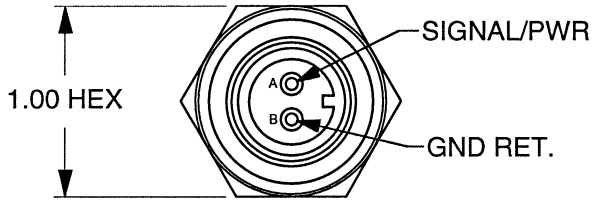
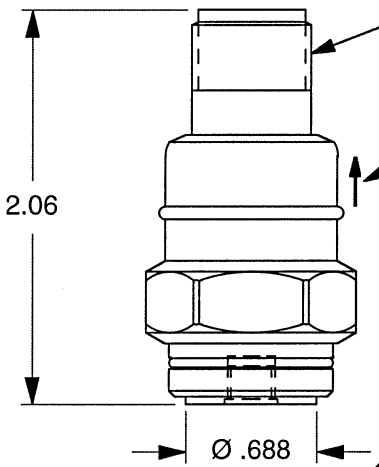


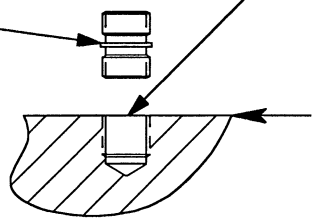


MS3102A-10-4P CONNECTOR
5/8-24UNEF-2A THREAD

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

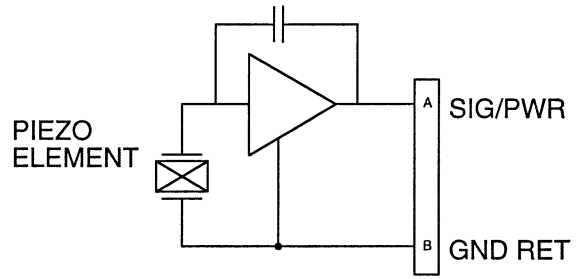
MOUNTING PREPARATION
PREPARE FLAT SURFACE (TO .001 TIR)
NEXT DRILL #3 (.213) DIA X .250 DEEP
BOTTOM TAP 1/4-28 UNF-2B X .200 MIN
THREAD DEPTH

6176 MOUNTING
STUD (SUPPLIED)



MOUNTING SURFACE

LIVM CHARGE
AMPLIFIER



Ⓐ
1. WEIGHT - 107 GRAMS.

EXCEPT AS OTHERWISE NOTED
ALL DIMENSIONS IN INCHES TOLERANCE: .XXX = ± .XX= ±
SURFACE FINISH EXCEPT AS NOTED √
BREAK EDGES TO DEBURR RADIUS OR CHAMFER
△ THESE DIAS ⊙ TO T.I.R.
FILLETS - MAX RAD.

DYTRAN INSTRUMENTS, INC. CHATSWORTH, CA.

MASTER
ONLY IF IN RED

SCALE	REV	DATE	ECN		
1X	A	2-10-03	N/A		
DATE 7-29-02	PART NO.				
DRAWN N.C. / CHECKED R.A.	MAT'L				
APPROVED AML 9.23.05	NEXT ASSEMBLY		USED ON		

TITLE
OUTLINE/INSTALLATION DRAWING
MODEL 3184E

DWG NO.
127-3184E

SHEET 1 OF 1

Model Number 3184E	PERFORMANCE SPECIFICATION	DOC NO PS3184E
	SINGLE AXIS INDUSTRIAL IEPE ACCELEROMETER	REV B, ECN 15646, 03/24/2020

- **EXCELLENT LINEARITY**
- **HERMETICALLY SEALED**

		ENGLISH		SI	
PHYSICAL					
Weight, Max		3.75	oz	107	grams
Connector	Type	2-PIN, MIL-DTL-5015		2-PIN, MIL-DTL-5015	
Mounting Provision		1/4-28 Tapped hole		1/4-28 Tapped hole	
Material : Housing, Base and Connector		300 Series S.S.		300 Series S.S.	
Element Style		Planar Shear		Planar Shear	
PERFORMANCE					
Sensitivity, ±5% [1]		100	mV/g	10.19	mV/m/s^2
Range F.S for ± 5 Volts Output		±50	g	±1962	m/s^2
Frequency Range	±5%	0.45 to 5000	Hz	0.45 to 5000	Hz
Frequency Range	±3dB	0.15 to 10000	Hz	0.15 to 10000	Hz
Resonant Frequency		>25	kHz	>25	kHz
Equivalent Electrical Noise Floor		0.0005	Grms	0.0049	m/s^2 rms
Linearity [2]		± 2	% F.S.	± 2	% F.S.
Maximum Transverse sensitivity		5	%	5	%
Strain Sensitivity		0.0001	g/με	0.001	m/s^2/με
ENVIRONMENTAL					
Maximum Vibration		100	G's,peak	981	m/s^2 peak
Maximum Shock		3000	G's,peak	29430	m/s^2 peak
Temperature Range		-60 to+250	°F	-52 to +121	°C
Seal		Hermetic		Hermetic	
ELECTRICAL					
Supply Current Range [3]		2 to 20	mA	2 to 20	mA
Compliance Voltage Range		+ 20 to +30	Volts	+ 20 to +30	Volts
Output Impedance,Typ		100	Ω	100	Ω
Bias Voltage		+11 to +13	VDC	+11 to +13	VDC
Discharge Time Constant		0.9 to 2.0	Sec	0.9 to 2.0	Sec
Output Signal Polarity Toward Top		Positive		Positive	

This family also includes:

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

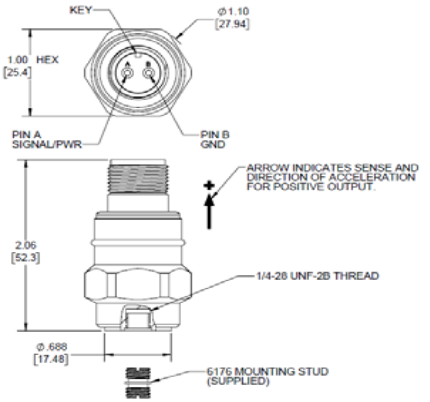
Refer to the performance specifications of the products in this family for detailed description

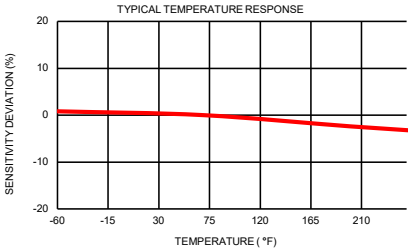
Supplied Accessories:

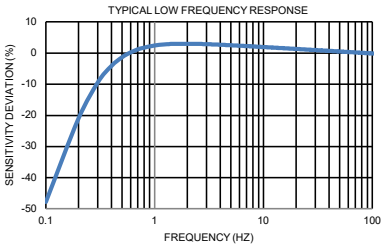
1) Accredited calibration certificate (ISO 17025)
2) Model 6176, 1/4-28 S.S. Mounting Stud

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 limting,20 mA MAX.To do so will destroy the IC charge amplifier.
[4] In the interest of constant product improvement, we reserve the right to change specifications without notice.
It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.







Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3184E for more information.

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