



# SAAB



## FIBER OPTIC GYRO UNIT 8088 009-156 THREE-AXIS

The high performance alternative. Based on our Fiber Optic technology backed up by over 40-years experience in inertial sensors.

This family of Gyro Units is specifically designed for stabilization applications where there is a need for three-axis rate sensing. They offer a very attractive solution based on fiber optic gyro technology that gives a number of benefits. The units are equipped with three Saab manufactured single axis Fiber Optic Gyros with built-in temperature sensor. They also include DC/DC converters, analog compensation electronics and filters to comply with international standards of EMI requirements. These units are also available in single-axis and dual-axis configuration.



Fiber Optic Gyro (FOG).



Stabilization of Remote Weapon Station with Saab FOG-Unit.

### Applications:

- Gun stabilization
- Sight stabilization
- Antenna stabilization
- Camera stabilization

### Features:

- Compensated analog output
- Solid state design
- Wide bandwidth
- High shock and vibration usability
- Very good bias stability
- Short start-up time

### Company Background

Saab has been a producer of gyros of various designs for over 40 years. Production was initially intended for Saab designed aircraft sight and missile requirements.

Since the end of 70's the gyro production have expanded into a product line of it's own including design and production of gyro products for worldwide customers. Up to the present time we have produced more than 40.000 sensors. Gyros based on FOG technology has been the main product since the end of 90's.

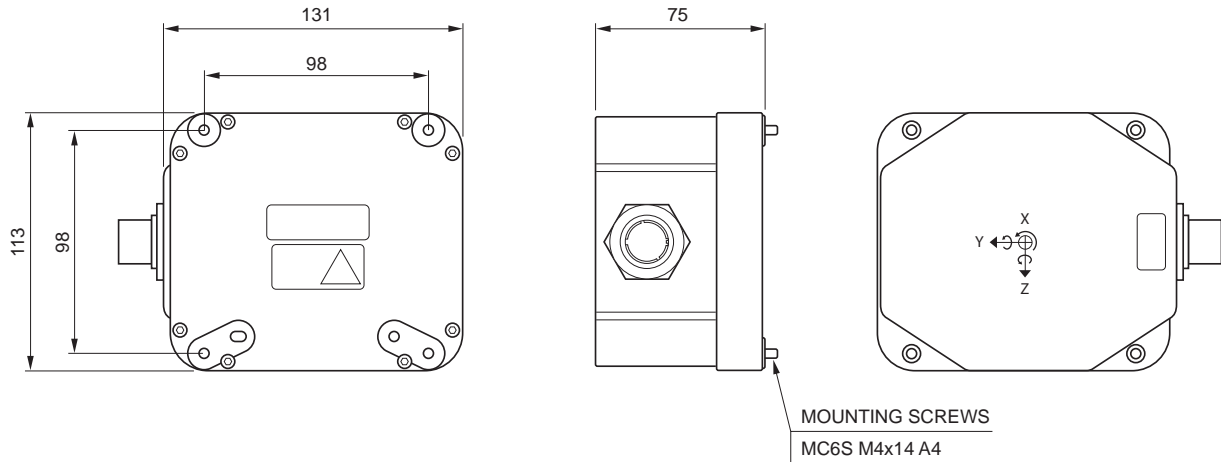


Mechanical Gyros.



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## DIMENSIONAL DRAWING FOG UNIT 8088 009-156



## SPECIFICATION VERSION 8088 009-156

CHARACTERISTICS	UNIT	VALUE
Operating Range (OR)	°/s	±150
Tracking Range (TR)	°/s	±20
Bias at 20°C (initial cond.)	°/h max	100
Bias variation peak to peak over temperature range	°/h max	40
Bias stability 1s	°/h max	5
Scale Factor Nominal at TR	mVDC/°/s	66.7
SF error over OR in room temperature	%	±1.0
SF error over TR in room temperature	%	±0.2
SF variation Over Temperature Range (@20°/s) *	%	±0.3
Linearity error 0-20 °/s	% of TR	±0.1
Linearity error 20-150 °/s	% of OR	±0.3
Bandwidth	Hz min	100
Start up time	s max	1
Misalignment	mrad max	8
Output Load	kΩ	80
<b>POWER REQUIREMENTS</b>		
Supply Voltage	VDC	+18 – +32
Input Power	W max	12
<b>ENVIRONMENTS</b>		
Shock	g : msec	300 : 1
Vibration, sine	g : Hz	10 : 20-2000
Vibration, random	g <sup>2</sup> /Hz : Hz	0.1 : 20-2000
Operating temperature range (OTR)	°C	-30 – +70
Storage temperature range	°C	-46 – +75

\* Change from room temperature to either extreme of OTR.

Specifications subject to change without notice

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