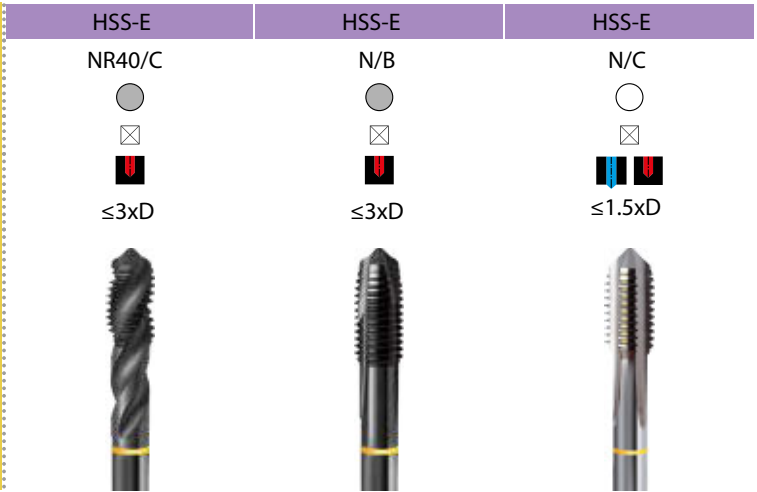


powertap

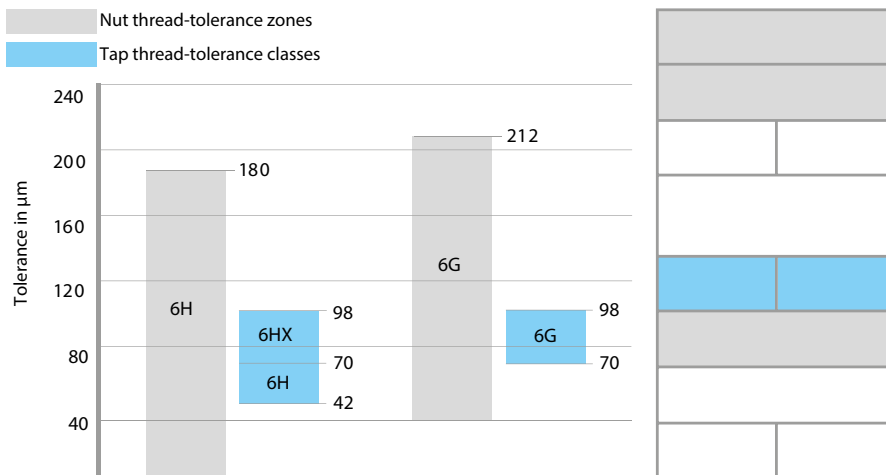
UNIVERSAL TAPS



Thread		Ø-range on page			
M		6	4	5	
Material / ISO Material	Hardness N/mm ²	Recommended cutting speed v _c m/min			
P	Struct./free-cutt./unall. heat-treat./case hard. steels	≤ 800	10	12	6
	Free-cutting steels, unall. case hard. steels, nitr. steels	800 - 1 000	8	10	x
	Alloyed heat-treatable, tool and high speed steels	800 - 1200	6	8	x
M	Stainless steel - easy to machine / sulphured	≤ 0750	6	8	x
	Stainless steel - moderately difficult to machine	750 - 950	6	8	x
K	Cast iron, grey cast iron, spher. graph./mall. cast iron		12	15	10
N	Aluminium, Al-wrought alloys, Al-alloys	≤ 6% Si	12	15	x
	Aluminium-cast alloys	≥ 6% Si	8	10	10
S	Titan, Ti-alloys		2	4	x
	Ni-alloys		x	x	x
H	Hardened steels	45 - 55 HRC	x	x	x
	Hardened steels	55 - 62 HRC	x	x	x

Available in all essential tolerances

Tolerance zone / tolerance class allocation



6H:
The tolerance zone 6H corresponds with the standard tolerance for taps to DIN EN 22857.

6HX:
The additional letter "X" (6HX) indicates taps produced with deviating tolerance to standard. These deviations are based upon the company standard. Taps produced to tolerance 6HX are, for example, selected for abrasive or tough materials.

6G:
The tolerance zone 6G corresponds with an over-size condition tolerance for taps to DIN EN 22857 and is applied for components that are, for example, surface treated.

ISO PowerTaps for ISO metric threads



through holes



steam tempered



external cooling

Guhring no.

4034

Standard

ISO 529

Tool material

HSS-E

Type

N

Form

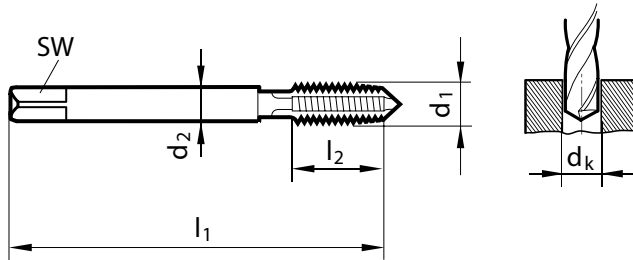
B

Tolerance

ISO 2 / 6H

Cutting direction

right-hand



d1	P	d2	SW	dk	l1	l2	Code no.
	mm	mm		mm	mm	mm	
M 3	0.50	3.15	2.50	2.50	48.00	10.00	3.000
M 4	0.70	4.00	3.15	3.30	53.00	12.00	4.000
M 5	0.80	5.00	4.00	4.20	58.00	16.00	5.000
M 6	1.00	6.30	5.00	5.00	66.00	18.00	6.000
M 8	1.25	8.00	6.30	6.80	72.00	22.00	8.000
M10	1.50	10.00	8.00	8.50	80.00	22.00	10.000
M 12	1.75	9.00	7.10	10.20	89.00	24.00	12.000
M 14	2.00	11.20	9.00	12.00	95.00	26.00	14.000
M 16	2.00	12.50	10.00	14.00	102.00	32.00	16.000
M 18	2.50	14.00	11.20	15.50	112.00	32.00	18.000
M 20	2.50	14.00	11.20	17.50	112.00	32.00	20.000

Table of application

ISO	P			M		K	N		S		H	
Material	Steel			Stainless steel		Cast iron	Aluminium		Special alloys		Hardened steel	
Properties	<800	<1000	<1200	<750	<950	GG	<6% Si	>6% Si	Ti	Ni	45-55 HRC	55-62 HRC
v _c m/min	12	10	8	8	8	15	15	10	4	x	x	x

ISO PowerTaps for ISO metric threads



through and blind holes

bright finish

external cooling

Guhring no.

4035

Standard

ISO 529

Tool material

HSS-E

Type

N

Form

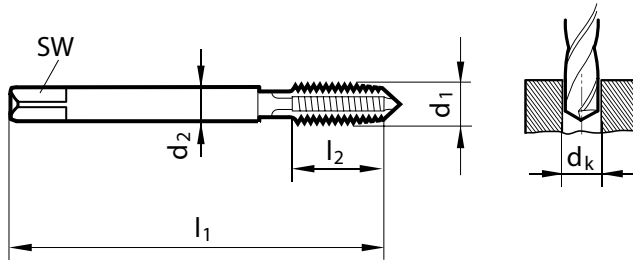
C

Tolerance

ISO 2 / 6H

Cutting direction

right-hand



d1	P	d2	SW	dk	l1	l2	Code no.
	mm	mm		mm	mm	mm	
M 3	0.50	3.15	2.50	2.50	48.00	10.00	3.000
M 4	0.70	4.00	3.15	3.30	53.00	12.00	4.000
M 5	0.80	5.00	4.00	4.20	58.00	16.00	5.000
M 6	1.00	6.30	5.00	5.00	66.00	18.00	6.000
M 8	1.25	8.00	6.30	6.80	72.00	22.00	8.000
M10	1.50	10.00	8.00	8.50	80.00	22.00	10.000
M 12	1.75	9.00	7.10	10.20	89.00	24.00	12.000
M 14	2.00	11.20	9.00	12.00	95.00	26.00	14.000
M 16	2.00	12.50	10.00	14.00	102.00	32.00	16.000
M 18	2.50	14.00	11.20	15.50	112.00	32.00	18.000
M 20	2.50	14.00	11.20	17.50	112.00	32.00	20.000

for through and blind holes

Table of application

ISO	P			M		K	N		S		H	
Material	Steel			Stainless steel		Cast iron	Aluminium		Special alloys		Hardened steel	
Properties	<800	<1000	<1200	<750	<950	GG	<6% Si	>6% Si	Ti	Ni	45-55 HRC	55-62 HRC
v _c m/min	6	x	x	x	x	10	x	10	x	x	x	x

ISO PowerTaps for ISO metric threads



blind holes



steam tempered



external cooling

Guhring no.

4036

Standard

ISO 529

Tool material

HSS-E

Type

N R40

Form

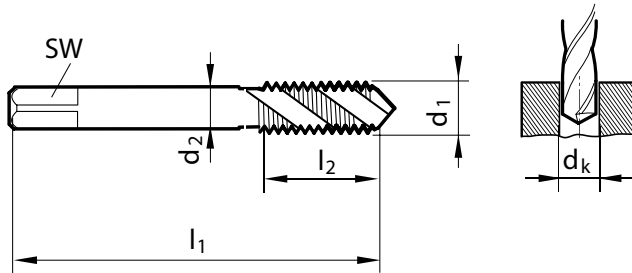
C

Tolerance

ISO 2 / 6H

Cutting direction

right-hand



d1	P	d2	SW	dk	l1	l2	Code no.
	mm	mm		mm	mm	mm	
M 3	0.50	3.15	2.50	2.50	48.00	10.00	3.000
M 4	0.70	4.00	3.15	3.30	53.00	12.00	4.000
M 5	0.80	5.00	4.00	4.20	58.00	16.00	5.000
M 6	1.00	6.30	5.00	5.00	66.00	18.00	6.000
M 8	1.25	8.00	6.30	6.80	72.00	22.00	8.000
M10	1.50	10.00	8.00	8.50	80.00	22.00	10.000
M 12	1.75	9.00	7.10	10.20	89.00	24.00	12.000
M 14	2.00	11.20	9.00	12.00	95.00	26.00	14.000
M 16	2.00	12.50	10.00	14.00	102.00	32.00	16.000
M 18	2.50	14.00	11.20	15.50	112.00	32.00	18.000
M 20	2.50	14.00	11.20	17.50	112.00	32.00	20.000

for blind holes



Table of application

ISO	P			M		K	N		S		H	
Material	Steel			Stainless steel		Cast iron	Aluminium		Special alloys		Hardened steel	
Properties	<800	<1000	<1200	<750	<950	GG	<6% Si	>6% Si	Ti	Ni	45-55 HRC	55-62 HRC
v _c m/min	10	8	6	6	6	12	12	8	2	x	x	x