



IEPE Piezo Velocity Transducer
100mV/ips & 500mV/ips Ranges
Case Isolated, Internally Shielded
Low Frequency Condition Monitoring

The Model 8011-06 is an internally shielded piezo velocity transducer designed for condition monitoring of low frequency rotating machinery. The transducer is available in ranges from 10.0 to 50.0 in/sec and interfaces with the standard IEPE constant current supply. The model 8011-06 features a top exit MIL-C-5015 connector and is designed to operating in temperature ranges from -50°C to +120°C. The unit is hermetically sealed and features the popular stud mount installation.



- 10.0 to 50.0 in/sec Dynamic Range
- 2-7000Hz Bandwidth
- -50°C to +120°C Temperature Range
- Hermetically Sealed, Welded
- Reverse Wiring Protection
- Stable Temperature Response
- 2-Pin MIL-C-5015 Connector

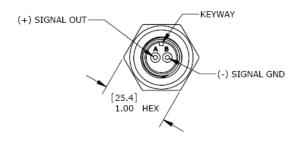
### **APPLICATIONS**

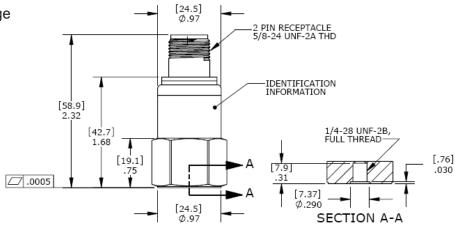
- Rotating Machinery
- Paper Mills
- Motors and Pumps
- Machine Spindles

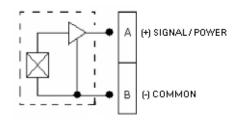




### dimensions









# Model 8011-06 Piezo Velocity Transducer

All values are typical at +24°C, 100Hz and 4mA excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice. Standard product parameters are described in PSC-1003 for Plug & Play AC Accelerometers.

| DYNAMIC  |  |                    | Notes       |
|--|--|--------------------|-------------|
| Dash Number  | -100   | -500               |             |
| Measurement Range (in/sec)   | 0-10   | 0-50               |             |
| Measurement Range (mm/sec  | 0-254  | 0-1270             |             |
| Sensitivity (mV/in/sec)  | 500  | 100                | ±10%        |
| Sensitivity (mV/mm/sec)  | 19.7   | 3.9                |             |
| Frequency Response (Hz)  | 3-4500   | 5-3500             | ±10%        |
| Frequency Response (Hz)  | 2-7000   | 2-6000             | ±3dB        |
| Natural Frequency (Hz)   | 17,000   | 17,000             |             |
| Non-Linearity (%FSO)   | ±1   | ±1                 |             |
| Transverse Sensitivity (%)   | <5   | <5                 |             |
| Shock Limit (g)  | 2500   | 2500               |             |
| Residual Noise (µin/sec)   | 25   | 120                | 1Hz to 3kHz |
| ELECTRICAL Compliance Voltage (Vdc) Excitation Current (mA) Bias Voltage (Vdc) Output Impedance ( $\Omega$ ) Insulation Resistance (M $\Omega$ ) Grounding | 18 to 30<br>2 to 10<br>8 to 12<br><100<br>>100<br>Case Isolated, I         | nternally Shielded | @100Vdc     |
| ENVIRONMENTAL Temperature Response (%) Operating Temperature (°C) Storage Temperature (°C) Humidity  | ±5<br>-50 to +120<br>-50 to +120<br>Hermetically Sea                       | aled, IP67         |             |
| PHYSICAL Sensing Element Case Material Weight (grams) Mounting Torque  | Ceramic (compression mode)<br>Stainless Steel<br>145<br>24 lb-in (2.7 N-m) |                    |             |

**Parameters** 

NIST Traceable Amplitude Calibration from 20Hz to ±3dB Frequency Response Limit Calibration supplied: CS-FREQ-0100

AC-A03663 1/4-28 to 1/4-28 mounting stud Supplied accessories:

Cable Assembly, Straight (XXX designates length in inches, 10ft standard) Optional accessories: 316-XXX

318-XXX Cable Assembly, 90 Degrees (XXX designates length in inches, 10ft standard)

AC-D03664 1/4-28 to M5 Mounting Stud AC-D03665 1/4-28 to M6 Mounting Stud AC-A04209 Magnetic Mounting Adaptor AC-D04210 Adhesive Mounting Adaptor

The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. Measurement Specialties, Inc. reserves the right to make changes without further notice to any product herein. Measurement Specialties, Inc. makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does Measurement Specialties, Inc. assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Typical parameters can and do vary in different applications. All operating parameters must be validated for each customer application by customer's technical experts. Measurement Specialties, Inc. does not convey any license under its patent rights nor the rights of others.

## ordering info

#### PART NUMBERING

8011-06-ZZZ Dynamic Range (100 is 0-10.0 in/sec)

100 = 0-10.0 in/sec (0-1270 mm/sec) 500 = 0-50.0 in/sec (0-254 mm/sec)

Example: 8011-06-100

Model 8011-06, 0-10.0 in/sec (0-1270 mm/sec)