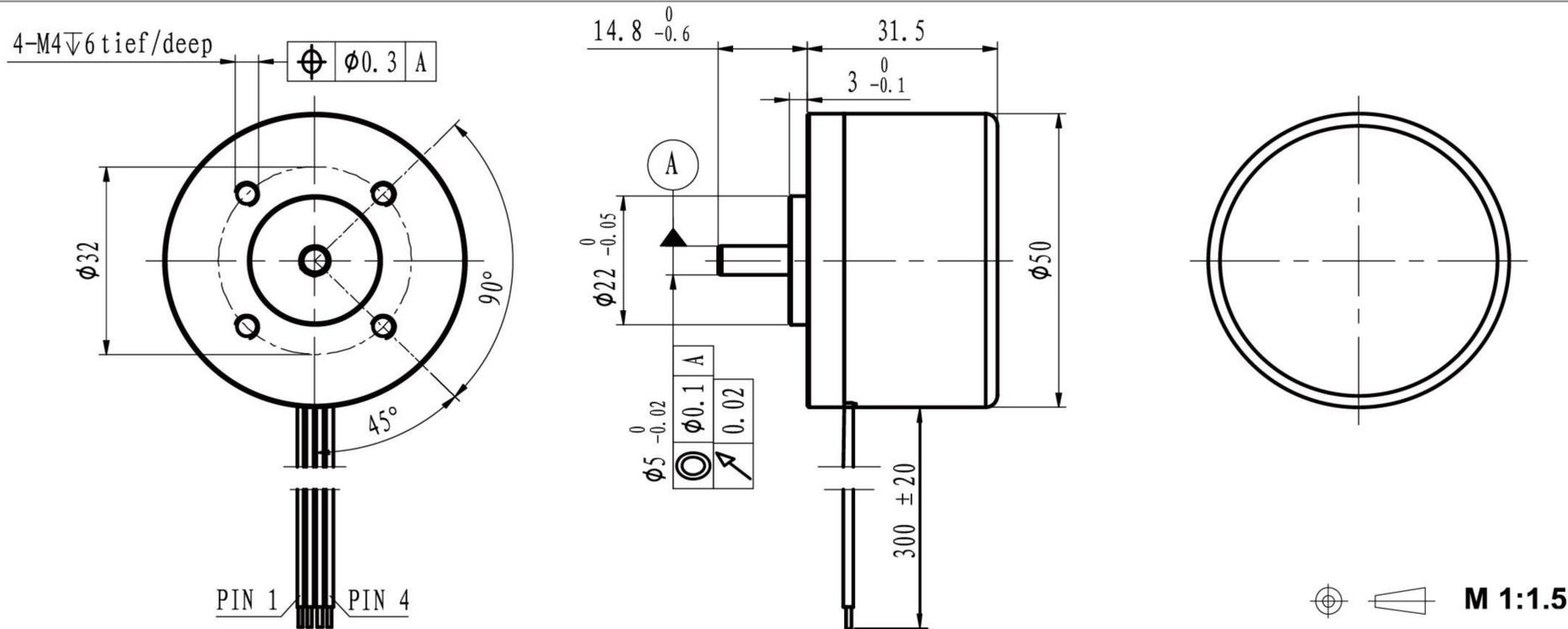


BF5032, Φ50mmX31.5mm

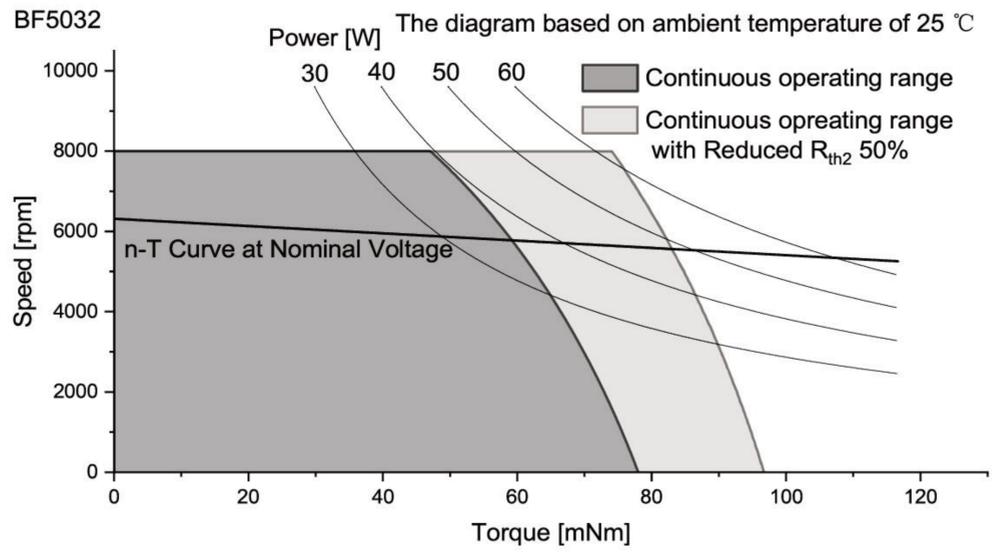


Motor data	With hall sensor	BF5032S-...	1204	2406					
------------	------------------	-------------	------	------	--	--	--	--	--

Values at nominal voltage									
1	Nominal voltage	V	12	24					
2	No load speed	rpm	5998	6070					
3	No load current	mA	400	220					
4	Nominal speed	rpm	5678	5794					
5	Nominal torque	mNm	40	40					
6	Nominal current	A	2.51	1.29					
7	Stall torque	mNm	748.99	880.65					
8	Stall current	A	40.00	23.76					
9	Max. efficiency	%	81.0	81.7					
10	Supply voltage +Vcc	V	10..28	10..28					
11	Direction of rotation		CW	CW					
12	Torque constant	mNm/A	18.91	37.41					
13	Speed constant	rpm/V	505	255					
14	Speed/torque gradient	rpm/mNm	8	7					
15	Mechanical time constant	ms	8.0	6.9					
16	Rotor inertia	gcm <sup>2</sup>	95	95					

17	Thermal resistance housing-ambient	8.3 K/W
18	Thermal resistance winding-housing	3.6 K/W
19	Thermal time constant winding	15 s
20	Thermal time constant motor	675 s
21	Ambient temperature	-30...+100°C
22	Max. permissible winding temperature	+150°C
23	Max. permissible speed	8000 rpm
24	Axial play at axial load	<8 N 0 mm >8 N max. 0.3 mm
25	Radial play	preloaded
26	Max. axial load (dynamic)	7.5 N
27	Max. force for press fits (static)	100 N
	(static, shaft supported)	2700 N
28	Max. radial loading, 5mm from flange	25 N
29	Number of pole pairs	5
30	Number of phases	3
31	Weight of motor	175 g

**Operating Range**



Controller features	
Sensor, Open loop, I <sub>max</sub> < 4A	
Overload protection, Stall protection	
Max. temperature of electronics	+105°C

**Connection**

Conection		PVC	
Pin 1	+VCC	AWG24	red
Pin 2	GND	AWG24	black
Pin 1	SP	AWG24	blue
Pin 2	FG	AWG24	yellow

**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