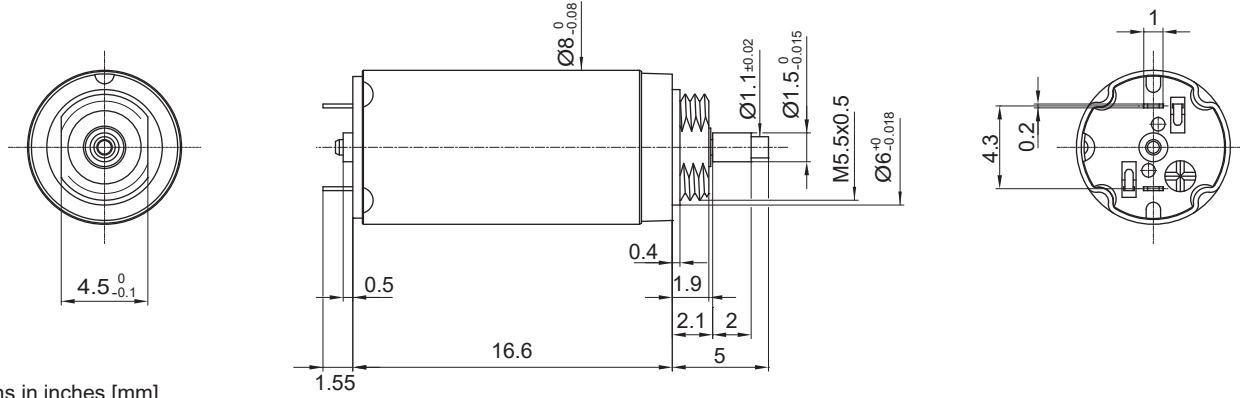


**08GS61**

Ø 8 mm • Precious metal commutation • 0.65 mNm



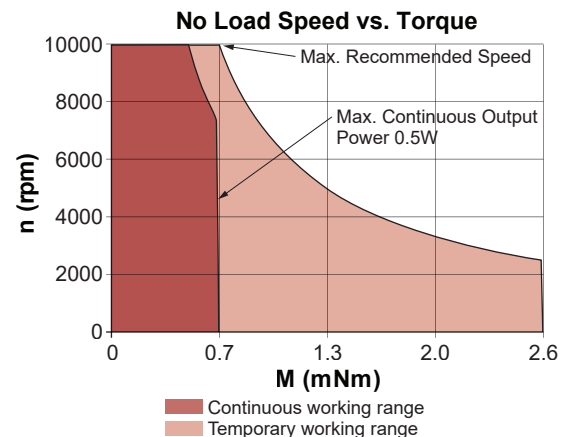
Dimensions in inches [mm]

Electrical Data	Symbol	08GS61 .... .3			Unit
		107	105	105C	
1 Nominal Voltage	V	2	4.5	6	Volt
2 No-Load Speed	$n_0$	7,000	10,670	11,000	rpm
3 No-Load Current	$I_0$	6.0	4.0	3.0	mA
4 Terminal Resistance	R	12.6	30.0	45.8	Ω
5 Output Power	$P_{2max}$	0.5	0.5	0.5	W
6 Stall Torque	mNm	0.42 (0.06)	0.59 (0.09)	0.64 (0.1)	mNm (oz-in)
7 Efficiency	$\eta_{max}$	65	70	72	%
8 Max Continuous Speed	$n_{e max}$	10,000	10,000	10,000	rpm
9 Max Continuous Torque	$M_{e max}$	0.64 (0.1)	0.64 (0.1)	0.66 (0.1)	mNm (oz-in)
10 Max Continuous Current	$I_{e max}$	0.25	0.17	0.13	A
11 Back-EMF Constant	$k_E$	0.28	0.41	0.53	mV/rpm
12 Torque Constant	$k_M$	2.63	3.92	5.10	mNm/A
13 Motor Regulation	$R/k^2$	1,820.0	1,950.0	1,760.0	10 <sup>3</sup> /Nms
14 Friction Torque	$T_F$	0.02 (0.01)	0.02 (0.01)	0.02 (0.01)	mNm (oz-in)
15 Rotor Inductance	L	0.06	0.11	0.20	mH
16 Mechanical Time Constant	$\tau_m$	5.5	5.9	5.3	ms
17 Rotor Inertia	J	0.03	0.03	0.03	g-cm <sup>2</sup>

General Data				
18 Thermal Resistance (rotor/body)	$R_{th1}/R_{th2}$	20/100		°C/W
19 Thermal Time Constant (rotor/stator)	$t_{w1}/t_{w2}$	5/100		S
20 Operating Temperature Range:	motor	-30°C to 85°C (-22°F to 185°F)		°C (°F)
	rotor	100°C (212°F)		°C (°F)
21 Shaft Load Max.: (2 mm from bearing)	With sleeve bearings			
	-radial	0.5 (1.8)		N (oz)
	-axial	30 (107.9)		N (oz)
22 Shaft Play:	-radial	<0.015 (0.0006)		mm (inch)
	-axial	0.100 (0.0039)		mm (inch)
23 Weight	g	3.8 (0.14)		g (oz)
24 Commutation Segments	-	5		segments

**Execution Table**

Gearbox	Single Shaft
R10	Upon Request
R08	Upon Request



► Motor shaft rotates CW when seen from motor front face when +ve and -ve supply is given to respective terminals.