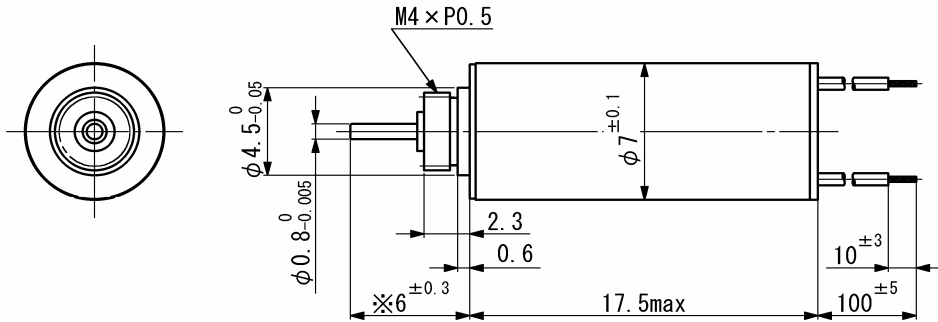


SCL07-17

Precious metal commutation



Weight 3.5 g
Dimension in mm

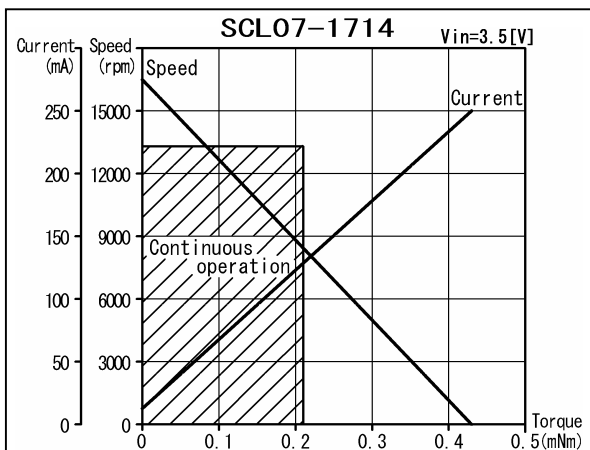
Note) Dimension marked * is measured with shaft pushed against motor.

For combination with gearhead: SPG07

Ordering number				SCL07-1714
1 Nominal voltage				3.5 V
2 Terminal resistance				14 Ω
3 Output power				0.19 W
4 Efficiency				54 %
5 No-load speed				16500 rpm
6 No-load current				17 mA
7 Stall torque				0.43 mNm
8 Friction torque				0.03 mNm
9 Back-EMF constant				0.2 mV/rpm
10 Torque constant				1.9 mNm/A
11 Slope of N-T curve				38500 rpm/mNm
12 Coil inductance				0.13 mH
13 Mechanical time constant				11 ms
14 Rotor inertia				0.03 gcm ²

Continuous operation

15 Speed range				13200 rpm
16 Max. torque				0.21 mNm



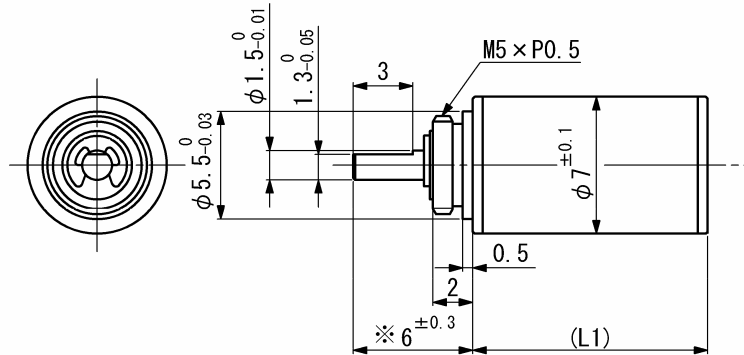
General specifications

17 Operating temperature	-20...+60	°C
18 Max. coil temperature	+80	°C
19 Thermal resistances	$R_{th1} = 20, R_{th2} = 84$	K/W
20 Bearings type	Sintered sleeves	
21 Max. shaft radial load	0.3 (5 mm)	N
22 Max. shaft axial load	0.1	N
23 Max. axial load at standstill	4.9	N
24 Shaft radial play	0.05	mm
25 Shaft axial play	0.03...0.2	mm

Options: Lead wires length, shaft length, special coils, commutator with capacitors.

SPG07

Planetary gearhead



Dimension in mm

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

For combination with motors: SCL07-17, SBL07-12

General specifications	SPG07	
Housing material	Metal	
Geartrain material	Steel	
Recommended max. input speed	12000	rpm
Operating temperature range	-10...+60	°C
Backlash at no-load per stage	≤ 1	°
Bearings on output shaft	Sintered sleeve bearings	
Max. shaft radial load (4.5 mm from flange)	1	N
Max. shaft axial load	0.5	N
Max. shaft press fit force	10	N
Shaft radial play	≤ 0.03	mm
Shaft axial play	≤ 0.3	mm

Ratio (nominal)	Stage	Gearhead length, L1 [mm]	Gearhead weight [g]	Max. allowable torque [mNm]		Length with motor [mm]				Efficiency [%]	Direction of rotation	
				Continuous	Intermittent	SCL07-17	SBL07-12					
4.7 : 1	1	7.4	2	10	20	24.9	19.4				85	=
22 : 1	2	9.6	2.5	10	20	27.1	21.6				72	=
105 : 1	3	11.8	3	10	20	29.3	23.8				61	=
494 : 1	4	14.1	3.5	10	20	31.6	26.1				52	=