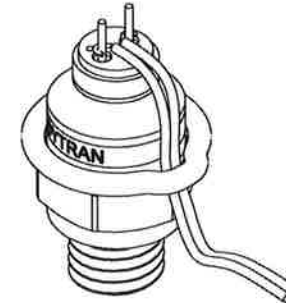
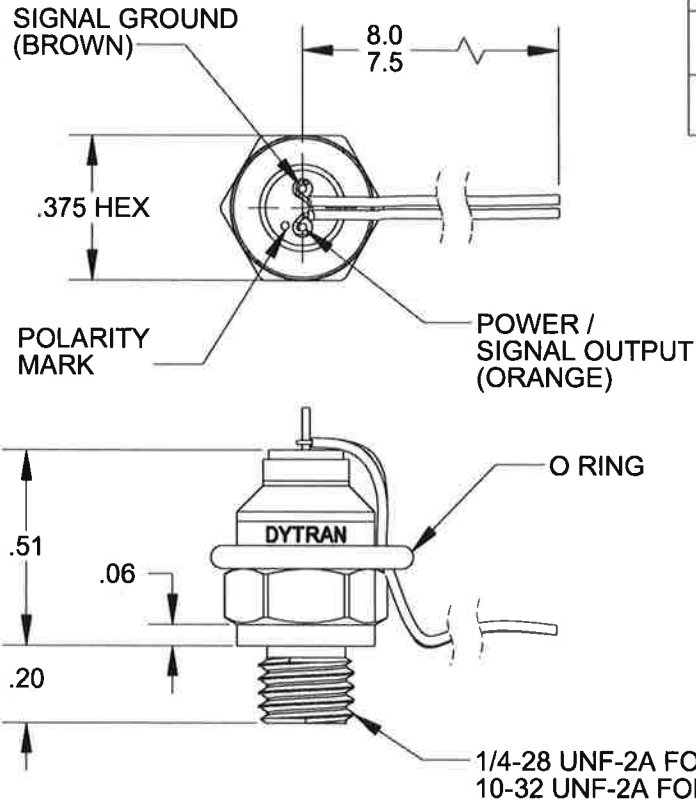


PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF DYTRAN INSTRUMENTS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF DYTRAN INSTRUMENTS, INC. IS PROHIBITED

REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
C	5057	IS:1/4-28 UNF-2A FOR 3086A1 THRU A6 10-32 UNF-2A FOR 3086A1T THRU A6T WAS: 1/4-28 UNF-2A	RA, 2/13/08	JS	JS
D	5498	ADDED WIRES & O RING	JS 10/16/08	AS	DV
E	12854	ADDED WIRE LENGTH DIMENSION	NDC 07/28/16	<i>h</i>	<i>pt</i>



2. HOUSING MATERIAL: TITANIUM ALLOY

1. RECOMMENDED MOUNTING TORQUE:
30 LB-IN

DRILL HOLE SIZE	TOLERANCE
.0135 THRU .125	+0.04 / -.001
.1260 THRU .250	+0.05 / -.001
.2510 THRU .500	+0.06 / -.001
.5010 THRU .750	+0.08 / -.001
.7510 THRU 1.000	+0.10 / -.001
1.001 THRU 2.000	+0.12 / -.001

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.
TOLERANCES ARE:

DECIMALS	ANGLES
.XX ± .010	± 1°
.XXX ± .005	

MATERIAL	APPROVALS	DATE
FINISH	ORIG	PML
	CHK	JS
	APP	DV
	APP	<i>h</i> 8/16/16

CONTRACT NO.	
APPROVALS	DATE
ORIG	PML
CHK	JS
APP	DV
APP	<i>h</i> 8/16/16

MASTER COPY ONLY IF IN RED

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

TITLE: **OUTLINE DRAWING, 3086A**

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-3086A	E

SCALE: 4:1 SOLIDWORKS SHEET 1 OF 1



- **MINIATURE SIZE**
- **EXCELLENT LINEARITY**
- **HERMETICALLY SEALED**

PHYSICAL

Weight
Connector
Mounting Provision
Material
Element Style

Top Mounted
Integral Stud
Accelerometer and Connector

	ENGLISH		SI
Weight	0.12	oz	3.5
Connector	Solder Pins		Solder Pins
Mounting Provision	10-32 UNF-2A		10-32 UNF-2A
Material	Titanium Alloy		Titanium Alloy
Element Style	Quartz Compression		Quartz Compression

PERFORMANCE

Sensitivity, Nom. [1]
Range Full Scale
Low Frequency -3dB Point, Nom
Low Frequency -5% Point
Frequency Response, ±10%
Resonant Frequency
Isolation Cup Resonance
Electrical Noise
Linearity [2]
Maximum Transverse Sensitivity

	ENGLISH		SI
Sensitivity, Nom. [1]	0.50	mV/g	0.05
Range Full Scale	±10000	g	±98000
Low Frequency -3dB Point, Nom	0.16	Hz	0.16
Low Frequency -5% Point	0.5	Hz	0.5
Frequency Response, ±10%	0.35 to 10000	Hz	0.35 to 10000
Resonant Frequency	>100	kHz	>100
Isolation Cup Resonance	>45	kHz	>45
Electrical Noise	0.14	Grms	1.37
Linearity [2]	±1	% F.S.	±1
Maximum Transverse Sensitivity	3	%	3

ENVIRONMENTAL

Maximum Shock
Temperature Range
Environmental Seal

	ENGLISH		SI
Maximum Shock	±50000	Gpeak	±490000
Temperature Range	-60 to +250	°F	-51 to 121
Environmental Seal	Hermetic		Hermetic

ELECTRICAL

Supply Current Range [3]
Compliance Voltage Range [3]
Output Impedance, Nom
Bias Voltage
Discharge Time Constant
Ground Isolation, Case to Mounting Surface, Min

	ENGLISH		SI
Supply Current Range [3]	2 to 20	mA	2 to 20
Compliance Voltage Range [3]	+18 to +20	Volts	+18 to +20
Output Impedance, Nom	100	Ω	100
Bias Voltage	+7.5 to +9.5	VDC	+7.5 to +9.5
Discharge Time Constant	0.8 to 2.0	Sec	0.8 to 2.0
Ground Isolation, Case to Mounting Surface, Min	10	MΩ	10

This family also includes:

Model	Sensitivity (mV/g)	Range F.S. (g)	Maximum Shock (g)	Operating Temp (°F)
3086A1T	0.05	70,000	100,000	-60 to +250
3086A2T	0.1	50,000	100,000	-60 to +250
3086A3T	0.25	20,000	100,000	-60 to +250
3086A5T	1.0	5,000	50,000	-60 to +250
3086A6T	2.0	2,500	50,000	-60 to +250

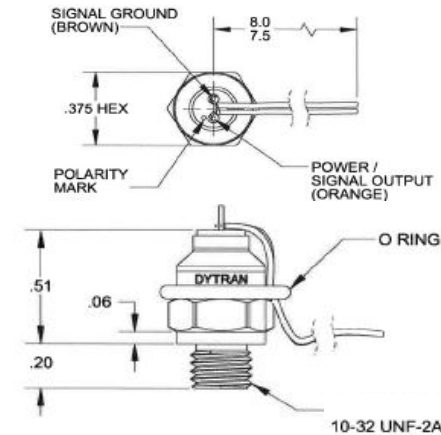
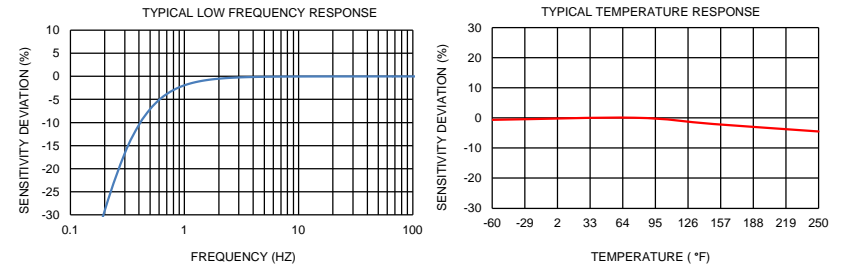
Please refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)

Notes:

- [1] Measured by impacting against calibrated force sensor. NIST traceable.
- [2] Percent of full scale or any lesser full scale range, zero-based best fit straight line method.
- [3] Power only with Dytran or Dytran approved current source type power unit. Do not supply power without current limiting. You will destroy the integral electronics. This will void the warranty.
- [4] Recommended Cable: Dytran Part No. 128-6869AXX (XX denotes length in feet)



Units on the line drawing are in inches. Refer to 127-3086A for more information.

