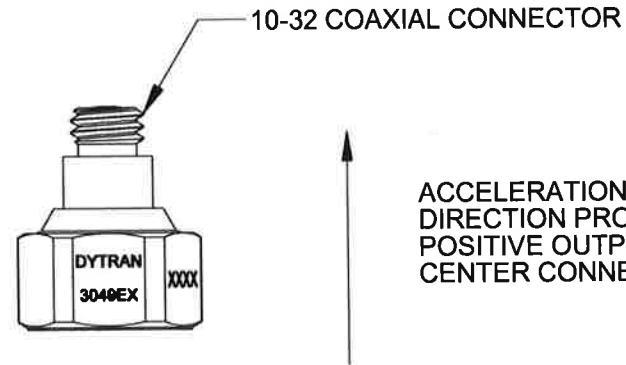
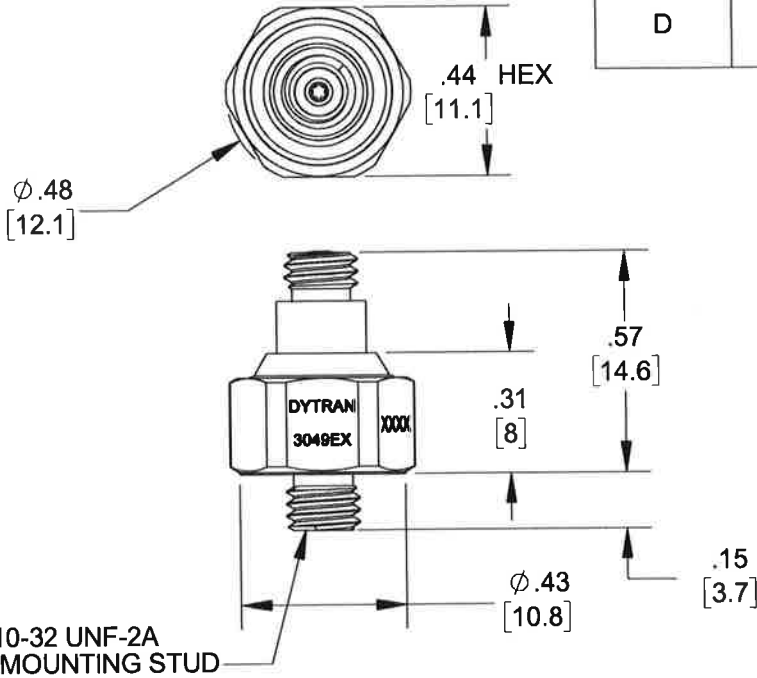


PROPRIETARY AND CONFIDENTIAL

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REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
C	10171	3049E1 & 3049E3 - WEIGHT IS: 3.5 GRAMS WAS: 4.0 GRAMS	LN 07/10/13	DV	AS
D	13077	ADDED 3049E4 & E5	JS 10/27/16	LA	AS



MODEL	REV	ECN	DATE	SENSITIVITY	MOUNTING	WEIGHT, MAX
3049E	B	9307	11/02/12	10 mV/g	STUD	4.2 GRAMS
3049E1	C	10171	07/10/13	10 mV/g	ADHESIVE	3.5 GRAMS
3049E2	B	9307	11/02/12	100 mV/g	STUD	4.2 GRAMS
3049E3	C	10171	07/10/13	100 mV/g	ADHESIVE	3.5 GRAMS
3049E4	A	13077	10/27/16	50mV/g	STUD	4.2 GRAMS
3049E5	A	13077	10/27/16	50mV/g	ADHESIVE	3.5 GRAMS

1 MOUNTING TORQUE TO: 8-10 lb-in
NOTES: UNLESS OTHERWISE SPECIFIED

USED ON	NEXT ASSY
APPLICATION	
THIRD ANGLE PROJECTION USA	

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.
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.
DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS
TOLERANCES ARE:
INCHES METRIC ANGLES
.XX ± .03 .X ± 0.8 ± 1°
.XXX ± .010 .XX ± 0.25

MATERIAL

FINISH

DO NOT SCALE DRAWING

CONTRACT NO.

APPROVALS		DATE
ORIG	PML	12/09/05
CHK	PML	04/17/06
APP	PML	04/17/06
APP		

DYTRAN INSTRUMENTS, INC. MASTER ONLY CHATSWORTH, CA

TITLE: **OUTLINE/INSTALLATION DRAWING, 3049E SERIES**

SIZE: A	CAGE CODE: 2W033	DWG. NO.: 127-3049E	REV: D
SCALE: 4:1	SOLIDWORKS	SHEET 1 OF 1	

Model Number 3049E	PERFORMANCE SPECIFICATIONS	DOC NO PS3049E
IEPE ACCELEROMETER		REV C, EGN 15295, 09/03/19



- MINIATURE DESIGN
- HERMETICALLY SEALED
- LOW-OUTGASSING
- BASE ISOLATED

PHYSICAL

Weight, Max.
Connector, Top Mounted
Mounting Provision
Material (Base, Cap, Connector)
Sensing Element

ENGLISH		SI	
Weight, Max.	0.15 oz	Weight, Max.	4.2 grams
Connector, Top Mounted	10-32	Connector, Top Mounted	10-32
Mounting Provision	Integral Stud 10-32 UNF-2A	Mounting Provision	Integral Stud 10-32 UNF-2A
Material (Base, Cap, Connector)	Titanium Alloy	Material (Base, Cap, Connector)	Titanium Alloy
Sensing Element	Ceramic	Sensing Element	Ceramic
Material Mode	Shear	Material Mode	Shear

PERFORMANCE

Sensitivity, ±5% [1]
Range for ± 5 Volts Output
Frequency Response, ± 5%
Resonant Frequency
Equivalent Electrical Noise Floor
Linearity, [2]
Maximum Transverse Sensitivity
Base Strain Sensitivity @ 250µε

Sensitivity, ±5% [1]	10 mV/g	Sensitivity, ±5% [1]	1.0 mV/m/s ²
Range for ± 5 Volts Output	500 g	Range for ± 5 Volts Output	4905 m/s ²
Frequency Response, ± 5%	1 to 10,000 Hz	Frequency Response, ± 5%	1 to 10,000 Hz
Resonant Frequency	> 35 kHz	Resonant Frequency	> 35 kHz
Equivalent Electrical Noise Floor	0.003 Grms	Equivalent Electrical Noise Floor	0.03 m/s ² rms
Linearity, [2]	±2 % F.S.	Linearity, [2]	±2 % F.S.
Maximum Transverse Sensitivity	5 %	Maximum Transverse Sensitivity	5 %
Base Strain Sensitivity @ 250µε	0.004 g/µε	Base Strain Sensitivity @ 250µε	0.04 m/s ² /µε

ENVIRONMENTAL

Maximum Vibration
Maximum Shock
Temperature Range
Seal

Maximum Vibration	600 Gpeak	Maximum Vibration	5886 m/s ² peak
Maximum Shock	5000 Gpeak	Maximum Shock	49050 m/s ² peak
Temperature Range	-60 to +250 °F	Temperature Range	-51 to 121 °C
Seal	Hermetic	Seal	Hermetic

ELECTRICAL

Supply Current Range [3]
Compliance Voltage Range
Output Impedance, Typ.
Bias Voltage
Discharge Time Constant
Output Signal Polarity for Acceleration Toward Top
Electrical Isolation (Case Ground to Mounting Surface)

Supply Current Range [3]	2 to 20 mA	Supply Current Range [3]	2 to 20 mA
Compliance Voltage Range	+18 to +30 Volts	Compliance Voltage Range	+18 to +30 Volts
Output Impedance, Typ.	100 Ω	Output Impedance, Typ.	100 Ω
Bias Voltage	+11 to +13 VDC	Bias Voltage	+11 to +13 VDC
Discharge Time Constant	0.5 to 1.2 Sec	Discharge Time Constant	0.5 to 1.2 Sec
Output Signal Polarity for Acceleration Toward Top	Positive	Output Signal Polarity for Acceleration Toward Top	Positive
Electrical Isolation (Case Ground to Mounting Surface)	10 GΩ	Electrical Isolation (Case Ground to Mounting Surface)	10 GΩ

This family also includes:

Model	Sensitivity (mV/g)	Frequency Response (Hz)	Time Constant (Sec)	Operating Temp (°F)

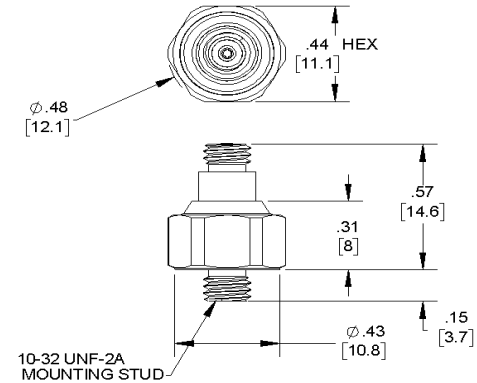
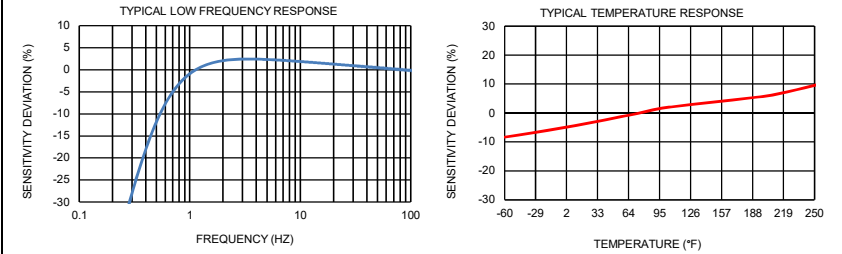
Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)

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.
 - [4] In the interest of constant product improvement, we reserve the rights to change the 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 127-3049E for more information.



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