# DIN RAIL MOUNT VIBRATION TRANSMITTERS

IMI SENSORS
A PCB DIVISION

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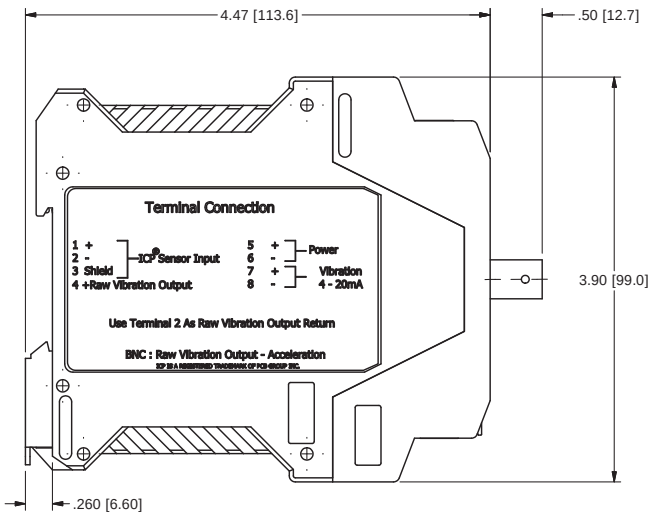
## LOW-COST VIBRATION TRANSMITTER


- Converts AC voltage signal to 4-20 mA current output for direct input into PLC/DCS/SCADA
- Provides Excitation Power for ICP® Accelerometers
- Integrates acceleration input to velocity

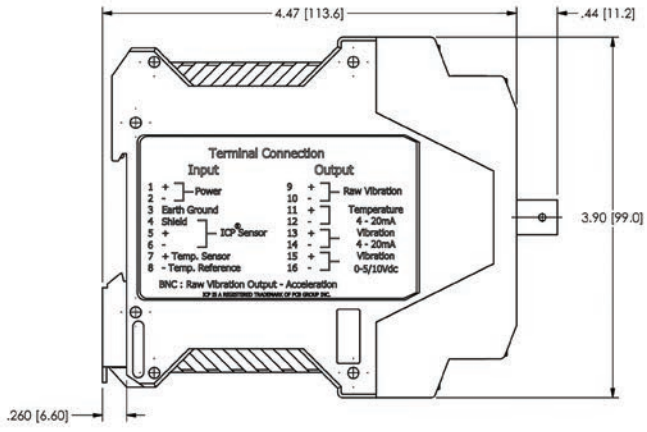



## MODELS 682A14 & 682A15

| SPECIFICATIONS | | |
|---|---|---|
| **Model Number** | **682A14** | **682A15** |
| **Performance** | | |
| Channels | 1 | |
| Input Signal (Vibration) | 100 mV/g<br>10.2 mV/(m/s²) | |
| Output Signal(DC Vibration) | 4 to 20 mA | |
| Output Signal(AC Vibration) | 100 mV/g<br>10.2 mV/(m/s²) | |
| Frequency Range(- 3 dB)<br>(Velocity) | 3.5 to 10,000 Hz | |
| Output Range(DC Velocity) | 0 to 1.00 in/sec pk<br>0 to 25.4 mm/s pk | 0 to 1.00 in/sec pk RMS<br>0 to 25.4 mm/s pk RMS |
| **Environmental** | | |
| Temperature Range (Operating) | -13 to 158 °F<br>-25 to 70 °C | |
| Temperature Range (Storage) | -40 to 257 °F<br>-40 to 125 °C | |
| Humidity Range<br>(Non-Condensing) | 0 to 95 % | |
| **Electrical** | | |
| DC Power | 23 to 25 VDC | |
| DC Power (Maximum) | 100 mA | |
| Settling Time | < 2 min | |
| Excitation Voltage<br>(Delivered to Sensor) | 19 to 21 VDC | |
| Constant Current Excitation<br>(Delivered to Sensor) | 3 to 5 mA | |
| Output Span (± 5.0 %)<br>(DC Vibration Current Output) | 16 mA | |
| **Physical** | | |
| Housing Material | Polyamide | |
| Status Indicator (Power "On") | Green LED | |
| Status Indicator (Input Fault) | Red LED | |
| Electrical Connector<br>(Input/Output) | Removable Screw Terminals | |
| Screw Terminal Wire Size | 24-14 AWG | |
| Electrical Connector<br>(Raw Vibration Output) | BNC Jack | |
| Din Rail Mount | 1.38 in<br>35 mm | |
| Size (Height x Width x Depth) | 3.9 in x 0.9 in x 4.5 in<br>99 mm x 22.5 mm x 114.5 mm | |
| Weight (Maximum) | 6.4 oz<br>127 g | |

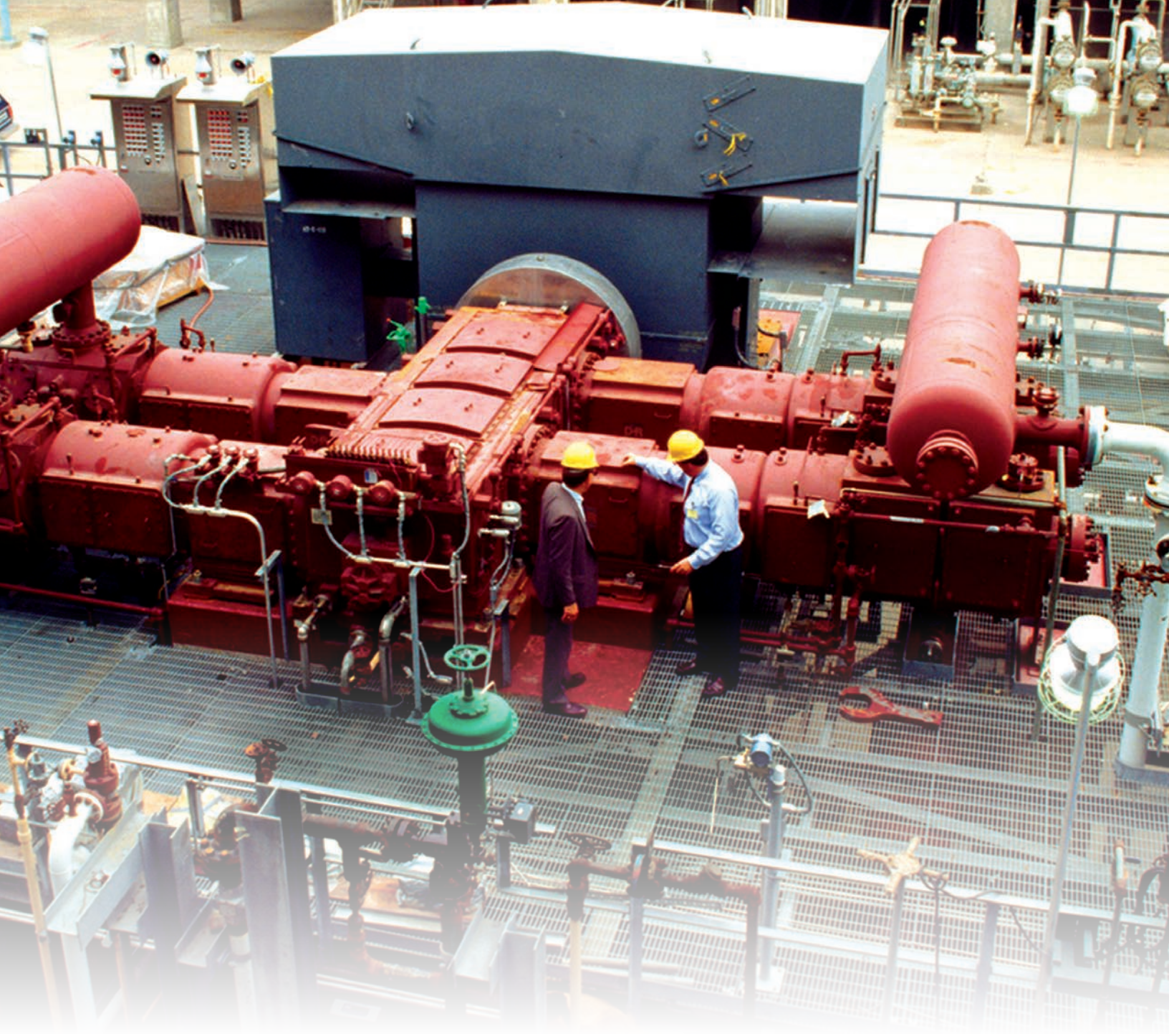
## CONFIGURABLE VIBRATION TRANSMITTER


- Plug-in filter modules allow field-adjustment of frequency range
- Fifteen measurement range options to fine tune product to application requirements
- Accepts vibration and temperature inputs for pairing with accelerometers with simultaneous vibration/ temperature outputs




## MODEL 682C03

| SPECIFICATIONS | |
|---|---|
| **Model Number** | **682C03** |
| **Performance** | |
| Channels | 1 |
| Input Signal (Vibration) | ±100 mV/g<br>±10.2 mV/(m/s²) |
| Input Signal (Temperature) | 0 to 1.2 VDC |
| Frequency Range (-3 dB)<br>(Acceleration) | 3 to 10,000 Hz |
| Frequency Range (-3 dB)<br>(Velocity) | 3.5 to 10,000 Hz |
| Frequency Range (-3 dB)<br>(Displacement) | 3.5 to 1,000 Hz |
| Output Signal (DC Vibration and Temperature) | 4 to 20 mA |
| Output Signal (DC Vibration) | 0 to 10 VDC |
| Output Signal (±0.01 %) (AC Vibration) | 100 mV/g<br>10.2 mV/(m/s²) |
| Output Range (DC Acceleration) | 0 to 5.00 g pk or rms<br>0 to 49.03 m/s² pk or rms |
| Output Range (DC Acceleration) | 0 to 10.00 g pk or rms<br>0 to 98.06 m/s² pk or rms |
| Output Range (DC Acceleration) | 0 to 20.00 g pk or rms<br>0 to 196.12 m/s² pk or rms |
| Output Range (DC Velocity) | 0 to 0.5 in/sec pk or rms<br>0 to 12.7 mm/s pk or rms |
| Output Range (DC Velocity) | 0 to 1.00 in/sec pk or rms<br>0 to 25.4 mm/s pk or rms |
| Output Range (DC Velocity) | 0 to 2.00 in/sec pk or rms<br>0 to 50.8 mm/s pk or rms |
| Output Range (DC Displacement) | 0 to 10.0 mil pk - pk<br>0 to 0.254 mm pk - pk |
| Output Range (DC Displacement) | 0 to 20.0 mil pk - pk<br>0 to 0.508 mm pk - pk |
| Output Range (DC Displacement) | 0 to 40.0 mil pk - pk<br>0 to 1.02 mm pk - pk |
| **Environmental** | |
| Temperature Range (Operating) | -13 to 158 °F<br>-25 to 70 °C |
| **Electrical** | |
| DC Power | 23 to 25 VDC |
| DC Power (Maximum) | 100 mA |
| Settling Time | < 2 min |
| Excitation Voltage (Delivered to Sensor) | 17 to 19 VDC |
| Constant Current Excitation<br>(Delivered to Sensor) | 3 to 5 mA |
| Output Span (±5.0 %)<br>(DC Vibration and Temperature Current Output) | 16 mA |
| Output Span (±5.0 %)<br>(DC Vibration Voltage Output) | 5 or 10 VDC |
| **Physical** | |
| Housing Material | Polyamide |
| Status Indicator (Power "On") | Green LED |
| Status Indicator (Input Fault) | Red LED |
| Status Indicator (Measurement Mode) | Green LED |
| Electrical Connector (Input/Output) | Removable Screw Terminals |
| Screw Terminal Wire Size | 24-14 AWG |
| Electrical Connector (AC Vibration) | BNC Jack |
| Din Rail Mount | 1.38 in<br>35 mm |
| Size (H x W x D) | 3.9 x 0.9 x 4.5 in<br>99.0 x 22.5 x 114.5 mm |
| Weight | 6.4 oz<br>127.0 g |



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