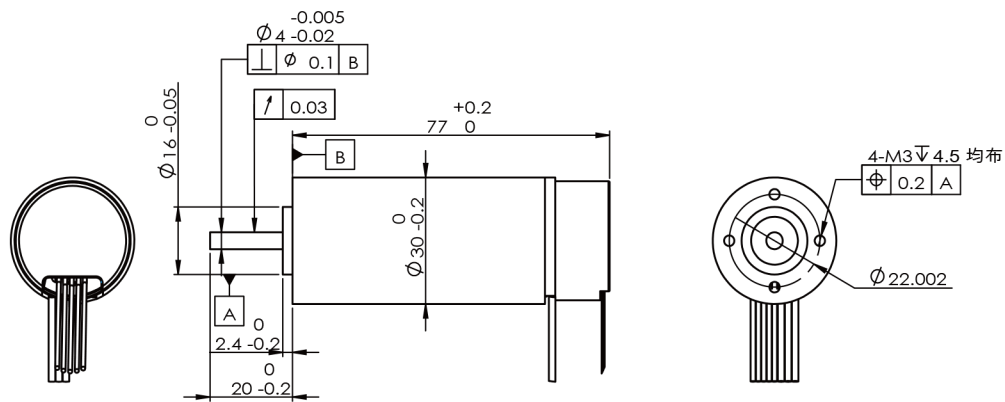




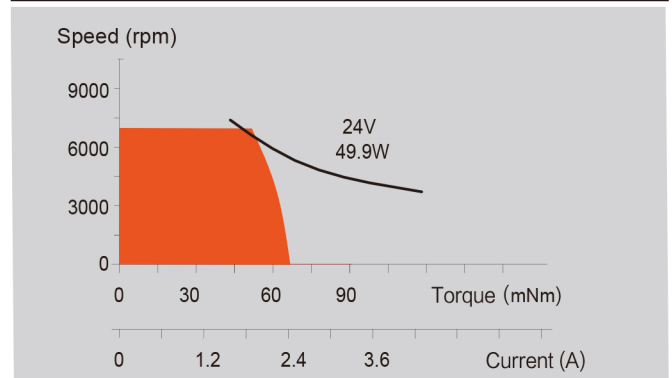
Motor Data

Motor model			SBR307724B-02	SBR307724B-03	SBR307736B-02	SBR307736B-03	SBR307748B-02	SBR307748B-03
1 Nominal voltage	V	V	24	24	36	36	48	48
2 No load speed	rpm	Wnl	7200	7900	8400	8700	6900	7200
3 No load current	mA	InI	<400	<400	<300	<350	<200	<200
4 Nominal speed	rpm	Wc	6600	7200	7700	800	6300	6600
5 Nominal torque	mNm	Tc	72	72	70	70	71	70
6 Nominal current	A	Ic	2.3	2.52	1.74	1.8	1.09	1.12
7 Output power	W	Pc	49.9	54.4	56.6	59.0	47.5	48.1
8 Stall torque	mNm	Tmax	751	713.7	724	763.5	789.9	666.3
9 Stall current	A	Imax	24	25	18	19.7	12.1	10.7
10 Max. efficiency	%	η_{max}	90.4	90	90.3	91	91	89
11 Terminal resistance	Ω	Rt	1	0.96	2	1.83	3.97	4.5
12 Terminal inductance	L	mH	0.26	0.38	0.72	0.91	1	1.3
13 Torque constant	mNm / A	Kt	31.3	28.55	40.24	38.81	65.33	62.47
14 Speed constant	rpm / V	Kn	305.08	334.5	237.2	246.0	146.17	152.87
15 Speed torque gradient	rpm / mNm	$\Delta n / \Delta T$	8.05	9.47	9.76	9.35	7.25	9.05

Specifications

1 ambient temperature	Ta	-20~+65 °C
2 max. winding temperature	Tcoilmax	+85 °C
3 max. speed	Nmax	9240 rpm
4 axial play	Δt	0.05-0.15 mm
5 number of pole pairs	2p	1
6 number of commutator segments		3
7 weight of motor	Wt	306 g
8 Max. axial load (dynamic)		5N
9 Max. force for press fits (static)		98N
10 Max. radial load, 4 mm from flange		25N

Operating Range



Terminal definitions

Green	U	1 +5V	Magnet Encoder 3 Channel 1000CPT
Black	V	2 GND	
Red	W	3 Channel A-	
		4 Channel A+	
		5 Channel B-	
		6 Channel B+	
		7 Channel Z-	
		8 Channel Z+	
		9 Hall3	
		10 Hall2	
		11 Hall1	