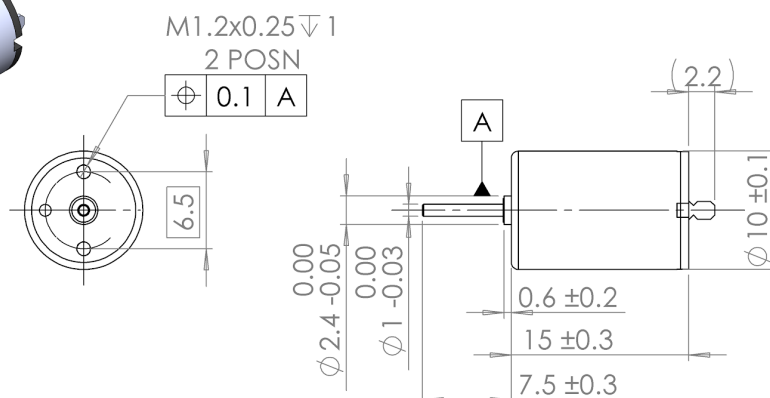
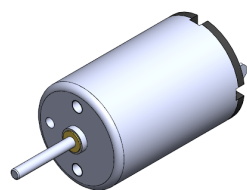


110-108 Brushed motor Coreless (precious metal brushes)

Ø10 x 15mm / fit for gearbox and encoder



DIMENSIONS ARE IN mm
SURFACE FINISH: N7
TOLERANCES:
LINEAR: ± 0.2
ANGULAR: $\pm 1^\circ$

Design and accessories			Samples available	Manufacturable on request	Custom design	
Units			110-108		110-XXX	
A	Availability		Stocked design		8 weeks	
B	Motor Type		Brushed		Brushed	
C	Commutation		Precious metal brush		Precious metal brush	
D	Shafts		Single		Single / Dual	
E	Gearbox		Not fitted		Range 1:3.5 ~ 1:1024	
F	Encoder		Not fitted		Magnetic / optical	
G	Connections		Terminals		Terminals / leads	
H	Cable		N/A		connectors	
I	Housing Material		Nickel plated steel		Nickel plated steel	
I	Body diameter	mm	10			
K	Body length	mm	15			
L	Weight	g	4.9			
Performance characteristics						
1	Nominal voltage	V	8.0		Nominal load, no load, and stall points, and efficiency will depend on the winding design. Please contact support@pmdri.com	
2	No load speed	rpm	18 100			
3	No load current	A	0.027			
4	Nominal speed	rpm	13 695			
5	Nominal torque	mNm	0.70			
6	Nominal current	A	0.215			
7	Stall torque	mNm	2.88			
8	Stall current	A	0.785			
9	Maximum efficiency	%	61.8			
Winding specific characteristics						
10	Terminal resistance	Ω	10.20		Winding dependent	
11	Terminal inductance	uH	185			
12	Torque constant (Kt)	mNm/A	4.08			
13	Speed constant (Kv)	rpm/V	2 343			
14	Speed / torque gradient	rpm/mNm	6 292			
15	Mechanical time constant	ms	9			
16	Rotor inertia	g·cm²	0.08			
Motor body characteristics			Performance curve (based on ambient 25°C)			
17	Thermal resistance housing-ambient	°C/W	50.0	110-108 Speed [rpm] Current [mA] Power [mW] Efficiency [%]		
18	Thermal resistance winding-housing	°C/W	20.0			
19	Thermal time constant winding	s	4			
20	Thermal time constant motor	s	120			
21	Ambient temperature	min °C	-20			
		max °C	+60			
22	Max. permissible winding temperature	°C	+85			
23	Max. permissible rotor speed	rpm	25 000			
24	Axial play at axial load	mm	0.3 max			
25	Max. axial load (dynamic)	N	0.1			
26	Max. force for press fits (static)	N	10.0			
	with shaft supported	Dual-shaft version only				
27	Max. radial loading (3mm from flange)	N	0.3			
28	Number of magnet pole pairs		1			