

4

3

2

1

D

C

B

A

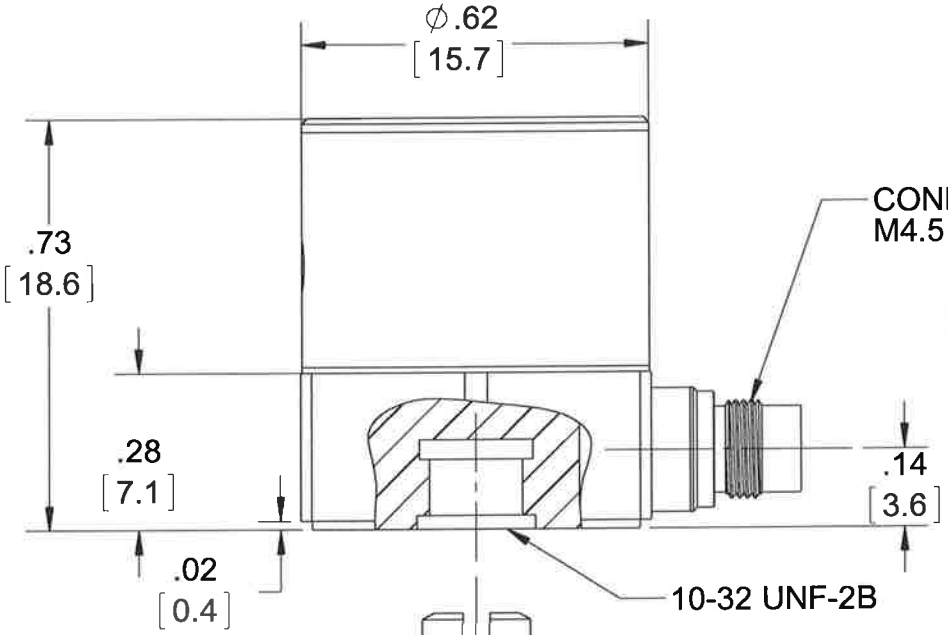
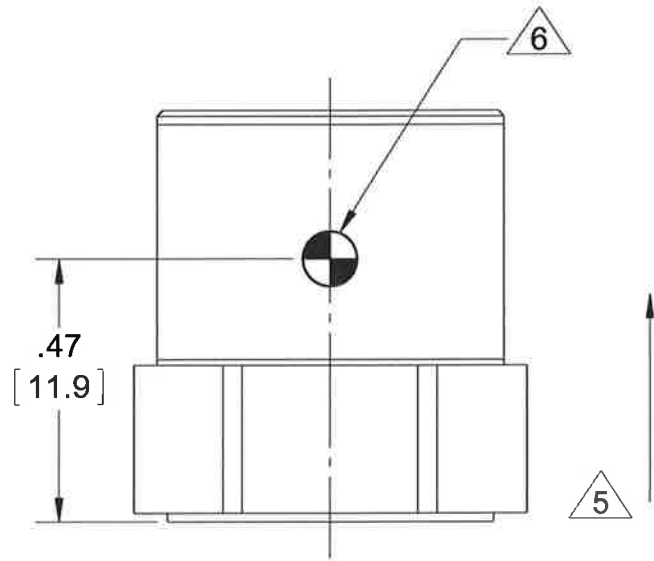
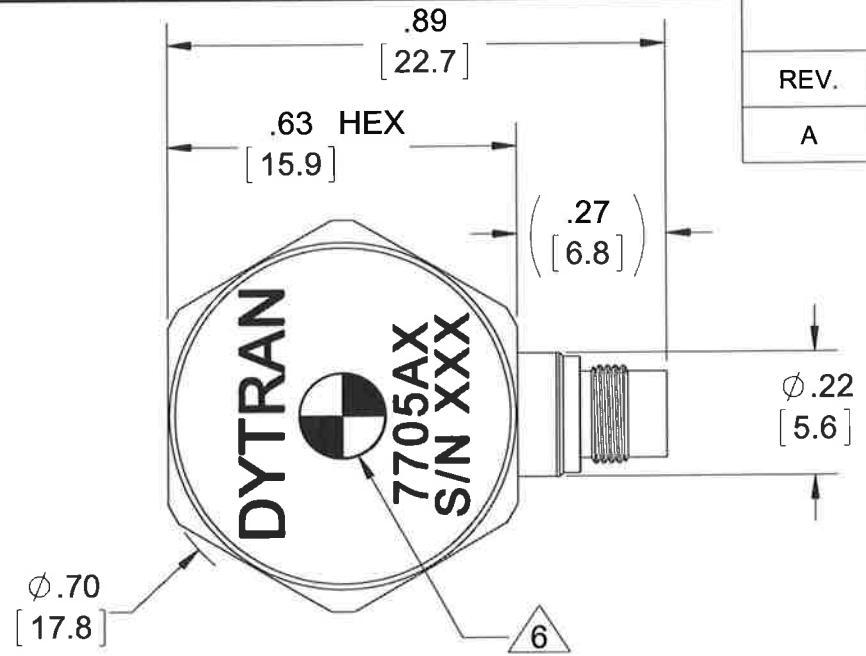
PROPRIETARY AND CONFIDENTIAL				
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MODEL	REV	ECN	DATE	INPUT RANGE
7705A1	A	10745	01/24/14	±200g
7705A2	A	10745	01/24/14	±40g
7705A3	A	10745	01/24/14	±20g

DWG NO 127-7705A

1

REV A

REVISIONS				
REV.	ECN	DESCRIPTION	BY/DATE	CHK APPR
A	10745	INITIAL RELEASE	JS 01/24/14	 AS



CONNECTOR, 4-PIN  
M4.5 X 0.35

PIN 4 - GROUND

PIN 3 - N/C

KEY

PIN 1 - SIG OUTPUT

PIN 2 - POWER

RECOMMENDED MOUNTING PREPARATION:  
PREPARE FLAT MOUNTING SURFACE,  $\phi$ .65 [16.5] MIN, FLAT TO .001 TIR.  
TAP 10-32 UNF-2B  $\nabla$ .200 [5.1] MIN. TORQUE TO 10-12 Lb-in.

- 6 MARKING DENOTES LOCATION OF SENSING ELEMENT'S CENTER OF MASS
- 5 ARROW INDICATES DIRECTION OF ACCELERATION FOR POSITIVE OUTPUT.
- 4 MOUNTING STUD, 10-32, MODEL 6200, SUPPLIED.
- 3 MATES WITH MODEL 6776AXX CABLE (XX = LENGTH IN FEET).

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.


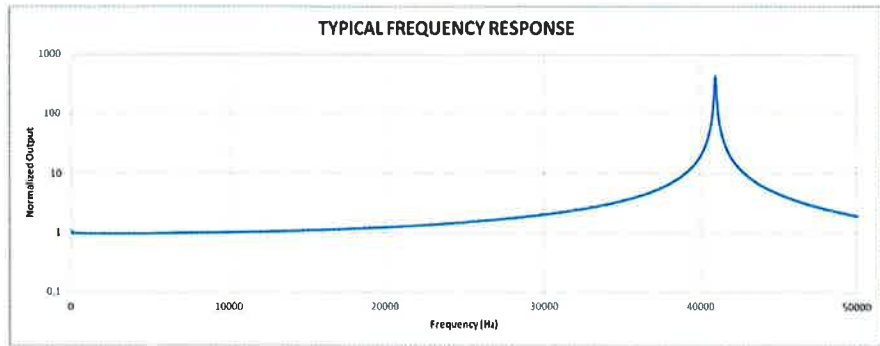
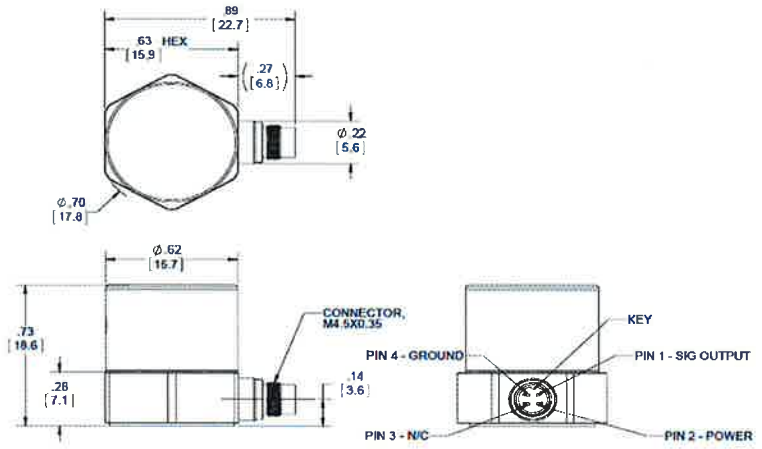
ALL MACHINED SURFACES. TOTAL RUNOUT WITHIN .005. BREAK SHARP EDGES .005 TO .010. MACHINED FILLET RADII .005 TO .015. WELDING SYMBOLS PER AWS A2.4. ABBREVIATIONS PER MIL-STD-12.


UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. DIMENSIONS IN BRACKETS [ ] ARE IN MILLIMETERS TOLERANCES ARE:		
DECIMALS	METRIC	ANGLES
.XX ±.03	.X ± 0.8	° ±1°
.XXX ±.010	.XX ±0.25	
APPROVALS		DATE
ORIG	LN	08/29/13
CHK		11/28/14
APP	AS	11/28/14
DO NOT SCALE DRAWING		

**MASTER**  
Chatsworth, CA  
ONLY IN RED

TITLE: **OUTLINE/INSTALLATION  
DRAWING, 7705A SERIES**

SIZE <b>B</b>	CAGE CODE <b>2W033</b>	DWG NO <b>127-7705A</b>	REV <b>A</b>
SCALE: 4:1	SHEET 1 OF 1		

Model Number 7705A3		PERFORMANCE SPECIFICATIONS				DOC NO PS7705A3				
		DUAL ELEMENT ACCELEROMETER				REV B, ECN 10971, 05/06/14				
		<div>• DUAL ELEMENT TECHNOLOGY</div> <div>• EXTENDED LOW FREQUENCY RESPONSE (0 Hz to 10kHz)</div> <div>• HERMETICALLY SEALED</div> <div>New type of accelerometer from Dytran Instruments Inc. combines the DC output of variable capacitance element with excellent high frequency response of piezoelectric sensor.</div> <div>Both outputs are electrically summed up and seamlessly superimposed on each other to provide the broadest frequency response from a single output pin.</div>				<b>This family also includes:</b>				
						Model	Sensitivity (mV/g)	Range (Gpeak)	Maximum Shock (Gpeak)	Noise Broadband (grms)
						7705A1	10	±200	5,000	0.004
						7705A2	50	±40	5,000	0.002
						Refer to the performance specifications of the products in this family for detailed description				
						<b>Supplied Accessories:</b> 1) Accredited calibration certificate (ISO 17025) 2) Model 6200 mounting stud (10-32 to 10-32) Qty. 1				
						<b>Notes:</b> [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] In the interest of constant product improvement, we reserve the right to change specifications without notice. [4] 0 to 1000Hz				
<b>PHYSICAL</b> Weight, Max. Mounting Connector Housing		Type Material								
		ENGLISH		SI						
		0.51	oz	14.5	grams					
		10-32 Tapped Hole		10-32 Tapped Hole						
		4-pin, M4.5X0.35		4-pin, M4.5X0.35						
		Titanium		Titanium						
<b>PERFORMANCE</b> Sensitivity, ±10% [1] Acceleration Range Frequency Response, ±10% Resonance Frequency Linearity [2] Transverse Sensitivity Output Noise, Broadband, Max. Phase shift mismatch, MAX Absolute phase shift, MAX [4] Base Strain Bias Offset		MAX								
		100	mV/g	10.2	mV/m/s <sup>2</sup>					
		±20	g's peak	±196	m/s <sup>2</sup> peak					
		0 to 10,000	Hz	0 to 10,000	Hz					
		>38	kHz	>38	kHz					
		1	% F.S.	1	% F.S.					
		<3	%	<3	%					
		0.001	Grms	0.0098	m/s <sup>2</sup> rms					
		+/-2	degrees	+/-2	degrees					
		+/-5	degrees	+/-5	degrees					
		0.0004	g/με	0.0039	m/s <sup>2</sup> /με					
		0.2	g's	1.96	m/s <sup>2</sup>					
<b>ENVIRONMENTAL</b> Maximum Mechanical Shock Bias Temperature Shift, Max [3] Bias Calibration Error Operating Temperature Thermal Sensitivity Coefficient Seal		MAX								
		5,000	Gpeak	49,050	m/s <sup>2</sup>					
		56	(ppm of span)/°F	101	(ppm of span)/°C					
		1.5	% of span	1.5	% of span					
		-60 to +250	°F	-51 to 121	°C					
		0.06	%/°F	0.12	%/°C					
		Hermetic		Hermetic						
<b>POWER</b> Compliance Voltage Current Range Output Bias Voltage, Typical Compliance Voltage Output Impedance, Nom. Power Supply Rejection Ratio		MAX								
		+5 to +28	VDC	+5 to +28	VDC					
		5 to 10	mA DC	5 to 10	mA DC					
		2.5	VDC	2.5	VDC					
		+5 to +28	VDC	+5 to +28	VDC					
		1	Ω	1	Ω					
		>65	dB	>65	dB					
										
										
						Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-7705A for more information.				



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