

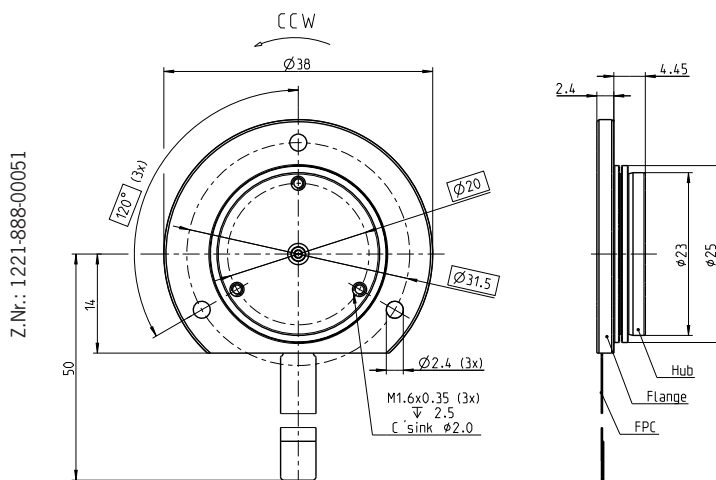


## BLDC FDB DTOV

Brushless 3 – Phase DC Motor – Small Form Factor

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	6400	0.277	0.413	0.146

\*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.



Z.Nr.: 1221-888-00051

### Features

- Fluid dynamic bearing technology
  - low noise < sound power overall max 20 dB(A) re 1 pW
  - low vibration
  - low runout (NRRO < 60 nm)
  - wobble error < 3"
- Run out rotor
  - axial: < 12 μm
  - radial: < 5 μm
- Static imbalance < 10 mg · cm

### General information

- Mounting position: arbitrary
- Bearing system: FDB (Fluid Dynamic Bearing)
- Torque Constant Kt: 2.83 mN · m/A
- Weight: 0.017 kg
- Polar Rotor Inertia:  $7.9 \cdot 10^{-7} \text{ kg} \cdot \text{m}^2$
- Temperature Range:
  - operating: -20 °C to +70 °C
  - non operating: -40 °C to +70 °C
- Direction of Rotation: CCW
- Number of Poles/Slot: 12/9
- Speed range: 3000 - 10000 rpm\*

### Options

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

