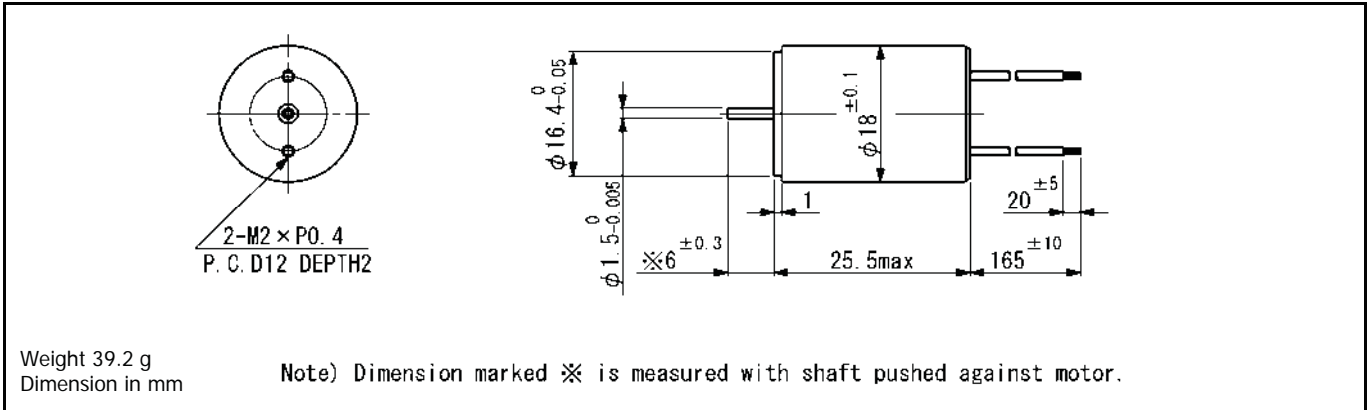


# SCL18-25

Precious metal commutation

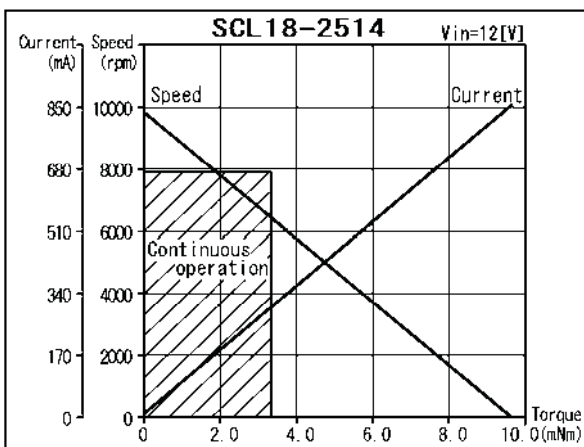


Weight 39.2 g  
Dimension in mm

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

For combination with gearheads: SSG18, SPG16

Ordering number	SCL18					
	-2503	-2504	-2509	-2514	-2521	-2534
1 Nominal voltage	3	6	9	12	15	18 V
2 Terminal resistance	2.7	3.5	8.8	14	21	34 $\Omega$
3 Output power	0.82	2.5	2.3	2.6	2.6	2.3 W
4 Efficiency	81	86	85	85	85	85 %
5 No-load speed	5400	9560	9560	9850	10290	9950 rpm
6 No-load current	11	10	6	5	4	3 mA
7 Stall torque	5.8	10.1	9.1	9.9	9.8	9.0 mNm
8 Friction torque	0.058	0.058	0.058	0.058	0.058	0.058 mNm
9 Back-EMF constant	0.55	0.62	0.94	1.2	1.5	1.8 mV/rpm
10 Torque constant	5.3	6.0	8.9	11.6	13.8	17.2 mNm/A
11 Slope of N-T curve	940	950	1050	1000	1050	1110 rpm/mNm
12 Coil inductance	0.045	0.058	0.13	0.22	0.32	0.49 mH
13 Mechanical time constant	11	11	11	11	11	11 ms
14 Rotor inertia	1.1	1.1	0.99	1.0	1.0	0.96 gcm <sup>2</sup>
<b>Continuous operation</b>						
15 Max. torque	3.6	3.6	3.4	3.5	3.4	3.3 mNm



### General specifications

16 Operating temperature	-20...+60	°C
17 Max. coil temperature	+80	°C
18 Thermal resistances	$R_{th1} = 6, R_{th2} = 28$	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, shaft length, special coils, commutator with capacitors.

V01

Specifications subject to change without notice