



Servomotor MP77M

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4.1Nm

Data sheet -----

Motor CEI and IEC standards – permanent magnet – 4 poles – low loss magnetic lamination

Speed/torque/current linear characteristics – excellent dynamic response

High torque increase at low speed – wide range speed regulation at constant torque

Rotation regularity at low rpm with minimum torque ondulation – skewed slots armature



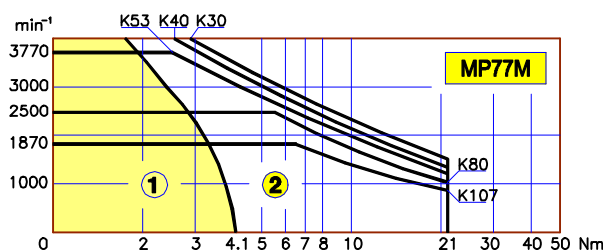
TYPE	Symbols	Units	MP77M				
Winding code	---	---	K30	K40	K53	K80	K107
Continuous stall torque	Cn	Nm	4.1	4.1	4.1	4.1	4.1
Continuous stall current	In	A	15.8	11.4	8.6	5.7	4.3
Peak stall torque	Cp	Nm	21	21	21	21	21
Peak current	Ip	A	79	57	43	29	21
Torque constant	Kt	Nm/A	0.26	0.36	0.48	0.72	0.96
Rated speed	n	min ⁻¹	3000	3000	3000	2000	1500
Befm rated speed	E	V	82	113	151	151	151
Voltage constant	Ke	Vs/rad	0.26	0.36	0.48	0.72	0.96
Armature resistance	Ra	ohm	0.4	0.56	1	2.15	3.5
Terminals resistance	Rm	ohm	0.55	0.76	1.2	2.35	3.7
Armature inductance	La	mH	1.2	2.1	3.6	7.9	13
Electrical time constant	Te	ms	2.2	2.7	3	3.4	3.5
Mechanical time constant	Tm	ms	17	13	11	10	9
Thermal time constant	Tt	min	45	45	45	45	45
Moment of inertia	J	Kgcm ²	22	22	22	22	22
Max. theoretical acceleration	a max.	rad/s ²	9500	9500	9500	9500	9500
Max. speed	n max	min ⁻¹	4000	4000	3770	2500	1870
Max. voltage	V max	V	120	160	200	200	200
Weight	---	Kg	9	9	9	9	9

Torque at 1500min ⁻¹	Duty S1	C1	Nm	3.5	3.5	3.5	3.5	3.5
Power at 1500min ⁻¹	Duty S1	P1	W	550	550	550	550	550
Current at 1500min ⁻¹	Duty S1	I1	A	13.5	9.7	7.3	4.9	3.6
Torque at 2000min ⁻¹	Duty S1	C2	Nm	3.2	3.2	3.2	3.2	3.2
Power at 2000min ⁻¹	Duty S1	P2	W	670	670	670	670	670
Current at 2000min ⁻¹	Duty S1	I2	A	12.3	8.9	6.7	4.5	3.4
Torque at 3000min ⁻¹	Duty S1	C3	Nm	2.4	2.4	2.4	2.4	2.4
Power at 3000min ⁻¹	Duty S1	P3	W	750	750	750	750	750
Current at 3000min ⁻¹	Duty S1	I3	A	9.3	6.7	5	3.3	2.5

Note/ notes

Form factor 1

Tolerance ±10%



①

CONTINUOUS DUTY

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INTERMITTENT DUTY