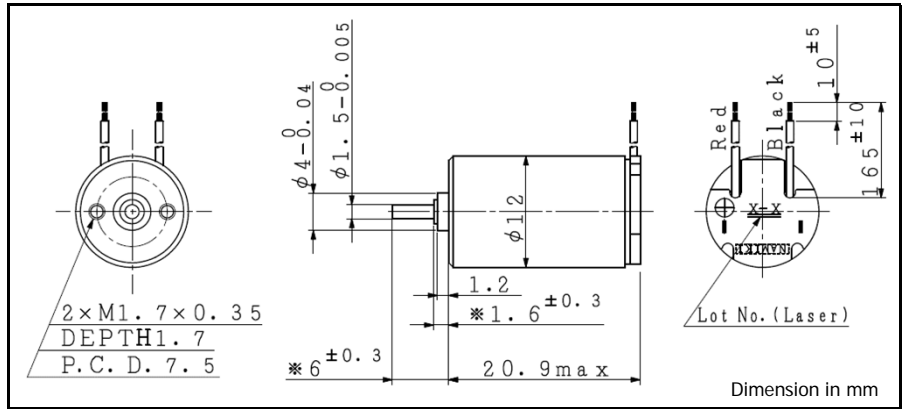
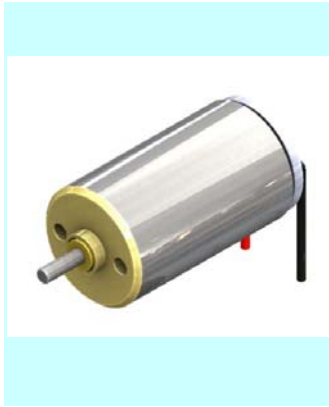


CMS 12-20 $\phi 12$, 0.50 mNm

Precious metal commutation, Sleeve bearing



For combination with gearhead: SSG12, SPG12

Ordering number	CMS12-2004	CMS12-2010	
1 Nominal voltage	7.4	12.0	V
2 Rated torque	0.499	0.513	mNm
3 Rated speed	20800	21800	rpm
4 Rated current	182	120	mA
5 No load speed	23000	24100	rpm
6 No load current	18	12	mA
7 Stall torque	5.11	5.38	mNm
8 Stall current	1.70	1.15	A
9 Output power	3.1	3.4	W
10 Max. efficiency	81	81	%
11 Terminal resistance	4.35	10.39	Ω
12 Friction torque	0.05	0.05	mNm
13 Back-EMF constant	0.318	0.493	mV/rpm
14 Torque constant	3.04	4.71	mNm/A
15 Slope of N-T curve	4499	4474	rpm/mNm
16 Mechanical time constant	10.06	10.04	ms
17 Rotor inertia	0.21	0.21	gcm ²
18 Max. torque	2.56	2.69	mNm

Mechanical data

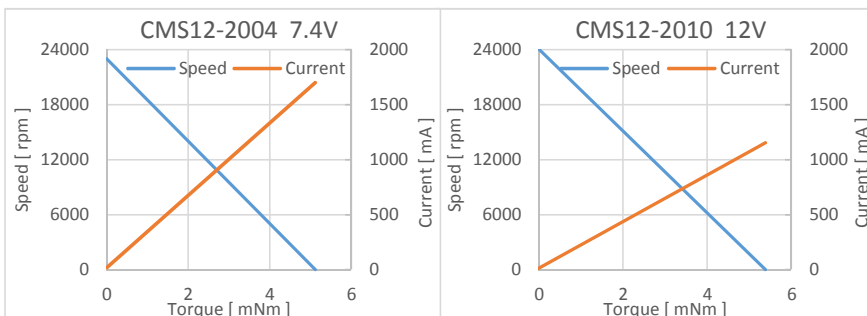
19 Shaft radial play	0.05	mm
20 Shaft axial play	0.03 ~ 0.2	mm
21 Max. shaft radial load	0.03 (5 mm)	N
22 Max. shaft axial load	0.1	N
23 Max. shaft axial load at standstill	4.9	N

Environmental specifications

24 Operating temperature	-20 ~ 60	$^{\circ}\text{C}$
25 Max. coil temperature	80	$^{\circ}\text{C}$

Other specifications

26 Weight	11.8	g
27 Number of segments	5	
28 Bearing type	Sintered sleeve	



V01