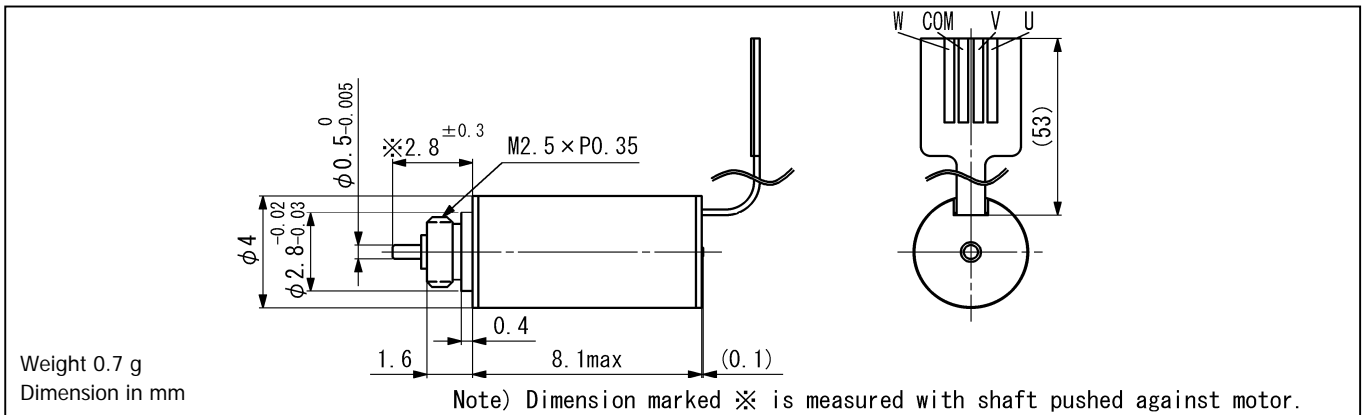


# SBL04-08

Electronically commutated sensorless motor, slotless stator design



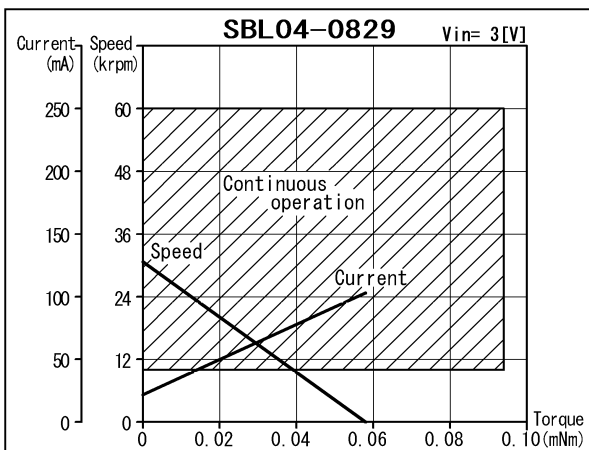
Sensorless drive circuit SSD04

Planetary gearhead SPG04

Ordering number				SBL04-0829
1 Nominal voltage				3 V
2 Terminal resistance				29 Ω
3 Output power				0.05 W
4 Efficiency				28 %
5 No-load speed				30700 rpm
6 No-load current				22 mA
7 Stall torque				0.058 mNm
8 Friction torque				0.016 mNm
9 Back-EMF constant				0.076 mV/rpm
10 Torque constant				0.73 mNm/A
11 Slope of n-M curve				525385 rpm/mNm
12 Coil inductance				0.074 mH
13 Mechanical time constant (starting oscillating time neglected)				5 ms
14 Rotor inertia				$9.01 \times 10^{-4}$ gcm <sup>2</sup>

### Continuous operation

15 Speed range				10...60 krpm
16 Max. torque				0.094 mNm



### General specifications

17 Operating temperature	-20...+70	°C
18 Max. coil temperature	+90	°C
19 Thermal resistances	$R_{th1} = 7.9, R_{th2} = 70.2$	K/W
20 Bearings type	Sintered sleeves	
21 Max. shaft radial load	0.22 (2.8 mm)	N
22 Max. shaft axial load	0.1	N
23 Max. axial load at standstill	8	N
24 Shaft radial play	0.018	mm
25 Shaft axial play	0.23	mm

**Options:** Special coils.