

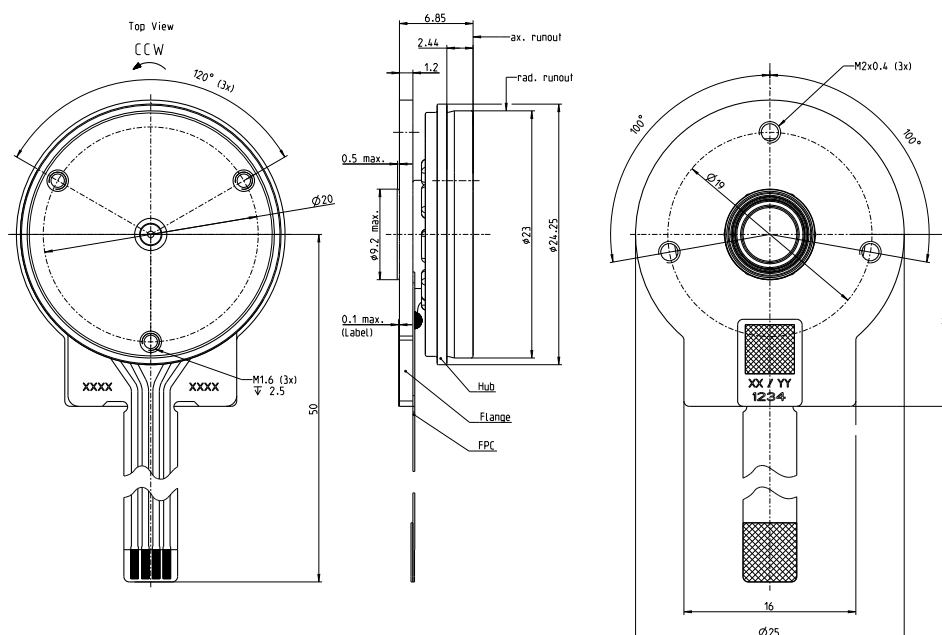
# BLDC FDB DTOV S

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	6400	0.277	0.413	0.146

\* These parameters are just example values at 23 °C. They depend on individual requirements and electronics used.

Z.Nr.: 1225-888-00007



## General information

- Mounting position: arbitrary
- Bearing system: FDB (Fluid Dynamic Bearing)
- Torque constant kt: 2.83 mN · m/A
- Motor weight: max. 18 g
- Polar rotor inertia:  $7.9 \cdot 10^{-7} \text{ kg} \cdot \text{m}^2$
- Temperature range:
  - operating: -40 °C to +105 °C\*\*
  - non operating: -40 °C to +105 °C\*\*
- Direction of rotation: CW only
- Number of poles/slot: 12/9
- Speed range: 1000 - 12000 rpm\*\*
- Recommended load: < 20 g\*\*

## Options

- Integrated drive electronic: No
- Planetary gearbox: No
- Sensorless operation: Yes

## Features

- Fluid dynamic bearing technology
- Low noise, sound power overall max. 20 dB(A) re 1 pW
- Low vibration
- Low NRRO < 40 nm
- Wobble error < 3"
- Run out rotor
  - axial: < 12 μm
  - radial: < 10 μm
- Static imbalance < 15 mg · cm

\*\* Operating conditions and load depending on specific application requirements.

