

## MT40P4

### D. C. Servomotors

#### Technical Data

Parameter	Unit	-76	-61	-38
<b>General</b>				
Voltage Gradient No Load	Volts/1000 RPM *	76	61	38
Max. Terminal Voltage	Volts	180	180	150
Max. Speed	RPM	2400	3000	4000
<b>Continuous Stall Torque TENV ***</b>	<b>Nm</b>	<b>6</b>	<b>6</b>	<b>6</b>
Continuous Stall Torque Blower Cooled ***	Nm	12	12	12
<b>Continuous Stall Current TENV ***</b>	<b>Amps</b>	<b>8.7</b>	<b>11</b>	<b>17</b>
Armature Polar Moment of Inertia	Kgm <sup>2</sup>	0.0077	0.0077	0.0077
<b>Current at Peak Torque **</b>	<b>Amps</b>	<b>50</b>	<b>63</b>	<b>100</b>
Peak Stall Torque **	Nm	34	34	34
Torque Constant K <sub>T</sub> **	Nm/Amp *	0.69	0.55	0.35
Voltage Constant K <sub>V</sub> **	Volts/Rad/Sec	0.69	0.55	0.345
Theoretical Acceleration at Peak Torque	Rad/Sec <sup>2</sup>	4400	4400	4400
<b>Winding</b>				
Armature Resistance Less Brushes **	Ohms *	1	0.6	0.25
Armature Inductance	Millihenrys *	4.5	3	1.2
Mechanical Time Constant **	Milliseconds	19	18	20
Insulation Class		F	F	F
Max. Ambient Temperature	°C	40	40	40
Thermal Time Constant	Minutes *	90	90	90
Static Friction Torque	Nm	0.23	0.23	0.23
Motor Weight	Kg	17.5	17.5	17.5
<b>Tachometer</b>				
Voltage Gradient	Volts/1000 RPM *	9.5	7	
Ripple	Volts/Rad/Sec *	0.09	0.067	
	Per Cent	1	1	
	Cycles/Rev	25	25	
Armature Resistance **	Ohms	36	24	
Armature Inductance	Millihenrys *	55	36	
Maximum Current	Amps	0.025	0.035	

\* Tolerance ± 10%

\*\* At 25°C

\*\*\* At 40°C Ambient