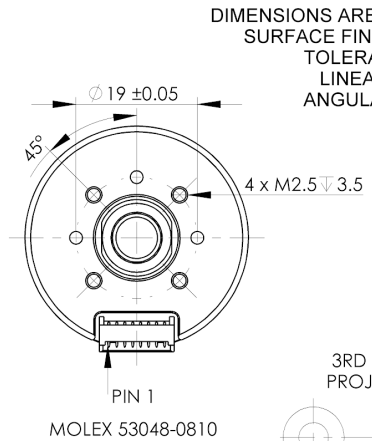
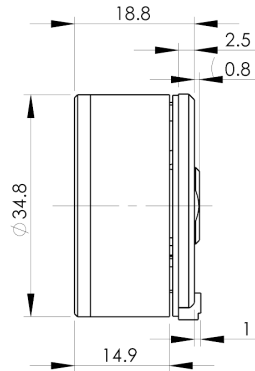
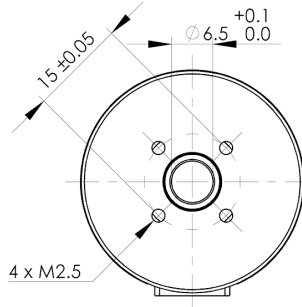


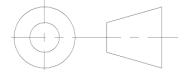
735-C00 Brushless motor Slotted (outrunner)

Ø35 x 19mm / no shafts / with sensors



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

Design and accessories		Units	Samples available 735-C00	Manufacturable on request 735-800	Custom design 735-XXX
A	Availability		Stocked design	8 weeks	8 weeks
B	Motor Type		Brushless	Brushless	Brushless
C	Commutation		Digital Hall	Digital Hall	Sensored / sensorless
D	Shafts		Not fitted	Not fitted	Dual / single
E	Encoder		Not fitted	Not fitted	Magnetic / optical
F	Gearbox		Not fitted	Not fitted	Range 1:4 ~ 1:7776
G	Connections		JST B8B PH1.25	JST B8B PH1.25	To requirement
H	Cable		Not fitted	Not fitted	To requirement
I	Housing Material		Aluminium alloy	Aluminium alloy	Aluminium alloy
I	Body diameter	mm	35	35	
K	Body length	mm	19	19	
L	Weight	g	61.0	61.0	

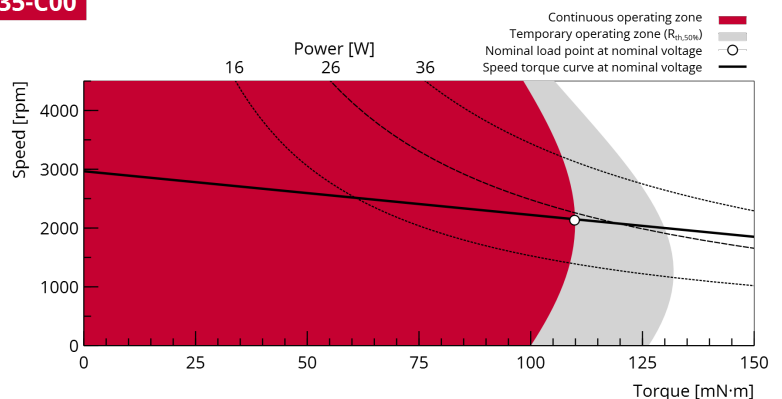
Performance characteristics					
1	Nominal voltage	v	32	24	This motor can be wound for nominal voltages in a 12 ~ 48V range. Nominal load, no load, and stall points, and efficiency will depend on the winding design. Please contact support@pmicrodrives.com
2	No load speed	rpm	2 960	13 390	
3	No load current	A	0.08	0.60	
4	Nominal speed	rpm	2 130	12 960	
5	Nominal torque	mNm	110.0	40.8	
6	Nominal current	A	1.16	3.00*	
7	Stall torque	mNm	401.3	1 315.5	
8	Stall current	A	3.95	77.42	
9	Maximum efficiency	%	74.30	83.20	

Winding specific characteristics					
10	Terminal resistance	Ω	8.10	0.31	Winding dependent
11	Terminal inductance	mH	4.13	0.17	
12	Torque constant (Kt)	mNm/A	101.59	16.99	
13	Speed constant (Kv)	rpm/V	94	562	
14	Speed / torque gradient	rpm/mNm	7.5	10	
15	Mechanical time constant	ms	2.4	3.3	
16	Rotor inertia	g·cm²	31.7	31.7	

Motor body characteristics				Operating range (based on ambient 25°C)
17	Thermal resistance housing-ambient	°C/W	7.9	735-C00
18	Thermal resistance winding-housing	°C/W	2.7	
19	Thermal time constant winding	s	16	
20	Thermal time constant motor	s	400	
21	Ambient temperature	min °C	-30	
		max °C	100	
22	Max. permissible winding temperature	°C	150	
23	Max. permissible rotor speed	rpm	27 000	
25	Radial play		Preloaded	
26	Max. axial load (dynamic)	kN	0.8	

* Recommended current limit 3.0A

29	Number of pole pairs	7
30	Number of winding phases	3



Detailed datasheets, and stocked samples, are available upon request. Please contact support@precisionmicrodrives.com

V1 - Feb 2025