



**IRD544M Classic Inductive Velocity Sensor**  
**Square Base Top Entry**  
**On-Line Vibration Measurements**



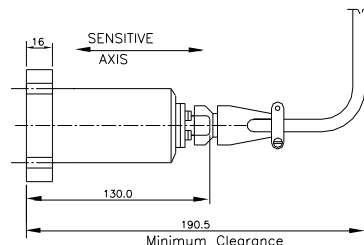
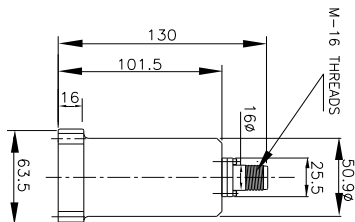
The model **IRD544M Classic** inductive velocity sensor is an industrial vibration measuring device for continuous on-line machinery protection, especially at the steam end of turbines (<260°C) and generator bearings. In production for over 60 years it continues to be the world's most widely used velocity sensor. It can be mounted horizontal or vertical at the bearing housing or other critical points on a machine.

The IRD544M Classic is **environmental friendly, generating its own power**. It's high output, low impedance and frequency response suits most types of machinery protection. The sensor's case insulates the signal from the housing to eliminate false alarms often encountered from ground loops and power surges. The sensor's hard anodized aluminium housing is IP65, waterproof, dustproof and approved for use in Class1 Division 2 hazardous areas. Calibrated to traceable National Standards, the sensor is supplied with a full frequency calibration test certificate. It can be serviced at an IRD National Service Centre.

BILL OF MATERIALS	Qty	Part Number
IRD544M Classic Inductive Velocity Vibration Sensor, Square Base – On-Line	1	M97120
<b>Optional Accessories:</b>		
Magnetic deflecting shroud (reduces AC magnetic field by 100:1)		M24825
Cable Assembly 10m, Teflon 3.5mm Dia (<260Degs C) Stainless Steel Conduit.. Mil 2 Pin connector with spade lugs at free end.		M60101
Right-angle connector rated for continuous operation		M14797
Mounting Pad MS 60x60x16mm with M6 thread tapped Blackodised		M60015
Mounting Block MS (XY) 60x60x60mm with M6 thread tapped Blackodised		M60014
Mounting Bracket MS (XY) for Sensor		M60019



**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 $\pm$ 8% (1080 $\pm$ 8% mV/in/s)
Impedance:	R=2k ohms, L = 0.7 H at 21°C
Maximum Amplitude:	3175 microns (125mils) Pk - Pk to 70 Hz; 30 g above 70 Hz
Transverse Response:	Less than 5% (average) 10 to 1,000 Hz
Isolation:	Signal insulated from case

**Mounting**

Orientation:	Any (horizontal & vertical best)
Mounting:	(4) holes 7.15mm Dia. on 2 x 2 centres
Grounding:	Case and signal ground isolated
Connector:	2-pin Mil Spec

**Environmental**

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

**Weight & Dimensions**

Weight:	700 grams
Dimensions:	63.5mm (W) x 63.5mm (L) x 130.0 (H) overall
Construction:	Aluminium, Hard Anodised

The **Vibration People** of IRD **Mechanalysis** can be contacted at

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