TiNi	B
1058	607		DIN 371	Machine taps for ISO metric fine threads	HSS-E-PM	TiNi	B
1059	611		~DIN 371/~DIN 376	Machine taps for UNC-threads	HSS-E-PM	TiNi	B
1060	615		~DIN 371/~DIN 374	Machine taps for UNF-threads	HSS-E-PM	TiNi	B
1061	605		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E-PM	Ti R15	C
1062	609		DIN 371	Machine taps for ISO metric fine threads	HSS-E-PM	Ti R15	C
1063	613		~DIN 371/~DIN 376	Machine taps for UNC-threads	HSS-E-PM	Ti R15	C
1064	618		~DIN 371/~DIN 374	Machine taps for UNF-threads	HSS-E-PM	Ti R15	C
1065	605		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E-PM	Ni R10	C(K)
1066	609		DIN 371	Machine taps for ISO metric fine threads	HSS-E-PM	Ni R10	C(K)
1067	613		~DIN 371/~DIN 376	Machine taps for UNC-threads	HSS-E-PM	Ni R10	C(K)
1068	618		~DIN 371/~DIN 374	Machine taps for UNF-threads	HSS-E-PM	Ni R10	C(K)
1082	373		~DIN 374	Oil feed taps for UNF threads	HSS-E	GG	C
1084	482		DIN 371	Machine taps for ISO metric threads	HSS-E	Ms	E
1085	371		~DIN 371	Oil feed taps for UNC threads	HSS-E	GG	C
1086	371		~DIN 376	Oil feed taps for UNC threads	HSS-E	GG	C
1087	268			Machine taps for NPT-threads	HSS-E	VA R25	C
1088	268			Machine taps for NPT-threads	HSS-E	VA R25	C
1090	113, 367, 496		DIN 374	Oil feed taps for ISO metric fine threads	HSS-E-PM	H	C
1091	78, 359, 479		DIN 371	Oil feed taps for ISO metric threads	HSS-E-PM	H	E
1098	74, 245, 485		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	N R50	C
1100	110, 254, 489		DIN 374	Machine taps for ISO metric fine threads	HSS-E-PM	N R50	C
1139	75, 247, 486		DIN 371	Oil feed taps for ISO metric threads	HSS-E-PM	VA R50	C
1142	75, 247, 486		DIN 376	Oil feed taps for ISO metric threads	HSS-E-PM	VA R50	C
1144	111, 255, 490		DIN 374	Oil feed taps for ISO metric fine threads	HSS-E-PM	VA R50	C
1152	74, 245, 485		DIN 371	Oil feed taps for ISO metric threads	HSS-E-PM	N R50	C
1161	683		~DIN 371	Machine taps for ISO metric fine threads	Solid carbide	H	D
1188	77		DIN 371	Oil feed taps for ISO metric threads	HSS-E-PM	H R15	C
1194	77		DIN 376	Oil feed taps for ISO metric threads	HSS-E-PM	H R15	C
1200	112		DIN 374	Oil feed taps for ISO metric fine threads	HSS-E-PM	H R15	C
1201	680		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E-PM	H	D
1246	30		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
1249	31		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
1252	60		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
1254	60		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C
1255	149, 271, 376, 506		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1256	149, 271, 376, 506		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1257	166, 287, 394, 525		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1258	166, 287, 394, 525		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1266	155, 276, 381, 512, 621		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1267	155, 276, 381, 512, 621		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1268	174, 293, 398, 534, 630		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1269	174, 293, 398, 534, 630		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1270	159, 280, 385, 516, 623		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
1271	159, 280, 385, 516, 623		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
1272	178, 296, 401, 536, 632		~DIN 371	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	C
1273	178, 296, 401, 536, 632		~DIN 374	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	C
1275	169, 288, 395, 530		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
1277	172, 292, 397, 532		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
1283	183, 301, 406, 543		~DIN 371	Fluteless machine taps for UNF-threads	HSS-E	N	C
1285	39		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	N	B
1286	39		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	N	B

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1287	40		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	N	B
1288	72		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	N R40	C
1289	72		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	N R40	C
1290	73		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	N R40	C
1291	98, 248		DIN 374	Machine taps for ISO metric fine threads	HSS-E-PM	N	B
1292	109		DIN 374	Machine taps for ISO metric fine threads	HSS-E-PM	N R40	C
1293	74, 245, 485		DIN 376	Oil feed taps for ISO metric threads	HSS-E-PM	N R50	C
1294	110, 254, 489		DIN 374	Oil feed taps for ISO metric fine threads	HSS-E-PM	N R50	C
1347	506		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1565	508		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1566	506		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1567	508		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1568	526		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1569	529		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1575	47		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	H	B
1576	47		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	H	B
1577	76		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	H R15	C
1578	76		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	H R15	C
1580	529		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1581	181, 299, 404, 541, 635		~DIN 371/~DIN 376	Oil feed fluteless taps f. ISO metric fine threads	Solid carbide	N	C
1582	182, 300, 405, 542		~DIN 371	Fluteless machine taps for UNC-threads	HSS-E	N	C
1583	182, 300, 405, 542		~DIN 376	Fluteless machine taps for UNC-threads	HSS-E	N	C
1584	183, 301, 406, 543		~DIN 371	Fluteless machine taps for UNF-threads	HSS-E	N	C
1585	183, 301, 406, 543		~DIN 374	Fluteless machine taps for UNF-threads	HSS-E	N	C
1586	184, 302, 408, 545		DIN 2189	Fluteless machine taps for BSP-threads	HSS-E	N	C
1587	152		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E	N	C
1588	153		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E	N	C
1589	152		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E	N	C
1590	153		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E	N	C
1591	169		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
1592	171		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
1593	169		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
1599	155		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1705	153		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1707	155		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1708	153		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1710	176		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1711	175		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1712	176		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1713	160, 281, 386, 518, 624		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
1715	179, 297, 402, 538, 633		~DIN 371	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	C
1716	179, 297, 402, 538, 633		~DIN 374	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	C
1717	159, 280, 385, 623		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
1718	161, 282, 387, 625		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
1719	159, 280, 385, 623		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
1720	161, 282, 387, 625		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
1721	178, 296, 401, 632		~DIN 371	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	C
1723	178, 296, 401, 632		~DIN 374	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	C
1725	159, 280, 385, 516, 623		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	E
1726	161, 282, 387, 519, 625		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	E
1727	159, 280, 385, 516, 623		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	E
1728	161, 282, 387, 519, 625		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	E
1729	178, 296, 401, 536, 632		~DIN 371	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	E
1730	179, 297, 402, 538, 633		~DIN 371	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	E
1731	178, 296, 401, 536, 632		~DIN 374	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	E
1732	179, 297, 402, 538, 633		~DIN 374	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	E
1740	167, 289, 392, 527		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1818	727		DIN 352	Hand taps for ISO metric threads	HSS-E-PM	H	
1819	727		DIN 352	Hand taps for ISO metric threads	HSS-E-PM	H	A
1820	727		DIN 352	Hand taps for ISO metric threads	HSS-E-PM	H	D
1821	727		DIN 352	Hand taps for ISO metric threads	HSS-E-PM	H	C
1837	124		~DIN 371	Machine taps for UNC-threads	HSS-E	N R40	C(K)
1838	131		~DIN 374	Machine taps for UNF-threads	HSS-E	N R40	C(K)
1839	87			Machine combination drill taps for ISO metric threads	HSS-E	N	D
1858	362, 476		DIN 371	Oil feed taps for ISO metric threads	Solid carbide	H	C
1859	362, 476		DIN 376	Oil feed taps for ISO metric threads	Solid carbide	H	C
1860	368, 491		DIN 374	Oil feed taps for ISO metric fine threads	Solid carbide	H	C
1861	368, 491		DIN 371	Oil feed taps for ISO metric fine threads	Solid carbide	H	C
1870	236, 473		DIN 371	Machine taps for ISO metric threads	HSS-E	VA	B
1871	240		DIN 371	Machine taps for ISO metric threads	HSS-E	VA AZ	B
1872	236, 473		DIN 376	Machine taps for ISO metric threads	HSS-E	VA	B
1873	256, 487		DIN 374	Machine taps for ISO metric fine threads	HSS-E	VA	B



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1874	249		DIN 374	Machine taps for ISO metric fine threads	HSS-E	VA R15	C
1875	357		DIN 371	Machine taps for ISO metric threads	HSS-E	GGT	C
1876	357		DIN 376	Machine taps for ISO metric threads	HSS-E	GGT	C
1883	362, 476		DIN 376	Oil feed taps for ISO metric threads	Solid carbide	H	C
1890	358		DIN 371	Oil feed taps for ISO metric threads	HSS-E	GG	C
1891	59		DIN 371	Oil feed taps for ISO metric threads	HSS-E	N R15	C
1892	243		DIN 371	Oil feed taps for ISO metric threads	HSS-E	VA R40	C
1893	63		DIN 371	Oil feed taps for ISO metric threads	HSS-E	N R40	C
1894	83		DIN 371	Oil feed taps for ISO metric threads	HSS-E	H R40	C
1897	358		DIN 376	Oil feed taps for ISO metric threads	HSS-E	GG	C
1898	59		DIN 376	Oil feed taps for ISO metric threads	HSS-E	N R15	C
1899	243		DIN 376	Oil feed taps for ISO metric threads	HSS-E	VA R40	C
1901	83		DIN 376	Oil feed taps for ISO metric threads	HSS-E	H R40	C
1904	366		DIN 374	Oil feed taps for ISO metric fine threads	HSS-E	GG	C
1905	104		DIN 374	Oil feed taps for ISO metric fine threads	HSS-E	N R15	C
1914	43		DIN 371	Machine taps for ISO metric threads	HSS-E	H	B
1915	43		DIN 376	Machine taps for ISO metric threads	HSS-E	H	B
1916	82		DIN 371	Machine taps for ISO metric threads	HSS-E	H R40	C
1917	82		DIN 376	Machine taps for ISO metric threads	HSS-E	H R40	C
1918	356		DIN 371	Machine taps for ISO metric threads	HSS-E	GG	C
1919	356		DIN 376	Machine taps for ISO metric threads	HSS-E	GG	C
1927	164, 285, 390, 523, 628		~DIN 371	Oil feed fluteless taps f. ISO metric threads	Solid carbide	N	E
1931	163, 284, 389, 522, 627		~DIN 376	Oil feed fluteless taps f. ISO metric threads	Solid carbide	N	C
1970	106		DIN 2181	Machine taps for ISO metric fine threads	HSS-E	N R40	C
1971	102		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R15	C
1972	163, 284, 389, 522, 627		~DIN 371	Oil feed fluteless taps f. ISO metric threads	Solid carbide	N	C
1977	121		~DIN 371	Machine taps for UNC-threads	HSS-E	N	C
1978	119		~DIN 371	Machine taps for UNC-threads	HSS-E	N R15	C
1979	370		~DIN 371	Machine taps for UNC-threads	HSS-E	GG	C
1980	258, 498		~DIN 371	Machine taps for UNC-threads	HSS-E	VA	B
1981	259, 499		~DIN 371	Machine taps for UNC-threads	HSS-E	VA R40	C
1984	370		~DIN 376	Machine taps for UNC-threads	HSS-E	GG	C
1985	258, 498		~DIN 376	Machine taps for UNC-threads	HSS-E	VA	B
1986	259, 499		~DIN 376	Machine taps for UNC-threads	HSS-E	VA R40	C
1987	126		~DIN 374	Machine taps for UNF-threads	HSS-E	N	C
1988	127		~DIN 374	Machine taps for UNF-threads	HSS-E	N R15	C
1989	372		~DIN 374	Machine taps for UNF-threads	HSS-E	GG	C
1990	260, 500		~DIN 374	Machine taps for UNF-threads	HSS-E	VA	B
1991	261		~DIN 374	Machine taps for UNF-threads	HSS-E	VA R15	C
2008	170, 291, 396, 531		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
2012	152, 274, 379, 510		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E	N	C
2013	152, 274, 379, 510		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E	N	C
2086	236		DIN 371	Machine taps for ISO metric threads	HSS-E	VA	B
2087	236		DIN 376	Machine taps for ISO metric threads	HSS-E	VA	B
2273	182, 300, 405, 542		~DIN 371	Fluteless machine taps for UNC-threads	HSS-E	N	C
2274	182, 300, 405, 542		~DIN 376	Fluteless machine taps for UNC-threads	HSS-E	N	C
2275	183, 301, 406, 543		~DIN 374	Fluteless machine taps for UNF-threads	HSS-E	N	C
2311	364		DIN 371	Oil feed taps for ISO metric threads	Solid carbide	H	C
2424	107		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	C
2425	66		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
2426	66		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C
2427	33		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
2428	33		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
2436	59		DIN 371	Oil feed taps for ISO metric threads	HSS-E	N R15	C
2437	59		DIN 376	Oil feed taps for ISO metric threads	HSS-E	N R15	C
2438	64		DIN 371	Oil feed taps for ISO metric threads	HSS-E	N R40	C
2439	64		DIN 376	Oil feed taps for ISO metric threads	HSS-E	N R40	C
2440	66		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
2441	66		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C
2442	156, 277, 382, 513		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
2443	156, 277, 382, 513		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
2444	156, 277, 382, 513		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
2445	156, 277, 382, 513		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
2446	156, 277, 382, 513		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
2447	157, 278, 383, 514		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
2448	156, 277, 382, 513		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
2465	45		DIN 371	Machine taps for ISO metric threads	HSS-E	H	B
2506	363		DIN 371	Oil feed taps for ISO metric threads	Solid carbide	H	C
2510	364		DIN 371	Oil feed taps for ISO metric threads	Solid carbide	N R15	C
2514	68		DIN 371	Oil feed taps for ISO metric threads	HSS-E	N R40	C
2515	517		~DIN 371/~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
2516	494		DIN 371	Oil feed taps for ISO metric threads	Solid carbide	N R15	C

Article no.	Page	Drilling depth	Standard	Description	Tool material	Type	Form
2517	34		DIN 371	Oil feed taps for ISO metric threads	HSS-E	N	B
2518	151, 273, 378, 509		~DIN 371/~DIN 376	Oil feed fluteless taps f. ISO metric threads	Solid carbide	N	C
2710	45		DIN 371	Machine taps for ISO metric threads	HSS-E	H	B
2790	69		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	E
2791	69		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	E
2792	107		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	E
2838	102		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R15	C
2839	120		~DIN 371	Machine taps for UNC-threads	HSS-E	N R15	C
2840	120		~DIN 376	Machine taps for UNC-threads	HSS-E	N R15	C
2841	127		~DIN 374	Machine taps for UNF-threads	HSS-E	N R15	C
2842	135		DIN 5156	Machine taps for BSP-threads	HSS-E	N R15	C
2843	105		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	C
2844	122		~DIN 371	Machine taps for UNC-threads	HSS-E	N R40	C
2845	122		~DIN 376	Machine taps for UNC-threads	HSS-E	N R40	C
2846	128		~DIN 374	Machine taps for UNF-threads	HSS-E	N R40	C
2847	143		~DIN 371	Machine taps for BSW-threads	HSS-E	N R40	C
2848	143		~DIN 376	Machine taps for BSW-threads	HSS-E	N R40	C
2849	136		DIN 5156	Machine taps for BSP-threads	HSS-E	N R40	C
2850	81		DIN 371	Machine taps for ISO metric threads	HSS-E	H R40	C
2851	81		DIN 376	Machine taps for ISO metric threads	HSS-E	H R40	C
2852	114		DIN 374	Machine taps for ISO metric fine threads	HSS-E	H R40	C
2853	107		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	C
2854	123		~DIN 371	Machine taps for UNC-threads	HSS-E	N R40	C
2855	123		~DIN 371	Machine taps for UNC-threads	HSS-E	N R40	C
2856	123		~DIN 376	Machine taps for UNC-threads	HSS-E	N R40	C
2857	123		~DIN 376	Machine taps for UNC-threads	HSS-E	N R40	C
2859	129		~DIN 374	Machine taps for UNF-threads	HSS-E	N R40	C
2860	137		DIN 5156	Machine taps for BSP-threads	HSS-E	N R40	C
2861	137		DIN 5156	Machine taps for BSP-threads	HSS-E	N R40	C
2862	243		DIN 371	Machine taps for ISO metric threads	HSS-E	VA R40	C
2863	243		DIN 376	Machine taps for ISO metric threads	HSS-E	VA R40	C
2864	251		DIN 374	Machine taps for ISO metric fine threads	HSS-E	VA R40	C
2865	259		~DIN 371	Machine taps for UNC-threads	HSS-E	VA R40	C
2866	259		~DIN 376	Machine taps for UNC-threads	HSS-E	VA R40	C
2867	262, 501		~DIN 374	Machine taps for UNF-threads	HSS-E	VA R40	C
2868	262		~DIN 374	Machine taps for UNF-threads	HSS-E	VA R40	C
2869	236		DIN 371	Machine taps for ISO metric threads	HSS-E	VA	B
2870	236		DIN 376	Machine taps for ISO metric threads	HSS-E	VA	B
2871	257		DIN 374	Machine taps for ISO metric fine threads	HSS-E	VA	B
2872	258		~DIN 371	Machine taps for UNC-threads	HSS-E	VA	B
2873	258		~DIN 376	Machine taps for UNC-threads	HSS-E	VA	B
2874	260		~DIN 374	Machine taps for UNF-threads	HSS-E	VA	B
2875	263		DIN 5156	Machine taps for BSP-threads	HSS-E	VA	B
2876	33		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
2877	33		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
2878	94		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	B
2879	94		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	B
2881	118		~DIN 371	Machine taps for UNC-threads	HSS-E	N	B
2883	118		~DIN 376	Machine taps for UNC-threads	HSS-E	N	B
2885	130		~DIN 374	Machine taps for UNF-threads	HSS-E	N	B
2886	140		DIN 5156	Machine taps for BSP-threads	HSS-E	N	B
2887	140		DIN 5156	Machine taps for BSP-threads	HSS-E	N	B
2888	91		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	B
2889	117		~DIN 371	Machine taps for UNC-threads	HSS-E	N	B
2890	117		~DIN 376	Machine taps for UNC-threads	HSS-E	N	B
2891	125		~DIN 374	Machine taps for UNF-threads	HSS-E	N	B
2892	142		~DIN 371	Machine taps for BSW-threads	HSS-E	N	B
2893	142		~DIN 376	Machine taps for BSW-threads	HSS-E	N	B
2894	132		DIN 5156	Machine taps for BSP-threads	HSS-E	N	B
2895	241		DIN 376	Machine taps for ISO metric threads	HSS-E	VA R15	C
2896	241		DIN 371	Machine taps for ISO metric threads	HSS-E	VA R15	C
2897	249		DIN 374	Machine taps for ISO metric fine threads	HSS-E	VA R15	C
2898	261		~DIN 374	Machine taps for UNF-threads	HSS-E	VA R15	C
2899	484		DIN 376	Oil feed taps for ISO metric threads	HSS-E	N AZ	E
2901	602		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E-PM	TiNi	B
2903	606		DIN 371	Machine taps for ISO metric fine threads	HSS-E-PM	TiNi	B
2905	610		~DIN 371	Machine taps for UNC-threads	HSS-E-PM	TiNi	B
2909	604		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E-PM	Ti R15	C
2910	608		DIN 371	Machine taps for ISO metric fine threads	HSS-E-PM	Ti R15	C
2912	612		~DIN 371/~DIN 376	Machine taps for UNC-threads	HSS-E-PM	Ti R15	C
2914	617		~DIN 371/~DIN 374	Machine taps for UNF-threads	HSS-E-PM	Ti R15	C
2916	602		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E-PM	TiNi	B



Article no.	Page	Drilling depth	Standard	Description	Tool material	Type	Form
2917	606		DIN 371	Machine taps for ISO metric fine threads	HSS-E-PM	TiNi	B
2918	610		~DIN 371	Machine taps for UNC-threads	HSS-E-PM	TiNi	B
2919	614		~DIN 371	Machine taps for UNF-threads	HSS-E-PM	TiNi	B
2920	604		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E-PM	Ni R10	C(K)
2921	608		DIN 371	Machine taps for ISO metric fine threads	HSS-E-PM	Ni R10	C(K)
2922	612		~DIN 371/~DIN 376	Machine taps for UNC-threads	HSS-E-PM	Ni R10	C(K)
2923	616		~DIN 371/~DIN 374	Machine taps for UNF-threads	HSS-E-PM	Ni R10	C(K)
2940	114		DIN 374	Machine taps for ISO metric fine threads	HSS-E	H R40	C
2941	43		DIN 371	Machine taps for ISO metric threads	HSS-E	H	B
2942	43		DIN 376	Machine taps for ISO metric threads	HSS-E	H	B
2943	97		DIN 374	Machine taps for ISO metric fine threads	HSS-E	H	B
2944	681		~DIN 371	Machine taps for ISO metric threads	Solid carbide	H	D
2983	99		DIN 374	Machine taps for ISO metric fine threads	HSS-E	H	B
2985	84		DIN 371	Machine taps for ISO metric threads	HSS-E	H R40	C
2986	84		DIN 371	Machine taps for ISO metric threads	HSS-E	H R40	C
2988	116		DIN 374	Machine taps for ISO metric fine threads	HSS-E	H R40	C
2989	116		DIN 374	Machine taps for ISO metric fine threads	HSS-E	H R40	C
2990	41		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
2991	41		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
2993	93		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	B
2994	73		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
2995	73		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
2998	108		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	C
2999	108		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	C
3510	413, 551, 643	1.5xD		Thread milling cutters with chamfer for ISO metric threads	Solid carbide	TMC SP	
3511	414, 552, 644	2xD		Thread milling cutters with chamfer for ISO metric threads	Solid carbide	TMC SP	
3512	416, 554, 646	1.5xD		Thread milling cutters with chamfer for ISO metric fine threads	Solid carbide	TMC SP	
3513	417, 555, 647	2xD		Thread milling cutters with chamfer for ISO metric fine threads	Solid carbide	TMC SP	
3514	202, 320, 429, 565, 657, 693	1.5xD		Thread milling cutters with chamfer for BSP-threads	Solid carbide	TMC SP	
3515	203, 321, 430, 566, 658, 694	2xD		Thread milling cutters with chamfer for BSP-threads	Solid carbide	TMC SP	
3516	195, 313, 420, 558, 650, 689	1.5xD		Thread milling cutters with chamfer for UNC-threads	Solid carbide	TMC SP	
3517	196, 314, 421, 559, 651, 690	2xD		Thread milling cutters with chamfer for UNC-threads	Solid carbide	TMC SP	
3518	198, 316, 423, 561, 653, 691	1.5xD		Thread milling cutters with chamfer for UNF-threads	Solid carbide	TMC SP	
3519	199, 317, 424, 562, 654, 692	2xD		Thread milling cutters with chamfer for UNF-threads	Solid carbide	TMC SP	
3520	206, 324, 426, 569, 661, 695			Thread milling cutters with chamfer for NPT-threads	Solid carbide	TMC SP	
3521	208, 326, 433, 571, 663, 696			Thread milling cutters with chamfer for NPTF-threads	Solid carbide	TMC SP	
3523	434, 572, 664			Universal thread milling cutters for ISO metric threads	Solid carbide	TMU SP	
3524	437, 575, 667			Universal thread milling cutters for BSP-threads	Solid carbide	TMU SP	
3525	188, 306, 413, 551, 643, 685	1.5xD		Thread milling cutters with chamfer for ISO metric threads	Solid carbide	TMC SP	
3526	189, 307, 414, 552, 644, 686	2xD		Thread milling cutters with chamfer for ISO metric threads	Solid carbide	TMC SP	
3527	191, 309, 416, 554, 646, 687	1.5xD		Thread milling cutters with chamfer for ISO metric fine threads	Solid carbide	TMC SP	
3528	192, 310, 417, 555, 647, 688	2xD		Thread milling cutters with chamfer for ISO metric fine threads	Solid carbide	TMC SP	
3529	202, 320, 429, 565, 657, 693	1.5xD		Thread milling cutters with chamfer for BSP-threads	Solid carbide	TMC SP	
3533	203, 321, 430, 566, 658, 694	2xD		Thread milling cutters with chamfer for BSP-threads	Solid carbide	TMC SP	
3534	195, 313, 420, 558, 650, 689	1.5xD		Thread milling cutters with chamfer for UNC-threads	Solid carbide	TMC SP	
3535	196, 314, 421, 559, 651, 690	2xD		Thread milling cutters with chamfer for UNC-threads	Solid carbide	TMC SP	
3536	198, 316, 423, 561, 653, 691	1.5xD		Thread milling cutters with chamfer for UNF-threads	Solid carbide	TMC SP	
3537	199, 317, 424, 562, 654, 692	2xD		Thread milling cutters with chamfer for UNF-threads	Solid carbide	TMC SP	
3538	206, 324, 426, 569, 661, 695			Thread milling cutters with chamfer for NPT-threads	Solid carbide	TMC SP	
3539	208, 326, 433, 571, 663, 696			Thread milling cutters with chamfer for NPTF-threads	Solid carbide	TMC SP	
3541	209, 327, 434, 572, 664, 697			Universal thread milling cutters for ISO metric threads	Solid carbide	TMU SP	
3542	212, 330, 437, 575, 667, 700			Universal thread milling cutters for BSP-threads	Solid carbide	TMU SP	
3543	188, 306, 413, 551, 643, 685	1.5xD		Thread milling cutters with chamfer for ISO metric threads	Solid carbide	TMC SP	
3544	189, 307, 414, 552, 644, 686	2xD		Thread milling cutters with chamfer for ISO metric threads	Solid carbide	TMC SP	
3545	191, 309, 416, 554, 646, 687	1.5xD		Thread milling cutters with chamfer for ISO metric fine threads	Solid carbide	TMC SP	
3546	192, 310, 417, 555, 647, 688	2xD		Thread milling cutters with chamfer for ISO metric fine threads	Solid carbide	TMC SP	
3556	209, 327, 434, 572, 664, 697			Universal thread milling cutters for ISO metric threads	Solid carbide	TMU SP	
3557	212, 330, 437, 575, 667, 700			Universal thread milling cutters for BSP-threads	Solid carbide	TMU SP	
3595	211, 329, 436, 574, 666, 699			Universal thread milling cutters for UN-threads	Solid carbide	TMU UN	
3596	211, 329, 436, 574, 666, 699			Universal thread milling cutters for UN-threads	Solid carbide	TMU UN	
3734	410, 548, 640	2xD		Thread milling cutters without chamfer for ISO metric threads	Solid carbide	TM SP	
3735	187, 305, 412, 550, 642	2.5xD		Thread milling cutters without chamfer for ISO metric threads	Solid carbide	TM SP	
3737	186, 304, 410, 548, 640	2xD		Thread milling cutters without chamfer for ISO metric threads	Solid carbide	TM SP	
3740	187, 305, 412, 550, 642	2.5xD		Thread milling cutters without chamfer for ISO metric threads	Solid carbide	TM SP	
3743	186, 304, 410, 548, 640	2xD		Thread milling cutters without chamfer for ISO metric threads	Solid carbide	TM SP	
3745	200, 318, 427, 563, 655	2xD		Thread milling cutters without chamfer for BSP-threads	Solid carbide	TM SP	
3746	201, 319, 428, 564, 656	2.5xD		Thread milling cutters without chamfer for BSP-threads	Solid carbide	TM SP	
3748	200, 318, 427, 563, 655	2xD		Thread milling cutters without chamfer for BSP-threads	Solid carbide	TM SP	
3750	201, 319, 428, 564, 656	2.5xD		Thread milling cutters without chamfer for BSP-threads	Solid carbide	TM SP	
3753	205, 323, 425, 568, 660			Thread milling cutters without chamfer for NPT-threads	Solid carbide	TM SP	
3754	205, 323, 425, 568, 660			Thread milling cutters without chamfer for NPT-threads	Solid carbide	TM SP	
3756	207, 325, 432, 570, 662			Thread milling cutters without chamfer for NPTF-threads	Solid carbide	TM SP	

Article no.	Page	Drilling depth	Standard	Description	Tool material	Type	Form
3757	207, 325, 432, 570, 662			Thread milling cutters without chamfer for NPTF-threads	Solid carbide	TM SP	
3759	190, 308, 415, 553, 645	2.5xD		Thread milling cutters with chamfer for ISO metric threads	Solid carbide	TMC SP	
3760	190, 308, 415, 553, 645	2.5xD		Thread milling cutters with chamfer for ISO metric threads	Solid carbide	TMC SP	
3762	193, 311, 418, 556, 648	2.5xD		Thread milling cutters with chamfer for ISO metric fine threads	Solid carbide	TMC SP	
3763	193, 311, 418, 556, 648	2.5xD		Thread milling cutters with chamfer for ISO metric fine threads	Solid carbide	TMC SP	
3765	204, 322, 431, 567, 659	2.5xD		Thread milling cutters with chamfer for BSP-threads	Solid carbide	TMC SP	
3766	204, 322, 431, 567, 659	2.5xD	Company std.	Thread milling cutters with chamfer for BSP-threads	Solid carbide	TMC SP	
3768	213, 331, 438, 576, 668, 701			Universal thread milling cutters for NPT-threads	Solid carbide	TMU SP	
3769	213, 331, 438, 576, 668, 701			Universal thread milling cutters for NPT-threads	Solid carbide	TMU SP	
3772	214, 332, 439, 577, 669, 702			Universal thread milling cutters for NPTF-threads	Solid carbide	TMU SP	
3773	214, 332, 439, 577, 669, 702			Universal thread milling cutters for NPTF-threads	Solid carbide	TMU SP	
3774	443, 581	1.5xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3775	443, 581	1.5xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3776	443, 581	1.5xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3777	443, 581	1.5xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3778	444, 582	2xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3779	444, 582	2xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3780	444, 582	2xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3781	444, 582	2xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3782	445, 583	2.5xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3783	445, 583	2.5xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3784	445, 583	2.5xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3785	445, 583	2.5xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3787	446, 584	1.5xD		Drill thread milling cutters for ISO metric fine threads	Solid carbide	DTMC SP	
3788	446, 584	1.5xD		Drill thread milling cutters for ISO metric fine threads	Solid carbide	DTMC SP	
3789	446, 584	1.5xD		Drill thread milling cutters for ISO metric fine threads	Solid carbide	DTMC SP	
3790	447, 585	2xD		Drill thread milling cutters for ISO metric fine threads	Solid carbide	DTMC SP	
3791	447, 585	2xD		Drill thread milling cutters for ISO metric fine threads	Solid carbide	DTMC SP	
3792	447, 585	2xD		Drill thread milling cutters for ISO metric fine threads	Solid carbide	DTMC SP	
3793	447, 585	2xD		Drill thread milling cutters for ISO metric fine threads	Solid carbide	DTMC SP	
4127	269			Machine taps for NPTF-threads	HSS-E	VA R25	C
4132	186, 304, 411, 549, 641	2xD		Thread milling cutters without chamfer for ISO metric threads	Solid carbide	TM SP	
4133	186, 304, 411, 549, 641	2xD		Thread milling cutters without chamfer for ISO metric threads	Solid carbide	TM SP	
4134	194, 312, 419, 557, 649	2xD		Thread milling cutters without chamfer for UNC-threads	Solid carbide	TM SP	
4135	194, 312, 419, 557, 649	2xD		Thread milling cutters without chamfer for UNC-threads	Solid carbide	TM SP	
4136	197, 315, 422, 560, 652	2xD		Thread milling cutters without chamfer for UNF-threads	Solid carbide	TM SP	
4137	197, 315, 422, 560, 652	2xD		Thread milling cutters without chamfer for UNF-threads	Solid carbide	TM SP	
4138	448, 586	2xD		Drill thread milling cutters for UNC-threads	Solid carbide	DTMC SP	
4139	448, 586	2xD		Drill thread milling cutters for UNC-threads	Solid carbide	DTMC SP	
4140	449, 587	2xD		Drill thread milling cutters for UNF-threads	Solid carbide	DTMC SP	
4141	449, 587	2xD		Drill thread milling cutters for UNF-threads	Solid carbide	DTMC SP	
4143	162, 283, 388, 521, 626			Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
4145	180, 298, 403, 540, 634			Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	C
4146	520		~DIN 371/~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
4147	537		~DIN 371/~DIN 374	Oil feed fluteless taps f. ISO metric fine threads	HSS-E	N	C
4151	539		~DIN 371/~DIN 374	Oil feed fluteless taps f. ISO metric fine threads	HSS-E	N	C
4152	546			Oil feed fluteless taps f. BSP-threads	HSS-E	N	C
4153	67			Machine taps for ISO metric threads	HSS-E	N R40	C
4154	48, 242		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E	N R15	C
4155	48, 242		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E	N R15	E
4156	103, 250		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R15	C
4157	103, 250		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R15	E
4158	135		DIN 5156	Machine taps for BSP-threads	HSS-E	N R15	E
4159	138, 266, 504		DIN 5156	Machine taps for BSP-threads	HSS-E-PM	VA R40	C
4161	682		DIN 371	Machine taps for ISO metric fine threads	HSS-E-PM	H	D
4162	210, 328, 435, 573, 665, 698			External thread milling cutters	Solid carbide	TMU SP	
4163	210, 328, 435, 573, 665, 698			External thread milling cutters	Solid carbide	TMU SP	
4165	78, 359, 479		DIN 376	Oil feed taps for ISO metric threads	HSS-E-PM	H	E
4218	38, 239		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
4219	90, 248		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	B
4220	134, 264		DIN 5156	Machine taps for BSP-threads	HSS-E	N	B
4225	217, 335, 442, 580, 639	3xD		Micro-thread milling cutters	Solid carbide	SP M/MF	
4226	215, 333, 440, 578, 637	3xD		Micro-thread milling cutters	Solid carbide	SP M	
4227	703	3xD		Micro-thread milling cutters	Solid carbide	SP M	
4228	216, 334, 441, 579, 638	3xD		Micro-thread milling cutters	Solid carbide	SP G	

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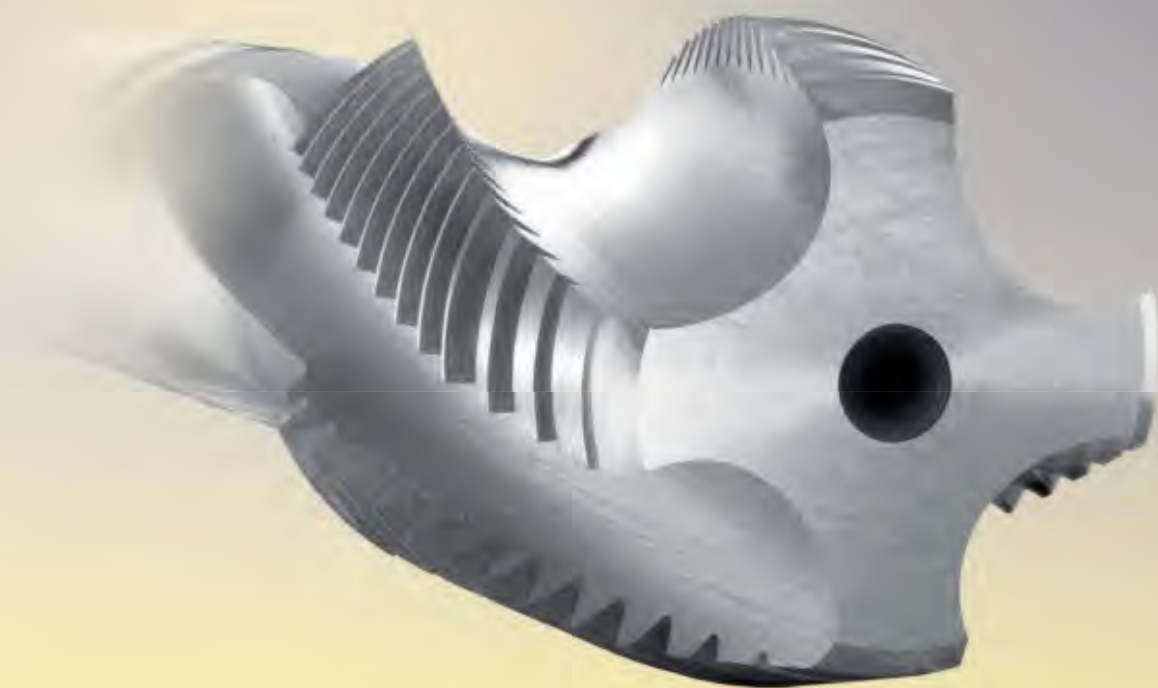
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