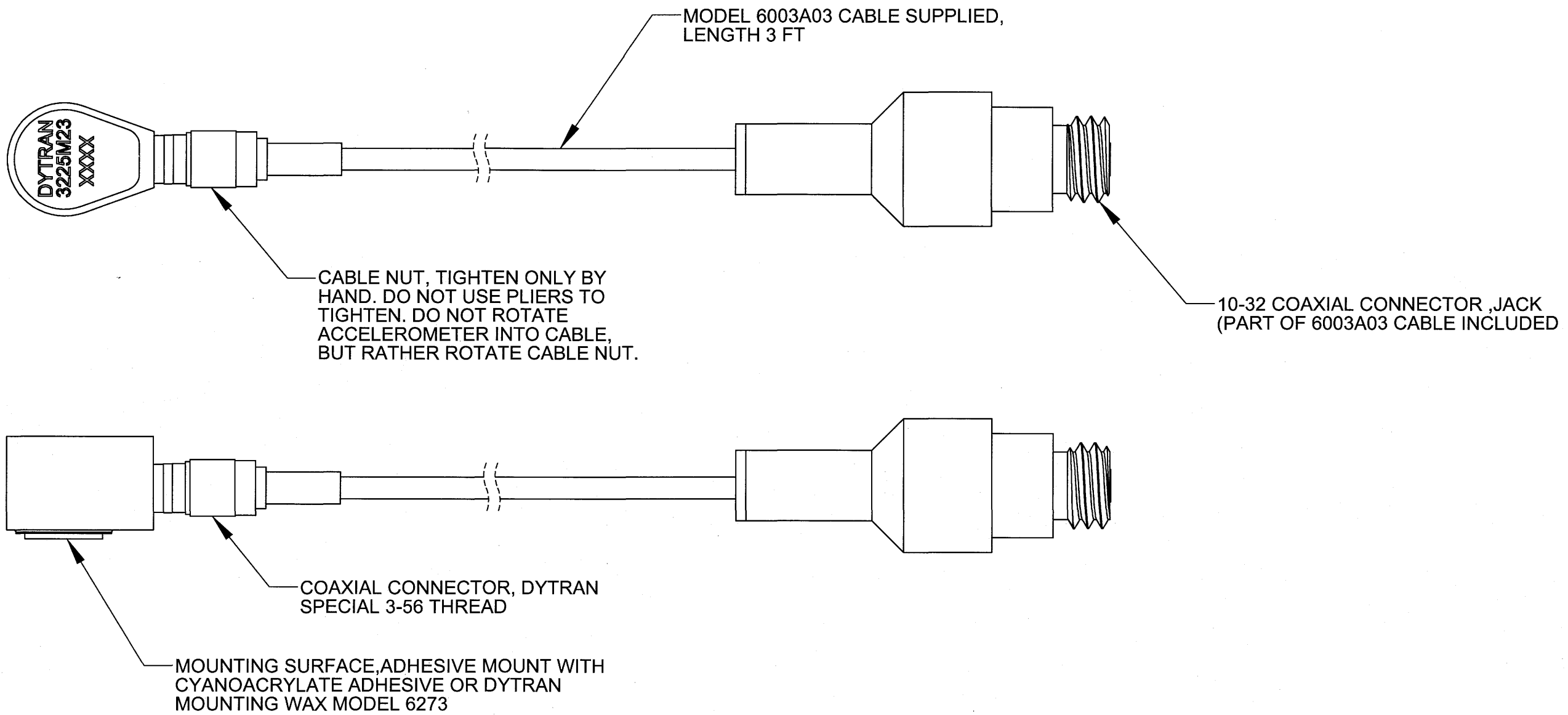


| REVISIONS |      |                      |                |          |
|-----------|------|----------------------|----------------|----------|
| REV.      | ECN  | DESCRIPTION          | BY/DATE        | CHK APPR |
| B         | 5081 | MARKING WAS ON SIDES | JS<br>03/02/08 | PM L PML |



- 3. CASE AND CONNECTOR MATERIAL: TITANIUM.
- 2. WEIGHT LESS CABLE: 0.85 GRAMS.

1 ARROW INDICATES SENSE AND DIRECTION OF INPUT ACCELERATION FOR POSITIVE GOING OUTPUT SIGNAL.

NOTES: UNLESS OTHERWISE SPECIFIED

| DRILL HOLE SIZE  | TOLERANCE      |
|------------------|----------------|
| .0135 THRU .125  | +0.004 / -.001 |
| .1260 THRU .250  | +0.005 / -.001 |
| .2510 THRU .500  | +0.006 / -.001 |
| .5010 THRU .750  | +0.008 / -.001 |
| .7510 THRU 1.000 | +0.010 / -.001 |
| 1.001 THRU 2.000 | +0.012 / -.001 |

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. THDS PER MIL-S-7742. DIMENSIONS APPLY AFTER FINISHING.

THIRD ANGLE PROJECTION USA

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. TOLERANCES ARE:<br>DECIMALS .XX ± .010 .XXX ± .005<br>ANGLES ± 1° | CONTRACT NO. |             |
|   | APPROVALS    | DATE        |
| MATERIAL:   | ORIG         | JS 02/01/08 |
|   | CHK          | CES 2/13/08 |
| FINISH:   | APP          | DV 2/14/08  |
|   | APP          |             |
| DO NOT SCALE DRAWING  |              |             |

**DYTRAN INSTRUMENTS, INC.** Chatsworth, CA

**MASTER ONLY IF IN RED**

TITLE: **OUTLINE/INSTALLATION DRAWING M3225M23**

|               |                        |                           |              |
|---------------|------------------------|---------------------------|--------------|
| SIZE <b>B</b> | CAGE CODE <b>2W033</b> | DWG NO <b>127-3225M23</b> | REV <b>B</b> |
|---------------|------------------------|---------------------------|--------------|

SCALE: NONE SOLIDWORKS SHEET 1 of 1



**SPECIFICATIONS**  
**MODEL 3225M23 MINIATURE IEPE ACCELEROMETER**

| <b>SPECIFICATION</b>   | <b>VALUE</b>   | <b>UNITS</b>     |
|--|--|------------------|
| <b>PHYSICAL</b>  |  |                  |
| WEIGHT   | 1  | gram             |
| SIZE (DIA x LENGTH HEX x HEIGHT)                                 | 0.25 x 0.43 x .215                                   | inch             |
| MOUNTING PROVISION   | Flat mounting surface for adhesive mount             |                  |
| CONNECTOR, RADIALLY MOUNTED [1]                                  | 3-56   |                  |
| CASE MATERIAL  | Titanium   |                  |
| SENSING ELEMENT TYPE   | Piezoceramics, planar shear                          |                  |
| <b>PERFORMANCE</b>   |  |                  |
| SENSITIVITY, $\pm 10\%$ [2] [3]                                  | 50   | mV/g             |
| RANGE F.S. FOR $\pm 5$ VOLTS OUT                                 | $\pm 100$  | g                |
| FREQUENCY RESPONSE, $\pm 10\%$ [3]                               | 2 to 10,000  | Hz               |
| MOUNTED RESONANT FREQUENCY                                       | >40  | kHz              |
| EQUIVALENT ELECTRICAL NOISE FLOOR                                | .0005  | grms             |
| AMPLITUDE NON-LINEARITY,<br>(ZERO BASED BEST-FIT ST.LINE METHOD) | 2  | % F.S., MAX.     |
| TRANSVERSE SENSITIVITY, MAX.                                     | 5  | %                |
| STRAIN SENSITIVITY @ 250 $\mu\epsilon$                           | .05  | g/ $\mu\epsilon$ |
| <b>ENVIRONMENTAL</b>   |  |                  |
| MAXIMUM VIBRATION  | 400  | grms             |
| MAXIMUM SHOCK  | 5000   | gpk              |
| TEMPERATURE RANGE  | -60 TO +220  | $^{\circ}$ F     |
| THERMAL COEFFICIENT OF SENSITIVITY                               | .15  | %/ $^{\circ}$ F  |
| ENVIRONMENTAL SEAL   | Hermetic, TIG welded & glass-to-metal seal connector |                  |
| <b>ELECTRICAL</b>  |  |                  |
| SUPPLY CURRENT [4]   | 2 to 20  | mA               |
| COMPLIANCE VOLTAGE RANGE   | +18 to +30   | Volts            |
| OUTPUT IMPEDANCE, TYP.   | 70   | $\Omega$         |
| BIAS VOLTAGE   | +11 to +13   | Vdc              |
| DISCHARGE TIME CONSTANT  | 0.5 to 1.8   | sec              |
| OUTPUT SIGNAL POLARITY FOR ACCELERATION TOWARD TOP               | Positive   |                  |

**SUPPLIED ACCESSORIES:**

- (1) MODEL 6591A INSTALLATION REMOVAL WRENCH
- (2) 6298 SMALL PETRO WAX

**NOTES:**

- [1] CONNECTOR MATES ONLY WITH DYTRAN CABLE MODEL 6003AXX (XX IS LENGTH IN FEET)
- [2] MEASURED AT 100 Hz, 1 grms PER ISA RP37.2.
- [3] ACTUAL SENSITIVITY IS GIVEN ON A CALIBRATION CERTIFICATE TRACEABLE TO NIST, SUPPLIED WITH EACH INSTRUMENT.
- [4] DO NOT APPLY POWER TO THIS DEVICE WITHOUT CURRENT LIMITING, 20 mA MAX. TO DO SO WILL DESTROY THE INTEGRAL IC AMPLIFIER.