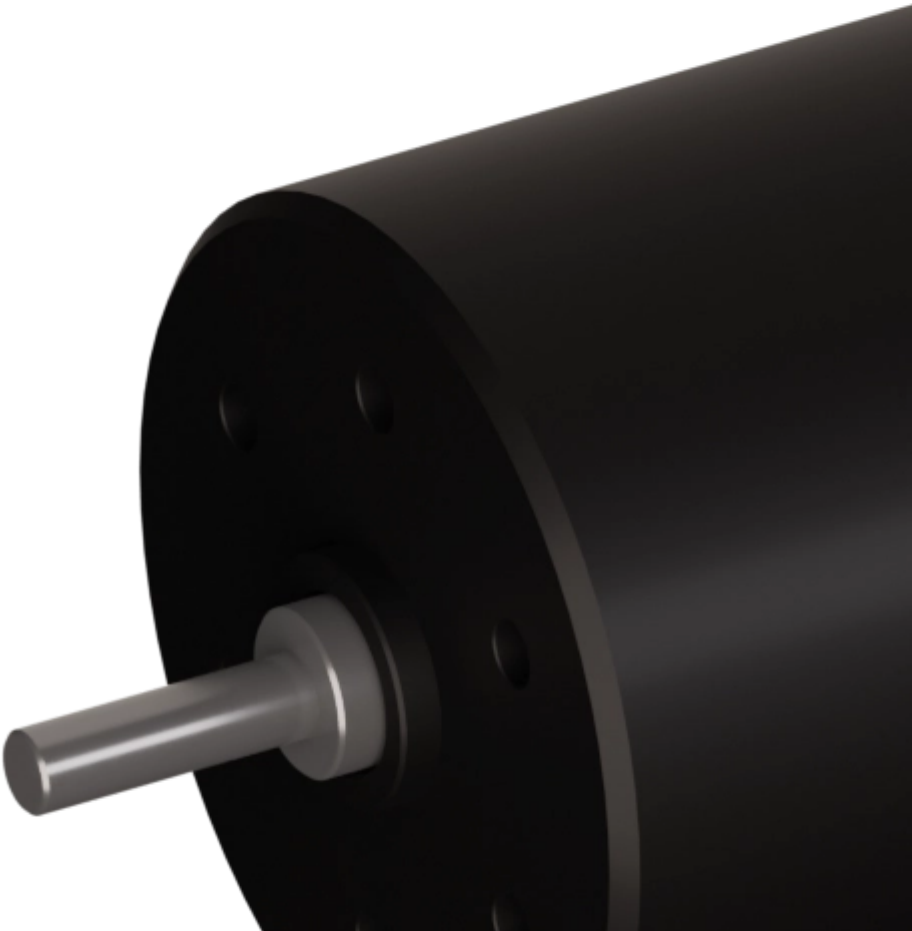
variables/V-color

# Micromotors | Coreless DC Motors | SVTN B 01-2230-12-S-OG



## Feature

| | SVTN B 01-2230-12-S-OG |
|---|---|
| **Nominal voltage** | 12 V |
| **No load speed** | 12200 rpm |
| **No load current** | 65 mA |
| **Nominal speed** | 10248 rpm |
| **Nominal torque** | 5.220 mNm |
| **Nominal current** | 0.630 A |
| **Stall torque** | 32.600 mNm |
| **Stall current** | 3.600 A |
| **Max. efficiency** | 74.930 % |
| **Terminal resistance*** | 3.330 ? |
| **Terminal inductance*** | 0.403 mH |
| **Torque constant** | 9.220 mNm/A |
| **Speed constant** | 1016 mNm/V |

**Notice :** The provided technical data are the higher limits recommended in static condition. To obtain the correct dimensioning of the product, it is necessary to hold account of all the applicable dynamic forces, including the inertia of the manipulator, the configuration of the tools and the external forces applied.

# 2 Pole Brushed DC Motors

| | SVTN B 01-2230-12-S-OG |
|---|---|
| **Speed/torque gradient** | 374.20 rpm/mNm |
| **Mechanical time constant** | 11.080 ms |

**SVTN B 01-2230-12-S-OG**

| | |
|---|---|
| **Rotor inertia** | 2.830 gcm² |

The specific design construction of a coreless DC motor provides several advantages over the traditional, iron core, technology. A first added value it is given by rotor lower mass and inertia, so very rapid acceleration and deceleration rates are possible. Furthermore, the lack of iron reduces "iron losses" to provide higher efficiencies (up to 90 percent) than traditional DC motors. Last, but not least, the coreless design reduces winding inductance, so sparking between the brushes and commutator is reduced, increasing motor life and reducing electromagnetic interference (EMI). Our Coreless DC Motors are available on a wide range of sizes and we can show high flexibility on custom requirements.

**Advantages**

- Winding technology without metal bodies
- Good heat dissipation and high overload capacity
- Long life expectancy

**Benefits**

- Light and compact, easy integration
- High reliability
- Good return on investment

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