

# Piezovelocity transducer



## 797V

### SPECIFICATIONS

|   |                         |   |
|---|-------------------------|---|
| <b>Sensitivity, <math>\pm 10\%</math>, 25°C</b>   |                         | 100 mV/in/sec                           |
| <b>Velocity range</b>                             |                         | 50 in/sec peak                          |
| <b>Amplitude nonlinearity</b>                     |                         | 1%                                      |
| <b>Frequency response:</b>                        | $\pm 10\%$              | 2.0 - 3,500 Hz                          |
|   | $\pm 3$ dB              | 1.6 - 7,000 Hz                          |
| <b>Resonance frequency</b>                        |                         | 18 kHz                                  |
| <b>Transverse sensitivity, max</b>                |                         | 5% of axial                             |
| <b>Temperature response:</b>                      | -50°C                   | -15%                                    |
|   | +120°C                  | +10%                                    |
| <b>Power requirement:</b>                         |                         |   |
| <b>Voltage source</b>                             |                         | 18 - 30 VDC                             |
| <b>Current regulating diode</b>                   |                         | 2 - 10 mA                               |
| <b>Electrical noise, equiv. in/sec:</b>           |                         |   |
| <b>Broadband</b>                                  | <b>2.5 Hz to 25 kHz</b> | 100 $\mu$ in/sec                        |
|   | <b>10 Hz</b>            | 10 $\mu$ in/sec/ $\sqrt{\text{Hz}}$     |
|   | <b>100 Hz</b>           | 0.8 $\mu$ in/sec/ $\sqrt{\text{Hz}}$    |
|   | <b>1,000 Hz</b>         | 0.1 $\mu$ in/sec/ $\sqrt{\text{Hz}}$    |
| <b>Output impedance, 4-20 mA supply</b>           |                         | the greater of: 200 $\Omega$ or 5,000/f |
| <b>Bias output voltage</b>                        |                         | 10 VDC                                  |
| <b>Grounding</b>                                  |                         | case isolated, internally shielded      |
| <b>Temperature range</b>                          |                         | -50° to +120°C                          |
| <b>Vibration limit</b>                            |                         | 250 g peak                              |
| <b>Shock limit</b>                                |                         | 2,500 g peak                            |
| <b>Electromagnetic sensitivity, equiv. in/sec</b> |                         | 50 $\mu$ in/sec/gauss                   |
| <b>Sealing</b>                                    |                         | hermetic                                |
| <b>Base strain sensitivity</b>                    |                         | 0.004 in/sec/ $\mu$ strain              |
| <b>Sensing element design</b>                     |                         | PZT ceramic / shear                     |
| <b>Weight</b>                                     |                         | 148 grams                               |
| <b>Case material</b>                              |                         | 316L stainless steel                    |
| <b>Mounting</b>                                   |                         | 1/4-28 captive socket head screw        |
| <b>Output connector</b>                           |                         | 2 pin, MIL-C-5015 style                 |
| <b>Mating connector</b>                           |                         | R6 type                                 |
| <b>Recommended cabling</b>                        |                         | J9T2A                                   |

**Accessories supplied:** #12105-01 captive socket head (metric mounting available); calibration data (level 3)

### Certifications

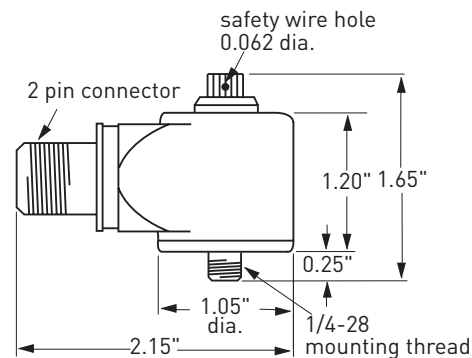
|  |   |
|--|---|
| All 797V models  | 797VE   |
|  |  Class I, II, III, T4<br>Div 1 Groups A, B, C, D, E, F, G<br>Div 2 Groups A, B, C, D, F, G |

Note: Due to continuous process improvement, specifications are subject to change without notice.  
This document is cleared for public release.



### Key features

- Certified version available for use in hazardous areas (model 797VE)
- Manufactured in ISO 9001 facility



### Connections

| Function     | Connector pin |
|--------------|---------------|
| power/signal | A             |
| common       | B             |
| ground       | shell         |

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Amphenol:](#)

[797V](#)