

MT30R4

D. C. Servomotors

Technical Data

Parameter	Unit	-58	-46	-37	-25
General					
Voltage Gradient No Load	Volts/1000 RPM *	58	46	37	25
Max. Terminal Voltage	Volts	140	140	140	140
Max. Speed	RPM	2500	3000	3800	4000
Continuous Stall Torque TENV ***	Nm	3.5	3.5	3.5	3.2
Continuous Stall Torque Blower Cooled ***	Nm	6	6	6	6
Continuous Stall Current TENV ***	Amps	6.1	7.6	9.5	13.3
Armature Polar Moment of Inertia	Kgm ²	0.002	0.002	0.002	0.002
Current at Peak Torque **	Amps	37	47	57	86
Peak Stall Torque **	Nm	18	18	18	18
Torque Constant K _T **	Nm/Amp *	0.57	0.46	0.37	0.24
Voltage Constant K _V **	Volts/Rad/Sec	0.57	0.46	0.37	0.24
Theoretical Acceleration at Peak Torque	Rad/Sec ²	9000	9000	9000	9000
Winding					
Armature Resistance Less Brushes **	Ohms *	1.7	0.9	0.72	0.4
Armature Inductance	Millihenrys *	11.5	7	5	2.2
Mechanical Time Constant **	Milliseconds	11	11	12	14
Insulation Class		F	F	F	F
Max. Ambient Temperature	°C	40	40	40	40
Thermal Time Constant	Minutes *	60	60	60	60
Static Friction Torque	Nm	0.2	0.2	0.2	0.2
Motor Weight	Kg	8.3	8.3	8.3	8.3
Tachometer					
Voltage Gradient	Volts/1000 RPM *	9.5		7	
	Volts/Rad/Sec *	0.09		0.067	
Ripple	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