



# Servomotor MP77L

## Servomotor MP77L

5.5Nm

Data sheet -----

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

Speed/torque/current linear characteristics – excellent dynamic response

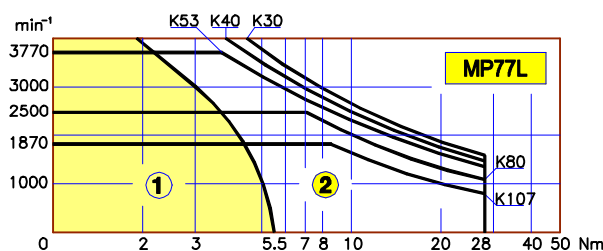
High torque increase at low speed – wide range speed regulation at constant torque

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



TYPE	Symbols	Units	MP77L				
Winding code	---	---	K30	K40	K53	K80	K107
Continuous stall torque	Cn	Nm	5.5	5.5	5.5	5.5	5.5
Continuous stall current	In	A	21.2	15.3	11.5	7.6	5.8
Peak stall torque	Cp	Nm	28	28	28	28	28
Peak current	Ip	A	106	76	57	38	29
Torque constant	Kt	Nm/A	0.26	0.36	0.48	0.72	0.96
Rated speed	n	min <sup>-1</sup>	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	0.24	0.42	0.68	1.8	2.6
Terminals resistance	Rm	ohm	0.39	0.62	0.88	2	2.8
Armature inductance	La	mH	1.1	1.5	2.3	5.8	9.6
Electrical time constant	Te	ms	2.8	2.4	2.6	2.9	3.4
Mechanical time constant	Tm	ms	16	13	11	11	9
Thermal time constant	Tt	min	50	50	50	50	50
Moment of inertia	J	Kgcm <sup>2</sup>	28	28	28	28	28
Max. theoretical acceleration	a max.	rad/s <sup>2</sup>	10000	10000	10000	10000	10000
Max. speed	n max	min <sup>-1</sup>	4000	4000	3770	2500	1870
Max. voltage	V max	V	120	160	200	200	200
Weight	---	Kg	11.5	11.5	11.5	11.5	11.5

Torque at 1500min <sup>-1</sup>	Duty S1	C1	Nm	4.7	4.7	4.7	4.7	4.7
Power at 1500min <sup>-1</sup>	Duty S1	P1	W	740	740	740	740	740
Current at 1500min <sup>-1</sup>	Duty S1	I1	A	18	13	9.7	6.5	4.9
Torque at 2000min <sup>-1</sup>	Duty S1	C2	Nm	4.2	4.2	4.2	4.2	4.2
Power at 2000min <sup>-1</sup>	Duty S1	P2	W	880	880	880	880	880
Current at 2000min <sup>-1</sup>	Duty S1	I2	A	16.2	12	8.8	5.9	4.4
Torque at 3000min <sup>-1</sup>	Duty S1	C3	Nm	3	3	3	3	3
Power at 3000min <sup>-1</sup>	Duty S1	P3	W	940	940	940	940	940
Corrente a/Current at 3000min <sup>-1</sup>	Duty S1	I3	A	11.6	8.4	6.3	4.2	3.2
Note/ notes				Form factor 1			Tolerance ±10%	



①

CONTINUOUS DUTY

②

INTERMITTENT DUTY