

SIMOTICS linear and torque motors

SIMOTICS T torque motors for SINAMICS S120

SIMOTICS T-1FW6 built-in torque motors

Natural cooling

Selection and ordering data

Maximum torque	Static torque ¹⁾	Rated torque ²⁾	Speed at maximum torque, max. ²⁾	Rated speed ²⁾	SIMOTICS T-1FW6 built-in torque motors Natural cooling	Moment of inertia of rotor	Weight, approx. stator + rotor
$M_{\max}$	M_0	M_{rated}	$n_{\max}$ at $M_{\max}$	n_{rated}	Article No.	J	m
Nm (lb _f -ft)	Nm (lb _f -ft)	Nm (lb _f -ft)	rpm	rpm		10 ⁻² kgm ² (lb _f -in-s ²)	kg (lb)
Natural cooling							
34.4 (25.4)	11.3 (8.33)	9.91 (7.31)	695	600	1FW6053-0 B03-0F 1	0.139 (0.012)	3.7 (8.16)
57.5 (42.4)	16.6 (12.2)	13.8 (10.2)	374	600	1FW6053-0 B05-0F 1	0.267 (0.024)	6.5 (14.3)
81.2 (59.9)	19.2 (14.2)	15.2 (11.2)	677	600	1FW6053-0 B07-0K 1	0.39 (0.035)	8.5 (18.7)
116 (85.6)	24.6 (18.1)	18.6 (13.7)	428	600	1FW6053-0 B10-0K 1	0.488 (0.043)	12 (26.5)
174 (128.3)	32.5 (24.0)	22.9 (16.9)	653	600	1FW6053-0 B15-1J 1	0.691 (0.061)	19.8 (43.7)
64.5 (47.6)	15.5 (11.4)	14 (10.3)	325	400	1FW6063-0 B03-0F 1	0.347 (0.031)	7.7 (17.0)
123 (90.7)	25.7 (19.0)	22.2 (16.4)	396	400	1FW6063-0 B05-0K 1	0.665 (0.059)	10.5 (23.2)
166 (122)	31.5 (23.2)	25.9 (19.1)	250	400	1FW6063-0 B07-0K 1	0.904 (0.080)	13.1 (28.9)
226 (167)	38.1 (28.1)	28.5 (21.0)	470	400	1FW6063-0 B10-1J 1	1.21 (0.107)	16.8 (37.0)
332 (245)	49 (36.1)	38.9 (28.7)	257	400	1FW6063-0 B15-1J 1	1.72 (0.152)	23 (50.7)

Cable outlet only for 1FW6053 and 1FW6063:

Axial
Tangential

K
L

Type of connection:

Permanently connected power and signal cables with exposed core ends⁵⁾

Length: 2 m (6.56 ft)

Permanently connected power and signal cables pre-assembled with connectors

Length: 0.5 m (1.64 ft)

C
D

