



# Servomotor MP77XL

*Servomotor MP77XL*

**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*



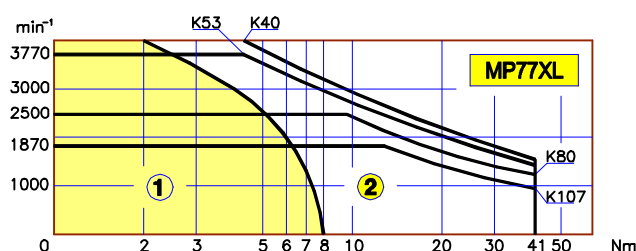
TYPE	Symbols	Units	MP77XL			
Winding code	---	---	K40	K53	K80	K107
Continuous stall torque	Cn	Nm	8	8	8	8
Continuous stall current	In	A	22.3	16.7	11.2	8.4
Peak stall torque	Cp	Nm	41	41	41	41
Peak current	Ip	A	154	111	83	42
Torque constant	Kt	Nm/A	0.36	0.48	0.72	0.96
Rated speed	n	min <sup>-1</sup>	3000	3000	2000	1500
Befm rated speed	E	V	113	151	151	151
Voltage constant	Ke	Vs/rad	0.36	0.48	0.72	0.96
Armature resistance	Ra	ohm	0.25	0.6	1	1.5
Terminals resistance	Rm	ohm	0.4	0.8	1.2	1.7
Armature inductance	La	mH	1	1.8	3.9	6.2
Electrical time constant	Te	ms	2.5	2.3	3.2	3.6
Mechanical time constant	Tm	ms	13	14	10	8
Thermal time constant	Tt	min	60	60	60	60
Moment of inertia	J	Kgcm <sup>2</sup>	41	41	41	41
Max. theoretical acceleration	a max.	rad/s <sup>2</sup>	10000	10000	10000	10000
Max. speed	n max	min <sup>-1</sup>	4000	3770	2500	1870
Max. voltage	V max	V	120	160	200	200
Weight	---	Kg	15	15	15	15

Torque at 1500min <sup>-1</sup>	Duty S1	C1	Nm	7.3	7.3	7.3	7.3
Power at 1500min <sup>-1</sup>	Duty S1	P1	W	1140	1140	1140	1140
Current at 1500min <sup>-1</sup>	Duty S1	I1	A	20.2	15.2	10.1	7.6
Torque at 2000min <sup>-1</sup>	Duty S1	C2	Nm	6	6	6	6
Power at 2000min <sup>-1</sup>	Duty S1	P2	W	1250	1250	1250	1250
Current at 2000min <sup>-1</sup>	Duty S1	I2	A	17	12.5	8.4	6.3
Torque at 3000min <sup>-1</sup>	Duty S1	C3	Nm	4	4	4	4
Power at 3000min <sup>-1</sup>	Duty S1	P3	W	1250	1250	1250	1250
Current at 3000min <sup>-1</sup>	Duty S1	I3	A	11.2	8.4	5.6	4.2

Note/ notes

Form factor 1

Tolerance ±10%



①

CONTINUOUS DUTY

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INTERMITTENT DUTY