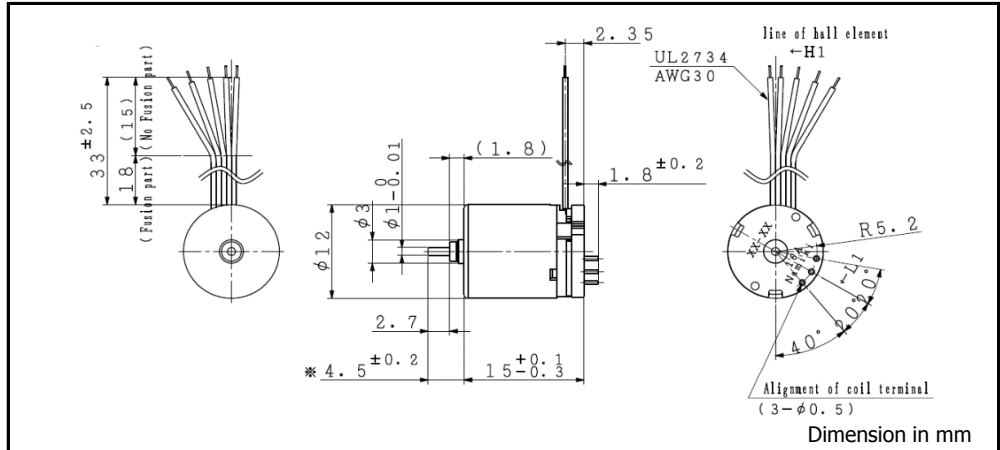
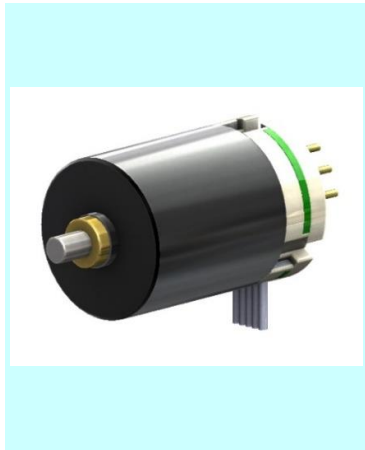


**BMS 12-15**       $\phi 12$  , 0.45 mNm



For combination with gearhead: SSG12, SPG12

Ordering number	BMS12-1503	BMS12-1506	
1 Nominal voltage	7.4	12.0	V
2 Rated torque	0.93	0.92	mNm
3 Rated speed	28200	30300	rpm
4 Rated current	572	376	mA
5 No load speed	33700	36200	rpm
6 No load current	112	74	mA
7 Stall torque	5.66	5.55	mNm
8 Stall current	2.92	1.90	A
9 Output power	5.0	5.3	W
10 Max. efficiency	65	64	%
11 Terminal resistance	2.53	6.31	$\Omega$
12 Friction torque	0.23	0.23	mNm
13 Back-EMF constant	0.211	0.318	mV/rpm
14 Torque constant	2.01	3.04	mNm/A
15 Slope of N-T curve	5960	6530	rpm/mNm
16 Mechanical time constant	5.53	6.06	ms
17 Rotor inertia	0.08	0.08	gcm <sup>2</sup>
18 Max. torque	2.83	2.77	mNm

**Mechanical data**

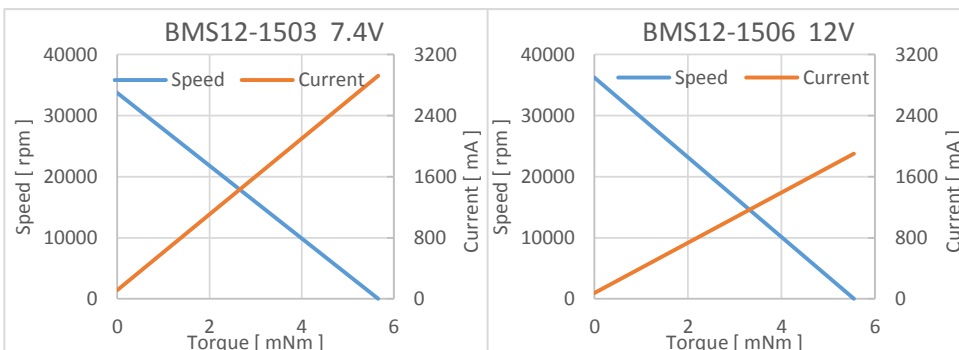
19 Shaft radial play	0.05	mm
20 Shaft axial play	0.03 ~ 0.2	mm
21 Max. shaft radial load	0.03 (5 mm)	N
22 Max. shaft axial load	0.1	N
23 Max. shaft axial load at standstill	4.9	N

**Pin order**

#1	Hall sensor W		
#2	Hall sensor V		
#3	Hall sensor U		
#4	Vhall 3.0~5.0V		
#5	Motor winding W		
#6	Motor winding V		
#7	Motor winding U		
#8	GND		

**Environmental specifications**

24 Operating temperature	-20 ~ 60	°C
25 Max. coil temperature	80	°C



V01