

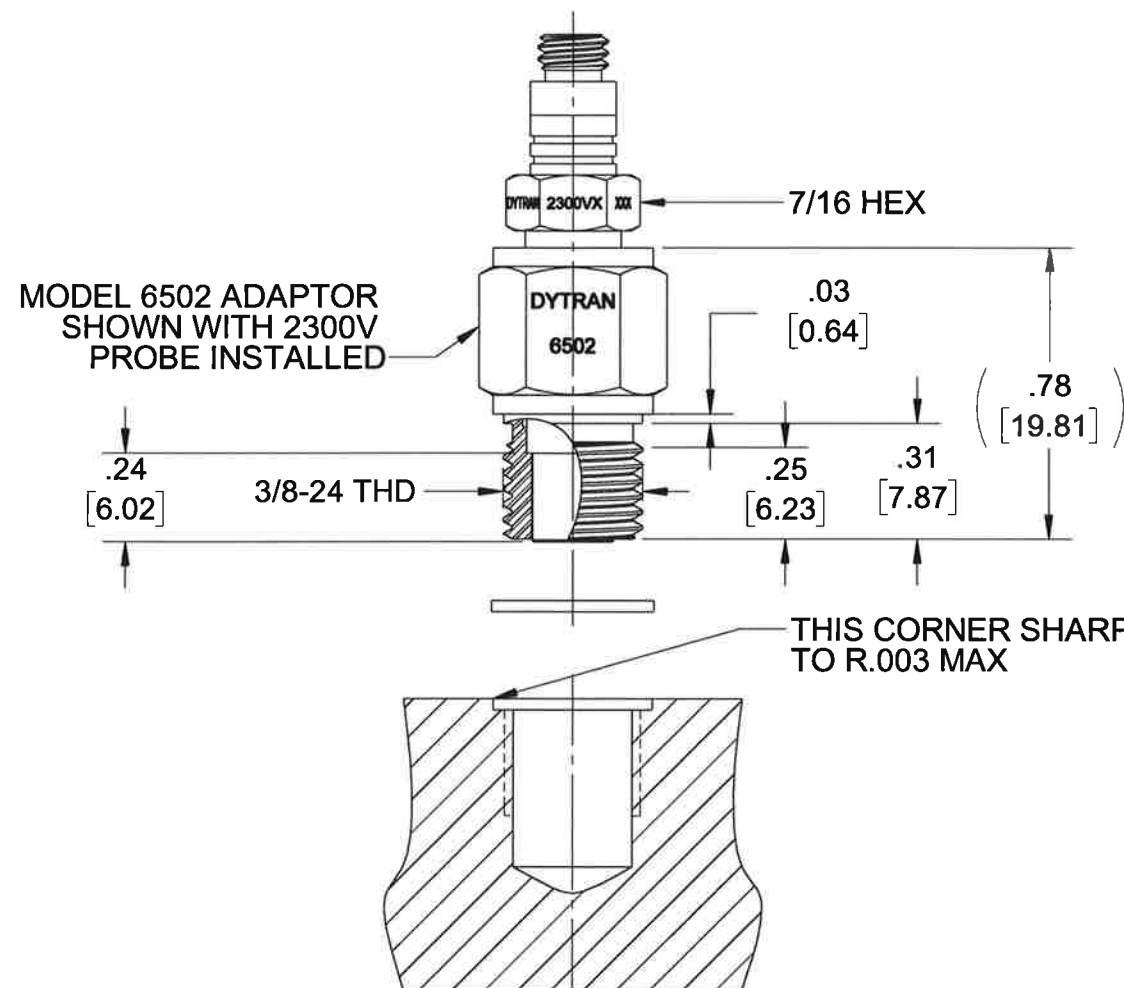
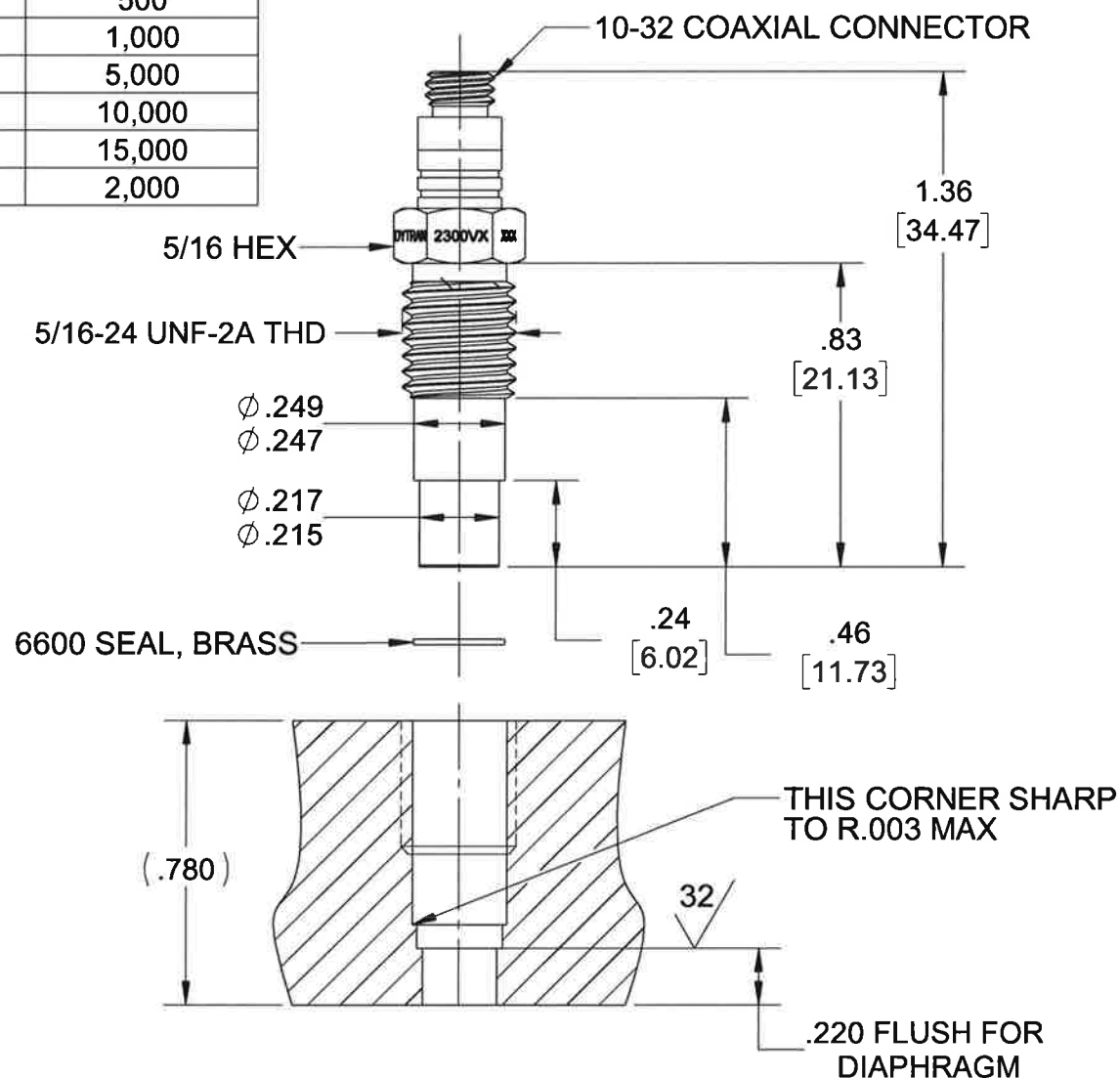
PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF DYTRAN INSTRUMENTS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF DYTRAN INSTRUMENTS INC. IS PROHIBITED

| MODEL | SENSITIVITY mV/psi | RANGE psi |
|--------|-----------------------|--------------|
| 2300V1 | 20 | 250 |
| 2300V3 | 10 | 500 |
| 2300V4 | 5 | 1,000 |
| 2300V5 | 1 | 5,000 |
| 2300V6 | 0.5 | 10,000 |
| 2300V7 | 0.33 | 15,000 |
| 2300V8 | 2.5 | 2,000 |

REVISIONS

| REV. | ECN | DESCRIPTION | BY/DATE | CHK | APPR |
|------|-------|---|-----------------|-----|------|
| B | 9202 | CONVERTED FROM ASHLAR TO SOLIDWORKS | AB 10/01/12 | JS | DV |
| C | 9256 | ADDED DIMENSIONS: ZONE C2 .03, .24, AND .25 | AB 10/10/12 | JS | DV |
| D | 12651 | ADDED NOTE 3, TABULATION CHART | RA, 04/28/16 | MH | LN |



PORT PREPARATION INSTRUCTIONS, 2300V

1. DRILL AND REAM $\phi .221 +.001/.000$ THRU
2. $\square \phi .250 +.003/-.000 \times .560 \nabla$
3. DRILL $\phi .272 +.003/-.000 \times .500 \nabla$
4. BOTTOM TAP 5/16-24 UNF-2B X .440 MIN DEPTH

PORT PREPARATION INSTRUCTIONS, 6502

1. DRILL $\phi .332$ THRU (OR .450 MIN DEPTH)
2. TAP 3/8-24 UNF-2B X .350 MIN ∇
3. $\square \phi .437 +.003/-.000 \times .030 \nabla$

3. MINOR VOIDS, SCARS, SCRATCHES AND MOUNTING BLEMISH/WITNESS MARKS ON EXTERIOR SURFACES ARE ALLOWED DUE TO RESTRAINING AND HANDLING DURING TESTING, TRANSPORT OR PROCESSING. THESE APPEAR AS INDICATORS THAT DO NOT AFFECT FORM, FIT OR FUNCTION AS INTENDED BY DESIGN OR APPLICATION

2. MOUNTING TORQUE FOR 6502 ADAPTOR: 50-60 LB-INCHES.

1. MOUNTING TORQUE FOR 2300V PROBE: 30 LB-INCHES.

NOTES: UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED:
INTERPRET DIM & TOL PER ASME Y14.5M - 1994.
REMOVE BURRS.
COUNTERSINK INTERNAL THDS 90° TO MAJOR DIA.
CHAM EXT THDS 45° TO MINOR DIA.
THD LENGTHS AND DEPTHS ARE FOR MIN FULL THDS.
DIMENSIONS APPLY AFTER FINISHING.

ALL MACHINED SURFACES.
TOTAL RUNOUT WITHIN .005.
BREAK SHARP EDGES .005 TO .010.
MACHINED FILLET RADII .005 TO .015.
WELDING SYMBOLS PER AWS A2.4.
ABBREVIATIONS PER MIL-STD-12.

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES.
DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS TOLERANCES ARE:

| DECIMALS | METRIC | ANGLES |
|------------|-----------|--------|
| .XX ±.03 | .X ± 0.8 | ±1° |
| .XXX ±.010 | .XX ±0.25 | |

| APPROVALS | | DATE |
|-----------|----|----------|
| ORIG | AB | 10/03/12 |
| CHK | JS | 10/12 |
| APP | DV | 10/12 |

DO NOT SCALE DRAWING



TITLE: **OUTLINE/INSTALLATION DRAWING, MODEL 2300V**

SIZE **B** CAGE CODE **2W033** DWG NO **127-2300V** REV **D**

SCALE: 4:1 SHEET 1 OF 1

| | | |
|--------------------------------------|----------------------------------|-----------------------------------|
| MODEL NUMBER 2300V5 | PERFORMANCE SPECIFICATION | DOC NO. PS2300V5 |
|--------------------------------------|----------------------------------|-----------------------------------|

| | | |
|--|--------------------------------------|----------------------------|
| | DYNAMIC PRESSURE SENSOR, IEPE | REV A, ECN 12998, 10/12/16 |
|--|--------------------------------------|----------------------------|



- **HIGH FREQUENCY**
- **ULTRA FAST RISE TIME**
- **HERMETIC**

PHYSICAL

Weight, Max.
Mounting Provision
Connector
Material (Housing/Diaphragm)

| | ENGLISH | | SI | |
|------------------------------|----------------|----------|----------------|-------|
| Weight, Max. | 0.2 | oz | 7 | grams |
| Mounting Provision | 5/16-24 UNF-2A | | 5/16-24 UNF-2A | |
| Connector | 10-32 COAXIAL | Type | 10-32 COAXIAL | |
| Material (Housing/Diaphragm) | 17-4ph / 316L | Material | 17-4ph / 316L | |

PERFORMANCE

Sensitivity +/- 20%
Range F.S for +/- 5 volts peak out
Maximum Pressure [2]
Equivalent Electrical Noise (Resolution)
Mounted Resonant Frequency, Nom.
Minimum Rise Time of Input Pulse
Discharge Time Constant
Linearity [3]
Lower -3db Frequency
Acceleration Sensitivity, Axial Direction

| | 1 | | 1.5E-04 | |
|---|-------|--------|---------|-------|
| Sensitivity +/- 20% | 5000 | mV/psi | 3.4E+07 | mV/Pa |
| Range F.S for +/- 5 volts peak out | 15000 | psi | 1.0E+08 | Pa |
| Maximum Pressure [2] | 0.07 | psi | 482.6 | Pa |
| Equivalent Electrical Noise (Resolution) | 500 | kHz | 500 | kHz |
| Mounted Resonant Frequency, Nom. | 1 | µsec | 1 | µsec |
| Minimum Rise Time of Input Pulse | >50 | sec | >50 | sec |
| Discharge Time Constant | +/-1 | Hz | +/-1 | % F.S |
| Linearity [3] | 0.003 | Hz | 0.003 | Hz |
| Lower -3db Frequency | 0.001 | psi/g | 6.9E-03 | Kpa/g |
| Acceleration Sensitivity, Axial Direction | | | | |

ENVIRONMENTAL

Maximum Vibration, +/-
Maximum Shock, +/-
Temperature Range [4]
Environmental Seal (Welded, Glass to Metal)
Ground Isolation, Min

| | 5000 | | 49050 | |
|---|--------------|-------|-------------|-----------------------|
| Maximum Vibration, +/- | 10000 | g rms | 98100 | m/s ² rms |
| Maximum Shock, +/- | -100 to +250 | g pk | -73 to +121 | m/s ² peak |
| Temperature Range [4] | Hermetic | °F | Hermetic | °C |
| Environmental Seal (Welded, Glass to Metal) | 100 | MΩ | 100 | MΩ |
| Ground Isolation, Min | | | | |

ELECTRICAL

Compliance (Supply) Voltage Range [5]
Supply Current Range
Output Impedance, Nom.
Output Bias Voltage

| | +18 to +30 | | +18 to +30 | |
|---------------------------------------|--------------|-----|--------------|-----|
| Compliance (Supply) Voltage Range [5] | 2 to 20 | VDC | 2 to 20 | VDC |
| Supply Current Range | 100 | mA | 100 | mA |
| Output Impedance, Nom. | +7.5 to +9.5 | Ω | +7.5 to +9.5 | Ω |
| Output Bias Voltage | | VDC | | VDC |

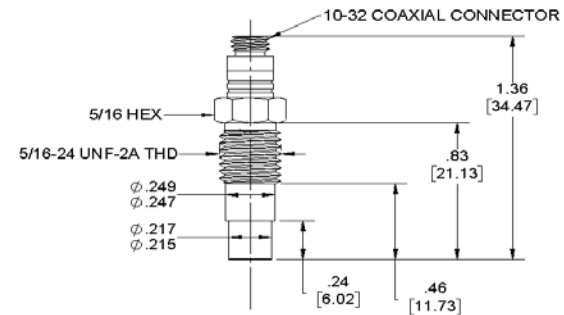
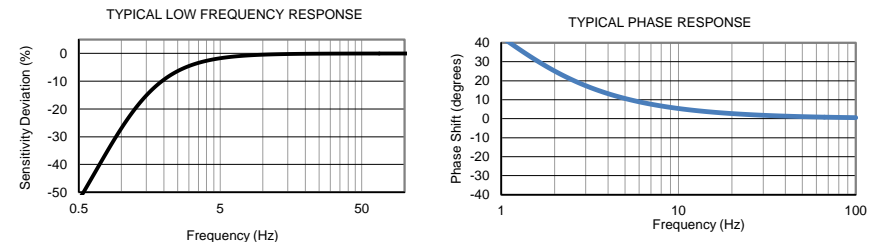
This family also includes:

| Model | Sensitivity (mV/psi) | Range (psi pk) | Resolution (Grms) | Oper. Temp(°F) | TC (Sec) |
|--------|----------------------|----------------|-------------------|----------------|----------|
| 2300V1 | 20 (±15%) | 250 | 0.004 | -100 to +250 | >2.0 |
| 2300V3 | 10 (±15%) | 500 | 0.007 | -100 to +250 | >5.0 |
| 2300V4 | 5 (±20%) | 1000 | 0.014 | -100 to +250 | >10.0 |
| 2300V6 | 0.5 (±20%) | 10000 | 0.14 | -100 to +250 | >100.0 |
| 2300V7 | 0.33 (±20%) | 15000 | 0.21 | -100 to +250 | >5.0 |

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

Notes:

- [1] A calibration certificate traceable to NIST is supplied with each instrument.
- [2] Refers to maximum pressure before possibility of damage to internal electronics.
- [3] Percent full scale, zero based fit straight line method.
- [4] Maximum flash temperature +3000°F (+1649°C), short duration.
- [5] From current limiting IEPE power unit only. Do not power up without current limiting power unit.
- [6] In the interest of constant product improvement, we reserve the right to change the specification without notice



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-2300V for more information.



21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax:818.700.7880
www.dytran.com For permission to reprint this content, please contact info@dytran.com