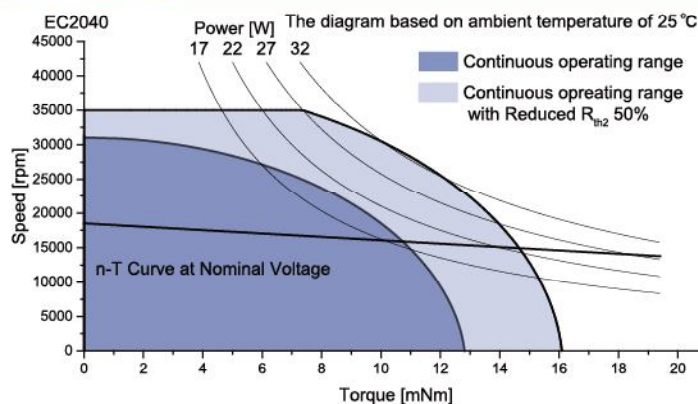


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		EC2040L-...	EC2040S-...	1218	1818	2418	3618
		Sensorless	With hall sensor				
Motor data							
Values at nominal voltage							
1	Nominal voltage	V		12	18	24	36
2	No load speed	rpm		17780	18360	18500	18880
3	No load current	mA		149	137	105	83
4	Nominal speed	rpm		15083	16171	16042	16164
5	Nominal torque	mNm		10	10	10	10
6	Nominal current	A		1.72	1.22	0.93	0.64
7	Stall torque	mNm		65.9	83.9	75.3	69.5
8	Stall current	A		10.5	9.23	6.28	3.98
9	Max. efficiency	%		77.6	77.1	75.8	73.2
10	Terminal resistance	Ω		1.14	1.95	3.82	9.04
11	Terminal inductance	mH		0.08	0.17	0.30	0.62
12	Torque constant	mNm/A		6.35	9.22	12.2	17.8
13	Speed constant	rpm/V		1503	1035	784	536
14	Speed/torque gradient	rpm/mNm		270	219	246	272
15	Mechanical time constant	ms		6.4	5.2	5.8	6.4
16	Rotor inertia	gcm ²		2.3	2.3	2.3	2.3

17	Thermal resistance housing-ambient	13.8 K/W
18	Thermal resistance winding-housing	4.3 K/W
19	Thermal time constant winding	8 s
20	Thermal time constant motor	366 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) (static, shaft supported)	44 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	56 g

Operating Range



Connection

Connection A (Sensor)		
Pin 1 Vhall 3-18 VDC	PVC	
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)		
Pin 1 Motor winding MA	PVC	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