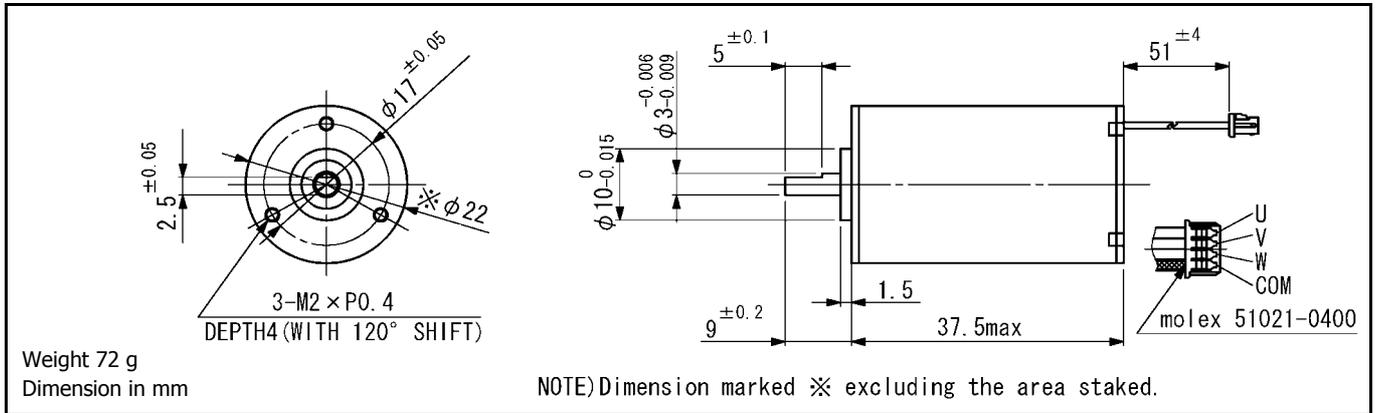


# SBL22-37

Electronically commutated sensorless motor, slotless stator design

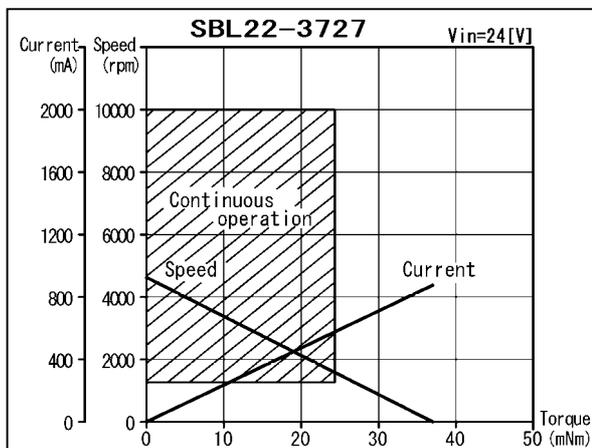


## Sensorless drive circuit SSD22

| Ordering number   | SBL22-3727            |
|---|-----------------------|
| 1 Nominal voltage   | 24 V                  |
| 2 Terminal resistance   | 27 Ω                  |
| 3 Output power  | 4.4 W                 |
| 4 Efficiency  | 51 %                  |
| 5 No-load speed   | 4685 rpm              |
| 6 No-load current   | 73 mA                 |
| 7 Stall torque  | 36 mNm                |
| 8 Friction torque   | 3.2 mNm               |
| 9 Back-EMF constant   | 4.7 mV/rpm            |
| 10 Torque constant  | 44.1 mNm/A            |
| 11 Slope of N-T curve   | 130 rpm/mNm           |
| 12 Coil inductance  | 2.4 mH                |
| 13 Mechanical time constant (starting oscillating time neglected) | 4.6 ms                |
| 14 Rotor inertia  | 3.31 gcm <sup>2</sup> |

## Continuous operation

|                |                  |
|----------------|------------------|
| 15 Speed range | 1300...10000 rpm |
| 16 Max. torque | 24.3 mNm         |



## General specifications

|                                  |  |     |
|----------------------------------|--|-----|
| 17 Operating temperature         | -20...+80                                      | °C  |
| 18 Max. coil temperature         | +90  | °C  |
| 19 Thermal resistances           | R <sub>th1</sub> = 0.6, R <sub>th2</sub> = 4.3 | K/W |
| 20 Bearings type                 | Preloaded ball bearings                        |     |
| 21 Max. shaft radial load        | 16 (9 mm)                                      | N   |
| 22 Max. shaft axial load         | 4  | N   |
| 23 Max. axial load at standstill | 250  | N   |
| 24 Shaft radial play             | 0.032  | mm  |
| 25 Shaft axial play              | 0  | mm  |

**Options:** Lead wires length, shaft length, special coils.