



Servomotor MP77S

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2.8Nm

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



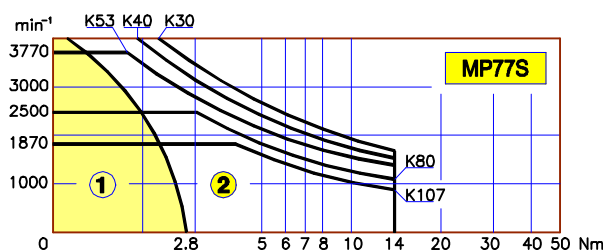
TYPE	Symbols	Units	MP77S				
Winding code	---	---	K30	K40	K53	K80	K107
Continuous stall torque	Cn	Nm	2.8	2.8	2.8	2.8	2.8
Continuous stall current	In	A	10.8	7.8	5.8	3.9	2.9
Peak stall torque	Cp	Nm	14	14	14	14	14
Peak current	Ip	A	54	39	29	20	14
Torque constant	Kt	Nm/A	0.26	0.36	0.48	0.72	0.96
Rated speed	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	0.55	1	1.7	4	6.7
Terminals resistance	Rm	ohm	0.7	1.2	1.9	4.2	6.9
Armature inductance	La	mH	1.75	3.1	5.2	14	21
Electrical time constant	Te	ms	2.3	2.6	2.7	3.3	3
Mechanical time constant	Tm	ms	16	15	13	13	12
Thermal time constant	Tt	min	40	40	40	40	40
Moment of inertia	J	Kgcm ²	16	16	16	16	16
Max. theoretical acceleration	a max.	rad/s ²	8750	8750	8750	8750	8750
Max. speed	n max	min ⁻¹	4000	4000	3770	2500	1870
Max. voltage	V max	V	120	160	200	200	200
Weight	---	Kg	7.5	7.5	7.5	7.5	7.5

Torque at 1500min ⁻¹	Duty S1	C1	Nm	2.4	2.4	2.4	2.4	2.4
Power at 1500min ⁻¹	Duty S1	P1	W	375	375	375	375	375
Current at 1500min ⁻¹	Duty S1	I1	A	9.2	6.6	5	3.3	2.6
Torque at 2000min ⁻¹	Duty S1	C2	Nm	2.2	2.2	2.2	2.2	2.2
Power at 2000min ⁻¹	Duty S1	P2	W	460	460	460	460	460
Current at 2000min ⁻¹	Duty S1	I2	A	8.5	6.1	4.6	3.1	2.3
Torque at 3000min ⁻¹	Duty S1	C3	Nm	1.7	1.7	1.7	1.7	1.7
Power at 3000min ⁻¹	Duty S1	P3	W	530	530	530	530	530
Current at 3000min ⁻¹	Duty S1	I3	A	6.5	4.7	3.6	2.4	1.8

Note/ notes

Form factor 1

Tolerance ±10%



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CONTINUOUS DUTY

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INTERMITTENT DUTY