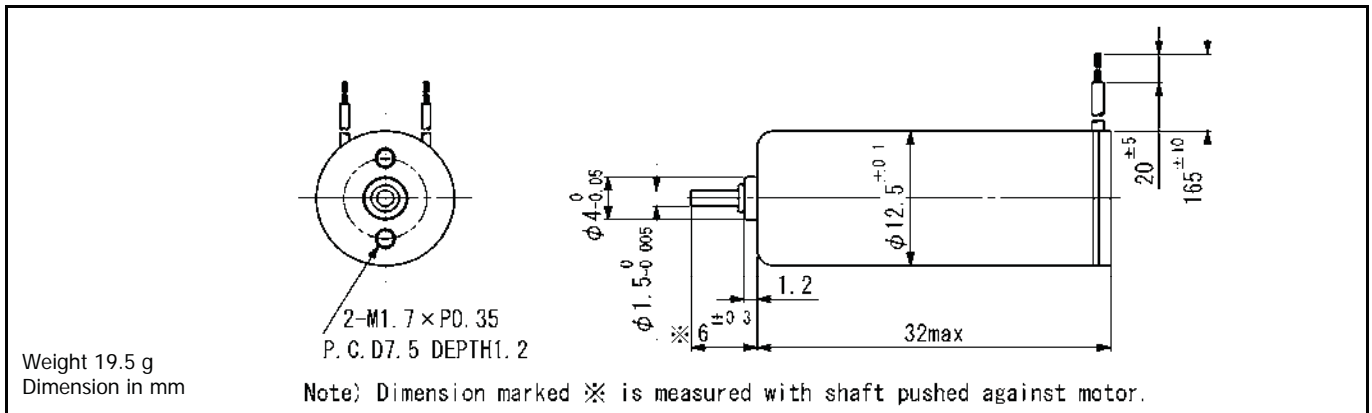


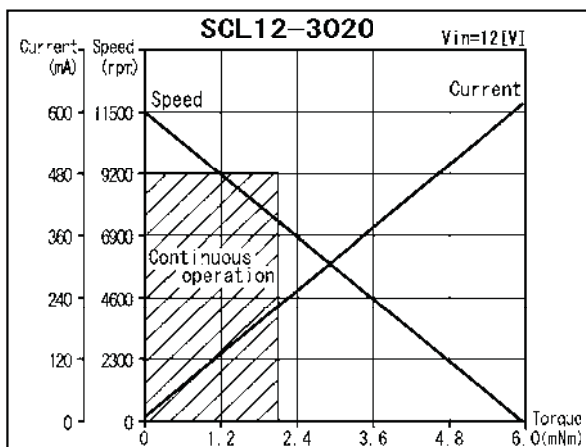
# SCL12-30

Precious metal commutation



For combination with gearheads: SSG12, SPG12

Ordering number	SCL12					
	-3002	-3005	-3003	-3010	-3020	-3043
1 Nominal voltage	4.5	6	6	9	12	15 V
2 Terminal resistance	2.5	4.6	2.9	9.6	20	43 Ω
3 Output power	2.0	1.9	3.0	2.1	1.8	1.3 W
4 Efficiency	80	80	81	80	77	72 %
5 No-load speed	11640	11640	13750	12420	11500	12840 rpm
6 No-load current	20	15	21	11	9	8 mA
7 Stall torque	6.5	6.3	8.4	6.4	6.0	3.7 mNm
8 Friction torque	0.073	0.073	0.088	0.073	0.088	0.087 mNm
9 Back-EMF constant	0.38	0.51	0.43	0.72	1.0	1.1 mV/rpm
10 Torque constant	3.6	4.9	4.1	6.8	9.8	10.9 mNm/A
11 Slope of N-T curve	1800	1860	1650	1950	1930	3460 rpm/mNm
12 Coil inductance	0.053	0.095	0.063	0.19	0.38	0.79 mH
13 Mechanical time constant	9	9	8	9	7	8 ms
14 Rotor inertia	0.47	0.45	0.47	0.43	0.33	0.21 gcm <sup>2</sup>
<b>Continuous operation</b>						
15 Max. torque	2.2	2.1	2.3	2.1	2.1	1.5 mNm



### General specifications

16 Operating temperature	-20...+60	°C
17 Max. coil temperature	+80	°C
18 Thermal resistances	R <sub>th1</sub> = 10, R <sub>th2</sub> = 37	K/W
19 Bearings type	Sintered sleeves	
20 Max. shaft radial load	1.2 (5 mm)	N
21 Max. shaft axial load	0.2	N
22 Max. axial load at standstill	9.8	N
23 Shaft radial play	0.05	mm
24 Shaft axial play	0.03...0.2	mm

**Options:** Lead wires length, terminals instead of lead wires, shaft length, special coils, commutator with capacitors.

V01

Specifications subject to change without notice