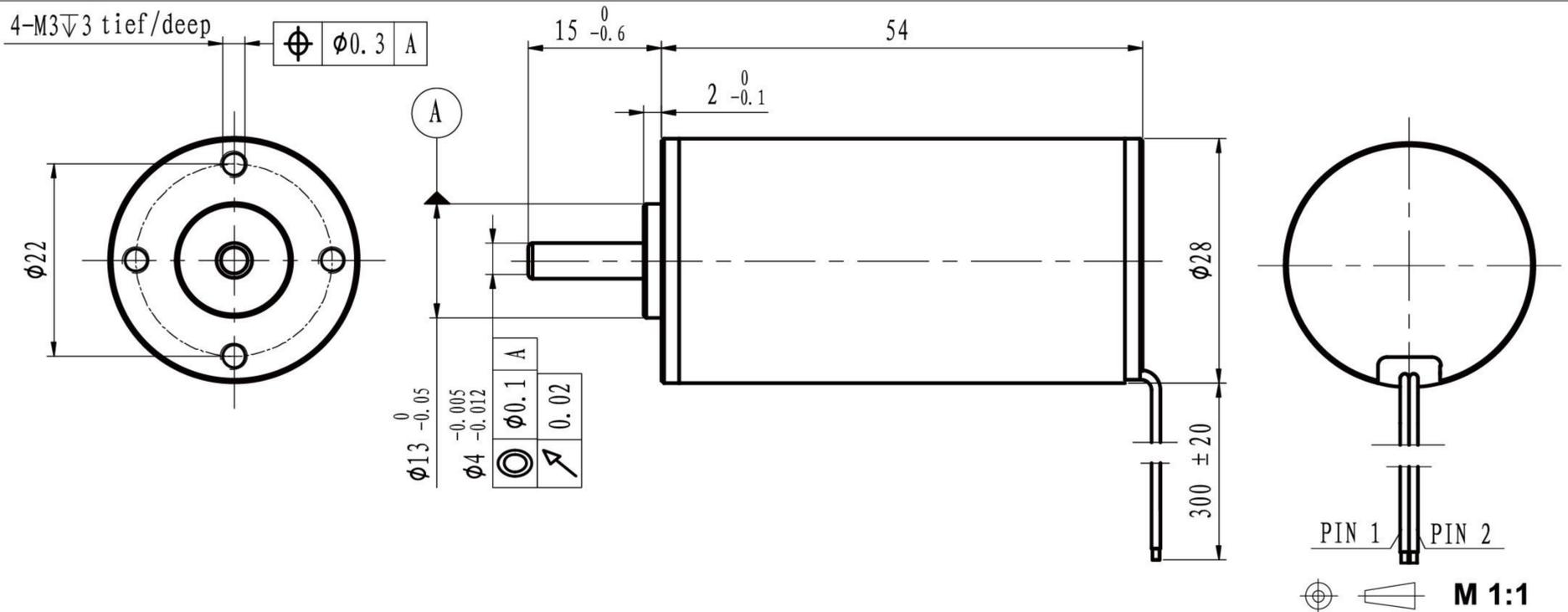


BD series. Slotted Brushless DC Motor with int. controller

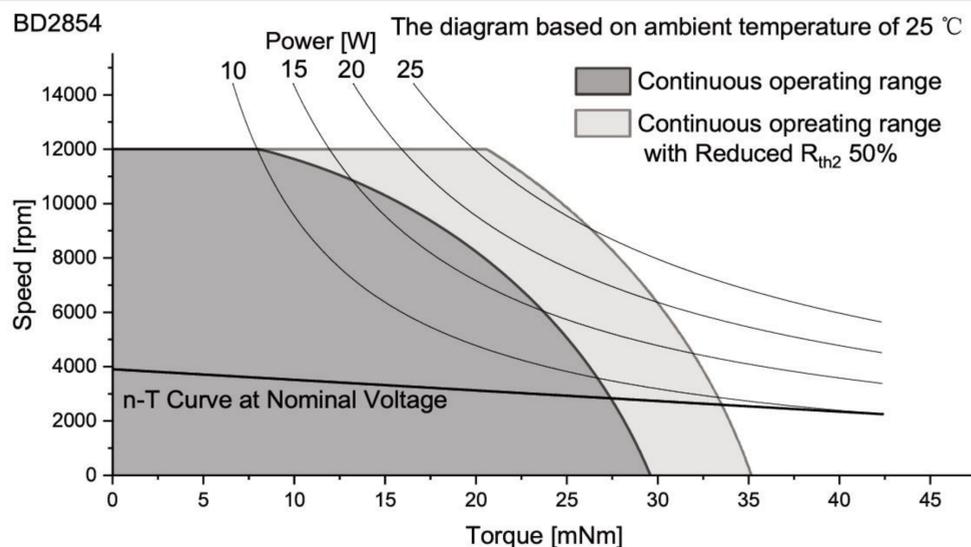
BD2854, $\Phi 28\text{mm} \times 54\text{mm}$



		With hall sensor	BD2854S-...	1204	2404				
Motor data									
Values at nominal voltage									
1	Nominal voltage	V		12	24				
2	No load speed	rpm		3950	4011				
3	No load current	mA		110	70				
4	Nominal speed	rpm		2964	3218				
5	Nominal torque	mNm		25	25				
6	Nominal current	A		1.00	0.52				
7	Stall torque	mNm		100.17	126.43				
8	Stall current	A		3.67	2.35				
9	Max. efficiency	%		68.4	68.5				
10	Supply voltage +Vcc	V		10..28	10..28				
11	Direction of rotation			CW	CW				
12	Torque constant	mNm/A		28.14	55.44				
13	Speed constant	rpm/V		339	172				
14	Speed/torque gradient	rpm/mNm		39	32				
15	Mechanical time constant	ms		2.6	2.1				
16	Rotor inertia	gcm ²		6.4	6.4				

17	Thermal resistance housing-ambient	11.2 K/W
18	Thermal resistance winding-housing	8 K/W
19	Thermal time constant winding	29 s
20	Thermal time constant motor	1211 s
21	Ambient temprature	-30...+100°C
22	Max. permissible winding temperature	+150°C
23	Max. permissible speed	12000 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)	2000 N
28	Max. radial loading, 5mm from flange	25 N
29	Number of pole pairs	3
30	Number of phases	3
31	Weight of motor	156 g

Operating Range



Controller features	
Sensor, Open loop, $I_{max} < 1.8A$	
Overload protection, Stall protection	
Max. temperature of electronics	+105°C

Connection

Conection			
Pin 1	+VCC	PVC	red
Pin 2	GND	AWG22	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:
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