

Model 544 VELOCITY TRANSDUCER

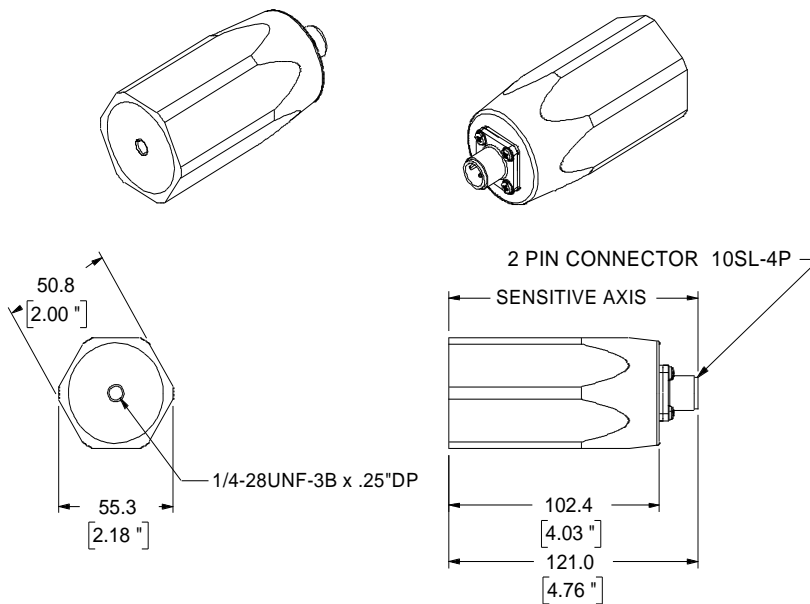
The IRD Balancing Model 544 vibration sensor is a seismic velocity transducer with a moving coil in a permanent magnetic field.

The Model 544 is suitable for a wide variety of manual and continuous monitoring applications due to its high output, low impedance, wide frequency response, and rugged construction.

The anodized aluminium housing is waterproof, dustproof, and acceptable for use in Division 2 hazardous areas. A variety of accessories are available.



Line Drawing:



Installation:

1. The sensitive axis may be oriented in any direction.
2. The mounting surface must be flat and smooth (minimum diameter = 2 3/8 in).
3. The mounting stud axis must be perpendicular to the mounting surface.
4. Hand-tighten only.
5. Connector pin A is both signal and housing ground; connector pin B is signal.

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GENERAL SPECIFICATIONS	
Frequency Response	14 to 1,000 Hz within $\pm 8\%$ @ 70°F (21°C)
Sensitivity	1080 $\pm 10\%$ mV/in/s (42.52 mV/mm/s)
Maximum Amplitude	125 mils pk-pk to 70 Hz 30 g above 70 Hz
Impedance	R=2 k Ω L= 0.7H @ 70° F (21° C)
Magnetic Field Sensitivity	0.15 in/s/Gauss
Damping Factor	0.7 (critical) @ 70° F (21° C)
Transverse Response	Less than 5% (average) between 10 and 1000 Hz
Housing	Waterproof and Dustproof
Connector	2-pin (10SL-4P)
Grounding	Case and signal ground common
Mounting	1/4" - 28 tapped hole, 1/4" depth
Mounting Orientation	Any
Weight	1.3 lbs. (0.59 kg)
Temperature Range	-40 to 500° F (-40° to 260° C)

Ordering Information for the Model 544	
Part Number	Description
E04526	Model 544 Vibration Sensor
E09199	Pickup Isolator to electrically isolate the sensor case from the machine
E10449	Magnetic Shield (reduces sensitivity to magnetic fields by 100:1)
E04224	Explosion-proof enclosure (for installation in Division 1, Class 1, group D, or Class II, Groups E,F,G hazardous areas)
E04332	Magnetic Holder, 65lb holding force
E01103	Aluminum Probe, 9-inch
E04521 (12') E04690 (25') E04691 (50')	Instrument interconnect cables for IRD Models 220/230/236/246/260/290/330 and 350, 3-pin connectors
E20433 (12') E30219 (25')	Instrument interconnect cables for IRD Models 220/230/236/246/260/290/330 and 350, 9-pin circular twist-on connectors

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Publication No: E51322
Rev 2, 22 May 2015

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