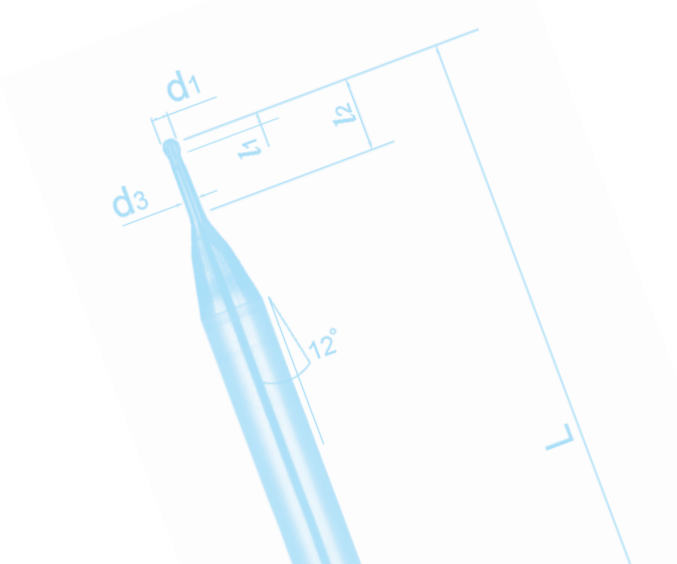
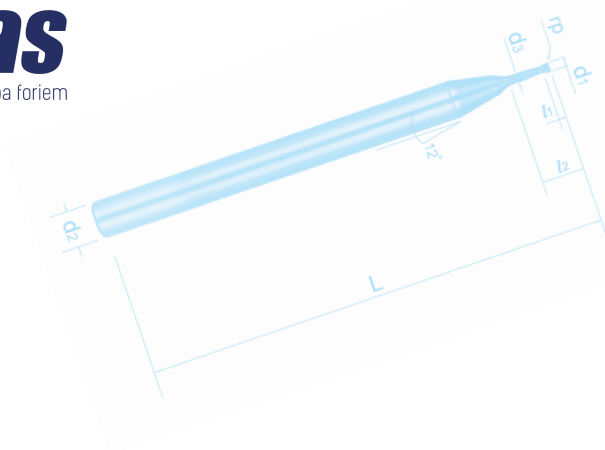
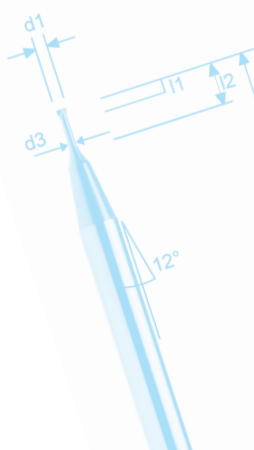


TVRDOKOVOVÉ MICRO FRÉZY DO 70 HRC

Mini end mills for steel



Microfresa testa torica in metallo duro integrale gambo Ø 3 mm

Solid carbide miniature corner radius end mill, shank Ø 3 mm

VHM - Mini Schafffräser mit Eckenradius, Schaft Ø 3 mm - Microfraise carbure avec rayon d'angle, queue Ø 3 mm

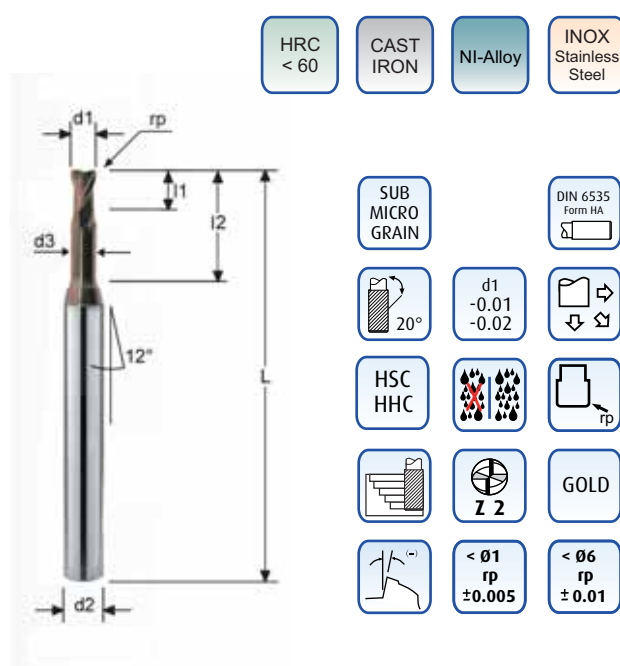
Мини-фреза концевая твердосплавная с угловым радиусом, хвостовик Ø 3 мм

Sk miniaturní fréza s rohovým rádiusem se stopkou Ø 3 mm



CODE	*d1 mm	d2h6 mm	rp mm	l1 mm	l2 mm	L mm	d3 mm	Z no.
200M.004	0.4	3	-	0.6	-	50	-	2
200ML.004	0.4	3	-	0.6	1,5	50	0.35	2
200M.005	0.5	3	0.05	0.7	-	50	-	2
200ML.005	0.5	3	0.05	0.7	2,5	50	0.45	2
200MXL.005	0.5	3	0.05	0.7	4	50	0.45	2
200MSL.005	0.5	3	0.05	0.7	7,5	50	0.45	2
200M.006	0.6	3	0.05	0.9	-	50	-	2
200ML.006	0.6	3	0.05	0.9	5	50	0.55	2
200M.008	0.8	3	0.05	1.2	-	50	-	2
200ML.008	0.8	3	0.05	1.2	4	50	0.75	2
200MXL.008	0.8	3	0.05	1.2	7	50	0.75	2
200MSL.008	0.8	3	0.05	1.2	12	50	0.75	2
200M.010	1.0	3	0.10	1.5	-	50	-	2
200ML.010	1.0	3	0.10	1.5	5	50	0.95	2
200MXL.010	1.0	3	0.10	1.5	8,5	50	0.95	2
200M.012	1.2	3	0.10	1.8	-	50	-	2
200ML.012	1.2	3	0.10	1.8	6	50	1.15	2
200MXL.012	1.2	3	0.10	1.8	10	50	1.15	2
200M.015	1.5	3	0.15	2.2	-	50	-	2
200ML.015	1.5	3	0.15	2.2	7,5	50	1.45	2
200MXL.015	1.5	3	0.15	2.2	12	50	1.45	2
200M.020	2.0	3	0.15	2.2	-	50	-	2
200ML.020	2.0	3	0.15	2.2	10	50	1.95	2
200MXL.020	2.0	3	0.15	2.2	16	50	1.95	2
200M.025	2.5	3	0.15	3.0	-	50	-	2
200ML.025	2.5	3	0.15	3.0	15	50	2.45	2

→ Help 152



HRC < 60	CAST IRON	NI-Alloy	INOX Stainless Steel
SUB MICRO GRAIN	DIN 6535 Form HA	d1 -0.01 -0.02	20°
HSC HHC	Z 2	< Ø1 rp ±0.005	< Ø6 rp ±0.01
GOLD			

Microfresa testa sferica 3D in metallo duro integrale gambo Ø 3 mm

Solid carbide 3D miniature ball nose end mill, shank Ø 3 mm

VHM - 3D Mini Radiusfräser, Schaft Ø 3 mm - Microfraise carbure mini 3D, hémisphérique, queue Ø 3 mm

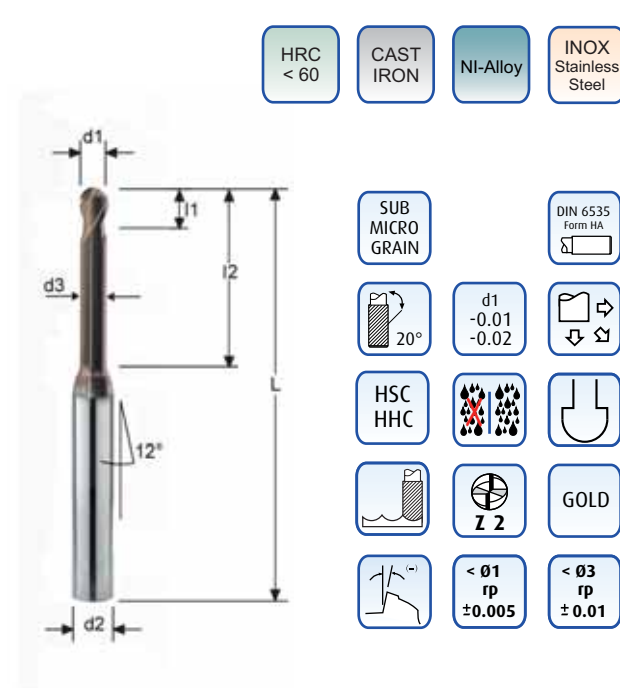
Мини-фреза концевая твердосплавная полусферическая 3D, хвостовик Ø 3 мм

Sk 3D miniaturní kulová fréza se stopkou Ø 3 mm



CODE	*d1 mm	d2h6 mm	l1 mm	l2 mm	L mm	d3 mm	Z no.
200RM.004	0.4	3	0.4	-	50	-	2
200RML.004	0.4	3	0.4	1.5	50	0.35	2
200RM.005	0.5	3	0.5	-	50	-	2
200RML.005	0.5	3	0.5	2.5	50	0.45	2
200RMXL.005	0.5	3	0.5	4	50	0.45	2
200RMSL.005	0.5	3	0.5	7.5	50	0.45	2
200RM.006	0.6	3	0.6	-	50	-	2
200RML.006	0.6	3	0.6	5	50	0.55	2
200RM.008	0.8	3	0.8	-	50	-	2
200RML.008	0.8	3	0.8	4	50	0.75	2
200RMXL.008	0.8	3	0.8	7	50	0.75	2
200RMSL.008	0.8	3	0.8	12	50	0.75	2
200RM.010	1.0	3	1.0	-	50	-	2
200RML.010	1.0	3	1.0	5	50	0.95	2
200RMXL.010	1.0	3	1.0	8.5	50	0.95	2
200RMSL.010	1.0	3	1.0	15	50	0.95	2
200RM.012	1.2	3	1.2	-	50	-	2
200RML.012	1.2	3	1.2	6	50	1.15	2
200RMXL.012	1.2	3	1.2	10	50	1.15	2
200RM.015	1.5	3	1.5	-	50	-	2
200RML.015	1.5	3	1.5	7.5	50	1.45	2
200RMXL.015	1.5	3	1.5	12	50	1.45	2
200RMSL.015	1.5	3	1.5	20	50	1.45	2
200RM.020	2.0	3	2.0	-	50	-	2
200RML.020	2.0	3	2.0	10	50	1.95	2
200RMXL.020	2.0	3	2.0	16	50	1.95	2
200RM.025	2.5	3	2.5	-	50	-	2
200RML.025	2.5	3	2.5	15	50	2.45	2

→ Help 153



HRC < 60	CAST IRON	NI-Alloy	INOX Stainless Steel
SUB MICRO GRAIN	DIN 6535 Form HA	d1 -0.01 -0.02	20°
HSC HHC	Z 2	< Ø1 rp ±0.005	< Ø3 rp ±0.01
GOLD			

Microfresa testa piana in metallo duro integrale gambo Ø 4-6 mm

Solid carbide mini flat nose end mill shank Ø 4-6 mm

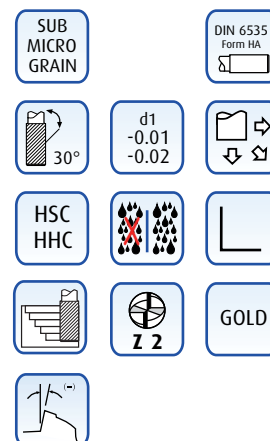
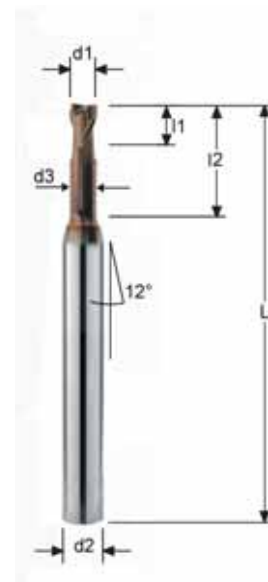
VHM – Mini gesenkräuser, shaft Ø 4-6 mm - Microfraise carbure à bout plat queue Ø 4-6 mm

Микро фреза концевая твердосплавная с плоским торцом, хвостовик Ø 4-6 mm

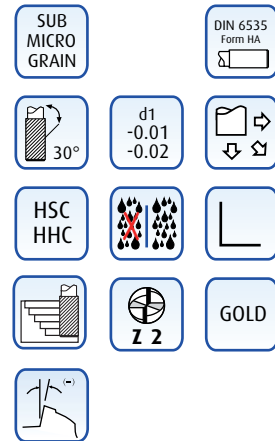
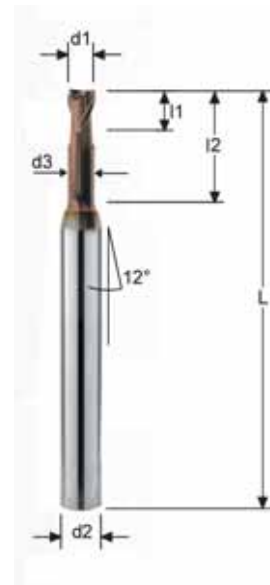
Sk minii rohová fréza se stopkou Ø 4-6 mm



CODE	*d1 mm	d2h6 mm	l1 mm	l2 mm	L mm	d3 mm	Z no.
205PM001.002S4	0.1	4	0.2	-	50	-	2
205PM001.015S4	0.1	4	0.15	1	50	0.08	2
205PM001.025S4	0.1	4	0.15	2	50	0.08	2
205PM0015.002S4	0.15	4	0.2	-	50	-	2
205PM002.004S4	0.2	4	0.4	-	50	-	2
205PM002.015S4	0.2	4	0.3	1	50	0.15	2
205PM002.025S4	0.2	4	0.3	2	50	0.15	2
205PM003.005S4	0.3	4	0.5	-	50	-	2
205PM003.015S4	0.3	4	0.4	1	50	0.25	2
205PM003.025S4	0.3	4	0.4	2	50	0.25	2
205PM003.035S4	0.3	4	0.4	3	50	0.25	2
205PM004.008S4	0.4	4	0.8	-	50	-	2
205PM004.015S4	0.4	4	0.6	1	50	0.35	2
205PM004.025S4	0.4	4	0.6	2	50	0.35	2
205PM004.035S4	0.4	4	0.6	3	50	0.35	2
205PM004.045S4	0.4	4	0.6	4	50	0.35	2
205PM004.055S4	0.4	4	0.6	5	50	0.35	2
205PM005.015S4	0.5	4	1.0	-	50	-	2
205PM005.025S4	0.5	4	0.8	2	50	0.45	2
205PM005.035S4	0.5	4	0.8	3	50	0.45	2
205PM005.045S4	0.5	4	0.8	4	50	0.45	2
205PM005.055S4	0.5	4	0.8	5	50	0.45	2
205PM005.065S4	0.5	4	0.8	6	50	0.45	2
205PM005.085S4	0.5	4	0.8	8	50	0.45	2
205PM005.105S4	0.5	4	0.8	10	50	0.45	2
205PM006.012S4	0.6	4	1.2	-	50	-	2
205PM006.025S4	0.6	4	0.9	2	50	0.55	2
205PM006.035S4	0.6	4	0.9	3	50	0.55	2
205PM006.045S4	0.6	4	0.9	4	50	0.55	2
205PM006.055S4	0.6	4	0.9	5	50	0.55	2
205PM006.065S4	0.6	4	0.9	6	50	0.55	2
205PM006.085S4	0.6	4	0.9	8	50	0.55	2
205PM006.105S4	0.6	4	0.9	10	50	0.55	2
205PM008.025S4	0.8	4	1.2	2	50	0.75	2
205PM008.045S4	0.8	4	1.2	4	50	0.75	2
205PM008.065S4	0.8	4	1.2	6	50	0.75	2
205PM008.085S4	0.8	4	1.2	8	50	0.75	2
205PM008.105S4	0.8	4	1.2	10	50	0.75	2
205PM009.015S4	0.9	4	1.5	-	50	0.85	2
205PM010.025S4	1.0	4	1.5	2	50	0.95	2
205PM010.025S6	1.0	6	1.5	2.5	50	0.95	2
205PM010.035S4	1.0	4	1.5	3	50	0.95	2
205PM010.045S4	1.0	4	1.5	4	50	0.95	2
205PM010.055S4	1.0	4	1.5	5	50	0.95	2
205PM010.065S4	1.0	4	1.5	6	50	0.95	2
205PM010.085S4	1.0	4	1.5	8	50	0.95	2
205PM010.105S4	1.0	4	1.5	10	50	0.95	2
205PM010.125S4	1.0	4	1.5	12	50	0.95	2
205PM010.145S4	1.0	4	1.5	14	50	0.95	2
205PM010.165S4	1.0	4	1.5	16	60	0.95	2
205PM010.185S4	1.0	4	1.5	18	60	0.95	2
205PM010.205S4	1.0	4	1.5	20	60	0.95	2
205PM012.004S4	1.2	4	4	-	50	-	2
205PM012.035S4	1.2	4	1.8	3	50	1.15	2
205PM012.045S4	1.2	4	1.8	4	50	1.15	2
205PM012.065S4	1.2	4	1.8	6	50	1.15	2
205PM012.085S4	1.2	4	1.8	8	50	1.15	2
205PM012.105S4	1.2	4	1.8	10	50	1.15	2
205PM012.125S4	1.2	4	1.8	12	50	1.15	2
205PM012.165S4	1.2	4	1.8	16	60	1.15	2



CODE	*d1 mm	d2h6 mm	l1 mm	l2 mm	L mm	d3 mm	Z no.
205PM013.04S4	1.3	4	4	-	50	-	2
205PM015.004S4	1.5	4	4	-	50	-	2
205PM015.04S6	1.5	6	4	-	50	1.45	2
205PM015.04S4	1.5	4	2.2	4	50	1.45	2
205PM015.05S4	1.5	4	2.2	5	50	1.45	2
205PM015.06S4	1.5	4	2.2	6	50	1.45	2
205PM015.08S4	1.5	4	2.2	8	50	1.45	2
205PM015.10S4	1.5	4	2.2	10	50	1.45	2
205PM015.12S4	1.5	4	2.2	12	50	1.45	2
205PM015.14S4	1.5	4	2.2	14	50	1.45	2
205PM015.16S4	1.5	4	2.2	16	60	1.45	2
205PM015.18S4	1.5	4	2.2	18	60	1.45	2
205PM015.20S4	1.5	4	2.2	20	60	1.45	2
205PM018.05S4	1.8	4	5.0	-	50	-	2
205PM020.006S4	2.0	4	6.0	-	50	-	2
205PM020.04S4	2.0	4	3.0	4	50	1.95	2
205PM020.06S4	2.0	4	3.0	6	50	1.95	2
205PM020.08S4	2.0	4	3.0	8	50	1.95	2
205PM020.10S4	2.0	4	3.0	10	50	1.95	2
205PM020.12S4	2.0	4	3.0	12	50	1.95	2
205PM020.14S4	2.0	4	3.0	14	50	1.95	2
205PM020.16S4	2.0	4	3.0	16	60	1.95	2
205PM020.18S4	2.0	4	3.0	18	60	1.95	2
205PM020.20S4	2.0	4	3.0	20	60	1.95	2
205PM020.22S4	2.0	4	3.0	22	60	1.95	2
205PM020.25S4	2.0	4	3.0	25	70	1.95	2
205PM020.30S4	2.0	4	3.0	30	70	1.95	2
205PM025.08S4	2.5	4	8.0	-	50	-	2
205PM025.08S6	2.5	6	8.0	-	50	-	2
205PM025.10S6	2.5	6	3.5	10	50	2.45	2
205PM025.12S6	2.5	6	3.5	12	50	2.45	2
205PM025.14S6	2.5	6	3.5	14	60	2.45	2
205PM025.16S6	2.5	6	3.5	16	60	2.45	2
205PM025.20S6	2.5	6	3.5	20	60	2.45	2
205PM025.25S6	2.5	6	3.5	25	70	2.45	2
205PM030.08S4	3.0	4	8.0	-	50	-	2
205PM030.06S6	3.0	6	4.0	6	50	2.95	2
205PM030.08S6	3.0	6	4.0	8	50	2.95	2
205PM030.10S6	3.0	6	4.0	10	50	2.95	2
205PM030.12S6	3.0	6	4.0	12	50	2.95	2
205PM030.14S6	3.0	6	4.0	14	60	2.95	2
205PM030.16S6	3.0	6	4.0	16	60	2.95	2
205PM030.18S6	3.0	6	4.0	18	60	2.95	2
205PM030.20S6	3.0	6	4.0	20	60	2.95	2
205PM030.25S6	3.0	6	4.0	25	70	2.95	2
205PM030.30S6	3.0	6	4.0	30	70	2.95	2
205PM030.35S6	3.0	6	4.0	35	80	2.95	2
205PM030.40S6	3.0	6	4.0	40	80	2.95	2
205PM040.10S4	4.0	4	10.0	-	50	-	2
205PM040.08S6	4.0	6	6.0	8	50	3.85	2
205PM040.10S6	4.0	6	6.0	10	50	3.85	2
205PM040.12S6	4.0	6	6.0	12	50	3.85	2
205PM040.14S6	4.0	6	6.0	14	60	3.85	2
205PM040.16S6	4.0	6	6.0	16	60	3.85	2
205PM040.18S6	4.0	6	6.0	18	60	3.85	2
205PM040.20S6	4.0	6	6.0	20	60	3.85	2
205PM040.25S6	4.0	6	6.0	25	70	3.85	2
205PM040.30S6	4.0	6	6.0	30	70	3.85	2
205PM040.35S6	4.0	6	6.0	35	80	3.85	2
205PM040.40S6	4.0	6	6.0	40	80	3.85	2
205PM040.45S6	4.0	6	6.0	45	90	3.85	2
205PM040.50S6	4.0	6	6.0	50	90	3.85	2



→ Help 151

Microfresa testa torica in metallo duro integrale gambo Ø 4-6 mm

Solid carbide mini corner radius end mill shank Ø 4-6 mm

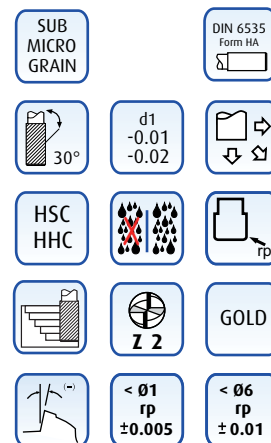
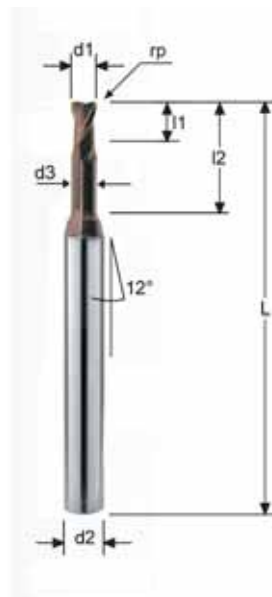
VHM – Mini torusfräser, shaft Ø 4-6 mm - Microfraise carbure avec rayon d'angle, queue Ø 4-6 mm

Микро фреза концевая твердосплавная с угловым радиусом, хвостовик Ø 4-6 мм

Sk minii fréza s rohovým rádiusem se stopkou Ø 4-6 mm



CODE	*d1 mm	d2h6 mm	rp mm	l1 mm	l2 mm	L mm	d3 mm	Z no.
205M005.03R005S4	0.5	4	0.05	1.0	3	50	0.45	2
205M006.01R005S4	0.6	4	0.05	1.0	-	50	-	2
205M007.012R005S4	0.7	4	0.05	1.2	-	50	-	2
205M008.014R005S4	0.8	4	0.05	1.4	-	50	-	2
205M009.015R005S4	0.9	4	0.05	1.5	-	50	-	2
205M010.025R01S4	1.0	4	0.1	2.5	-	50	-	2
205M010.025R02S4	1.0	4	0.2	2.5	-	50	-	2
205M010.025R03S4	1.0	4	0.3	2.5	-	50	-	2
205M010.04R01S4	1.0	4	0.1	1.5	4	50	0.95	2
205M010.04R02S4	1.0	4	0.2	1.5	4	50	0.95	2
205M010.06R01S4	1.0	4	0.1	1.5	6	50	0.95	2
205M010.06R02S4	1.0	4	0.2	1.5	6	50	0.95	2
205M010.06R03S4	1.0	4	0.3	1.5	6	50	0.95	2
205M010.08R01S4	1.0	4	0.1	1.5	8	50	0.95	2
205M010.08R02S4	1.0	4	0.2	1.5	8	50	0.95	2
205M010.10R01S4	1.0	4	0.1	1.5	10	50	0.95	2
205M010.10R02S4	1.0	4	0.2	1.5	10	50	0.95	2
205M010.10R03S4	1.0	4	0.3	1.5	10	50	0.95	2
205M010.12R01S4	1.0	4	0.1	1.5	12	50	0.95	2
205M010.12R02S4	1.0	4	0.2	1.5	12	50	0.95	2
205M010.12R03S4	1.0	4	0.3	1.5	12	50	0.95	2
205M015.03R01S4	1.5	4	0.1	3.0	-	50	-	2
205M015.03R02S4	1.5	4	0.2	3.0	-	50	-	2
205M015.03R03S4	1.5	4	0.3	3.0	-	50	-	2
205M015.03R05S4	1.5	4	0.5	3.0	-	50	-	2
205M015.06R01S4	1.5	4	0.1	2.2	6	50	1.45	2
205M015.06R02S4	1.5	4	0.2	2.2	6	50	1.45	2
205M015.06R03S4	1.5	4	0.3	2.2	6	50	1.45	2
205M015.08R01S4	1.5	4	0.1	2.2	8	50	1.45	2
205M015.08R02S4	1.5	4	0.2	2.2	8	50	1.45	2
205M015.08R03S4	1.5	4	0.3	2.2	8	50	1.45	2
205M015.10R01S4	1.5	4	0.1	2.2	10	50	1.45	2
205M015.10R02S4	1.5	4	0.2	2.2	10	50	1.45	2
205M015.10R03S4	1.5	4	0.3	2.2	10	50	1.45	2
205M015.12R02S4	1.5	4	0.2	2.2	12	50	1.45	2
205M020.05R01S4	2.0	4	0.1	5.0	-	50	-	2
205M020.05R02S4	2.0	4	0.2	5.0	-	50	-	2
205M020.05R03S4	2.0	4	0.3	5.0	-	50	-	2
205M020.05R05S4	2.0	4	0.5	5.0	-	50	-	2
205M020.06R01S4	2.0	4	0.1	3.0	6	50	1.95	2
205M020.06R02S4	2.0	4	0.2	3.0	6	50	1.95	2
205M020.06R03S4	2.0	4	0.3	3.0	6	50	1.95	2
205M020.06R05S4	2.0	4	0.5	3.0	6	50	1.95	2
205M020.08R01S4	2.0	4	0.1	3.0	8	50	1.95	2
205M020.08R02S4	2.0	4	0.2	3.0	8	50	1.95	2
205M020.08R03S4	2.0	4	0.3	3.0	8	50	1.95	2
205M020.08R05S4	2.0	4	0.5	3.0	8	50	1.95	2
205M020.10R01S4	2.0	4	0.1	3.0	10	50	1.95	2
205M020.10R02S4	2.0	4	0.2	3.0	10	50	1.95	2
205M020.10R03S4	2.0	4	0.3	3.0	10	50	1.95	2
205M020.10R05S4	2.0	4	0.5	3.0	10	50	1.95	2
205M020.12R01S4	2.0	4	0.1	3.0	12	50	1.95	2
205M020.12R02S4	2.0	4	0.2	3.0	12	50	1.95	2
205M020.12R03S4	2.0	4	0.3	3.0	12	50	1.95	2
205M020.12R05S4	2.0	4	0.5	3.0	12	50	1.95	2
205M020.16R05S4	2.0	4	0.5	3.0	16	60	1.95	2
205M025.06R02S6	2.5	6	0.2	6.0	-	50	-	2
205M025.06R03S6	2.5	6	0.3	6.0	-	50	-	2
205M025.06R05S6	2.5	6	0.5	6.0	-	50	-	2
205M030.08R01S6	3.0	6	0.1	8.0	-	50	-	2
205M030.08R02S6	3.0	6	0.2	8.0	-	50	-	2



Microfresa testa torica in metallo duro integrale gambo Ø 4-6 mm

Solid carbide mini corner radius end mill shank Ø 4-6 mm

VHM – Mini torusfräser, shaft Ø 4-6 mm - Microfraise carbure avec rayon d'angle, queue Ø 4-6 mm

Микро фреза концевая твердосплавная с угловым радиусом, хвостовик Ø 4-6 mm

Sk mini fréza s rohovým rádiusem se stopkou Ø 4-6 mm



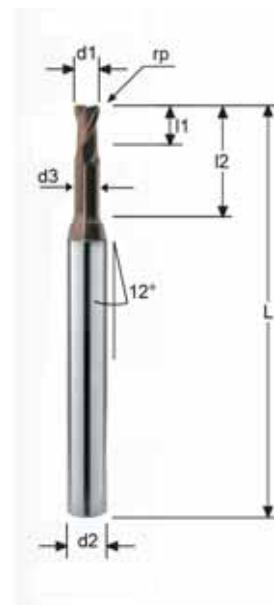
CODE	*d1 mm	d2h6 mm	rp mm	l1 mm	l2 mm	L mm	d3 mm	Z no.
205M030.08R03S6	3.0	6	0.3	8.0	-	50	-	2
205M030.08R05S6	3.0	6	0.5	8.0	-	50	-	2
205M030.08R1S6	3.0	6	1.0	8.0	-	50	-	2
205M030.10R01S6	3.0	6	0.1	4.0	10	60	2.85	2
205M030.10R02S6	3.0	6	0.2	4.0	10	60	2.85	2
205M030.10R03S6	3.0	6	0.3	4.0	10	60	2.85	2
205M030.10R05S6	3.0	6	0.5	4.0	10	60	2.85	2
205M030.12R01S6	3.0	6	0.1	4.0	12	60	2.85	2
205M030.12R02S6	3.0	6	0.2	4.0	12	60	2.85	2
205M030.12R03S6	3.0	6	0.3	4.0	12	60	2.85	2
205M030.12R05S6	3.0	6	0.5	4.0	12	60	2.85	2
205M030.16R01S6	3.0	6	0.1	4.0	16	60	2.85	2
205M030.16R02S6	3.0	6	0.2	4.0	16	60	2.85	2
205M030.16R03S6	3.0	6	0.3	4.0	16	60	2.85	2
205M030.16R05S6	3.0	6	0.5	4.0	16	60	2.85	2
205M030.20R02S6	3.0	6	0.2	4.0	20	60	2.85	2
205M030.20R03S6	3.0	6	0.3	4.0	20	60	2.85	2
205M030.20R05S6	3.0	6	0.5	4.0	20	60	2.85	2
205M040.08R01S6	4.0	6	0.1	8.0	-	50	-	2
205M040.08R02S6	4.0	6	0.2	8.0	-	50	-	2
205M040.08R03S6	4.0	6	0.3	8.0	-	50	-	2
205M040.08R05S6	4.0	6	0.5	8.0	-	50	-	2
205M040.08R1S6	4.0	6	1.0	8.0	-	50	-	2
205M040.10R01S6	4.0	6	0.1	6.0	10	50	3.85	2
205M040.12R01S6	4.0	6	0.1	6.0	12	50	3.85	2
205M040.12R02S6	4.0	6	0.2	6.0	12	50	3.85	2
205M040.12R03S6	4.0	6	0.3	6.0	12	50	3.85	2
205M040.12R05S6	4.0	6	0.5	6.0	12	50	3.85	2
205M040.16R01S6	4.0	6	0.1	6.0	16	60	3.85	2
205M040.16R02S6	4.0	6	0.2	6.0	16	60	3.85	2
205M040.16R03S6	4.0	6	0.3	6.0	16	60	3.85	2
205M040.16R05S6	4.0	6	0.5	6.0	16	60	3.85	2
205M040.20R02S6	4.0	6	0.2	6.0	20	60	3.85	2
205M040.20R03S6	4.0	6	0.3	6.0	20	60	3.85	2
205M040.20R05S6	4.0	6	0.5	6.0	20	60	3.85	2
205M040.25R02S6	4.0	6	0.2	6.0	25	70	3.85	2
205M040.25R03S6	4.0	6	0.3	6.0	25	70	3.85	2
205M040.25R05S6	4.0	6	0.5	6.0	25	70	3.85	2
205M050.10R05S6	5.0	6	0.5	10.0	-	60	-	2
205M060.12R01S6	6.0	6	0.1	12.0	-	60	-	2
205M060.12R02S6	6.0	6	0.2	12.0	-	60	-	2
205M060.12R03S6	6.0	6	0.3	12.0	-	60	-	2
205M060.12R05S6	6.0	6	0.5	12.0	-	60	-	2
205M060.12R1S6	6.0	6	1.0	12.0	-	60	-	2
205M060.12R15S6	6.0	6	1.5	12.0	-	60	-	2
205M060.12R2S6	6.0	6	2.0	12.0	-	60	-	2
205M060.16R01S6	6.0	6	0.1	8.0	16	60	5.85	2
205M060.16R02S6	6.0	6	0.2	8.0	16	60	5.85	2
205M060.16R03S6	6.0	6	0.3	8.0	16	60	5.85	2
205M060.16R05S6	6.0	6	0.5	8.0	16	60	5.85	2
205M060.16R1S6	6.0	6	1.0	8.0	16	60	5.85	2
205M060.16R15S6	6.0	6	1.5	8.0	16	60	5.85	2
205M060.20R01S6	6.0	6	0.1	8.0	20	60	5.85	2
205M060.20R02S6	6.0	6	0.2	8.0	20	60	5.85	2
205M060.20R03S6	6.0	6	0.3	8.0	20	60	5.85	2
205M060.20R05S6	6.0	6	0.5	8.0	20	60	5.85	2
205M060.20R1S6	6.0	6	1.0	8.0	20	60	5.85	2
205M060.20R15S6	6.0	6	1.5	8.0	20	60	5.85	2
205M060.25R1S6	6.0	6	1.0	8.0	25	70	5.85	2
205M060.25R15S6	6.0	6	1.5	8.0	25	70	5.85	2
205M060.30R1S6	6.0	6	1.0	8.0	30	70	5.85	2
205M060.30R15S6	6.0	6	1.5	8.0	30	70	5.85	2

HRC
< 70

CAST
IRON

NI-Alloy

INOX
Stainless
Steel



SUB
MICRO
GRAIN



DIN 6535
Form HA



d1
-0.01
-0.02



HSC
HHC



Z 2

GOLD



< Ø1
rp
±0.005

< Ø6
rp
± 0.01

Microfresa testa sferica 3D in metallo duro integrale gambo Ø 4-6 mm

Solid carbide mini 3D ball nose end mill shank Ø 4-6 mm

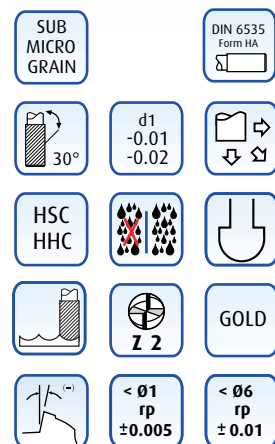
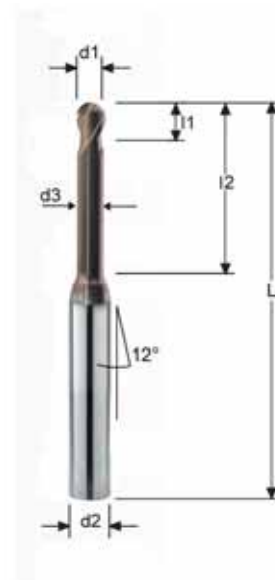
VHM – 3D Mini Radiusfräser, shaft Ø 4-6 mm - Microfraise carbure mini 3D hémisphérique, queue Ø 4-6 mm

Микро фреза концевая твердосплавная радиусная 3D, хвостовик Ø 4-6 mm

Sk mini 3D kulová se stopkou Ø 4-6 mm



CODE	*d1 mm	d2h6 mm	l1 mm	l2 mm	L mm	d3 mm	Z no.
205RM001.0012S4	0.1	4	0.12	-	50	-	2
205RM001.01S4	0.1	4	0.12	1	50	0.08	2
205RM001.02S4	0.1	4	0.12	2	50	0.08	2
205RM0015.0018S4	0.15	4	0.18	-	50	-	2
205RM002.0025S4	0.2	4	0.25	-	50	-	2
205RM002.01S4	0.2	4	0.25	1	50	0.15	2
205RM002.02S4	0.2	4	0.25	2	50	0.15	2
205RM003.004S4	0.3	4	0.4	-	50	0.25	2
205RM003.01S4	0.3	4	0.4	1	50	0.25	2
205RM003.02S4	0.3	4	0.4	2	50	0.25	2
205RM003.03S4	0.3	4	0.4	3	50	0.25	2
205RM004.005S4	0.4	4	0.5	-	50	-	2
205RM004.01S4	0.4	4	0.5	1	50	0.35	2
205RM004.02S4	0.4	4	0.5	2	50	0.35	2
205RM004.03S4	0.4	4	0.5	3	50	0.35	2
205RM004.04S4	0.4	4	0.5	4	50	0.35	2
205RM004.05S4	0.4	4	0.5	5	50	0.35	2
205RM005.01S4	0.5	4	0.6	1	50	0.45	2
205RM005.02S4	0.5	4	0.6	2	50	0.45	2
205RM005.03S4	0.5	4	0.6	3	50	0.45	2
205RM005.04S4	0.5	4	0.6	4	50	0.45	2
205RM005.05S4	0.5	4	0.6	5	50	0.45	2
205RM005.06S4	0.5	4	0.6	6	50	0.45	2
205RM005.08S4	0.5	4	0.6	8	50	0.45	2
205RM005.10S4	0.5	4	0.6	10	50	0.45	2
205RM006.01S4	0.6	4	0.7	1	50	-	2
205RM006.02S4	0.6	4	0.7	2	50	0.55	2
205RM006.03S4	0.6	4	0.7	3	50	0.55	2
205RM006.04S4	0.6	4	0.7	4	50	0.55	2
205RM006.05S4	0.6	4	0.7	5	50	0.55	2
205RM006.06S4	0.6	4	0.7	6	50	0.55	2
205RM006.08S4	0.6	4	0.7	8	50	0.55	2
205RM006.10S4	0.6	4	0.7	10	50	0.55	2
205RM007.01S4	0.7	4	0.8	1	50	-	2
205RM007.02S4	0.7	4	0.8	2	50	0.65	2
205RM007.03S4	0.7	4	0.8	3	50	0.65	2
205RM007.04S4	0.7	4	0.8	4	50	0.65	2
205RM007.05S4	0.7	4	0.8	5	50	0.65	2
205RM007.06S4	0.7	4	0.8	6	50	0.65	2
205RM007.08S4	0.7	4	0.8	8	50	0.65	2
205RM007.10S4	0.7	4	0.8	10	50	0.65	2
205RM008.01S4	0.8	4	0.9	1	50	-	2
205RM008.02S4	0.8	4	0.9	2	50	0.75	2
205RM008.03S4	0.8	4	0.9	3	50	0.75	2
205RM008.04S4	0.8	4	0.9	4	50	0.75	2
205RM008.05S4	0.8	4	0.9	5	50	0.75	2
205RM008.06S4	0.8	4	0.9	6	50	0.75	2
205RM008.08S4	0.8	4	0.9	8	50	0.75	2
205RM008.10S4	0.8	4	0.9	10	50	0.75	2
205RM010.002S4	1.0	4	2.0	-	50	-	2
205RM010.02S6	1.0	6	2.0	-	50	-	2
205RM010.02S4	1.0	4	1.2	2	50	0.95	2
205RM010.03S4	1.0	4	1.2	3	50	0.95	2
205RM010.04S4	1.0	4	1.2	4	50	0.95	2
205RM010.05S4	1.0	4	1.2	5	50	0.95	2
205RM010.06S4	1.0	4	1.2	6	50	0.95	2
205RM010.08S4	1.0	4	1.2	8	50	0.95	2



→ Help 153

Microfresa testa sferica 3D in metallo duro integrale gambo Ø 4-6 mm

Solid carbide mini 3D ball nose end mill shank Ø 4-6 mm

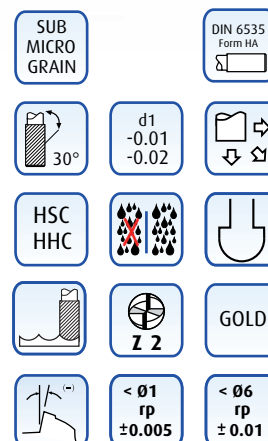
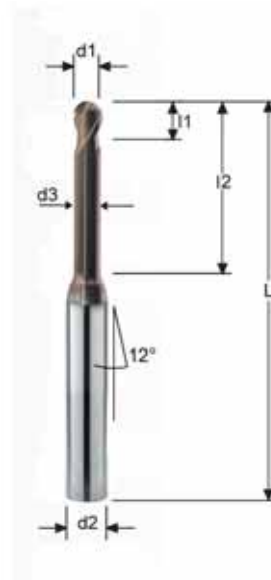
VHM - 3D Mini Radiusfräser, shaft Ø 4-6 mm - Microfraise carbure mini 3D hémisphérique, queue Ø 4-6 mm

Микро фреза концевая твердосплавная радиусная 3D, хвостовик Ø 4-6 mm

Sk mini 3D kulová se stopkou Ø 4-6 mm



CODE	*d1 mm	d2h6 mm	l1 mm	l2 mm	L mm	d3 mm	Z no.
205RM010.10S4	1.0	4	1.2	10	50	0.95	2
205RM010.12S4	1.0	4	1.2	12	50	0.95	2
205RM010.14S4	1.0	4	1.2	14	50	0.95	2
205RM010.16S4	1.0	4	1.2	16	60	0.95	2
205RM010.18S4	1.0	4	1.2	18	60	0.95	2
205RM010.20S4	1.0	4	1.2	20	60	0.95	2
205RM012.003S4	1.2	4	3.0	-	50	-	2
205RM012.03S4	1.2	4	1.4	3	50	1.15	2
205RM012.04S4	1.2	4	1.4	4	50	1.15	2
205RM012.05S4	1.2	4	1.4	5	50	1.15	2
205RM012.06S4	1.2	4	1.4	6	50	1.15	2
205RM012.08S4	1.2	4	1.4	8	50	1.15	2
205RM012.10S4	1.2	4	1.4	10	50	1.15	2
205RM012.12S4	1.2	4	1.4	12	50	1.15	2
205RM012.14S4	1.2	4	1.4	14	50	1.15	2
205RM012.16S4	1.2	4	1.4	16	60	1.15	2
205RM014.03S4	1.4	4	3.0	-	50	-	2
205RM014.04S4	1.4	4	1.7	4	50	1.35	2
205RM014.05S4	1.4	4	1.7	5	50	1.35	2
205RM014.06S4	1.4	4	1.7	6	50	1.35	2
205RM014.08S4	1.4	4	1.7	8	50	1.35	2
205RM014.10S4	1.4	4	1.7	10	50	1.35	2
205RM014.12S4	1.4	4	1.7	12	50	1.35	2
205RM015.03S4	1.5	4	1.8	3	50	1.45	2
205RM015.03S6	1.5	6	3.0	-	50	1.45	2
205RM015.04S4	1.5	4	1.8	4	50	1.45	2
205RM015.05S4	1.5	4	1.8	5	50	1.45	2
205RM015.06S4	1.5	4	1.8	6	50	1.45	2
205RM015.08S4	1.5	4	1.8	8	50	1.45	2
205RM015.10S4	1.5	4	1.8	10	50	1.45	2
205RM015.12S4	1.5	4	1.8	12	50	1.45	2
205RM015.14S4	1.5	6	1.8	14	50	1.45	2
205RM015.16S4	1.5	4	1.8	16	60	1.45	2
205RM015.18S4	1.5	4	1.8	18	60	1.45	2
205RM015.20S4	1.5	4	1.8	20	60	1.45	2
205RM016.03S4	1.6	4	3.0	-	50	-	2
205RM016.04S4	1.6	4	1.9	4	50	1.55	2
205RM016.05S4	1.6	4	1.9	5	50	1.55	2
205RM016.06S4	1.6	4	1.9	6	50	1.55	2
205RM016.08S4	1.6	4	1.9	8	50	1.55	2
205RM016.10S4	1.6	4	1.9	10	50	1.55	2
205RM016.12S4	1.6	4	1.9	12	50	1.55	2
205RM016.14S4	1.6	4	1.9	14	50	1.55	2
205RM016.16S4	1.6	4	1.9	16	60	1.55	2
205RM016.18S4	1.6	4	1.9	18	60	1.55	2
205RM016.20S4	1.6	4	1.9	20	60	1.55	2
205RM018.04S4	1.8	4	4.0	-	50	-	2
205RM019.04S4	1.9	4	4.0	-	50	-	2
205RM020.05S4	2.0	4	5.0	-	50	-	2
205RM020.05S6	2.0	6	5.0	-	50	-	2
205RM020.04S4	2.0	4	2.2	4	50	1.95	2
205RM020.06S4	2.0	4	2.2	6	50	1.95	2
205RM020.08S4	2.0	4	2.2	8	50	1.95	2
205RM020.10S4	2.0	4	2.2	10	50	1.95	2
205RM020.12S4	2.0	4	2.2	12	50	1.95	2
205RM020.14S4	2.0	4	2.2	14	50	1.95	2
205RM020.16S4	2.0	4	2.2	16	60	1.95	2
205RM020.18S4	2.0	4	2.2	18	60	1.95	2
205RM020.20S4	2.0	4	2.2	20	60	1.95	2
205RM020.22S4	2.0	4	2.2	22	60	1.95	2
205RM020.25S4	2.0	4	2.2	25	70	1.95	2
205RM020.30S4	2.0	4	2.2	30	70	1.95	2



Microfresa testa sferica 3D in metallo duro integrale gambo Ø 4-6 mm

Solid carbide mini 3D ball nose end mill shank Ø 4-6 mm

VHM – 3D Mini Radiusfräser, shaft Ø 4-6 mm - Microfraise carbure mini 3D hémisphérique, queue Ø 4-6 mm

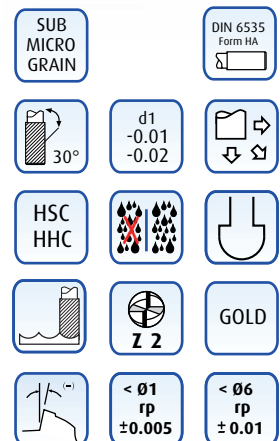
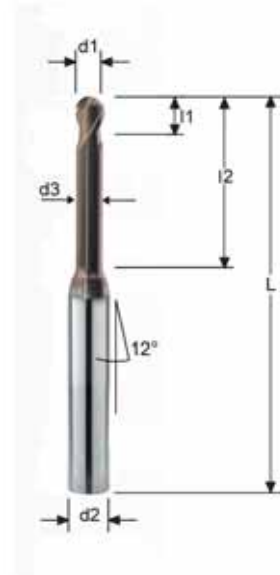
Микро фреза концевая твердосплавная радиусная 3D, хвостовик Ø 4-6 mm

Sk mini 3D kulová se stopkou Ø 4-6 mm



CODE	*d1 mm	d2h6 mm	l1 mm	l2 mm	L mm	d3 mm	Z no.
205RM025.06S4	2.5	4	6.0	-	50	-	2
205RM025.06S6	2.5	6	6.0	-	50	-	2
205RM025.10S6	2.5	6	3.0	10	50	2.45	2
205RM025.12S6	2.5	6	3.0	12	50	2.45	2
205RM025.14S6	2.5	6	3.0	14	60	2.45	2
205RM025.16S6	2.5	6	3.0	16	60	2.45	2
205RM025.20S6	2.5	6	3.0	20	60	2.45	2
205RM025.25S6	2.5	6	3.0	25	70	2.45	2
205RM030.08S4	3.0	4	8.0	-	60	-	2
205RM030.008S6	3.0	6	8.0	-	60	-	2
205RM030.06S6	3.0	6	3.6	6	50	2.95	2
205RM030.08S6	3.0	6	3.6	8	50	2.95	2
205RM030.10S6	3.0	6	3.6	10	50	2.95	2
205RM030.12S6	3.0	6	3.6	12	50	2.95	2
205RM030.14S6	3.0	6	3.6	14	60	2.95	2
205RM030.16S6	3.0	6	3.6	16	60	2.95	2
205RM030.18S6	3.0	6	3.6	18	60	2.95	2
205RM030.20S6	3.0	6	3.6	20	60	2.95	2
205RM030.25S6	3.0	6	3.6	25	70	2.95	2
205RM030.30S6	3.0	6	3.6	30	70	2.95	2
205RM030.35S6	3.0	6	3.6	35	80	2.95	2
205RM030.40S6	3.0	6	3.6	40	80	2.95	2
205RM040.08S4	4.0	4	8.0	-	50	-	2
205RM040.008S6	4.0	6	8.0	-	50	-	2
205RM040.08S6	4.0	6	5.0	8	50	3.85	2
205RM040.10S6	4.0	6	5.0	10	50	3.85	2
205RM040.12S6	4.0	6	5.0	12	50	3.85	2
205RM040.14S6	4.0	6	5.0	14	60	3.85	2
205RM040.16S6	4.0	6	5.0	16	60	3.85	2
205RM040.18S6	4.0	6	5.0	18	60	3.85	2
205RM040.20S6	4.0	6	5.0	20	60	3.85	2
205RM040.25S6	4.0	6	5.0	25	70	3.85	2
205RM040.30S6	4.0	6	5.0	30	70	3.85	2
205RM040.35S6	4.0	6	5.0	35	80	3.85	2
205RM040.40S6	4.0	6	5.0	40	80	3.85	2
205RM040.45S6	4.0	6	5.0	45	90	3.85	2
205RM040.50S6	4.0	6	5.0	50	90	3.85	2

→ Help 153-154



Formulas

Formel - Formules

Формулы

Fz (mm) = Avanzamento per Dente
Feed per tooth
Vorschub pro Zain
Avance par dent
Подача на зуб
Posuv na zub

N (1/min) = Velocità di rotazione
Rotation number
Drehzahl
Frequence de rotation
Частота вращения шпинделя
Otáčky

Vc (m/min) = Velocità di taglio
Cutting speed
Schnittgeschwindigkeit
Vitesse de coupe
Скорость резания
Řezná rychlost

Vf (mm/min) = Velocità di avanzamento
Feed Speed
Vorschubgeschwindigkeit
Vitesse d'avance
Скорость подачи
Rychlost posuvu

Q (cm³/min) = Volume truciolo asportato
Quantity of removed chip
Swarf Volumen
Coupeau volume
Количество снимаемой стружки
Množství odebraného materiálu

$$Fz = \frac{Vf}{Z \times N} \text{ mm}$$

$$N = \frac{Vc \times 1000}{\pi \times \emptyset} \text{ 1/min.}$$

$$Vf = Z \times N \times fz \text{ mm/min.}$$

$$Vc = \frac{\pi \times \emptyset \times N}{1000} \text{ m/min.}$$

$$Q = \frac{a_e \times a_p \times V_f}{1000} \text{ cm}^3/\text{min.}$$

REZNÉ PARAMETRE

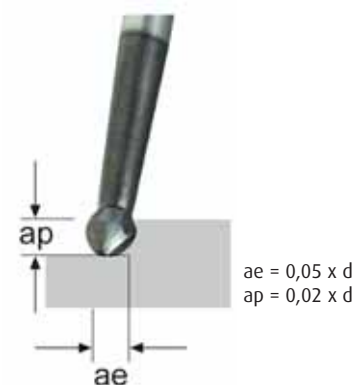
Cutting speed

Richtwerte - Paramètres - Режимы обработки - Řežná rychlost

200RM 205RM	Ø mm	l2 mm	ap mm	Steel HRC<25 СТАЛЬ		Stainless Steel HRC<25-35 НЕРЖАВЕЮЩАЯ СТАЛЬ		Heat Resistant Steel HRC<35-50 ЛЕГИРОВАННАЯ СТАЛЬ		Tempered Steel HRC<50-70 СТАЛЬ	
				Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
205RM030..	3.0	-6-8-10-12	0.02-0.08 x d	121-151	0.0600-0.0750	98-136	0.0540-0.0750	82-128	0.0429-0.0670	59-113	0.0328-0.0630
		14-16	0.02-0.08 x d	121-151	0.0540-0.0675	98-136	0.0486-0.0675	82-128	0.0386-0.0603	59-113	0.0295-0.0567
		18-20-25-30	0.02-0.08 x d	109-136	0.0540-0.0675	88-122	0.0486-0.0675	74-115	0.0386-0.0603	53-102	0.0295-0.0567
		35	0.02-0.08 x d	97-121	0.0510-0.0638	78-109	0.0459-0.0638	65-102	0.0364-0.0569	47-90	0.0278-0.0535
		40	0.02-0.08 x d	89-111	0.0486-0.0607	71-99	0.0434-0.0603	54-85	0.0338-0.0528	37-72	0.0256-0.0493
205RM040..	4.0	-	0.02-0.08 x d	115-144	0.08000-0.1000	94-130	0.0720-0.1000	79-123	0.0576-0.0900	56-108	0.0442-0.0850
		8-10-12-14 -16-18-20	0.02-0.08 x d	115-144	0.0800-0.1000	94-130	0.0720-0.1000	79-123	0.0576-0.0900	56-108	0.0442-0.0850
		25-30-35-40	0.02-0.08 x d	104-130	0.0720-0.0900	84-117	0.0648-0.0900	71-111	0.0518-0.0810	51-98	0.0398-0.0765
		45-50	0.02-0.08 x d	93-116	0.0680-0.0850	75-104	0.0612-0.0850	63-98	0.0490-0.0765	45-87	0.0375-0.0722

CODE: 200RB STANDARD CUTTING SPEED

MATERIAL	Aluminium Cast Iron Non Alloy Steels АЛЮМИНИЙ-ЧУГУН ЛЕГИРОВАННАЯ СТАЛЬ		Alloy Steels Heat Resistant Steel ЛЕГИРОВАННАЯ СТАЛЬ			
	< 170 HB		HRC 30 - HRC 40		< HRC 65	
Ø	n	Vf	n	Vf	n	Vf
2 - 3	34000	2700	32000	2500	11500	900
4	25000	2200	24000	2100	8000	700
6	16800	1800	15800	1700	6000	600
8	13000	1700	11900	1500	4000	500
10	10000	1400	9800	1300	3600	500
12	8800	1300	7900	1200	2900	400



CODE: 400RB STANDARD CUTTING SPEED

MATERIAL	Aluminium Cast Iron Non Alloy Steels АЛЮМИНИЙ-ЧУГУН ЛЕГИРОВАННАЯ СТАЛЬ		Alloy Steels Heat Resistant Steel ЛЕГИРОВАННАЯ СТАЛЬ			
	< 170 HB		HRC 30 - HRC 40		< HRC 65	
Ø	n	Vf	n	Vf	n	Vf
-	-	-	-	-	-	-
-	-	-	-	-	-	-
6	16800	3800	15900	3400	5800	1200
8	13000	3600	11800	2900	4400	1000
10	10000	2900	10000	2400	3300	900
12	8900	2700	7900	2400	3000	900

REZNÉ PARAMETRE

Cutting speed

Richtwerte - Paramètres - Режимы обработки - Řežná rychlost

200RM 205RM	Ø mm	l2 mm	ap mm	Steel HRC<25 СТАЛЬ		Stainless Steel HRC<25-35 НЕРЖАВЕЮЩАЯ СТАЛЬ		Heat Resistant Steel HRC<35-50 ЛЕГИРОВАННАЯ СТАЛЬ		Tempered Steel HRC<50-70 СТАЛЬ	
				Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
205RM001..	0.1	-	0.02-0.08 x d	13-16	0.002-0.0025	12-16	0.0018-0.0025	10-16	0.0015-0.0023	8-16	0.0010-0.0020
		1	0.02-0.08 x d	13-16	0.0014-0.0018	12-16	0.0013-0.0018	10-16	0.0010-0.0016	8-16	0.0007-0.0014
		2	0.02-0.08 x d	13-16	0.0009-0.0011	12-16	0.0008-0.0011	10-16	0.0006-0.0009	8-16	0.0004-0.0008
205RM015..	0.15	-	0.02-0.08 x d	19-24	0.0020-0.0025	17-24	0.0018-0.0025	15-24	0.0015-0.0023	12-24	0.0010-0.0020
205RM002..	0.2	-1	0.02-0.08 x d	25-31	0.0028-0.0035	22-31	0.0025-0.0035	20-31	0.0021-0.0033	15-29	0.0016-0.0030
		2	0.02-0.08 x d	25-31	0.0026-0.0032	22-31	0.0022-0.0031	19-21	0.0019-0.0029	13-25	0.0014-0.0027
205RM003..	0.3	-1	0.02-0.08 x d	38-47	0.0040-0.0050	34-47	0.0036-0.0050	30-47	0.0029-0.0045	22-42	0.0022-0.0043
		2-3	0.02-0.08 x d	38-47	0.0036-0.0045	33-46	0.0032-0.0045	28-43	0.0026-0.0041	20-38	0.0020-0.0038
205RM004..	0.4	-1-2	0.02-0.08 x d	48-60	0.0048-0.0060	39-54	0.0043-0.0060	33-51	0.0035-0.0055	23-45	0.0026-0.0050
		3-4	0.02-0.08 x d	43-54	0.0043-0.0054	35-49	0.0039-0.0054	29-46	0.0032-0.0050	21-41	0.0023-0.0045
		5	0.02-0.08 x d	38-48	0.0041-0.0051	31-43	0.0037-0.0051	26-41	0.0030-0.0047	19-36	0.0022-0.0043
205RM005..	0.5	1-2	0.02-0.08 x d	50-63	0.0080-0.0100	41-57	0.0072-0.0100	34-53	0.0058-0.0090	24-47	0.0047-0.0090
		3-4-5	0.02-0.08 x d	46-57	0.0072-0.0090	37-51	0.0065-0.0090	31-48	0.0052-0.0081	22-42	0.0042-0.0081
		6-8	0.02-0.08 x d	40-50	0.0068-0.0085	32-45	0.0061-0.0085	28-43	0.0049-0.0076	20-38	0.0040-0.0076
		10	0.02-0.08 x d	35-44	0.0059-0.0074	29-40	0.0055-0.0077	24-37	0.0042-0.0066	17-33	0.0033-0.0064
205RM006..	0.6	-2-3	0.02-0.08 x d	60-75	0.0120-0.0150	49-68	0.0108-0.0150	41-64	0.0083-0.0130	30-57	0.0062-0.0120
		4	0.02-0.08 x d	54-68	0.0114-0.0143	44-61	0.0102-0.0142	37-58	0.0079-0.0124	27-51	0.0059-0.0114
		5-6	0.02-0.08 x d	54-68	0.0108-0.0135	44-61	0.0097-0.0135	37-58	0.0075-0.0117	27-51	0.0056-0.0108
		8	0.02-0.08 x d	48-60	0.0102-0.0128	39-54	0.0091-0.0127	33-51	0.0070-0.0110	23-45	0.0053-0.0102
		10	0.02-0.08 x d	42-53	0.0102-0.0128	34-47	0.0092-0.0128	29-45	0.0071-0.0111	21-40	0.0053-0.0102
205RM007..	0.7	-2-3	0.02-0.08 x d	70-88	0.0120-0.0150	57-79	0.0108-0.0150	48-75	0.0083-0.0130	34-66	0.0062-0.0120
		4	0.02-0.08 x d	63-79	0.0114-0.0143	51-71	0.0102-0.0142	43-67	0.0079-0.0124	31-59	0.0059-0.0114
		5-6	0.02-0.08 x d	63-79	0.0108-0.0135	51-71	0.0097-0.0135	43-67	0.0075-0.0117	31-59	0.0056-0.0108
		8	0.02-0.08 x d	56-70	0.0102-0.0128	45-63	0.0091-0.0127	38-60	0.0070-0.0110	28-53	0.0053-0.0102
		10	0.02-0.08 x d	50-62	0.0102-0.0128	40-55	0.0092-0.0128	33-52	0.0071-0.0111	24-46	0.0053-0.0102
205RM008..	0.8	-2-3-4	0.02-0.08 x d	80-100	0.0144-0.0180	65-90	0.0130-0.0180	54-85	0.0102-0.0160	39-75	0.0078-0.0150
		5-6	0.02-0.08 x d	72-90	0.0130-0.0162	58-81	0.0117-0.0162	49-77	0.0092-0.0144	35-68	0.0070-0.0135
		8	0.02-0.08 x d	64-80	0.0130-0.0162	52-72	0.0117-0.0162	44-68	0.0092-0.0144	31-60	0.0070-0.0135
		10	0.02-0.08 x d	64-80	0.0122-0.0153	52-72	0.0110-0.0153	44-68	0.0087-0.0136	31-60	0.0067-0.0128
205RM009..	0.9	-3-4	0.02-0.08 x d	90-113	0.0144-0.0180	73-102	0.0130-0.0180	61-96	0.0102-0.0160	44-85	0.0078-0.0150
		5-6	0.02-0.08 x d	82-102	0.0130-0.0162	66-92	0.0117-0.0162	55-86	0.0092-0.0144	40-76	0.0070-0.0135
		8	0.02-0.08 x d	72-90	0.0130-0.0162	58-81	0.0117-0.0162	49-77	0.0092-0.0144	35-68	0.0070-0.0135
		10	0.02-0.08 x d	72-90	0.0122-0.0153	58-81	0.0110-0.0153	49-77	0.0087-0.0136	35-68	0.0067-0.0128
205RM010..	1.0	-2-3-4-5	0.02-0.08 x d	90-113	0.0200-0.0250	73-102	0.0180-0.0250	61-96	0.0144-0.0225	44-85	0.0109-0.0210
		6-8-10	0.02-0.08 x d	82-102	0.0180-0.0225	66-92	0.0162-0.0225	55-86	0.0129-0.0202	40-76	0.0098-0.0189
		12-14-16	0.02-0.08 x d	72-90	0.0170-0.0213	58-81	0.0153-0.0213	49-77	0.0122-0.0191	35-68	0.0093-0.0178
		18	0.02-0.08 x d	63-79	0.0160-0.0200	51-71	0.0144-0.0200	43-67	0.0115-0.0180	31-59	0.0087-0.0168
205RM011..	1.1	-	0.02-0.08 x d	99-124	0.0200-0.0250	81-112	0.0180-0.0250	68-106	0.0144-0.0225	48-93	0.0109-0.0210
205RM012..	1.2	-3-4-5	0.02-0.08 x d	98-122	0.0228-0.0285	79-110	0.0205-0.0285	67-104	0.0163-0.0254	48-92	0.0128-0.0247
		6-8-10	0.02-0.08 x d	87-109	0.0208-0.0260	71-98	0.0187-0.0260	59-92	0.0160-0.0250	42-81	0.0114-0.0220
		12-14-16	0.02-0.08 x d	87-109	0.0187-0.0234	71-98	0.0168-0.0234	59-92	0.0144-0.0225	42-81	0.0103-0.0198
205RM013..	1.3	-	0.02-0.08 x d	106-132	0.0228-0.0285	86-119	0.0205-0.0285	72-112	0.0163-0.0254	51-99	0.0128-0.0247
		-4-5	0.02-0.08 x d	102-127	0.0240-0.0300	80-111	0.0216-0.0300	68-106	0.0173-0.0270	46-88	0.0135-0.0260
		6-8	0.02-0.08 x d	89-111	0.0240-0.0300	72-100	0.0216-0.0300	60-94	0.0173-0.0270	43-83	0.0135-0.0260
		10-12	0.02-0.08 x d	89-111	0.0216-0.0270	72-100	0.0194-0.0270	60-94	0.0156-0.0243	43-83	0.0122-0.0234
205RM015..	1.5	-4-5-6	0.02-0.08 x d	106-132	0.0264-0.0330	86-119	0.0238-0.0330	72-112	0.0192-0.0300	51-99	0.0140-0.0270
		8-10-12	0.02-0.08 x d	95-119	0.0238-0.0297	77-107	0.0214-0.0297	65-101	0.0173-0.0270	46-89	0.0126-0.0243
		14-16-18-20	0.02-0.08 x d	85-106	0.0225-0.0281	68-95	0.0202-0.0281	58-90	0.0163-0.0255	41-79	0.0119-0.0229
205RM016..	1.6	-4-5-6-8	0.02-0.08 x d	105-131	0.0280-0.0350	85-118	0.0252-0.0350	71-111	0.0198-0.0310	51-98	0.0156-0.0300
		10-12-14-16	0.02-0.08 x d	94-118	0.0252-0.0315	76-106	0.0227-0.0315	64-100	0.0179-0.0279	46-88	0.0140-0.0270
		18-20	0.02-0.08 x d	83-104	0.0238-0.0298	68-94	0.0215-0.0298	57-89	0.0169-0.0264	41-78	0.0133-0.0255
205RM017..	1.7	-	0.02-0.08 x d	111-139	0.0320-0.0400	90-125	0.0288-0.0400	76-118	0.0224-0.0350	54-104	0.0172-0.0330
205RM018..	1.8	-	0.02-0.08 x d	118-147	0.0320-0.0400	95-132	0.0288-0.0400	80-125	0.0224-0.0350	57-110	0.0172-0.0330
205RM019..	1.9	-	0.02-0.08 x d	124-155	0.0320-0.0400	101-140	0.0288-0.0400	84-132	0.0224-0.0350	60-116	0.0172-0.0330
205RM020..	2.0	-4	0.02-0.08 x d	106-132	0.0400-0.0500	86-119	0.0360-0.0500	72-112	0.0288-0.0450	51-99	0.0224-0.0430
		6-8	0.02-0.08 x d	106-132	0.0360-0.0450	86-119	0.0324-0.0450	72-112	0.0256-0.0400	51-99	0.0198-0.0380
		10-12-14	0.02-0.08 x d	106-132	0.0320-0.0400	86-119	0.0288-0.0400	72-112	0.0207-0.0324	51-99	0.0177-0.0340
		16-18-20	0.02-0.08 x d	95-119	0.0288-0.0360	77-107	0.0259-0.0360	65-101	0.0207-0.0324	46-89	0.0159-0.0306
		22	0.02-0.08 x d	90-112	0.0272-0.0340	73-101	0.0245-0.0340	61-95	0.0196-0.0306	44-84	0.0150-0.0289
		25-30	0.02-0.08 x d	85-106	0.0272-0.0340	68-95	0.0245-0.0340	58-90	0.0196-0.0306	41-79	0.0150-0.0289
205RM022..	2.2	-	0.02-0.08 x d	116-145	0.0400-0.0500	94-131	0.0360-0.0500	79-123	0.0288-0.0450	57-109	0.0224-0.0430
205RM025..	2.5	-10	0.02-0.08 x d	121-151	0.0465-0.0581	98-136	0.0418-0.0581	80-125	0.0344-0.0537	57-110	0.0238-0.0457
		12-14-16	0.02-0.08 x d	106-133	0.0525-0.0656	86-120	0.0472-0.0656	70-110	0.0388-0.0606	50-97	0.0268-0.0516
		20-25	0.02-0.08 x d	101-126	0.0453-0.0566	81-113	0.0408-0.0566	67-104	0.0355-0.0523	47-91	0.0230-0.0442

REZNÉ PARAMETRE

Cutting speed

Richtwerte - Paramètres - Режимы обработки - Řežná rychlost

200M 205M	Ø mm	l ₂ mm	r _p mm	ap	Steel HRC<25 СТАЛЬ		Stainless Steel HRC<25-35 НЕРЖАВЕЮЩАЯ СТАЛЬ		Heat Resistant Steel HRC<35-50 ЛЕГИРОВАННАЯ СТАЛЬ		Tempered Steel HRC<50-70 СТАЛЬ	
					Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
205M005.03R00554	0.5	-	0.05	0.02-0.07 x d	79	0.0090	79	0.0076	63	0.0058	47	0.0063
205M006.01R00554	0.6	-	0.05	0.02-0.07 x d	94	0.0100	80	0.0088	64	0.0074	49	0.0075
205M007.012R00554	0.7	-	0.05	0.02-0.07 x d	106	0.0104	79	0.0104	62	0.0093	44	0.0080
205M008.014R00554	0.8	-	0.05	0.02-0.07 x d	113	0.0111	90	0.0104	70	0.0093	50	0.0080
205M009.015R00554	0.9	-	0.05	0.02-0.07 x d	127	0.0111	102	0.0104	79	0.0093	57	0.0080
205M010..	1.0	-4	0.1-0.2-0.3	0.02-0.07 x d	102	0.0210	92	0.0210	86	0.0189	76	0.0168
		6	0.1-0.2-0.3	0.02-0.07 x d	82	0.0189	74	0.0189	70	0.0189	62	0.0168
		8	0.1-0.2	0.02-0.07 x d	73	0.0189	66	0.0189	62	0.0189	55	0.0168
		10	0.1-0.2-0.3	0.02-0.07 x d	64	0.0189	58	0.0189	54	0.0189	48	0.0168
		12	0.1	0.02-0.07 x d	57	0.0189	51	0.0189	48	0.0189	43	0.0168
		12	0.2-0.3	0.02-0.07 x d	57	0.0168	51	0.0168	48	0.0147	43	0.0147
205M015..	1.5	-	0.1-0.2 -0.3-0.5	0.02-0.07 x d	117	0.0227	106	0.0226	99	0.0207	88	0.0181
		6-8	0.1-0.2-0.3	0.02-0.07 x d	107	0.0226	96	0.0226	91	0.0226	80	0.0201
		10-12	0.1-0.2-0.3	0.02-0.07 x d	85	0.0227	77	0.0227	73	0.0226	64	0.0201
205M020..	2.0	-6	0.1-0.2 -0.3-0.5	0.02-0.07 x d	131	0.0393	118	0.0393	111	0.0393	98	0.0315
		8-10	0.1-0.2 -0.3-0.5	0.02-0.07 x d	119	0.0393	107	0.0393	101	0.0393	89	0.0315
205M025	2.5	12	0.1-0.2 -0.3-0.5	0.02-0.07 x d	96	0.0354	87	0.0354	82	0.0354	72	0.0314
		16	0.5	0.02-0.07 x d	85	0.0354	77	0.0354	73	0.0354	64	0.0315
		-	0.2-0.3-0.5	0.02-0.07 x d	136	0.0392	122	0.0391	116	0.0391	102	0.0313
205M030..	3.0	-10	0.1-0.2 -0.3-0.5-1	0.02-0.07 x d	136	0.0491	122	0.0492	115	0.0491	102	0.0393
		12-16	0.1-0.2 -0.3-0.5	0.02-0.07 x d	122	0.0491	110	0.0491	104	0.0491	92	0.0393
		20	0.2-0.3-0.5	0.02-0.07 x d	110	0.0491	99	0.0492	93	0.0491	82	0.0393
205M040..	4.0	-10-12 -16	0.1-0.2 -0.3-0.5-1	0.02-0.07 x d	131	0.0668	117	0.0677	111	0.0636	98	0.0561
		20	0.2-0.3-0.5	0.02-0.07 x d	110	0.0668	99	0.0677	93	0.0636	92	0.0561
		25	0.3-0.5	0.02-0.07 x d	100	0.0668	90	0.0677	85	0.0636	82	0.0561
205M05.10R156	5.0	-	0.5	0.02-0.07 x d	127	0.0676	115	0.0675	108	0.0638	96	0.0561
205M060..	6.0	-16-20 -25-30	0.1-0.2-0.3 -0.5-1-1.5-2	0.02-0.07 x d	136	0.0674	122	0.0673	115	0.0639	102	0.0565



REZNÉ PARAMETRE

Cutting speed

Richtwerte - Paramètres - Режимы обработки - Řezná rychlost

205PM	Ø mm	l2 mm	ap mm	Steel HRC<25 СТАЛЬ		Stainless Steel HRC<25-35 НЕРЖАВЕЮЩАЯ СТАЛЬ		Heat Resistant Steel HRC<35-50 ЛЕГИРОВАННАЯ СТАЛЬ		Tempered Steel HRC<50-65 СТАЛЬ	
				Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
205PM001..	0.1	-1	0.02-0.07 x d	16	0.0050	16	0.0048	15	0.0036	13	0.0030
		2	0.02-0.07 x d	16	0.0046	15	0.0045	14	0.0036	12	0.0030
205PM0015..	0.15	-	0.02-0.07 x d	24	0.0050	24	0.0475	23	0.0036	20	0.0030
205PM002..	0.2	-1	0.02-0.07 x d	28	0.0071	25	0.0071	24	0.0053	21	0.0045
		2	0.02-0.07 x d	25	0.0065	23	0.0065	22	0.0053	19	0.0045
205PM003..	0.3	-1	0.02-0.07 x d	38	0.0071	34	0.0071	32	0.0053	28	0.0045
		2-3	0.02-0.07 x d	34	0.0065	31	0.0065	29	0.0053	25	0.0045
205PM004..	0.4	-1	0.02-0.07 x d	40	0.0110	36	0.0110	34	0.0082	30	0.0069
		2	0.02-0.07 x d	40	0.0110	36	0.0110	34	0.0074	30	0.0062
		3-4	0.02-0.07 x d	36	0.0101	33	0.0101	31	0.0074	27	0.0062
		5	0.02-0.07 x d	32	0.0088	29	0.0088	27	0.0060	24	0.0060
205PM005..	0.5	-2	0.02-0.07 x d	50	0.0110	45	0.0110	43	0.0820	38	0.0690
		3-4-5	0.02-0.07 x d	45	0.0101	41	0.0101	38	0.0082	34	0.0069
		6	0.02-0.07 x d	40	0.0088	36	0.0113	34	0.0060	30	0.0060
		8	0.02-0.07 x d	40	0.0076	36	0.0088	34	0.0057	30	0.0051
		10	0.02-0.07 x d	35	0.0060	32	0.0060	30	0.0052	26	0.0040
205PM006..	0.6	-2	0.02-0.07 x d	60	0.0158	54	0.0157	51	0.0117	45	0.0099
		3-4-5-6	0.02-0.07 x d	54	0.0144	49	0.0144	46	0.0117	41	0.0099
		8-10	0.02-0.07 x d	48	0.0126	43	0.0126	41	0.0085	36	0.0085
205PM007..	0.7	-2	0.02-0.07 x d	70	0.0158	63	0.0157	60	0.0117	53	0.0099
		4-6	0.02-0.07 x d	63	0.0144	57	0.0144	54	0.0117	42	0.0099
		8-10	0.02-0.07 x d	56	0.0126	51	0.0126	48	0.0085	42	0.0085
205PM008..	0.8	2-4	0.02-0.07 x d	80	0.0158	72	0.0157	68	0.0117	60	0.0099
		6-8	0.02-0.07 x d	72	0.0144	65	0.0144	61	0.0117	54	0.0099
		10	0.02-0.07 x d	64	0.0126	58	0.0126	55	0.0085	48	0.0085
205PM009..	0.9	-3-5-8	0.02-0.07 x d	81	0.0144	73	0.0144	69	0.0117	61	0.0099
		10	0.02-0.07 x d	72	0.0126	65	0.0126	61	0.0085	54	0.0085
205PM010..	1.0	2-3-4	0.02-0.07 x d	90	0.0235	81	0.0236	77	0.0191	68	0.0162
		5-6-8-10	0.02-0.07 x d	81	0.0216	73	0.0216	69	0.0175	61	0.0148
		12-14	0.02-0.07 x d	72	0.0189	65	0.0189	61	0.0128	54	0.0128
		16-18	0.02-0.07 x d	72	0.0162	65	0.0162	61	0.0122	54	0.0108
		20	0.02-0.07 x d	63	0.0131	57	0.0129	54	0.0096	48	0.0086
205PM011.025S4	1.1	-	0.02-0.07 x d	99	0.0235	90	0.0236	85	0.0191	75	0.0162
205PM012..	1.2	-3-4-5-6	0.02-0.07 x d	96	0.0236	87	0.0236	82	0.0176	72	0.0148
		8-10-12	0.02-0.07 x d	87	0.0216	78	0.0216	74	0.0175	65	0.0148
		14-16	0.02-0.07 x d	77	0.0216	69	0.0216	66	0.0175	58	0.0148
205PM013.04S4	1.3	-	0.02-0.07 x d	91	0.0236	82	0.0236	78	0.0175	69	0.0149
205PM014..	1.4	-4-5-6	0.02-0.07 x d	98	0.0236	89	0.0236	84	0.0175	74	0.0149
		8-10-12	0.02-0.07 x d	89	0.0216	80	0.0216	75	0.0175	66	0.0165
205PM015..	1.5	4-5-6	0.02-0.07 x d	106	0.0236	95	0.0236	90	0.0175	79	0.0149
		8-10-12-14	0.02-0.07 x d	95	0.0216	85	0.0216	81	0.0175	71	0.0148
		16-18-20	0.02-0.07 x d	84	0.0189	76	0.0189	72	0.0128	63	0.0128
205PM016..	1.6	-4-5-6-8	0.02-0.07 x d	104	0.0263	94	0.0263	89	0.0195	78	0.0165
		10-12-14-16	0.02-0.07 x d	94	0.0240	85	0.0240	80	0.0195	71	0.0165
		18-20	0.02-0.07 x d	84	0.0210	75	0.0210	71	0.0142	63	0.0143
205PM017.05S4	1.7	-	0.02-0.07 x d	111	0.0263	100	0.0263	94	0.0195	83	0.0165
205PM018.05S4	1.8	-	0.02-0.07 x d	118	0.0263	106	0.0263	100	0.0195	88	0.0165
205PM019.05S4	1.9	-	0.02-0.07 x d	100	0.0315	90	0.0315	85	0.0234	75	0.0198
205PM020..	2.0	4-6-8-10	0.02-0.07 x d	106	0.0315	95	0.0315	90	0.0234	79	0.0198
		12-14-16-18-20	0.02-0.07 x d	95	0.0288	85	0.0288	81	0.0234	71	0.0198
		22-25-30	0.02-0.07 x d	84	0.0252	76	0.0252	72	0.0171	63	0.0171
205PM025..	2.5	-10-12	0.02-0.07 x d	113	0.0394	102	0.0394	96	0.0292	85	0.0248
		14-16-20	0.02-0.07 x d	102	0.0360	92	0.0360	86	0.0292	76	0.0247
		25	0.02-0.07 x d	89	0.0286	81	0.0287	76	0.0232	67	0.0197
205PM030..	3.0	-6-8-10-12	0.02-0.07 x d	121	0.0394	109	0.0394	102	0.0292	90	0.0247
		14-16-18-20-25-30	0.02-0.07 x d	109	0.0360	98	0.0360	92	0.0293	81	0.0248
		35-40	0.02-0.07 x d	96	0.0360	87	0.0360	82	0.0292	72	0.0247
205PM040..	4.0	-8-10-12-14-16	0.02-0.07 x d	118	0.1000	106	0.0900	100	0.0850	89	0.0640
		18-20-25-30	0.02-0.07 x d	106	0.0900	96	0.0810	90	0.0765	80	0.0640
		35-40	0.02-0.07 x d	96	0.0900	86	0.0810	81	0.0765	72	0.0640
		45-50	0.02-0.07 x d	84	0.0716	76	0.0644	70	0.0619	63	0.0509

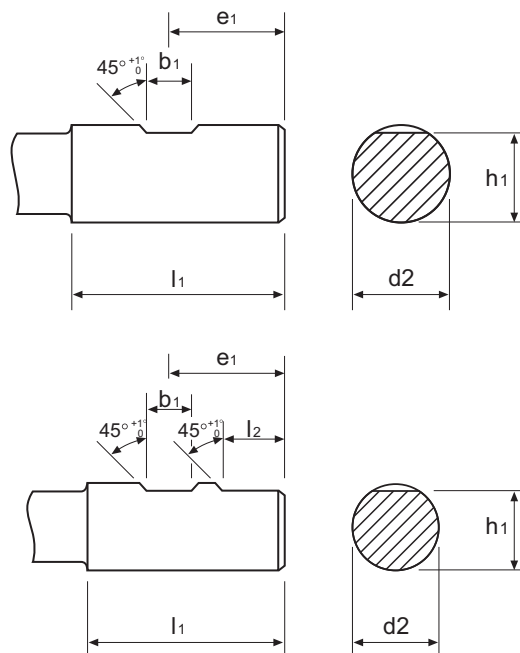
Dimensioni gambi weldon DIN 6535 HB a richiesta

Weldon shank dimentions DIN 6535 HB on request

Dimension Weldon DIN 6535 HB auf Anfrage - Dimensions queue weldon DIN 6535 HB sur demande

Хвостовик типа Weldon DIN 6535 HB

d2 mm	b1 mm	e1 mm	h1 mm	l1 mm	l2 mm
6	4.2	18.0	5.1	36	-
8	5.5	18.0	6.9	36	-
10	7.0	20.0	8.5	40	-
12	8.0	22.5	10.4	45	-
14	8.0	22.5	12.7	45	-
16	10.0	24.0	14.2	48	-
18	10.0	24.0	16.2	48	-
20	11.0	25.0	18.2	50	-
25	12.0	32.0	23.0	56	17
32	14.0	36.0	30.0	60	19



Dimensioni gambi flat DIN 6535 HE a richiesta

Whistle notch shank dimentions DIN 6535 HE on request

Dimension spannflache DIN 6535 HE auf anfrage - Dimensions queue flat DIN 6535 HE sur demande

Хвостовик типа HEWeldon DIN 6535

d2 mm	b1 mm	b2 mm	h2 mm	h1 mm	l1 mm	l3 mm	l2 mm	r mm
6	3.5	4.8	5.4	4.8	36	25	18	1.2
8	4.7	6.1	7.2	6.6	36	25	18	1.2
10	5.7	7.3	9.1	8.4	40	28	20	1.2
12	6.0	8.2	11.2	10.4	45	33	22.5	1.2
16	7.6	10.1	15.0	14.2	48	36	24	1.6
20	8.4	11.5	19.1	18.2	50	38	25	1.6
25	9.3	13.6	24.1	23.0	56	44	32	1.6
32	9.4	15.5	31.2	30.0	60	48	35	1.6

