



IRD544 Inductive Velocity Sensor
Off-Line Vibration Measurement



The model IRD544 inductive velocity vibration sensor is an industrial vibration measuring device 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 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 the IRD Mechanalysis National Service Centre.



BILL OF MATERIALS

IRD544 Inductive Velocity Sensor

Optional Accessories:

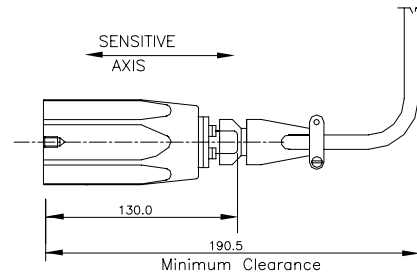
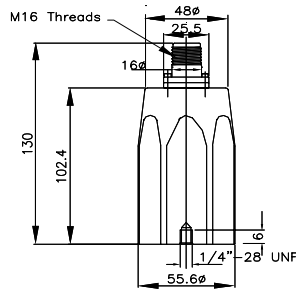
Magnetic Holder model for IRD544 Sensor (recommended for routine portable measurements)

Magnetic Shield (reduces sensitivity to magnetic field by 100:1)

Straight cable 1.2m rubber insulated, shielded. Mil to Mil Connectors for operation at 121°C

Qty	Part Number
1	M45260
1	M43320
1	M10449
1	M24820

Dimensions & Connections



Technical Performance

Frequency Response	: 14 to 1,000 Hz <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 q above 70 Hz
Transverse Response	: Less than 5% (average) 10 to 1,000 Hz

Mounting

Orientation	: Any (Horizontal Vertical or Axial)
Mounting	: ¼" - 28 tapped hole ¼ 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

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

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