

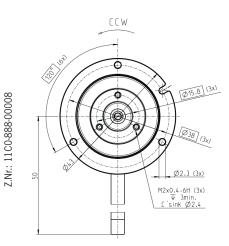


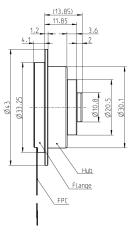
BLDC FDB SP2B

Brushless 3 - Phase DC Motor

Rated Voltage*	Rated Speed*	Power at rated speed	Friction torque at rated speed	Current at rated Speed (without load)
[V]	[rpm]	[W]	[mNm]	[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: $< 10 \ \mu m$

radial: < 5 μm

• Static imbalance $< 35 \text{ mg} \cdot \text{cm}$

General information

• Mounting position: arbitrary

Bearing system: FDB (Fluid Dynamic Bearing)

• Torque Constant Kt: $6.6 \text{ mN} \cdot \text{m/A}$ • Weight: 45 g max. • Polar Rotor Inertia: $1.4 \cdot 10^6 \text{ kg} \cdot \text{m}^2$

• Temperature Range:

operating: -20 °C to +70 °C

non operating: -40 °C to +70 °C

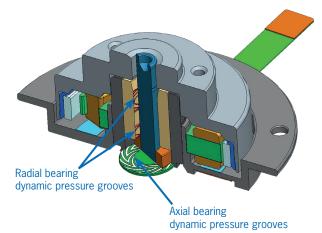
Direction of Rotation: CCW only!Number of Poles/Slot: 12/9

• Speed range: 3000 - 12000 rpm*

Options

Integrated Drive Electronic: NoPlanetary Gearbox: NoSensorless Operation: Yes

FDB Motor Cross Section







MinebeaMitsumi Passion to Create Value through Difference

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