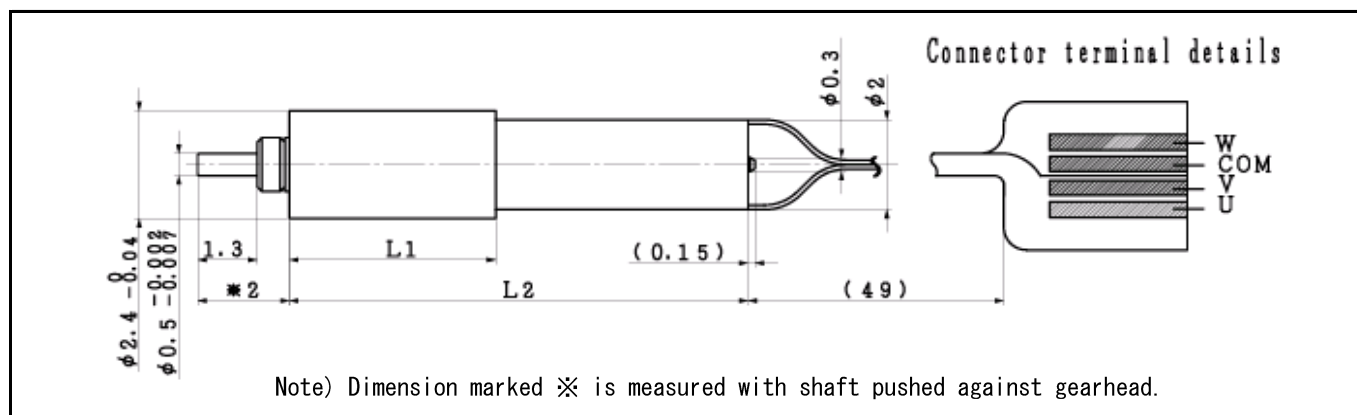


SBL02-06

Electronically commutated sensorless motor, slotless stator design



Ordering number	SBL02-06H1 PG02-4.3	SBL02-06H1 PG02-18	SBL02-06H1 PG02-79	SBL02-06H1 PG02-337
1 Nominal voltage	3	3	3	3 V
2 Terminal resistance	105	105	105	105 Ω
3 Gearhead reduction ratio	4.3	18	79	337 :1
4 Gearhead number of stage	1	2	3	4
5 Max. output power, gearhead output	0.0075	0.0050	0.0045	0.0036 W
6 Max. efficiency, motor only	17.7	16.6	16.0	15.5 %
7 No-load speed, gearhead output	16700	3600	900	200 rpm
8 No-load current	9.4	9.8	10.2	10.6 mA
9 Stall torque (2-points measurement), gearhead output	0.017	0.052	0.19	0.66 mNm
10 Friction torque	0.0086	0.030	0.11	0.39 mNm
11 Back-EMF constant	0.12	0.53	2.1	9.3 mV/rpm
12 Torque constant	0.92	3.1	10.4	36.4 mNm/A
13 Coil inductance	110	110	110	110 μ H
14 Mechanical time constant, motor only	6.2	6.2	6.2	6.2 ms
15 Gearhead length, L1	3.5	4.3	5	5.8 mm
16 Total length, L2	8.5	9.3	10	10.8 mm
17 Rotor inertia, motor only	4.3×10^{-5}	4.3×10^{-5}	4.3×10^{-5}	4.3×10^{-5} gcm ²
18 Total weight	190	210	230	245 mg

General data

19 Operating temperature range	-10 ... +50	°C
20 Max. temperature raise at stall	20	°C
21 Bearing type	Sintered sleeves	
22 Max. permissible press fit force, gearhead output	2.9	N
23 Max. radial play, gearhead output	0.06	mm
24 Max. axial play, gearhead output	0.1	mm

Ordering example

SBL02-06H1PG18 corresponds to:

Motor SBL02-06H1 +

Planetary gearhead SPG02-18