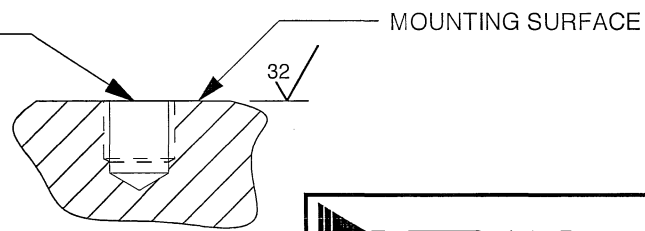


MOUNTING PREPARATION
 PREPARE FLAT SURFACE (TO .001 TIR)
 NEXT DRILL 5/16 (Ø.312) X .320 DEEP
 BOTTOM TAP 3/8-16 UNC-2B X .300 MIN
 THREAD DEPTH



REDRAWN ON CAD 9-9-96

4. DO NOT APPLY IMPACT LOADS TO FORCE SENSOR WITHOUT IMPACT CAP, MODEL 6217 OR EQUIVALENT. CONSULT FACTORY FOR SPECIAL IMPACT CAPS FOR YOUR PARTICULAR APPLICATION.
3. TORQUE TO 20-25 LB-FT AT INSTALLATION USING WRENCH ON WRENCH FLATS ONLY.
2. WEIGHT - 420 GRAMS
1. MATERIAL, HOUSING & CONNECTOR HOUSING: 300 SERIES STAINLESS STEEL. TOP AND BOTTOM SURFACES, 17-4 PH ST. STEEL

| | | | | | |
|---|----------|--------------------------------|---------------|------------------|--|
| | | <h1>MASTER ONLY IF IN RED</h1> | | CHATSWORTH, CA. | |
| SCALE | 1X | REV | DATE | ECN | |
| DATE | 12/19/85 | PART NO. | 1061V | | |
| DRAWN | N.C. | CHECKED | MAT'L | | |
| APPROVED | N.C. | 05/17/05 | NEXT ASSEMBLY | USED ON | |
| TITLE | | | | DWG NO. | |
| OUTLINE/INSTALLATION DRAWING FORCE SENSOR, SERIES 1061V | | | | 127-1061V | |
| | | | | SHEET 1 OF 1 | |



- DYNAMIC FORCE SENSOR
- VOLTAGE MODE
- EXCELLENT LINEARITY

| | ENGLISH | | SI | |
|-----------------|-----------------|----|-----------------|-------|
| Weight, Max. | 15.82 | oz | 452 | grams |
| Connector | Coaxial | | Coaxial | |
| Thread | 10-32 | | 10-32 | |
| Housing | Stainless steel | | Stainless steel | |
| Isolation | Case grounded | | Case grounded | |
| Sensing Element | Quartz | | Quartz | |
| Mode | Compression | | Compression | |

PERFORMANCE

| | | | | |
|------------------------------|-------|--------------|---------|--------------|
| Sensitivity, +/-10% | 0.2 | mV/Lb | 0.04 | mV/N |
| Compression Range | 25000 | Lbs.Force | 111200 | N |
| Maximum Compression , +/-5% | 50000 | Lbs.Force | 222400 | N |
| Tension Range | 1000 | Lbs.Force | 4448 | N |
| Maximum Tension [1], +/-5% | 1000 | Lbs.Force | 4448 | N |
| Resolution | .35 | Lb. RMS | 1.55680 | 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 | Epoxy | | Epoxy | |

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 |
| Bias Voltage | 7.5 to 9.5 | VDC | 7.5 to 9.5 | VDC |

This family also includes:

| Model | Sensitivity (mV/Lb) | Range (LbsF) Compressive, Tensile | Max Force (LbsF) Compressive, Tensile | Discharge Time Constant (Sec) |
|--------|---------------------|--------------------------------------|--|----------------------------------|
| 1061V1 | 10 | 500, 500 | 10000, 1000 | 150 |
| 1061V2 | 5 | 1000, 1000 | 20000, 1000 | 300 |
| 1061V3 | 1 | 5000, 1000 | 30000, 1000 | 1500 |
| 1061V4 | 0.5 | 10000, 1000 | 40000, 1000 | 2000 |
| 1061V6 | 0.1 | 50000, 1000 | 60000, 1000 | 2000 |

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

Supplied Accessories:

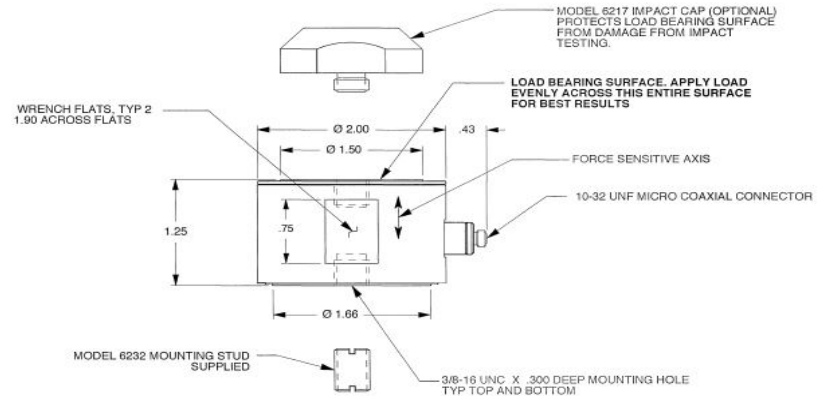
- 1) Accredited Calibration Certificate (ISO 17025)
- 2) MOD 6232 MOUNTING STUDS (2)

Available Accessories:

- 1) MOD 6217 STAINLESS STEEL IMPACT CAP

Notes:

- [1] Absolute maximum tension. Do not exceed in any case!
- [2] Percent of full scale or any lesser range, zero based best-fit straight 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.
- [4] In the interest of constant product improvement, we reserve the right to change specifications without notice. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-1061V for more information.

