

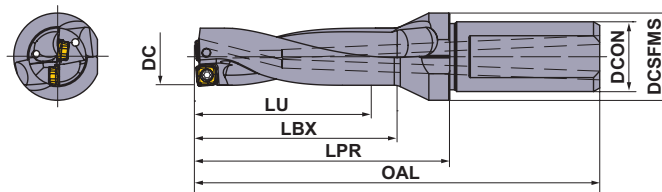
FURAÇÃO(TIPO INTERCAMBIÁVEL)

MVX

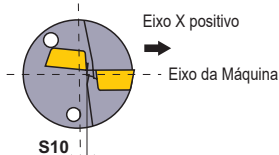
- Combinação ideal: inserto CVD na periferia e PVD no centro.
- Corpo de alta rigidez permite furação 6xD.



P	M	K	N	S	H
Aço	Aço Inoxidável	Ferro Fundido	Metais Não Ferrosos		Aço Endurecido





Ajuste radial máximo para utilização em torno



L/D	Tolerância do furo (meta)(mm)		
	ø14.0-ø33.0	ø33.5-ø47.0	ø48.0-ø63.0
2D, 3D	0 +0.25	0 +0.3	0 +0.3
4D, 5D	0 +0.35	0 +0.4	0 +0.45
6D	0 +0.45	0 +0.6	

DC (mm)	Prof. do Furo (L/D)	Referência para Pedido	Estoque	Número de Dentes	Dimensões (mm)					S10 (mm)	Referência do Inserto	Parafuso de Fixação	F Chave	
					LU	LBX	LPR	OAL	DCON					DCSFMS
14.0	2	MVX1400X2F20	●	2	28	35	50	93	20	25	0.6	SOX05	TPS20-1	TIP06F
14.0	3	MVX1400X3F20	●	2	42	49	64	107	20	25	0.6	SOX05	TPS20-1	TIP06F
14.0	4	MVX1400X4F20	●	2	56	63	78	121	20	25	0.6	SOX05	TPS20-1	TIP06F
14.0	5	MVX1400X5F20	●	2	70	77	92	135	20	25	0.6	SOX05	TPS20-1	TIP06F
14.5	2	MVX1450X2F20	●	2	29	36	51	94	20	25	0.5	SOX05	TPS20-1	TIP06F
14.5	3	MVX1450X3F20	●	2	43.5	50.5	65.5	108.5	20	25	0.5	SOX05	TPS20-1	TIP06F
14.5	4	MVX1450X4F20	●	2	58	65	80	123	20	25	0.5	SOX05	TPS20-1	TIP06F
14.5	5	MVX1450X5F20	●	2	72.5	79.5	94.5	137.5	20	25	0.5	SOX05	TPS20-1	TIP06F
15.0	2	MVX1500X2F20	●	2	30	37	52	95	20	25	0.35	SOX05	TPS20-1	TIP06F
15.0	3	MVX1500X3F20	●	2	45	52	67	110	20	25	0.35	SOX05	TPS20-1	TIP06F
15.0	4	MVX1500X4F20	●	2	60	67	82	125	20	25	0.35	SOX05	TPS20-1	TIP06F
15.0	5	MVX1500X5F20	●	2	75	82	97	140	20	25	0.35	SOX05	TPS20-1	TIP06F
15.5	2	MVX1550X2F20	●	2	31	38	53	96	20	25	0.3	SOX05	TPS20-1	TIP06F
15.5	3	MVX1550X3F20	●	2	46.5	53.5	68.5	111.5	20	25	0.3	SOX05	TPS20-1	TIP06F
15.5	4	MVX1550X4F20	●	2	62	69	84	127	20	25	0.3	SOX05	TPS20-1	TIP06F
15.5	5	MVX1550X5F20	●	2	77.5	84.5	99.5	142.5	20	25	0.3	SOX05	TPS20-1	TIP06F
16.0	2	MVX1600X2F20	●	2	32	39	54	97	20	25	0.25	SOX05	TPS20-1	TIP06F
16.0	3	MVX1600X3F20	●	2	48	55	70	113	20	25	0.25	SOX05	TPS20-1	TIP06F
16.0	4	MVX1600X4F20	●	2	64	71	86	129	20	25	0.25	SOX05	TPS20-1	TIP06F
16.0	5	MVX1600X5F20	●	2	80	87	102	145	20	25	0.25	SOX05	TPS20-1	TIP06F
16.5	2	MVX1650X2F20	●	2	33	40	55	98	20	25	0.25	SOX05	TPS20-1	TIP06F
16.5	3	MVX1650X3F20	●	2	49.5	56.5	71.5	114.5	20	25	0.25	SOX05	TPS20-1	TIP06F
16.5	4	MVX1650X4F20	●	2	66	73	88	131	20	25	0.25	SOX05	TPS20-1	TIP06F
16.5	5	MVX1650X5F20	●	2	82.5	89.5	104.5	147.5	20	25	0.25	SOX05	TPS20-1	TIP06F
17.0	2	MVX1700X2F20	●	2	34	41	56	99	20	25	0.5	SOX06	TPS25	TIP07F
17.0	3	MVX1700X3F20	●	2	51	58	73	116	20	25	0.5	SOX06	TPS25	TIP07F
17.0	4	MVX1700X4F20	●	2	68	75	90	133	20	25	0.5	SOX06	TPS25	TIP07F
17.0	5	MVX1700X5F20	●	2	85	92	107	150	20	25	0.5	SOX06	TPS25	TIP07F
17.0	6	MVX1700X6F20	●	2	102	109	124	167	20	25	0.5	SOX06	TPS25	TIP07F
17.5	2	MVX1750X2F25	●	2	35	42	62	112	25	32	0.45	SOX06	TPS25	TIP07F
17.5	3	MVX1750X3F25	●	2	52.5	59.5	79.5	129.5	25	32	0.45	SOX06	TPS25	TIP07F
17.5	4	MVX1750X4F25	●	2	70	77	97	147	25	32	0.45	SOX06	TPS25	TIP07F

* Torque de Fixação (N • m) : TPS20-1=0.6, TPS25=1.0

DC (mm)	Prof. do Furo (L/D)	Referência para Pedido	Estoque	Número de Dentes	Dimensões (mm)					S10 (mm)	Referência do Inserto			
					LU	LBX	LPR	OAL	DCON					DCSFMS
17.5	5	MVX1750X5F25	●	2	87.5	94.5	114.5	164.5	25	32	0.45	SOX06	TPS25	TIP07F
17.5	6	MVX1750X6F25	●	2	105	112	132	182	25	32	0.45	SOX06	TPS25	TIP07F
18.0	2	MVX1800X2F25	●	2	36	43	63	113	25	32	0.4	SOX06	TPS25	TIP07F
18.0	3	MVX1800X3F25	●	2	54	61	81	131	25	32	0.4	SOX06	TPS25	TIP07F
18.0	4	MVX1800X4F25	●	2	72	79	99	149	25	32	0.4	SOX06	TPS25	TIP07F
18.0	5	MVX1800X5F25	●	2	90	97	117	167	25	32	0.4	SOX06	TPS25	TIP07F
18.0	6	MVX1800X6F25	●	2	108	115	135	185	25	32	0.4	SOX06	TPS25	TIP07F
18.5	2	MVX1850X2F25	●	2	37	44	64	114	25	32	0.35	SOX06	TPS25	TIP07F
18.5	3	MVX1850X3F25	●	2	55.5	62.5	82.5	132.5	25	32	0.35	SOX06	TPS25	TIP07F
18.5	4	MVX1850X4F25	●	2	74	81	101	151	25	32	0.35	SOX06	TPS25	TIP07F
18.5	5	MVX1850X5F25	●	2	92.5	99.5	119.5	169.5	25	32	0.35	SOX06	TPS25	TIP07F
18.5	6	MVX1850X6F25	●	2	111	118	138	188	25	32	0.35	SOX06	TPS25	TIP07F
19.0	2	MVX1900X2F25	●	2	38	45	65	115	25	32	0.3	SOX06	TPS25	TIP07F
19.0	3	MVX1900X3F25	●	2	57	64	84	134	25	32	0.3	SOX06	TPS25	TIP07F
19.0	4	MVX1900X4F25	●	2	76	83	103	153	25	32	0.3	SOX06	TPS25	TIP07F
19.0	5	MVX1900X5F25	●	2	95	102	122	172	25	32	0.3	SOX06	TPS25	TIP07F
19.0	6	MVX1900X6F25	●	2	114	121	141	191	25	32	0.3	SOX06	TPS25	TIP07F
19.5	2	MVX1950X2F25	●	2	39	46	66	116	25	32	0.25	SOX06	TPS25	TIP07F
19.5	3	MVX1950X3F25	●	2	58.5	65.5	85.5	135.5	25	32	0.25	SOX06	TPS25	TIP07F
19.5	4	MVX1950X4F25	●	2	78	85	105	155	25	32	0.25	SOX06	TPS25	TIP07F
19.5	5	MVX1950X5F25	●	2	97.5	104.5	124.5	174.5	25	32	0.25	SOX06	TPS25	TIP07F
19.5	6	MVX1950X6F25	●	2	117	124	144	194	25	32	0.25	SOX06	TPS25	TIP07F
20.0	2	MVX2000X2F25	●	2	40	47	67	117	25	32	0.6	SOX07	TPS3	TIP10F
20.0	3	MVX2000X3F25	●	2	60	67	87	137	25	32	0.6	SOX07	TPS3	TIP10F
20.0	4	MVX2000X4F25	●	2	80	87	107	157	25	32	0.6	SOX07	TPS3	TIP10F
20.0	5	MVX2000X5F25	●	2	100	107	127	177	25	32	0.6	SOX07	TPS3	TIP10F
20.0	6	MVX2000X6F25	●	2	120	127	147	197	25	32	0.6	SOX07	TPS3	TIP10F
20.5	2	MVX2050X2F25	●	2	41	48	68	118	25	32	0.55	SOX07	TPS3	TIP10F
20.5	3	MVX2050X3F25	●	2	61.5	68.5	88.5	138.5	25	32	0.55	SOX07	TPS3	TIP10F
21.0	2	MVX2100X2F25	●	2	42	49	69	119	25	32	0.5	SOX07	TPS3	TIP10F
21.0	3	MVX2100X3F25	●	2	63	70	90	140	25	32	0.5	SOX07	TPS3	TIP10F
21.0	4	MVX2100X4F25	●	2	84	91	111	161	25	32	0.5	SOX07	TPS3	TIP10F
21.0	5	MVX2100X5F25	●	2	105	112	132	182	25	32	0.5	SOX07	TPS3	TIP10F
21.0	6	MVX2100X6F25	●	2	126	133	153	203	25	32	0.5	SOX07	TPS3	TIP10F
21.5	2	MVX2150X2F25	●	2	43	50	70	120	25	32	0.45	SOX07	TPS3	TIP10F
21.5	3	MVX2150X3F25	●	2	64.5	71.5	91.5	141.5	25	32	0.45	SOX07	TPS3	TIP10F
22.0	2	MVX2200X2F25	●	2	44	51	71	121	25	32	0.4	SOX07	TPS3	TIP10F
22.0	3	MVX2200X3F25	●	2	66	73	93	143	25	32	0.4	SOX07	TPS3	TIP10F
22.0	4	MVX2200X4F25	●	2	88	95	115	165	25	32	0.4	SOX07	TPS3	TIP10F
22.0	5	MVX2200X5F25	●	2	110	117	137	187	25	32	0.4	SOX07	TPS3	TIP10F
22.0	6	MVX2200X6F25	●	2	132	139	159	209	25	32	0.4	SOX07	TPS3	TIP10F
22.5	2	MVX2250X2F25	●	2	45	52	72	122	25	32	0.35	SOX07	TPS3	TIP10F
22.5	3	MVX2250X3F25	●	2	67.5	74.5	94.5	144.5	25	32	0.35	SOX07	TPS3	TIP10F
23.0	2	MVX2300X2F25	●	2	46	53	73	123	25	32	0.8	SOX08	TPS351	TIP10W
23.0	3	MVX2300X3F25	●	2	69	76	96	146	25	32	0.8	SOX08	TPS351	TIP10W
23.0	4	MVX2300X4F25	●	2	92	99	119	169	25	32	0.8	SOX08	TPS351	TIP10W
23.0	5	MVX2300X5F25	●	2	115	122	142	192	25	32	0.8	SOX08	TPS351	TIP10W
23.0	6	MVX2300X6F25	●	2	138	145	165	215	25	32	0.8	SOX08	TPS351	TIP10W
23.5	2	MVX2350X2F25	●	2	47	54	74	124	25	32	0.75	SOX08	TPS351	TIP10W
23.5	3	MVX2350X3F25	●	2	70.5	77.5	97.5	147.5	25	32	0.75	SOX08	TPS351	TIP10W

* Torque de Fixação (N • m) : TPS25=1.0, TPS3=2.0, TPS351=2.5



DESCRIÇÃO DO INSERTO > N167
ACESSÓRIOS > P001

N161

FURAÇÃO(TIPO INTERCAMBIÁVEL)

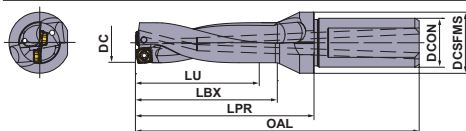
MVX



METAL DURO

DC (mm)	Prof. do Furo (L/D)	Referência para Pedido	Estoque	Número de Dentes	Dimensões (mm)					S10 (mm)	Referência do Inserto			
					LU	LBX	LPR	OAL	DCON					DCSFMS
24.0	2	MVX2400X2F25	●	2	48	55	75	125	25	32	0.7	SOX08	TPS351	TIP10W
24.0	3	MVX2400X3F25	●	2	72	79	99	149	25	32	0.7	SOX08	TPS351	TIP10W
24.0	4	MVX2400X4F25	●	2	96	103	123	173	25	32	0.7	SOX08	TPS351	TIP10W
24.0	5	MVX2400X5F25	●	2	120	127	147	197	25	32	0.7	SOX08	TPS351	TIP10W
24.0	6	MVX2400X6F25	●	2	144	151	171	221	25	32	0.7	SOX08	TPS351	TIP10W
24.5	2	MVX2450X2F25	●	2	49	56	76	126	25	32	0.65	SOX08	TPS351	TIP10W
24.5	3	MVX2450X3F25	●	2	73.5	80.5	100.5	150.5	25	32	0.65	SOX08	TPS351	TIP10W
25.0	2	MVX2500X2F25	●	2	50	57	77	127	25	32	0.6	SOX08	TPS351	TIP10W
25.0	3	MVX2500X3F25	●	2	75	82	102	152	25	32	0.6	SOX08	TPS351	TIP10W
25.0	4	MVX2500X4F25	●	2	100	107	127	177	25	32	0.6	SOX08	TPS351	TIP10W
25.0	5	MVX2500X5F25	●	2	125	132	152	202	25	32	0.6	SOX08	TPS351	TIP10W
25.0	6	MVX2500X6F25	●	2	150	157	177	227	25	32	0.6	SOX08	TPS351	TIP10W
25.5	2	MVX2550X2F25	●	2	51	58	78	128	25	32	0.6	SOX08	TPS351	TIP10W
25.5	3	MVX2550X3F25	●	2	76.5	83.5	103.5	153.5	25	32	0.6	SOX08	TPS351	TIP10W
26.0	2	MVX2600X2F32	●	2	52	59	79	134	32	42	0.5	SOX08	TPS351	TIP10W
26.0	3	MVX2600X3F32	●	2	78	85	105	160	32	42	0.5	SOX08	TPS351	TIP10W
26.0	4	MVX2600X4F32	●	2	104	111	131	186	32	42	0.5	SOX08	TPS351	TIP10W
26.0	5	MVX2600X5F32	●	2	130	137	157	212	32	42	0.5	SOX08	TPS351	TIP10W
26.0	6	MVX2600X6F32	●	2	156	163	183	238	32	42	0.5	SOX08	TPS351	TIP10W
26.5	2	MVX2650X2F32	●	2	53	60	80	135	32	42	0.5	SOX08	TPS351	TIP10W
26.5	3	MVX2650X3F32	●	2	79.5	86.5	106.5	161.5	32	42	0.5	SOX08	TPS351	TIP10W
27.0	2	MVX2700X2F32	●	2	54	61	81	136	32	42	0.45	SOX08	TPS351	TIP10W
27.0	3	MVX2700X3F32	●	2	81	88	108	163	32	42	0.45	SOX08	TPS351	TIP10W
27.0	4	MVX2700X4F32	●	2	108	115	135	190	32	42	0.45	SOX08	TPS351	TIP10W
27.0	5	MVX2700X5F32	●	2	135	142	162	217	32	42	0.45	SOX08	TPS351	TIP10W
27.0	6	MVX2700X6F32	●	2	162	169	189	244	32	42	0.45	SOX08	TPS351	TIP10W
27.5	2	MVX2750X2F32	●	2	55	62	82	137	32	42	0.4	SOX08	TPS351	TIP10W
27.5	3	MVX2750X3F32	●	2	82.5	89.5	109.5	164.5	32	42	0.4	SOX08	TPS351	TIP10W
28.0	2	MVX2800X2F32	●	2	56	63	83	138	32	42	0.85	SOX09	TPS4	TIP15W
28.0	3	MVX2800X3F32	●	2	84	91	111	166	32	42	0.85	SOX09	TPS4	TIP15W
28.0	4	MVX2800X4F32	●	2	112	119	139	194	32	42	0.85	SOX09	TPS4	TIP15W
28.0	5	MVX2800X5F32	●	2	140	147	167	222	32	42	0.85	SOX09	TPS4	TIP15W
28.0	6	MVX2800X6F32	●	2	168	175	195	250	32	42	0.85	SOX09	TPS4	TIP15W
28.5	2	MVX2850X2F32	●	2	57	64	84	139	32	42	0.8	SOX09	TPS4	TIP15W
28.5	3	MVX2850X3F32	●	2	85.5	92.5	112.5	167.5	32	42	0.8	SOX09	TPS4	TIP15W
29.0	2	MVX2900X2F32	●	2	58	65	85	140	32	42	0.75	SOX09	TPS4	TIP15W
29.0	3	MVX2900X3F32	●	2	87	94	114	169	32	42	0.75	SOX09	TPS4	TIP15W
29.0	4	MVX2900X4F32	●	2	116	123	143	198	32	42	0.75	SOX09	TPS4	TIP15W
29.0	5	MVX2900X5F32	●	2	145	152	172	227	32	42	0.75	SOX09	TPS4	TIP15W
29.0	6	MVX2900X6F32	●	2	174	181	201	256	32	42	0.75	SOX09	TPS4	TIP15W
29.5	2	MVX2950X2F32	●	2	59	66	86	141	32	42	0.7	SOX09	TPS4	TIP15W
29.5	3	MVX2950X3F32	●	2	88.5	95.5	115.5	170.5	32	42	0.7	SOX09	TPS4	TIP15W
30.0	2	MVX3000X2F32	●	2	60	67	87	142	32	42	0.65	SOX09	TPS4	TIP15W
30.0	3	MVX3000X3F32	●	2	90	97	117	172	32	42	0.65	SOX09	TPS4	TIP15W
30.0	4	MVX3000X4F32	●	2	120	127	147	202	32	42	0.65	SOX09	TPS4	TIP15W
30.0	5	MVX3000X5F32	●	2	150	157	177	232	32	42	0.65	SOX09	TPS4	TIP15W
30.0	6	MVX3000X6F32	●	2	180	187	207	262	32	42	0.65	SOX09	TPS4	TIP15W
30.5	3	MVX3050X3F32	●	2	91.5	98.5	118.5	173.5	32	42	0.6	SOX09	TPS4	TIP15W
31.0	2	MVX3100X2F40	●	2	62	69	89	154	40	50	0.55	SOX09	TPS4	TIP15W
31.0	3	MVX3100X3F40	●	2	93	100	120	185	40	50	0.55	SOX09	TPS4	TIP15W

* Torque de Fixação (N • m) : TPS351=2.5, TPS4=3.5

● : Estoque mantido.



DC (mm)	Prof. do Furo (L/D)	Referência para Pedido	Estoque	Número de Dentes	Dimensões (mm)					S10 (mm)	Referência do Inserto			
					LU	LBX	LPR	OAL	DCON					DCSFMS
31.0	4	MVX3100X4F40	●	2	124	131	151	216	40	50	0.55	SOX09	TPS4	TIP15W
31.0	5	MVX3100X5F40	●	2	155	162	182	247	40	50	0.55	SOX09	TPS4	TIP15W
31.0	6	MVX3100X6F40	●	2	186	193	213	278	40	50	0.55	SOX09	TPS4	TIP15W
31.5	3	MVX3150X3F40	●	2	94.5	101.5	121.5	186.5	40	50	0.55	SOX09	TPS4	TIP15W
32.0	2	MVX3200X2F40	●	2	64	71	91	156	40	50	0.45	SOX09	TPS4	TIP15W
32.0	3	MVX3200X3F40	●	2	96	103	123	188	40	50	0.45	SOX09	TPS4	TIP15W
32.0	4	MVX3200X4F40	●	2	128	135	155	220	40	50	0.45	SOX09	TPS4	TIP15W
32.0	5	MVX3200X5F40	●	2	160	167	187	252	40	50	0.45	SOX09	TPS4	TIP15W
32.0	6	MVX3200X6F40	●	2	192	199	219	284	40	50	0.45	SOX09	TPS4	TIP15W
32.5	3	MVX3250X3F40	●	2	97.5	104.5	124.5	189.5	40	50	0.45	SOX09	TPS4	TIP15W
33.0	2	MVX3300X2F40	●	2	66	73	93	158	40	50	0.4	SOX09	TPS4	TIP15W
33.0	3	MVX3300X3F40	●	2	99	106	126	191	40	50	0.4	SOX09	TPS4	TIP15W
33.0	4	MVX3300X4F40	●	2	132	139	159	224	40	50	0.4	SOX09	TPS4	TIP15W
33.0	5	MVX3300X5F40	●	2	165	172	192	257	40	50	0.4	SOX09	TPS4	TIP15W
33.0	6	MVX3300X6F40	●	2	198	205	225	290	40	50	0.4	SOX09	TPS4	TIP15W
33.5	3	MVX3350X3F40	●	2	100.5	107.5	127.5	192.5	40	50	1.15	SOX11	TPS43	TIP15W
34.0	2	MVX3400X2F40	●	2	68	75	105	170	40	50	1.11	SOX11	TPS43	TIP15W
34.0	3	MVX3400X3F40	●	2	102	109	139	204	40	50	1.11	SOX11	TPS43	TIP15W
34.0	4	MVX3400X4F40	●	2	136	143	173	238	40	50	1.11	SOX11	TPS43	TIP15W
34.0	5	MVX3400X5F40	●	2	170	177	207	272	40	50	1.11	SOX11	TPS43	TIP15W
34.0	6	MVX3400X6F40	●	2	204	211	241	306	40	50	1.1	SOX11	TPS43	TIP15W
34.5	3	MVX3450X3F40	●	2	103.5	110.5	140.5	205.5	40	50	1.08	SOX11	TPS43	TIP15W
35.0	2	MVX3500X2F40	●	2	70	77	107	172	40	50	1.03	SOX11	TPS43	TIP15W
35.0	3	MVX3500X3F40	●	2	105	112	142	207	40	50	1.03	SOX11	TPS43	TIP15W
35.0	4	MVX3500X4F40	●	2	140	147	177	242	40	50	1.03	SOX11	TPS43	TIP15W
35.0	5	MVX3500X5F40	●	2	175	182	212	277	40	50	1.03	SOX11	TPS43	TIP15W
35.0	6	MVX3500X6F40	●	2	210	217	247	312	40	50	1.02	SOX11	TPS43	TIP15W
35.5	3	MVX3550X3F40	●	2	106.5	113.5	143.5	208.5	40	50	0.99	SOX11	TPS43	TIP15W
36.0	2	MVX3600X2F40	●	2	72	79	109	174	40	50	0.95	SOX11	TPS43	TIP15W
36.0	3	MVX3600X3F40	●	2	108	115	145	210	40	50	0.95	SOX11	TPS43	TIP15W
36.0	4	MVX3600X4F40	●	2	144	151	181	246	40	50	0.95	SOX11	TPS43	TIP15W
36.0	5	MVX3600X5F40	●	2	180	187	217	282	40	50	0.95	SOX11	TPS43	TIP15W
36.0	6	MVX3600X6F40	●	2	216	223	253	318	40	50	0.94	SOX11	TPS43	TIP15W
37.0	2	MVX3700X2F40	●	2	74	81	111	176	40	50	0.87	SOX11	TPS43	TIP15W
37.0	3	MVX3700X3F40	●	2	111	118	148	213	40	50	0.87	SOX11	TPS43	TIP15W
37.0	4	MVX3700X4F40	●	2	148	155	185	250	40	50	0.87	SOX11	TPS43	TIP15W
37.0	5	MVX3700X5F40	●	2	185	192	222	287	40	50	0.87	SOX11	TPS43	TIP15W
37.0	6	MVX3700X6F40	●	2	222	229	259	324	40	50	0.86	SOX11	TPS43	TIP15W
38.0	2	MVX3800X2F40	●	2	76	83	113	178	40	50	0.79	SOX11	TPS43	TIP15W
38.0	3	MVX3800X3F40	●	2	114	121	151	216	40	50	0.79	SOX11	TPS43	TIP15W
38.0	4	MVX3800X4F40	●	2	152	159	189	254	40	50	0.79	SOX11	TPS43	TIP15W
38.0	5	MVX3800X5F40	●	2	190	197	227	292	40	50	0.79	SOX11	TPS43	TIP15W
38.0	6	MVX3800X6F40	●	2	228	235	265	330	40	50	0.78	SOX11	TPS43	TIP15W
39.0	2	MVX3900X2F40	●	2	78	85	115	180	40	50	0.71	SOX11	TPS43	TIP15W
39.0	3	MVX3900X3F40	●	2	117	124	154	219	40	50	0.71	SOX11	TPS43	TIP15W
39.0	4	MVX3900X4F40	●	2	156	163	193	258	40	50	0.71	SOX11	TPS43	TIP15W
39.0	5	MVX3900X5F40	●	2	195	202	232	297	40	50	0.71	SOX11	TPS43	TIP15W
39.0	6	MVX3900X6F40	●	2	234	241	271	336	40	50	0.7	SOX11	TPS43	TIP15W
40.0	2	MVX4000X2F40	●	2	80	87	117	182	40	50	1.46	SOX13	TPS43	TIP15W
40.0	3	MVX4000X3F40	●	2	120	127	157	222	40	50	1.46	SOX13	TPS43	TIP15W



* Torque de Fixação (N • m) : TPS4=3.5, TPS43=3.5

DESCRIÇÃO DO INSERTO > N167
ACESSÓRIOS > P001

FURAÇÃO(TIPO INTERCAMBIÁVEL)

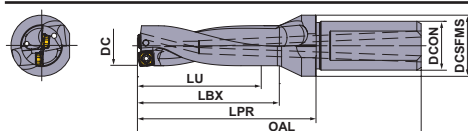
MVX



METAL DURO

DC (mm)	Prof. do Furo (L/D)	Referência para Pedido	Estoque	Número de Dentes	Dimensões (mm)					S10 (mm)	Referência do Inserto			
					LU	LBX	LPR	OAL	DCON					DCSFMS
40.0	4	MVX4000X4F40	●	2	160	167	197	262	40	50	1.46	SOX13	TPS43	TIP15W
40.0	5	MVX4000X5F40	●	2	200	207	237	302	40	50	1.46	SOX13	TPS43	TIP15W
40.0	6	MVX4000X6F40	●	2	240	247	277	342	40	50	1.45	SOX13	TPS43	TIP15W
41.0	2	MVX4100X2F40	●	2	82	89	119	184	40	50	1.36	SOX13	TPS43	TIP15W
41.0	3	MVX4100X3F40	●	2	123	130	160	225	40	50	1.36	SOX13	TPS43	TIP15W
41.0	4	MVX4100X4F40	●	2	164	171	201	266	40	50	1.36	SOX13	TPS43	TIP15W
41.0	5	MVX4100X5F40	●	2	205	212	242	307	40	50	1.36	SOX13	TPS43	TIP15W
41.0	6	MVX4100X6F40	●	2	246	253	283	348	40	50	1.35	SOX13	TPS43	TIP15W
42.0	2	MVX4200X2F40	●	2	84	91	121	186	40	50	1.27	SOX13	TPS43	TIP15W
42.0	3	MVX4200X3F40	●	2	126	133	163	228	40	50	1.27	SOX13	TPS43	TIP15W
42.0	4	MVX4200X4F40	●	2	168	175	205	270	40	63	1.27	SOX13	TPS43	TIP15W
42.0	4	MVX4200X4F50	●	2	168	175	205	280	50	63	1.27	SOX13	TPS43	TIP15W
42.0	5	MVX4200X5F40	●	2	210	217	247	312	40	63	1.27	SOX13	TPS43	TIP15W
42.0	5	MVX4200X5F50	●	2	210	217	247	322	50	63	1.27	SOX13	TPS43	TIP15W
42.0	6	MVX4200X6F40	●	2	252	259	289	354	40	63	1.27	SOX13	TPS43	TIP15W
42.0	6	MVX4200X6F50	●	2	252	259	289	364	50	63	1.26	SOX13	TPS43	TIP15W
43.0	2	MVX4300X2F40	●	2	86	93	123	188	40	50	1.18	SOX13	TPS43	TIP15W
43.0	3	MVX4300X3F40	●	2	129	136	166	231	40	50	1.18	SOX13	TPS43	TIP15W
43.0	4	MVX4300X4F40	●	2	172	179	209	274	40	63	1.18	SOX13	TPS43	TIP15W
43.0	4	MVX4300X4F50	●	2	172	179	209	284	50	63	1.18	SOX13	TPS43	TIP15W
43.0	5	MVX4300X5F40	●	2	215	222	252	317	40	63	1.18	SOX13	TPS43	TIP15W
43.0	5	MVX4300X5F50	●	2	215	222	252	327	50	63	1.18	SOX13	TPS43	TIP15W
43.0	6	MVX4300X6F40	●	2	258	265	295	360	40	63	1.17	SOX13	TPS43	TIP15W
43.0	6	MVX4300X6F50	●	2	258	265	295	370	50	63	1.17	SOX13	TPS43	TIP15W
44.0	2	MVX4400X2F40	●	2	88	95	125	190	40	50	1.08	SOX13	TPS43	TIP15W
44.0	3	MVX4400X3F40	●	2	132	139	169	234	40	50	1.08	SOX13	TPS43	TIP15W
44.0	4	MVX4400X4F40	●	2	176	183	213	278	40	63	1.08	SOX13	TPS43	TIP15W
44.0	4	MVX4400X4F50	●	2	176	183	213	288	50	63	1.08	SOX13	TPS43	TIP15W
44.0	5	MVX4400X5F40	●	2	220	227	257	322	40	63	1.08	SOX13	TPS43	TIP15W
44.0	5	MVX4400X5F50	●	2	220	227	257	332	50	63	1.08	SOX13	TPS43	TIP15W
45.0	2	MVX4500X2F40	●	2	90	97	127	192	40	50	0.99	SOX13	TPS43	TIP15W
45.0	3	MVX4500X3F40	●	2	135	142	172	237	40	50	0.99	SOX13	TPS43	TIP15W
45.0	4	MVX4500X4F40	●	2	180	187	217	282	40	63	0.99	SOX13	TPS43	TIP15W
45.0	4	MVX4500X4F50	●	2	180	187	217	292	50	63	0.99	SOX13	TPS43	TIP15W
45.0	5	MVX4500X5F40	●	2	225	232	262	327	40	63	0.99	SOX13	TPS43	TIP15W
45.0	5	MVX4500X5F50	●	2	225	232	262	337	50	63	0.99	SOX13	TPS43	TIP15W
46.0	2	MVX4600X2F40	●	2	92	99	129	194	40	50	0.89	SOX13	TPS43	TIP15W
46.0	3	MVX4600X3F40	●	2	138	145	175	240	40	50	0.89	SOX13	TPS43	TIP15W
46.0	4	MVX4600X4F40	●	2	184	191	221	286	40	63	0.89	SOX13	TPS43	TIP15W
46.0	4	MVX4600X4F50	●	2	184	191	221	296	50	63	0.89	SOX13	TPS43	TIP15W
46.0	5	MVX4600X5F40	●	2	230	237	267	332	40	63	0.89	SOX13	TPS43	TIP15W
46.0	5	MVX4600X5F50	●	2	230	237	267	342	50	63	0.89	SOX13	TPS43	TIP15W
47.0	2	MVX4700X2F40	●	2	94	101	141	206	40	63	1.9	SOX16	TPS54	TIP25D
47.0	3	MVX4700X3F40	●	2	141	148	188	253	40	63	1.9	SOX16	TPS54	TIP25D
47.0	4	MVX4700X4F40	●	2	188	195	235	300	40	63	1.9	SOX16	TPS54	TIP25D
47.0	4	MVX4700X4F50	●	2	188	195	235	310	50	63	1.9	SOX16	TPS54	TIP25D
47.0	5	MVX4700X5F40	●	2	235	242	282	347	40	63	1.9	SOX16	TPS54	TIP25D
47.0	5	MVX4700X5F50	●	2	235	242	282	357	50	63	1.9	SOX16	TPS54	TIP25D
48.0	2	MVX4800X2F40	●	2	96	103	143	208	40	63	1.8	SOX16	TPS54	TIP25D
48.0	3	MVX4800X3F40	●	2	144	151	191	256	40	63	1.8	SOX16	TPS54	TIP25D

* Torque de Fixação (N • m) : TPS43=3.5, TPS54=7.5

● : Estoque mantido.





DC (mm)	Prof. do Furo (L/D)	Referência para Pedido	Estoque	Número de Dentes	Dimensões (mm)					S10 (mm)	Referência do Inserto			
					LU	LBX	LPR	OAL	DCON					DCSFMS
48.0	4	MVX4800X4F40	●	2	192	199	239	304	40	63	1.8	SOX16	TPS54	TIP25D
48.0	4	MVX4800X4F50	●	2	192	199	239	314	50	63	1.8	SOX16	TPS54	TIP25D
48.0	5	MVX4800X5F40	●	2	240	247	287	352	40	63	1.8	SOX16	TPS54	TIP25D
48.0	5	MVX4800X5F50	●	2	240	247	287	362	50	63	1.8	SOX16	TPS54	TIP25D
49.0	2	MVX4900X2F40	●	2	98	105	145	210	40	63	1.7	SOX16	TPS54	TIP25D
49.0	3	MVX4900X3F40	●	2	147	154	194	259	40	63	1.7	SOX16	TPS54	TIP25D
49.0	4	MVX4900X4F40	●	2	196	203	243	308	40	63	1.7	SOX16	TPS54	TIP25D
49.0	4	MVX4900X4F50	●	2	196	203	243	318	50	63	1.7	SOX16	TPS54	TIP25D
49.0	5	MVX4900X5F40	●	2	245	252	292	357	40	63	1.7	SOX16	TPS54	TIP25D
49.0	5	MVX4900X5F50	●	2	245	252	292	367	50	63	1.7	SOX16	TPS54	TIP25D
50.0	2	MVX5000X2F40	●	2	100	107	147	212	40	63	1.6	SOX16	TPS54	TIP25D
50.0	3	MVX5000X3F40	●	2	150	157	197	262	40	63	1.6	SOX16	TPS54	TIP25D
50.0	4	MVX5000X4F40	●	2	200	207	247	312	40	63	1.6	SOX16	TPS54	TIP25D
50.0	4	MVX5000X4F50	●	2	200	207	247	322	50	63	1.6	SOX16	TPS54	TIP25D
50.0	5	MVX5000X5F40	●	2	250	257	297	362	40	63	1.6	SOX16	TPS54	TIP25D
50.0	5	MVX5000X5F50	●	2	250	257	297	372	50	63	1.6	SOX16	TPS54	TIP25D
51.0	2	MVX5100X2F40	●	2	102	109	149	214	40	63	1.5	SOX16	TPS54	TIP25D
51.0	3	MVX5100X3F40	●	2	153	160	200	265	40	63	1.5	SOX16	TPS54	TIP25D
51.0	4	MVX5100X4F40	●	2	204	211	251	316	40	63	1.5	SOX16	TPS54	TIP25D
51.0	4	MVX5100X4F50	●	2	204	211	251	326	50	63	1.5	SOX16	TPS54	TIP25D
51.0	5	MVX5100X5F40	●	2	255	262	302	367	40	63	1.5	SOX16	TPS54	TIP25D
51.0	5	MVX5100X5F50	●	2	255	262	302	377	50	63	1.5	SOX16	TPS54	TIP25D
52.0	2	MVX5200X2F40	●	2	104	111	151	216	40	63	1.39	SOX16	TPS54	TIP25D
52.0	3	MVX5200X3F40	●	2	156	163	203	268	40	63	1.39	SOX16	TPS54	TIP25D
52.0	4	MVX5200X4F40	●	2	208	215	255	320	40	63	1.39	SOX16	TPS54	TIP25D
52.0	4	MVX5200X4F50	●	2	208	215	255	330	50	63	1.39	SOX16	TPS54	TIP25D
52.0	5	MVX5200X5F40	●	2	260	267	307	372	40	63	1.39	SOX16	TPS54	TIP25D
52.0	5	MVX5200X5F50	●	2	260	267	307	382	50	63	1.39	SOX16	TPS54	TIP25D
53.0	2	MVX5300X2F40	●	2	106	113	153	218	40	63	1.29	SOX16	TPS54	TIP25D
53.0	3	MVX5300X3F40	●	2	159	166	206	271	40	63	1.29	SOX16	TPS54	TIP25D
53.0	4	MVX5300X4F40	●	2	212	219	259	324	40	63	1.29	SOX16	TPS54	TIP25D
53.0	4	MVX5300X4F50	●	2	212	219	259	334	50	63	1.29	SOX16	TPS54	TIP25D
53.0	5	MVX5300X5F40	●	2	265	272	312	377	40	63	1.29	SOX16	TPS54	TIP25D
53.0	5	MVX5300X5F50	●	2	265	272	312	387	50	63	1.29	SOX16	TPS54	TIP25D
54.0	2	MVX5400X2F40	●	2	108	115	155	220	40	63	1.19	SOX16	TPS54	TIP25D
54.0	3	MVX5400X3F40	●	2	162	169	209	274	40	63	1.19	SOX16	TPS54	TIP25D
54.0	4	MVX5400X4F40	●	2	216	223	263	328	40	63	1.19	SOX16	TPS54	TIP25D
54.0	4	MVX5400X4F50	●	2	216	223	263	338	50	63	1.19	SOX16	TPS54	TIP25D
54.0	5	MVX5400X5F40	●	2	270	277	317	382	40	63	1.19	SOX16	TPS54	TIP25D
54.0	5	MVX5400X5F50	●	2	270	277	317	392	50	63	1.19	SOX16	TPS54	TIP25D
55.0	2	MVX5500X2F40	●	2	110	117	157	222	40	63	1.08	SOX16	TPS54	TIP25D
55.0	3	MVX5500X3F40	●	2	165	172	212	277	40	63	1.08	SOX16	TPS54	TIP25D
55.0	4	MVX5500X4F40	●	2	220	227	267	332	40	63	1.08	SOX16	TPS54	TIP25D
55.0	4	MVX5500X4F50	●	2	220	227	267	342	50	63	1.08	SOX16	TPS54	TIP25D
55.0	5	MVX5500X5F40	●	2	275	282	322	387	40	63	1.08	SOX16	TPS54	TIP25D
55.0	5	MVX5500X5F50	●	2	275	282	322	397	50	63	1.08	SOX16	TPS54	TIP25D
56.0	2	MVX5600X2F40	●	2	112	119	159	224	40	63	0.98	SOX16	TPS54	TIP25D
56.0	3	MVX5600X3F40	●	2	168	175	215	280	40	63	0.98	SOX16	TPS54	TIP25D
56.0	4	MVX5600X4F40	●	2	224	231	271	336	40	63	0.98	SOX16	TPS54	TIP25D
56.0	4	MVX5600X4F50	●	2	224	231	271	346	50	63	0.98	SOX16	TPS54	TIP25D

* Torque de Fixação (N • m) : TPS54=7.5

FURAÇÃO(TIPO INTERCAMBIÁVEL)

MVX

METAL DURO

DC (mm)	Prof. do Furo (L/D)	Referência para Pedido	Estoque	Número de Dentes	Dimensões (mm)					S10 (mm)	Referência do Inserto			
					LU	LBX	LPR	OAL	DCON					DCSFMS
56.0	5	MVX5600X5F40	●	2	280	287	327	392	40	63	0.98	SOX16	TPS54	TIP25D
56.0	5	MVX5600X5F50	●	2	280	287	327	402	50	63	0.98	SOX16	TPS54	TIP25D
57.0	2	MVX5700X2F40	●	2	114	121	161	226	40	68	1.47	SOX18	TPS54	TIP25D
57.0	3	MVX5700X3F40	●	2	171	178	218	283	40	68	1.47	SOX18	TPS54	TIP25D
57.0	4	MVX5700X4F40	●	2	228	235	275	340	40	68	1.47	SOX18	TPS54	TIP25D
57.0	4	MVX5700X4F50	●	2	228	235	275	350	50	68	1.47	SOX18	TPS54	TIP25D
57.0	5	MVX5700X5F40	●	2	285	292	332	397	40	68	1.47	SOX18	TPS54	TIP25D
57.0	5	MVX5700X5F50	●	2	285	292	332	407	50	68	1.47	SOX18	TPS54	TIP25D
58.0	2	MVX5800X2F40	●	2	116	123	163	228	40	68	1.37	SOX18	TPS54	TIP25D
58.0	3	MVX5800X3F40	●	2	174	181	221	286	40	68	1.37	SOX18	TPS54	TIP25D
58.0	4	MVX5800X4F40	●	2	232	239	279	344	40	68	1.37	SOX18	TPS54	TIP25D
58.0	4	MVX5800X4F50	●	2	232	239	279	354	50	68	1.37	SOX18	TPS54	TIP25D
58.0	5	MVX5800X5F40	●	2	290	297	337	402	40	68	1.37	SOX18	TPS54	TIP25D
58.0	5	MVX5800X5F50	●	2	290	297	337	412	50	68	1.37	SOX18	TPS54	TIP25D
59.0	2	MVX5900X2F40	●	2	118	125	165	230	40	68	1.26	SOX18	TPS54	TIP25D
59.0	3	MVX5900X3F40	●	2	177	184	224	289	40	68	1.26	SOX18	TPS54	TIP25D
59.0	4	MVX5900X4F40	●	2	236	243	283	348	40	68	1.26	SOX18	TPS54	TIP25D
59.0	4	MVX5900X4F50	●	2	236	243	283	358	50	68	1.26	SOX18	TPS54	TIP25D
59.0	5	MVX5900X5F40	●	2	295	302	342	407	40	68	1.26	SOX18	TPS54	TIP25D
59.0	5	MVX5900X5F50	●	2	295	302	342	417	50	68	1.26	SOX18	TPS54	TIP25D
60.0	2	MVX6000X2F40	●	2	120	127	167	232	40	68	1.16	SOX18	TPS54	TIP25D
60.0	3	MVX6000X3F40	●	2	180	187	227	292	40	68	1.16	SOX18	TPS54	TIP25D
60.0	4	MVX6000X4F40	●	2	240	247	287	352	40	68	1.16	SOX18	TPS54	TIP25D
60.0	4	MVX6000X4F50	●	2	240	247	287	362	50	68	1.16	SOX18	TPS54	TIP25D
60.0	5	MVX6000X5F40	●	2	300	307	347	412	40	68	1.16	SOX18	TPS54	TIP25D
60.0	5	MVX6000X5F50	●	2	300	307	347	422	50	68	1.16	SOX18	TPS54	TIP25D
61.0	2	MVX6100X2F40	●	2	122	129	169	234	40	68	1.05	SOX18	TPS54	TIP25D
61.0	3	MVX6100X3F40	●	2	183	190	230	295	40	68	1.05	SOX18	TPS54	TIP25D
61.0	4	MVX6100X4F40	●	2	244	251	291	356	40	68	1.05	SOX18	TPS54	TIP25D
61.0	4	MVX6100X4F50	●	2	244	251	291	366	50	68	1.05	SOX18	TPS54	TIP25D
61.0	5	MVX6100X5F40	●	2	305	312	352	417	40	68	1.05	SOX18	TPS54	TIP25D
61.0	5	MVX6100X5F50	●	2	305	312	352	427	50	68	1.05	SOX18	TPS54	TIP25D
62.0	2	MVX6200X2F40	●	2	124	131	171	236	40	68	0.95	SOX18	TPS54	TIP25D
62.0	3	MVX6200X3F40	●	2	186	193	233	298	40	68	0.95	SOX18	TPS54	TIP25D
62.0	4	MVX6200X4F40	●	2	248	255	295	360	40	68	0.95	SOX18	TPS54	TIP25D
62.0	4	MVX6200X4F50	●	2	248	255	295	370	50	68	0.95	SOX18	TPS54	TIP25D
62.0	5	MVX6200X5F40	●	2	310	317	357	422	40	68	0.95	SOX18	TPS54	TIP25D
62.0	5	MVX6200X5F50	●	2	310	317	357	432	50	68	0.95	SOX18	TPS54	TIP25D
63.0	2	MVX6300X2F40	●	2	126	133	173	238	40	68	0.85	SOX18	TPS54	TIP25D
63.0	3	MVX6300X3F40	●	2	189	196	236	301	40	68	0.85	SOX18	TPS54	TIP25D
63.0	4	MVX6300X4F40	●	2	252	259	299	364	40	68	0.85	SOX18	TPS54	TIP25D
63.0	4	MVX6300X4F50	●	2	252	259	299	374	50	68	0.85	SOX18	TPS54	TIP25D
63.0	5	MVX6300X5F40	●	2	315	322	362	427	40	68	0.85	SOX18	TPS54	TIP25D
63.0	5	MVX6300X5F50	●	2	315	322	362	437	50	68	0.85	SOX18	TPS54	TIP25D


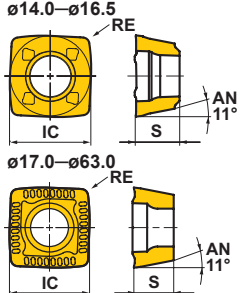

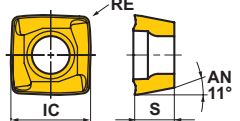

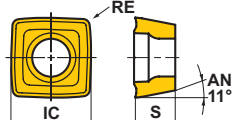

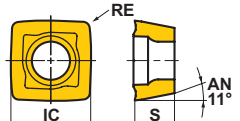
* Torque de Fixação (N • m) : TPS54=7.5

FURAÇÃO N

● : Estoque mantido.













(Nota: 1 insertos por embalagem)

INSERTOS

Formato	Diâm. da Broca	Referência do Inserto	IC	S	RE	Com Cobertura				Sem Cobertura	Geometria
						MC5020	MC1020	VP15TF	DP8020	TF15	
 Uso geral Inserto central/periférico	ø14.0–ø16.5	SOMX052704-UM	5.0	2.7	0.4	●	●	●			
	ø17.0–ø19.5	SOMX063005-UM	6.0	3.0	0.5	●	●	●			
	ø20.0–ø22.5	SOMX073505-UM	7.0	3.5	0.5	●	●	●			
	ø23.0–ø27.5	SOMX084005-UM	8.3	4.0	0.5	●	●	●			
	ø28.0–ø33.0	SOMX094506-UM	9.7	4.5	0.6	●	●	●			
	ø33.5–ø39.0	SOMX115506-UM	11.6	5.5	0.6	●	●	●			
	ø40.0–ø46.0	SOMX136008-UM	13.8	6.0	0.8	●	●	●			
 Para aço inoxidável Inserto central	ø17.0–ø19.5	SOMX063005-US	6.0	3.0	0.5			●			
	ø20.0–ø22.5	SOMX073505-US	7.0	3.5	0.5			●			
	ø23.0–ø27.5	SOMX084005-US	8.3	4.0	0.5			●			
	ø28.0–ø33.0	SOMX094506-US	9.7	4.5	0.6			●			
	ø33.5–ø39.0	SOMX115506-US	11.6	5.5	0.6			●			
	ø40.0–ø46.0	SOMX136008-US	13.8	6.0	0.8			●			
	ø47.0–ø56.0	SOMX166508-US	16.5	6.5	0.8			●			
 Aresta reforçada Inserto central	ø17.0–ø19.5	SOMX062905-UH	6.0	2.9	0.5				●		
	ø20.0–ø22.5	SOMX073405-UH	7.0	3.4	0.5				●		
	ø23.0–ø27.5	SOMX083905-UH	8.3	3.9	0.5				●		
	ø28.0–ø33.0	SOMX094406-UH	9.7	4.4	0.6				●		
	ø33.5–ø39.0	SOMX115406-UH	11.6	5.4	0.6				●		
	ø40.0–ø46.0	SOMX135908-UH	13.8	5.9	0.8				●		
	ø47.0–ø56.0	SOMX166408-UH	16.5	6.4	0.8				●		
 Para ligas de alumínio Inserto central/periférico	ø17.0–ø19.5	SOGX063005-UN	6.0	3.0	0.5				●		
	ø20.0–ø22.5	SOGX073505-UN	7.0	3.5	0.5				●		
	ø23.0–ø27.5	SOGX084005-UN	8.3	4.0	0.5				●		
	ø28.0–ø33.0	SOGX094506-UN	9.7	4.5	0.6				●		
	ø33.5–ø39.0	SOGX115506-UN	11.6	5.5	0.6				●		
	ø40.0–ø46.0	SOGX136008-UN	13.8	6.0	0.8				●		
	ø47.0–ø56.0	SOGX166508-UN	16.5	6.5	0.8				●		
ø57.0–ø63.0	SOGX187008-UN	18.2	7.0	0.8				●			

Nota 1) Classes MC1020 e MC5020 somente para inserto periférico. O DP8020 é indicado para uso exclusivo como inserto central.

SELEÇÃO DE INSERTOS

Material	1ª Recomendação		Quando o inserto periférico sofre fratura	
	Externo	Interno	Externo	Interno
P Aço Baixo Carbono, Aço Liga	MC1020 	VP15TF 	VP15TF 	VP15TF 
	Quebra-cavaco UM	Quebra-cavaco UM	Quebra-cavaco UM	Quebra-cavaco UM
M Aço Inoxidável	MC1020 	VP15TF 	VP15TF 	VP15TF 
	Quebra-cavaco UM	Quebra-cavaco US	Quebra-cavaco UM	Quebra-cavaco US
K Ferro Fundido	MC5020 	VP15TF 	VP15TF 	VP15TF 
	Quebra-cavaco UM	Quebra-cavaco UM	Quebra-cavaco UM	Quebra-cavaco UM

Material	1ª Recomendação		Quando o inserto periférico sofre fratura	
	Externo	Interno	Externo	Interno
H Aço Endurecido	MC1020 	DP8020 	VP15TF 	DP8020 
	Quebra-cavaco UM	Quebra-cavaco UH	Quebra-cavaco UM	Quebra-cavaco UH
N Ligas de Alumínio	TF15 	TF15 		
	Quebra-cavaco UN	Quebra-cavaco UN		

N

FURAÇÃO

CONDIÇÕES DE CORTE RECOMENDADAS

Material	Dureza	Vel. de Corte (m/min)	Quebra-cavaco central	φ14—φ16.5mm			
				Avanço (mm/rot)			
				L/D=2, 3	4	5	
P	Aço baixo carbono (ASTM A36, AISI 1010)	≤180HB	200 (180—235)	UM	0.05 (0.04—0.06)	0.05 (0.04—0.06)	0.05 (0.04—0.06)
				UH	—	—	—
	Aço Carbono, Aço Liga (AISI 1045, AISI 4140)	180—280HB	140 (115—180)	UM	0.08 (0.06—0.14)	0.08 (0.06—0.09)	0.08 (0.06—0.09)
				UH	—	—	—
	Aço Carbono, Aço Liga (AISI 4340)	280—350HB	100 (75—140)	UM	0.08 (0.06—0.14)	0.08 (0.06—0.09)	0.08 (0.06—0.09)
				UH	—	—	—
	Aço ferramenta liga (SKD, SKT)	≤350HB	135 (100—170)	UM	0.08 (0.06—0.14)	0.08 (0.06—0.09)	0.08 (0.06—0.09)
				UH	—	—	—
M	Aço Inoxidável Austenítico (AISI 304, AISI 316)	≤200HB	130 (80—180)	US	—	—	—
				UM	0.06 (0.04—0.08)	0.05 (0.04—0.06)	0.05 (0.04—0.06)
	Aço Inoxidável Austenítico (AISI 304LN, AISI 316LN)	>200HB	130 (80—180)	US	—	—	—
				UM	0.06 (0.04—0.08)	0.05 (0.04—0.06)	0.05 (0.04—0.06)
	Aço inoxidável ferrítico e martensítico (AISI 410, AISI 430)	≤200HB	120 (80—165)	US	—	—	—
				UM	0.06 (0.04—0.08)	0.05 (0.04—0.06)	0.05 (0.04—0.06)
	Aço inoxidável ferrítico e martensítico (AISI 431, AISI 420J2)	>200HB	120 (80—165)	US	—	—	—
				UM	0.06 (0.04—0.08)	0.05 (0.04—0.06)	0.05 (0.04—0.06)
K	Ferro Fundido Cinzento (DIN GG-30)	Resistência à Tração ≤350MPa	160 (130—195)	UM	0.10 (0.06—0.14)	0.08 (0.06—0.10)	0.08 (0.06—0.10)
	Ferro Fundido Nodular (DIN GGG-45)	Resistência à Tração ≤450MPa	100 (80—135)	UM	0.10 (0.06—0.14)	0.08 (0.06—0.10)	0.08 (0.06—0.10)
	Ferro Fundido Nodular (DIN GGG-70)	Resistência à Tração ≤800MPa	100 (70—125)	UM	0.08 (0.06—0.12)	0.07 (0.06—0.08)	0.07 (0.06—0.08)
N	Ligas de Alumínio (A6061, A7075)	Si < 5%	200 (100—350)	UN	—	—	—
	Ligas de Alumínio (AC4B)	5% ≤ Si ≤ 10%	150 (100—200)	UN	—	—	—
	Ligas de Alumínio (ADC12, A390)	Si > 10%	150 (100—200)	UN	—	—	—
H	Aço Endurecido (AISI H13, JIS SKT4)	38—45HRC	50 (30—80)	UH	—	—	—

Nota 1) Quando usar a classe VP15TF como inserto periférico, reduza a velocidade de corte para 70%.

Nota 2) Quando usar refrigeração externa, a profundidade máxima de corte deve ser L/D=3. Não é recomendado usar profundidades de corte maiores.

Nota 3) Para usinagem de aço inoxidável, use sempre refrigeração interna.

	$\phi 17-\phi 19.5\text{mm}$				$\phi 20-\phi 23.5\text{mm}$				$\phi 24-\phi 29.5\text{mm}$			
	Avanço (mm/rot)				Avanço (mm/rot)				Avanço (mm/rot)			
	L/D=2, 3	4	5	6	L/D=2, 3	4	5	6	L/D=2, 3	4	5	6
	0.05 (0.04-0.06)	0.05 (0.04-0.06)	0.05 (0.04-0.06)	0.04 (0.04-0.05)	0.06 (0.04-0.08)	0.06 (0.04-0.07)	0.06 (0.04-0.07)	0.04 (0.04-0.05)	0.07 (0.04-0.08)	0.06 (0.04-0.07)	0.06 (0.04-0.07)	0.05 (0.04-0.06)
	0.08 (0.06-0.14)	0.08 (0.06-0.09)	0.08 (0.06-0.09)	0.05 (0.04-0.06)	0.10 (0.06-0.18)	0.09 (0.06-0.12)	0.09 (0.06-0.12)	0.07 (0.06-0.08)	0.12 (0.08-0.18)	0.10 (0.08-0.12)	0.10 (0.08-0.12)	0.09 (0.08-0.10)
	0.08 (0.06-0.14)	0.08 (0.06-0.09)	0.08 (0.06-0.09)	0.05 (0.04-0.06)	0.10 (0.06-0.18)	0.09 (0.06-0.12)	0.09 (0.06-0.12)	0.07 (0.06-0.08)	0.12 (0.08-0.18)	0.10 (0.08-0.12)	0.10 (0.08-0.12)	0.09 (0.08-0.10)
	0.08 (0.06-0.14)	0.08 (0.06-0.09)	0.08 (0.06-0.09)	0.05 (0.04-0.06)	0.10 (0.06-0.18)	0.09 (0.06-0.12)	0.09 (0.06-0.12)	0.07 (0.06-0.08)	0.12 (0.08-0.18)	0.10 (0.08-0.12)	0.10 (0.08-0.12)	0.09 (0.08-0.10)
	0.08 (0.06-0.12)	0.06 (0.04-0.08)	0.06 (0.04-0.08)	0.05 (0.04-0.06)	0.10 (0.06-0.14)	0.07 (0.06-0.08)	0.07 (0.06-0.08)	0.06 (0.06-0.07)	0.10 (0.06-0.14)	0.08 (0.06-0.10)	0.08 (0.06-0.10)	0.07 (0.06-0.08)
	0.06 (0.04-0.08)	0.05 (0.04-0.06)	0.05 (0.04-0.06)	0.04 (0.04-0.05)	0.08 (0.06-0.12)	0.07 (0.06-0.08)	0.07 (0.06-0.08)	0.06 (0.06-0.07)	0.09 (0.06-0.12)	0.07 (0.06-0.09)	0.07 (0.06-0.09)	0.06 (0.06-0.08)
	0.08 (0.06-0.12)	0.06 (0.04-0.08)	0.06 (0.04-0.08)	0.05 (0.04-0.06)	0.10 (0.06-0.14)	0.07 (0.06-0.08)	0.07 (0.06-0.08)	0.06 (0.06-0.07)	0.10 (0.06-0.14)	0.08 (0.06-0.10)	0.08 (0.06-0.10)	0.07 (0.06-0.08)
	0.06 (0.04-0.08)	0.05 (0.04-0.06)	0.05 (0.04-0.06)	0.04 (0.04-0.05)	0.08 (0.06-0.12)	0.07 (0.06-0.08)	0.07 (0.06-0.08)	0.06 (0.06-0.07)	0.09 (0.06-0.12)	0.07 (0.06-0.09)	0.07 (0.06-0.09)	0.06 (0.06-0.08)
	0.08 (0.06-0.12)	0.06 (0.04-0.08)	0.06 (0.04-0.08)	0.05 (0.04-0.06)	0.10 (0.06-0.14)	0.07 (0.06-0.08)	0.07 (0.06-0.08)	0.06 (0.06-0.07)	0.10 (0.06-0.14)	0.08 (0.06-0.10)	0.08 (0.06-0.10)	0.07 (0.06-0.08)
	0.06 (0.04-0.08)	0.05 (0.04-0.06)	0.05 (0.04-0.06)	0.04 (0.04-0.05)	0.08 (0.06-0.12)	0.07 (0.06-0.08)	0.07 (0.06-0.08)	0.06 (0.06-0.07)	0.09 (0.06-0.12)	0.07 (0.06-0.09)	0.07 (0.06-0.09)	0.06 (0.06-0.08)
	0.11 (0.08-0.14)	0.09 (0.08-0.10)	0.09 (0.08-0.10)	0.05 (0.04-0.06)	0.14 (0.10-0.18)	0.10 (0.10-0.12)	0.10 (0.10-0.12)	0.07 (0.06-0.08)	0.15 (0.10-0.20)	0.11 (0.10-0.13)	0.11 (0.10-0.13)	0.09 (0.08-0.10)
	0.11 (0.08-0.14)	0.09 (0.08-0.10)	0.09 (0.08-0.10)	0.05 (0.04-0.06)	0.13 (0.10-0.16)	0.10 (0.10-0.11)	0.10 (0.10-0.11)	0.07 (0.06-0.08)	0.14 (0.10-0.18)	0.11 (0.10-0.12)	0.11 (0.10-0.12)	0.09 (0.08-0.10)
	0.11 (0.08-0.14)	0.09 (0.08-0.10)	0.09 (0.08-0.10)	0.05 (0.04-0.06)	0.13 (0.10-0.16)	0.10 (0.10-0.11)	0.10 (0.10-0.11)	0.07 (0.06-0.08)	0.14 (0.10-0.18)	0.11 (0.10-0.12)	0.11 (0.10-0.12)	0.09 (0.08-0.10)
	0.12 (0.05-0.18)	0.12 (0.05-0.18)	0.12 (0.05-0.18)	0.08 (0.05-0.12)	0.12 (0.05-0.18)	0.12 (0.05-0.18)	0.12 (0.05-0.18)	0.08 (0.05-0.12)	0.12 (0.05-0.18)	0.12 (0.05-0.18)	0.12 (0.05-0.18)	0.08 (0.05-0.12)
	0.12 (0.05-0.18)	0.12 (0.05-0.18)	0.12 (0.05-0.18)	0.08 (0.05-0.12)	0.12 (0.05-0.18)	0.12 (0.05-0.18)	0.12 (0.05-0.18)	0.08 (0.05-0.12)	0.12 (0.05-0.18)	0.12 (0.05-0.18)	0.12 (0.05-0.18)	0.08 (0.05-0.12)
	0.12 (0.05-0.18)	0.12 (0.05-0.18)	0.12 (0.05-0.18)	0.08 (0.05-0.12)	0.12 (0.05-0.18)	0.12 (0.05-0.18)	0.12 (0.05-0.18)	0.08 (0.05-0.12)	0.12 (0.05-0.18)	0.12 (0.05-0.18)	0.12 (0.05-0.18)	0.08 (0.05-0.12)
	0.08 (0.04-0.12)	0.06 (0.04-0.09)	—	—	0.09 (0.06-0.14)	0.07 (0.06-0.09)	—	—	0.09 (0.06-0.14)	0.07 (0.06-0.09)	—	—

CONDIÇÕES DE CORTE RECOMENDADAS

Material	Dureza	Vel. de Corte (m/min)	Quebra-cavaco central	φ30—φ63mm				
				Avanço (mm/rot)				
				L/D=2, 3	4	5	6	
P Aço baixo carbono (ASTM A36, AISI 1010)	≤180HB	200 (180—235)	UM	0.08 (0.06—0.10)	0.07 (0.06—0.08)	0.07 (0.06—0.08)	0.06 (0.06—0.07)	
			UH					
	180—280HB	140 (115—180)	UM	0.14 (0.08—0.20)	0.12 (0.08—0.16)	0.12 (0.08—0.16)	0.11 (0.10—0.12)	
			UH					
Aço Carbono, Aço Liga (AISI 1045, AISI 4140)	280—350HB	100 (75—140)	UM	0.14 (0.08—0.20)	0.12 (0.08—0.16)	0.12 (0.08—0.16)	0.11 (0.10—0.12)	
			UH					
Aço ferramenta liga (SKD, SKT)	≤350HB	135 (100—170)	UM	0.14 (0.08—0.20)	0.12 (0.08—0.16)	0.12 (0.08—0.16)	0.10 (0.08—0.12)	
			UH					
M	≤200HB	130 (80—180)	US	0.10 (0.06—0.14)	0.09 (0.06—0.12)	0.09 (0.06—0.12)	0.07 (0.06—0.10)	
			UM	0.09 (0.06—0.12)	0.08 (0.06—0.10)	0.08 (0.06—0.10)	0.07 (0.06—0.08)	
	>200HB	130 (80—180)	US	0.10 (0.06—0.14)	0.09 (0.06—0.12)	0.09 (0.06—0.12)	0.07 (0.06—0.10)	
			UM	0.09 (0.06—0.12)	0.08 (0.06—0.10)	0.08 (0.06—0.10)	0.07 (0.06—0.08)	
	Aço inoxidável austenítico (AISI 304, AISI 316)	≤200HB	120 (80—165)	US	0.10 (0.06—0.14)	0.09 (0.06—0.12)	0.09 (0.06—0.12)	0.07 (0.06—0.10)
				UM	0.09 (0.06—0.12)	0.08 (0.06—0.10)	0.08 (0.06—0.10)	0.07 (0.06—0.08)
	Aço inoxidável austenítico (AISI 304LN, AISI 316LN)	>200HB	120 (80—165)	US	0.10 (0.06—0.14)	0.09 (0.06—0.12)	0.09 (0.06—0.12)	0.07 (0.06—0.10)
				UM	0.09 (0.06—0.12)	0.08 (0.06—0.10)	0.08 (0.06—0.10)	0.07 (0.06—0.08)
Aço inoxidável ferrítico e martensítico (AISI 410, AISI 430)	≤200HB	120 (80—165)	US	0.10 (0.06—0.14)	0.09 (0.06—0.12)	0.09 (0.06—0.12)	0.07 (0.06—0.10)	
			UM	0.09 (0.06—0.12)	0.08 (0.06—0.10)	0.08 (0.06—0.10)	0.07 (0.06—0.08)	
Aço inoxidável ferrítico e martensítico (AISI 431, AISI 420J2)	>200HB	120 (80—165)	US	0.10 (0.06—0.14)	0.09 (0.06—0.12)	0.09 (0.06—0.12)	0.07 (0.06—0.10)	
			UM	0.09 (0.06—0.12)	0.08 (0.06—0.10)	0.08 (0.06—0.10)	0.07 (0.06—0.08)	
K	Resistência à Tração ≤350MPa	160 (130—195)	UM	0.15 (0.10—0.20)	0.12 (0.10—0.13)	0.12 (0.10—0.13)	0.11 (0.10—0.12)	
	Resistência à Tração ≤450MPa	100 (80—135)	UM	0.15 (0.10—0.20)	0.12 (0.10—0.13)	0.12 (0.10—0.13)	0.11 (0.10—0.12)	
	Resistência à Tração ≤800MPa	100 (70—125)	UM	0.15 (0.10—0.20)	0.12 (0.10—0.13)	0.12 (0.10—0.13)	0.11 (0.10—0.12)	
N	Si < 5%	200 (100—350)	UN	0.12 (0.05—0.20)	0.12 (0.05—0.18)	0.12 (0.05—0.18)	0.08 (0.05—0.12)	
	5% ≤ Si ≤ 10%	150 (100—200)	UN	0.12 (0.05—0.20)	0.12 (0.05—0.18)	0.12 (0.05—0.18)	0.08 (0.05—0.12)	
	Si > 10%	150 (100—200)	UN	0.12 (0.05—0.20)	0.12 (0.05—0.18)	0.12 (0.05—0.18)	0.08 (0.05—0.12)	
H	38—45HRC	50 (30—80)	UH	0.11 (0.06—0.16)	0.09 (0.06—0.12)	—	—	

Nota 1) Quando usar a classe VP15TF como inserto periférico, reduza a velocidade de corte para 70%.

Nota 2) Quando usar refrigeração externa, a profundidade máxima de corte deve ser L/D=3. Não é recomendado usar profundidades de corte maiores.

Nota 3) Para usinagem de aço inoxidável, use sempre refrigeração interna.