

MT40ZD4

D. C. Servomotors

Technical Data

Parameter	Unit	-90	-60	-45
General				
Voltage Gradient No Load	Volts/1000 RPM *	90	60	45
Max. Terminal Voltage	Volts	180	180	180
Max. Speed	RPM	2000	3000	4000
Continuous Stall Torque TENV ***	Nm	11	11	11
Continuous Stall Torque Blower Cooled ***	Nm	21	21	21
Continuous Stall Current TENV ***	Amps	13.5	20	26
Armature Polar Moment of Inertia	Kgm ²	0.014	0.014	0.014
Current at Peak Torque **	Amps	85	125	170
Peak Stall Torque **	Nm	66	66	66
Torque Constant K _T **	Nm/Amp *	0.82	0.55	0.41
Voltage Constant K _V **	Volts/Rad/Sec	0.85	0.55	0.41
Theoretical Acceleration at Peak Torque	Rad/Sec ²	4700	4700	4700
Winding				
Armature Resistance Less Brushes **	Ohms *	0.56	0.25	0.15
Armature Inductance	Millihenrys *	4	1.8	1
Mechanical Time Constant **	Milliseconds	14	16	17
Insulation Class		F	F	F
Max. Ambient Temperature	°C	40	40	40
Thermal Time Constant	Minutes *	100	100	100
Static Friction Torque	Nm	0.25	0.25	0.25
Motor Weight	Kg	26	26	26
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