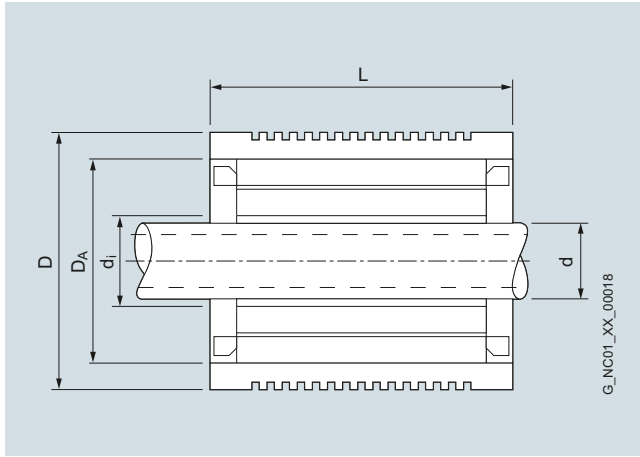


Main spindle motors

Main spindle motors

SIMOTICS M-1FE1 synchronous built-in motors – Water cooling

Dimensional drawings



For motor Type	Dimensions in mm (inches)			
	Total length L	Total outer diameter D	Stator outer diameter D_A	Rotor inner diameter d_i
1FE1 High-Speed series				
1FE1051-4....-1BA.	130 (5.12)	120 (4.72)	106 (4.17)	46 (1.81)
1FE1052-4....-1BA.	180 (7.09)			
1FE1053-4....-1BA.	230 (9.06)			
1FE1072-4W...-1BA.	185 (7.28)	155 (6.10)	135 (5.31)	58 (2.28)
1FE1073-4W...-1BA.	235 (9.25)			
1FE1074-4W...-1BA.	285 (11.22)			
1FE1075-4W...-1BA.	335 (13.19)	155 (6.10)	135 (5.31)	58 (2.28)
1FE1082-4W...-1BA.	190 (7.48)	180 (7.09)	160 (6.30)	68 (2.68)
1FE1083-4W...-1BA.	240 (9.45)			
1FE1084-4W...-1BA.	290 (11.42)			
1FE1085-4W...-1BA.	340 (13.39)			
1FE1092-4W...-1BR.	200 (7.87)	205 (8.07)	180 (7.09)	80 (3.15)
1FE1093-4W...-1BA.	250 (9.84)			72 (2.83)
1FE1093-4W...-1BR.	250 (9.84)			80 (3.15)
1FE1094-4W...-1BA.	300 (11.81)			72 (2.83)
1FE1094-4W...-1BR.	300 (11.81)			80 (3.15)
1FE1095-4W...-1BA.	350 (13.78)			72 (2.83)
1FE1095-4W...-1BR.	350 (13.78)			80 (3.15)
1FE1096-4W...-1BA.	400 (15.75)			72 (2.83)
1FE1096-4W...-1BR.	400 (15.75)			80 (3.15)
1FE1103-4W...-1BA.	265 (10.43)	230 (9.06)	200 (7.87)	96 (3.78)
1FE1104-4W...-1BA.	315 (12.40)			
1FE1105-4W...-1BA.	365 (14.37)			
1FE1106-4W...-1BA.	415 (16.34)			
1FE1124-4W...-1BA.	315 (12.40)	270 (10.63)	240 (9.45)	110 (4.33)
1FE1125-4W...-1BA.	365 (14.37)			
1FE1126-4W...-1BA.	415 (16.34)			

For motor Type	Dimensions in mm (inches)				Rotor inner diameter with sleeve				
	Total length L	Total outer diameter D	Stator outer diameter D_A	Rotor inner diameter d_i	d	d	d	d	d
1FE1 High-Torque series									
1FE1041-6W...-1BA.	107 (4.21)	95 (3.74)	85 (3.35)	44 (1.73)	–	–	–	–	–
1FE1042-6W...-1BA.	157 (6.18)	95 (3.74)	85 (3.35)	44 (1.73)	–	–	–	–	–
1FE1051-6W...-1B..	170 (6.69)	115 (4.53)	103.5 (4.07)	42 (1.65)	–	33 (1.30)	–	–	–
1FE1052-6W...-1B..	220 (8.66)	115 (4.53)	103.5 (4.07)	42 (1.65)	–	33 (1.30)	–	–	–
1FE1054-6W...-1BA.	320 (12.60)	115 (4.53)	103.5 (4.07)	42 (1.65)	–	–	–	–	–
1FE1061-6W...-1B..	130 (5.12)	130 (5.12)	118 (4.65)	58 (2.28)	48 (1.89)	–	–	–	–
1FE1062-6W...-1BA.	180 (7.09)	130 (5.12)	118 (4.65)	58 (2.28)	–	–	–	–	–
1FE1064-6W...-1BA.	280 (11.02)	130 (5.12)	118 (4.65)	58 (2.28)	–	–	–	–	–
1FE1082-6W...-1B..	195 (7.68)	190 (7.48)	170 (6.69)	93 (3.66)	67 (2.64)	74 (2.91)	80 (3.15)	–	–
1FE1083-6W...-1B..	245 (9.65)	190 (7.48)	170 (6.69)	93 (3.66)	67 (2.64)	74 (2.91)	–	–	–
1FE1084-6W...-1B..	295 (11.61)	190 (7.48)	170 (6.69)	93 (3.66)	67 (2.64)	74 (2.91)	–	–	–
1FE1091-6W...-1B..	150 (5.91)	205 (8.07)	180 (7.09)	92 (3.62)	67 (2.64)	80 (3.15)	–	–	–
1FE1092-6W...-1B..	200 (7.87)	205 (8.07)	180 (7.09)	92 (3.62)	67 (2.64)	80 (3.15)	–	–	–
1FE1093-6W...-1B..	250 (9.84)	205 (8.07)	180 (7.09)	92 (3.62)	67 (2.64)	80 (3.15)	–	–	–
1FE1113-6W...-1B..	260 (10.24)	250 (9.84)	220 (8.66)	120 (4.72)	–	–	80 (3.15)	105.2 (4.14)	–
1FE1114-6W...-1B..	310 (12.20)	250 (9.84)	220 (8.66)	120 (4.72)	82 (3.23)	102 (4.02)	–	–	–
1FE1115-6W...-1B..	360 (14.17)	250 (9.84)	220 (8.66)	120 (4.72)	–	102 (4.02)	–	–	–
1FE1116-6W...-1B..	410 (16.14)	250 (9.84)	220 (8.66)	120 (4.72)	82 (3.23)	102 (4.02)	–	–	–
1FE1143-8W...-1BA.	290 (11.42)	310 (12.20)	280 (11.02)	166.7 (6.56)	–	–	–	–	–
1FE1144-8W...-1B..	340 (13.39)	310 (12.20)	280 (11.02)	166.7 (6.56)	–	150.3 (5.92)	–	–	–
1FE1145-8W...-1B..	390 (15.35)	310 (12.20)	280 (11.02)	–	–	150.3 (5.92)	140.3 (5.52)	125 (4.92)	–
1FE1147-8W...-1B..	490 (19.29)	310 (12.20)	280 (11.02)	–	–	150.3 (5.92)	140.3 (5.52)	–	–