

OVERVIEW

The SA6200 API 670 Accelerometer is capable of sensing a wide range of vibration frequencies, which makes it ideal for use on a variety of machines. It consists of a temperature stabilized piezo-electric sensor and an amplifier packaged together in a 316 stainless steel case, from which the sensing circuit is electrically isolated. A built-in amplifier provides a high level, low impedance output.



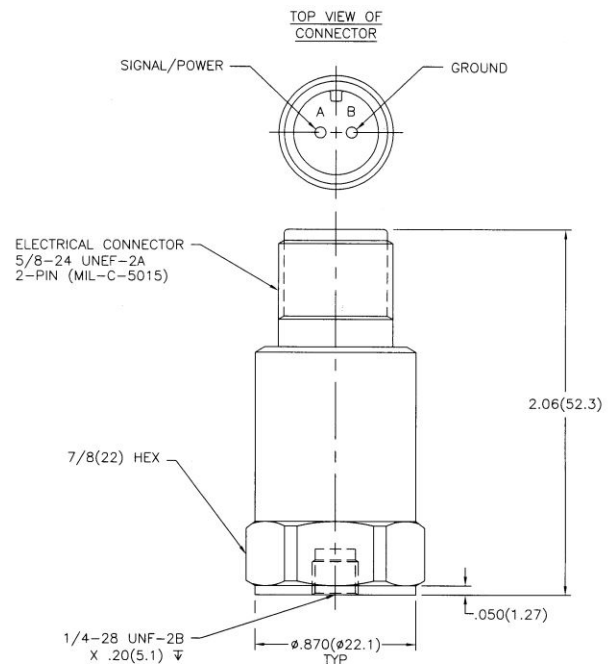
API 670 COMPARISON TABLE

| | SA6200 | API 670 |
|--------------------------------------|------------------|---------------|
| Case Material | 316 SS | 316 SS |
| Frequency Response (± 3dB) | 0.5 Hz- 12 kHz | 10 Hz- 10 kHz |
| Noise Floor | 0.004 g rms | 0.004 g rms |
| Mounted Resonance | 18kHz | N/A |
| Hazardous Area Certifications | CSA, ATEX, IECEx | N/A |

SPECIFICATIONS

| Dynamics | |
|------------------------|---|
| Accuracy | 2% (repeatability) |
| Sensitivity (±5%) | 100 mV/g (10.2 mV/m/s ²) |
| Frequency Response | <ul style="list-style-type: none"> 1 to 4000 Hz (± 5%) 0.67 to 6500 Hz (±10%) 0.33 to 12,000 Hz (±3dB) |
| Resonant Frequency | 18 kHz |
| Cross Axis Sensitivity | ≤5% |
| Measurement Range | ≤50 g |
| Broadband Resolution | 1000 µg (9810 µm/sec ²) |
| Mechanical | |
| Case Material | 316 Stainless Steel |
| Connector Type | 2-pin MIL-C-5015 |
| Hermetic Seal | Welded |
| Mounting Thread | 1/4-28 Female |
| Sensing Element | Quartz |
| Weight | 94 gm (3.3 oz) |
| Electrical | |
| Excitation Current | 2 to 20 mA |
| Excitation Voltage | 18 to 28 VDC |
| Output Bias | 8 to 12 VDC |
| Settling Time | ≤10 sec |
| Transient Protection | RFI & ESD |
| Environmental | |
| Shock Limit | 5,000 pk |
| Temperature Range | -65°F to +250°F (-54°C to +121°C) |
| Enclosure Rating | IP68 |
| Hazardous Area Cert. | CSA, ATEX and IECEx |

WEIGHT & DIMENSIONS



Aprox. Weight: 94 gm (3.3 oz)
Units in inches (mm)

HOW TO ORDER

SA6200 - **A** **B** **C**

| A | Hazardous Area Certification |
|---|--|
| 0 | Non-Agency Approved |
| 5 | CSA US/CA, Class 1, Div 2, Groups A-D, T4 (non incandive) CSA US/CA, Class 1, Div 1, Groups A-D, T4 (I.S. w/barrier) ATEX/IECEx Ex nA IIC T4 Gc (non incandive) ATEX/IECEx Ex ia IIC T4 Ga (I.S. w/barrier) |

| B | Mounting Stud |
|---|-------------------------|
| 5 | 1/4-28 UNF and M6 x 1.0 |
| 3 | NONE |

| C | Connector Type |
|---|---------------------|
| 1 | 2-pin Hermetic Plug |