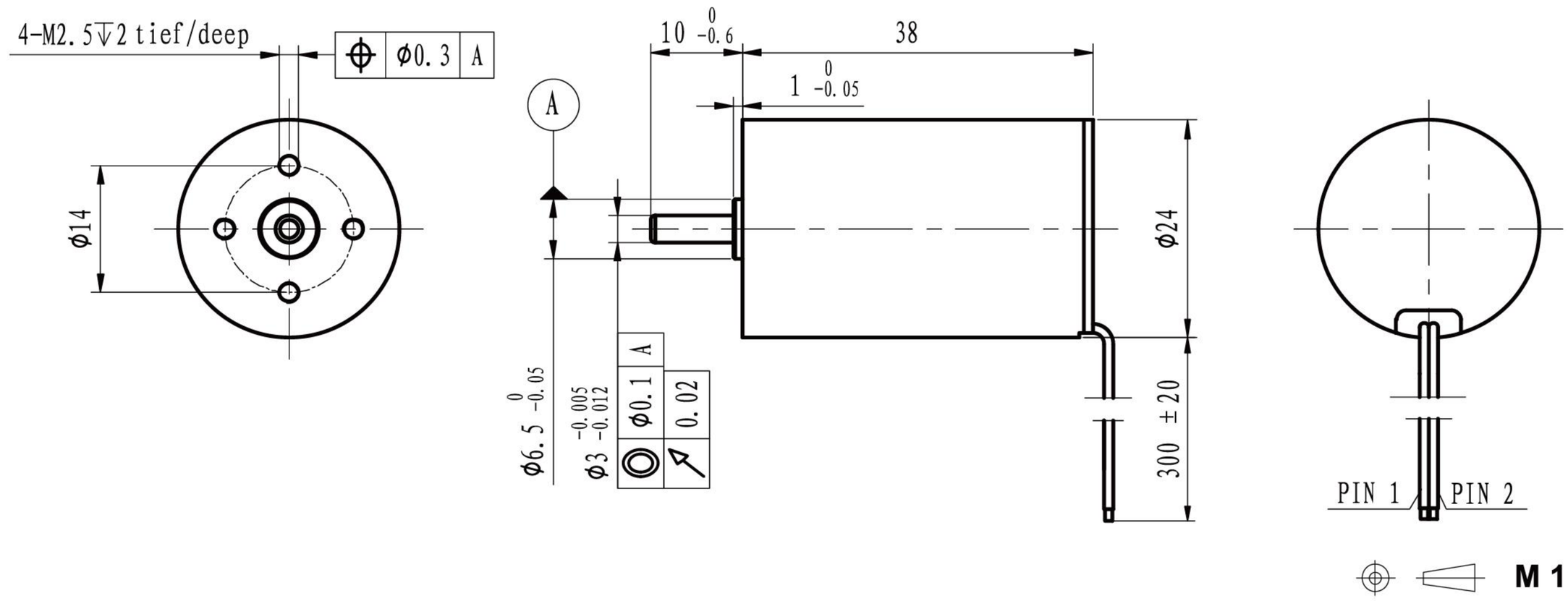
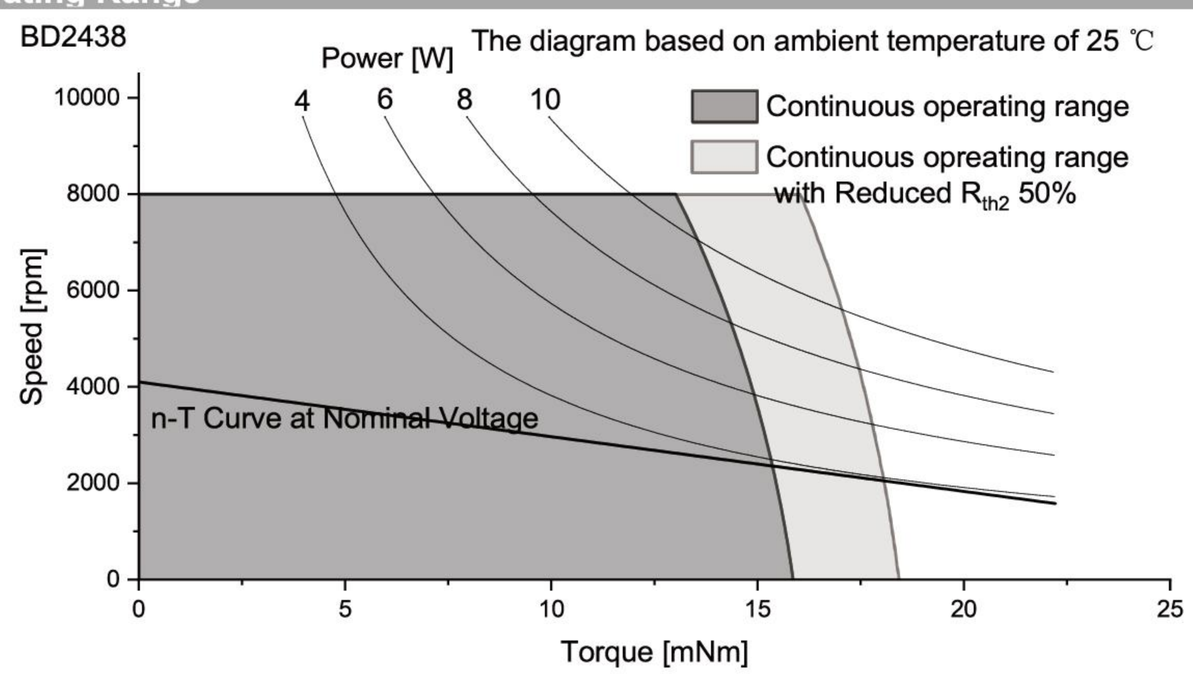


With hall sensor	BD2438S-…	1204	2404
Motor data			
Values at nominal voltage			
1 Nominal voltage	V	12	24
2 No load speed	rpm	4045	4101
3 No load current	mA	90	50
4 Nominal speed	rpm	2907	2913
5 Nominal torque	mNm	10	10
6 Nominal current	A	0.47	0.24
7 Stall torque	mNm	35.53	34.52
8 Stall current	A	1.43	0.71
9 Max. efficiency	%	56.1	54.1
10 Supply voltage +Vcc	V	10..28	10..28
11 Direction of ratation		CW	CW
12 Torque constant	mNm/A	26.54	51.97
13 Speed constant	rpm/V	360	184
14 Speed/torque gradient	rpm/mNm	114	119
15 Mechanical time constant	ms	3.4	3.5
16 Rotor inertia	gcm^2	2.85	2.85

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		-30…+100℃
22 Max. permissible winding temperature		+150℃
23 Max. permissible speed		8000 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		3
30 Number of phases		3
31 Weight of motor		57 g

Operating Range



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

Connection

Conection		PVC	
Pin 1	+VCC	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 in 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