

SIMOTICS servomotors

SIMOTICS S synchronous motors for SINAMICS S120

SIMOTICS S-1FK7 geared servomotors 1FK7 helical geared motors

Selection and ordering data

Power at duty type S3-60 %	Output speed at the gear shaft	Rated output torque gearbox at duty type S3-60 %	Acceleration torque, max. gearbox	Nominal ratio	Exact ratio	Cantilever force, perm. gear shaft extension	Overload factor
P_2 kW (HP)	n_2 rpm	M_2 Nm (lb _f -ft)	M_{2max} Nm (lb _f -ft)	i_{nom}	i_{exact}	F_{rperm} N (lb _f)	f_B
Natural cooling – SH 36/SH 48/SH 63							
0.30 (0.40)	782	3.63 (2.68)	19 (14.0)	3.8	441/115	560 (126)	4.2
	476	5.96 (4.40)	29 (21.4)	6.3	2035/323	660 (148)	3.9
	291	9.74 (7.18)	51 (37.6)	10.5	1421/138	778 (175)	4.2
	192	14.8 (10.9)	72 (53.1)	15.5	1595/102	894 (201)	3.9
	129	22 (16.2)	65 (47.9)	23	325/14	1020 (229)	2.4
	86	33.1 (24.4)	65 (47.9)	35	1261/36	1170 (263)	1.6
	64	44.3 (32.7)	65 (47.9)	47	7865/168	1289 (290)	1.2
	43	66.6 (49.1)	138 (102)	70	775/11	2099 (472)	1.7
0.41 (0.55)	782	5.02 (3.70)	36 (26.6)	3.8	441/115	560 (126)	6.0
	476	8.25 (6.10)	55 (40.6)	6.3	2035/323	660 (148)	5.6
	291	13.5 (10.0)	72 (53.1)	10.5	1421/138	778 (175)	4.5
	192	20.5 (15.1)	72 (53.1)	15.5	1595/102	894 (201)	3.0
	128	30.8 (22.7)	138 (102)	24	1035/44	1456 (327)	3.8
	129	30.4 (22.4)	65 (47.9)	23	325/14	1020 (229)	1.8
	86	45.9 (33.9)	138 (102)	35	2700/77	1663 (374)	2.5
	86	45.9 (33.9)	65 (47.9)	35	1261/36	1170 (263)	1.2
0.79 (1.06)	64	61.4 (45.3)	138 (102)	47	516/11	1833 (412)	1.9
	782	9.67 (7.10)	36 (26.6)	3.8	441/115	560 (126)	3.2
	476	15.9 (11.7)	55 (40.6)	6.3	2035/323	660 (148)	3.0
	291	26 (19.2)	72 (53.1)	10.5	1421/138	778 (175)	2.4
	191	39.6 (29.2)	138 (102)	15.5	377/24	1273 (286)	3.0
	192	39.4 (29.1)	72 (53.1)	15.5	1595/102	894 (201)	1.6
	128	59.3 (43.7)	138 (102)	24	1035/44	1456 (327)	2.0
	86	88.4 (65.2)	138 (102)	35	2700/77	1663 (374)	1.4
1.43 (1.92)	64	118 (87.0)	138 (102)	47	516/11	1833 (412)	1.0
	782	17.5 (12.9)	50 (36.9)	3.8	441/115	560 (126)	2.2
	476	28.7 (21.2)	59 (43.5)	6.3	2035/323	660 (148)	1.6
	511	26.8 (19.8)	102 (75.2)	5.9	47/8	917 (206)	3.0
	291	46.9 (34.6)	72 (53.1)	10.5	1421/138	778 (175)	1.2
	289	47.3 (34.9)	138 (102)	10.5	841/81	1109 (249)	2.3
	191	71.6 (52.8)	138 (102)	15.5	377/24	1273 (286)	1.5
	196	69.7 (51.4)	230 (170)	15.5	703/46	1775 (399)	2.6
1.43 (1.92)	128	107 (78.9)	138 (102)	25	1035/44	1456 (327)	1.0
	128	107 (78.9)	350 (258)	24	845/36	3045 (685)	2.6

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SIMOTICS S synchronous motors for SINAMICS S120

SIMOTICS S-1FK7 geared servomotors 1FK7 helical geared motors

Gearbox size	Motor shaft height	1FK7 helical geared motors				Gearbox weight, approx. kg (lb)
		Order No.	Order codes	Gearbox type	Type/gear shaft extension Type of construction/ mounting position/ connector mounting position	
	SH					
C002	36	1FK7032-5AK71-1 ■■■ 5-Z	D01	G . .	H . .	8.6 (19.0)
C002	36	1FK7032-5AK71-1 ■■■ 5-Z	D02	G . .	H . .	8.6 (19.0)
C002	36	1FK7032-5AK71-1 ■■■ 5-Z	D03	G . .	H . .	8.6 (19.0)
C002	36	1FK7032-5AK71-1 ■■■ 5-Z	D04	G . .	H . .	8.6 (19.0)
C002	36	1FK7032-5AK71-1 ■■■ 5-Z	D05	G . .	H . .	8.6 (19.0)
C002	36	1FK7032-5AK71-1 ■■■ 5-Z	D06	G . .	H . .	8.6 (19.0)
C002	36	1FK7032-5AK71-1 ■■■ 5-Z	D07	G . .	H . .	8.6 (19.0)
C102	36	1FK7032-5AK71-1 ■■■ 5-Z	D18	G . .	H . .	13.5 (29.8)
C002	48	1FK7040-5AK71-1 ■■■ 5-Z	D01	G . .	H . .	9.4 (20.7)
C002	48	1FK7040-5AK71-1 ■■■ 5-Z	D02	G . .	H . .	9.4 (20.7)
C002	48	1FK7040-5AK71-1 ■■■ 5-Z	D03	G . .	H . .	9.4 (20.7)
C002	48	1FK7040-5AK71-1 ■■■ 5-Z	D04	G . .	H . .	9.4 (20.7)
C102	48	1FK7040-5AK71-1 ■■■ 5-Z	D15	G . .	H . .	14.3 (31.5)
C002	48	1FK7040-5AK71-1 ■■■ 5-Z	D05	G . .	H . .	9.4 (20.7)
C102	48	1FK7040-5AK71-1 ■■■ 5-Z	D16	G . .	H . .	14.3 (31.5)
C002	48	1FK7040-5AK71-1 ■■■ 5-Z	D06	G . .	H . .	9.4 (20.7)
C102	48	1FK7040-5AK71-1 ■■■ 5-Z	D17	G . .	H . .	14.3 (31.5)
C002	48	1FK7042-5AF71-1 ■■■ 5-Z	D01	G . .	H . .	10.7 (23.6)
C002	48	1FK7042-5AF71-1 ■■■ 5-Z	D02	G . .	H . .	10.7 (23.6)
C002	48	1FK7042-5AF71-1 ■■■ 5-Z	D03	G . .	H . .	10.7 (23.6)
C102	48	1FK7042-5AF71-1 ■■■ 5-Z	D14	G . .	H . .	15.6 (34.4)
C002	48	1FK7042-5AF71-1 ■■■ 5-Z	D04	G . .	H . .	10.7 (23.6)
C102	48	1FK7042-5AF71-1 ■■■ 5-Z	D15	G . .	H . .	15.6 (34.4)
C102	48	1FK7042-5AF71-1 ■■■ 5-Z	D16	G . .	H . .	15.6 (34.4)
C102	48	1FK7042-5AF71-1 ■■■ 5-Z	D17	G . .	H . .	15.6 (34.4)
C002	63	1FK7060-5AF71-1 ■■■ 5-Z	D01	G . .	H . .	13.4 (29.6)
C002	63	1FK7060-5AF71-1 ■■■ 5-Z	D02	G . .	H . .	13.4 (29.6)
C102	63	1FK7060-5AF71-1 ■■■ 5-Z	D12	G . .	H . .	18.3 (40.4)
C002	63	1FK7060-5AF71-1 ■■■ 5-Z	D03	G . .	H . .	13.4 (29.6)
C102	63	1FK7060-5AF71-1 ■■■ 5-Z	D13	G . .	H . .	18.3 (40.4)
C102	63	1FK7060-5AF71-1 ■■■ 5-Z	D14	G . .	H . .	18.3 (40.4)
C202	63	1FK7060-5AF71-1 ■■■ 5-Z	D24	G . .	H . .	22.3 (49.2)
C102	63	1FK7060-5AF71-1 ■■■ 5-Z	D15	G . .	H . .	18.3 (40.4)
C302	63	1FK7060-5AF71-1 ■■■ 5-Z	D35	G . .	H . .	27.4 (60.4)
Encoder systems for motors without DRIVE-CLiQ interface:	IC2048S/R encoder	A				
	AM2048S/R encoder (from shaft height 48)	E				
	AM512S/R encoder (shaft height 36 only)	H				
	AM32S/R encoder (from shaft height 48)	G				
	AM16S/R encoder (shaft height 36 only)	J				
Encoder systems for motors with DRIVE-CLiQ interface:	Multi-pole resolver	S				
	2-pole resolver	T				
Holding brake:	Motor without holding brake	U				
	Motor with holding brake	V				

Order codes for type/gear shaft extension and type of construction/
mounting position/connector mounting position, see page 4/92.

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Selection and ordering data

Power at duty type S3-60 %	Output speed at the gear shaft	Rated output torque gearbox at duty type S3-60 %	Acceleration torque, max. gearbox	Nominal ratio	Exact ratio	Cantilever force, perm. gear shaft extension	Overload factor
P_2 kW (HP)	n_2 rpm	M_2 Nm (lb _f -ft)	M_{2max} Nm (lb _f -ft)	i_{nom}	i_{exact}	F_{Tperm} N (lb _f)	f_B
Natural cooling – SH 63/SH 80							
1.42 (1.90)	85	160 (118)	230 (170)	35	1372/39	2343 (527)	1.1
1.43 (1.92)	86	159 (117)	550 (406)	35	975/28	5961 (1340)	2.7
	60	227 (167)	400 (295)	50	2736/55	3911 (879)	1.4
1.44 (1.93)	60	229 (169)	600 (443)	50	1305/26	6734 (1514)	2.1
	43	319 (235)	550 (406)	70	559/8	7519 (1690)	1.4
	43	319 (235)	850 (627)	70	10075/144	9229 (2075)	2.1
2.23 (2.99)	782	27.2 (20.1)	50 (36.9)	3.8	441/115	560 (126)	1.2
	511	41.6 (30.7)	102 (75.2)	5.9	47/8	917 (206)	1.6
2.22 (2.98)	289	73.5 (54.2)	138 (102)	10.5	841/81	1109 (249)	1.2
	196	108 (79.7)	230 (170)	15.5	703/46	1775 (399)	1.4
	128	166 (122)	350 (258)	23	845/36	3045 (685)	1.4
2.23 (2.99)	86	247 (182)	550 (406)	35	975/28	5961 (1340)	1.5
	60	355 (262)	600 (443)	50	1305/26	6734 (1514)	1.1
	43	495 (365)	850 (627)	70	10075/144	9229 (2075)	1.1
2.07 (2.78)	773	25.6 (18.9)	101 (74.5)	3.9	1363/351	799 (180)	3.3
2.08 (2.79)	511	38.8 (28.6)	115 (84.8)	5.9	47/8	917 (206)	2.5
2.07 (2.78)	289	68.5 (50.5)	138 (102)	10.5	847/81	1109 (249)	1.7
	196	101 (74.5)	230 (170)	15.5	703/46	1775 (399)	1.9
2.08 (2.79)	191	104 (76.7)	138 (102)	15.5	377/24	1273 (286)	1.1
	128	155 (114)	350 (258)	23	845/36	3045 (685)	1.9
2.07 (2.78)	127	156 (115)	230 (170)	24	637/27	2051 (461)	1.3
	86	230 (170)	550 (406)	35	975/28	5961 (1340)	2.0
2.08 (2.79)	86	231 (170)	350 (258)	35	1261/36	3479 (782)	1.3
2.07 (2.78)	60	329 (243)	920 (679)	50	1943/39	8241 (1853)	2.4
2.09 (2.80)	44	454 (335)	1380 (1018)	69	620/9	12344 (2775)	2.6
3.20 (4.29)	773	39.5 (29.1)	101 (74.5)	3.9	1363/351	799 (180)	1.7
	772	39.6 (29.2)	154 (114)	3.9	486/125	1125 (253)	2.5
	511	59.8 (44.1)	115 (84.8)	5.9	47/8	917 (206)	1.3
	518	59.0 (43.5)	176 (130)	5.8	666/115	1284 (289)	2.0
	320	95.6 (70.5)	230 (170)	9.4	2450/261	1509 (339)	1.6
	322	94.8 (69.9)	350 (258)	9.3	3575/384	2237 (503)	2.4
3.19 (4.28)	193	158 (117)	400 (295)	15.5	544/35	2654 (597)	1.7
3.18 (4.26)	190	160 (118)	600 (443)	16	63/4	4576 (1029)	2.5
3.19 (4.28)	128	238 (176)	550 (406)	23	1495/64	5219 (1173)	1.5
	128	238 (176)	850 (627)	23	1495/64	6402 (1439)	2.3
3.20 (4.29)	86	355 (262)	550 (406)	35	975/28	5961 (1340)	1.0
	86	355 (262)	1380 (1018)	35	1360/39	9838 (2212)	2.6
3.19 (4.28)	60	507 (374)	920 (679)	50	1943/39	2265 (509)	1.2
3.20 (4.29)	64	477 (352)	1971 (1454)	47	515/11	14923 (3355)	2.7
3.23 (4.33)	44	702 (518)	1380 (1018)	69	620/9	12344 (2775)	1.3
3.19 (4.28)	43	708 (522)	2300 (1697)	70	765/11	17027 (3828)	2.1

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Gearbox size	Motor shaft height	1FK7 helical geared motors	Gearbox type	Type/gear shaft extension	Type of construction/ mounting position/ connector mounting position	Gearbox weight, approx. kg (lb)
SH		Order No.	Order codes			
C202	63	1FK7060-5AF71-1 ■■■ 5-Z	D26	G . .	H . .	22.3 (49.2)
C402	63	1FK7060-5AF71-1 ■■■ 5-Z	D46	G . .	H . .	37.6 (82.9)
C302	63	1FK7060-5AF71-1 ■■■ 5-Z	D37	G . .	H . .	27.4 (60.4)
C402	63	1FK7060-5AF71-1 ■■■ 5-Z	D47	G . .	H . .	37.6 (82.9)
C402	63	1FK7060-5AF71-1 ■■■ 5-Z	D48	G . .	H . .	37.6 (82.9)
C502	63	1FK7060-5AF71-1 ■■■ 5-Z	D58	G . .	H . .	49.2 (108)
C002	63	1FK7063-5AF71-1 ■■■ 5-Z	D01	G . .	H . .	17.1 (37.7)
C102	63	1FK7063-5AF71-1 ■■■ 5-Z	D12	G . .	H . .	22.0 (48.5)
C102	63	1FK7063-5AF71-1 ■■■ 5-Z	D13	G . .	H . .	22.0 (48.5)
C202	63	1FK7063-5AF71-1 ■■■ 5-Z	D24	G . .	H . .	26.0 (57.3)
C302	63	1FK7063-5AF71-1 ■■■ 5-Z	D35	G . .	H . .	31.1 (68.6)
C402	63	1FK7063-5AF71-1 ■■■ 5-Z	D46	G . .	H . .	41.3 (91.1)
C402	63	1FK7063-5AF71-1 ■■■ 5-Z	D47	G . .	H . .	41.3 (91.1)
C502	63	1FK7063-5AF71-1 ■■■ 5-Z	D58	G . .	H . .	52.9 (117)
C102	80	1FK7080-5AF71-1 ■■■ 5-Z	D11	G . .	H . .	21.7 (47.9)
C102	80	1FK7080-5AF71-1 ■■■ 5-Z	D12	G . .	H . .	21.7 (47.9)
C102	80	1FK7080-5AF71-1 ■■■ 5-Z	D13	G . .	H . .	21.7 (47.9)
C202	80	1FK7080-5AF71-1 ■■■ 5-Z	D24	G . .	H . .	25.7 (56.7)
C102	80	1FK7080-5AF71-1 ■■■ 5-Z	D14	G . .	H . .	21.7 (47.9)
C302	80	1FK7080-5AF71-1 ■■■ 5-Z	D35	G . .	H . .	30.8 (67.9)
C202	80	1FK7080-5AF71-1 ■■■ 5-Z	D25	G . .	H . .	25.7 (56.7)
C402	80	1FK7080-5AF71-1 ■■■ 5-Z	D46	G . .	H . .	41.0 (90.4)
C302	80	1FK7080-5AF71-1 ■■■ 5-Z	D36	G . .	H . .	30.8 (67.9)
C502	80	1FK7080-5AF71-1 ■■■ 5-Z	D57	G . .	H . .	52.6 (116)
C612	80	1FK7080-5AF71-1 ■■■ 5-Z	D68	G . .	H . .	67.9 (150)
C102	80	1FK7083-5AF71-1 ■■■ 5-Z	D11	G . .	H . .	26.9 (59.3)
C202	80	1FK7083-5AF71-1 ■■■ 5-Z	D21	G . .	H . .	30.9 (68.1)
C102	80	1FK7083-5AF71-1 ■■■ 5-Z	D12	G . .	H . .	26.9 (59.3)
C202	80	1FK7083-5AF71-1 ■■■ 5-Z	D22	G . .	H . .	30.9 (68.1)
C202	80	1FK7083-5AF71-1 ■■■ 5-Z	D23	G . .	H . .	30.9 (68.1)
C302	80	1FK7083-5AF71-1 ■■■ 5-Z	D33	G . .	H . .	36.0 (79.4)
C302	80	1FK7083-5AF71-1 ■■■ 5-Z	D34	G . .	H . .	36.0 (79.4)
C402	80	1FK7083-5AF71-1 ■■■ 5-Z	D44	G . .	H . .	46.2 (102)
C402	80	1FK7083-5AF71-1 ■■■ 5-Z	D45	G . .	H . .	46.2 (102)
C502	80	1FK7083-5AF71-1 ■■■ 5-Z	D55	G . .	H . .	57.8 (127)
C402	80	1FK7083-5AF71-1 ■■■ 5-Z	D46	G . .	H . .	46.2 (102)
C612	80	1FK7083-5AF71-1 ■■■ 5-Z	D66	G . .	H . .	73.1 (161)
C502	80	1FK7083-5AF71-1 ■■■ 5-Z	D57	G . .	H . .	57.8 (127)
C712	80	1FK7083-5AF71-1 ■■■ 5-Z	D77	G . .	H . .	108.4 (239)
C612	80	1FK7083-5AF71-1 ■■■ 5-Z	D68	G . .	H . .	73.1 (161)
C712	80	1FK7083-5AF71-1 ■■■ 5-Z	D78	G . .	H . .	108.4 (239)

Encoder systems for motors without DRIVE-CLiQ interface: IC2048S/R encoder
AM2048S/R encoder
AM32S/R encoder
Multi-pole resolver
2-pole resolver

A
E
G
S
T

Encoder systems for motors with DRIVE-CLiQ interface: IC22DQ encoder
AM22DQ encoder
AM16DQ encoder
R15DQ resolver
R14DQ resolver

D
F
K
U
P

Holding brake: Motor without holding brake
Motor with holding brake

U
V

Order codes for type/gear shaft extension and type of construction/mounting position/connector mounting position, see page 4/92.

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P_2 kW (HP)	n_2 rpm	M_2 Nm (lb _f -ft)	M_{2max} Nm (lb _f -ft)	i_{nom}	i_{exact}	F_{rperm} N (lb _f)	f_B
Natural cooling – SH 100							
3.66 (4.91)	774 512	45.1 (33.3) 68.2 (50.3)	251 (185) 288 (212)	3.9 5.9	190/49 2584/441	1671 (376) 1917 (431)	3.7 2.8
3.64 (4.88)	322	108 (79.7)	350 (258)	9.3	3575/384	2237 (503)	2.2
3.66 (4.91)	193	181 (134)	400 (295)	15.5	544/35	2654 (597)	1.5
3.64 (4.88)	190	183 (135)	600 (443)	16	63/4	4576 (1029)	2.2
3.65 (4.89)	128 128	272 (201) 272 (201)	850 (627) 550 (406)	23 23	1495/64 1495/64	6402 (1439) 5219 (1173)	2.1 1.3
3.66 (4.91)	86	406 (300)	1380 (1018)	35	1360/39	9838 (2212)	2.3
3.65 (4.89)	66 64	528 (390) 545 (402)	1380 (1018) 2300 (1697)	45 47	136/3 515/11	1852 (416) 14923 (3355)	1.7 2.8
3.70 (4.96)	44	802 (592)	4140 (3054)	69	620/9	23146 (5203)	3.4
4.73 (6.34)	774	58.3 (43.0)	251 (185)	3.9	190/49	1671 (376)	2.5
4.72 (6.33)	512 324	88.1 (65.1) 139 (103)	288 (212) 550 (406)	5.9 9.3	2584/441 3445/372	1917 (431) 3834 (862)	1.9 2.3
	322 191	140 (103) 236 (174)	350 (258) 920 (679)	9.3 15.5	3575/384 377/24	2237 (503) 5609 (1261)	1.4 2.2
	190	237 (175)	600 (443)	16	63/4	4576 (1029)	1.5
4.70 (6.30)	128	351 (259)	850 (627)	23	1495/64	6402 (1439)	1.4
4.71 (6.32)	120	375 (277)	1650 (1217)	25	5185/208	8797 (1978)	2.5
4.75 (6.37)	86	527 (389)	2300 (1697)	35	2700/77	13552 (3047)	2.5
4.71 (6.32)	66	682 (503)	1380 (1018)	45	136/3	10737 (2414)	1.2
4.72 (6.33)	64	704 (519)	2300 (1697)	47	515/11	14923 (3355)	1.9
4.77 (6.40)	44	1036 (764)	4140 (3054)	69	620/9	23146 (5203)	2.3

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Order codes for type/gear shaft extension and type of construction/
mounting position/connector
mounting position, see page 4/92.

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SIMOTICS S-1FK7 geared servomotors 1FK7 helical geared motors

Selection and ordering data

Power at duty type S3-60 %	Output speed at the gear shaft	Rated output torque gearbox at duty type S3-60 %	Acceleration torque, max. gearbox	Nominal ratio	Exact ratio	Cantilever force, perm. gear shaft extension	Overload factor
P_2 kW (HP)	n_2 rpm	M_2 Nm (lb _f -ft)	M_{2max} Nm (lb _f -ft)	i_{nom}	i_{exact}	F_{rperm} N (lb _f)	f_B
Natural cooling – SH 100							
5.19 (6.96)	644	77 (56.8)	251 (185)	3.9	190/49	1671 (376)	1.9
5.18 (6.95)	423	117 (86.3)	288 (212)	5.9	2584/441	1917 (431)	2.0
5.19 (6.96)	424	117 (86.3)	420 (310)	5.9	377/64	3297 (741)	1.4
5.18 (6.95)	269	184 (136)	350 (258)	9.3	3575/384	2237 (503)	2.5
5.20 (6.97)	241	206 (152)	850 (627)	9.3	3445/372	4886 (1098)	1.1
5.21 (6.99)	159	313 (231)	600 (443)	16	63/4	4576 (1029)	1.1
5.19 (6.96)	154	322 (238)	1650 (1217)	16	1037/64	7620 (1713)	2.9
5.20 (6.97)	107	464 (342)	850 (627)	23	1495/64	6402 (1439)	1.9
5.19 (6.96)	100	496 (366)	1650 (1217)	25	5185/208	8797 (1978)	1.1
5.23 (7.01)	72	694 (512)	1380 (1018)	35	1360/39	9838 (2212)	3.4
	71	703 (519)	4140 (3054)	35	106/3	18528 (4165)	1.1
5.17 (6.93)	53	931 (687)	2300 (1697)	47	515/11	14923 (3355)	2.2
5.18 (6.95)	46	1076 (794)	4140 (3054)	54	704/13	21362 (4802)	1.2
5.16 (6.92)	36	1370 (1011)	4140 (3054)	69	620/9	23146 (5203)	1.1
7.92 (10.6)	770	98.2 (72.4)	366 (270)	3.9	841/216	2872 (646)	2.0
7.93 (10.6)	774	97.8 (72.1)	251 (185)	3.9	190/49	1671 (377)	1.4
7.95 (10.7)	513	148 (109)	650 (479)	5.9	117/20	4036 (907)	2.4
7.93 (10.6)	512	148 (109)	288 (212)	5.9	2584/441	1917 (431)	1.1
7.94 (10.7)	324	234 (173)	850 (627)	9.3	3445/372	4703 (1057)	2.0
	324	234 (173)	550 (406)	9.3	3445/372	3834 (862)	1.3
7.92 (10.6)	191	396 (292)	920 (679)	16	377/24	5609 (1261)	1.3
	185	409 (302)	1650 (1217)	16	1037/64	7620 (1713)	2.2
7.90 (10.6)	129	585 (432)	2300 (1697)	23	255/11	11806 (2654)	2.1
	120	629 (464)	1650 (1217)	25	5185/208	8797 (1978)	1.4
7.93 (10.6)	85	891 (657)	4140 (3054)	36	106/3	18528 (4165)	2.5
7.96 (10.7)	86	884 (652)	2300 (1697)	35	2700/77	13552 (3047)	1.4
7.93 (10.6)	66	1148 (847)	4140 (3054)	46	592/13	20163 (4533)	2.0
7.91 (10.6)	64	1181 (871)	2300 (1697)	47	515/11	14923 (3355)	1.1
8.00 (10.7)	44	1737 (1281)	4140 (3054)	69	620/9	23146 (5203)	1.3

SIMOTICS servomotors

SIMOTICS S synchronous motors for SINAMICS S120

SIMOTICS S-1FK7 geared servomotors 1FK7 helical geared motors

Gearbox size	Motor shaft height	1FK7 helical geared motors				Gearbox weight, approx. kg (lb)
		Order No.	Order codes	Gearbox type	Type/gear shaft extension Type of construction/ mounting position/ connector mounting position	
	SH					
C302	100	1FK7103-5AF71-1 ■■■ 5-Z	D31	G . .	H . .	50.4 (111)
C302	100	1FK7103-5AF71-1 ■■■ 5-Z	D32	G . .	H . .	50.4 (111)
C402	100	1FK7103-5AF71-1 ■■■ 5-Z	D42	G . .	H . .	60.6 (134)
C302	100	1FK7103-5AF71-1 ■■■ 5-Z	D33	G . .	H . .	50.4 (111)
C502	100	1FK7103-5AF71-1 ■■■ 5-Z	D53	G . .	H . .	72.2 (159)
C402	100	1FK7103-5AF71-1 ■■■ 5-Z	D44	G . .	H . .	60.6 (134)
C612	100	1FK7103-5AF71-1 ■■■ 5-Z	D64	G . .	H . .	87.5 (193)
C502	100	1FK7103-5AF71-1 ■■■ 5-Z	D55	G . .	H . .	72.2 (159)
C612	100	1FK7103-5AF71-1 ■■■ 5-Z	D65	G . .	H . .	87.5 (193)
C612	100	1FK7103-5AF71-1 ■■■ 5-Z	D66	G . .	H . .	87.5 (193)
C812	100	1FK7103-5AF71-1 ■■■ 5-Z	D86	G . .	H . .	182.4 (402)
C712	100	1FK7103-5AF71-1 ■■■ 5-Z	D77	G . .	H . .	122.8 (271)
C812	100	1FK7103-5AF71-1 ■■■ 5-Z	D87	G . .	H . .	182.4 (402)
C812	100	1FK7103-5AF71-1 ■■■ 5-Z	D88	G . .	H . .	182.4 (402)
C402	100	1FK7105-5AF71-1 ■■■ 5-Z	D41	G . .	H . .	70.6 (156)
C302	100	1FK7105-5AF71-1 ■■■ 5-Z	D31	G . .	H . .	60.4 (133)
C502	100	1FK7105-5AF71-1 ■■■ 5-Z	D52	G . .	H . .	82.2 (181)
C302	100	1FK7105-5AF71-1 ■■■ 5-Z	D32	G . .	H . .	60.4 (133)
C502	100	1FK7105-5AF71-1 ■■■ 5-Z	D53	G . .	H . .	82.2 (181)
C402	100	1FK7105-5AF71-1 ■■■ 5-Z	D43	G . .	H . .	70.6 (156)
C502	100	1FK7105-5AF71-1 ■■■ 5-Z	D54	G . .	H . .	82.2 (181)
C612	100	1FK7105-5AF71-1 ■■■ 5-Z	D64	G . .	H . .	97.5 (215)
C712	100	1FK7105-5AF71-1 ■■■ 5-Z	D75	G . .	H . .	132.8 (293)
C612	100	1FK7105-5AF71-1 ■■■ 5-Z	D65	G . .	H . .	97.5 (215)
C812	100	1FK7105-5AF71-1 ■■■ 5-Z	D86	G . .	H . .	192.4 (424)
C712	100	1FK7105-5AF71-1 ■■■ 5-Z	D76	G . .	H . .	132.8 (293)
C812	100	1FK7105-5AF71-1 ■■■ 5-Z	D87	G . .	H . .	192.4 (424)
C712	100	1FK7105-5AF71-1 ■■■ 5-Z	D77	G . .	H . .	132.8 (293)
C812	100	1FK7105-5AF71-1 ■■■ 5-Z	D88	G . .	H . .	192.4 (424)
Encoder systems for motors without DRIVE-CLiQ interface:		IC2048S/R encoder AM2048S/R encoder AM32S/R encoder Multi-pole resolver 2-pole resolver	A E G S T			
Encoder systems for motors with DRIVE-CLiQ interface:		IC22DQ encoder AM22DQ encoder AM16DQ encoder R15DQ resolver R14DQ resolver				
Holding brake:		Motor <u>without</u> holding brake Motor <u>with</u> holding brake	U V			

Order codes for type/gear shaft extension and type of construction/
mounting position/connector mounting position, see page 4/92.