

Key Features

- Full-Scale range 2 in/S RMS
- Convenient 1/4-28 UNF Mount
- Protect machinery from unwanted vibration
- Monitor For Multiple Failure Points
- Stainless Steel NEMA 4X Housing



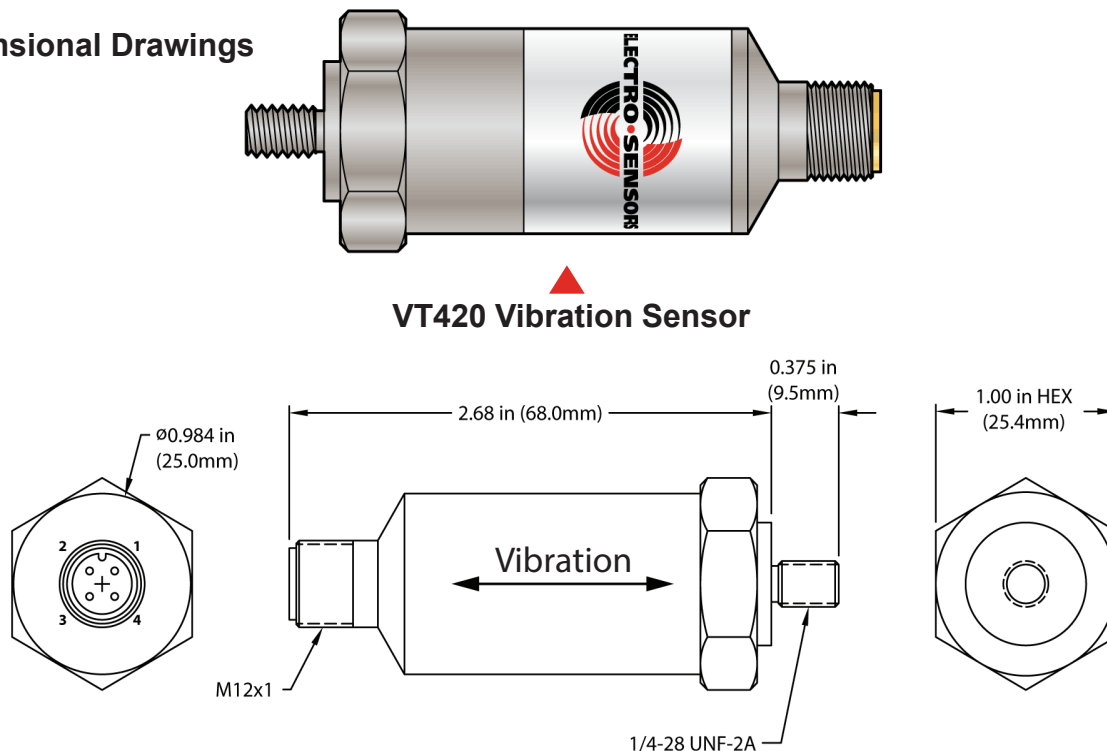
Description

The VT420 is a RMS Vibration Velocity sensor (per ISO 10816) housed in a stainless steel enclosure with a built in 1/4-28 mounting stud. The standard sensor monitors vibration in 2 in/S RMS vibration range. The housing uses a standard M12 connector for power and allows for easy connection/wiring. The VT420 outputs vibration data in a proportional 4-20mA output signal.

Principle of Operation

The Electro-Sensors VT420 Vibration Monitor confirms normal operation of processes utilizing continuous vibration. The VT420 measures vibration in RMS vibration velocity. The sensor outputs data via a 4-20 mA output that can be used with a PLC or plant control system. It can be mounted directly to machinery or be mounted with a magnetic mounting platform. Electro-Sensors also offers a PM500 display unit to show sensor data at the monitoring point or in the control room.

Dimensional Drawings



Specifications

Product	
Dimensions (Sensor Block)	68mm x 25.4mm x 25.4mm
Mounting Thread	1/4-28 UNF-2A
Sensor Connection	M12, 4-pin, male, A-code pin 1 (+) pin 2 (-) pin 3 (not connected) pin 4 (not connected)
Power	
Voltage	6.5 → 30 Vdc (24 Vdc recommended)
Wiring Method	2-Wire
Signal Output	4-20 mA
Sensing	
Full-scale Range	2 in/S RMS
Accuracy	±5% max error (full scale @ 100Hz)
Vibration Frequency Range	10 → 1000 Hz (≥ -3db)
Angle of Vibration Sensing	Horizontally Accross Sensor

Ordering

Model Number	Part Number
VT420	VT420-e-02-M12-A0
1.5" VT Magnet Mount	810-000062
1.25" VT Magnet Mount	810-000063

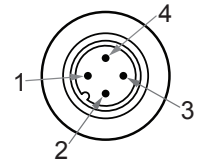
Options

Optional Process Meter Display Unit

Model Number	Part Number
PM 500, 115 VAC	800-004300
PM500, 230 VAC	991-000020
PM500, With 2 Relays	991-000021
PM500, With Analog Output	991-00023

Typical Wiring Diagram

M12, 4-pin, male A-code	Connect to
Pin 1	Power (+)
Pin 2	Power (-)
Pin 3	Not Connected
Pin 4	Not Connected



Customization

If the standard VT420 2 in/S RMS measurement range doesn't fit your application please contact us for additional measurement range & frequency options.

Additional Information

See the VT 420 Installation and Operating Manual for complete details, specifications, and programming instructions.