

## MT30Z4

### D. C. Servomotors

#### Technical Data

Parameter	Unit	-85	-61	-37
<b>General</b>				
Voltage Gradient No Load	Volts/1000 RPM *	85	61	37
Max. Terminal Voltage	Volts	140	140	140
Max. Speed	RPM	1600	2300	3750
<b>Continuous Stall Torque TENV ***</b>	<b>Nm</b>	<b>5.5</b>	<b>5</b>	<b>4.4</b>
Continuous Stall Torque Blower Cooled ***	Nm	10	9	8
<b>Continuous Stall Current TENV ***</b>	<b>Amps</b>	<b>6.8</b>	<b>8.6</b>	<b>12.6</b>
Armature Polar Moment of Inertia	Kgm <sup>2</sup>	0.003	0.003	0.003
<b>Current at Peak Torque **</b>	<b>Amps</b>	<b>32</b>	<b>50</b>	<b>86</b>
Peak Stall Torque **	Nm	26	26	26
Torque Constant K <sub>T</sub> **	Nm/Amp *	0.81	0.58	0.35
Voltage Constant K <sub>V</sub> **	Volts/Rad/Sec	0.81	0.58	0.35
Theoretical Acceleration at Peak Torque	Rad/Sec <sup>2</sup>	8700	8700	8700
<b>Winding</b>				
Armature Resistance Less Brushes **	Ohms *	2.2	1.2	0.35
Armature Inductance	Millihenrys *	17	8	3
Mechanical Time Constant **	Milliseconds	12	12	10
Insulation Class	F	F	F	F
Max. Ambient Temperature	°C	40	40	40
Thermal Time Constant	Minutes *	60	60	60
Static Friction Torque	Nm	0.2	0.2	0.2
Motor Weight	Kg	11.3	11.3	11.3
<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