



# SAAB



## FIBER OPTIC GYRO UNIT

### 8088 009-30X ONE/TWO/THREE-AXIS DIGITAL

The high performance digital alternative. Based on our Fiber Optic technology backed up by over 50-years' experience in inertial sensors.

This family Gyro Units is specifically designed for applications where there is a need for rate sensing with digital output. They offer a very attractive solution based on fiber optic gyro technology that gives a number of benefits. The units are equipped with Saab manufactured single axis Fiber Optic Gyros, DC/DC converters, digital compensation electronics and filters to comply with international standards of EMI requirements. These units are available in single-axis, dual-axis and three-axis configuration. They can be offered with parallel serial interfaces or with one serial interface for multi-axis units.



*Fiber Optic Gyro (FOG).*



*Stabilization of Remote Weapon Station with Saab FOG-Unit.*

#### Applications:

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

#### Features:

- Compensated digital output
- Solid state design
- Wide bandwidth
- High shock and vibration usability
- Very good bias stability
- Short start-up time
- High internal sampling rate
- Low delay on digital interface
- Parallel or one serial interface

#### Company Background:

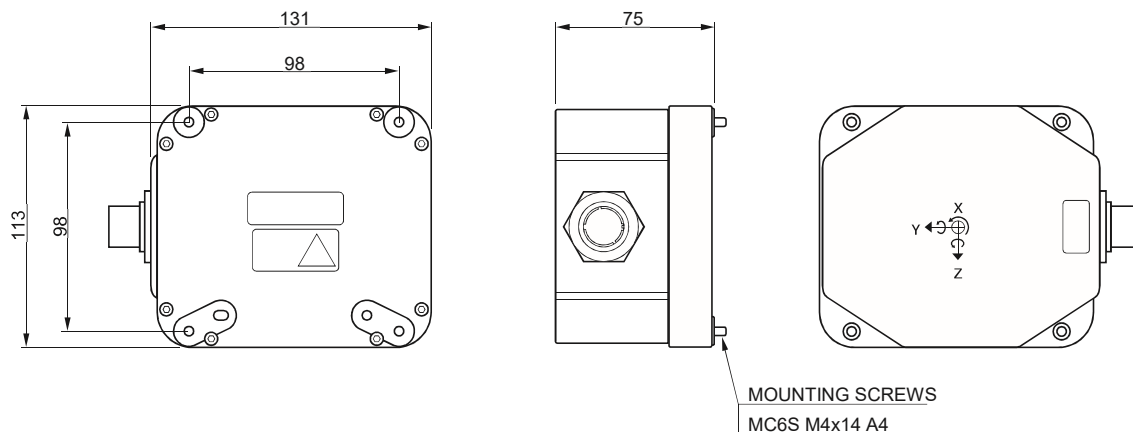
Saab has been a producer of gyros of various designs for over 50 years. Production was initially intended for Saab designed aircraft sight and missile requirements.

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 50.000 sensors. Gyros based on FOG technology has been the main product since the end of 90's.



*Mechanical Gyros.*

## DIMENSIONAL DRAWING FOG UNIT 8088 009-30X



## TYPICAL SPECIFICATION VERSION 8088 009-30X\*

CHARACTERISTICS	UNIT	VALUE
Range	°/s	Up to 350
Bias at 20°C (initial cond.)	°/h	10
Bias variation peak to peak over temperature range	°/h	20
Bias stability	°/h rms	1
SF error in Room Temperature	%	0.1
SF variation Over Temperature Range	%	0.2
Linearity error 0-150 °/s	% of Full Scale	0.1
Bandwidth	Hz	<1000
Start up time	sec max	1
Built In Test Output		
<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	-40 to +70
Storage temperature range	°C	-46 to +70
<b>DIGITAL OUTPUT FORMAT RS422</b>		
Resolution	Available with parallel or with single serial interface	20-24
Transmission Rate	Bits	115.2 – 921.6
Output Update Rate	kBaud	1-10

\* Only as an example. Can be tailored to customer requirements.

Specifications subject to change without notice

Feb 2022

