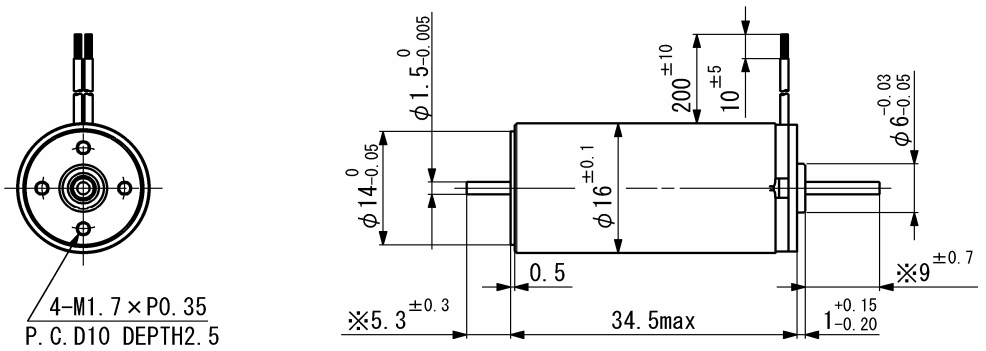
SCL16-34

Precious metal commutation

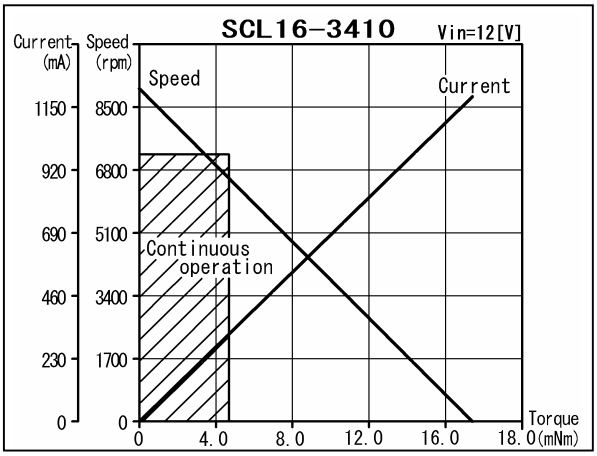


Weight 37 g
Dimension in mm

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

For combination with gearheads: SSG15, SPG16

	Ordering number				SCL16-3410	
1	Nominal voltage				12	V
2	Terminal resistance				10.2	Ω
3	Output power				4	W
4	Efficiency				83	%
5	No-load speed				9000	rpm
6	No-load current				10	mA
7	Stall torque				16.7	mNm
8	Friction torque				0.13	mNm
9	Back-EMF constant				1.32	mV/rpm
10	Torque constant				12.6	mNm/A
11	Slope of N-T curve				612	rpm/mNm
12	Coil inductance				0.16	mH
13	Mechanical time constant				6.6	ms
14	Rotor inertia				1.03	gcm^2
	Continuous operation					
15	Speed range				7200	rpm
16	Max. torque				4.43	mNm

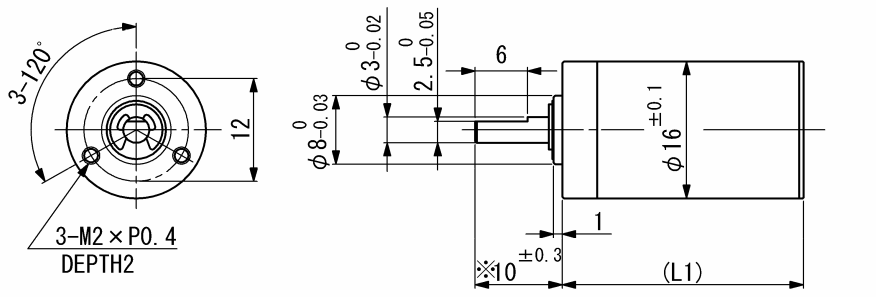


	General specifications		
17	Operating temperature	-20...+60	°C
18	Max. coil temperature	+80	°C
19	Thermal resistances	R_{th1} = 4, R_{th2} = 30	K/W
20	Bearings type	Sintered sleeves	
21	Max. shaft radial load	1.2 (5 mm)	N
22	Max. shaft axial load	0.2	N
23	Max. axial load at standstill	9.8	N
24	Shaft 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

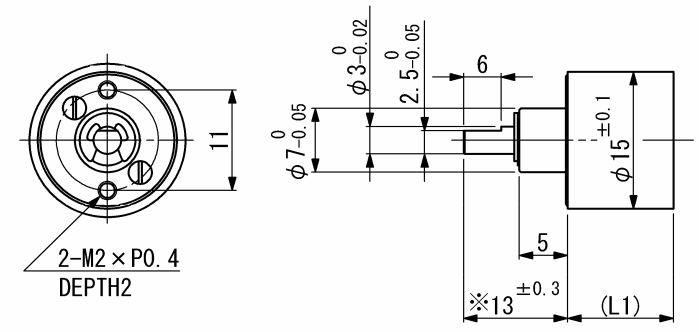
General specifications	SPG16	
Housing material	Metal	
Geartrain material	Steel	
Recommended max. input speed	6000	rpm
Operating temperature range	-10...+60	°C
Backlash at no-load per stage	≦ 1	°
Bearings on output shaft	Sintered sleeve bearings (ball bearings)	
Max. shaft radial load (7 mm from flange)	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	=

SSG15

Spur gearhead



Dimension in mm

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

For combination with motors: SCL16-15, SCL16-25, SCL16-30, SCL17-30
For combination with motor-tachogenerators: SCL16-44, SCL17-44

General specifications	SSG15	
Housing material	Metal	
Geartrain material	Metal	
Recommended max. input speed	6000	rpm
Operating temperature range	-10...+60	°C
Max. backlash at no-load, 5 stages	≦ 5	°
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	SCL16-15	SCL16-25	SCL16-30	SCL17-30	SCL16-44	SCL17-44		
29 : 1	3	9.6	8.9	15	30	27.1	34.6	41	41	54.1	54.2	73	≠
49 : 1	4	11.6	10.3	24	60	29.1	36.6	43	43	56.1	56.2	66	=
71 : 1	4	11.6	10.3	24	60	29.1	36.6	43	43	56.1	56.2	66	=
94 : 1	4	11.6	10.3	24	60	29.1	36.6	43	43	56.1	56.2	66	=
198 : 1	5	13.6	11.5	24	60	31.1	38.6	45	45	58.1	58.2	59	≠