

PROPRIETARY AND CONFIDENTIAL

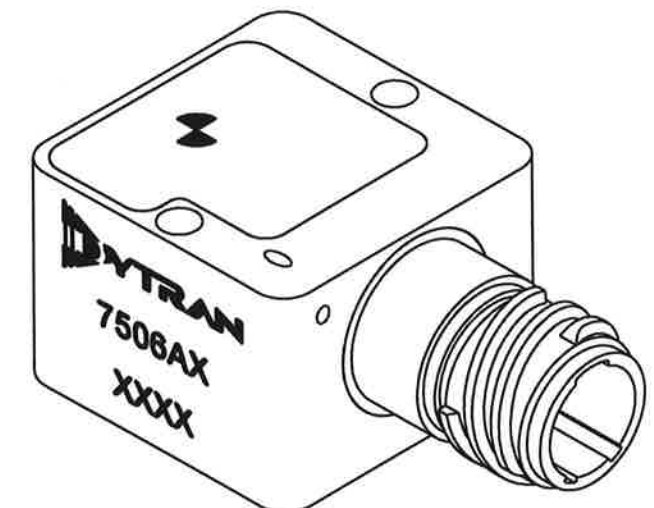
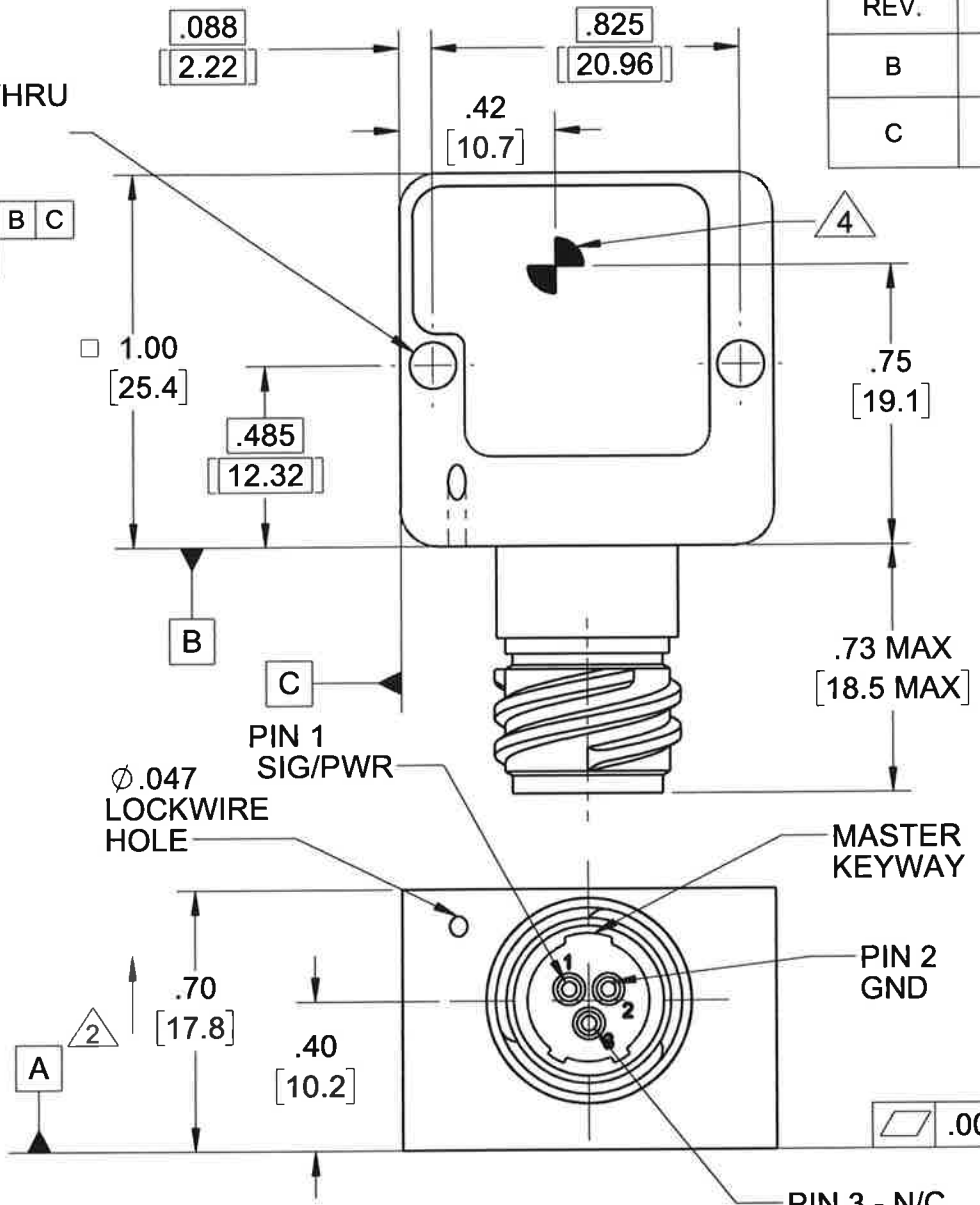
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF DYTRAN INSTRUMENTS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF DYTRAN INSTRUMENTS INC. IS PROHIBITED

MODEL	SENSITIVITY
7506A1	100 μ A/g
7506A2	13 μ A/g

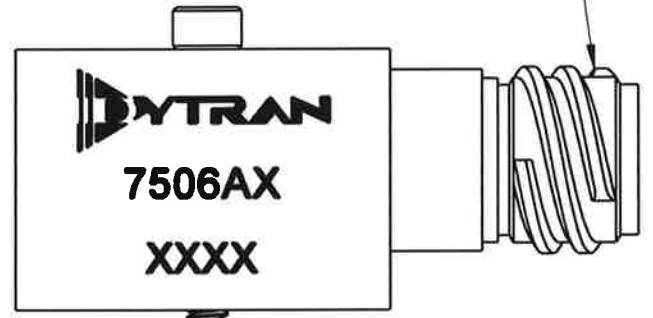
2X ϕ .125^{+0.010}/_{-.001} THRU

ϕ .020 (M)	A	B	C
ϕ .006 (M)	A		

REVISIONS					
REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
B	11868	ADDED SUGGESTED HARDWARE AND MOUNTING PROVISION.	LA 03/31/15	DV	AS
C	12594	ADDED NOTE 6	JS 03/30/16	LA	AS



3 CONNECTOR, RECEPTACLE, 3-PIN, GLENAIR P/N: 805-006-13Z18-23PA



5 MOUNTING RECOMMENDATIONS: PREPARE MOUNTING SURFACE FLAT TO .001 TIR. TAP 4-40 UNC-2B ∇ .20 MIN. RECOMMENDED MOUNTING TORQUE 6-8LB-IN. FOR BEST FREQUENCY RESPONSE, MOUNTING SURFACE MUST CONTACT THE ENTIRE ACCELEROMETER MOUNTING SURFACE.

6. MINOR VOIDS, SCARS, SCRATCHES AND MOUNTING BLEMISH/WITNESS MARKS ON EXTERIOR SURFACES ARE ALLOWED DUE TO RESTRAINING AND HANDLING DURING TESTING, TRANSPORT OR PROCESSING. THESE APPEAR AS INDICATORS THAT DO NOT AFFECT FORM, FIT OR FUNCTION AS INTENDED BY DESIGN OR APPLICATION

- 5 SUGGESTED HARDWARE: 4-40 UNC-2A X .875, SHCS, 300 SERIES STAINLESS STEEL.
 - 4 LOCATION OF SENSING ELEMENT
 - 3 MATES WITH GLENAIR PLUG 805-001-16Z18-23SA AND 805-002-16Z18-23SA.
 - 2 ARROW INDICATES ACCELERATION DIRECTION FOR POSITIVE OUTPUT
 - 1. WEIGHT: 70 GRAMS MAX
- 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. 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.

DECIMALS		METRIC		ANGLES	
.XX ±.03	.X ± 0.8	.XX ±0.25		±1°	
.XXX ±.010					

APPROVALS		DATE
ORIG	LN	11/25/14
CHK	DV	02/02/15
APP	RT	02/02/15

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION USA

DYTRAN INSTRUMENTS, INC. CHATSWORTH, CA

MASTER ONLY IF IN RED

TITLE: **OUTLINE/INSTALLATION, CVLD ACCEL, 7506A1 & 7506A2**

SIZE	CAGE CODE	DWG NO	REV
B	2W033	127-7506A1	C

SCALE: 2:1

SHEET 1 OF 1

Model Number 7506A2	PERFORMANCE SPECIFICATIONS			DOC NO PS7506A2
	VARIABLE CAPACITANCE ACCELEROMETER			REV A, ECN 11762 , 02/12/15



- VARIABLE CAPACITANCE ACCELEROMETER
- CURRENT OUTPUT
- HERMETICALLY SEALED
- DC RESPONSE
- 4-20 mA LOOP COMPATIBLE

PHYSICAL

Weight, Max	
Connector [2]	Type
Mounting	Thru Holes
Material	

ENGLISH		SI	
2.5	oz	70	grams
Receptacle, 3-pin		Receptacle, 3-pin	
2 X Ø.125		2 X Ø.125	
300 Series S.S.		300 Series S.S.	

PERFORMANCE

Input Range	±400	g	±3924	m/s ²
Frequency Response (-3dB), ± 50Hz [1]	0-300	Hz	0-300	Hz
Sensitivity Differential, ±10%	13	µA/g	1.3	µA/m/s ²
Output Noise, Differential ,Typ	400	µ g rms/√ Hz	3924	µ m/s ² /√ Hz
Non-Linearity, Max [4]	0.5	% F.S	0.5	% F.S
Transverse Sensitivity, Max	2	%	2	%
Scale Factor Calibration Error, Max	2	%	2	%
Zero Measured Output	±50	mV	±50	mV

ENVIRONMENTAL

Maximum Mechanical Shock	5000	gpk	49050	m/s ² peak
Bias Temperature Shift ,Max [3]	56	(ppm of span)/°F	100	(ppm of span)/°C
Bias Calibration Error	1.5	% of span	1.5	% of span
Operating Temperature Range	-55 to +257	°F	-48 to +125	°C
Scale Factor Temperature Shift [3]	-111 to 0	ppm/°F	-200 to 0	ppm/°C
Seal	Hermetic		Hermetic	

ELECTRICAL

Bias Current	14-15	mA	14-15	mA
Output Impedence, Nom	400	Ω	400	Ω
Operating Voltage	10-36	VDC	10-36	VDC
Full Scale Output	±5	mA	±5	mA
Power Supply Rejection Ratio	>65	dB	>65	dB

This family also includes:

Model	Input Range (g)	Frequency response (Hz)	Sensitivity Differential, ±10% (µA/g)	Max.Shock (gpk)	Noise Differential (µg rms/√Hz)
7506A1	± 50	0-300	100	5000	50

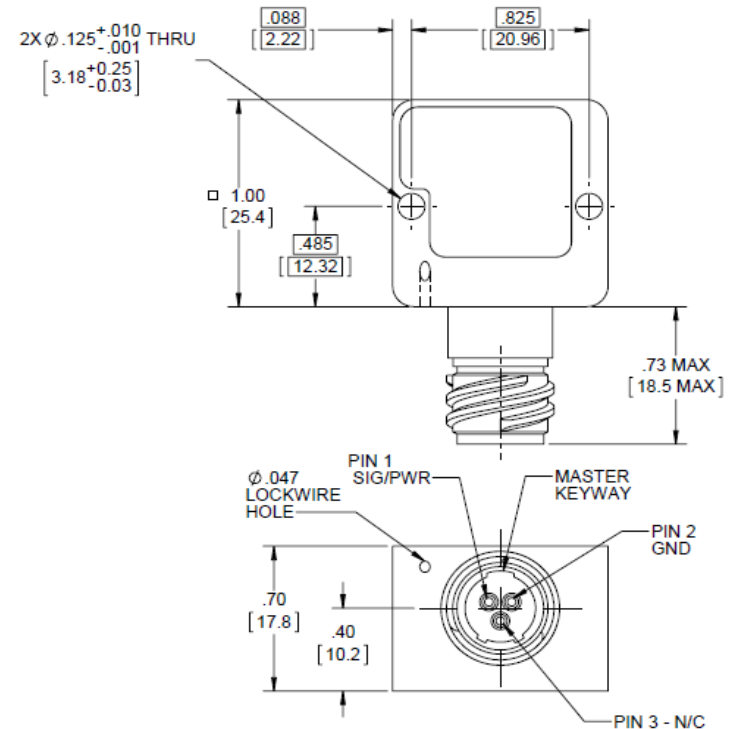
Refer to the performance specifications of the products in this family for detailed description.

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)

Notes:

- [1] Low pass first order filter, corner frequency at 300Hz.
- [2] Glenair P/N 805-006-13Z18-23PA. Mates with 805-001-16Z18-23SA and 805-002-16Z18-23SA
- [3] Over the rated temperature range.
- [4] -90% to +90% of Full Scale.



Units on the line drawing are in inches, dimensions in brackets [] are in millimeters. Refer to 127-7506A1 for more information.



21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax:818.700.7880 www.dytran.com
For permission to reprint this content, please contact info@dytran.com