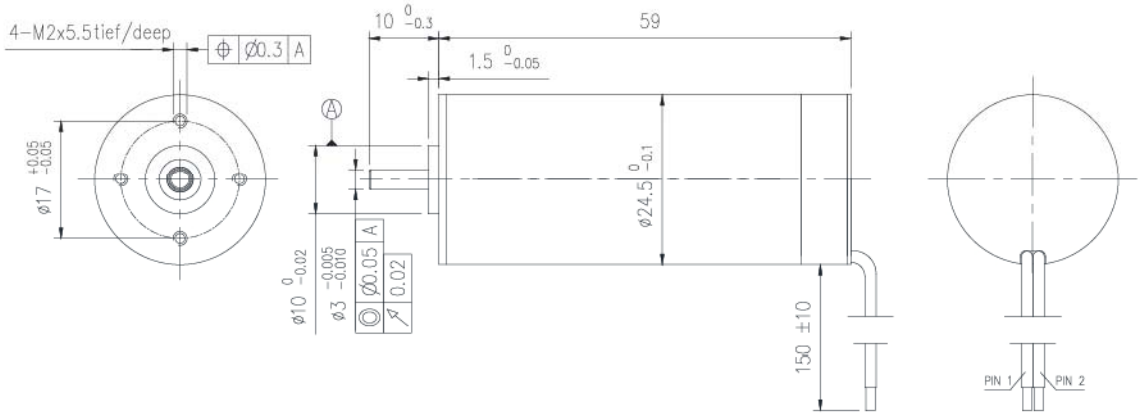
ECD Series Slotless Brushless DC Motor with build-in controller

ECD2459 Φ24.5mmX59mm

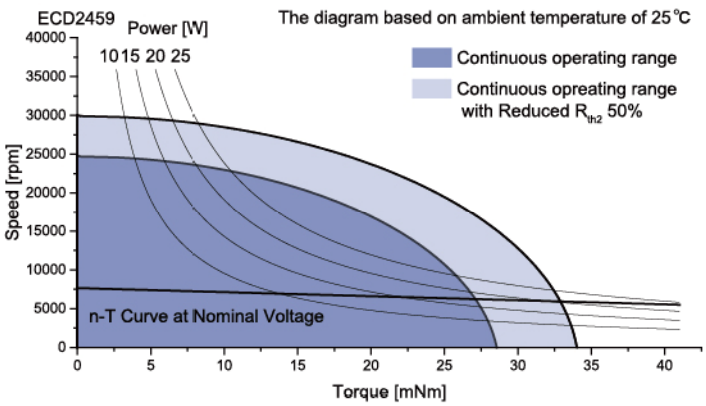


M 1:1

With hall sensor ECD2459S-...			1207	2407						
Motor data										
Values at nominal voltage										
1	Nominal voltage	V	12	24						
2	No load speed	rpm	7699	7655						
3	No load current	mA	114	73						
4	Nominal speed	rpm	6958	6597						
5	Nominal torque	mNm	14	20						
6	Nominal current	A	1.07	0.75						
7	Stall torque	mNm	145	145						
8	Stall current	A	10	4.98						
9	Max. efficiency	%	79.8	77.2						
10	Supply voltage +Vcc	V	10..28	10..28						
11	Direction of ratation		CW	CW						
12	Torque constant	mNm/A	14.7	29.5						
13	Speed constant	rpm/V	649	324						
14	Speed/torque gradient	rpm/mNm	52.9	52.9						
15	Mechanical time constant	ms	3.3	3.3						
16	Rotor inertia	gcm^2	5.9	5.9						

17	Thermal resistance housing-ambient	10.2 K/W
18	Thermal resistance winding-housing	6.4 K/W
19	Thermal time constant winding	36 s
20	Thermal time constant motor	555 s
21	Ambient temprature	-40...+100℃
22	Max. permissible winding temperature	+150℃
23	Max. permissible speed	30000 rpm
24	Axial play at axial load <4 N	0 mm
	>4 N	max. 0.3 mm
25	Radial play	preloaded
26	Max. axial load (dynamic)	3.5 N
27	Max.force for press fits (static)	44 N
	(static, shaft supported)	1200 N
28	Max. radial loading, 5mm from flange	15 N
29	Number of pole pairs	1
30	Number of phases	3
31	Weight of motor	130 g

Operating Range



Controller features	
Sensor, Open loop, Imax < 1.5A	
Overload protection, Stall protection	
Max. temperature of electronics	+105℃

Connection

Conection

Pin 1	+VCC	PTFE AWG24	red
Pin 2	GND	AWG24	black

Caution:
Incorrect lead connection will damage the controller!

Configuration

Function: On&Off/Direction/Speed control/Brake
Speed closed&open-loop Control/Speed feedback
Performance: Customized within the continuous operating range
Ball bearing: Preload
Flange: Standard frange front&back/customize the frange
Shaft: Length/Diameter/Cut face
Leadwire: PVC/Silicon/Teflon/UL No/Dimension/length
Connector: JST/MOLEX/TE

More :
Please contact our sales engineers