

Features

- Connects to HazardPRO Node with External Power
- Stainless Steel Housing
- 2-wire (current loop type)
- Installs perpendicular to monitored surface
- Polyurethane and stainless steel jacketed cable options
- Measures 2 in/s RMS
- Provides average vibration level from 10 – 1000 Hz



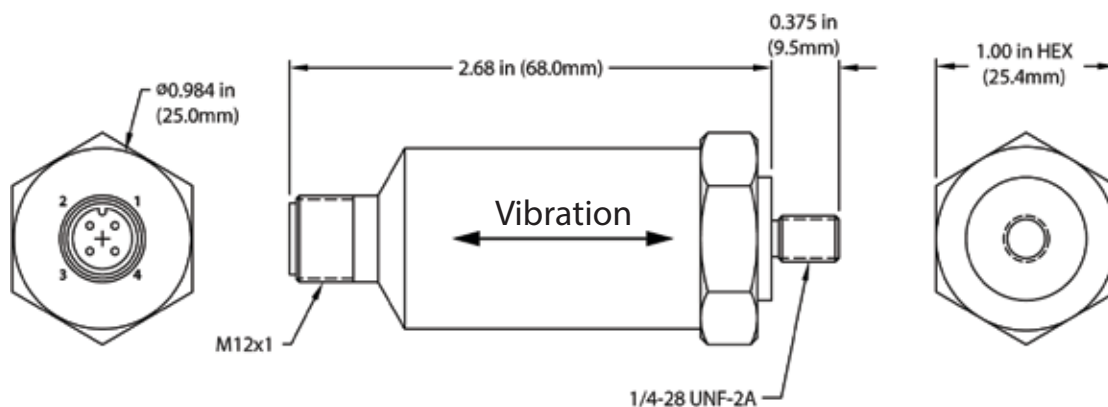
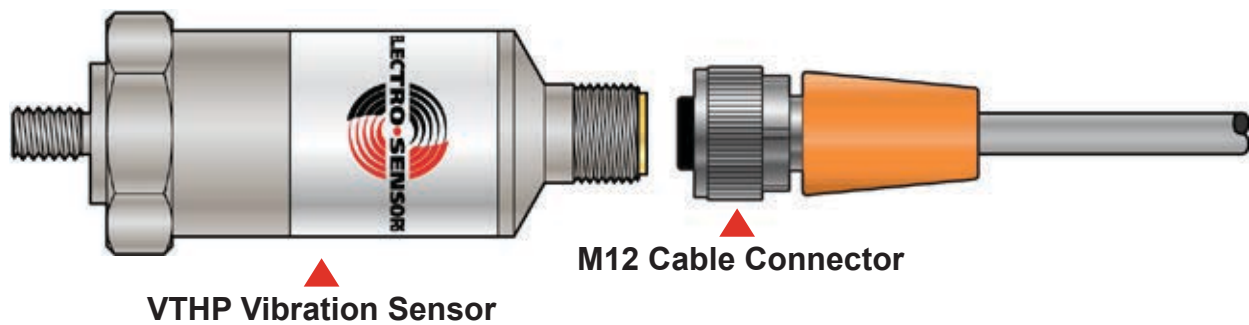
Description

The HazardPRO vibration sensor (VTHP) measures vibration velocity in RMS (per ISO 10816). This information is wirelessly transmitted to the HazardPRO wireless node and then sent to the HazardPRO system manager where the data is used to protect machinery.

Application

The VTHP is mounted perpendicular to the surface being monitored. It can be mounted using a threaded mounting magnet, using a threaded tap in the machinery itself, or can be epoxied directly to the equipment. The VTHP monitors vibration levels used on many types of machinery.

Dimensions



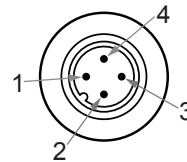
HazardPRO Vibration Sensor

Specifications	
Operating power (P+, P-)	6.0 → 30Vdc, < 0.7 mA
I =	(in/s RMS)*55.55µA + 255.4µA
Full-scale range	2 in/S RMS
Vibration Frequency Range	10 → 1000 Hz (≥ -3db)
Accuracy	±5% max error (full scale @ 100Hz)
Plane of Measurement	Single Axis (Length of sensor)
(Anticipated) Environmental	IP65, NEMA 4X, -40 → 80°C
Housing	Stainless Steel, ¼-28 mounting stud

I.S. Entity Parameters	
Ui	21 V
Ii	21 mA
Pi	0.11 W
Ci	0 µF
Li	0 µH

Anticipated NRTL approval:
Intrinsically Safe Apparatus
Class 1 Div 1 Gr. A, B, C, D
Class 2 Div 1 Gr. E, F, G

M12, 4-pin, male A-code		Connect to
Pin 1 (P+)	I.S. Power (+)	Isolated, I.S. DC power source (+)*
Pin 2 (S+)	I.S. Signal (+)	I.S. Node (temp) sensor connector pin 2
Pin 3 (P-)	I.S. Power (-)	Isolated, I.S. DC power source (-)*
Pin 4 (S-)	I.S. Signal (-)	I.S. Node (temp) sensor connector pin 4



*Each VTHP requires separate, isolated I.S. power – see VTHP applications guide

Specifications subject to change without notice.

Ordering

Sensor	Part Number
2 in/S RMS Stainless Steel Vibration Sensor	VTHP0-e-02-M12

Extension Cables	Part Number
Polyurethane Jacket (2 Meter)	775-007140
Polyurethane Jacket (5 Meter)	775-007142
Polyurethane Jacket (10 Meter)	775-007144
Stainless Steel Jacketed Polyurethane (2 Meter)	775-007141
Stainless Steel Jacketed Polyurethane (5 Meter)	775-007143
Stainless Steel Jacketed Polyurethane (10 Meter)	775-007145

Accessories

Option	Part Number
Magnet Mount 1.50"	810-000062
Magnet Mount 1.25"	810-000063
Node Battery Bracket	800-012031
VTHP Battery	800-012030

Additional Information

For more information about HazardPRO Vibration Sensors, please contact Electro-Sensors.