

## MT30E4

### D. C. Servomotors

#### Technical Data

Parameter	Unit	-52	-32	-25	-20
<b>General</b>					
Voltage Gradient No Load	Volts/1000 RPM *	52	32	25	20
Max. Terminal Voltage	Volts	140	130	100	80
Max. Speed	RPM	2700	4000	4000	4000
<b>Continuous Stall Torque TENV ***</b>	<b>Nm</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>
Continuous Stall Torque Blower Cooled ***	Nm	2	2	2	2
<b>Continuous Stall Current TENV ***</b>	<b>Amps</b>	<b>2.5</b>	<b>4.1</b>	<b>5.4</b>	<b>7</b>
Armature Polar Moment of Inertia	Kgm <sup>2</sup>	0.0011	0.0011	0.0011	0.0011
<b>Current at Peak Torque **</b>	<b>Amps</b>	<b>13</b>	<b>22</b>	<b>29</b>	<b>37</b>
Peak Stall Torque **	Nm	6	6	6	6
Torque Constant K <sub>T</sub> **	Nm/Amp *	0.48	0.29	0.22	0.17
Voltage Constant K <sub>V</sub> **	Volts/Rad/Sec	0.48	0.29	0.22	0.17
Theoretical Acceleration at Peak Torque	Rad/Sec <sup>2</sup>	5500	5500	5500	5500
<b>Winding</b>					
Armature Resistance Less Brushes **	Ohms *	5.9	2.2	1.25	0.9
Armature Inductance	Millihenrys *	28	10	6	3.7
Mechanical Time Constant **	Milliseconds	30	30	30	30
Insulation Class		F	F	F	F
Max. Ambient Temperature	°C	40	40	40	40
Thermal Time Constant	Minutes *	40	40	40	40
Static Friction Torque	Nm	0.15	0.15	0.15	0.15
Motor Weight	Kg	5.1	5.1	5.1	5.1
<b>Tachometer</b>					
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