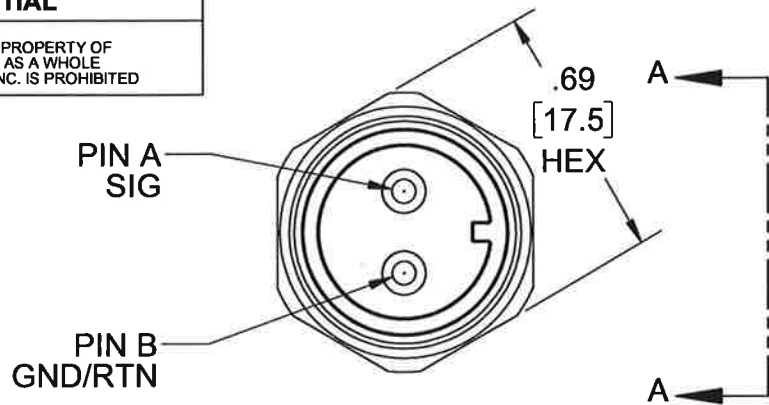


PROPRIETARY AND CONFIDENTIAL

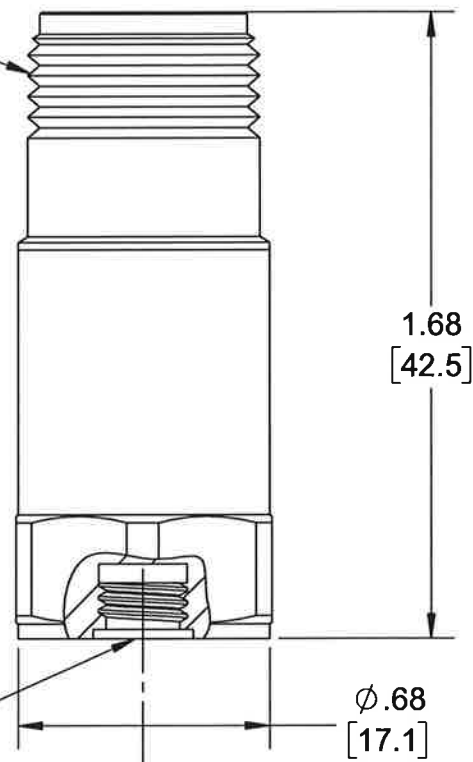
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REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	12601	ADDED MODEL 3176B2 AND VARIATION TABLE, REDRAWN IN SOLIDWORKS	LA 04/05/16	MH	LN
B	12911	3176B1; IS: 100mV/g, WAS: 1mV/g	EM 08/24/16	MH	W

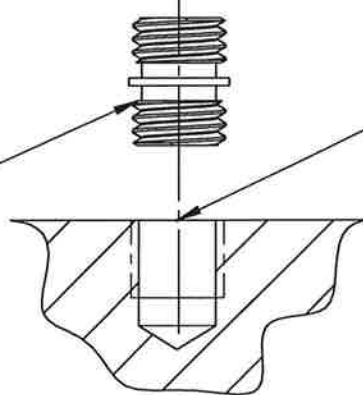


10SL-4P, 2-PIN CONNECTOR MIL-C-5015



1/4-28 UNF-2B ∇ .20

MOUNTING STUD SUPPLIED (MODEL 6176)



VIEW A-A ROTATED 90° CW



MODEL	SENSITIVITY
3176B1	100mV/g
3176B2	10mV/g

MOUNTING RECOMMENDATION: PREPARE MOUNTING SURFACE FLAT TO .001 TIR TAP 1/4-28 UNF-2B ∇ .20MIN. MOUNTING TORQUE 10-12 LB-IN.

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 $\sqrt{63}$
 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	NC	06/04/02
CHK	RA	06/04/02
APP	PML	09/23/05

THIRD ANGLE PROJECTION

DO NOT SCALE DRAWING

MASTER
 ONLY IF IN RED
 Chatsworth, CA

DYTRAN INSTRUMENTS, INC.

TITLE: **OUTLINE/INSTALLATION DRAWING, MODEL 3176B1**

SIZE B	CAGE CODE 2W033	DWG NO 127-3176B1	REV B
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SCALE: 2:1 SHEET 1 OF 1

Model Number 3176B1	PERFORMANCE SPECIFICATION	DOC NO PS3176B1
	IEPE ACCELEROMETER	REV A, ECN 12601, 04/04/16



- **HIGH SENSITIVITY**
- **ELECTRICALLY ISOLATED**
- **HERMETICALLY SEALED**

PHYSICAL

Weight, Max.
Connector
Type Pins
Mounting Provision
Material (Case/Connector)
Element Type

ENGLISH		SI	
1.6	oz	44	grams
MIL-C-5015		MIL-C-5015	
2-PIN		2-PIN	
Tapped 1/4-28 Hole		Tapped 1/4-28 Hole	
300 Series S.S.		300 Series S.S.	
Piezoceramic, Planar Shear		Piezoceramic, Planar Shear	

PERFORMANCE

Sensitivity, ±5% [1]
Range F.S for ± 5 Volts Output
Frequency Response, ±10%
Mounted Resonant Frequency
Equivalent Electrical Noise Floor
Amplitude Non-Linearity, Max. [2]
Maximum Transverse Sensitivity
Strain Sensitivity @ 250/μϵ

100	mV/g	10.2	mV/m/s ²
±50	g	±490.5	m/s ²
0.3 to 10,000	Hz	0.3 to 10,000	Hz
> 27	kHz	> 27	kHz
0.00002	Grms	0.0002	m/s ² rms
±2	% F.S.	±2	% F.S.
5	%	5	%
0.0001	g/μϵ	0.001	m/s ² /μϵ

ENVIRONMENTAL

Maximum Vibration
Maximum Shock
Temperature Range
Seal

500	G's, peak	4905	m/s ² peak
5000	G's, peak	49050	m/s ² peak
-60 to +250	°F	-51 to +121	°C
Hermetic		Hermetic	

ELECTRICAL

Supply Current Range [3]
Compliance Voltage Range
Output Impedance, Typ.
Output Bias Voltage
Discharge Time Constant
Output Signal Polarity
Electrical Isolation, Ground Pin to Case

2 to 20	mA	2 to 20	mA
+20 to +30	Volts	+20 to +30	Volts
200	Ω	200	Ω
+11 to +13	VDC	+11 to +13	VDC
0.9 to 2.0	Sec	0.9 to 2.0	Sec
Positive for Acceleration Toward Top		Positive for Acceleration Toward Top	
10	GΩ, min	10	GΩ, min

This family also includes:

Model	Sensitivity	Range F.S ± 5 Volts	Max Vibration/Shock	Resonant Frequency

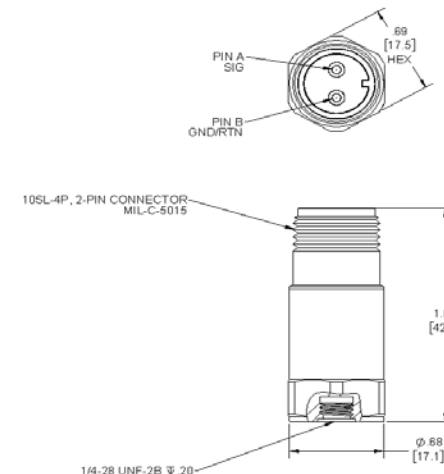
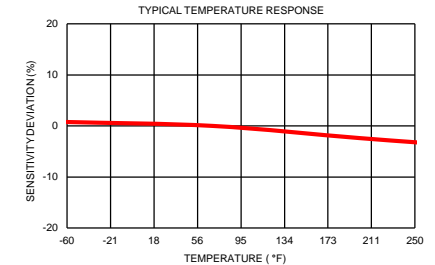
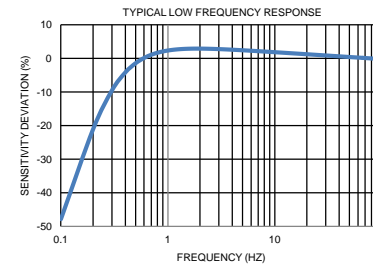
Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Mounting Stud Model 6176, 1/4-28 to 1/4-28

Notes:

- [1] Measured at 100Hz, 1 Grms per ISA RP 37.2
- [2] Measure using zero-based straight line method, % of F.S. or any lesser range.
- [3] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3176B1 for more information.



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