

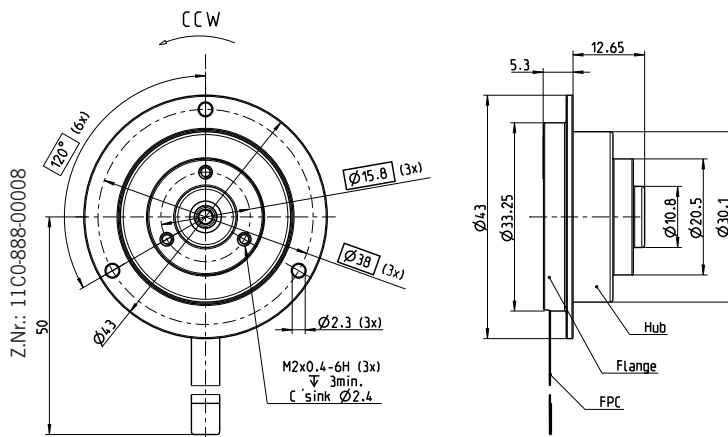


BLDC FDB SP2B

Brushless 3 – Phase DC Motor

Rated Voltage* [V]	Rated Speed* [rpm]	Power at rated speed [W]	Friction torque at rated speed [mNm]	Current at rated Speed (without load) [A]
5	3600	0.45	1.19	0.18

*The specification for Rated Voltage and Rated Speed are just example values. These parameters are depending on customer requirements and electronics. The Speed Range is also depending on the rotor mass, temperature and center of gravity.



Features

- Fluid dynamic bearing technology
 - low noise < sound power overall max 20 dB(A) re 1 pW
 - low vibration
 - low runout (NRRO < 40 nm)
 - wobble error < 3"
- Run out rotor
 - axial: < 10 µm
 - radial: < 5 µm
- Static imbalance < 20 mg · cm

General information

- Mounting position: arbitrary
- Bearing system: FDB (Fluid Dynamic Bearing)
- Torque Constant Kt: 6.6 mN · m/A
- Weight: 0.037 kg
- Polar Rotor Inertia: 1.4 · 10⁻⁶ kg · m²
- Temperature Range:
 - operating: -20 °C to +70 °C
 - non operating: -40 °C to +70 °C
- Direction of Rotation: CCW only!
- Number of Poles/Slot: 12/9
- Speed range: 3000 - 12000 rpm*

Options

- Integrated Drive Electronic: No
- Planetary Gearbox: No
- Sensorless Operation: Yes

FDB Motor Cross Section

