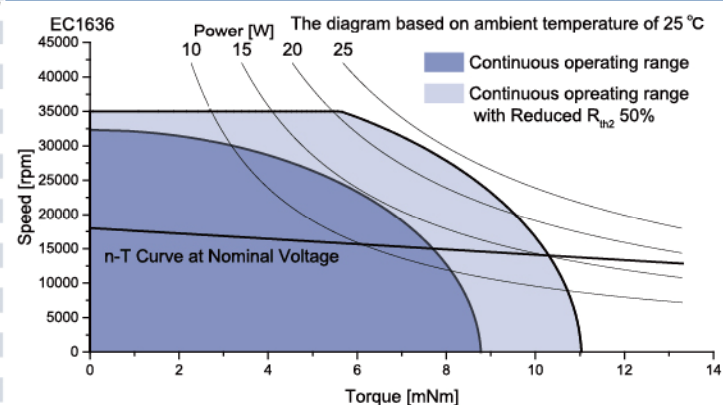


	Sensorless With hall sensor	EC1636L-...	0618	0918	1218	2418			
Motor data									
Values at nominal voltage									
1	Nominal voltage	V	6	9	12	24			
2	No load speed	rpm	17920	18180	18900	18200			
3	No load current	mA	182	130	110	70			
4	Nominal speed	rpm	14684	14884	15816	15150			
5	Nominal torque	mNm	6	6	6	6			
6	Nominal current	A	2.09	1.42	1.12	0.56			
7	Stall torque	mNm	33.2	33.1	36.8	35.8			
8	Stall current	A	10.8	7.26	6.28	2.98			
9	Max. efficiency	%	75.7	75	75.3	71.7			
10	Terminal resistance	Ω	0.56	1.24	1.91	8.05			
11	Terminal inductance	mH	0.02	0.05	0.08	0.33			
12	Torque constant	mNm/A	3.14	4.64	5.96	12.3			
13	Speed constant	rpm/V	3038	2057	1603	777			
14	Speed/torque gradient	rpm/mNm	539	549	514	508			
15	Mechanical time constant	ms	3.5	3.6	3.3	3.3			
16	Rotor inertia	gcm ²	0.62	0.62	0.62	0.62			

17	Thermal resistance housing-ambient	20.0 K/W
18	Thermal resistance winding-housing	8.8 K/W
19	Thermal time constant winding	8 s
20	Thermal time constant motor	236 s
21	Ambient temperature	-40...+100°C
22	Max. permissible winding temperature	+150°C
23	Max. permissible speed	35000 rpm
24	Axial play at axial load <1.8 N	0 mm
	>1.8 N	max. 0.3 mm
25	Radial play	preloaded
26	Max. axial load (dynamic)	1.3 N
27	Max. force for press fits (static)	15 N
	(static, shaft supported)	350 N
28	Max. radial loading, 5mm from flange	5 N
29	Number of pole pairs	1
30	Number of phases	3
31	Weight of motor	32 g

Operating Range



Connection

Connection A (Sensor)		PTFE
Pin 1	Vhall 3-18 VDC	AWG28 black
Pin 2	Hall sensor HA	AWG28 black
Pin 3	Hall sensor HB	AWG28 black
Pin 4	Hall sensor HC	AWG28 black
Pin 5	GND	AWG28 black
Pin 6	Motor winding MA	AWG28 black
Pin 7	Motor winding MB	AWG28 black
Pin 8	Motor winding MC	AWG28 black
Connector		JST PH2.0-8P

Connection B (Sensorless)		PTFE
Pin 1	Motor winding MA	AWG28 yellow
Pin 2	Motor winding MB	AWG28 green
Pin 3	Motor winding MC	AWG28 blue

Configuration

Performance: Customized within 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