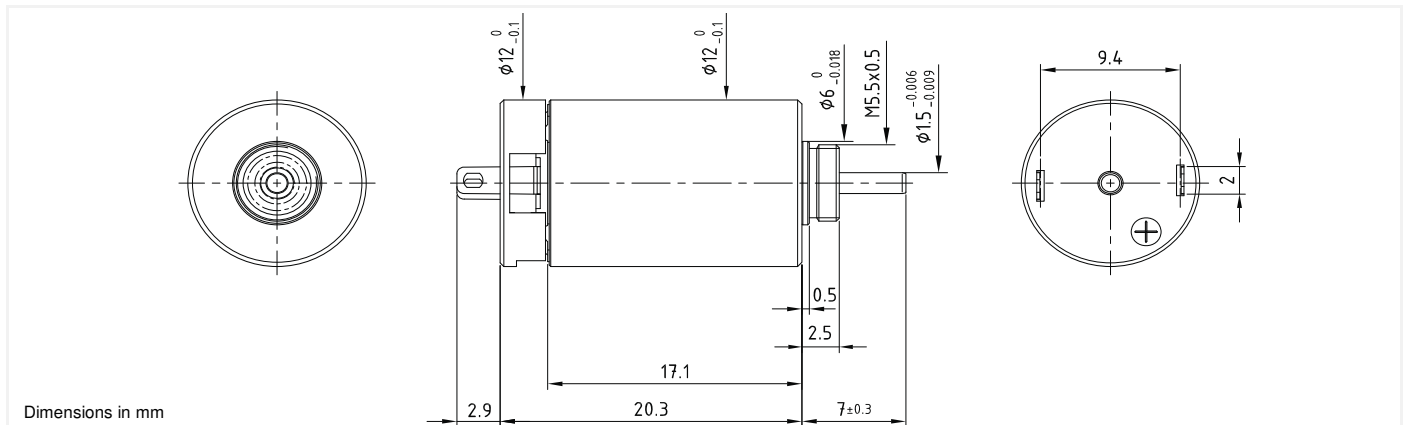


12GS88 Athlonix™

Precious metal commutation

Ø12mm

1.5 mNm



12GS88 **** .1007

Electrical Data	****	210E	208F	
1 Nominal Voltage	V	3	6	Volt
2 No-Load Speed	n_0	7,280	9,000	rpm
3 No-Load Current	I_0	14.0	12.0	mA
4 Terminal Resistance	R	7.4	20.6	Ω
5 Output Power	P_{2max}	1.2	1.1	W
6 Stall Torque	mNm	1.54 (0.22)	1.78 (0.26)	mNm (oz-in)
7 Efficiency	η_{max}	66	64	%
8 Max Continuous Speed	$n_{e max.}$	10,000	10,000	rpm
9 Max Continuous Torque	$M_{e max.}$	1.51 (0.21)	1.45 (0.21)	mNm (oz-in)
10 Max Continuous Current	$I_{e max.}$	0.41	0.25	A
11 Back-EMF Constant	k_E	0.40	0.64	mV/rpm
12 Torque Constant	k_M	3.80	6.10	mNm/A
13 Motor Regulation	R/k^2	512.0	550.0	$10^3/Nms$
14 Friction Torque	T_F	0.07 (0.01)	0.07 (0.01)	mNm (oz-in)
15 Rotor Inductance	L	0.09	0.25	mH
16 Mechanical Time Constant	t_m	9.7	12.0	ms
17 Rotor Inertia	J	0.19	0.21	$g.cm^2$

General Data				
18 Thermal Resistance (rotor/body)	R_{th1} / R_{th2}	14/66		$^{\circ}C/W$
19 Thermal Time Constant (rotor/stator)	t_{w1}/t_{w2}	5/150		S
20 Operating Temperature Range:	motor	-30 $^{\circ}C$ to 85 $^{\circ}C$ (-22 $^{\circ}F$ to 185 $^{\circ}F$)		$^{\circ}C$ ($^{\circ}F$)
	rotor	100 $^{\circ}C$ (212 $^{\circ}F$)		$^{\circ}C$ ($^{\circ}F$)
21 Shaft Load Max.:		With sleeve bearings		
(5mm from bearing)	-radial	1.5 (5.4)		N (oz)
	-axial	150 (539.5)		N (oz)
22 Shaft Play:	-radial	<0.03 (0.0012)		mm (inch)
	-axial	0.15 (0.0059)		mm (inch)
23 Weight	g	13.5 (0.48)		g (oz)

Execution Table		
Gearbox	Single Shaft	MR2
R10	Upon Request	Upon Request
R13	Upon Request	Upon Request

