

### SBL12-15

Electronically commutated sensorless motor, slotless stator design

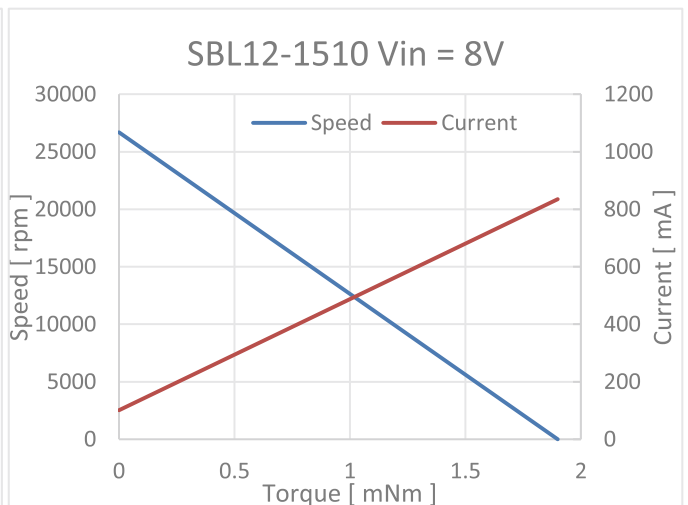
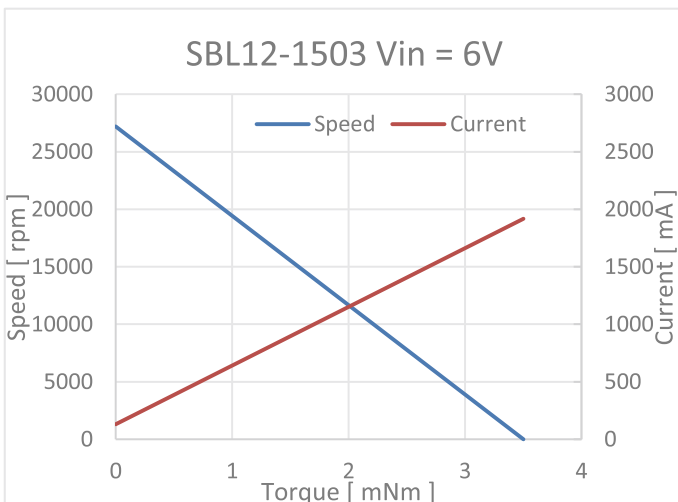
Hall element line		Coil terminal	
H1	Hin-	L1	Lb
H2	Hin+	L2	La
H3	Hc-	L3	Lc
H4	Hc+		
H5	Hb-		
H6	Hb+		
H7	Ha-		
H8	Ha+		

Dimension in mm

Note) Dimension marked ※ is measured with shaft pushed against motor.

SBL12

Ordering number		-1503	-1505	-1510	-1524
1 Nominal voltage		6	6	8	12 V
2 Terminal resistance		3.1	4.9	9.6	24 Ω
3 Output power		2.5	1.5	1.3	1.1 W
4 Efficiency		55	47	43	37 %
5 No-load speed		27200	24800	26700	28700 rpm
6 No-load current		130	121	101	76 mA
7 Stall torque		3.5	2.3	1.9	1.4 mNm
8 Friction torque		0.26	0.25	0.25	0.26 mNm
9 Back-EMF constant		0.21	0.22	0.26	0.35 mV/rpm
10 Torque constant		2.0	2.1	2.5	3.4 mNm/A
11 Slope of N-T curve		7750	10760	14450	20370 rpm/mNm
12 Mechanical time constant (starting oscillating time neglected)		8	11	15	21 ms
13 Rotor inertia		0.10	0.10	0.10	0.10 gcm <sup>2</sup>



V01

Specifications subject to change without notice