BLDC FDB SP2B
with internal driver electronic
Brushless 3 – Phase DC Motor

Supply Voltage * [ V ] Nominal Speed* [ rpm ] Cont. Power [ W ] Torque at nominal speed [ mNm ] Current at nominal speed [ A ]
9 3600 0.765 1.075 0.085
12 7200 1.896 1.639 0.185

*The specification for Rated Voltage and Nominal 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 1pW
- low vibration
- low runout (NRRO below 40 nm)
- wobble error < 3''

Run out rotor
- axial < 10 µm, radial < 5µm
- Static imbalance < 20 mgcm

**General informations**

- Mounting position: free
- Bearing system: FDB (Fluid Dynamic Bearing)
- Torque Constant Kt: 6.6 mNm/A
- Weight: 0.037 kg
- Rotor Inertia: 1.4 x 10E-6 kgm2
- Oper. Temp. Range: 0 °C to +70 °C
- Non oper. Range: -40 °C to +70 °C
- Direction of Rotation: CCW only!
- Number of Poles/Slot: 12/9

**Options**

- Integrated Drive Electro.: Yes
- Voltage range: 7-19 V
- Planetary Gearbox: No
- Sensorless Operation: Yes

- BUS-System: Lin/PWM
- Connector PCB: JST S4B - ZR - SM4A - TF
- Connector Wire: JST ZHR-4 / SZH-002T-P0.5