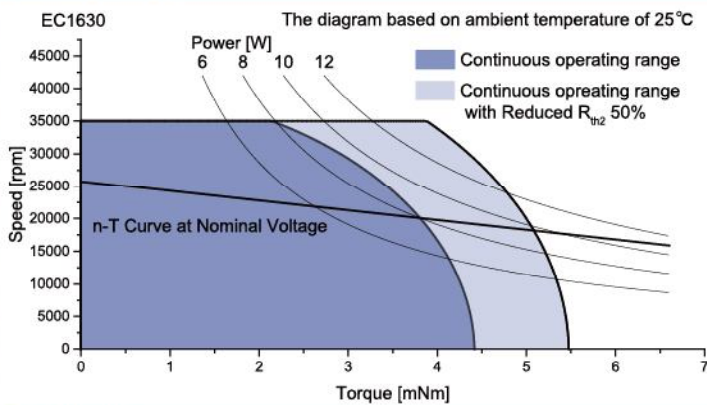


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	Sensorless	EC1630L-...	1223	1223	2423			
	With hall sensor	EC1630S-...						
Motor data								
Values at nominal voltage								
1	Nominal voltage	V	12	18	24			
2	No load speed	rpm	23220	23511	23760			
3	No load current	mA	210	150	100			
4	Nominal speed	rpm	19138	19506	19203			
5	Nominal torque	mNm	3.5	3.5	3.5			
6	Nominal current	A	0.95	0.65	0.48			
7	Stall torque	mNm	19.9	20.5	18.2			
8	Stall current	A	4.44	3.1	2.09			
9	Max. efficiency	%	61.3	60.9	61			
10	Terminal resistance	Ω	2.7	5.8	11.5			
11	Terminal inductance	mH	0.08	0.17	0.33			
12	Torque constant	mNm/A	4.7	6.96	9.18			
13	Speed constant	rpm/V	2031	1373	1040			
14	Speed/torque gradient	rpm/mNm	1166	1144	1302			
15	Mechanical time constant	ms	5.8	5.7	6.5			
16	Rotor inertia	gcm ²	0.48	0.48	0.48			

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	-30...+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	25 g

Operating Range



Connection

Connection 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
Connector			
JST PH2.0-8P			

Connection 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