



**IRD544S Inductive Velocity Sensor  
Class1 Div2, Stainless Steel Case**



The model IRD544S inductive velocity vibration sensor in a stainless steel case is a special applications industrial measuring device for use with portable instruments in a hazardous environment. It is self generating with high sensitivity output and suitable for a wide variety of machinery diagnostic applications, especially where displacement is important.

The case is sealed to IP65, approved for use in Class 1, Div 2 hazardous areas and operates up to 260°C. In production for over 45 years, it continues to be one of the World's most widely used velocity sensors. Calibrated to traceable National Standards, the sensor is supplied with a full frequency calibration test certificate. It can be fully serviced only at a IRD Mechanalysis National Service Centre



**BILL OF MATERIALS**

IRD544S Inductive Velocity Sensor C1D2 Stainless Steel Case

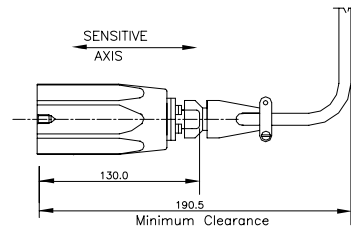
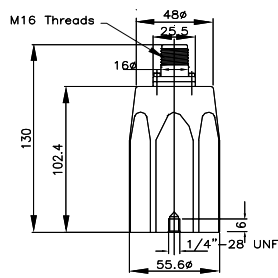
Qty Part Number  
M45265

**Optional Accessories:**

Straight cable connector rated for continuous operation at 121°C  
Right-angle connector rated for continuous operation at 121°C  
Stainless Steel Straight 9° Stinger Prod should be used in C1D2 areas with the IRD544S sensor.

1 M43660  
1 M14797  
1 M11031

**Dimensions & Connections**



**Technical Performance**

Frequency Response	:	14 to 1,000 Hz within <8%
	:	10Hz -20% (average) at 21°C
Sensitivity	:	42.52 mV/mm/sec ± 10%
Impedance	:	R=2k ohms, L = 0.7 H at 21°C
Maximum Amplitude	:	3175 microns Pk - Pk to 70 Hz; 30 g above 70 Hz
Transverse Response	:	Less than 5% (average) 10 to 1,000 Hz

**Mounting**

Orientation	:	Any (Horizontal Vertical or Axial)
Mounting	:	1/4" - 28 tapped hole 1/4 in depth
Grounding	:	Case and signal ground common
Connector	:	2-pin Mil Spec

**Environmental**

Operating range	:	-40°C to 260°C
Housing	:	Stainless Steel, IP65 sealed
Classification	:	Class1, Div2

**Weight & Dimensions**

Weight	:	1.2 Kg
Dimensions	:	50.8mm (Hex) base x 130 mm (H)
Construction	:	Stainless Steel

The **Vibration People** of IRD Mechanalysis can be contacted at the following branches or your local distributor:

Mumbai	Delhi	Kolkata	Chennai	International
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