

Product Details

DC Gearmotor GM14904S012-R1

Note: Product photo is for illustrative purposes. Please refer to Engineering Drawing for specifics.



Motor Series	Series GM14900 LO-COG Brush Commutated DC Gearmotors
Price (USD)	
Frame Size (Mounting Face) (in)	2
Motor Frame Size (in)	2.125
Gear Frame Size (in)	2.000
Overall Body Length (in)	6.048
Supply Voltage (V)	24
Continuous Output Torque (oz-in)	140
Output Speed @ Cont. Torque (RPM)	536
Current @ Cont. Torque (A)	3.8
Continuous Output Power (W)	55
No Load Current (A)	0.39
No Load Output Speed (RPM)	612
Peak Current (A)	24
Peak Output Torque (oz-in)	1100
Motor Constant (oz-in/ \sqrt{W})	8.63
Motor Torque Constant (oz-in/A)	8.67
Motor Voltage Constant (V/krpm)	6.41
Terminal Resistance (Ohms)	1.01
Inductance (mH)	1.6
Coulomb Friction Torque (oz-in)	1.6
Viscous Damping Factor (oz-in/krpm)	0.18
Electrical Time Constant (ms)	1.6
Mechanical Time Constant (ms)	7
Thermal Time Constant (min)	29
Thermal Resistance ($^{\circ}\text{C}/\text{Watt}$)	7.7
Maximum Winding Temperature ($^{\circ}\text{C}$)	155
Rotor Inertia (oz-in-s ²)	0.0037
Output Bearing	Ball
Gear Series	G51A-HT
Gear Ratio (xx.x:1)	5.9
Gear Type	high torque spur
Gear Efficiency	0.9
Gear Maximum Torque (oz-in)	300
Encoder Series	E30B
Encoder Resolution (CPR)	500
Encoder Output Channels	3
Weight (Mass) (oz)	43
Voltage Note	n/a
Torque Warning	Warning: potential peak torque at rated voltage exceeds gearbox torque capacity. Care must be taken to limit the peak torque so as not to exceed the gearbox rating