

MON-420 Series Vibration Sensor

Braided Cable, 4-20mA Velocity Transducer for PLC Interface



Typical Applications

- Low cost online means of monitoring with the capability of interfacing direct into PLC, BMS or any 4-20mA input module.
Proven use in vibration monitoring for offline applications using commercially available data collectors.
- **Protecting...**
Fans, Motors, Pumps, Compressors, Centrifuges, Conveyers, Air Handlers, Gearboxes, Rolls, Dryers, Presses, Cooling, HVAC, Spindles, Machine Tooling, Process Equipment and many more.

Technical Performance

| | |
|------------------------|-------------------------------------|
| Mounted Base Resonance | 5 kHz min. |
| Velocity Ranges | 0-10 to 0-100 mm/sec RMS (5 ranges) |
| Frequency Response | 10 Hz to 1 kHz $\pm 5\%$ - ISO10816 |
| Isolation | Base isolated |
| Measurement Range | 50 g peak |
| Transverse Sensitivity | Less than 5% |

Electrical

| | |
|------------------|--|
| Output Current | 4-20 mA DC proportional to RMS velocity (mm/s) |
| Supply Voltage | 15 - 30 Volts DC (for 4-20 mA) |
| Settling Time | 2 seconds |
| Output Impedance | Loop Resistance 600 Ohms max. at 24 Volts |
| Case Isolation | $>10^8$ Ohms at 500 Volts |

Environmental

| | |
|-----------------------------|------------------|
| Operating Temperature Range | -25 to 90 °C |
| Sealing | IP65 |
| Maximum Shock | 5000 g |
| Emissions | EN61000-6-4:2001 |
| Immunity | EN61000-6-2:1999 |

Mechanical

| | |
|------------------------------|--|
| Case Material | Stainless Steel |
| Sensing Element/Construction | PZT/Compression |
| Mounting Torque | 8 Nm |
| Weight | 135 gms (nom) |
| Maximum Cable length | 1000 metres |
| Standard Cable | 5 metres armoured ETFE |
| Mounting Threads | See 'How to order' table |
| Options | Ranges, connector, other cable lengths, intrinsically safe, |



MONITION LTD

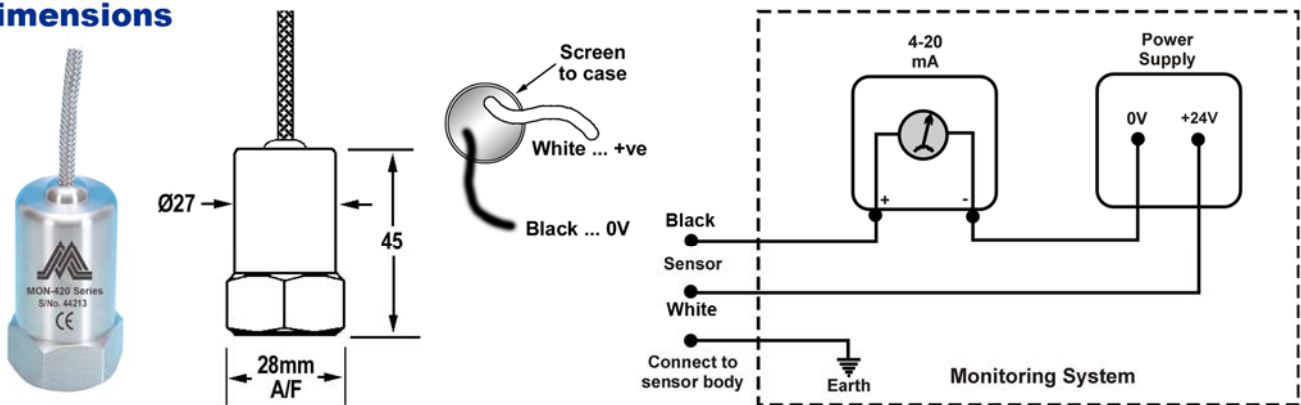
Condition Monitoring
& Plant Reliability Services

Tel: +44(0) 1909 722000
Fax: +44(0) 1909 722208
Email: sales@monition.com
Web: www.monition.com

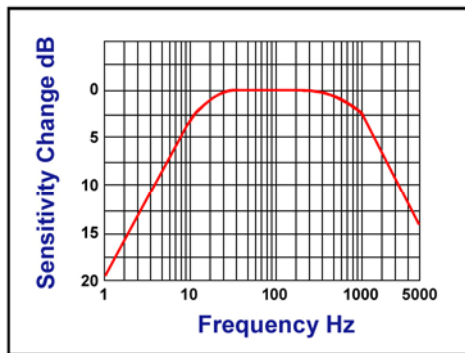
PRODUCT DATA

MON-420 Series Vibration Sensor

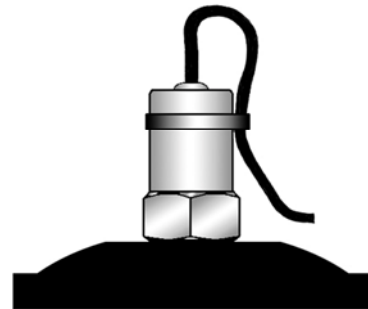
Dimensions



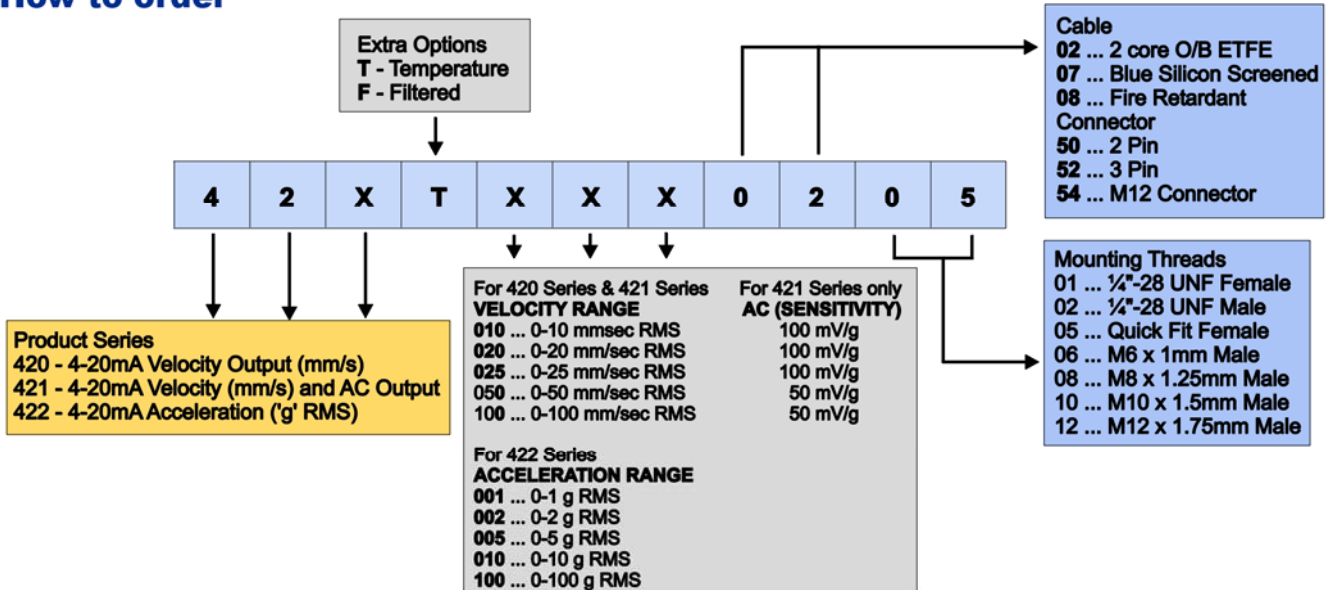
Frequency Response



Mounting of sensor to achieve good repeatable readings. Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



How to order



Please contact our Sales Office for information on sensor accessories (mounting studs, etc) and multichannel switch boxes.

We reserve the right to alter the specification of this product without prior notice.