Reamer 830

High feed precision tool for through holes

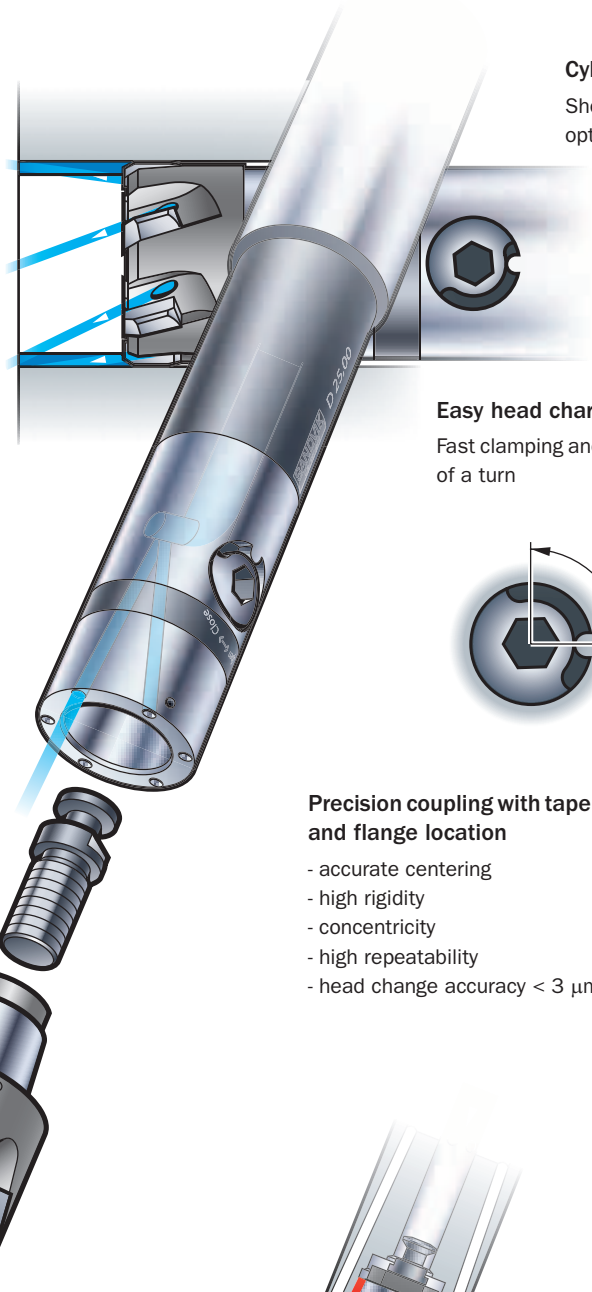
Fast and easy head change by front clamping

High surface finish and operation security

Effective chip evacuation by directing cutting fluid at each edge.

Cylindrical shank

Short and long shank options

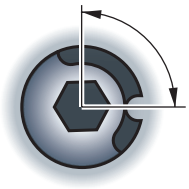


High penetration rate

f_n = 0.4-1.5 mm/rev
v_c = up to 200 m/min

Easy head charge

Fast clamping and release in a quarter of a turn



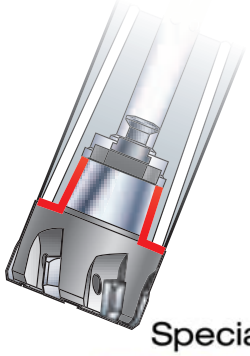
Clamping force:

D_c 10.0-23.0 mm: 7Nm
D_c 24.0-31.75 mm: 12Nm

Precision coupling with taper and flange location

- accurate centering
- high rigidity
- concentricity
- high repeatability
- head change accuracy < 3 µm

Ground for hole tolerance = H7



ISO application areas:

P K

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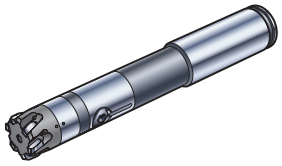
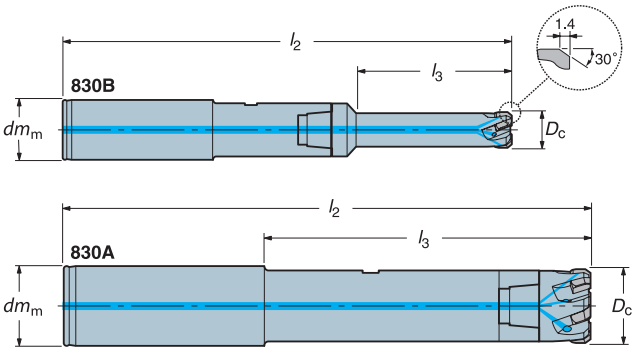
Reamer 830

for finishing of through holes

For hole diameters 10.00 - 31.75 mm
Max hole depth, l_3





Rake angle	6°
Brazed inserts:	grade P10R
Hole tolerance:	H7
Cutting fluid:	Internal
Shank design	Cylindrical
Tolerance dm_m	h6

For hole diameter		Head	Short shank				Long shank				
D_c mm	z_n	Ordering code	Ordering code	l_2	l_3	dm_m	Ordering code	l_2	l_3	dm_m	kg
10.0	6	830B-E06D1000H7S12	830-S12A20035F[1]	145	45	20					0.22-0.23
11.0	6	830B-E06D1100H7S12	830-S12A20069F[1]	178.5	45	20	830-S12A20130F[1]	239.5	45	20	0.3-0.4
12.0	6	830B-E06D1200H7S12									
13.0	6	830B-E06D1300H7S12	830-S12A20035F[1]	145	45	20					0.24-0.26
14.0	6	830B-E06D1400H7S12	830-S12A20069F[1]	178.5	45	20	830-S12A20130F[1]	239.5	45	20	0.3-0.4
15.0	6	830B-E06D1500H7S12									
16.0	6	830B-E06D1600H7S12	830-S12A20035F[1]	145	45	20					0.27-0.29
17.0	6	830B-E06D1700H7S12	830-S12A20069F[1]	178.5	45	20	830-S12A20130F[1]	239.5	45	20	0.4-0.5
18.0	6	830B-E06D1800H7S12									
19.0	6	830A-E06D1900H7S12	830-S12A20035F[1]	99.5	49.5	20					
19.05	6	830A-E06D1905H7S12	830-S12A20069F[1]	133	83	20	830-S12A20130F[1]	194	144	20	0.4-0.5
20.0	6	830A-E06D2000H7S12									
21.0	6	830A-E06D2100H7S12									
22.0	6	830A-E06D2200H7S14	830-S14A20070F[2]	135	85	20	830-S14A20131F[2]	196	146	20	0.5-0.6
23.0	6	830A-E06D2300H7S14									
24.0	6	830A-E06D2400H7S16									
25.0	6	830A-E06D2500H7S16									
25.4	6	830A-E06D2540H7S16									
26.0	6	830A-E06D2600H7S16	830-S16A25090F[3]	166	106	25	830-S16A25151F[3]	227	167	25	0.5-0.7
27.0	6	830A-E06D2700H7S16									
28.0	6	830A-E06D2800H7S16									
29.0	6	830A-E06D2900H7S16									
30.0	8	830A-E06D3000H7S20	830-S20A25089F[3]	166	106	25	830-S20A25150F[3]	227	167	25	0.7-1.1
31.75	8	830A-E06D3175H7S20									

1) Delivered with retention knobs 5519 107-01 and 5519 106-01.
2) Delivered with retention knob 5519 106-01.
3) Delivered with retention knob 5519 106-02.

Ordering example: 2 pieces 830B-E06D1000H7S12
1 piece 830-S12A20069F

Main spare parts

For reamer diameter	Key for head (mm)	Retention knob with cutting fluid through	Retention knob without cutting fluid through
10 – 18	3021 010-040 (4.0)	5519 107-01	–
19 – 23	3021 010-040 (4.0)	–	5519 106-01
24 – 31.75	3021 010-050 (5.0)	–	5519 106-02

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Cutting data for Reamer 830

ISO	CMC	Material	Hardness Brinell HB	Grade	Cutting speed V_c m/min	Feed f_z mm/insert	Radial depth of cut a_p mm
P		**Unalloyed steel**					
	01.1	Non-hardened 0,10-0,25% C	90-200		150-200	0.15-0.25	
	01.2	Non-hardened 0,25-0,55% C	125-225	P10R	150-200	0.15-0.25	0.1-0.3
	01.3	Non-hardened 0,55-0,80% C	150-225		140-180	0.15-0.25	
	01.4	High carbon & carbon tool steel	180-225		140-180	0.15-0.25	
		Low alloy steel					
	02.1	Non-hardened	150-260	P10R	110-180	0.15-0.25	0.1-0.3
	02.2	Hardened and tempered	220-400		70-130	0.10-0.20	
		Steel castings					
	06.1	Unalloyed	90-225	P10R	140-180	0.15-0.25	0.1-0.3
	06.2	Low alloyed	150-250		100-150	0.15-0.25	
K		**Mallable cast iron**					
	07.2	Perlitic	150-270	P10R	150-200	0.15-0.25	0.1-0.3
		Nodular cast iron					
	09.2	Perlitic	200-300	P10R	110-190	0.15-0.25	0.1-0.3

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