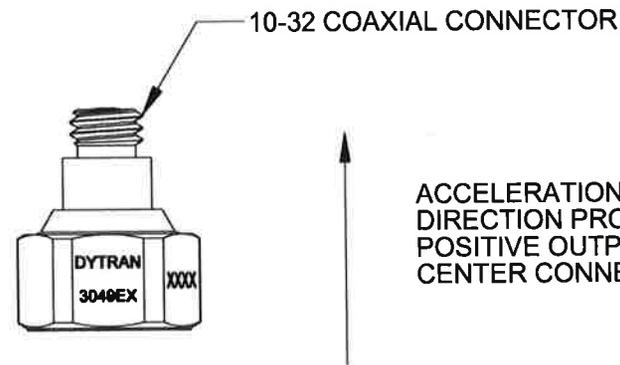
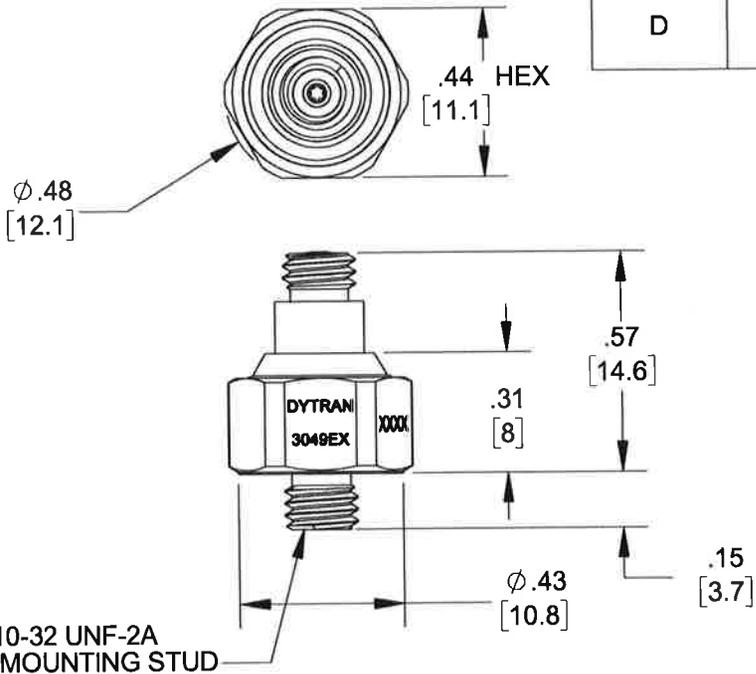


PROPRIETARY AND CONFIDENTIAL

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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

CONTRACT NO.



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

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

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

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



- **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	4.2	grams
Connector, Top Mounted	10-32		10-32	
Mounting Provision	Integral Stud 10-32 UNF-2A		Integral Stud 10-32 UNF-2A	
Material (Base, Cap, Connector)	Titanium Alloy		Titanium Alloy	
Sensing Element	Ceramic	Material Mode	Ceramic	
	Shear		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	1.0	mV/m/s <sup>2</sup>
Range for ± 5 Volts Output	500	g	4905	m/s <sup>2</sup>
Frequency Response, ± 5%	1 to 10,000	Hz	1 to 10,000	Hz
Resonant Frequency	> 35	kHz	> 35	kHz
Equivalent Electrical Noise Floor	0.003	Grms	0.03	m/s <sup>2</sup> rms
Linearity, [2]	±2	% F.S.	±2	% F.S.
Maximum Transverse Sensitivity	5	%	5	%
Base Strain Sensitivity @ 250µε	0.004	g/µε	0.04	m/s <sup>2</sup> /µε

**ENVIRONMENTAL**

Maximum Vibration  
Maximum Shock  
Temperature Range  
Seal

Maximum Vibration	600	Gpeak	5886	m/s <sup>2</sup> peak
Maximum Shock	5000	Gpeak	49050	m/s <sup>2</sup> peak
Temperature Range	-60 to +250	°F	-51 to 121	°C
Seal	Hermetic		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	2 to 20	mA
Compliance Voltage Range	+18 to +30	Volts	+18 to +30	Volts
Output Impedance, Typ.	100	Ω	100	Ω
Bias Voltage	+11 to +13	VDC	+11 to +13	VDC
Discharge Time Constant	0.5 to 1.2	Sec	0.5 to 1.2	Sec
Output Signal Polarity for Acceleration Toward Top	Positive		Positive	
Electrical Isolation (Case Ground to Mounting Surface)	10	GΩ	10	GΩ

**This family also includes:**

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

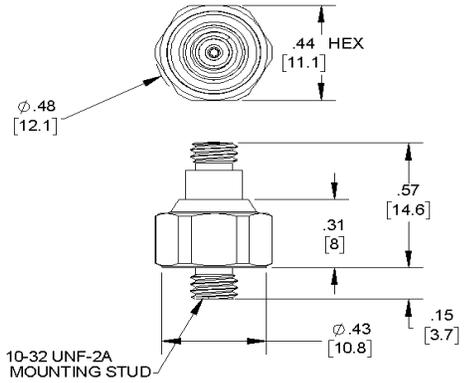
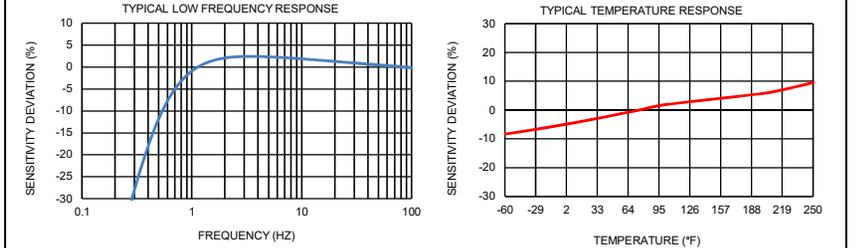
Refer to the performance specifications of the products in this family for detailed description

**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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