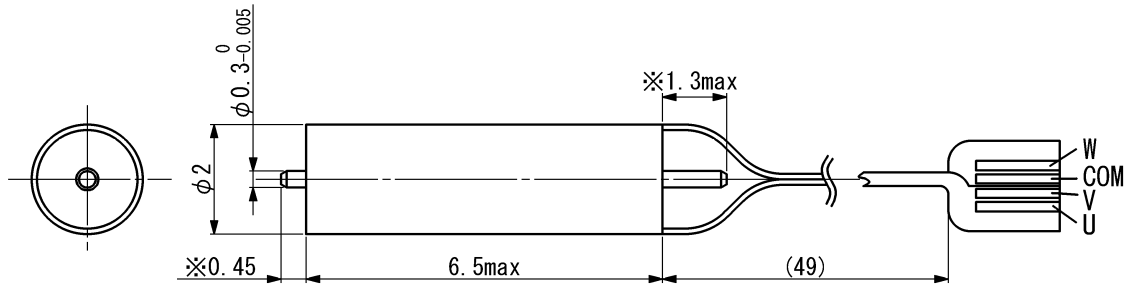


# SBL02-06

Electronically commutated sensorless motor, slotless stator design



Weight 0.12 g  
Dimension in mm

Note) Dimension marked  $\times$  is measured with shaft pushed against motor.

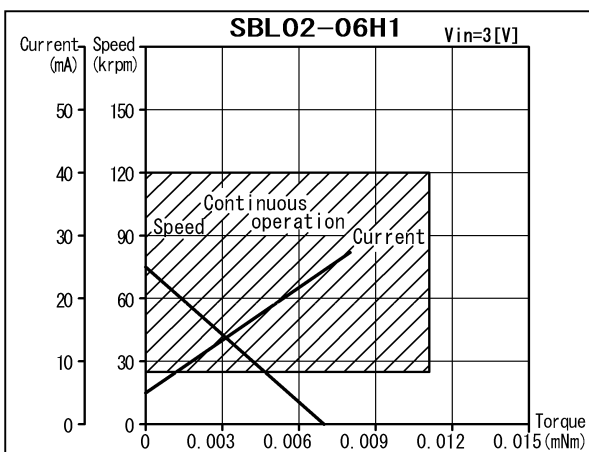
Sensorless drive circuit SSD04

Planetary gearhead SPG02

Ordering number				SBL02-06H1
1 Nominal voltage				3 V
2 Terminal resistance				110 $\Omega$
3 Output power				0.014 W
4 Efficiency				33 %
5 No-load speed				75000 rpm
6 No-load current				5 mA
7 Stall torque				0.007 mNm
8 Friction torque				0.002 mNm
9 Back-EMF constant				0.033 mV/rpm
10 Torque constant				0.314 mNm/A
11 Slope of n-M curve				10.7 x 10 <sup>6</sup> rpm/mNm
12 Coil inductance				0.11 mH
13 Mechanical time constant (starting oscillating time neglected)				6.2 ms
14 Rotor inertia				4.3 x 10 <sup>-5</sup> gcm <sup>2</sup>

### Continuous operation

15 Speed range				25...120 krpm
16 Max. torque				0.0112 mNm



### General specifications

17 Operating temperature	-10...+50	°C
18 Max. coil temperature	+90	°C
19 Thermal resistances	$R_{th1} + R_{th2} = 272$	K/W
20 Bearings type	Sintered sleeves	
21 Max. shaft radial load	0.2 (0.45 mm)	N
22 Max. shaft axial load	0.1	N
23 Max. axial load at standstill	1	N
24 Shaft radial play	0.012	mm
25 Shaft axial play	0.18	mm

Options: Special coils.