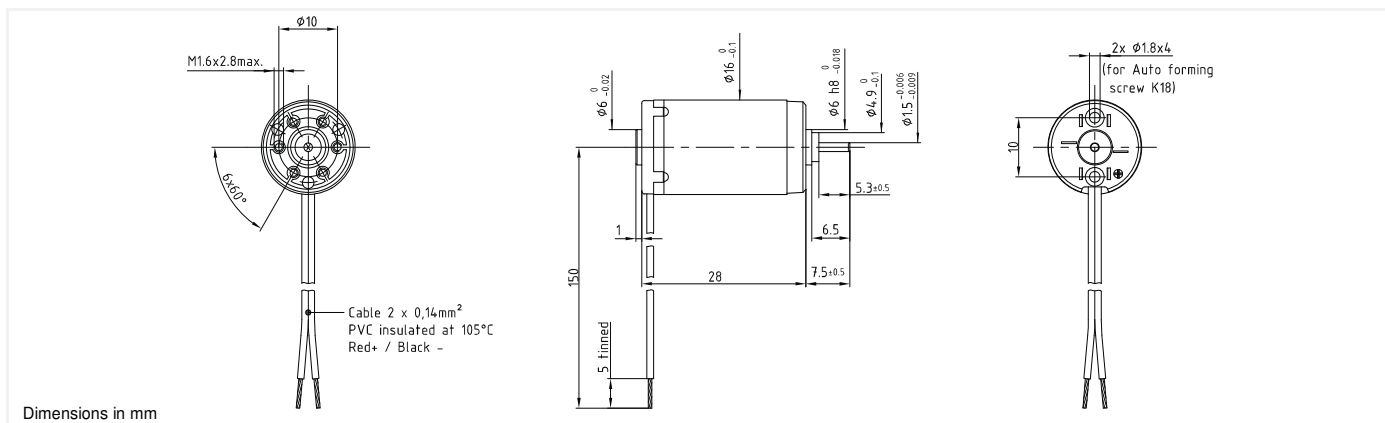


16G88

Precious metal commutation

Ø16mm

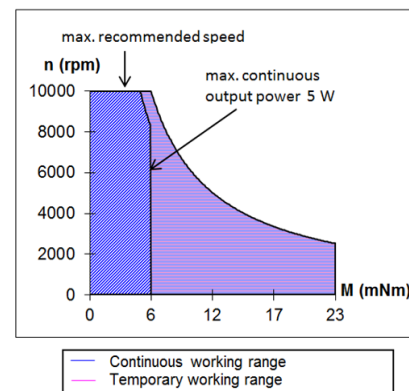
5.8 mNm



16G88 **** .1

Electrical Data	****	220P	214E	213E	211E	210E	205E		
1 Nominal Voltage	V	3	8	9	12	15	32	Volt	
2 No-Load Speed	n_0	11,025	9,250	7,980	8,690	9,000	8,150	rpm	
3 No-Load Current	I_0	45.0	10.0	8.0	6.5	5.5	2.0	mA	
4 Terminal Resistance	R	0.5	5.4	7.6	13.0	19.5	135.0	Ω	
5 Output Power	P_{2max}	4.1	4.2	4.6	4.2	4.2	2.5	W	
6 Stall Torque	mNm	16 (2.27)	12.1 (1.72)	12.7 (1.8)	12.1 (1.72)	12.2 (1.73)	8.8 (1.25)	mNm (oz-in)	
7 Efficiency	η_{max}	83	84	84	84	84	82	%	
8 Max Continuous Speed	$n_{e,max}$	10,000	10,000	10,000	10,000	10,000	10,000	rpm	
9 Max Continuous Torque	$M_{e,max}$	5.5 (0.76)	5.3 (0.76)	5.8 (0.83)	5.4 (0.77)	5.4 (0.77)	4.8 (0.68)	mNm (oz-in)	
10 Max Continuous Current	$I_{e,max}$	2.20	0.66	0.55	0.42	0.35	0.13	A	
11 Back-EMF Constant	k_E	0.27	0.86	1.12	1.37	1.65	3.90	mV/rpm	
12 Torque Constant	k_M	2.58	8.20	10.70	13.10	15.80	37.20	mNm/A	
13 Motor Regulation	R/k^2	75.1	80.3	66.4	75.75	78.11	97.55	$10^3/Nms$	
14 Friction Torque	T_F	0.12 (0.02)	0.08 (0.02)	0.09 (0.02)	0.09 (0.02)	0.09 (0.02)	0.07 (0.01)	mNm (oz-in)	
15 Rotor Inductance	L	0.01	0.12	0.15	0.26	0.40	1.70	mH	
16 Mechanical Time Constant	t_m	6.0	6.4	5.3	6.1	5.8	7.8	ms	
17 Rotor Inertia	J	0.80	0.80	0.80	0.80	0.74	0.80	$g.cm^2$	
General Data									
18 Thermal Resistance (rotor/body)	R_{th1} / R_{th2}	8 / 35							°C/W
19 Thermal Time Constant (rotor/stator)	t_{w1}/t_{w2}	6 / 500							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.:	With sleeve bearings								
(5mm from bearing)	-radial	1.5 (5.4)							N (oz)
	-axial	100 (359.6)							N (oz)
22 Shaft Play:	-radial	<0.03 (0.0012)							mm (inch)
	-axial	0.15 (0.0059)							mm (inch)
23 Weight	g	24 (0.85)							g (oz)

Execution Table		
Gearbox	Single Shaft	MR2
B16	5	Upon Request
BA16	5	Upon Request
R16	1	Upon Request



V121616