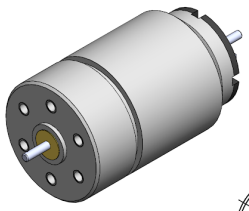
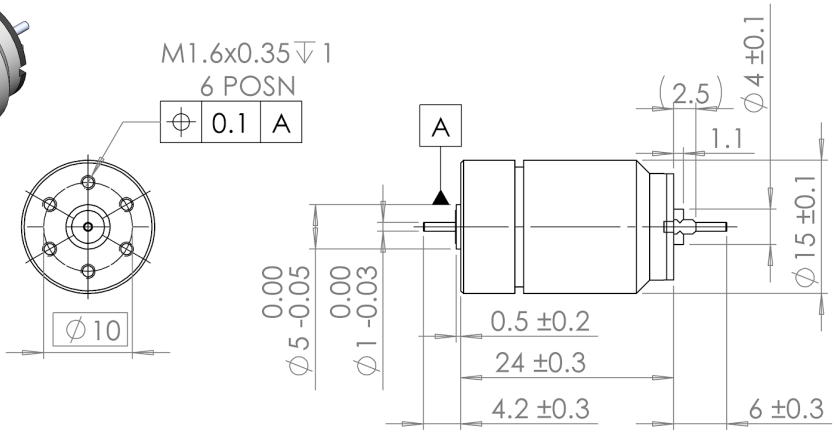
115-800 Brushed motor Coreless (precious metal brushes)

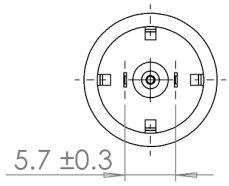
Ø15 x 24mm / customizable housing / fit for gearbox and encoder

PRECISION MICRODRIVES ™

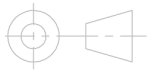




DIMENSIONS ARE IN mm
SURFACE FINISH: N7
TOLERANCES:
LINEAR: ± 0.2
ANGULAR: ±1°



3RD ANGLE PROJECTION



			Samples available	Manufacturable on request	Custom design
Design and accessories		**Units**	**115-800**	**115-200**	**115-XXX**
A	Availability		Stocked design	8 weeks	8 weeks
B	Motor Type		Brushed	Brushed	Brushed
C	Commutation		Precious metal brush	Precious metal brush	Precious metal brush
D	Shafts		Dual	Dual	Single / Dual
E	Gearbox		Not fitted	Not fitted	Range 1:3.79 ~ 1:2865
F	Encoder		Not fitted	Not fitted	Magnetic / optical
G	Connections		Terminals	Terminals	To requirement
H	Cable		N/A	N/A	To requirement
I	Housing Material		Nickel plated steel	Nickel plated steel	Nickel plated steel
J	Body diameter	mm	15	15	
K	Body length	mm	24	24	
L	Weight	g	22.0	22.0	
Performance characteristics					
1	Nominal voltage	V	9.0	2.4	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	8 235	8 050	
3	No load current	A	0.006	0.029	
4	Nominal speed	rpm	5 190	4 985	
5	Nominal torque	mNm	2.90	2.90	
6	Nominal current	A	0.305	1.120	
7	Stall torque	mNm	7.85	7.62	
8	Stall current	A	0.81	2.90	
9	Maximum efficiency	%	78.7	76.5	
Winding specific characteristics					
10	Terminal resistance	Ω	11.10	0.83	Winding dependent
11	Terminal inductance	mH	0.200	0.015	
12	Torque constant (Kt)	mNm/A	10.36	2.82	
13	Speed constant (Kv)	rpm/V	922	3 388	
14	Speed / torque gradient	rpm/mNm	1 049	1 056	
15	Mechanical time constant	ms	6.1		
16	Rotor inertia	g·cm²	0.65		

Motor body characteristics				
17	Thermal resistance housing-ambient		°C/W	35.0
18	Thermal resistance winding-housing		°C/W	12.0
19	Thermal time constant winding		s	6
20	Thermal time constant motor		s	230
21	Ambient temperature	min	°C	-20
		max	°C	+60
22	Max. permissable winding temperature		°C	+85
23	Max. permissable rotor speed		rpm	15 000
24	Axial play at axial load		mm	0.3 max
25	Max. axial load (dynamic)		N	0.15
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

Performance curve (based on ambient 25°C)