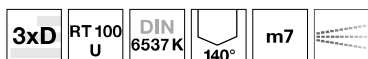


**Ratio drills with oil feed**


**P** • web thinning  $\geq \varnothing 3.000$  • facet point grinding • main cutting edge form straight • optimised cutting geometry

**M** ○

**K** •

**N** ○

**S** ○

**H** ○

structural and case hardened steels • free-cutting steels, heat-treatable steels • steels (alloyed/unalloyed) up to 1200 N/mm<sup>2</sup> • cast materials • bronze, brass • high-alloyed AISI-alloys

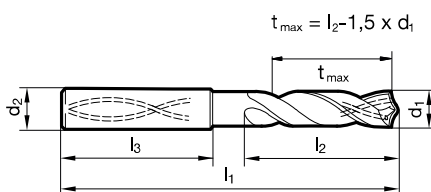
 Tool material **Solid carbide**

 Surface **F** **F**

Shank form HA HE

**GUHRING NAVIGATOR**

Cutting data page 72


 Article no. **5510** **5610**

 Discount group **155** **155**

 Cutting direction **(R)** **(R)**

d1		d2 h6	l1	l2	l3	Availability	
mm	inch	mm	mm	mm	mm		
3.000		6.00	62.00	20.00	36.00	●	●
3.100		6.00	62.00	20.00	36.00	●	●
3.170	1/8	6.00	62.00	20.00	36.00	●	●
3.200		6.00	62.00	20.00	36.00	●	●
3.250		6.00	62.00	20.00	36.00	●	●
3.300		6.00	62.00	20.00	36.00	●	●
3.400		6.00	62.00	20.00	36.00	●	●
3.500		6.00	62.00	20.00	36.00	●	●
3.570	9/64	6.00	62.00	20.00	36.00	●	●
3.600		6.00	62.00	20.00	36.00	●	●
3.700		6.00	62.00	20.00	36.00	●	●
3.800		6.00	66.00	24.00	36.00	●	●
3.900		6.00	66.00	24.00	36.00	●	●
3.970	5/32	6.00	66.00	24.00	36.00	●	●
4.000		6.00	66.00	24.00	36.00	●	●
4.100		6.00	66.00	24.00	36.00	●	●
4.200		6.00	66.00	24.00	36.00	●	●
4.300		6.00	66.00	24.00	36.00	●	●
4.370	11/64	6.00	66.00	24.00	36.00	●	●
4.400		6.00	66.00	24.00	36.00	●	●
4.500		6.00	66.00	24.00	36.00	●	●
4.600		6.00	66.00	24.00	36.00	●	●
4.650		6.00	66.00	24.00	36.00	●	●
4.700		6.00	66.00	24.00	36.00	●	●
4.760	3/16	6.00	66.00	28.00	36.00	●	●
4.800		6.00	66.00	28.00	36.00	●	●
4.900		6.00	66.00	28.00	36.00	●	●
5.000		6.00	66.00	28.00	36.00	●	●
5.100		6.00	66.00	28.00	36.00	●	●
5.160	13/64	6.00	66.00	28.00	36.00	●	●
5.200		6.00	66.00	28.00	36.00	●	●
5.300		6.00	66.00	28.00	36.00	●	●
5.400		6.00	66.00	28.00	36.00	●	●
5.500		6.00	66.00	28.00	36.00	●	●
5.550		6.00	66.00	28.00	36.00	●	●
5.560	7/32	6.00	66.00	28.00	36.00	●	●



						Article no.	5510	5610
						Discount group	155	155
						Cutting direction	(R)	(R)
d1		d2 h6	l1	l2	l3	Availability		
mm	inch	mm	mm	mm	mm			
5.600		6.00	66.00	28.00	36.00	●	●	
5.700		6.00	66.00	28.00	36.00	●	●	
5.800		6.00	66.00	28.00	36.00	●	●	
5.900		6.00	66.00	28.00	36.00	●	●	
5.950	15/64	6.00	66.00	28.00	36.00	●	●	
6.000		6.00	66.00	28.00	36.00	●	●	
6.100		8.00	79.00	34.00	36.00	●	●	
6.200		8.00	79.00	34.00	36.00	●	●	
6.300		8.00	79.00	34.00	36.00	●	●	
6.350	1/4	8.00	79.00	34.00	36.00	●	●	
6.400		8.00	79.00	34.00	36.00	●	●	
6.500		8.00	79.00	34.00	36.00	●	●	
6.600		8.00	79.00	34.00	36.00	●	●	
6.700		8.00	79.00	34.00	36.00	●	●	
6.750	17/64	8.00	79.00	34.00	36.00	●	●	
6.800		8.00	79.00	34.00	36.00	●	●	
6.900		8.00	79.00	34.00	36.00	●	●	
7.000		8.00	79.00	34.00	36.00	●	●	
7.100		8.00	79.00	41.00	36.00	●	●	
7.140	9/32	8.00	79.00	41.00	36.00	●	●	
7.200		8.00	79.00	41.00	36.00	●	●	
7.300		8.00	79.00	41.00	36.00	●	●	
7.400		8.00	79.00	41.00	36.00	●	●	
7.500		8.00	79.00	41.00	36.00	●	●	
7.540	19/64	8.00	79.00	41.00	36.00	●	●	
7.600		8.00	79.00	41.00	36.00	●	●	
7.700		8.00	79.00	41.00	36.00	●	●	
7.800		8.00	79.00	41.00	36.00	●	●	
7.900		8.00	79.00	41.00	36.00	●	●	
7.940	5/16	8.00	79.00	41.00	36.00	●	●	
8.000		8.00	79.00	41.00	36.00	●	●	
8.100		10.00	89.00	47.00	40.00	●	●	
8.200		10.00	89.00	47.00	40.00	●	●	
8.300		10.00	89.00	47.00	40.00	●	●	
8.330	21/64	10.00	89.00	47.00	40.00	●	●	
8.400		10.00	89.00	47.00	40.00	●	●	
8.500		10.00	89.00	47.00	40.00	●	●	
8.600		10.00	89.00	47.00	40.00	●	●	
8.700		10.00	89.00	47.00	40.00	●	●	
8.730	11/32	10.00	89.00	47.00	40.00	●	●	
8.800		10.00	89.00	47.00	40.00	●	●	
8.900		10.00	89.00	47.00	40.00	●	●	
9.000		10.00	89.00	47.00	40.00	●	●	
9.100		10.00	89.00	47.00	40.00	●	●	
9.130	23/64	10.00	89.00	47.00	40.00	●	●	
9.200		10.00	89.00	47.00	40.00	●	●	
9.250		10.00	89.00	47.00	40.00	●	●	
9.300		10.00	89.00	47.00	40.00	●	●	
9.400		10.00	89.00	47.00	40.00	●	●	
9.500		10.00	89.00	47.00	40.00	●	●	
9.520	3/8	10.00	89.00	47.00	40.00	●	●	
9.600		10.00	89.00	47.00	40.00	●	●	
9.700		10.00	89.00	47.00	40.00	●	●	
9.800		10.00	89.00	47.00	40.00	●	●	
9.900		10.00	89.00	47.00	40.00	●	●	
9.920	25/64	10.00	89.00	47.00	40.00	●	●	
10.000		10.00	89.00	47.00	40.00	●	●	
10.100		12.00	102.00	55.00	45.00	●	●	
10.200		12.00	102.00	55.00	45.00	●	●	
10.300		12.00	102.00	55.00	45.00	●	●	



						Article no.	5510	5610
						Discount group	155	155
						Cutting direction		
d1		d2 h6	l1	l2	l3	Availability		
mm	inch	mm	mm	mm	mm			
10.320	13/32	12.00	102.00	55.00	45.00	●	●	
10.400		12.00	102.00	55.00	45.00	●	●	
10.500		12.00	102.00	55.00	45.00	●	●	
10.600		12.00	102.00	55.00	45.00	●	●	
10.700		12.00	102.00	55.00	45.00	●	●	
10.800		12.00	102.00	55.00	45.00	●	●	
10.900		12.00	102.00	55.00	45.00	●	●	
11.000		12.00	102.00	55.00	45.00	●	●	
11.100		12.00	102.00	55.00	45.00	●	●	
11.110	7/16	12.00	102.00	55.00	45.00	●	●	
11.200		12.00	102.00	55.00	45.00	●	●	
11.300		12.00	102.00	55.00	45.00	●	●	
11.400		12.00	102.00	55.00	45.00	●	●	
11.500		12.00	102.00	55.00	45.00	●	●	
11.600		12.00	102.00	55.00	45.00	●	●	
11.700		12.00	102.00	55.00	45.00	●	●	
11.800		12.00	102.00	55.00	45.00	●	●	
11.900		12.00	102.00	55.00	45.00	●	●	
11.910	15/32	12.00	102.00	55.00	45.00	●	●	
12.000		12.00	102.00	55.00	45.00	●	●	
12.200		14.00	107.00	60.00	45.00	●	●	
12.400		14.00	107.00	60.00	45.00	●	●	
12.500		14.00	107.00	60.00	45.00	●	●	
12.700	1/2	14.00	107.00	60.00	45.00	●	●	
12.800		14.00	107.00	60.00	45.00	●	●	
13.000		14.00	107.00	60.00	45.00	●	●	
13.500		14.00	107.00	60.00	45.00	●	●	
13.700		14.00	107.00	60.00	45.00	●	●	
13.800		14.00	107.00	60.00	45.00	●	●	
14.000		14.00	107.00	60.00	45.00	●	●	
14.200		16.00	115.00	65.00	48.00	●	●	
14.290	9/16	16.00	115.00	65.00	48.00	●	●	
14.300		16.00	115.00	65.00	48.00	●	●	
14.500		16.00	115.00	65.00	48.00	●	●	
14.700		16.00	115.00	65.00	48.00	●	●	
14.800		16.00	115.00	65.00	48.00	●	●	
15.000		16.00	115.00	65.00	48.00	●	●	
15.200		16.00	115.00	65.00	48.00	●	●	
15.500		16.00	115.00	65.00	48.00	●	●	
15.700		16.00	115.00	65.00	48.00	●	●	
16.000		16.00	115.00	65.00	48.00	●	●	
16.500		18.00	123.00	73.00	48.00	●	●	
17.000		18.00	123.00	73.00	48.00	●	●	
17.500		18.00	123.00	73.00	48.00	●	●	
17.700		18.00	123.00	73.00	48.00	●	●	
18.000		18.00	123.00	73.00	48.00	●	●	
18.500		20.00	131.00	79.00	50.00	●	●	
19.000		20.00	131.00	79.00	50.00	●	●	
19.500		20.00	131.00	79.00	50.00	●	●	
20.000		20.00	131.00	79.00	50.00	●	●	