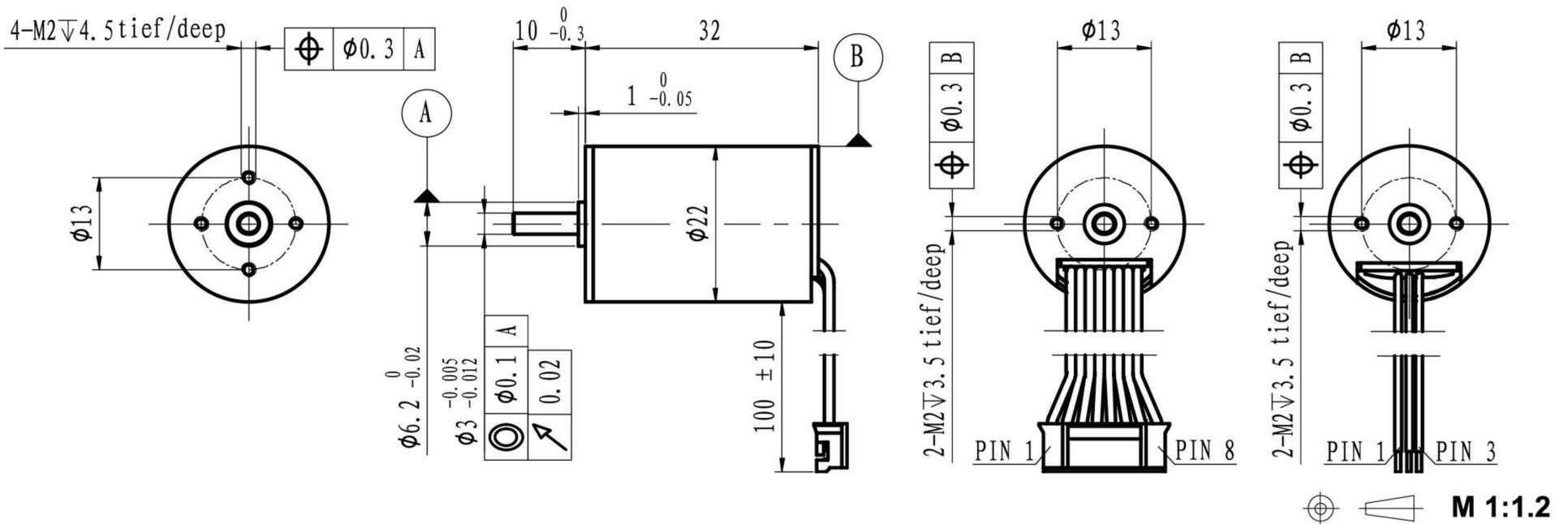


A: With Hall Sensors

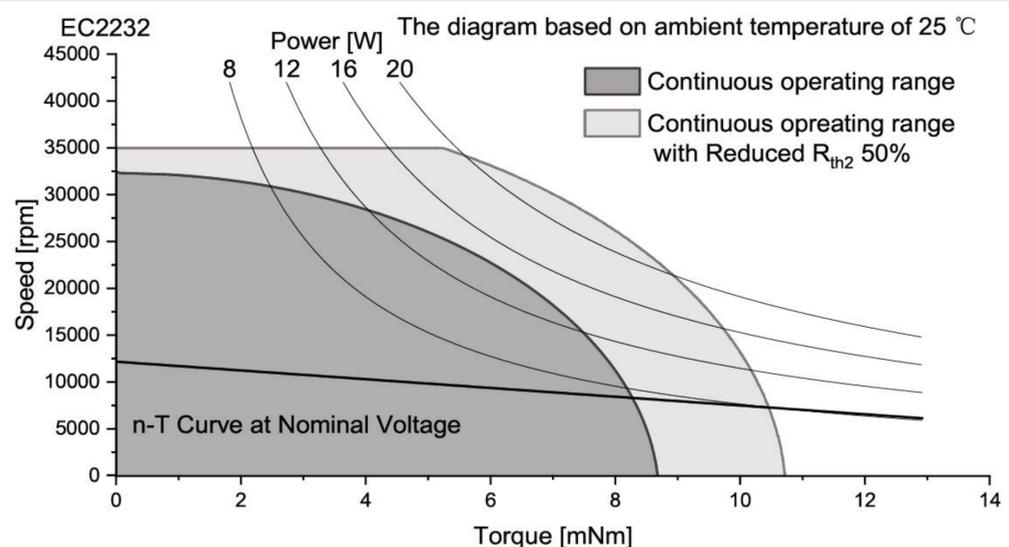
B: Sensorless



	Sensorless	EC2232L-...	0612	1212	1812	2412			
	With hall sensor	EC2232S-...							
Motor data									
Values at nominal voltage									
1	Nominal voltage	V	6	12	18	24			
2	No load speed	rpm	11700	11184	12080	12164			
3	No load current	mA	230	150	86	60			
4	Nominal speed	rpm	9585	9023	9937	9362			
5	Nominal torque	mNm	6	6	6	6			
6	Nominal current	A	1.50	0.76	0.52	0.39			
7	Stall torque	mNm	33.18	31.05	33.82	26.05			
8	Stall current	A	7.23	3.32	2.55	1.50			
9	Max. efficiency	%	67.5	62.0	66.6	64.0			
10	Terminal resistance	Ω	0.83	3.61	7.07	16			
11	Terminal inductance	mH	0.08	0.28	0.66	1.72			
12	Torque constant	mNm/A	4.74	9.78	13.75	18.09			
13	Speed constant	rpm/V	2014	976	695	528			
14	Speed/torque gradient	rpm/mNm	353	360	357	467			
15	Mechanical time constant	ms	5.5	5.7	5.6	7.3			
16	Rotor inertia	gcm ²	1.5	1.5	1.5	1.5			

17	Thermal resistance housing-ambient	15.2 K/W
18	Thermal resistance winding-housing	6.0 K/W
19	Thermal time constant winding	11 s
20	Thermal time constant motor	383 s
21	Ambient temperature	-30...+100°C
22	Max. permissible winding temperature	+150°C
23	Max. permissible speed	35000 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	48 g

Operating Range



Connection

Conection A (Sensor)		PVC
Pin 1	Vhall 3-18 VDC	AWG26 black
Pin 2	Hall sensor HA	AWG26 black
Pin 3	Hall sensor HB	AWG26 black
Pin 4	Hall sensor HC	AWG26 black
Pin 5	GND	AWG26 black
Pin 6	Motor winding MA	AWG26 black
Pin 7	Motor winding MB	AWG26 black
Pin 8	Motor winding MC	AWG26 black
Conector		JST PH2.0-8P

Conection B (Sensorless)		PVC
Pin 1	Motor winding MA	AWG26 yellow
Pin 2	Motor winding MB	AWG26 green
Pin 3	Motor winding MC	AWG26 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