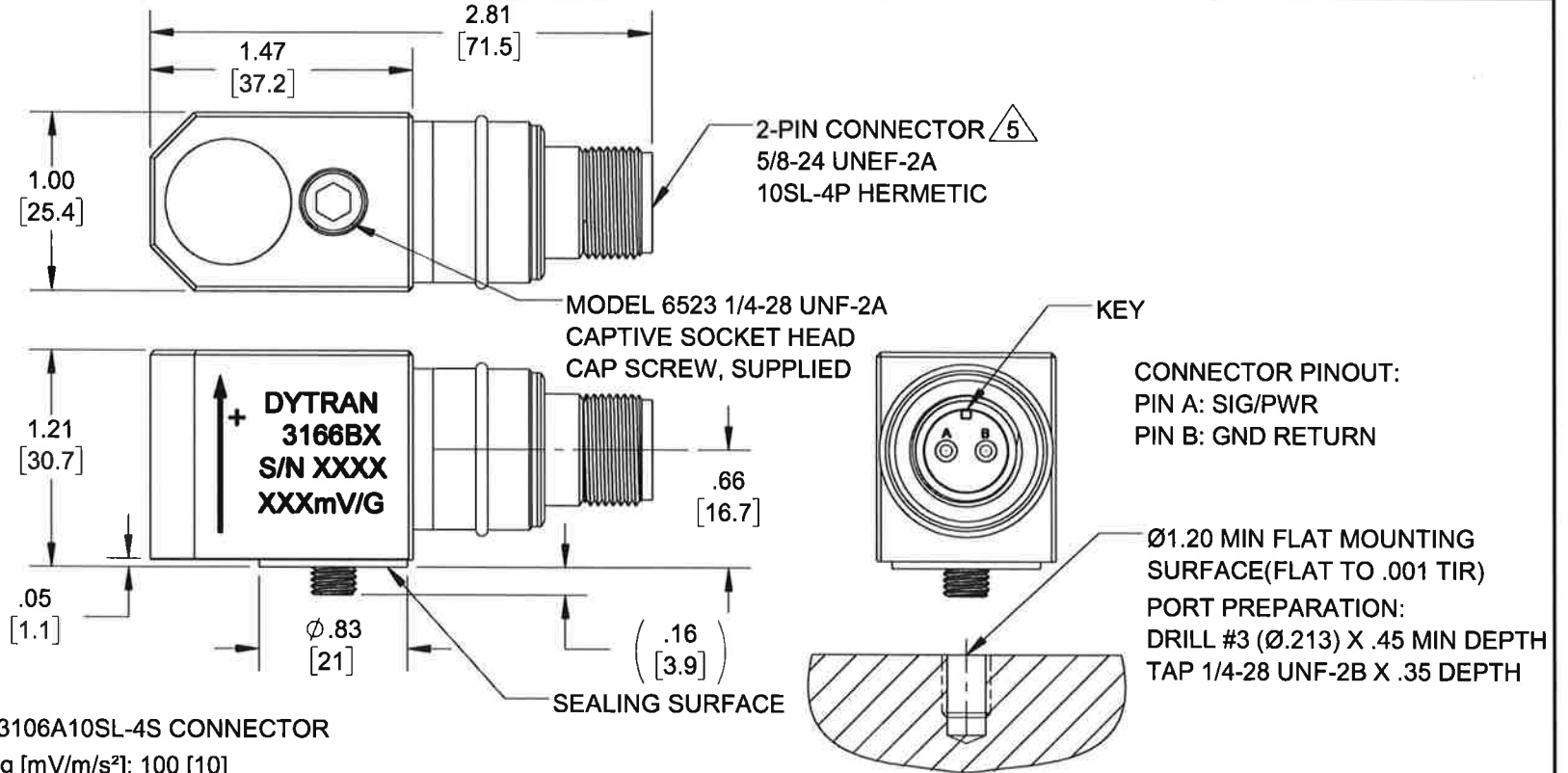


**PROPRIETARY AND CONFIDENTIAL**

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**REVISIONS**

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
B	13143	REDRAWN ON SOLIDWORKS WITH CHANGES	RA, 11/30/16	MH	LA



- $\triangle 5$  MATES WITH MS3106A10SL-4S CONNECTOR
- 4. SENSITIVITY mV/g [mV/m/s<sup>2</sup>]: 100 [10]
- 3. WEIGHT: 8 OZ [228 GRAMS] MAX
- 2. SEAL: HERMETIC
- 1. POWER GROUND IS INSULATED FROM CASE BY >10 MEGOHMS.

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.		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. DIMENSIONS IN BRACKETS [ ] ARE IN MILLIMETERS TOLERANCES ARE: INCHES METRIC ANGLES .XX ± .03 .X ± 0.8 ± 1° .XXX ± .010 .XX ± 0.25	
3166B	USED ON	NEXT ASSY	
APPLICATION			
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.			

MATERIAL	
FINISH	
DO NOT SCALE DRAWING	

CONTRACT NO.	
APPROVALS	
ORIG	NC
CHK	RA
APP	ANS
APP	
DATE	
07/29/02	
07/29/02	
07/29/02	

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

**MASTER ONLY IF IN RED**

TITLE:  
**OUTLINE/INSTALLATION  
DRAWING, 3166B SERIES**

SIZE	CAGE CODE	DWG. NO.	REV
<b>A</b>	<b>2W033</b>	<b>127-3166B</b>	<b>B</b>
SCALE: NONE		SOLIDWORKS	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, $\pm 10\%$ , 3166B/ 3166B1/ 3166B2	0.3 – 5,000	Hz
MOUNTED RESONANT FREQUENCY	>21	kHz
EQUIV. ELECT. NOISE FLOOR, (RESOLUTION) 3166B/ 3166B1/ 3166B2	.00006/ .00008/ .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	0.0001	G/ $\mu\epsilon$ @ 250/ $\mu\epsilon$
<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	+11 to +13	VDC
DISCHARGE TIME CONSTANT	0.9 to 2.0	SEC.
OUTPUT SIGNAL POLARITY FOR ACCELERATION TOWARD TOP	POSITIVE GOING	
POWER/SIGNAL GROUND to CASE ISOLATION, MIN	10	GIGAOHMS

#### 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.