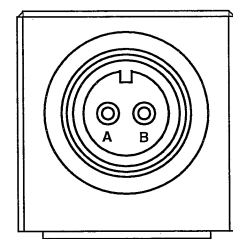
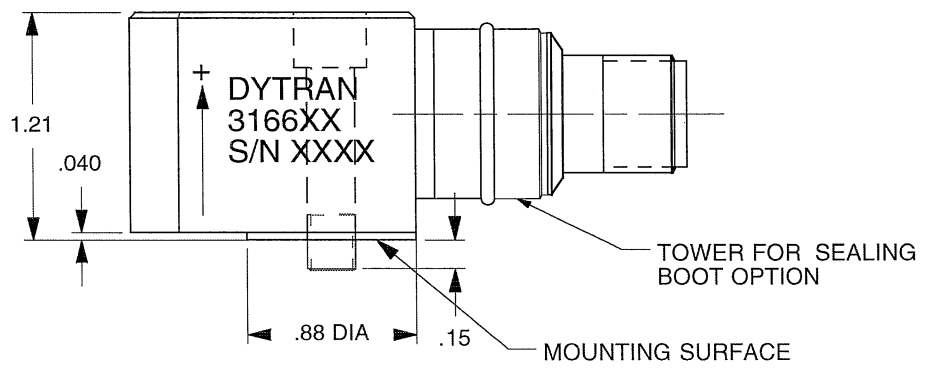
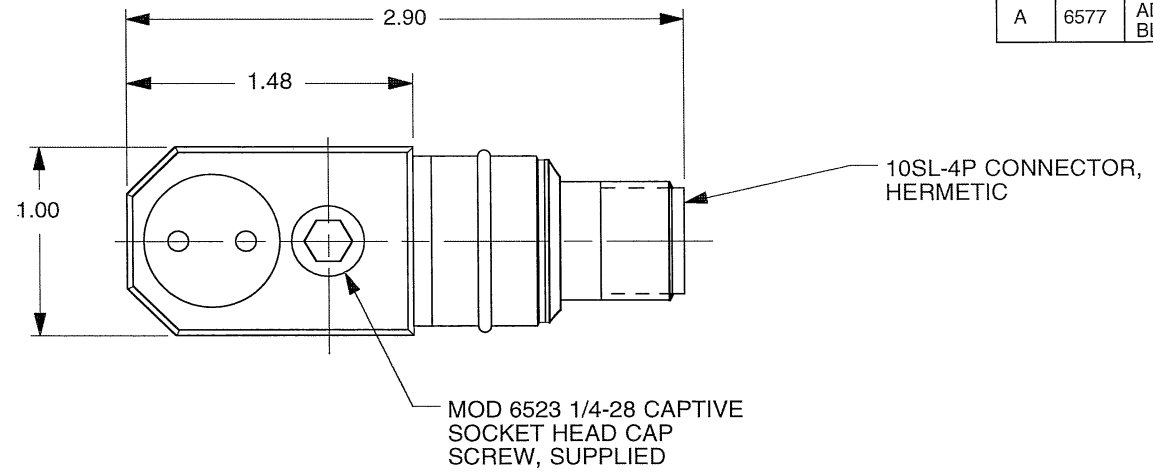


REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	6577	ADDED 3166M5 TO USED ON BLOCK, ADDED MARKING	JS 03/01/10	<i>JS</i>	<i>As</i>



CONNECTOR PINOUT:  
PIN A: SIG/PWR  
PIN B: GND RETURN

- 1) POWER GROUND IS INSULATED FROM CASE BY >10 MEGOHMS.
- 2) SEAL: HERMETIC.

**EXCEPT AS OTHERWISE NOTED**

ALL DIMENSIONS IN INCHES  
TOLERANCE: .XXX = ± .005 .XX = ± .01

SURFACE FINISH EXCEPT AS NOTED **✓**

BREAK EDGES TO DEBURR RADIUS OR CHAMFER

△ THESE DIAS ⊙ TO .005 T.I.R.

FILLETS - MAX RAD.

<b>DYTRAN</b> INSTRUMENTS, INC.		<b>MASTER ONLY IF IN RED</b>		CHATSWORTH, CA.	
SCALE	1X	REV	DATE	ECN	
DATE	7-29-02	PART NO.	MODELS 3166B, B1 & B2		
DRAWN	N.C.	CHECKED	R.A.	MAT'L	
APPROVED	<i>As</i>		NEXT ASSEMBLY	USED ON	3166B, 3166B1, 3166M5
TITLE				DWG NO.	
<b>OUTLINE/INSTALLATION DRAWING, MODELS 3166B, 3166B1 &amp; 3166B2</b>				<b>127-3166B</b>	
				SHEET 1 OF 1	



## SPECIFICATIONS

### MODELS 3166B, 3166B1 & 3166B2 LIVM ACCELEROMETER

SPECIFICATION	VALUE	UNITS
<b>PHYSICAL</b>		
WEIGHT	228	GRAMS
SIZE, L x W x H	2.90 x 1.00 x 1.21	IN
MOUNTING PROVISION, (MOD 6523 SCREW PROVIDED)	THRU HOLE, CAPTIVE 1/4-28 SCREW	
ELECTRICAL CONNECTOR, RADIAL	2-PIN MILITARY 10SL-4P, HERMETIC	
MATERIAL CASE/CONNECTOR	316L	ST. STEEL
ELEMENT STYLE	CERAMIC PLANAR SHEAR	
<b>PERFORMANCE</b>		
SENSITIVITY, $\pm 5\%$ 3166B/3166B1/B2 [1]	100/500/10	mV/G
RANGE FOR $\pm 5$ VOLTS OUT, 3166B/ 3166B1/ 3166B2	$\pm 50/ \pm 10/ \pm 500$	G
FREQUENCY RESPONSE, $\pm 5\%$ , 3166B/ 3166B1/ 3166B2	.5 - 5,000/.5 - 1,000/5-5,000	Hz
$\pm 3$ db, 3166B/ 3166B1/ 3166B2	.2 - 12,000 / .2 - 3,000/ .2 - 12,000	Hz
MOUNTED RESONANT FREQUENCY, TYP.	21 (16)	kHz
EQUIV. ELECT. NOISE FLOOR, (RESOLUTION) 3166B/ 3166B1/ 3166B2	.00006/ .00002/ .001	G RMS
AMPLITUDE NON-LINEARITY (ZERO BASED BEST FIT ST.LINE METHOD)	2.0	% F.S., MAX.
TRANSVERSE SENSITIVITY, MAX.	5	PERCENT
STRAIN SENSITIVITY	.0001	G's PER MICROSTRAIN @ 250 $\mu\sigma$
<b>ENVIRONMENTAL</b>		
MAXIMUM VIBRATION	350	G's, RMS
MAXIMUM SHOCK	3000	G's, PEAK
TEMPERATURE RANGE	-60 TO +250	$^{\circ}$ F
ENVIRONMENTAL SEAL	GLASS TO METAL/WELDED, HERMETIC	
<b>ELECTRICAL</b>		
COMPLIANCE (SUPPLY) VOLTAGE RANGE [2]	+20 to +30	VDC
EXCITATION CURRENT RANGE	2 to 20	mA
OUTPUT IMPEDANCE, NOM.	200	OHMS
OUTPUT BIAS VOLTAGE,	10.0 to 12.0	VDC
DISCHARGE TIME CONSTANT, MIN. 3166B (3166B1)	1.0 (1.0)	SEC.
OUTPUT SIGNAL POLARITY FOR ACCELERATION TOWARD TOP	POSITIVE GOING	
POWER/SIGNAL GROUND to CASE ISOLATION, MIN	10	MEGOHMS

#### SUPPLIED ACCESSORIES:

(1) Model 6523, 1/4-28 captive, socket head cap screw

[1] MEASURED AT 100 Hz, 1 G RMS. A CALIBRATION CERTIFICATE TRACEABLE TO NIST IS SUPPLIED WITH EACH INSTRUMENT.

[2] THE USE OF DYTRAN LIVM CURRENT SOURCE POWER UNITS IS RECOMMENDED. **DO NOT CONNECT THIS INSTRUMENT TO A SOURCE OF DC VOLTAGE WITHOUT CURRENT LIMITING PROTECTION, 20 mA MAX.** TO DO SO WILL DESTROY THE INTERNAL AMPLIFIER AND VOID THE WARRANTY.