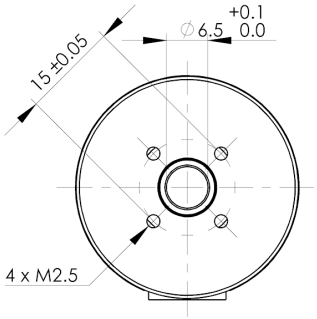
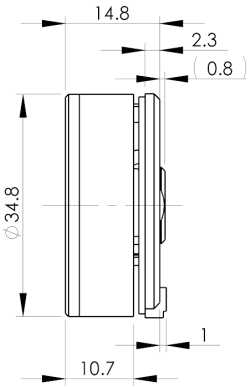
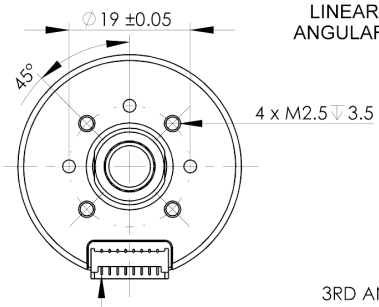
735-400 Brushless motor Slotted (outrunner)

Ø35 x 14mm / no shafts / with sensors

PRECISION MICRODRIVES ™



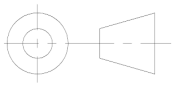




MOLEX 53048-0810

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

3RD ANGLE PROJECTION



PIN	Description
1	U
2	V
3	W
4	Hu
5	Hv
6	Hw
7	GND
8	5VDC

Samples available | Manufacturable on request | Custom design

Design and accessories		Units	735-400	735-XXX
A	Availability		Stocked design	8 weeks
B	Motor Type		Brushless	Brushless
C	Commutation		Digital Hall	Sensored / sensorless
D	Shafts		Not fitted	Dual / single
E	Encoder		Not fitted	Magnetic / optical
F	Gearbox		Not fitted	Range 1:4 ~ 1:7776
G	Connections		JST B8B PH1.25	To requirement
H	Cable		Not fitted	To requirement
I	Housing Material		Aluminium alloy	Aluminium alloy
J	Body diameter	mm	35	
K	Body length	mm	15	
L	Weight	g	39.1	
Performance characteristics				
1	Nominal voltage	v	12	This motor can be wound for nominal voltages in a 12 ~ 48V range. 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	2 360	
3	No load current	A	0.04	
4	Nominal speed	rpm	1 210	
5	Nominal torque	mNm	48.70	
6	Nominal current	A	1.06	
7	Stall torque	mNm	102.31	
8	Stall current	A	2.14	
9	Maximum efficiency	%	74.00	
Winding specific characteristics				
10	Terminal resistance	Ω	5.60	Winding dependent
11	Terminal inductance	mH	1.40	
12	Torque constant (Kt)	mNm/A	47.75	
13	Speed constant (Kv)	rpm/V	200	
14	Speed / torque gradient	rpm/mNm	23	
15	Mechanical time constant	ms	5.8	
16	Rotor inertia	g·cm²	23.9	

Motor body characteristics				
17	Thermal resistance housing-ambient		°C/W	10.0
18	Thermal resistance winding-housing		°C/W	4.5
19	Thermal time constant winding		s	9
20	Thermal time constant motor		s	307
21	Ambient temperature	min	°C	-30
		max	°C	100
22	Max. permissable winding temperature		°C	150
23	Max. permissable rotor speed		rpm	12 000
25	Radial play			Preloaded
26	Max. axial load (dynamic)		kN	0.8
29	Number of pole pairs			7
30	Number of winding phases			3

Operating range (based on ambient 25°C)

735-400