

## Product Details

### DC Gearmotor GM8224S024

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



Motor Series	Series GM8000 LO-COG Brush Commutated DC Gearmotors
Vendor	Pittman
Frame Size (Mounting Face) (in)	1.37
Motor Frame Size (in)	1.175
Gear Frame Size (in)	1.370
Overall Body Length (in)	3.285
Supply Voltage (V)	12
Continuous Output Torque (oz-in)	175
Output Speed @ Cont. Torque (RPM)	20.2
Current @ Cont. Torque (A)	1.2
Continuous Output Power (W)	2.6
No Load Current (A)	0.27
No Load Output Speed (RPM)	48.4
Peak Current (A)	2.8
Peak Output Torque (oz-in)	550
Motor Constant (oz-in/√W)	1.48
Motor Torque Constant (oz-in/A)	3.09
Motor Voltage Constant (V/krpm)	2.29
Terminal Resistance (Ohms)	4.33
Inductance (mH)	2.3
Coulomb Friction Torque (oz-in)	0.35
Viscous Damping Factor (oz-in/krpm)	0.02
Electrical Time Constant (ms)	0.54
Mechanical Time Constant (ms)	15
Thermal Time Constant (min)	11
Thermal Resistance (°C/Watt)	21
Maximum Winding Temperature (°C)	155
Rotor Inertia (oz-in-s <sup>2</sup> )	0.00023
Output Bearing	Ball
Gear Series	G35A-WF
Gear Ratio (xx.x:1)	95.9
Gear Type	wide face spur
Gear Efficiency	0.74
Gear Maximum Torque (oz-in)	175
Encoder Series	n/a
Encoder Resolution (CPR)	n/a
Encoder Output Channels	n/a
Weight (Mass) (oz)	8.6
Voltage Note	Note: rated voltage of PittmanExpress item is different than catalog reference voltage of base motor.
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



