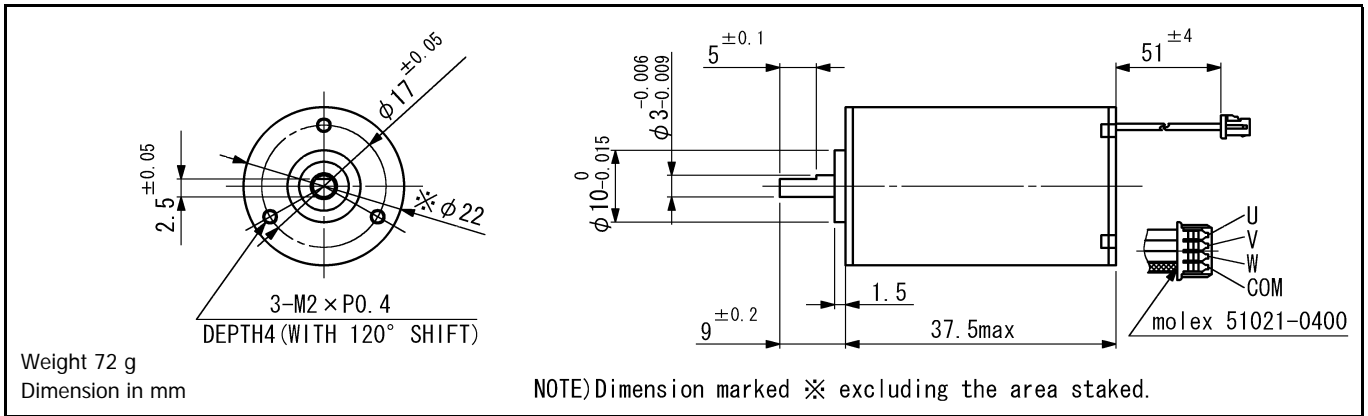


SBL22-37

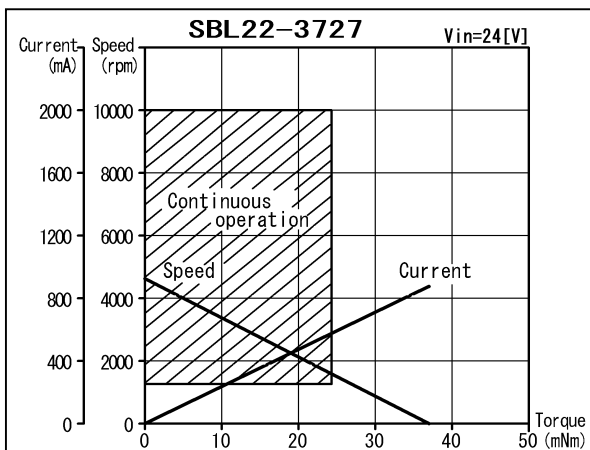
Electronically commutated sensorless motor, slotless stator design



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 ² |

| 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 | $R_{th1} = 0.6, R_{th2} = 4.3$ | 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.