

MFOG091A

Technical manual

Technical manual of MFOG091A

1. Brief introduction

MFOG091A fiber optic gyro is mainly composed of optical circuit components, circuit components and structural components. It is characterized by simple structure, no moving parts, no wear parts, fast startup, small volume and light weight. It can be applied to carrier attitude body control and measurement.

2. Product Performance

2.1 Dimension

$\varnothing 24\text{mm} \times 51.6\text{mm}$ 。



Pic.1 MFOG091A

2.2 Weight

$\leq 30\text{g}$ 。

2.3 Operation temperature

$-40^{\circ}\text{C} \sim +65^{\circ}\text{C}$ 。

2.4 Storage temperature

$-55^{\circ}\text{C} \sim +85^{\circ}\text{C}$ 。

2.5 Vibration

Random vibration: 20g, 20Hz~ 2000Hz.

2.6 Specification



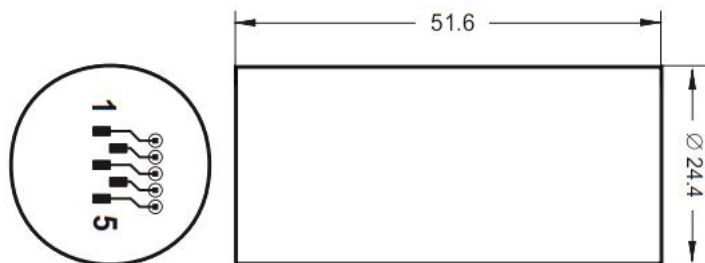
Table 1 Main parameters

1	Input range (°/s)	±60
2	Scale factor	7±0.7mv/°/s
3	Bias stability (10s, 1σ, °/h)	≤2
4	Bias repeatability (1σ, °/h)	≤2
5	Random walk (°/h ^{1/2})	≤0.02
6	Bias offset (10s,1σ)	≤0.05
7	3dB Band Width (Hz)	≥1KHz
8	Supply voltage (V)	5±0.15
9	Power consumption (W)	≤0.7

3. Dimension and Interface

Dimension is shown as below:

Housing material - aluminum alloy



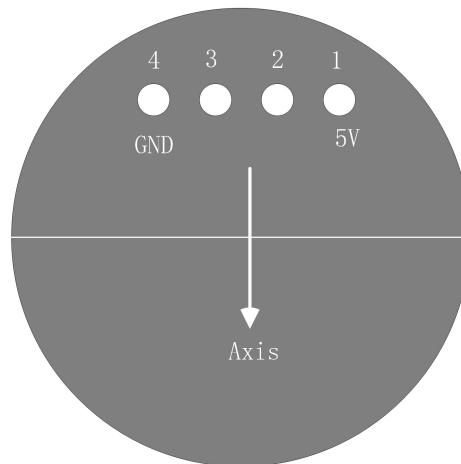
The micro-nano fiber optic gyro is electrically connected to the exterior using solder pins.

Definition is shown as below.

表 2 Pin definition

Num.	Definition
1	5V
2	Out-
3	Out+
4	GND

Output impedance is $1k\ \Omega$, output level is 1V and differential analog voltage output is used.



Pic.2 Pin definition

4. Storage

- a) Products placed in boxes should be stored in air-conditioned warehouses at an ambient temperature of 15°C to 35°C under standard atmospheric pressure,
- b) The storage period of the product is 15 years.

5. Documents

- a) Certificate of Conformity;
- b)MFOG091A Acceptance Report;
- c) MFOG091A Technical manual (One cope per lot)。