

## Product Details

### DC Gearmotor GM8224S020

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



<b>Motor Series</b>	Series GM8000 LO-COG Brush Commutated DC Gearmotors
<b>Price (USD)</b>	
<b>Frame Size (Mounting Face) (in)</b>	1.37
<b>Motor Frame Size (in)</b>	1.175
<b>Gear Frame Size (in)</b>	1.370
<b>Overall Body Length (in)</b>	3.285
<b>Supply Voltage (V)</b>	12
<b>Continuous Output Torque (oz-in)</b>	120
<b>Output Speed @ Cont. Torque (RPM)</b>	32
<b>Current @ Cont. Torque (A)</b>	1.2
<b>Continuous Output Power (W)</b>	2.9
<b>No Load Current (A)</b>	0.27
<b>No Load Output Speed (RPM)</b>	76.7
<b>Peak Current (A)</b>	2.8
<b>Peak Output Torque (oz-in)</b>	360
<b>Motor Constant (oz-in/√W)</b>	1.48
<b>Motor Torque Constant (oz-in/A)</b>	3.09
<b>Motor Voltage Constant (V/krpm)</b>	2.29
<b>Terminal Resistance (Ohms)</b>	4.33
<b>Inductance (mH)</b>	2.3
<b>Coulomb Friction Torque (oz-in)</b>	0.35
<b>Viscous Damping Factor (oz-in/krpm)</b>	0.02
<b>Electrical Time Constant (ms)</b>	0.54
<b>Mechanical Time Constant (ms)</b>	15
<b>Thermal Time Constant (min)</b>	11
<b>Thermal Resistance (°C/Watt)</b>	21
<b>Maximum Winding Temperature (°C)</b>	155
<b>Rotor Inertia (oz-in-s<sup>2</sup>)</b>	0.00023
<b>Output Bearing</b>	Ball
<b>Gear Series</b>	G35A-WF
<b>Gear Ratio (xx.x:1)</b>	60.5
<b>Gear Type</b>	wide face spur
<b>Gear Efficiency</b>	0.78
<b>Gear Maximum Torque (oz-in)</b>	175
<b>Encoder Series</b>	n/a
<b>Encoder Resolution (CPR)</b>	n/a
<b>Encoder Output Channels</b>	n/a
<b>Weight (Mass) (oz)</b>	8.4
<b>Voltage Note</b>	Note: rated voltage of PittmanExpress item is different than catalog reference voltage of base motor.
<b>Torque Warning</b>	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