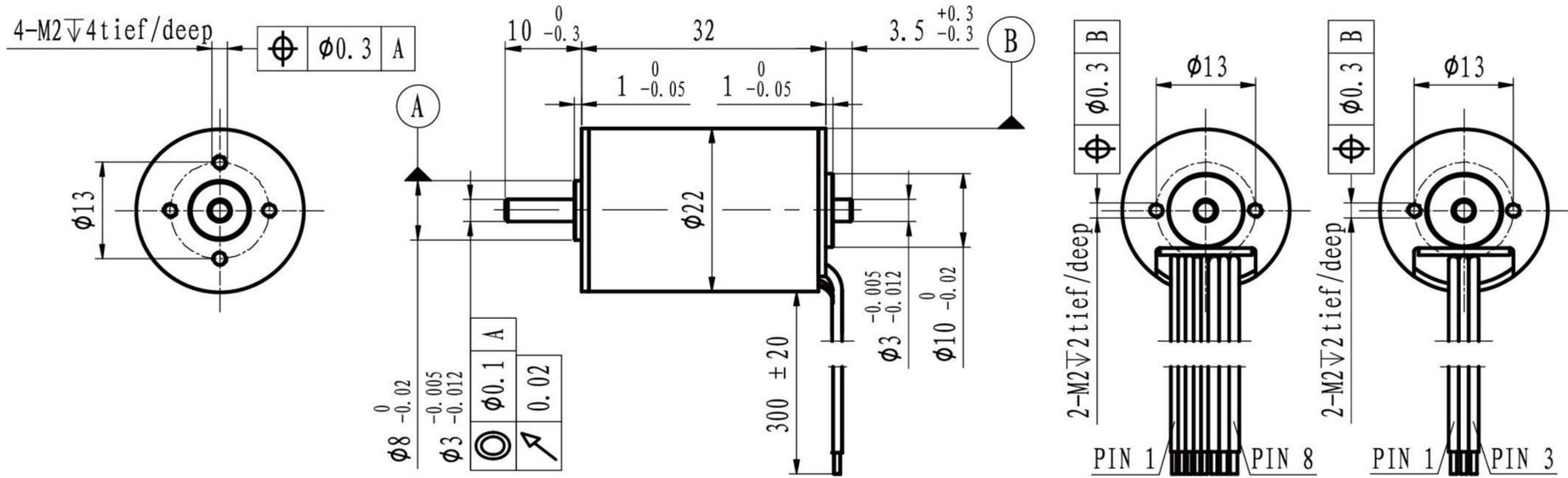


A: With Hall Sensors B: Sensorless

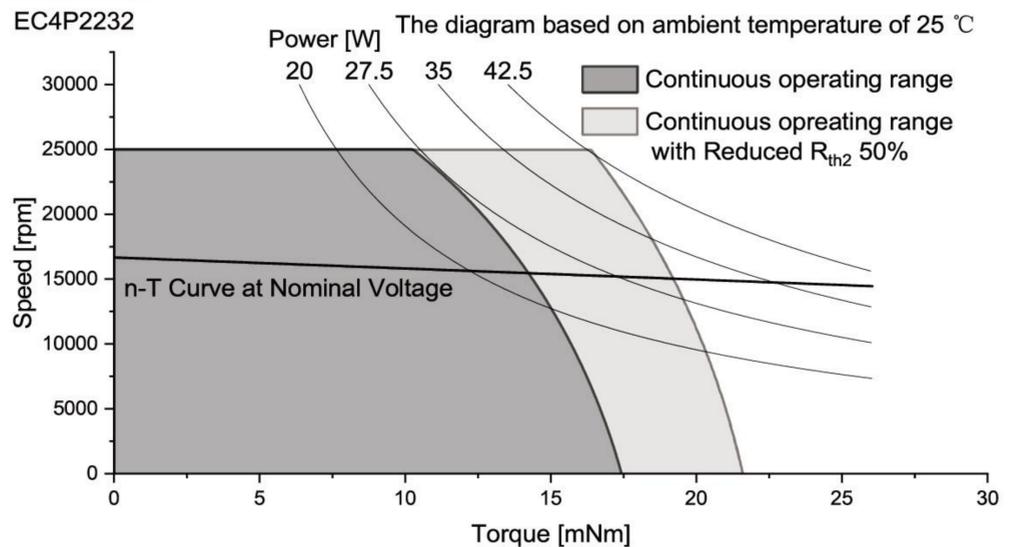


M 1:1.2

	Sensorless	EC4P2232L-...	1216	2416	3616	4816
	With hall sensor	EC4P2232S-...				
Motor data						
Values at nominal voltage						
1	Nominal voltage	V	12	24	36	48
2	No load speed	rpm	16302	16092	16210	16008
3	No load current	mA	210	120	72	60
4	Nominal speed	rpm	14812	15006	15095	14893
5	Nominal torque	mNm	13.5	13.5	13.5	13.5
6	Nominal current	A	2.15	1.08	0.71	0.54
7	Stall torque	mNm	147.7	200.1	196.3	193.8
8	Stall current	A	21.43	14.29	9.40	6.89
9	Max. efficiency	%	81.2	82.5	83.3	82.2
10	Terminal resistance	Ω	0.56	1.68	3.83	6.97
11	Terminal inductance	mH	0.03	0.11	0.25	0.48
12	Torque constant	mNm/A	6.96	14.12	21.05	28.38
13	Speed constant	rpm/V	1372	676	454	336
14	Speed/torque gradient	rpm/mNm	110	80	83	83
15	Mechanical time constant	ms	3.9	2.8	2.9	2.9
16	Rotor inertia	gcm ²	3.34	3.34	3.34	3.34

17	Thermal resistance housing-ambient	18.0 K/W
18	Thermal resistance winding-housing	7.8 K/W
19	Thermal time constant winding	17.6 s
20	Thermal time constant motor	735 s
21	Ambient temperature	-30...+100°C
22	Max. permissible winding temperature	+150°C
23	Max. permissible speed	25000 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	2
30	Number of phases	3
31	Weight of motor	77.2 g

Operating Range



Connection

Conection A (Sensor)		PTFE
Pin 1	Vhall 3-18 VDC	AWG26 Red
Pin 2	Hall sensor HA	AWG26 Yellow
Pin 3	Hall sensor HB	AWG26 Blue
Pin 4	Hall sensor HC	AWG26 Green
Pin 5	GND	AWG26 black
Pin 6	Motor winding MA	AWG20 Yellow
Pin 7	Motor winding MB	AWG20 Blue
Pin 8	Motor winding MC	AWG20 Green

Conection B (Sensorless)		PTFE
Pin 1	Motor winding MA	AWG20 yellow
Pin 2	Motor winding MB	AWG20 green
Pin 3	Motor winding MC	AWG20 blue

Configuration

Performance: Customized in the continuous operating range
Ball bearing: Preload
Flange: Standard frange front&back/customize the frange
Shaft: Length/Diameter/Cut face/double shaft/hollow shaft
Leadwire: PVC/Silicon/Teflon/UL No/Dimension/length
Connector: JST/MOLEX/TE