

BJP Gyroscope (Fiber Optic Gyroscope)



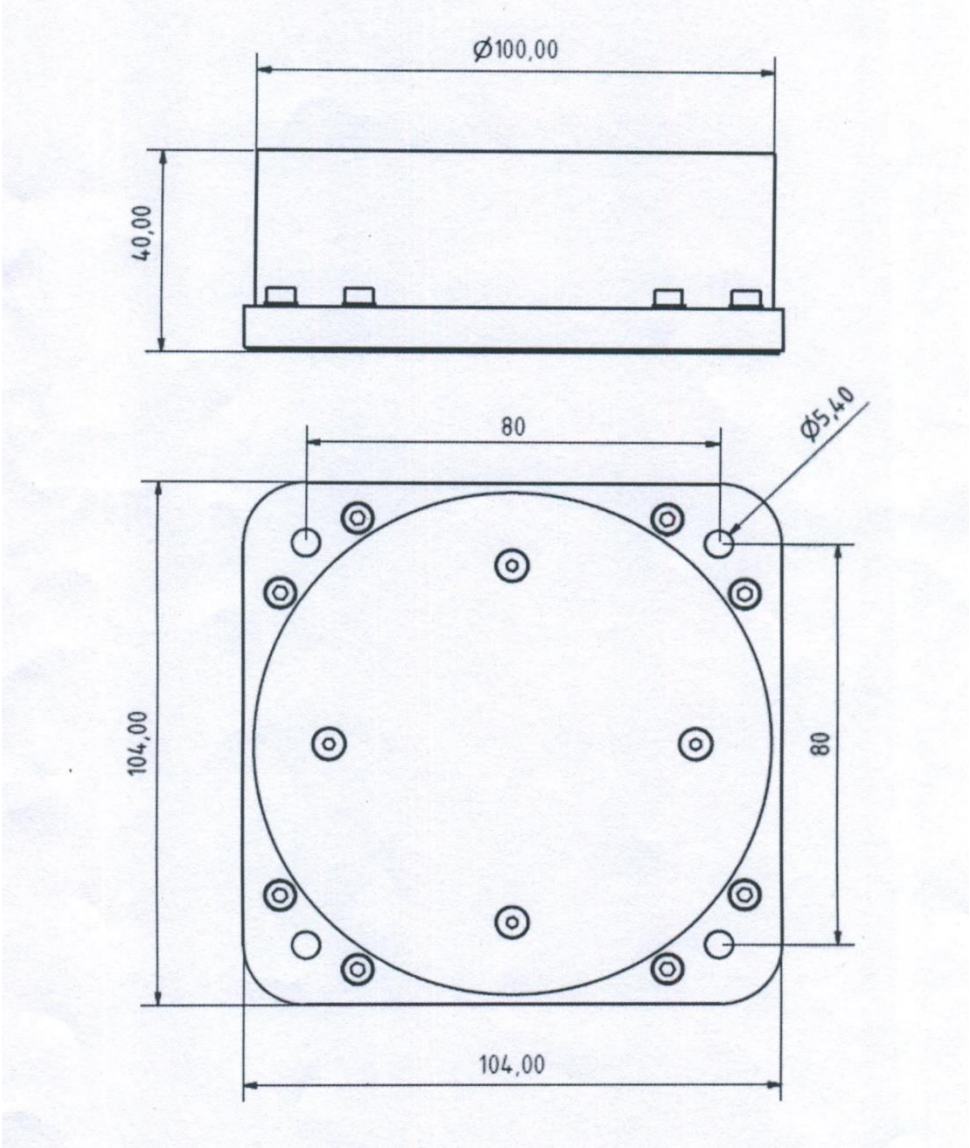
Price: 12000USD

Fiber optic Gyroscope is one of most important inertia navigation systems sensors which measure angel rate for specifying and controlling system situation.

Mechanical specifications:

Gyroscope Outside Plan:

Dimensions: based on (mm)



Gyroscope Technical Specifications:

Row	Performance	Unit	SABA24	SABA24F
1	Bias Drift at fixed temperature	° / h	≤ 0.03	≤ 0.01
2	Bias Drift at full temperature range from -40°C ~ 60°C	° / h	≤ 0.3	≤ 0.1
3	Bias Drift Repeatability at fixed temperature	° / h	≤ 0.03	≤ 0.01
4	Bias Drift Repeatability at full temperature range from -40°C ~ 60°C	° / h	≤ 0.4	≤ 0.1
5	Random walk	°/√hr	< 0.003	< 0.001
6	Scale Factor Non-linearity at fixed temperature	ppm	< 50	< 20
7	Scale Factor Non-linearity at full temperature range from -40°C ~ 60°C	ppm	< 80	< 50
8	Scale Factor Repeatability at fixed temperature	ppm	< 30	< 20
9	Scale Factor Repeatability at full temperature range from -40°C ~ 60°C	ppm	< 50	< 50
10	Range of measured angular rate	° / s	±150	±90
11	Bandwidth	HZ	200	100
12	Power Supply	V	±5 (> 5W)	±5 (> 5W)
13	Power Consumption	W	< 5	< 5
14	Readiness Time	S	≤ 20	≤ 20
15	Test Temperature	°C	-40 ~ +60	-40 ~ +60
16	Warm up Time	min	< 15	< 5
17	Storage Temperature	°C	-40 ~ +65	-40 ~ +65
18	Weight	g	< 800	< 800
19	Dimension	mm	104 x 104 x 40	104 x 104 x 40
20	Vibration	g , HZ	4.2 g, 20 - 2000	4.2 g, 20 - 2000
21	Shock	g , ms	40 g , 11 ms	40 g , 11 ms
22	Output		RS422	RS422
23	Sync pulse repetitions frequency	HZ	2 ~ 2000	2 ~ 2000
24	MTBF	hour	5000	5000
25	Life Time	year	10	10
26	Pressure effected	° / h	0.1	0.1
27	Insulation Resistance > 50MΩ	Ω - V	29-27	29-27
28	Magnetic Field sensitivity	° / h /uT	<0.001	<0.001

Connector and Pin out Specifications:

BJP Gyroscope connectors is CDBF-21Z and its pin out is as follow:

No of pins	Pin Function	Remarks
17,18	$\pm 5V$ ground	Power supply for FOG
19,21	+5V	
3,4	-5V	
5	+5V	Power supply for Light source cooling
6	Ground	
7	Command Input	Sync Pulse
8	Output (+)	TX+
9	Input (+)	RX+
10	Output (-)	TX-
11	Input (-)	RX-
13	Pulse Output	Pulse output for simulation (100 hz)

Connector Outside Plan

Dimensions: based on (mm)

CDBF-21Z

