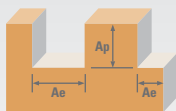
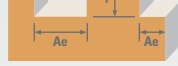




Series
44M, 43MCR, 43MCB,
43M, 47M, 47MB,
47MES, 47MEB
Metric



44M, 43MCR, 43MCB, 43M, 47M, 47MB, 47MES, 47MEB Metric					Diameter (D ₁) (mm)								
				Ae x D ₁	Ap x D ₁	Vc (m/min)	3	6	10	12	20	25	
N	COPPER ALLOYS Beryllium Copper C110, Manganese Bronze, Tin Bronze		1	≤ 1	(84-126)	105	RPM	11148	5574	3344	2787	1672	1338
						Fz	0.019	0.048	0.107	0.120	0.160	0.175	
						Feed 2 flutes (m/min)	428	535	713	669	535	468	
						Feed 3 flutes (m/min)	642	803	1070	1003	803	702	
			≤ 0.5	≤ 1.5	(104-156)	130	RPM	13802	6901	4141	3450	2070	1656
						Fz	0.019	0.048	0.107	0.120	0.160	0.175	
						Feed 2 flutes (m/min)	530	662	883	828	662	580	
						Feed 3 flutes (m/min)	795	994	1325	1242	994	870	
			≤ 0.5	≤ 2	(172-258)	215	RPM	22826	11413	6848	5706	3424	2739
						Fz	0.041	0.108	0.227	0.276	0.373	0.400	
						Feed 2 flutes (m/min)	1862	2465	3104	3150	2556	2191	
						Feed 3 flutes (m/min)	2794	3697	4656	4725	3835	3287	
	PLASTICS ABS, Polycarbonate, PVC, Polypropylene		1	≤ 1	(392-588)	490	RPM	52022	26011	15607	13005	7803	6243
						Fz	0.036	0.096	0.200	0.240	0.320	0.350	
						Feed 2 flutes (m/min)	3745	4994	6243	6242	4994	4370	
						Feed 3 flutes (m/min)	5618	7490	9364	9363	7491	6555	
			≤ 0.5	≤ 1.5	(488-732)	610	RPM	64762	32381	19429	16190	9714	7771
						Fz	0.036	0.096	0.200	0.240	0.320	0.350	
						Feed 2 flutes (m/min)	4662	6217	7771	7771	6217	5440	
						Feed 3 flutes (m/min)	6994	9325	11657	11656	9326	8160	
			≤ 0.5	≤ 2	(804-1206)	1005	RPM	106698	53349	32009	26674	16005	12804
						Fz	0.082	0.216	0.453	0.552	0.733	0.800	
						Feed 2 flutes (m/min)	17412	23045	29022	29446	23473	20487	
						Feed 3 flutes (m/min)	26117	34567	43532	44169	35210	30730	

rpm = (1000 x m/min) / (3.14 x D₁)

mm / min = (mm / flute) x number of flutes x rpm

HSM (high speed machining)

reduce speed and feed for materials harder than listed

reduce feed and Ae when finish milling (.02 x D₁ maximum)

refer to the SGS Tool Wizard for complete technical information ()