



**MOTION SENSORS, INC.**

*Producing High Quality Solutions Since 1970*

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## **RF Sensors - Standard**

Motion Sensors (MSI) modulated carrier (RF) sensors require coupling with our PA1001A or PA2001 series preamplifiers or other modulated carrier amplifiers.

When used with the PA1001A or PA2001 preamplifiers, they offer square wave (digital) output, low speed response, no drag, and large air gaps. They also have the ability to sense non-ferrous metals like aluminum and stainless steel, in addition to ferrous metals. RF sensors are becoming increasingly popular in applications such as turbine flowmetering where it is important to sense small, free spinning devices without inducing drag on the movement of the rotor.

## **Product Specifications**

In addition to the models specified, MSI can make custom RF sensors in other lengths, diameters, configurations, mounting threads (e.g., metric) as well as with different operating specifications and options like pigtail leads, NPT threads for explosion proof applications, etc. to satisfy special requirements. The products below are only a sampling of our product line; if you do not see a sensor that meets your needs, please contact us and we would be happy to manufacture a product to your specifications.

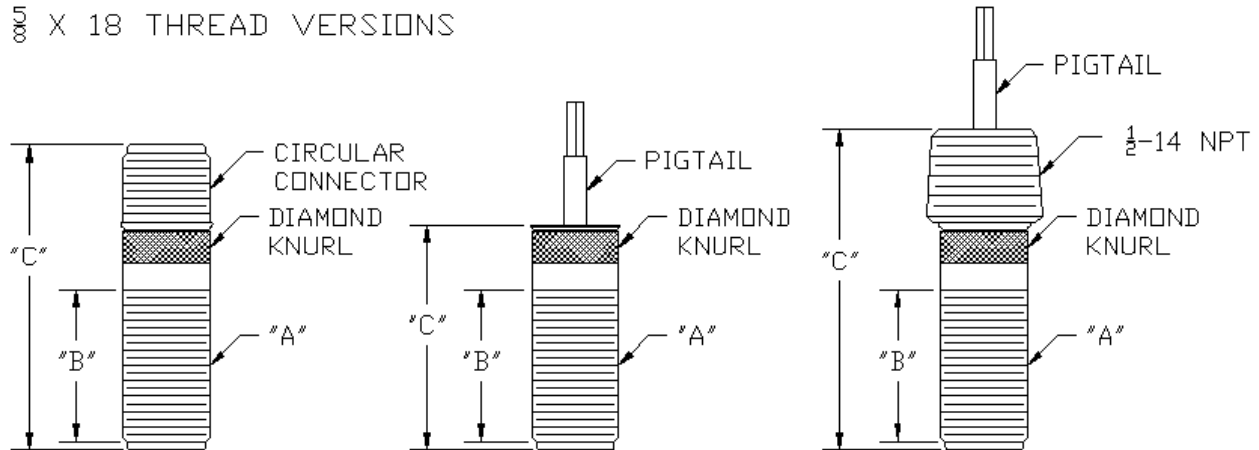
## **Standard Features and Specifications**

- Modulated carrier (RF) type
- Epoxy encapsulation
- Open front construction (closed fronts and hermetically sealed versions are also available)
- 300 series stainless steel enclosure
- Two (2) pin gold plated connector (mates with: MS3106-10SL-4S) or pigtail leads
- Inductance: 1 mH +/- 10%
- DC resistance: 10.5 ohms +/- 10%
- Temperature range: -100°F to +400°F (-74°C to +204°C)
- IR leakage: minimum of 50 Mohms @ 50 VDC
- High Shock and Vibration resistance - Impact: 100 G's (6 mS, 1/2 sine) min.; Vibration: 20 G's at 2,000 Hz min
- Unconditional one (1) year warranty if used within specifications

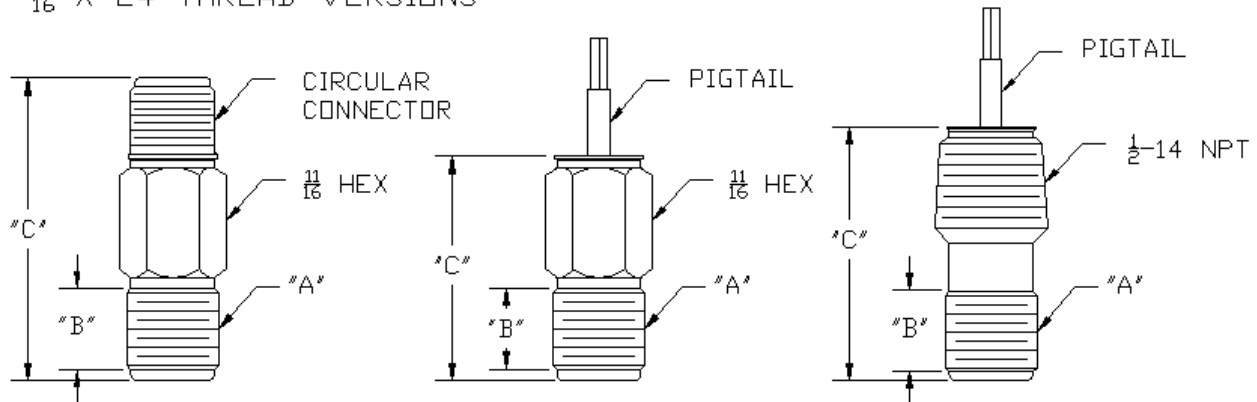


## Dimension Keys

### 5/16" X 18 THREAD VERSIONS



### 11/16" X 24 THREAD VERSIONS



## Standard RF Models

Model Number	Mounting Thd (A)	Thd Length (B)	Overall L (C)	Connection	Additional Features
RF-1	11/16x24	.580	2.24	2 pin	
RF-1PT	11/16x24	.580	1.66	pigtail	
RF-1EX	11/16x24	.630	1.88	NPT/pigtail	explosion proof
RF-3	5/8x18	1.10	2.20	2 pin	
RF-3PT	5/8x18	1.10	1.625	pigtail	
RF-3EX	5/8x18	1.10	2.27	NPT/pigtail	explosion proof

### Notes:

1. Dimensions in inches
2. Specifications +/- 10%
3. Mounting threads UNF-2A