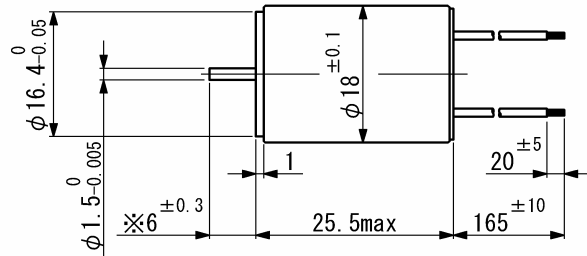
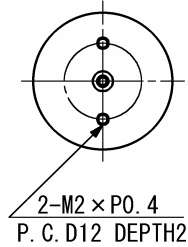


SCL18-25

Precious metal commutation



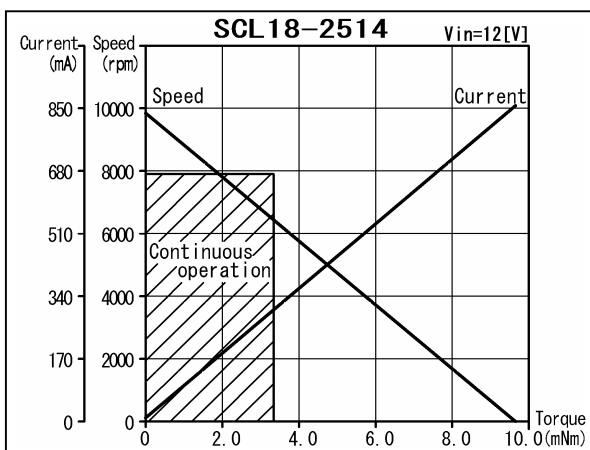
Weight 39.2 g
Dimension in mm

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

For combination with gearheads: SSG18, SPG16

Ordering number				SCL18-2514
1 Nominal voltage				12 V
2 Terminal resistance				14 Ω
3 Output power				2.6 W
4 Efficiency				85 %
5 No-load speed				9850 rpm
6 No-load current				5 mA
7 Stall torque				9.85 mNm
8 Friction torque				0.06 mNm
9 Back-EMF constant				1.21 mV/rpm
10 Torque constant				11.6 mNm/A
11 Slope of N-T curve				1000 rpm/mNm
12 Coil inductance				0.22 mH
13 Mechanical time constant				10.9 ms
14 Rotor inertia				1.04 gcm ²

Continuous operation				
15 Speed range				7900 rpm
16 Max. torque				3.51 mNm



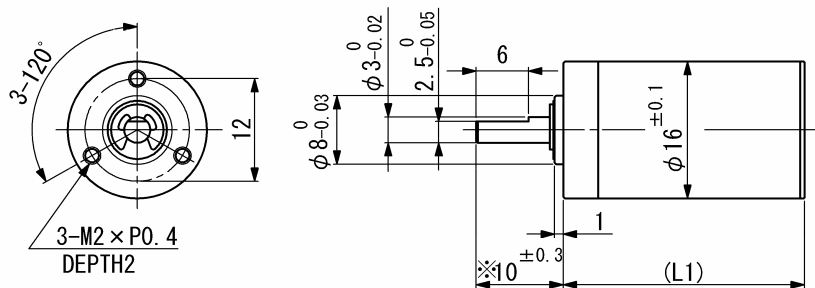
General specifications

17 Operating temperature	-20...+60	°C
18 Max. coil temperature	+80	°C
19 Thermal resistances	R _{th1} = 6, R _{th2} = 28	K/W
20 Bearings type	Sintered sleeves	
21 Max. shaft radial load	1.2 (5 mm)	N
22 Max. shaft axial load	0.2	N
23 Max. axial load at standstill	9.8	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.

SPG16

Planetary gearhead



Dimension in mm Note) Dimension marked ⊗ is measured with shaft pushed against gearhead.

For combination with motors: SCL16-25, SCL16-30, SCL17-30, SCL18-25, SCL18-33

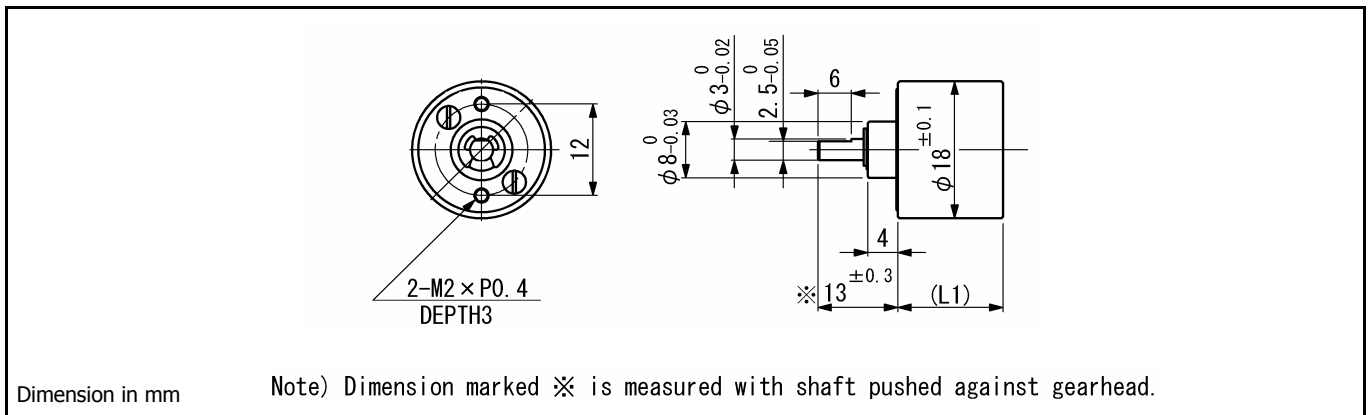
General specifications	SPG16	
Housing material	Metal	
Geartrain material	Steel	
Recommended max. input speed	6000	rpm
Operating temperature range	-10...+60	°C
Backlash at no-load per stage	≤ 1	°
Bearings on output shaft	Sintered sleeve bearings	
Max. shaft radial load (7 mm from flange)	4 (25)	N
Max. shaft axial load	2	N
Max. shaft press fit force	30	N
Shaft radial play	≤ 0.03	mm
Shaft axial play	≤ 0.2	mm

In parenthesis the max. radial load with ball bearing option.

Ratio (nominal)	Stage	Gearhead length, L1 [mm]	Gearhead weight [g]	Max. allowable torque [mNm]		Length with motor [mm]					Efficiency [%]	Direction of rotation
				Continuous	Intermittent	SCL16-25	SCL16-30	SCL17-30	SCL18-25	SCL18-33		
3.6 : 1	1	15.3	20	200	400	40.3	46.7	46.7	40.8	50.3	85	=
4.7 : 1	1	15.3	20	200	400	40.3	46.7	46.7	40.8	50.3	85	=
13 : 1	2	19.5	24.5	200	400	44.5	50.9	50.9	45	54.5	72	=
22 : 1	2	19.5	24.5	200	400	44.5	50.9	50.9	45	54.5	72	=
61 : 1	3	23.7	29	200	400	48.7	55.1	55.1	49.2	58.7	61	=
105 : 1	3	23.7	29	200	400	48.7	55.1	55.1	49.2	58.7	61	=

SSG18

Spur gearhead



For combination with motors: SCL18-25, SCL18-33

For combination with motor-tachogenerator: SCL18-44

General specifications

General specifications	SSG18	
Housing material	Metal	
Geartrain material	Metal	
Recommended max. input speed	4000	rpm
Operating temperature range	-10...+60	°C
Max. backlash at no-load, 4 stages	≤ 4	°
Bearings on output shaft	Sintered sleeve bearings	
Max. shaft radial load (10 mm from flange)	4	N
Max. shaft axial load	2	N
Max. shaft press fit force	30	N
Shaft radial play	≤ 0.03	mm
Shaft axial play	≤ 0.2	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	SCL18-25	SCL18-33	SCL18-44				
15 : 1	3	12.5	16.4	40	80	38	47.5	56.7			73	≠
27 : 1	3	12.5	16.4	40	80	38	47.5	56.7			73	≠
47 : 1	4	14.9	19.2	40	80	40.4	49.9	59.1			66	=
75 : 1	4	14.9	19.2	40	80	40.4	49.9	59.1			66	=
95 : 1	4	14.9	19.2	40	80	40.4	49.9	59.1			66	=