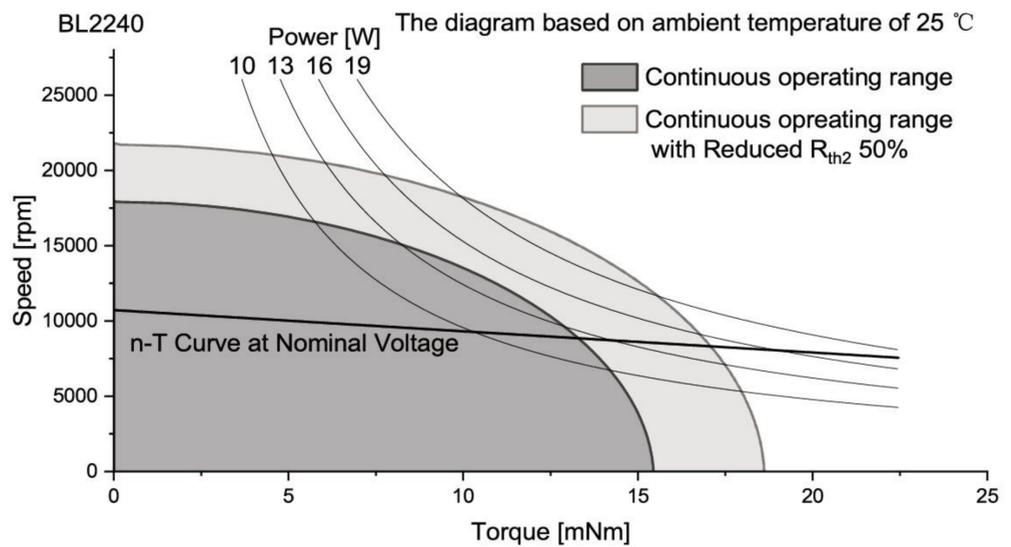


	Sensorless	BL2240L-...	1210	2410					
	With hall sensor	BL2240S-...							
<b>Motor data</b>									
<b>Values at nominal voltage</b>									
1	Nominal voltage	V	12	24					
2	No load speed	rpm	10339	10720					
3	No load current	mA	193	110					
4	Nominal speed	rpm	8652	9028					
5	Nominal torque	mNm	12	12					
6	Nominal current	A	1.31	0.69					
7	Stall torque	mNm	73.56	76.04					
8	Stall current	A	7.02	3.77					
9	Max. efficiency	%	69.6	68.8					
10	Terminal resistance	$\Omega$	1.71	6.36					
11	Terminal inductance	mH	0.24	0.96					
12	Torque constant	mNm/A	10.78	20.76					
13	Speed constant	rpm/V	886	460					
14	Speed/torque gradient	rpm/mNm	141	141					
15	Mechanical time constant	ms	1.9	1.9					
16	Rotor inertia	gcm <sup>2</sup>	1.26	1.26					

17	Thermal resistance housing-ambient	15.1 K/W
18	Thermal resistance winding-housing	9.0 K/W
19	Thermal time constant winding	18 s
20	Thermal time constant motor	496 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	1
30	Number of phases	3
31	Weight of motor	64 g

**Operating Range**



**Connection**

<b>Connection A (Sensor)</b>		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			

<b>Connection B (Sensorless)</b>		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