

4-161 Series Velometer

Applications

- Light Industrial
- Multi Point Experimental
- Gear Boxes, Fans, Motors
- Generators
- Bearing Housing
- Compressors, Pumps

Features

- Two Wire Current Driven
- Internal Amplifier
- Hermetically Sealed
- Internal Shielded
- Electrical Isolation, Thermal Isolation
- Stainless Steel Body
- Single Point Mounting



Description

The 4-161 Series Velometer is intended to satisfy the general specification requirements for a low cost vibration transducer for use in multi-point experimental or light industrial vibration monitoring applications.

The two-wire current loop operating principle permits very long interconnecting cables to be used where necessary and at minimum expense since standard screened pair (or multi-pair) cables may be used.

The piezoelectric sensor and amplifier are contained within an inner metal enclosure which is electrically and thermally insulated from the outer stainless steel body. This arrangement prevents ground loops and minimizes the effects of thermal shocks and base strain. The inner enclosure is connected to the 0V of the two-wire system and is therefore an effective electrical screen. External connections are made via a top exist integral cable or electrical connector.

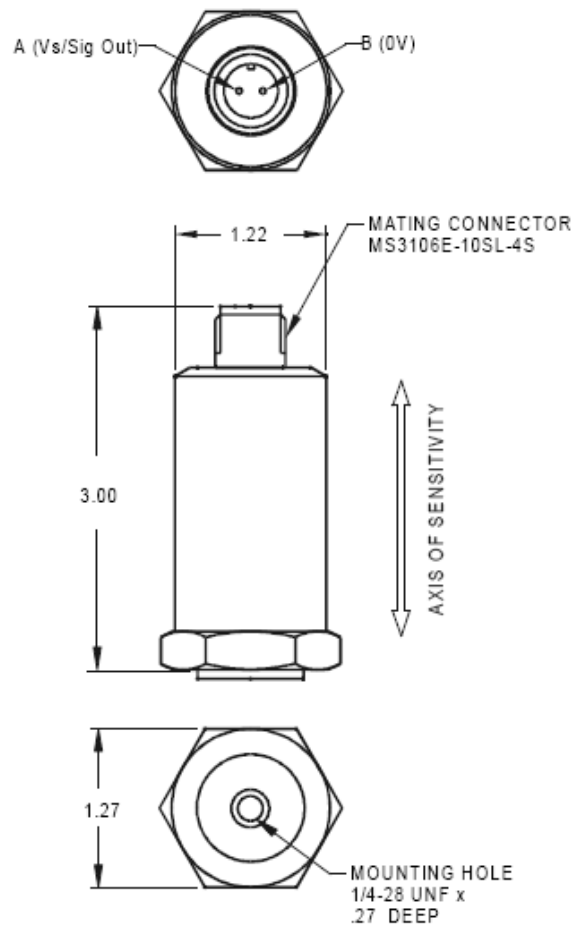
The transducer is mounted by means of a single threaded hole in the base of the cylindrical body, this being intended to accept a mounting stud of the standard (non-isolating) type.

4-161 Specifications

Operating Voltage/Current:	22 to 30 VDC constant current source of 2.2mA to 10mA
Output Signal:	100mV/ips ± 5 superimposed on 12V DC
Frequency Range:	2.5 Hz to 4.5 kHz
Transverse Sensitivity:	Less than 5%
Amplitude Linearity:	$\pm 2\%$ or better
Temperature Range:	-30°C to +120°C (-22°F to +248°F)
Environmental Sealing:	IP66
Residual Electrical Noise:	Less than 0.2 mg

Options

4-161-1001	2-Pin Integral Connector
4-161-1002	Integral Stainless Steel braided cable, 6-foot standard length



Dimensions are in inches.

Ordering Information:

When ordering, specify 4-161-0001. Mating connectors and cable assemblies are not furnished and must be ordered separately. In keeping with CEC's policy of continuing product improvement, specifications may be changed without notice.