

## PRODUCT SPECIFICATION

### Inductive Velocity Sensor: Off-Line Measurements

**Model No:**  
MIL544

**Part Number:**  
M45260

The Mechanalysis model MIL544 vibration sensor is an industrial vibration measuring sensor for use with portable measuring instruments and rotor balancing. It is self generating with high sensitivity output and suitable for a wide variety of machinery measurements, especially where displacement is important.

The sensor is sealed to IP65, approved for use in Class 1, Div 2 hazardous areas and operates up to 260°C. In production for over 35 years, it continues to be one of the World's most widely used velocity sensors; Indian industry alone has more than 7000 in daily use. Calibrated to traceable National Standards, the sensor is supplied with a full frequency calibration test certificate. It can be serviced only at the Mechanalysis National Service Centre in Mumbai.

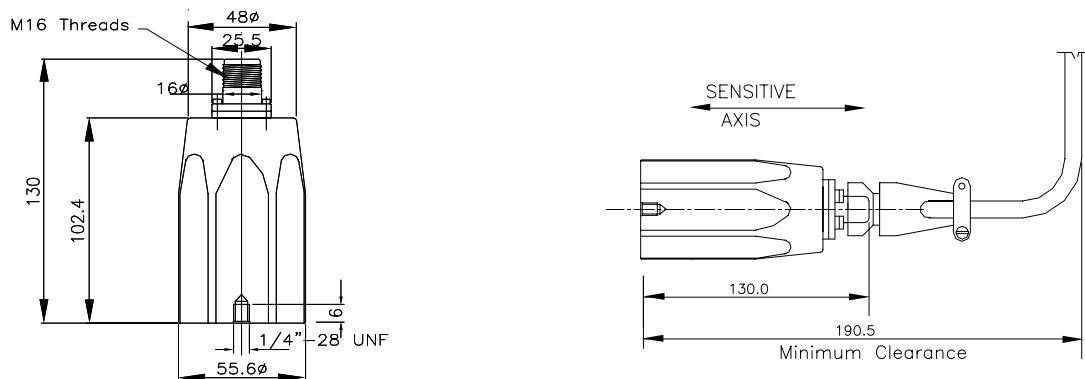


### Optional accessories:

Magnetic Shield (reduces sensitivity to magnetic field by 100:1)  
 Straight cable connector rated for continuous operation at 121°C  
 Right-angle connector rated for continuous operation at 121°C  
 Magnetic Holder model for MIL544 Sensor (recommended for routine portable measurements)

Qty	Part Number
1	M10449
1	M43660
1	M14797
1	M43320

### Dimensions & Connections



### Technical Performance

Frequency Response	: 14 to 1,000 Hz within $\pm 8\%$ : 10Hz -20% (average) at 21°C
Sensitivity	: 42.52 mV/mm/sec $\pm 10\%$
Impedance	: R=2k ohms, L = 0.7 H at 21°C
Maximum Amplitude	: 3175 microns Pk - Pk to 70 Hz; 30 q 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	: Aluminium, IP65 sealed
Classification	: Class1, Div2

### Weight & Dimensions

Weight	: 0.65 Kg
Dimensions	: 50.8mm (Hex) base x 130 mm (H)
Construction	: Aluminium

Mechanalysis (India) Ltd. continuously improves products; it therefore retains the right to change the above specification without notice

The Vibration People of Mechanalysis (India) Ltd can be contacted at any one of the following Branches

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