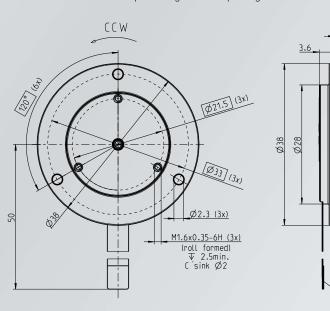


# **BLDC FDB SYOV**

# 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 ]	[ <b>W</b> ]	[ mNm ]	[ A ]
5	5400	0.244	0.43	0.08

<sup>\*</sup>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.



Dwg. No.: 1219-888-00032

#### **General information**

• Mounting position: arbitrary

• Bearing system: FDB (Fluid Dynamic Bearing)

Torque Constant Kt: 5.4 mN•m/AWeight: 0.025 kg

• Polar Rotor Inertia: 1.26 x 10<sup>-6</sup> kg•m<sup>2</sup>

• Temperature Range:

operating:  $-20 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$ non operating:  $-40 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$ 

• Direction of Rotation: CCW only!

• Number of Poles/Slot: 12/9

• **Speed range:** 4000 - 7000 rpm\*

#### **Features**

### Fluid dynamic bearing technology

low noise < sound power overall

max 20 dB(A) re 1 pW

low vibration

Flange

FPC

low runout (NRRO < 40 nm)

wobble error < 3"

#### Run out rotor

axial:  $< 15 \mu m$ radial:  $< 5 \mu m$ 

• Static imbalance < 20 mg•cm

## **Options**

Integrated Drive Electronic: NoPlanetary Gearbox: No

• Sensorless Operation: Yes

NMB

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