

MT40W4

D. C. Servomotors

Technical Data

Parameter	Unit	-90	-68	-45
General				
Voltage Gradient No Load	Volts/1000 RPM *	90	68	45
Max. Terminal Voltage	Volts	180	180	180
Max. Speed	RPM	2000	2600	4000
Continuous Stall Torque TENV ***	Nm	8.5	8.5	8.5
Continuous Stall Torque Blower Cooled ***	Nm	16	16	16
Continuous Stall Current TENV ***	Amps	10	13	20
Armature Polar Moment of Inertia	Kgm ²	0.011	0.011	0.011
Current at Peak Torque **	Amps	65	86	130
Peak Stall Torque **	Nm	50	50	50
Torque Constant K _T **	Nm/Amp *	0.85	0.64	0.42
Voltage Constant K _V **	Volts/Rad/Sec	0.85	0.64	0.42
Theoretical Acceleration at Peak Torque	Rad/Sec ²	4500	4500	4500
Winding				
Armature Resistance Less Brushes **	Ohms *	0.8	0.47	0.2
Armature Inductance	Millihenrys *	6	3.3	1.2
Mechanical Time Constant **	Milliseconds	14	17	17
Insulation Class		F	F	F
Max. Ambient Temperature	°C	40	40	40
Thermal Time Constant	Minutes *	100	100	100
Static Friction Torque	Nm	0.23	0.23	0.23
Motor Weight	Kg	21.5	21.5	21.5
Tachometer				
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