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SUPORTES TORNEAMENTO

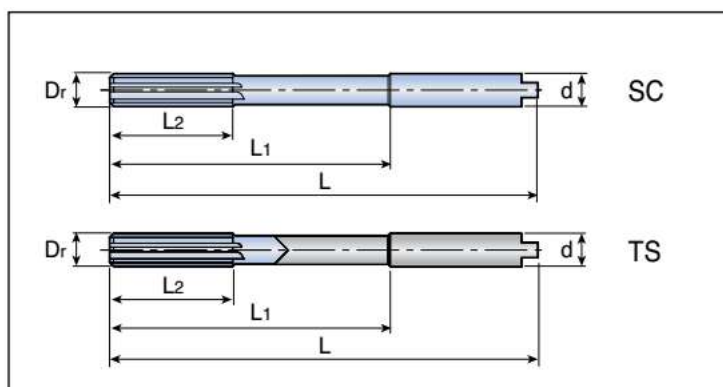
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ALARGADORES MD

TS-S



- Canal Reto – DIN8093
- Classe – UF1A



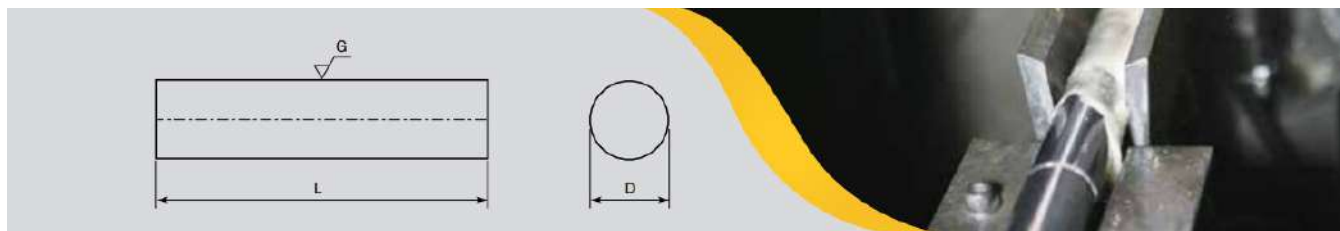
Código	Descrição	Dr (mm)	L (mm)	L1 (mm)	L2 (mm)	d (mm)	Nº Facas
13402	MD TS-S0300-SC UF1A	3	61	30	15	3.0	6
13403	MD TS-S0400-SC UF1A	4	75	44	19	4.0	6
13404	MD TS-S0500-SC UF1A	5	86	53	23	5.0	6
13405	MD TS-S0600-SC UF1A	6	93	56	26	6.0	6
13406	MD TS-S0800-SC UF1A	8	117	75	33	8.0	6
13407	MD TS-S1000-TS UF1A	10	133	87	38	10.0	6
13408	MD TS-S1200-TS UF1A	12	151	105	44	12.0	6



BITS MD

BITS MD

Redondo Retificado



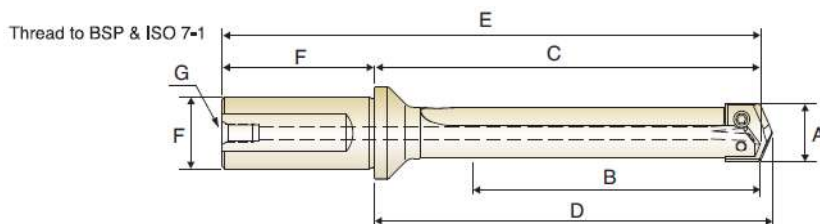
D(mm)	Tolerance(mm)
All Types	h6



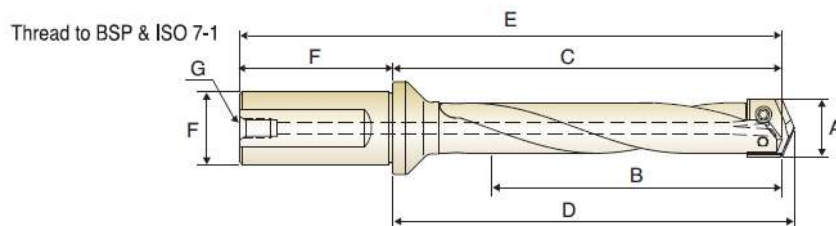
Código	Descrição	L (mm)	D (mm)
15570	BITS REDONDO METAL DURO RETIF 02X320MM	320	02
9902	BITS REDONDO METAL DURO RETIF 03X100MM	100	03
9214	BITS REDONDO METAL DURO RETIF 03X320MM	320	03
9052	BITS REDONDO METAL DURO RETIF 04X100MM	100	04
9136	BITS REDONDO METAL DURO RETIF 04X320MM	320	04
5971	BITS REDONDO METAL DURO RETIF 05X100MM	100	05
9137	BITS REDONDO METAL DURO RETIF 05X320MM	320	05
5972	BITS REDONDO METAL DURO RETIF 06X100MM	100	06
9138	BITS REDONDO METAL DURO RETIF 06X320MM	320	06
5973	BITS REDONDO METAL DURO RETIF 08X100MM	100	08
9139	BITS REDONDO METAL DURO RETIF 08X320MM	320	08
5974	BITS REDONDO METAL DURO RETIF 10X100MM	100	10
9140	BITS REDONDO METAL DURO RETIF 10X320MM	320	10
7817	BITS REDONDO METAL DURO RETIF 12X100MM	100	12
9135	BITS REDONDO METAL DURO RETIF 12X320MM	320	12
19272	BITS REDONDO METAL DURO RETIF 14X100MM	100	14
9141	BITS REDONDO METAL DURO RETIF 14X320MM	320	14
9142	BITS REDONDO METAL DURO RETIF 16X320MM	320	16
18856	BITS REDONDO METAL DURO RETIF 18X320MM	320	18
9143	BITS REDONDO METAL DURO RETIF 20X320MM	320	20
9213	BITS REDONDO METAL DURO RETIF 25X320MM	320	25

BROCAS INTERCAMBIÁVEIS

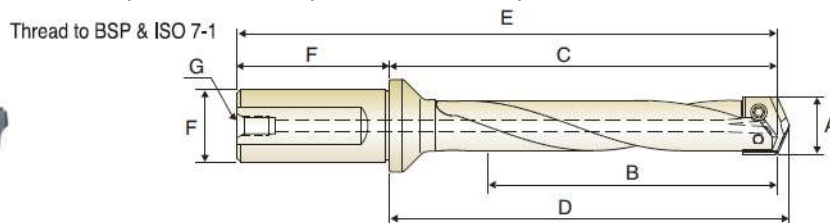
ESPADA YG-1



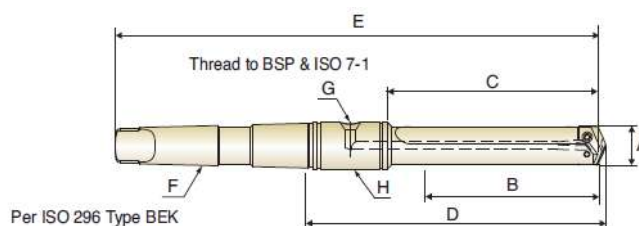
Código	Descrição	Canal	Gama	Referência
17968	BROCA ESPADA CURTA H25	CR	18.0 - 24.0	Z10STSF025M
24558	BROCA ESPADA CURTA H32	CR	25.0 - 35.0	Z20STSF032M



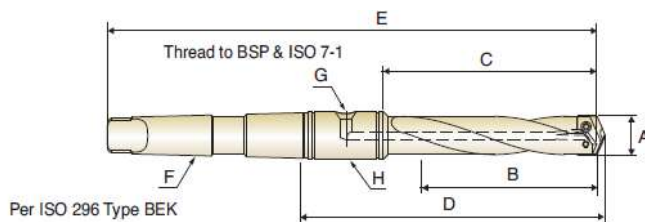
Código	Descrição	Canal	Gama	Referência
17918	BROCA ESPADA CURTA H25	CH	18.0 - 24.0	Z10SDHF025M
16464	BROCA ESPADA CURTA H25	CH	22.0 - 24.0	Z15SDHF025M



Código	Descrição	Canal	Gama	Referência
24069	BROCA ESPADA LONGA H25	CH	18.0 - 24.0	Z10EXHF025M



Código	Descrição	Canal	Gama	Referência
16441	BROCA ESPADA CURTA CM2	CR	13.0 - 17.5	Z00STSMT02M
16440	BROCA ESPADA CURTA CM3	CR	18.0 - 24.0	Z10STSMT03M
18188	BROCA ESPADA CURTA CM3	CR	22.0 - 24.0	Z15STSMT03M

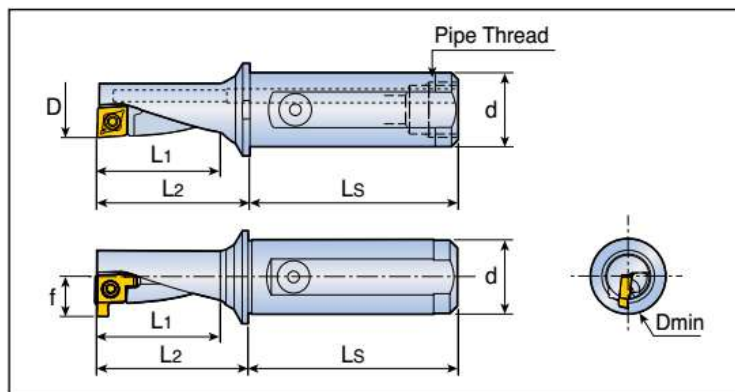


Código	Descrição	Canal	Gama	Referência
17974	BROCA ESPADA MEDIA CM3	CH	18.0 - 24.0	Z10ITHMT03M

Com Pastilhas T-CAP



Right Hand Shown



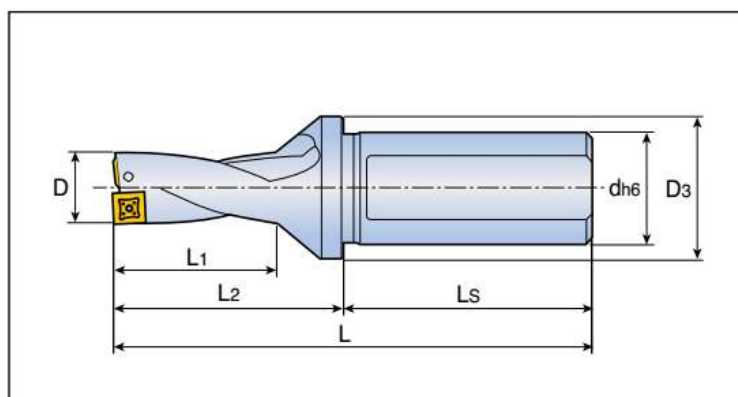
Código	Descrição	f (mm)	D (mm)	d (mm)	L1 (mm)	L2 (mm)	LS (mm)	Dmin (mm)	Rosca Tubo	Inserto
8045	BROCA TCAP 08R-2.25	-	8	12	18.0	22.5	42	-	G 1/16	XCMT 04...
8046	BROCA TCAP 10R-2.25D	7.1	10	12	22.5	27.5	42	12.0	G 1/16	XCMT 05...
11524	BROCA TCAP 10R-3.0DN	7.1	10	12	30.0	-	-	12.0	G 1/16	XCMT 05...
7936	BROCA TCAP 12R-2.25D	8.5	12	16	27.0	33.0	45	14.5	G 1/8	XCMT 06...
8164	BROCA TCAP 14R-2.25D	9.5	14	16	31.5	38.5	45	16.5	G 1/8	XCMT 07...
13193	BROCA TCAP 16R-2.25DN-GV	11.1	16	20	36.0	44.0	50	19.0	G 1/8	XCMT 08...
16761	BROCA TCAP 16R-3.00DN	11.1	16	20	48.0	-	-	19.0	G 1/8	XCMT 08...
12465	BROCA TCAP 20R-2.25DN	13.2	20	25	45.0	55.0	56	23.5	G 1/8	XCMT 10...

Com Pastilhas T-DRILL

2 X DIAMETRO T-DRILL



• Profundidade de furação: 2XDiâmetro



Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Inserto
8577	BROCA TDR 2125-20T2-05	12.5	20	26	44	25	50	SMPG 05...
7931	BROCA TDR 2130-20T2-05	13.0	20	26	44	25	50	SMPG 05...
8530	BROCA TDR 2135-20T2-05	13.5	20	28	46	25	50	SMPG 05...
7983	BROCA TDR 2140-20T2-05	14.0	20	28	46	25	50	SMPG 05...
9477	BROCA TDR 2145-20T2-05	14.5	20	30	49	25	50	SMPG 05...
7932	BROCA TDR 2150-20T2-05	15.0	20	30	49	25	50	SMPG 05...
8910	BROCA TDR 2155-25T2-06	15.5	25	32	52	32	56	SPMG 06...
7644	BROCA TDR 2160-25T2-06	16.0	25	32	52	32	56	SPMG 06...
9393	BROCA TDR 2165-25T2-06	16.5	25	34	54	32	56	SPMG 06...
7499	BROCA TDR 2170-25T2-06	17.0	25	34	54	32	56	SPMG 06...
7643	BROCA TDR 2180-25T2-06	18.0	25	36	57	32	56	SPMG 06...
8572	BROCA TDR 2190-25T2-06	19.0	25	38	59	32	56	SPMG 06...

2 X DIAMETRO CONTINUAÇÃO

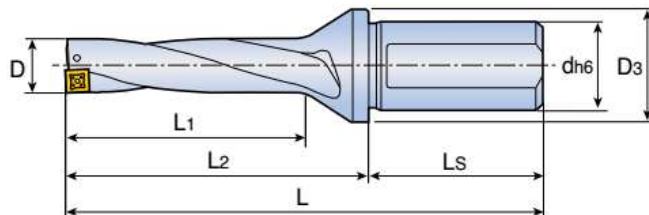
Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Inserto
9423	BROCA TDR 2195-25T2-06	19.5	25	40	63	32	56	SPMG 06...
16061	BROCA TDR 2196-M12-06	29.6	-	40	63	32	56	SPMG 06...
7990	BROCA TDR 2200-25T2-06	20.0	25	40	63	32	56	SPMG 06...
16186	BROCA TDR 2205-25T2-06	20.5	25	42	65	32	56	SPMG 06...
7816	BROCA TDR 2210-25T2-06	21.0	25	42	65	32	56	SPMG 06...
7586	BROCA TDR 2220-25T2-07	22.0	25	44	67	32	56	SPMG 07...
7798	BROCA TDR 2230-25T2-07	23.0	25	46	71	45	56	SPMG 07...
7552	BROCA TDR 2240-32T2-07	24.0	32	48	74	45	60	SPMG 07...
7544	BROCA TDR 2250-32T2-07	25.0	32	50	77	45	60	SPMG 07...
13707	BROCA TDR 2255-32T2-07	25.5	32	50	77	45	60	SPMG 07...
8595	BROCA TDR 2260-32T2-07	26.0	32	52	79	45	60	SPMG 07...
7726	BROCA TDR 2270-32T2-07	27.0	32	54	81	45	60	SPMG 07...
7403	BROCA TDR 2280-32T2-09	28.0	32	56	84	45	60	SPMG 09...
8603	BROCA TDR 2290-32T2-09	29.0	32	58	86	45	60	SPMG 09...
7545	BROCA TDR 2300-32T2-09	30.0	32	60	91	55	60	SPMG 09...
9572	BROCA TDR 2310-32T2-09	31.0	32	62	94	55	60	SPMG 09...
9478	BROCA TDR 2320-32T2-09	32.0	32	64	96	55	60	SPMG 09...
7977	BROCA TDR 2330-32T2-09	33.0	32	66	99	55	60	SPMG 09...
7569	BROCA TDR 2340-40T2-11	34.0	40	68	101	55	70	SPMG 11...
12309	BROCA TDR 2350-40T2-11	35.0	40	70	104	55	70	SPMG 11...
7554	BROCA TDR 2360-40T2-11	36.0	40	72	107	55	70	SPMG 11...
12404	BROCA TDR 2370-32T2-11	37.0	32	74	110	55	60	SPMG 11...
12470	BROCA TDR 2380-40T2-11	38.0	40	76	113	55	70	SPMG 11...
11476	BROCA TDR 2390-40T2-11	39.0	40	78	115	55	70	SPMG 11...
9235	BROCA TDR 2400-40T2-11	40.0	40	80	178	60	70	SPMG 11...
9253	BROCA TDR 2410-40T2-11	41.0	40	82	121	60	70	SPMG 11...
9255	BROCA TDR 2420-40T2-14	42.0	40	84	123	60	70	SPMG 14...
9257	BROCA TDR 2430-40T2-14	43.0	40	86	126	60	70	SPMG 14...
9254	BROCA TDR 2440-40T2-14	44.0	40	88	128	60	70	SPMG 14...
8026	BROCA TDR 2450-40T2-14	45.0	40	90	132	60	70	SPMG 14...
9134	BROCA TDR 2460-40T2-14	46.0	40	92	135	60	70	SPMG 14...
12406	BROCA TDR 2470-40T2-14	47.0	40	94	137	60	70	SPMG 14...
9236	BROCA TDR 2480-40T2-14	48.0	40	96	140	60	70	SPMG 14...
9237	BROCA TDR 2490-40T2-14	49.0	40	98	142	60	70	SPMG 14...
7645	BROCA TDR 2500-40T2-14	50.0	40	100	145	60	70	SPMG 14...



3 X DIAMETRO T-DRILL



• Profundidade de furação: 3XDímetro



Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Inserto
7848	BROCA TDR 3125-20T2-05	12.5	20	39	57	25	50	SPMG 05...
7836	BROCA TDR 3130-20T2-05	13.0	20	39	57	25	50	SPMG 05...
7903	BROCA TDR 3135-20T2-05	13.5	20	42	60	25	50	SPMG 05...
7841	BROCA TDR 3140-20T2-05	14.0	20	42	60	25	50	SPMG 05...
7920	BROCA TDR 3145-20T2-05	14.5	20	45	64	25	50	SPMG 05...
7874	BROCA TDR 3150-20T2-05	15.0	20	45	64	25	50	SPMG 05...
7595	BROCA TDR 3155-25T2-06	15.5	25	48	68	32	56	SPMG 06...
7228	BROCA TDR 3160-25T2-06	16.0	25	48	68	32	56	SPMG 06...
7784	BROCA TDR 3165-25T2-06	16.5	25	51	71	32	56	SPMG 06...
7635	BROCA TDR 3170-25T2-06	17.0	25	51	71	32	56	SPMG 06...
7938	BROCA TDR 3175-25T2-06	17.5	25	54	75	32	56	SPMG 06...
7449	BROCA TDR 3180-25T2-06	19.0	25	54	75	32	56	SPMG 06...
7718	BROCA TDR 3185-25T2-06	18.5	25	57	78	32	56	SPMG 06...
7571	BROCA TDR 3190-25T2-06	19.0	25	57	78	32	56	SPMG 06...
7797	BROCA TDR 3195-25T2-06	19.5	25	60	83	32	56	SPMG 06...
7134	BROCA TDR 3200-25T2-06	20.0	25	60	83	32	56	SPMG 06...
8612	BROCA TDR 3205-25T2-06	20.5	25	63	86	32	56	SPMG 06...
7498	BROCA TDR 3210-25T2-06	21.0	25	63	86	32	56	SPMG 06...
8287	BROCA TDR 3215-25T2-06	21.5	25	66	89	32	56	SPMG 06...
7542	BROCA TDR 3220-25T2-07	22.0	25	66	89	32	56	SPMG 07...
8587	BROCA TDR 3225-25T2-07	22.5	25	69	94	45	56	SPMG 07...
20094	BROCA TDR 3230-25T2-07	23.0	25	69	94	45	56	SPMG 07...
7543	BROCA TDR 3230-32T2-07	23.0	32	69	94	45	60	SPMG 07...
8604	BROCA TDR 3235-32T2-07	23.5	32	72	98	45	60	SPMG 07...
7082	BROCA TDR 3240-32T2-07	24.0	32	72	98	45	60	SPMG 07...
8602	BROCA TDR 3245-32T2-07	24.5	32	75	102	45	60	SPMG 07...
19311	BROCA TDR 3250-25T2-07	25.0	25	75	102	45	56	SPMG 07...
7582	BROCA TDR 3250-32T2-07	25.0	32	75	102	45	60	SPMG 07...
8611	BROCA TDR 3255-32T2-07	25.5	32	78	105	45	60	SPMG 07...
7636	BROCA TDR 3260-32T2-07	26.0	32	78	105	45	60	SPMG 07...
8599	BROCA TDR 3265-32T2-07	26.5	32	81	108	45	60	SPMG 07...
7566	BROCA TDR 3270-32T2-07	27.0	32	81	108	45	60	SPMG 07...
8573	BROCA TDR 3275-32T2-07	27.5	32	84	112	45	60	SPMG 07...
7450	BROCA TDR 3280-32T2-09	28.0	32	84	112	45	60	SPMG 09...
8600	BROCA TDR 3285-32T2-09	28.5	32	87	115	45	60	SPMG 09...

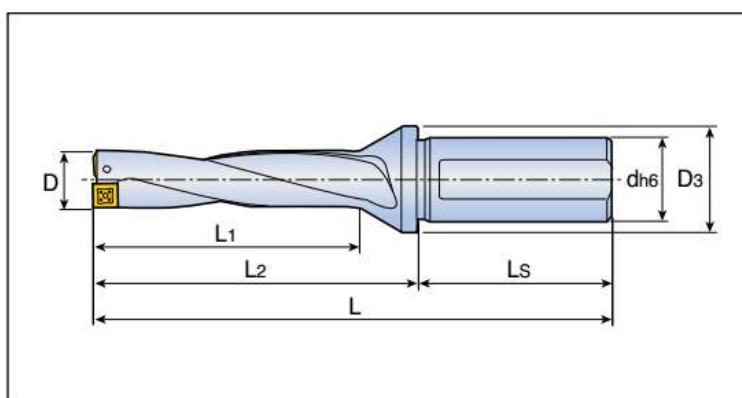
3 X DIAMETRO CONTINUAÇÃO

Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Inserto
7603	BROCA TDR 3290-32T2-09	29.0	32	87	115	45	60	SPMG 09...
8601	BROCA TDR 3295-32T2-09	29.5	32	90	121	55	60	SPMG 09...
7129	BROCA TDR 3300-32T2-09	30.0	32	90	121	55	60	SPMG 09...
18248	BROCA TDR 3305-32T2-09	30.5	32	93	125	55	60	SPMG 09...
7567	BROCA TDR 3310-32T2-09	31.0	32	93	125	55	60	SPMG 09...
7584	BROCA TDR 3320-32T2-09	32.0	32	96	128	55	60	SPMG 09...
20043	BROCA TDR 3325-32T2-09	32.5	32	99	132	55	60	SPMG 09...
7637	BROCA TDR 3330-32T2-09	33.0	32	99	132	55	60	SPMG 09...
7638	BROCA TDR 3340-32T2-11	34.0	32	102	135	55	60	SPMG 11...
7596	BROCA TDR 3350-32T2-11	35.0	32	105	139	55	60	SPMG 11...
7564	BROCA TDR 3360-32T2-11	36.0	32	108	143	55	60	SPMG 11...
7568	BROCA TDR 3370-32T2-11	37.0	32	111	147	55	60	SPMG 11...
7639	BROCA TDR 3380-40T2-11	38.0	40	114	151	55	70	SPMG 11...
7640	BROCA TDR 3390-40T2-11	39.0	40	117	154	55	70	SPMG 11...
7535	BROCA TDR 3400-40T2-11	40.0	40	120	158	60	70	SPMG 11...
7589	BROCA TDR 3410-40T2-11	41.0	40	123	162	60	70	SPMG 11...
8931	BROCA TDR 3420-40T2-14	42.0	40	126	165	60	70	SPMG 14...
9276	BROCA TDR 3430-40T2-14	43.0	40	129	169	60	70	SPMG 14...
7583	BROCA TDR 3440-40T2-14	44.0	40	132	172	60	70	SPMG 14...
7536	BROCA TDR 3450-40T2-14	45.0	40	135	177	60	70	SPMG 14...
8942	BROCA TDR 3460-40T2-14	46.0	40	138	181	60	70	SPMG 14...
8943	BROCA TDR 3470-40T2-14	47.0	40	141	184	60	70	SPMG 14...
8900	BROCA TDR 3480-40T2-14	48.0	40	144	188	60	70	SPMG 14...
7940	BROCA TDR 3490-40T2-14	49.0	40	147	191	60	70	SPMG 14...
7843	BROCA TDR 3500-40T2-14	50.0	40	150	195	60	70	SPMG 14...

4 X DIAMETRO T-DRILL



• Profundidade de furação: 4XDiâmetro



Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Inserto
7908	BROCA TDR 4125-20T2-05	12.5	20	52	70	25	50	SPMG 05...
7899	BROCA TDR 4130-20T2-05	13.0	20	52	70	25	50	SPMG 05...
8118	BROCA TDR 4135-20T2-05	13.5	20	56	74	25	50	SPMG 05...
8030	BROCA TDR 4140-20T2-05	14.0	20	56	74	25	50	SPMG 05...
7901	BROCA TDR 4145-20T2-05	14.5	20	60	79	25	50	SPMG 05...
7833	BROCA TDR 4150-20T2-05	15.0	20	60	79	25	50	SPMG 05...

4 X DIAMETRO CONTINUAÇÃO

Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Inserto
7613	BROCA TDR 4155-25T2-06	15.5	25	64	84	32	56	SPMG 06...
7041	BROCA TDR 4160-25T2-06	16.0	25	64	84	32	56	SPMG 06...
7785	BROCA TDR 4165-25T2-06	16.5	25	68	88	32	56	SPMG 06...
7122	BROCA TDR 4170-25T2-06	17.0	25	68	88	32	56	SPMG 06...
7752	BROCA TDR 4175-25T2-06	17.5	25	72	93	32	56	SPMG 06...
7505	BROCA TDR 4180-25T2-06	18.0	25	72	93	32	56	SPMG 06...
7976	BROCA TDR 4185-25T2-06	18.5	25	76	97	32	56	SPMG 06...
7507	BROCA TDR 4190-25T2-06	19.0	25	76	97	32	56	SPMG 06...
8574	BROCA TDR 4195-25T2-06	19.5	25	80	103	32	56	SPMG 06...
7585	BROCA TDR 4200-25T2-06	20.0	25	80	103	32	56	SPMG 06...
7840	BROCA TDR 4205-25T2-06	20.5	25	84	107	32	56	SPMG 06...
7506	BROCA TDR 4210-25T2-06	21.0	25	84	107	32	56	SPMG 06...
8928	BROCA TDR 4215-25T2-06	21.5	25	88	111	32	56	SPMG 06...
7451	BROCA TDR 4220-25T2-07	22.0	25	88	111	32	56	SPMG 07...
8712	BROCA TDR 4225-25T2-07	22.5	25	92	117	45	56	SPMG 07...
7557	BROCA TDR 4230-25T2-07	23.0	25	92	117	45	56	SPMG 07...
8940	BROCA TDR 4235-25T2-07	23.5	25	96	122	45	56	SPMG 07...
7533	BROCA TDR 4240-25T2-07	24.0	25	96	122	45	56	SPMG 07...
8442	BROCA TDR 4245-25T2-07	24.5	25	100	127	45	56	SPMG 07...
8941	BROCA TDR 4245-32T2-07	24.5	32	100	127	45	60	SPMG 07...
7534	BROCA TDR 4250-32T2-07	25.0	32	100	127	45	60	SPMG 07...
8885	BROCA TDR 4255-32T2-07	25.5	32	104	131	45	60	SPMG 07...
7531	BROCA TDR 4260-32T2-07	26.0	32	104	131	45	60	SPMG 07...
8932	BROCA TDR 4265-32T2-07	26.5	32	108	135	45	60	SPMG 07...
7553	BROCA TDR 4270-32T2-07	27.0	32	108	135	45	60	SPMG 07...
8933	BROCA TDR 4275-32T2-07	27.5	32	112	140	45	60	SPMG 07...
7508	BROCA TDR 4280-32T2-09	28.0	32	112	140	45	60	SPMG 09...
8972	BROCA TDR 4285-32T2-09	28.5	32	116	144	45	60	SPMG 09...
7369	BROCA TDR 4290-32T2-09	29.0	32	116	144	45	60	SPMG 09...
8934	BROCA TDR 4295-32T2-09	29.5	32	120	151	55	60	SPMG 09...
7565	BROCA TDR 4300-32T2-09	30.0	32	120	151	55	60	SPMG 09...
12694	BROCA TDR 4305-32T2-09	30.5	32	124	156	55	60	SPMG 09...
7604	BROCA TDR 4310-32T2-09	31.0	32	124	156	55	60	SPMG 09...
10291	BROCA TDR 4315-32T2-09	31.5	32	128	160	55	60	SPMG 09...
7587	BROCA TDR 4320-32T2-09	32.0	32	128	160	55	60	SPMG 09...
8119	BROCA TDR 4330-32T2-09	33.0	32	132	165	55	60	SPMG 09...
7561	BROCA TDR 4340-40T2-11	34.0	40	136	169	55	70	SPMG 11...
7805	BROCA TDR 4350-40T2-11	35.0	40	140	174	55	70	SPMG 11...
7588	BROCA TDR 4360-40T2-11	36.0	40	144	179	55	70	SPMG 11...
7562	BROCA TDR 4370-40T2-11	37.0	40	148	184	55	70	SPMG 11...
7532	BROCA TDR 4380-40T2-11	38.0	40	152	189	55	70	SPMG 11...
7590	BROCA TDR 4390-40T2-11	39.0	40	156	193	55	70	SPMG 11...
7591	BROCA TDR 4400-40T2-11	40.0	40	160	198	60	70	SPMG 11...
9117	BROCA TDR 4410-40T2-11	41.0	40	164	203	60	70	SPMG 11...
9256	BROCA TDR 4420-40T2-14	42.0	40	168	207	60	70	SPMG 14...
9258	BROCA TDR 4430-40T2-14	43.0	40	172	212	60	70	SPMG 14...



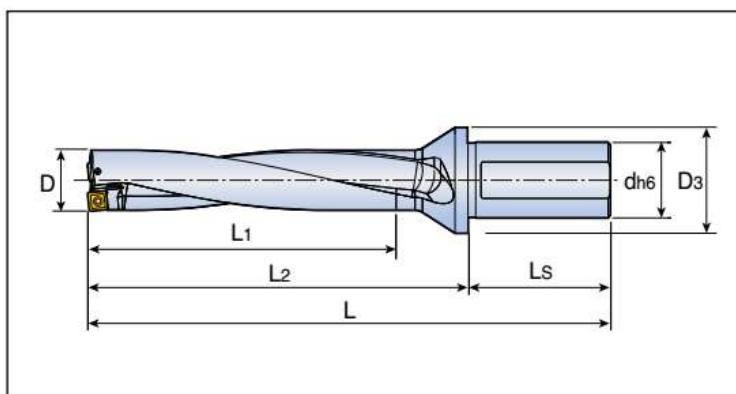
4 X DIAMETRO CONTINUAÇÃO

Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Inserto
7563	BROCA TDR 4440-40T2-14	44.0	40	176	216	60	70	SPMG 14...
9277	BROCA TDR 4450-40T2-14	45.0	40	180	222	60	70	SPMG 14...
9157	BROCA TDR 4460-40T2-14	46.0	40	184	227	60	70	SPMG 14...
9158	BROCA TDR 4470-40T2-14	47.0	40	188	231	60	70	SPMG 14...
7555	BROCA TDR 4480-40T2-14	48.0	40	192	236	60	70	SPMG 14...
9221	BROCA TDR 4490-40T2-14	49.0	40	196	240	60	70	SPMG 14...
8331	BROCA TDR 4500-40T2-14	50.0	40	200	245	60	70	SPMG 14...

5 X DIAMETRO T-DRILL



- Profundidade de furação: 5XDímetro



Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Inserto
9415	BROCA TDR 5125 20T2-05	12.5	20	65	83	25	50	SPMG 05...
9430	BROCA TDR 5130-20T2-05	13.0	20	65	83	25	50	SPMG 05...
9431	BROCA TDR 5135-20T2-05	13.5	20	70	88	25	50	SPMG 05...
9492	BROCA TDR 5140 20T2-05	14.0	20	70	88	25	50	SPMG 05...
9429	BROCA TDR 5145 20T2-05	14.5	20	75	94	25	50	SPMG 05...
9479	BROCA TDR 5150 20T2-05	15.0	20	75	94	25	50	SPMG 05...
9432	BROCA TDR 5155-25T2-06	15.5	25	80	100	32	56	SPMG 06...
8906	BROCA TDR 5160 25T2-06	16.0	25	80	100	32	56	SPMG 06...
9433	BROCA TDR 5165-25T2-06	16.5	25	85	105	32	56	SPMG 06...
8898	BROCA TDR 5170-25T2-06	17.0	25	85	105	32	56	SPMG 06...
9434	BROCA TDR 5175-25T2-06	17.5	25	90	111	32	56	SPMG 06...
8899	BROCA TDR 5180-25T2-06	18.0	25	90	111	32	56	SPMG 06...
9354	BROCA TDR 5185-25T2-06	18.5	25	95	116	32	56	SPMG 06...
8911	BROCA TDR 5190-25T2-06	19.0	25	95	116	32	56	SPMG 06...
9435	BROCA TDR 5195-25T2-06	19.5	25	100	123	32	56	SPMG 06...
8528	BROCA TDR 5200-25T2-06	20.0	25	100	123	32	56	SPMG 06...
9482	BROCA TDR 5205-25T2-06	20.5	25	105	128	32	56	SPMG 06...
8935	BROCA TDR 5210-25T2-06	21.0	25	105	128	32	56	SPMG 06...
9437	BROCA TDR 5215-25T2-06	21.5	25	110	133	32	56	SPMG 06...
8936	BROCA TDR 5220-25T2-07	22.0	25	110	133	32	56	SPMG 07...
12463	BROCA TDR 5225-32T2-07	22.5	32	115	140	45	60	SPMG 07...
8937	BROCA TDR 5230-32T2-07	23.0	32	115	140	45	60	SPMG 07...
12307	BROCA TDR 5235-32T2-07	23.5	32	120	146	45	60	SPMG 07...
9000	BROCA TDR 5240-32T2-07	24.0	32	120	146	45	60	SPMG 07...
12464	BROCA TDR 5245-25T2-07	24.5	32	125	152	45	60	SPMG 07...

5 X DIAMETRO CONTINUAÇÃO

Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Inserto
8938	BROCA TDR 5250-32T2-07	25.0	32	125	152	45	60	SPMG 07...
12308	BROCA TDR 5255-32T2-07	25.5	32	130	157	45	60	SPMG 07...
8529	BROCA TDR 5260-32T2-07	26.0	32	130	157	45	60	SPMG 07...
8939	BROCA TDR 5270-32T2-07	27.0	32	135	162	45	60	SPMG 07...
9438	BROCA TDR 5280-32T2-09	28.0	32	140	168	45	60	SPMG 09...
9439	BROCA TDR 5290-32T2-09	29.0	32	145	173	45	60	SPMG 09...
9441	BROCA TDR 5300-32T2-09	30.0	32	150	181	55	60	SPMG 09...
9440	BROCA TDR 5310-32T2-09	31.0	32	155	187	55	60	SPMG 09...
9323	BROCA TDR 5320-32T2-09	32.0	32	160	192	55	60	SPMG 09...
9442	BROCA TDR 5330-32T2-09	33.0	32	165	198	55	60	SPMG 09...
9443	BROCA TDR 5340-40T2-11	34.0	40	170	203	55	70	SPMG 11...
9444	BROCA TDR 5350-40T2-11	35.0	40	175	209	55	70	SPMG 11...
9445	BROCA TDR 5360-40T2-11	36.0	40	180	215	55	70	SPMG 11...
16097	BROCA TDR 5370-40T2-11	37.0	40	185	221	55	70	SPMG 11...
20067	BROCA TDR 5380-40T2-11	38.0	40	190	227	55	70	SPMG 11...
25290	BROCA TDR 5390-32T2-11	39.0	32	195	232	55	60	SPMG 11...
11791	BROCA TDR 5400-40T2-11	40.0	40	200	238	60	70	SPMG 11...
11765	BROCA TDR 5420-40T2-14	42.0	40	210	249	60	70	SPMG 14...
11766	BROCA TDR 5440-40T2-14	44.0	40	220	260	60	70	SPMG 14...
15902	BROCA TDR 5450-40T2-14	45.0	40	225	267	60	70	SPMG 14...
25367	BROCA TDR 5480-40T2-14	48.0	40	240	284	60	70	SPMG 14...
11610	BROCA TDR 5500-40T2-14	50.0	40	250	295	60	70	SPMG 14...

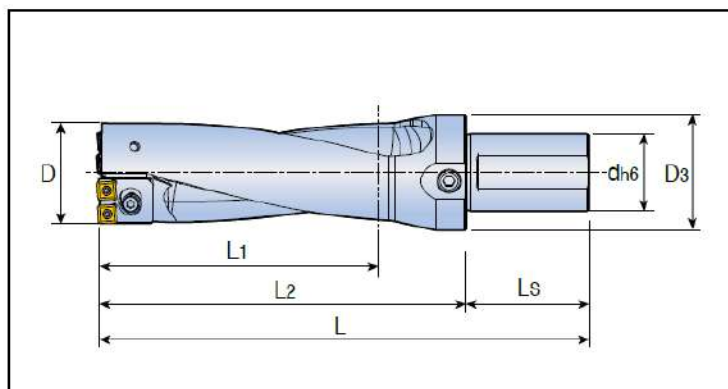
GRANDES DIAMETROS T-DRILL 2.5X e 3.5X DIAMETRO



- Profundidade de furação: 2.5XDiâmetro



- Profundidade de furação: 3.5XDiâmetro



Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Inserto
9455	BROCA TDR 2551-53-50T2-07CA	51	50	133	170	60	80	SPMG 07...
9456	BROCA TDR 2554-56-50T2-07CA	54	50	140	180	60	80	SPMG 07...
9457	BROCA TDR 2557-62-50T2-09CA	57	50	155	201	60	80	SPMG 09...
9458	BROCA TDR 2563-66-50T2-09C	63	50	165	215	60	80	SPMG 09...
12436	BROCA TDR 3551 53 - 50T2-07CA	51	50	186	223	60	80	SPMG 07...
12437	BROCA TDR 3554 56-50T2-07CA	54	50	196	236	60	80	SPMG 07...
12439	BROCA TDR 3557 62 - 50T2-09CA	57	50	217	263	60	80	SPMG 09...
12440	BROCA TDR 3563 66 - 50T2-09CA	63	50	231	281	60	80	SPMG 09...
12441	BROCA TDR 3567 73 - 50T2-11CA	67	50	256	313	60	80	SPMG 11...
12442	BROCA TDR 3574 80 - 50T2-12CA	74	50	280	330	60	80	SPMG 12...
9459	BROCA TDR 2567-73-50T2-11CA	67	50	183	240	60	80	SPMG 11...

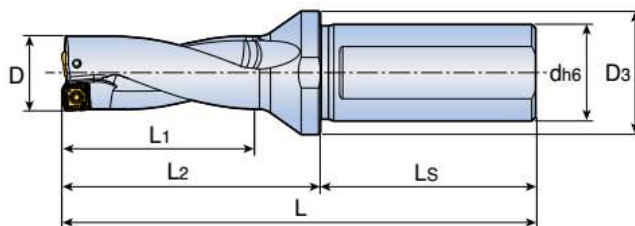
ACESSÓRIOS T-DRILL

Designation	Screw	Wrench	Plug	Set Screw
				
TDR 4125 - 4150	TS 20043I/HG-P	TD 6P	SL 20 M	-
TDR 4155 - 4215	TS 22052I/HG	TD 7	SL 25 M	-
TDR 4220 - 4270	TS 25064I	TD 8	SL 25 M / SL 32 M	-
TDR 4275	TS 25064I	TD 8	-	SS M6x1x6
TDR 4280 - 4330	TS 35088I	TD 10	-	SS M6x1x6
TDR 4340 - 4390	TS 40093I	TD 15	-	SS M6x1x6
TDR 4400 - 4410	TS 40093I	TD 15	-	SS M8x1.25x8
TDR 4420 - 4500	SO 50090I	TD 20	-	SS M8x1.25x8

Com Pastilhas TOP DRILL

2 X DIAMETRO TOP DRILL


- Drilling depth: 2xDiameter

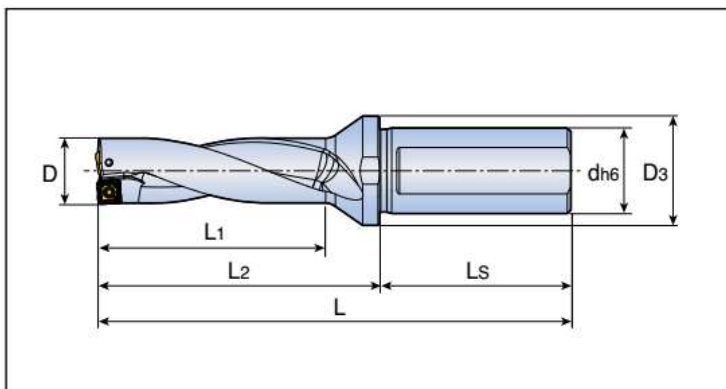


Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Inserto
26805	BROCA TOP 2140-20T2-05	14.0	20	28	46	25	50	SOMT 05...
25642	BROCA TOP 2145-20T2-05	14.5	20	30	49	25	50	SOMT 05...
25539	BROCA TOP 2150-20T2-05	15.0	20	30	49	25	50	SOMT 05...
26806	BROCA TOP 2155-20T2-05	15.5	20	32	52	25	50	SOMT 05...
26807	BROCA TOP 2165-25T2-06	16.5	25	32	52	32	56	SOMT 06...
25643	BROCA TOP 2180-25T2-06	18.0	25	36	57	32	56	SOMT 06...
26802	BROCA TOP 2190-25T2-06	19.0	25	36	57	32	56	SOMT 06...
25644	BROCA TOP 2200-25T2-07	20.0	25	40	63	32	56	SOMT 07...
26803	BROCA TOP 2210-25T2-07	21.0	25	42	65	32	56	SOMT 07...
25645	BROCA TOP 2220-25T2-07	22.0	25	44	67	32	56	SOMT 07...
25317	BROCA TOP 2230-25T2-08	23.0	25	46	68	32	56	SOMT 08...
26799	BROCA TOP 2245-25T2-08	24.5	25	50	72	32	56	SOMT 08...
25646	BROCA TOP 2250-25T2-08	25.0	25	50	72	32	56	SOMT 08...
26808	BROCA TOP 2255-25T2-08	25.5	25	52	73	32	56	SOMT 08...
25316	BROCA TOP 2270-32T2-09	27.0	32	54	77	40	60	SOMT 09...
26809	BROCA TOP 2280-32T2-09	28.0	32	56	79	40	60	SOMT 09...
25312	BROCA TOP 2290-32T2-09	29.0	32	58	81	40	60	SOMT 09...
25647	BROCA TOP 2300-32T2-09	30.0	32	60	83	40	60	SOMT 09...
25648	BROCA TOP 2310-32T2-09	31.0	32	62	85	40	60	SOMT 09...
25649	BROCA TOP 2320-32T2-11	32.0	32	64	87	40	60	SOMT 11...
25650	BROCA TOP 2330-32T2-11	33.0	32	66	89	40	60	SOMT 11...
26810	BROCA TOP 2340-32T2-11	34.0	32	68	91	40	60	SOMT 11...
25315	BROCA TOP 2350-32T2-11	35.0	32	70	93	40	60	SOMT 11...
25738	BROCA TOP 2370-32T2-13	37.0	32	74	102	40	60	SOMT 13...
25811	BROCA TOP 2380-40T2-13	38.0	40	76	104	50	70	SOMT 13...
25651	BROCA TOP 2390-40T2-13	39.0	40	78	106	50	70	SOMT 13...
25652	BROCA TOP 2420-40T2-13	42.0	40	84	112	50	70	SOMT 13...
26811	BROCA TOP 2430-40T2-13	43.0	40	86	114	50	70	SOMT 13...
25992	BROCA TOP 2440-40T2-15	44.0	40	88	123	50	70	SOMT 15...
26230	BROCA TOP 2450-40T2-15	45.0	40	90	125	50	70	SOMT 15...
26812	BROCA TOP 2460-40T2-15	46.0	40	92	127	50	70	SOMT 15...
26519	BROCA TOP 2470-40T2-15	47.0	40	94	129	50	70	SOMT 15...
26864	BROCA TOP 2500-40T2-15	50.0	40	100	135	50	70	SOMT 15...

3 X DIAMETRO TOP DRILL



• Drilling depth: 3xDiameter



Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Inserto
25653	BROCA TOP 3140-20T2-05	14.0	20	42	60	25	50	SOMT 05...
26800	BROCA TOP 3145-20T2-05	14.5	20	45	64	25	50	SOMT 05...
17310	BROCA TOP 3150-20T2-05	15.0	20	45	64	25	50	SOMT 05...
25654	BROCA TOP 3155-20T2-05	15.5	20	48	68	25	50	SOMT 05...
14033	BROCA TOP 3160-20T2-05	16.0	20	48	68	25	50	SOMT 05...
17800	BROCA TOP 3165-25T2-06	16.5	25	51	71	32	56	SOMT 06...
25318	BROCA TOP 3170-25T2-06	17.0	25	51	71	32	56	SOMT 06...
25655	BROCA TOP 3175-25T2-06	17.5	25	54	75	32	56	SOMT 06...
17507	BROCA TOP 3180-25T2-06	18.0	25	54	75	32	56	SOMT 06...
25656	BROCA TOP 3185-25T2-06	18.5	25	57	78	32	56	SOMT 06...
14055	BROCA TOP 3190-25T2-06	19.0	25	57	78	32	56	SOMT 06...
26801	BROCA TOP 3195-25T2-07	19.5	25	60	83	32	56	SOMT 07...
14197	BROCA TOP 3200-25T2-07	20.0	25	60	83	32	56	SOMT 07...
25657	BROCA TOP 3205-25T2-07	20.5	25	63	86	32	56	SOMT 07...
25612	BROCA TOP 3210-25T2-07	21.0	25	63	86	32	56	SOMT 07...
24997	BROCA TOP 3215-25T2-07	21.5	25	66	89	32	56	SOMT 07...
14196	BROCA TOP 3220-25T2-07	22.0	25	66	89	32	56	SOMT 07...
25658	BROCA TOP 3225-25T2-08	22.5	25	69	91	32	56	SOMT 08...
25332	BROCA TOP 3230-25T2-08	23.0	25	69	91	32	56	SOMT 08...
25047	BROCA TOP 3235-25T2-08	23.5	25	72	94	32	56	SOMT 08...
25131	BROCA TOP 3240-25T2-08	24.0	25	72	94	32	56	SOMT 08...
25546	BROCA TOP 3250-25T2-08	25.0	25	75	97	32	56	SOMT 08...
26426	BROCA TOP 3255-25T2-08	25.5	25	75	97	32	56	SOMT 08...
25130	BROCA TOP 3260-25T2-08	26.0	25	78	99	32	56	SOMT 08...
26017	BROCA TOP 3270-32T2-09	27.0	32	81	104	40	60	SOMT 09...
26813	BROCA TOP 3275-32T2-09	27.5	32	84	107	40	60	SOMT 09...
25659	BROCA TOP 3280-32T2-09	28.0	32	84	107	40	60	SOMT 09...
26018	BROCA TOP 3290-32T2-09	29.0	32	87	110	40	60	SOMT 09...
26814	BROCA TOP 3295-32T2-09	29.5	32	87	110	40	60	SOMT 09...
25660	BROCA TOP 3300-32T2-09	30.0	32	90	113	40	60	SOMT 09...
25661	BROCA TOP 3310-32T2-09	31.0	32	93	116	40	60	SOMT 09...
25662	BROCA TOP 3320-32T2-11	32.0	32	96	119	40	60	SOMT 11...
25663	BROCA TOP 3330-32T2-11	33.0	32	96	119	40	60	SOMT 11...
26518	BROCA TOP 3340-32T2-11	34.0	32	102	125	40	60	SOMT 11...
25664	BROCA TOP 3350-32T2-11	35.0	32	105	128	40	60	SOMT 11...
26571	BROCA TOP 3360-32T2-11	36.0	32	108	131	40	60	SOMT 11...

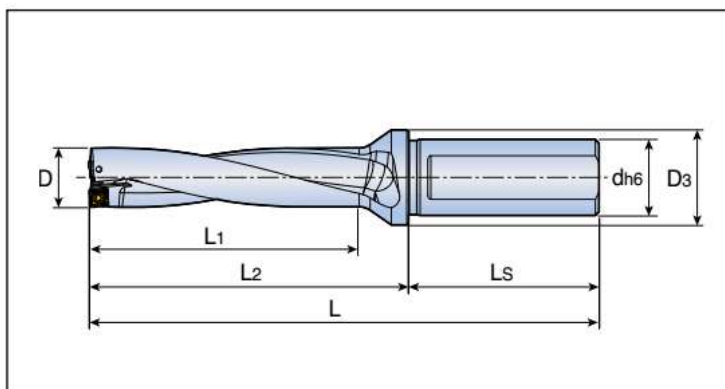
3 X DIAMETRO TOP DRILL

Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Inserto
25665	BROCA TOP 3370-32T2-13	37.0	32	111	139	40	60	SOMT 13...
25666	BROCA TOP 3380-40T2-13	38.0	40	114	142	40	60	SOMT 13...
25667	BROCA TOP 3400-40T2-13	40.0	40	120	148	50	70	SOMT 13...
25668	BROCA TOP 3410-40T2-13	41.0	40	123	151	50	70	SOMT 13...
25669	BROCA TOP 3420-40T2-13	42.0	40	126	154	50	70	SOMT 13...
26815	BROCA TOP 3430-40T2-13	43.0	40	129	157	50	70	SOMT 13...
26019	BROCA TOP 3440-40T2-15	44.0	40	132	167	50	70	SOMT 15...
26572	BROCA TOP 3460-40T2-15	46.0	40	138	173	50	70	SOMT 15...
26716	BROCA TOP 3480-40T2-15	48.0	40	144	179	50	70	SOMT 15...
25670	BROCA TOP 3500-40T2-15	50.0	40	150	185	50	70	SOMT 15...

4 X DIAMETRO TOP DRILL



- Drilling depth: 4xDiameter

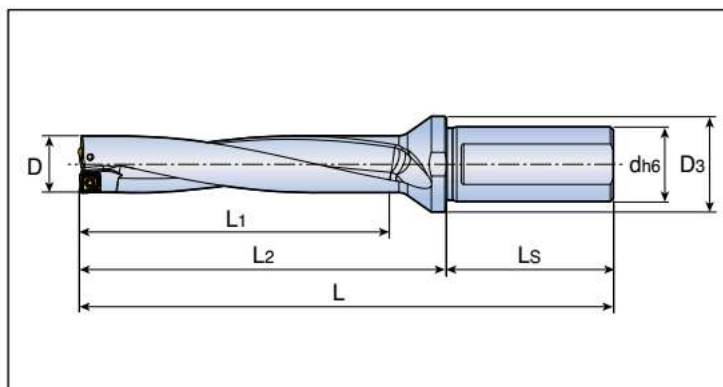


Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Inserto
25671	BROCA TOP 4140-20T2-05	14.0	20	56	74	25	50	SOMT 05...
26804	BROCA TOP 4145-20T2-05	14.5	20	60	79	25	50	SOMT 05...
26010	BROCA TOP 4150-20T2-05	15.0	20	60	79	25	50	SOMT 05...
25672	BROCA TOP 4155-20T2-05	15.5	20	64	84	25	50	SOMT 05...
26011	BROCA TOP 4160-20T2-05	16.0	20	64	84	25	50	SOMT 05...
25673	BROCA TOP 4165-25T2-06	16.5	25	68	88	32	56	SOMT 06...
25674	BROCA TOP 4170-25T2-06	17.0	25	68	88	32	56	SOMT 06...
25676	BROCA TOP 4175-25T2-06	17.5	25	72	93	32	56	SOMT 06...
26012	BROCA TOP 4180-25T2-06	18.0	25	72	93	32	56	SOMT 06...
26013	BROCA TOP 4185-25T2-06	18.5	25	76	97	32	56	SOMT 06...
26020	BROCA TOP 4190-25T2-06	19.0	25	76	97	32	56	SOMT 06...
26816	BROCA TOP 4195-25T2-07	19.5	25	80	103	32	56	SOMT 07...
19500	BROCA TOP 4200-25T2-07	20.0	25	80	103	32	56	SOMT 07...
26546	BROCA TOP 4205-25T2-07	20.5	25	84	107	32	56	SOMT 07...
25678	BROCA TOP 4210-25T2-07	21.0	25	84	107	32	56	SOMT 07...
26014	BROCA TOP 4215-25T2-07	21.5	25	88	111	32	56	SOMT 07...
26015	BROCA TOP 4220-25T2-07	22.0	25	88	111	32	56	SOMT 07...
26817	BROCA TOP 4225-25T2-08	22.5	25	92	114	32	56	SOMT 08...
25710	BROCA TOP 4230-25T2-08	23.0	25	92	114	32	56	SOMT 08...
26016	BROCA TOP 4235-25T2-08	23.5	25	96	118	32	56	SOMT 08...
25679	BROCA TOP 4240-25T2-08	24.0	25	96	118	32	56	SOMT 08...
26818	BROCA TOP 4250-25T2-08	25.0	25	100	122	32	56	SOMT 08...
25313	BROCA TOP 4255-25T2-08	25.5	25	100	122	32	56	SOMT 08...

4 X DIAMETRO TOP DRILL

Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Inserto
25680	BROCA TOP 4260-25T2-08	26.0	25	104	125	32	56	SOMT 08...
25681	BROCA TOP 4260-25T2-08	26.0	25	104	125	32	56	SOMT 08...
25301	BROCA TOP 4280-25T2-09	28.0	25	112	135	32	56	SOMT 09...
25682	BROCA TOP 4300-32T2-09	30.0	32	112	135	40	60	SOMT 09...
26819	BROCA TOP 4305-32T2-09	30.5	32	124	147	40	60	SOMT 09...
25683	BROCA TOP 4310-32T2-09	31.0	32	124	147	40	60	SOMT 09...
26820	BROCA TOP 4350-32T2-11	35.0	32	140	163	40	60	SOMT 11...
26821	BROCA TOP 4360-32T2-11	36.0	32	144	167	40	60	SOMT 11...
25749	BROCA TOP 4370-32T2-13	37.0	32	148	176	40	60	SOMT 13...
26831	BROCA TOP 4380-40T2-13	38.0	40	152	180	50	70	SOMT 13...
26822	BROCA TOP 4440-40T2-15	44.0	40	176	211	50	70	SOMT 15...
26823	BROCA TOP 4500-40T2-15	50.0	40	200	235	50	70	SOMT 15...

5 X DIAMETRO TOP DRILL



- Drilling depth: 5xDiameter

Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Inserto
25684	BROCA TOP 5140-20T2-05	14.0	20	70	88	25	50	SOMT 05...
25314	BROCA TOP 5145-20T2-05	14.5	20	75	94	25	50	SOMT 05...
25685	BROCA TOP 5150-20T2-05	15.0	20	75	94	25	50	SOMT 05...
26834	BROCA TOP 5155-20T2-05	15.5	20	80	100	25	50	SOMT 05...
26824	BROCA TOP 5160-20T2-05	16.0	20	80	100	25	50	SOMT 05...
25686	BROCA TOP 5170-25T2-06	17.0	25	85	105	32	56	SOMT 06...
25687	BROCA TOP 5175-25T2-06	17.5	25	90	111	32	56	SOMT 06...
26729	BROCA TOP 5180-25T2-06	18.0	25	90	111	32	56	SOMT 06...
26255	BROCA TOP 5190-25T2-06	19.0	25	95	116	32	56	SOMT 06...
26798	BROCA TOP 5200-25T2-07	20.0	25	100	123	32	56	SOMT 07...
26830	BROCA TOP 5210-25T2-07	21.0	25	105	128	32	56	SOMT 07...
25688	BROCA TOP 5215-25T2-07	21.5	25	110	133	32	56	SOMT 07...
25689	BROCA TOP 5220-25T2-07	22.0	25	110	133	32	56	SOMT 07...
25690	BROCA TOP 5230-25T2-08	23.0	25	115	137	32	56	SOMT 08...
25691	BROCA TOP 5245-25T2-08	24.5	25	125	147	32	56	SOMT 08...
25692	BROCA TOP 5250-25T2-08	25.0	25	125	147	32	56	SOMT 08...
26825	BROCA TOP 5255-25T2-08	25.5	25	130	151	32	56	SOMT 08...
26835	BROCA TOP 5260-25T2-08	26.0	25	130	151	32	56	SOMT 08...
27056	BROCA TOP 5265-32T2-09	26.5	32	135	158	40	60	SOMT 09...
26836	BROCA TOP 5270-32T2-09	27.0	32	135	158	40	60	SOMT 09...

5 X DIAMETRO TOP DRILL

Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Inserto
26826	BROCA TOP 5300-32T2-09	30.0	32	150	173	40	60	SOMT 09...
23503	BROCA TOP 5320-32T2-11	32.0	32	160	183	40	60	SOMT 11...
25693	BROCA TOP 5330-32T2-11	33.0	32	165	188	40	60	SOMT 11...
25694	BROCA TOP 5370-32T2-13	37.0	32	185	213	40	60	SOMT 13...
26829	BROCA TOP 5440-40T2-15	44.0	40	220	255	50	70	SOMT 15...
26827	BROCA TOP 5460-40T2-15	46.0	40	230	265	50	70	SOMT 15...
26312	BROCA TOP 5500-40T2-15	50.0	40	250	285	50	70	SOMT 15...

ACESSÓRIOS TOP DRILL

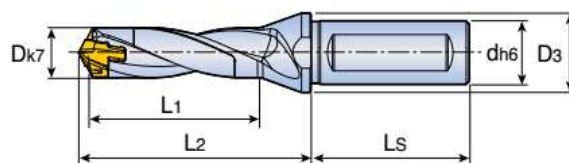
Designation	Screw 	Wrench 	Plug* 	
TOP 5140 - 5160	TS 20043I/HG-P	TD 6P	SL 20M	
TOP 5165 - 5222	TS 22052I/HG-P	TD 7P	SL 25M	
TOP 5225 - 5260	SO 25065I	TD 7	SL 25M / SL 32M	
TOP 5265 - 5360	TS 35088I	TD 10	SL 25M / SL 32M	
TOP 5370 - 5430	TS 40093I	TD 15	SL 32M / SL 40M	
TOP 5440 - 5500	TS 50115I	TD 20	SL 32M / SL 40M	

Acessórios para todos os comprimentos (2, 3, 4 e 5x o Diâmetro).

Com Ponteiros DRILL RUSH

2 X DIAMETRO DRILL RUSH

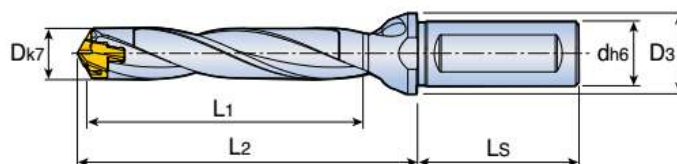

- Drilling depth: 1.5xDiameter



Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Chave
24141	BROCA TCD 100-109-16T3-1.5D	10.0-10.9	16	15	31.2	20	48	K TCD D100-D199
25007	BROCA TCD 130-139-16T3-1.5D	13.0-13.9	16	20	37.1	20	48	K TCD D100-D199
24922	BROCA TCD 200-209-25T2-1.5D	20.0-20.9	25	30	61.6	32	56	K TCD D200-D269

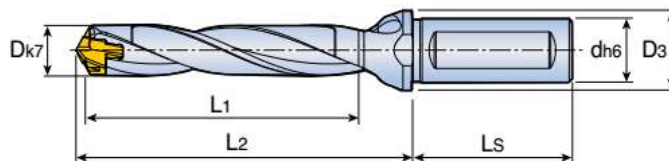
3 X DIAMETRO DRILL RUSH


- Drilling depth: 3xDiameter



Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Chave
24643	BROCA TCD 080-084-12T3-3D	8.0-8.4	12	24	39.4	16	45	K TCD D060-D099
19306	BROCA TCD 090-094-12T3-3D	9.0-9.4	12	27	42.8	16	45	K TCD D060-D099
24645	BROCA TCD 100-104-16T3-3D	10.0-10.4	16	30	46.2	20	48	K TCD D100-D199
17653	BROCA TCD 110-114-16T3-3D	11.0-11.4	16	33	49.6	20	48	K TCD D100-D199
14516	BROCA TCD 120-124-16T3-3D	12.0-12.4	16	36	53.0	20	48	K TCD D100-D199
14440	BROCA TCD 125-129-16T3-3D	12.5-12.9	16	37	54.5	20	48	K TCD D100-D199
14052	BROCA TCD 130-134-16T3-3D	13.0-13.4	16	39	56.6	20	48	K TCD D100-D199
14053	BROCA TCD 135-139-16T3-3D	13.5-13.9	16	41	58.1	20	48	K TCD D100-D199
13889	BROCA TCD 140-144-16T3-3D	14.0-14.4	16	42	62.1	20	48	K TCD D100-D199
13884	BROCA TCD 145-149-16T3-3D	14.5-14.9	16	44	63.6	20	48	K TCD D100-D199
14392	BROCA TCD 150-159-20T3-3D	15.0-15.9	20	45	68.7	25	50	K TCD D100-D199
14288	BROCA TCD 160-169-20T3-3D	16.0-16.9	20	48	73.3	25	50	K TCD D100-D199
14521	BROCA TCD 170-179-20T3-3D	17.0-17.9	20	51	77.9	25	50	K TCD D100-D199
14523	BROCA TCD 180-189-25T2-3D	18.0-18.9	25	54	82.5	32	56	K TCD D100-D199
14525	BROCA TCD 190-199-25T2-3D	19.0-19.9	25	57	87.0	32	56	K TCD D100-D199
18865	BROCA TCD 200-209-25T2-3D	20.0-20.9	25	60	91.6	32	56	K TCD D200-D269
19928	BROCA TCD 210-219-25T2-3D	21.0-21.9	25	63	96.2	32	56	K TCD D200-D269
19382	BROCA TCD 220-229-25T2-3D	22.0-22.9	25	32	66	32	56	K TCD D200-D269
23625	BROCA TCD 230-239-32T2-3D	23.0-23.9	32	42	69	42	60	K TCD D200-D269
24843	BROCA TCD 250-259-32T2-3D	25.0-25.9	32	42	75	42	60	K TCD D200-D269

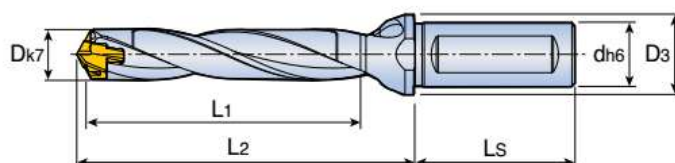
5 X DIAMETRO DRILL RUSH



- Drilling depth: 5xDiameter

Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Chave
24654	BROCA TCD 085-089-12T3-5D	8.5-8.9	12	43	57.9	16	45	K TCD D060-D099
19326	BROCA TCD 090-094-12T3-5D	9.0-9.4	12	45	60.8	16	45	K TCD D060-D099
25484	BROCA TCD 095-099-12T3-5D	9.5-9.9	12	48	63.3	16	45	K TCD D060-D099
13733	BROCA TCD 100-104-16T3-5D	10.0-10.4	16	50	66.2	20	48	K TCD D100-D199
13737	BROCA TCD 105-109-16T3-5D	10.5-10.9	16	53	68.7	20	48	K TCD D100-D199
13738	BROCA TCD 110-114-16T3-5D	11.0-11.4	16	55	71.6	20	48	K TCD D100-D199
13740	BROCA TCD 115-119-16T3-5D	11.5-11.9	16	58	74.1	20	48	K TCD D100-D199
13741	BROCA TCD 120-124-16T3-5D	12.0-12.4	16	60	77.0	20	48	K TCD D100-D199
13743	BROCA TCD 125-129-16T3-5D	12.5-12.9	16	62	79.5	20	48	K TCD D100-D199
13744	BROCA TCD 130-134-16T3-5D	13.0-13.4	16	65	82.6	20	48	K TCD D100-D199
13745	BROCA TCD 135-139-16T3-5D	13.5-13.9	16	68	85.1	20	48	K TCD D100-D199
13746	BROCA TCD 140-144-16T3-5D	14.0-14.4	16	70	90.2	20	48	K TCD D100-D199
13747	BROCA TCD 145-149-16T3-5D	14.5-14.9	16	73	92.7	20	48	K TCD D100-D199
13748	BROCA TCD 150-159-20T3-5D	15.0-15.9	20	75	98.7	25	50	K TCD D100-D199
13749	BROCA TCD 160-169-20T3-5D	16.0-16.9	20	80	105.3	25	50	K TCD D100-D199
13750	BROCA TCD 170-179-20T3-5D	17.0-17.9	20	85	111.9	25	50	K TCD D100-D199
13751	BROCA TCD 180-189-25T2-5D	18.0-18.9	25	90	118.5	32	56	K TCD D200-D269
13752	BROCA TCD 190-199-25T2-5D	19.0-19.9	25	95	125.0	32	56	K TCD D200-D269
18867	BROCA TCD 200-209-25T2-5D	20.0-20.9	25	100	131.6	32	56	K TCD D200-D269
19232	BROCA TCD 220-229-25T2-5D	22.0-22.9	25	105	138.2	32	56	K TCD D200-D269
19449	BROCA TCD 230-239-32T2-5D	23.0-23.9	32	115	151.4	42	60	K TCD D200-D269
23943	BROCA TCD 240-249-32T2-5D	24.0-24.9	32	120	158.0	42	60	K TCD D200-D269

8 X DIAMETRO DRILL RUSH



- Drilling depth: 8xDiameter

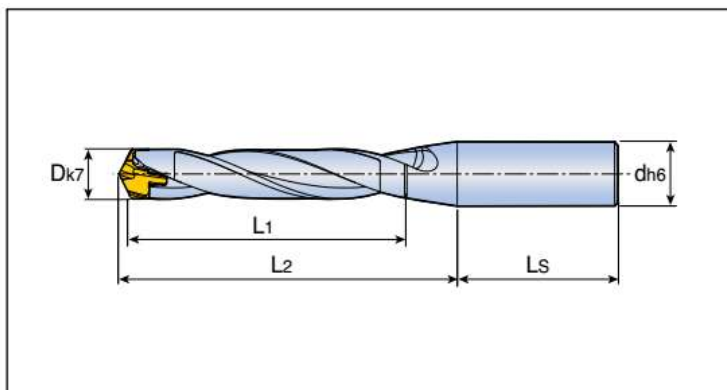
8 X DIAMETRO CONTINUAÇÃO

Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	D3 (mm)	LS (mm)	Chave
19654	BROCA TCD 085-089-12T3-8D	8.5-8.9	12	68	84.4	16	45	K TCD D060-D099
13736	BROCA TCD 100-104-16T3-8D	10.0-10.4	16	80	96.2	20	42	K TCD D100-D199
17574	BROCA TCD 105-109-16T3-8D	10.5-10.9	16	84	100.2	20	42	K TCD D100-D199
13739	BROCA TCD 110-114-16T3-8D	11.0-11.4	16	88	104.6	20	42	K TCD D100-D199
14514	BROCA TCD 115-119-16T3-8D	11.5-11.9	16	92	108.6	20	42	K TCD D100-D199
13742	BROCA TCD 120-124-16T3-8D	12.0-12.4	16	96	113.0	20	42	K TCD D100-D199
14517	BROCA TCD 125-129-16T3-8D	12.5-12.9	16	100	117.0	20	42	K TCD D100-D199
14518	BROCA TCD 130-134-16T3-8D	13.0-13.4	16	104	121.6	20	42	K TCD D100-D199
14519	BROCA TCD 135-139-16T3-8D	13.5-13.9	16	108	125.6	20	42	K TCD D100-D199
14285	BROCA TCD 140-144-16T3-8D	14.0-14.4	16	112	132.1	20	42	K TCD D100-D199
14520	BROCA TCD 145-149-16T3-8D	14.5-14.9	16	116	136.2	20	42	K TCD D100-D199
14042	BROCA TCD 150-159-20T3-8D	15.0-15.9	20	120	143.7	25	50	K TCD D100-D199
14130	BROCA TCD 160-169-20T3-8D	16.0-16.9	20	128	153.3	25	50	K TCD D100-D199
14522	BROCA TCD 170-179-20T3-8D	17.0-17.9	20	136	162.9	25	50	K TCD D100-D199
14524	BROCA TCD 180-189-25T2-8D	18.0-18.9	25	144	172.5	32	56	K TCD D100-D199
14406	BROCA TCD 190-199-25T2-8D	19.0-19.9	25	152	182.0	32	56	K TCD D100-D199
19227	BROCA TCD 200-209-25T2-8D	20.0-20.9	25	160	191.6	32	56	K TCD D200-D269
23909	BROCA TCD 210-219-25T2-8D	21.0-21.9	25	168	201.2	32	56	K TCD D200-D269
18866	BROCA TCD 220-229-25T2-8D	22.0-22.9	25	176	210.8	32	56	K TCD D200-D269
24117	BROCA TCD 250-259-32T2-8D	25.0-25.9	32	200	239.5	42	60	K TCD D200-D269

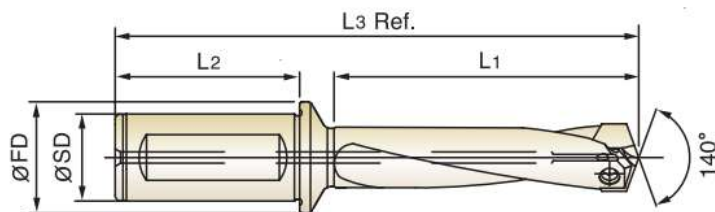
12 X DIAMETRO DRILL RUSH



- Drilling depth: 12xDiameter



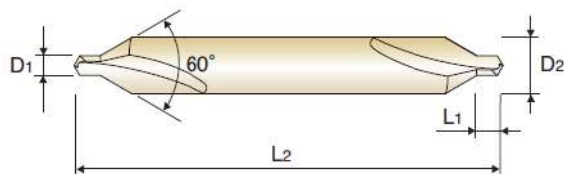
Código	Descrição	D (mm)	d (mm)	L1 (mm)	L2 (mm)	L1 (mm)	LS (mm)	Chave
25392	BROCA TCD 160-169-20S03-12D	16.0-16.9	20	192	224	192	50	K TCD D100-D199

com Ponteira i-Dream Drill YG-1


Código	Descrição	Gama (mm)	x Diam.	L1 (mm)	L3 (mm)	Chave
16312	BROCA PONTEIRA YG-1 21,5MM 3XD H25	20.00 - 21.99	3	64.5	150.5	TX2122T20
16234	BROCA PONTEIRA YG-1 24,0MM 3XD H32	24.00 - 25.99	3	72	164.8	TX2425T20
19904	BROCA PONTEIRA YG-1 26,0MM 3XD H32	26.00 - 27.99	3	78	171.2	TX2627T25
17981	BROCA PONTEIRA YG-1 28,0MM 3XD H32	28.00 - 29.99	3	84	178.2	TX2829T25
16934	BROCA PONTEIRA YG-1 22,0MM 5XD H25	22.00 - 23.99	5	110	196.4	TX2223T20
23096	BROCA PONTEIRA YG-1 26,0MM 5XD H32	26.00 - 27.99	5	130	223.2	TX2627T25
16372	BROCA PONTEIRA YG-1 27,5MM 5XD H32	26.00 - 27.99	5	137.5	230.2	TX2728T25
18832	BROCA PONTEIRA YG-1 12,5MM 7XD H20	12.00 - 13.99	7	87.5	163.4	TX1213T08
16747	BROCA PONTEIRA YG-1 16,5MM 7XD H20	16.00 - 17.99	7	49.5	127.5	TX1617T08
16467	BROCA PONTEIRA YG-1 20,0MM 7XD H25	20.00 - 21.99	7	140	225.5	TX2021T20
16473	BROCA PONTEIRA YG-1 21,5MM 7XD H25	20.00 - 21.99	7	64.5	150.5	TX2122T20
16303	BROCA PONTEIRA YG-1 22,0MM 7XD H25	22.00 - 23.99	7	154	240.4	TX2223T20
23383	BROCA PONTEIRA YG-1 28,0MM 7XD H32	28.00 - 29.99	7	196	290.2	TX2829T25

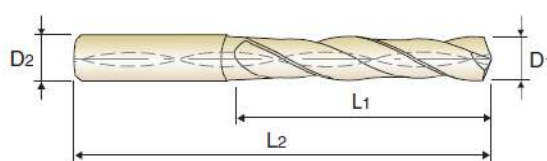
BROCA INTEIRIÇA METAL DURO

BROCAS DE CENTRO DIN 333



Código	Descrição	L1 (mm)	L2 (mm)	Referência
26133	BROCA CENTRAR MD 333 02,50 X 06,30	3.1	45	D5303025
23717	BROCA CENTRAR MD 333 03,15 X 08,00	45	50	D5303931

COM REFRIGERAÇÃO DIN 6537



Código	Descrição	L1 (mm)	L2 (mm)	Cobertura	Referência
17200	BROCA MD 04,50 3XD C/RI TIALN	24	66	TIALN	DH406045
17547	BROCA MD 05,20 3XD C/RI TIALN	26	62	TIALN	DH404052
14466	BROCA MD 06,03 3XD C/RI TIALN	30	68	TIALN	4205793
17548	BROCA MD 06,10 3XD C/RI TIALN	31	70	TIALN	DH404061
10354	BROCA MD 06,30 3XD C/RI TIALN	34	79	TIALN	DH406063
23438	BROCA MD 07,00 3XD C/RI TIALN	34	79	TIALN	DH406070
23902	BROCA MD 07,50 3XD C/RI TIALN	41	79	TIALN	DH406075
14467	BROCA MD 08,03 3XD C/RI TIALN	41	79	TIALN	4205795
19283	BROCA MD 08,40 3XD C/RI TIALN	47	89	TIALN	
14437	BROCA MD 08,60 3XD C/RI TIALN	47	89	TIALN	DH406086
19189	BROCA MD 09,00 3XD C/RI TIALN	47	89	TIALN	---
23164	BROCA MD 09,30 3XD C/RI TIALN	47	89	TIALN	DH406093
24054	BROCA MD 09,70 3XD C/RI TIALN	47	89	TIALN	DH406097
24055	BROCA MD 09,80 3XD C/RI TIALN	47	89	TIALN	DH406098
14468	BROCA MD 10,03 3XD C/RI TIALN	48	90	TIALN	4205939
19064	BROCA MD 10,40 3XD C/RI TIALN	55	102	TIALN	DH406104
19918	BROCA MD 10,50 3XD C/RI TIALN	55	102	TIALN	DH406105
18355	BROCA MD 11,00 3XD C/RI TIALN	55	102	TIALN	DH406110
23295	BROCA MD 11,10 3XD C/RI TIALN	55	102	TIALN	DH406111
18793	BROCA MD 11,40 3XD C/RI TIALN	55	102	TIALN	DH406114
19063	BROCA MD 12,00 3XD C/RI TIALN	55	102	TIALN	DH406120
10415	BROCA MD 13,00 3XD C/RI TIALN	60	107	TIALN	DH406130
13474	BROCA MD 13,10 3XD C/RI TIALN	60	107	TIALN	DH406131
20238	BROCA MD 13,60 3XD C/RI TIALN	60	107	TIALN	
18516	BROCA MD 14,00 3XD C/RI TIALN	60	107	TIALN	---
15548	BROCA MD 14,10 3XD C/RI TIALN	60	107	TIALN	DH406141
25795	BROCA MD 14,50 3XD C/RI TIALN	65	115	TIALN	DH406145
19092	BROCA MD 14,70 3XD C/RI TIALN	65	115	TIALN	---
16757	BROCA MD 15,00 3XD C/RI TIALN	65	115	TIALN	DH406150

COM REFRIGERAÇÃO DIN 6537 - CONTINUAÇÃO

Código	Descrição	L1 (mm)	L2 (mm)	Cobertura	Referência
10675	BROCA MD 15,90 3XD C/RI TIALN	65	115	TIALN	DH406159
23294	BROCA MD 16,00 3XD C/RI ALU	65	115	ALU	D5432160
24701	BROCA MD 16,00 3XD C/RI TIALN	65	115	TIALN	DH406160
10612	BROCA MD 16,50 3XD C/RI TIALN	73	123	TIALN	DH406165
18521	BROCA MD 17,00 3XD C/RI TIALN	73	123	TIALN	DH406170
18524	BROCA MD 19,00 3XD C/RI TIALN	79	131	TIALN	DH406190
18525	BROCA MD 19,10 3XD C/RI TIALN	79	131	TIALN	DH406191
12174	BROCA MD 20,00 3XD C/RI TIALN	79	131	TIALN	DH406200
18207	BROCA MD 01,20 5XD C /RI TIALN	12	55	TIALN	DH408012
18208	BROCA MD 01,50 5XD C/RI TIALN	16	55	TIALN	DH408015
18209	BROCA MD 01,70 5XD C/RI TIALN	16	55	TIALN	DH408017
18149	BROCA MD 02,20 5XD C/RI TIALN	21	57	TIALN	DH408022
16983	BROCA MD 02,40 5XD C/RI TIALN	21	57	TIALN	DH408024
16823	BROCA MD 02,50 5XD C/RI TIALN	21	57	TIALN	DH408025
18148	BROCA MD 02,60 5XD C/RI TIALN	21	57	TIALN	DH408026
19691	BROCA MD 02,70 5XD C/RI	21	57		DH408027
17545	BROCA MD 03,00 5XD C/RI TIALN	28	66	TIALN	DH408030
12448	BROCA MD 03,10 5XD C/RI TIALN	28	66	TIALN	DH408031
23764	BROCA MD 03,20 5XD C/RI TIALN	28	66	TIALN	DH408032
13143	BROCA MD 03,30 5XD C/RI TIALN	28	66	TIALN	DH408033
16671	BROCA MD 03,40 5XD C/RI TIALN	28	66	TIALN	DH408034
17546	BROCA MD 03,50 5XD C/RI TIALN	28	66	TIALN	DH408035
18451	BROCA MD 03,60 5XD C/RI ALU	28	66	ALU	D5433036
18846	BROCA MD 03,80 5XD C/RI TIALN	36	74	TIALN	DH408038
12122	BROCA MD 03,90 5XD C/RI TIALN	36	74	TIALN	DH408039
17279	BROCA MD 04,00 5XD C/RI TIALN	36	74	TIALN	DH408040
12395	BROCA MD 04,10 5XD C/RI TIALN	36	74	TIALN	DH408041
11278	BROCA MD 04,20 5XD C/RI TIALN	36	74	TIALN	DH408042
18147	BROCA MD 04,30 5XD C/RI TIALN	36	74	TIALN	DH408043
25456	BROCA MD 04,40 5XD C/RI TIALN	36	74	TIALN	DH408044
11404	BROCA MD 04,50 5XD C/RI TIALN	36	74	TIALN	DH408045
18452	BROCA MD 04,60 5XD C/RI ALU	36	74	ALU	D5433046
12127	BROCA MD 04,60 5XD C/RI TIALN	36	74	TIALN	DH408046
12128	BROCA MD 04,70 5XD C/RI TIALN	36	74	TIALN	DH408047
12129	BROCA MD 04,80 5XD C/RI TIALN	44	82	TIALN	DH408048
12130	BROCA MD 04,90 5XD C/RI TIALN	44	82	TIALN	DH408049
17038	BROCA MD 05,00 5XD C/RI TIALN	44	82	TIALN	DH408050
17461	BROCA MD 05,10 5XD C/RI TIALN	44	82	TIALN	DH408051
16675	BROCA MD 05,20 5XD C/RI TIALN	44	82	TIALN	DH408052
17283	BROCA MD 05,30 5XD C/RI TIALN	44	82	TIALN	DH408053
12451	BROCA MD 05,40 5XD C/RI TIALN	44	82	TIALN	DH408054
18453	BROCA MD 05,50 5XD C/RI ALU	44	82	ALU	D5433055
17656	BROCA MD 05,50 5XD C/RI TIALN	44	82	TIALN	DH408055
12132	BROCA MD 05,60 5XD C/RI TIALN	44	82	TIALN	DH408056
12133	BROCA MD 05,70 5XD C/RI TIALN	44	82	TIALN	DH408057

COM REFRIGERAÇÃO DIN 6537 - CONTINUAÇÃO

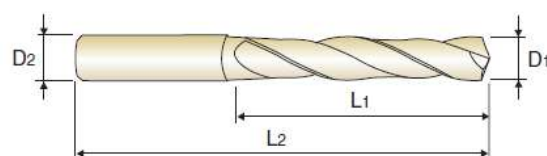
Código	Descrição	L1 (mm)	L2 (mm)	Cobertura	Referência
18033	BROCA MD 05,80 5XD C/RI TIALN	44	82	TIALN	DH408058
12135	BROCA MD 05,90 5XD C/RI TIALN	44	82	TIALN	DH408059
17057	BROCA MD 06,00 5XD C/RI TIALN	44	82	TIALN	DH408060
16981	BROCA MD 06,10 5XD C/RI TIALN	53	91	TIALN	DH408061
17281	BROCA MD 06,20 5XD C/RI TIALN	53	91	TIALN	DH408062
23790	BROCA MD 06,30 5XD C/RI TIALN	53	91	TIALN	DH408063
19471	BROCA MD 06,40 5XD C/RI TIALN	53	91	TIALN	DH408064
17549	BROCA MD 06,50 5XD C/RI TIALN	53	91	TIALN	DH408065
12140	BROCA MD 06,60 5XD C/RI TIALN	53	91	TIALN	DH408066
18853	BROCA MD 06,70 5XD C/RI TIALN	53	91	TIALN	DH408067
17635	BROCA MD 06,80 5XD C/RI TIALN	53	91	TIALN	DH408068
17831	BROCA MD 06,90 5XD C/RI TIALN	53	91	TIALN	---
11266	BROCA MD 07,00 5XD C/RI TIALN	53	91	TIALN	DH408070
23008	BROCA MD 07,10 5XD C/RI TIALN	53	91	TIALN	DH408071
12144	BROCA MD 07,20 5XD C/RI TIALN	53	91	TIALN	---
18731	BROCA MD 07,30 5XD C/RI P/ ALUMINIO	53	91	ALU	DH408073
19317	BROCA MD 07,30 5XD C/RI TIALN	53	91	TIALN	DH408073
17284	BROCA MD 07,40 5XD C/RI TIALN	53	91	TIALN	DH408074
11461	BROCA MD 07,50 5XD C/RI TIALN	53	91	TIALN	DH408075
12148	BROCA MD 07,60 5XD C/RI TIALN	53	91	TIALN	DH408076
12149	BROCA MD 07,70 5XD C/RI TIALN	53	91	TIALN	DH408077
17801	BROCA MD 07,80 5XD C/RI TIALN	53	91	TIALN	DH408078
12151	BROCA MD 07,90 5XD C/RI TIALN	53	91	TIALN	DH408079
17280	BROCA MD 08,00 5XD C/RI TIALN	53	91	TIALN	DH408080
16884	BROCA MD 08,10 5XD C/RI TIALN	61	103	TIALN	DH408081
17285	BROCA MD 08,20 5XD C/RI TIALN	61	103	TIALN	DH408082
16970	BROCA MD 08,30 5XD C/RI TIALN	61	103	TIALN	DH408083
18781	BROCA MD 08,40 5XD C/RI TIALN	61	103	TIALN	---
17298	BROCA MD 08,50 5XD C/RI TIALN	61	103	TIALN	DH408085
12156	BROCA MD 08,60 5XD C/RI TIALN	61	103	TIALN	---
16838	BROCA MD 08,70 5XD C/RI TIALN	61	103	TIALN	DH408087
18957	BROCA MD 08,80 5XD C/RI TIALN	61	103	TIALN	DH408088
23009	BROCA MD 08,90 5XD C/RI TIALN	61	103	TIALN	DH424089
17896	BROCA MD 09,00 5XD C/RI TIALN	61	103	TIALN	DH408090
25140	BROCA MD 09,10 5XD C/RI TIALN	61	103	TIALN	DH408091
12161	BROCA MD 09,20 5XD C/RI TIALN	61	103	TIALN	DH408092
25193	BROCA MD 09,30 5XD C/RI TIALN	61	103	TIALN	DH408093
18732	BROCA MD 09,30 5XD C/RI ALU	61	103	ALU	D5433093
23258	BROCA MD 09,40 5XD C/RI TIALN	61	103	TIALN	DH408094
18002	BROCA MD 09,50 5XD C/RI TIALN	61	103	TIALN	DH408095
18713	BROCA MD 09,60 5XD C/RI TIALN	61	103	TIALN	DH408096
17934	BROCA MD 09,70 5XD C/RI TIALN	61	103	TIALN	DH408097
18714	BROCA MD 09,80 5XD C/RI TIALN	61	103	TIALN	DH408098
17750	BROCA MD 09,90 5XD C/RI TIALN	61	103	TIALN	DH408099
17282	BROCA MD 10,00 5XD C/RI TIALN	61	103	TIALN	DH408100
12167	BROCA MD 10,10 5XD C/RI TIALN	71	118	TIALN	DH408101

COM REFRIGERAÇÃO DIN 6537 - CONTINUAÇÃO

Código	Descrição	L1 (mm)	L2 (mm)	Cobertura	Referência
18514	BROCA MD 10,20 5XD C/RI TIALN	71	118	TIALN	DH408102
10093	BROCA MD 10,30 5XD C/RI TIALN	71	118	TIALN	DH408103
12555	BROCA MD 10,40 5XD C/RI TIALN	71	118	TIALN	DH408104
16956	BROCA MD 10,50 5XD C/RI TIALN	71	118	TIALN	DH408105
25817	BROCA MD 10,60 5XD C/RI TIALN	71	118	TIALN	DH408106
18933	BROCA MD 10,70 5XD C/RI TIALN	71	118	TIALN	DH408107
18959	BROCA MD 10,80 5XD C/RI TIALN	71	118	TIALN	DH408108
11963	BROCA MD 11,00 5XD C/RI TIALN	71	118	TIALN	DH408110
23670	BROCA MD 11,20 5XD C/RI TIALN	71	118	TIALN	DH408112
25844	BROCA MD 11,30 5XD C/RI TIALN	71	118	TIALN	DH408113
23577	BROCA MD 11,50 5XD C/RI TIALN	71	118	TIALN	DH408115
24362	BROCA MD 11,70 5XD C/RI TIALN	71	118	TIALN	DH408117
17935	BROCA MD 11,80 5XD C/RI TIALN	71	118	TIALN	DH408118
17745	BROCA MD 11,90 5XD C/RI TIALN	71	118	TIALN	DH408119
17189	BROCA MD 12,00 5XD C/RI TIALN	71	118	TIALN	DH408120
17256	BROCA MD 12,10 5XD C/RI TIALN	77	124	TIALN	DH408121
17936	BROCA MD 12,50 5XD C/RI TIALN	77	124	TIALN	---
18934	BROCA MD 12,60 5XD C/RI TIALN	77	124	TIALN	DH408126
12170	BROCA MD 12,70 5XD C/RI TIALN	77	124	TIALN	DH408127
18716	BROCA MD 12,80 5XD C/RI TIALN	77	124	TIALN	DH408128
17003	BROCA MD 13,00 5XD C/RI TIALN	77	124	TIALN	DH408130
17288	BROCA MD 13,50 5XD C/RI TIALN	77	124	TIALN	DH408135
11812	BROCA MD 14,00 5XD C/RI TIALN	77	124	TIALN	DH408140
18715	BROCA MD 14,50 5XD C/RI TIALN	83	133	TIALN	DH408145
19009	BROCA MD 14,70 5XD C/RI TIALN	83	133	TIALN	DH408147
17055	BROCA MD 15,00 5XD C/RI TIALN	83	133	TIALN	DH408150
18517	BROCA MD 15,10 5XD C/RI TIALN	83	133	TIALN	DH408151
18146	BROCA MD 15,30 5XD C/RI TIALN	83	133	TIALN	DH408153
24108	BROCA MD 15,50 5XD C/RI TIALN	83	133	TIALN	DH408155
18717	BROCA MD 15,70 5XD C/RI TIALN	83	133	TIALN	DH408157
19091	BROCA MD 16,00 5XD C/RI TIALN	83	133	TIALN	DH408160
19525	BROCA MD 16,40 5XD C/RI TIALN	93	143	TIALN	DH408164
18518	BROCA MD 16,50 5XD C/RI TIALN	93	143	TIALN	DH408165
23205	BROCA MD 16,60 5XD C/RI TIALN	93	143	TIALN	DH408166
18519	BROCA MD 16,70 5XD C/RI TIALN	93	143	TIALN	DH408167
18520	BROCA MD 16,90 5XD C/RI TIALN	93	143	TIALN	DH408169
18522	BROCA MD 17,00 5XD C/RI TIALN	93	143	TIALN	DH408170
19215	BROCA MD 17,50 5XD C/RI TIALN	93	143	TIALN	---
18523	BROCA MD 18,50 5XD C/RI TIALN	101	153	TIALN	DH408185
18684	BROCA MD 20,00 5XD C/RI TIALN	101	153	TIALN	DH408200
25377	BROCA MD 03,00 8XD C/RI TIALN	34	72	TIALN	DH421030
16674	BROCA MD 05,00 8XD C/RI TIALN	57	95	TIALN	DH421050
24531	BROCA MD 05,10 8XD C/RI TIALN	57	95	TIALN	DH421051
19896	BROCA MD 06,00 8XD C/RI TIALN	57	95	TIALN	DH421060
16702	BROCA MD 07,00 8XD C/RI TIALN	76	114	TIALN	DH421070

COM REFRIGERAÇÃO DIN 6537 - CONTINUAÇÃO

Código	Descrição	L1 (mm)	L2 (mm)	Cobertura	Referência
17263	BROCA MD 08,00 8XD C/RI TIALN	76	114	TIALN	DH421080
23345	BROCA MD 08,10 8XD C/RI TIALN	95	142	TIALN	DH4221081
19684	BROCA MD 08,50 8XD C/RI TIALN	95	142	TIALN	DH421085
23346	BROCA MD 08,90 8XD C/RI TIALN	95	142	TIALN	DH421089
26044	BROCA MD 09,00 8XD C/RI TIALN	95	142	TIALN	DH421090
23349	BROCA MD 09,40 8XD C/RI TIALN	95	142	TIALN	DH421094
17265	BROCA MD 09,50 8XD C/RI TIALN	95	142	TIALN	DH421095
23347	BROCA MD 09,60 8XD C/RI TIALN	95	142	TIALN	DH421096
23348	BROCA MD 09,90 8XD C/RI TIALN	95	142	TIALN	DH421099
19923	BROCA MD 10,00 8XD C/RI TIALN	95	142	TIALN	DH421100
16960	BROCA MD 12,00 8XD C/RI TIALN	114	162	TIALN	DH421120
12311	BROCA MD 04,00 10XD C/RI TIALN	52	103	TIALN	4206550
18286	BROCA MD 05,00 10XD C/RI TIALN	65	118	TIALN	DH510050
24167	BROCA MD 05,10 10XD C/RI TIALN	72	127	TIALN	
17672	BROCA MD 07,00 10XD C/RI TIALN	91	147	TIALN	---
18060	BROCA MD 08,00 10XD C/RI TIALN	104	161	TIALN	DH510080
12316	BROCA MD 09,00 10XD C/RI TIALN	117	175	TIALN	DH510090
25271	BROCA MD 10,50 10XD C/RI TIALN	137	201	TIALN	DH510105
13729	BROCA MD 06,00 20XD C/RI TIALN	138	193	TIALN	DH520060

SEM REFRIGERAÇÃO DIN 6537


Código	Descrição	L1 (mm)	L2 (mm)	Cobertura	Referência
23089	BROCA MD 02,00 2XD S/RI	12	38		D5405020
17010	BROCA MD 02,10 2XD S/RI	12	38		D5405021
17011	BROCA MD 02,50 2XD S/RI	14	43		D54055025
17012	BROCA MD 02,90 2XD S/RI	16	46		D5405029
17013	BROCA MD 03,30 2XD S/RI TIALN	20	62	TIALN	DH406033
17617	BROCA MD 03,50 2XD S/RI TIN	20	52	TIN	---
17014	BROCA MD 05,00 2XD S/RI	26	62		D5405050
17618	BROCA MD 05,00 2XD S/RI TIN	26	62	TIN	D6405050
20010	BROCA MD 05,60 2XD S/RI TIN	28	66	TIN	D6405056
25591	BROCA MD 06,40 2XD S/RI TIN	31	70	TIN	D6405064
17732	BROCA MD 06,50 2XD S/RI	31	70		D5405065
24656	BROCA MD 07,50 2XD S/RI TIN	34	74	TIN	D6405075
23088	BROCA MD 02,50 3XD S/RI	14	43		D5405025
18700	BROCA MD 03,00 3XD S/RI TIALN	20	62	TIALN	DH423030
19000	BROCA MD 03,10 3XD S/RI ALU	18	49	ALU	D5432031
12444	BROCA MD 03,10 3XD S/RI TIALN	18	49	TIALN	DH404031
23160	BROCA MD 03,30 3XD S/RI TIALN	18	49	TIALN	DH404033
22944	BROCA MD 03,40 3XD S/RI TIN	18	49	TIN	D6405034

SEM REFRIGERAÇÃO DIN 6537 - CONTINUAÇÃO

Código	Descrição	L1 (mm)	L2 (mm)	Cobertura	Referência
18710	BROCA MD 03,50 3XD S/RI TIALN	20	52	TIALN	DH404035
9719	BROCA MD 03,60 3XD S/RI TIALN	20	52	TIALN	DH404036
22942	BROCA MD 03,70 3XD S/RI TIN	20	52	TIN	D6405037
18145	BROCA MD 04,00 3XD S/RI	22	55		D5405040
24269	BROCA MD 04,00 3XD S/RI TIALN	22	55	TIALN	DH404040
19001	BROCA MD 04,10 3XD S/RI ALU	22	55	ALU	D5432041
9522	BROCA MD 04,10 3XD S/RI TIALN	22	55	TIALN	DH404041
23163	BROCA MD 04,20 3XD S/RI TIALN	22	55	TIALN	DH404042
22946	BROCA MD 04,30 3XD S/RI TIN	22	55	TIN	D6405043
24386	BROCA MD 04,50 3XD S/RI TIALN	24	58	TIALN	DH404045
25531	BROCA MD 04,60 3XD S/RI TIALN	24	66	TIALN	DH423046
10135	BROCA MD 04,70 3XD S/RI TIALN	24	58	TIALN	DH404047
19820	BROCA MD 04,80 3XD S/RI TIALN	28	66	TIALN	DH423048
12446	BROCA MD 04,90 3XD S/RI TIALN	26	62	TIALN	DH404049
18144	BROCA MD 05,00 3XD S/RI	26	62		D5405050
23605	BROCA MD 05,00 3XD S/RI TIALN	26	62	TIALN	DH404050
22785	BROCA MD 05,20 3XD S/RI TIALN	26	62	TIALN	DH404052
25310	BROCA MD 05,30 3XD S/RI TIALN	28	66	TIALN	DH423053
16394	BROCA MD 05,50 3XD S/RI TIALN	28	66	TIALN	DH423055
22770	BROCA MD 05,60 3XD S/RI TIALN	28	66	TIALN	DH404056
22786	BROCA MD 05,60 3XD S/RI TIN	28	66	TIN	D6405056
12101	BROCA MD 05,70 3XD S/RI TIALN	28	66	TIALN	DH404057
10610	BROCA MD 05,80 3XD S/RI TIALN	28	66	TIALN	DH404058
25252	BROCA MD 05,90 3XD S/RI TIALN	28	66	TIALN	DH404059
25438	BROCA MD 06,00 3XD S/RI TIALN	28	66	TIALN	DH404060
17661	BROCA MD 06,10 3XD S/RI TIALN	34	79	TIALN	DH423061
9729	BROCA MD 06,20 3XD S/RI TIALN	31	70	TIALN	DH404062
23083	BROCA MD 06,30 3XD S/RI TIALN	31	70	TIALN	DH404063
23084	BROCA MD 06,50 3XD S/RI TIALN	31	70	TIALN	DH404065
23229	BROCA MD 06,60 3XD S/RI TIALN	31	70	TIALN	DH404066
12104	BROCA MD 06,90 3XD S/RI TIALN	34	74	TIALN	DH404069
24632	BROCA MD 07,00 3XD S/RI TIALN	34	74	TIALN	DH404070
12277	BROCA MD 07,10 3XD S/RI TIALN	34	74	TIALN	DH404071
24387	BROCA MD 07,20 3XD S/RI TIALN	34	74	TIALN	DH404072
12105	BROCA MD 07,60 3XD S/RI TIALN	37	79	TIALN	DH404076
12106	BROCA MD 07,70 3XD S/RI TIALN	37	79	TIALN	DH404077
10582	BROCA MD 07,90 3XD S/RI TIALN	37	79	TIALN	DH404079
16405	BROCA MD 08,00 3XD S/RI TIALN	37	79	TIALN	DH404080
25175	BROCA MD 08,20 3XD S/RI TIALN	37	79	TIALN	DH404082
11255	BROCA MD 08,30 3XD S/RI TIALN	37	79	TIALN	DH404083
23090	BROCA MD 08,50 3XD S/RI	47	89		D5405085
17056	BROCA MD 08,50 3XD S/RI TIALN	47	89	TIALN	DH423085
12110	BROCA MD 08,60 3XD S/RI TIALN	40	84	TIALN	DH404086
12111	BROCA MD 08,70 3XD S/RI TIALN	40	84	TIALN	DH404087
25439	BROCA MD 08,80 3XD S/RI TIALN	40	84	TIALN	DH404088
16982	BROCA MD 08,90 3XD S/RI TIALN	40	84	TIALN	DH404089

SEM REFRIGERAÇÃO | DIN 6537 - CONTINUAÇÃO

Código	Descrição	L1 (mm)	L2 (mm)	Cobertura	Referência
9985	BROCA MD 09,10 3XD S/RI TIALN	40	84	TIALN	DH404091
12114	BROCA MD 09,20 3XD S/RI TIALN	40	84	TIALN	DH404092
24344	BROCA MD 09,30 3XD S/RI TIALN	47	89	TIALN	DH423093
12115	BROCA MD 09,40 3XD S/RI TIALN	40	84	TIALN	DH404094
24172	BROCA MD 09,50 3XD S/RI TIALN	40	84	TIALN	DH404095
9521	BROCA MD 09,70 3XD S/RI TIALN	43	89	TIALN	DH404097
25176	BROCA MD 09,80 3XD S/RI TIALN	43	89	TIALN	DH404098
12116	BROCA MD 09,90 3XD S/RI TIALN	43	89	TIALN	DH404099
23091	BROCA MD 10,00 3XD S/RI	43	89		D5405100
11253	BROCA MD 10,00 3XD S/RI TIALN	43	89	TIALN	DH404100
17751	BROCA MD 10,20 3XD S/RI TIALN	43	89	TIALN	DH404102
11254	BROCA MD 10,40 3XD S/RI TIALN	43	89	TIALN	
17186	BROCA MD 10,50 3XD S/RI TIALN	55	102	TIALN	DH423105
9519	BROCA MD 10,80 3XD S/RI TIALN	55	102	TIALN	DH404108
12117	BROCA MD 10,90 3XD S/RI TIALN	55	102	TIALN	DH404109
25134	BROCA MD 11,20 3XD S/RI TIALN	55	102	TIALN	DH423112
12178	BROCA MD 11,90 3XD S/RI TIALN	55	102	TIALN	DH404119
18466	BROCA MD 12,00 3XD S/RI TIALN	55	102	TIALN	DH404120
18920	BROCA MD 12,30 3XD S/RI TIALN	60	107	TIALN	DH423123
18942	BROCA MD 12,50 3XD S/RI TIALN	60	107	TIALN	DH423125
24193	BROCA MD 12,80 3XD S/RI TIALN	60	107	TIALN	DH423128
9525	BROCA MD 13,00 3XD S/RI TIALN	51	102	TIALN	DH404130
11970	BROCA MD 13,50 3XD S/RI TIALN	54	107	TIALN	DH404135
16773	BROCA MD 14,00 3XD S/RI TIALN	54	107	TIALN	DH404140
13257	BROCA MD 14,10 3XD S/RI TIALN	56	11	TIALN	DH404141
9523	BROCA MD 14,50 3XD S/RI TIALN	56	111	TIALN	DH404145
11451	BROCA MD 15,00 3XD S/RI TIALN	56	111	TIALN	DH404150
23937	BROCA MD 16,00 3XD S/RI TIALN	58	115	TIALN	
15645	BROCA MD 16,50 3XD S/RI TIALN	58	115	TIALN	DH404160
23938	BROCA MD 20,00 3XD S/RI TIALN	79	131	TIALN	
18150	BROCA MD 01,20 5XD S/RI TIALN	12	55	TIALN	DH424012
18151	BROCA MD 01,50 5XD S/RI TIALN	16	55	TIALN	DH424015
18152	BROCA MD 01,70 5XD S/RI TIAL	16	55	TIAL	DH424017
16183	BROCA MD 02,00 5XD S/RI TIALN	21	57	TIALN	DH424020
25273	BROCA MD 02,50 5XD S/RI TIALN	21	57	TIALN	DH424025
16432	BROCA MD 02,80 5XD S/RI TIALN	21	57	TIALN	DH424028
19872	BROCA MD 03,20 5XD S/RI TIAL	28	66	TIAL	DH424032
13874	BROCA MD 03,30 5XD S/RI TIALN	28	66	TIALN	DH424033
23626	BROCA MD 03,90 5XD S/RI	36	74		D5407039
25526	BROCA MD 04,00 5XD S/RI TIALN	36	74	TIALN	DH424040
24630	BROCA MD 04,20 5XD S/RI TIALN	36	74	TIALN	DH424042
25572	BROCA MD 04,60 5XD S/RI TIALN	36	74	TIALN	DH424046
25466	BROCA MD 04,70 5XD S/RI TIALN	36	74	TIALN	DH424047
23038	BROCA MD 05,00 5XD S/RI TIALN	44	82	TIALN	DH424050
18919	BROCA MD 05,10 5XD S/RI TIALN	44	82	TIALN	DH424051
24349	BROCA MD 05,50 5XD S/RI TIALN	44	82	TIALN	DH424055

SEM REFRIGERAÇÃO DIN 6537 - CONTINUAÇÃO

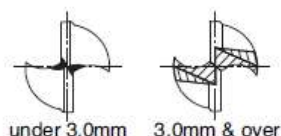
Código	Descrição	L1 (mm)	L2 (mm)	Cobertura	Referência
23552	BROCA MD 05,70 5XD S/RI TIALN	44	82	TIALN	DH424057
24234	BROCA MD 06,00 5XD S/RI TIALN	44	82	TIALN	DH424060
24233	BROCA MD 06,50 5XD S/RI TIALN	53	91	TIALN	DH424065
25268	BROCA MD 06,70 5XD S/RI TIALN	53	91	TIALN	DH424067
25226	BROCA MD 06,80 5XD S/RI TIALN	53	91	TIALN	DH424068
17890	BROCA MD 07,00 5XD S/RI TIALN	53	91	TIALN	DH424070
12175	BROCA MD 07,20 5XD S/RI TIALN	53	91	TIALN	DH424072
19214	BROCA MD 08,00 5XD S/RI TIALN	53	91	TIALN	DH424080
24899	BROCA MD 08,50 5XD S/RI TIALN	61	103	TIALN	DH424085
25533	BROCA MD 08,60 5XD S/RI TIALN	61	103	TIALN	DH424086
20139	BROCA MD 09,00 5XD S/RI TIALN	61	103	TIALN	DH424090
17601	BROCA MD 09,30 5XD S/RI TIALN	61	103	TIALN	DH424093
23554	BROCA MD 09,70 5XD S/RI TIALN	61	103	TIALN	DH424097
23464	BROCA MD 10,00 5XD S/RI TIALN	61	103	TIALN	DH424100
24523	BROCA MD 10,50 5XD S/RI TIALN	71	118	TIALN	DH424105
25529	BROCA MD 10,70 5XD S/RI TIALN	71	118	TIALN	DH424107
24629	BROCA MD 11,00 5XD S/RI TIALN	71	118	TIALN	DH424110
17839	BROCA MD 11,20 5XD S/RI TIALN	71	118	TIALN	DH424112
23555	BROCA MD 11,70 5XD S/RI TIALN	71	118	TIALN	DH424117
15092	BROCA MD 11,80 5XD S/RI TIALN	71	118	TIALN	DH424118
24627	BROCA MD 12,00 5XD S/RI TIALN	71	118	TIALN	DH424120
10138	BROCA MD 12,70 5XD S/RI TIALN	77	124	TIALN	DH424127
25285	BROCA MD 12,80 5XD S/RI TIALN	77	124	TIALN	DH423128
13089	BROCA MD 13,00 5XD S/RI TIALN	77	124	TIALN	DH424130
25805	BROCA MD 13,50 5XD S/RI TIALN	77	124	TIALN	DH424135
23039	BROCA MD 14,00 5XD S/RI TIALN	77	124	TIALN	DH424140
17937	BROCA MD 16,00 5XD S/RI TIALN	83	133	TIALN	DH424160
17731	BROCA MD 17,00 5XD S/RI TIALN	93	143	TIALN	DH424170

DIN 338 MD

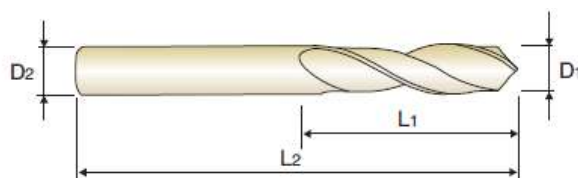
Código	Descrição	L1 (mm)	L2 (mm)	Cobertura	Referência
18103	BROCA MD DIN338 01,00MM	12	34		D5407010
17744	BROCA MD DIN338 01,20MM	16	38		D5407012
16305	BROCA MD DIN338 01,50MM	18	40		D5407015
24212	BROCA MD DIN338 01,70MM TIN	20	43	TIN	D6407017
25141	BROCA MD DIN338 01,80MM	22M	46		D5407018
14259	BROCA MD DIN338 02,00MM	24	49		D5407020
25366	BROCA MD DIN338 02,10MM	24	49		D5407021
17760	BROCA MD DIN338 02,50MM	30	57		D5407025
22949	BROCA MD DIN338 02,50MM TIN	30	57	TIN	D6407025
20566	BROCA MD DIN338 02,60MM	30	57		
25495	BROCA MD DIN338 02,60MM TIN	30	57	TIN	D6407026
24485	BROCA MD DIN338 02,80MM TIN	33	61	TIN	D6407028
25436	BROCA MD DIN338 02,90MM	33	61		D5407029
10662	BROCA MD DIN338 03,00MM	33	61		D5407030
17389	BROCA MD DIN338 03,00MM TIN	33	61	TIN	D6407030

DIN 338 MD CONTINUAÇÃO

Código	Descrição	L1 (mm)	L2 (mm)	Cobertura	Referência
20567	BROCA MD DIN338 03,20MM	36	65		
23672	BROCA MD DIN338 03,20MM TIN	36	65	TIN	D6407032
17518	BROCA MD DIN338 03,40MM	39	70		D5407034
17552	BROCA MD DIN338 03,40MM TIN	39	70	TIN	D6407034
18924	BROCA MD DIN338 03,50MM TIN	39	70	TIN	D6407035
19862	BROCA MD DIN338 04,00MM TIN	43	75	TIN	D6407040
18399	BROCA MD DIN338 04,20MM	47	80		D5407047
10937	BROCA MD DIN338 04,20MM TIN	47	80	TIN	---
17570	BROCA MD DIN338 04,40MM	47	80		
18820	BROCA MD DIN338 05,00MM	52	86		D5407050
24448	BROCA MD DIN338 05,00MM TIN	52	86	TIN	D6407050
24192	BROCA MD DIN338 05,10MM	52	86		D5407051
22948	BROCA MD DIN338 05,20MM TIN	52	86	TIN	D6407052
25250	BROCA MD DIN338 05,50MM	57	93		D5407055
17571	BROCA MD DIN338 05,60MM	57	93		D5407056
24191	BROCA MD DIN338 05,80MM	57	93		D5407058
18191	BROCA MD DIN338 06,00MM	57	93		D6405060
25068	BROCA MD DIN338 06,20MM	63	101		D5407062
25249	BROCA MD DIN338 06,50MM	63	101		D5407065
25045	BROCA MD DIN338 06,80MM	69	109		D5407068
17733	BROCA MD DIN338 06,80MM TIN	69	109	TIN	D6405068
20568	BROCA MD DIN338 07,00MM	69	109		
10665	BROCA MD DIN338 07,50MM TIALN	69	109	TIALN	
10666	BROCA MD DIN338 07,60MM TIALN	69	109	TIALN	
25142	BROCA MD DIN338 08,50MM	75	117		
18027	BROCA MD DIN338 08,80MM	75	117		
10669	BROCA MD DIN338 09,90MM TIALN	81	125	TIALN	
18135	BROCA MD DIN338 10,50MM	87	133		D5407105
11611	BROCA MD DIN338 11,50MM TIALN	94	142	TIALN	
19777	BROCA MD DIN338 12,00MM TIN	101	151	TIN	
18134	BROCA MD DIN338 12,50MM	101	151		D5407125
22966	BROCA MD DIN338 13,00MM	101	151		D54070130

DIN 6539


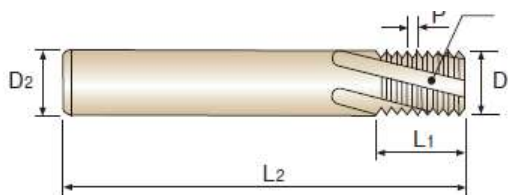
under 3.0mm 3.0mm & over



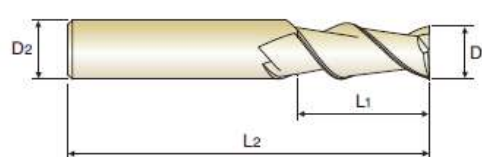
Código	Descrição	L1 (mm)	L2 (mm)	Cobertura	Referência
20807	BROCA MD DIN6539 02,50MM TIN	14	43	TIN	D6405025
20009	BROCA MD DIN6539 02,90MM TIN	16	46	TIN	D6405029
24447	BROCA MD DIN6539 05,20MM TIN	26	62	TIN	D6405052

DIN 6539
CONTINUAÇÃO

Código	Descrição	L1 (mm)	L2 (mm)	Cobertura	Referência
25225	BROCA MD DIN6539 05,50MM EXTRA CURTA	28	66		
26029	BROCA MD DIN6539 05,50MM TIN	28	66	TIN	D6405055
18161	BROCA MD DIN6539 06,00MM	28	66		D5405060
24201	BROCA MD DIN6539 06,10MM TIALN	31	70	TIALN	DH404061
24353	BROCA MD DIN6539 06,80MM TIN	34	74	TIN	D6405068
19147	BROCA MD DIN6539 07,00MM EXTRA CURTA	34	74		
18024	BROCA MD DIN6539 07,80MM	37	79		D5405078
23934	BROCA MD DIN6539 08,00MM TIN	37	79	TIN	
18025	BROCA MD DIN6539 08,50MM	37	79		D5405085
23935	BROCA MD DIN6539 09,00MM	40	84		D5405090
19515	BROCA MD DIN6539 09,00MM TIN	40	84	TIN	---
25759	BROCA MD DIN6539 09,50MM TIN	40	84	TIN	D6405095
18026	BROCA MD DIN6539 09,80MM	43	89		D5405098
23936	BROCA MD DIN6539 11,00MM	47	95		D5405110
23907	BROCA MD DIN6539 11,50MM EXTRA CURTA	47	95		
23908	BROCA MD DIN6539 12,00MM EXTRA CURTA	47	95		

FRESAS INTEIRIÇAS METAL DURO
FRESA DE INTERPOLAR ROSCA YG1


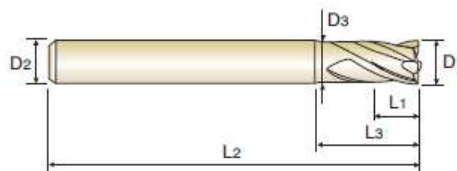
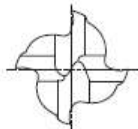
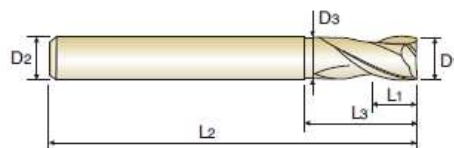
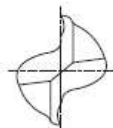
Código	Descrição	L1 (mm)	L2 (mm)	P °	Referência
17233	FRESA INTERPOLAR ROSCA MD M 6 X 1,00MM	13	57	60°	L1211310
24026	FRESA INTERPOLAR ROSCA M10X1,50	21	72	60°	L1211420
23632	FRESA INTERPOLAR ROSCA M18X1,50 4C C/COB C/RI	28.5	92	60°	L4212670
17889	FRESA INTERPOLAR ROSCA UNC 7/16" 14F	23.6	72	60°	L1213520

ALU - PARA ALUMÍNIO YG1


Código	Descrição	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Ângulo	Referência
25194	FRESA MD 2C 06,00MM ALU	6.0	6.0	13	57	45°	E5522060



BLUE YG1

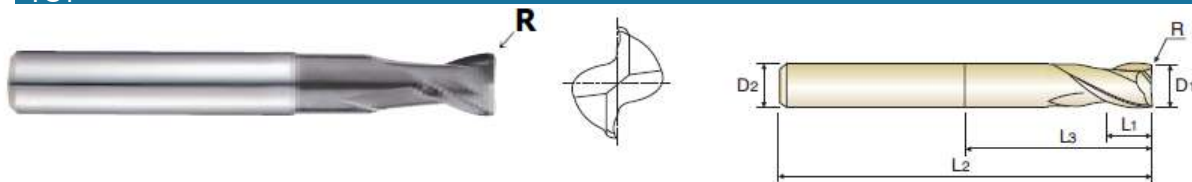


Código	Descrição	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Ângulo	Referência
17054	FRESA MD 2C 00,20MM BLUE	0.2	4	0.4	40	30°	G8A01002
16320	FRESA MD 2C 00,60MM ALIVIO 6MM BLUE	0.6	4	0.6	45	30°	G8A45992
16784	FRESA MD 2C 00,80MM ALIVIO 10MM BLUE	0.8	4	1.2	45	30°	G8A45995
16328	FRESA MD 2C 00,80MM BLUE	0.8	4	1.2	45	30°	G8A45908
16785	FRESA MD 2C 01,00MM ALIVIO 16MM BLUE	1.0	4	1.5	50	30°	G8A45997
16682	FRESA MD 2C 01,00MM BLUE	1.0	6	1.5	50	30°	G8A01010
25253	FRESA MD 2C 01,00MM R0.2 BLUE	1.0	6	1.5	50	30°	G8A60010
17021	FRESA MD 2C 01,50MM R0.2 BLUE	1.5	6	1.5	50	30°	G8A60010
16681	FRESA MD 2C 01,50MM BLUE	1.5	6	1.7	50	30°	G8A01015
16679	FRESA MD 2C 02,00MM BLUE	2.0	6	2.0	50	30°	G8A01020
19532	FRESA MD 2C 02,00MM BLUE REBAIXADA	2.0	4	3.0	45	30°	G8A45020
19971	FRESA MD 2C 02,00MM R0.2 BLUE	2.0	6	3.0	50	30°	G8A600200208
19417	FRESA MD 2C 02,00MM R0.5 BLUE REBAIXADA	2.0	6	3.0	55	30°	G8A60020
19970	FRESA MD 2C 02,00MM R.5 REBAIXADA 12MM H6 BLUE	2.0	6	3.0	55	30°	G8A60918
25701	FRESA MD 2C 03,00MM BLUE	3.0	6	3.0	55	30°	G8A01030
19530	FRESA MD 2C 03,00MM R.5 BLUE REBAIXADA 12MM	3.0	6	4.0	55	30°	G8A600300512
19860	FRESA MD 2C 03,00MM R0.5 BLUE REBAIXADA 20MM	3.0	6	4.0	55	30°	G8A60902
22881	FRESA MD 2C 04,00MM BLUE	4.0	6	4.0	55	30°	G8A01040
18166	FRESA MD 2C 04,00MM R0.5 BLUE	4.0	6	5.0	55	30°	G8A60040
19672	FRESA MD 2C 06,00MM BLUE	6.0	6	6.0	55	30°	G8A01060
19942	FRESA MD 2C 08,00MM BLUE	8.0	8	8.0	65	30°	G8A01080
23754	FRESA MD 2C 10,00MM BLUE	10.0	10	11.0	80	30°	G8A28100
19531	FRESA MD 4C 01,00MM BLUE	1.0	4	1.5	45	30°	G8A45996
24030	FRESA MD 4C 02,00MM R0.5 BLUE ALTO AVANÇO	2.0	6	1.0	60	30°	G8B5902005
19420	FRESA MD 4C 02,00MM REBAIXADA BLUE	2.0	6	2.0	50	30°	G8A02020
19717	FRESA MD 4C 03,00MM BLUE	3.0	6	3.0	55	30°	G8A02030
16700	FRESA MD 4C 03,00MM R0.5 BLUE	3.0				30°	G8A4030
23287	FRESA MD 4C 03,00MM R0.5 BLUE - ALTO AVANÇO	3.0	6	1.2	50	30°	G8B5903005
16695	FRESA MD 4C 04,00MM BLUE	4.0	6	4.0	55	30°	G8A02040
16691	FRESA MD 4C 04,00MM R0.5 BLUE	4.0	4	6.0	55	30°	G8A47040
23288	FRESA MD 4C 04,00MM R0.5 BLUE - ALTO AVANÇO	4.0	6	1.5	50	30°	G8B5904005
25716	FRESA MD 4C 04,00MM R0.5 ALIVIO 20MM BLUE	4.0	6	5.0	55	30°	G8A47921
16692	FRESA MD 4C 04,00MM R1.0 BLUE	4.0	6	5.0	55	30°	G8A47922
19453	FRESA MD 4C 05,00MM R0.5 BLUE	5.0				30°	
19418	FRESA MD 4C 06,00MM R0.5 H04 BLUE	6.0	6	9.0	90	30°	G8B0806005090

BLUE

Código	Descrição	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Ângulo	Referência
16696	FRESA MD 4C 06,00MM BLUE	6.0	6	6.0	55	30°	G8A02060
16489	FRESA MD 4C 06,00MM R0,5 BLUE	6.0	6	7.0	60	30°	G8A47060
23289	FRESA MD 4C 06,00MM R0,5 BLUE - ALTO AVANCO	6.0	6	2.5	60	30°	G8B5906005
16490	FRESA MD 4C 06,00MM R1,0 BLUE	6.0	6	7.0	60	30°	G8A47905
19419	FRESA MD 4C 08,00MM R0,5 BLUE REBAIXADA	8.0	8	12.0	100	30°	G8B0808005100
16697	FRESA MD 4C 08,00MM BLUE	8.0	8	8.0	65	30°	G8A02080
16487	FRESA MD 4C 08,00MM R0,5 BLUE	8.0	8	9.0	60	30°	G8A47910
16488	FRESA MD 4C 08,00MM R1,0 BLUE	8.0	8	9.0	60	30°	G8A47080
19137	FRESA MD 4C 08,00MM R1,0 BLUE REBAIXADA	8.0	8	12.0	100	30°	G8B0808010100
20056	FRESA MD 4C 10,00MM BLUE	10.0	10	10.0	75	30°	G8A02100
16875	FRESA MD 4C 10,00MM R0,5 BLUE	10.0	10	11.0	70	30°	G8A47911
24860	FRESA MD 4C 10,00MM R0,5 BLUE REBAIXADA	10.0	10	15.0	100	30°	G8B0810005100
16693	FRESA MD 4C 10,00MM R1,0 BLUE	10.0	10	11.0	70	30°	G8A47100
19071	FRESA MD 4C 10,00MM R1,0 BLUE REBAIXADA	10.0	10	15.0	100	30°	G8B0810010100
20057	FRESA MD 4C 12,00MM BLUE	12.0	12	12.0	85	30°	G8A02120
24854	FRESA MD 4C 12,00MM R0,5 BLUE	12.0	12	12.0	80	30°	G8A47912
16694	FRESA MD 4C 12,00MM R1,0 BLUE	12.0	12	12.0	80	30°	G8A47120
24115	FRESA MD 4C 12,00MM R1,0 BLUE REBAIXADA	12.0	12	18.0	110	30°	G8B0812010110
16876	FRESA MD 4C 12,00MM R2,0 BLUE	12.0	12	12.0	80	30°	G8A47915
24897	FRESA MD 4C 12,00MM R2,0 BLUE REBAIXADA	12.0	12	18.0	110	30°	G8B0812020110

DLC



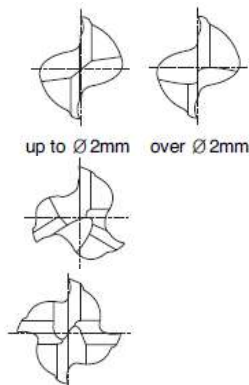
Código	Descrição	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Ângulo	Referência
26283	FRESA MD 2C 06,00MM R0,5 LONGA DLC	6.0	6	9	60	30°	SGED290600520
26284	FRESA MD 2C 08,00MM R0,5 LONGA DLC	8.0	8	12	65	30°	SGED290800525

[illegible]



K2

YG1



Código	Descrição	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Ângulo	Referência
18009	FRESA MD 2C 01,00MM H3 K2	1.0	3	3.0	39	30°	G9A68010
24286	FRESA MD 2C 01,00MM R 0,5 REBAIXADA	1.0	4	1.5	50	30°	G9B81010
9971	FRESA MD 2C 01,50MM K2	1.5	4	4.5	40	30°	G9424015
10132	FRESA MD 2C 02,00MM K2	2.0	2	8.0	32	30°	G9424020
24857	FRESA MD 2C 02,00MM R0,2 K2	2.0	4	4.0	50	30°	G9B82020
13133	FRESA MD 2C 02,00MM R0,5 K2	2.0	4	4.0	50	30°	G9B82902
6021	FRESA MD 2C 02,50MM K2	2.5	2.5	8.0	32	30°	G9424025
24048	FRESA MD 2C 02,50MM K2 REBAIXADA 12	2.5	4	3.7	50	30°	G9B80931
23655	FRESA MD 2C 02,50MM K2 REBAIXADA 20	2.5	4	3.7	50	30°	G9B80933
9765	FRESA MD 2C 03,00MM H3 K2	3.0	3	12.0	32	30°	G9424030
18101	FRESA MD 2C 03,00MM K2	3.0	6	4.0	50	30°	G9444030
23231	FRESA MD 2C 03,00MM K2 LONGA	3.0	6	7.0	50	30°	G9527030
23656	FRESA MD 2C 03,00MM K2 REBAIXADA	3.0	6	4.5	75	30°	G9B80937
24856	FRESA MD 2C 03,00MM R0,2 K2	3.0	4	6	50	30°	G9B8203
16411	FRESA MD 2C 03,00MM R0,5 K2	3.0	4	6	50	30°	G9B82906
24287	FRESA MD 2C 03,00MM R 1,5 REBAIXADA	3.0	6	4.5	60	30°	G9B81926
9928	FRESA MD 2C 03,50MM K2	3.5	3.5	12	32	30°	G9424035
24682	FRESA MD 2C 03,50MM K2 LONGA	3.5	3.5	7	50	30°	G9527035
9766	FRESA MD 2C 04,00MM H4 K2	4.0	4	12	40	30°	G9424040
17721	FRESA MD 2C 04,00MM H4 R0.5 LONGA K2	4.0	4	8	75	30°	G9B83040
19819	FRESA MD 2C 04,00MM K2 EXTRA LONGA	4.0	4	20	60	30°	G9452904
23771	FRESA MD 2C 04,00MM K2 LONGA	4.0	4	8	50	30°	G9527040
24855	FRESA MD 2C 04,00MM R0,2 K2	4.0	4	8	50	30°	G9B82040
16410	FRESA MD 2C 04,00MM R0,5 K2	4.0	4	8	50	30°	G9B82909
9929	FRESA MD 2C 04,50MM K2	4.5	4.5	14	50	30°	G9424045
24681	FRESA MD 2C 04,50MM K2 LONGA	4.5	4.5	8	50	30°	G9527045
9970	FRESA MD 2C 05,00MM K2	5.0	5	14	50	30°	G9424050
18109	FRESA MD 2C 05,00MM K2 EXTRA LONGA	5.0	5	25	75	30°	G9452905
23772	FRESA MD 2C 05,00MM K2 LONGA	5.0	5	10	50	30°	G9527050
25503	FRESA MD 2C 05,00MM R0,5 K2	5.0	6	10	50	30°	G9B82912
9737	FRESA MD 2C 05,50MM K2	5.5	5.5	16	50	30°	G9424055
9536	FRESA MD 2C 06,00MM K2	6.0	6	16	50	30°	G9424060
19818	FRESA MD 2C 06,00MM K2 EXTRA LONGA	6.0	6	30	75	30°	G9452906
23773	FRESA MD 2C 06,00MM K2 LONGA	6.0	6	10	57	30°	G9527060
25504	FRESA MD 2C 06,00MM R0,5 K2	6.0	6	12	50	30°	G9B82915
17602	FRESA MD 2C 07,00MM K2	7.0	7	20	60	30°	G9424070
24112	FRESA MD 2C 07,00MM K2 LONGA	7.0	7	13	60	30°	G9527070

K2
YG1 - CONTINUAÇÃO

Código	Descrição	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Ângulo	Referência
12091	FRESA MD 2C 07,50MM K2	7.5	8	13	60	30°	G9424075
10314	FRESA MD 2C 08,00MM K2	8.0	8	13	60	30°	
24809	FRESA MD 2C 08,00MM K2 EXTRA LONGA	8.0	8	30	75	30°	G9452908
24680	FRESA MD 2C 08,00MM K2 LONGA	8.0	8	16	63	30°	G9527080
19722	FRESA MD 2C 08,00MM R0,5 K2	8.0	8	16	60	30°	G9B82080
12090	FRESA MD 2C 08,50MM K2	8.5	8	16	63	30°	G9527085
18794	FRESA MD 2C 09,00MM K2	9.0	9	20	60	30°	G9424090
17989	FRESA MD 2C 09,00MM K2 LONGA	9.0	9	16	67	30°	G9527090
25245	FRESA MD 2C 10,00MM EXTRA LONGA K2	10.0	10	40	100	30°	G9452910
17899	FRESA MD 2C 10,00MM K2	10.0	10	22	70	30°	G9424100
16964	FRESA MD 2C 10,00MM K2 LONGA	10.0	10	19	72	30°	G9527100
24255	FRESA MD 2C 11,00MM K2 LONGA	11.0	11	22	83	30°	G9527110
11709	FRESA MD 2C 12,00MM K2	12.0	12	22	70	30°	G9424120
24683	FRESA MD 2C 12,00MM K2 LONGA	12.0	12	22	83	30°	G9527120
25379	FRESA MD 2C 12,00MM EXTRA LONGA	12.0	12	75	150	30°	E5452120
11710	FRESA MD 2C 13,00MM K2	13.0	13	22	83	30°	G9527130
24099	FRESA MD 2C 14,00MM K2	14.0	14	25	75	30°	G9424140
11711	FRESA MD 2C 15,00MM K2	15.0	15	26	92	30°	G9527150
16856	FRESA MD 3C 03,00MM H3 K2	3.0	3	12	32	30°	G9425030
17970	FRESA MD 3C 10,00MM K2	10.0	10	19	72	30°	G9528100
17823	FRESA MD 3C 12,00MM K2 LONGA	12.0	12	22	83	30°	G9528120
5550	FRESA MD 4C 01,00MM K2	1.0	4	3	40	30°	G9432010
5551	FRESA MD 4C 01,50MM K2	1.5	4	4.5	40	30°	G9432015
16132	FRESA MD 4C 02,00MM R0,5 K2	2.0	4	4	50	30°	G9B84902
16852	FRESA MD 4C 02,00MM CURTA K2	2.0	2	8	32	30°	G9432020
5552	FRESA MD 4C 02,00MM K2	2.0	6	4	50	30°	G9448020
23086	FRESA MD 4C 02,50MM R0,5 K2	2.5	4	5	50	30°	G9B82904
5553	FRESA MD 4C 02,50MM K2	2.5	6	4	50	30°	G9448025
20121	FRESA MD 4C 03,00MM EXTRA LONGA K2	3.0	3	20	60	30°	G9453903
16853	FRESA MD 4C 03,00MM H3 K2	3.0	3	12	32	30°	G9432030
5554	FRESA MD 4C 03,00MM K2	3.0	6	5	50	30°	G9448030
16854	FRESA MD 4C 03,00MM LONGA K2	3.0	4	8	75	30°	G954003007
19465	FRESA MD 4C 03,00MM R0,5 K2	3.0	4	6	50	30°	G9B84906
5555	FRESA MD 4C 03,50MM K2	3.5	6	6	50	30°	G9448035
22875	FRESA MD 4C 04,00MM EXTRA LONGA K2	4.0	4	30	75	30°	E5453040
24427	FRESA MD 4C 04,00MM H4 EXTRA LONGA K2	4.0	4	20	60	30°	G9453904
16596	FRESA MD 4C 04,00MM H4 K2	4.0	4	14	51	30°	G9A69040
17454	FRESA MD 4C 04,00MM H4 R0.5 LONGA K2	4.0	4	8	75	30°	G9B85040
5556	FRESA MD 4C 04,00MM K2	4.0	6	14	50	30°	
18167	FRESA MD 4C 04,00MM K2 LONGA	4.0	4	11	50	30°	G9540040
17709	FRESA MD 4C 04,00MM R0,5 K2	4.0	4	8	50	30°	G9B84909
18729	FRESA MD 4C 04,00MM R0,5 K2 LONGA	4.0	4	8	75	30°	G9B85040
5557	FRESA MD 4C 04,50MM K2	4.5	6	8	54	30°	G9448045
26287	FRESA MD 4C 05,00MM EXTRA LONGA K2	5.0	5	40	100	30°	E5453050
5558	FRESA MD 4C 05,00MM K2	5.0	6	9	54	30°	G9448050
17990	FRESA MD 4C 05,00MM K2 LONGA	5.0	5	13	50	30°	G9540050

K2
YG1 - CONTINUAÇÃO

Código	Descrição	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Ângulo	Referência
17559	FRESA MD 4C 05,00MM R0,5 K2	5.0	6	10	50	30°	G9B84912
23261	FRESA MD 4C 05,50MM K2	5.5	5.5	9	50	30°	
24805	FRESA MD 4C 05,50MM K2 LONGA	5.5	5.5	13	50	30°	G9540055
22876	FRESA MD 4C 06,00MM EXTRA LONGA K2	6.0	6	30	75	30°	G9453906
5559	FRESA MD 4C 06,00MM K2	6.0	6	10	54	30°	G9448060
18075	FRESA MD 4C 06,00MM K2 EX LONGA	6.0	6	30	75	30°	G9453906
25574	FRESA MD 4C 06,00MM R0,3 K2	6.0	6	12	50	30°	G9B84914
19558	FRESA MD 4C 06,00MM R0,5 K2	6.0	6	12	50	30°	G9B84915
25299	FRESA MD 4C 06,00MM R0,5 LONGA K2	6.0	6	12	75	30°	G9B85060
17905	FRESA MD 4C 06,00MM R1,0 K2	6.0	6	12	50	30°	G9B84916
26066	FRESA MD 4C 06,00MM R1,0 LONGA K2	6.0	6	12	75	30°	G9B85904
25884	FRESA MD 4C 06,50MM K2 LONGA	6.5	6.5	16	60	30°	G9540065
23342	FRESA MD 4C 07,00MM CURTA K2	7.0	7	20	60	30°	E5432070
5560	FRESA MD 4C 07,00MM K2	7.0	8	11	58	30°	G9448070
11813	FRESA MD 4C 07,50MM K2	7.5	7.5	19	63	30°	G9540075
17734	FRESA MD 4C 08,00MM EXTRA LONGA K2	8.0	8	50	150	30°	E5453080
5561	FRESA MD 4C 08,00MM K2	8.0	8	13	63	30°	
18210	FRESA MD 4C 08,00MM K2 LONGA	8.0	8	19	63	30°	G9540080
19466	FRESA MD 4C 08,00MM R0,5 K2	8.0	8	16	60	30°	G9B84080
23596	FRESA MD 4C 08,00MM R0,5 LONGA K2	8.0	8	16	100	30°	G9B85080
17229	FRESA MD 4C 08,00MM R1,0 K2	8.0	8	16	60	30°	G9B84917
23597	FRESA MD 4C 08,00MM R1,0 LONGA K2	8.0	8	16	100	30°	G9B85905
25743	FRESA MD 4C 08,50MM LONGA	8.5	8.5	19	67	30°	G9540085
5562	FRESA MD 4C 09,00MM K2	9.0	10	13	66	30°	G9448090
17991	FRESA MD 4C 09,00MM K2 LONGA	9.0	9	19	67	30°	G9540090
5563	FRESA MD 4C 10,00MM K2	10.0				30°	
17249	FRESA MD 4C 10,00MM K2 LONGA	10.0	10	40	100	30°	G9453910
18735	FRESA MD 4C 10,00MM R0,5 K2	10.0	10	20	75	30°	G9B84100
18822	FRESA MD 4C 10,00MM R0,5 K2 LONGA	10.0	10	20	100	30°	G9B85100
17230	FRESA MD 4C 10,00MM R1,0 K2	10.0	10	20	75	30°	G9B84921
23598	FRESA MD 4C 10,00MM R1,0 LONGA K2	10.0	10	20	100	30°	G9B85909
11712	FRESA MD 4C 11,00MM K2	11.0	11	26	83	30°	G9540110
5565	FRESA MD 4C 12,00MM K2	12.0	12	16	73	30°	G9448120
25380	FRESA MD 4C 12,00MM EXTRA LONGA	12.0	12	75	150	30°	E5453120
23599	FRESA MD 4C 12,00MM R1,0 LONGA K2	12.0	12	24	100	30°	G9B85913
26067	FRESA MD 4C 12,00MM R2,0 LONGA K2	12.0	12	24	100	30°	G9B85915
16377	FRESA MD 4C 13,00MM K2	13.0	13	26	83	30°	G9540130
5566	FRESA MD 4C 14,00MM K2	14.0	14	18	75	30°	G9448140
18682	FRESA MD 4C 14,00MM LONGA K2	14.0	14	65	150	30°	E5453140
17070	FRESA MD 4C 15,00MM K2	15.0	15	18	75	30°	G9A69150
19687	FRESA MD 4C 15,00MM LONGA K2	15.0	15	32	92	30°	G9540150
16974	FRESA MD 4C 16,00MM K2	16.0	16	32	89	30°	G9A69160
16393	FRESA MD 4C 16,00MM LONGA K2	16.0	16	45	100	30°	G9453916
16462	FRESA MD 4C 18,00MM K2	18.0	18	32	92	30°	G9540180
23434	FRESA MD 4C 18,00MM EXTRA LONGA	18.0	18	65	150	30°	E5453180
25864	FRESA MD 4C 20,00MM EXTRA LONGA	20.0	20	65	150	30°	E5453200

V7

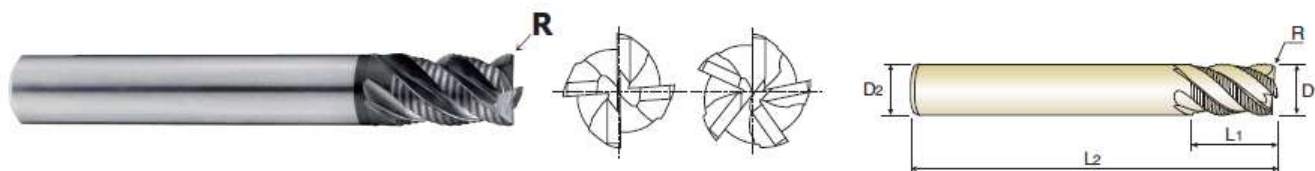
YG1



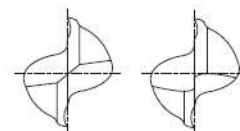
Código	Descrição	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Referência
16378	FRESA MD 4C 16,00MM R0,8 V7	16.0	16	32	92	EMD40160
23027	FRESA MD 4C 25,00MM R0.8 V7	25.0	25	38	104	EMD40250

X-POWER YG1

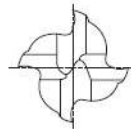

Código	Descrição	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Ângulo	Referência
16772	FRESA MD 2C 00,50MM X-POWER	00.5	3	1	40	30°	EM810005
20036	FRESA MD 2C 00,60MM X-POWER	00.6	3	1.2	40	30°	EM810006
22990	FRESA MD 2C 00,80MM X-POWER	00.8	3	1.6	40	30°	EM810008
22870	FRESA MD 2C 04,00MM X-POWER	04.0	6	11	45	30°	EM810040
24673	FRESA MD 2C 06,00MM X-POWER	06.0	6	13	50	30°	EM810060
16855	FRESA MD 4C 02,00MM LONGA X-POWER	02.0	4	8	40	30°	EM817020
24182	FRESA MD 4C 02,00MM R0.5 X-POWER	02.0	4	8	40	30°	EM81902001
17159	FRESA MD 4C 04,00MM X-POWER	04.0	6	11	45	30°	EM811040
23023	FRESA MD 4C 06,00MM R0,6 X-POWER	06.0	6	7	55	30°	EM839060
20119	FRESA MD 4C 06,50MM X-POWER	06.5	8	16	60	30°	EM811065
25159	FRESA MD 4C 08,00MM R0,5 LONGA X-POWER	08.0	8	25	70	30°	EM819080
17809	FRESA MD 4C 09,00MM X-POWER	09.0	10	19	70	30°	EM811090
16501	FRESA MD 4C 12,00MM X-POWER	12.0	12	26	75	30°	EM811120
17722	FRESA MD 4C 16,00MM LONGA X-POWER	16.0	16	50	110	30°	EM817160
17634	FRESA MD 4C 16,00MM R0.5 LONGA X-POWER	16.0	16	50	110	30°	EM819160
19563	FRESA MD 4C 20,00MM R0.5 LONGA X-POWER	20.0	20	55	110	30°	EM819200
11714	FRESA MD 4C 22,00MM X-POWER	22.0	20	38	105	30°	EM811220

X-SPEED YG1


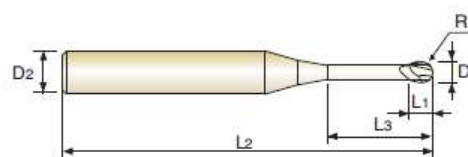
Código	Descrição	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Ângulo	Referência
24429	FRESA MD 4C 12,00MM R0,5 DESBASTE X-SPEED	12.0	12	18	83	M-Helix	G9D75120

METAL DURO YG1


up to Ø3mm over Ø3mm



Código	Descrição	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Ângulo	Referência
26135	FRESA MD 2C 01,50MM	01.5	4	4.5	40	30°	E5424015
13132	FRESA MD 2C 01,50MM R0,3	01.5	4	4.5	40	30°	
25632	FRESA MD 2C 02,50MM	02.5	2.5	8	32	30°	E5424025
25633	FRESA MD 2C 03,00MM	03.0	3	12	32	30°	E5424030
18277	FRESA MD 2C 03,50MM	03.5	3.5	7	50	30°	E5527035
24204	FRESA MD 3C 16,00MM LONGA	16.0	16	32	92	30°	
25575	FRESA MD 4C 10,00MM LONGA	10.0	10	22	72	30°	E5540100
25576	FRESA MD 4C 12,00MM LONGA	12.0	12	26	83	30°	E5540120
18681	FRESA MD 4C 16,00MM LONGA	16.0	16	32	92	30°	E5540160
25577	FRESA MD 4C 20,00MM LONGA	20.0	20	38	104	30°	E5540200

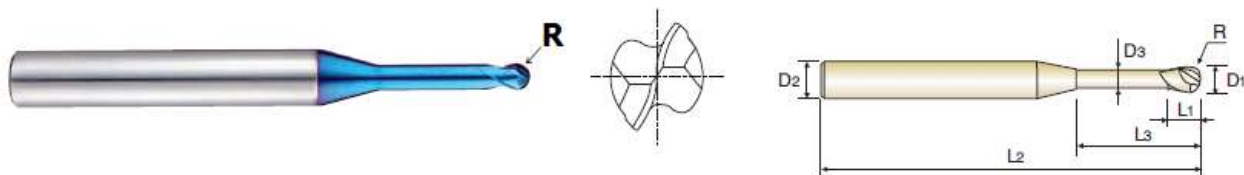
4G ESFÉRICA YG1


Código	Descrição	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Ângulo	Referência
25463	FRESA MD ESFERIC 2C 01,00MM LONGA 4G	01.0	4	2	50	30°	SEM84602010E
25915	FRESA MD ESFERIC 2C 01,00MM LONGA 70MM 4G	01.0	6	2.5	70	30°	SEMD98010070E
25255	FRESA MD ESFERIC 2C 01,50MM REBAIXADAM 4G	01.5	4	1.5	50	30°	SEM84601508E
25464	FRESA MD ESFERIC 2C 02,00MM LONGA 4G	02.0	4	2	50	30°	SEM84602010E
25916	FRESA MD ESFERIC 2C 04,00MM H4 LONGA 4G	04.0	4	8	70	30°	SEMD980404SE

ÁREA DE PROPAGANDA

ÁREA D

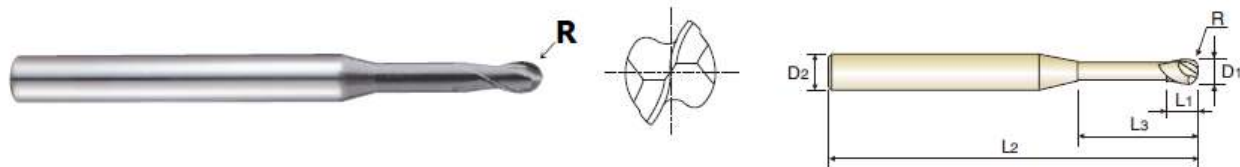
ÁREA DE PROPAGANDA

BLUE ESFÉRICA YG1


Código	Descrição	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Ângulo	Referência
16687	FRESA MD ESFERIC 2C 00,40MM BLUE	00.4	4	0.6	40	30°	G8A28004
24852	FRESA MD ESFERIC 2C 00,40MM MINI BLUE	00.4	6	0.4	50	30°	G8A53004
25991	FRESA MD ESFERIC 2C 00,50MM BLUE	00.5	4	0.7	40	30°	G8A28005
16686	FRESA MD ESFERIC 2C 00,60MM BLUE	00.6	4	0.9	40	30°	G8A28006
26281	FRESA MD ESFERIC 2C 00,60MM REBAIXADA BLUE	00.6	4	0.5	45	30°	G8A46915
16688	FRESA MD ESFERIC 2C 00,80MM BLUE	00.8	4	1.2	40	30°	G8A28008
26269	FRESA MD ESFERIC 2C 00,80MM BLUE REBAIXADA	00.8	4	0.6	45	30°	G8A46919
16330	FRESA MD ESFERIC 2C 01,00MM BLUE	01.0	6	1.5	50	30°	G8A28010
19415	FRESA MD ESFERIC 2C 01,00MM BLUE REBAIXADA	01.0	4	0.8	45	30°	G8A46010
16684	FRESA MD ESFERIC 2C 01,50MM BLUE	01.5	6	2.0	50	30°	G8A28015
19528	FRESA MD ESFERIC 2C 1,50MM BLUE REBAIXADA	01.5	4	1.2	45	30°	G8A46015
24892	FRESA MD ESFERIC 2C 01,50MM EXTRA CURTA BLUE	01.5	6	1.5	50	30°	G8A54907
24895	FRESA MD ESFERIC 2C 01,50MM H6 EXTRA CURTA BLUE	01.5	6	2.5	50	30°	G8A54908
16683	FRESA MD ESFERIC 2C 02,00MM BLUE	02.0	6	2.5	50	30°	G8A28020
19416	FRESA MD ESFERIC 2C 02,00MM BLUE REBAIXADA 8MM	02.0	4	1.6	45	30°	G8A46020
25917	FRESA MD ESFERIC 2C 02,00MM T60MM BLUE	02.0	4	1.6	60	30°	G8A46945
17019	FRESA MD ESFERIC 2C 02,50MM BLUE	02.5	6	3	50	30°	G8A28025
16580	FRESA MD ESFERIC 2C 03,00MM BLUE	03.0	6	4	60	30°	G8A28030
19529	FRESA MD ESFERIC 2C 03,00MM LONGA BLUE	03.0	6	3	60	30°	G8A38030
16685	FRESA MD ESFERIC 2C 04,00MM BLUE	04.0	6	5	60	30°	G8A28040
17304	FRESA MD ESFERIC 2C 04,00MM LONGA BLUE	04.0	6	4	70	30°	G8A38040
22883	FRESA MD ESFERIC 2C 04,50MM BLUE	04.5	6	5.5	60	30°	G8A28045
16581	FRESA MD ESFERIC 2C 05,00MM BLUE	05.0	6	6	60	30°	G8A28050
16698	FRESA MD ESFERIC 2C 06,00MM BLUE	06.0	6	7	60	30°	G8A28060
16699	FRESA MD ESFERIC 2C 08,00MM BLUE	08.0	8	9	80	30°	G8A28080
23513	FRESA MD ESFERIC 2C 1,50MM BLUE LONGA	01.5	4	1.5	50	30°	G8A38015
26233	FRESA MD ESFERIC 2C 10,00MM BLUE	10.0	10	11	80	30°	G8A28100
26234	FRESA MD ESFERIC 2C 12,00MM BLUE	12.0	12	14	80	30°	G8A28120
23788	FRESA MD ESFERIC 3C 04,00MM BLUE LONGA	04.0	6	8	70	30°	G8A59040
23512	FRESA MD ESFERIC 3C 06,00MM BLUE LONGA	06.0	6	12	90	30°	G8A59060
23789	FRESA MD ESFERIC 3C 08,00MM BLUE LONGA	08.0	8	14	100	30°	G8A59080
17885	FRESA MD ESFERIC 4C 08,00MM BLUE	08.0	8	9	60	30°	G8A47913

DE PROPAGANDA

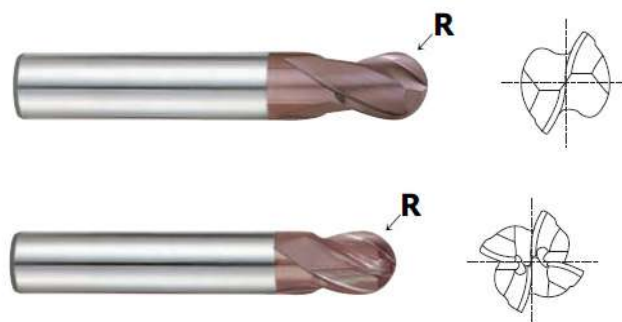
ÁREA DE PROPAGANDA

CRX S - ESFÉRICA YG1


Código	Descrição	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Ângulo	Referência
26046	FRESA MD ESFERIC 2C 00,50MM CRXS	00.5	4	0.5	45	30°	SGED2700504

K2 - ESFÉRICA

YG1



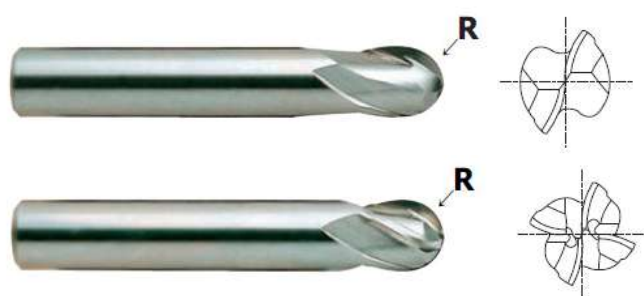
Código	Descrição	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Ângulo	Referência
6035	FRESA MD ESFERIC 2C 01,00MM K2	01.0	3	3	39	30°	G9A70010
6036	FRESA MD ESFERIC 2C 01,50MM K2	01.5	3	5	39	30°	G9A70015
17251	FRESA MD ESFERIC 2C 02,00MM K2	02.0	3	7	39	30°	G9A70020
6038	FRESA MD ESFERIC 2C 02,50MM K2	02.5	3	8	39	30°	G9A70025
17252	FRESA MD ESFERIC 2C 03,00MM H3 K2	03.0	3	9	39	30°	G9A70030
6039	FRESA MD ESFERIC 2C 03,00MM K2	03.0	6	4	48	30°	G9624030
22884	FRESA MD ESFERIC 2C 03,00MM K2 LONGA	03.0	6	7	57	30°	G9445030
15703	FRESA MD ESFERIC 2C 04,00MM H4 K2	04.0	4	14	51	30°	G9A70040
17756	FRESA MD ESFERIC 2C 04,00MM H4 K2 LONGA	04.0	4	8	75	30°	G9454040
6041	FRESA MD ESFERIC 2C 04,00MM K2	04.0	6	6	50	30°	G9624040
17158	FRESA MD ESFERIC 2C 04,00MM LONGA K2	04.0	4	8	75	30°	E5454040
6043	FRESA MD ESFERIC 2C 05,00MM K2	05.0	6	6	54	30°	G9437050
24490	FRESA MD ESFERIC 2C 05,00MM LONGA K2	05.0	6	10	57	30°	G9438050
6044	FRESA MD ESFERIC 2C 06,00MM K2	06.0	6	7	54	30°	G9437060
22872	FRESA MD ESFERIC 2C 06,00MM LONGA K2	06.0	6	10	57	30°	G9438060
6046	FRESA MD ESFERIC 2C 08,00MM K2	08.0	8	9	58	30°	G9437080
24491	FRESA MD ESFERIC 2C 08,00MM LONGA K2	08.0	8	16	63	30°	G9438080
25630	FRESA MD ESFERIC 2C 08,00MM LONGO ALCANCE K2	08.0	8	12	100	30°	G9454080
24428	FRESA MD ESFERIC 2C 8,00MM EXTRA-LONGA	08.0	8	30	75	30°	G9455908
6048	FRESA MD ESFERIC 2C 10,00MM K2	10.0	10	11	66	30°	G9437100
9252	FRESA MD ESFERIC 2C 12,00MM K2	12.0	12	14	71	30°	G9624120
11713	FRESA MD ESFERIC 2C 14,00MM K2	14.0	14	14	71	30°	G9624140

K2 - ESFÉRICA
YG1 - CONTINUAÇÃO

Código	Descrição	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Ângulo	Referência
9489	FRESA MD ESFERIC 2C 16,00MM K2	16.0	16	16	76	30°	G9624160
25063	FRESA MD ESFERIC 2C 18,00MM K2	18.0	18	18	76	30°	G9624180
17007	FRESA MD ESFERIC 4C 02,00MM K2	02.0	6	4	48	30°	G9634020
17008	FRESA MD ESFERIC 4C 04,00MM K2	04.0	6	6	50	30°	G9634040
17556	FRESA MD ESFERIC 4C 05,00MM K2	05.0	6	7	51	30°	G9634050
17557	FRESA MD ESFERIC 4C 06,00MM K2	06.0	6	7	51	30°	G9634060
17558	FRESA MD ESFERIC 4C 08,00MM K2	08.0	8	9	59	30°	G9634080
17009	FRESA MD ESFERIC 4C 10,00MM K2	10.0	10	10	60	30°	G9634100
25434	FRESA MD ESFERIC 4C 12,00MM K2	12.0	12	14	71	30°	G9634120

X-POWER - ESFÉRICA
YG1

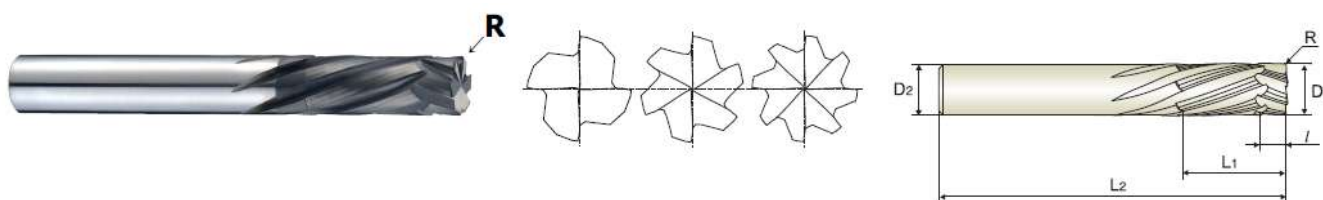

Código	Descrição	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Ângulo	Referência
25809	FRESA MD ESFERIC 2C 00,50MM X-POWER	00.5	3	1.1	40	30°	EM865005
25013	FRESA MD ESFERIC 2C 01,50MM REB12 X-POWER	01.5	4	2.3	45	30°	EM886906
19920	FRESA MD ESFERIC 2C 02,00MM X-POWER	02.0	6	3	50	30°	EM876020
16380	FRESA MD ESFERIC 2C 06,00MM X-POWER	06.0	6	7	54	30°	EM876060
6045	FRESA MD ESFERIC 2C 07,00MM X-POWER	07.0	8	8	58	30°	EM876070
6047	FRESA MD ESFERIC 2C 09,00MM X-POWER	09.0	10	19	70	30°	
24534	FRESA MD ESFERIC 2C 14,00MM LONGA X-POWER	14.0	14	26	110	30°	EM813140
17302	FRESA MD ESFERIC 4C 03,00MM X-POWER	03.0	6	8	45	30°	
17303	FRESA MD ESFERIC 4C 04,00MM X-POWER	04.0	6	11	45	30°	

METAL DURO - ESFÉRICA
YG1


Código	Descrição	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Ângulo	Referência
26030	FRESA MD ESFERIC 2C 01,00MM	01.0	6	4	48	30°	E562401011
26031	FRESA MD ESFERIC 2C 02,00MM	02.0	6	4	48	30°	E5624020
26032	FRESA MD ESFERIC 2C 03,00MM	03.0	6	4	48	30°	E5624030
6042	FRESA MD ESFERIC 2C 04,50MM	04.5	6	4	48	30°	B222F
12269	FRESA MD ESFERIC 2C 05,50MM	05.5	6	7	51	30°	
26033	FRESA MD ESFERIC 2C 06,00MM	06.0	6	7	51	30°	E5624060
26034	FRESA MD ESFERIC 2C 10,00MM	10.0	10	10	60	30°	E5624100
23922	FRESA MD ESFERIC 2C 12,00MM	12.0	12	14	71	30°	E5624120
23923	FRESA MD ESFERIC 4C 06,00MM	06.0	6	7	51	30°	E5634060
19370	FRESA MD ESFERIC 4C 20,00MM	20.0	20	20	82	30°	E5634200

K2 - MULTICANAL YG1

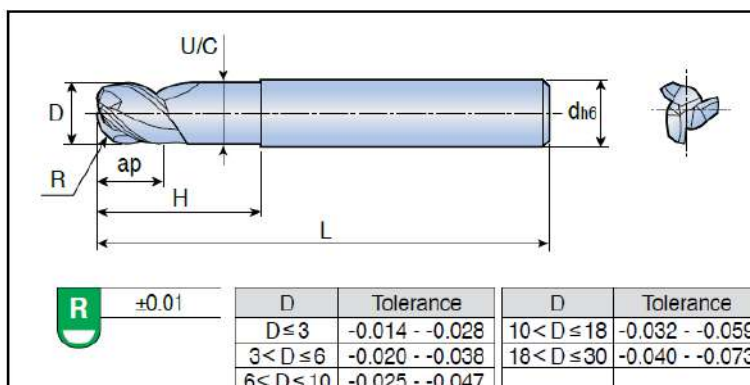
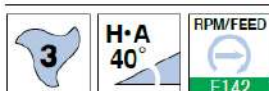

Código	Descrição	Nº Canal	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Ângulo	Referência
24600	FRESA MD MULTI C 08,00MM DESBASTE LONGA K2	3	08.0	8	16	63	30°	G9A42080
26039	FRESA MD MULTI C 10,00MM DESBASTE LONGA K2	4	10.0	10	22	72	30°	G9A42100
25197	FRESA MD MULTI C 16,00MM DESBASTE LONGA K2	4	16.0	16	32	92	30°	G9A42160

D-POWER - MULTICANAL YG1


Código	Descrição	Nº Canal	D1 (mm)	D2 (mm)	L1 (mm)	L2 (mm)	Ângulo	Referência
26282	FRESA MD MULTI C 06,00MM R0,5 D-POWER	4	06.0	6	12	65	20°	GUF40060

AEB TAEGUTEC - AluMill

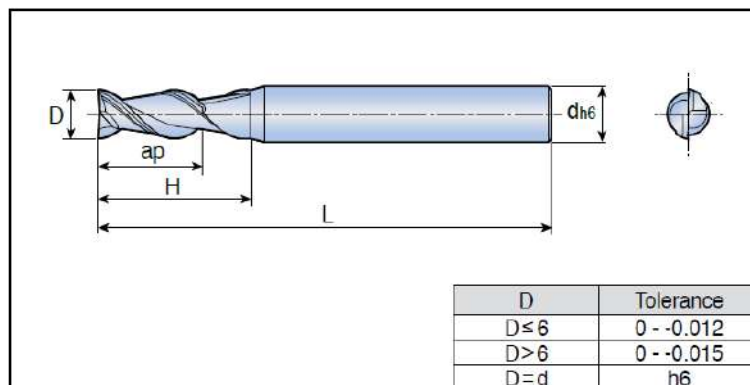
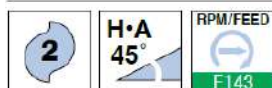

• Aluminum and Non-ferrous materials



Código	Descrição	D (mm)	ap (mm)	L (mm)	H (mm)	d (mm)
17188	FRESA MD AEB 3100M TT9020	10	15.0	80	30	10

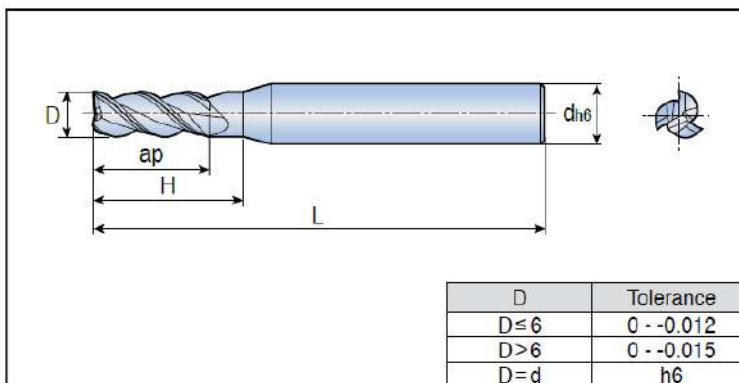
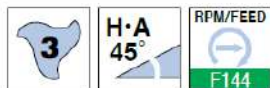
AES TAEGUTEC - AluMill


• Aluminum and Non-ferrous materials



AES TAEGUTEC - AluMill - CONTINUAÇÃO

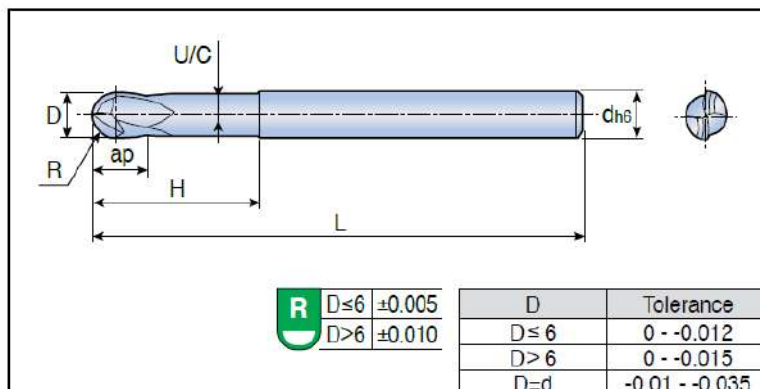
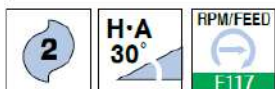

• Aluminum and Non-ferrous materials



Código	Descrição	D (mm)	ap (mm)	L (mm)	H (mm)	d (mm)
12323	FRESA MD AES 2020 UF10	2.0	6.0	40	8	4
11231	FRESA MD AES 2020XL UF10	2.0	12.0	60	15	4
23430	FRESA MD AES 2030 R0.5 UF10	3.0	10.0	47	13	6
6932	FRESA MD AES 2030 UF10	3.0	10.0	47	13	6
12355	FRESA MD AES 2030XL UF10	3.0	20.0	70	23	6
7416	FRESA MD AES 2035 UF10	3.5	10.0	47	13	6
6933	FRESA MD AES 2040 UF10	4.0	12.0	47	15	6
10818	FRESA MD AES 2040XL UF10	4.0	25.0	70	28	6
6934	FRESA MD AES 2050 UF10	5.0	15.0	52	20	6
11390	FRESA MD AES 2050XL UF10	5.0	30.0	80	35	6
6935	FRESA MD AES 2060 UF10	6.0	15.0	52	-	6
12328	FRESA MD AES 2060XL UF10	6.0	30.0	80	30	6
6936	FRESA MD AES 2070 UF10	7.0	20.0	60	26	8
6937	FRESA MD AES 2080 UF10	8.0	20.0	60	-	8
8598	FRESA MD AES 2080XL UF10	8.0	40.0	90	-	8
6784	FRESA MD AES 2100 UF10	10.0	25.0	68	31	10
8564	FRESA MD AES 2100XL UF10	10.0	50.0	100	-	10
6673	FRESA MD AES 2120 UF10	12.0	30.0	76	-	12
17627	FRESA MD AES 2140 UF10	14.0	35.0	85	40	14
7496	FRESA MD AES 2160 UF10	16.0	40.0	90	-	16
12228	FRESA MD AES 2160XL R2.0 UF10	16.0	70.0	125	-	16
18761	FRESA MD AES 2160XL R3.0 UF10	16.0	70.0	125	-	16
8594	FRESA MD AES 2160XL UF10	16.0	70.0	125	-	16
19408	FRESA MD AES 2170 UF10	17.0	40.0	110	55	18
19409	FRESA MD AES 2190 UF10	19.0	40.0	110	55	20
23578	FRESA MD AES 3030 UF10	3.0	10.0	47	13	6
11432	FRESA MD AES 3060 UF10	6.0	15.0	52	-	6
11391	FRESA MD AES 3060XL UF10	6.0	25.0	80	30	6
12244	FRESA MD AES 3080 UF10	8.0	20.0	60	-	8
10446	FRESA MD AES 3080XL UF10	8.0	30.0	90	-	8
12245	FRESA MD AES 3100 UF10	10.0	25.0	68	31	10
9320	FRESA MD AES 3100XL UF10	10.0	35.0	100	-	10
13371	FRESA MD AES 3120 UF10	12.0	30.0	76	-	12
10297	FRESA MD AES 3120XL UF10	12.0	40.0	110	-	12
11399	FRESA MD AES 3160 UF10	16.0	40.0	90	-	16
12359	FRESA MD AES 3160XL UF10	16.0	55.0	125	-	16
8976	FRESA MD AES 3200 UF10	20.0	45.0	110	-	20

AMB TAEGUTEC - ApexMill

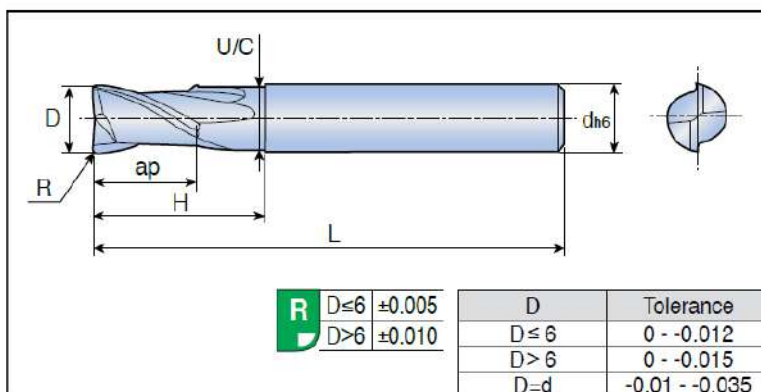
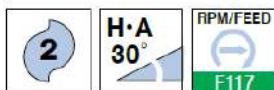

- Pre-hardened Steels, Tool Steels, Alloy Steels, Carbon Steels
- Hardness < 55 HRC



Código	Descrição	D (mm)	ap (mm)	L (mm)	H (mm)	d (mm)
6806	FRESA MD AMB 2010T-6D KT5515	1.0	1.2	52	2.5	6
6851	FRESA MD AMB 2015T-6D KT8600	1.5	1.2	52	2.5	6
15432	FRESA MD AMB 2020T-3D TT1040	2.0	2.5	40	5	3
19161	FRESA MD AMB 2020T-6D KT8600	2.0	2.5	52	5	6
6692	FRESA MD AMB 2020T-6D TT1040	2.0	2.5	52	5	6
23330	FRESA MD AMB 2020T-6D TT5510	2.0	2.5	52	5	6
19581	FRESA MD AMB 2030T TT5515	3.0	4.0	70	9	6
7418	FRESA MD AMB 2030T-3D TT1040	3.0	4.0	40	9	3
6728	FRESA MD AMB 2030T-6D KT8600	3.0	4.0	52	9	6
24536	FRESA MD AMB 2040T TT5515	4.0	5.0	70	12	6
7419	FRESA MD AMB 2040T-4D TT1040	4.0	5.0	50	12	4
6730	FRESA MD AMB 2050T TT1040	5.0	6.0	80	15	6
19162	FRESA MD AMB 2060T KT8600	6.0	7.0	80	18	6
6731	FRESA MD AMB 2060T TT5515	6.0	7.0	80	18	6
19163	FRESA MD AMB 2080T KT8600	8.0	10.0	90	24	8
6852	FRESA MD AMB 2080T TT5515	8.0	10.0	90	24	8
7008	FRESA MD AMB 2100T TT5515	10.0	12.0	100	30	10
17597	FRESA MD AMB 2120T TT5515	12.0	14.0	110	36	12

AMF TAEGUTEC - ApexMill


- Pre-hardened Steels, Tool Steels, Alloy Steels, Carbon Steels
- Hardness < 55 HRC

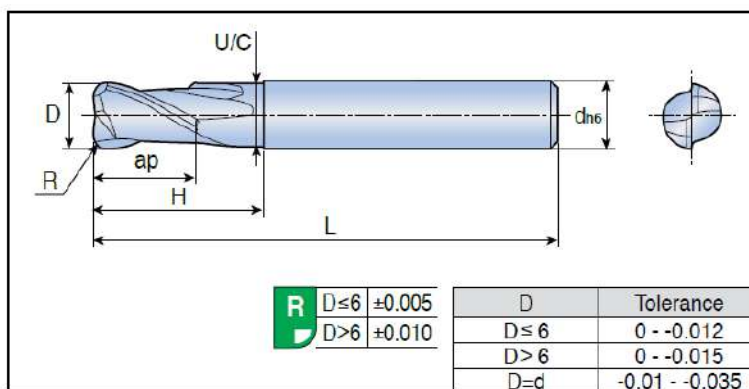
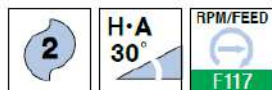


AMF TAEGUTEC - ApexMill - CONTINUAÇÃO

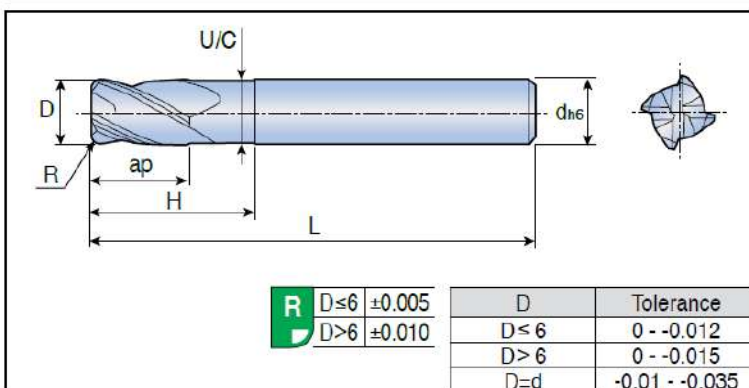
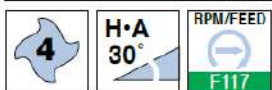
Código	Descrição	D (mm)	ap (mm)	L (mm)	H (mm)	d (mm)
7793	FRESA MD AMF 2010T TT1040	1.0	1.2	52	2.5	6
8468	FRESA MD AMF 2020T KT8600	2.0	2.5	52	5	6
19159	FRESA MD AMF 2020T-3D TT1040	2.0	2.5	40	5	3
8469	FRESA MD AMF 2030T TT1040	3.0	5.0	52	8	6
17137	FRESA MD AMF 2030T-3D TT1040	3.0	5.0	40	8	3
16669	FRESA MD AMF 2040T-4D TT1040	4.0	6.0	40	10	4
23604	FRESA MD AMF 2050T TT1040	5.0	8.0	52	15	6
19160	FRESA MD AMF 2060T TT5515	6.0	8.0	52	15	6
17138	FRESA MD AMF 2080T TT5515	8.0	12.0	60	20	6
19600	FRESA MD AMF 2100T TT1040	10.0	15.0	68	25	10
16670	FRESA MD AMF 2120T TT1040	12.0	18.0	76	28	12

AMR TAEGUTEC - ApexMill

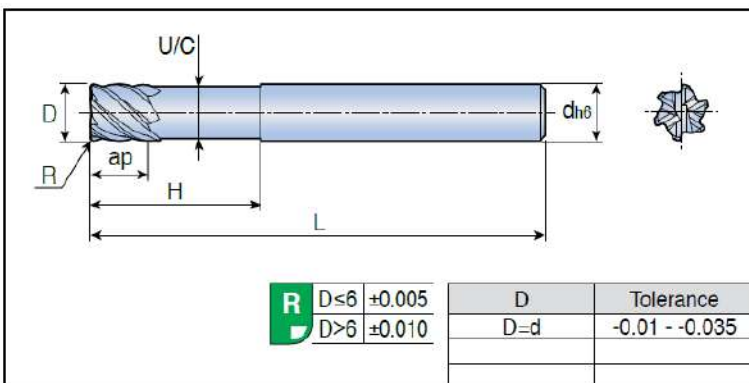
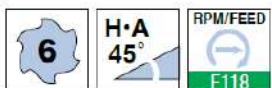

- Pre-hardened Steels, Tool Steels, Alloy Steels, Carbon Steels
- Hardness < 55 HRC



- Pre-hardened Steels, Tool Steels, Alloy Steels, Carbon Steels
- Hardness < 55 HRC



- Pre-hardened Steels, Tool Steels, Alloy Steels, Carbon Steels
- Hardness < 55 HRC
- Finishing

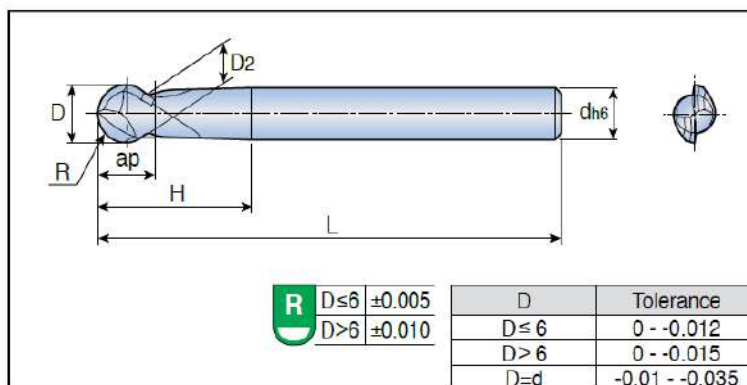
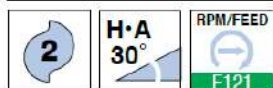


AMR TAEGUTEC - ApexMill - CONTINUAÇÃO

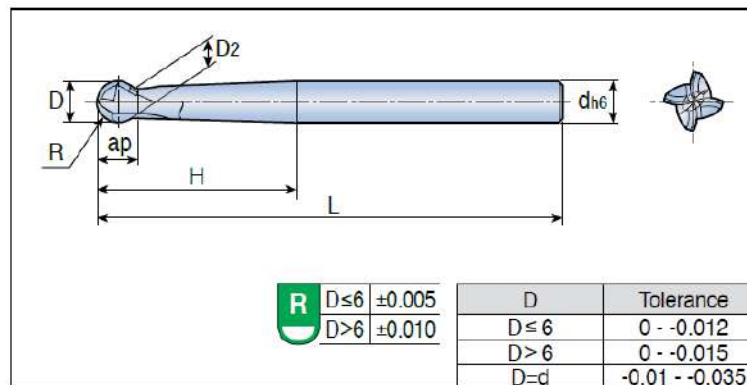
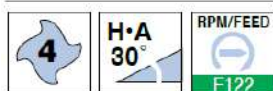
Código	Descrição	D (mm)	ap (mm)	L (mm)	H (mm)	d (mm)
6955	FRESA MD AMR 2030T- R0.5 TT5515	3.0	5.0	52	8	6
6944	FRESA MD AMR 2030T- R1.0 KT8600	3.0	5.0	52	8	6
7026	FRESA MD AMR 2040T- R0.5 KT8600	4.0	6.0	52	6	6
6945	FRESA MD AMR 2040T- R1.0 KT8600	4.0	6.0	52	6	6
17957	FRESA MD AMR 2060T-R0.5 TT1040	6.0	8.0	52	8	6
6956	FRESA MD AMR 2080T- R1.0 KT8600	8.0	12.0	60	20	8
17958	FRESA MD AMR 2080T-R0.5 TT1040	8.0	12.0	60	20	8
9392	FRESA MD AMR 4030T- R0.5 TT1040	3.0	5.0	52	8	6
13372	FRESA MD AMR 4030T- R1.0 KT8600	3.0	5.0	52	8	6
7860	FRESA MD AMR 4040T-R0.5 TT5515	4.0	6.0	52	10	6
10216	FRESA MD AMR 4040T-R1.0 TT1040	4.0	6.0	52	10	6
10495	FRESA MD AMR 4060T-R0.5 TT1040	6.0	8.0	52	15	6
7861	FRESA MD AMR 4060T-R1.0 TT5515	6.0	8.0	52	15	6
10857	FRESA MD AMR 4080T- R0.5 TT1040	8.0	12.0	60	20	8
13087	FRESA MD AMR 4080T- R1.0 TT5515	8.0	12.0	60	20	8
7078	FRESA MD AMR 4100T-R1.0 TT1040	10.0	15.0	68	25	10
16946	FRESA MD AMR 4100T-R2.0 TT1040	10.0	15.0	68	25	10
12621	FRESA MD AMR 4120T-R0.5 TT1040	12.0	18.0	76	28	12
10698	FRESA MD AMR 4120T-R1.0 TT1040	12.0	18.0	76	28	12
24744	FRESA MD AMR 4120T-R2.0 TT1040	12.0	18.0	76	28	12
12777	FRESA MD AMR 6120T R1.0 TT1040	12.0	18.0	76	28	12

BES TAEGUTEC - ApexMill


- Pre-hardened Steels, Tool Steels, Alloy Steels, Carbon Steels
- Hardness < 55 HRC



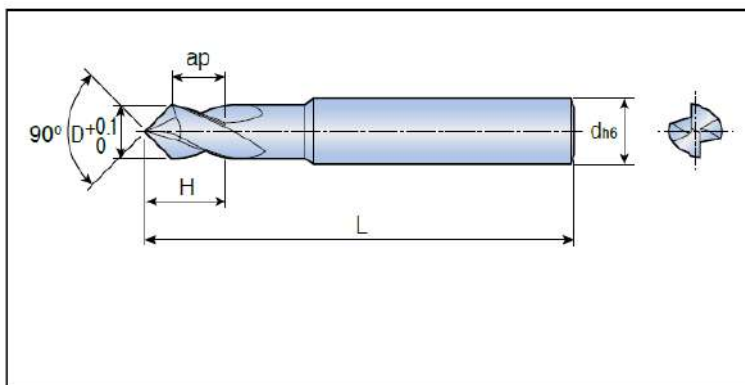
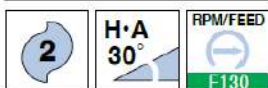
- Pre-hardened Steels, Tool Steels, Alloy Steels, Carbon Steels
- Hardness < 55 HRC



Código	Descrição	D (mm)	ap (mm)	L (mm)	H (mm)	d (mm)
14115	FRESA MD BES 2160T TT9030	16.0	15.4	155	58	16
19894	FRESA MD BES 4080T TT1040	8.0	8.2	100	33	8

CEM TAEGUTEC - ApexMill


- Multi-function
- Centering, Chamfering, V-shape grooving and side-milling

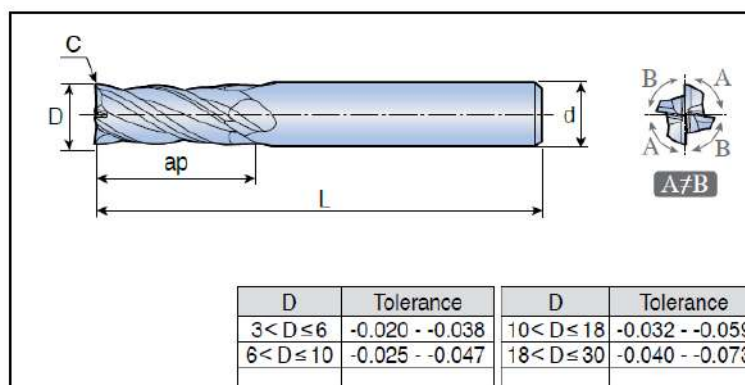
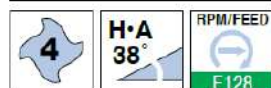


Código	Descrição	D (mm)	ap (mm)	L (mm)	H (mm)	d (mm)
10047	FRESA MD CEM 2060 UF10	6.0	6.0	80	9	6
23273	FRESA MD CEM 2080 UF10	8.0	8.0	90	12	8
7751	FRESA MD CEM 1016 UF10	10.0	10.0	115	15	16
7766	FRESA MD CEM 1216 UF10	12.0	12.0	145	20	16

CFM TAEGUTEC - ApexMill

VFI-MILL

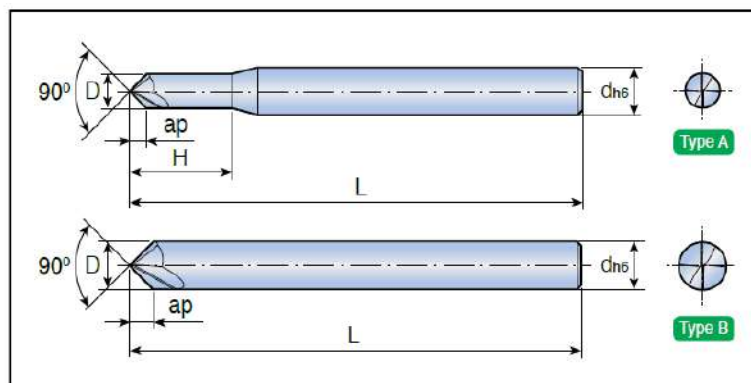
- Vibration free mill
- Maximize stock removal rate
- Alloy Steels, Carbon Steels, Stainless Steels
- Hardness < 45 HRC



Código	Descrição	D (mm)	ap (mm)	L (mm)	d (mm)
10878	FRESA MD CFM 4060M TT9030	6.0	14.0	57	6
10879	FRESA MD CFM 4080T TT9030	8.0	18.0	63	8
17317	FRESA MD CFM 4120T TT9030	10.0	26.0	83	12

ECEM TAEGUTEC - ApexMill


- Multi-function
- Chamfer boring, Chamfer milling, Centering, V-Slot milling

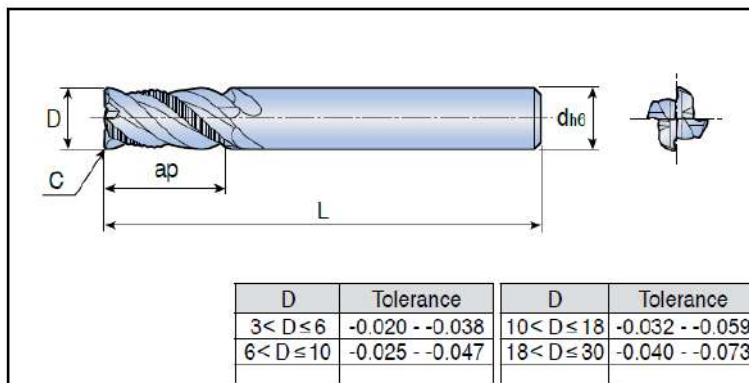


Código	Descrição	D (mm)	ap (mm)	L (mm)	d (mm)
17779	FRESA MD ECEM 2120 UF10	12.0	5.9	83	12

FSM TAEGUTEC - ApexMill

MULTIMILL

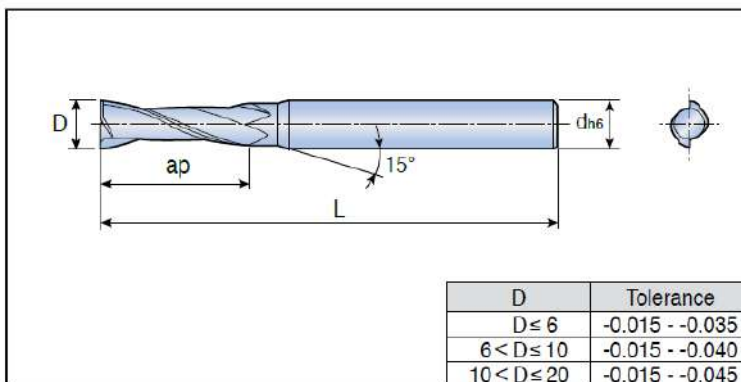
- MultiMill (Rough + Finish)
- Reduces tool changeovers and Set-up times


H·A
45°


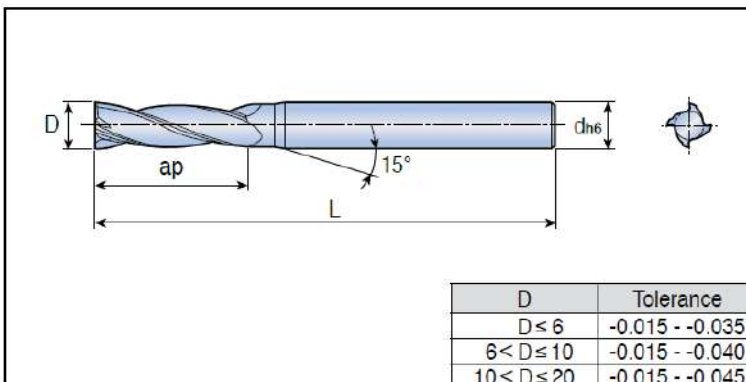
Código	Descrição	D (mm)	ap (mm)	L (mm)	d (mm)
10496	FRESA MD FSM 4060M TT9030	6.0	14.0	57	6
10497	FRESA MD FSM 4080M TT9030	8.0	18.0	63	8
10498	FRESA MD FSM 4100M TT9030	10.0	22.0	72	10
10499	FRESA MD FSM 4120M TT9030	12.0	26.0	83	12
15090	FRESA MD FSM 4140M TT9030	14.0	30.0	83	14
10500	FRESA MD FSM 4160M TT9030	16.0	34.0	92	16
13253	FRESA MD FSM 4200M TT9030	20.0	42.0	104	20

HES TAEGUTEC - ApexMill


- Long reach and long flute cutter design
- Pre-hardened Steels, Tool Steels, Alloy Steels, Carbon Steels
- Hardness < 45 HRC

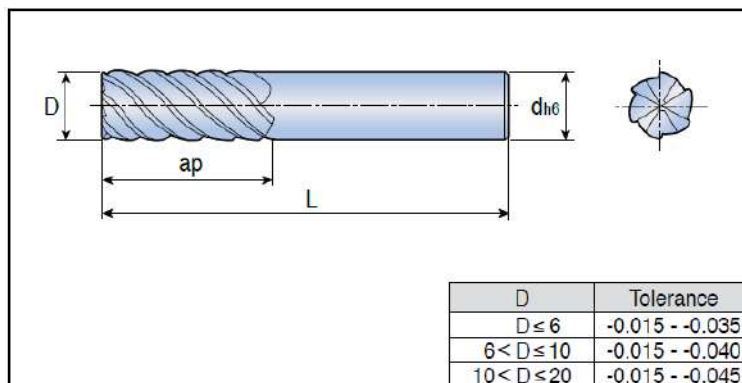
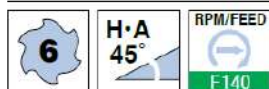

H·A
30°


- Long reach and long flute cutter design
- Pre-hardened Steels, Tool Steels, Alloy Steels, Carbon Steels
- Hardness < 45 HRC


H·A
30°


HES TAEGUTEC - ApexMill - CONTINUAÇÃO


- Stainless Steels, Super Alloys
- Hardness < 40 HRC
- Finishing



Código	Descrição	D (mm)	ap (mm)	L (mm)	d (mm)
16920	FRESA MD HES 2014T TT1040	1.4	10.0	47	4
6869	FRESA MD HES 2020 UFB	2.0	10.0	47	4
8186	FRESA MD HES 20238T TT9030 - 3/32	2.38	10.0	47	4
7132	FRESA MD HES 2025T-6 TT1040	2.5	10.0	47	6
6871	FRESA MD HES 2030 UFB	3.0	10.0	47	4
7270	FRESA MD HES 2030LT (10X70) TT9030	3.0	10.0	70	6
8422	FRESA MD HES 2030T-R0.5 TT9030	3.0	10.0	47	6
8454	FRESA MD HES 2030T-R1,0 TT9030	3.0	10.0	47	6
6898	FRESA MD HES 2030XLT (20X70) TT9030	3.0	20.0	70	6
8189	FRESA MD HES 20317T TT9030 - 1/8	3.17	12.0	47	6
6808	FRESA MD HES 2040 UFB	4.0	12.0	47	6
7271	FRESA MD HES 2040LT (12X70) TT9030	4.0	12.0	70	6
25296	FRESA MD HES 2040LT (20X100) TT9080	4.0	20.0	100	6
8423	FRESA MD HES 2040T-R0,5 TT1040	4.0	12.0	47	6
8455	FRESA MD HES 2040T-R1.0 TT9030	4.0	12.0	47	6
6899	FRESA MD HES 2040XLT(20X70) TT1040	4.0	20.0	70	6
8188	FRESA MD HES 20476T TT9030 - 3/16	4.76	15.0	52	6
6809	FRESA MD HES 2050 UFB	5.0	15.0	52	6
7255	FRESA MD HES 2050 XLT TT9030	5.0	25.0	80	6
7013	FRESA MD HES 2050LT (15X80) TT9030	5.0	15.0	80	6
9264	FRESA MD HES 2050T-R0.5 TT9030	5.0	15.0	52	6
8458	FRESA MD HES 2050T-R1.0 TT9030	5.0	15.0	52	6
6810	FRESA MD HES 2060 UFB	6.0	15.0	52	6
6854	FRESA MD HES 2060 XLT TT5525	6.0	25.0	80	6
7011	FRESA MD HES 2060LT (15X80) TT9030	6.0	15.0	80	6
7002	FRESA MD HES 2060T-R0.5 TT9030	6.0	15.0	52	6
7003	FRESA MD HES 2060T-R1.0 TT9030	6.0	15.0	52	6
6812	FRESA MD HES 2080 UF10	8.0	20.0	60	8
6855	FRESA MD HES 2080 XLT TT9030	8.0	35.0	90	8
7012	FRESA MD HES 2080LT (20X90) TT9030	8.0	20.0	90	8
12739	FRESA MD HES 2080LT R0.5 TT1040	8.0	20.0	90	8
7004	FRESA MD HES 2080T-R0.5 TT9030	8.0	20.0	60	8
7005	FRESA MD HES 2080T-R1.0 TT1040Q	8.0	20.0	60	8
7010	FRESA MD HES 2100LT (25X100) TT9030	10.0	25.0	100	10
8414	FRESA MD HES 2100T-R0,5 TT9030	10.0	25.0	68	10
7006	FRESA MD HES 2100T-R1.0 TT9030	10.0	25.0	68	10

HES TAEGUTEC - ApexMill - CONTINUAÇÃO

Código	Descrição	D (mm)	ap (mm)	L (mm)	d (mm)
6799	FRESA MD HES 2100XLT(45X100)	10.0	45.0	100	10
7257	FRESA MD HES 2120 UFB	12.0	30.0	76	12
7887	FRESA MD HES 2120LT 30 X 110 TT9030	12.0	30.0	110	12
12740	FRESA MD HES 2120LTR0.5 TT1040	12.0	30.0	110	12
8467	FRESA MD HES 2120T-R0.5 TT9030	12.0	30.0	76	12
7007	FRESA MD HES 2120T-R1.0 TT9030	12.0	30.0	76	12
14405	FRESA MD HES 2120T-R2.0 TT9030	12.0	30.0	76	12
7072	FRESA MD HES 2120XLT(55X110) TT9030	12.0	55.0	110	12
8897	FRESA MD HES 2140LT TT9030	14.0	35.0	125	16
8538	FRESA MD HES 2160 UFB	16.0	30.0	110	16
10111	FRESA MD HES 2160XLT TT9030	16.0	70.0	125	16
10465	FRESA MD HES 2200XLT TT9030	20.0	75.0	150	20
7886	FRESA MD HES 4030LT(10 X 70) TT9030	3.0	10.0	70	6
11617	FRESA MD HES 4030LT-3D-R0.5 TT9030	3.0	10.0	70	6
8456	FRESA MD HES 4030LT-R0.5 TT5525	3.0	10.0	70	6
8457	FRESA MD HES 4030LT-R1.0 TT9030	3.0	10.0	70	6
8509	FRESA MD HES 4030T R1.0 TT9030	3.0	10.0	47	6
8831	FRESA MD HES 4030XLT (20X70) TT9030	3.0	20.0	70	6
7888	FRESA MD HES 4040 UF10	4.0	12.0	47	6
7889	FRESA MD HES 4040LT -R0.5 TT5515	4.0	12.0	70	6
7890	FRESA MD HES 4040LT -R1.0 TT5525	4.0	12.0	70	6
8844	FRESA MD HES 4040LT TT5525	4.0	12.0	70	6
25254	FRESA MD HES 4040T-R0.5 TT5515	4.0	12.0	47	6
8511	FRESA MD HES 4040T-R1.0 TT9030	4.0	12.0	47	6
7288	FRESA MD HES 4040XLT TT9030	4.0	20.0	70	6
8845	FRESA MD HES 4050LT TT9030	5.0	15.0	80	6
8459	FRESA MD HES 4050LT-R0.5 TT9030	5.0	15.0	80	6
8460	FRESA MD HES 4050LT-R1.0 TT9030	5.0	15.0	80	6
8735	FRESA MD HES 4050XLT TT9030	5.0	25.0	80	6
8036	FRESA MD HES 4060 UF10	6.0	15.0	52	6
7893	FRESA MD HES 4060LT -R0,5 TT5525	6.0	15.0	80	6
7894	FRESA MD HES 4060LT -R1,0 TT9030	6.0	15.0	80	6
7400	FRESA MD HES 4060LT TT9030	6.0	15.0	80	6
7892	FRESA MD HES 4060T-R0.5 TT1040	6.0	15.0	52	6
7986	FRESA MD HES 4060T-R1.0 TT9030	6.0	15.0	52	6
7289	FRESA MD HES 4060XLT TT9030	6.0	25.0	80	6
10046	FRESA MD HES 4070T TT9030	7.0	20.0	68	8
8037	FRESA MD HES 4080 UF10	8.0	20	60	8
7401	FRESA MD HES 4080LT TT5525	8.0	20.0	90	8
8302	FRESA MD HES 4080LT-R0.5 TT5525	8.0	20.0	90	8
8012	FRESA MD HES 4080LT-R1.0 TT9030	8.0	20.0	90	8
8052	FRESA MD HES 4080T-R0.5 TT5515	8.0	20.0	60	8
7982	FRESA MD HES 4080T-R1.0 TT5515	8.0	20.0	60	8
7290	FRESA MD HES 4080XLT TT5525	8.0	35.0	90	8
8049	FRESA MD HES 4100 UFB	10.0	25	68	10

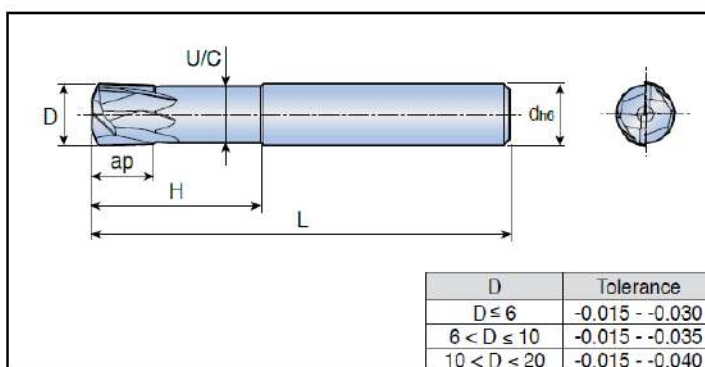
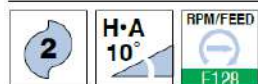
HES TAEGUTEC - ApexMill - CONTINUAÇÃO

Código	Descrição	D (mm)	ap (mm)	L (mm)	d (mm)
7891	FRESA MD HES 4100LT (25X100) TT9030	10.0	25.0	100	10
8415	FRESA MD HES 4100LT R0.5 TT5525	10.0	25.0	100	10
8349	FRESA MD HES 4100LT R1.0 TT9030	10.0	25.0	100	10
8792	FRESA MD HES 4100T-R0.5 TT5525	10.0	25.0	68	10
7985	FRESA MD HES 4100T-R1.0 TT9030	10.0	25.0	68	10
7291	FRESA MD HES 4100XLT TT5525	10.0	45.0	100	10
10113	FRESA MD HES 4110T TT9030	11.0	30.0	76	12
8741	FRESA MD HES 4120 UF10	12.0	30.0	76	12
8861	FRESA MD HES 4120LT R0.5 TT5525	12.0	30.0	110	12
8343	FRESA MD HES 4120LT R1.0 TT9030	12.0	30.0	110	12
7814	FRESA MD HES 4120LT TT9030	12.0	30.0	110	12
7885	FRESA MD HES 4120T TT1040	12.0	30.0	76	12
8793	FRESA MD HES 4120T-0.5 TT9030	12.0	30.0	76	12
8864	FRESA MD HES 4120T-R1.0 TT9030	12.0	30.0	76	12
7292	FRESA MD HES 4120XLT TT9030	12.0	55.0	110	12
24214	FRESA MD HES 4140LT TT5515	14.0	35.0	125	16
8836	FRESA MD HES 4140XLT TT9030	14.0	60.0	125	16
19778	FRESA MD HES 4160LT TT9030	16.0	40.0	125	16
7620	FRESA MD HES 4160T TT9030	16.0	40.0	90	16
23738	FRESA MD HES 4160T-R0,5 TT1040	16.0	40.0	90	16
9687	FRESA MD HES 4160XLT TT9030	16.0	70.0	125	16
23264	FRESA MD HES 4200LT TT9030	20.0	45.0	150	20
8471	FRESA MD HES 4200XLT TT5525	20.0	75.0	150	20
18174	FRESA MD HES 4200XLT(100X200)TT9030	20.0	100.0	200	20
15843	FRESA MD HES 6060T TT9030	6.0	15	52	6
7052	FRESA MD HES 6080T TT9030	8.0	20	60	8

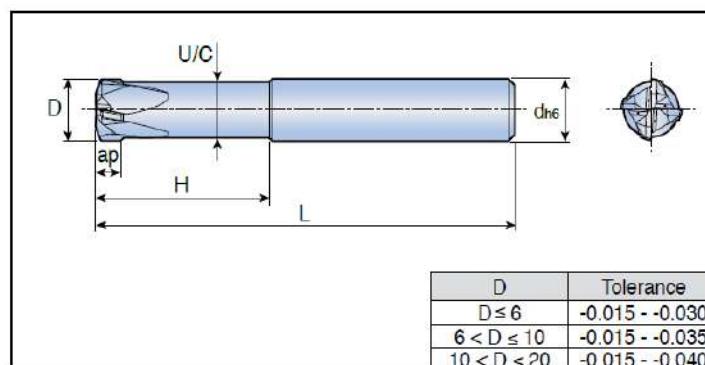
HFM TAEGUTEC - ApexMill

SOLIDFEED

- High Feed Machining (H.F.M)
- Unique geometry-low cutting force
- Pre-hardened Steels, Alloy Steels, Carbon Steels
- Hardness < 45 HRC


SOLIDFEED

- High Feed Machining (H.F.M)
- Unique geometry-low cutting force
- Pre-hardened Steels, Alloy Steels, Carbon Steels
- Hardness < 45 HRC

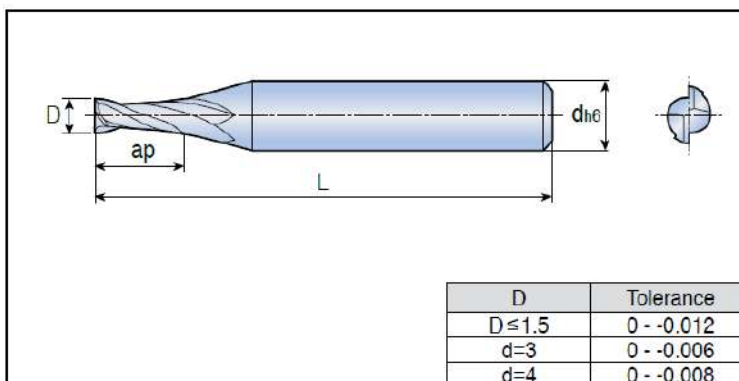
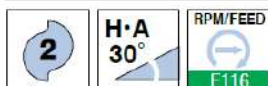


HFM TAEGUTEC - ApexMill - CONTINUAÇÃO

Código	Descrição	D (mm)	ap (mm)	L (mm)	H (mm)	d (mm)
13847	FRESA MD HFM 2100 TT1040	10.0	10.0	68	28	10
13845	FRESA MD HFM 4060 TT5515	6.0	2.5	52	16	6
13846	FRESA MD HFM 4080 TT1040	8.0	3.5	60	24	8
15076	FRESA MD HFM 4100 TT1040	10.0	4.0	68	28	10
18460	FRESA MD HFM 4120 TT1040	12.0	5.0	76	33	12

HMF TAEGUTEC - ApexMill

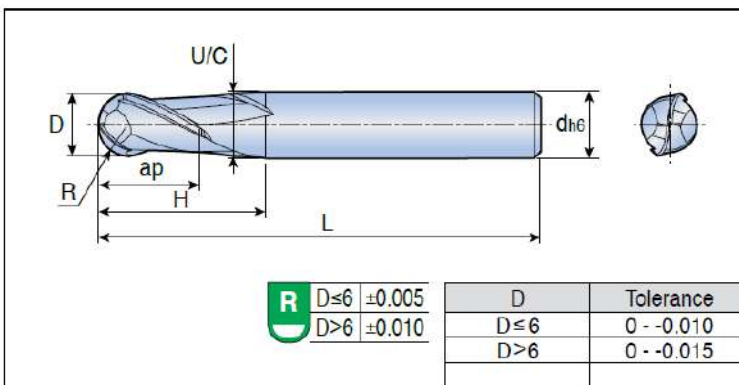
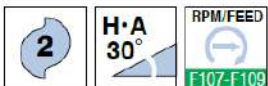

- Pre-hardened Steels, Tool Steels, Alloy Steels, Carbon Steels
- Hardness < 55 HRC



Código	Descrição	D (mm)	ap (mm)	L (mm)	d (mm)
8838	FRESA MD HMF 2004-3 TT1040	0.4	0.8	40	3
9705	FRESA MD HMF 2005-3 TT1040	0.5	1.0	40	3
8794	FRESA MD HMF 2006-3 TT1040	0.6	1.2	40	3
8802	FRESA MD HMF 2008-3 TT1040	0.8	1.6	40	3

HSB TAEGUTEC - HardMill

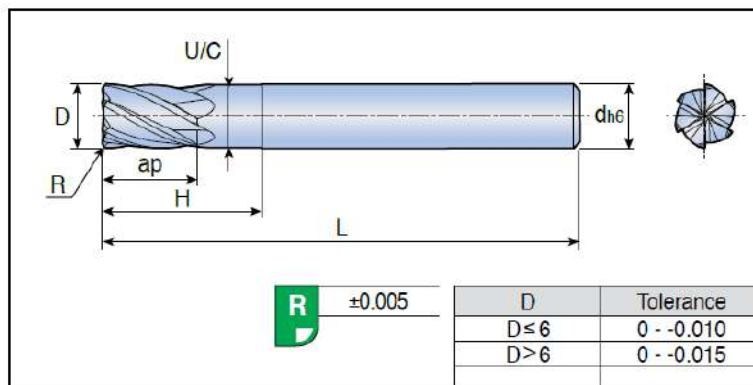
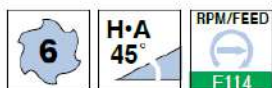

- High Speed Machining (H.S.M)
- Hardened Steels, Pre-hardened Steels
- Hardness < 65 HRC



Código	Descrição	D (mm)	ap (mm)	L (mm)	H (mm)	d (mm)
23335	FRESA MD HSB 2020T-6D TT5505	2.0	3.0			
25865	FRESA MD HSB 2040S TT5505	4.0	6.0	54	10	6
25866	FRESA MD HSB 2060S TT5505	6.0	9.0	54	17	6
25867	FRESA MD HSB 2100S TT5505	10.0	15.0	66	25	10

HSR TAEGUTEC - HardMill

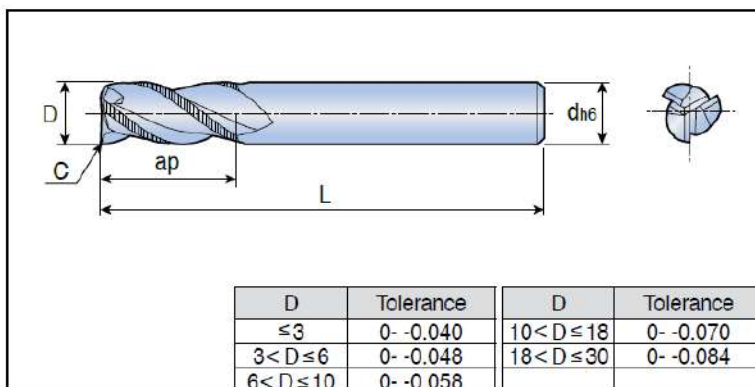
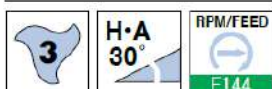

- High Speed Machining (H.S.M)
- Hardened Steels, Pre-hardened Steels
- Hardness < 65 HRC • Finishing



Código	Descrição	D (mm)	ap (mm)	L (mm)	H (mm)	d (mm)
26103	FRESA MD HSR 6080 100 200 TT5505	8.0	12.0	70	20	8

REA TAEGUTEC - Alum

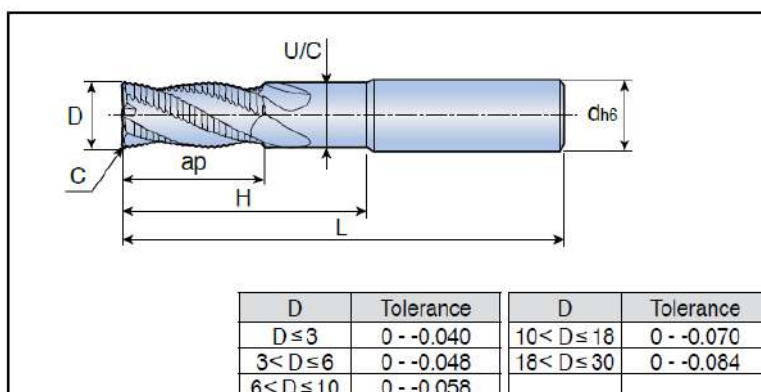
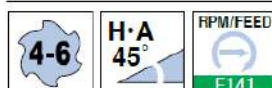

- Maximum stock removal in aluminum



Código	Descrição	D (mm)	ap (mm)	L (mm)	d (mm)
12624	FRESA MD REA 3060L UF10	6.0	16.0	57	6

REH TAEGUTEC - StarMill

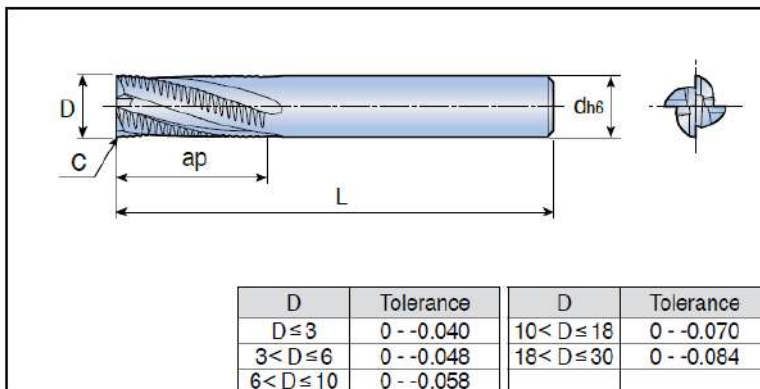
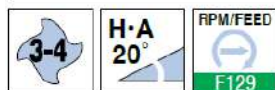

- Roughing
- Carbon Steels, Alloy Steels, Tool Steels and Stainless Steels
- Hardness < 40 HRC



Código	Descrição	D (mm)	ap (mm)	L (mm)	H (mm)	d (mm)
14117	FRESA MD REH 4100L TT9030	10.0	22.0	72	31	10

REL TAEGUTEC - ApexMill

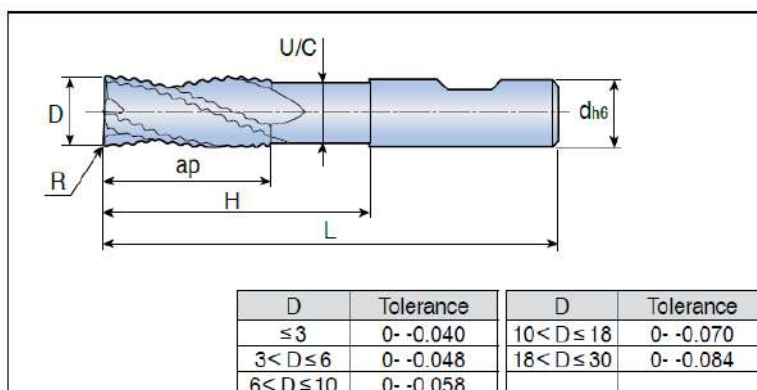
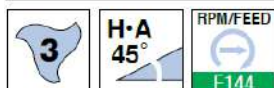

- Roughing
- Hardened Steels, Mold Steels, Alloy Steels and Tool Steels



Código	Descrição	D (mm)	ap (mm)	L (mm)	d (mm)
11411	FRESA MD REL 3060L TT1040	6.0	16.0	57	6
8135	FRESA MD REL 3080L KT8600	8.0	16.0	63	8
10537	FRESA MD REL 4100L TT1040	10.0	22.0	72	10
15299	FRESA MD REL 4120L TT1040	12.0	26.0	83	12

REMA TAEGUTEC - AluMill


- Maximum stock removal in aluminum



Código	Descrição	D (mm)	ap (mm)	L (mm)	H (mm)	d (mm)
15396	FRESA MD REMA 3060C UF10	6.0	9.0	57	21	6
12246	FRESA MD REMA 3100C UF10	10.0	12.0	72	31	10

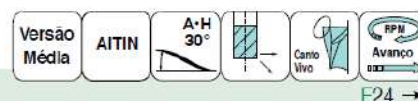
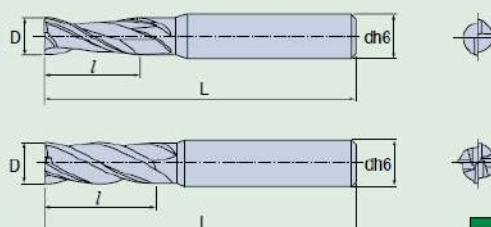
RFE TAEGUTEC - ApexMill


RFE 2000M



RFE 4000M

- Adequada para usinagem com alto avanço, devido ao incremento da alma
- Aços para moldes, Materiais endurecidos, Aços Ferramenta
- Classe: TT1040

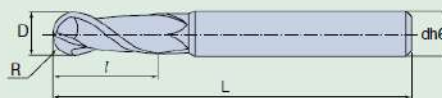
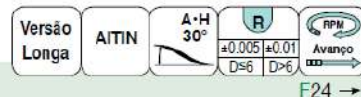


D	Tolerância
$D \leq 6$	-0.015 - -0.035
$6 < D \leq 10$	-0.015 - -0.040
$10 < D \leq 25$	-0.015 - -0.045

Código	Descrição	D (mm)	ap (mm)	L (mm)	d (mm)
12382	FRESA MD RFE 2010M-6 TT1040	1.0	3.0	57	6
12379	FRESA MD RFE 2015M-6 TT1040	1.5	4.0	57	6
12489	FRESA MD RFE 2020M-6 TT1040	2.0	7.0	57	6

RFE TAEGUTEC - ApexMill - CONTINUAÇÃO

Código	Descrição	D (mm)	ap (mm)	L (mm)	d (mm)
12494	FRESA MD RFE 2025M-6 TT1040	2.5	10.0	57	6
12490	FRESA MD RFE 2030M TT1040	3.0	10.0	57	6
10152	FRESA MD RFE 2030M-3 TT1040	3.0	10.0	38	3
10546	FRESA MD RFE 2035M TT1040	3.5	12.0	57	6
13091	FRESA MD RFE 2040M TT1040	4.0	12.0	57	6
10151	FRESA MD RFE 2040M-4 TT1040	4.0	12.0	50	4
10384	FRESA MD RFE 2045M TT1040	4.5	12.0	57	6
13092	FRESA MD RFE 2050M TT1040	5.0	14.0	57	6
10674	FRESA MD RFE 2050M-5 TT1040	5.0	14.0	50	5
10547	FRESA MD RFE 2055M TT1040	5.5	14.0	57	6
12493	FRESA MD RFE 2060M TT1040	6.0	16.0	57	6
10548	FRESA MD RFE 2065M TT1040	6.5	20.0	63	8
14097	FRESA MD RFE 2075M TT1040	7.5	20.0	63	8
12380	FRESA MD RFE 2080M TT1040	8.0	20.0	63	8
13139	FRESA MD RFE 2085M TT1040	8.5	22.0	72	10
12383	FRESA MD RFE 2090M TT1040	9.0	22.0	72	10
12771	FRESA MD RFE 2095M TT1040	9.5	22.0	72	10
12356	FRESA MD RFE 2100M TT1040	10.0	22.0	72	10
15131	FRESA MD RFE 2105M TT1040	10.5	25.0	83	12
12384	FRESA MD RFE 2110M TT1040	11.0	25.0	83	12
13041	FRESA MD RFE 2120M TT1040	12.0	25.0	83	12
12364	FRESA MD RFE 2160M TT5515	16.0	32.0	92	16
12381	FRESA MD RFE 4020M 6 TT1040	2.0	6.0	42	6
16851	FRESA MD RFE 4025M 6 TT1040	2.5	8.0	57	6
12365	FRESA MD RFE 4030M TT1040	3.0	10.0	57	6
12366	FRESA MD RFE 4040M TT5515	4.0	12.0	57	6
12367	FRESA MD RFE 4050M TT5515	5.0	14.0	57	6
10182	FRESA MD RFE 4060M TT5515	6.0	16.0	57	6
10157	FRESA MD RFE 4070M TT1040	7.0	20.0	63	8
10153	FRESA MD RFE 4080M TT5515	8.0	20.0	63	8
12478	FRESA MD RFE 4090M TT1040	9.0	22.0	72	10
12353	FRESA MD RFE 4100M TT5515	10.0	22.0	72	10
12385	FRESA MD RFE 4110M TT1040	11.0	25.0	83	12
12368	FRESA MD RFE 4120M TT5515	12.0	25.0	83	12
12712	FRESA MD RFE 4130M TT1040	13.0	25.0	83	14
12708	FRESA MD RFE 4130T TT1040	13.0	25.0	83	14
12287	FRESA MD RFE 4140M TT5515	14.0	25.0	83	14
12369	FRESA MD RFE 4160M TT1040	16.0	32.0	92	16
12372	FRESA MD RFE 4180M TT1040	18.0	32.0	92	18
12375	FRESA MD RFE 4200M TT1040	20.0	38.0	104	20

RSB TAEGUTEC - ApexMill


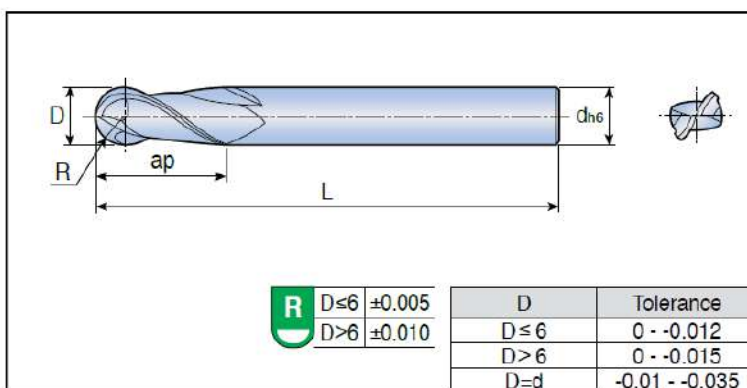
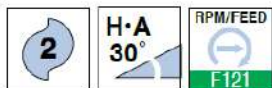
D	Tolerância
D ≤ 6	0 - -0.02
6 < D ≤ 10	0 - -0.025
10 < D ≤ 20	0 - -0.03

- Adequada para usinagem com alto avanço, devido ao incremento da alma
- Aços para moldes, Materiais endurecidos, Aços Ferramenta
- Classe: TT1040

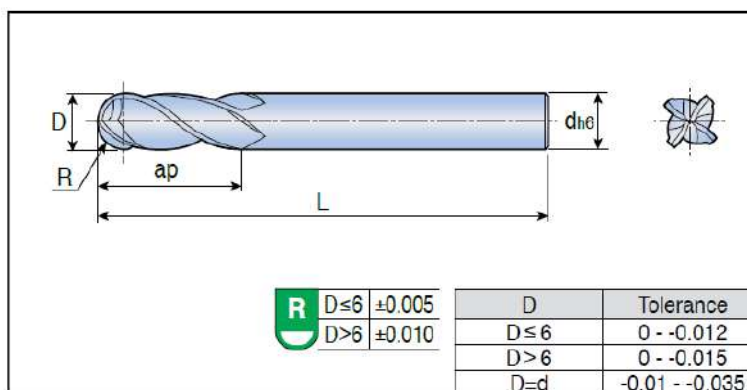
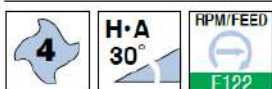
Código	Descrição	D (mm)	ap (mm)	L (mm)	d (mm)
12491	FRESA MD RSB 2010L-6 TT1040	1.0	1.5	52	6
12361	FRESA MD RSB 2015L-6 TT1040	1.5	2.3	52	6
12492	FRESA MD RSB 2020L-6 TT5515	2.0	5.0	52	6
12393	FRESA MD RSB 2025L-6 TT1040	2.5	5.0	52	6
13093	FRESA MD RSB 2030L TT5515	3.0	8.0	70	6
10596	FRESA MD RSB 2030L-3 TT5515	3.0	8.0	70	3
10549	FRESA MD RSB 2035L TT1040	3.5	8.0	70	6
12354	FRESA MD RSB 2040L TT5515	4.0	8.0	70	6
10595	FRESA MD RSB 2040L-4 TT5515	4.0	8.0	70	4
12362	FRESA MD RSB 2050L TT5515	5.0	12.0	80	6
10154	FRESA MD RSB 2060L TT5515	6.0	12.0	80	6
12363	FRESA MD RSB 2080L TT5515	8.0	15.0	90	8
12775	FRESA MD RSB 2100L TT1040	10.0	20.0	100	10
12373	FRESA MD RSB 2120L TT1040	12.0	25.0	110	12
8514	FRESA MD RSB 2130L TT1040	13.0	30.0	120	12
12374	FRESA MD RSB 2140L TT5515	14.0	30.0	120	12
13260	FRESA MD RSB 2160L TT1040	16.0	35.0	125	16

SBE TAEGUTEC - ApexMill


- Pre-hardened Steels, Tool Steels, Alloy Steels, Carbon Steels
- Hardness < 55 HRC



- Pre-hardened Steels, Tool Steels, Alloy Steels, Carbon Steels
- Hardness < 55 HRC

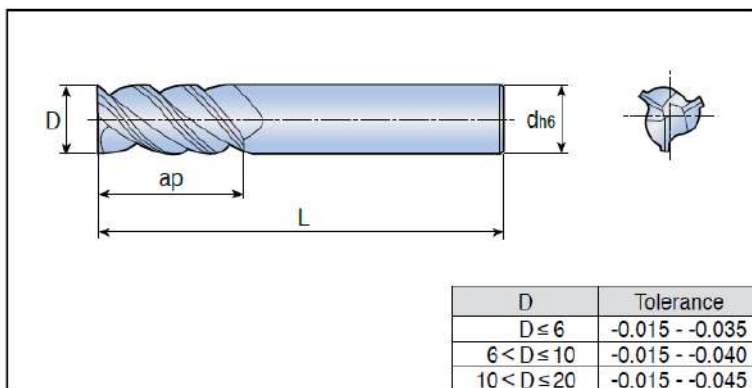
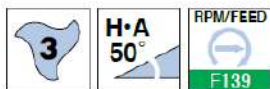


SBE TAEGUTEC - ApexMill - CONTINUAÇÃO

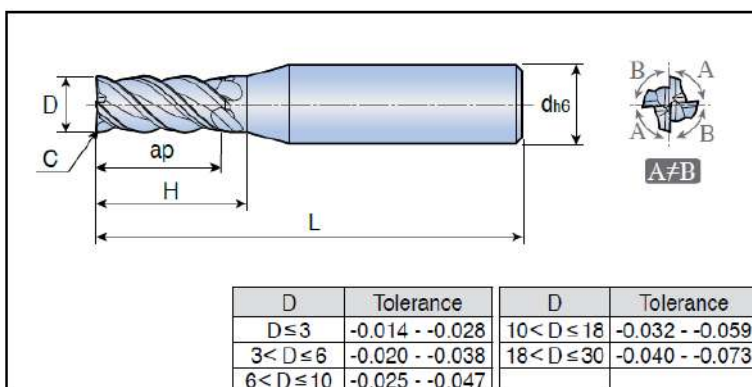
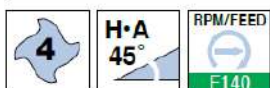
Código	Descrição	D (mm)	ap (mm)	L (mm)	d (mm)
7258	FRESA MD SBE 2010 UF10	1.0	1.5	50	4
6793	FRESA MD SBE 2015T TT1040	1.5	2.3	50	4
6644	FRESA MD SBE 2020 UF10	2.0	3.0	50	4
8475	FRESA MD SBE 2020LT TT5515	2.0	4.0	100	6
7884	FRESA MD SBE 2025 UF10	2.5	3.8	50	4
6962	FRESA MD SBE 2025T TT9030	2.5	3.8	50	4
7261	FRESA MD SBE 2030 UF10	3.0	8.0	50	4
8334	FRESA MD SBE 2030L UF10	3.0	4.0	100	6
6490	FRESA MD SBE 2030LT TT1040	3.0	4.0	100	6
11344	FRESA MD SBE 2030S TT1040	3.0	4.0	50	6
6489	FRESA MD SBE 2030T TT1040	3.0	8.0	70	6
7262	FRESA MD SBE 2040 UF10	4.0	8.0	70	6
7272	FRESA MD SBE 2040L UF10	4.0	6.0	100	6
6853	FRESA MD SBE 2040LT TT5515	4.0	6.0	100	6
11343	FRESA MD SBE 2040S TT1040	4.0	8.0	54	6
6629	FRESA MD SBE 2040T TT5515	4.0	8.0	70	6
7263	FRESA MD SBE 2050 UF10	5.0	12.0	70	6
7273	FRESA MD SBE 2050L UF10	5.0	7.0	115	8
6947	FRESA MD SBE 2050LT TT1040	5.0	7.0	115	8
7264	FRESA MD SBE 2050T TT9030	5.0	12.0	80	6
6882	FRESA MD SBE 2060 UF10	6.0	12.0	80	6
7274	FRESA MD SBE 2060L UF10	6.0	8.0	115	8
6948	FRESA MD SBE 2060LT TT5515	6.0	8.0	115	8
10156	FRESA MD SBE 2060LT-6D TT5515	6.0	8.0	115	6
11342	FRESA MD SBE 2060S TT1040	6.0	12.0	54	6
6485	FRESA MD SBE 2060T TT1040	6.0	12.0	80	6
7265	FRESA MD SBE 2080 UF10	8.0	15.0	90	8
7275	FRESA MD SBE 2080L UF10	8.0	12.0	125	10
6788	FRESA MD SBE 2080LT TT5515	8.0	12.0	125	10
24781	FRESA MD SBE 2080LT-8D TT5515	8.0	12.0	125	8
7266	FRESA MD SBE 2080T TT1040	8.0	15.0	90	8
7276	FRESA MD SBE 2100L UF10	10.0	15.0	140	10
7009	FRESA MD SBE 2100LT TT5515	10.0	15.0	140	10
7268	FRESA MD SBE 2100T TT1040	10.0	20.0	100	10
7269	FRESA MD SBE 2120 UF10	12.0	25.0	110	12
10027	FRESA MD SBE 2120L UF10N	12.0	18.0	150	12
7287	FRESA MD SBE 2120LT TT9030	12.0	18.0	150	12
7214	FRESA MD SBE 2120T TT1040	12.0	25.0	110	12
8862	FRESA MD SBE 2160T TT1040	16.0	35.0	125	16
10110	FRESA MD SBE 2200T TT9030	20.0	40.0	150	20
18727	FRESA MD SBE 4030T TT1040	3.0	8.0	57	6
7165	FRESA MD SBE 4040T TT9030	4.0	8.0	70	6
8718	FRESA MD SBE 4050T TT9030	5.0	12.0	80	6
8692	FRESA MD SBE 4060T TT1040	6.0	12.0	80	6
8683	FRESA MD SBE 4080T TT5515	8.0	15.0	90	8
9333	FRESA MD SBE 4100T TT1040	10.0	20.0	100	10
9575	FRESA MD SBE 4120T TT1040	12.0	25.0	110	12

SED TAEGUTEC - StarMill


- Stainless Steels, Super Alloys
- Hardness < 40 HRC



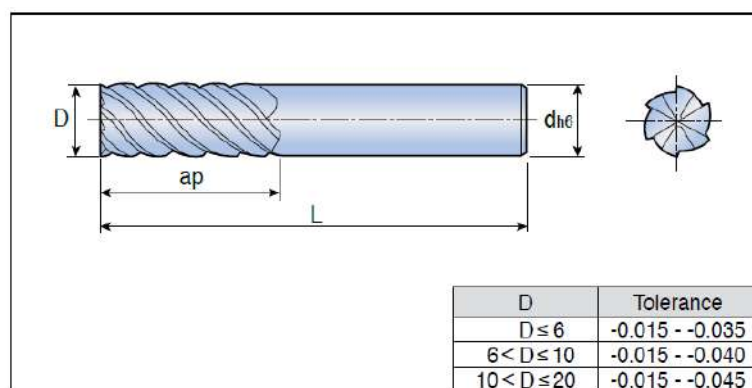
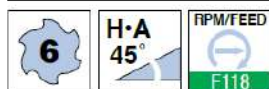
- Excellent chatter damping credit to unequal spacing of cutting edges
- Stainless Steels, Super Alloys
- Hardness < 40 HRC



Código	Descrição	D (mm)	ap (mm)	L (mm)	H (mm)	d (mm)
17135	FRESA MD SED 3030T TT9020	3.0	10.0	47	-	6
17136	FRESA MD SED 3040T TT9020	4.0	12.0	47	-	6
17299	FRESA MD SED 3050T TT9020	5.0	15.0	52	-	6
12653	FRESA MD SED 3060T TT9020	6.0	15.0	52	-	6
10245	FRESA MD SED 3070T TT9020	7.0	18.0	60	-	8
14116	FRESA MD SED 3080T TT9020	8.0	18.0	60	-	8
19694	FRESA MD SED 3090T TT9020	9.0	22.0	68	-	10
17103	FRESA MD SED 3100T TT9020	10.0	22.0	68	-	10
17104	FRESA MD SED 3120T TT9020	12.0	26.0	76	-	12
13374	FRESA MD SED 3140T TT9020	14.0	32.0	85	-	14
23321	FRESA MD SED 3200T TT9020	20.0	38.0	110	-	20
11373	FRESA MD SED 4080T TT9030	8.0	18.0	60	-	8
17315	FRESA MD SED 4120M TT9020	12.0	26.0	76	-	12
17316	FRESA MD SED 4120U-C0.4 TT1040	12.0	26.0	83	-	12
18165	FRESA MD SED 4200M TT9030	20.0	38.0	110	-	20

SEH TAEGUTEC - ApexMill


- Pre-hardened Steels, Tool Steels, Alloy Steels
- Hardness < 55 HRC
- Finishing

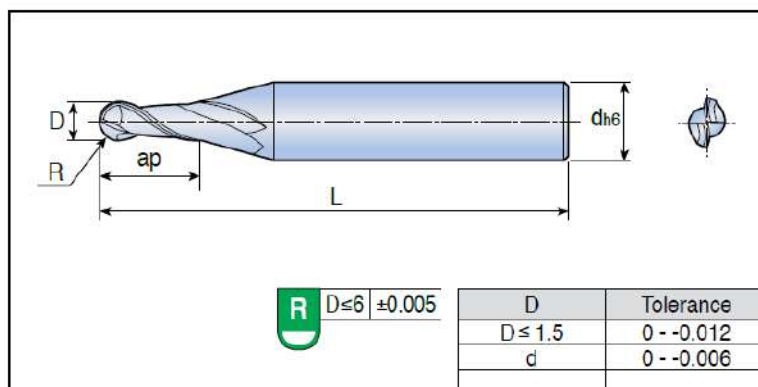
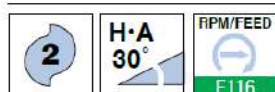


SEH TAEGUTEC - ApexMill - CONTINUAÇÃO

Código	Descrição	D (mm)	ap (mm)	L (mm)	d (mm)
12625	FRESA MD SEH 6050T TT1040	5.0	15.0	52	6
11334	FRESA MD SEH 6060XLT TT1040	6.0	25.0	80	6
13226	FRESA MD SEH 6070T TT9030	7.0	18.0	60	8
9120	FRESA MD SEH 6100XLT TT9030	10.0	45.0	100	10
7301	FRESA MD SEH 6120 TT1040	12.0	26.0	76	12
9121	FRESA MD SEH 6120XLT TT9030	12.0	55.0	110	12
10173	FRESA MD SEH 6140 TT1040	14.0	32.0	85	14
7158	FRESA MD SEH 6160T TT1040	16.0	32.0	90	16
8322	FRESA MD SEH 6160XLT TT1040	16.0	70.0	125	16
7343	FRESA MD SEH 6200 TT9030	20.0	38.0	110	20
8323	FRESA MD SEH 6200XLT TT5515	20.0	75.0	150	20

SMB TAEGUTEC - ApexMill

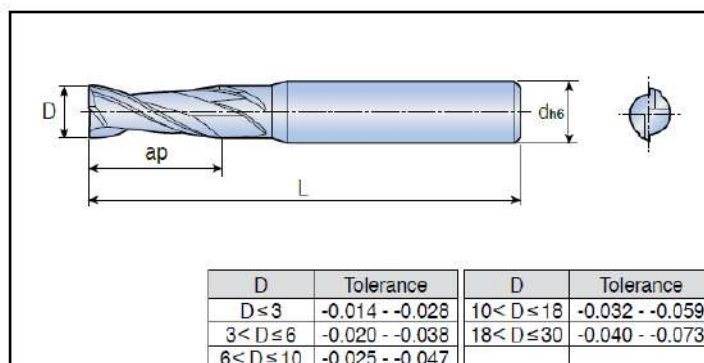
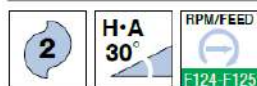

- Pre-hardened Steels, Tool Steels, Alloy Steels, Carbon Steels
- Hardness < 55 HRC



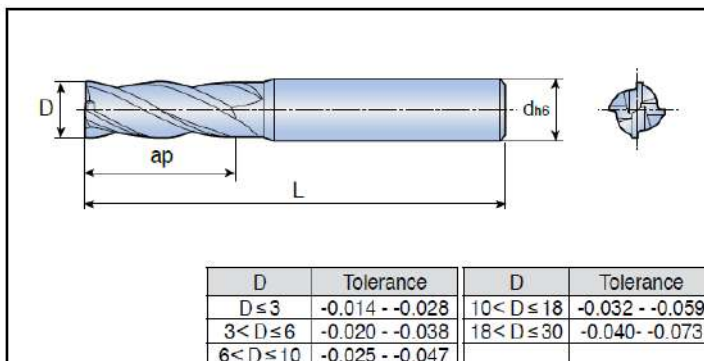
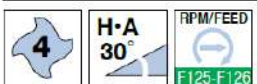
Código	Descrição	D (mm)	ap (mm)	L (mm)	d (mm)
8795	FRESA MD SMB 2006-3 TT 1040	0.6	1.1	40	3
8796	FRESA MD SMB 2008-3 TT1040	0.8	2.0	40	3

TSE TAEGUTEC - ApexMill


- General Purpose
- Pre-hardened Steels, Tool Steels, Alloy Steels, Carbon Steels
- Hardness < 45 HRC



- General Purpose
- Pre-hardened Steels, Tool Steels, Alloy Steels, Carbon Steels
- Hardness < 45 HRC



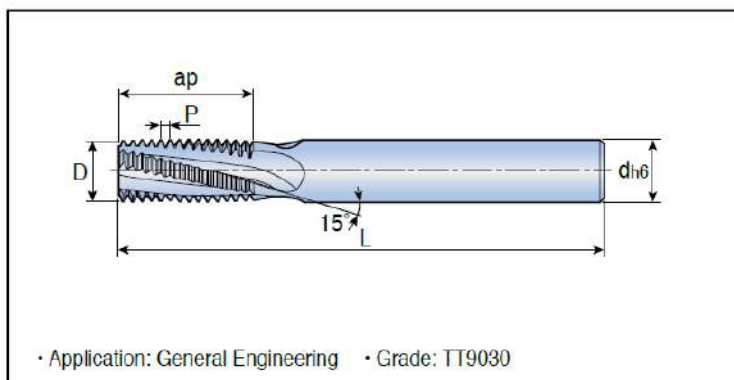
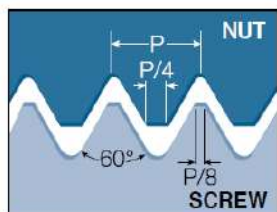
TSE TAEGUTEC - ApexMill - CONTINUAÇÃO

Código	Descrição	D (mm)	ap (mm)	L (mm)	d (mm)
6866	FRESA MD TSE 2010M TT1040	1.0	3.0	42	6
6867	FRESA MD TSE 2015M TT1040	1.5	4.0	42	6
7254	FRESA MD TSE 2020M TT1040	2.0	6.0	42	6
6870	FRESA MD TSE 2030M TT5515	3.0	10.0	57	6
6807	FRESA MD TSE 2040M TT5515	4.0	12.0	57	6
6815	FRESA MD TSE 2050M TT1040	5.0	14.0	57	6
6805	FRESA MD TSE 2060M TT1040	6.0	16.0	57	6
7787	FRESA MD TSE 2070M TT1040	7.0	20.0	60	8
6811	FRESA MD TSE 2080M TT1040	8.0	20.0	63	8
8969	FRESA MD TSE 2090M TT1040	9.0	25.0	68	10
7256	FRESA MD TSE 2100M TT1040	10.0	22.0	72	10
6825	FRESA MD TSE 2120M TT1040	12.0	25.0	83	12
7091	FRESA MD TSE 2160M TT1040	16.0	32.0	92	16
7380	FRESA MD TSE 2200T TT9030	20.0	38.0	104	20
10454	FRESA MD TSE 4020M TT1040	2.0	6.0	42	6
7859	FRESA MD TSE 4030M TT1040	3.0	10.0	57	6
7869	FRESA MD TSE 4040M TT1040	4.0	12.0	57	6
17926	FRESA MD TSE 4040M TT9030	4.0	12.0	57	6
8231	FRESA MD TSE 4050M TT1040	5.0	12.0	57	6
17973	FRESA MD TSE 4050M TT9030	5.0	14.0	57	6
7399	FRESA MD TSE 4060M TT1040	6.0	16.0	57	6
17819	FRESA MD TSE 4080M TT5515	8.0	20.0	63	8
10112	FRESA MD TSE 4090M TT1040	9.0	25.0	68	10
7054	FRESA MD TSE 4100M TT1040	10.0	22.0	72	10
17600	FRESA MD TSE 4120M TT5515	12.0	25.0	83	12
23152	FRESA MD TSE 4140M-14 TT1040	14.0	25.0	83	14
17806	FRESA MD TSE 4160M TT9030	16.0	32.0	92	16
8035	FRESA MD TSE 4180M-18 TT9030	18.0	32.0	92	18
7907	FRESA MD TSE 4200M TT9030	20.0	38.0	104	20
17260	FRESA MD TSE 4250M TT1040	25.0	65.0	140	25



MACHOS METAL DURO

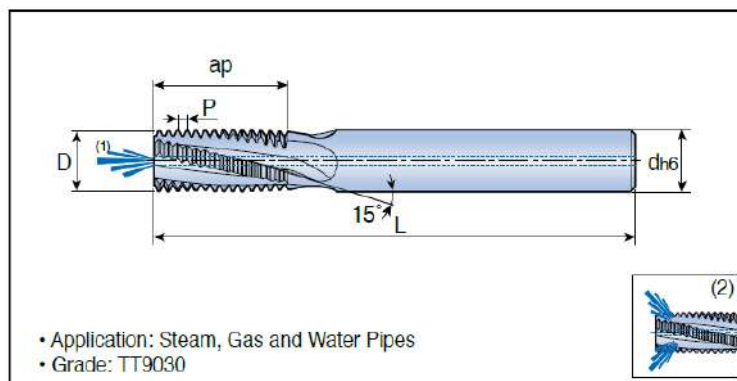
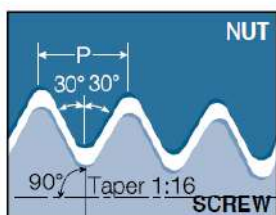
TMTEC-ISO TAEGUTEC



• Application: General Engineering • Grade: TT9030

Código	Descrição	Passo (mm)	D (mm)	ap (mm)	Nº Canal	L (mm)	d (mm)
15713	MACHO TT TMTEC 1010D21 1.5ISO 9030	1.5	10.0	21.8	4	73	10

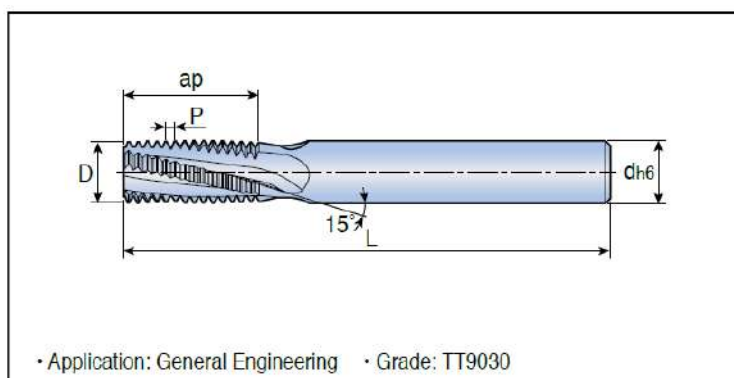
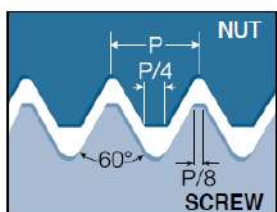
TMTEC-NPT TAEGUTEC



• Application: Steam, Gas and Water Pipes
• Grade: TT9030

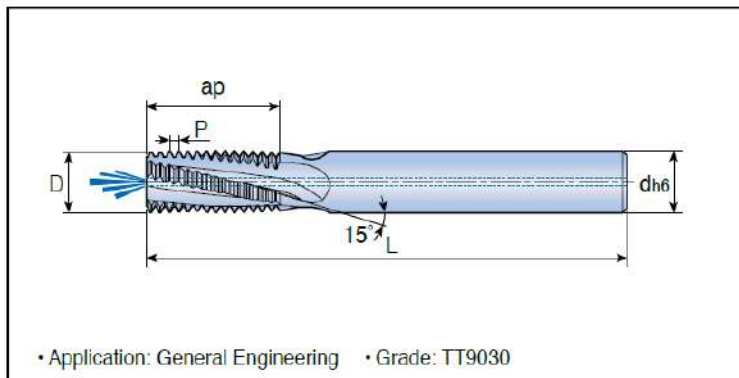
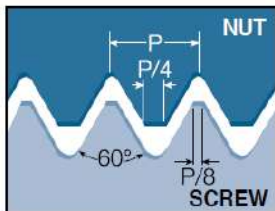
Código	Descrição	TPI	D (mm)	ap (mm)	Nº Canal	L (mm)	d (mm)
14258	MACHO TT TMTEC 1212D20 14NPT TT9030	14	12.0	20.9	4	84	12
23618	MACHO TT TMTEC 1616D2711 11.5 NPT TT9030	11.5	16.0	27.6	4	105	16

TMTEC-UN TAEGUTEC

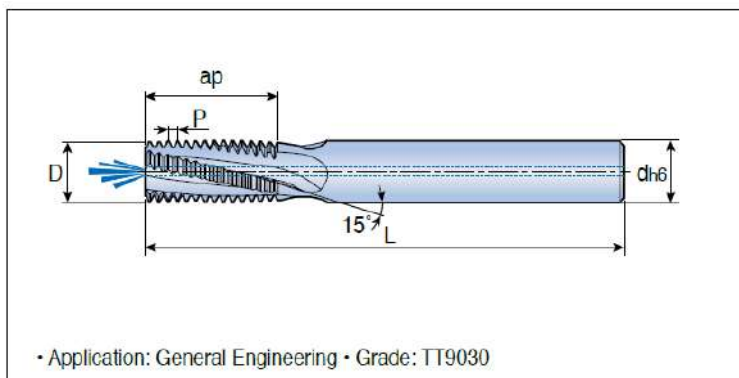
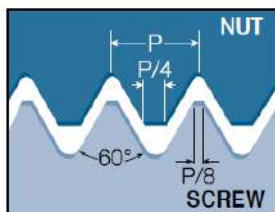


• Application: General Engineering • Grade: TT9030

Código	Descrição	TPI	D (mm)	ap (mm)	Nº Canal	L (mm)	d (mm)
17208	MACHO TT TMTEC 1212D31 16UN TT9030	16	12.0	30.0	4	84	12
13640	MACHO TT TMTEC 1615E37 14UN TT9030	14	15.0	37.2	5	105	16

TMTECB-ISO TAEGUTEC


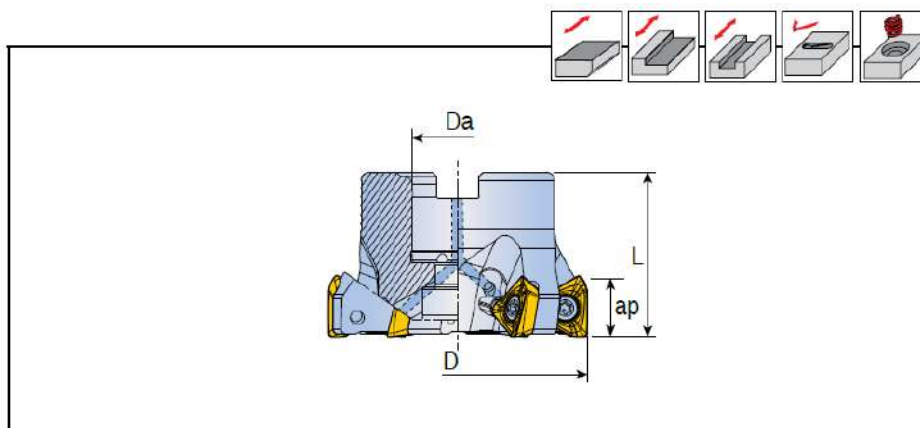
Código	Descrição	Passo (mm)	D (mm)	ap (mm)	Nº Canal	L (mm)	d (mm)
16820	MACHO TT TMTECB 08078C17 1.5 ISO TT9030	1.5	7.8	17.0	3	64	8
12790	MACHO TT TMTECB 08078C24 1.5 ISO TT9030	1.5	7.8	24.8	3	64	8
14099	MACHO TT TMTECB 1615E33 2.5ISO TT9030	2.5	15.0	33.8	5	105	16

TMTECB-UN TAEGUTEC


Código	Descrição	TPI	D (mm)	ap (mm)	Nº Canal	L (mm)	d (mm)
10572	MACHO TT TMTECB 1212D31 16UN TT9030	16	12.0	31.0	4	84	12
10448	MACHO TT TMTECB 1616E41 12UN TT9030	12	16.0	41.3	5	105	16

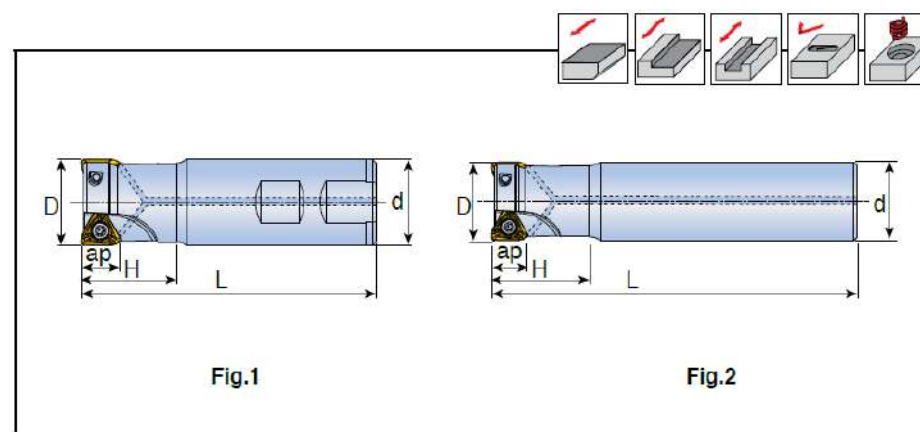
PORTA PASTILHAS FRESAMENTO

3P TF90 MILL RUSH



Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
14388	FRESA TT 3P TF90-540-16R-10	5	40	7	3PK(H)T 1004...R-M 3PK(H)T 1004...R-ML 3PHT 1004...R-AL
17728	FRESA TT 3P TF90-640-16R-10	6	40		
14251	FRESA TT 3P TF90-650-22R-10	6	50		
14252	FRESA TT 3P TF90-863-22R-10	8	63		
15846	FRESA TT 3P TF90-963-22R-10	9	63		
24845	FRESA TT 3P TF90 8100-22R-10	8	100		
24846	FRESA TT 3P TF90 10125-22R-10	10	125	11	3PK(H)T 1505...R-M 3PK(H)T 1505...R-ML 3PHT 1505...R-AL
13826	FRESA TT 3P TF90-450-22R-15	4	50		
17415	FRESA TT 3P TF90-463-22R-15-B	4	63		
13827	FRESA TT 3P TF90-663-22R-15	6	63		
14263	FRESA TT 3P TF90 8100-32R-15	8	100	15	3PK(H)T 1906...R-M 3PKT 1906...R-ML 3PHT 1906...R-AL
24907	FRESA TT 3P TF90-450-W32-19	4	50		
24962	FRESA TT 3P TF90-663-22R-19	6	63		
19546	FRESA TT 3P TF90-780-27R-19	7	80		

3P TE90 MILL RUSH

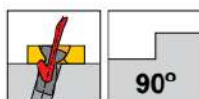
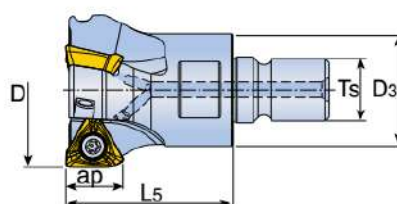
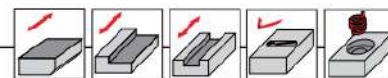


Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
19579	FRESA TT 3P TE90-420-W20-06	4	20	4.7	3PKT 0603...R-M 3PHT 0603...R-AL
13818	FRESA TT 3P TE90-116-W16-10	1	16	7	3PK(H)T 1004...R-M 3PK(H)T 1004...R-ML 3PHT 1004...R-AL
16995	FRESA TT 3P TE90-116 W16-10L-200MM	1	16		
19578	FRESA TT 3P TE90-216-16-06-L150	2	16		

3P TE90 MILL RUSH - CONTINUAÇÃO

Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
25523	FRESA TT 3P TE90-220-19-10-L170	2	20	7	3PK(H)T 1004...R-M 3PK(H)T 1004...R-ML 3PHT 1004...R-AL
13819	FRESA TT 3P TE90-220-20-10-L170	2	20		
14247	FRESA TT 3P TE90-220-W20-10	2	20		
13820	FRESA TT 3P TE90-221-20-10-L200	2	21		
19572	FRESA TT 3P TE90-222-W20-10	2	22		
13821	FRESA TT 3P TE90-225-25-10-L210	2	25		
13822	FRESA TT 3P TE90-226-25-10-L250	2	26		
24446	FRESA TT 3P TE90-325-24-10	3	25		
23718	FRESA TT 3P TE90-325-24-10 L210	3	25		
19713	FRESA TT 3P TE90-325-25-10	3	25		
13824	FRESA TT 3P TE90-325-25-10-L210	3	25		
15957	FRESA TT 3P TE90-328-25-10	3	25		
14183	FRESA TT 3P TE90-330-W25-10	3	28		
14246	FRESA TT 3P TE90-332-32-10-L250	3	32		
14250	FRESA TT 3P TE90-333-32-10-L250	3	33		
24794	FRESA TT 3P TE90 333-32-10-L400	3	33		
14249	FRESA TT 3P TE90-432-W32-10	4	32		
14216	FRESA TT 3P TE90-440-32-10-L200	4	40		
13894	FRESA TT 3P TE90-532-W32-10	5	32		
13823	FRESA TT 3P TE90-232-32-15-L250	2	32	11	3PK(H)T 1505...R-M 3PK(H)T 1505...R-ML 3PHT 1505...R-AL
13825	FRESA TT 3P TE90-332-W32-15	3	32		
19547	FRESA TT 3P TE90-340-32-15-L200	3	40		

3P-M TE90 MILL RUSH

Modular


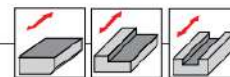
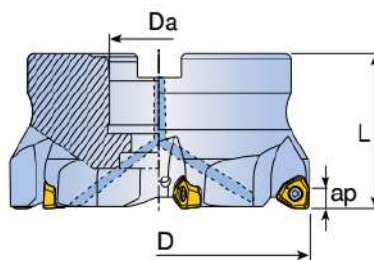
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
24023	FRESA TT 3P TE90-220-M10-10	2	20	7	3PK(H)T 1004...R-M 3PK(H)T 1004...R-ML 3PHT 1004...R-AL
17474	FRESA TT 3P TE90-325-25-M12-10	3	25		
24024	FRESA TT 3P TE90-325-M12-10	3	25		
14737	FRESA TT 3P TE90-432-M16-10	4	32		

6N TF90

MILL 2 RUSH

Face Mill


90°



Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
24092	FRESA TT 6N TF90-440-22R-06	4	40	6.2	6NGU 0604...R-M 6NGU 0604...R-ML 6NGU 0604...R-AL
13814	FRESA TT 6N TF90-450-22R-06	4	50		
13816	FRESA TT 6N TF90-463-22R-06	4	63		
25231	FRESA TT 6N TF90-663-22R-06	6	63		
16122	FRESA TT 6N TF90-980-27R-06	9	80		
24361	FRESA TT 6N TF90-7125-40R-06	7	125		
24369	FRESA TT 6N TF90-11125-40R-06	11	125		
13815	FRESA TT 6N TF90-450-22R-09	4	50	9.2	6NGU 0905...R-M 6NGU 0905...R-ML 6NGU 0905...R-AL
13817	FRESA TT 6N TF90-463-22R-09	4	63		
17375	FRESA TT 6N TF90-550-22R-09	5	50		
13893	FRESA TT 6N TF90-580-27R-09	5	80		
13996	FRESA TT 6N TF90-663-22R-09	6	63		
18164	FRESA TT 6N TF90-780-27R-09	7	80		
14254	FRESA TT 6N TF90-7125-40R-09	7	125		
14561	FRESA TT 6N TF90-8100-32R-09	8	100		

6N TE90

MILL 2 RUSH

End Mill


90°

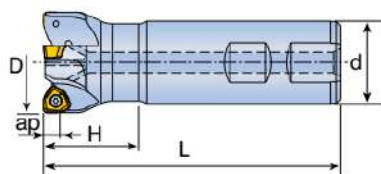


Fig.1

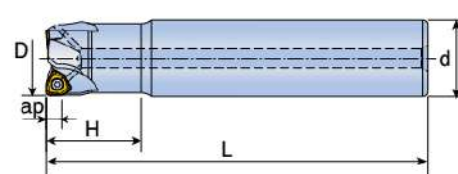
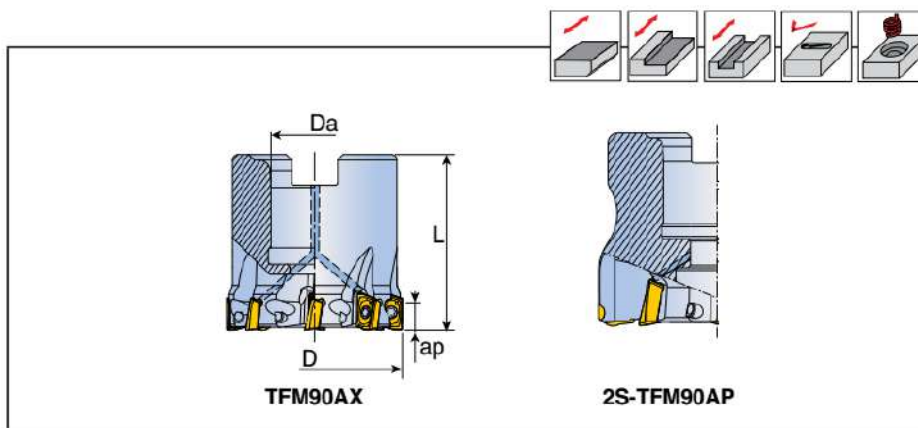


Fig.2

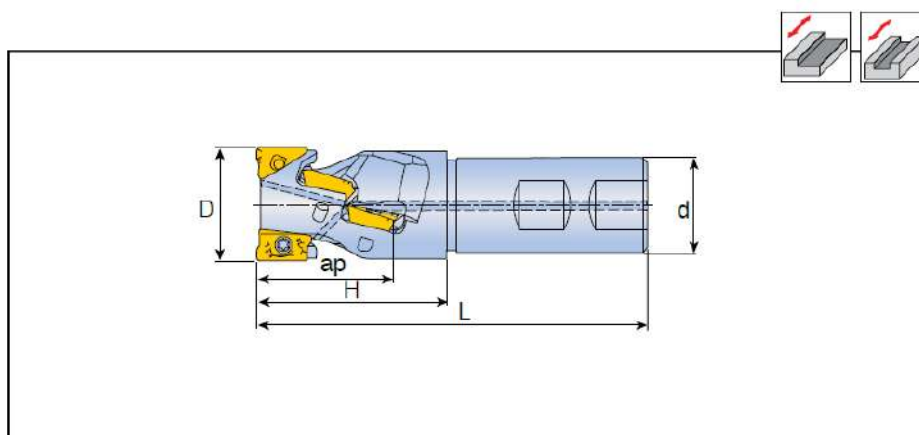
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
13808	FRESA TT 6N TE90-225-25-06-L150	2	25	6.2	6NGU 0604...R-M 6NGU 0604...R-ML 6NGU 0604...R-AL
13878	FRESA TT 6N TE90-225-W25-06	2	25		
14253	FRESA TT 6N TE90-232-32-06-L160	2	32		
13810	FRESA TT 6N TE90-332-32-06-L160	3	32		
13888	FRESA TT 6N TE90-332-W32-06	3	32		
13812	FRESA TT 6N TE90-440-W32-06	4	40		

6N TE90
MILL 2 RUSH - CONTINUAÇÃO

Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
13809	FRESA TT 6N TE90-232-32-09-L160	2	32	9.2	6NGU 0905...R-M 6NGU 0905...R-ML 6NGU 0905...R-AL
17348	FRESA TT 6N TE90-335-W32-09	3	35		
13811	FRESA TT 6N TE90-340-32-09-L200	3	40		
25440	FRESA TT 6N TE90-340-W26-09-L200	3	40		
25339	FRESA TT 6N TE90-440-W26-09	4	40		
13813	FRESA TT 6N TE90-440-W32-09	4	40		

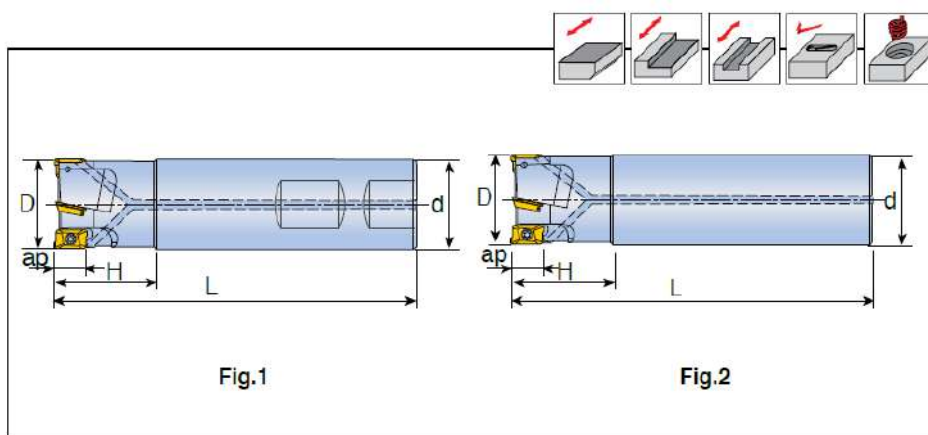
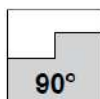
TFM90AX / 2S-TFM90AP
CHASE MILL
Face Mill


Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
16839	FRESA TT TFM90AX 332-16R-09	3	32	8.8	APKT 09T3 PER EM/M APKT 09T3...R-EM APCT 09T3 PER-ML APCT 09T3 PER-AL APKT 09T3R-HF
8515	FRESA TT TFM90AX 540-16R-09	5	40		
7895	FRESA TT TFM90AX 550-22R-09	5	50		
18697	FRESA TT TFM90AX 563-22R-09	5	63		
15831	FRESA TT TFM90AX 650-22R-09	6	50		
9500	FRESA TT TFM90AX 663-22R-09	6	63		
11272	FRESA TT TFM90AX 863-22R-09	8	63		
8439	FRESA TT TFM90AX 1080-27R-09	10	80		
6651	FRESA TT 2S TE90AP 112-W12 09	1	12		
25236	FRESA TT 2S-TE90AP 432-W25-09	4	32		

TEF- AX
CHASE MILL
Extended Flute Cutter


TEF- AX
CHASE MILL - CONTINUAÇÃO

Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
11384	FRESA TT TEF D20-21-W20-AX06	12	20	21	AXMT 0602 PER-EM AXCT 0602...R-AL
8787	FRESA TT TEF D20-25-W20-AX09	12	20	25	
8786	FRESA TT TEF D25-42- W25-AX09	20	25	42	
7461	FRESA TT TEF D32-42-W32-AX09	20	32	42	

TE90AX
CHASE MILL
End Mill


Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
20161	FRESA TT TE90AX 108-08-06-C	1	08	5.75	AXMT 0602 PER- EM AXMT 0602...R-EM AXMT 0602R-HF AXCT 0602...R-AL
8478	FRESA TT TE90AX 108-10-06L		08		
14704	FRESA TT TE90AX 109-12-06		09		
10633	FRESA TT TE90AX 210-09-06L	2	10		
7988	FRESA TT TE90AX 210-10-06L		10		
19701	FRESA TT TE90AX 210-10-06L - C/RI		10		
14695	FRESA TT TE90AX 211-10-06L		11		
17309	FRESA TT TE90AX 212-10-06L		12		
10634	FRESA TT TE90AX 212-11-06L		12		
7906	FRESA TT TE90AX 212-12-06L		12		
19704	FRESA TT TE90AX 212-12-06-L - C/RI		12		
12255	FRESA TT TE90AX 2122-12-06L				
15840	FRESA TT TE90AX 213--06L		13		
9037	FRESA TT TE90AX 214-14-06L		14		
16239	FRESA TT TE90AX 214-14-06L X 160		14		
11680	FRESA TT TE90AX 215-14-06L		15		
8054	FRESA TT TE90AX 312-12-06	3	12		
15841	FRESA TT TE90AX 313--06L		13		
15838	FRESA TT TE90AX 314-14-06L		14		
11759	FRESA TT TE90AX 316-15-06		16		
23825	FRESA TT TE90AX 316-15-06L		16		
8004	FRESA TT TE90AX 316-16-06		16		
23824	FRESA TT TE90AX 318-16-06L		18		
24000	FRESA TT TE90AX 318-17-06-L		18		



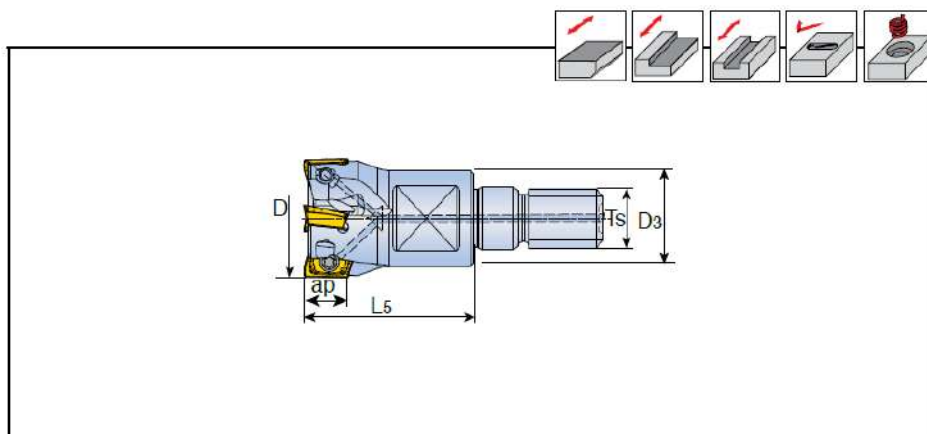
TE90AX

CHASE MILL - CONTINUAÇÃO

Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
23462	FRESA TT TE90AX 416-15-06L180	4	16	5.7	AXMT 0602 PER- EM AXMT 0602...R-EM AXMT 0602R-HF AXCT 0602...R-AL
9428	FRESA TT TE90AX 416-16-06		16		
10597	FRESA TT TE90AX 418-W16-06		18		
11760	FRESA TT TE90AX 420-19-06		20		
23969	FRESA TT TE90AX 420-19-06L		20		
8562	FRESA TT TE90AX 420-20-06		20		
24001	FRESA TT TE90AX 422-21-06L		22		
15839	FRESA TT TE90AX 425-20-06L		25		
20044	FRESA TT TE90AX 525-20-06	5	25	8.8	APKT 09T3 PER-EM/M APKT 09T3 R-EM APCT 09T3 PER-ML APCT 09T3 PER-AL APKT 09T3R-HF
9404	FRESA TT TE90AX 725-W20-06	7	25		
10599	FRESA TT TE90AX 832-W25-06	8	32		
6630	FRESA TT TE90AX 110-09	1	10		
7548	FRESA TT TE90AX 112-W16-09-C		12		
6631	FRESA TT TE90AX 114-09		14		
25169	FRESA TT TE90AX 114-13-09		14		
19863	FRESA TT TE90AX 215-14-09 L120	2	15		
13384	FRESA TT TE90AX 215-15-09L		15		
19927	FRESA TT TE90AX 215-16-09L		15		
6620	FRESA TT TE90AX 216-09		16		
6621	FRESA TT TE90AX 216-09-L		16		
12338	FRESA TT TE90AX 216-09L X 250MM		16		
9552	FRESA TT TE90AX 216-15-09-L		16		
19699	FRESA TT TE90AX 216-15-09-L - C/RI		16		
17072	FRESA TT TE90AX 216-15-09L X 200MM		16		
10240	FRESA TT TE90AX 217-16-09-L-X180MM		16		
6355	FRESA TT TE90AX 218-09		18		
6510	FRESA TT TE90AX 218-09-L		18		
17983	FRESA TT TE90AX 219-18-09-L		19		
6425	FRESA TT TE90AX 220-09-L		20		
19700	FRESA TT TE90AX 220-09L - C/RI		20		
11993	FRESA TT TE90AX 220-19-09 X 300		20		
9553	FRESA TT TE90AX 220-19-09-L		20		
10241	FRESA TT TE90AX 221-20-09-LX 200MM		21		
6827	FRESA TT TE90AX 222-20-09-L		22		
6653	FRESA TT TE90AX 225-09-L		25		
19888	FRESA TT TE90AX 225-20-09-L		25		
10628	FRESA TT TE90AX 225-24-09-L		25		
16155	FRESA TT TE90AX 225-24-09-L300		25		
12564	FRESA TT TE90AX 226-25-09-LX 250MM		26		
6744	FRESA TT TE90AX 232-09-L		32		
24728	FRESA TT TE90AX 233-32-09-L400		33		
10242	FRESA TT TE90AX 233-32-09-LX 350MM		33		
7245	FRESA TT TE90AX 240-09-L		40		
6354	FRESA TT TE90AX 320-09	3	20		

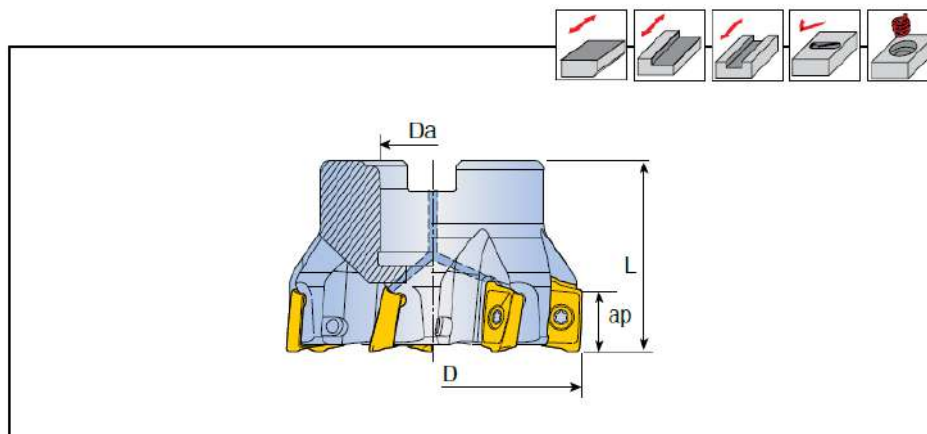
TE90AX
CHASE MILL - CONTINUAÇÃO

Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
14415	FRESA TT TE90AX 320-19-09L	3	20	8.8	APKT 09T3 PER-EM/M APKT 09T3 R-EM APCT 09T3 PER-ML APCT 09T3 PER-AL APKT 09T3R-HF
23108	FRESA TT TE90AX 321-19-09		21		
6652	FRESA TT TE90AX 322-09		22		
7458	FRESA TT TE90AX 322-W20-09-C		22		
6356	FRESA TT TE90AX 325-09		25		
10632	FRESA TT TE90AX 325-24-09-L		25		
15313	FRESA TT TE90AX 325-24-09-L260		25		
6556	FRESA TT TE90AX 325-25-09-L		25		
24367	FRESA TT TE90AX 328-25-09		28		
25340	FRESA TT TE90AX 329,3-25-09		29,3		
23846	FRESA TT TE90AX 330-25-09		30		
12236	FRESA TT TE90AX 330-W25-09		30		
6782	FRESA TT TE90AX 332-09		32		
7243	FRESA TT TE90AX 430-09	4	30		
7244	FRESA TT TE90AX 432-09		32		
6640	FRESA TT TE90AX 432-09-L		32		
13375	FRESA TT TE90AX 433-32-09L		33		
17143	FRESA TT TE90AX 435-32-09L	5	35		
7246	FRESA TT TE90AX 540-09		40		
8853	FRESA TT TE90AX 540-32-09L		40		
16022	FRESA TT TE90AX 550-25-09		50		

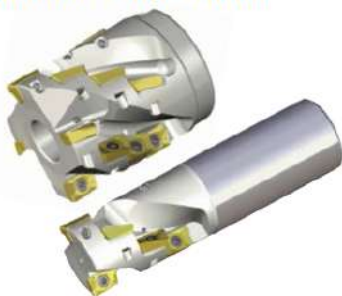
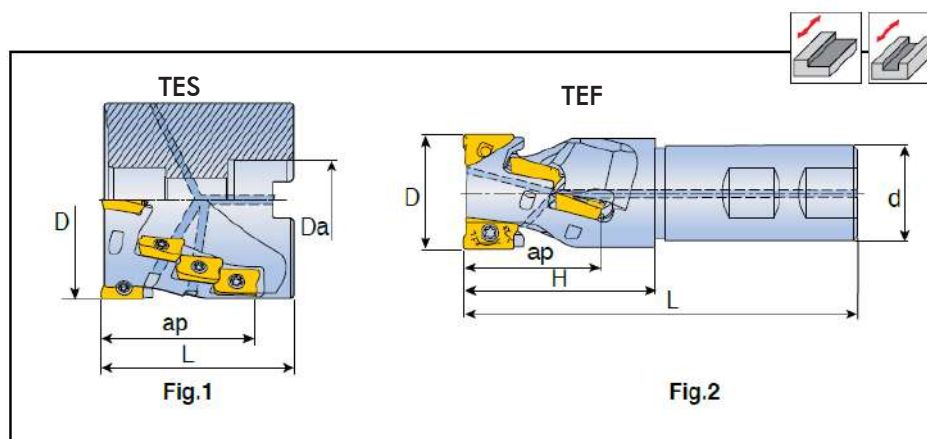
TE90AX-M
CHASE MILL
Modular


Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
14481	FRESA TT TE90AX 210-M06-06	2	10	5.75	AXMT 0602 PER-EM AXMT 0602...R-EM AXMT 0602R-HF AXCT 0602...R-AL
24991	FRESA TT TE90AX 312-M06-06	3	12		
8093	FRESA TT TE90AX 216-M08-09	2	16	8.8	APKT 09T3 PER-EM/M APKT 09T3 R-EM APCT 09T3 PER-ML APCT 09T3 PER-AL APKT 09T3R-HF
7302	FRESA TT TE90AX 320-M10-09	3	20		
8095	FRESA TT TE90AX 325-M12-09	3	25		
23411	FRESA TT TE90AX 432-M16-09	4	32		
15318	FRESA TT TE90AX 532-M16-09	5	32		
24992	FRESA TT TE90AX 540-M16-09	5	40		

TFM90AP
CHASE MILL
Face Mill

90°


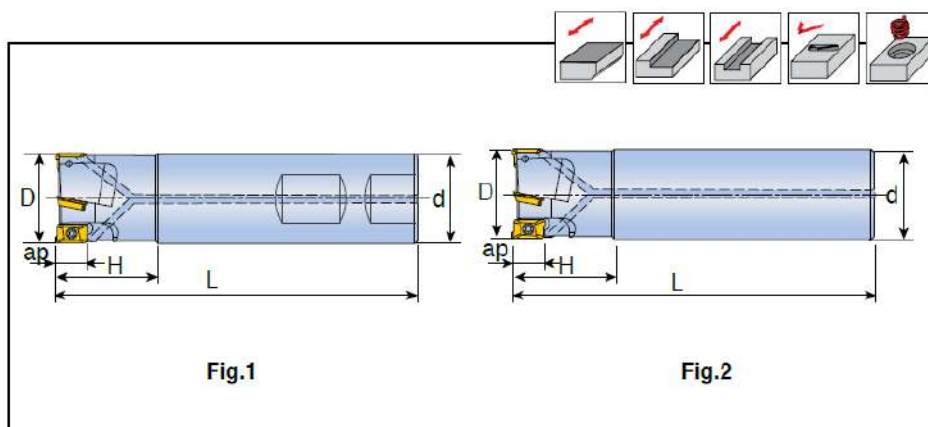
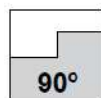
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
18828	FRESA TT TFM90AP 438-19,05R-12	4	38	12	APKT 1204 PER-EM/EL/EML APKT 1204 PER-SM APKT 120R-EM APCT 1204R-ML APCT 1204R-AL APKT 1204R-HF
13716	FRESA TT TFM90AP 440-16R-12	4	40		
24750	FRESA TT TFM90AP 450-22R-12	4	45		
17986	FRESA TT TFM90AP 550-22R-12	5	50		
24703	FRESA TT TFM90AP 663-22R-12	6	63		
6663	FRESA TT TFM90AP 350-22R-17 B	3	50	16.1	APKT 1705 PER-M APKT 1705 PER -EM/EL/EML APKT 1705 PER-SM APKT 1705...R-EM APKT 1705 PER-AL
6706	FRESA TT TFM90AP 440-16R-17	4	40		
6938	FRESA TT TFM90AP 550-22R-17	5	50		
6724	FRESA TT TFM90AP 563-22R-17	5	63		
6641	FRESA TT TFM90AP 680-27R-17	6	68		
6464	FRESA TT TFM90AP 6100-32R-17	6	100		
6718	FRESA TT TFM90AP 8100-32R-17	8	100		

TES/TEF-AP
CHASE MILL
Extended Flute Cutter

90°


Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
9029	FRESA TT TES D50-44-22-AP17	6	50	44	APKT 1705 PER-M APKT 1705 PER-EM/EL/EML APKT 1705 PER-SM APKT 1705 PER-AL
16803	FRESA TT TES D63-110-27-AP17	9	63		
8408	FRESA TT TES D63-44-27-AP17	9	63		
8770	FRESA TT TES D80-58-32-AP17	16	80	58	
19383	FRESA TT TES D100-30-40-AP17 IFBR	30	100	88	
8769	FRESA TT TES D100-88-40-AP17	30	100		

TES/TEF-AP CHASE MILL - CONTINUAÇÃO

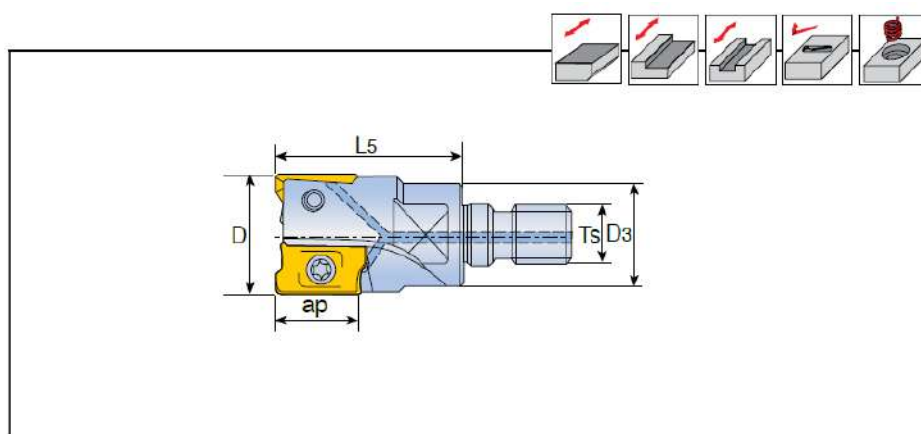
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
17840	FRESA TT TEF D25-34-W25-AP12	6	25	34	APKT 1204 PER-EM/EL/EML APKT 1204 PER-SM
10573	FRESA TT TEF D32- 45-W32-AP12	8	32	45	
7614	FRESA TT TEF D32-30-W32-AP12	8	32	30	
10603	FRESA TT TEF D32-45-W32-AP12	8	32	45	
19302	FRESA TT TEF D40-55-W32-AP12	12	40	55	
8466	FRESA TT TEF D40-44-W32-AP17	6	40	44	APKT 1705 PER-M APKT 1705 PER-EM/EL/EML APKT 1705 PER-SM APKT 1705 PER-AL

TE90AP
CHASE MILL
End Mill


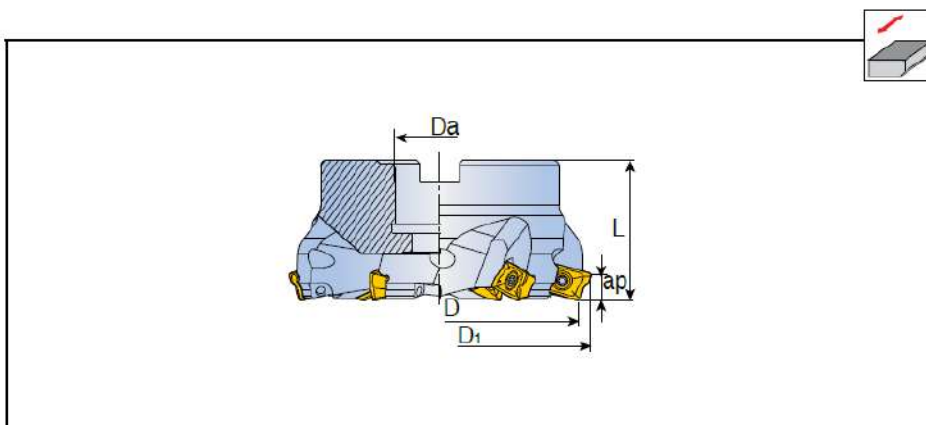
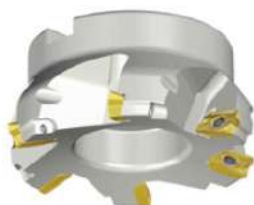
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
19519	FRESA TT TE90AP 232-32-09-L	2	32	8.8	APKT 09T3 PER-EM/M APKT 09T3 R-EM APCT 09T3 PER-ML APCT 09T3 PER-AL APKT 09T3R-HF
24768	FRESA TT TE90AP 440-32-09	4	40		
24766	FRESA TT TE90AP 540-32-09	5	40		
9101	FRESA TT TE90AP 220-W20-12-C	2	20	12	APKT 1204 PER-EM/EL/EML APKT 1204 PER-SM APKT 1204...R-EM APCT 1204...R-ML APCT 1204...R-AL APKT 1204R-HF
9949	FRESA TT TE90AP 220-W20-12-L	2	20		
19145	FRESA TT TE90AP 2218-W20-12	2	21.8		
9950	FRESA TT TE90AP 225-W20-12-L	2	25		
10601	FRESA TT TE90AP 226-25-12-L250	2	26		
15833	FRESA TT TE90AP 325-20-12	3	25		
9734	FRESA TT TE90AP 325-25-12L	3	25		
10455	FRESA TT TE90AP 325-W25-12C	3	25		
14297	FRESA TT TE90AP 332-32-12-L250	3	32		
10600	FRESA TT TE90AP 332-W25-12L-C	3	32		
15834	FRESA TT TE90AP 432-32-12L	4	32	16.1	APKT 1705 PER-M APKT 1705 PER-EM/EL/EML APKT 1705 PER-SM APKT 1705...R-EM APKT 1705 PER-AL
10602	FRESA TT TE90AP 432-W25-12-C	4	32		
6826	FRESA TT TE90AP 120-W20-17	1	20		
6548	FRESA TT TE90AP 225-25-17-L	2	25		
6982	FRESA TT TE90AP 225-W25-17	2	25		
17609	FRESA TT TE90AP 226-25-17L	2	26		
15835	FRESA TT TE90AP 228-25-17L	2	28		
9640	FRESA TT TE90AP 230-25-17	2	30		

TE90AP
CHASE MILL - CONTINUAÇÃO

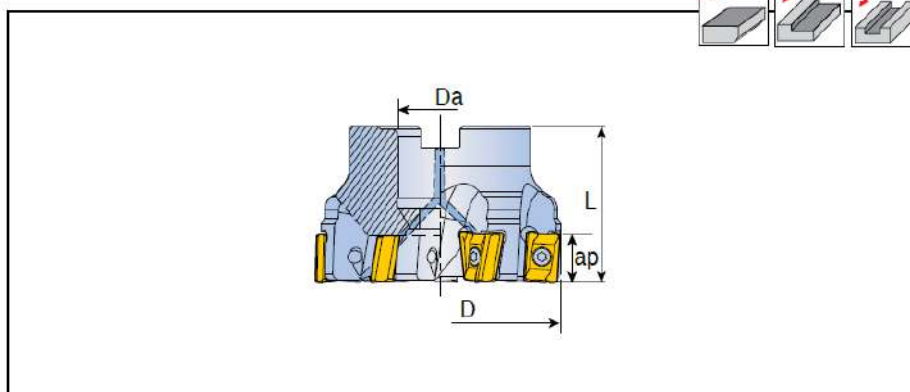
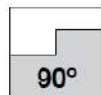
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
6549	FRESA TT TE90AP 232-32-17-L	2	32	16.1	APKT 1705 PER-M APKT 1705 PER-EM/EL/EML APKT 1705 PER-SM APKT 1705...R-EM APKT 1705 PER-AL
10598	FRESA TT TE90AP 233-32-17-L300	2	33		
15837	FRESA TT TE90AP 2335-32-17L	2	33.5		
7247	FRESA TT TE90AP 240-32-17-L	2	40		
15836	FRESA TT TE90AP 332-25-17L	3	32		
7124	FRESA TT TE90AP 332-32-17-L	3	32		
7170	FRESA TT TE90AP 332-W32-17	3	32		
11770	FRESA TT TE90AP 335-25-17	3	35		
7023	FRESA TT TE90AP 340-32-17	3	40		
7248	FRESA TT TE90AP 440-W32-17	4	40		

TE90AP-M
CHASE MILL
Modular


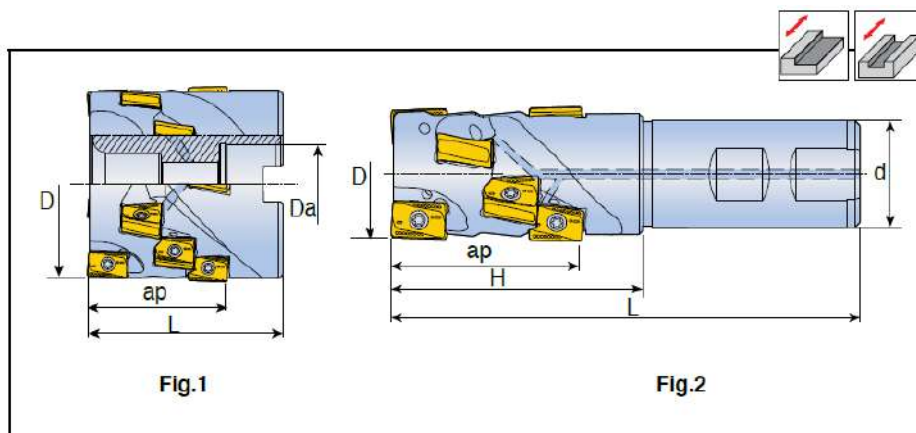
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
8951	FRESA TT TE90AP 225-M12-17	2	25	16.1	APKT 1705 PER-M APKT 1705 PER-EM/EL/EML APKT 1705 PER-SM APKT 1705...R-EM APKT 1705 PER-AL
12278	FRESA TT TE90AP 332-M16-17	3	32		
25329	FRESA TT TE90AP 440-M16-17	4	40		

TFM75AP
CHASE MILL
Face Mill


Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
6838	FRESA TT TFM75AP 580-27R-17	5	80	3.9	APKT 1705 PER-M APKT 1705 PER-EM

TFM90AN
CHASE 2 MILL
Face Mill


Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
22780	FRESA TT TFM90AN 450-22R-11	4	50	11.1	ANMX 110608R-M ANHX 1106...R-M/AL
9293	FRESA TT TFM90AN 450-22R-16	4	50	15	ANMX 160708R-M ANHX 160...R-M/AL ANHX 160708RML/MR/SM
9100	FRESA TT TFM90AN 663-22R-16	6	63		
9752	FRESA TT TFM90AN 780-27R-16	7	80		
9400	FRESA TT TFM90AN 8100-32R-16	8	100		
9983	FRESA TT TFM90AN 10125-40R-16	10	125		
25229	FRESA TT TFM90AN 12160-40R-16	12	160		

TES/ TEF-AN
CHASE 2 MILL
Extended Flute Cutter


Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
23098	FRESA TT TES D63-60-27R-AN11	24	63	60	ANMX 110608R-M ANHX 110608R-M/AL
17861	FRESA TT TEF D40-40-W32-AN11	12	40	40	

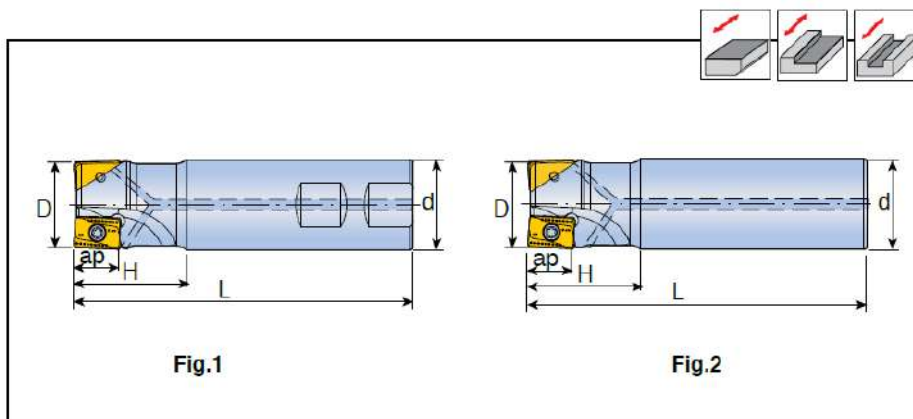
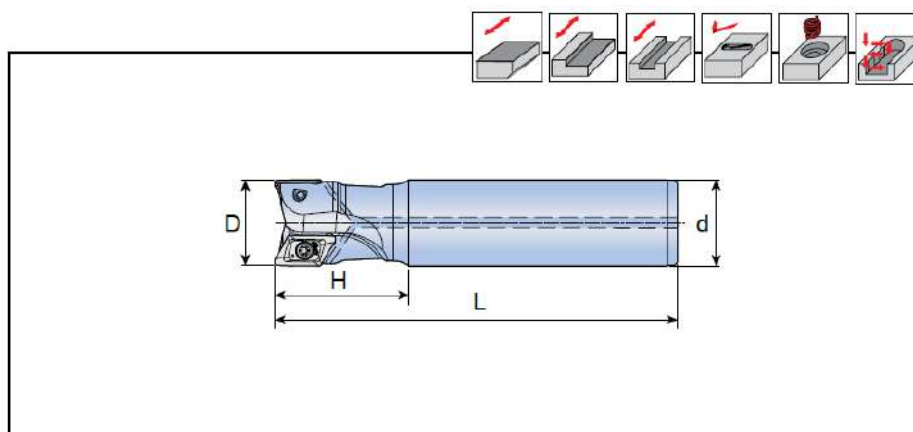
TE90AN
CHASE 2 MILL
End Mill


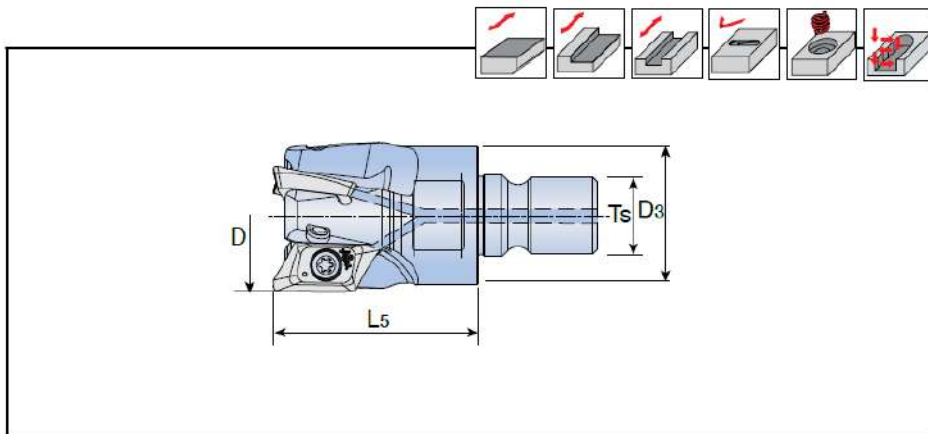
Fig.1

Fig.2

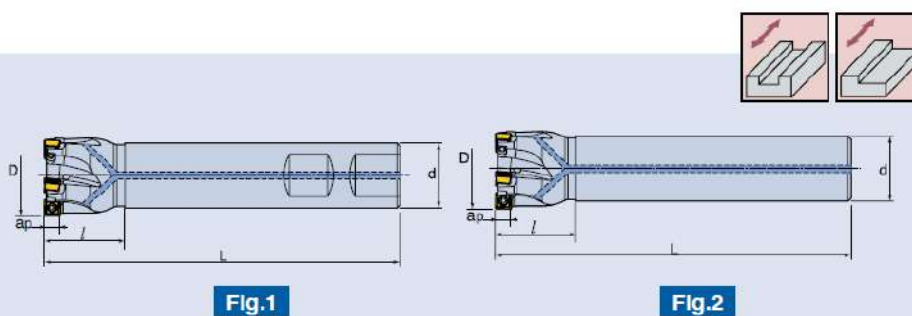
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
9344	FRESA TT TE90AN 232-32-16	2	32	15	ANMX 160708R-M ANHX 160708R-SM ANHX 1607...R-M/AL ANHX 160708R-ML/MR
9962	FRESA TT TE90AN 233-32-16-L200	2	33		
17187	FRESA TT TE90AN 337-32-16	3	37		
9346	FRESA TT TE90AN 340-32-16	3	40		
11852	FRESA TT TE90AN 450-32-16	4	50		

TE90XE
CHASE ALU
End Mill


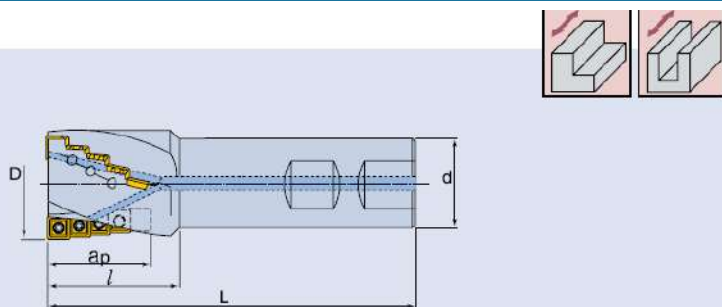
Código	Descrição	Qtde Pastilhas	D (mm)	Max RPM	Pastilha
16091	FRESA TT TE90XE 225-25-16	2	25	38	ANMX 160708R-M ANHX 160708R-SM ANHX 1607...R-M/AL ANHX 160708R-ML/MR
14418	FRESA TT TE90XE 225-25-16-L170	2	25	38	
16373	FRESA TT TE90XE 232-32-16-L200	2	32	34	
14419	FRESA TT TE90XE 332-32-16-L200	3	32	34	

TE90XE-M CHASE ALU
Modular


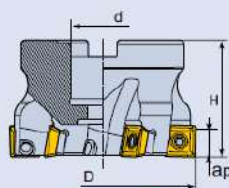
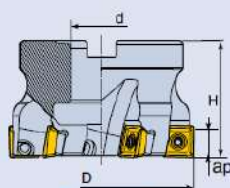
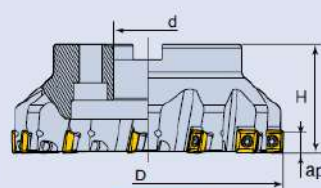
Código	Descrição	Qtde Pastilhas	D (mm)	Max RPM	Pastilha
17267	FRESA TT TE90XE 332-M16-16	3	32	34	ANMX 160708R-M ANHX 160708R-SM ANHX 1607...R-M/AL ANHX 160708R-ML/MR

TE90SD
CHASE QUAD


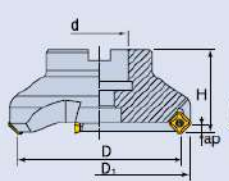
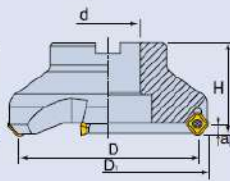
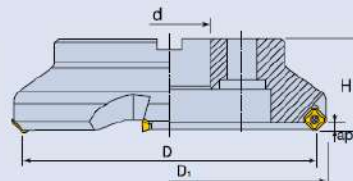
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
11431	FRESA TT TE90SD 108-10-05-C	1	08	4.5	SDMT 050204-M SDHT 050204-AL
10407	FRESA TT TE90SD 110-10-05-C	1	10		
19635	FRESA TT TE90SD 212-11-05-C - L110	2	12		
9957	FRESA TT TE90SD 212-12-05-C	2	12		
9968	FRESA TT TE90SD 316-16-05-C	3	16		
9995	FRESA TT TE90SD 420-W20-05-C	4	20		
12282	FRESA TT TE90SD 525-W24-05	5	25		

TEF-SD
CHASE QUAD


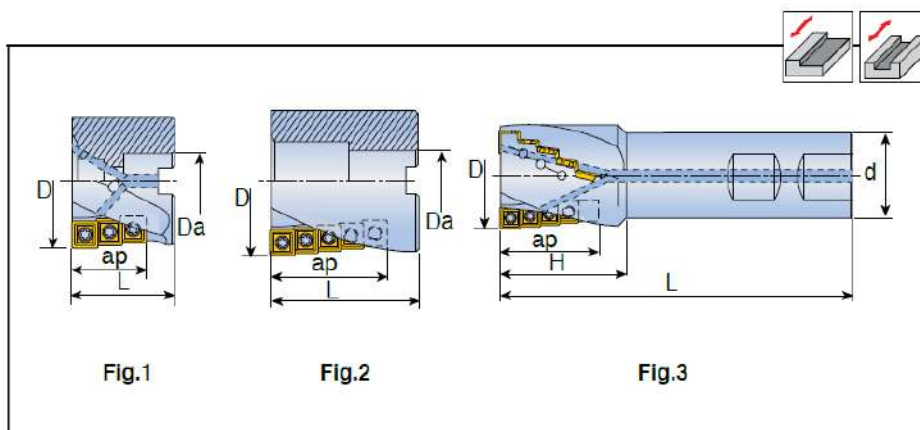
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
11385	FRESA TT TEF D20-20-W20-SD05	10	20	20	SDMT 050204-M SDHT 050204-AL

TFM90SE CHASE QUAD

Fig.1

Fig.2

Fig.3

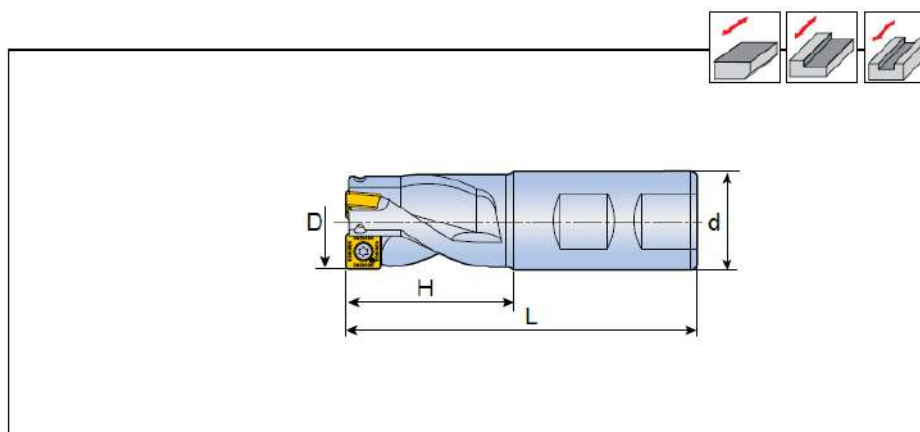
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
7463	FRESA TT TFM90SE 450-22R-13	4	50	11	SEMT 1304 PETR-M SEHT 1304 PER-AL
7468	FRESA TT TFM90SE 563-22R-13	5	63		
15828	FRESA TT TFM90SE 5100-32R-13		100		
7014	FRESA TT TFM90SE 680-27R-13	6	80		
7015	FRESA TT TFM90SE 7100-32R-13	7	100		
7904	FRESA TT TFM90SE 8125-40R-13	8	125		
9510	FRESA TT TFM90SE 10160-40R-13	10	160		

TFM45SE CHASE QUAD

Fig.1

Fig.2

Fig.3

Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
8665	FRESA TT TFM45SE 450-22R-12	4	50	6.7	SEKT 12T3 AFTN-M SEKT 12T3 AFTR-WC SEKT 12T3 AFTN-WC SEHT 12T3 AFN-AL
6454	FRESA TT TFM45SE 563-22R-12	5	63		
12556	FRESA TT TFM45SE 680-27L-12	6	80		
8675	FRESA TT TFM45SE 680-27R-12	6	80		
12756	FRESA TT TFM45SE 6100-32L-12	6	100		
7871	FRESA TT TFM45SE 6100-32R-12	6	100		
9460	FRESA TT TFM45SE 7125-40R-12	7	125		
10864	FRESA TT TFM45SE 880-27R-12F	8	80		
11264	FRESA TT TFM45SE 10100-32R-12F	10	100		
19474	FRESA TT TFM45SE 10250-60R-12	10	250		

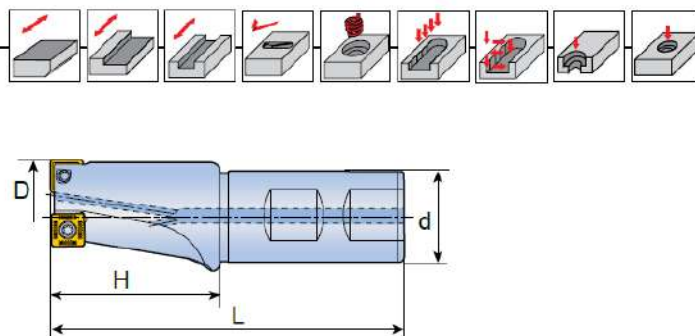
TES/TEF
CHASE QUAD
Extended Flute Cutter


Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
6994	FRESA TT TES D50-29-22-11	9	50	29	SPMG(T)110408-EM
17777	FRESA TT TES D63-35-27-11	16	63	35	
7033	FRESA TT TEF D40-38-W32-11	8	40	38.9	
8784	FRESA TT TEF D50-48-W40-11	15	50	48.4	

TSF
CHASE QUAD
End Mill


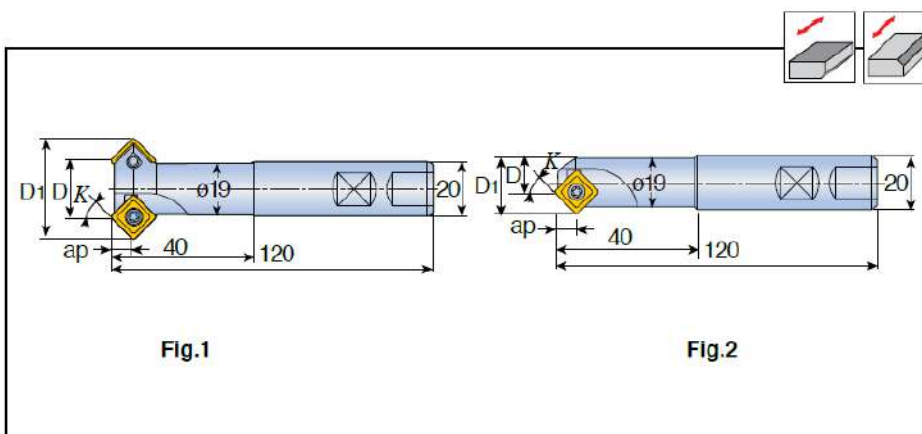
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
18683	FRESA TT TSF 215-14-06L 120MM	2	15	5.6	XOMT 060204
16572	FRESA TT TSF 215-15-06L 120MM	2	15		
7664	FRESA TT TSF 216--06	2	16		
9578	FRESA TT TSF 218-W20-06	2	18		
7671	FRESA TT TSF 320-W20-06	3	20		
16576	FRESA TT TSF 750-25-06	7	50	9.0	SPMG 090408-EM SPMT 090408-EM
6519	FRESA TT TSF 222-W25-09L	2	22		
7123	FRESA TT TSF 225-W25-09	2	25		
9791	FRESA TT TSF 226-25-09L	2	26		
13377	FRESA TT TSF 228-25-09L	2	28		
12377	FRESA TT TSF 230-W25-09	2	30	10.7	SPMG 110408-EM SPMT 110408-EM
10392	FRESA TT TSF 332-W25-09	3	32		
24540	FRESA TT TSF 439-W32-11	4	39		
12378	FRESA TT TSF 440-W32-11	4	40	13.4	SPMG 140508-EM SPMT 140508-EM
25291	FRESA TT TSF 460-W40-14	4	60		

TDM
CHASE QUAD
End Mill

90°


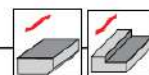
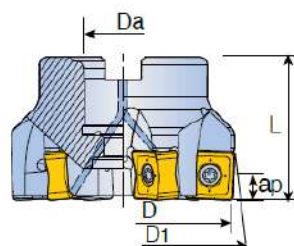
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
6929	FRESA TT TDM 112 W16-06	1	12	5.6	XOMT 060204
6550	FRESA TT TDM 216 W20-06	2	16		
6659	FRESA TT TDM 218 W20-06	2	18		
24162	FRESA TT TDM 219 W20-06	2	19		
6930	FRESA TT TDM 220 W25-06	2	20		
7634	FRESA TT TDM 222 W25-06	2	22		
15935	FRESA TT TDM 222 W25-06	2	22	9.0	SPMG 090408-EM SPMT 090408-EM
24163	FRESA TT TDM 225 W25-09	2	25		
19467	FRESA TT TDM 228 W32-09	2	28		
23384	FRESA TT TDM 231 W32-09	2	31	10.7	SPMG 110408-EM SPMT 110408-EM
20136	FRESA TT TDM 239 W32-11	2	39		

TCF
CHASE QUAD
End Mill

45°


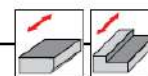
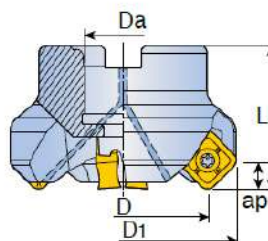
Código	Descrição	Qtde Pastilhas	D (mm)	D1 (mm)	Pastilha
16281	FRESA TT TCF15 D25-11	2	25	30.5	SPMT 110408-EM SPMG 110408-EM
13410	FRESA TT TCF30 D25-11	2	25	35.5	
8032	FRESA TT TCF45 D07-11	1	07	21.5	
8010	FRESA TT TCF45 D19-11	2	19	33.4	
8420	FRESA TT TCF45 D25-11	3	25	39.4	
16483	FRESA TT TCF55 D07-11		07		

TFM90SN / TFM88SN CHASE 2 QUAD
Face Mill

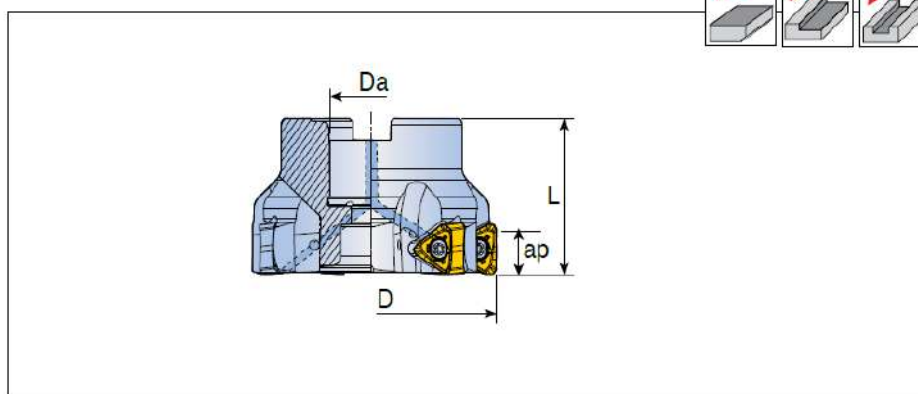
90°
88°


Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
11363	FRESA TT TFM88SN 980-27R-13	9	80	6.7	SNGX 1306 ZN-M/ML SNGX 1306C08 ZN-M SNGX 1306 ZNTN-W
12268	FRESA TT TFM90SN 550-22R-13	5	50		SNGX 130608-M/MM/ML SNGX 130612-M/MM/ML SNGX 130616-M/MM SNGX 130620-M SNGX 130608-CE SNGX 1306 PNTN-W
11438	FRESA TT TFM90SN 663-22R-13	6	63		
11746	FRESA TT TFM90SN 780-27R-13	7	80		
12207	FRESA TT TFM90SN 8100-32R-13	8	100		
12267	FRESA TT TFM90SN 10125-40R-13	10	125		

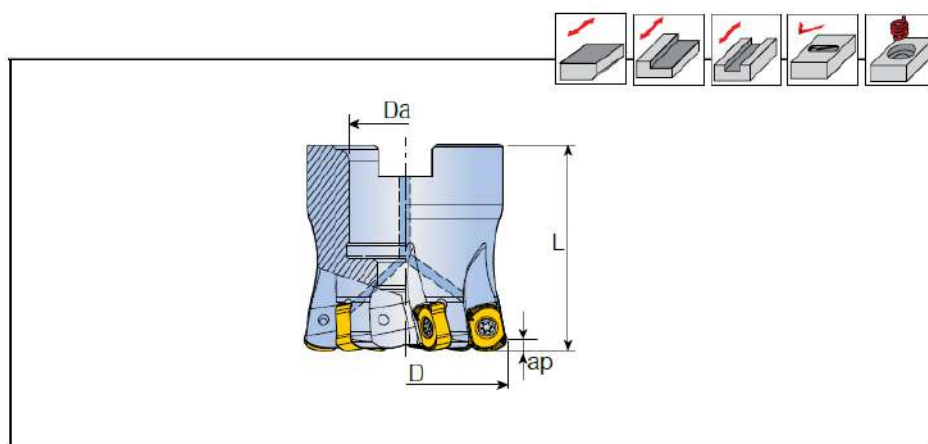
TFM45SN CHASE 2 QUAD
Face Mill

45°


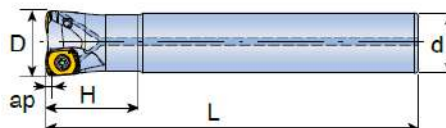
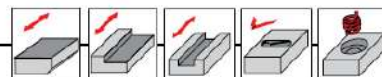
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
25502	FRESA TT TFM45SN 5100-32R-13B	5	100	7	SNGX 1306 ANTIN-M SNMX 1306 ANTIN-M SNGX 1306 ANTIN-ML SNGX 1306 ANN-AL SNMX 1306 ANTR-MP SNGX 1306 ANTIN-W SNMX 1306 XTN

SCRM90TN LS 2 TRIO
Face Mill


Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
10884	FRESA TT SCRM90TN 350-16R-22	3	50	15	TNGX 2207 PNTN TNMX 2207 PNTN
10903	FRESA TT SCRM90TN 463-22R-22	4	63		
10267	FRESA TT SCRM90TN 580-27R-22	5	80		
10287	FRESA TT SCRM90TN 6100-32R-22	6	100		
12796	FRESA TT SCRM90TN 8125-40R-22	8	125		
10353	FRESA TT SCRM90TN 10160-40R-22	10	160		

TFMBL
CHASE 2 FEED
Face Mill


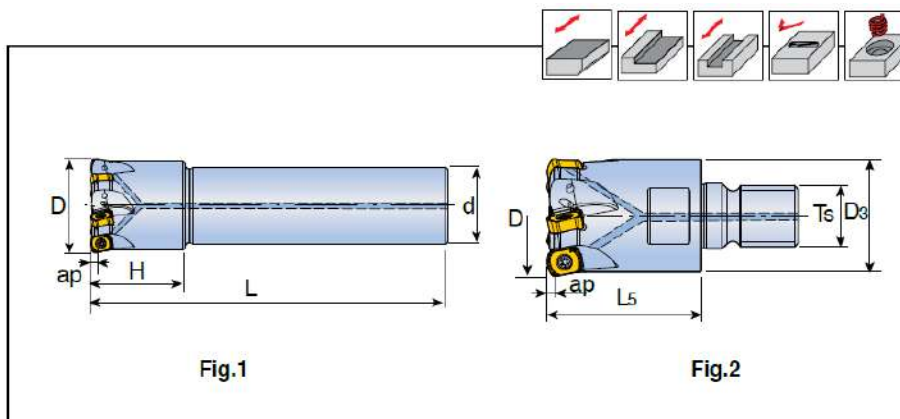
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
19931	FRESA TT TFMBL 550-22R-06	5	50	1	BLMP 0603R-M BLMP 0603R-MM BLMP 0603R-ML
12340	FRESA TT TFMBL 640-22R-06	6	40		
24007	FRESA TT TFMBL 642-22R-06	6	42		
25507	FRESA TT TFMBL 650-22R-06	6	50		
12536	FRESA TT TFMBL 750-22R-06	7	50		
24772	FRESA TT TFMBL 763-22R-06	7	63		
25399	FRESA TT TFMBL 550-22R-09	5	50	1.5	BLMP 0904R-M BLMP 0904R-MM BLMP 0904R-ML
24114	FRESA TT TFMBL 880-27R-09	8	80		
11317	FRESA TT TFMBL 450-22R-12	4	50	2	BLMP 1205R-M
9057	FRESA TT TFMBL 463-22R-12	4	63		
11700	FRESA TT TFMBL 563-22R-12	5	63		
10000	FRESA TT TFMBL 580-27R-12	5	80		

TEBL
CHASE 2 FEED
End Mill


Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
16910	FRESA TT TEBL 216-15-06 L100	2	16	0.7	BLMP 0603R-M BLMP 0603R-MM BLMP 0603R-M
16911	FRESA TT TEBL 216-15-06 L150	2	16		
16762	FRESA TT TEBL 216-15-06 L180	2	16		
16912	FRESA TT TEBL 216-15-06 L200	2	16		
12329	FRESA TT TEBL 216-16-06	2	16	1	
23062	FRESA TT TEBL 320-19-06L	3	20		
13376	FRESA TT TEBL 320-20-06	3	20		
16285	FRESA TT TEBL 321-20-06-L200	3	21		
16913	FRESA TT TEBL 325-24-06 L100	3	25		
16914	FRESA TT TEBL 325-24-06 L150	3	25		
16915	FRESA TT TEBL 325-24-06 L200	3	25		
23859	FRESA TT TEBL 325-25-06-L220	3	25		
16917	FRESA TT TEBL 332-25-06 L200	3	32		
16916	FRESA TT TEBL 332-32-06 L150	3	32		
18869	FRESA TT TEBL 425-20-06	4	25		
12528	FRESA TT TEBL 425-25-06	4	25		
14015	FRESA TT TEBL 426-25-06-L200	4	26		
24358	FRESA TT TEBL 435-16-06	4	35		
24436	FRESA TT TEBL 440-32-06	4	40		
12351	FRESA TT TEBL 532-32-06-S	5	32	1.5	BLMP 0904R-M BLMP 0904R-MM BLMP 0904R-ML
18291	FRESA TT TEBL 325-25-09-L150	3	25		
25400	FRESA TT TEBL 332-32-09-L220	3	32		
23006	FRESA TT TEBL 432-32-09-L 160	4	32		
11694	FRESA TT TEBL 232-32-12	2	32	2	BLMP 1205R-M
9056	FRESA TT TEBL 232-32-12-L	2	32		

TEBL-M

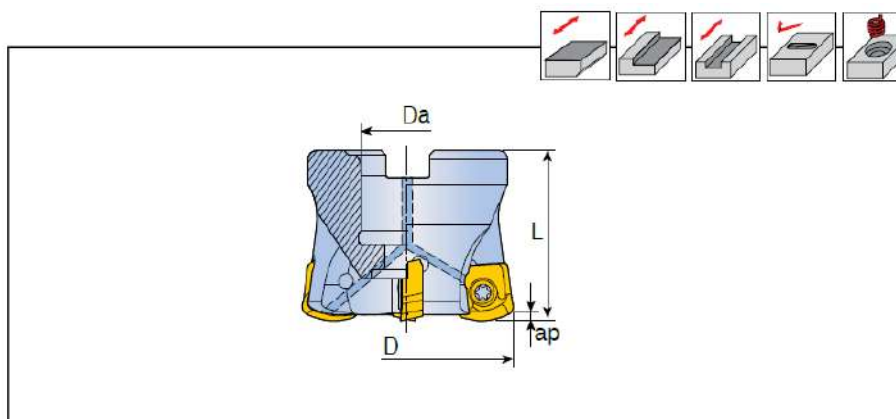
CHASE 2 FEED

End Mill & Modular


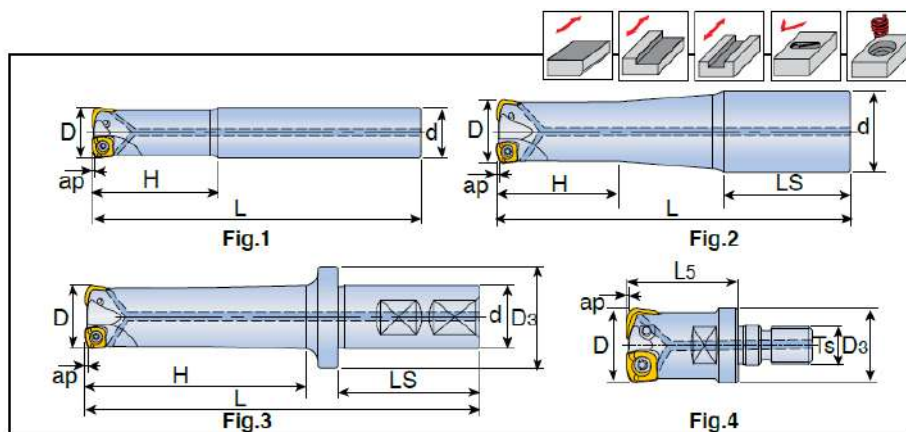
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
15483	FRESA TT TEBL 425-M12-06	4	25	1	BLMP 0603R-M BLMP 0603R-MM BLMP 0603R-ML
12611	FRESA TT TEBL 532-M16 06	5	32		
24479	FRESA TT TEBL 325-M12-09	3	25		BLMP 0904R-M BLMP 0904R-MM BLMP 0904R-ML
25518	FRESA TT TEBL 432-M16-09	4	32	1.5	
10858	FRESA TT TEBL 232-M16-12	2	32	2	BLMP 1205R-M

TFMXD

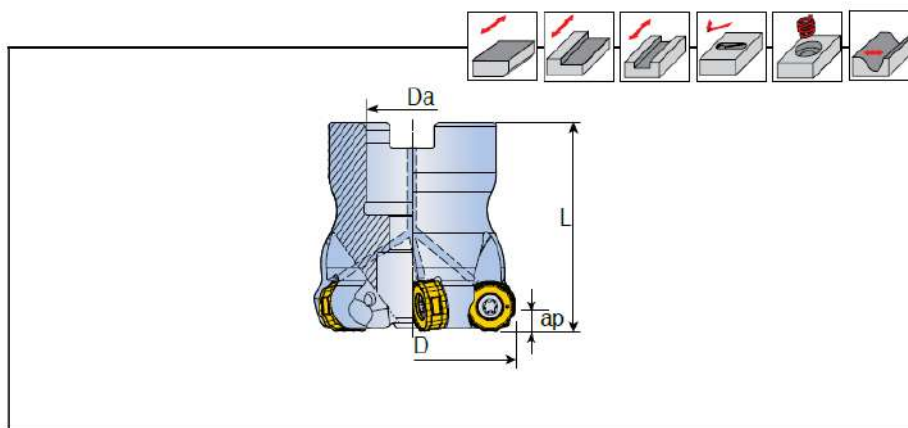
CHASE 2 FEED

Face Mill


Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
8407	FRESA TT TFMXD 550-22R-08	5	50	1	XDMX 08T310R-M XDMX 08T310R-MR
7514	FRESA TT TFMXD 463-22R-13	4	63	2	XDMX 130515R-MM XDMX 130515R-MR
7515	FRESA TT TFMXD 580-32R-13	5	80		

TEXTD
CHASE 2 FEED
End Mill & Modular


Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
8666	FRESA TT TEXTD 220-20-08-L	2	20	1	XDMX 08T310R-M XDMX 08T310R-MR
8797	FRESA TT TEXTD 325-25-08	3	25		
7511	FRESA TT TEXTD 232-32-13-L	2	32	2	XDMX 130515R-MM XDMX 130515R-MR
7581	FRESA TT TEXTD 232-W25F-13-L	2	32		
7512	FRESA TT TEXTD 240-42-13-XL	2	40		
7513	FRESA TT TEXTD 340-32-13-L	3	40		
7549	FRESA TT TEXTD 340-W32F-13-L	3	40		
7550	FRESA TT TEXTD 340-W32F-13-XL	3	40		

TFMRNS
CHASE 2 MOLD
Face Mill


Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
17551	FRESA TT TFMRNS 450-22R-12	4	50	6	RNMU 1205-ML RNMU 1205S-M
16953	FRESA TT TFMRNS 550-22R-12	5	50		
17782	FRESA TT TFMRNS 663-22R-12	6	63		
17783	FRESA TT TFMRNS 780-27R-12	7	80		

TERNS
 End Mill

CHASE 2 MOLD

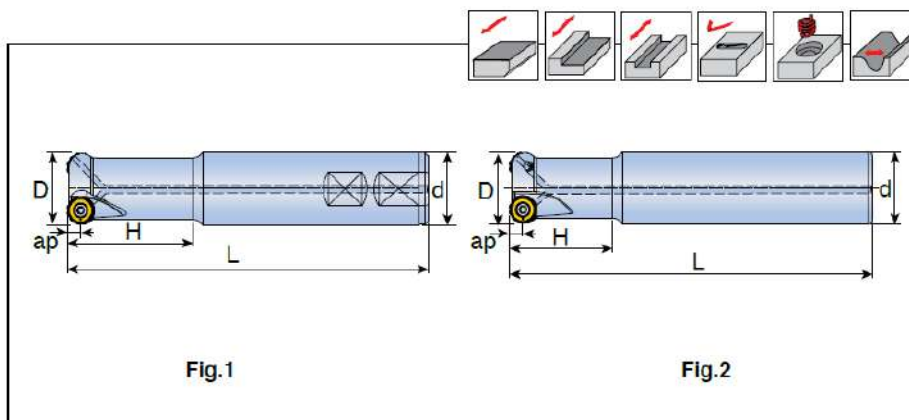


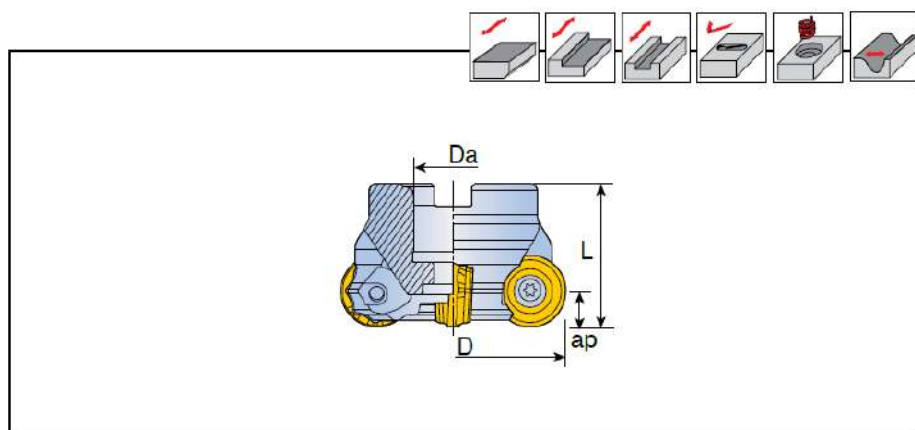
Fig.1

Fig.2

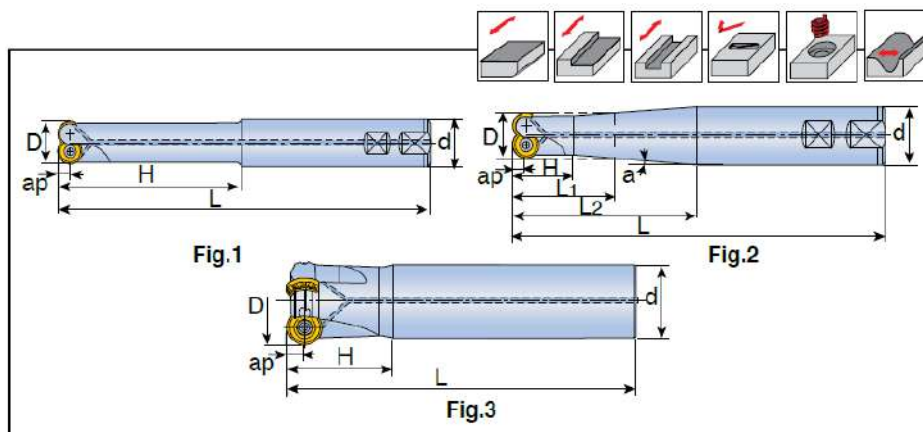
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
17873	FRESA TT TERNS 232-32-12L	2	32	6	RNMU 1205-ML RNMU 1205S-M

TFMRX
 Face Mill

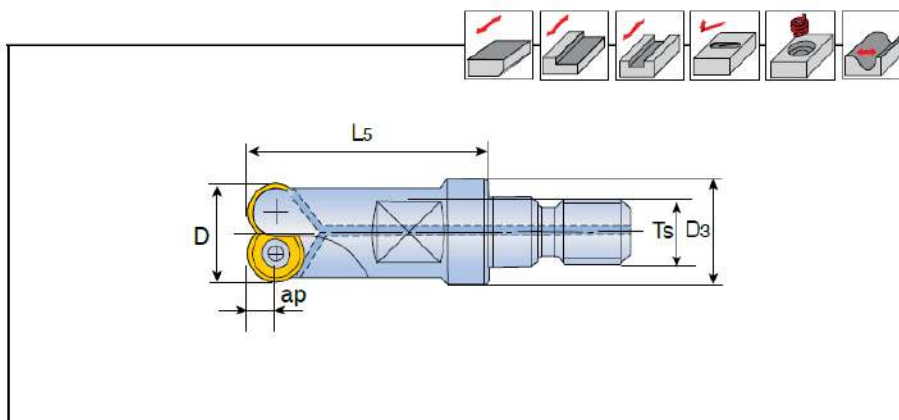
CHASE MOLD



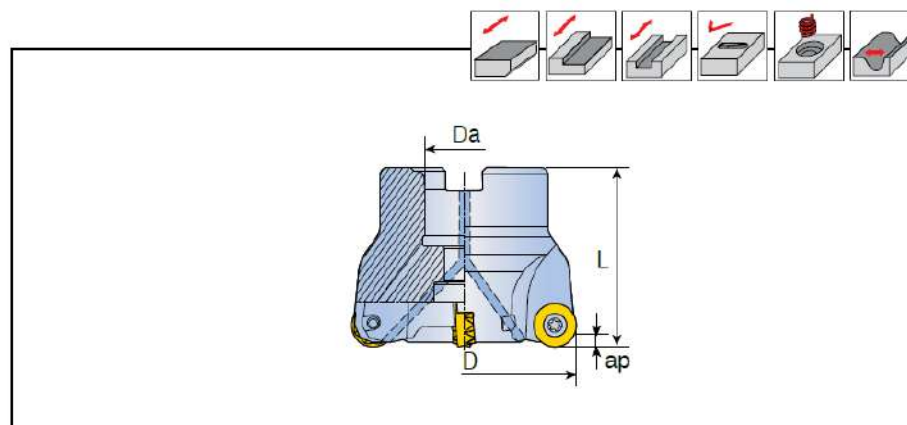
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
9682	FRESA TT TFMRX 550-22R-07	5	50	3.5	RDMX 0702-M
17092	FRESA TT TFMRX 340-16R-10	3	40	5	RXMX 1003M/ML/MR RXHX 1003-AL/ML
15181	FRESA TT TFMRX 550-22R-10	5	50		
10863	FRESA TT TFMRX 650-22R-10	6	50		
12495	FRESA TT TFMRX 652-22R-10	6	52		
6614	FRESA TT TFMRX 450-22R-12	4	50	6	RXMX 12T3-M/ML/MR RXHX 12T3-AL/MR
8661	FRESA TT TFMRX 550-22R-12	5	50		
6470	FRESA TT TFMRX 563-22R-12	5	63		
8674	FRESA TT TFMRX 663-22R-12	6	63		
6467	FRESA TT TFMRX 680-27R-12	6	80		
7146	FRESA TT TFMRX 7100-32R-12	7	100		
9168	FRESA TT TFMRX 7125-40R-12	7	125		
7000	FRESA TT TFMRX 8160-40R-12	8	160	8	RXMX 1604-M/MR/ML
8680	FRESA TT TFMRX 463 22R -16	4	63		
8731	FRESA TT TFMRX 580-27R-16	5	80		
8293	FRESA TT TFMRX 6100-32R-16	6	100		
7984	FRESA TT TFMRX 7125-40R-16	7	125		
23361	FRESA TT TFMRX 8125-40R-16	8	125		
13715	FRESA TT TFMRX 8160-40R-16	8	160	10	RXMX 2006-M/MR
8842	FRESA TT TFMRX 463-22R-20	4	63		
11176	FRESA TT TFMRX 580-27R-20	5	80		

TERD/ TERX CHASE MOLD
End Mill


Código	Descrição	3Qtd de Pas-tilhas	D (mm)	ap (mm)	Pastilha
6532	FRESA TT TERD 108-W10-05	1	8	2.5	RDMX 0501-M
6486	FRESA TT TERD 210-W12-05	2	10		
7249	FRESA TT TERD 212-16-05-L	2	12		
6492	FRESA TT TERD 212-W12-05	2	12		
7250	FRESA TT TERD 215-20-07-L	2	15	3.5	RDMX 0702-M
6551	FRESA TT TERD 215-W20-07	2	15		
10644	FRESA TT TERD 216-15-07	2	16		
9407	FRESA TT TERD 217-16-07-L200	2	17		
10645	FRESA TT TERD 320-19-07	3	20		
7991	FRESA TT TERD 325-W25-07L	3	25		
10643	FRESA TT TERD 425-24-07	4	25		
25065	FRESA TT TERD 432-W25-07L	4	32	5	RXMX 1003-M/ML/MR RXHX 1003-AL/MR
6600	FRESA TT TERX 220-W20-10	2	20		
15511	FRESA TT TERX 221-20-10-L200	2	21		
25287	FRESA TT TERX 225-24-10-L	2	25		
7252	FRESA TT TERX 225-32-10-L	2	25		
6844	FRESA TT TERX 225-W25-10	2	25		
10862	FRESA TT TERX 226-25-10-L300	2	26		
15492	FRESA TT TERX 325-W25-10	3	25		
9416	FRESA TT TERX 332-W32-10	3	32		
10865	FRESA TT TERX 432-W32-10	4	32		
15476	FRESA TT TERX 120-20-12	1	20	6	RXMX 12T3-M/ML/MR RXHX 12T3-AL/MR
10642	FRESA TT TERX 225-24-12-L	2	25		
9269	FRESA TT TERX 225-25-12-L	2	25		
6469	FRESA TT TERX 225-W25-12	2	25		
7113	FRESA TT TERX 232-32-12-L	2	32		
10861	FRESA TT TERX 233-32-12-L300	2	33		
6558	FRESA TT TERX 332-W32-12	3	32		
16652	FRESA TT TERX 340-W32-12	3	40		
7253	FRESA TT TERX 440-W32-12	4	40		

TERD-M/ TERX-M
CHASE MOLD
Modular


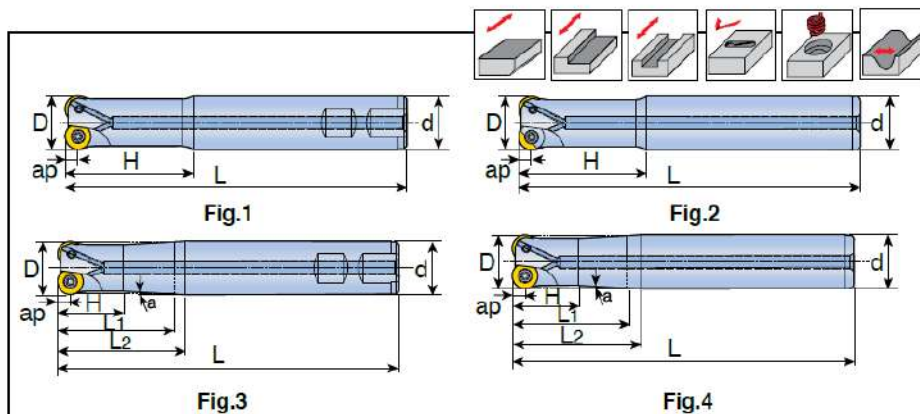
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
7160	FRESA TT TERD 210-M08-05 - PONTEIRA	2	10	2.5	RDMX 0501-M
24993	FRESA TT TERD 212-M08-05	2	12		
7402	FRESA TT TERD 215-M08-07 - PONTEIRA	2	15	3.5	RDMX 0702-M
12612	FRESA TT TERD 320-M08-07	3	20		
10390	FRESA TT TERX 320-M08-07 - PONTEIRA	3	20		
7161	FRESA TT TERX 220-M10-10 - PONTEIRA	2	20	5	RXMX 1003-M/ML/MR RXHX 1003-AL/MR
9331	FRESA TT TERX 325-M12-10	3	25		
9762	FRESA TT TERX 432-M16-10	4	32		
19095	FRESA TT TERX 224-M12-12	2	24	6	RXMX 12T3-M/ML/MR RXHX 12T3-AL/MR
10253	FRESA TT TERX 232-M16-12 - PONTEIRA	2	32		
10174	FRESA TT TERX 332-M16-12 - PONTEIRA	3	32		
7396	FRESA TT TERX 340-M16-12-PONTEIRA	3	40		

TFMRY
NEW CHASE MOLD
Face Mill


Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
17692	FRESA TT TFMRY 650-22R-10	6	50	5	RYMX 10-M/ML/MM/MR RYHX 10-ML/MR/AL
17376	FRESA TT TFMRY 450-22R-12	4	50	6	RYMX 12-M/ML/MM/MR RYHX 12-ML/MM/MR/AL
24311	FRESA TT TFMRY 550-22R-12	5	50	6	
19938	FRESA TT TFMRY 563-22R-12	5	63	6	
18244	FRESA TT TFMRY 663-22R-12	6	63	6	
20104	FRESA TT TFMRY 7100-32R-12	7	100	6	
23466	FRESA TT TFMRY 10150-40R - 12	10	150	6	
23973	FRESA TT TFMRY 16250-60R-12	16	250	6	
18192	FRESA TT TFMRY 10160-40R-16	10	160	8	RYMX 16-M/MM/ML/MR RYHX 16-ML/AL

TERY
 End Mill

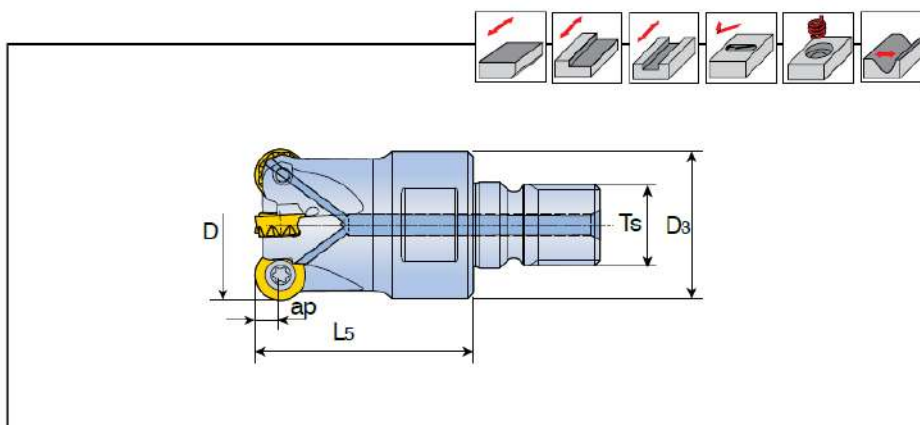
NEW CHASE MOLD



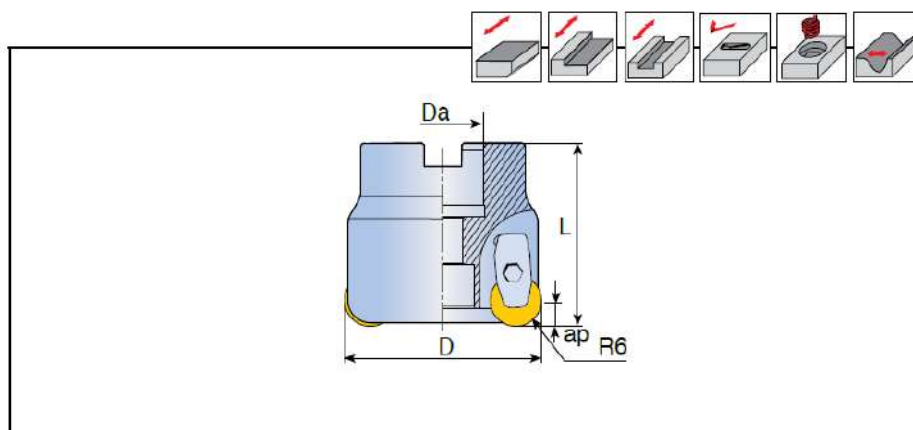
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
15290	FRESA TT TERY 216-W20-08-L	2	16	4	RYMX 08-M/ML/MM/MR RYHX 08-ML/MR/AL
16591	FRESA TT TERY 320-W20-08	3	20		
16238	FRESA TT TERY 220-W20-10	2	20	5	RYMX 10-M/ML/MM/MR RYHX 10-ML/MR/AL
17089	FRESA TT TERY 325-W25-10	3	25		
19218	FRESA TT TERY 332-W32-10	3	32		
17088	FRESA TT TERY 225-W25-12	2	25	6	RYMX 12-M/ML/MM/MR RYHX 12-ML/MMMR/AL
17090	FRESA TT TERY 332-W32-12	3	32		

TERY-M
 Modular

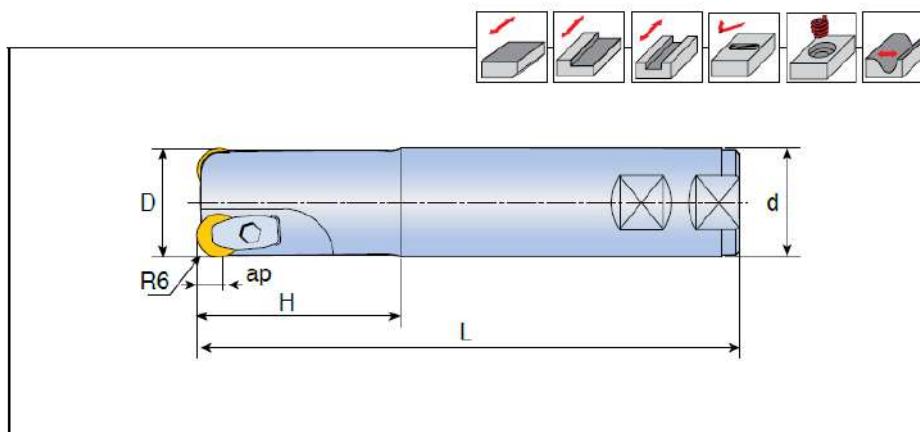
NEW CHASE MOLD



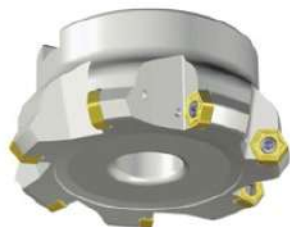
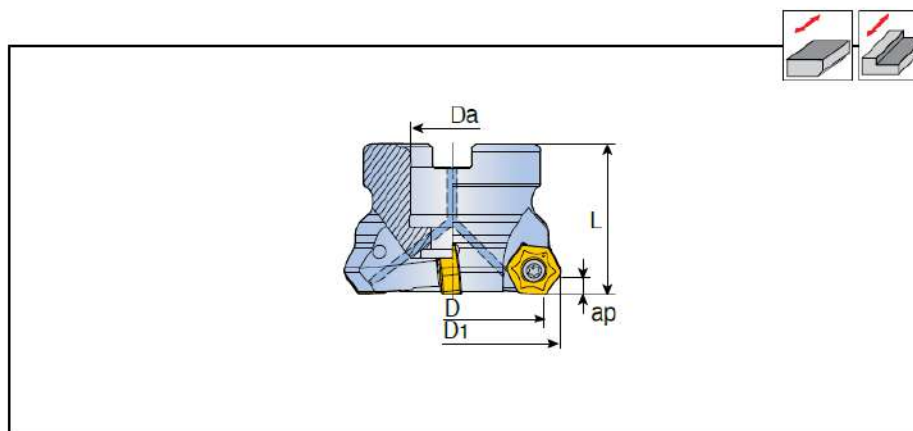
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
25393	FRESA TT TERY 320-M10-08	3	20	4	RYMX 08-M/ML/MM/MR RYHX 08-ML/MR/AL
16109	FRESA TT TERY 432-M16-10	4	32	5	RYMX 10-M/ML/MM/MR RYHX 10-ML/MR/AL
16181	FRESA TT TERY 435-M16-10	4	35		

TFMRN
CHASE SPEED
Face Mill


Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
17854	FRESA TT TFMNR 350-22R-12 CH	3	50	6	RNGX 1207 CH

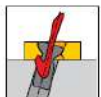
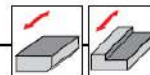
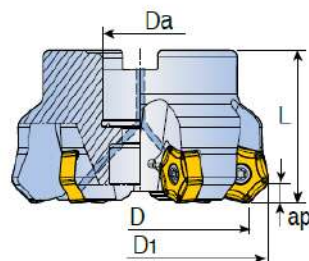
TERP
CHASE SPEED
End Mill


Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
9403	FRESA TT TERP 232-W32-12CH	2	32	6	RPGX 1204 CH

TFM55AHNS
HEXA 2 MILL
Face Mill

55°


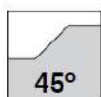
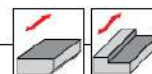
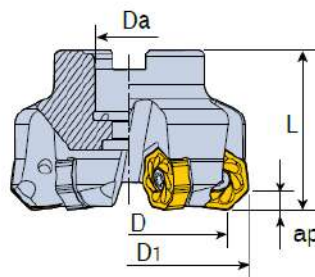
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
7993	FRESA TT TFM55AHNS 450-22R-05B	4	50	5	HNM(C)X 050410-MM HNCX 050410R-MP HNCX 050410R-L HNCX 050610-MR HNCX 05R-W
19683	FRESA TT TFM55AHNS 563-22R-05	5	63		
11400	FRESA TT TFM55AHNS 650-22R-05	6	50		
11351	FRESA TT TFM55AHNS 1080-27R-05	10	80		

TFM45HNS HEXA 2 MILL

Face Mill: Angled Screw Clamp Type Cutter

45°


Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
14399	FRESA TT TFM45HNS 680-27R-10	6	80	6.1	HNHX1006 ANT-N-M HNHX1006 ANT-N-ML HNHX1006 ANT-N-MM HNHX1006 ANT-N-W HNHX1006 ANT-N-CE

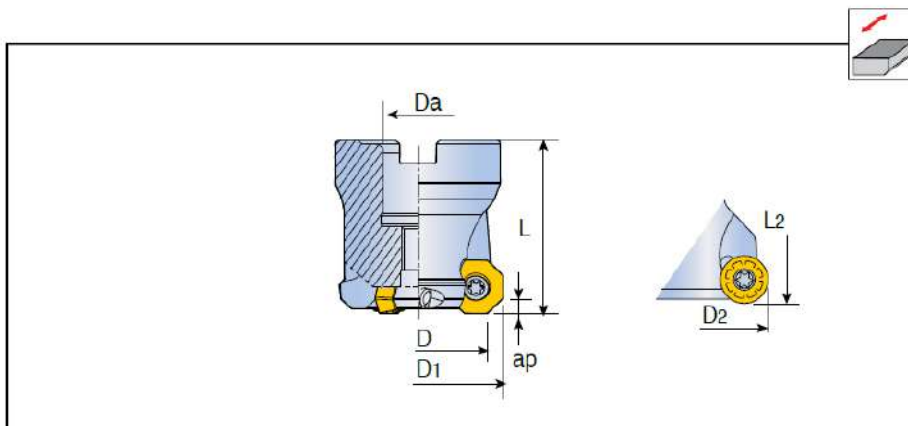
14D-F45XN HEXA 2 HEPTA

Face Mill

45°


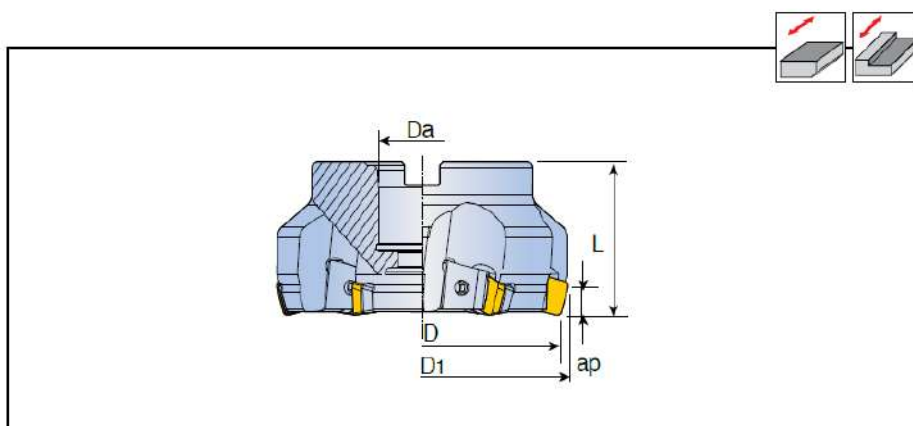
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
15287	FRESA TT 14D F45XN 563-22R-09	5	63	5	XNMU 0906 ANTR-M XNMU 0906 ANT-N-ML XNHU 0906 ANT-N-MM XNHU 0906 ANT-N-ML XNHU 0906 ANT-N-W XNHU 0906 ANT-N-CE
16449	FRESA TT 14D F45XN 663-22R-09	6	63		
14463	FRESA TT 14D F45XN 680-27R-09	6	80		
15286	FRESA TT 14D F45XN 780-27R-09	7	80		
15288	FRESA TT 14D F45XN 7100-32R-09	7	100		
16247	FRESA TT 14D-F45XN 8125-40R-09	8	125		
18688	FRESA TT 14D-F45XN 10125-40R-09	10	125		
18689	FRESA TT 14D-F45XN 12160-40R-09	12	160		
17425	FRESA TT 14D-F45XN 12200-60R-09	12	200		

TFM430FS/ TFM43Z0FW
CHASE OCTO
Face Mill

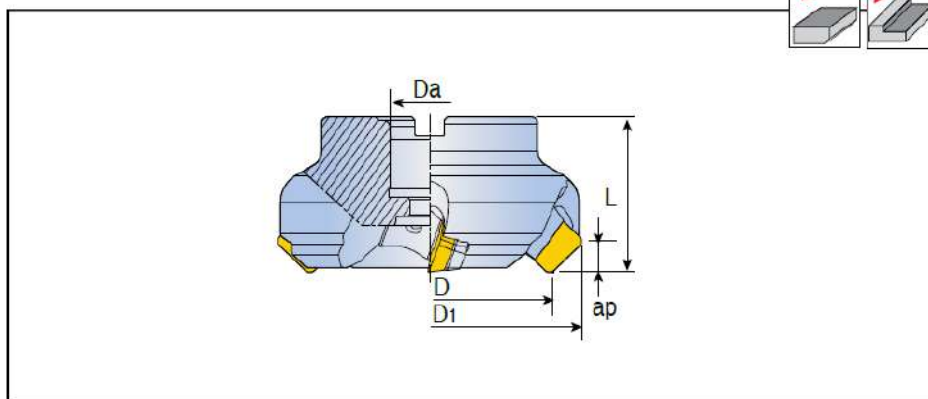
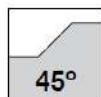
TFM430FS

TFM43Z0FW


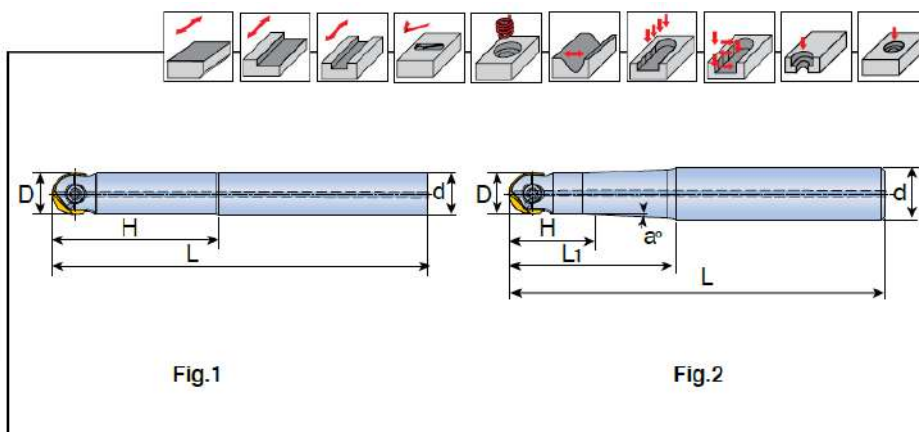
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
6495	FRESA TT TFM430FS 550-22R-05	5	50	3.5	OFCW 05T3 TN-MR OFCW 05T3 TN-EMR OFCT 05T3 TN-M OFCT 05T3 TN-EM OFMT 05T3 TN-ML OFCT 05T3 TN-AL RFMT 1404-ML
6709	FRESA TT TFM430FS 563-22R-05	5	63		
6819	FRESA TT TFM430FS 780-27R-05	7	80		
6437	FRESA TT TFM430FS 8100-32R-05	8	100		
9483	FRESA TT TFM430FS 8125-40R-05	8	125		
8505	FRESA TT TFM430FS 9125-40R-05	9	125		
12371	FRESA TT TFM430FS 10160-40R-05	10	160		
23838	FRESA TT TFM43Z0FW 12200-60R-07	12	200	5	OFCN 0704 TN-MR OFCN 0704 TN-EMR OFMR 0704 AER-M OFCR 0704 TN-ML OFCR 0704 TN-EML OFMR 0704 TN-AL RFMR 1904-M

LM75SP LION MILL
Face Mill


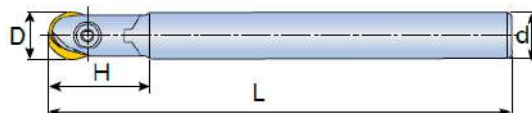
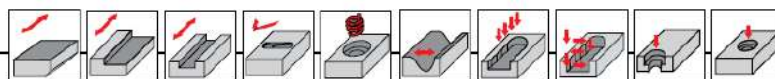
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
18053	FRESA TT LM75SP 8100-28L-12	8	100	9.5	SPKN 1203 ED
18057	FRESA TT LM75SP 8125-28R-12	8	125		

LM45SE LION MILL
Face Mill


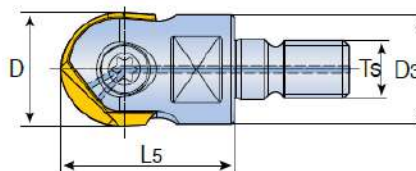
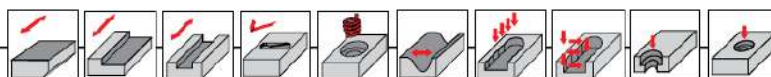
Código	Descrição	Qtde Pastilhas	D (mm)	ap (mm)	Pastilha
17689	FRESA TT LM45SE 463-22R-12	4	63	6.5	SEKN 1203 AF
23547	FRESA TT LM45SE 580-27R-1204	5	80		
17735	FRESA TT LM45SE 6100-32L-12	6	100		

TNF FINE BALL
Steel Shank Type


Código	Descrição	D (mm)	Fig.	Pastilha
14179	FRESA TT TNF 080-08S	8	1	NFB 080-SM NFB 080-FM NFR 080A-R
14180	FRESA TT TNF 080-12M	8	2	
16730	FRESA TT TNF 100-10S	10	1	NFB 100-SM NFB 100-FM NFR 100A-R NFR 110A-R
16731	FRESA TT TNF 100-12S	10	2	
16732	FRESA TT TNF 100-16M	10	2	
15738	FRESA TT TNF 120-12S	12	1	NFB 120-SM NFB 120-FM NFR 120A-R NFR 130A-R
16733	FRESA TT TNF 120-16M	12	2	
16734	FRESA TT TNF 120-20L	12	2	
16735	FRESA TT TNF 160-16M	16	1	NFB 160-SM NFB 160-FM NFR 160A-R NFR 170A-R
19686	FRESA TT TNF 160-20M	16	2	
16311	FRESA TT TNF 160-25L	16	2	
17217	FRESA TT TNF 200-20L	20	1	NFB 200-SM NFB 200-FM NFR 200A-R NFR 210A-R
17177	FRESA TT TNF 200-25L	20	2	

TNF-CT-L FINE BALL
Tungsten Carbide Shank Type


Código	Descrição	D (mm)	Pastilha
24005	FRESA TT TNF 100-10-CT-L140 MD	10	NFB 100-SM NFB 100-FM NFR 100A-R NFR 110A-R
23479	FRESA TT TNF 160-16-CT-L120 MD	16	NFB 160-SM NFB 160-FM NFR 160A-R NFR 170A-R
19783	FRESA TT TNF 160-16-CT-L160 MD	16	

TNF-M FINE BALL
Modular


Código	Descrição	D (mm)	Pastilha
19979	FRESA TT TNF 225 -M12	22.5	

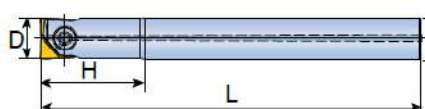
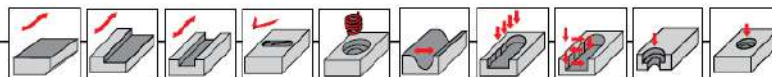
TNFR FINE BALL
Steel Shank Type


Fig.1

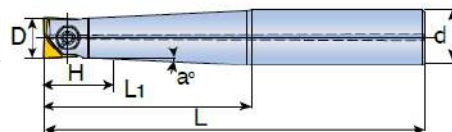
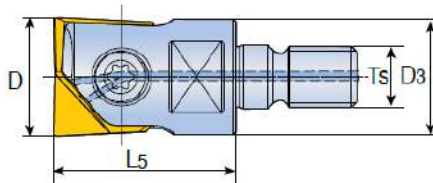
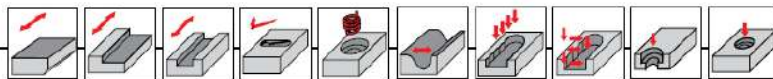
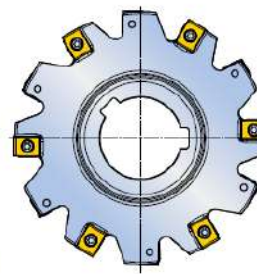
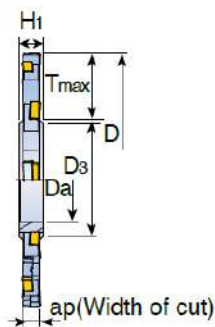
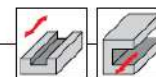


Fig.2

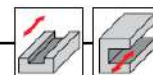
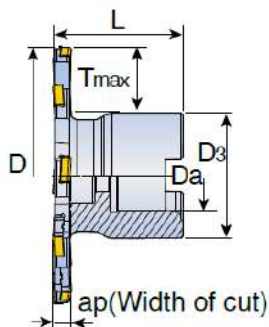
Código	Descrição	D (mm)	Pastilha
17015	FRESA TT TNFR 080-12S	8	NFR 080A-R

TNFR-M FINE BALL
Modular


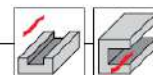
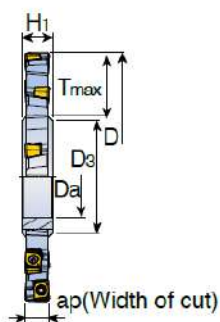
Código	Descrição	D (mm)	Pastilha
18970	FRESA TT TNFR 120-M06	12	NFR 120A-R NFR 130A-R

TSM-FD TOP SLOT
Slotting Cutter: Fixed Pocket Disk Type


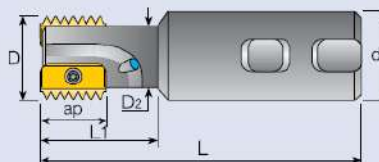
Código	Descrição	Nº de Pastilhas	D (mm)	Ap (mm)	Pastilha
18949	FRESA TT TSM 063-FD 03,15 - 22N -Z018	4+4	63	3	ZNHT 018-...
18181	FRESA TT TSM 063FD-03-22N Z018	4+4	63	3	
17784	FRESA TT TSM 080FD-03-22N Z018	5+5	80	3	
15965	FRESA TT TSM 052FD-049-22N Z028	3+3	32		ZNHT 028-...
18841	FRESA TT TSM 055FD-05-22N Z028	3+3	55	5	
19526	FRESA TT TSM 063-FD 04,75 - 22N -Z028	4+4	63		
17969	FRESA TT TSM 080FD-05-22N Z028	5+5	80	5	
18880	FRESA TT TSM 100FD-07-27N Z038	5+5	100	7	ZNHT 038-...
25070	FRESA TT TSM 125FD-07-32N Z038	6+6	124	7	
16459	FRESA TT TSM 080FD-08-27N Z043	4+4	80	8	ZNHT 043-...
17612	FRESA TT TSM 090FD-08,4-27N Z043	4+4	90	8,4	
17613	FRESA TT TSM 100FD-08,4-27N Z043	5+5	100	8,4	
19057	FRESA TT TSM 125FD-09-40N Z048	6+6	125	9	ZNHT 048-...
17351	FRESA TT TSM 160FD-10-40N Z053	8+8	160	10	ZNHT 053-...
19182	FRESA TT TSM 200FD-10-40N Z053	9+9	200	10	

TSM-FF TOP SLOT
Slotting Cutter: Fixed Pocket Flange Type


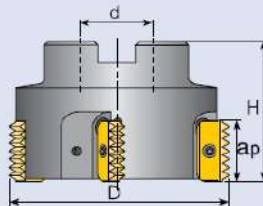
Código	Descrição	Nº de Pastilhas	D (mm)	Pastilha
17863	FRESA TT TSM 080FF-07-22R Z038	4+4	80	ZNHT 018-...

TSM-FD-ZN TOP SLOT
Slotting Cutter: Fixed Pocket Disk Type


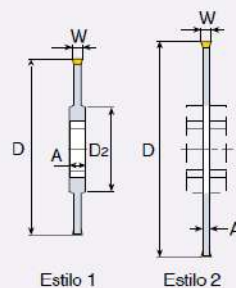
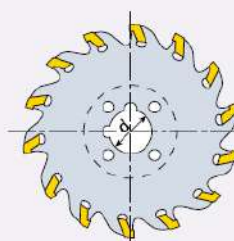
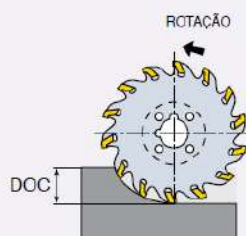
Código	Descrição	Nº de Pastilhas	D (mm)	Pastilha
18497	FRESA TT TSM 080FD-10-27N ZN08	4+4	80	ZNHU 080-...

TMTSR TS-THREAD


Código	Descrição	Nº de Pastilhas	D (mm)	Pastilha
14728	FRESA TT TMTSR 0009 H12	1	9.5	TMT 12
15829	FRESA TT TMTSR 0012 F14	1	12	TMT 14
13871	FRESA TT TMTSR 0014 H14	1	14.5	
9550	FRESA TT TMTSR 0018 H21	1	18	TMT 21
15872	FRESA TT TMTSR 0021 H21	1	21	
17904	FRESA TT TMTSR 0025 K21	1	25	
16437	FRESA TT TMTSR 0040 L30-2	2	40	TMT 30

TMSR
TS-THREAD


Código	Descrição	Nº de Pastilhas	D (mm)	Pastilha
13003	FRESA TT TMSR 0063C21-5-22	5	63	TMT 21
13401	FRESA TT TMSR 0080C21-5-27	5	80	TMT 40

TSC
T-CLAMP


Código	Descrição	Nº de Pastilhas	D (mm)	Pastilha
15420	FRESA TT TSC 75 1.6 22A	8	75	TIMC / TIMJ / TIPV... 1
15479	FRESA TT TSC 75 1.85 22A	8	75	
24295	FRESA TT TSC 100 1.6 22A	10	100	
18881	FRESA TT TSC 63-2-22A	8	63	TIMC / TIMJ / TIPV... 2
10494	FRESA TT TSC 100 3 22K	6	100	TIMC / TIMJ / TIPV... 4
15520	FRESA TT TSC 100 3 22K P/TDC	6	100	
9756	FRESA TT TSC 160 3 40K	10	160	
14394	FRESA TT TSC 80 4 22K	6	80	
10133	FRESA TT TSC 100 4 22K	6	100	
18726	FRESA TT TSC 125 4 32K	8	125	TIMC / TIMJ / TIPV... 1
17175	FRESA TT TSC 75 1.6 27FF	8	75	

PASTILHAS (REFERÊNCIAS TÉCNICAS)

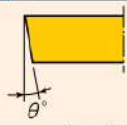
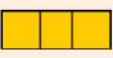
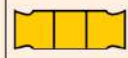
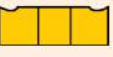
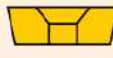
CLASSES

Classe	Cor	Classe ISO 	Aplicação						Material da Peça e Aplicação
			Torneamento	Fresamento	T-Clamp	Furação	Rosqueamento	Fresamento Topo / Perfil	
Cobertura CVD	TT5100 GOLD-RUSH	Amarelo	P20 - P35 M20 - M35	●		●	●		Torneamento em usinagem média e furação de aços baixo carbono e aços ligados Usinagem média a baixa velocidades de aços inoxidáveis
	Novo TT6300 GOLD-RUSH	Amarelo	K01-K15		●				Torneamento em altas velocidades e ranhuramento de ferro fundido
	Novo TT6800 GOLD-RUSH	Amarelo	K10 - K25 P10-P25		●				Fresamento em alta velocidade de ferro fundido cinzento e nodular Fresamento em alta velocidade de aços
	Novo TT7005 BLACK-RUSH	Preto	K01 - K15	●					Torneamento em alta velocidade em corte contínuo de ferro fundido cinzento e nodular
	Novo TT7015 BLACK-RUSH	Preto	K10 - K25	●					Torneamento geral em corte contínuo e interrompido de ferro fundido cinzento e nodular
	TT7100 GOLD-RUSH	Amarelo	P30 - P45	●					Torneamento desbaste em corte interrompido de aços
	Novo TT7800 GOLD-RUSH	Amarelo	P30 - P45 M30 - M45		●		●		Fresamento desbaste e furação em alta velocidade de aços carbono e aços ligados Fresamento em médias velocidades de aço inoxidável
	Novo TT8115 GOLD-RUSH	Amarelo	P05 - P20	●					Torneamento em alta velocidade de aços
	Novo TT8125 GOLD-RUSH	Amarelo	P15 - P30	●					Torneamento geral de aços
	Novo TT8135 GOLD-RUSH	Amarelo	P25 - P40	●					Torneamento interrompido pesado de aços. Tenacidade melhorada e maior resistência à fratura
	Novo TT9100 GOLD-RUSH	Amarelo	P10 - P25			●			Torneamento em alta velocidade e ranhuramento
	Novo TT9215 GOLD-RUSH	Roxo	M05 - M20 S05-S20	●					Torneamento em alta velocidade de aço inoxidável Usinagem em alta e média velocidades de ligas resistentes ao calor
	Novo TT9225 GOLD-RUSH	Roxo	M15 - M30 S15 - S30	●					Torneamento geral de aço inoxidável Usinagem em média velocidade de ligas resistentes ao calor
	Novo TT9235 GOLD-RUSH	Roxo	M25 - M40 S25 - S40	●					Torneamento em baixa velocidade e interrompido de aço inoxidável Usinagem em baixa velocidade de ligas resistentes ao calor
	Novo TT9300 GOLD-RUSH	Amarelo	P10 - P25				●		Furação em alta velocidade de aços carbono e ligados
Cobertura PVD	TT1040	Preto	P10 - P30 M10 - M30 K10 - K30 S10 - S30 H10 - H30					●	Fresamento em alta velocidade de aços. Excelente resistência ao desgaste e ao calor Fresamento geral de aço inoxidável Fresamento geral de ferro fundido Fresamento geral de ligas resistentes ao calor Fresamento em alta velocidade de aços endurecidos. Excelente resistência ao desgaste.
	Novo TT5080 GOLD-RUSH	Amarelo	M05 - M25 S05 - S25	●					Torneamento acabamento em alta velocidade de aço inoxidável Torneamento em alta velocidade de ligas resistentes ao calor
	Novo TT6080 GOLD-RUSH	Amarelo	K05 - K25 H05 - H25		●	●	●		Usinagem geral de ferro fundido cinzento e nodular Usinagem acabamento a médio de ferro fundido cinzento e nodular
	TT7010	Amarelo	P05 - P25 K05 - K25					●	Rosqueamento em aços Rosqueamento em ferro fundido
	Novo TT7080 GOLD-RUSH	Amarelo	P05 - P25 K05 - K25		●				Fresamento geral de aços Corte interrompido pesado de ferro fundido
	TT7220	Cinza	P25 - P45 M25 - M45			●			Corte, ranhuramento, torneamento de ranhuras e furação de aços Corte, ranhuramento, torneamento de ranhuras e furação de aço inoxidável
	TT8010	Amarelo	P30 - P50 M30 - M50 S30 - S50					●	Para uma ampla gama de rosqueamento em aços baixo carbono e aços baixo carbono ligados Para uma ampla gama de rosqueamento em aço inoxidável e materiais exóticos Classe bastante tenaz para a linha de rosqueamento
	TT8020	Cinza	P30 - P50 M30 - M50 S30 - S50	●	●	●	●		Usinagem interrompido e desbaste de aços Usinagem interrompido e desbaste de aço inoxidável Torneamento em baixa velocidade e interrompido de ligas resistentes ao calor.
	Novo TT8080 GOLD-RUSH	Amarelo	P30 - P50 M30 - M50 S30 - S50		●				Usinagem interrompido e desbaste de aços Usinagem interrompido e desbaste de aço inoxidável Torneamento em baixa velocidade e interrompido de ligas resistentes ao calor.
	TT9020	Cinza	P20 - P40 M20 - M40	●					Torneamento de peças pequenas de aço Usinagem geral de aço inoxidável
	TT9030	Preto	P20 - P40 M20 - M40 S20 - S40		●		●	●	Usinagem geral de aços Usinagem geral de aço inoxidável Usinagem geral de ligas resistentes ao calor
	Novo TT9080 GOLD-RUSH	Amarelo	P20 - P40 M20 - M40 S20 - S40		●	●	●		Usinagem geral de aços Usinagem geral de aço inoxidável Usinagem geral de ligas resistentes ao calor

CLASSES CONTINUAÇÃO

Classe		Cor	Classe ISO	Aplicação						Material da Peça e Aplicação	
				Torneamento	Fresamento	T-Clamp	Furação	Rosqueamento	Fresamento Topo / Perfil		
Metal Duro	K10	Metálico	K05 - K15	●	●	●	●			Usinagem geral de ferro fundido	
			N05 - N15	●	●	●	●			Usinagem geral de ligas de alumínio e materiais não ferrosos	
			S05 - S15	●		●	●			Usinagem geral de ligas resistentes ao calor	
	P30	Metálico	P25 - P35	●	●					Usinagem geral de aços	
	UF10	Metálico	P25 - P35						●	Usinagem geral de aços	
M25 - M35									●	Usinagem geral de aço inoxidável	
N25 - N35				●		●			●	Usinagem geral de ligas de alumínio e materiais não ferrosos	
PVD Cermet	PV3010	Amarelo	P05 - P20	●		●				Usinagem de acabamento em alta velocidade de aço carbono, aço liga, aço macio, aços para moldes e aços de fácil usinagem	
			M05 - M20	●		●					Usinagem de acabamento em alta velocidade de aço inoxidável
			K05 - K20	●		●					Usinagem em acabamento em alta velocidade de ferro fundido
	PV3030	Preto	P05 - P20	●		●					Usinagem de acabamento em alta velocidade de aço carbono, aço liga, aço macio, aços para moldes e aços de fácil usinagem
			M05 - M20	●		●					Usinagem média e de acabamento em alta velocidade de aços inoxidáveis austeníticos e martensíticos
K05 - K20			●		●					Usinagem média e de acabamento em alta velocidade de ferro fundido cinzento e nodular	
Cermet	CT3000	Metálico	P10 - P20	●		●				Usinagem de acabamento em alta velocidade de aço carbono, aço liga, aço macio e aços para moldes. Boa rugosidade de superfície.	
			M10 - M20	●		●					Usinagem de acabamento de aço inoxidável. Boa rugosidade de superfície
			K10 - K20	●		●					Usinagem de acabamento de ferro fundido
	CT7000	Metálico	P15 - P25		●						Fresamento de acabamento em aços
			M15 - M25		●						
Cerâmica com cobertura	AB2010	PVD	Amarelo	H01 - H10	●						Torneamento em alta velocidade de aço endurecido. Cor amarelo brilhante
	SC10	CVD	Amarelo	K20 - K30	●						Desbaste de ferro fundido com ou sem refrigeração
Cerâmica	Novo AW120	Azul	K01 - K10	●							Torneamento em alta velocidade de ferro fundido. Excelente resistência ao desgaste
	AB20	Preto	H01 - H10	●							Torneamento de aços e ferro fundido endurecidos (50-65 HRC)
	AB30	Preto	K05 - K15	●		●					Torneamento em corte interrompido suave de ferro fundido sem refrigeração.
			H05 - H15	●		●					Torneamento em alta velocidade de aço endurecido (40-50 HRC)
	Novo AS500	Cinza	K10 - K20	●		●					Desbaste de ferro fundido com ou sem refrigeração. Classe cerâmica. SiAlON grade
	AS10	Cinza	K20 - K30	●	●	●					Torneamento e fresamento de ferro fundido
	AS20	Marrom	S05 - S20	●	●						Torneamento e fresamento em alta velocidade de super ligas
	Novo TC430	Verde	S01 - S15	●	●	●					Torneamento e fresamento em alta velocidade de super ligas. Cerâmica Whisker
	Novo TB610	Cinza Escuro	H01 - H10	●		●					Torneamento corte contínuo de aços cementados endurecido
	TB650	Cinza Escuro	H10 - H20	●		●					Torneamento geral de aços cementados endurecido
CBN	Novo TB670	Cinza Escuro	H15 - H25	●		●					Torneamento de interrompido severo de aço endurecido.
	Novo TB730	Cinza Escuro	K15 - K25	●		●					Torneamento de precisão em alta velocidade de ferro fundido com ou sem corte interrompido
			S05 - S20	●		●					Torneamento em corte interrompido severo de ligas resistentes ao calor
	KB90	Cinza Escuro	K15 - K25	●	●	●					Usinagem em alta velocidade de ferro fundido
			S05 - S20	●	●	●					Usinagem de ligas resistentes ao calor
	KB90A	Cinza Escuro	K10 - K25	●							Torneamento de precisão em alta velocidade de ferro fundido. Solid CBN sólido
	KP500	Preto	N01 - N10	●	●	●			●		Ligas de alta concentração de Si-Al, Metal Duro, compósitos metálicos e materiais compósitos cerâmicos
KP300	Preto	N10 - N20	●	●	●			●		Torneamento e fresamento geral de materiais não ferrosos	
KP100	Preto	N20 - N30	●	●	●			●		Metais não ferrosos. Bom acabamento de superfície	

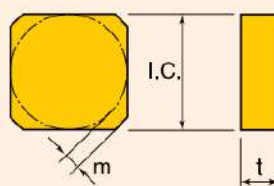
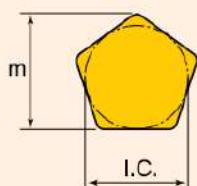
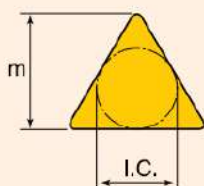
GEOMETRIAS FRESAMENTO

1 Formato da Pastilha				2 Ângulo de Folga				4 Formador de Cavaco e Fixação		
										
A	B	C	H	B	5°	F	25°	A	F	G
				C	7°	G	30°			
L	O	P	R	D	15°	N	0°	M	N	R
			ESPECIAL	E	20°	P	11°			ESPECIAL
S	T	W	X					T	W	X



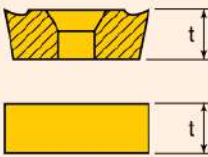
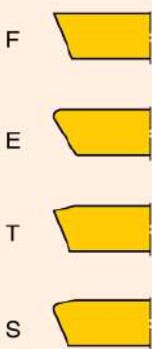
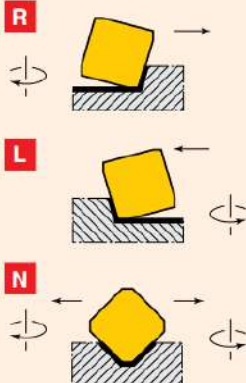
3 Tolerância

Classe	Tolerância (mm)			I.C. Dimensão (mm)					
	m	t	I.C.	6.35	9.525	12.7	15.875	19.05	25.4
A	±0.005	±0.025	±0.025	•	•	•	•	•	•
E	±0.025	±0.025	±0.025	•	•	•	•	•	•
F	±0.005	±0.025	±0.013	•	•	•	•	•	•
G	±0.025	±0.13	±0.025	•	•	•	•	•	•
H	±0.013	±0.025	±0.013	•	•	•	•	•	•
K	±0.013	±0.025	±0.05	•	•				
			±0.08			•			
			±0.10				•	•	
			±0.13						•
M	±0.08 ±0.13 ±0.15 ±0.18	±0.13	±0.05	•	•				
			±0.08			•			
			±0.10				•	•	
			±0.13						•



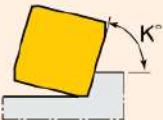
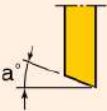
GEOMETRIAS FRESAMENTO

CONTINUAÇÃO

6	Espessura	7	Raio de Ponta (mm)	8	Tipo de Aresta	9	Sentido de Corte
 01t=1.59 05t=5.56 02t=2.38 06t=6.35 03t=3.18 07t=7.94 T3t=3.97 09t=9.52 04t=4.76		 00R=Sentido de Corte 02R=0.2 15R=1.5 04R=0.4 16R=1.6 05R=0.5 24R=2.4 08R=0.8 32R=3.2 10R=1.0 40R=4.0 12R=1.2					

12	03	08	T	R	-	
5	6	7	8	9		10

5	Comprimento da Aresta (mm)					
	I.C	C	R,S	T	H	O
	5.56			09		
	6.35	06	06	11		
	7.94	08		13		
	9.525	09	09	16		
	12.7	12	12	22	05	05
	15.875	16	15	27	09	
	17.94					07
	19.05	19	19	33	10	
	25.4	25	25			
	L					

7	Fase Plana
Ângulo de Posição	
1st	
	
A=45° D=60° E=75° F=85° P=90° Z=Special	
Ângulo de Folga da Fase Plana	
2nd	
	
B= 5° F=25° C= 7° G=30° D=15° N= 0° E=20° P=11° Z= Especial	

10	Opção do Fabricante
AL	Alumínio
WC	Alisadora
MR	Desbaste Médio
M	Médio
L	Leve
ML	Médio Leve
E□	Econômica

Definição dos Ângulos

K : Ângulo de Posição

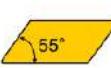
γ_A : Ângulo de Saída Axial

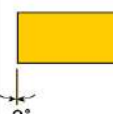
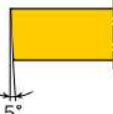
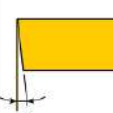
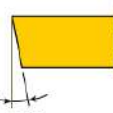
γ_R : Ângulo de Saída Radial

γ_r : Ângulo de Saída Real

Detalhes: ver E208

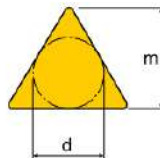
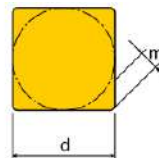
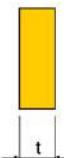
GEOMETRIAS TORNEAMENTO

1 Formato		
		
C	D	E
		
H	K	R
		
S	T	V
		
W		

2 Ângulo de Folga	
	
N	B
	
C	P

4 Tipo		
		
A	G	M
		
R	B, W	T.H
Especial Z,X		



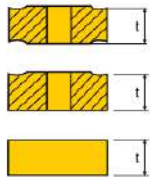
3 Tolerância			
  			
Classe	Tolerância		
	Em m		Em d
	Classe M	Classe U	
A	±0.005	±0.025	±0.025
F	±0.005	±0.025	±0.013
C	±0.013	±0.025	±0.025
H	±0.013	±0.025	±0.013
E	±0.025	±0.025	±0.025
G	±0.025	±0.13	±0.025
M	±0.08 - ±0.18	±0.13	±0.05 - ±0.13
U	±0.13 - ±0.38	±0.13	±0.08 - ±0.25

Diâmetro do CI	Tolerância			
	Em m		Em d	
	Classe M	Classe U	Classe M	Classe U
6.35	±0.08	±0.13	±0.05	±0.08
9.52	±0.08	±0.13	±0.05	±0.08
12.70	±0.13	±0.20	±0.08	±0.13
15.88	±0.15	±0.27	±0.10	±0.18
19.05	±0.15	±0.27	±0.10	±0.18
25.40	±0.18	±0.38	±0.13	±0.25
31.75	±0.18	±0.38	±0.13	±0.25

GEOMETRIAS TORNEAMENTO

CONTINUAÇÃO

6 Espessura



01 = 1.59mm
 T1 = 1.98mm
 02 = 2.38mm
 T2 = 2.78mm
 03 = 3.18mm
 T3 = 3.97mm
 04 = 4.76mm
 05 = 5.56mm
 06 = 6.35mm
 07 = 7.94mm
 09 = 9.52mm

7 Raio da Ponta



01 = 0.1mm
 02 = 0.2mm
 04 = 0.4mm
 05 = 0.5mm
 08 = 0.8mm
 12 = 1.2mm
 16 = 1.6mm
 20 = 2.0mm
 24 = 2.4mm
 32 = 3.2mm

8 Direção de Corte



R: Right hand

L: Left hand

9 Quebra Cavaco

Para quebra cavacos, ver pag. **A17 - A20**

12
5

04
6

08
7

(R)
8

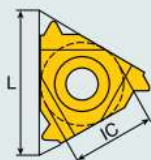
MP
9

5 Comprimento da Aresta de Corte										
C.I (mm)	C	D	E	R	S	T	V	W	K	H
3.97	03	04			03	06		02		
4.76	04	05			04	08	08			
5.56	05	06			05	09	09	03		
6.35	06	07			06	11	11	04		
7.94	08	09			07	13	13	05		
8.0				08						
9.52	09	11		09	09	16	16	06	16	
10.0				10						
12.0				12						
12.7	12	15	13		12	22	22	08		05
15.88	16	19		15	15	27	27	10		
16.0				16						
19.05	19	23		19	19	33	33	13		10
20.0				20						
25.0				25						
25.4	25	31		25	25	44	44	17		
31.75	32	38			31	54	54	21		
32.0				32						

GEOMETRIAS ROSQUEAMENTO

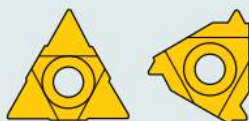
1 Tamanho da Pastilha

L (mm)	IC
06	3.968mm=5/32"
08	4.762mm=3/16"
11	6.350mm=1/4"
16	9.525mm=3/8"
22	12.700mm=1/2"
27	15.875mm=5/8"



2 Aplicação

- E** - Externo
- I** - Interno
- UE** - Tipo U, Exterba
- UI** - Tipo U, Interna
- UEI** - Tipo U, Externa e Interna



Tipo U **Tipo Regular**

3 Sentido de Corte

- R** - Versão direita
- L** - Versão esquerda
- RL** - Versão direita e esquerda

4 Tipo

- M** - Quebra Cavaco Sinterizado
- ☐ - Sem indicação - Tipo Regular

16

1

E

2

R

3

M

4

1.50

5

ISO

6

2M

7

TT9030

8

5 Passo

Perfil Completo
(Valor pelo número)
0.35 - 9.0 **mm**
72 - 2 **TPI**

Perfil Parcial
(Gama por letra)

	mm	TPI
A	0.5 - 1.5	48 - 16
AG	0.5 - 3.0	48 - 8
G	1.75 - 3.0	14 - 8
N	3.5 - 5.0	7 - 5
U	5.5 - 9.0	4.5 - 2.75
Q	5.5 - 6.0	4.5 - 4

6 Rosca Standart

- 60** - Perfil Parcial 60°
- 55** - Perfil Parcial 55°
- ISO** - ISO Métrico
- UN** - American UN
- W** - Whitworth
- BSPT** - British BSPT
- RND** - Round DIN 405
- TR** - Trapezoidal DIN 103
- ACME** - ACME
- STACME** - Stub ACME
- ABUT** - American Buttress
- UNJ** - UNJ
- NPT** - NPT
- API RD** - API Round
- BUT** - API Buttress Casing
- API** - API

7 Nº. de dentes (Opcional)

2M - 2 desntes
3M - 3 dentes

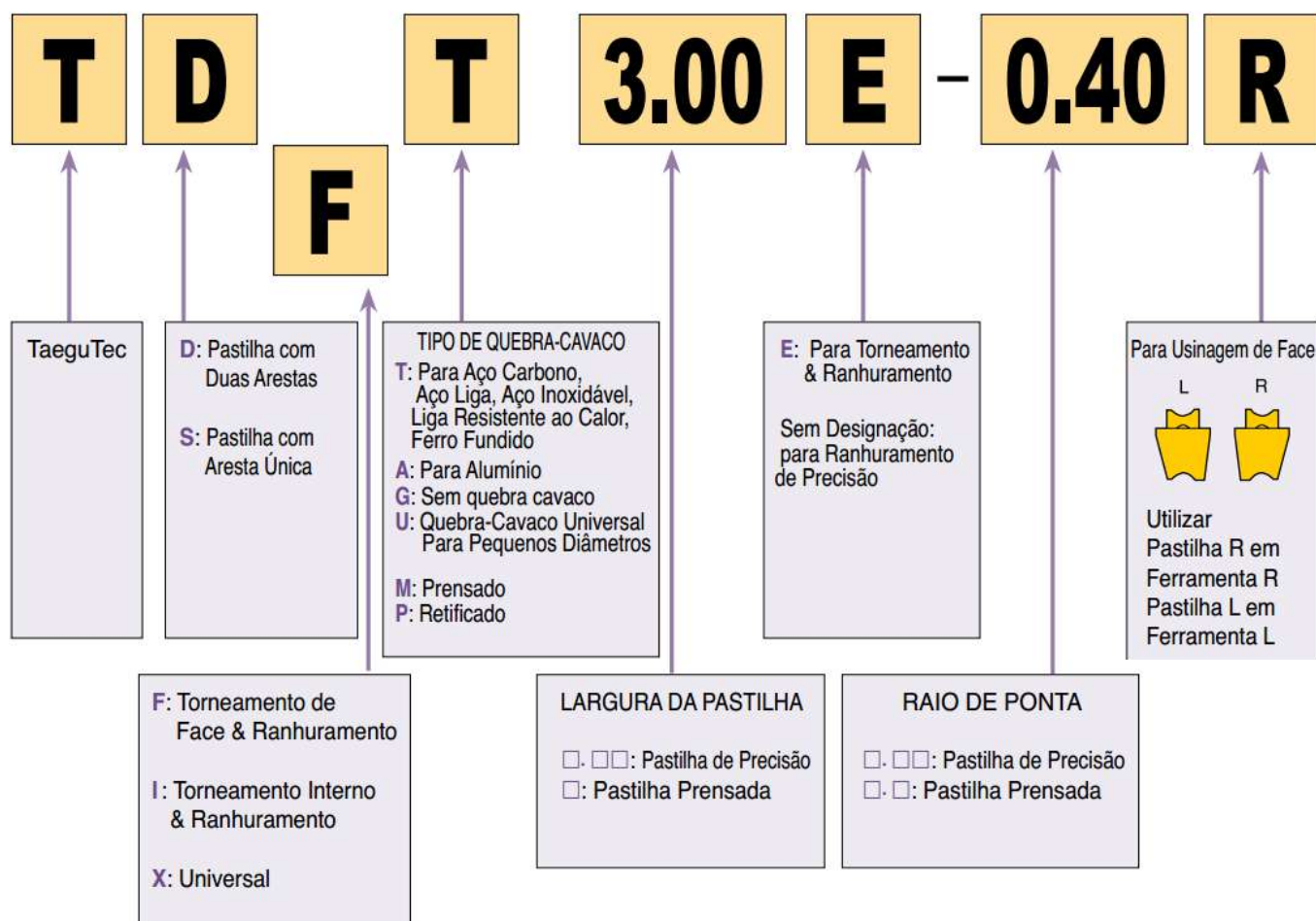
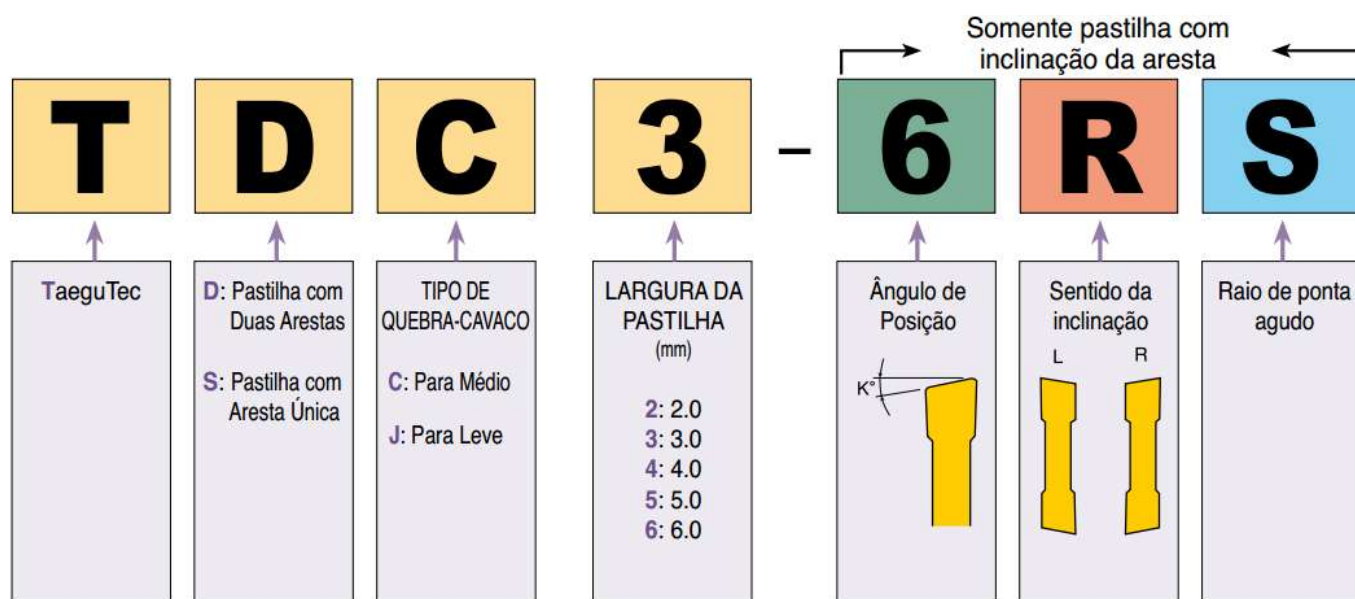
8 Grade

Revestido
TT7010
TT8010
TT9030

Sem revestimento
P30

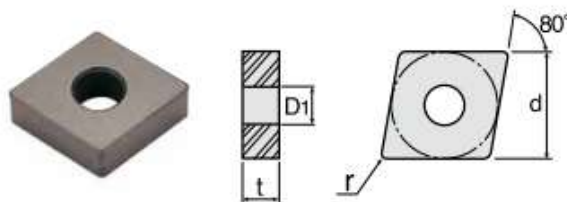


GEOMETRIAS CANAL



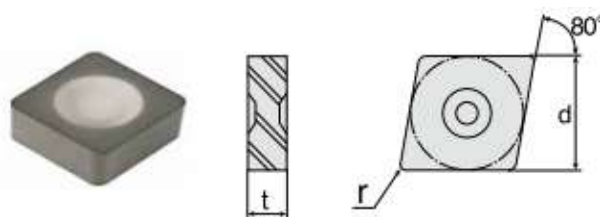
PASTILHAS CERÂMICA

CNGA Pastilha de Cerâmica



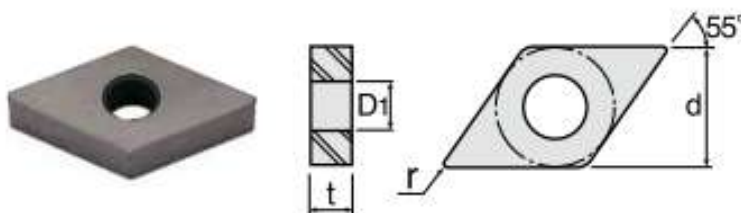
Código	Descrição	d (mm)	t (mm)	r (mm)	D1 (mm)
6769	CNGA 120404 AB20	12.70	4.76	0.4	5.16
6770	CNGA 120404 AB30	12.70	4.76	0.4	5.16
6350	CNGA 120408 AB30	12.70	4.76	0.8	5.16
6889	CNGA 120412 AS10	12.70	4.76	1.2	5.16
25398	CNGA 120412 T7-WZ AB20	12.70	4.76	1.2	5.16
9667	CNGA 120416 AS10	12.70	4.76	1.6	5.16
8315	CNGA 160616 T4 AS10	15.88	6.35	1.6	6.35

CNGX Pastilha de Cerâmica

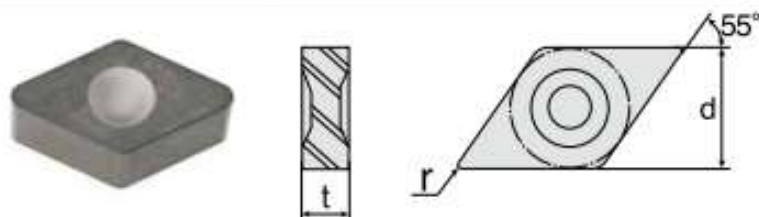


Código	Descrição	d (mm)	t (mm)	r (mm)	D1 (mm)
18753	CNGX 120708 WZ AS10	12.7	7.94	0.8	-
8446	CNGX 120712 CB AS10	12.7	7.94	1.2	-
9345	CNGX 120712 CH AS10	12.7	7.94	1.2	-
8305	CNGX 120716 CH AS10	12.7	7.94	1.6	-
19934	CNGX 120716 T7-CH AS500	12.7	7.94	1.6	-

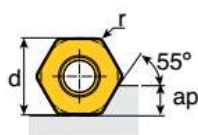
DNGA Pastilha de Cerâmica



Código	Descrição	d (mm)	t (mm)	r (mm)	D1 (mm)
6890	DNGA 150408 AB 20	12.7	4.76	0.8	5.16
6649	DNGA 150604 AB30	12.7	6.35	0.4	5.16
6648	DNGA 150608 AB30	12.7	6.35	0.8	5.16
7783	DNGA 150612 AB20	12.7	6.35	1.2	5.16
18850	DNGA 150612 AB2010	12.7	6.35	1.2	5.16

DNGX Pastilha de Cerâmica


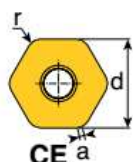
Código	Descrição	d (mm)	t (mm)	r (mm)	D1 (mm)
14260	DNGX 150712 CH AS10	12.70	7.94	1.2	-
14101	DNGX 150716 CH AS10	12.70	7.94	1.6	-

HNCX Pastilha de Cerâmica - Linha Hexa 2 Mill

MR

Size	Dimension (mm)					
	d	t	ap	r		
05	12.7	5.0	5.0	1.0		


MR

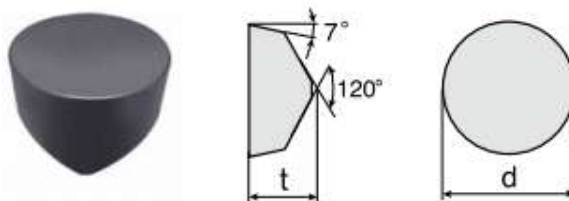
Código	Descrição	Fz (mm/ tooth)	Ap (mm)
11349	HNCX 050610-MR AS10	0.13-0.25	1.5 - 4.0

HNEN Pastilha de Cerâmica - Linha Hexa 2 Mill

CE

Size	Dimension (mm)					
	d	t	ap	a	r	
HNEN10-T	19.05	5.80	8.0	0.6	1.0	


HNEN

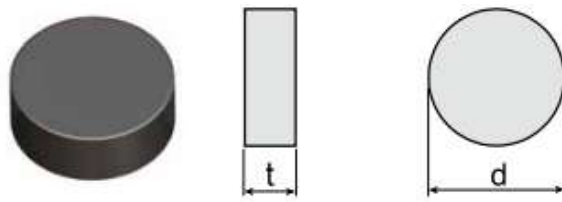
Código	Descrição	Fz (mm/ tooth)	Ap (mm)
7435	HNEN 100510 T AS10	0.125-0.25	2.0 - 6.0

RCGX Pastilha de Cerâmica


Código	Descrição	d (mm)	t (mm)	r (mm)	D1 (mm)
9535	RCGX 060600 U1 AB30	6.35	6.35	-	-

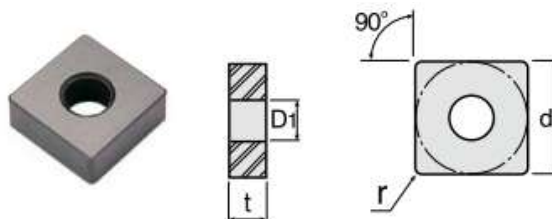


RNGN Pastilha de Cerâmica



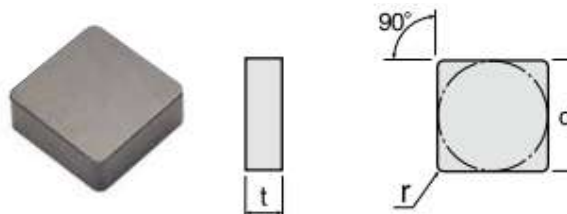
Código	Descrição	d (mm)	t (mm)	r (mm)	D1 (mm)
6463	RNGN 120400 AB30	12.7	4.76	-	-

SNGA Pastilha de Cerâmica



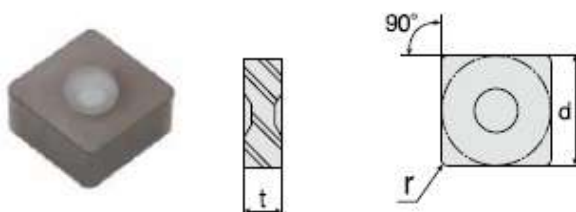
Código	Descrição	d (mm)	t (mm)	r (mm)	D1 (mm)
14326	SNGA 120404 AB2010	12.7	4.76	0.4	5.16
9042	SNGA 120404 AB30	12.7	4.76	0.4	5.16
18928	SNGA 120408 AB2010	12.7	4.76	0.8	5.16
8506	SNGA 120408 AB30	12.7	4.76	0.8	5.16
12702	SNGA 120412 SC10	12.7	4.76	1.2	5.16

SNGN Pastilha de Cerâmica

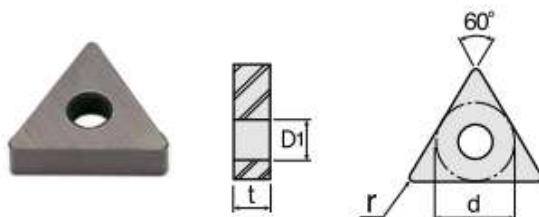


Código	Descrição	d (mm)	t (mm)	r (mm)	D1 (mm)
14365	SNGN 120304 P30	9.525	3.18	0.8	-
19693	SNGN 120412 AB30	12.7	4.76	1.2	-

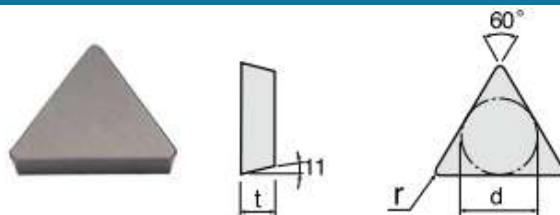
SNGX Pastilha de Cerâmica



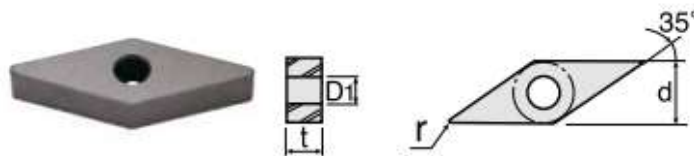
Código	Descrição	d (mm)	t (mm)
11528	SNGX 130608-CE AS10	0.13-0.25	3.5 - 10.0

TNGA Pastilha de Cerâmica


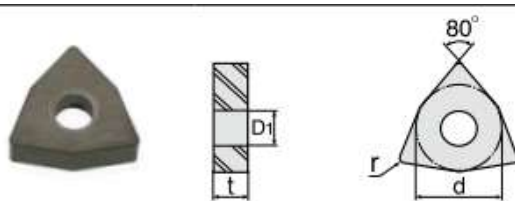
Código	Descrição	d (mm)	t (mm)	r (mm)	D1 (mm)
6617	TNGA 160404 AB20	9.52	4.76	0.4	3.81
9059	TNGA 160404 AB2010	9.52	4.76	0.4	3.81
6611	TNGA 160404 AB30	9.52	4.76	0.8	3.81
6428	TNGA 160408 AB20	9.52	4.76	0.8	3.81
9038	TNGA 160408 AB2010	9.52	4.76	1.2	3.81
6487	TNGA 160408 AB30	9.52	4.76	0.8	3.81
6657	TNGA 160412 AB20	9.52	4.76	1.2	3.81
11737	TNGA 160412 AB2010	9.52	4.76	1.6	3.81
24166	TNGA 160416 AB20	9.52	4.76	0.8	3.81
15306	TNGA 220408 AB30	12.7	4.76	0.8	3.81
6658	TNGA 220412 AB30	12.7	4.76	1.2	3.81

TPGN Pastilha de Cerâmica


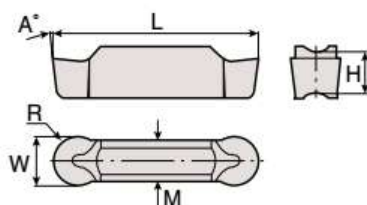
Código	Descrição	d (mm)	t (mm)	r (mm)	D1 (mm)
6440	TPGN 110304 AB20	6.35	3.18	0.4	-
11324	TPGN 110304 AB30	6.35	3.18	0.4	-
6874	TPGN 110308 AB20	6.35	3.18	0.8	-
6742	TPGN 110308 AB30	6.35	3.18	0.8	-
6626	TPGN 160304 AB20	9.52	3.18	0.4	-
7578	TPGN 160304 AB30	9.52	3.18	0.4	-
6767	TPGN 160308 AB20	9.52	3.18	0.8	-
6768	TPGN 160308 AB30	9.52	3.18	0.8	-

VNGA Pastilhas de Cerâmica


Código	Descrição	d (mm)	t (mm)	r (mm)	D1 (mm)
18375	VNGA 160404 AB 2010	9.52	4.76	0.4	3.81
8464	VNGA 160404 AB20	9.52	4.76	0.4	3.81
7723	VNGA 160404 AB30	9.52	4.76	0.4	3.81
6634	VNGA 160408 AB20	9.52	4.76	0.8	3.81
9967	VNGA 160408 AB2010	9.52	4.76	0.8	3.81
6563	VNGA 160408 AB30	9.52	4.76	0.8	3.81
12647	VNGA 160412 AB20	9.52	4.76	1.2	3.81

WNGA Pastilhas de Cerâmica


Código	Descrição	d (mm)	t (mm)	r (mm)	D1 (mm)
6845	WNGA 080408 AB30	12.70	4.76	0.8	5.16
7725	WNGA 080412 AB30	12.70	4.76	1.2	5.16
8463	WNGA 080412 AS10	12.70	4.76	1.2	5.16
24635	WNGA 080412 T7 WZ AS10	12.70	4.76	1.2	5.16

PASTILHAS CORTE E CANAL
TDA Pastilhas para Usinagem de Roda de Alumínio


Size	Dimension (mm)					
	W±0.02	R±0.05	M	L	H	A
3	3.00	1.5	2.4	20.0	4.7	7
4	4.00	2.0	3.0	20.0	4.7	7
6	6.00	3.0	5.0	25.0	5.2	7
8	8.00	0.8-4.0	6.0	30.0	6.4	10

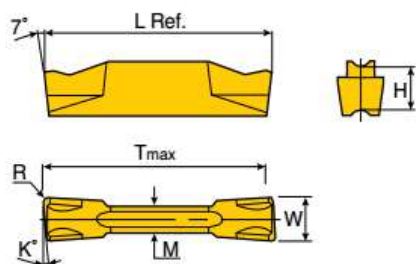


TDA

Código	Descrição	Tamanho do Assento da Pastilha
19599	TDA 3.00-1.50 K10	3
8539	TDA 6.00-3.00 K10	6

TDC

Pastilhas com Duas Arestas para Corte e Ranhuramento com Quebra-cavaco Tipo "C"



Right hand shown

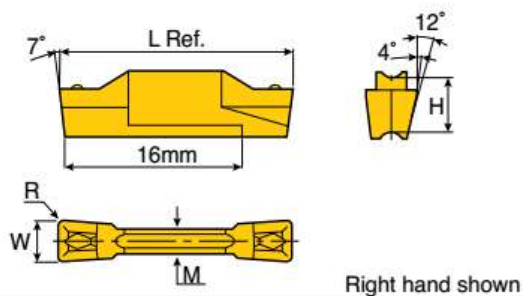
Size	Dimension (mm)						
	W±0.05	R	M	L	K	H	Tmax
2 (..R/L)	2.0	0.20	1.7	20.0	0-15	4.7	19
2 RS/LS	2.0	0.02	1.7	19.6	15	4.7	19
3 (..R/L)	3.0	0.20	2.4	20.0	0-15	4.7	19
3 RS/LS	3.0	0.02	2.4	19.6	6-15	4.7	19
4 (..R/L)	4.0	0.30	3.0	20.0	0-15	4.7	19
5 (..R/L)	5.0	0.30	4.0	25.0	0-4	5.2	24
6	6.0	0.30	5.0	25.0	-	5.2	24
8	8.0	0.40	6.0	30.0	-	6.4	29



Código	Descrição	W 0.05
12713	TDC 2 PV3030	2
6664	TDC 2 TT7220	2
6843	TDC 2 TT8020	2
17078	TDC 2 TT9030	2
9150	TDC 2 TT9080	2
11956	TDC 2-15L TT8020	2
6752	TDC 2-15R TT7220	2
24886	TDC 2-15R TT8020	2
9726	TDC 2-15R TT9030	2
9976	TDC 2-15RS TT7220	2

**TDC****CONTINUAÇÃO**

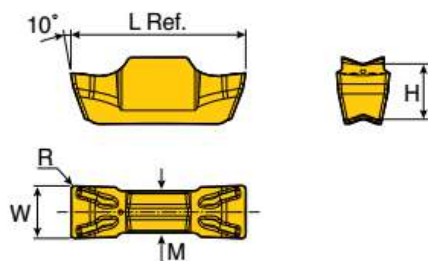
Código	Descrição	W 0.05
6622	TDC 2-6L TT7220	2
24461	TDC 2-6L TT8020	2
7230	TDC 2-6R TT8020	2
19269	TDC 2-6R TT9030	2
6594	TDC 3 TT7220	3
6670	TDC 3 TT8020	3
16760	TDC 3 TT9030	3
7351	TDC 3 TT9080	3
7629	TDC 3-15L TT7220	3
7630	TDC 3-15L TT8020	3
25447	TDC 3-15L TT9080	3
6753	TDC 3-15R TT7220	3
16339	TDC 3-15R TT8020	3
24072	TDC 3-15R TT9030	3
11319	TDC 3-15RS TT8020	3
6624	TDC 3-6L TT7220	3
7487	TDC 3-6L TT8020	3
8800	TDC 3-6L TT9030	3
6669	TDC 3-6R TT7220	3
6615	TDC 3-6R TT8020	3
8723	TDC 3-6R TT9030	3
19503	TDC 4 15L TT 8020	4
6671	TDC 4 TT7220	4
6410	TDC 4 TT8020	4
9355	TDC 4 TT9030	4
7679	TDC 4-15R TT7220	4
15138	TDC 4-15R TT8020	4
6712	TDC 4-4L TT7220	4
6713	TDC 4-4R TT7220	4
6676	TDC 4-4R TT8020	4
25311	TDC 5 K10	5
11728	TDC 5 TT7220	5
7459	TDC 5 TT8020	5
25217	TDC 5 TT9080	5
6403	TDC 6 TT8020	6
10824	TDC 6 TT9030	6
12728	TDC 8 TT8030	8

TDFT-E Pastilhas Prensadas para Ranhuramento de Face e Torneamento


Size	Dimension (mm)				
	W±0.05	R	M	L	H
3E	3.0	0.40	2.2	20.0	4.7
4E	4.0	0.40	3.0	20.0	4.7
4E... CE	4.0	0.40	3.0	20.0	4.7



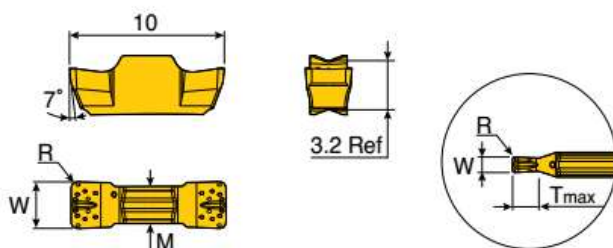
Código	Descrição	W 0.05
10305	TDFT 3E-0.4R TT7220	3

TDIM Pastilha prensada para Torneamento e Ranhuramento Interno


Size	Dimension (mm)				
	W±0.05	R	M	L	H
2	2.0	0.15	1.6	10	3.2
3	3.0	0.20	2.4	10	3.2



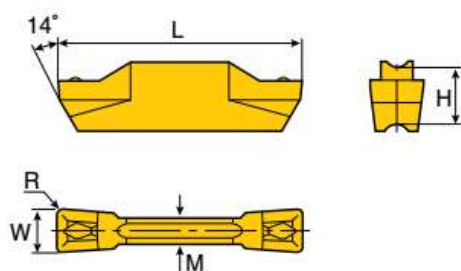
Código	Descrição	W 0.05
11321	TDIM 3E 0.2 TT9080	3

TDIP Pastilha de Precisão para Torneamento Interno e Ranhuramento


Size	Dimension (mm)			
	W±0.02	R	M	Tmax
1.00	1.00	0.10-0.50	1.6	1.6
1.20	1.20	0.00	1.6	1.8
1.40	1.40	0.00	1.6	2.0
1.50	1.50	0.10	1.6	2.0
2.00	2.00	0.10-1.00	1.6	-
2.15	2.15	0.15	1.6	-
2.50	2.50	0.20	2.4	-
3.00	3.00	0.20-1.50	2.4	-

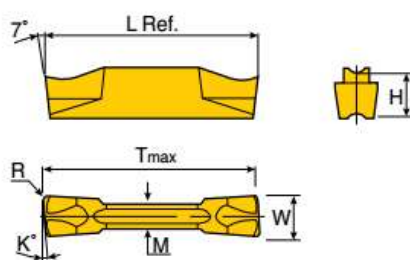


Código	Descrição	W 0.02
15258	TDIP 1.00-0.10 TT9080	2
15259	TDIP 1.20-0.00 TT9080	1.2
25160	TDIP 1.20-0.60 TT9080	1.2
16252	TDIP 1.50-0.10 TT9080	1.5
17893	TDIP 2.00-0.20 TT9080	2
16309	TDIP 2.15-0.15 TT9080	2.15
17894	TDIP 3.00E-0.20 TT9080	3
17730	TDIP 3.00E-1.50 TT9030	3

TDIT
Pastilhas de Precisão para Torneamento Interno, Ranhuramento, Perfilamento e Alívios


Size	Dimension (mm)				
	W±0.02	R±0.05	M	L	H
3	3.00	0.40	2.2	20.0	4.7
4	4.00	0.40-0.80	3.0	20.0	4.7
5	5.00	0.40-0.80	4.0	25.0	5.2
6	6.00	0.80-1.20	5.0	25.0	5.2
8	8.00	1.20	6.0	30.0	6.4

Código	Descrição	W 0.02
8138	TDIT 3.00E-0.4 TT5100	3
6562	TDIT 4.00E-0.40 TT5100	4
19014	TDIT 4.00E-0.40 TT7220	4
6667	TDIT 4.00E-0.80 TT7220	4
25325	TDIT 5.00E 0.40 TT7220	5
11252	TDIT 6.00E-0.80 K10	6
12644	TDIT 6.00E-3.00 TT5100	6

TDJ
Pastilhas com Duas Arestas para Corte e Ranhuramento com Quebra-cavaco Tipo "J"


Right hand shown

Size	Dimension (mm)						
	W±0.05	R	M	L	K	H	Tmax
1.4	1.4	0.16	1.0	16.0	-	4.0	15
2 (..R/L)	2.0	0.20	1.7	20.0	0-15	4.7	19
2 RS/LS	2.0	0.02	1.7	19.6	6-15	4.7	19
3 (..R/L)	3.0	0.20	2.4	20.0	0-15	4.7	19
3 RS/LS	3.0	0.02	2.4	19.6	6-15	4.7	19
4 (..R/L)	4.0	0.30	3.0	20.0	0-15	4.7	19
5 (..R/L)	5.0	0.30	4.0	25.0	0-4	5.2	24
6	6.0	0.30	5.0	25.0	-	5.2	24



Código	Descrição	4Tamanho do Assento da Pastilha
9241	TDJ 1.4 TT8020	1.4
10440	TDJ 2 K10	2
6514	TDJ 2 TT8020	2
8260	TDJ 2 TT8030	2
9162	TDJ 2 TT9030	2
7467	TDJ 2-15LS TT7220	2
14006	TDJ 2-15LS TT8020	2
6754	TDJ 2-15R TT7220	2
9727	TDJ 2-15R TT9030	2
9655	TDJ 2-15RS TT7220	2
7203	TDJ 2-15RS TT8020	2
9656	TDJ 2-15RS TT9080	2
17776	TDJ 2-6R K10	2
16484	TDJ 2-6R TT8020	2
8628	TDJ 2-6R TT9030	2
8985	TDJ 3 K10	3
7517	TDJ 3 TT8020	3
8259	TDJ 3 TT8030	3
9249	TDJ 3 TT9030	3

TDJ

CONTINUAÇÃO



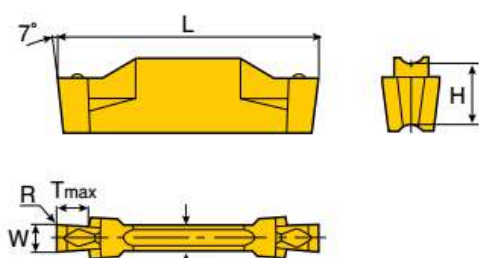
Código	Descrição	4Tamanho do Assento da Pastilha
9676	TDJ 3-15LS TT8020	3
16877	TDJ 3-15RS TT8020	3
14114	TDJ 3-6L TT7220	3
8648	TDJ 3-6L TT9030	3
8592	TDJ 3-6R TT8020	3
9350	TDJ 3-6R TT9030	3
11315	TDJ 3-6RS TT8020	3
10604	TDJ 4 K10	4
9082	TDJ 4 TT8020	4
9371	TDJ 4 TT9080	4
7485	TDJ 5 TT7220	5
24074	TDJ 6 K10	6
10957	TDJ 6 TT9030	6

TDT

Pastilhas Pressadas para Torneamento e Ranhuramento Externo

TDT
T-CLAMP
 ULTRA PLUS

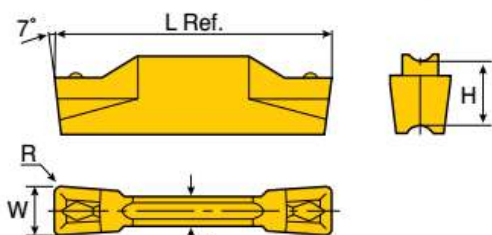
Precision Inserts for External Grooving Only



Size	Dimension (mm)					
	W±0.02	R±0.05	M	L	T _{max}	H
1.00	1.00	0.00	2.2	20.0	2.5	4.7
1.30	1.30	0.00	2.2	20.0	2.5	4.7
1.60	1.60	0.10	2.2	20.0	2.5	4.7
1.85	1.85	0.10	2.2	20.0	3.5	4.7
2.15	2.15	0.15	2.2	20.0	3.5	4.7

TDT-E
T-CLAMP
 ULTRA PLUS

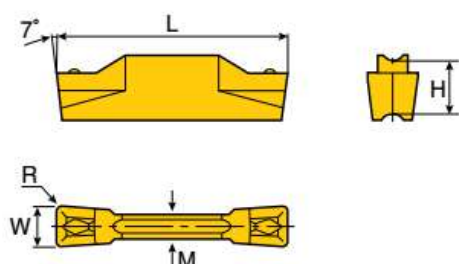
Pressed Inserts for External Turning and Grooving



Size	Dimension (mm)				
	W±0.05	R	M	L	H
3	3.0	0.4	2.2	20.0	4.7
4	4.0	0.4	3.0	20.0	4.7
6	6.0	0.8	5.0	25.0	5.2

TDT-E
T-CLAMP
 ULTRA PLUS

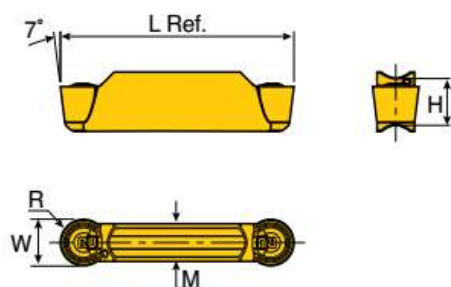
Precision Inserts for External Turning and Grooving



Size	Dimension (mm)				
	W±0.02	R	M	L	H
2.65 / 3.00 / 3.15	2.65-3.15	0.15-0.40	2.2	20.0	4.7
4.00 / 4.15	4.00-4.15	0.15-0.80	3.0	20.0	4.7
4.78 / 5.00 / 5.15	4.78-5.15	0.15-0.80	4.0	25.0	5.2
6.00	6.00	0.80-1.20	5.0	25.0	5.2
8.00	8.00	0.80-1.20	6.0	30.0	6.4
10.00	10.00	0.80-2.00	8.0	30.0	6.4



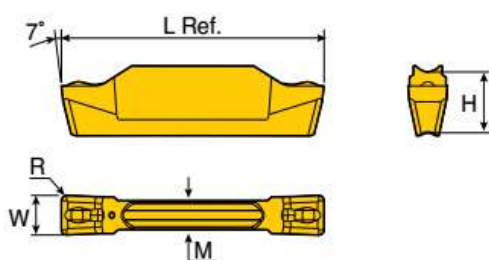
Código	Descrição	Tamanho do Assento da Pastilha	W 0.02	R ± 0.05
8824	TDT 1.00-0.00 TT5100	2	1.00	0.00
6501	TDT 1.00-0.00 TT7220	2	1.00	0.00
8827	TDT 1.00-0.00 TT9030	2	1.00	0.00
23292	TDT 1.20-0.00 TT5100	2	1.20	0.00
7408	TDT 1.30-0.00 TT5100	2	1.30	0.00
17379	TDT 1.30-0.00 TT9030	2	1.30	0.00
7666	TDT 1.60-0.10 TT5100	2	1.30	0.10
16485	TDT 1.60-0.10 TT9030	2	1.60	0.10
8513	TDT 1.85-0.10 TT5100	2	1.60	0.10
10361	TDT 1.85-0.10 TT7220	2	1.85	0.10
17380	TDT 1.85-0.10 TT9080	2	1.85	0.10
9069	TDT 2.15-0.15 TT5100	2	2.15	0.15
12616	TDT 2.15-0.15 TT9030	2	2.15	0.15
19703	TDT 2.50-0.20 TT9030	2	2.50	0.20
13178	TDT 2.50-0.50 TT7220	2	2.50	0.50
7594	TDT 2.65-0.15 TT5100	3	2.65	0.15
17642	TDT 2.65-0.15 TT7220	3	2.65	0.15
18722	TDT 2.65-0.15 TT9030	3	2.65	0.15
6512	TDT 2.78-1.50	3	2.78	1.50
13188	TDT 3.00E-0.20 TT5100	3	3.00	0.20
12761	TDT 3.00E-0.20 TT9030	3	3.00	0.20
6500	TDT 3.00E-1.50 TT5100	3	3.00	1.50
8722	TDT 3.00E-1.50 TT9030	3	3.00	1.50
7873	TDT 3.15-0.15 TT7200	3	3.15	0.15
14390	TDT 3.5E-0.4 FUTURA	3	3.50	0.40
12780	TDT 3E-0.4 K10	3	3.00	0.40
6775	TDT 3E-0.4 TT72020	3	3.00	0.40
8720	TDT 3E-0.4 TT9030	3	3.00	0.40
13204	TDT 4.00E-0.20 TT9030	4	4.00	0.20
14266	TDT 4.00E-0.80 TT7220	4	4.00	0.80
7381	TDT 4.00E-2.00 K10	4	4.00	2.00
6525	TDT 4.00E-2.00 TT5100	4	4.00	2.00
25087	TDT 4E-0.4 TT6080	4	4.00	0.40
7755	TDT 4E-0.4 TT7005	4	4.00	0.40
23721	TDT 4E-0.4 TT7015	4	4.00	0.40
6776	TDT 4E-0.4 TT7220	4	4.00	0.40
8721	TDT 4E-0.4 TT9030	4	4.00	0.40
7234	TDT 4E-0.4T CE AB30	4	4.00	0.40
13415	TDT 5.00E-0.40 TT6030	5	5.00	0.40
10784	TDT 5.00E-0.40 TT7200	5	5.00	0.40
10826	TDT 5.00E-0.80 TT6300	5	5.00	0.80
6655	TDT 6.00E-3.00 TT7220	6	6.00	3.00
8647	TDT 6E 0.8TCE AB30	6	6.00	6.0
7633	TDT 8.00E-0.80 K10	8	8.00	0.80
7653	TDT 8.00E-0.80 TT7220	8	8.00	0.80

TDT-RU (Raio Total) Pastilhas Prensadas para Torneamento Externo, Ranhuramento e Perfilamento


Size	Dimension (mm)				
	W±0.05	R	M	L	H
2	2.0	1.0	1.7	20.0	4.7
3	3.0	1.5	2.2	20.0	4.7
4	4.0	2.0	3.0	20.0	4.7
5	5.0	2.5	4.0	25.0	5.2
6	6.0	3.0	5.0	25.0	5.2
8	8.0	4.0	6.0	30.0	6.4



Código	Descrição	R 0.05
12757	TDT 2 E-1.0 RU TT9030	2
9580	TDT 3E-1.5 RU TT5100	3
9218	TDT 3E-1.5 RU TT9030	3
17652	TDT 3E-1.5-RU K10	3
11420	TDT 4E-2.0 RU TT5100	4
9122	TDT 4E-2.0 RU TT9080	4
17327	TDT 5E-2.5 RU TT5100	5
23744	TDT 5E-2.5 RU TT6080	5
9044	TDT 5E-2.5 RU TT9030	5
17328	TDT 5E-2.5 RU TT9080	5
11394	TDT 6E-3.0 RU PV3030	6
25195	TDT 6E-3.0 RU TT6300	6
9646	TDT 6E-3.0 RU TT7220	6
9153	TDT 6E-3.0 RU TT9030	6
11369	TDT 8E-4.0-RU TT5100	8
10265	TDT 8E-4.0-RU TT9030	8

TDXT Pastilhas Prensadas para Torneamento Externo e Ranhuramento


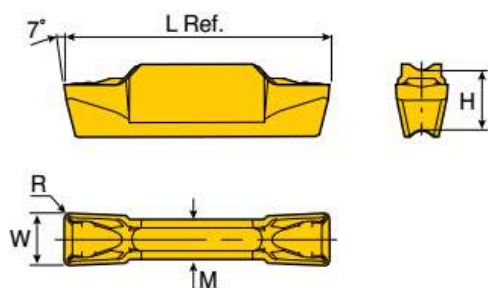
Size	Dimension (mm)				
	W±0.05	R	M	L	H
3E-0.4	3.0	0.4	2.2	20.0	4.7
4E-0.4	4.0	0.4	3.0	20.0	4.7
5E-0.4	5.0	0.4	4.0	25.0	5.2
6E-0.8	6.0	0.8	5.0	25.0	5.2
8E-0.8	8.0	0.8	6.0	30.0	6.4



Código	Descrição	W 0.05
17266	TDXT 3E-0.4 TT6080	3
18385	TDXT 6E-0.8 TT6080	6

TDXU

Pastilhas Prensadas para Torneamento Externo, Interno, Faceamento, Ranhuramento e Corte



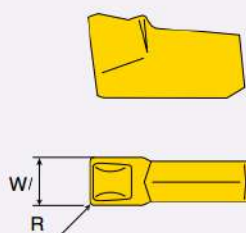
Size	Dimension (mm)				
	W±0.05	R	M	L	H
2E-0.3	2.0	0.3	1.7	20.0	4.7
3E-0.3	3.0	0.3	2.2	20.0	4.7
4E-0.4	4.0	0.4	3.0	20.0	4.7
4E-0.8	4.0	0.8	3.0	20.0	4.7
5E-0.4	5.0	0.4	4.0	25.0	5.2
5E-0.8	5.0	0.8	4.0	25.0	5.2
6E-0.4	6.0	0.4	5.0	25.0	5.2
6E-0.8	6.0	0.8	5.0	25.0	5.2
8E-0.8	8.0	0.8	6.0	30.0	6.4



Código	Descrição	W 0.05
9147	TDXU 3E-0.3 TT5100	3
15038	TDXU 3E-0.3 TT7220	3
19217	TDXU 3E-0.3 TT9030	3
10382	TDXU 3E-0.3 TT9080	3
15039	TDXU 3E-0.3 TT9100	3
19069	TDXU 4E-0.4 PV3030	4
12733	TDXU 4E-0.4 TT5100	4
15114	TDXU 4E-0.4 TT6030	4
12732	TDXU 4E-0.4 TT7220	4
9079	TDXU 4E-0.4 TT9030/TT9080	4
15115	TDXU 4E-0.4 TT9100	4
16707	TDXU 4E-0.8 TT6080	4
14503	TDXU 4E-0.8 TT9080	4
16994	TDXU 6E-0.4 TT9030	6
12785	TDXU 8E-0.8 TT9030	8

TIMC

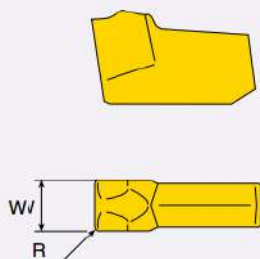
Corte e Ranhuramento com Quebra-cavaco Tipo "C"



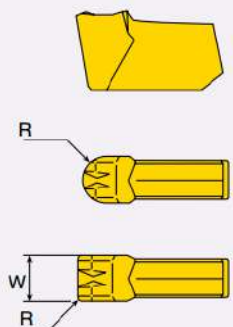
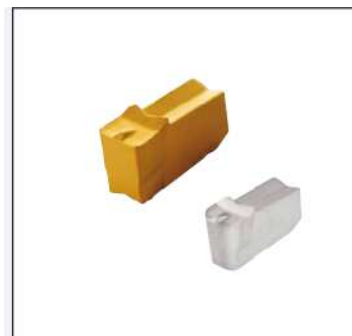
Código	Descrição	Tamanho do Assento da Pastilha	W 0.1	R
11467	TIMC 1.6 K10	1	1.6	0.16
17314	TIMC 1.6 TT7220	1		
10679	TIMC 1.6 TT8020	1		
17131	TIMC 1.6 TT9030	1		
9154	TIMC 2 TT8020	2	2.2	0.2
18779	TIMC 2.4 TT6030	2	2.4	
9749	TIMC 3 TT6030	4	3.1	
9155	TIMC 3 TT8020	4	3.1	
14432	TIMC 4 TT6030	4	4.1	0.25

TIMC
CONTINUAÇÃO

Código	Descrição	Tamanho do Assento da Pastilha	W 0.1	R
10134	TIMC 4 TT7220	4	4.1	0.25
12334	TIMC 4 TT8020	4		
18531	TIMC 4.80 TT8020	4	4.8	0.28
25088	TIMC 5 TT6030	5		
11435	TIMC 5 TT8020	5		

TIMJ
Corte e Ranhuramento com Quebra-cavaco Tipo "J"


Código	Descrição	Tamanho do Assento da Pastilha	W 0.1	R
9753	TIMJ 2.4 TT8020	2	2.4	0.20
15478	TIMJ 3 K10	3	3.1	
9979	TIMJ 3 TT8020	3		

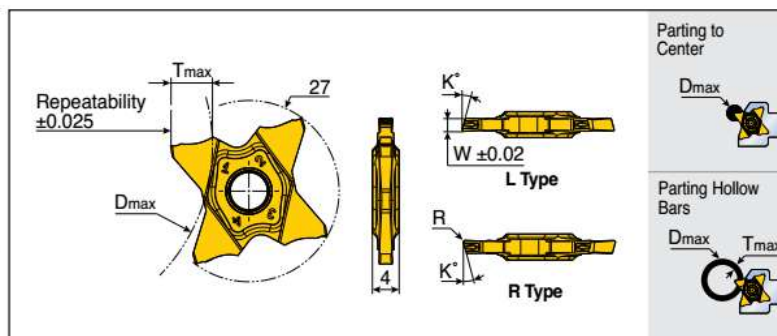
TIPV
Torneamento, Ranhuramento e Perfilamento Com Quebra-cavaco Tipo "V"


$R=1/2 W$
para pastilhas de raio total

Código	Descrição	Tamanho do Assento da Pastilha	W 0.1	R
10647	TIPV 1.85 0.10 TT5100	2	1.85	0.10
11676	TIPV 1.85 0.10 TT8020	2		
14751	TIPV 2.00 0.20 TT5100	2	2.00	0.20
18780	TIPV 2.00 0.20 TT6030	2		
18901	TIPV 2.65 0.15 TT6030	4	2.65	0.15
10263	TIPV 3.00 0.20 TT6030	4	3.00	0.20
25053	TIPV 3.10 0.20 TIALN	4	3.10	
25076	TIPV 3.18 0.20 K10	4	3.18	
9718	TIPV 4.00 0.20 TT5100	4	4.00	
23580	TIPV 4.15 0.15 TT5100	4	4.15	0.15
19052	TIPV 4.15 0.15 TT6030	4		

TIPV
CONTINUAÇÃO

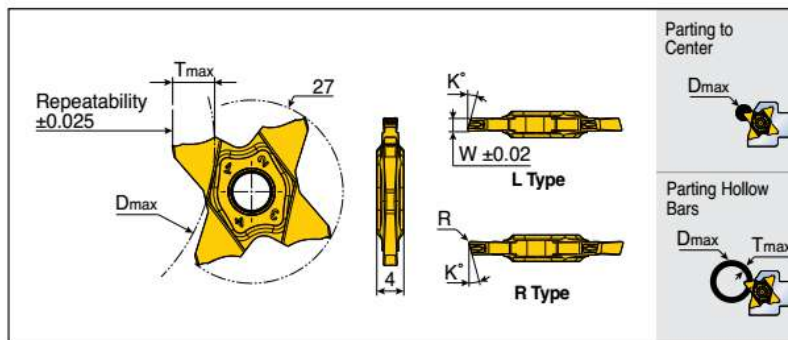
Código	Descrição	Tamanho do Assento da Pastilha	W 0.1	R
10646	TIPV 4.50E 0.40 TT5100	4	4.50	0.40
18599	TIPV 5.00E2.50 TT5100	5	5.00	2.50

TQJ
Para Ranhuramento de Precisão, Corte e Torneamento


Código	Descrição	Tmax	W 0.02	R
24608	TQJ 27-0.50-0.04 TT9080	2.5	0.50	0.04
25458	TQJ 27-0.75-0.10 TT9080	2.5	0.75	0.10
15456	TQJ 27-0.80-0.00 TT9080	1.6	0.80	0.00
15260	TQJ 27-1.00-0.10 TT9080	3.5	1.00	0.10
19943	TQJ 27-1.04-0.00 TT9080	2.0	1.04	0.00
24187	TQJ 27-1.20-0.00 TT9080	2.0	1.20	0.00
15136	TQJ 27-1.25-0.10 TT9080	3.5	1.25	0.10
18699	TQJ 27-1.40-0.00 TT9080	2.0	1.40	0.00
16248	TQJ 27-1.50-0.10 TT9080	5.7	1.50	0.10
19912	TQJ 27-1.57-0.15 TT9080	3.0	1.57	0.15
18473	TQJ 27-1.75-0.10 TT9080	3.0	1.75	0.10
23982	TQJ 27-1.85-0.20 TT9080	3.0	1.85	0.20
17646	TQJ 27-2.00-0.10 TT9080	6.4	2.00	0.10
15284	TQJ 27-2.00-0.20 TT9080	6.4		0.20
23983	TQJ 27-2.22-0.15 TT9080	3.5	2.22	0.15
17647	TQJ 27-2.30-0.20 TT9080	3.5	2.30	0.20
17628	TQJ 27-2.50-0.10 TT9080	5.7	2.50	0.10
17373	TQJ 27-2.70-0.10 TT9080	6.2	2.70	0.10
16879	TQJ 27-3.00-0.20 TT9080	6.4	3.00	0.20
15285	TQJ 27-3.00-0.40 TT9080	6.4		0.40

TQJ

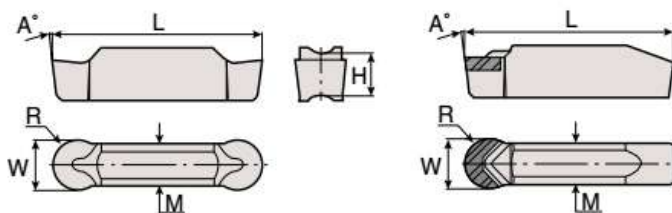
Para Corte



Código	Descrição	Tmax	W 0.02	R
19910	TQJ 27-1.00-15L TT9080	3.5	1.00	0.06
16249	TQJ 27-1.50-15R TT9080	5.7	1.50	
19911	TQJ 27-1.50-6L TT9080	5.7		
16918	TQJ 27-2.00-6L TT9080	6.4	2.00	0.10
23647	TQJ 27-2.00-6R TT9080	6.4		

TSA

Pastilhas para Usinagem de Roda de Alumínio

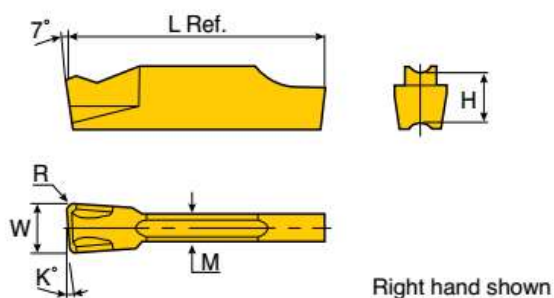


Size	Dimension (mm)					
	W±0.02	R±0.05	M	L	H	A
3	3.00	1.5	2.4	20.0	4.7	7
4	4.00	2.0	3.0	20.0	4.7	7
6	6.00	3.0	5.0	25.0	5.2	7
8	8.00	0.8-4.0	6.0	30.0	6.4	10

Código	Descrição	Tamanho do Assento da Pastilha
12646	TSA 6.00 3.00 CB KP 300	6

TSC

Pastilhas com Aresta Única para Ranhuramento Profundo e Corte com Quebra-cavaco Tipo "C"



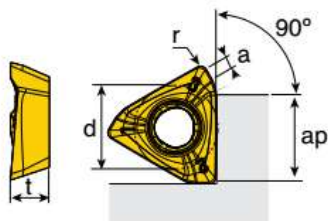
Size	Dimension (mm)					
	W±0.05	R	M	L	K	H
2 (..R/L)	2.0	0.20	1.7	20.0	0-15	4.7
2 RS/LS	2.0	0.02	1.7	19.6	15	4.7
3 (..R/L)	3.0	0.20	2.4	20.0	0-15	4.7
3 RS/LS	3.0	0.02	2.4	19.6	15	4.7
4 (..R/L)	4.0	0.30	3.0	20.0	0-15	4.7
5 (..R/L)	5.0	0.30	4.0	25.0	0-4	5.2
6	6.0	0.30	5.0	25.0	-	5.2
8	8.0	0.40	6.0	30.0	-	6.4

Código	Descrição	Tamanho do Assento da Pastilha
7942	TSC 3 TT8020	3
9374	TSC 3-6L TT7220	3
7064	TSC 3-6L TT8020	3
7713	TSC 3-6R TT8020	3
8526	TSC 4 TT8020	4
9425	TSC 5 TT8020	5
9389	TSC 6 TT8020	6



PASTILHAS FRESAMENTO

3PHT Linha Mill Rush



Size	Dimension (mm)				
	d	t	ap	a	r
06	5.3	2.8	4.7	0.6-1.2	0.2-0.8
10	6.9	4.0	7.0	0.5-1.3	0.4-1.6
15	10.7	5.0	11.0	0.5-2.0	0.4-2.4
19	13.5	6.0	15.0	0.5-2.0	0.4-3.2



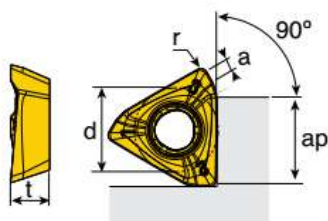
M



AL

Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
19472	3PHT 100404R-AL K10	0.05-0.12	2.0 - 6.0	3P TE90- - -10 3P TE90- -M -10 3P TF90- - R-10
13795	3PHT 100408R-AL K10	0.05-0.12	2.0 - 6.0	
14301	3PHT 100408R-M TT9080	0.05-0.12	2.0 - 6.0	
14264	3PHT 150508R-AL K10	0.07-0.17	3.0 - 9.0	3P TE90- - -15 3P TE90- -M -15 3P TF90- - R-15

3PKT Linha Mill Rush



Size	Dimension (mm)				
	d	t	ap	a	r
06	5.3	2.8	4.7	0.6-1.2	0.2-0.8
10	6.9	4.0	7.0	0.5-1.3	0.4-1.6
15	10.7	5.0	11.0	0.5-2.0	0.4-2.4
19	13.5	6.0	15.0	0.5-2.0	0.4-3.2

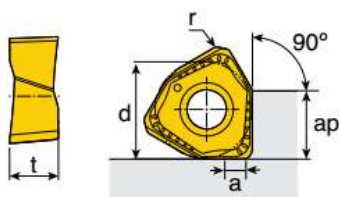


M



ML

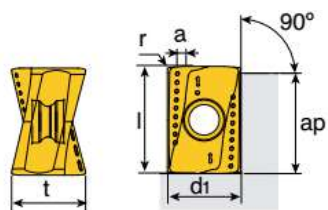
Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
19576	3PKT 060304R-M TT6080	0.04-0.10	1.0 - 4.0	3P TE90- - -06 3P TE90- -M -06 3P TF90- - R-06
19577	3PKT 060304R-M TT8020	0.04-0.10	1.0 - 4.0	
19575	3PKT 060304R-M TT9080	0.04-0.10	1.0 - 4.0	
24081	3PKT 060308R-M TT9080	0.04-0.10	1.0 - 4.0	
17812	3PKT 100404R-M TT9080	0.05-0.12	2.0 - 6.0	3P TE90- - -10 3P TE90- -M -10 3P TF90- - R-10
25216	3PKT 100408R-M TT2510	0.05-0.12	2.0 - 6.0	
13793	3PKT 100408R-M TT6080	0.05-0.12	2.0 - 6.0	
14184	3PKT 100408R-M TT7080	0.05-0.12	2.0 - 6.0	
13792	3PKT 100408R-M TT8080	0.05-0.12	2.0 - 6.0	
13791	3PKT 100408R-M TT9080	0.05-0.12	2.0 - 6.0	
14255	3PKT 100408R-ML TT8080	0.05-0.12	2.0 - 6.0	
14217	3PKT 100408R-ML TT9080	0.05-0.12	2.0 - 6.0	
24164	3PKT 100416R-M TT9080	0.05-0.12	2.0 - 6.0	
13797	3PKT 150508R-M TT9080	0.07-0.17	3.0 - 9.0	3P TE90- - -15 3P TE90- -M -15 3P TF90- - R-15
13796	3PKT 150508R-M TT8080	0.07-0.17	3.0 - 9.0	
14428	3PKT 150508R-ML TT9080	0.07-0.17	3.0 - 9.0	
24959	3PKT 190608R-M TT6080	0.09-0.22	4.5 - 12.0	3P TE90- - -19 3P TE90- -M -19 3P TF90- - R-19
19545	3PKT 190608R-M TT9080	0.09-0.22	4.5 - 12.0	

6NGU Linha Mill 2 Rush


Size	Dimension (mm)					
	d	t	ap	a	r	
06	9.26	4.76	6.2	12-24	0.4-1.6	
09	13.05	6.70	9.2	12-22	0.4-1.6	



Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
24771	6NGU 060404R-AL K10	0.10-0.40	1.5 - 5.0	6N TE90- - - 06 6N TE90- -M - 06 6N TF90- - R- 06
13798	6NGU 060404R-M TT9080	0.08-0.15	1.5 - 5.0	
14256	6NGU 060408R-M TT7080	0.08-0.15	1.5 - 5.0	
13799	6NGU 060408R-M TT8080	0.08-0.15	1.5 - 5.0	
13800	6NGU 060408R-M TT9080	0.08-0.15	1.5 - 5.0	
16121	6NGU 060416R-M TT6080	0.08-0.15	1.5 - 5.0	
13801	6NGU 060416R-M TT8080	0.08-0.15	1.5 - 5.0	
13802	6NGU 060416R-M TT9080	0.08-0.15	1.5 - 5.0	
18097	6NGU 090504R-M TT9080	0.10-0.20	2.5 - 7.5	
13803	6NGU 090508R-M TT6080	0.10-0.20	2.5 - 7.5	6N TE90- - - 09 6N TE90- -M - 09 6N TF90- - R- 09
14257	6NGU 090508R-M TT7080	0.10-0.20	2.5 - 7.5	
13804	6NGU 090508R-M TT8080	0.10-0.20	2.5 - 7.5	
13805	6NGU 090508R-M TT9080	0.10-0.20	2.5 - 7.5	
25441	6NGU 090508R-ML TT6080	0.05-0.10	2.5 - 7.5	
19490	6NGU 090516R-M TT6080	0.10-0.20	2.5 - 7.5	
13806	6NGU 090516R-M TT8080	0.10-0.20	2.5 - 7.5	
13807	6NGU 090516R-M TT9080	0.10-0.20	2.5 - 7.5	

ANHX Linha Chase 2 Mill


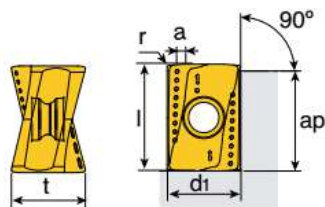
Size	Dimension (mm)					
	l	d1	t	ap	a	r
11	12	9.2	8.5	11	0.7-1.5	0.4-1.6
16	16	11.0	10.4-10.9	15	0.6-1.7	0.4-2.4



Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
19505	ANHX 110604R AL K10	0.10-0.40	3.0 - 9.0	TE90AN-11 TE90AN-M -11 TFM90AN-11 TEF-AN11 TES-AN11
19506	ANHX 110608R AL K10	0.10-0.40	3.0 - 9.0	
24195	ANHX 110608R-M TT6080	0.08-0.15	3.0 - 9.0	
17859	ANHX 110608R-M TT7080	0.08-0.15	3.0 - 9.0	
23099	ANHX 110608R-M TT9080	0.08-0.15	3.0 - 9.0	
13190	ANHX 160704R-AL K10	0.10-0.40	4.5 - 12.0	TE90AN-16 TE90AN-M -16 TFM90AN-16 TEF-AN16 TES-AN16
17201	ANHX 160704R-M TT6030	0.10-0.20	4.5 - 12.0	
9342	ANHX 160708R-M TT6080	0.10-0.20	4.5 - 12.0	
9096	ANHX 160708R-M TT6290	0.10-0.20	4.5 - 12.0	
10808	ANHX 160708R-M TT7080	0.10-0.20	4.5 - 12.0	
9097	ANHX 160708R-M TT8020	0.10-0.20	4.5 - 12.0	
24184	ANHX 160708R-M TT9080	0.10-0.20	4.5 - 12.0	

ANHX CONTINUAÇÃO

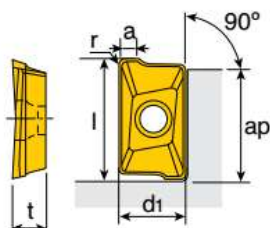
Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
10318	ANHX 160716R-M TT6080	0.10-0.20	4.5 - 12.0	TE90AN-16 TE90AN-M -16 TFM90AN-16 TEF-AN16 TES-AN16
23007	ANHX 160716R-M TT7080	0.10-0.20	4.5 - 12.0	
11413	ANHX 160716R-M TT8030	0.10-0.20	4.5 - 12.0	
10091	ANHX 160716R-M TT9080	0.10-0.20	4.5 - 12.0	

ANMX Linha Chase 2 Mill


Size	Dimension (mm)					
	l	d1	t	ap	a	r
11	12	9.2	8.5	11	0.7-1.5	0.4-1.6
16	16	11.0	10.4-10.9	15	0.6-1.7	0.4-2.4



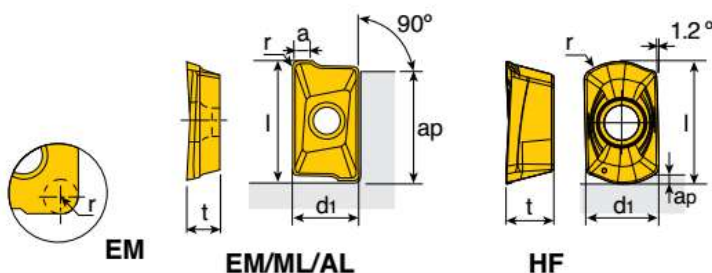
Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
17860	ANMX 110608R-M TT9080	0.10-0.20	4.5 - 12.0	TE90AN-11 TE90AN-M -11 TFM90AN-11 TEF-AN11 TES-AN11
9095	ANMX 160708R-M TT9080	0.10-0.20	4.5 - 12.0	TE90AN-16 TE90AN-M -16 TFM90AN-16 TEF-AN16 TES-AN16

APCT Linha Chase Mill

EM/ML/AL

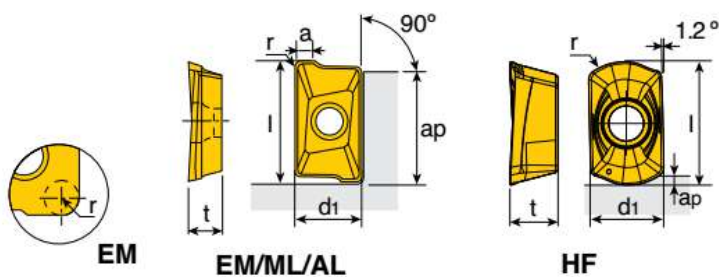
Size	Dimension (mm)					
	l	d1	t	ap	a	r
12	13.3-14.6	8.3	4.5-4.9	11.8-12.5	0.9-2.1	0.4-4.0
12(HF)	14.2	8.0	5.0	1.2	-	8.35



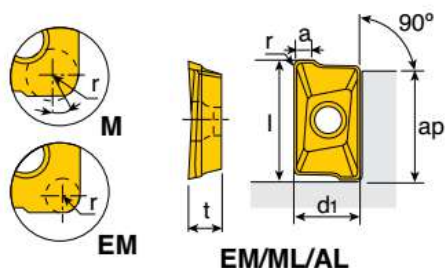
Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
10671	APCT 1204 PER-AL K10	0.10-0.50	3.5 - 10.0	TE90AP- -12 TE90AP -M -12 TEF - -W -AP12 TES - - R-AP17 TFM90AP - R-12

APKT Linha Chase Mill


Size	Dimension (mm)					
	l	d1	t	ap	a	r
09	10.5	6.20	3.8	8.8	0.5-1.79	0.4-3.2
09(HF)	10.7	5.94	3.9	1.0	-	5.25

APKT CONTINUAÇÃO


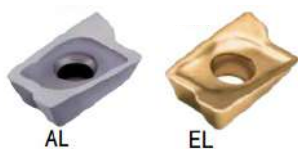
Size	Dimension (mm)					
	l	d1	t	ap	a	r
12	13.3-14.6	8.3	4.5-4.9	11.8-12.5	0.9-2.1	0.4-4.0
12(HF)	14.2	8.0	5.0	1.2	-	8.35



Size	Dimension (mm)					
	l	d1	t	ap	a	r
17	18.5	10.7	5.56	16.1	0.9-3.17	0.4-6.4
17(AL)	17.6	10.7	5.27	16.1	3.15	0.8

09

12

17


Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
6546	APKT 090316R-EML TT6080	0.05-0.10	2.5 - 7.5	2S-TE90AP -09 2S-TE90AP -M -09 2S-TEF - -AP09 2S-TFM90AP -09
6375	APKT 09T3 PER-EM TT8020	0.05-0.10	2.5 - 7.5	
7056	APKT 09T3 PER-EM TT9080	0.05-0.10	2.5 - 7.5	
12176	APKT 09T3 R-HF TT9080	0.30-0.80	0.1 - 1.0	
25067	APKT 09T308R-EM TT2510	0.05-0.10	2.5 - 7.5	
6662	APKT 09T308R-EM TT6080	0.05-0.10	2.5 - 7.5	
12574	APKT 09T308R-EM TT7080	0.05-0.10	2.5 - 7.5	
6523	APKT 09T308R-EM TT8020	0.05-0.10	2.5 - 7.5	
14674	APKT 09T308R-EM TT8080	0.05-0.10	2.5 - 7.5	
7121	APKT 09T308R-EM TT9080	0.05-0.10	2.5 - 7.5	
24898	APKT 09T316R-EM TT2510	0.05-0.10	2.5 - 7.5	
6409	APKT 09T316R-EM TT8020	0.05-0.10	2.5 - 7.5	
24733	APKT 09T316R-EM TT8080	0.05-0.10	2.5 - 7.5	
8097	APKT 09T316R-EM TT9080	0.05-0.10	2.5 - 7.5	
24732	APKT 09T320R-EM TT8080	0.05-0.10	2.5 - 7.5	
18265	APKT 09T320R-EM TT9080	0.05-0.10	2.5 - 7.5	
10426	APKT 1204 PER-EL TT9030	0.03-0.05	3.5 - 10.0	TE90AP- -12 TE90AP -M -12 TEF - -W -AP12 TES - - R-AP17 TFM90AP - R-12
13850	APKT 1204 PER-EM TT6080	0.07-0.14	3.5 - 10.0	
17985	APKT 1204 PER-EM TT8020	0.07-0.14	3.5 - 10.0	
9098	APKT 1204 PER-EM TT9080	0.07-0.14	3.5 - 10.0	
19996	APKT 1204 PER-SM TT6080	0.07-0.14	3.5 - 10.0	
18163	APKT 1204 PER-SM TT9080	0.07-0.14	3.5 - 10.0	
9420	APKT 120416R-EM TT9030	0.07-0.14	3.5 - 10.0	
19191	APKT 120430R-EM TT6080	0.07-0.14	3.5 - 10.0	
9733	APKT 120430R-EM TT9030	0.07-0.14	3.5 - 10.0	TE90AP- -17 TE90AP -M -17 TEF - -W -AP17 TES - - R-AP17 TFM90AP - R-17 TFM75AP - R-17
6379	APKT 1705 PER-AL K10	0.10-0.50	4.5 - 13.0	
7761	APKT 1705 PER-EL TT9030	0.05-0.10	4.5 - 13.0	
6378	APKT 1705 PER-EM TT6080	0.09-0.18	4.5 - 13.0	
6480	APKT 1705 PER-EM TT7030	0.09-0.18	4.5 - 13.0	
6377	APKT 1705 PER-EM TT8020	0.09-0.18	4.5 - 13.0	

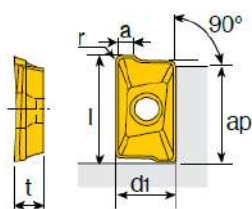
APKT CONTINUAÇÃO
17


EM/M



SM

Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
7241	APKT 1705 PER-EM TT9080	0.09-0.18	4.5 - 13.0	TE90AP- -17 TE90AP -M -17 TEF - -W -AP17 TES - - R-AP17 TFM90AP - R-17 TFM75AP - R-17
17980	APKT 1705 PER-SM TT9080	0.09-0.17	4.5 - 13.0	
6725	APKT 170516R-EM TT6080	0.09-0.17	4.5 - 13.0	
7111	APKT 170516R-EM TT8020	0.09-0.17	4.5 - 13.0	
7242	APKT 170516R-EM TT9030/TT9080	0.09-0.17	4.5 - 13.0	
6726	APKT 170524R-EM TT6030	0.09-0.17	4.5 - 13.0	
14724	APKT 170524R-EM TT9030	0.09-0.17	4.5 - 13.0	
18175	APKT 170530R-EM TT9030	0.09-0.17	4.5 - 13.0	
19258	APKT 170532R-EM TT6080	0.09-0.17	4.5 - 13.0	
9295	APKT 170532R-EM TT8020	0.09-0.17	4.5 - 13.0	

AXCT Linha Chase Mill


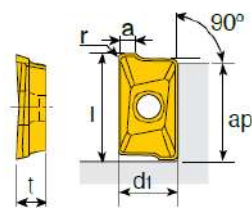
EM/AL

Size	Dimension (mm)					
	l	d1	t	ap	a	r
6	6.7	4.15	2.6	5.5	0.83-1.0	0.2-2.0

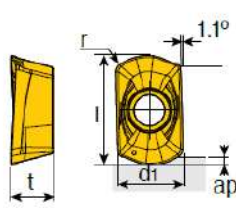


AL

Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
8154	AXCT 060204R-AL K10	0.10-0.20	1.5-5.0	TE90AX- - - 06 TE90AX- - M - 06 TEF- - - W -AX06 TFM90AX- - R-06
6353	AXCT 0903 PER-AL K10	0.10-0.20	1.5-5.0	
23364	AXCT 090320 PER-AL K10	0.10-0.20	1.5-5.0	

AXMT Linha Chase Mill


EM/AL



HF

Size	Dimension (mm)					
	l	d1	t	ap	a	r
6	6.7	4.15	2.6	5.5	0.83-1.0	0.2-2.0
6(HF)	6.7	4.04	2.6	0.5	-	3.0



EM

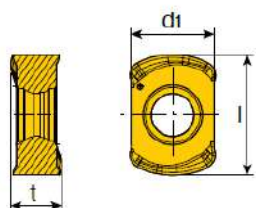


HF

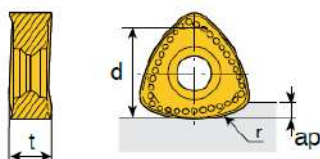
Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
7905	AXMT 0602 PER-EM TT8020	0.04-0.08	1.5-5.0	TE90AX- - - 06 TE90AX- - M - 06 TEF- - - W -AX06 TFM90AX- - R-06
7987	AXMT 0602 PER-EM TT9030	0.04-0.08	1.5-5.0	
25119	AXMT 060204R-EM TT2510	0.07-0.13	1.5-5.0	
16227	AXMT 060204R-EM TT6080	0.07-0.13	1.5-5.0	
8617	AXMT 060204R-EM TT8020	0.07-0.13	1.5-5.0	
8590	AXMT 060204R-EM TT9030	0.07-0.13	1.5-5.0	
25120	AXMT 060208R-EM TT2510	0.07-0.13	1.5-5.0	
18471	AXMT 060208R-EM TT8020	0.07-0.13	1.5-5.0	
8618	AXMT 060208R-EM TT8080	0.07-0.13	1.5-5.0	
8619	AXMT 060208R-EM TT9030	0.07-0.13	1.5-5.0	
9291	AXMT 060216R-EM TT9030	0.07-0.13	1.5-5.0	

AXMT CONTINUAÇÃO

Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
11670	AXMT 0602R-HF TT8080	0.30-0.70	0.2 - 0.5	TE90AX- - - 06 TE90AX- - M - 06 TEF- - - W -AX06 TFM90AX- - R-06
9748	AXMT 0602R-HF TT9080	0.30-0.70	0.2 - 0.5	
17992	AXMT 0903 PER-AL K10	0.12 - 0.45	0.15 - 0.50	
6376	AXMT 0903 PER-EML TT6080	0.07 - 0.12	0.10 - 0.25	TE90AX- -09 TE90AX- -09-C TE90AX- - M- 09 TEF- -AX09 TFM90AX- -09
11604	AXMT 0903 PER-EML TT6290	0.07 - 0.12	0.10 - 0.25	
6801	AXMT 0903 PER-EML TT8030	0.05 - 0.12	0.10 - 0.20	
6535	AXMT 090316R-EML TT7030	0.05 - 0.12	0.10 - 0.20	
10359	AXMT 090332R-EML TT9030	0.05 - 0.12	0.10 - 0.25	

BLMP Linha Chase 2 Feed


Size	Dimension (mm)				
	l	d1	t	ap	
06	9.0	6.39	3.73	1.0	
09	11.9	9.18	4.80	1.5	

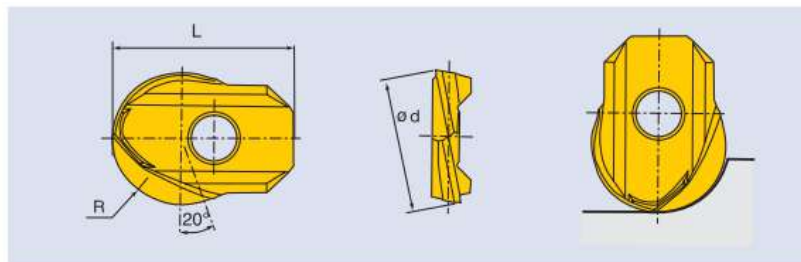


Size	Dimension (mm)				
	d	t	ap	r	
12	12	5.5	2	15	

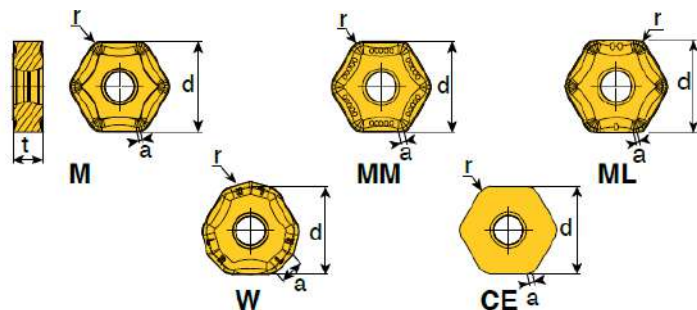
06 / 09


Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
19221	BLMP 0603 R M TT8020	0.30-2.50	0.1 - 1.0	
12405	BLMP 0603R M TT7800	0.30-2.50	0.1 - 1.0	
12331	BLMP 0603R M TT9080	0.30-2.50	0.1 - 1.0	
25006	BLMP 0603R-M TT2510	0.30-2.50	0.1 - 1.0	
24734	BLMP 0904 M TT 8080	0.30-3.50	1.0 - 1.5	
19386	BLMP 0904 M TT 9080	0.30-3.50	1.0 - 1.5	
25517	BLMP 0904R MM TT2510	0.20-3.00	1.0 - 1.5	
20102	BLMP 1205R-M TT7080	0.40-4.50	0.5 - 2.0	
10852	BLMP 1205R-M TT8030	0.40-4.50	0.5 - 2.0	
24578	BLMP 1205R-M TT8080	0.40-4.50	0.5 - 2.0	
9062	BLMP 1205R-M TT9080	0.40-4.50	0.5 - 2.0	

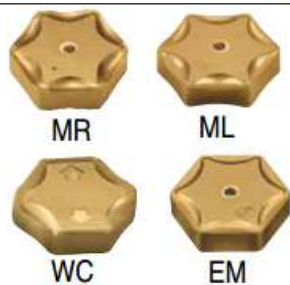
12


BN
F-BALL


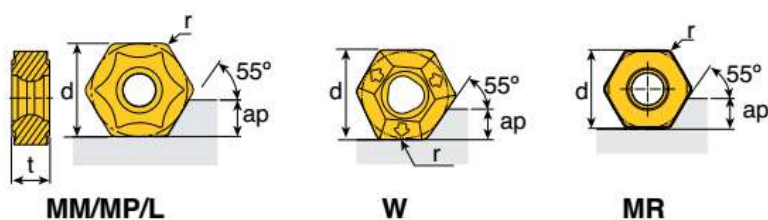
Código	Descrição	R	L	Aplicação
8764	BN 100F TT9030	5	12.0	TBN - TBN -M TBN -C -CTC
9067	BN 100F UF10	5	12.0	
8993	BN 120F TT1040	6	17.45	
8672	BN 120F TT9030	6	17.45	
8889	BN 120F UF10	6	17.45	
9061	BN 160F TT1040	8	22.8	
12575	BN 160F TT8030	8	22.8	
8693	BN 160F TT9030	8	22.8	
8791	BN 160F UF10	8	22.8	
8521	BN 200F TT9030	10	26.3	
9411	BN 200F UF10	10	26.3	
10269	BN 250F TT9030	12.5	26.3	

HNCF
Hexa 2 Mill


Size	Dimension (mm)					
	d	t	ap	a	r	
HNHX10	19.05	6.35	6.1	1.0	1.0	
HNHX10-W	19.05	6.35	6.1	4.85	250	
HNCF10	19.05	5.80	8.0	0.6	1.0	
HNCF10-WC	19.337	5.80	8.0	-	400	
HNEN10-T	19.05	5.80	8.0	0.6	1.0	



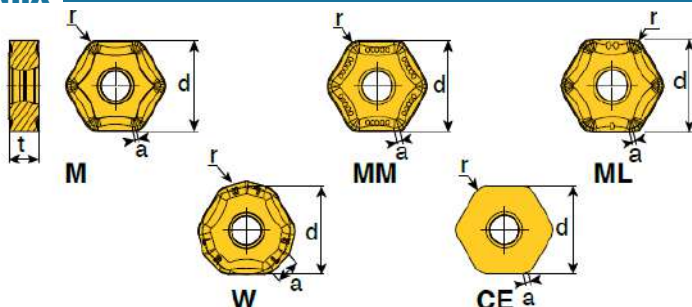
Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
7036	HNCF 100510-EM TT6030	0.10-0.20	2.0 - 6.5	TFM55HN-10
8763	HNCF 100510-ML TT6030	0.10-0.20	2.0 - 6.5	
7804	HNCF 100510-MR TT6080	0.125-0.25	2.0 - 6.5	
7037	HNCF 100510-WC TT6080	0.05-0.15	0.1 - 1.0	

HNCX
Hexa 2 Mill


Size	Dimension (mm)					
	d	t	ap	r		
05	12.7	5.0	5.0	1.0		
05(W)	12.7	5.56	5.0	250		

HNCX CONTINUAÇÃO

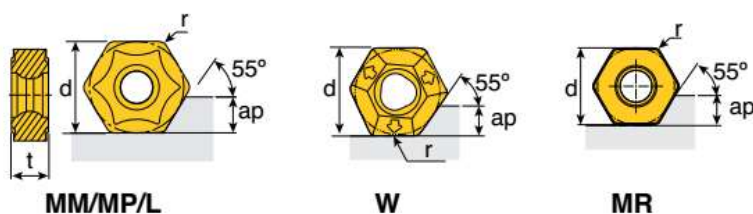

Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
11234	HNCX 050410 ML TT6290	0.13-0.25	1.5 - 4.0	TFM55AHNS- - R-05
11361	HNCX 050410 ML TT9080	0.13-0.25	1.5 - 4.0	
17844	HNCX 050410 MP TT6080	0.05-0.20	1.5 - 4.0	
18004	HNCX 050410-MLW TT6080	0.05-0.15	1.5 - 4.0	
24418	HNCX 050410R MP TT7080	0.05-0.20	1.5 - 4.0	TFM55AHNS- - R-05
24065	HNCX 050410R-MP TT9080	0.05-0.20	1.5 - 4.0	
16495	HNCX 05R-W TT6030	0.05-0.15	0.1 - 1.0	
9289	HNCX 05R-W TT9030	0.05-0.15	0.1 - 1.0	

HNHX Linha Hexa 2 Mill


Size	Dimension (mm)					
	d	t	ap	a	r	
HNHX10	19.05	6.35	6.1	1.0	1.0	
HNHX10-W	19.05	6.35	6.1	4.85	250	
HNCF10	19.05	5.80	8.0	0.6	1.0	
HNCF10-WC	19.337	5.80	8.0	-	400	
HNEN10-T	19.05	5.80	8.0	0.6	1.0	



Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
15494	HNHX 1006ANTN-M TT6080	0.10-0.20	1.5 - 5.0	TFM45HNS- - R-10 TFM15HNS- - R-10 TFM45HN / TQ45HN- - R-10
14402	HNHX 1006ANTN-ML TT6030	0.10-0.20	1.5 - 5.0	
14749	HNHX 1006ANTN-MM TT6080	0.125-0.25	1.5 - 5.0	
14403	HNHX 1006ANTN-W TT6030	0.10-0.20	0.1 - 1.0	

HNMX Linha Hexa 2 Mill


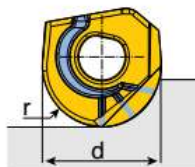
Size	Dimension (mm)				
	d	t	ap	r	
05	12.7	5.0	5.0	1.0	
05(W)	12.7	5.56	5.0	250	



Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
7802	HNMX 050410-M TT6030	0.07-0.20	1.5 - 4.0	TFM55AHNS- - R-05
18034	HNMX 050410-MM TT6080	0.07-0.20	1.5 - 4.0	
9387	HNMX 050410-MM TT6290	0.07-0.20	1.5 - 4.0	
23262	HNMX 050410-MM TT6800	0.07-0.20	1.5 - 4.0	
9294	HNMX 050410-MM TT8030	0.07-0.20	1.5 - 4.0	
7803	HNMX 050410-MM TT9030	0.07-0.20	1.5 - 4.0	

NFB

Linha Fine Ball



Size	Dimension (mm)				
	d	t	r		
080	8	2.2	4.0		
100	10	2.7	5.0		
120	12	3.2	6.0		
160	16	4.2	8.0		
200	20	5.2	10.0		
250	25	6.2	12.5		
300	30	7.2	15.0		
320	32	7.2	16.0		



FM


 Aresta de corte
reta

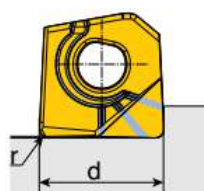
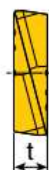
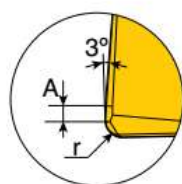

SM


 Aresta de corte
em Hélice

Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
14190	NFB 080-FM TT1040	0.05-0.20	0.05 - 0.3	TNF - TNF -M TNF -CT
14191	NFB 080-SM TT1040	0.05-0.25	1.2 - 3.2	
16736	NFB 100-FM TT5515	0.05-0.20	0.05 - 0.3	
16737	NFB 100-FM TT9030	0.05-0.20	0.05 - 0.3	
16902	NFB 100-SM TT1040	0.05-0.25	1.5 - 1.40	
16738	NFB 120-FM TT1040	0.08-0.30	0.05 - 0.5	
16901	NFB 120-SM TT1040	0.08-0.35	1.8 - 4.0	
15739	NFB 120-SM TT9030	0.08-0.35	1.8 - 4.0	
16739	NFB 160-FM TT1040	0.08-0.30	0.05 - 0.5	
16740	NFB 160-FM TT9030	0.08-0.30	0.05 - 0.5	
24014	NFB 160-SM TT5515	0.08-0.35	2.4 - 6.4	
16741	NFB 200-FM TT9030	0.08-0.30	0.1 - 1.0	
17178	NFB 200-SM TT1040	0.08-0.35	3.0 - 8.0	
19980	NFB 250-FM TT9030	0.08-0.40	0.15 - 1.0	

NFR

Linha Fine Ball

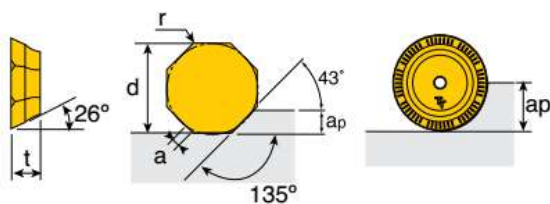


Size	Dimension (mm)				
	d	t	r		
080	8	2.2	0.3-1.0		
100	10	2.7	0.3-2.0		
110	11	2.7	0.3-2.0		
120	12	3.2	0.3-2.0		
130	13	3.2	0.3-2.0		
160	16	4.2	0.3-3.0		
170	17	4.2	1.0-2.0		



NFR-R□

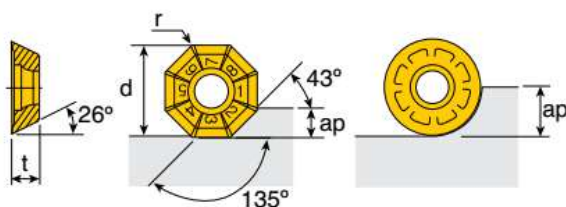
Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
15542	NFR 080A-R05 TT1040	0.05-0.12	0.05 - 0.2	TNF - TNF -M TNF -CT TNFR - TNFR -M TNFR -CT
18971	NFR 120A-R03 TT9030	0.08-0.15	0.07 - 0.3	
23478	NFR 160A-R13 TT1040	0.08-0.15	0.08 - 0.5	
16882	NFR 160A-R30 TT9030	0.08-0.15	0.08 - 0.5	
19981	NFR 250A-R10 TT1040	0.08-0.15	0.1 - 1.0	

OFCN / OFCR Linha Chase Octo


Size	Dimension (mm)					
	d	t	ap	a	r	
OF... 05	17.94	5.0-5.1	5.0	1.3-2.2	0.8	
RFMR 14	19.00	5.3	9.5	-	-	



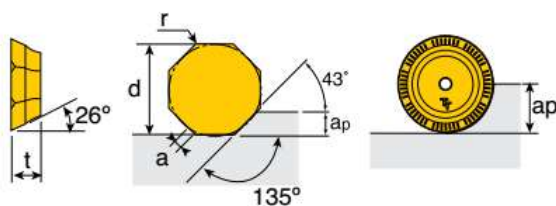
Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
8663	OFCN 0704 TN-EMR TT8020	0.08-0.15	1.5 - 4.0	TFM43ZOFW -
19452	OFCR 0704 TN-ML TT6030	0.05-0.15	1.5 - 4.0	

OFCT / OFCW Linha Chase Octo


Size	Dimension (mm)					
	d	t	ap	r		
OF... 05	12.7	3.76-3.86	3.5	0.5-0.8		
RFMT 14	14.0	4.53	7.0	-		



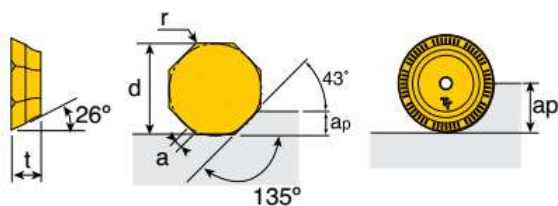
Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
7092	OFCT 05T3 TN-AL K10	0.10-0.50	1.0 - 3.0	TFM43OFS-
6560	OFCT 05T3 TN-EM TT6080	0.05-0.10	1.0 - 3.0	
17820	OFCT 05T3 TN-EM TT6800	0.05-0.10	1.0 - 3.0	
6540	OFCT 05T3 TN-EM TT8020	0.05-0.10	1.0 - 3.0	
7934	OFCT 05T3 TN-EM TT9030	0.05-0.10	1.0 - 3.0	
6619	OFCT 05T3 TN-M TT7030	0.08-0.15	1.0 - 3.0	
6708	OFCW 05T3 TN-EMR TT8020	0.08-0.15	1.0 - 3.0	

OFMR Linha Chase Octo


Size	Dimension (mm)					
	d	t	ap	a	r	
OF... 05	17.94	5.0-5.1	5.0	1.3-2.2	0.8	
RFMR 14	19.00	5.3	9.5	-	-	



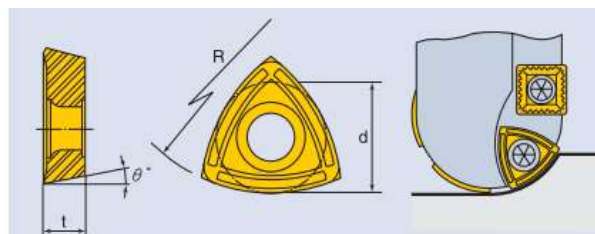
Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
19323	OFMR 0704 AER-M TT6080	0.10-0.19	1.5 - 4.0	TFM43ZOFW-
7063	OFMR 0704 AER-M TT8020	0.10-0.19	1.5 - 4.0	
7933	OFMR 0704 AER-M TT9030	0.10-0.19	1.5 - 4.0	
6789	OFMR 0704 TN-AL K10	0.08-0.15	1.5 - 4.0	

OFMT Linha Chase Octo


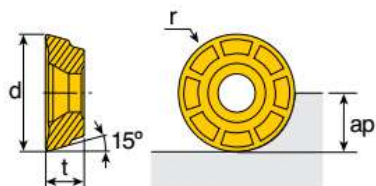
Size	Dimension (mm)					
	d	t	ap	a	r	
OF...05	17.94	5.0-5.1	5.0	1.3-2.2	0.8	
RFMR 14	19.00	5.3	9.5	-	-	



Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
6416	OFMT 05T3 TN-ML K10	0.06-0.12	1.0 - 3.0	TFM43OFS-
6539	OFMT 05T3 TN-ML TT7030	0.06-0.12	1.0 - 3.0	
6443	OFMT 05T3 TN-ML TT8020	0.06-0.12	1.0 - 3.0	
23154	OFMT 05T3 TN-ML TT9030	0.06-0.12	1.0 - 3.0	

RBET/ RBEX Linha Chase Ball / Chase Feed


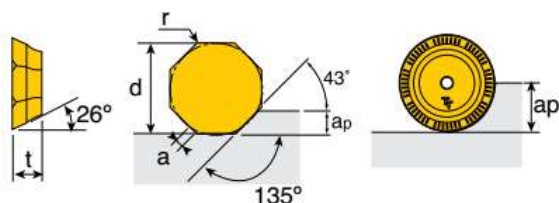
Código	Descrição	d (mm)	R (mm)	Aplicação
6419	RBET 20-M TT8020	6.7	10	ST -TBE TTBE TFMRB- - R-50
9884	RBET 32-M TT9080	10.5	16	
9650	RBEX 40M TT9030	12.7	20	
10124	RBEX 50M TT6030	12.7	25	
12576	RBEX 50M TT8030	12.7	25	
8673	RBEX 50M TT9030	12.7	25	
11239	RBEX 50MM TT7080	12.7	25	
11360	RBEX 50MM TT9080	12.7	25	

RDMX Chase Mold


Size	Dimension (mm)					
	r	d	t	ap		
05	2.5	5	1.5	2.5		
07	3.5	7	2.38	3.5		
10	5.0	10	3.18	5.0		
12	6.0	12	3.97	6.0		
16	8.0	16	4.76	8.0		
20	10.0	20	5.85	10.0		



Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
9099	RDMX 0501-M TT6030	0.04-0.25	0.5 - 2.0	TERD- - TERD- -M -
6700	RDMX 0501-M TT7080	0.04-0.25	0.5 - 2.0	
7525	RDMX 0501-M TT9080	0.04-0.25	0.5 - 2.0	
11251	RDMX 0702-M TT6080	0.05-0.25	1.0 - 3.0	
7526	RDMX 0702-M TT7080	0.05-0.25	1.0 - 3.0	
7105	RDMX 0702-M TT8020	0.05-0.25	1.0 - 3.0	
7456	RDMX 0702-M TT9080	0.05-0.25	1.0 - 3.0	

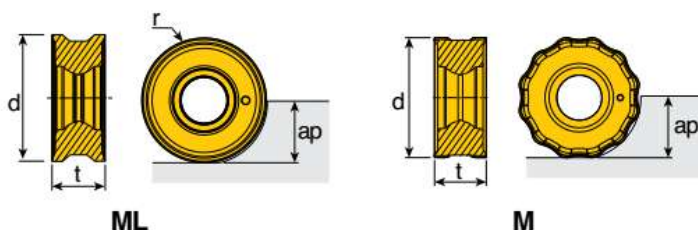
RFMT Linha Chase Octo


Size	Dimension (mm)					
	d	t	ap	a	r	
OF... 05	17.94	5.0-5.1	5.0	1.3-2.2	0.8	
RFMR 14	19.00	5.3	9.5	-	-	



RFMT

Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
6707	RFMT 1404 ML TT8020	0.14-0.27	2.0 - 6.0	TFM43OFS

RNMU Chase 2 Mold


Size	Dimension (mm)					
	r	d	t	ap		
10	5	10	4.5	5		
12	6	12	5.0	6		
16	8	16	6.3	8		

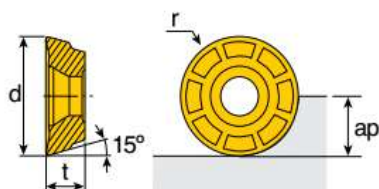


RNMU1205-ML



RNMU1205S-M

Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
17595	RNMU 1205-ML TT7800	0.05-0.35	1.5 - 4.0	TERNS - -12 TERNS -M -12 TFMRNS - R-12
17594	RNMU 1205-ML TT8080	0.05-0.35	1.5 - 4.0	
16955	RNMU 1205-ML TT9080	0.05-0.35	1.5 - 4.0	
16958	RNMU 1205S-M TT9080	0.05-0.40	1.5 - 5.0	

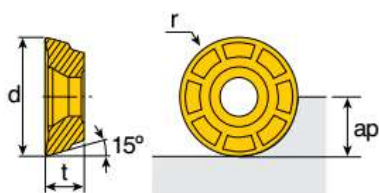
RXHX Chase Mold


Size	Dimension (mm)					
	r	d	t	ap		
05	2.5	5	1.5	2.5		
07	3.5	7	2.38	3.5		
10	5.0	10	3.18	5.0		
12	6.0	12	3.97	6.0		
16	8.0	16	4.76	8.0		
20	10.0	20	5.85	10.0		



AL

Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
8812	RXHX 1003-AL K10	0.10-0.80	1.5 - 4.0	TERX- - - TERX- -M TFMRX- - -
7497	RXHX 12T3-AL K10	0.10-0.80	1.5 - 5.0	

RXXM Chase Mold


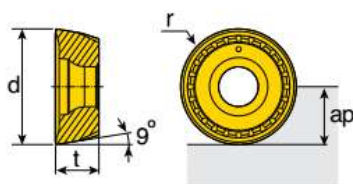
Size	Dimension (mm)				
	r	d	t	ap	
05	2.5	5	1.5	2.5	
07	3.5	7	2.38	3.5	
10	5.0	10	3.18	5.0	
12	6.0	12	3.97	6.0	
16	8.0	16	4.76	8.0	
20	10.0	20	5.85	10.0	


M

MR

ML

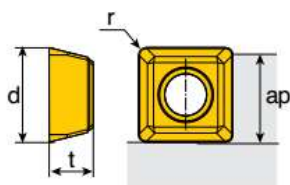
Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
25382	RXXM 1003-M TT6080	0.10-0.30	1.5 - 4.0	TERX- - - TERX- -M TFMRX- - -
7457	RXXM 1003-M TT7080	0.10-0.30	1.5 - 4.0	
6596	RXXM 1003-M TT8020	0.10-0.30	1.5 - 4.0	
7104	RXXM 1003-M TT9080	0.10-0.30	1.5 - 4.0	
25276	RXXM 1003-ML TT8020	0.05-0.30	1.5 - 4.0	
7911	RXXM 1003-MR TT9080	0.05-0.30	1.5 - 4.0	
6751	RXXM 12T3-M TT6080	0.10-0.50	1.8 - 5.0	
7127	RXXM 12T3-M TT7080	0.10-0.50	1.8 - 5.0	
6381	RXXM 12T3-M TT8020	0.10-0.50	1.8 - 5.0	
7188	RXXM 12T3-M TT9080	0.10-0.50	1.8 - 5.0	
7493	RXXM 12T3-ML TT8020	0.05-0.45	1.5 - 5.0	
7790	RXXM 12T3-ML TT9080	0.05-0.45	1.5 - 5.0	
9113	RXXM 12T3-MR TT6080	0.05-0.35	1.5 - 5.0	
24786	RXXM 12T3-MR TT7080	0.05-0.35	1.5 - 5.0	
7872	RXXM 12T3-MR TT9080	0.05-0.35	1.5 - 5.0	
7835	RXXM 1604-M TT8020	0.10-0.50	2.0 - 6.5	
7896	RXXM 1604-M TT9080	0.10-0.50	2.0 - 6.5	
13213	RXXM 1604-ML TT8020	0.10-0.45	2.0 - 6.5	
14729	RXXM 1604-MR TT8020	0.10-0.40	2.0 - 6.5	
8669	RXXM 1604-MR TT9030	0.10-0.40	2.0 - 6.5	
8670	RXXM 2006-MR TT8020	0.10-0.40	3.0 - 8.0	
14363	RXXM 2006-MR TT9080	0.10-0.40	3.0 - 8.0	

RYMX / RYHX Chase Mold


Size	Dimension (mm)				
	r	d	t	ap	
08	4	8	3.2	4	
10	5	10	4.0	5	
12	6	12	4.8	6	
16	8	16	6.1	8	
20	10	20	7.0	10	



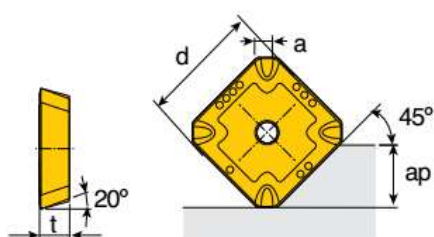
Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
24050	RYHX 1205-AL K10	0.10 - 0.80	1.5 - 5.0	TERY -- TERY -M TFMRY -- TFMRY H--
25401	RYMX 0803-M TT2510	0.05-0.25	1.0 - 3.5	
15034	RYMX 0803-M TT6080	0.05-0.25	1.0 - 3.5	
15289	RYMX 0803-M TT9080	0.05-0.25	1.0 - 3.5	
15035	RYMX 0803-ML TT8080	0.05-0.25	1.0 - 3.5	
15291	RYMX 1004-M TT9080	0.10-0.30	1.5 - 4.0	
16180	RYMX 1004-MR TT9080	0.10-0.30	1.5 - 4.0	
24924	RYMX 1205-M TT6080	0.10-0.50	1.5 - 5.0	
17091	RYMX 1205-M TT9080	0.10-0.50	1.5 - 5.0	
24737	RYMX 1205-ML TT8020	0.10-0.50	1.5 - 5.0	
17463	RYMX 1205-ML TT9080	0.10-0.50	1.5 - 5.0	
25100	RYMX 1205-MR TT6080	0.10-0.50	1.5 - 5.0	
17377	RYMX 1205-MR TT9080	0.10-0.50	1.5 - 5.0	
18193	RYMX 1606-M TT9080	0.10-0.50	2.0 - 6.5	
18194	RYMX 1606-MR TT9080	0.05-0.40	2.0 - 6.5	

SDMT / SEHT Chase Quad


Size	Dimension (mm)			
	d	t	ap	r
06	6.16	2.56	5.6	0.4
09	9.8	4.3	9.0	0.8
11	11.5	4.8	10.7	0.8
14	14.2	5.2	13.4	0.8



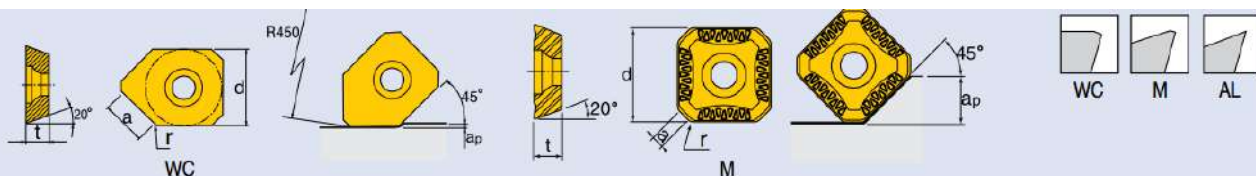
Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
9956	SDMT 050204-M TT9030			TE90SD- -05-C TE90SD- -M -05 TEF- - -SD05 TFM90SD- -05
7606	SDMT 090308 RBE TT8020			
10428	SDMT 090308 RBE TT9030			

SEKN/ SEKR Lion Mill


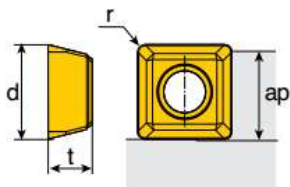
Size	Dimension (mm)			
	d	t	ap	a
12	12.7	3.18	6.3	2.08
15	15.875	4.76	8.4	2.06

SEKN CONTINUAÇÃO


Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
6524	SEKN 1203 AFN K10	0.10-0.25	1.5-6.0	LM45SE - R-12
6639	SEKN 1203 AFTN P30	0.10-0.25	1.5-6.0	
6591	SEKN 1203 AFTN-EM TT8020	0.10-0.25	1.5-6.0	
18980	SEKN 1203 AFTN-HPN TT7080	0.10-0.25	1.5-6.0	
6360	SEKN 1204 AFTN P30	0.10-0.25	1.5-6.0	
6434	SEKN 1204 AFTN-EM TT8020	0.10-0.25	1.5-6.0	LM45SE - R-15
7309	SEKN 1504 AFN K20M	0.10-0.25	1.5-8.0	
6482	SEKN 1504 AFTN P30	0.10-0.25	1.5-8.0	
8851	SEKN 1504 AFTN-EM TT8020	0.10-0.25	1.5-8.0	TE45SE- -12 E86 TFM45SE- - R-12
7353	SEKR 1203 AFTN-EM TT8020	0.10-0.25	1.5-6.0	
6625	SEKR 1204 AFTN-EM TT7080	0.10-0.25	1.5-6.0	

SEKT/ SEHT
Chase Quad


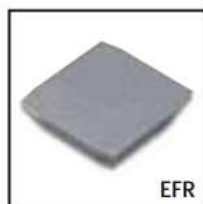
Código	Descrição	Ap (mm)	Aplicação
7500	SEKT 12T3 AFTN-M CT7000	1.5-6.0	TE45SE- -12 E86 TFM45SE- - R-12
24739	SEKT 12T3 AFTN-M P30	1.5-6.0	
6720	SEKT 12T3 AFTN-M TT6080	1.5-6.0	
12534	SEKT 12T3 AFTN-M TT7800	1.5-6.0	
6681	SEKT 12T3 AFTN-M TT8020	1.5-8.0	
7767	SEKT 12T3 AFTN-M TT9030	1.5-8.0	
11955	SEKT 12T3 AFTR-WC TT8020	2.0	
10871	SEHT 12T3 AFN-AL K10	1.5-8.0	

SEMT / SEHT
Chase Quad


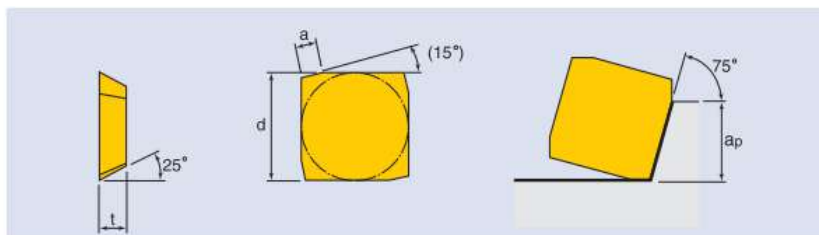
Size	Dimension (mm)				
	d	t	ap	r	
06	6.16	2.56	5.6	0.4	
09	9.8	4.3	9.0	0.8	
11	11.5	4.8	10.7	0.8	
14	14.2	5.2	13.4	0.8	



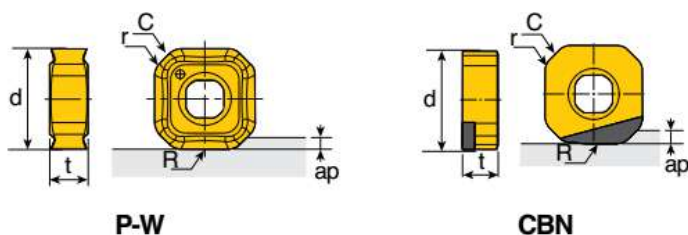
Código	Descrição	Ap (mm)	Aplicação
6989	SEMT 1304 PETR-M TT6080	11	TFM90SE- -13
6924	SEMT 1304 PETR-M TT7080	11	
6925	SEMT 1304 PETR-M TT8020	11	
7210	SEMT 1304 PETR-M TT9030	11	
9390	SEHT 1304 PER-AL K10	9	

SFAN


EFR



Código	Descrição	a (mm)	Ap (mm)	Aplicação
7102	SFAN 1203 EFR K10	2.5	8	-

SNET / SNEX Chase 2 Quad


P-W

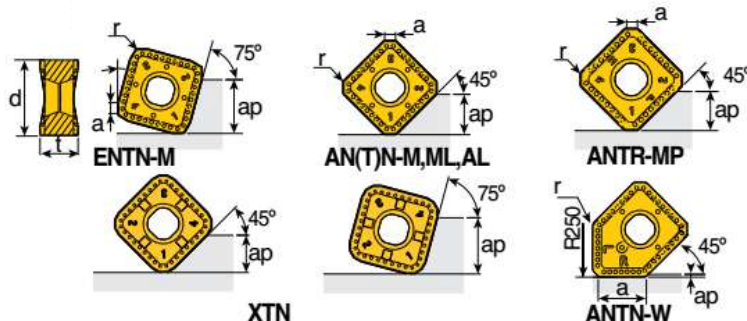
CBN

Size	Dimension (mm)					
	d	t	ap	r	R	C
1204 P-W	12.7	4.76	1.0	2.0	450	2.5
1204-W	12.7	4.76	0.5	2.0	800	-
1205-W	12.7	5.56	1.0	2.0	450	2.5
1204R-CBN	12.7	4.76	0.5	0.8	250	1.5



W

Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
24829	SNET 1205-W TT6080	0.07-0.15	0.3 - 0.8	TFM90SNS - R-12 TQ90SNS R-12
24828	SNET 1205-W TT9080	0.07-0.15	0.3 - 0.8	
9362	SNEX 1204-W TT6030	0.07-0.15	0.3 - 0.8	

SNGX Chase 2 Quad


ENTN-M

AN(T)N-M, ML, AL

ANTR-MP

XTN

ANTN-W

Size	Dimension (mm)					
	d	t	ap	a	r	
13 ENTN-M	13.5	7.0	9.5	2.2	0.4	
13 ANTN-M	13.5	6.8	7.0	2.2	0.4	
13 ANTN-ML	13.5	6.8	7.0	2.2	0.4	
13 ANN-AL	13.5	6.8	7.0	2.2	0.4	
13 ANTR-MP	13.5	6.8	6.0	2.2	0.4	
13 ANTN-W	13.5	6.8	-	7.5	1.2	
13 XTN(75°)	13.5	6.8	9.6	1.4	0.4	
13 XTN(45°)	13.5	6.8	6.35	1.4	0.4	

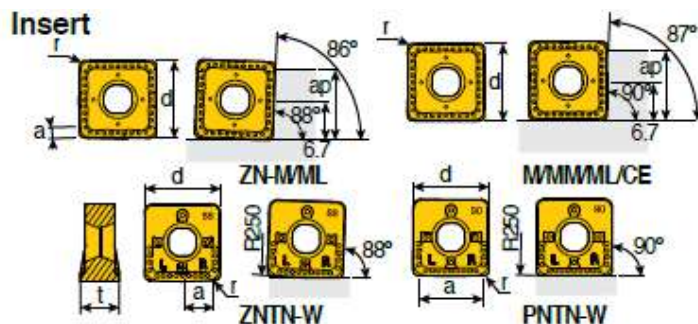


ANTN-W

Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
25220	SNGX 1306 ANTN-W TTT6080	0.01-0.20	0.2 - 1.0	TFM90SN - R-13

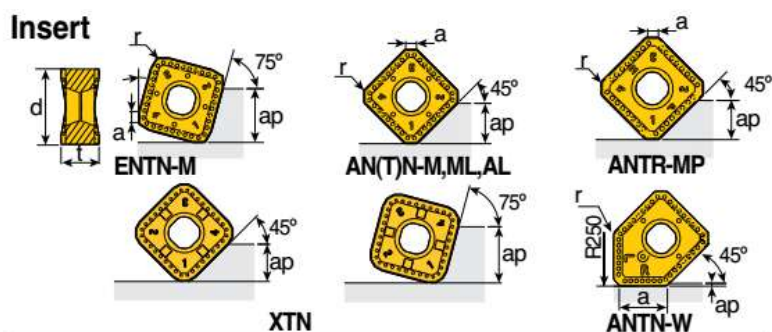
SNGX Chase 2 Quad

Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
11456	SNGX 1205 ANTM-W TT6030	0.10-0.20	0.2 - 1.0	SCRM45SN-R-12
11764	SNGX 1205 ANTM-W TT9080	0.10-0.20	0.2 - 1.0	
12222	SNGX 1205 XTN ML TT6030	0.10-0.20	0.2 - 1.0	
11291	SNGX 1205 XTN ML TT8030	0.10-0.20	0.2 - 1.0	
9322	SNGX 1205 XTN TT6030	0.10-0.20	0.2 - 1.0	

SNGX Chase 2 Quad


Size	Dimension (mm)				
	d	t	ap	a	r
13	13.5	6.8-7.0	10-12	1.2-5.3	0.4-1.6
13 PNTN-W	13.5	6.8	-	11.5	1.0

Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
10876	SNGX 1306 ZN-M TT6030	0.01-0.20	0.2 - 1.0	TFM88SN - R-13
12243	SNGX 130608-M TT6080	0.10-0.20	3.5 - 10.0	TFM88SN - R-13 TFM90SN - R-13
11677	SNGX 130608-M TT6290	0.10-0.20	3.5 - 10.0	
17359	SNGX 130608-M TT6800	0.10-0.20	3.5 - 10.0	
11678	SNGX 130612-M TT6030	0.10-0.20	3.5 - 10.0	
10872	SNGX 130612-M TT9080	0.10-0.20	3.5 - 10.0	
24891	SNGX 130612-ML TT6800	0.10-0.20	3.5 - 10.0	
14182	SNGX 130632 TT9080	0.10-0.20	3.5 - 10.0	

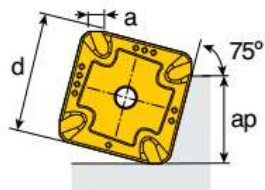
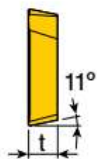
SNMX Chase 2 Quad


Size	Dimension (mm)				
	d	t	ap	a	r
13 ENTN-M	13.5	7.0	9.5	2.2	0.4
13 ANTN-M	13.5	6.8	7.0	2.2	0.4
13 ANTN-ML	13.5	6.8	7.0	2.2	0.4
13 ANN-AL	13.5	6.8	7.0	2.2	0.4
13 ANTR-MP	13.5	6.8	6.0	2.2	0.4
13 ANTN-W	13.5	6.8	-	7.5	1.2
13 XTN(75°)	13.5	6.8	9.6	1.4	0.4
13 XTN(45°)	13.5	6.8	6.35	1.4	0.4

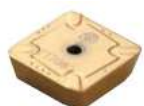


ANTN-M, ML

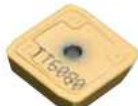
Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
9375	SNMX 1205 XTN TT6080	0.10-0.20	2.0 - 6.0	SCRM45SN-R-12
9222	SNMX 1205 XTN TT6290	0.10-0.20	2.0 - 6.0	
8388	SNMX 1205 XTN TT7080	0.10-0.20	2.0 - 6.0	
9376	SNMX 1205 XTN TT7800	0.10-0.20	2.0 - 6.0	
9110	SNMX 1205 XTN TT8080	0.10-0.20	2.0 - 6.0	
9111	SNMX 1205 XTN TT9080	0.10-0.20	2.0 - 6.0	
19138	SNMX 1306 ANTN-M TT8080	0.10-0.20	2.0 - 6.0	TFM45SN - R-13
24524	SNMX 1306 ANTN-M TT9080	0.10-0.20	2.0 - 6.0	

SPKN Lion Mill


Size	Dimension (mm)				
	d	t	ap	a	
12	12.7	3.18	8	1.2-1.6	
15	15.875	4.76	12	1.4-1.6	

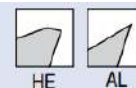
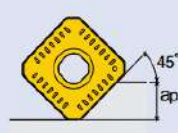
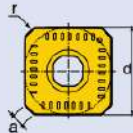
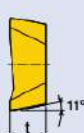


EDR-HPN

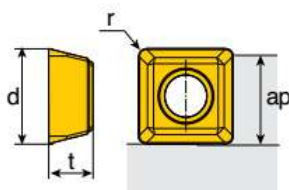


EDR-HPN

Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
5838	SPKN 1203 EDR-EM TT6030	0.10-0.25	1.5 - 7.0	LM75SP - R-12
6278	SPKN 1203 EDTR-CM TT7030	0.10-0.25	1.5 - 7.0	
25324	SPKN 1203 EDTR-EM TT8020	0.10-0.25	1.5 - 7.0	
6984	SPKN 1203 EDTR-HP TT7080	0.10-0.25	1.5 - 7.0	LM75SP - R-15
6680	SPKN 1504 EDTR P30	0.10-0.25	1.5 - 10.0	
6694	SPKN 1504 EDTR TT8020	0.10-0.25	1.5 - 10.0	

SPKT LS Quad


Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
14465	SPKT 1205 AFTR-HE TT7080			SCRM45SP- - R-12

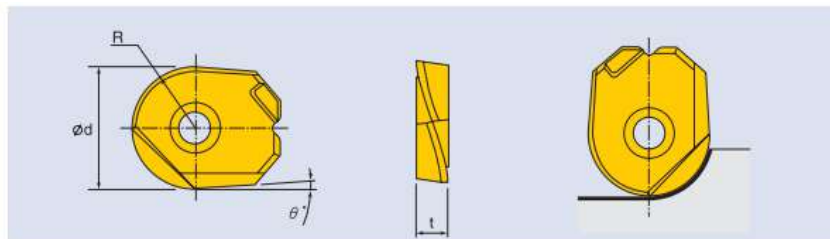
SPMT Chase Quad


Size	Dimension (mm)				
	d	t	ap	r	
06	6.16	2.56	5.6	0.4	
09	9.8	4.3	9.0	0.8	
11	11.5	4.8	10.7	0.8	
14	14.2	5.2	13.4	0.8	

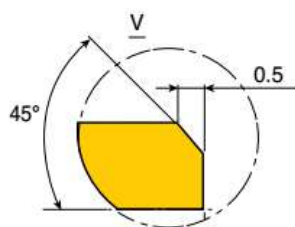
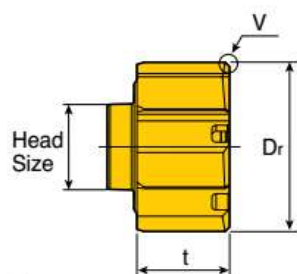
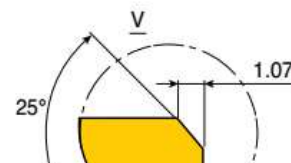
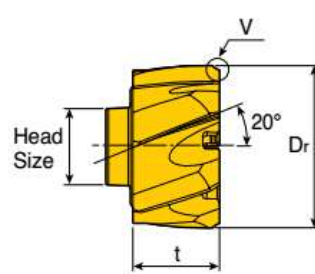


SPMT

Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
8975	SPMT 060304 RBE TT6030			
6502	SPMT 060304 RBE TT8020			
11707	SPMT 060304 RBE TT9080			
13184	SPMT 090408-EM TT6290	0.83-0.17	2.5-7.5	TSF- TDM- TCF- TEF- TES-
7016	SPMT 090408-EM TT8020	0.83-0.17	2.5-7.5	
8448	SPMT 110408-EM TT6080	0.73-0.15	3.0-8.5	
6703	SPMT 110408-EM TT8020	0.73-0.15	3.0-8.5	
19181	SPMT 110410-EM TIALN IFBR			
9011	SPMT 120408 RBE TT6030			
6987	SPMT 120408 RBE TT8020			

TBE
Linha Chase Ball


Código	Descrição	R (mm)	t (mm)	Aplicação
6515	TBE 100B-T KT8600	5	3	TFBE A TFBE A-M
6516	TBE 120B-T KT8600	6	3.5	
6466	TBE 160B-T KT8600	8	4	
6505	TBE 200B-T KT8600	10	5	

TM
Cabeça de Alargador Intercambiável
AS

BL

AS

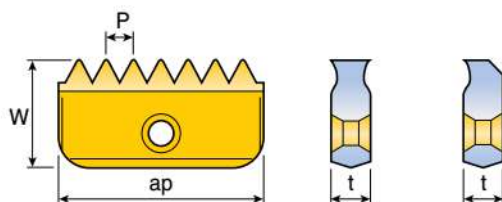

Canal Reto

Código	Descrição	Dr	t	Canal	Tamanho da Cabeça	Tipo de Canal	Tipo de Aresta
18860	TM-12.000-AS-B5 TT9030	12.000	9.3	6	B5	S	A
13440	TM-15.000-BL-B6 TT9030	15.000	9.4	6	B6	L	B
14675	TM-16.001-AS-B7 TT9030	16.000	9.4	6	B6	S	A
18861	TM-20.001-BL-B8 TT9030	20.001	12.8	8	B8	L	B

TM
Cabeça de Alargador Intercambiável
BL

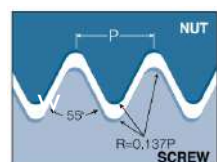
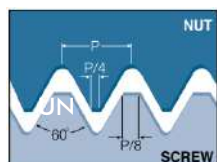
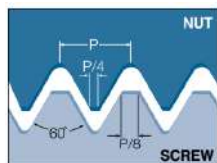
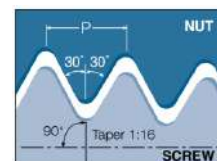
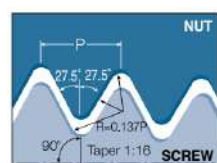

Canal com hélice à esquerda

Código	Descrição	Dr	t	Canal	Tamanho da Cabeça	Tipo de Canal	Tipo de Aresta
15921	TM-23.000-BL-B8 TT9030	23.000	12.8	8	B8	L	B
18387	TM-29.000-BL-B9 TT9030	29.000	12.8	8	B9	L	B
18862	TM-30.000-BL-B9 TT9030	30.000	12.8	8	B9	L	B

TMT
Thread Milling Inserts

TMT12 I ⁽¹⁾

TMT

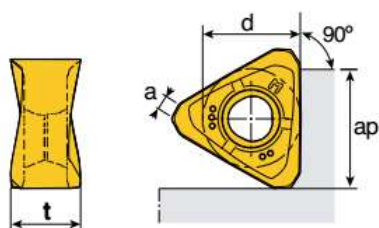
CONTINUAÇÃO

ISO

NPT

BSPT


Código	Descrição	TPI	ap	W	t
15367	TMT12-18NPT TT9030	18	12	6.3	2.9
13870	TMT14 14 NPT TT8030	14	14	7.5	3.1
19822	TMT14 I 1.00 ISO TT9030	1.00	14	7.5	3.1
13998	TMT14 I 1.50 ISO TT9030	1.50	14	7.5	3.1
11288	TMT14 I 12 UN TT8030	12	14	7.5	3.1
15089	TMT14 I 16 UN TT8030	16	14	7.5	3.1
14497	TMT14 I 2.00 ISO TT9030	2.00	14	7.5	3.1
14496	TMT14 I 2.50 ISO TT9030	2.50	14	7.5	3.1
10944	TMT21 11 W TT9030	11	21	12	4.7
13789	TMT21 11.5 NPT TT9030	11.5	21	12	4.7
9549	TMT21 14 NPT TT9030	14	21	12	4.7
14139	TMT21 14 W TT8030	14	21	12	4.7
10854	TMT21 I 1.50 ISO TT9030	1.5	21	12	4.7
25543	TMT21 I 12 UN TT9030	12	21	12	4.7
13581	TMT21 I 2.00 ISO TT9030	2.00	21	12	4.7
9493	TMT21 I 2.50 ISO TT9030	2.50	21	12	4.7
16244	TMT21 I 20 UN TT9030	20	21	12	4.7
12789	TMT21 I 3.00 ISO TT9030	3.00	21	12	4.7
14725	TMT21 I 3.50 ISO TT9030	3.50	21	12	4.7
15808	TMT21 I 8 UN TT9030	8	21	12	4.7
12623	TMT30 11 BSPT TT8030	11	30	16	5.5
14181	TMT30 I 1.50 ISO TT9030	1.5	30	16	5.5
12456	TMT30 I 2.00 ISO TT9030	2.00	30	16	5.5
13997	TMT30 I 3.00 ISO TT9030	3.00	30	16	5.5
16436	TMT30 I 8 UN TT9030	8	30	16	5.5
13830	TMT40 8 NPT TT9030	8	40	20	6.3

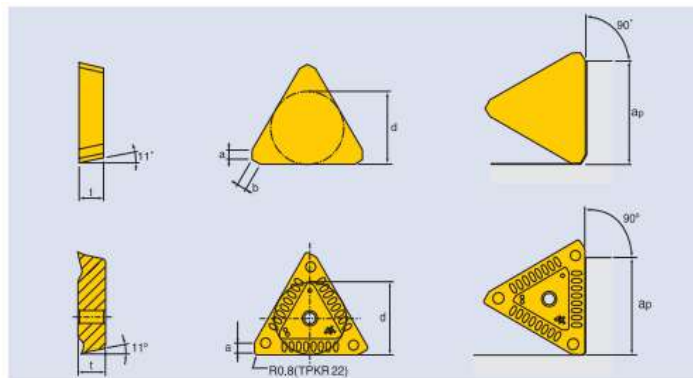
TNMX

Mill 2 Rush

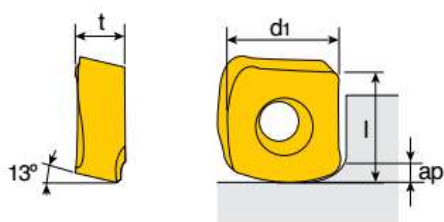


Size	Dimension (mm)				
	d	t	ap	a	
18	11.65	8	13	1.4	

Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
10476	TNMX 2207 PNTN TT6080	0.07-0.15	1.0-11.0	SCRM90TN- - R-22
10207	TNMX 2207 PNTN TT8030	0.07-0.15	1.0-11.0	
10208	TNMX 2207 PNTN TT9080	0.07-0.15	1.0-11.0	

TPKN/ TPKR Lion Mill


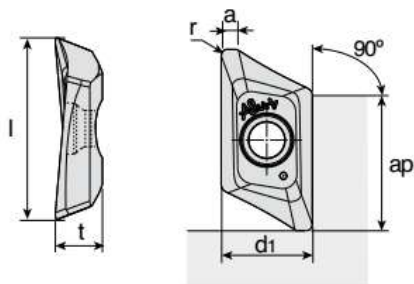
Código	Descrição	d (mm/ tooth)	Ap (mm)	Aplicação
6450	TPKN 1603 PPR K10	9.525	14	M400TP- -16
6584	TPKN 1603 PPR K20M	9.525	14	
6462	TPKN 1603 PPTR P30	9.525	14	
19404	TPKN 1603 PPTR TT8020	9.525	14	
6504	TPKN 1603 PPTR TT8020	9.525	14	
6279	TPKN 1603 PPTR-EM TT7080	9.525	14	
6578	TPKN 1603 PPTR-GP TT6080	9.525	14	
6358	TPKN 2204 PDR K10	12.7	17	M400TP- -22
11414	TPKN 2204 PDTR-EM TT7080	12.7	17	
7656	TPKN 2204 PDTR-EM+ TT8020	12.7	17	
25116	TPKR 1603 PPR-EM TT6080	9.525	14	M400TP- -16
7654	TPKR 1603 PPR-EM TT7080	9.525	14	
7060	TPKR 1603 PPR-EM TT8020	9.525	14	
7655	TPKR 2204 PDR-EM TT7080	12.7	14	M400TP- -22
7061	TPKR 2204 PDR-MM TT8020	12.7	17	

XDMX Chase 2 Feed


Size	Dimension (mm)				
	d1	l	t	ap	
08	8.1	8.1	3.97	1	
13	12.9	12.9	5.56	2	

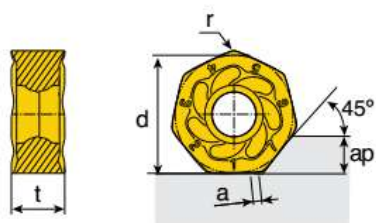


Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
8691	XDMX 08T310R-M TT9030	0.10-0.80	0.2-1.0	TEXD - -08 TEXD -M -08 TFMXD - R-08
7510	XDMX 130515R-M TT7030	0.10-1.50	0.3-2.0	TEXD - -13 TEXD -M -13 TFMXD - R-13

XECT Chase Alu


Size	Dimension (mm)					
	l	d ₁	t	ap	a	r
16	18.4-22.24	11.23	5.4-5.9	13-16	0.3-1.3	0.4-5.0

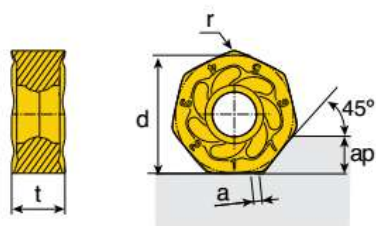
Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
14420	XECT 160508R-AL K10	0.10-0.80	4.5-13.0	TE90XE TFM90XE
14421	XECT 160530R-AL K10	0.10-35.0	4.0-11.5	

XNHU Chase 2 Hepta


Size	Dimension (mm)					
	d	t	a	r	ap	
06	13.7	6.2	1.0	1.0	3.5	



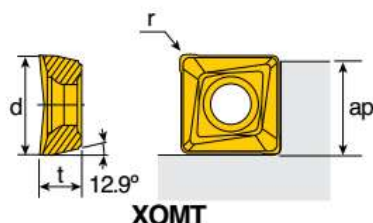
Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
16392	XNHU 0906 ANTM-MM TT6080	0.10-0.20	1.0-3.5	14D-F45XN - R-09 14D-F45XNW - R-09
23869	XNHU 0906 ANTN-ML TT6080	0.10-0.20	1.0-3.5	
19011	XNHU 0906 ANTN-W TT6080	0.10-0.20	1.0-3.5	

XNMU Chase 2 Hepta


Size	Dimension (mm)					
	d	t	a	r	ap	
06	13.7	6.2	1.0	1.0	3.5	



Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
14693	XNMU 0906 ANTR-M TT6080	0.10-0.20	1.0-3.0	14D-F45XN - R-09
15493	XNMU 0906 ANTR-M TT7080	0.10-0.20	1.0-3.0	
14461	XNMU 0906 ANTR-M TT9080	0.10-0.20	1.0-3.0	

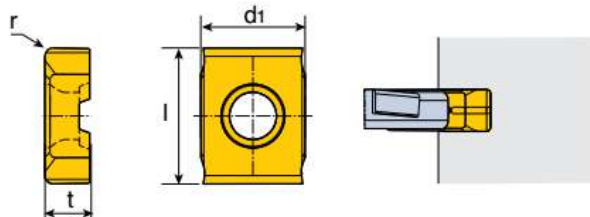
XOMT Chase Quad


Size	Dimension (mm)					
	d	t	ap	r		
06	6.16	2.56	5.6	0.4		
09	9.8	4.3	9.0	0.8		
11	11.5	4.8	10.7	0.8		
14	14.2	5.2	13.4	0.8		

XOMT CONTINUAÇÃO

XOMT

Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
6538	XOMT 060204 TT8020	0.03-0.06	1.5-4.5	TSF-TDM-

ZNHT Top Slot


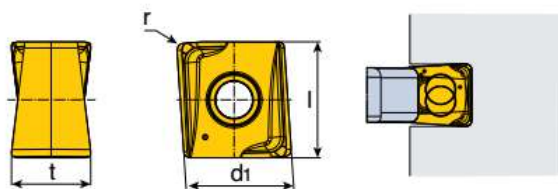
Size	Dimension (mm)				
	l	d1	t	r	
018	10	7.5	1.8	0.2-0.8	
023	10	7.5	2.3	0.2-0.8	
028	10	7.5	2.8	0.2-0.8	
033	10	7.5	3.3	0.2-0.8	
038	13	10	3.8	0.4-0.8	
043	13	10	4.3	0.4-0.8	
048	13	10	4.8	0.4-0.8	
053	13	10	5.3	0.4-0.8	


ZNHT

ZNHT-ML

ZNHT-AL

Código	Descrição	Fz (mm/ tooth)	Aplicação
17786	ZNHT 018-04 ML TT8080	0.05-0.08	TSM -Z
17785	ZNHT 018-04 TT9080	0.05-0.08	
25305	ZNHT 028-02 AL K10	0.10-0.35	
25294	ZNHT 028-02 TT6080	0.05-0.10	
25292	ZNHT 028-04 TT6080	0.05-0.10	
14241	ZNHT 028-04 TT9080	0.05-0.10	
18711	ZNHT 028-08 TT9080	0.05-0.10	
25293	ZNHT 028-13 TT6080	0.05-0.10	
13210	ZNHT 033-08 TT7800	0.05-0.12	
17864	ZNHT 038-08 TT8080	0.05-0.12	
17615	ZNHT 043-08 TT7080	0.05-0.15	
15033	ZNHT 043-08 TT9080	0.05-0.15	
19058	ZNHT 048-08 TT9080	0.05-0.15	
17352	ZNHT 053-08 TT6080	0.05-0.15	
17353	ZNHT 053-08 TT9080	0.05-0.15	

ZNHU Top Slot


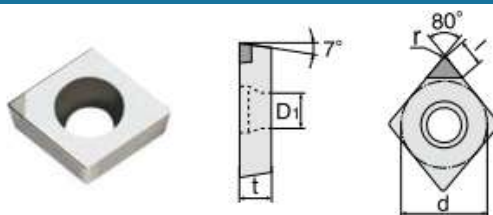
Size	Dimension (mm)			
	l	d1	t	r
080	7.6	10.7	6.36-6.49	0.8
110	10.6	13.0	8.38-8.42	0.8
140	14	13.0	9.59-9.65	0.8


ZNHU

Código	Descrição	Fz (mm/ tooth)	Aplicação
18498	ZNHU 080-08 TT9080	0.08-0.16	TSM -ZN

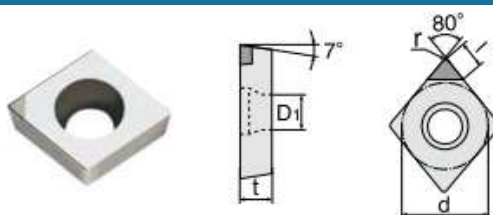
PASTILHAS PCD / CBN

CCGW Pastilhas de CBN



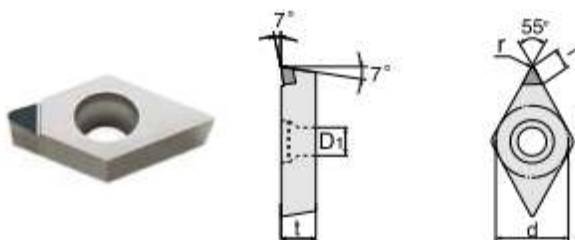
Código	Descrição	l (mm)	d (mm)	t (mm)	r (mm)	D1 (mm)
10484	CCGW 09T304 WZ-LS TB650	2.3	9.52	3.97	0.4	4.44

CNMA Pastilhas de CBN



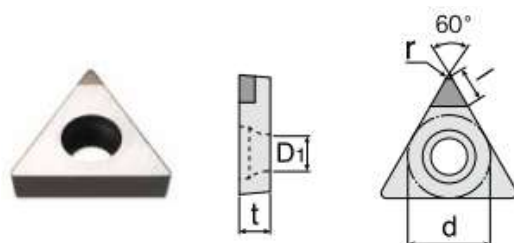
Código	Descrição	l (mm)	d (mm)	t (mm)	r (mm)	D1 (mm)
9494	CNMA 120408 LS4 TB650	2.1	12.70	4.76	0.8	5.16

DCGW Pastilha de PCD

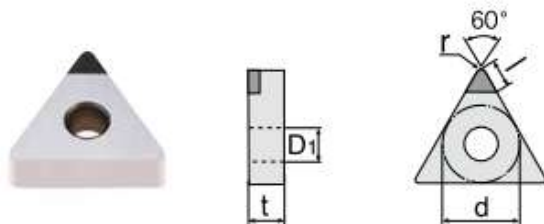


Código	Descrição	l (mm)	d (mm)	t (mm)	r(mm)	D1(mm)
10141	DCGW 070202 LN-7 KP300	3.4	6.35	2.38	0.2	2.8
10118	DCGW 11T308 LS TB650	2.2	9.52	3.97	0.8	4.4

TCGW Pastilha de PCD



Código	Descrição	l (mm)	d (mm)	t (mm)	r(mm)	D1(mm)
10310	TCGW 110204 LS TB650	2.3	6.35	2.38	0.4	2.8
11376	TCGW 110208 LS KB90	2.1	6.35	2.38	0.8	2.8
25295	TCGW 16T304 LS TB650	2.8	9.52	3.97	0.4	4.4
10101	TCGW 16T308 LS TB650	2.5	9.52	3.97	0.8	4.4

TNMA Pastilha de PCD


Código	Descrição	l (mm)	d (mm)	t (mm)	r(mm)	D1(mm)
15439	TNMA 160404 LS KB50	2.2	9.52	4.76	0.4	3.81
11270	TNMA 160408 LS3 KB90	2.1	9.52	4.76	0.8	3.81
9732	TNMA 160408 LS3 TB650	2.1	9.52	4.76	0.8	3.81
16391	TNMA 160412 TX-LS3 TB650	2.5	9.52	4.76	1.2	3.81
11378	TNMA 160416 LS TB650	2.4	9.52	4.76	1.6	3.81

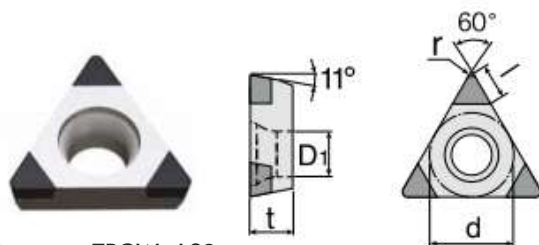
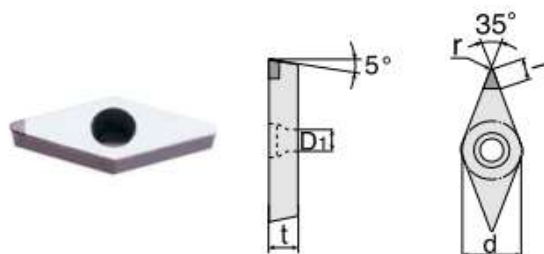
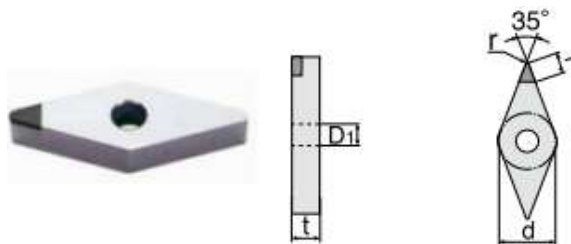
TPGW Pastilhas de CBN


Imagem TPGW...LS3

Código	Descrição	l (mm)	d (mm)	t (mm)	r(mm)	D1(mm)
12571	TPGW 110308TX LS2 TB650	2.3	6.35	3.18	0.8	3.4

VBGW Pastilhas de CBN


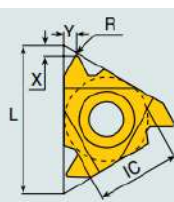
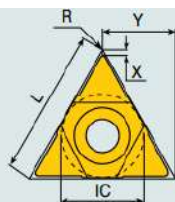
Código	Descrição	l (mm)	d (mm)	t (mm)	r(mm)	D1(mm)
18690	VBGW 110304 LS TB670	3.2	6.35	3.18	0.4	2.8
10364	VBGW 160404 LS TB650	3.2	9.52	4.76	0.4	4.4
12772	VBGW 160408 LN-7 KP 300	2.3	9.52	4.76	0.8	4.4

VNGA Pastilhas de CBN


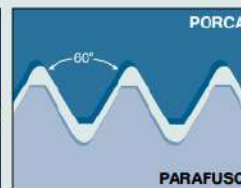
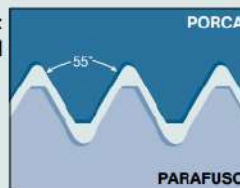
Código	Descrição	l (mm)	d (mm)	t (mm)	r (mm)	D1 (mm)
7916	VNGA 160408 LS2 TB650	2.4	9.52	4.76	0.8	3.81

PASTILHAS ROSQUEAMENTO

Perfil Parcial 55 / 60



Aplicação:
Indústria em Geral



Externa



Tipo - Regular



Tipo - M

Interna



Tipo - Regular



Tipo - M

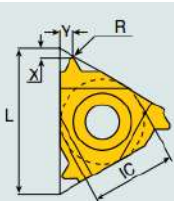
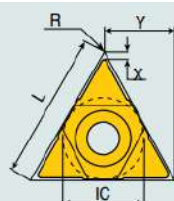


Tipo U

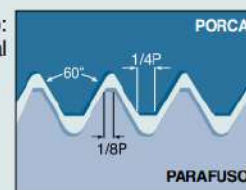
EXTERNO		INTERNO		IC
Código	Descrição	Código	Descrição	
-	-	11729	08 UIRL U 55 TT8010	3/16"
-	-	8657	11IR A 55 TT7010	1/4"
-	-	24947	11IR A 55 TT9030	1/4"
9261	16ER G 55 TT9030	9217	16IR G 55 TT9030	3/8"
12538	16ER AG 55 TT8010	-	-	3/8"
23683	16ERB G 55 TT9030	23685	16IRB G 55 TT9030	-
10147	16ERM G 55 TT7010	10146	16IRM G 55 TT7010	3/8"
7927	16ERM G 55 TT9030	7815	16IRM G 55 TT9030	3/8"
9994	16ERM AG 55 TT7010	-	-	3/8"
7616	16ERM AG 55 TT9030	6821	16IRM AG 55 TT9030	3/8"
25452	22ER N 55 TT7010	8593	22IR N 55 TT7010	1/2"
8610	22ER N 55 TT9030	10453	22IR N 55 TT9030	1/2"
-	-	12273	27IR Q 55 TT9030	5/8"

EXTERNO		INTERNO		IC
Código	Descrição	Código	Descrição	
-	-	7438	06IRM A 60 TT8010	5/32"
-	-	10329	08IRM A 60 TT9030	3/16"
-	-	9721	11IRM A 60 TT9030	1/4"
7145	16ER G 60 TT8010	12729	16IR G 60 TT8010	3/8"
9240	16ER G 60 TT9030	9239	16IR G 60 TT9030	3/8"
23682	16ERB G 60 TT9030	23684	16IRB G 60 TT9030	-
24867	16ERM A 60 TT9030	24866	16IRM A 60 TT9030	3/8"
7395	16ERM AG 60 TT9030	7305	16IRM AG 60 TT9030	3/8"
10085	16ERM G 60 TT7010	10239	16IRM G 60 TT7010	3/8"
7712	16ERM G 60 TT9030	7502	16IRM G 60 TT9030	3/8"
6837	22ERM N 60 TT9030	7796	22IRM N 60 TT9030	1/2"
13714	27ER Q 60 TT9030	13713	27IR Q 60 TT9030	5/8"

Perfil Completo ISO Métrico



Aplicação:
Indústria em Geral



EXTERNO		INTERNO		IC
Código	Descrição	Código	Descrição	
-	-	9424	11IRM 1.50 ISO TT7010	1/4"
-	-	10527	11IRM 1.50 ISO TT9030	1/4"

Perfil Completo ISO Métrico CONTINUAÇÃO
Externa


Tipo - Regular



Tipo - M

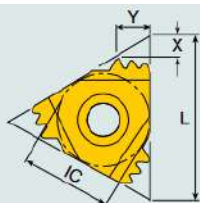
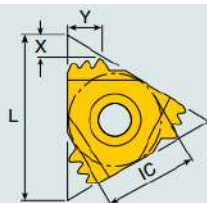
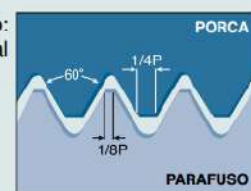
Interna


Tipo - Regular

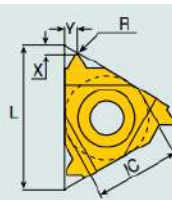
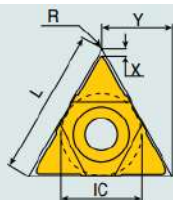
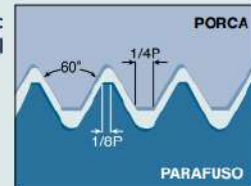


Tipo - M

EXTERNO		INTERNO		IC
Código	Descrição	Código	Descrição	
-	-	25108	11IRM 2.00 ISO TT9030	1/4"
-	-	7043	16IR 0.70 ISO TT6010	3/8"
-	-	11793	16IR 1.00 ISO TT9030	3/8"
-	-	12788	16IR 1.50 ISO TT9030	3/8"
25527	16EL 2.00 ISO TT7010	-	-	3/8"
10790	16ER 2.00 ISO TT9030	10841	16IR 2.00 ISO TT9030	3/8"
8828	16ERM 1.00 ISO TT9030	8771	16IRM 1.00 ISO TT9030	3/8"
9039	16ERM 1.25 ISO TT9030	9391	16IRM 1.25 ISO TT9030	3/8"
8788	16ERM 1.50 ISO TT9030	8819	16IRM 1.50 ISO TT9030	3/8"
8818	16ERM 1.75 ISO TT9030	8820	16IRM 1.75 ISO TT9030	3/8"
14296	16ERM 2.00 ISO TT7010	14345	16IRM 2.00 ISO TT7010	3/8"
8829	16ERM 2.00 ISO TT9030	8815	16IRM 2.00 ISO TT9030	3/8"
8973	16ERM 2.50 ISO TT9030	9280	16IRM 2.50 ISO TT9030	3/8"
9347	16ERM 3.00 ISO TT9030	9292	16IRM 3.00 ISO TT9030	3/8"
10098	22ER 4.00 ISO TT9030	9450	22IR 4.00 ISO TT9030	1/2"
11530	22ER 4.50 ISO TT7010	-	-	1/2"
10099	27ER 6.00 ISO TT7010	10405	27IR 6.00 ISO TT7010	5/8"

Perfil Completo Multi-Dente ISO Métrico

 Aplicação:
Indústria em Geral

Interna / Externa


EXTERNO		INTERNO		IC
Código	Descrição	Código	Descrição	
11730	22ER 2.00 ISO 2M TT9030			5/8"
10350	22ER 2.00 ISO 3M TT9030	10515	22IR 2.00 ISO 3M TT9030	5/8"

Perfil Completo American UN (UN, UNC, UNF, UNEF)

 Aplicação:
Indústria em Geral

Externa


Tipo - Regular



Tipo - M

EXTERNO		INTERNO		IC
Código	Descrição	Código	Descrição	
-	-	17807	11IR 18UN TT9030	1/4"
9382	16ERM 8 UN TT7010	9379	16IRM 8 UN TT7010	3/8"
-	-	12693	16IRM 8 UN TT9030	3/8"
9230	16ERM 12UN TT7010	9281	16IRM 12UN TT7010	3/8"
8984	16ERM 12UN TT9030	9032	16IRM 12UN TT9030	3/8"
10772	16ER 13UN TT9030	-	-	3/8"
10746	16ERM 14UN TT7010	-	-	3/8"

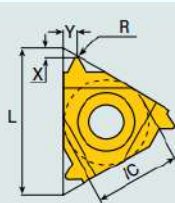
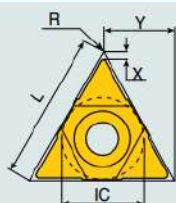
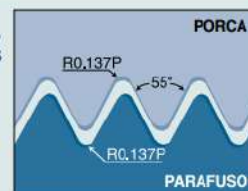
Perfil Completo American UN (UN, UNC, UNF, UNEF)
CONTINUAÇÃO
Interna


Tipo - Regular



Tipo - M

EXTERNO		INTERNO		IC
Código	Descrição	Código	Descrição	
9229	16ERM 14UN TT9030	9279	16IRM 14UN TT9030	3/8"
10887	16ERM 16UN TT7010	-	-	3/8"
9228	16ERM 16UN TT9030	7807	16IRM 16UN TT9030	3/8"
9227	16ERM 18UN TT9030	9349	16IRM 18UN TT9030	3/8"
9207	16ERM 20UN TT9030	9231	16IRM 20UN TT9030	3/8"
7387	16ERM 24 UN TT7010	-	-	3/8"
11362	16ERM 24 UN TT9030	-	-	3/8"
18951	16ER 28UN TT7010	-	-	3/8"
10427	16ER 32 UN TT9030	-	-	3/8"
9481	22ER 7 UN TT7010	-	-	1/2"
-	-	25430	27IR 4UN TT9030	5/8"

Perfil Completo Whitworth (BSW, BSF, BSP)

 Aplicação: Geral na Indústria,
Tubos e Conexões

Externa


Tipo - Regular



Tipo - M

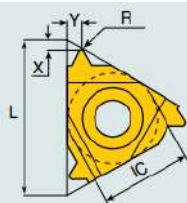
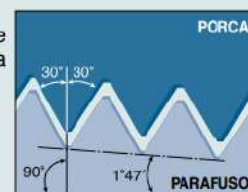
Interna


Tipo - Regular



Tipo - M

EXTERNO		INTERNO		IC
Código	Descrição	Código	Descrição	
-	-	10139	11IR 16W TT9030	1/4"
12784	16ER 8W TT9030	12767	16IR 8W TT9030	3/8"
12532	16ER 11W TT9030	12319	16IR 11W TT9030	3/8"
9965	16ERM 11W TT9030	7851	16IRM 11 W TT9030	3/8"
10859	16ER 12W TT9030	9781	16IR 12W TT9030	3/8"
11271	16ERM 14 W TT9030	7850	16IRM 14 W TT9030	3/8"
12336	16ER 18W TT9030	-	-	3/8"
20018	16ERM 19W TT9030	20029	16IRM 19W TT9030	3/8"
-	-	9573	22IR 6 W TT7010	1/2"
9574	22ER 6 W TT9030	12679	22IR 6 W TT9030	1/2"

Perfil Completo NPT (National Pipes Threads)

 Aplicação: Tubulação de
vapor, gás e água


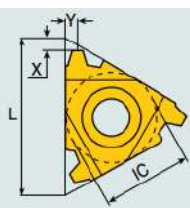
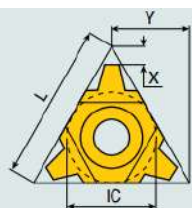
Perfil Completo NPT (National Pipes Threads) CONTINUAÇÃO
Externa


Tipo - M

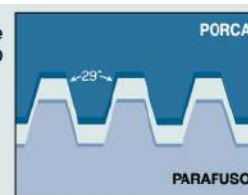
Interna


Tipo - M

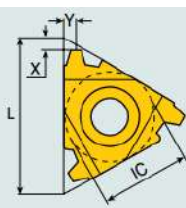
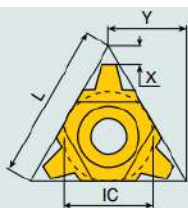
EXTERNO		INTERNO		IC
Código	Descrição	Código	Descrição	
20015	16ERM 8 NPT TT9030	20017	16IRM 8 NPT TT9030	3/8"
10606	16ERM 11.5 NPT TT9030	7503	16IRM 11.5 NPT TT9030	3/8"
11465	16ERM 14 NPT TT9030	7361	16IRM 14 NPT TT9030	3/8"

ACME


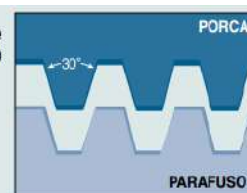
Aplicação: Parafusos de Acionamento


Interna


EXTERNO		INTERNO		IC
Código	Descrição	Código	Descrição	
		13182	27IL 4 ACME TT9030	5/8"

Trapezoidal DIN103


Aplicação: Parafusos de Acionamento


Externa

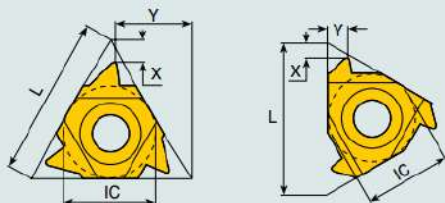
Interna

Externa / Interna

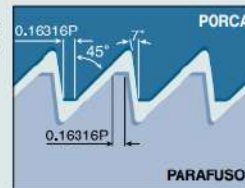

Tipo U

EXTERNO		INTERNO		IC
Código	Descrição	Código	Descrição	
9769	16ER 2TR TT9030	9751	16IR 2TR TT9030	3/8"
9260	16ER 3 TR TT9030	9297	16IR 3TR TT9030	3/8"
7845	22ER 4 TR TT9030	7879	22IR 4 TR TT9030	1/2"
7758	22ER 5 TR TT9030	8754	22IR 5 TR TT9030	1/2"
11417	22UERL 6 TR TT9030	11419	22UIRL 6 TR TT9030	1/2"
11381	22UERL 7 TR TT9030	11418	22UIRL 7 TR TT9030	1/2"
8516	27ER 6 TR TT9030	8990	27IR 6 TR TT9030	5/8"
19375	27ER 7 TR TT7010	19376	27IR 7 TR TT7010	5/8"
13173	27ER 7 TR TT9030	18096	27IR 7 TR TT9030	5/8"
7599	27UERL 8 TR TT7010	10309	27UIRL 8 TR TT7010	5/8"

American Buttress



Aplicação: Para grandes cargas em uma direção



Externa

Interna



EXTERNO		INTERNO		IC
Código	Descrição	Código	Descrição	
19562	16ER 10 ABUT TT9030	14727	16IR 10 ABAUT TT9030	3/8"
15928	22UERL 4 ABUT TT7010	15927	22UIRL 4 ABUT TT7010	1/2"

Externa

Interna

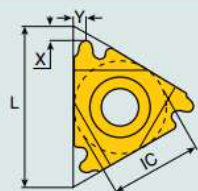


Tipo U

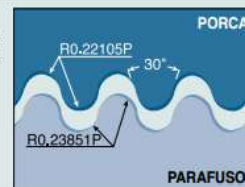


Tipo U

Round DIN 405



Aplicações: Acoplamentos cônicos p/ sist. Anti-incendio e Ind. Alimentícia



Externa

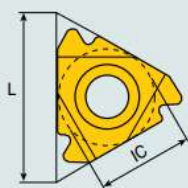


Interna

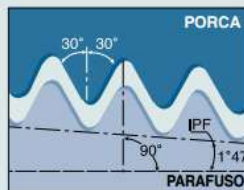


EXTERNO		INTERNO		IC
Código	Descrição	Código	Descrição	
12537	16ER 6RND TT9030	-	-	3/8"
-	-	9417	16IRM 6 RND TT7010	3/8"
9649	16ERM 6 RND TT9030	9672	16IRM 6 RND TT9030	3/8"
-	-	10140	22IR 6 RND TT6010	1/2"

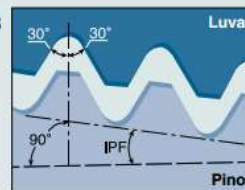
API - Roscas para Indústria Petrolífera



API Round
Aplicação: Indústria de petróleo e gás



V 0.038

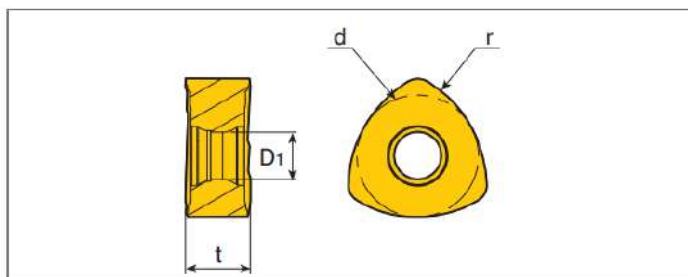


API Round

EXTERNO		INTERNO		IC
Código	Descrição	Código	Descrição	
-	-	8753	16IR 8 API RD TT9030	3/8"

PASTILHAS TORNEAMENTO

BNMX Alto Avanço

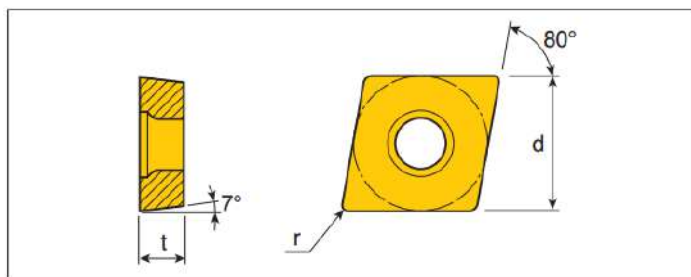


Size	Dimension (mm)			
	d	t	r	D1
15	15	8	15	6.2



Código	Descrição	Avanço (mm/rot)	Ap (mm)
13720	BNMX 150720 L-HF TT8115	0.5-2.5	0.5-2.5
13721	BNMX 150720 L-HF TT8125	0.5-2.5	0.5-2.5
13861	BNMX 150720 R-HF TT8115	0.5-2.5	0.5-2.5
13862	BNMX 150720 R-HF TT8125	0.5-2.5	0.5-2.5

CCGT Rombicas 80° Positivas com 7° de ângulo de folga



Size	Dimension (mm)		
	d	t	r
03	3.97	1.59	0.03-0.4
04	4.76	1.59	0.03-0.4
06	6.35	2.38	0.03-0.4
09	9.52	3.97	0.03-0.4

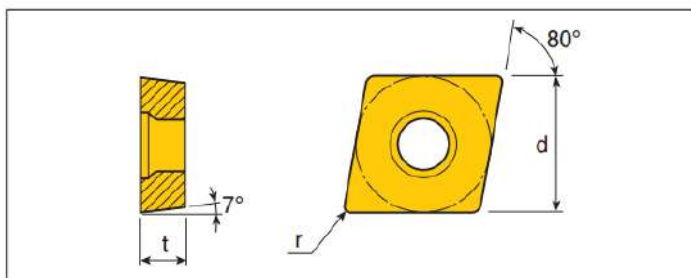
Nova



Acabamento

Código	Descrição	Avanço (mm/rot)	Ap (mm)
16848	CCGT 030104 L-FL CT3000	0.05-0.20	0.1-0.4
7831	CCGT 060202 FL K10	0.02-0.15	0.1-1.5
6831	CCGT 060204 FL K10	0.03-0.20	0.1-2.4
24735	CCGT 09T302 FL K10	0.02-0.15	0.1-2.5
17852	CCGT 09T302 SA TT9020	0.02-0.15	0.1-2.5
6385	CCGT 09T304 FL K10	0.03-0.20	0.1-2.5
6411	CCGT 09T308 FL K10	0.03-0.25	0.1-2.5
9093	CCGT 120404 FL K10	0.08 - 0.25	0.4 - 4.0
6834	CCGT 120408 FL K10	0.10 - 0.30	0.7 - 4.0

CCMT Rombicas 80° Positivas com 7° de ângulo de folga



Size	Dimension (mm)		
	d	t	r
06	6.35	2.38	0.1-0.8
09	9.52	3.97	0.1-0.8
12	12.7	4.76	0.4-1.2

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
6778	CCMT 060204 FG CT3000	0.05 - 0.15	0.3 - 1.5
7212	CCMT 060204 FG TT5080	0.05 - 0.15	0.3 - 1.5

CCMT CONTINUAÇÃO
FG


Acabamento

MT


Usinagem Média

PC


Para Semi-acabamento

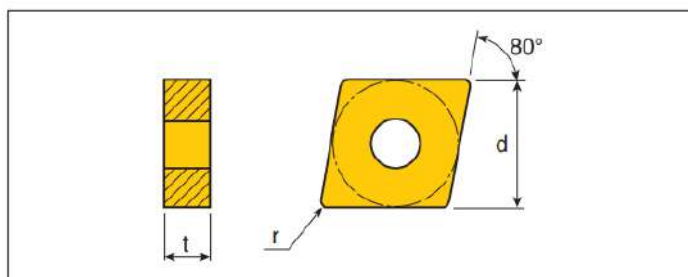
WT


Usinagem Média

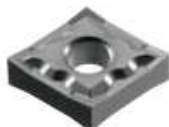
Código	Descrição	Avanço (mm/rot.)	Ap (mm)
7236	CCMT 060204 FG TT8125	0.05 - 0.15	0.3 - 1.5
7615	CCMT 060204 MT TT5080	0.07 - 0.20	0.5 - 2.0
18384	CCMT 060204 MT TT7005	0.07 - 0.20	0.5 - 2.0
18925	CCMT 060204 MT TT7310	0.07 - 0.20	0.5 - 2.0
7237	CCMT 060204 MT TT8020	0.07 - 0.20	0.5 - 2.0
6829	CCMT 060204 MT TT8125	0.07 - 0.20	0.5 - 2.0
20160	CCMT 060204 PC TT9080	0.06 - 0.18	0.3 - 2.0
12769	CCMT 060208 MT KT450	0.13 - 0.30	0.7 - 2.0
10814	CCMT 060208 MT TT1300	0.13 - 0.30	0.7 - 2.0
23981	CCMT 060208 MT TT8020	0.13 - 0.30	0.7 - 2.0
12743	CCMT 060208 MT TT8115	0.13 - 0.30	0.7 - 2.0
9206	CCMT 060208 MT TT8125	0.13 - 0.30	0.7 - 2.0
8682	CCMT 09T304 FG TT5030	0.07 - 0.20	0.4 - 2.0
7748	CCMT 09T304 FG TT 8020	0.07 - 0.20	0.4 - 2.0
6633	CCMT 09T304 FG TT8125	0.07 - 0.20	0.4 - 2.0
7311	CCMT 09T304 MT TT5030	0.10 - 0.25	0.7 - 3.5
9448	CCMT 09T304 MT TT8020	0.10 - 0.25	0.7 - 3.5
6323	CCMT 09T304 MT TT8115	0.10 - 0.25	0.7 - 3.5
8785	CCMT 09T308 FG TT1300	0.10 - 0.25	0.6 - 2.0
9238	CCMT 09T308 FG TT5080	0.10 - 0.25	0.6 - 2.0
19732	CCMT 09T308 FG TT8115	0.10 - 0.25	0.6 - 2.0
7384	CCMT 09T308 FG TT8125	0.10 - 0.25	0.6 - 2.0
19320	CCMT 09T308 MT TT5080	0.13 - 0.30	1.0 - 3.5
18382	CCMT 09T308 MT TT7005	0.13 - 0.30	1.0 - 3.5
18926	CCMT 09T308 MT TT7310	0.13 - 0.30	1.0 - 3.5
6721	CCMT 09T308 MT TT8020	0.13 - 0.30	1.0 - 3.5
7139	CCMT 09T308 MT TT8115	0.13 - 0.30	1.0 - 3.5
24176	CCMT 09T308 PC TT8115	0.10 - 0.28	0.5 - 3.0
24175	CCMT 09T308 PC TT9080	0.10 - 0.28	0.5 - 3.0
12700	CCMT 09T308 WT TT1300	0.10 - 0.28	0.5 - 3.0
12726	CCMT 120404 MT TT5100	0.10 - 0.25	1.0 - 5.0
6324	CCMT 120408 FG TT8125	0.10 - 0.25	0.6 - 2.0
11983	CCMT 120408 MT TT5100	0.13 - 0.30	1.3 - 5.0
23465	CCMT 120408 MT TT7005	0.13 - 0.30	1.3 - 5.0
10930	CCMT 120408 MT TT8020	0.13 - 0.30	1.3 - 5.0
10487	CCMT 120408 MT TT8125	0.13 - 0.30	1.3 - 5.0
11380	CCMT 120412 MT TT8125	0.17 - 0.35	1.5 - 5.0



CNGG Rômbicas 80° Negativas



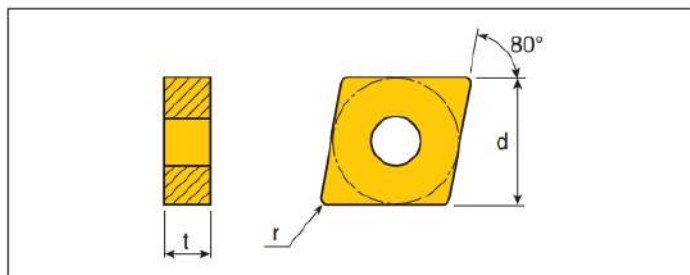
Size	Dimension (mm)		
	d	t	r
09	9.52	4.76	0.8-1.2
12	12.7	4.76	0.1-1.6
16	15.88	6.35	1.2-1.6
19	19.05	6.35	0.4-1.6
25	25.4	9.52	2.4



Usinagem Média

Código	Descrição	Avanço (mm/rot)	Ap (mm)
10731	CNGG 120404 ML K10	0.10 - 0.30	0.8 - 3.5
10732	CNGG 120408 ML K10	0.12 - 0.35	1.0 - 3.5

CNMA Rômbicas 80° Negativas



Size	Dimension (mm)		
	d	t	r
09	9.52	4.76	0.8-1.2
12	12.7	4.76	0.1-1.6
16	15.88	6.35	1.2-1.6
19	19.05	6.35	0.4-1.6
25	25.4	9.52	2.4

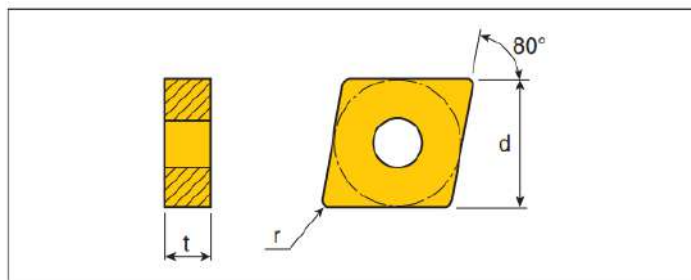


Desbaste

Código	Descrição	Avanço (mm/rot)	Ap (mm)
6321	CNMA 120408 TT1300	0.15 - 0.60	1.0 - 6.0
17336	CNMA 120408 TT7005	0.15 - 0.60	1.0 - 6.0
17329	CNMA 120408 TT7015	0.15 - 0.60	1.0 - 6.0
9583	CNMA 120408 TT7310	0.15 - 0.60	1.0 - 6.0
6892	CNMA 120412 TT1300	0.15 - 0.70	1.5 - 6.0
16868	CNMA 120412 TT7005	0.15 - 0.70	1.5 - 6.0
16869	CNMA 120412 TT7015	0.15 - 0.70	1.5 - 6.0
9722	CNMA 120412 TT7310	0.15 - 0.70	1.5 - 6.0
12346	CNMA 120416 TT7310	0.20 - 0.80	2.0 - 6.0
12347	CNMA 160616 TT7005	0.20 - 0.80	2.0 - 8.0
6888	CNMA 190612 TT1300	0.15 - 0.70	2.0 - 10.0
7218	CNMA 190616 TT1300	0.15 - 1.00	3.0 - 10.0
9368	CNMA 190616 TT7310	0.15 - 1.00	3.0 - 10.0



CNMG Rômbicas 80° Negativas



Size	Dimension (mm)		
	d	t	r
09	9.52	4.76	0.4-1.2
12	12.7	4.76	0.4-1.6
16	15.88	4.76-6.35	0.4-1.6
19	19.05	6.35	0.4-1.6

ET



Desbaste



Usinagem Média

FC



Acabamento

EA



Acabamento

MC



Usinagem Média

EM



Usinagem Média

ML



Usinagem Média

MP



Usinagem Média

MT



Usinagem Média

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
24391	CNMG 090308 MT TT8115	0.17 - 0.45	1.0-3.5
25154	CNMG 090404 MM TT9225	0.07 - 0.20	0.5 - 2.0
25319	CNMG 090404 PC TT8125	0.07 - 0.20	0.5 - 2.0
25150	CNMG 090408 EM TT9225	0.17 - 0.45	1.0-3.5
25320	CNMG 090408 PC TT8125	0.17 - 0.45	1.0-3.5
23283	CNMG 120404 ML TT5080	0.10 - 0.30	0.8 - 3.5
25202	CNMG 120404 ML TT8125	0.10 - 0.30	0.8 - 3.5
11732	CNMG 120404 MT TT1500	0.15 - 0.40	1.0 - 5.0
6580	CNMG 120404 MT TT3500	0.15 - 0.40	1.0 - 5.0
7151	CNMG 120404 TT1500	0.17 - 0.45	1.0 - 5.0
12539	CNMG 120408 EA TT3500	0.07 - 0.40	0.15 - 1.5
9966	CNMG 120408 ET TT5030	0.17 - 0.55	1.2 - 5.5
12569	CNMG 120408 FC PV3010	0.08 - 0.35	0.3 - 2.5
11733	CNMG 120408 MC KT450	0.12 - 0.35	0.7 - 3.5
10378	CNMG 120408 MC TT8115	0.12 - 0.35	0.7 - 3.5
8637	CNMG 120408 ML TT5030	0.12 - 0.35	1.0 - 3.5
6997	CNMG 120408 ML TT8020	0.12 - 0.35	1.0 - 3.5
14325	CNMG 120408 MP TT5100	0.12 - 0.40	1.0 - 4.0
14323	CNMG 120408 MT CT3000	0.17 - 0.55	1.2 - 5.0
6326	CNMG 120408 MT TT1300	0.17 - 0.55	1.2 - 5.0
6895	CNMG 120408 MT TT5030	0.17 - 0.55	1.2 - 5.0
7125	CNMG 120408 MT TT8115	0.17 - 0.55	1.2 - 5.0
6923	CNMG 120408 MT TT8125	0.17 - 0.55	1.2 - 5.0
12533	CNMG 120408 PC TT8115	0.15 - 0.50	0.5 - 5.0
10616	CNMG 120408 PC TT8125	0.15 - 0.50	0.5 - 5.0
13144	CNMG 120408 PC TT9235	0.15 - 0.50	0.5 - 5.0
9352	CNMG 120408 RT TT7310	0.25 - 0.70	2.5 - 6.0
24736	CNMG 120408 RT TT8115	0.25 - 0.70	2.5 - 6.0
6287	CNMG 120408 WT TT8115	0.15 - 0.60	1.0 - 5.0
17313	CNMG 120412 EM TT9080	0.15 - 0.55	0.5 - 5.0
19742	CNMG 120412 EM TT9225	0.15 - 0.55	0.5 - 5.0
11731	CNMG 120412 ET TT9225	0.20 - 0.60	1.2 - 5.5
7519	CNMG 120412 MT TT1500	0.20 - 0.55	1.5 - 5.0
6247	CNMG 120412 MT TT3500	0.20 - 0.55	1.5 - 5.0
10211	CNMG 120412 MT TT5030	0.20 - 0.55	1.5 - 5.0
10736	CNMG 120412 MT TT5100	0.20 - 0.55	1.5 - 5.0
6717	CNMG 120412 MT TT8020	0.20 - 0.55	1.5 - 5.0
6248	CNMG 120412 RT TT1300	0.25 - 0.70	2.5 - 6.0

CNMG CONTINUAÇÃO
PC
Nova

Usinagem Média
RT

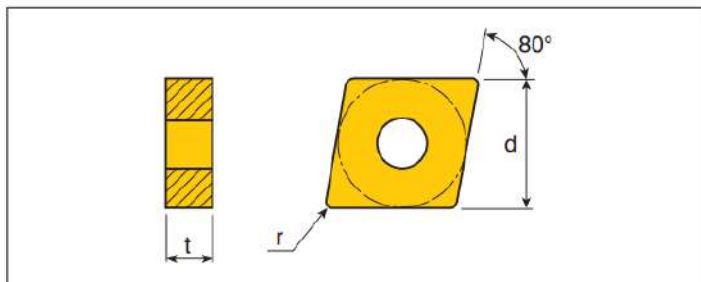
Desbaste
WT
Wiper

Usinagem Média

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
9512	CNMG 120412 RT TT7310	0.25 - 0.70	2.5 - 6.0
7025	CNMG 120412 RT TT8115	0.25 - 0.70	2.5 - 6.0
6922	CNMG 120412 RT TT8125	0.25 - 0.70	2.5 - 6.0
14318	CNMG 120412 WT TT1300	0.20 - 0.80	1.0 - 5.0
17356	CNMG 120412 WT TT7005	0.20 - 0.80	1.0 - 5.0
10486	CNMG 120412 WT TT8115	0.20 - 0.80	1.0 - 5.0
23333	CNMG 120416 EM TT9225	0.17 - 0.60	0.5 - 5.0
14539	CNMG 120416 RT TT7310	0.30 - 0.70	2.5 - 6.0
9451	CNMG 160612 ET TT3500	0.25 - 0.60	2.5 - 7.0
10542	CNMG 160612 ET TT5030	0.25 - 0.60	2.5 - 7.0
10543	CNMG 160612 ET TT5100	0.25 - 0.60	2.5 - 7.0
18851	CNMG 160612 RT TT5100	0.25 - 0.70	3.0 - 7.0
23972	CNMG 160612 RT TT8115	0.25 - 0.70	3.0 - 7.0
19206	CNMG 160612 RT TT8125	0.25 - 0.70	3.0 - 7.0
25480	CNMG 160616 MT TT8115	0.30 - 0.55	2.0 - 6.5
14474	CNMG 160616 PC TT8115	0.30 - 0.55	2.0 - 6.5
11471	CNMG 160616 PC TT8125	0.30 - 0.55	2.0 - 6.5
22908	CNMG 160616 RT TT7005	0.30 - 0.85	3.0 - 7.0
24015	CNMG 160616 RT TT7015	0.30 - 0.85	3.0 - 7.0
10045	CNMG 160616 RT TT7310	0.30 - 0.85	3.0 - 7.0
9654	CNMG 160616 RT TT8115	0.30 - 0.85	3.0 - 7.0
9232	CNMG 160616 RT TT8125	0.30 - 0.85	3.0 - 7.0
24248	CNMG 190608 RT TT3500	0.30 - 0.85	3.0 - 7.0
11758	CNMG 190612 RT TT5100	0.17 - 0.60	0.5 - 8.0
18819	CNMG 190616 EM TT9235	0.17 - 0.60	0.5 - 8.0
11466	CNMG 190616 ET TT9225	0.30 - 0.65	3.0 - 9.0
11375	CNMG 190616 ET TT9235	0.30 - 0.65	3.0 - 9.0
10301	CNMG 190616 RT TT7100	0.30 - 0.85	3.0 - 9.0
10880	CNMG 190616 RT TT8020	0.30 - 0.85	3.0 - 9.0
19084	CNMG 190616 RT TT8115	0.30 - 0.85	3.0 - 9.0
17061	CNMG 190616 RT TT8125	0.30 - 0.85	3.0 - 9.0
13180	CNMG 190616 TT8125	0.17 - 0.60	0.5 - 8.0



CNMM Rômbicas 80° Negativas



Size	Dimension (mm)		
	d	t	r
12	12.7	4.76	0.8-1.2
16	15.88	6.35	0.8-1.6
19	19.05	6.35	0.8-2.4
25	25.4	7.94-9.52	2.4-3.2

HT



Desbaste Pesado

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
7020	CNMM 120412 RH TT1500	0.30 - 0.80	2.5 - 6.0
10834	CNMM 190616 RHN KT450	0.30 - 0.70	3.0 - 8.0
10375	CNMM 190624 HT TT3500	0.55 - 1.2	4.0 - 9.0

RH / RHN



RH(N)

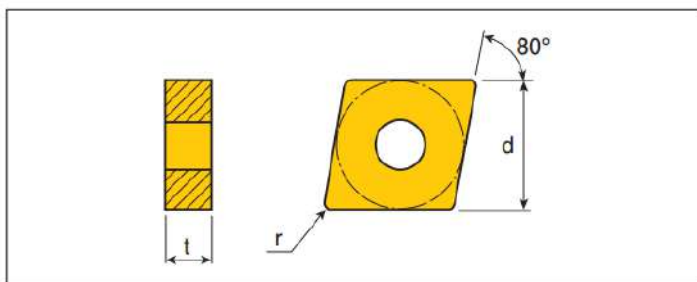


RH

Desbaste



CNMX Rômbicas 80° Negativas

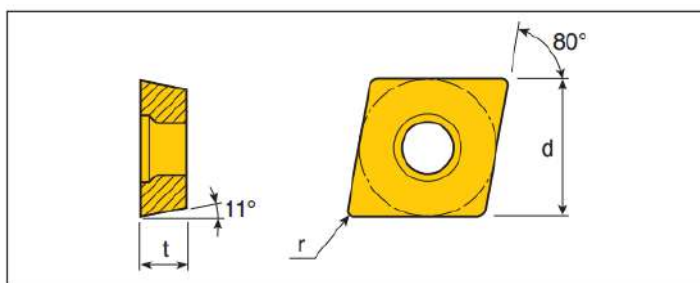


Size	Dimension (mm)		
	d	t	r
12	12.7	4.76-5.56	0.8-1.2
16	15.88	6.35-7.94	1.2-2.4
19	19.05	6.35	0.8-2.4
25	25.4	7.94-9.52	2.4



Código	Descrição	Avanço (mm/rot.)	Ap (mm)
14128	CNMX 160712 HB TT8115	0.30 - 0.80	1.5 - 8.0
14188	CNMX 160712 HB TT8125	0.30 - 0.80	1.5 - 8.0
14189	CNMX 160716 HB TT8115	0.30 - 0.80	1.5 - 8.0
13722	CNMX 160716 HB TT8125	0.30 - 0.80	1.5 - 8.0

CPMT Rômbicas 80° Positivas e Ângulo de Folga de 11°



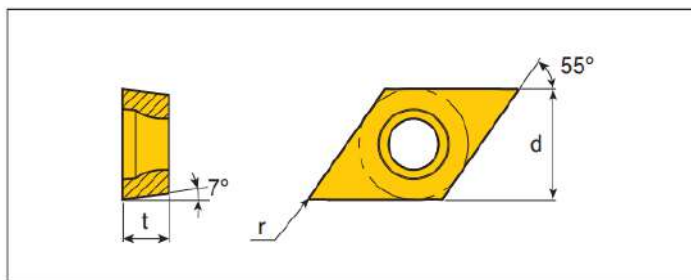
Size	Dimension (mm)		
	d	t	r
06	6.35	2.38	0.4-0.8
08	7.94	2.38	0.4-0.8
09	9.52	3.18-3.97	0.4-0.8



Acabamento

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
24879	CPMT 080204 FG TT5100	0.30 - 0.80	1.5 - 8.0

DCET Rômbicas 55° Positivas e Ângulo de Folga de 7°



Size	Dimension (mm)		
	d	t	r
07	6.35	2.38	0.03-0.8
11	9.52	3.97	0.03-0.8

GF



Mostrado vs. Direita
Acabamento

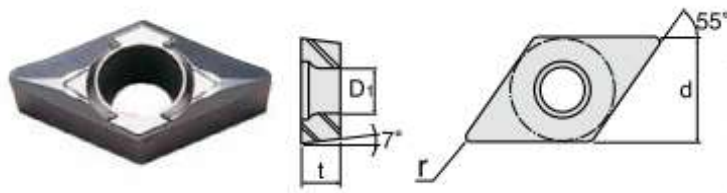
GW



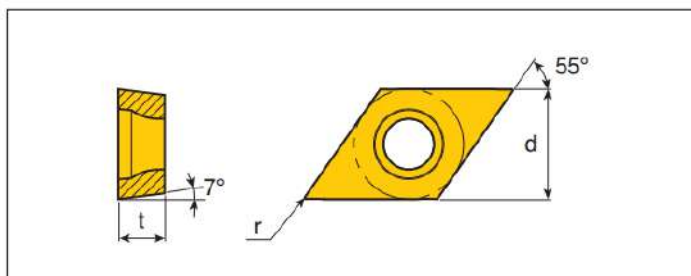
Mostrado vs. Direita
Acabamento

Pode ser aplicada somente
no Porta Pastilha com
ângulo de posição de 93°

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
17508	DCET 0702003 L GW TT9020	0.02 - 0.15	0.1 - 1.5
16894	DCET 070202 R-GF TT9020	0.03 - 0.17	0.3 - 1.5
17753	DCET 11T3003 L GW TT9020	0.02 - 0.15	0.1 - 2.5

DCGT Patilhas para Alumínio, positivas, ângulo de folga 7°


Código	Descrição	d (mm)	t (mm)	r (mm)	D1 (mm)
7312	DCGT 070204 FL K10	6.35	2.38	0.4	2.8
8153	DCGT 11T302 FL K10	9.525	3.97	0.2	4.4
7974	DCGT 11T304 FL K10	9.525	3.97	0.4	4.4
7079	DCGT 11T308 FL K10	9.525	3.97	0.8v	4.4

DCMT Rômbicas 55° Positivas e Ângulo de folga 7°


Size	Dimension (mm)		
	d	t	r
07	6.35	2.38	0.4-0.8
11	9.52	3.97	0.4-1.2

FA


Acabamento

FG


Acabamento

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
8165	DCMT 070202 FA TT5080	0.05 - 0.15	0.1 - 1.5
8230	DCMT 070202 FA TT5100	0.05 - 0.15	0.1 - 1.5
7470	DCMT 070204 FG PV3010	0.07 - 0.20	0.4 - 1.5
7197	DCMT 070204 FG TT5080	0.07 - 0.20	0.4 - 1.5
8833	DCMT 070204 FG TT5100	0.07 - 0.20	0.4 - 1.5
8807	DCMT 070204 FG TT8020	0.07 - 0.20	0.4 - 1.5
7425	DCMT 070204 FG TT8115	0.07 - 0.20	0.4 - 1.5
6795	DCMT 070204 FG TT8125	0.07 - 0.20	0.4 - 1.5
10068	DCMT 070208 FG TT8115	0.07 - 0.20	0.4 - 2.0
15390	DCMT 070208 FG TT9225	0.07 - 0.20	0.4 - 2.0
14039	DCMT 11T302 FA PV3010	0.05 - 0.15	0.1 - 1.5
8163	DCMT 11T302 FA TT5100	0.05 - 0.15	0.1 - 1.5
9704	DCMT 11T302 FA CT3000	0.05 - 0.15	0.1 - 1.5
7862	DCMT 11T304 FG PV3010	0.10 - 0.25	0.6 - 1.5
16018	DCMT 11T304 FG TT5030	0.10 - 0.25	0.6 - 1.5



DCMT CONTINUAÇÃO

MT



Usinagem Média

PC

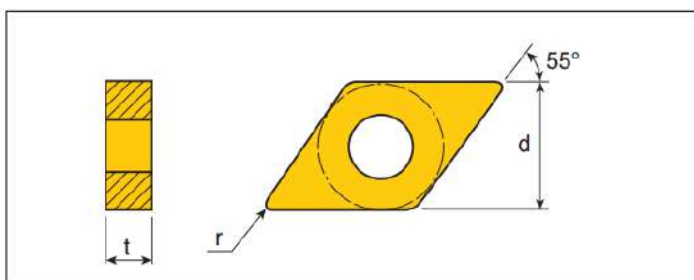
Nova



Para Semi-acabamento

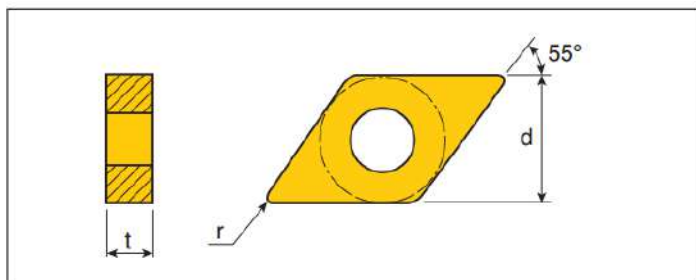
Código	Descrição	Avanço (mm/rot.)	Ap (mm)
7227	DCMT 11T304 FG TT8020	0.10 - 0.25	0.6 - 1.5
7209	DCMT 11T304 FG TT8125	0.10 - 0.25	0.6 - 1.5
17629	DCMT 11T304 FG TT9215	0.10 - 0.25	0.6 - 1.5
6949	DCMT 11T304 MT KT450	0.10 - 0.25	0.7 - 3.0
7226	DCMT 11T304 MT TT1300	0.10 - 0.25	0.7 - 3.0
7162	DCMT 11T304 MT TT5080	0.10 - 0.25	0.7 - 3.0
10330	DCMT 11T304 MT TT7310	0.10 - 0.25	0.7 - 3.0
7213	DCMT 11T304 MT TT8020	0.10 - 0.25	0.7 - 3.0
6289	DCMT 11T304 MT TT8115	0.10 - 0.25	0.7 - 3.0
7365	DCMT 11T304 MT TT8125	0.10 - 0.25	0.7 - 3.0
6618	DCMT 11T308 FG TT8125	0.10 - 0.25	0.6 - 2.0
6413	DCMT 11T308 MT TT1300	0.13 - 0.30	1.0 - 3.0
7133	DCMT 11T308 MT TT5080	0.13 - 0.30	1.0 - 3.0
9579	DCMT 11T308 MT TT5100	0.13 - 0.30	1.0 - 3.0
9651	DCMT 11T308 MT TT7310	0.13 - 0.30	1.0 - 3.0
8896	DCMT 11T308 MT TT8020	0.13 - 0.30	1.0 - 3.0
6249	DCMT 11T308 MT TT8115	0.13 - 0.30	1.0 - 3.0
6479	DCMT 11T308 MT TT8125	0.13 - 0.30	1.0 - 3.0
13879	DCMT 11T312 PC TT9080	0.12 - 0.32	0.5 - 3.0

DNMA Rômbicas 55° Negativas



Size	Dimension (mm)		
	d	t	r
11	9.52	4.76	0.8-1.2
13	11.11	5.56	0.4-1.2
15	12.7	4.76-6.35	0.1-1.6

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
9360	DNMA 150608 TT1300	0.15 - 0.65	0.8 - 4.0
12779	DNMA 150612 TT7310	0.15 - 0.65	1.2 - 4.0

DNMG Rombicas 55° Negativas


Size	Dimension (mm)		
	d	t	r
11	9.52	4.76	0.8-1.2
13	11.11	5.56	0.4-1.2
15	12.7	4.76-6.35	0.4-1.2



Usinagem Média

FG


Acabamento

MC


Usinagem Média

ML


Usinagem Média

MP


Usinagem Média

MT


Usinagem Média

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
12540	DNMG 110404 FG TT1500	0.07 - 0.20	0.5 - 2.0
8488	DNMG 110404 FG TT3500	0.07 - 0.20	0.5 - 2.0
9324	DNMG 110404 FG TT5100	0.07 - 0.20	0.5 - 2.0
19374	DNMG 110404 FG TT8125	0.07 - 0.20	0.5 - 2.0
9075	DNMG 110408 MT TT1300	0.17 - 0.40	1.0 - 3.0
13732	DNMG 110408 MT TT1500	0.17 - 0.40	1.0 - 3.0
7600	DNMG 110408 MT TT8125	0.17 - 0.40	1.0 - 3.0
10117	DNMG 110412 MT TT1300	0.20 - 0.45	1.0 - 3.0
9165	DNMG 110412 MT TT1500	0.20 - 0.45	1.0 - 3.0
24913	DNMG 130508 MT TT8115	0.15 - 0.45	1.0 - 4.5
24912	DNMG 130512 MT TT8115	0.20 - 0.55	1.2 - 4.5
6814	DNMG 150604 FG CT3000	0.10 - 0.30	0.5 - 3.5
8799	DNMG 150604 L-VF TT8115	0.10 - 0.35	0.7 - 4.5
8620	DNMG 150604 L-VF TT8125	0.10 - 0.35	0.7 - 4.5
12541	DNMG 150604 MC TT1500	0.10 - 0.30	0.5 - 3.5
7180	DNMG 150604 ML TT5030	0.10 - 0.30	0.8 - 3.5
7540	DNMG 150604 ML TT8125	0.10 - 0.30	0.8 - 3.5
9685	DNMG 150604 MP TT8115	0.10 - 0.30	0.8 - 4.0
6587	DNMG 150604 MT TT1300	0.15 - 0.40	0.8 - 4.0
6436	DNMG 150604 MT TT3500	0.15 - 0.40	0.8 - 4.0
6452	DNMG 150604 MT TT8115	0.15 - 0.40	0.8 - 4.0
8625	DNMG 150604 R-VF TT8115	0.10 - 0.35	0.7 - 4.5
8243	DNMG 150604 R-VF TT8125	0.10 - 0.35	0.7 - 4.5
8991	DNMG 150608 L-VF TT8115	0.12 - 0.45	1.0 - 4.5
8295	DNMG 150608 L-VF TT8125	0.12 - 0.45	1.0 - 4.5
7371	DNMG 150608 ML TT5080	0.12 - 0.35	1.0 - 3.5
7372	DNMG 150608 ML TT8125	0.12 - 0.35	1.0 - 3.5
7181	DNMG 150608 MP TT8020	0.12 - 0.40	1.0 - 4.0
6677	DNMG 150608 MT TT1300	0.17 - 0.50	1.0 - 4.0
7137	DNMG 150608 MT TT5030	0.17 - 0.50	1.0 - 4.0
7198	DNMG 150608 MT TT8115	0.17 - 0.50	1.0 - 4.0
6250	DNMG 150608 MT TT8125	0.17 - 0.50	1.0 - 4.0
10754	DNMG 150608 PC TT8115	0.15 - 0.50	0.5 - 4.0
16001	DNMG 150608 RT TT1300	0.25 - 0.65	2.0 - 4.0
19305	DNMG 150608 RT TT7310	0.25 - 0.65	2.0 - 4.0
14040	DNMG 150608 RT TT8115	0.25 - 0.65	2.0 - 4.0
8804	DNMG 150608 R-VF TT8115	0.12 - 0.45	1.0 - 4.5



DNMG CONTINUAÇÃO

PC

Nova



Usinagem Média

RT



Desbaste

VF



Mostrado vs. Direita
Usinagem Média

WT

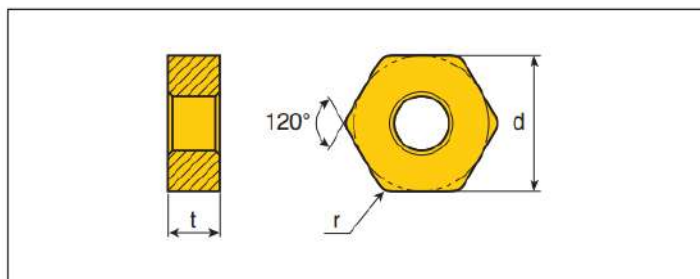
Wiper



Usinagem Média

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
8627	DNMG 150608 R-VF TT8125	0.12 - 0.45	1.0 - 4.5
9359	DNMG 150612 MT TT5030	0.20 - 0.50	1.3 - 4.0
7521	DNMG 150612 MT TT8115	0.20 - 0.50	1.3 - 4.0
12778	DNMG 150612 PC TT3500	0.17 - 0.55	0.6 - 4.0
6460	DNMG 150612 RT TT8125	0.25 - 0.65	2.5 - 4.0
15923	DNMG 150612 TT1300	0.25 - 0.55	1.5 - 4.0
12639	DNMG 150612 TT3500	0.25 - 0.55	1.5 - 4.0
10246	DNMG 150612 WT TT8115	0.15 - 0.60	1.0 - 5.0

HNMG Pastilhas Hexagonais 120° Negativas



Size	Dimension (mm)		
	d	t	r
05	12.7	4.76	0.8
10	19.05	6.35	1.2

GU



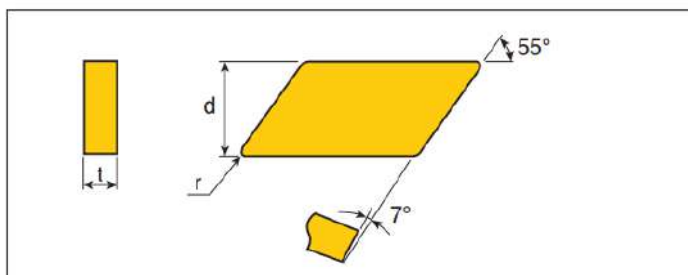
Usinagem Média

SU



Usinagem Média

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
9063	HNMG 050408 GU TT1300	0.15 - 0.60	0.5 - 3.5
9070	HNMG 050408 GU TT5100	0.15 - 0.60	0.5 - 3.5
9314	HNMG 050408 GU TT7310	0.15 - 0.60	0.5 - 3.5
12760	HNMG 050408 GU TT8020	0.15 - 0.60	0.5 - 3.5
9055	HNMG 050408 GU TT8125	0.15 - 0.60	0.5 - 3.5
9064	HNMG 050408 SU TT5030	0.15 - 0.60	0.5 - 3.5
9312	HNMG 050408 SU TT5100	0.15 - 0.60	0.5 - 3.5

KNUX Rômbicas 55° Negativas


Size	Dimension (mm)		
	d	t	r
16	9.52	4.76	0.5-1.0

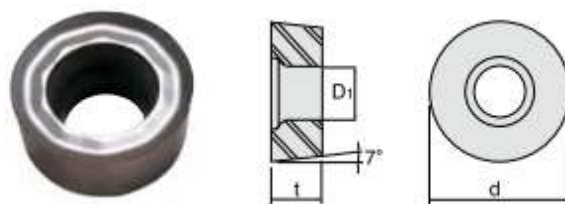
L/R 11

 Mostrado vs. Direita
 Usinagem Média

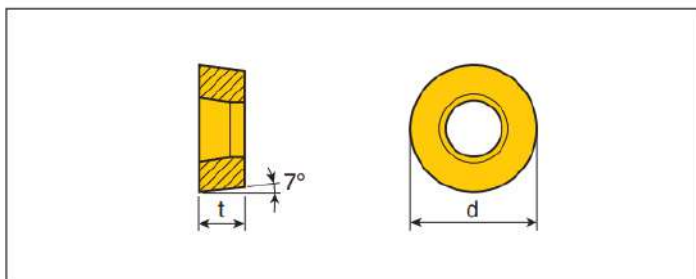
Código	Descrição	Avanço (mm/rot.)	Ap (mm)
9266	KNUX 160405 L11 TT5100	0.15 - 0.35	1.5 - 5.0
6079	KNUX 160405 L11 TT8115	0.15 - 0.35	1.5 - 5.0
16966	KNUX 160405 R11 TT5100	0.15 - 0.35	1.5 - 5.0
6276	KNUX 160405 R11 TT8125	0.15 - 0.35	1.5 - 5.0
8547	KNUX 160410 L12 TT1500	0.30 - 0.60	2.5 - 6.0

L/R 12

 Mostrado vs. Direita
 Desbaste

RCGT Pastilhas Positivas, Ângulo de Folga 7° para Usinagem de Alumínio


Código	Descrição	d (mm)	t (mm)	r (mm)	D1 (mm)
17081	RCGT 1003MO FL K10	10.0	3.18	-	4.4
25228	RCGT 10T3MO FL K10	10.0	3.97	-	4.4

RCMT Pastilhas Redondas Positivas, Ângulo de Folga 7°


Size	Dimension (mm)		
	d	t	
08	8.0	3.18	
10	10.0	3.18-3.97	
12	12.0	4.76	
16	16.0	6.35	
20	20.0	6.35	
25	25.0	7.94	
32	32.0	9.52	

MT


Usinagem Média

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
23468	RCMT 080300 MT TT5100	0.15-0.40	0.5 - 3.0
23312	RCMT 080300 MT TT8115	0.15-0.40	0.5 - 3.0
7417	RCMT 10T300 MT TT3500/TT8125	0.20-0.50	1.0 - 4.0
11416	RCMT 120400 MT TT8020	0.30-0.60	2.0 - 5.0
17335	RCMT 120400 MT TT8115	0.30-0.60	2.0 - 5.0
11292	RCMT 120400 MT TT8125	0.30-0.60	2.0 - 5.0



RCMT CONTINUAÇÃO

PC

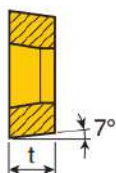
Nova



Para Semi-acabamento

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
16957	RCMT 120400 PC TT8125	0.20-0.60	1.3 - 4.5
14548	RCMT 160600 MT TT3500	0.40-0.80	3.0 - 7.0
9684	RCMT 160600 MT TT7310	0.40-0.80	3.0 - 7.0

RCMX Pastilhas Redondas Positivas, Ângulo de Folga 7°



Size	Dimension (mm)	
	d	t
08	8.0	3.18
10	10.0	3.18-3.97
12	12.0	4.76
16	16.0	6.35
20	20.0	6.35
25	25.0	7.94
32	32.0	9.52



Desbaste

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
24628	RCMX 120400 TT5100	0.30 - 0.60	2.5 - 5.0
6891	RCMX 120400 TT8125	0.30 - 0.60	2.5 - 5.0
9380	RCMX 160600 TT8125	0.40 - 0.75	3.0 - 7.0
9408	RCMX 200600 TT3500	0.48 - 0.90	3.5 - 9.0
10105	RCMX 250700 KT450	0.55 - 1.20	4.0 - 12.0

RNMG Pastilhas Redondas Negativas



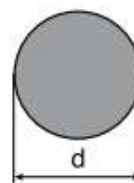
Size	Dimension (mm)	
	d	t
12	12.7	4.76
15	15.88	6.35
19	19.05	6.35
25	25.4	9.52
31	31.75	9.52



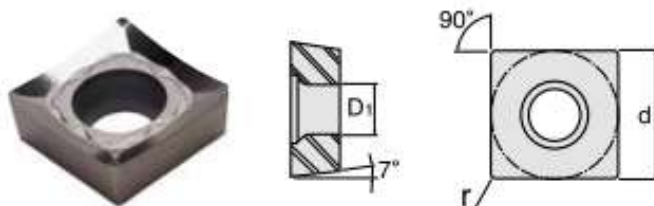
Desbaste

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
17326	RNMG 120400 TT5100	0.30 - 0.60	2.0 - 5.0
17325	RNMG 120400 TT8115	0.30 - 0.60	2.0 - 5.0
10809	RNMG 120400 TT8125	0.30 - 0.60	2.0 - 5.0

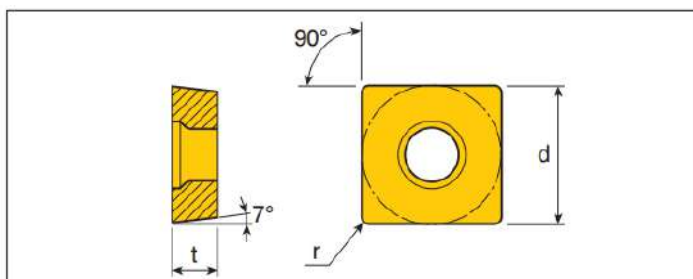
RNMN Pastilhas de CBN



Código	Descrição	l (mm)	d (mm)	t (mm)	r (mm)	D1 (mm)
17354	RNMN 060300 SD KB90A	-	6.35	3.18	-	-

SCGT Pastilhas Positivas, Ângulo de Folga 7° para Usinagem de Alumínio


Código	Descrição	d (mm)	t (mm)	r (mm)	D1 (mm)
7939	SCGT 09T308 FL K10	9.525	3.97	0.8	4.4
9969	SCGT 120404 FL K10	12.70	4.76	0.4	5.5
9094	SCGT 120408 FL K10	12.70	4.76	0.8	5.5

SCMT Pastilhas Quadradas Positivas, Ângulo de Folga 7°


Size	Dimension (mm)		
	d	t	r
09	9.52	3.97	0.4-0.8
12	12.7	4.76	0.4-1.2

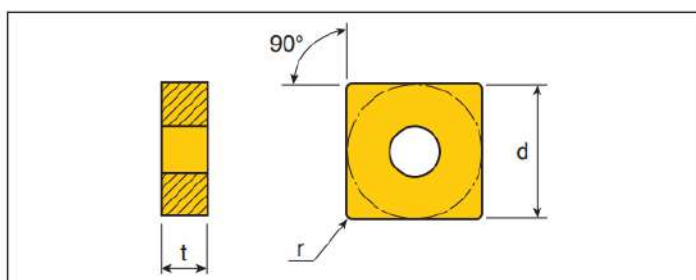
FG


Acabamento

MT

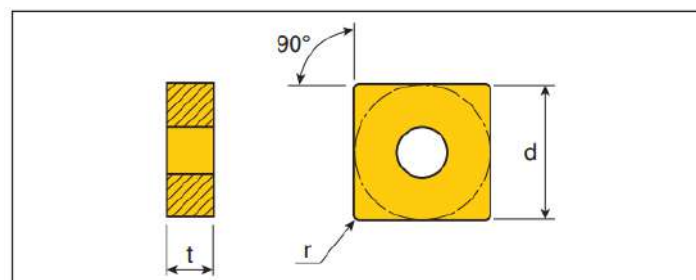

Usinagem Média

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
10485	SCMT 09T304 MT TT1300	0.10 - 0.25	0.7 - 3.5
7388	SCMT 09T304 MT TT3500	0.10 - 0.25	0.7 - 3.5
7231	SCMT 09T304 MT TT5100	0.10 - 0.25	0.7 - 3.5
13118	SCMT 09T304 MT TT8020	0.10 - 0.25	0.7 - 3.5
16454	SCMT 09T308 FG TT8020	0.13 - 0.30	1.0 - 3.5
10306	SCMT 09T308 FG TT8125	0.13 - 0.30	1.0 - 3.5
9388	SCMT 09T308 MT TT5100	0.13 - 0.30	1.0 - 3.5
19463	SCMT 09T308 MT TT7005	0.13 - 0.30	1.0 - 3.5
19464	SCMT 09T308 MT TT7015	0.13 - 0.30	1.0 - 3.5
10554	SCMT 09T308 MT TT7310	0.13 - 0.30	1.0 - 3.5
13119	SCMT 09T308 MT TT8020	0.13 - 0.30	1.0 - 3.5
7049	SCMT 09T308 MT TT8115	0.13 - 0.30	1.0 - 3.5
6842	SCMT 09T308 MT TT8125	0.13 - 0.30	1.0 - 3.5
6802	SCMT 120404 MT TT1500	0.10 - 0.25	1.0 - 5.0
6803	SCMT 120404 MT TT3500	0.10 - 0.25	1.0 - 5.0
6846	SCMT 120404 MT TT5100	0.10 - 0.25	1.0 - 5.0
6290	SCMT 120408 MT TT1300	0.13 - 0.30	1.0 - 5.0
7389	SCMT 120408 MT TT5100	0.13 - 0.30	1.0 - 5.0
18383	SCMT 120408 MT TT7005	0.13 - 0.30	1.0 - 5.0
14431	SCMT 120408 MT TT8020	0.13 - 0.30	1.0 - 5.0
6251	SCMT 120408 MT TT8125	0.13 - 0.30	1.0 - 5.0

SNMA Pastilhas Quadradas Negativas


Size	Dimension (mm)		
	d	t	r
09	9.52	3.18	0.4-0.8
12	12.7	4.76	0.4-1.6
19	19.05	6.35	1.2-1.6
25	25.4	7.94-9.52	1.6-2.4
31	31.75	9.52	2.4

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
6291	SNMA 120408 TT7005	0.15 - 0.70	1.0 - 6.0
24710	SNMA 120412 TT7005	0.20 - 0.80	1.5 - 6.0
9584	SNMA 120412 TT7310	0.20 - 0.80	1.5 - 6.0
14362	SNMA 120416 T02020 TT7310	0.30 - 1.00	2.0 - 6.0
6293	SNMA 120416 TT1300	0.30 - 1.00	2.0 - 6.0

SNMG Pastilhas Negativas Quadradas


Size	Dimension (mm)		
	d	t	r
09	9.52	4.76	0.4-1.2
12	12.7	4.76	0.4-1.6
15	15.88	6.35	0.8-1.6
19	19.05	6.35	0.4-1.6
25	25.4	7.94-9.52	1.6-2.4



Usinagem Média

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
24758	SNMG 090308 FG TT3500	0.10 - 0.25	0.7 - 2.0
7193	SNMG 090308 MT TT2500	0.15 - 0.45	1.0 - 3.5
7475	SNMG 090308 MT TT5100	0.15 - 0.45	1.0 - 3.5
9144	SNMG 120404 MT TT5100	0.12 - 0.40	1.0 - 5.0
7168	SNMG 120404 MT TT8125	0.12 - 0.40	1.0 - 5.0
19866	SNMG 120408 EM TT 9225	0.13 - 0.50	0.8 - 5.0
14317	SNMG 120408 FG CT3000	0.10 - 0.25	0.7 - 3.0

SNMG CONTINUAÇÃO
EM
Nova


Usinagem Média

FG


Acabamento

MC


Usinagem Média

ML


Usinagem Média

MP


Usinagem Média

MT


Usinagem Média

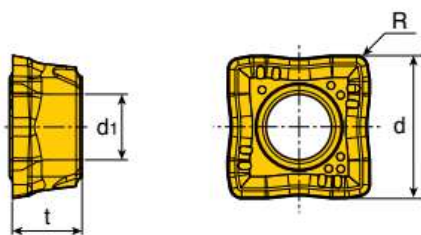
PC
Nova


Usinagem Média

RT


Desbaste

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
23842	SNMG 120408 MC TT8020	0.12 - 0.35	0.7 - 3.5
23971	SNMG 120408 MC TT8125	0.12 - 0.35	0.7 - 3.5
6254	SNMG 120408 ML TT1500	0.12 - 0.35	1.0 - 3.5
7119	SNMG 120408 ML TT8020	0.12 - 0.35	1.0 - 3.5
7299	SNMG 120408 MP TT5080	0.12 - 0.40	1.0 - 4.0
25170	SNMG 120408 MP TT9215	0.12 - 0.40	1.0 - 4.0
9084	SNMG 120408 MT TT5080	0.17 - 0.55	1.2 - 5.0
7690	SNMG 120408 MT TT5100	0.17 - 0.55	1.2 - 5.0
6298	SNMG 120408 MT TT7015	0.17 - 0.55	1.2 - 5.0
9810	SNMG 120408 MT TT8125	0.17 - 0.55	1.2 - 5.0
23841	SNMG 120408 PC TT8125	0.15 - 0.50	0.5 - 5.0
6300	SNMG 120408 RT TT5100	0.25 - 0.70	2.5 - 6.0
17895	SNMG 120408 RT TT7005	0.25 - 0.70	2.5 - 6.0
10883	SNMG 120408 RT TT7310	0.25 - 0.70	2.5 - 6.0
10581	SNMG 120408 RT TT8115	0.25 - 0.70	2.5 - 6.0
19678	SNMG 120412 EM TT5080	0.15 - 0.55	0.8 - 5.0
19388	SNMG 120412 EM TT9080	0.15 - 0.55	0.8 - 5.0
19679	SNMG 120412 EM TT9225	0.15 - 0.55	0.8 - 5.0
14315	SNMG 120412 MP TT8115	0.15 - 0.40	1.3 - 4.0
7039	SNMG 120412 MT TT8125	0.20 - 0.55	1.5 - 5.0
13452	SNMG 120412 PC TT8125	0.15 - 0.50	0.6 - 5.0
12697	SNMG 120412 RT TT1300	0.30 - 0.70	2.5 - 6.0
12642	SNMG 120412 RT TT1500/TT8115	0.30 - 0.70	2.5 - 6.0
23029	SNMG 120412 RT TT7005	0.30 - 0.70	2.5 - 6.0
19389	SNMG 120412 RT TT7015	0.30 - 0.70	2.5 - 6.0
13583	SNMG 120412 RT TT7310	0.30 - 0.70	2.5 - 6.0
8646	SNMG 120416 TT8125	0.35 - 0.70	2.0 - 5.0
7702	SNMG 150608 TT8125	0.25 - 0.60	1.5 - 6.0
10954	SNMG 150612 RT TT3500	0.30 - 0.70	3.0 - 7.0
17874	SNMG 150612 TT8125	0.25 - 0.60	2.0 - 6.0
7794	SNMG 190612 MT TT8020	0.20 - 0.55	3.0 - 8.0
7617	SNMG 190612 RT KT450	0.30 - 0.75	3.0 - 9.0

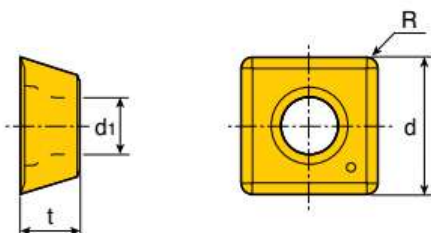
SOMT Pastilha Furação TOP DRILL


Size	Dimension (mm)			
	d	t	R	d1
05	4.9	2.38	0.4	2.25
06	5.7	2.38	0.4	2.60
07	6.8	2.80	0.6	2.60
08	7.9	3.97	0.6	2.85
09	9.2	3.97	0.8	3.80
11	11.0	3.97	0.8	3.80
13	12.8	4.40	0.8	4.40
15	15.0	4.80	1.0	5.40



• Classe: TT9080, TT8020

Código	Descrição	Parafuso
14037	SOMT 050204 DP TT9080	TS 20043I/HG-P
14038	SOMT 050204 DP TT9300	TS 20043I/HG-P
14056	SOMT 060204 DP TT9080	TS 22052I/HG-P
17798	SOMT 060204 DP TT9300	TS 22052I/HG-P
14198	SOMT 070306 DP TT9080	TS 22052I/HG-P
17799	SOMT 070306 DP TT9300	TS 22052I/HG-P
24740	SOMT 08T306 DP TT9080	SO 25065I
25129	SOMT 09T308 DP TT9080	TS 35088I
23502	SOMT 11T308 DP TT9080	TS 35088I

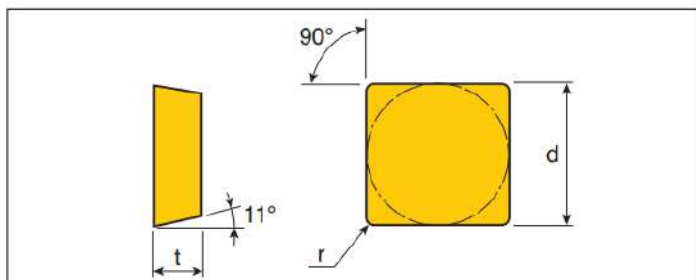
SPGG Pastilha Furação T-DRILL para Alumínio


Size	Dimension (mm)			
	d	t	R	d1
05	5.00	2.38	0.4	2.25
06	6.00	2.38	0.4	2.61
07	7.94	3.97	0.8	2.85
09	9.80	4.30	0.8	4.05
11	11.50	4.80	0.8	4.45
14	14.30	5.20	1.2	5.75



- Para liga de alumínio
- Classe: K10

Código	Descrição	Gama de Broca
9315	SPGG 050204 DA K10	12.5-15.0
9306	SPGG 060204 DA K10	15.5-21.5
9313	SPGG 07T308 DA K10	22.0-27.5
9326	SPGG 090408 DA K10	28.0-33.0
10552	SPGG 110408 DA K10	34.0-41.0
10473	SPGG 140512 DA K10	42.0-50.0

SPGN Pastilhas Quadradas Positivas, Ângulo de Folga 11°


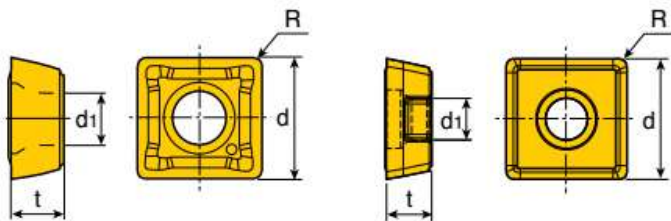
Size	Dimension (mm)		
	d	t	r
09	9.52	3.18	0.4-0.8
12	12.7	3.18-4.76	0.4-1.6
15	15.88	4.76	0.4-1.2
19	19.05	4.76	0.4-1.2

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
12711	SPGN 090302 TT8020	0.08 - 0.20	0.7 - 3.5
15305	SPGN 090308 (0) TT6010	0.10 - 0.25	0.7 - 3.5

SPGN CONTINUAÇÃO


Acabamento

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
25446	SPGN 120412 K20	0.15 - 0.30	1.0 - 5.0
17374	SPGN 120412 TT6080	0.15 - 0.30	1.0 - 5.0
18719	SPGN 120432 TT6030	0.18 - 0.33	1.0 - 5.0
13411	SPGN 190408 P20	0.10 - 0.25	1.5 - 9.0
14504	SPGN 190408 P20 TIALN	0.10 - 0.25	1.5 - 9.0

SPMG Patilhas Furação T-DRILL


SPMG 120408 DG

Size	Dimension (mm)			
	d	t	R	d1
05	5.00	2.38	0.4	2.25
06	6.00	2.38	0.4	2.61
07	7.94	3.97	0.8	2.85
09	9.80	4.30	0.8	4.05
11	11.50	4.80	0.8	4.45
12	12.70	4.76	0.8	4.37
14	14.30	5.20	1.2	5.75

Código	Descrição	Gama da Broca
8929	SPMG 050204 DG TT7400	12.5-15.0
9263	SPMG 050204 DG TT8020	12.5-15.0
7795	SPMG 050204 DG TT9030	12.5-15.0
10251	SPMG 050204 DK TT6030	12.5-15.0
8053	SPMG 060204 DG TT7400	15.5-21.5
8136	SPMG 060204 DG TT8020	15.5-21.5
7042	SPMG 060204 DG TT9030	15.5-21.5
9577	SPMG 060204 DK TT6030	15.5-21.5
11523	SPMG 060204 DS TT9030	15.5-21.5
8039	SPMG 07T308 DG TT7400	22.0-27.5
8100	SPMG 07T308 DG TT8020	22.0-27.5
7080	SPMG 07T308 DG TT9030	22.0-27.5
10451	SPMG 07T308 DK TT6030	22.0-27.5
11699	SPMG 07T308 DS TT9030	22.0-27.5
8003	SPMG 090404-EM TT8020	28.0-33.0
6610	SPMG 090408-EM TT8020	28.0-33.0
8184	SPMG 090408 DG TT7400	28.0-33.0
8185	SPMG 090408 DG TT8020	28.0-33.0
7128	SPMG 090408 DG TT9030	28.0-33.0
9118	SPMG 090408 DK TT6030	28.0-33.0
7032	SPMG 110408-EM TT8020	34.0-41.0
9220	SPMG 110408 DG TT7400	34.0-41.0
9124	SPMG 110408 DG TT8020	34.0-41.0
7509	SPMG 110408 DG TT9030	34.0-41.0
10352	SPMG 110408 DK TT6030	34.0-41.0
12285	SPMG 120408 DG TT9030	74.0-80.0
19015	SPMG 140508-EM TT 6080	42.0-50.0
9114	SPMG 140512 DG TT7400	42.0-50.0
8609	SPMG 140512 DG TT8020	42.0-50.0
7537	SPMG 140512 DG TT9030	42.0-50.0
10553	SPMG 140512 DK TT6030	42.0-50.0

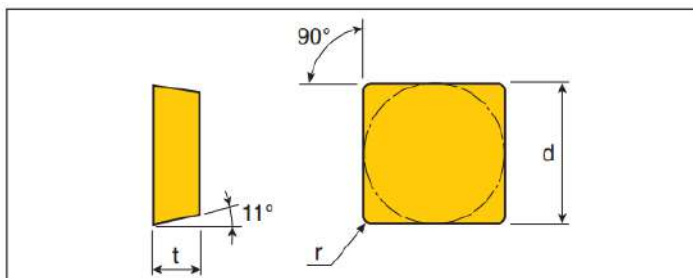
DG

DK


- Para ferro fundido
- Classe: TT6030



SPMR Pastilhas Quadradas Positivas, Ângulo de Folga 11°



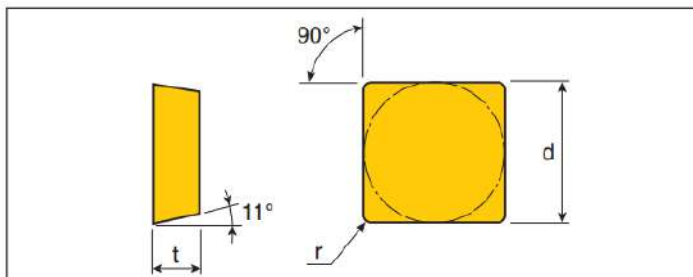
Size	Dimension (mm)		
	d	t	r
09	9.52	3.18	0.4-0.8
12	12.7	3.18-4.76	0.4-1.6
15	15.88	4.76	0.4-1.2
19	19.05	4.76	0.4-1.2



Usinagem Média

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
7308	SPMR 090304 TT8125	0.10 - 0.25	0.7 - 3.5
11241	SPMR 090308 KT450	0.13 - 0.30	1.0 - 3.5
6900	SPMR 090308 KT450	0.13 - 0.30	1.0 - 3.5
6444	SPMR 090308 TT8125	0.13 - 0.30	1.0 - 3.5
6605	SPMR 120304 TT8115	0.10 - 0.25	1.0 - 5.0
6387	SPMR 120304 TT8125	0.10 - 0.25	1.0 - 5.0
13571	SPMR 120308 TT5100	0.13 - 0.30	1.0 - 5.0
6255	SPMR 120308 TT8115	0.13 - 0.30	1.0 - 5.0
6256	SPMR 120308 TT8125	0.13 - 0.30	1.0 - 5.0

SPUN Pastilhas Quadradas Positivas, Ângulo de Folga 11°



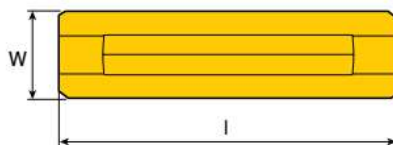
Size	Dimension (mm)		
	d	t	r
09	9.52	3.18	0.4-0.8
12	12.7	3.18-4.76	0.4-1.6
15	15.88	4.76	0.4-1.2
19	19.05	4.76	0.4-1.2



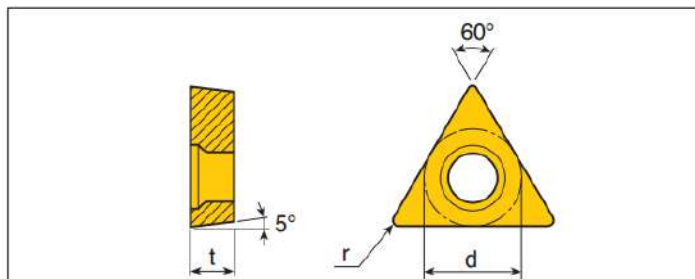
Usinagem Média

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
8813	SPUN 120304 TT8125	0.10 - 0.30	1.0 - 5.0
6566	SPUN 120308 P30	0.15 - 0.40	1.0 - 5.0
9750	SPUN 120308 TT3500/TT8125	0.15 - 0.40	1.0 - 5.0
10955	SPUN 120308 TT8115	0.15 - 0.40	1.0 - 5.0

TB Lâmina para Alargador



Código	Descrição	Tamanho	Tipo de Entrada	Ângulo Saída	L	W	t
14373	TB-2B12 TT5030	2	B	12	15.5	3.6	1.5
15660	TB-3B06 TT5030	3	B	6	17.0	4.4	2.0

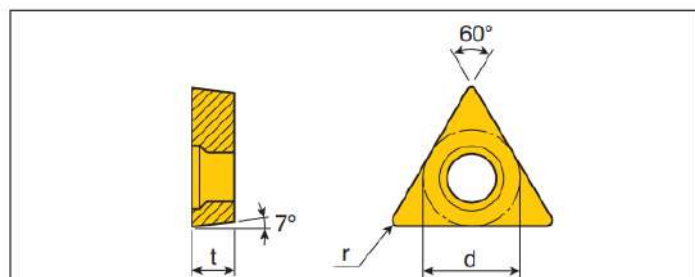
TBGT Pastilhas Triangulares Positivas, Ângulo de Folga 5°


Size	Dimension (mm)		
	d	t	r
06	3.97	1.59	0.03-0.4

Nova


Acabamento

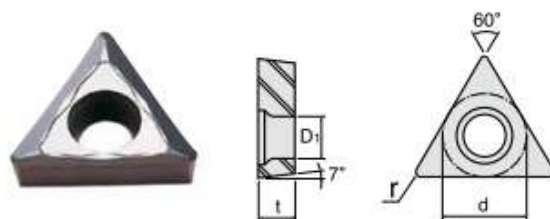
Código	Descrição	Avanço (mm/rot.)	Ap (mm)
17836	TBGT 060101 L-FF CT3000	0.03 - 0.12	0.08 - 0.4
10349	TBGT 060102 E-L CT3000	0.03 - 0.15	0.1 - 0.4

TCET Pastilhas Triangulares Positivas, Ângulo de Folga 7°


Size	Dimension (mm)		
	d	t	r
06	3.97	1.98	0.2
09	5.56	2.38	0.4-0.8
11	6.35	2.38-3.18	0.1-0.8
16	9.52	3.97	0.4-1.2
22	12.7	4.76	0.8


 Mostrado vs. Direita
 Acabamento

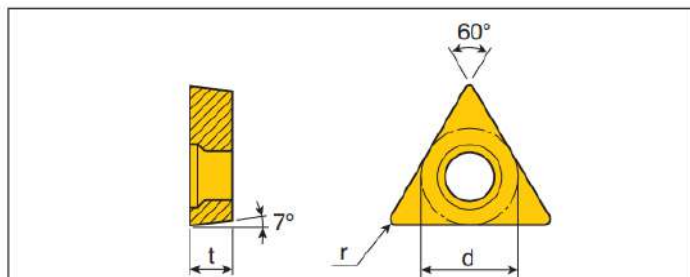
Código	Descrição	Avanço (mm/rot.)	Ap (mm)
16895	TCET 110302 R-GF TT9020	0.03-0.17	0.3 - 1.5

TCGT Pastilhas Para Alumínio


Código	Descrição	d (mm)	t (mm)	r (mm)	D1 (mm)
6361	TCGT 090204 FL K10	5.56	2.38	0.4	2.5
6399	TCGT 110204 FL K10	6.35	2.38	0.4	2.8
6542	TCGT 16T304 FL K10	9.525	3.97	0.4	4.4
7200	TCGT 16T308 FL K10	9.525	3.97	0.8	4.4



TCMT Pastilhas Triangulares Positivas, Ângulo de Folga 7°



Size	Dimension (mm)		
	d	t	r
06	3.97	1.98	0.2
09	5.56	2.38	0.4-0.8
11	6.35	2.38-3.18	0.1-0.8
16	9.52	3.97	0.4-1.2
22	12.7	4.76	0.8

FG



Acabamento

MT



Antigo

Usinagem Média

PC



Para Semi-acabamento

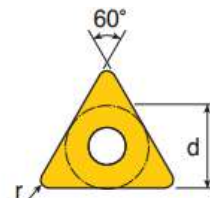
Código	Descrição	Avanço (mm/rot.)	Ap (mm)
6836	TCMT 090204 MT CT3000	0.10 - 0.25	0.6 - 2.0
7196	TCMT 090204 MT TT5080	0.10 - 0.25	0.6 - 2.0
8050	TCMT 090204 MT TT7005	0.10 - 0.25	0.6 - 2.0
11346	TCMT 090204 MT TT8020	0.10 - 0.25	0.6 - 2.0
6281	TCMT 090204 MT TT8115	0.10 - 0.25	0.6 - 2.0
7038	TCMT 090204 MT TT8125	0.10 - 0.25	0.6 - 2.0
11354	TCMT 090208 FG TT5100	0.10 - 0.25	0.6 - 1.5
6257	TCMT 090208 FG TT8125	0.10 - 0.25	0.6 - 1.5
6804	TCMT 090208 MT TT1300	0.13 - 0.30	0.8 - 2.0
7176	TCMT 090208 MT TT8115	0.13 - 0.30	0.8 - 2.0
13875	TCMT 090208 MT TT8125	0.13 - 0.30	0.8 - 2.0
13158	TCMT 110204 FG PV3010	0.07 - 0.20	0.4 - 1.5
8304	TCMT 110204 FG TT5080	0.07 - 0.20	0.4 - 1.5
7491	TCMT 110204 FG TT5100	0.07 - 0.20	0.4 - 1.5
10815	TCMT 110204 FG TT8020	0.07 - 0.20	0.4 - 1.5
7202	TCMT 110204 FG TT8125	0.07 - 0.20	0.4 - 1.5
7166	TCMT 110204 MT CT3000	0.10 - 0.25	0.6 - 3.0
7340	TCMT 110204 MT TT5080	0.10 - 0.25	0.6 - 3.0
7187	TCMT 110204 MT TT5100	0.10 - 0.25	0.6 - 3.0
18927	TCMT 110204 MT TT7005	0.10 - 0.25	0.6 - 3.0
17736	TCMT 110204 MT TT8020	0.10 - 0.25	0.6 - 3.0
6950	TCMT 110204 MT TT8115	0.10 - 0.25	0.6 - 3.0
6282	TCMT 110204 MT TT8125	0.10 - 0.25	0.6 - 3.0
14361	TCMT 110204 PC TT8115	0.06 - 0.2	0.3 - 2.5
7685	TCMT 110208 FG TT5080	0.10 - 0.25	0.6 - 1.5
9116	TCMT 110208 FG TT5100	0.10 - 0.25	0.6 - 1.5
8473	TCMT 110208 FG TT8115	0.10 - 0.25	0.6 - 1.5
6284	TCMT 110208 FG TT8125	0.10 - 0.25	0.6 - 1.5
25389	TCMT 110208 MT TT5080	0.13 - 0.30	0.8 - 3.0
10348	TCMT 110208 MT TT7005	0.13 - 0.30	0.8 - 3.0
10816	TCMT 110208 MT TT8020	0.13 - 0.30	0.8 - 3.0
6992	TCMT 110208 MT TT8115	0.13 - 0.30	0.8 - 3.0
6283	TCMT 110208 MT TT8125	0.13 - 0.30	0.8 - 3.0
8462	TCMT 16T304 FG TT5100	0.07 - 0.20	0.4 - 2.0
13005	TCMT 16T304 FG TT8020	0.07 - 0.20	0.4 - 2.0
6258	TCMT 16T304 FG TT8125	0.07 - 0.20	0.4 - 2.0
8537	TCMT 16T304 MT TT5080	0.10 - 0.25	0.8 - 5.0
9511	TCMT 16T304 MT TT7310	0.10 - 0.25	0.8 - 5.0
6832	TCMT 16T304 MT TT8115	0.10 - 0.25	0.8 - 5.0

TCMT CONTINUAÇÃO

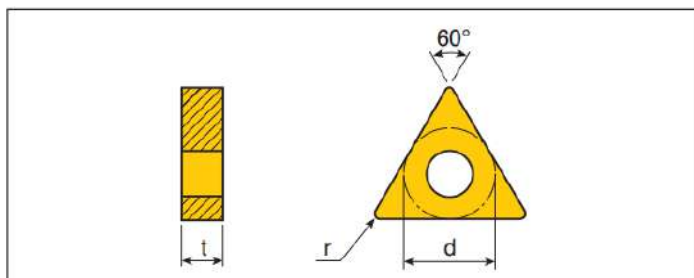
Código	Descrição	Avanço (mm/rot.)	Ap (mm)
19224	TCMT 16T308 FG TT5080	0.10 - 0.25	0.6 - 2.0
14480	TCMT 16T308 FG TT8115	0.10 - 0.25	0.6 - 2.0
6285	TCMT 16T308 FG TT8125	0.10 - 0.25	0.6 - 2.0
7768	TCMT 16T308 MT TT5030	0.10 - 0.30	1.0 - 5.0
6404	TCMT 16T308 MT TT7005	0.10 - 0.30	1.0 - 5.0
9476	TCMT 16T308 MT TT7310	0.10 - 0.30	1.0 - 5.0
9307	TCMT 16T308 MT TT8020	0.10 - 0.30	1.0 - 5.0
6901	TCMT 16T308 MT TT8115	0.10 - 0.30	1.0 - 5.0
6433	TCMT 16T308 MT TT8125	0.10 - 0.30	1.0 - 5.0
25199	TCMT 16T308 PC TT8115	0.10 - 0.28	0.5 - 3.0
23960	TCMT 16T312 MT TT7005	0.10 - 0.30	1.5 - 5.0
7504	TCMT 16T312 MT TT8125	0.10 - 0.30	1.5 - 5.0

TNGG Pastilhas Triangulares Negativas 60°

Designação	d	t	r
TNMG 130404	7.94	4.76	0.4
TNMG 130408	7.94	4.76	0.8
TNMG 130412	7.94	4.76	1.2



Código	Descrição	Avanço (mm/rot.)	Ap (mm)
25038	TNGG 130404L CT3000	0.12 - 0.30	1.0 - 3.5
25034	TNGG 130404R CT3000	0.12 - 0.30	1.0 - 3.5
25039	TNGG 130408L CT3000	0.15 - 0.35	1.3 - 3.5
25037	TNGG 130408R CT3000	0.15 - 0.35	1.3 - 3.5

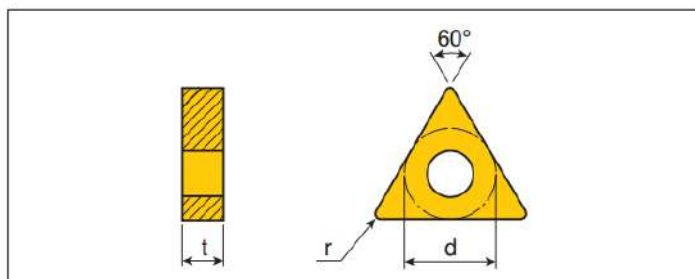
TNMA Pastilhas Triangulares Negativas


Size	Dimension (mm)		
	d	t	r
11	6.35	3.18	0.4
13	7.94	4.76	0.2-1.2
16	9.52	4.76	0.4-1.6
22	12.7	4.76	0.4-1.6

TNMA CONTINUAÇÃO

Desbaste

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
10792	TNMA 160404 TT1300	0.15 - 0.30	1.0 - 4.0
18694	TNMA 160404 TT7005	0.15 - 0.30	1.0 - 4.0
12698	TNMA 160408 TT1500	0.15 - 0.40	1.0 - 4.0
17063	TNMA 160408 TT7005	0.15 - 0.40	1.0 - 4.0
9343	TNMA 160408 TT7310	0.15 - 0.40	1.0 - 4.0
6459	TNMA 160412 TT1300	0.20 - 0.50	1.5 - 4.5
16802	TNMA 160412 TT7005	0.20 - 0.50	1.5 - 4.5
19808	TNMA 160412 TT7015	0.20 - 0.50	1.5 - 4.5
9325	TNMA 160412 TT7310	0.20 - 0.50	1.5 - 4.5
10710	TNMA 220408 TT7310	0.15 - 0.40	1.5 - 5.0
6612	TNMA 220412 TT1300	0.20 - 0.50	1.5 - 5.0

TNMG Pastilhas Triangulares Negativas


Size	Dimension (mm)		
	d	t	r
11	6.35	3.18	0.4-0.8
13	7.94	4.76	0.4-1.2
16	9.52	4.76	0.4-1.2
22	12.7	4.76	0.4-1.6
27	15.88	6.35	0.8-1.6
33	19.05	7.94-9.52	1.6-2.4


Usinagem Média
EA

Acabamento
EM

Usinagem Média
FC

Acabamento

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
25032	TNMG 130404 EA TT9080	0.05 - 0.30	0.13 - 1.5
22950	TNMG 130404 FG TT8115	0.07 - 0.30	0.25 - 1.5
24999	TNMG 130404 FM CT3000	0.07 - 0.30	0.25 - 1.5
25030	TNMG 130404 FM TT8115	0.07 - 0.30	0.25 - 1.5
24590	TNMG 130404 FT TT8115	0.07 - 0.30	0.25 - 1.5
24430	TNMG 130404 FT TT8125	0.07 - 0.30	0.25 - 1.5
24939	TNMG 130404 MM TT9225	0.15 - 0.45	0.40 - 3.5
22951	TNMG 130404 PC TT8115	0.10 - 0.30	0.40 - 3.0
22952	TNMG 130404 PC TT8125	0.10 - 0.30	0.40 - 3.0
25139	TNMG 130404 PC TT9080	0.10 - 0.30	0.40 - 3.0
25035	TNMG 130404 TT7005	0.10 - 0.45	0.50 - 4.0
24982	TNMG 130404 TT7015	0.10 - 0.45	0.50 - 4.0
24973	TNMG 130408 EM TT9080	0.13 - 0.40	0.50 - 4.0
25281	TNMG 130408 EM TT9235	0.13 - 0.40	0.50 - 4.0
24960	TNMG 130408 FG TT8125	0.10 - 0.35	0.30 - 1.5
25000	TNMG 130408 FM CT3000	0.10 - 0.35	0.30 - 1.5
25031	TNMG 130408 FM TT8115	0.10 - 0.35	0.30 - 1.5
23875	TNMG 130408 FM TT8125	0.10 - 0.35	0.30 - 1.5
24803	TNMG 130408 FT TT8115	0.10 - 0.40	0.30 - 2.5
23876	TNMG 130408 FT TT8125	0.10 - 0.40	0.30 - 2.5
25283	TNMG 130408 FT TT8135	0.10 - 0.40	0.30 - 2.5
25033	TNMG 130408 MM TT9225	0.20 - 0.50	0.50 - 3.5
24237	TNMG 130408 MT TT8115	0.15 - 0.45	1.00 - 3.5
22953	TNMG 130408 PC TT8125	0.15 - 0.40	0.50 - 3.0

TNMG CONTINUAÇÃO
FG

Acabamento
FS

**Mostrado vs. Direita
Usinagem Média**
MC

Usinagem Média
ML

Usinagem Média
MP

Usinagem Média
MT

Usinagem Média

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
23762	TNMG 130408 PC TT9080	0.15 - 0.40	0.50 - 3.0
24972	TNMG 130408 TT7005	0.10 - 0.50	0.50 - 4.0
24971	TNMG 130408 TT7015	0.10 - 0.50	0.50 - 4.0
22955	TNMG 130412 MT TT8115	0.20 - 0.55	1.20 - 3.5
22956	TNMG 130412 MT TT8125	0.20 - 0.55	1.20 - 3.5
22954	TNMG 130412 PC TT8115	0.18 - 0.50	0.60 - 3.0
25036	TNMG 130412 TT7005	0.10 - 0.55	0.50 - 4.0
24953	TNMG 130412 TT7015	0.10 - 0.55	0.50 - 4.0
8893	TNMG 160404 L-VF CT3000	0.10 - 0.30	0.7 - 3.5
6786	TNMG 160404 R CT3000	0.10 - 0.30	0.7 - 3.5
23699	TNMG 160404 R CTCP125	0.10 - 0.30	0.7 - 3.5
9383	TNMG 160404 R-VF CT3000	0.10 - 0.30	0.7 - 3.5
9652	TNMG 160404 FC PV3010	0.05 - 0.30	0.2 - 2.5
9653	TNMG 160404 FC T8125	0.05 - 0.30	0.2 - 2.5
24720	TNMG 160404 FC TT8115	0.05 - 0.30	0.2 - 2.5
7068	TNMG 160404 FG PV3010	0.07 - 0.20	0.5 - 2.0
6964	TNMG 160404 FG TT8115	0.07 - 0.20	0.5 - 2.0
6259	TNMG 160404 FG TT8125	0.07 - 0.20	0.5 - 2.0
8041	TNMG 160404 L-FS TT5100	0.15 - 0.30	0.8 - 3.0
10176	TNMG 160404 L-FS TT8020	0.15 - 0.30	0.8 - 3.0
6412	TNMG 160404 L-FS TT8125	0.15 - 0.30	0.8 - 3.0
8626	TNMG 160404 L-VF TT8115	0.10 - 0.30	0.7 - 3.5
8294	TNMG 160404 L-VF TT8125	0.10 - 0.30	0.7 - 3.5
6952	TNMG 160404 ML K10	0.10 - 0.30	0.8 - 3.5
7182	TNMG 160404 ML TT5080	0.10 - 0.30	0.8 - 3.5
24631	TNMG 160404 ML TT5100	0.10 - 0.30	0.8 - 3.5
7391	TNMG 160404 ML TT8020	0.10 - 0.30	0.8 - 3.5
6260	TNMG 160404 ML TT8125	0.10 - 0.30	0.8 - 3.5
7156	TNMG 160404 MP TT8020	0.10 - 0.30	0.8 - 3.5
24741	TNMG 160404 MP TT9215	0.10 - 0.30	0.8 - 3.5
24058	TNMG 160404 MP TT9225	0.10 - 0.30	0.8 - 3.5
8507	TNMG 160404 MT TT5080	0.17 - 0.40	1.0 - 3.5
23030	TNMG 160404 MT TT7005	0.17 - 0.40	1.0 - 3.5
24075	TNMG 160404 MT TT7015	0.17 - 0.40	1.0 - 3.5
10337	TNMG 160404 MT TT7310	0.17 - 0.40	1.0 - 3.5
7154	TNMG 160404 MT TT8115	0.17 - 0.40	1.0 - 3.5
6881	TNMG 160404 MT TT8125	0.17 - 0.40	1.0 - 3.5
11226	TNMG 160404 PC TT8125	0.15 - 0.40	1.0 - 3.5
24742	TNMG 160404 PC TT9080	0.15 - 0.40	1.0 - 3.5
24584	TNMG 160404 PC TT9225	0.15 - 0.40	1.0 - 3.5
7462	TNMG 160404 R-FS TT5100	0.15 - 0.30	0.8 - 3.0
10175	TNMG 160404 R-FS TT8020	0.15 - 0.30	0.8 - 3.0
25086	TNMG 160404 R-FS TT8115	0.15 - 0.30	0.8 - 3.0
6552	TNMG 160404 R-FS TT8125	0.15 - 0.30	0.8 - 3.0
12306	TNMG 160404 R-VF PV3010	0.10 - 0.30	0.7 - 3.5
8286	TNMG 160404 R-VF TT8115	0.10 - 0.30	0.7 - 3.5

TNMG CONTINUAÇÃO
PC
Nova

Usinagem Média
RT

Desbaste
SF

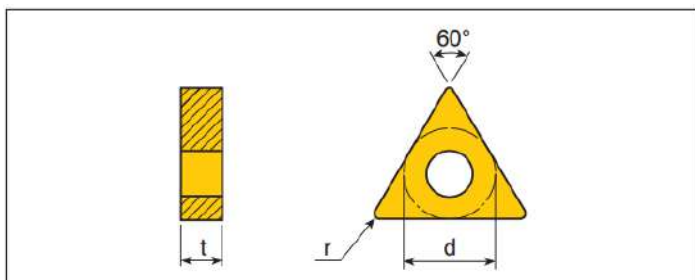
Acabamento
VF

**Mostrado vs. Direita
Usinagem Média**

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
8202	TNMG 160404 R-VF TT8125	0.10 - 0.30	0.7 - 3.5
7045	TNMG 160408 L CT3000	0.20 - 0.40	1.0 - 3.5
6763	TNMG 160408 R CT3000	0.20 - 0.40	1.0 - 3.5
19867	TNMG 160408 EM TT 9225	0.13 - 0.50	0.8 - 4.5
13832	TNMG 160408 EM TT9080	0.13 - 0.50	0.8 - 4.5
12565	TNMG 160408 FC PV3010	0.08 - 0.35	0.2 - 2.5
14176	TNMG 160408 FC TT8115	0.08 - 0.35	0.2 - 2.5
12566	TNMG 160408 FG PV3010	0.10 - 0.25	0.7 - 2.0
23792	TNMG 160408 KT TT7015	0.10 - 0.25*	0.7 - 2.0*
9772	TNMG 160408 L-FS TT5100	0.20 - 0.40	1.0 - 3.5
10300	TNMG 160408 L-FS TT8020	0.20 - 0.40	1.0 - 3.5
25085	TNMG 160408 L-FS TT8115	0.20 - 0.40	1.0 - 3.5
6773	TNMG 160408 L-FS TT8125	0.20 - 0.40	1.0 - 3.5
9119	TNMG 160408 L-VF TT8115	0.12 - 0.35	1.0 - 3.5
9422	TNMG 160408 L-VF TT8125	0.12 - 0.35	1.0 - 3.5
7479	TNMG 160408 MC TT5100	0.17 - 0.40	0.7 - 3.5
6974	TNMG 160408 MC TT8115	0.17 - 0.40	0.7 - 3.5
6531	TNMG 160408 MC TT8125	0.17 - 0.40	0.7 - 3.5
9447	TNMG 160408 ML K10	0.12 - 0.35	1.0 - 3.5
6261	TNMG 160408 ML TT1500	0.12 - 0.35	1.0 - 3.5
7216	TNMG 160408 ML TT5080	0.12 - 0.35	1.0 - 3.5
6384	TNMG 160408 ML TT8020	0.12 - 0.35	1.0 - 3.5
6262	TNMG 160408 ML TT8125	0.12 - 0.35	1.0 - 3.5
6423	TNMG 160408 MP TT3500	0.12 - 0.40	1.0 - 3.5
7771	TNMG 160408 MP TT5030	0.12 - 0.40	1.0 - 3.5
6998	TNMG 160408 MP TT8020	0.12 - 0.40	1.0 - 3.5
12345	TNMG 160408 MP TT9030	0.12 - 0.40	1.0 - 3.5
12776	TNMG 160408 MP TT9225	0.12 - 0.40	1.0 - 3.5
6544	TNMG 160408 MT TT1300	0.17 - 0.50	1.2 - 3.5
7106	TNMG 160408 MT TT5030	0.17 - 0.50	1.2 - 3.5
6660	TNMG 160408 MT TT5100	0.17 - 0.50	1.2 - 3.5
17331	TNMG 160408 MT TT7005	0.17 - 0.50	1.2 - 3.5
17330	TNMG 160408 MT TT7015	0.17 - 0.50	1.2 - 3.5
9974	TNMG 160408 MT TT7310	0.17 - 0.50	1.2 - 3.5
7050	TNMG 160408 MT TT8020	0.17 - 0.50	1.2 - 3.5
6545	TNMG 160408 MT TT8115	0.17 - 0.50	1.2 - 3.5
6264	TNMG 160408 MT TT8125	0.17 - 0.50	1.2 - 3.5
25483	TNMG 160408 MT TT9225	0.17 - 0.50	1.2 - 3.5
10545	TNMG 160408 PC TT5100	0.15 - 0.50	0.5 - 4.5
10800	TNMG 160408 PC TT8115	0.15 - 0.50	0.5 - 4.5
10419	TNMG 160408 PC TT8125	0.15 - 0.50	0.5 - 4.5
15037	TNMG 160408 PC TT9080	0.15 - 0.50	0.5 - 4.5
12241	TNMG 160408 PC TT9215	0.15 - 0.50	0.5 - 4.5
11531	TNMG 160408 PC TT9225	0.15 - 0.50	0.5 - 4.5
12208	TNMG 160408 PC TT9235	0.15 - 0.50	0.5 - 4.5
7405	TNMG 160408 R- FS TT5100	0.20 - 0.40	1.0 - 3.5

TNMG CONTINUAÇÃO

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
10094	TNMG 160408 R-FS TT8020	0.20 - 0.40	1.0 - 3.5
25084	TNMG 160408 R-FS TT8115	0.20 - 0.40	1.0 - 3.5
6582	TNMG 160408 R-FS TT8125	0.20 - 0.40	1.0 - 3.5
17361	TNMG 160408 RT TT7005	0.25 - 0.65	2.0 - 5.0
17337	TNMG 160408 RT TT7015	0.25 - 0.65	2.0 - 5.0
9340	TNMG 160408 RT TT7310	0.25 - 0.65	2.0 - 5.0
6265	TNMG 160408 RT TT8125	0.25 - 0.65	2.0 - 5.0
8210	TNMG 160408 R-VF TT8115	0.12 - 0.35	1.0 - 3.5
8211	TNMG 160408 R-VF TT8125	0.12 - 0.35	1.0 - 3.5
8923	TNMG 160408 SF TT5080	0.10 - 0.30	0.7 - 1.5
9085	TNMG 160408 SF TT5100	0.10 - 0.30	0.7 - 1.5
7480	TNMG 160408 TT5100	0.17 - 0.55	2.0 - 3.5
7937	TNMG 160408 TT8115	0.17 - 0.55	2.0 - 3.5
9735	TNMG 160408 TT8125	0.17 - 0.55	2.0 - 3.5
15956	TNMG 160408(P) FC TT 7310	0.08 - 0.35	0.2 - 2.5
25089	TNMG 160412 EM TT9225	0.10 - 0.40	0.3 - 2.5
12567	TNMG 160412 FC PV3010	0.10 - 0.40	0.3 - 2.5
19868	TNMG 160412 FC TT 9225	0.10 - 0.40	0.3 - 2.5
12568	TNMG 160412 FG TT8115	0.13 - 0.30	0.7 - 2.0
6266	TNMG 160412 ML TT3500	0.15 - 0.35	1.5 - 3.5
24562	TNMG 160412 ML TT5100	0.15 - 0.35	1.5 - 3.5
9105	TNMG 160412 MP TT1500	0.15 - 0.40	1.5 - 3.5
7678	TNMG 160412 MT KT450	0.20 - 0.50	1.5 - 3.5
10061	TNMG 160412 MT TT5100	0.20 - 0.50	1.5 - 3.5
6268	TNMG 160412 MT TT8115	0.20 - 0.50	1.5 - 3.5
10680	TNMG 160412 PC TT8115	0.17 - 0.55	0.6 - 4.5
12234	TNMG 160412 PC TT8125	0.17 - 0.55	0.6 - 4.5
8418	TNMG 160412 RT TT3500/TT8125	0.25 - 0.65	2.0 - 5.0
17378	TNMG 160412 RT TT7005	0.25 - 0.65	2.0 - 5.0
17650	TNMG 160412 RT TT7015	0.25 - 0.65	2.0 - 5.0
9341	TNMG 160412 RT TT7310	0.25 - 0.65	2.0 - 5.0
6585	TNMG 220404 ML TT8125	0.10 - 0.30	1.0 - 4.0
12219	TNMG 220404 MP TT5030	0.12 - 0.35	1.0 - 3.5
6581	TNMG 220404 MT TT8125	0.15 - 0.40	1.2 - 5.0
15391	TNMG 220408 ML TT5100	0.12 - 0.35	1.0 - 4.0
15464	TNMG 220408 ML TT8020	0.12 - 0.35	1.0 - 4.0
9103	TNMG 220408 MP TT5030	0.12 - 0.40	1.0 - 4.0
24893	TNMG 220408 MT TT7005	0.17 - 0.50	1.2 - 5.0
10089	TNMG 220408 MT TT8020	0.17 - 0.50	1.2 - 5.0
7089	TNMG 220408 MT TT8125	0.17 - 0.50	1.2 - 5.0
16126	TNMG 220412 MT TT8020	0.20 - 0.50	1.5 - 5.0
16719	TNMG 220412 MT TT8125	0.20 - 0.50	1.5 - 5.0
18029	TNMG 220412 PC TT7015	0.20 - 0.50	1.5 - 5.0
12257	TNMG 220412 PC TT8115	0.20 - 0.50	1.5 - 5.0
8694	TNMG 220416 TT3500	0.30 - 0.60	2.0 - 5.0
7150	TNMG 270612 TT8135	0.25 - 0.55	3.0 - 7.0

TNMM Pastilhas Triangulares Negativas


Size	Dimension (mm)		
	d	t	r
16	9.52	4.76	0.4-1.2
22	12.7	4.76	0.8-1.6
27	15.88	6.35	1.2

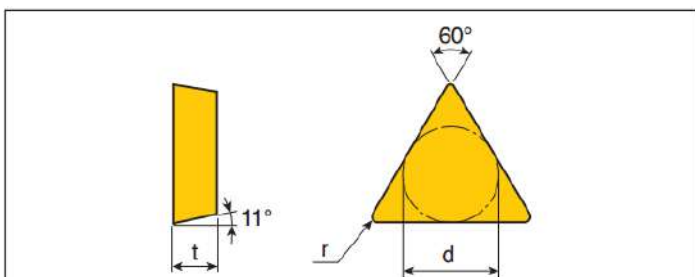
RH


Desbaste

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
17372	TNMM 160412 RX TT8115	0.25-0.70	1.0 - 7.0
6441	TNMM 160412 RX TT8125	0.25-0.70	1.0 - 7.0
12680	TNMM 220408 RX TT8135	0.20-0.55	0.7 - 7.5
24998	TNMM 220412 RX TT8135	0.25-0.70	1.0-7.5
10452	TNMM 220416 RH TT3500	0.30-0.90	1.5-7.5

RX


Desbaste

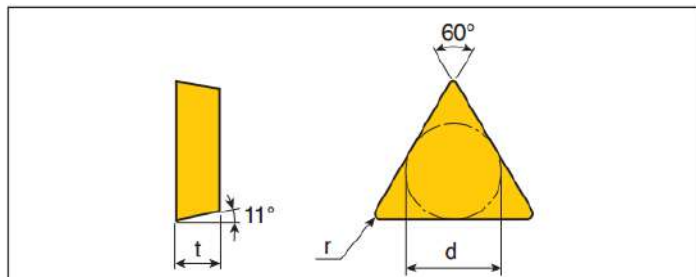
TPGN Pastilhas Triangulares Positivas, Ângulo de Folga 11°


Size	Dimension (mm)		
	d	t	r
09	5.56	2.38	0.2-0.8
11	6.35	3.18	0.2-0.8
16	9.52	3.18-4.76	0.2-1.2
22	12.7	4.76	0.4-3.0
27	15.88	6.35	0.8



Acabamento

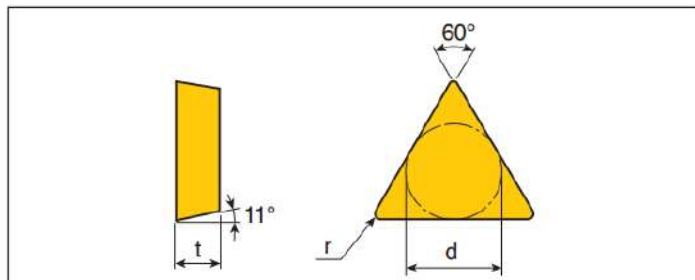
Código	Descrição	Avanço (mm/rot.)	Ap (mm)
10828	TPGN 160302 K10	0.05 - 0.18	1.0 - 5.0

TPGT Pastilhas Triangulares Positivas, Ângulo de Folga 11°


Size	Dimension (mm)		
	d	t	r
09	5.56	2.38	0.2-0.8
11	6.35	3.18	0.2-0.8
16	9.52	3.18-4.76	0.2-1.2
22	12.7	4.76	0.4-3.0
27	15.88	6.35	0.8


 Mostrado vs. Direita
 Acabamento

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
9015	TPGT 110304 R-C CT3000	0.07 - 0.20	0.5 - 2.0
9495	TPGT 110308 L- C CT3000	0.07 - 0.25	0.5 - 2.0
8689	TPGT 160404 L-C CT3000	0.05 - 0.20	0.7 - 3.0

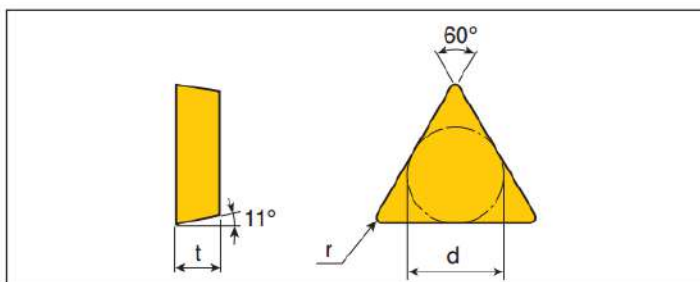
TPGX Pastilhas Triangulares Positivas, Ângulo de Folga 11°


Size	Dimension (mm)		
	d	t	r
09	5.56	2.38	0.2-0.8
11	6.35	3.18	0.2-0.8
16	9.52	3.18-4.76	0.2-1.2
22	12.7	4.76	0.4-3.0
27	15.88	6.35	0.8



Mostrado vs. Esquerda
Acabamento

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
8134	TPGX 090202 L CT3000	0.05 - 0.15	0.4 - 1.5
7348	TPGX 090204 L CT3000	0.08 - 0.20	0.6 - 1.5
8051	TPGX 110302 L CT3000	0.08 - 0.20	0.5 - 1.5
8137	TPGX 110302 R CT3000	0.08 - 0.20	0.5 - 1.5
7349	TPGX 110304 L CT3000	0.08 - 0.20	0.6 - 2.0
9259	TPGX 110304 R CT3000	0.08 - 0.20	0.6 - 2.0

TPMR Pastilhas Triangulares Positivas, Ângulo de Folga 11°


Size	Dimension (mm)		
	d	t	r
09	5.56	2.38	0.2-0.8
11	6.35	3.18	0.2-0.8
16	9.52	3.18-4.76	0.2-1.2
22	12.7	4.76	0.4-3.0
27	15.88	6.35	0.8

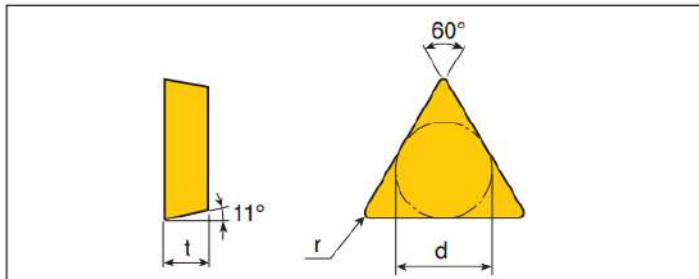


Antigo



Usinagem Média

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
7135	TPMR 090204 TT8125	0.10 - 0.25	0.5 - 2.0
22970	TPMR 090208 TT8125	0.13 - 0.30	0.7 - 2.0
6981	TPMR 110304 TT8115	0.10 - 0.25	0.7 - 3.0
6565	TPMR 110304 TT8125	0.10 - 0.25	0.7 - 3.0
18956	TPMR 110308 CT3000	0.13 - 0.30	1.0 - 3.0
7030	TPMR 110308 TT8125	0.13 - 0.30	1.0 - 3.0
6427	TPMR 160304 TT1300	0.10 - 0.25	1.0 - 5.0
6526	TPMR 160304 TT5100	0.10 - 0.25	1.0 - 5.0
6301	TPMR 160304 TT8115	0.10 - 0.25	1.0 - 5.0
6316	TPMR 160304 TT8125	0.10 - 0.25	1.0 - 5.0
6616	TPMR 160308 TT1300	0.13 - 0.30	1.0 - 5.0
10684	TPMR 160308 TT5100	0.13 - 0.30	1.0 - 5.0
6656	TPMR 160308 TT8115	0.13 - 0.30	1.0 - 5.0
6269	TPMR 160308 TT8125	0.13 - 0.30	1.0 - 5.0
6755	TPMR 160312 TT1500	0.15 - 0.35	1.0 - 5.0
7770	TPMR 220408 TT8125	0.13 - 0.30	1.5 - 7.0

TPMT Pastilhas Triangulares Positivas, Ângulo de Folga 11°


Size	Dimension (mm)		
	d	t	r
09	5.56	2.38	0.4
11	6.35	2.38-3.18	0.4-0.8
16	9.52	3.18-3.97	0.4-1.6
22	12.7	4.76	0.4-1.6

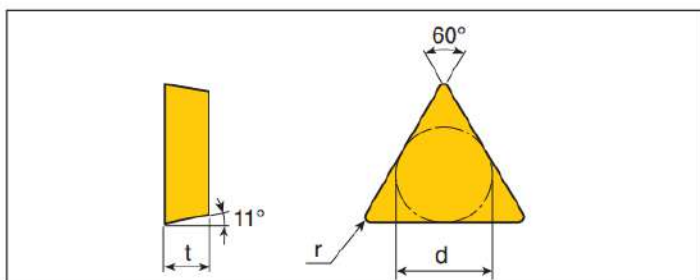
FG


Acabamento

PC


Para Semi-acabamento

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
13731	TPMT 090204 PC TT9080	0.06 - 0.18	0.3 - 2.0
14417	TPMT 090204 PC TT9225	0.06 - 0.18	0.3 - 2.0
19219	TPMT 110204 PC TT5100	0.06 - 0.2	0.4 - 2.5
19220	TPMT 110208 PC TT5100	0.1 - 0.26	0.5 - 2.5
12765	TPMT 110304 FG TT8020	0.07 - 0.20	0.4 - 1.5
9773	TPMT 110304 FG TT8115	0.07 - 0.20	0.4 - 1.5
9677	TPMT 110304 FG TT8125	0.07 - 0.20	0.4 - 1.5
12759	TPMT 110308 PC TT7310	0.1 - 0.26	0.5 - 2.5
13174	TPMT 110308 PC TT8125	0.1 - 0.26	0.5 - 2.5
23713	TPMT 16T304 PC CT3000	0.08 - 0.25	0.45 - 2.0

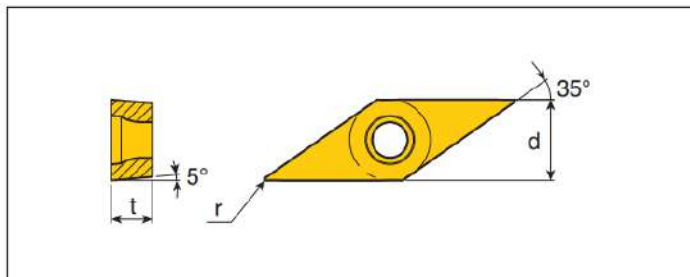
TPUN Pastilhas Triangulares Positivas, Ângulo de Folga 11°


Size	Dimension (mm)		
	d	t	r
09	5.56	2.38	0.4
11	6.35	2.38-3.18	0.4-0.8
16	9.52	3.18-3.97	0.4-1.6
22	12.7	4.76	0.4-1.6



Usinagem Média

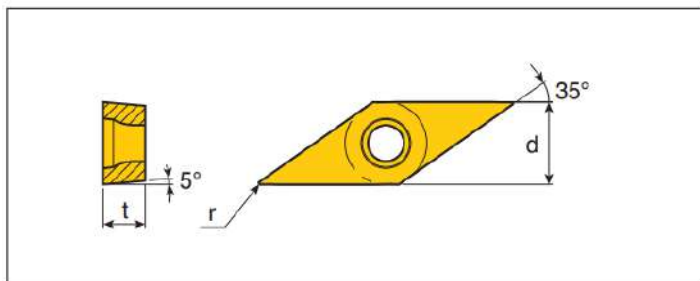
Código	Descrição	Avanço (mm/rot.)	Ap (mm)
6406	TPUN 110308 TT1300	0.15-0.40	1.0 - 3.0
8930	TPUN 160304 K10	0.10-0.30	1.0 - 5.0
9888	TPUN 160304 P30	0.10-0.30	1.0 - 5.0
8479	TPUN 160304 TT1300	0.10-0.30	1.0 - 5.0
7483	TPUN 160304 TT8125	0.10-0.30	1.0 - 5.0
7501	TPUN 160308 P30	0.15-0.40	1.0 - 5.0
6327	TPUN 160308 TT8115	0.15-0.40	1.0 - 5.0
6270	TPUN 160308 TT8125	0.15-0.40	1.0 - 5.0
9770	TPUN 160312 P30	0.20-0.50	1.5 - 5.0
7040	TPUN 160312 TT3500	0.20-0.50	1.5 - 5.0
8387	TPUN 220408 K10	0.15-0.40	1.5 - 7.0
6583	TPUN 220408 P30	0.15-0.40	1.5 - 7.0
6503	TPUN 220408 TT3500	0.15-0.40	1.5 - 7.0
10100	TPUN 220408 TT8030	0.15-0.40	1.5 - 7.0
13141	TPUN 220416 P30	0.25-0.55	1.5 - 7.0

VBET Pastilhas Rômbicas 35° Positivas, Ângulo de Folga 5°


Size	Dimension (mm)		
	d	t	r
11	6.35	3.18	0.03-0.4
16	9.52	4.76	0.1-1.2


 Mostrado vs. Direita
 Acabamento

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
10902	VBET 110301 R-GF TT9020	0.02 - 0.15	0.2 - 1.5
9982	VBET 110302 L-GF TT9020	0.03 - 0.17	0.3 - 1.5
9283	VBET 110302 R-GF TT9020	0.03 - 0.17	0.3 - 1.5
9673	VBET 110304 R-GF TT9020	0.03 - 0.17	0.3 - 1.5

VBMT Pastilhas Rômbicas 35° Positivas, Ângulo de Folga 5°


Size	Dimension (mm)		
	d	t	r
16	9.52	4.76	0.4-1.2

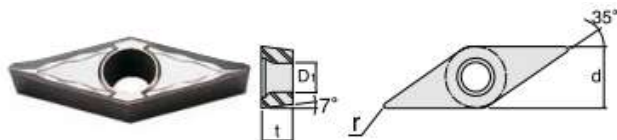
Código	Descrição	Avanço (mm/rot.)	Ap (mm)
9080	VBMT 160404 FG PV3010	0.07 - 0.20	0.5 - 1.5
7925	VBMT 160404 FG TT5030	0.07 - 0.20	0.5 - 1.5
7140	VBMT 160404 FG TT8125	0.07 - 0.20	0.5 - 1.5
9148	VBMT 160404 FG CT3000	0.07 - 0.20	0.5 - 1.5
7909	VBMT 160404 MT CT3000	0.10 - 0.25	0.6 - 3.0
6364	VBMT 160404 MT TT1300	0.10 - 0.25	0.6 - 3.0
7648	VBMT 160404 MT TT5080	0.10 - 0.25	0.6 - 3.0
9471	VBMT 160404 MT TT8020	0.10 - 0.25	0.6 - 3.0
7619	VBMT 160404 MT TT8115	0.10 - 0.25	0.6 - 3.0
6590	VBMT 160404 MT TT8125	0.10 - 0.25	0.6 - 3.0
6271	VBMT 160408 FG TT8125	0.10 - 0.25	0.7 - 2.0
17515	VBMT 160408 FG TT9225	0.10 - 0.25	0.7 - 2.0
12525	VBMT 160408 MT CT3000	0.13 - 0.30	0.9 - 3.0
6272	VBMT 160408 MT TT1300	0.13 - 0.30	0.9 - 3.0
7215	VBMT 160408 MT TT5080	0.13 - 0.30	0.9 - 3.0
7314	VBMT 160408 MT TT5100	0.13 - 0.30	0.9 - 3.0
18693	VBMT 160408 MT TT7005	0.13 - 0.30	0.9 - 3.0
8419	VBMT 160408 MT TT8020	0.13 - 0.30	0.9 - 3.0
6273	VBMT 160408 MT TT8115	0.13 - 0.30	0.9 - 3.0
6274	VBMT 160408 MT TT8125	0.13 - 0.30	0.9 - 3.0
9317	VBMT 160412 MT TT8115	0.15 - 0.30	1.2 - 3.0
6275	VBMT 160412 MT TT8125	0.15 - 0.30	1.2 - 3.0

FG

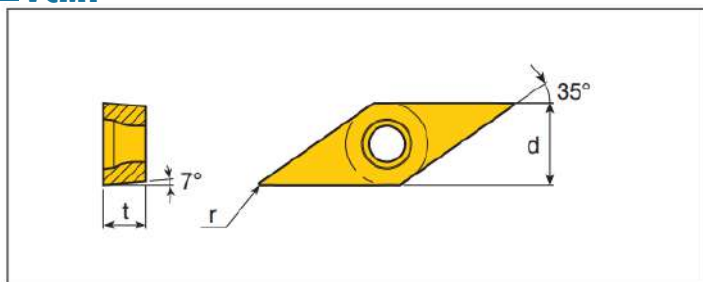

Acabamento

MT


Usinagem Média

VCGT Pastilhas de Alumínio


Código	Descrição	d (mm)	t (mm)	r (mm)	D1 (mm)
9146	VCGT 110302 FL K10	6.35	3.18	0.2	2.8
10810	VCGT 110304 FL K10	6.35	3.18	0.4	2.8
7189	VCGT 160404 FL K10	9.525	4.76	0.4	4.4
7034	VCGT 160408 FL K10	9.525	4.76	0.8	4.4
6302	VCGT 160412 FL K10	9.525	4.76	1.2	5.5
13191	VCGT 220530 FL K10	12.70	5.56	3.0	5.5

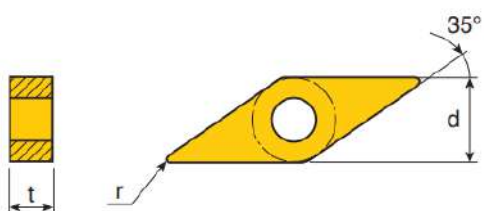
VCMT Pastilhas Rômbicas 35° Positivas, Ângulo de Folga 7°


Size	Dimension (mm)		
	d	t	r
08	4.76	2.38	0.2-0.4
11	6.35	3.18	0.1-0.4
16	9.52	4.76	0.4-0.8



Para Semi-acabamento

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
14367	VCMT 110304 PC TT8125	0.05 - 0.20	0.1 - 1.7

VNMG Pastilhas Rombicas 35° Negativas


Size	Dimension (mm)		
	d	t	r
13	7.94	4.76	0.4-0.8
16	9.52	4.76	0.1-1.2



Usinagem Média

FC


Acabamento

FG


Acabamento

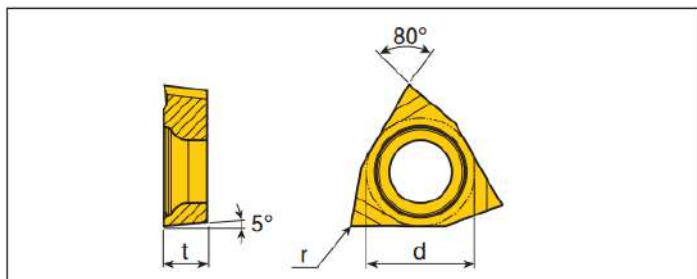
MT


Usinagem Média

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
19373	VNMG 080408 MT TT7005	0.08 - 0.20	0.5 - 1.5
9265	VNMG 130404 FG TT5030	0.08 - 0.20	0.5 - 1.5
8790	VNMG 130404 FG TT5100	0.08 - 0.20	0.5 - 1.5
24194	VNMG 130404 FG TT8115	0.08 - 0.20	0.5 - 1.5
8447	VNMG 130404 FG TT8125	0.08 - 0.20	0.5 - 1.5
20157	VNMG 130404 MT CT3000	0.15 - 0.36	0.8 - 2.5
14327	VNMG 130404 MT TT7005	0.15 - 0.36	0.8 - 2.5
20146	VNMG 130404 MT TT8115	0.15 - 0.36	0.8 - 2.5
20154	VNMG 130404 MT TT8125	0.15 - 0.36	0.8 - 2.5
7576	VNMG 130408 FG TT3500	0.10 - 0.23	0.5 - 2.0
9311	VNMG 130408 FG TT5030	0.10 - 0.23	0.5 - 2.0
9310	VNMG 130408 FG TT5100	0.10 - 0.23	0.5 - 2.0
9053	VNMG 130408 MT TT5030	0.17 - 0.36	1.0 - 2.5
9321	VNMG 130408 MT TT7005	0.17 - 0.36	1.0 - 2.5
10940	VNMG 130408 MT TT8115	0.17 - 0.36	1.0 - 2.5
7647	VNMG 130408 MT TT8125	0.17 - 0.36	1.0 - 2.5
12357	VNMG 160404 FC TT 8115	0.05 - 0.30	0.3 - 2.5
11422	VNMG 160404 FG PV3010	0.08 - 0.20	0.5 - 2.0
7138	VNMG 160404 MT TT5030	0.15 - 0.36	0.8 - 3.0
8303	VNMG 160404 MT TT8115	0.15 - 0.36	0.8 - 3.0
6303	VNMG 160404 MT TT8125	0.15 - 0.36	0.8 - 3.0
12006	VNMG 160408 FC TT9225	0.08 - 0.35	0.3 - 2.5
12572	VNMG 160408 FG PV3010	0.10 - 0.23	0.5 - 2.0
6304	VNMG 160408 FG TT3500	0.10 - 0.23	0.5 - 2.0
25208	VNMG 160408 FG TT5080	0.10 - 0.23	0.5 - 2.0
12526	VNMG 160408 MT CT3000	0.17 - 0.36	1.0 - 2.5
7516	VNMG 160408 MT TT1300	0.17 - 0.36	1.0 - 2.5
12608	VNMG 160408 MT TT5030	0.17 - 0.36	1.0 - 2.5
19377	VNMG 160408 MT TT7005	0.17 - 0.36	1.0 - 2.5
14500	VNMG 160408 MT TT8115	0.17 - 0.36	1.0 - 2.5
6685	VNMG 160408 MT TT8125	0.17 - 0.36	1.0 - 2.5
8979	VNMG 160412 TT1300	0.20 - 0.50	1.5 - 3.0
7426	VNMG 160412 TT8125	0.20 - 0.50	1.5 - 3.0



WBG T Pastilhas Trigonais 80° Positivas, Ângulo de Folga 5°



Size	Dimension (mm)		
	d	t	r
06	9.52	1.59	0.03-0.4

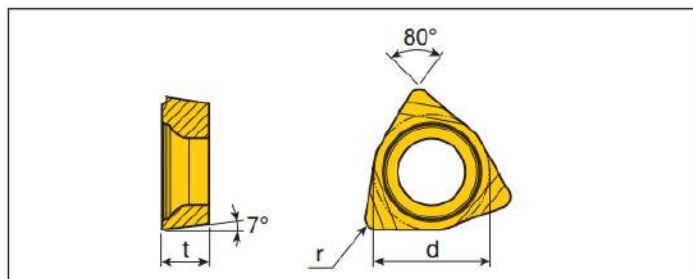
Nova



Acabamento

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
22838	WBG T 060102 L-FF CT3000	0.03-0.15	0.1 - 0.2

WCG T Pastilhas Trigonais 80° Positivas, Ângulo de Folga 7°



Size	Dimension (mm)		
	d	t	r
02	3.97	1.59	0.2-0.4

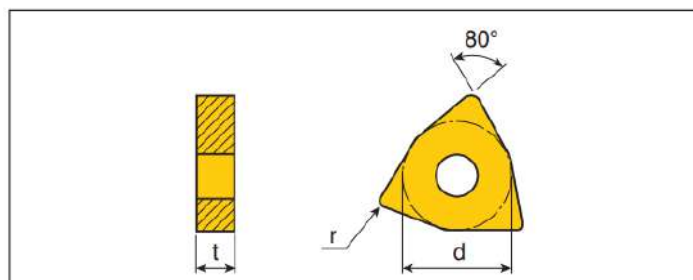
Nova



Acabamento

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
11807	WCG T 020102L TT9030	0.03-0.15	0.1 - 0.4

WNMA Pastilhas Trigonais 80° Negativas

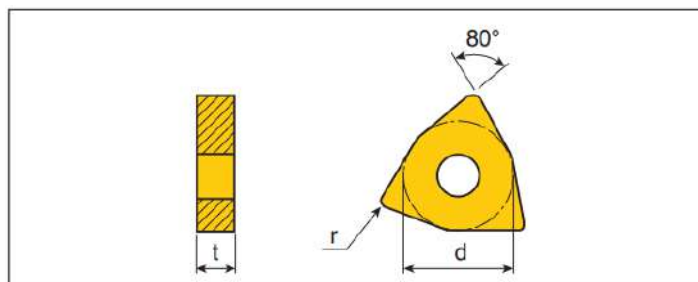


Size	Dimension (mm)		
	d	t	r
06	9.52	4.76	0.4-1.2
08	12.7	4.76	0.4-1.2



Desbaste

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
7580	WNMA 060408 TT7005	0.15 - 0.70	1.0 - 4.0
9394	WNMA 060408 TT7310	0.15 - 0.70	1.0 - 4.0
16261	WNMA 080408 TT1300	0.15 - 0.70	1.0 - 5.0
7437	WNMA 080408 TT7005	0.15 - 0.70	1.0 - 5.0
17258	WNMA 080408 TT7015	0.15 - 0.70	1.0 - 5.0
9233	WNMA 080408 TT7310	0.15 - 0.70	1.0 - 5.0
6422	WNMA 080412 TT1300	0.20 - 0.80	1.5 - 5.0
16262	WNMA 080412 TT7005	0.20 - 0.80	1.5 - 5.0
18701	WNMA 080412 TT7015	0.20 - 0.80	1.5 - 5.0
9234	WNMA 080412 TT7310	0.20 - 0.80	1.5 - 5.0
18028	WNMA 080416 TT7005	0.20 - 0.80	1.5 - 5.0
12626	WNMA 080416 TT7310	0.20 - 0.80	1.5 - 5.0

WNMG Pastilhas Trigonais 80° Negativas


Size	Dimension (mm)		
	d	t	r
06	9.52	4.76	0.4-1.2
08	12.7	4.76	0.4-1.6

EM

Nova



Usinagem Média

FG


Acabamento

MC


Usinagem Média

ML


Usinagem Média

MP


Usinagem Média

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
24636	WNMG 060404 FG CT 320	0.07 - 0.2	0.5 - 2.0
6305	WNMG 060404 FG TT8115	0.07 - 0.2	0.5 - 2.0
15293	WNMG 060404 MT CT320	0.12 - 0.40	1.0 - 3.0
9107	WNMG 060404 MT TT5030	0.12 - 0.40	1.0 - 3.0
6308	WNMG 060404 MT TT8115	0.12 - 0.40	1.0 - 3.0
6309	WNMG 060404 MT TT8125	0.12 - 0.40	1.0 - 3.0
24877	WNMG 060408 EM TT5080	0.13 - 0.50	0.8 - 3.0
13584	WNMG 060408 EM TT9080	0.13 - 0.50	0.8 - 3.0
6311	WNMG 060408 FG TT3500	0.10 - 0.25	0.7 - 2.0
6861	WNMG 060408 MC TT5100	0.12 - 0.35	0.7 - 3.0
7943	WNMG 060408 MC TT8115	0.12 - 0.35	0.7 - 3.0
7169	WNMG 060408 MP TT5080	0.12 - 0.35	1.0 - 3.0
6453	WNMG 060408 MP TT8020	0.12 - 0.35	1.0 - 3.0
12758	WNMG 060408 MP TT9030	0.12 - 0.35	1.0 - 3.0
13473	WNMG 060408 MP TT9080	0.12 - 0.35	1.0 - 3.0
11474	WNMG 060408 MP TT9225	0.12 - 0.35	1.0 - 3.0
6314	WNMG 060408 MT TT1300	0.15 - 0.45	1.2 - 3.0
7478	WNMG 060408 MT TT5080	0.15 - 0.45	1.2 - 3.0
8449	WNMG 060408 MT TT5100	0.15 - 0.45	1.2 - 3.0
18356	WNMG 060408 MT TT7005	0.15 - 0.45	1.2 - 3.0
24554	WNMG 060408 MT TT7015	0.15 - 0.45	1.2 - 3.0
25118	WNMG 060408 MT TT8020	0.15 - 0.45	1.2 - 3.0
6632	WNMG 060408 MT TT8115	0.15 - 0.45	1.2 - 3.0
7282	WNMG 060408 MT TT8125	0.15 - 0.45	1.2 - 3.0
11519	WNMG 060408 MT TT9225	0.15 - 0.45	1.2 - 3.0
11544	WNMG 060408 PC TT8115	0.15 - 0.50	0.5 - 4.0
11543	WNMG 060408 PC TT8125	0.15 - 0.50	0.5 - 4.0
10753	WNMG 060408 WT TT5100	0.15 - 0.60	0.7 - 3.5
6991	WNMG 060408 WT TT8115	0.15 - 0.60	0.7 - 3.5
7297	WNMG 060408 WT TT8125	0.15 - 0.60	0.7 - 3.5
6315	WNMG 060412 MP TT1500	0.15 - 0.40	1.3 - 3.0
6317	WNMG 060412 MP TT2500	0.15 - 0.40	1.3 - 3.0
19708	WNMG 080404 FG CT320	0.07 - 0.20	0.5 - 2.0
19707	WNMG 080404 MT CT3000	0.12 - 0.40	1.0 - 4.0
6828	WNMG 080404 MT TT1300	0.12 - 0.40	1.0 - 4.0
9054	WNMG 080404 MT TT5030	0.12 - 0.40	1.0 - 4.0
7734	WNMG 080404 MT TT8115	0.12 - 0.40	1.0 - 4.0
7310	WNMG 080404 MT TT8125	0.12 - 0.40	1.0 - 4.0
19865	WNMG 080408 EM TT 9225	0.12 - 0.45	0.8 - 4.0

WNMG CONTINUAÇÃO
MT

PC

RT

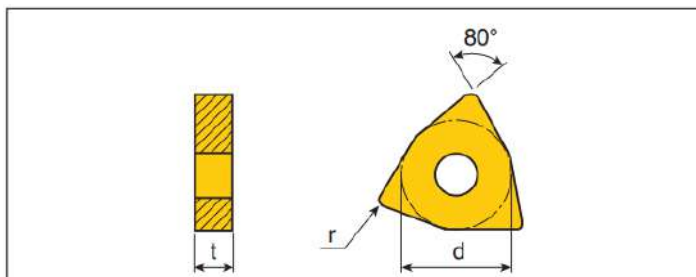
WS

WT


Código	Descrição	Avanço (mm/rot.)	Ap (mm)
13831	WNMG 080408 EM TT9080	0.12 - 0.45	0.8 - 4.0
10894	WNMG 080408 ET TT5030	0.15 - 0.55	0.8 - 4.5
11545	WNMG 080408 ET TT9215	0.15 - 0.55	0.8 - 4.5
11364	WNMG 080408 ET TT9225	0.15 - 0.55	0.8 - 4.5
11379	WNMG 080408 ET TT9235	0.15 - 0.55	0.8 - 4.5
6319	WNMG 080408 FG TT3500	0.10 - 0.25	0.7 - 2.0
10471	WNMG 080408 MC TT5100	0.12 - 0.35	0.7 - 3.5
8549	WNMG 080408 MC TT8115	0.12 - 0.35	0.7 - 3.5
9149	WNMG 080408 MC TT8125	0.12 - 0.35	0.7 - 3.5
6953	WNMG 080408 ML K10	0.12 - 0.35	1.0 - 3.5
7756	WNMG 080408 ML TT8020	0.12 - 0.35	1.0 - 3.5
24272	WNMG 080408 ML TT8115	0.12 - 0.35	1.0 - 3.5
10640	WNMG 080408 ML TT8125	0.12 - 0.35	1.0 - 3.5
7070	WNMG 080408 MP TT5080	0.12 - 0.40	1.0 - 4.0
7044	WNMG 080408 MP TT8020	0.12 - 0.40	1.0 - 4.0
19926	WNMG 080408 MT CT3000	0.17 - 0.55	1.2 - 4.0
6488	WNMG 080408 MT KT450	0.17 - 0.55	1.2 - 4.0
8292	WNMG 080408 MT TT5030	0.17 - 0.55	1.2 - 4.0
6405	WNMG 080408 MT TT5100	0.17 - 0.55	1.2 - 4.0
18052	WNMG 080408 MT TT7015	0.17 - 0.55	1.2 - 4.0
9081	WNMG 080408 MT TT7100	0.17 - 0.55	1.2 - 4.0
10739	WNMG 080408 MT TT7310	0.17 - 0.55	1.2 - 4.0
6790	WNMG 080408 MT TT8020	0.17 - 0.55	1.2 - 4.0
6424	WNMG 080408 MT TT8115	0.17 - 0.55	1.2 - 4.0
6457	WNMG 080408 MT TT8125	0.17 - 0.55	1.2 - 4.0
14360	WNMG 080408 PC TT5100	0.15 - 0.50	0.5 - 4.0
10741	WNMG 080408 PC TT8115	0.15 - 0.50	0.5 - 4.0
10822	WNMG 080408 PC TT8125	0.15 - 0.50	0.5 - 4.0
11345	WNMG 080408 PC TT9235	0.15 - 0.50	0.5 - 4.0
6461	WNMG 080408 RT TT1300	0.25 - 0.70	2.5 - 4.0
16985	WNMG 080408 RT TT7005	0.25 - 0.70	2.5 - 4.0
17259	WNMG 080408 RT TT7015	0.25 - 0.70	2.5 - 4.0
9367	WNMG 080408 RT TT7310	0.25 - 0.70	2.5 - 4.0
7191	WNMG 080408 RT TT8115	0.25 - 0.70	2.5 - 4.0
6478	WNMG 080408 RT TT8125	0.25 - 0.70	2.5 - 4.0
23959	WNMG 080408 WS TT7310	0.07 - 0.35	0.5 - 2.0
12253	WNMG 080408 WS TT8115	0.07 - 0.35	0.5 - 2.0
10759	WNMG 080408 WT TT5100	0.15 - 0.60	1.0 - 4.0
9890	WNMG 080408 WT TT7310	0.15 - 0.60	1.0 - 4.0
9648	WNMG 080408 WT TT8115	0.15 - 0.60	1.0 - 4.0
17666	WNMG 080412 EM TT9080	0.12 - 0.45	0.8 - 4.0
11726	WNMG 080412 MC TT8125	0.15 - 0.40	0.7 - 3.5
7069	WNMG 080412 MT TT5030	0.25 - 0.55	1.5 - 4.0
8214	WNMG 080412 MT TT5100	0.25 - 0.55	1.5 - 4.0
11395	WNMG 080412 MT TT9235	0.25 - 0.55	1.5 - 4.0
10833	WNMG 080412 PC TT8115	0.17 - 0.50	0.6 - 4.0

WNMG CONTINUAÇÃO

Código	Descrição	Avanço (mm/rot.)	Ap (mm)
11383	WNMG 080412 PC TT8125	0.17 - 0.50	0.6 - 4.0
11415	WNMG 080412 PC TT9225	0.17 - 0.50	0.6 - 4.0
8638	WNMG 080412 RT TT1300	0.25 - 0.70	2.5 - 4.0
12648	WNMG 080412 RT TT5100	0.25 - 0.70	2.5 - 4.0
16263	WNMG 080412 RT TT7005	0.25 - 0.70	2.5 - 4.0
16865	WNMG 080412 RT TT7015	0.25 - 0.70	2.5 - 4.0
9363	WNMG 080412 RT TT7310	0.25 - 0.70	2.5 - 4.0
6791	WNMG 080412 RT TT8115	0.25 - 0.70	2.5 - 4.0
6421	WNMG 080412 RT TT8125	0.25 - 0.70	2.5 - 4.0
8232	WNMG 080412 WT TT1300	0.20 - 0.80	1.0 - 4.0
12578	WNMG 080412 WT TT3500	0.20 - 0.80	1.0 - 4.0
12483	WNMG 080412 WT TT5100	0.20 - 0.80	1.0 - 4.0
9891	WNMG 080412 WT TT7310	0.20 - 0.80	1.0 - 4.0
9398	WNMG 080412 WT TT8115	0.20 - 0.80	1.0 - 4.0
24908	WNMG 080416 KT TT8115	0.20 - 0.50	0.8 - 4.0
11437	WNMG 080416 MT TT8115	0.20 - 0.50	0.8 - 4.0
18849	WNMG 080416 PC TT8125	0.20 - 0.50	0.8 - 4.0
18369	WNMG 080416 RT TT7005	0.30 - 0.75	2.5 - 4.0
11436	WNMG 080416 RT TT8115	0.30 - 0.75	2.5 - 4.0
8755	WNMG 080416 RT TT8125	0.30 - 0.75	2.5 - 4.0

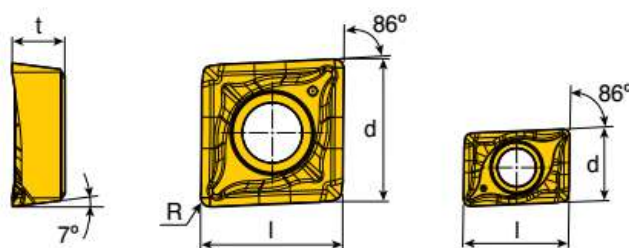
WNMX Pastilhas Trigonais 80° Negativas


Size	Dimension (mm)		
	d	t	r
06	9.52	4.76	0.4-1.2
08	12.7	4.76	0.4-1.6

RHINO-RUSH


For Medium

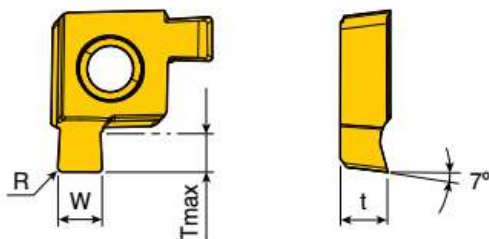
Código	Descrição	Avanço (mm/rot.)	Ap (mm)
25354	WNMX 060404 PC TT8115	0.10-0.30	0.4 - 3.5

XCGT Pastilha de Furação para Alumínio


XCGT 0401

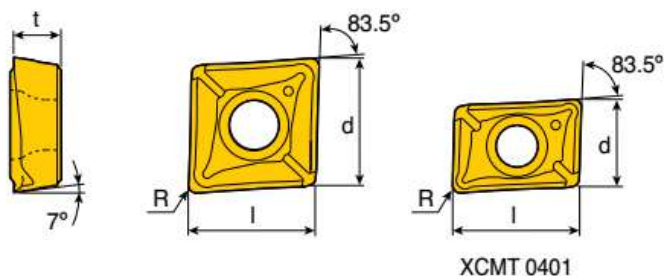
Size	Dimension (mm)			
	d	l	t	R
04	4.4	6.4	1.70	0.4
05	5.6	5.6	2.10	0.4
06	6.4	6.4	2.38	0.4
07	7.5	7.5	3.18	0.4
08	8.4	8.4	3.18	0.4
10	10.5	10.5	3.97	0.4
13	13.4	13.4	4.76	0.4
17	17.5	17.5	5.56	0.8

Código	Descrição
19680	XCGT 040104R TA K10

XCMT Pastilhas de Furação T-CAP Para Ranhuramento


Size	Dimension (mm)			
	W	Tmax	t	R
05	2.0	1.8	2.28	0.2
06	2.0	2.0	2.65	0.2
07	2.5	2.0	3.41	0.2
08	2.5	2.5	3.50	0.2
10	3.0	3.0	4.34	0.3
13	3.5	3.5	5.18	0.3
17	4.0	4.0	6.00	0.4

Código	Descrição
25061	XCMT 08R-250020GV TT9080

XCMT Pastilhas de Furação T-CAP


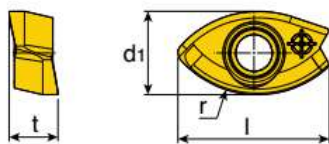
Size	Dimension (mm)			
	d	l	t	R
04	4.4	6.4	1.70	0.4
05	5.6	5.6	2.10	0.4
06	6.4	6.4	2.38	0.4
07	7.5	7.5	3.18	0.4
08	8.4	8.4	3.18	0.4
10	10.5	10.5	3.97	0.4/0.8
13	13.4	13.4	4.76	0.4/0.8
17	17.4	17.4	5.56	0.8


 Mostrado versão direita
 (XCMT 0401)

Código	Descrição
8042	XCMT 040104R TC TT9030
12649	XCMT 050204 TC TT 8020
8043	XCMT 050204 TC TT 9030
12650	XCMT 060204 TC TT8020
7935	XCMT 060204 TC TT9030
8044	XCMT 070304 TC TT9030
13195	XCMT 080304 TC TT9030
9159	XCMT 10T304 TC TT9030
12466	XCMT 10T308 TC TT9030
12344	XCMT 130404 TC TT9030

PONTEIRAS DE BROCA

2FB Duet Ball



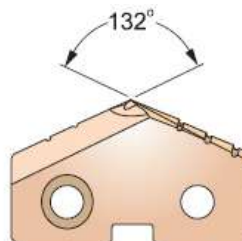
Size	Dimension (mm)					
	l	d1	t	ap	r	
160-M	12.4	6.8	3.7	8.0	8.0	
200-M	14.9	8.2	4.8	10.0	10.0	
250-M	18.9	10.2	5.9	12.5	12.5	
300-M	22.1	11.8	6.9	15.0	15.0	
320-M	23.9	12.8	7.5	16.0	16.0	



M

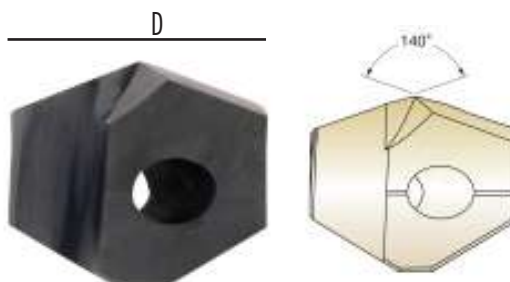
Código	Descrição	Fz (mm/ tooth)	Ap (mm)	Aplicação
25190	2FB160-M TT9080	0.07-0.30	2.0-6.5	2F - -L 2F - -M
23613	2FB200-M TT9080	0.08-0.35	3.0-8.0	

ESPADA i-Xmill - YG1



Código	Descrição	D (mm)	Referência
25143	ESPADA HSS 100,00X11.1-7 TIN-SM	100	SM455A00
25144	ESPADA HSS 110,00X11.1-8 TIN-SM	110	SM455B00
16443	ESPADA HSS 14,00X3-0 TIN-SM	14	
16442	ESPADA HSS 18,00X4-1 TIN-SM	18	
24345	ESPADA HSS 19,45X4-1 TIN-SM	19.45	SM105049
24070	ESPADA HSS 19,84X4-1 TIN-SM	19.84	SM105050
16465	ESPADA HSS 22,00X4-1 TIN-SM	22.00	
24964	ESPADA HSS 65X7.9-4 TIN-SM	65	SM155650
24929	ESPADA HSS 76,00X11.1-5 TIN-SM	76	SM455760
16824	ESPADA MD 14,00X3.2-0 TIALN-SM	14	
16840	ESPADA MD 18,00X4-1 TIALN-SM	18	
17698	ESPADA MD 21,00X4-1 TIALN-SM	21	
16673	ESPADA MD 22,00X4-1 TIALN-SM	22	
24557	ESPADA MD 25,00X4,8-2 TIALN-SM	25	SM865250

PONTEIRA MD i-Dream Drill YG1

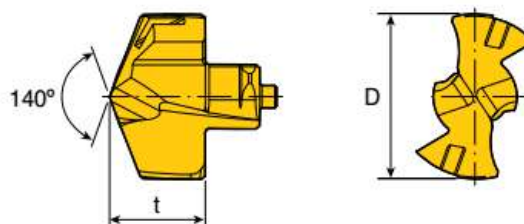


PONTEIRA MD CONTINUAÇÃO

Código	Descrição	D (mm)	Referência
18833	MD 12,50 X 3,6 X C/TIALN	12.50	
17966	MD 1"3/16X8.0XJ TIALN	30.16	
16748	MD 16,50 X4,5XC TIALN	16.15	
16466	MD 20,00 X6,0XF TIALN	20.00	
16282	MD 22,00 X6,0XF TIALN	22.00	
16233	MD 24,00 X6,5XG TIALN	24.00	
25183	MD 25,10 X6,5XG TIALN	25.10	
18915	MD 25,50 X6,5XG TIALN	25.50	YG1A2550
19905	MD 26,00 X7,1XH TIALN	26.00	YH1A2600
16371	MD 27,50 X7,1XH TIALN	27.50	YH1A2750
17982	MD 28,00 X7,7XI TIALN	28.00	YI1A2800
19026	MD 29,50 X 7,7 X C TIALN	29.50	
24057	MD 29,50 X7,7XI TIALN	29.50	YI1A2950

TCD
Ponteira Intercambiável Drill Rush


• Grade: TT9080



Código	Descrição	D (mm)	t (mm)	Tamanho
24644	TCD-080-P TT9080	8.0	5.4	8
25201	TCD-083-P TT9080	8.3	5.4	8
24655	TCD-085-K TT9080	8.5	5.4	8
19653	TCD-085-P TT9080	8.5	5.4	8
19307	TCD-090-P TT9080	9.0	5.8	9
25485	TCD-099-P TT9080	9.9	5.8	9
13754	TCD-100-P TT9080	10.0	6.2	10
13755	TCD-101-P TT9080	10.1	6.2	10
13756	TCD-102-P TT9080	10.2	6.2	10
13757	TCD-103-P TT9080	10.3	6.2	10
13758	TCD-104-P TT9080	10.4	6.2	10
13759	TCD-105-P TT9080	10.5	6.2	10
14526	TCD-106-P TT9080	10.6	6.2	10
14527	TCD-107-P TT9080	10.7	6.2	10
14471	TCD-108-P TT9080	10.8	6.2	10
13760	TCD-109-P TT9080	10.9	6.2	10
13761	TCD-110-P TT9080	11.0	6.6	11
14528	TCD-111-P TT9080	11.1	6.6	11
13762	TCD-112-P TT9080	11.2	6.6	11
13763	TCD-113-P TT9080	11.3	6.6	11

Código	Descrição	D (mm)	t (mm)	Tamanho
14529	TCD-114-P TT9080	11.4	6.6	11
13764	TCD-115-P TT9080	11.5	6.6	11
14320	TCD-116-P TT9080	11.6	6.6	11
14530	TCD-117-P TT9080	11.7	6.6	11
14469	TCD-118-P TT9080	11.8	6.6	11
13765	TCD-119-P TT9080	11.9	6.6	11
13766	TCD-120-P TT9080	12.0	7.0	12
14290	TCD-121-P TT9080	12.1	7.0	12
13767	TCD-122-P TT9080	12.2	7.0	12
14336	TCD-123-P TT9080	12.3	7.0	12
14531	TCD-124-P TT9080	12.4	7.0	12
13768	TCD-125-P TT9080	12.5	7.0	12
14532	TCD-126-P TT9080	12.6	7.0	12
13769	TCD-127-P TT9080	12.7	7.0	12
14129	TCD-128-P TT9080	12.8	7.0	12
13770	TCD-129-P TT9080	12.9	7.0	12
13771	TCD-130-P TT9080	13.0	7.6	13
14533	TCD-131-P TT9080	13.1	7.6	13
14147	TCD-134-P TT9080	13.4	7.6	13
13772	TCD-135-P TT9080	13.5	7.6	13

TCD
CONTINUAÇÃO

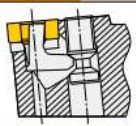
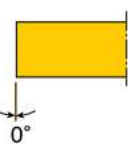
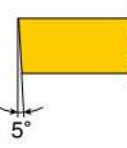
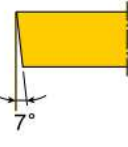
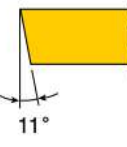
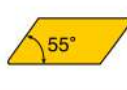
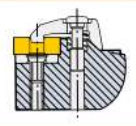
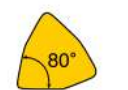
Código	Descrição	D (mm)	t (mm)	Tamanho
24726	TCD-138-P TT9080	13.8	7.6	13
13773	TCD-139-P TT9080	13.9	7.6	13
13887	TCD-140-M TT9080	14.0	8.1	14
13774	TCD-140-P TT9080	14.0	8.1	14
14804	TCD-142-P TT9080	14.2	8.1	14
24455	TCD-143-P TT9080	14.3	8.1	14
19566	TCD-144-P TT9080	14.4	8.1	14
13775	TCD-145-P TT9080	14.5	8.1	14
18831	TCD-146-P TT9080	14.6	8.1	14
13886	TCD-148-P TT9080	14.8	8.1	14
14293	TCD-149-P TT9080	14.9	8.1	14
24691	TCD-150-M TT9080	15.0	8.7	15
13776	TCD-150-P TT9080	15.0	8.7	15
14534	TCD-151-P TT9080	15.1	8.7	15
14537	TCD-152-P TT9080	15.2	8.7	15
14043	TCD-153-P TT9080	15.3	8.7	15
14538	TCD-154-P TT9080	15.4	8.7	15
13777	TCD-155-P TT9080	15.5	8.7	15
14215	TCD-157-P TT9080	15.7	8.7	15
18903	TCD-1585-K TT9080	15.85	8.7	15
23964	TCD-1588-K TT9080	15.88	8.7	15
16450	TCD-158-P TT9080	15.8	8.7	15
14535	TCD-159-P TT9080	15.9	8.7	15
13778	TCD-160-P TT9080	16.0	9.3	16
14738	TCD-161-P TT9080	16.1	9.3	16
14054	TCD-163-P TT9080	16.3	9.3	16
13779	TCD-165-P TT9080	16.5	9.3	16
18723	TCD-166-P TT9080	16.6	9.3	16
14146	TCD-167-P TT9080	16.7	9.3	16
14294	TCD-168-P TT9080	16.8	9.3	16
14177	TCD-169-P TT9080	16.9	9.3	16
13780	TCD-170-P TT9080	17.0	9.9	17
14470	TCD-171-P TT9080	17.1	9.9	17

Código	Descrição	D (mm)	t (mm)	Tamanho
14536	TCD-172-P TT9080	17.2	9.9	17
13781	TCD-173-P TT9080	17.3	9.9	17
24354	TCD-174-P TT9080	17.4	9.9	17
13782	TCD-175-P TT9080	17.5	9.9	17
14407	TCD-177-P TT9080	17.7	9.9	17
18721	TCD-178-P TT9080	17.8	9.9	17
13783	TCD-180-P TT9080	18.0	10.5	18
25172	TCD-181-P TT9080	18.1	10.5	18
16768	TCD-182-P TT9080	18.2	10.5	18
13784	TCD-185-P TT9080	18.5	10.5	18
24437	TCD-186-P TT9080	18.6	10.5	18
24438	TCD-187-P TT9080	18.7	10.5	18
23527	TCD-188-P TT9080	18.8	10.5	18
16862	TCD-189-P TT9080	18.9	10.5	18
13785	TCD-190-P TT9080	19.0	11.0	19
14376	TCD-192-P TT9080	19.2	11.0	19
14295	TCD-193-P TT9080	19.3	11.0	19
13786	TCD-195-P TT9080	19.5	11.0	19
25383	TCD-197-P TT9080	19.7	11.0	19
13787	TCD-199-P TT9080	19.9	11.0	19
19226	TCD-200-P TT9080	20.0	11.6	20
18863	TCD-205-P TT9080	20.5	11.6	20
19929	TCD-210-P TT9080	21.0	12.1	21
23624	TCD-215-P TT9080	21.5	12.1	21
19930	TCD-219-P TT9080	21.9	12.1	21
18864	TCD-225-P TT9080	22.5	12.7	22
19723	TCD-226-P TT9080	22.6	12.7	22
19451	TCD-230-P TT9080	23.0	13.3	23
23623	TCD-239-P TT9080	23.9	13.3	23
24029	TCD-242-P TT9080	24.2	13.9	24
23944	TCD-243-P TT9080	24.3	13.9	24
24118	TCD-250-P TT9080	25.0	14.5	25
24764	TCD-255-P TT9080	25.5	14.5	25

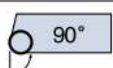
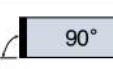
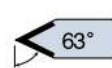
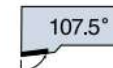
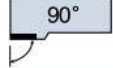
SUPORTES TORNEAMENTO

Sistema de codificação

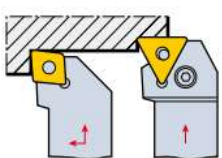
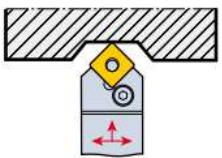
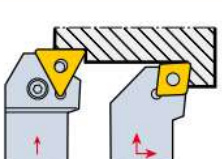
PORTA PASTILHAS

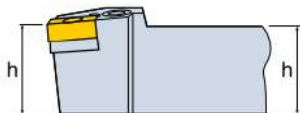
1 Sistema de Fixação		4 Ângulo de Folga da Pastilha		2 Formato da Pastilha		
						
P/Alavanca	C/Grampo	N	B	C	D	E
						
S/Parafuso	M/Pino-Grampo	C	P	H	K	R
						
T-Holder	W/Cunha - Grampo			S	T	V
						W

P	C	L	N	R
1	2	3	4	5

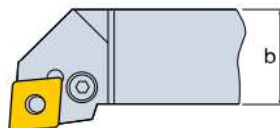
3 Ângulo de Posição								
Símbolo	Formato	Offset	Símbolo	Formato	Offset	Símbolo	Formato	Offset
A		x	J		○	V		x
			K		○	W		○
B		x	L		○	X		
			M		x	C*		x
D		x	N		x	H*		○
E		x	R		○	Q*		○
F		○	S		○			
G		○	T		○			
			U		○			

* Standard TaeguTec

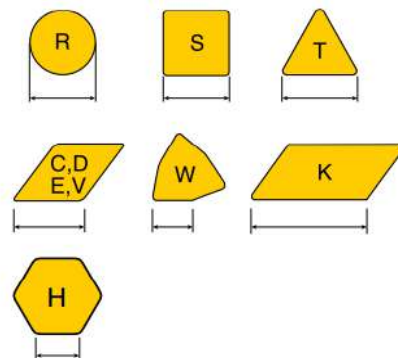
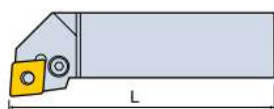
5 Sentido de Corte
 Direito R
 Neutro N
 Esquerdo L

PORTA PASTILHAS
6 Altura da Haste


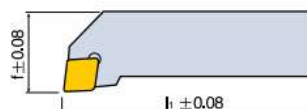
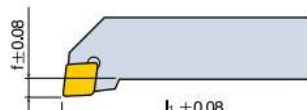
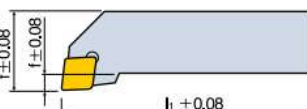
Inteiros devem ser precedidos de 0
 Por ex.: h=8mm é indicado por 08

7 Largura da Haste


Inteiros devem ser precedidos de 0
 Por ex.: b=8mm é indicado por 08

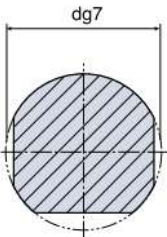
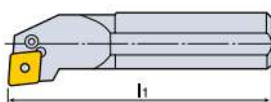
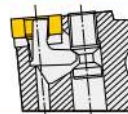
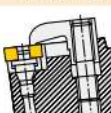
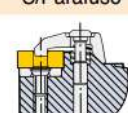
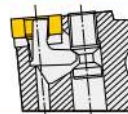
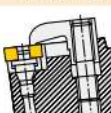
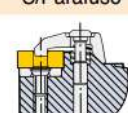
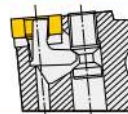
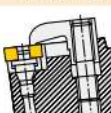
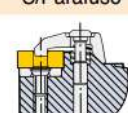
9 Comprimento da Aresta de Corte

25
6
25
7
M
8
12
9
-
10
11
8 Comprimento da Ferramenta


L (mm)	Símbolo	L (mm)	Símbolo
32	A	160	N
40	B	170	P
50	C	180	Q
60	D	200	R
70	E	250	S
80	F	300	T
90	G	350	U
100	H	400	V
110	J	450	W
125	K	500	Y
140	L	스페셜	X
150	M		

10 Ferramenta de Precisão
Q

F

B

11 Designação do fabricante

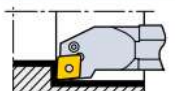
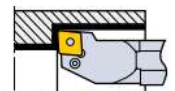
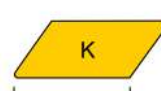
Exclusivo do fabricante

BARRA DE MANDRILAR

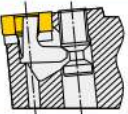
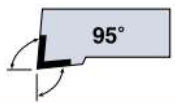
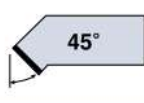
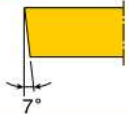
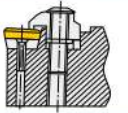
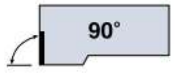
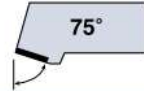
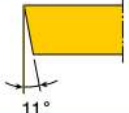
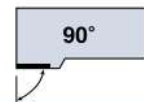
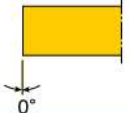
1	Barra de Mandrilar	2	Diâmetro da Barra	3	Comprimento da Ferramenta	4	Sistema de Fixação																											
S: Haste de Aço A: Haste de Aço c/ refrig. Interna C: Haste de Metal Duro E: Haste de M. Duro c/ refrig. Interna X: Especial				 <table><tr><td>K</td><td>125</td><td>U</td><td>350</td></tr><tr><td>M</td><td>150</td><td>V</td><td>400</td></tr><tr><td>Q</td><td>180</td><td>W</td><td>450</td></tr><tr><td>R</td><td>200</td><td>Y</td><td>500</td></tr><tr><td>S</td><td>250</td><td>X</td><td>Especial</td></tr><tr><td>T</td><td>300</td><td></td><td></td></tr></table>		K	125	U	350	M	150	V	400	Q	180	W	450	R	200	Y	500	S	250	X	Especial	T	300			<table><tr><td> P/Alavanca  C/Grampo </td><td> S/Parafuso  M/Pino-Grampo </td></tr><tr><td> T-Holder  W/Cunha - Grampo </td></tr></table>		 P/Alavanca  C/Grampo	 S/Parafuso  M/Pino-Grampo	 T-Holder  W/Cunha - Grampo
K	125	U	350																															
M	150	V	400																															
Q	180	W	450																															
R	200	Y	500																															
S	250	X	Especial																															
T	300																																	
 P/Alavanca  C/Grampo	 S/Parafuso  M/Pino-Grampo																																	
 T-Holder  W/Cunha - Grampo																																		

S	32	S	-	C	T	F	P	R	-	16	-	
1	2	3		4	5	6	7	8	9	10		

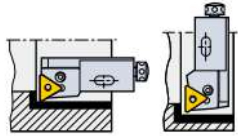
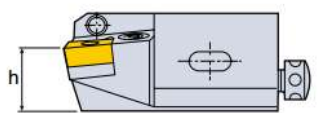
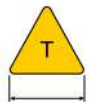
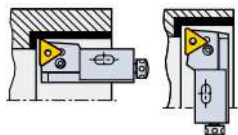
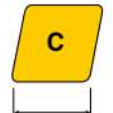
5 Formato da Pastilha	6 Ângulo de Posição	7 Ângulo de Folga da Pastilha
 80° C	 95° L	 0° N
 55° D	 75° K	 5° B
 75° E	 93° U	 93° Z
 120° H	 55° K	 45° Q
 55° K	 90° F	 7° C
 R	 117.5° P	 11° P
 35° V		
 80° W		

8 Sentido de Corte	9 Comprimento da Aresta de Corte	10 Designação do Fabricante
R  Direita *Utiliza pastilhas na versão esquerda	 R  S  T	Exclusivo do Fabricante
L  Esquerda *Utiliza pastilhas na versão direita	 C,D,E,V  W  K  H	

CAPSULAS

1 Sistema de Fixação	2 Formato da Pastilha	3 Ângulo de Posição		4 Ângulo de Folga da Pastilha
				
P/Alavanca	T	L	S	C
				
C/Grampo	C	F	R	P
				
S/Parafuso	S	K	G	N
				
		W	T	

P	C	L	N	R	-	16	C	A	-	12
1	2	3	4	5		6	7	8		9

5 Sentido de Corte	6 Altura	7 Tipo de Ferramenta	9 Comprimento da Aresta de Corte
 Direito R	 h	C: Cápsula	 T
 Esquerdo L		8 Estilo	 S
		A: Letra para Estilo Alternativo	 C

PORTA PASTILHAS ROSCA

1 Sistema de Fixação

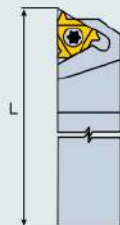
S - Fixação por Parafuso

2 Aplicação

E - Externa
I - Interna

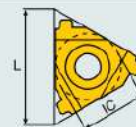
5 Comprimento da Ferramenta

mm
D - 60
F - 80
H - 100
K - 125
L - 140
M - 150
P - 170
R - 200
S - 250
T - 300
U - 350
V - 400



6 Tamanho da Pastilha

L (mm)	IC
06	3.968mm = 5/32"
08	4.762mm = 3/16"
08U	4.762mm = 3/16"
11	6.350mm = 1/4"
16	9.525mm = 3/8"
22	12.700mm = 1/2"
22U	12.700mm = 1/2"
27	15.875mm = 5/8"
27U	15.875mm = 5/8"



S

1

E

2

R

3

2020

4

K

5

16

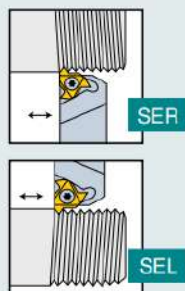
6



7

3 Sentido de Corte

R - Direita
L - Esquerda



4 Tamanho da Haste

Porta Pastilhas Externos
Haste: hxb

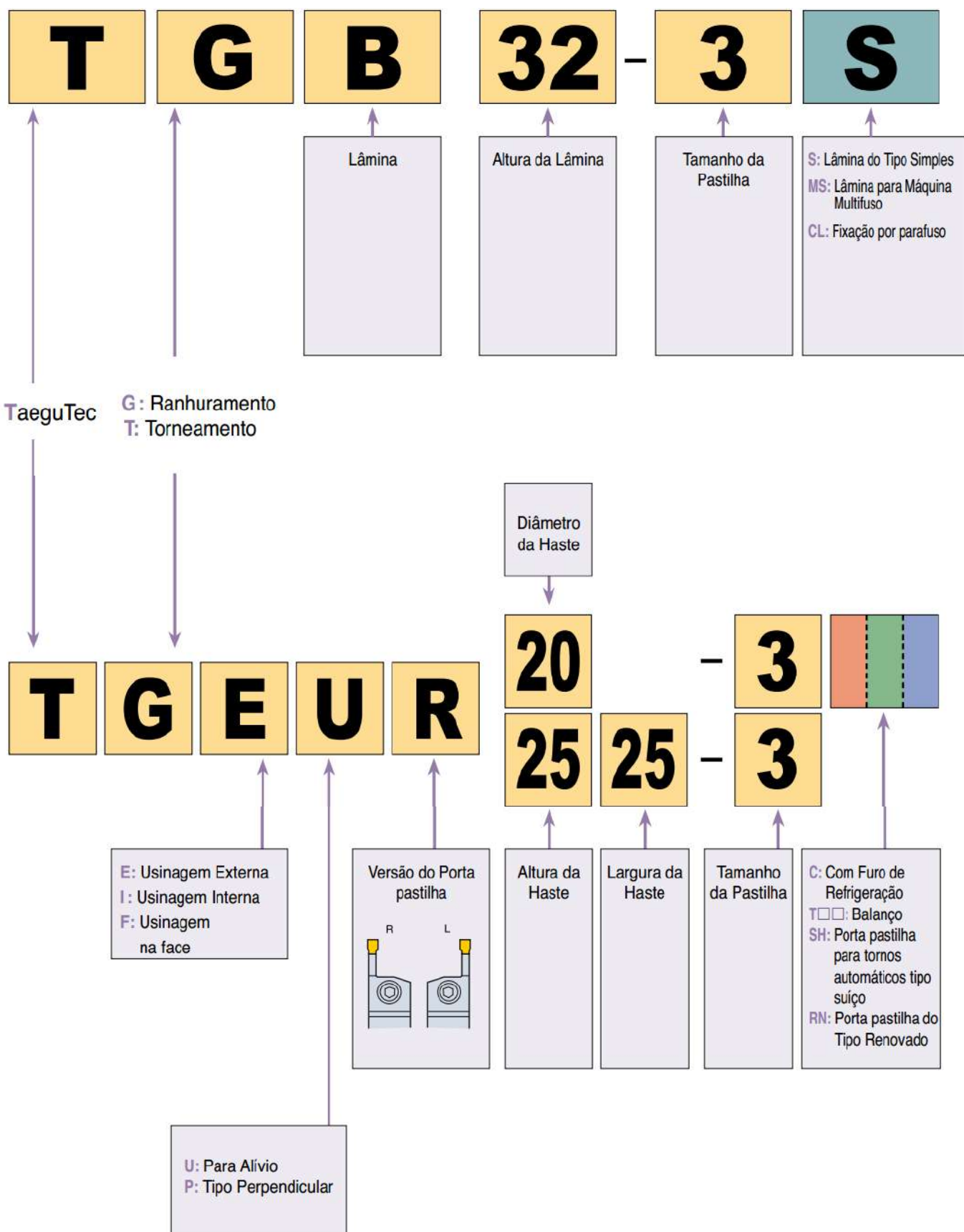
2020: 20x20mm

Porta Pastilhas Internos
Haste: Diâmetro d

0025: Diâmetro de 25mm

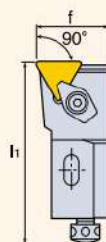
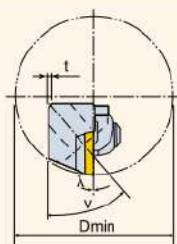
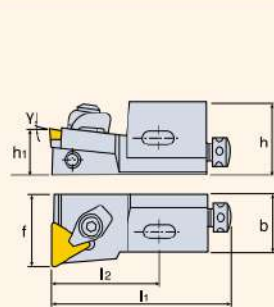
7 Especificações Opcionais

U - Para pastilhas tipo U
B - Com furo de refrigeração
C - Haste de metal duro
SP - Especial

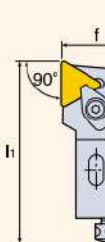
PORTA PASTILHAS CANAL


CÁPULAS SUPORTES DE TORNEAMENTO

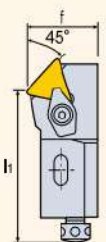
CTFPR/L / CTWPR/L Cápsulas



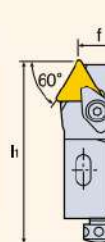
CTFPR



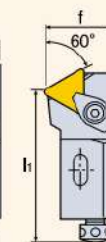
CTGPR



CTSPR



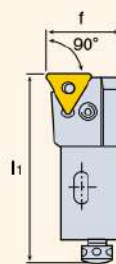
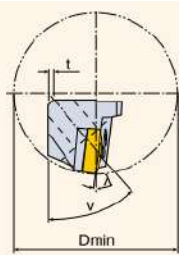
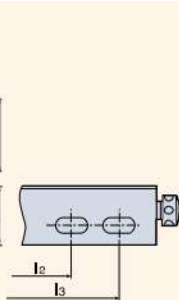
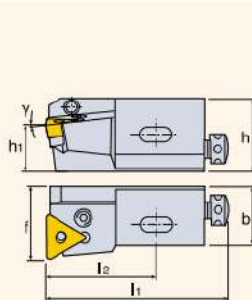
CTTPR



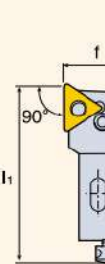
CTWPR

Código	Descrição	Ângulo de Posição	Tipo de Pastilha	Tamanho de Pastilha
11988	CAPSULA CTFPR 10CA 11	90°	TPMR TP N	1103
19696	CAPSULA CTFPR 12 CA 16	90°		1603
19632	CAPSULA CTWPR 10 CA 11	60°		1103

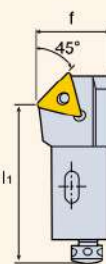
PTFNR/L / PTGNR/L Cápsulas



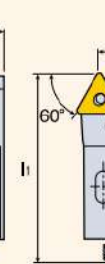
PTFNR



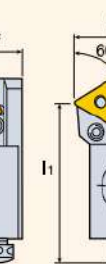
PTGNR



PTSNR



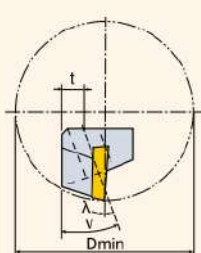
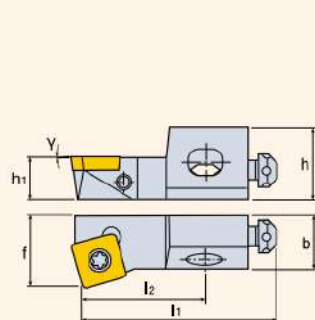
PTTNR



PTWNR

Código	Descrição	Ângulo de Posição	Tipo de Pastilha	Tamanho de Pastilha
18827	CAPSULA PTFNR 12 CA 16	90°	TN	1604
18990	CAPSULA PTGNR 12 CA 16	90°		1604

SSKCR/L Cápsulas

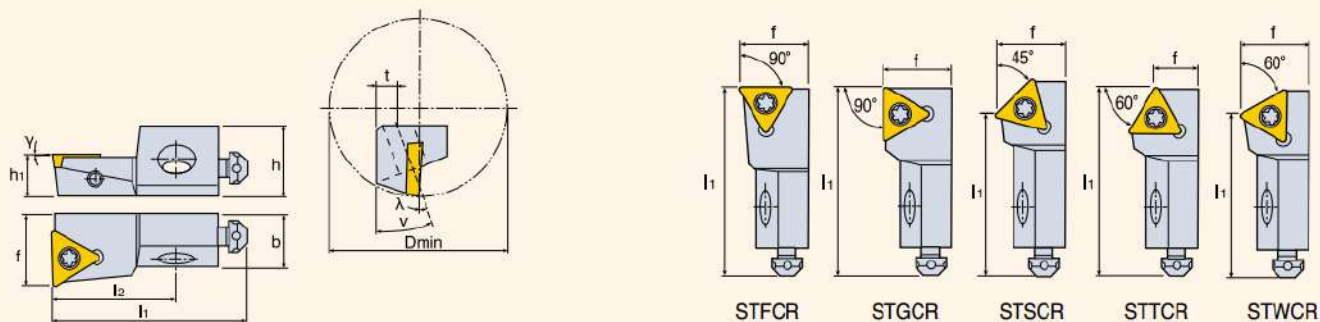


SSKCR

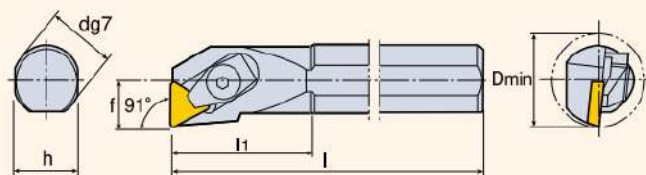
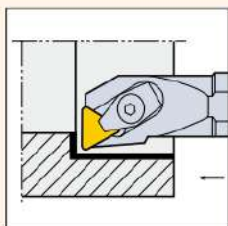


SSSCR

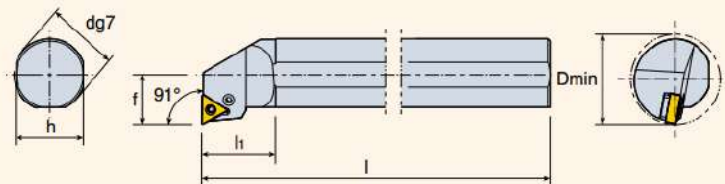
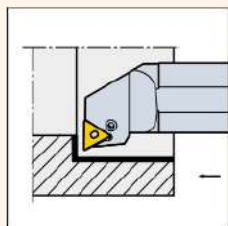
Código	Descrição	Ângulo de Posição	Tipo de Pastilha	Tamanho de Pastilha
24051	CAPSULA SSKCR 10CA09	75°	SC	09T3
24782	CAPSULA SSKCR 12CA09	75°		1204

STFCR/L / STGCR/L / STSCR/L / STTCR/L / STWCR/L Cápsulas


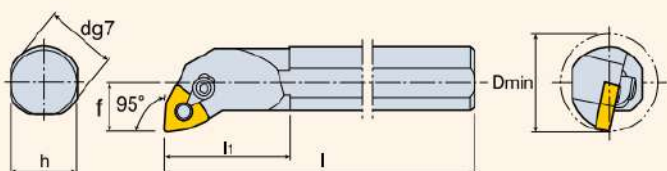
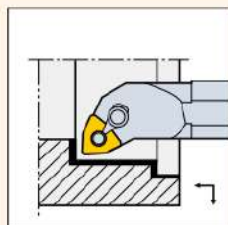
Código	Descrição	Ângulo de Posição	Tipo de Pastilha	Tamanho de Pastilha
17665	CAPSULA STFCL 08 CA 09	90°	TC	0902
19144	CAPSULA STFCL 12 CA 16	90°		16T3
25251	CAPSULA STFCR 08 CA 11	90°		1102
11814	CAPSULA STFCR 10 CA 11	90°		1102
12279	CAPSULA STFCR 12 CA 16	90°		16T3
19698	CAPSULA STFCR 16 CA 16	90°		16T3
18978	CAPSULA STGCL 12 CA 16	90°		16T3
18239	CAPSULA STGCR 12 CA 16	90°		16T3
23823	CAPSULA STSCR 08 CA 09	45°		0902
24441	CAPSULA STSCR 10 CA 11	45°		1102
20151	CAPSULA STTCR 08 CA 09	60°		0902
18845	CAPSULA STTCR 10 CA 11	60°		1102
20152	CAPSULA STWCR 08 CA 09	60°		0902
20111	CAPSULA STWCR 10CA11	60°		1102

BARRA DE MANDRILAR
SUPORES DE TORNEAMENTO
S- CTFPR/L Barra de Mandrilar


Código	Descrição	d	Pastilha
22939	PORTA PASTILHA S12M CTFPR 09	12	TPGN, TP R 0902
7235	PORTA PASTILHA S12M CTFPR 11	12	TPMR, TP N 1103
14268	PORTA PASTILHA S16R CTFPL 11	16	
6414	PORTA PASTILHA S16R CTFPR 11	16	
8650	PORTA PASTILHA S20S CTFPR 11	20	
7922	PORTA PASTILHA S16R CTFPR 16	16	TPMR, TP N 1603
6574	PORTA PASTILHA S20S CTFPR 16	20	
8688	PORTA PASTILHA S25T CTFPR 16	25	
8655	PORTA PASTILHA S32U CTFPR 16	32	

S- HTFNR/L Barra de Mandrilar


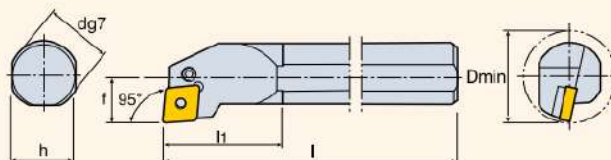
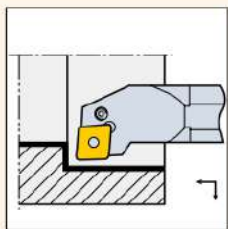
Código	Descrição	d	Pastilha
24759	PORTA PASTILHA S16Q HTFNL 1304	16	TNMG 1304
24760	PORTA PASTILHA S20Q HTFNL 1304	20	
25069	PORTA PASTILHA S16Q HTFNR 1304	16	
23372	PORTA PASTILHA S20Q HTFNR 1304	20	
23371	PORTA PASTILHA S25R HTFNR 1304	25	

S- MWLNR/L Barra de Mandrilar


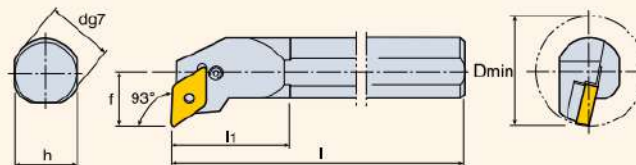
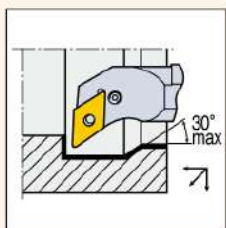
Código	Descrição	d	Pastilha
10431	PORTA PASTILHA S20S MWLNL 06	20	WN 0602
10685	PORTA PASTILHA S25T MWLNL 06	25	
7225	PORTA PASTILHA S25T MWLNL 08	25	WN 0804
7694	PORTA PASTILHA S32U MWLNL 08	32	

S- MWLNR/L CONTINUAÇÃO

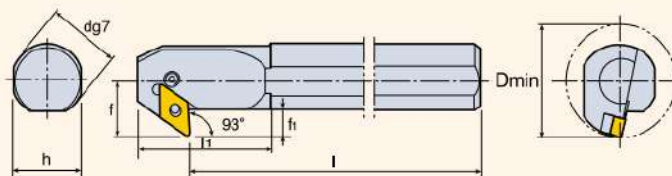
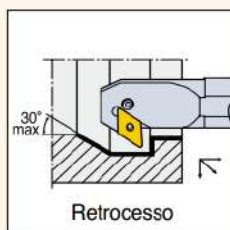
Código	Descrição	d	Pastilha
11829	PORTA PASTILHA S40V MWLNL 08	40	WN 0804
9336	PORTA PASTILHA S16R MWLNR 06	16	WN 0602
6980	PORTA PASTILHA S20S MWLNR 06	20	
7283	PORTA PASTILHA S25T MWLNR 06	25	
8055	PORTA PASTILHA S32U MWLNR 06	32	
9133	PORTA PASTILHA S40V MWLNR 06	40	
12000	PORTA PASTILHA S50W MWLNR 06	50	
9102	PORTA PASTILHA S25T MWLNR 08	25	WN 0804
9330	PORTA PASTILHA S32U MWLNR 08	32	
9472	PORTA PASTILHA S40V MWLNR 08	40	
9335	PORTA PASTILHA S50W MWLNR 08	50	
23595	PORTA PASTILHA S50X MWLNR 08 L-560	50	

S- PCLNR/L Barra de Mandrilar


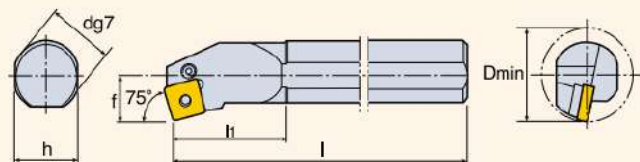
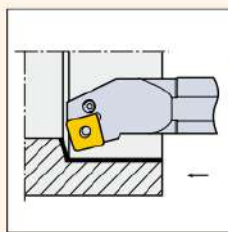
Código	Descrição	d	Pastilha
16366	PORTA PASTILHA S40V PCLNL 12	40	CN 1204
8344	PORTA PASTILHA S25T PCLNR 12	25	
9002	PORTA PASTILHA S32U PCLNR 12	32	
8840	PORTA PASTILHA S40V PCLNR 12	40	

S- PDUNR/L Barra de Mandrilar


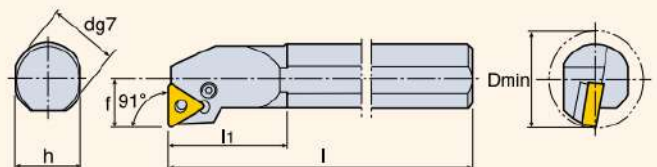
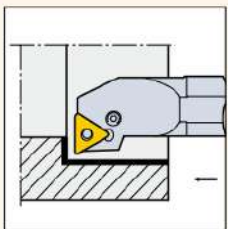
Código	Descrição	d	Pastilha
9421	PORTA PASTILHA S32U PDUNL 15	32	DN 1506
9936	PORTA PASTILHA S25T PDUNR 11	25	
8946	PORTA PASTILHA S32U PDUNR 15	32	
8841	PORTA PASTILHA S40V PDUNR 15	40	
16492	PORTA PASTILHA S50U PDUNR 15	50	

S- PDZNR/L Barra de Mandrilar


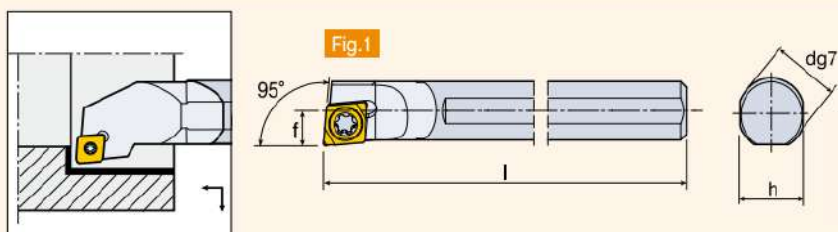
Código	Descrição	d	Pastilha
18763	PORTA PASTILHA S25T PDZNL 15	25	DN 1506
10107	PORTA PASTILHA S32U PDZNR 15	32	
14142	PORTA PASTILHA S40T PDZNR 15	40	

S- PSKNR/L Barra de Mandrilar


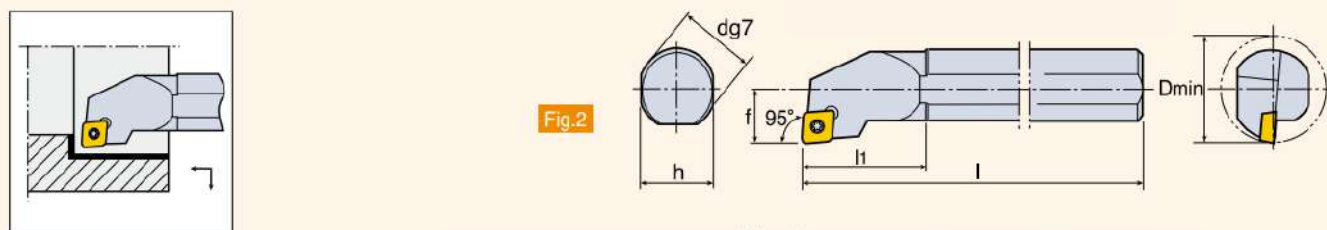
Código	Descrição	d	Pastilha
9935	PORTA PASTILHA S25T PSKNR 12	25	SN 1204

S- PTFNR/L Barra de Mandrilar


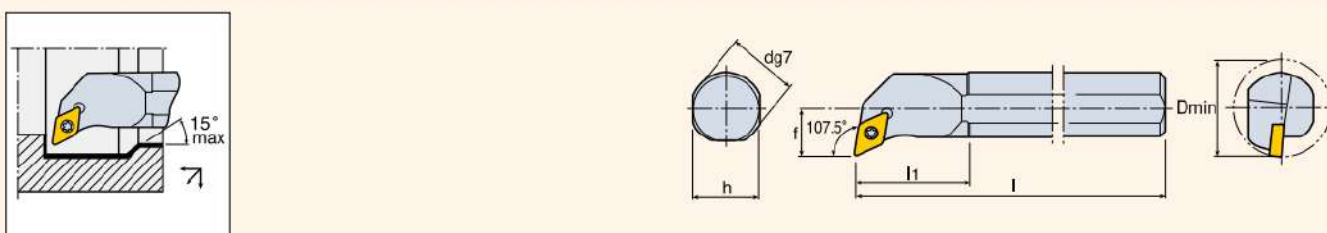
Código	Descrição	d	Pastilha
23373	PORTA PASTILHA S20Q PTFNL 1304	20	TN 1304
9406	PORTA PASTILHA S20S PTFNL 16	20	TN 1604
7924	PORTA PASTILHA S25T PTFNL 16	25	
17308	PORTA PASTILHA S25T PTFNL 16 NEUTRO	25	
9405	PORTA PASTILHA S32U PTFNL 16W	32	
8857	PORTA PASTILHA S40V PTFNL 16	40	
13261	PORTA PASTILHA S50W PTFNL 16	50	
8959	PORTA PASTILHA S20S PTFNR 16	20	
6575	PORTA PASTILHA S25T PTFNR 16	25	
20103	PORTA PASTILHA S25T PTFNR 16 NEUTRO	25	
8417	PORTA PASTILHA S32U PTFNR 16	32	
9419	PORTA PASTILHA S40V PTFNR 16	40	
9033	PORTA PASTILHA S50U PTFNR 16	50	
19511	PORTA PASTILHA S50W PTFNR 16	50	
17470	PORTA PASTILHA S63 PTFNR 16W	63	
11748	PORTA PASTILHA S32U PTFNR 22	32	TN 2204

C- SCLCR/L Barra de Mandrilar


Código	Descrição	d	Pastilha	Parafuso
16847	PORTA PASTILHA C04G SCLCR 03-D05	04	CC T 0301	TS16031I
14562	PORTA PASTILHA C08K SCLCR 06	08	CC T 0602	SO25050I
12606	PORTA PASTILHA C20S SCLCR 09	20	CC T 09T3	SO35080I

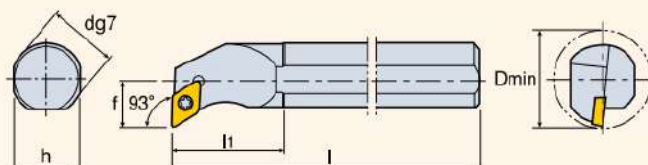
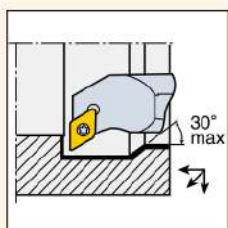
S- SCLCR/L Barra de Mandrilar


Código	Descrição	d	Pastilha	Parafuso
7221	PORTA PASTILHA S08K SCLCR 06	08	CC T 0602	SO 25050I SO 25065I
8699	PORTA PASTILHA S10K SCLCR 06	10		
8686	PORTA PASTILHA S12M SCLCR 06	12		
25338	PORTA PASTILHA S14M SCLCR 06	14		
8695	PORTA PASTILHA S12M SCLCR 09	12	CC T 09T3	SO 35080I
7454	PORTA PASTILHA S16M SCLCR 09	16		
8492	PORTA PASTILHA S16R SCLCR 09	16		
8958	PORTA PASTILHA S20S SCLCR-09	20		
24411	PORTA PASTILHA S25T SCLCR 12	25	CC T 1204	SO 45130I

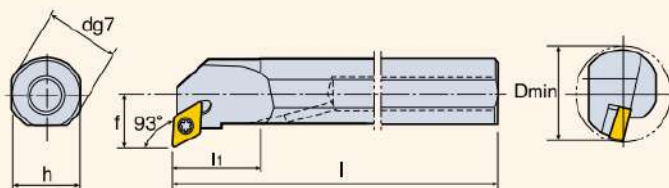
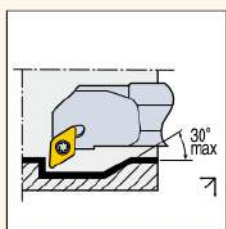
S- SDQCR/L Barra de Mandrilar


S- SDQCR/L CONTINUAÇÃO

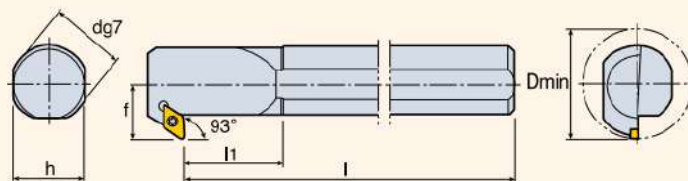
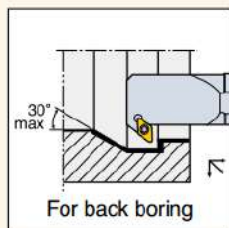
Código	Descrição	d	Pastilha
24606	PORTA PASTILHA S08K SDQCL 07	08	DC T 0702
16362	PORTA PASTILHA S10K SDQCL 07	10	
10787	PORTA PASTILHA S12M SDQCL 07	12	
23504	PORTA PASTILHA S16R SDQCL 07	16	
11749	PORTA PASTILHA S20S SDQCL 11	20	DC T 11T3
12717	PORTA PASTILHA S10K SDQCR 07	10	DC T 0702
16156	PORTA PASTILHA S12M SDQCR 07	12	
13219	PORTA PASTILHA S16R SDQCR 07	16	
9647	PORTA PASTILHA S16R SDQCR 11	16	DC T 11T3
7194	PORTA PASTILHA S20S SDQCR 11	20	
10785	PORTA PASTILHA S25T SDQCR 11	25	

S- SDUCR/L Barra de Mandrilar


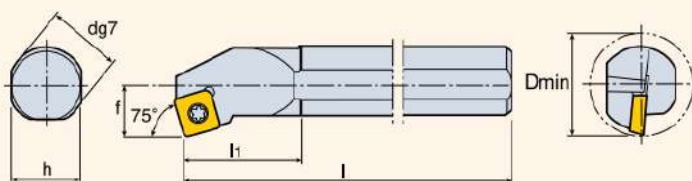
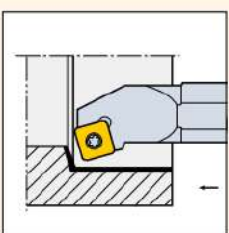
Código	Descrição	d	Pastilha
9327	PORTA PASTILHA S10K SDUCL 07	10	DC T 0702
15781	PORTA PASTILHA S12M SDUCL 07	12	
24025	PORTA PASTILHA S16R SDUCL 07	16	
8685	PORTA PASTILHA S16R SDUCL 11	16	DC T 11T3
8453	PORTA PASTILHA S20S SDUCL 11	20	
25326	PORTA PASTILHA S25T SDUCL 11	25	
8698	PORTA PASTILHA S10K SDUCR 07	10	DC T 0702
7921	PORTA PASTILHA S12M SDUCR 07	12	
8444	PORTA PASTILHA S16R SDUCR 07	16	
7366	PORTA PASTILHA S16R SDUCR 11	16	DC T 11T3
7206	PORTA PASTILHA S20S SDUCR 11	20	
7201	PORTA PASTILHA S25T SDUCR 11	25	
7367	PORTA PASTILHA S32U SDUCR 11	32	
16255	PORTA PASTILHA S40T SDUCR 11	40	

A- SDUNR/L Barra de Mandrilar


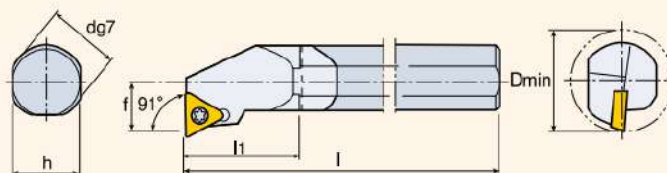
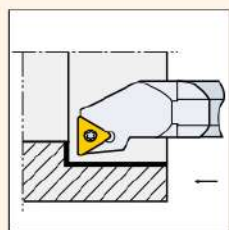
Código	Descrição	d	Pastilha
10493	PORTA PASTILHA A25T SDUNR 11	25	DN 1104
10063	PORTA PASTILHA S25T SDUNR 11	25	

S- SDZCR/L Barra de Mandrilar


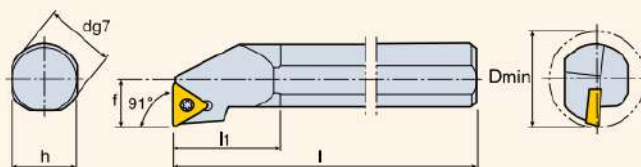
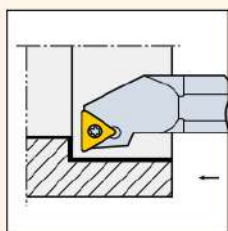
Código	Descrição	d	Pastilha
10587	PORTA PASTILHA S16R SDZCR 07	16	DC T 0702
10588	PORTA PASTILHA S20S SDZCR 11	20	DC T 11T3
11609	PORTA PASTILHA S32U SDZCR 11	32	

S- SSKCR/L Barra de Mandrilar


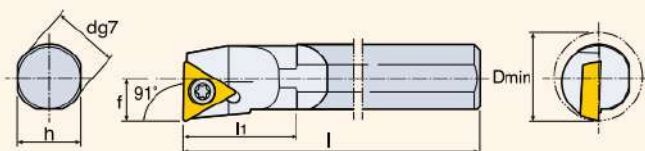
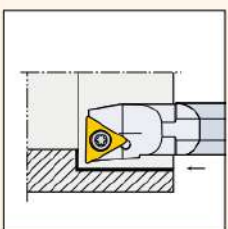
Código	Descrição	d	Pastilha
9932	PORTA PASTILHA S16R SSKCR 09	16	SC T 09T3
12937	PORTA PASTILHA S20S SSKCR 09	20	DC T 11T3

C- STFCR/L Barra de Mandrilar


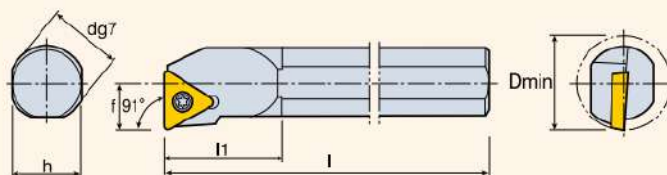
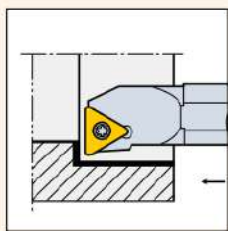
Código	Descrição	d	Pastilha
10145	PORTA PASTILHA C10K STFCL 11	10	TC T 1102
15775	PORTA PASTILHA C12M STFCL 11	12	
8814	PORTA PASTILHA C10K STFCR 09	10	TC T 0902
8687	PORTA PASTILHA C10K STFCR 11	12	TC T 1102
8697	PORTA PASTILHA C12M STFCR 11	12	
8653	PORTA PASTILHA C16R STFCR 11	16	

S- STFCL/L Barra de Mandrilar


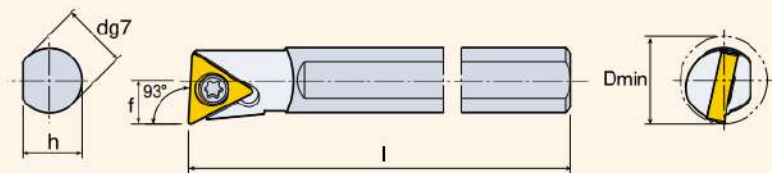
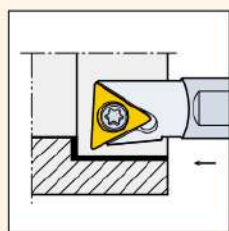
Código	Descrição	d	Pastilha
12335	PORTA PASTILHA S06H STFCL 06	06	TC T 06T1
7706	PORTA PASTILHA S08K STFCL 09	08	TC T 0902
16182	PORTA PASTILHA S10K STFCL 09	10	
15128	PORTA PASTILHA S10K STFCL 11	10	TC T 1102
8316	PORTA PASTILHA S12M STFCL 11	12	
7195	PORTA PASTILHA S16R STFCL 11	16	
16710	PORTA PASTILHA S18R STFCL 11	18	
24397	PORTA PASTILHA S20S STFCL 11	20	
13580	PORTA PASTILHA S16R STFCL 16	16	TC T 16T3
11478	PORTA PASTILHA S20S STFCL 16	20	
12376	PORTA PASTILHA S25T STFCL 16	25	
10430	PORTA PASTILHA S08K STFCR 06	08	TC T 06T1
7375	PORTA PASTILHA S08K STFCR 09	08	TC T 0902
7672	PORTA PASTILHA S10K STFCR 09	10	
8640	PORTA PASTILHA S12M STFCR 09	12	
9933	PORTA PASTILHA S16R STFCR 09	16	
8927	PORTA PASTILHA S10K STFCR 11	10	TC T 1102
7917	PORTA PASTILHA S12M STFCR 11	12	
7705	PORTA PASTILHA S16R STFCR 11	16	
13400	PORTA PASTILHA S18R STFCR 11	18	
6847	PORTA PASTILHA S20S STFCR 11	20	
8533	PORTA PASTILHA S16R STFCR 16	16	TC T 16T3
7923	PORTA PASTILHA S20S STFCR 16	20	
7357	PORTA PASTILHA S25T STFCR 16	25	
9499	PORTA PASTILHA S32U STFCR 16	32	

C- STFPR/L Barra de Mandrilar


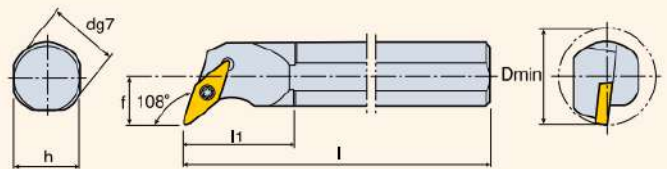
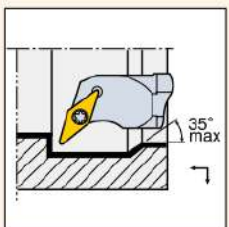
Código	Descrição	d	Pastilha
8822	PORTA PASTILHA C10K STFPR 11	10	TPGT 1103

S- STFPR/L Barra de Mandrilar


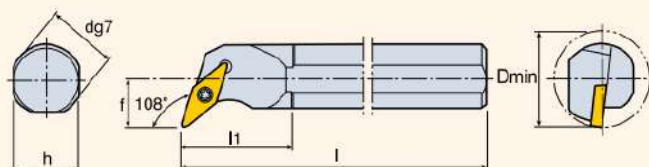
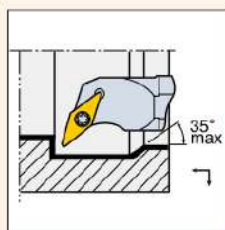
Código	Descrição	d	Pastilha
25138	PORTA PASTILHA S12M STFPL 11	12	TP T 1103
17444	PORTA PASTILHA S16R STFPL 11	16	
15783	PORTA PASTILHA S20S STFPL 11	20	
11693	PORTA PASTILHA S08K STFPR 09	08	TP T 0902
23237	PORTA PASTILHA S10K STFPR 09	10	
9296	PORTA PASTILHA S10K STFPR 11	10	TP T 1103
9247	PORTA PASTILHA S12M STFPR 11	12	
9641	PORTA PASTILHA S16R STFPR 11	16	
12251	PORTA PASTILHA S18R STFPR 11	18	
9642	PORTA PASTILHA S20S STFPR 11	20	
24271	PORTA PASTILHA S25T STFPR 11	25	
17392	PORTA PASTILHA S20S STFPR 16	20	TP T 1604

C- STUBR/L Barra de Mandrilar


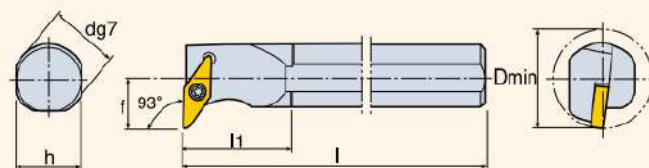
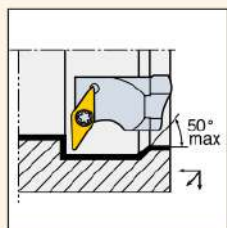
Código	Descrição	d	Pastilha
15543	PORTA PASTILHA C06J STUBR 06-08	06	TB T 0601

S- SVBQR/L Barra de Mandrilar


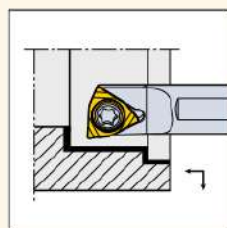
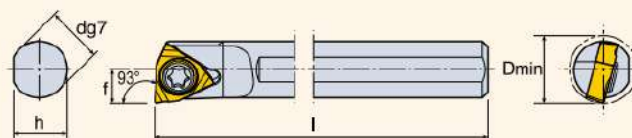
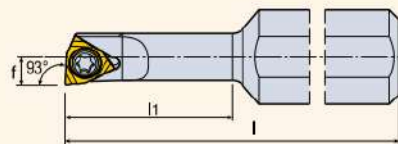
Código	Descrição	d	Pastilha
11529	PORTA PASTILHA S25T SVQBL 16	25	VB T 1604
10148	PORTA PASTILHA S32U SVQBL 16	32	
9361	PORTA PASTILHA S25T SVQBR 16	25	
9372	PORTA PASTILHA S32U SVQBR 16	32	

S- SVQCR/L Barra de Mandrilar


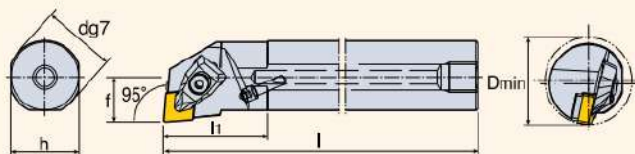
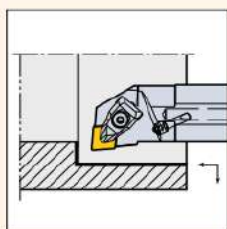
Código	Descrição	d	Pastilha
14143	PORTA PASTILHA S40T SVQCL 16	40	VC T 1604

S- SVUBR/L Barra de Mandrilar


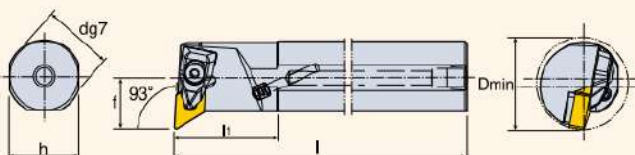
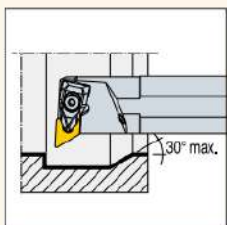
Código	Descrição	d	Pastilha
10342	PORTA PASTILHA S25T SVUBL 16	25	VB T 1604
17560	PORTA PASTILHA S25T SVUBR 11	25	VB T 1604
9696	PORTA PASTILHA S25T SVUBR 16	25	
9328	PORTA PASTILHA S32U SVUBR 16	32	
14559	PORTA PASTILHA S40T SVUBR 16	40	
13148	PORTA PASTILHA S40V SVUBR 16	40	

S- SWUBR/L Barra de Mandrilar

Fig.1

Fig.2


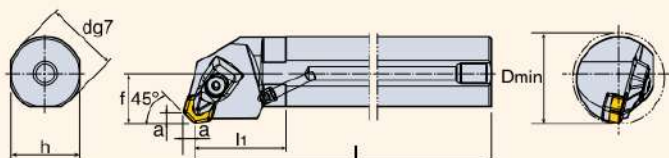
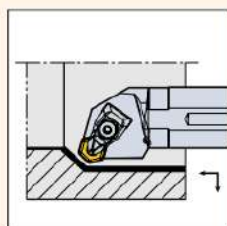
Código	Descrição	d	Pastilha
25062	PORTA PASTILHA S10H SWUBR 06D06	10	WB T 0601

A- TCLNR/L Barra de Mandrilar


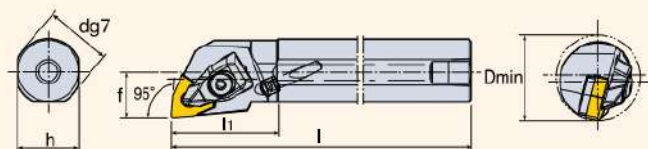
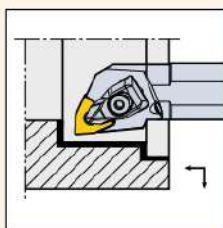
Código	Descrição	d	Pastilha
14140	PORTA PASTILHA A32U TCLNL 12	32	CN 1204
14141	PORTA PASTILHA A40T TCLNL 12	40	
8713	PORTA PASTILHA A32U TCLNR 12	32	
8956	PORTA PASTILHA A40T TCLNR 12	40	
10051	PORTA PASTILHA A50U TCLNR 12	50	

A- TDUNR/L Barra de Mandrilar


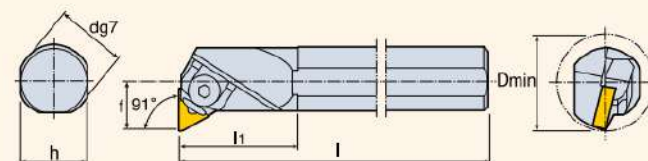
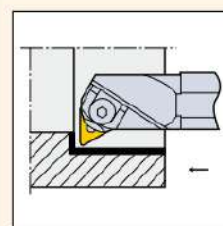
Código	Descrição	d	Pastilha
10406	PORTA PASTILHA A32U TDUNL 15	32	DN 1506
10052	PORTA PASTILHA A32U TDUNR 15	32	
8730	PORTA PASTILHA A40V TDUNR 15	40	
8715	PORTA PASTILHA A50W TDUNR 15	50	

A- THSNR/L Barra de Mandrilar


Código	Descrição	d	Pastilha
10589	PORTA PASTILHA A32U THSNL 05	32	HN G 0504
10090	PORTA PASTILHA A40V THSNL 05	40	
25297	PORTA PASTILHA A50U THSNL 05	50	
9886	PORTA PASTILHA A32T THSNR 05	32	
9353	PORTA PASTILHA A40V THSNR 05	40	
10057	PORTA PASTILHA A50W THSNR 05	50	

A- TWLNR/L Barra de Mandrilar


Código	Descrição	d	Pastilha
24294	PORTA PASTILHA A20S TWLNL 06	25	WN 0604
24464	PORTA PASTILHA A25T TWLNL 06	25	
10507	PORTA PASTILHA A25T TWLNL 08	25	WN 0804
13378	PORTA PASTILHA A32U TWLNL 06	32	
9972	PORTA PASTILHA A32U TWLNL 08	32	
13379	PORTA PASTILHA A40V TWLNL 08	40	
13382	PORTA PASTILHA A50U TWLNL 08	50	
8696	PORTA PASTILHA A20S TWLNR 06	20	WN 0604
8821	PORTA PASTILHA A25T TWLNR 06	25	
10058	PORTA PASTILHA A32U TWLNR 06	32	
13380	PORTA PASTILHA A40V TWLNR 06	40	
8810	PORTA PASTILHA A25T TWLNR 08	25	WN 0804
8656	PORTA PASTILHA A32U TWLNR 08	32	
8725	PORTA PASTILHA A40V TWLNR 08	40	
8275	PORTA PASTILHA A40V TWLNR 08	40	
13383	PORTA PASTILHA A50U TWLNR 08	50	

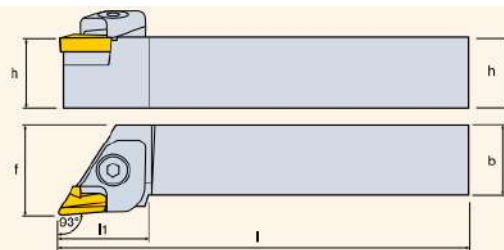
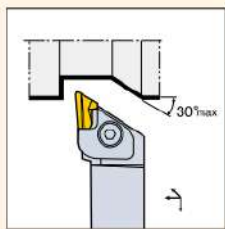
S- WTFNR/L Barra de Mandrilar


Código	Descrição	d	Pastilha
23370	PORTA PASTILHA S25R WTFNL 1304	25	TN 1304
25164	PORTA PASTILHA S32S WTFNL 1304	32	
25166	PORTA PASTILHA S40T WTFNL 13	40	
8461	PORTA PASTILHA S25T WTFNL 16	25	TN 1604
10086	PORTA PASTILHA S32T WTFNL 16	32	
13381	PORTA PASTILHA S40T WTFNL 16	40	
25123	PORTA PASTILHA S25R WTFNR 1304	25	TN 1304
23374	PORTA PASTILHA S32S WTFNR 1304	32	
8645	PORTA PASTILHA S25T WTFNR 16	25	TN 1604
8858	PORTA PASTILHA S32T WTFNR 16	32	
8716	PORTA PASTILHA S40T WTFNR 16	40	
10256	PORTA PASTILHA S50W WTFNR 16	50	
13127	PORTA PASTILHA S40T WTFNR 22	40	TN 2204



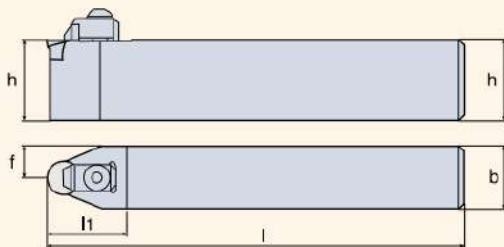
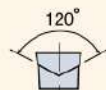
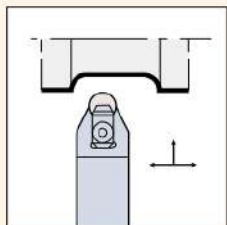
PORTA PASTILHAS SUPORTES DE TORNEAMENTO

CKJNR/L Porta Pastilhas



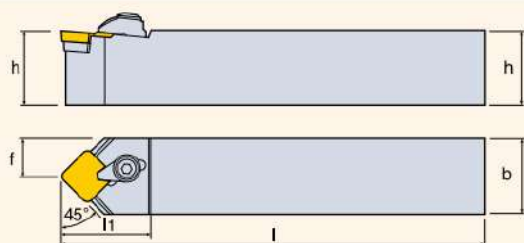
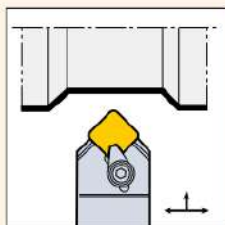
Código	Descrição	h	Pastilha
17322	PORTA PASTILHA CKJNL 3232 P16	32	KNUX 1604 R/L 11 KNUX 1604 R/L 12
19178	PORTA PASTILHA CKJNR 2525 M16	25	
17321	PORTA PASTILHA CKJNR 3232 P16	32	

CRDCN Porta Pastilhas



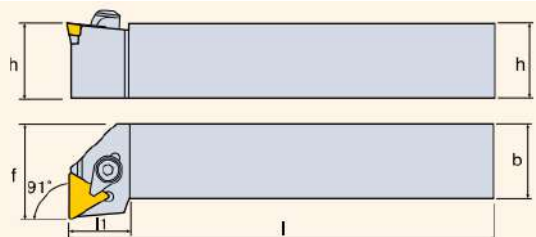
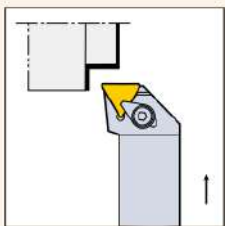
Código	Descrição	h	Pastilha
23912	PORTA PASTILHA CRDCN 2525 M06-120	25	RCGX 060600

CSDPN Porta Pastilhas

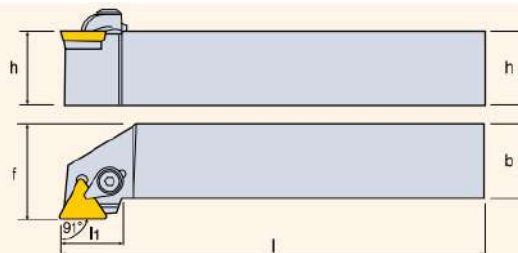
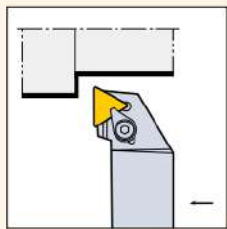


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6877	PORTA PASTILHA CSDPN 2020 K12	20	SPMR, SP N 1203

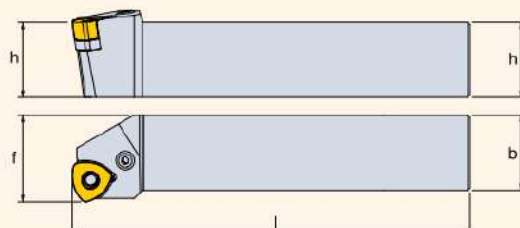
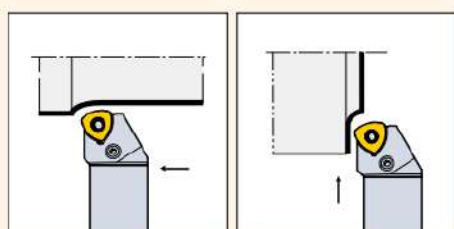
CTFPR Porta Pastilhas



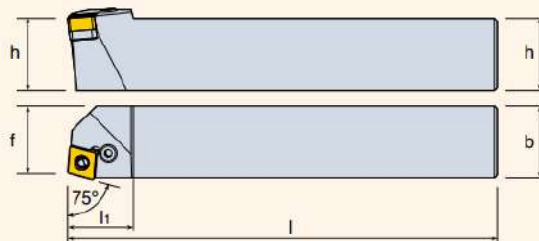
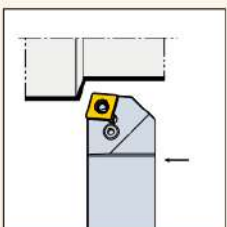
Código	Descrição	h	Pastilha
6536	PORTA PASTILHA CTFPR 2020 K16	20	TPMR, TP N 1603
6537	PORTA PASTILHA CTFPR 2525 M16	25	

CTGPR/L Porta Pastilhas


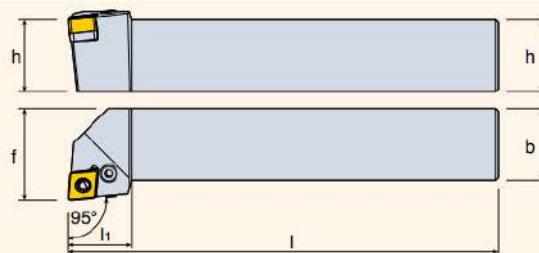
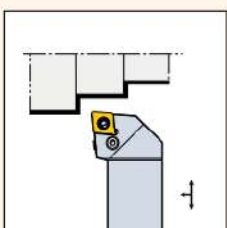
Código	Descrição	h	Pastilha
24665	PORTA PASTILHA CTGPL 2020 K16	20	TPMR, TP N 1603
11796	PORTA PASTILHA CTGPR 2020 K16	20	

HBXNR/L Porta Pastilhas


Código	Descrição	h	Pastilha
13724	PORTA PASTILHA HBXNL 2525 M1507	25	BNMX 150720R/L-HF
13719	PORTA PASTILHA HBXNL 3232 P1507	32	
13863	PORTA PASTILHA HBXNR 2525 M1507	25	

HCBNR/L Porta Pastilhas


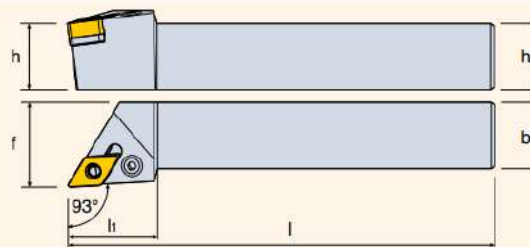
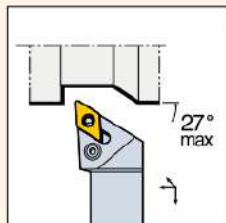
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19974	PORTA PASTILHA HCBNR 2525 M1607	25	CNMG 1607

HCLNR/L Porta Pastilhas


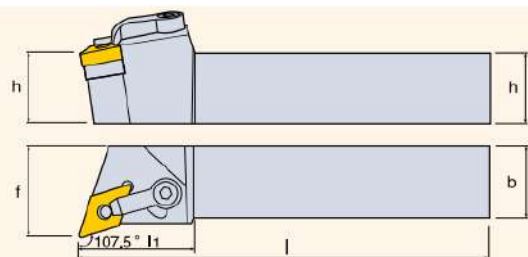
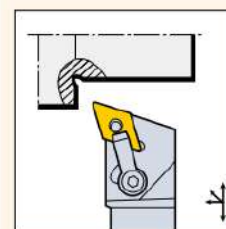
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24389	PORTA PASTILHA HCLNL 2020 K 0904	25	CNMG 0904
13838	PORTA PASTILHA HCLNL 2525 M1607	32	CNMG 1607
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14185	PORTA PASTILHA HCLNL 3232 P1607	32	

HCLNR/L Porta Pastilhas

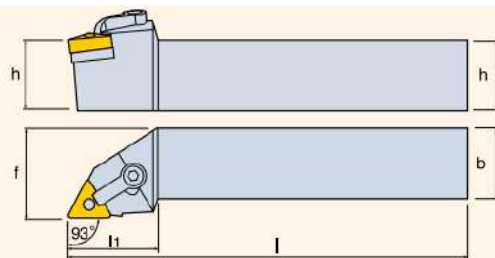
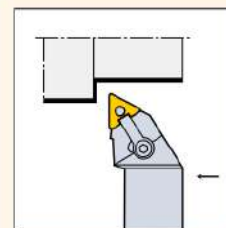
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25153	PORTA PASTILHA HCLNR 2525 M0904	25	CNMG 0904
13880	PORTA PASTILHA HCLNR 2525 M1607	25	CNMG 1607
14563	PORTA PASTILHA HCLNR 3232 P1607	32	

HDJNR/L Porta Pastilhas


Código	Descrição	h	Pastilha
25152	PORTA PASTILHA HDJNL 2020 K13	20	DNMG 1305
24914	PORTA PASTILHA HDJNL 2525 M1305	25	

MDQNR/L Porta Pastilhas


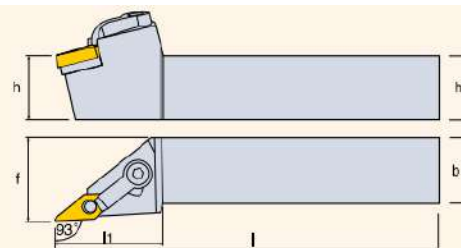
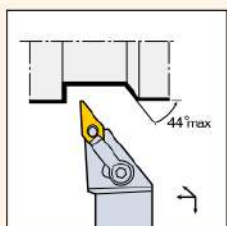
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19166	PORTA PASTILHA MDQNR 2525 M15	25	DN 1504

MTJNR/L Porta Pastilhas


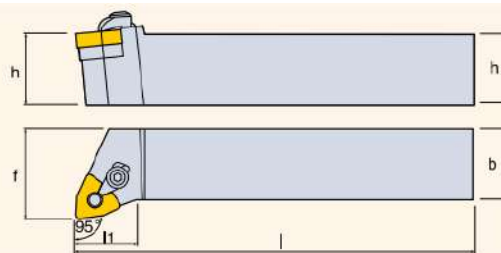
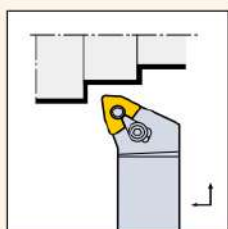
Código	Descrição	h	Pastilha
7420	PORTA PASTILHA MTJNL 2020 K16	20	TN 1604
7608	PORTA PASTILHA MTJNL 2525 M16	25	
10836	PORTA PASTILHA MTJNL 3232 M16	32	
13566	PORTA PASTILHA MTJNL 3232 P22	32	TN 2204
6573	PORTA PASTILHA MTJNR 2020 K16	20	TN 1604
6859	PORTA PASTILHA MTJNR 2525 M16	25	
9671	PORTA PASTILHA MTJNR 3232 P16	32	
10482	PORTA PASTILHA MTJNR 4040 S16	40	

MTJNR/L Porta Pastilhas

Código	Descrição	h	Pastilha
10044	PORTA PASTILHA MTJNR 2525 M22	25	TN 2204
10223	PORTA PASTILHA MTJNR 3232 P22	32	
19442	PORTA PASTILHA MTJNR 4040 S22	40	
11752	PORTA PASTILHA MTJNR 5050 S22	50	

MVJNR/L Porta Pastilhas


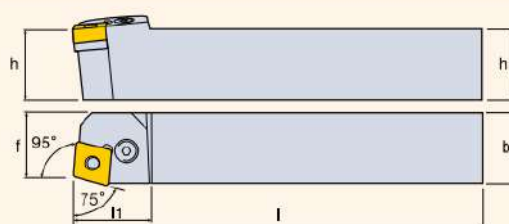
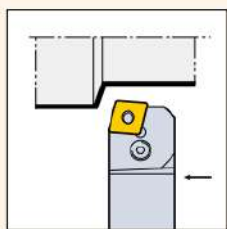
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24489	PORTA PASTILHA MVJNR 2525 M16	25	VN 1604
6577	PORTA PASTILHA MVJNR 2020 K16	20	
18874	PORTA PASTILHA MVJNR 2525 M16	25	
23913	PORTA PASTILHA MVJNR 3232 P16	32	

MWLNR/L Porta Pastilhas


Código	Descrição	h	Pastilha
7421	PORTA PASTILHA MWLNL 2020 K06	20	WN 0604
7729	PORTA PASTILHA MWLNL 2525 M06	25	
7422	PORTA PASTILHA MWLNL 2020 K08	20	
11371	PORTA PASTILHA MWLNL 2525 M08	25	WN 0804
19891	PORTA PASTILHA MWLNL 3225 M08	32	
10166	PORTA PASTILHA MWLNL 3232 M08	32	
6572	PORTA PASTILHA MWLNR 2020 K06	20	WN 0604
7240	PORTA PASTILHA MWLNR 2525 M06	25	
7345	PORTA PASTILHA MWLNR 2020 K08	20	
7280	PORTA PASTILHA MWLNR 2525 M08	25	WN 0804
9931	PORTA PASTILHA MWLNR 3232 P08	32	

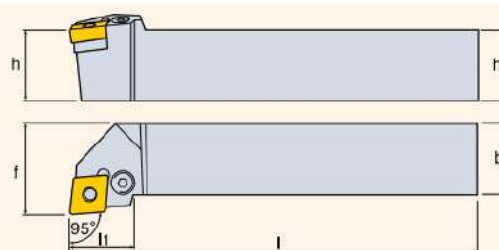
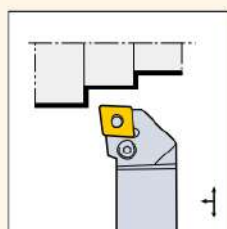


PCBNR/L Porta Pastilhas



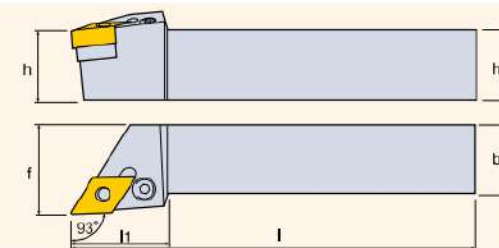
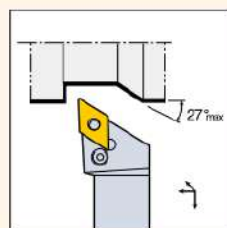
Código	Descrição	h	Pastilha
10044	PORTA PASTILHA MTJNR 2525 M22	25	TN 2204
10223	PORTA PASTILHA MTJNR 3232 P22	32	
19442	PORTA PASTILHA MTJNR 4040 S22	40	
11752	PORTA PASTILHA MTJNR 5050 S22	50	

PCLNR/L Porta Pastilhas

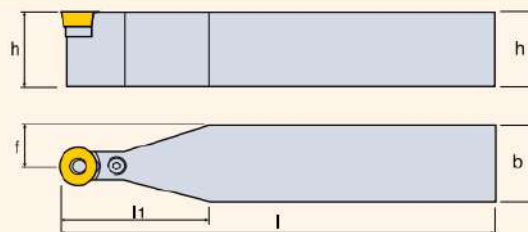
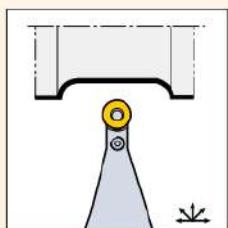


Código	Descrição	h	Pastilha
10798	PORTA PASTILHA PCLNL 2525 M12	25	CN 1204
6637	PORTA PASTILHA PCLNR 2020 K12	20	
9285	PORTA PASTILHA PCLNR 2525 M12	25	

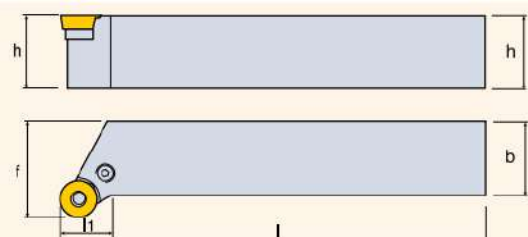
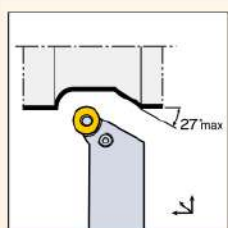
PDJNR/L Porta Pastilhas



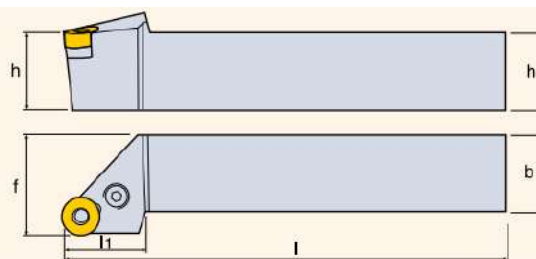
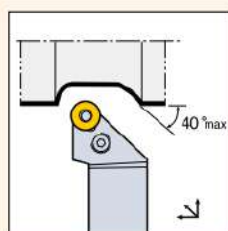
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17409	PORTA PASTILHA PDJNL 2020 K11	20	DN 1104
15779	PORTA PASTILHA PDJNL 4040 S15	40	DN 1506
7736	PORTA PASTILHA PDJNR 2525 M15	25	
15780	PORTA PASTILHA PDJNR 4040 S15	40	

PRDCN
Porta Pastilhas


Código	Descrição	h	Pastilha
17443	PORTA PASTILHA PRDCN 2020 K12	20	RC X 120400

PRGCR/L
Porta Pastilhas


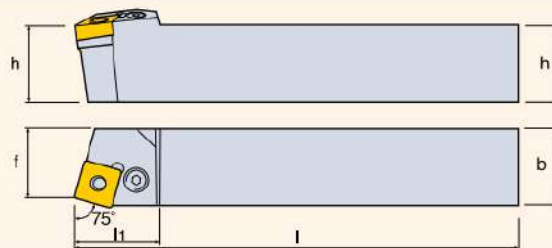
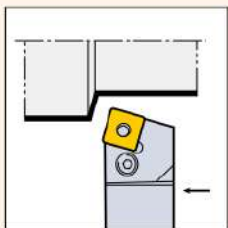
Código	Descrição	h	Pastilha
18941	PORTA PASTILHA PRGCL 2525 M12	25	RC X 120400
10050	PORTA PASTILHA PRGCR 2020 K12	20	
12370	PORTA PASTILHA PRGCR 2525 M12	25	
10142	PORTA PASTILHA PRGCR 2525 M16	25	RC X 160600
15463	PORTA PASTILHA PRGCR 3232 P16	32	
9658	PORTA PASTILHA PRGCR 3232 P20	32	RC X 200600
10125	PORTA PASTILHA PRGCR 4040 S25	40	RC X 250700

PRGNR/L
Porta Pastilhas


Código	Descrição	h	Pastilha
10143	PORTA PASTILHA PRGNL 2525 M12	25	RNMG 120400

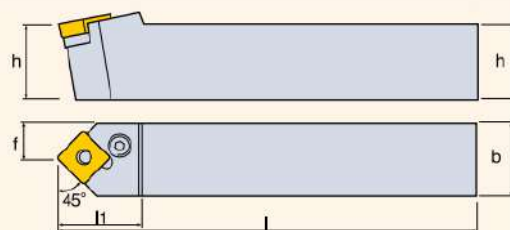
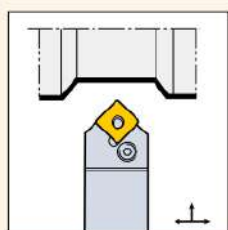


PSBNR/L Porta Pastilhas



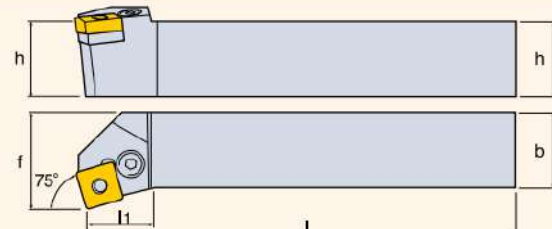
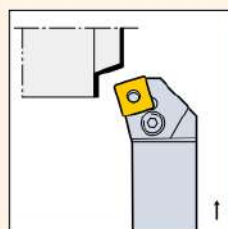
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9219	PORTA PASTILHA PSBNL 2525 M12	25	SN 1204
10204	PORTA PASTILHA PSBNR 2020 M12	20	
9945	PORTA PASTILHA PSBNR 2525 M12	25	

PSDNN Porta Pastilhas



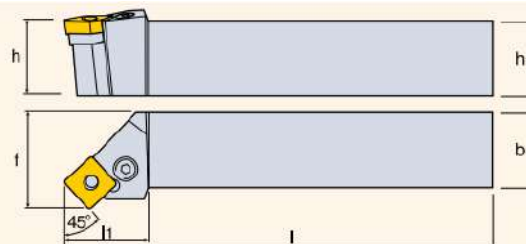
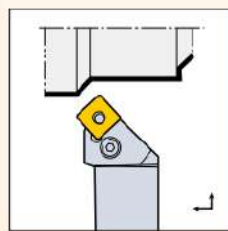
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7239	PORTA PASTILHA PSDNN 2020 K12	20	SN 1204
17262	PORTA PASTILHA PSDNN 2525 M12	25	

PSKNR/L Porta Pastilhas



Código	Descrição	h	Pastilha
7239	PORTA PASTILHA PSDNN 2020 K12	20	SN 1204
17262	PORTA PASTILHA PSDNN 2525 M12	25	

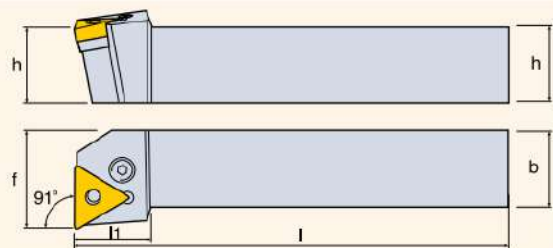
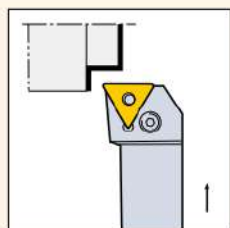
PSSNR/L Porta Pastilhas



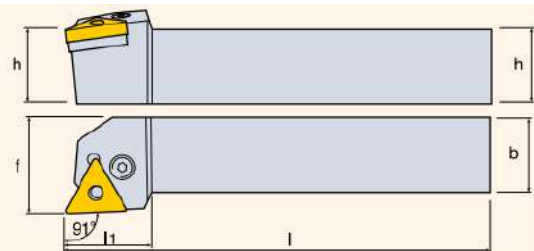
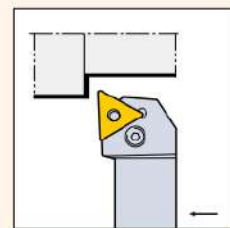
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8809	PORTA PASTILHA PSSNR 2020 K09	20	SN 0903

PSSNR/L Porta Pastilhas

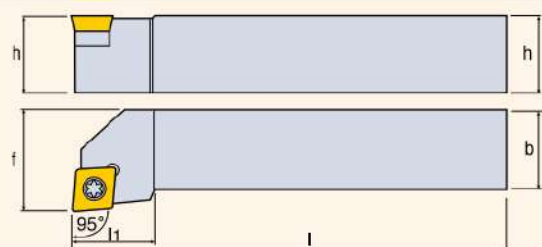
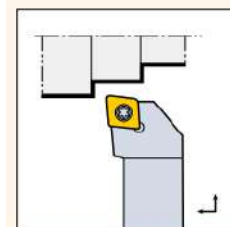
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9801	PORTA PASTILHA PSSNR 1212 F12	12	SN 1204
6723	PORTA PASTILHA PSSNR 2020 K12	20	
7347	PORTA PASTILHA PSSNR 2525 M12	25	
12467	PORTA PASTILHA PSSNR 3232 P12	32	
9697	PORTA PASTILHA PSSNR 3232 P19	32	SN 1906
10126	PORTA PASTILHA PSSNR 4040 S19	40	

PTFNR/L Porta Pastilhas


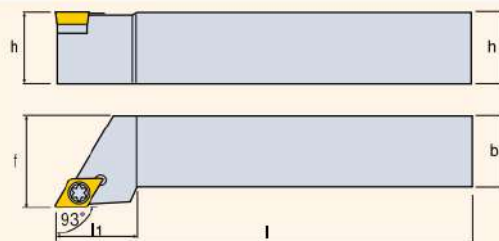
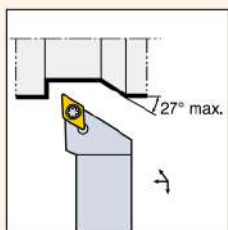
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10158	PORTA PASTILHA PTFNR 4040 S22	40	TN 2204

PTGNR/L Porta Pastilhas


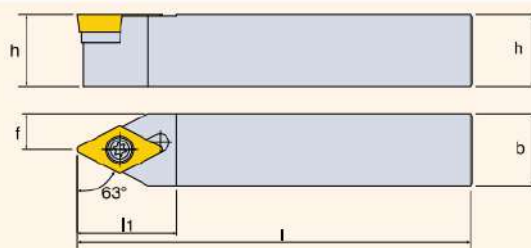
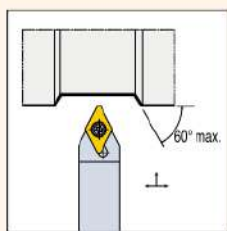
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6931	PORTA PASTILHA PTGNR 2020 K16	20	TN 1604

SCLCR/L Porta Pastilhas


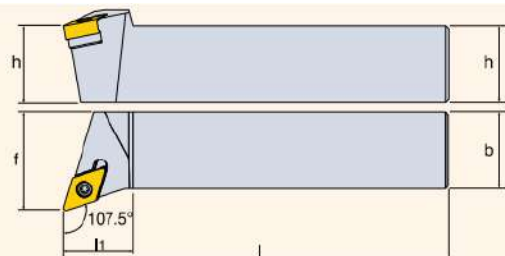
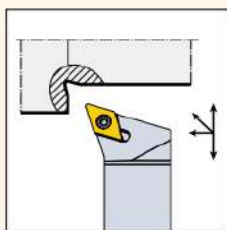
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6849	PORTA PASTILHA SCLCR 1212 E09	12	CC T 09T3
14178	PORTA PASTILHA SCLCR 1616 K09	16	
7452	PORTA PASTILHA SCLCR 2020 K09	20	
9316	PORTA PASTILHA SCLCR 2020 K12	20	CC T 1204
9681	PORTA PASTILHA SCLCR 2525 M12	25	

SDJCR/L Porta Pastilhas


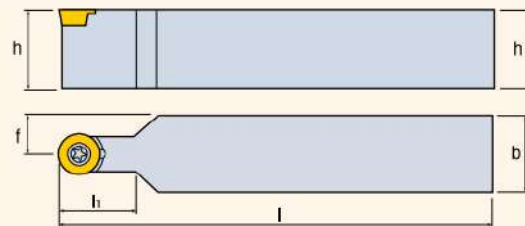
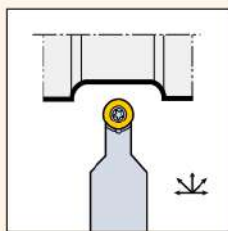
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17484	PORTA PASTILHA SDJCL 1212 F07	12	DC T 0702
8960	PORTA PASTILHA SDJCL 2020 K11	20	DC T 11T3
22871	PORTA PASTILHA SDJCL 2525 K11	25	
17640	PORTA PASTILHA SDJCR 1212 F07	12	DC T 0702
11526	PORTA PASTILHA SDJCR 1616 H07	16	
15784	PORTA PASTILHA SDJCR 2020 K07	20	
16896	PORTA PASTILHA SDJCR 2020 K07-SH	20	
9034	PORTA PASTILHA SDJCR 1616 H11	16	DC T 11T3
6873	PORTA PASTILHA SDJCR 2020 K11	20	
8894	PORTA PASTILHA SDJCR 2525 M11	25	

SDNCN Porta Pastilhas


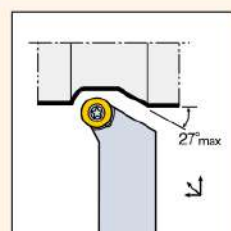
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10477	PORTA PASTILHA SDNCN 1010 F07	10	DC T 0702
9793	PORTA PASTILHA SDNCN 1212 F07	12	
14389	PORTA PASTILHA SDNCN 2020 K11	20	DC T 11T3
17997	PORTA PASTILHA SDNCN 2525 M11	25	

SDQNR/L Porta Pastilhas


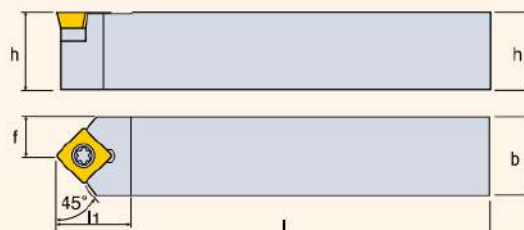
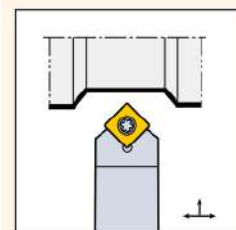
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17808	PORTA PASTILHA SDQNR 2525 M11	25	DN 1104

SRDCN
Porta Pastilhas


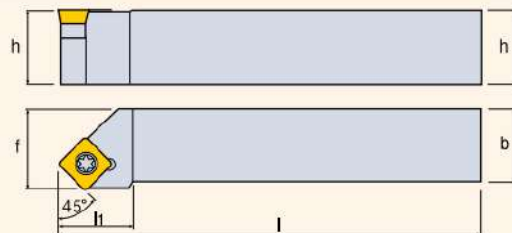
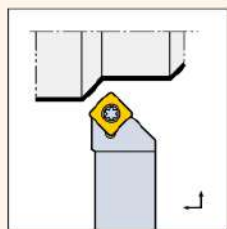
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23191	PORTA PASTILHA SRDCN 2525 M08	25	RC T 0803
9509	PORTA PASTILHA SRDCN 2020 K10	20	
10221	PORTA PASTILHA SRDCN 2525 M10	25	RC T 10T3
24497	PORTA PASTILHA SRDCN 2020 K12	20	
10576	PORTA PASTILHA SRDCN 2525 M12	25	RC T 1204
19399	PORTA PASTILHA SRDCN 3225 M16	32	
13203	PORTA PASTILHA SRDCN 4040 S16	40	RC T 1604

SRGCR/L
Porta Pastilhas


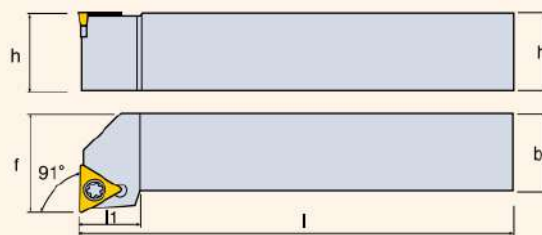
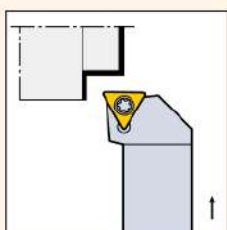
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20070	PORTA PASTILHAS SRGCR 2020 K10	20	RC T 10T3
9678	PORTA PASTILHAS SRGCR 2525 M10	25	
23167	PORTA PASTILHAS SRGCR 2020 K12	20	RC T 1204

SSDCN
Porta Pastilhas


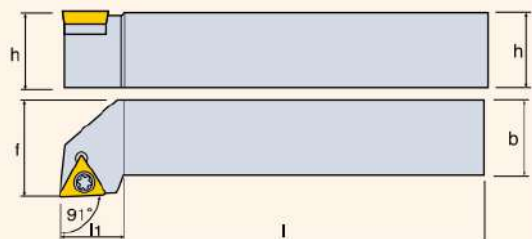
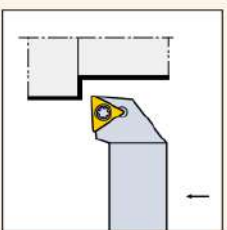
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23839	PORTA PASTILHA SSDCN 1010 F09 120L	10	SC T 09T3
10577	PORTA PASTILHA SSDCN 1212 F09	12	
9946	PORTA PASTILHA SSDCN 1616 H09	16	

SSSCR/L Porta Pastilhas


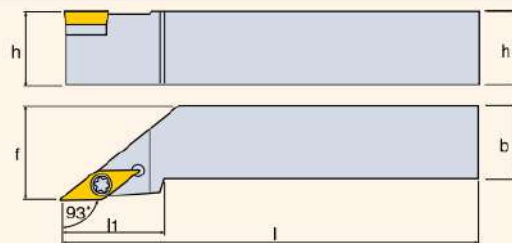
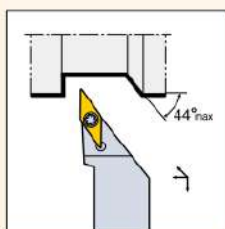
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25211	PORTA PASTILHA SSSCR 1010 F09 L120	10	SC T 09T3 SC T 1204
10578	PORTA PASTILHA SSSCR 2020 K12	20	
10149	PORTA PASTILHA SSSCR 2525 M12	25	

STFCR/L Porta Pastilhas


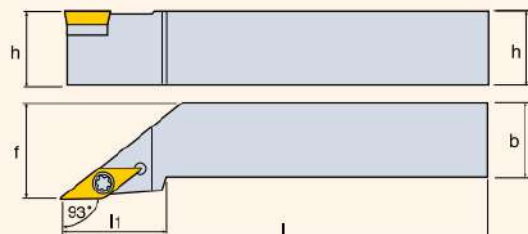
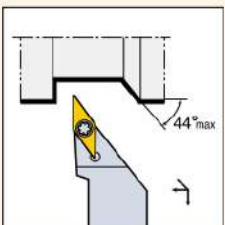
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8961	PORTA PASTILHA STFCL 2020 K16	20	TC T 16T3 TC T 1102
19864	PORTA PASTILHA STFCR 1010 H11	10	
18263	PORTA PASTILHA STFCR 1212 K11	12	
15785	PORTA PASTILHA STFCR 2020 K11	20	
9944	PORTA PASTILHA STFCR 2525 M11	25	
8702	PORTA PASTILHA STFCR 2020 K16	20	TC T 16T3

STFCR/L Porta Pastilhas


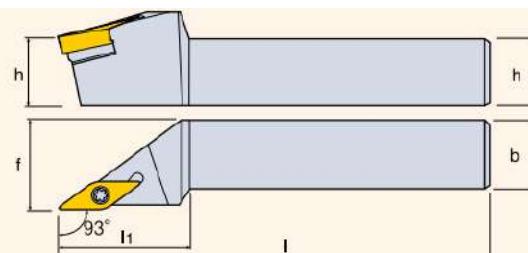
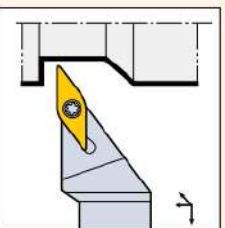
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10517	PORTA PASTILHA STGCL 2020 K16	20	TC T 16T3
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10167	PORTA PASTILHA STGCR 1010 11 -L120	10	TC T 1102
11809	PORTA PASTILHA STGCR 1212 H11	12	
10102	PORTA PASTILHA STGCR 1616 H11	16	
16949	PORTA PASTILHA STGCR 2020 K11-SH	20	
9960	PORTA PASTILHA STGCR 1616 H16	16	TC T 16T3
6569	PORTA PASTILHA STGCR 2020 K16	20	
8535	PORTA PASTILHA STGCR 2525 M16	25	

STFCR/L Porta Pastilhas


Código	Descrição	h	Pastilha
10928	PORTA PASTILHA SVJBL 2020 K11	20	VB T 1103
13160	PORTA PASTILHA SVJBL 2525 M11	25	
13395	PORTA PASTILHA SVJBL 1212 K16	12	VB T 1604
8701	PORTA PASTILHA SVJBL 2020 K16	20	
8364	PORTA PASTILHA SVJBL 2525 M16	25	
8634	PORTA PASTILHA SVJBL 2525 M16	25	
12617	PORTA PASTILHA SVJBL 3232 P16	32	
25171	PORTA PASTILHA SVJBR 1010 K11	10	VB T 1103
19280	PORTA PASTILHA SVJBR 1212 K11	12	
9715	PORTA PASTILHA SVJBR 2020 K11	20	
9716	PORTA PASTILHA SVJBR 2525 K11	25	
11830	PORTA PASTILHA SVJBR 1212 K16	12	VB T 1604
6961	PORTA PASTILHA SVJBR 2020 K16	20	
6408	PORTA PASTILHA SVJBR 2525 M16	25	
12468	PORTA PASTILHA SVJBR 3232 P16	32	

SVJCR/L Porta Pastilhas


Código	Descrição	h	Pastilha
19502	PORTA PASTILHA SVJCL 2525 M16	25	VC T 1604
19501	PORTA PASTILHA SVJCR 2525 M16	25	

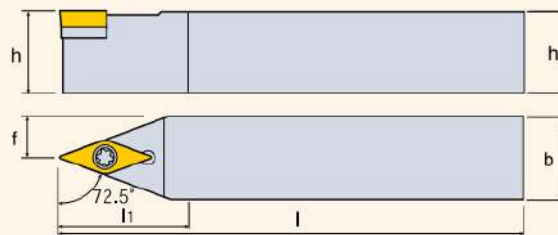
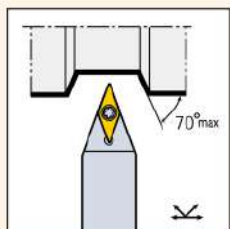
SVJNR/L Porta Pastilhas


Código	Descrição	h	Pastilha
24398	PORTA PASTILHA SVJNL 2020 K13	20	VN 1304
18897	PORTA PASTILHA SVJNL 2525 M13	25	
7627	PORTA PASTILHA SVJNR 2525 M13	25	



SVVBN

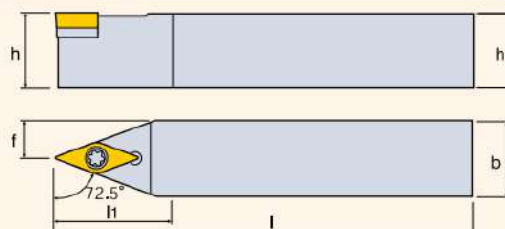
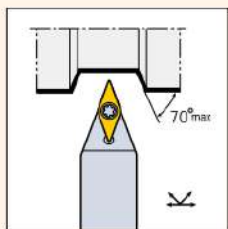
Porta Pastilhas



Código	Descrição	h	Pastilha
24603	PORTA PASTILHA SVVBN 1212 K11	12	V 1103
11992	PORTA PASTILHA SVVBN 2020 K11	20	
19363	PORTA PASTILHA SVVBN 2525 M11	25	
7453	PORTA PASTILHA SVVBN 2020 K16	20	VB 1604
7609	PORTA PASTILHA SVVBN 2525 M16	25	

SVVCN

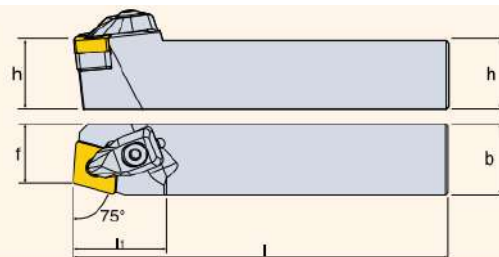
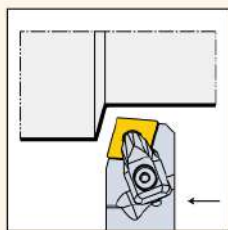
Porta Pastilhas



Código	Descrição	h	Pastilha
24213	PORTA PASTILHA SVVCN 2525 M16	25	VC T 1604

TCBNR/L

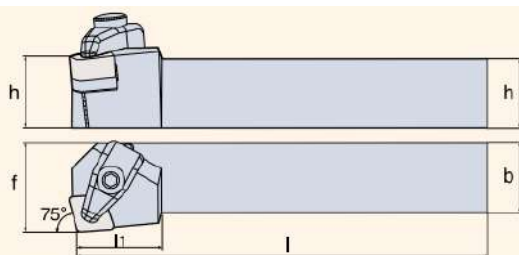
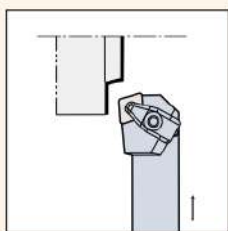
Porta Pastilhas



Código	Descrição	h	Pastilha
8487	PORTA PASTILHA TCBNR 2525 M12	25	CNGX 1207 CH
9243	PORTA PASTILHA TCBNR 2525 M12 CH	25	

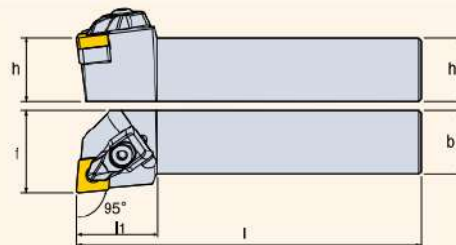
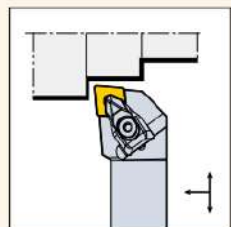
TCKNR/L

Porta Pastilhas

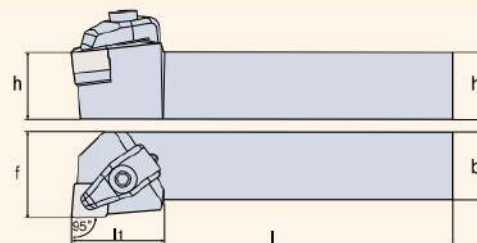
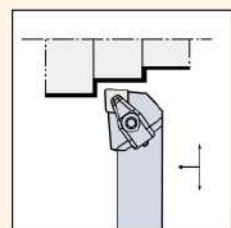


TCKNR/L CONTINUAÇÃO

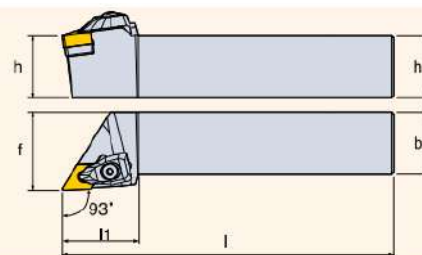
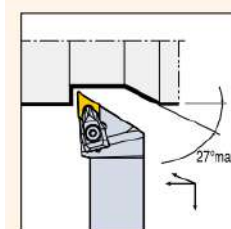
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9043	PORTA PASTILHA TCKNL 2525 M12 CH	25	CNGX 1207 CH
16472	PORTA PASTILHA TCKNR 2525 M12	25	
9104	PORTA PASTILHA TCKNR 2525 M12 CH	25	
10788	PORTA PASTILHA TCKNR 3225 M12 CH	32	

TCLNR/L Porta Pastilhas


Código	Descrição	h	Pastilha
8437	PORTA PASTILHA TCLNL 2020 K12	20	CN 1204
8690	PORTA PASTILHA TCLNL 2525 M12	25	
10385	PORTA PASTILHA TCLNL 2525 M16	25	CN 1606
8649	PORTA PASTILHA TCLNR 2020 K12	20	CN 1204
8639	PORTA PASTILHA TCLNR 2525 M12	25	
10181	PORTA PASTILHA TCLNR 2525 M16	25	CN 1606
10462	PORTA PASTILHA TCLNR 3232 M19	32	CN 1906
10376	PORTA PASTILHA TCLNR 4040 S19	40	

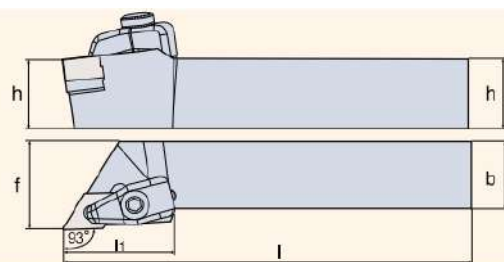
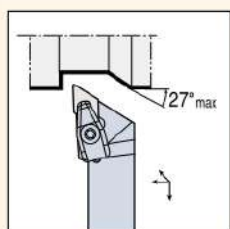
TCLNR/L-CH Porta Pastilhas


Código	Descrição	h	Pastilha
8306	PORTA PASTILHA TCLNL 2525 M12 CH	25	CNGX 1207 CH
8436	PORTA PASTILHA TCLNR 2525 M12-CH	25	
9286	PORTA PASTILHA TCLNR 3225 P12-CH	32	
9160	PORTA PASTILHA TCLNR 3232 M12-CH	32	

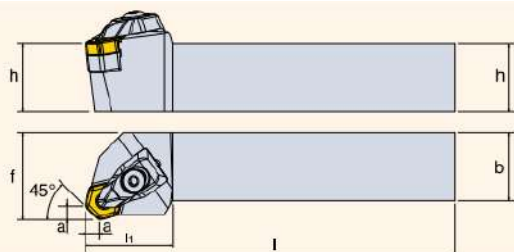
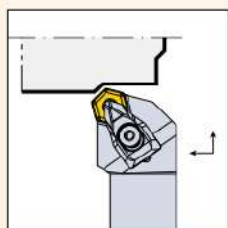
TDJNR/L Porta Pastilhas


TDJNR/L CONTINUAÇÃO

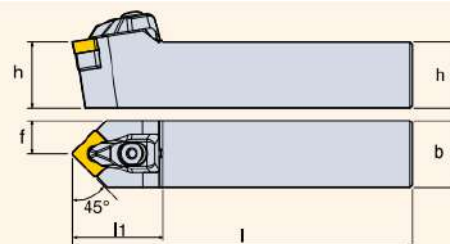
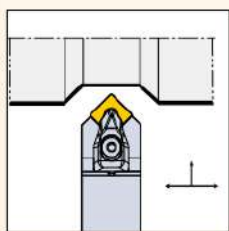
Código	Descrição	h	Pastilha
10422	PORTA PASTILHA TDJNL 2525 M11	25	DN 1104
8912	PORTA PASTILHA TDJNL 2020 K15	20	DN 1506
8870	PORTA PASTILHA TDJNL 2525 K15	25	
10904	PORTA PASTILHA TDJNL 3232 P15	32	
8636	PORTA PASTILHA TDJNR 2020 K11	20	DN 1104
8652	PORTA PASTILHA TDJNR 2525 M11	25	
8811	PORTA PASTILHA TDJNR 2020 K15	20	DN 1506
8635	PORTA PASTILHA TDJNR 2525 M15	25	

TDJNR/L-CH Porta Pastilhas


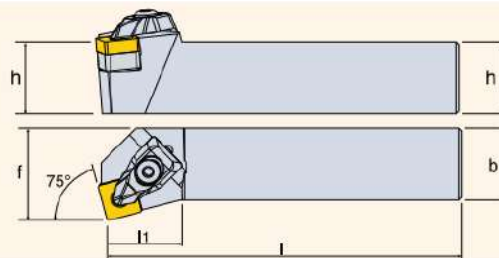
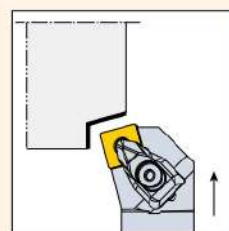
Código	Descrição	h	Pastilha
15786	PORTA PASTILHA TDJNL 2525 M15 CH	25	DNGX 1507 CH
13262	PORTA PASTILHA TDJNR 2525 M15 CH	25	

THSNR/L Porta Pastilhas


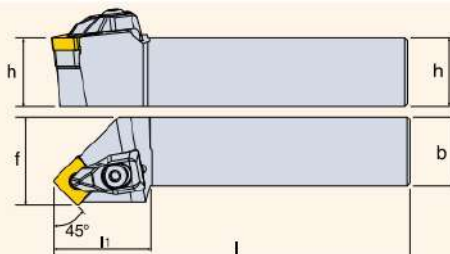
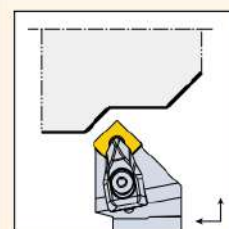
Código	Descrição	h	Pastilha
10177	PORTA PASTILHA THSNL 2020 M05	20	HN 0504
9066	PORTA PASTILHA THSNL 2525 M05	25	
19976	PORTA PASTILHA THSNL 2525 M05 - CH	25	
9302	PORTA PASTILHA THSNL 3232 P05	32	
9973	PORTA PASTILHA THSNR 2020 K05	20	
9065	PORTA PASTILHA THSNR 2525 M05	25	
9303	PORTA PASTILHA THSNR 3232 P05	32	

TSDNN
Porta Pastilhas


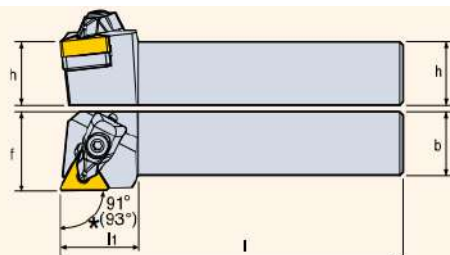
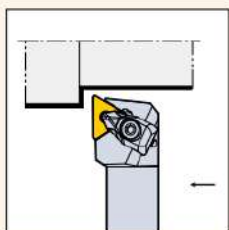
Código	Descrição	h	Pastilha
8451	PORTA PASTILHA TSDNN 2525 M12	25	SN 1204
10860	PORTA PASTILHA TSDNN 3232 P19	32	SN 1906

TSKNR/L
Porta Pastilhas


Código	Descrição	h	Pastilha
8465	PORTA PASTILHA TSKNL 2525 M12	25	SN 1204
8452	PORTA PASTILHA TSKNR 2525 M12	25	

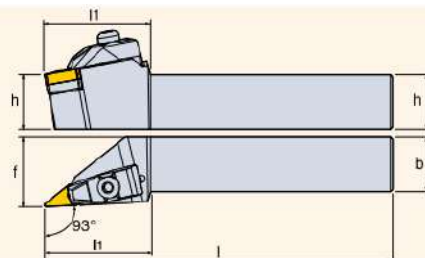
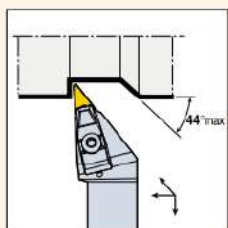
TSSNR/L
Porta Pastilhas


Código	Descrição	h	Pastilha
14560	PORTA PASTILHA TSSNL 2525 M12	25	SN 1204
23228	PORTA PASTILHA TSSNR 2020 K12	20	
9284	PORTA PASTILHA TSSNR 2525 M12	25	
11973	PORTA PASTILHA TSSNR 3232 P12	32	
9484	PORTA PASTILHA TSSNR 3232 P12-CH	32	

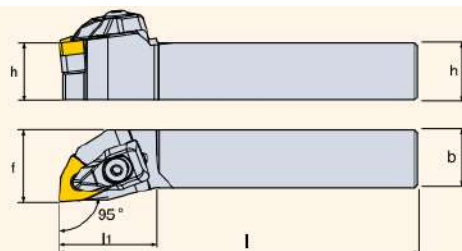
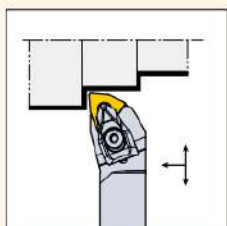
TTJNR/L
Porta Pastilhas


TTJNR/L CONTINUAÇÃO

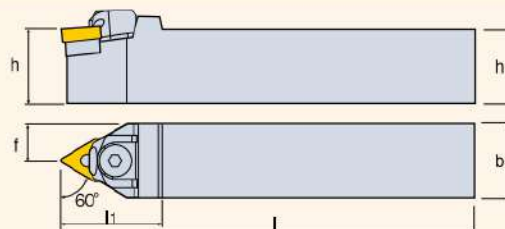
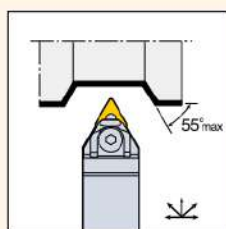
Código	Descrição	h	Pastilha
7915	PORTA PASTILHA TTJNL 2020 K16	25	TN 1604
7912	PORTA PASTILHA TTJNL 2525 M16	20	
7876	PORTA PASTILHA TTJNR 2020 K16	20	
7877	PORTA PASTILHA TTJNR 2525 M16	25	

TVJNR/L Porta Pastilhas


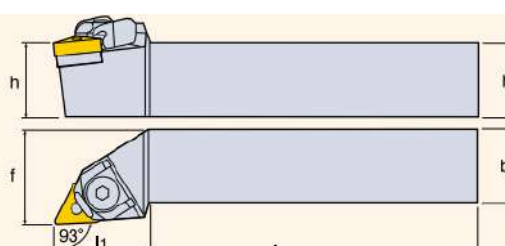
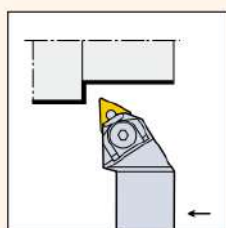
Código	Descrição	h	Pastilha
8839	PORTA PASTILHA TVJNL 2020 K13	20	VN 1304
8426	PORTA PASTILHA TVJNL 2525 K13	25	
8700	PORTA PASTILHA TVJNL 2020 K16	20	VN 1604
8729	PORTA PASTILHA TVJNL 2525 M16	25	
14144	PORTA PASTILHA TVJNL 3232 M16	32	
24535	PORTA PASTILHA TVJNR 1212 K13	12	VN 1304
7941	PORTA PASTILHA TVJNR 2020 K13	20	
8025	PORTA PASTILHA TVJNR 2525 K13	25	
7870	PORTA PASTILHA TVJNR 2020 K16	20	VN 1604
7902	PORTA PASTILHA TVJNR 2525 M16	25	

TWLNR/L Porta Pastilhas


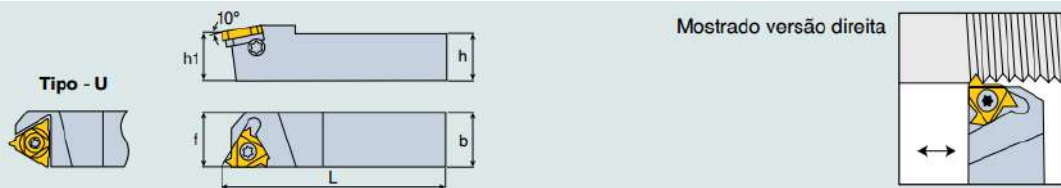
Código	Descrição	h	Pastilha
7858	PORTA PASTILHA TWLNL 2020 K06	20	WN 0604
7732	PORTA PASTILHA TWLNL 2525 M06	25	
7865	PORTA PASTILHA TWLNL 2020 K08	20	WN 0804
7307	PORTA PASTILHA TWLNL 2525 M08	25	
19884	PORTA PASTILHA TWLNL 3225 M08	32	
12683	PORTA PASTILHA TWLNL 3232 M08	32	WN 0604
7875	PORTA PASTILHA TWLNR 2020 K06	20	
7321	PORTA PASTILHA TWLNR 2525 M06 (N)	25	WN 0804
7900	PORTA PASTILHA TWLNR 2020 K08	20	
7322	PORTA PASTILHA TWLNR 2525 M08 (N)	25	
9668	PORTA PASTILHA TWLNR 3232 P08	32	

WTENN
Porta Pastilhas


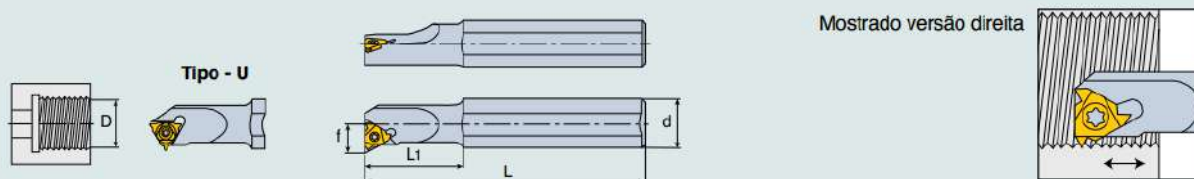
Código	Descrição	h	Pastilha
8011	PORTA PASTILHA WTENN 2020 K16	20	TN 1604
6683	PORTA PASTILHA WTENN 2525 M16	25	
6672	PORTA PASTILHA WTENN 2525 M22	25	
			TN 2204

WTJNR
Porta Pastilhas


Código	Descrição	h	Pastilha
23368	PORTA PASTILHA WTJNL 2020 K1304	20	TN 1304
23369	PORTA PASTILHA WTJNL 2525 M1304	25	
24954	PORTA PASTILHA WTJNL 3225 M1304	32	
8005	PORTA PASTILHA WTJNL 2020 K16	20	TN 1604
8006	PORTA PASTILHA WTJNL 2525 M16	25	
10585	PORTA PASTILHA WTJNL 2525 M22	25	TN 2204
10586	PORTA PASTILHA WTJNL 3232 P22	32	
24605	PORTA PASTILHA WTJNR 1212 K1304	12	TN 1304
23366	PORTA PASTILHA WTJNR 2020 K1304	20	
23367	PORTA PASTILHA WTJNR 2525 M1304	25	
7179	PORTA PASTILHA WTJNR 2020 K16	20	TN 1604
7319	PORTA PASTILHA WTJNR 2525 M16	25	
14080	PORTA PASTILHA WTJNR 3232 P16	32	
8717	PORTA PASTILHA WTJNR 2525 M22	25	TN 1604
8726	PORTA PASTILHA WTJNR 3232 P22	32	

PORTA PASTILHAS ROSQUEAMENTO
SUportes de Torneamento
SER/L
Porta Pastilhas Rosqueamento


Código	Descrição	h	Pastilha
24602	PORTA PASTILHA SEL 1212 K16	12	16 EL....
8962	PORTA PASTILHA SEL 2020 K16	20	
8532	PORTA PASTILHA SEL 2525 M16	25	
9776	PORTA PASTILHA SEL 2525 M22	25	22 EL...
24838	PORTA PASTILHA SEL 3232 P22	32	
23877	PORTA PASTILHA SER 1212 K16	12	16 ER...
19688	PORTA PASTILHA SER 1616 H16	16	
7304	PORTA PASTILHA SER 2020 K16	20	
7669	PORTA PASTILHA SER 2525 M16	25	
10483	PORTA PASTILHA SER 3232 P16	32	
9503	PORTA PASTILHA SER 2020 K22	20	22 ER...
6872	PORTA PASTILHA SER 2525 M22	25	
7759	PORTA PASTILHA SER 3232 P22	32	
12237	PORTA PASTILHA SER 4040 S22	40	
12221	PORTA PASTILHA SER 2525 M22U	25	22 UERL...
7597	PORTA PASTILHA SER 2525 M27	25	27 ER...
17554	PORTA PASTILHA SER 2020 K27U	20	27 UERL...
13414	PORTA PASTILHA SER 2525 M27U	25	
8801	PORTA PASTILHA SER 3232 P27U	32	

SIR/L
Porta Pastilhas Rosqueamento


Código	Descrição	d	Pastilha
16123	PORTA PASTILHA SIL 0010 K11	16	11 IL....
18077	PORTA PASTILHA SIL 0013 P16	16	16 IL...
9461	PORTA PASTILHA SIL 0016 P16	20	
12432	PORTA PASTILHA SIL 0020 P16	20	
17231	PORTA PASTILHA SIL 0025 P16	25	
10752	PORTA PASTILHA SIL 0032 R16	32	
17120	PORTA PASTILHA SIL 0020 P22	20	22 IL...
23679	PORTA PASTILHA SIR 0007 K08	16	08 IR...
14475	PORTA PASTILHA SIR 0007 K08 U	16	08 UIRL...
7172	PORTA PASTILHA SIR 0010 K11	16	11IR...
8895	PORTA PASTILHA SIR 0012 K11	16	
10593	PORTA PASTILHA SIR 0013 L11	16	

Código	Descrição	d	Pastilha
9657	PORTA PASTILHA SIR 0013 M16	16	16 IR...
6822	PORTA PASTILHA SIR 0016 P16	20	
7407	PORTA PASTILHA SIR 0020 - P16	20	
8947	PORTA PASTILHA SIR 0025 R16	25	
9446	PORTA PASTILHA SIR 0032 R16	32	
10945	PORTA PASTILHA SIR 0040 16	40	
7846	PORTA PASTILHA SIR 0020 P22	20	22 IR...
8987	PORTA PASTILHA SIR 0025 R22	25	
9551	PORTA PASTILHA SIR 0032 S22	32	
12220	PORTA PASTILHA SIR 0025 R22U	25	22 UIRL...
12240	PORTA PASTILHA SIR 0032 S22U	32	
15934	PORTA PASTILHA SIR 0040 22U	40	
8992	PORTA PASTILHA SIR 0025 R27	25	27 IR...
11347	PORTA PASTILHA SIR 0032 S27	32	
23594	PORTA PASTILHA SIR 0025 R27U	25	27 UIRL...
11339	PORTA PASTILHA SIR 0032 S27U	32	

PORTA PASTILHAS CANAL SUPORTES DE TORNEAMENTO

TGB

Porta Pastilhas Canal

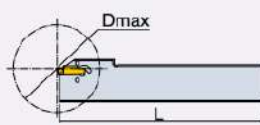


Fig.1

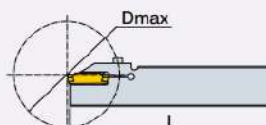


Fig.3

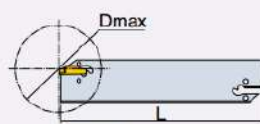


Fig.2

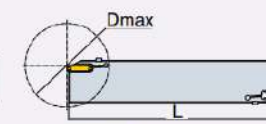
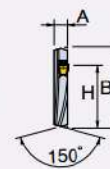
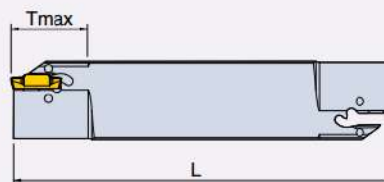


Fig.4

Código	Descrição	Tamanho da Pastilha	B	Dmax	Figura
13431	PORTA PASTILHA TGB 26-2S	2	26	40	1
6691	PORTA PASTILHA TGB 26-3S	3	26	50	1
6699	PORTA PASTILHA TGB 32-3		32	100	2
13187	PORTA PASTILHA TGB 26-4	4	26	80	2
13864	PORTA PASTILHA TGB 32-4		32	100	2
24595	PORTA PASTILHA TGB 45-8	8	45	120	2

TGBFR/L

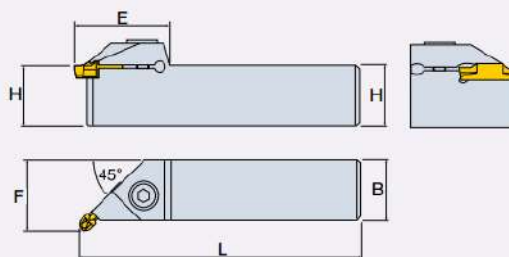
Porta Pastilhas Canal



Código	Descrição	Tamanho da Pastilha	B	Dmax
24402	PORTA PASTILHA TGBFR 32T25-114-180-3	3	32	-
24403	PORTA PASTILHA TGBFR 32T30-120-200-4	4	32	200

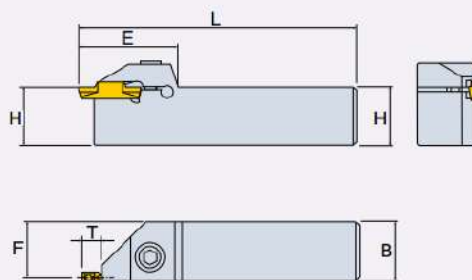
TGEUR/L

Porta Pastilhas Canal



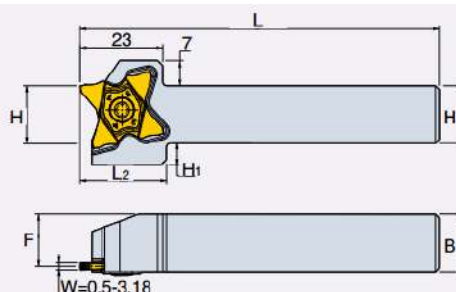
Mostrado versão direita

Código	Descrição	Tamanho da Pastilha	B	Tmax
6714	PORTA PASTILHA TGEUR 2020-3	3	20	2.8
8995	PORTA PASTILHA TGEUR 2525-3		25	2.8
25327	PORTA PASTILHA TGEUR 3232-4	4	32	2.8

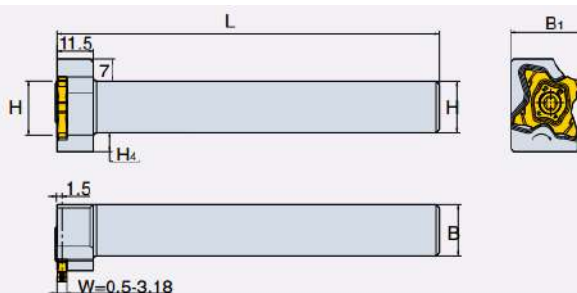
TGFR/L
Porta Pastilhas Canal


Mostrado versão direita

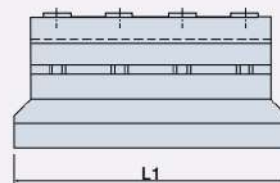
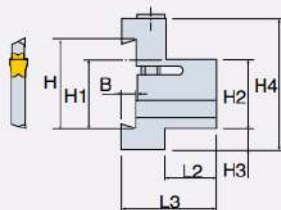
Código	Descrição	Tamanho da Pastilha	B	Dmax
17610	PORTA PASTILHA TGFR 2020 4	4	20	4.8
12755	PORTA PASTILHA TGFR 2525 4		25	4.8

TQHR/L
Porta Pastilhas Canal


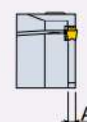
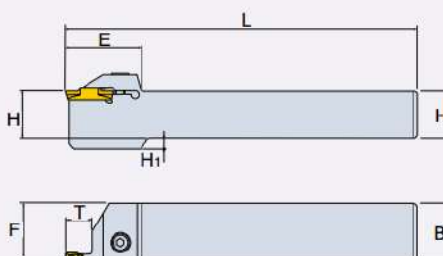
Código	Descrição	Pastilha	B	Parafuso
23291	PORTA PASTILHA TQHL 10-27	TQJ 27...	10	TS 50125I
24604	PORTA PASTILHA TQHL 12-27		12	
16919	PORTA PASTILHA TQHL 16-27		16	
16945	PORTA PASTILHA TQHL 20-27		20	
15261	PORTA PASTILHA TQHL 25-27		25	
23290	PORTA PASTILHA TQHR 10-27		10	TS 50125IL
24200	PORTA PASTILHA TQHR 12-27		12	
16250	PORTA PASTILHA TQHR 16-27		16	
16251	PORTA PASTILHA TQHR 20-27		20	
15135	PORTA PASTILHA TQHR 25-27		25	

TQHPR/L
Porta Pastilhas Canal


Código	Descrição	Pastilha	B	Parafuso
25459	PORTA PASTILHA TQHPR 20-27	TQJ 27...	20	TS 50125I

TTBN
Porta Pastilhas Canal


Código	Descrição	H	H2	B
10168	PORTA PASTILHA TTBN 20-26	26	20	4
10062	PORTA PASTILHA TTBN 25-26		25	4
6715	PORTA PASTILHA TTBN 20-32	32	20	5.5
6957	PORTA PASTILHA TTBN 25-32		25	5.5

TTER/L
Porta Pastilhas Canal


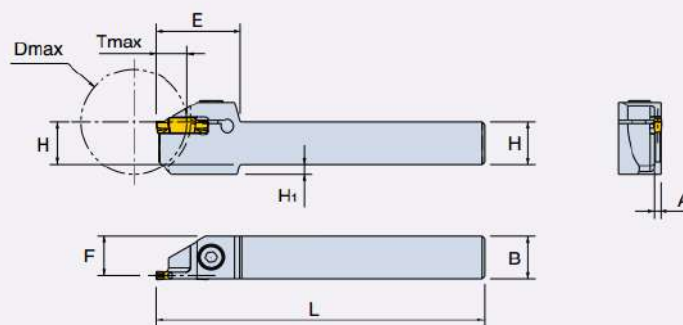
Código	Descrição	Tamanho da Pastilha	H	Tmax
7232	PORTA PASTILHA TTEL 2020-2	2	20	12.0
9250	PORTA PASTILHA TTEL 2525-2		25	
12265	PORTA PASTILHA TTEL 9.5-2T17		9.5	17.0
13409	PORTA PASTILHA TTEL 1616-2T17		16	
8964	PORTA PASTILHA TTEL 2020-2T17		20	
7847	PORTA PASTILHA TTEL 2525 2T17		25	20.0
12659	PORTA PASTILHA TTEL 1010-2T20		10	
12762	PORTA PASTILHA TTEL 2020-2T20	3	20	9.0
10077	PORTA PASTILHA TTEL 2525-3T09		25	
12570	PORTA PASTILHA TTEL 1010-3T12		10	12.0
6693	PORTA PASTILHA TTEL 2020-3		20	
7350	PORTA PASTILHA TTEL 2525-3		25	
10271	PORTA PASTILHA TTEL 1616-3T20		16	20.0
7335	PORTA PASTILHA TTEL 2020-3T20		20	
7336	PORTA PASTILHA TTEL 2525-3T20		25	
11808	PORTA PASTILHA TTEL 4040-3T20		40	
9068	PORTA PASTILHA TTEL 2020-3T25		20	25.0
9669	PORTA PASTILHA TTEL 2525-3T25		25	
17094	PORTA PASTILHA TTEL 3225-3T25		32	
24621	PORTA PASTILHA TTEL 3232-3T25		32	

Código	Descrição	Tamanho da Pastilha	H	Tmax
9251	PORTA PASTILHA TTEL 2525-3T30	3	25	30.0
18061	PORTA PASTILHA TTEL 2525-3T33		25	33.0
10078	PORTA PASTILHA TTEL 2525-4T10	4	25	10.0
15773	PORTA PASTILHA TTEL 3232-4T10		32	
6646	PORTA PASTILHA TTEL 2020-4		20	15.0
6645	PORTA PASTILHA TTEL 2525-4		25	
18264	PORTA PASTILHA TTEL 1212 4T15		12	
19479	PORTA PASTILHA TTEL 2020 4T20		20	20.0
7116	PORTA PASTILHA TTEL 2525-4T20		25	
13258	PORTA PASTILHA TTEL 1616-4T25		16	25.0
8450	PORTA PASTILHA TTEL 2020-4T25		20	
7279	PORTA PASTILHA TTEL 2525-4T25		25	
17093	PORTA PASTILHA TTEL 3225-4T25		32	
24876	PORTA PASTILHA TTEL 3232-4T25		32	30.0
9491	PORTA PASTILHA TTEL 2525-4T30		25	
8965	PORTA PASTILHA TTEL 2525-4T38		25	38.0
18535	PORTA PASTILHA TTEL 2525-5T9	5	25	09.0
9301	PORTA PASTILHA TTEL 2020-5		20	20.0
7460	PORTA PASTILHA TTEL 2525-5		25	
15772	PORTA PASTILHA TTEL 2525-5T32		25	32.0
12618	PORTA PASTILHA TTEL 2020-6	6	20	20.0
8968	PORTA PASTILHA TTEL 2525-6		25	
12730	PORTA PASTILHA TTEL 3232-6		32	
20041	PORTA PASTILHA TTEL 3225-6T15		32	15.0
16937	PORTA PASTILHA TTEL 3232-6T20		32	20.0
13399	PORTA PASTILHA TTEL 2525-6T37		25	37.0
10591	PORTA PASTILHA TTEL 2525-8	7	25	25.0
13572	PORTA PASTILHA TTEL 3232-8		32	
12181	PORTA PASTILHA TTEL 3232-8T36		32	36.0
10335	PORTA PASTILHA TTER 1616-2T08	2	16	08
12734	PORTA PASTILHA TTER 2525-2T08		25	
17755	PORTA PASTILHA TTER 2020-2T09		20	09
6507	PORTA PASTILHA TTER 1212 2T12		12	12
8727	PORTA PASTILHA TTER 1616-2		16	
6756	PORTA PASTILHA TTER 2020-2		20	
6506	PORTA PASTILHA TTER 2525-2		25	
24834	PORTA PASTILHA TTER 2020-2T15		20	15
9156	PORTA PASTILHA TTER 1010-2T16		10	16
8848	PORTA PASTILHA TTER 9.5-2T17		9.5	17
8849	PORTA PASTILHA TTER 12.7-2T17		12.7	
10771	PORTA PASTILHA TTER 1212 2T17		12	
12940	PORTA PASTILHA TTER 1616-2T17		16	
7277	PORTA PASTILHA TTER 2020-2T17		20	
8856	PORTA PASTILHA TTER 2525-2T17		25	

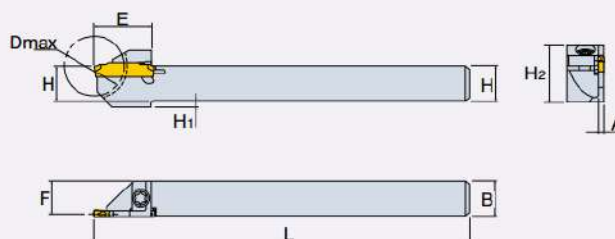
Código	Descrição	Tamanho da Pastilha	H	Tmax
12053	PORTA PASTILHA TTER 1010 2T20	2	10	20
9586	PORTA PASTILHA TTER 1212 2T20		12	
7332	PORTA PASTILHA TTER 2020-2T20		20	
7333	PORTA PASTILHA TTER 2525-2T20		25	
10002	PORTA PASTILHA TTER 2020-3T09	3	20	09
8651	PORTA PASTILHA TTER 2525-3T09		25	
16112	PORTA PASTILHA TTER 1616-3		16	12
6599	PORTA PASTILHA TTER 2020-3		20	
12343	PORTA PASTILHA TTER 2525-3		25	
12724	PORTA PASTILHA TTER 2020-3T15		20	15
9163	PORTA PASTILHA TTER 1010-3T16		10	16
8850	PORTA PASTILHA TTER 12.7-3T20		12.7	20
12052	PORTA PASTILHA TTER 1212 3T20		12	
10210	PORTA PASTILHA TTER 1616-3T20		16	
6973	PORTA PASTILHA TTER 2020-3T20		20	
7334	PORTA PASTILHA TTER 2525-3T20		25	
9488	PORTA PASTILHA TTER 3232-3T20		32	
9505	PORTA PASTILHA TTER 4040-3T20		40	
7676	PORTA PASTILHA TTER 2020-3T25		20	25
6975	PORTA PASTILHA TTER 2525-3T25		25	
9487	PORTA PASTILHA TTER 3225-3T25		32	
9167	PORTA PASTILHA TTER 2525-3T30		25	30
10273	PORTA PASTILHA TTER 2525-3T32		25	32
12341	PORTA PASTILHA TTER 3232-3T35		32	35
6743	PORTA PASTILHA TTER 2020-4T10	4	20	10
6976	PORTA PASTILHA TTER 2525-4T10		25	
6415	PORTA PASTILHA TTER 2020-4		20	15
6517	PORTA PASTILHA TTER 2525-4		25	
16013	PORTA PASTILHA TTER 2020-4T20		20	20
6912	PORTA PASTILHA TTER 2525-4T20		25	
15475	PORTA PASTILHA TTER 3232-4T20		32	
7665	PORTA PASTILHA TTER 2020-4T25		20	25
9462	PORTA PASTILHA TTER 2525-4T25		25	
11434	PORTA PASTILHA TTER 3232-4T25		32	
7337	PORTA PASTILHA TTER 2525-4T30		25	30
11850	PORTA PASTILHA TTER 3232-4T32		32	32
16668	PORTA PASTILHA TTER 2525-4T38		25	38
15901	PORTA PASTILHA TTER 3232-4T40		32	40
18536	PORTA PASTILHA TTER 2525-5T9	5	25	09
8967	PORTA PASTILHA TTER 2525-5T12		25	12
7695	PORTA PASTILHA TTER 2020-5 T20		20	20
8966	PORTA PASTILHA TTER 2525-5		25	

TTER/L
CONTINUAÇÃO

Código	Descrição	Tamanho da Pastilha	H	Tmax
24696	PORTA PASTILHA TTER 2525-6T12	6	25	12
19784	PORTA PASTILHA TTER 1212 6		12	20
9290	PORTA PASTILHA TTER 2020-6		20	
6654	PORTA PASTILHA TTER 2525-6		25	
12242	PORTA PASTILHA TTER 3232-6		32	
10254	PORTA PASTILHA TTER 2525-6T32		25	32
13735	PORTA PASTILHA TTER 3232-6T32		32	
19554	PORTA PASTILHA TTER 2020-8T20	8	20	20
6407	PORTA PASTILHA TTER 2525-8		25	25
11761	PORTA PASTILHA TTER 3232-8		32	
8728	PORTA PASTILHA TTER 2525-8T36		25	36

TTER/L-D
Porta Pastilhas Canal


Código	Descrição	Tamanho da Pastilha	H	Dmax
13186	PORTA PASTILHA TTEL 2020-3T20-D45	3	20	45
12752	PORTA PASTILHA TTER 1010 2T15-D40	2	10	40
12753	PORTA PASTILHA TTER 1212 2T15-D40		12	40
12754	PORTA PASTILHA TTER 1212 3T15-D40	3	12	40
19809	PORTA PASTILHA TTER 2020-3T20-D45		20	45

TTER/L-SH
Porta Pastilhas Canal


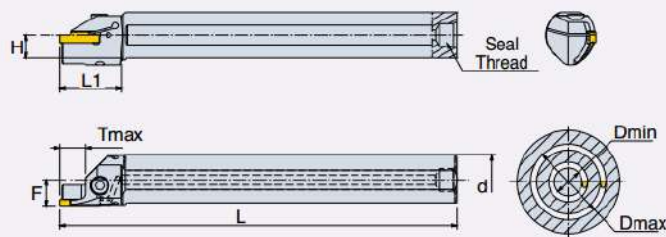
Usar Pastilha	
TDC/TSC	: Pág. C8, C9
TDJ/TSJ	: Pág. C10, C11
TDXU/TDXT	: Pág. C12
TDT	: Pág. C13 - C15

Mostrado versão direita

Código	Descrição	Tamanho da Pastilha	H	Tmax
7432	PORTA PASTILHA TTEL 10-20-2SH	2	10	20
10249	PORTA PASTILHA TTEL 12-24 2SH		12	24
24400	PORTA PASTILHA TTEL 12-24 3SH	3	12	24
10079	PORTA PASTILHA TTER 10-20 1.4SH	1	10	20
10001	PORTA PASTILHA TTER 12-24 1.4SH		12	24

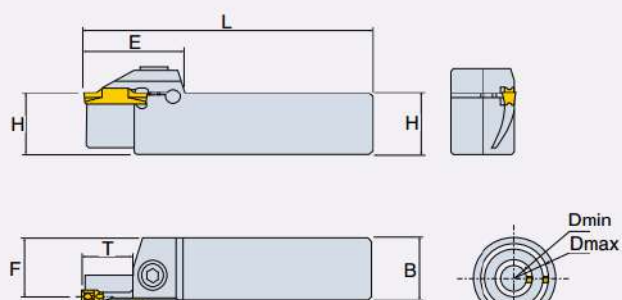
TTER/L-SH CONTINUAÇÃO

Código	Descrição	Tamanho da Pastilha	H	Tmax
6547	PORTA PASTILHA TTER 10-20-2SH	2	10	20
9581	PORTA PASTILHA TTER 12-24 2SH		12	24
11669	PORTA PASTILHA TTER 16-32-2SH		16	32
12723	PORTA PASTILHA TTER 12-30 3SH	3	12	30
14541	PORTA PASTILHA TTER 10-20-4SH	4	10	20

TTFIR/L Porta Pastilhas Canal


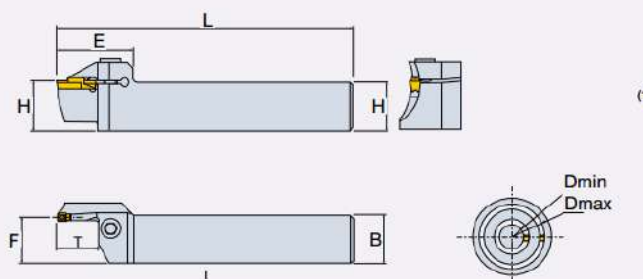
Mostrado versão direita

Código	Descrição	Tamanho da Pastilha	H	Dmax
16447	PORTA PASTILHA TTFIL 25-3	3	25	
25041	PORTA PASTILHA TTFIL 25-3T12 79-150		25	150
16448	PORTA PASTILHA TTFIL 25-4	4	25	
24285	PORTA PASTILHA TTFIR 25-3 T12 13-23	3	25	23
23955	PORTA PASTILHA TTFIR 25-4	4	25	

TTFL/L Porta Pastilhas Canal


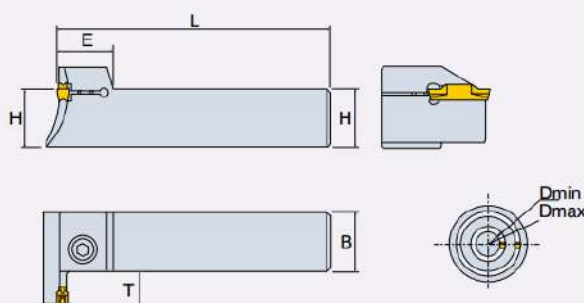
Mostrado versão direita

Código	Descrição	Tamanho da Pastilha	H	Dmax
19385	PORTA PASTILHA TTFL 20-60-3	3	20	85
18212	PORTA PASTILHA TTFL 25-60-3		25	85
15771	PORTA PASTILHA TTFL 25-50-4	4	25	60
8703	PORTA PASTILHA TTFL 25-60-4		25	85
23847	PORTA PASTILHA TTFL 25-85-6	6	25	150

TTFR/L-RN Porta Pastilhas Canal


Mostrado versão direita

Código	Descrição	Tamanho da Pastilha	H	Tmax
17213	PORTA PASTILHA TTFL 20-12-3 RN	3	20	10.0
17447	PORTA PASTILHA TTFL 20-34-50-3T10 RN			10.0
17448	PORTA PASTILHA TTFL 20-44-70-3T15 RN			15.0
17449	PORTA PASTILHA TTFL 20-64-100-3T15 RN			15.0
12531	PORTA PASTILHA TTFL 25-30-3 RN		25	10.0
8476	PORTA PASTILHA TTFL 25-40-3 RN			10.0
8773	PORTA PASTILHA TTFL 25-50-3 RN			15.0
8963	PORTA PASTILHA TTFL 25-70-3RN			15.0
17450	PORTA PASTILHA TTFL 20-112-200-4T16 RN	4	20	16.0
9463	PORTA PASTILHA TTFL 25-30-4 RN		25	10.0
11290	PORTA PASTILHA TTFL 25-36-4 RN			20.0
7338	PORTA PASTILHA TTFL 25-50-4RN			20.0
8774	PORTA PASTILHA TTFL 25-70-4 RN			20.0
8704	PORTA PASTILHA TTFL 25-120-4 RN			20.0
15429	PORTA PASTILHA TTFL 25-200-4 RN			20.0
16298	PORTA PASTILHA TTFL 25-80-5 RN	5		25.0

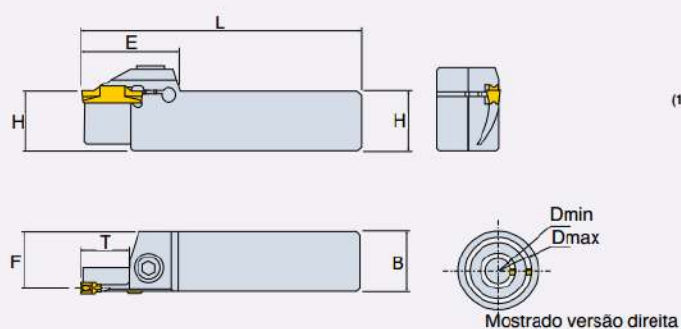
TTFPR/L Porta Pastilhas Canal


Mostrado versão direita

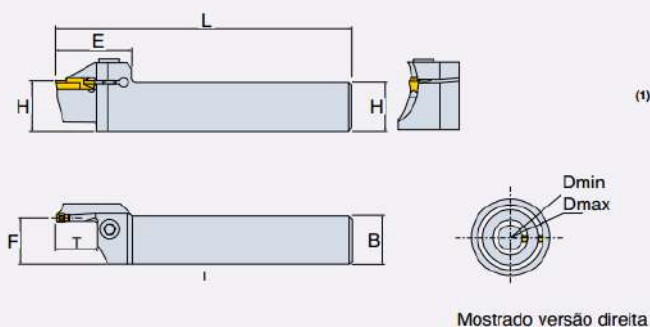
Código	Descrição	Tamanho da Pastilha	H	Tmax
10288	PORTA PASTILHA TTFPL 25-50-3	3	25	15.0
12727	PORTA PASTILHA TTFPL 25-60-3		25	15.0
7832	PORTA PASTILHA TTFPL 25-60-4	4	25	15.0
12250	PORTA PASTILHA TTFPR 25 30 3	3	25	10.0
11353	PORTA PASTILHA TTFPR 25-35-3		25	10.0
10540	PORTA PASTILHA TTFPR 25-40-3		25	10.0
10491	PORTA PASTILHA TTFPR 25-50-3		25	15.0
12535	PORTA PASTILHA TTFPR 25-60-3		25	15.0

TTFPR/L
CONTINUAÇÃO

Código	Descrição	Tamanho da Pastilha	H	Tmax
17670	PORTA PASTILHA TTFPR 25-110-03	3	25	15.0
18962	PORTA PASTILHA TTFPR 25-200-03		25	15.0
12563	PORTA PASTILHA TTFPR 25-30-4	4	25	12.0
10490	PORTA PASTILHA TTFPR 25-40-4		25	15.0
9717	PORTA PASTILHA TTFPR 25-50-4		25	15.0
11086	PORTA PASTILHA TTFPR 25-60-4		25	15.0
14319	PORTA PASTILHA TTFPR 25-80-5	5	25	20.0
13249	PORTA PASTILHA TTFPR 25-110-05		25	20.0

TTFR/L
Porta Pastilhas Canal


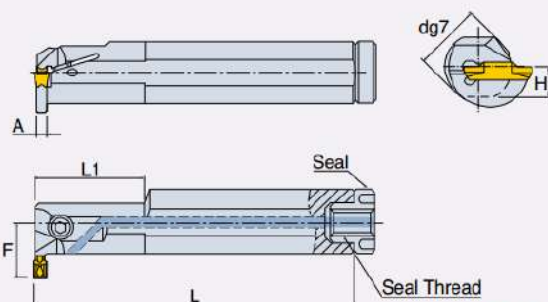
Código	Descrição	Tamanho da Pastilha	H	Tmax
16986	PORTA PASTILHA TTFR 20-30-3	3	20	10.0
23977	PORTA PASTILHA TTFR 20-50-3			15.0
23980	PORTA PASTILHA TTFR 20-60-3			15.0
8789	PORTA PASTILHA TTFR 25-30-3		25	10.0
10326	PORTA PASTILHA TTFR 25-35-3			10.0
12768	PORTA PASTILHA TTFR 25-40-3			10.0
12742	PORTA PASTILHA TTFR 25-60-3			15.0
7360	PORTA PASTILHA TTFR 25-50-4	4		15.0
7208	PORTA PASTILHA TTFR 25-60-4			15.0
15624	PORTA PASTILHA TTFR 25-60-6	6		20.0

TTFR/L-RN
Porta Pastilhas Canal


Código	Descrição	Tamanho da Pastilha	H	Tmax
17346	PORTA PASTILHA TTFR 20-30-2RN	2	20	10.0
19504	PORTA PASTILHA TTFR 20-50-3 RN	3	20	15.0
13396	PORTA PASTILHA TTFR 25-30-3RN		25	10.0

TTFR/L-RN CONTINUAÇÃO

Código	Descrição	Tamanho da Pastilha	H	Tmax
10054	PORTA PASTILHA TTFR 25-35-3 RN	3	25	10.0
7919	PORTA PASTILHA TTFR 25-40-3 RN		25	10.0
7918	PORTA PASTILHA TTFR 25-50-3 RN		25	15.0
8772	PORTA PASTILHA TTFR 25-70-3 RN		25	15.0
25148	PORTA PASTILHA TTFR 25-120-3 RN		25	15.0
12459	PORTA PASTILHA TTFR 25-30-4RN	4	25	10.0
10059	PORTA PASTILHA TTFR 25-36-4 RN		25	20.0
9304	PORTA PASTILHA TTFR 25-42-4 RN		25	20.0
8445	PORTA PASTILHA TTFR 25-50-4 RN		25	20.0
8756	PORTA PASTILHA TTFR 25-70-4 RN		25	20.0
8438	PORTA PASTILHA TTFR 25-120-4 RN	5	25	20.0
13221	PORTA PASTILHA TTFR 25-200-4 RN		25	20.0
12619	PORTA PASTILHA TTFR 25-60-5 RN	5	25	25.0
10699	PORTA PASTILHA TTFR 25-110-5 RN		25	25.0
16027	PORTA PASTILHA TTFR 25-100-6 RN	6	25	25.0
9278	PORTA PASTILHA TTFR 25-180-6 RN		25	25.0

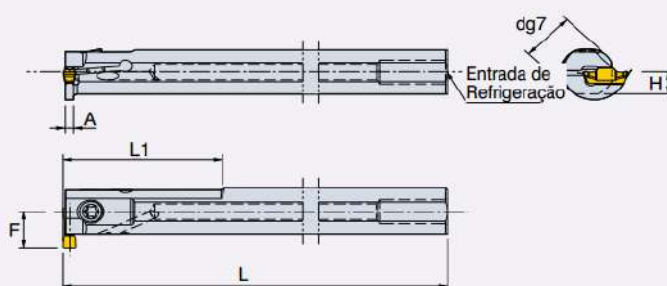
TTIR/L
Porta Pastilhas Canal


Mostrado versão direita

Código	Descrição	Tamanho da Pastilha	H	Tmax
23637	PORTA PASTILHA TTIL 16-2C	2	16	8.5
8048	PORTA PASTILHA TTIL 20-2C		20	6.0
8971	PORTA PASTILHA TTIL 25-2C		25	5.0
8033	PORTA PASTILHA TTIL 20-3C	3	20	6.0
7394	PORTA PASTILHA TTIL 25-3C		25	5.1
16818	PORTA PASTILHA TTIL 25-3C-T8		25	8.0
9952	PORTA PASTILHA TTIL 32-3C		32	4.7
16297	PORTA PASTILHA TTIL 32-3CT10	4	32	10.0
8886	PORTA PASTILHA TTIL 20-4C		20	6.0
8887	PORTA PASTILHA TTIL 25-4C		25	5.2
16418	PORTA PASTILHA TTIL 32-4C		32	4.7
18884	PORTA PASTILHA TTIL 50-4C T12	5	50	12.0
16717	PORTA PASTILHA TTIL 25- 5C T8		25	8.0
16714	PORTA PASTILHA TTIL 32-5C-T10		32	10.0
16716	PORTA PASTILHA TTIL 40-5C T12	2	40	12.0
9474	PORTA PASTILHA TTIR 1620-2C		16	8.5
9777	PORTA PASTILHA TTIR 16-2C		16	8.5
8235	PORTA PASTILHA TTIR 20-2C	2	20	6.0

TTIR/L
CONTINUAÇÃO

Código	Descrição	Tamanho da Pastilha	H	Tmax
8101	PORTA PASTILHA TTIR 25-2C	2	25	5.0
10855	PORTA PASTILHA TTIR 32-2C		32	4.7
9009	PORTA PASTILHA TTIR 1420-3C	3	14	
9010	PORTA PASTILHA TTIR 1620-3C		16	
6666	PORTA PASTILHA TTIR 20-3C		20	6.0
7716	PORTA PASTILHA TTIR 25-3C		25	5.1
12429	PORTA PASTILHA TTIR 25-3C T8		25	8.0
9373	PORTA PASTILHA TTIR 32-3C		32	4.7
12610	PORTA PASTILHA TTIR 32-3C-T10		32	10.0
9948	PORTA PASTILHA TTIR 40-3C		40	8.7
12485	PORTA PASTILHA TTIR 40-3C T12		40	12.0
8527	PORTA PASTILHA TTIR 20-4C	4	20	6.0
6561	PORTA PASTILHA TTIR 25-4C		25	5.1
12460	PORTA PASTILHA TTIR 25-4C T8		25	8.0
9246	PORTA PASTILHA TTIR 32-4C		32	4.7
17677	PORTA PASTILHA TTIR 32-4C-T8		32	8.0
12434	PORTA PASTILHA TTIR 32-4C-T10		32	10.0
9947	PORTA PASTILHA TTIR 40-4C		40	8.7
12458	PORTA PASTILHA TTIR 40-4C T10		40	10.0
23746	PORTA PASTILHA TTIR 40-4C T12		40	12.0
12457	PORTA PASTILHA TTIR 50-4C		50	10.0
16571	PORTA PASTILHA TTIR 50-4T12		50	12.0
16712	PORTA PASTILHA TTIR 25-5C T8	5	25	8.0
9309	PORTA PASTILHA TTIR 32-5C		32	4.7
16713	PORTA PASTILHA TTIR 32-5C-T10		32	10.0
16715	PORTA PASTILHA TTIR 40-5C T12		40	12.0
16416	PORTA PASTILHA TTIR 50-5C T14		50	14.0
9305	PORTA PASTILHA TTIR 32-6C	6	32	4.7
19966	PORTA PASTILHA TTIR 40-6		40	5.8
15787	PORTA PASTILHA TTIR 50-6C		50	8.0

TTSIR/L
Porta Pastilhas Canal


Código	Descrição	Tamanho da Pastilha	d	Tmax
17068	PORTA PASTILHA TTSIL 10-12.5-2	2	10	2.4
25429	PORTA PASTILHA TTSIL 12-14-2		12	2.6
17069	PORTA PASTILHA TTSIL 16 14-3	3	16	2.6

TTSIR/L
CONTINUAÇÃO

Código	Descrição	Tamanho da Pastilha	d	Tmax
11787	PORTA PASTILHA TTSIR 10-12.5-2	2	10	2.4
11786	PORTA PASTILHA TTSIR 12-14-2		12	2.6
14267	PORTA PASTILHA TTSIR 16 14-2		16	2.6
17479	PORTA PASTILHA TTSIR 12-14-3	3	12	2.6
11322	PORTA PASTILHA TTSIR 16 14-3		16	2.6
17018	PORTA PASTILHA TTSIR 16 16-2		16	3.0
16845	PORTA PASTILHA TTSIR 16 16-3		16	3.0
17147	PORTA PASTILHA TTSIR 16 20-3T05		16	5.0