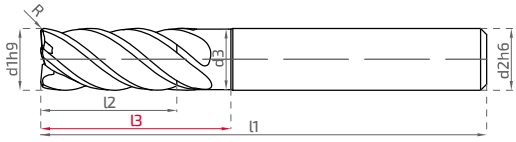

Short Series

S	Order No	Code	d1h9	d2h6	d3	l1	l2	l3	Corner
	61100	154.5.0300.0580.R0020.0080.0290.0100.00.S06H1C01.01	3	6	2,9	58	8	10	R 0.20
	61102	154.5.0300.0580.R0050.0080.0290.0100.00.S06H1C01.01	3	6	2,9	58	8	10	R 0.50
	61104	154.5.0400.0580.R0050.0110.0390.0130.00.S06H1C01.01	4	6	3,9	58	11	13	R 0.50
	61106	154.5.0500.0580.R0020.0130.0490.0160.00.S06H1C01.01	5	6	4,9	58	13	16	R 0.20
	61108	154.5.0500.0580.R0050.0130.0490.0160.00.S06H1C01.01	5	6	4,9	58	13	16	R 0.50
	61110	154.5.0600.0580.R0025.0130.0590.0190.00.S06H1C01.01	6	6	5,9	58	13	19	R 0.25
	61112	154.5.0600.0580.R0050.0130.0590.0190.00.S06H1C01.01	6	6	5,9	58	13	19	R 0.50
	61114	154.5.0600.0580.R0100.0130.0590.0190.00.S06H1C01.01	6	6	5,9	58	13	19	R 1.00
	61116	154.5.0800.0640.R0020.0190.0770.0250.00.S08H1C01.01	8	8	7,7	64	19	25	R 0.20
	61118	154.5.0800.0640.R0050.0190.0770.0250.00.S08H1C01.01	8	8	7,7	64	19	25	R 0.50
	61120	154.5.0800.0640.R0100.0190.0770.0250.00.S08H1C01.01	8	8	7,7	64	19	25	R 1.00
	61122	154.5.0800.0640.R0150.0190.0770.0250.00.S08H1C01.01	8	8	7,7	64	19	25	R 1.50
	61124	154.5.0800.0640.R0200.0190.0770.0250.00.S08H1C01.01	8	8	7,7	64	19	25	R 2.00
	61126	154.5.1000.0730.R0050.0220.0980.0310.00.S10C1C01.01	10	10	9,8	73	22	31	R 0.50
	61128	154.5.1000.0730.R0100.0220.0980.0310.00.S10C1C01.01	10	10	9,8	73	22	31	R 1.00
	61130	154.5.1000.0730.R0200.0220.0980.0310.00.S10C1C01.01	10	10	9,8	73	22	31	R 2.00
	61132	154.5.1200.0820.R0050.0260.1140.0370.00.S12C1C01.01	12	12	11,4	82	26	37	R 0.50
	61134	154.5.1200.0820.R0100.0260.1140.0370.00.S12C1C01.01	12	12	11,4	82	26	37	R 1.00
	61136	154.5.1200.0820.R0150.0260.1140.0370.00.S12C1C01.01	12	12	11,4	82	26	37	R 1.50
	61138	154.5.1200.0820.R0200.0260.1140.0370.00.S12C1C01.01	12	12	11,4	82	26	37	R 2.00
	61140	154.5.1200.0820.R0250.0260.1140.0370.00.S12C1C01.01	12	12	11,4	82	26	37	R 2.50
	61142	154.5.1200.0820.R0300.0260.1140.0370.00.S12C1C01.01	12	12	11,4	82	26	37	R 3.00
	61144	154.5.1200.0820.R0400.0260.1140.0370.00.S12C1C01.01	12	12	11,4	82	26	37	R 4.00
	61146	154.5.1600.1000.R0050.0350.1520.0490.00.S16C2C01.01	16	16	15,2	100	35	49	R 0.50
	61148	154.5.1600.1000.R0100.0350.1520.0490.00.S16C2C01.01	16	16	15,2	100	35	49	R 1.00
	61150	154.5.1600.1000.R0150.0350.1520.0490.00.S16C2C01.01	16	16	15,2	100	35	49	R 1.50
	61152	154.5.1600.1000.R0250.0350.1520.0490.00.S16C2C01.01	16	16	15,2	100	35	49	R 2.50
	61154	154.5.1600.1000.R0300.0350.1520.0490.00.S16C2C01.01	16	16	15,2	100	35	49	R 3.00
	61156	154.5.1600.1000.R0400.0350.1520.0490.00.S16C2C01.01	16	16	15,2	100	35	49	R 4.00
	61158	154.5.2000.1120.R0100.0400.1920.0620.00.S20C2C01.01	20	20	19,2	112	40	62	R 1.00
	61160	154.5.2000.1120.R0200.0400.1920.0620.00.S20C2C01.01	20	20	19,2	112	40	62	R 2.00
	61162	154.5.2000.1120.R0300.0400.1920.0620.00.S20C2C01.01	20	20	19,2	112	40	62	R 3.00
	61164	154.5.2000.1120.R0400.0400.1920.0620.00.S20C2C01.01	20	20	19,2	112	40	62	R 4.00
	61166	154.5.2500.1250.R0100.0400.2460.0720.00.S25C1C01.01	25	25	24,6	125	40	72	R 1.00
	61168	154.5.2500.1250.R0300.0400.2460.0720.00.S25C1C01.01	25	25	24,6	125	40	72	R 3.00
	61170	154.5.2500.1250.R0400.0400.2460.0720.00.S25C1C01.01	25	25	24,6	125	40	72	R 4.00

Cutting Parameters

	Material	Shoulder Milling ap=2xØ/ae=0,05-0,10	Shoulder Milling ap=2xØ/ae=0,1-0,25Ø	Shoulder Milling ap=2xØ/ae=0,25-0,5Ø	Slotting ap=0,25-0,5Ø	Slotting ap=0,5-1Ø
		Vc (m/min)	Vc (m/min)	Vc (m/min)	Vc (m/min)	Vc (m/min)
Steel	Unalloyed Steel	170-200	130-160	110-130	150-180	120-140
Steel	Steel	170-200	130-160	110-130	150-180	120-140
Steel	Tempered Steel	160190	120-150	100-120	140-170	110-140
Steel	Cold Work Tool Steel	100-130	80-100	60-70	90-110	80-100
Steel	Hot work tool stee	90-110	70-90	60-70	80-100	75-95
Stainless Steel	AISI 304-416-420	110-130	90-110	80-100	100-120	90-110
Stainless Steel	AISI 316-440	110-130	90-110	80-100	80-100	80-90
Stainless Steel	17-4 PH 15-5 PH	90-110	70-90	60-80	70-90	70-80
Stainless Steel	Chrome-Cobalt alloy	80-100	60-80	60-80	60-80	60-70
Stainless Steel	Duplex F51	70-90	50-70	50-60	60-80	60-70
Stainless Steel	Super Duplex F55	70-90	50-70	50-60	60-80	60-70
Cast Iron	Gray cast	150-180	120-150	90-120	140-160	120-150
Cast Iron	Alloyed cast	140-160	110-140	90-110	130-150	110-140
Cast Iron	Precision cast	130-150	110-130	90-110	120-140	110-130
Titanium	Iron-based superalloys	60-80	40-60	40-50	50-70	50-60
Titanium	Nickel-based superalloys	60-80	40-60	40-50	50-70	50-60
Titanium	Titanium-based superalloys	60-80	40-60	40-50	50-70	50-60
Hardened Steel	≤ 54 HRC	100-120	80-120	70-90	70-90	60-70
Hardened Steel	>54 HRC	80-100	70-90	60-70	70-90	60-70

HPC

Steel	Unalloyed Steel	350-450	300-350	150-300	160	150-170
Steel	Steel	275-345	255-275	175-255	90	80
Steel	Tempered Steel	255-315	230-255	175-230	90	80
Steel	Cold Work Tool Steel	125-155	85-125	60-85	85	65
Steel	Hot work tool stee	150-185	100-150	75-100	75	65
Stainless Steel	AISI 304-416-420	130-160	120-130	65-120	80	70
Stainless Steel	AISI 316-440	100-125	90-100	65-90	80	70
Stainless Steel	17-4 PH 15-5 PH	130-160	120-130	35-120	60	40
Stainless Steel	Chrome-Cobalt alloy	100-125	90-100	40-90	60	45
Stainless Steel	Duplex F51	60-75	55-60	40-55	60	45
Stainless Steel	Super Duplex F55	60-75	55-60	35-55	50	40
Cast Iron	Gray cast	395-495	265-395	110-265	105	110
Cast Iron	Alloyed cast	165-205	155-165	80-155	80	85
Cast Iron	Precision cast	165-205	155-165	80-155	80	85
Titanium	Iron-based Superalloys	45-55	40-45	25-40	40	30
Titanium	Nickel-based Superalloys	45-55	40-45	25-40	40	30
Titanium	Titanium-based Superalloys	105-115	100-105	55-100	60	55
Hardened Steel	≤ 54 HRC	150-185	100-150	75-100	80	70
Hardened Steel	>54 HRC	125-155	85-125	60-85	65	55

Feed Per Tooth (mm/tooth)

Ø	ae=0,05xØ	ae=0,1xØ	ae=0,25xØ	ae=0,5xØ	ap=0,25-1Ø
3	0,035	0,025	0,021	0,02	0,01
4	0,045	0,035	0,03	0,029	0,02
5	0,06	0,045	0,04	0,035	0,025
6	0,07	0,05	0,041	0,04	0,03
8	0,08	0,07	0,062	0,06	0,04
10	0,09	0,08	0,071	0,07	0,05
12	0,12	0,99	0,085	0,08	0,06
16	0,15	0,12	0,11	0,1	0,08
18	0,18	0,14	0,12	0,11	0,09
20	0,2	0,16	0,131	0,12	0,1
25	0,25	0,19	0,16	0,15	0,125

HPC

Ø	ae=0,05xØ	ae=0,1xØ	ae=0,25xØ	ae=0,5xØ	ap=0,25-1Ø
3	0,069	0,054	0,036	0,03	0,01
4	0,092	0,072	0,048	0,04	0,02
5	0,115	0,09	0,06	0,05	0,025
6	0,138	0,108	0,072	0,06	0,03
8	0,184	0,144	0,096	0,08	0,04
10	0,23	0,18	0,12	0,1	0,05
12	0,276	0,216	0,144	0,12	0,06
16	0,368	0,288	0,192	0,16	0,08
18	0,414	0,324	0,216	0,18	0,09
20	0,46	0,36	0,24	0,2	0,1
25	0,575	0,45	0,3	0,25	0,125

Z5

≤52 HRc
+AlCrN
FORM HA DIN 6535

Steel	●
Stainless Steel	●
Hardened Steel ≤54 HRc	◑
Hardened Steel >54 HRc	○
Cast Iron	●
Graphite	○
Non Ferrous Material	○
HRSA	●
Titanium	●

● Recommended ◑ Acceptable ○ Not Recommended

* Marked products can be delivered quickly from stock.