



High-performance reamers, H7 series

Article no. 7285



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H7 series in accordance with DIN 1420 • extremely unequal flute spacing • central internal coolant supply, outlet on the face • intermediate dimensions of $\varnothing$ 1.95-20.1 mm possible • for clamping in hydraulic and shrink fit chucks

High-performance reamers, H7 series

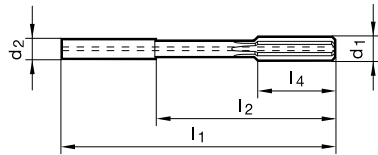
Article no. 7286



cutting data see page 165



H7 series in accordance with DIN 1420 • extremely unequal flute spacing • central internal coolant supply, outlet via oil grooves on shank • intermediate dimensions of $\varnothing$ 1.95-20.1 mm possible • for clamping in hydraulic and shrink fit chucks



Article no.

7285

7286

d1 mm	d2 h6 mm	l1 mm	l2 mm	l4 mm	Z	Order no.	
2.000	4.00	50.0	22.0	8.0	4	7285 2.000	7286 2.000
3.000	4.00	68.0	40.0	12.0	4	7285 3.000	7286 3.000
4.000	4.00	68.0	40.0	12.0	4	7285 4.000	7286 4.000
5.000	6.00	76.0	40.0	12.0	4	7285 5.000	7286 5.000
6.000	6.00	76.0	40.0	12.0	4	7285 6.000	7286 6.000
7.000	8.00	101.0	65.0	16.0	6	7285 7.000	7286 7.000
8.000	8.00	101.0	65.0	16.0	6	7285 8.000	7286 8.000
9.000	10.00	101.0	61.0	19.0	6	7285 9.000	7286 9.000
10.000	10.00	101.0	61.0	19.0	6	7285 10.000	7286 10.000
11.000	12.00	130.0	85.0	19.0	6	7285 11.000	7286 11.000
12.000	12.00	130.0	85.0	19.0	6	7285 12.000	7286 12.000
13.000	14.00	130.0	85.0	22.0	6	7285 13.000	7286 13.000
14.000	14.00	130.0	85.0	22.0	6	7285 14.000	7286 14.000
15.000	16.00	150.0	102.0	22.0	6	7285 15.000	7286 15.000
16.000	16.00	150.0	102.0	22.0	6	7285 16.000	7286 16.000
17.000	18.00	150.0	102.0	25.0	6	7285 17.000	7286 17.000
18.000	18.00	150.0	102.0	25.0	6	7285 18.000	7286 18.000
19.000	20.00	150.0	100.0	25.0	6	7285 19.000	7286 19.000
20.000	20.00	150.0	100.0	25.0	6	7285 20.000	7286 20.000

Solid carbide high-performance reamers HR 500



HR 500 AL



Machining group	 v _c (m/min)	f (mm/rev) with nom. Ø									
		2	3	4	6	8	10	12	14	16	20
P1.1.1 Unalloyed steel, annealed, 0.15 % C, Rm 420 N/mm ² , 125 HB											
P1.1.2 Unalloyed steel, heat-treated, 0.15 % C, Rm 420 N/mm ² , 125 HB											
P1.1.3 Unalloyed steel, annealed, 0.45 % C, Rm 640 N/mm ² , 190 HB											
P1.1.4 Unalloyed steel, heat-treated, 0.45 % C, Rm 640 N/mm ² , 190 HB											
P1.1.5 Unalloyed steel, heat-treated, 0.45 % C, Rm 850 N/mm ² , 250 HB											
P1.1.6 Unalloyed steel, annealed, 0.75 % C, Rm 915 N/mm ² , 270 HB											
P1.1.7 Unalloyed steel, heat-treated, 0.75 % C, Rm 1020 N/mm ² , 300 HB											
P2.1.1 Low-alloy steel, annealed, Rm 610 N/mm ² , 180 HB											
P2.1.2 Low-alloy steel, heat-treated, Rm 930 N/mm ² , 275 HB											
P2.1.3 Low-alloy steel, heat-treated, Rm 1020 N/mm ² , 300 HB											
P2.1.4 Low-alloy steel, heat-treated, Rm 1190 N/mm ² , 350 HB											
P3.1.1 High-alloy steel and tool steel, annealed, Rm 680 N/mm ² , 200 HB											
P3.1.2 High-alloy steel and tool steel, hardened and tempered, Rm 1100 N/mm ² , 325 HB											
M1.1.1 Stainless steel, ferritic/martensitic, with machining additives											
M1.1.2 Stainless steel, ferritic/martensitic, annealed, Rm 680 N/mm ² , 200 HB											
M1.1.3 Stainless steel, ferritic/martensitic, heat-treated, Rm 810 N/mm ² , 240 HB											
M2.1.1 Stainless steel, austenitic, quenched, 180 HB											
M2.2.1 Duplex steel, high-strength stainless steels											
K1.1.1 Grey cast iron, pearlitic/ferritic, 180 HB											
K1.1.2 Grey cast iron, pearlitic/martensitic, 260 HB											
K1.2.1 Cast iron with spheroidal graphite, ferritic, 160 HB											
K1.2.2 Cast iron with spheroidal graphite, pearlitic, 250 HB											
K1.3.1 Malleable cast iron, ferritic, 130 HB											
K1.3.2 Malleable cast iron, pearlitic, 230 HB											
K2.1.1 Vermicular graphite cast iron (GJV)											
K2.2.1 Austenitic-ferritic spheroidal graphite cast iron (ADI)											
N1.1.1 Wrought aluminium alloys, non-hardened, 60 HB	260	0.35	0.55	0.75	1.35	1.75	2.15	2.30	2.45	2.60	2.85
N1.1.2 Wrought aluminium alloys, hardened, 100 HB	260	0.35	0.55	0.75	1.35	1.75	2.15	2.30	2.45	2.60	2.85
N2.1.1 Aluminium casting alloys, non-hardened, ≤ 12 % Si, 75 HB	260	0.35	0.55	0.75	1.35	1.75	2.15	2.30	2.45	2.60	2.85
N2.1.2 Aluminium casting alloys, hardened, ≤ 12 % Si, 90 HB	195	0.35	0.55	0.75	1.35	1.75	2.15	2.30	2.45	2.60	2.85
N2.1.3 Aluminium casting alloys, non-hardened, > 12 % Si, 130 HB	195	0.35	0.55	0.75	1.35	1.75	2.15	2.30	2.45	2.60	2.85
N3.1.1 Copper and copper alloys: Free-machining alloy, Pb > 1 %											
N3.1.2 Copper and copper alloys: CuZn, CuSnZn											
N3.1.3 Copper and copper alloys: CuSn, lead-free copper and copper electrolyte											
N4.1.1 Non-metallic materials: Duroplastics, fibre-reinforced plastics											
N4.1.2 Non-metallic materials: Hard rubber, wood, etc.											
N4.1.3 Non-metallic materials: Graphite											
S1.1.1 Heat-resistant alloys, Fe-based, annealed, 200 HB											
S1.1.2 Heat-resistant alloys, Fe-based, hardened, 280 HB											
S1.1.3 Heat-resistant alloys, Ni- or Co-based, annealed, 250 HB											
S1.1.4 Heat-resistant alloys, Ni- or Co-based, hardened, 350 HB											
S1.1.5 Heat-resistant alloys, Ni- or Co-based, cast, 320 HB											
S2.1.1 Titanium alloys, pure titanium, Rm 400 N/mm ²											
S2.1.2 Titanium alloys, Alpha and Beta alloys, hardened, Rm 1050 N/mm ²											
H1.1.1 Hardened steel, hardened and tempered, < 55 HRC											
H1.1.2 Hardened steel, hardened and tempered, < 60 HRC											
H1.1.3 Hardened steel, hardened and tempered, > 60 HRC											
H2.1.1 Chilled cast iron, 400 HB											
H2.1.2 Chilled cast iron, hardened and tempered, < 55 HRC											

Cutting data



HR 500

HR 500

Solid carbide high-performance reamers up to Ø 20 mm for universal application

HR 500 T NEW

Solid carbide reamer head for Ø 16-38 mm

HR 500 Cast

Solid carbide high-performance reamers for the machining of GG and GGG achieving optimal surface quality and efficiency

HR 500 Alu

Solid carbide high-performance reamers for the machining of aluminium and AlSi-alloys

HR 500 G

Carbide-tipped or cermet-tipped high-performance reamers from Ø 6 mm up to 40 mm

HR 500 GT

Carbide-tipped or cermet-tipped high-performance reamers from Ø 40 mm up to 76.2 mm

USA Edition 2018

EXCLUSIVELINE®

Made by Guhring

HR 500 high-performance reamers Pictograms

Tool material	Solid Carbide Carbide Tipped Cermet Tipped
	Solid carbide Carbide tipped Cermet tipped
Internal cooling	
Standard	G to Guhring standard
Type	HR 500 S HR 500 TS HR 500 Guss S HR 500 Alu S HR 500 G S HR 500 GT S HR 500 D HR 500 TD HR 500 Guss D HR 500 Alu D HR 500 G D HR 500 GT D
	Blind hole (S) Through hole (D)
Cutting direction	R Right hand
Tolerance	H7 +0,005
Hole type	Through hole Blind hole
No. of cutting edges	
Shank form	HA
Helix angle	 straight-fluted
Spacing	EU extremely unequal

Possible misprints or any type of intermediate changes do not entitle to any claims. All DIN marked products can be supplied deviating from the catalog dimensions as long as they correspond to the specified DIN standard.

Guhring, Inc.
1445 Commerce Ave., Brookfield, WI 53045
(800) 776-6170 (262) 784-6730
www.guhring.com