

**Model Number** Doc No PERFORMANCE SPECIFICATION 1060V6 PS1060V6 Force Sensors, IEPE REV A, ECN 12920, 08/23/16



DYNAMIC FORCE SENSOR

|                                    |                  | ENGLIS                | Н            | SI              |              |
|------------------------------------|------------------|-----------------------|--------------|-----------------|--------------|
| PHYSICAL                           |                  |                       | 7            |                 | <b>-</b>     |
| Weight, Max.                       |                  | 16.10                 | OZ           | 460             | grams        |
| Connector                          | Туре             | Coaxial               | 4            | Coaxial         | _            |
| Haveler.                           | Thread           | 10-32                 |              | 10-32           | _            |
| Housing                            | Material         | Stainless steel       |              | Stainless steel |              |
| Canaina Flament                    | Isolation        | Case grounded         | 4            | Case grounded   | _            |
| Sensing Element                    | Material<br>Mode | Quartz<br>Compression | 4            | Quartz          | 4            |
|                                    | Mode             | Compression           | J            | Compression     |              |
| PERFORMANCE                        |                  |                       | _            |                 | _            |
| Sensitivity, +/-10%                |                  | 0.1                   | mV/Lb        | 0.02            | mV/N         |
| Compression Range                  |                  | 50000                 | Lbs.Force    | 222400          | N            |
| Maximum Compression , +/-5%        |                  | 60000                 | Lbs.Force    | 266880          | N            |
| Tension Range                      |                  | 1000                  | Lbs.Force    | 4448            | N            |
| Maximum Tension [1], +/-5%         |                  | 1000                  | Lbs.Force    | 4448            | N            |
| Resolution                         |                  | 0.70                  | Lb. RMS      | 3.11360         | N RMS        |
| Linearity [2]                      |                  | ± 1                   | % Full Scale | ± 1             | % Full Scale |
| Mounted Resonance (Unloaded)       |                  | ≥ 75                  | kHz          | ≥ 75            | kHz          |
| Stiffness                          |                  | 50                    | Lb/µin       | 8.66            | kN/μm        |
| ENVIRONMENTAL                      |                  |                       |              |                 |              |
| Coefficient Of Thermal Sensitivity |                  | 0.03                  | %/°F         | 0.05            | %/°C         |
| Operating Temperature              |                  | -100 to +250          | °F           | -73 to +121     | °C           |
| Maximum Vibration                  |                  | ±3000                 | g's,Peak     | ±29400          | m/s^2 Peak   |
| Maximum Shock                      |                  | 5,000                 | g's,Peak     | 49,000          | m/s^2 Peak   |
| Environmental Seal                 |                  | Ероху                 | ]            | Ероху           |              |
| ELECTRICAL                         |                  |                       |              |                 |              |
| Supply Current [3]                 |                  | 2 to 20               | mA           | 2 to 20         | mA           |
| Compliance Voltage                 |                  | 18 to 30              | VDC          | 18 to 30        | VDC          |
| Discharge Time Constant, Min.      |                  | 2000                  | Seconds      | 2000            | Seconds      |
| F.S. Output Voltage                |                  | 5                     | Volts        | 5               | Volts        |
| Output Impedance                   |                  | 100                   | Ω            | 100             | Ω            |

| This family also includes: |                     |                                   |  |                                  |  |  |  |  |
|----------------------------|---------------------|-----------------------------------|--|----------------------------------|--|--|--|--|
| Model                      | Sensitivity (mV/Lb) | Range (LbsF) Compressive, Tensile | Max Force (LbsF)<br>Compressive, Tensile | Discharge Time<br>Constant (Sec) |  |  |  |  |
| 1060V1                     | 10                  | 500, 500                          | 10000, 1000                              | 150                              |  |  |  |  |
| 1060V2                     | 5                   | 1000, 1000                        | 20000, 1000                              | 300                              |  |  |  |  |
| 1060V3                     | 1                   | 5000, 1000                        | 30000, 1000                              | 1500                             |  |  |  |  |
| 1060V4                     | 0.5                 | 10000, 1000                       | 40000, 1000                              | 2000                             |  |  |  |  |
| 1060V5                     | 0.2                 | 25000, 1000                       | 50000, 1000                              | 2000                             |  |  |  |  |

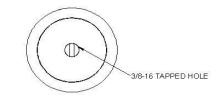
Refer to the performance specifications of the products in this family for detailed description

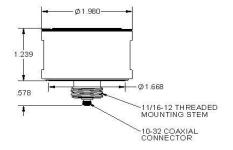
## Supplied Accessories:

- 1) Accredited Calibration Certificate (ISO 17025)
- 2) MOD 6232 MOUNTING STUD

## Notes:

- [1] Absolute maximum tension. Do not exceed in any case!
- [2] Percent of full scale or any lesser range, zero based best-fit sraight line method.
- [3] Power these instruments only with constant current type power units. Do not connect to a source of voltage without current limiting. This will destroy the integral IC amplifier.





Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-1060V for more information.

