

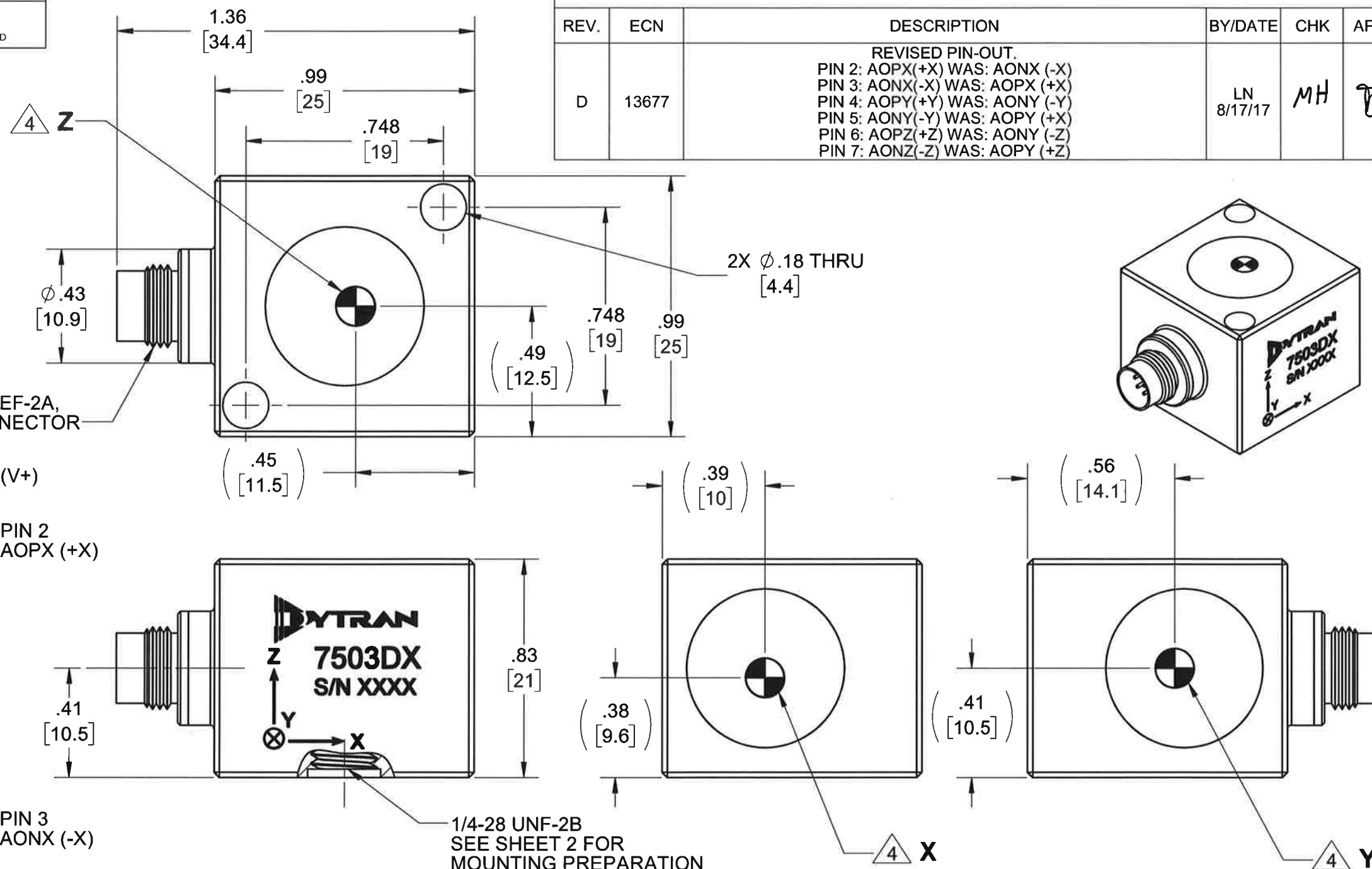
REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
D	13677	REVISED PIN-OUT. PIN 2: AOPX(+X) WAS: AONX (-X) PIN 3: AONX(-X) WAS: AOPX (+X) PIN 4: AOPY(+Y) WAS: AONY (-Y) PIN 5: AONY(-Y) WAS: AOPY (+X) PIN 6: AOPZ(+Z) WAS: AONY (-Z) PIN 7: AONZ(-Z) WAS: AOPY (+Z)	LN 8/17/17	MH	

Diagram of the 5/16-32 UNEF-2A, 9-PIN CONNECTOR. The connector is shown with its 9 pins and their corresponding functions:

- PIN 1 - (V+)
- PIN 2 AOPX (+X)
- PIN 3 AONX (-X)
- PIN 4 AOPY (+Y)
- PIN 5 AONY (-Y)
- PIN 6 AOPZ (+Z)
- PIN 7 AONZ (-Z)
- PIN 8 - (V-)
- PIN 9 - NC

The diagram also includes a KEY, a dimension of .41 [10.5], and a note: 5/16-32 UNEF-2A, 9-PIN CONNECTOR.



2. WEIGHT: 38 GRAMS, MAX.
1. MATERIAL: TITANIUM ALLOY.

NOTES: UNLESS OTHERWISE SPECIFIED

SCALE: 1:1	SHEET 1 OF 2
------------	--------------

4

3

DWG NO

127-7503D

SH

2

REV

D

2

1

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

D

D

C

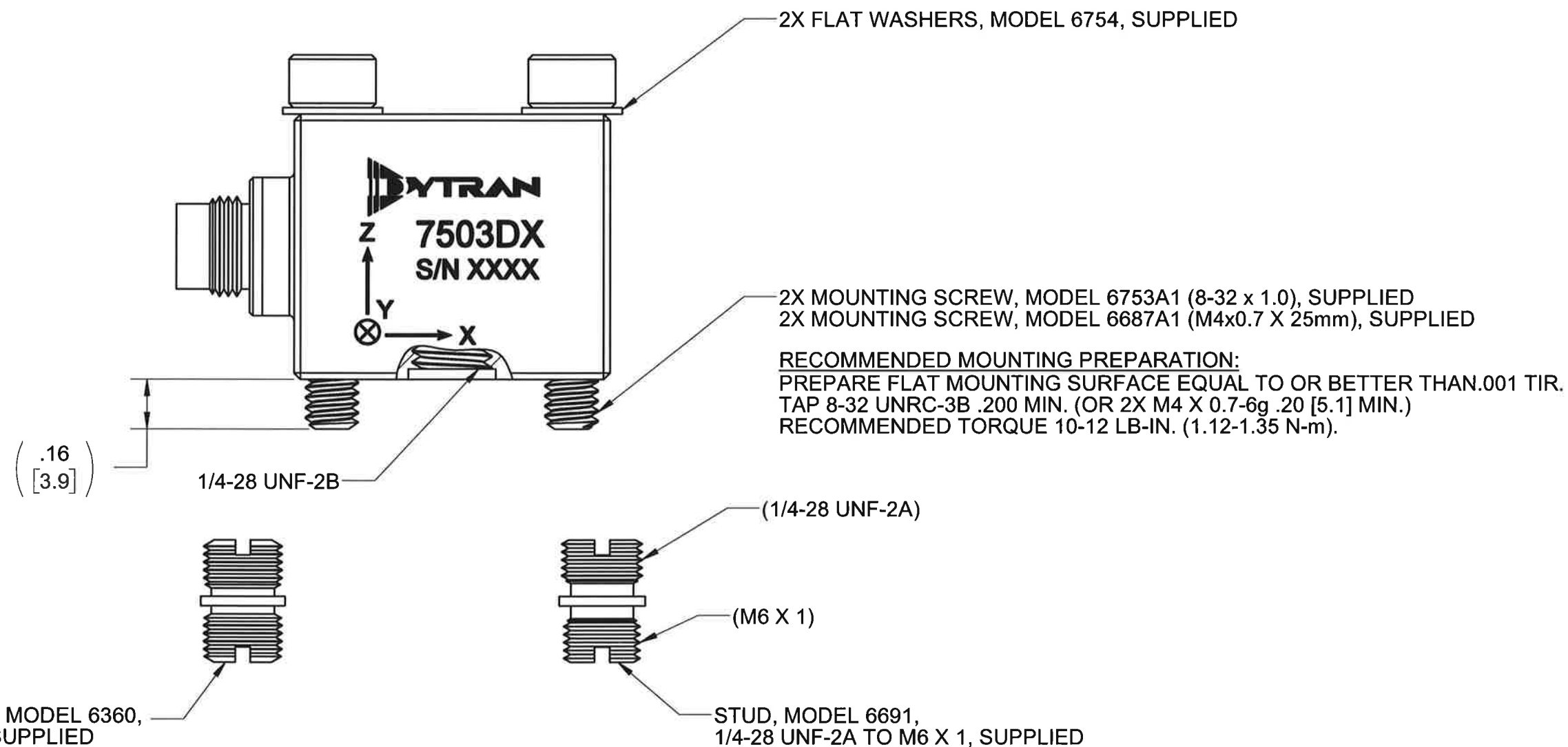
C

B

B

A

A



RECOMMENDED MOUNTING PREPARATION: MODEL 6366
PREPARE MOUNTING SURFACE, $\phi 1.25$ [31.2] MIN, FLAT TO .001 TIR.
TAP 1/4-28 UNF-2B ∇ .200 [5.1] MIN. TORQUE TO 12-15 Lb-in.

RECOMMENDED MOUNTING PREPARATION: MODEL 6691
PREPARE MOUNTING SURFACE, $\phi 1.25$ [31.2] MIN, FLAT TO .001 TIR.
TAP M6 X 1 ∇ .200 [5.1] MIN. TORQUE TO 12-15 Lb-in.

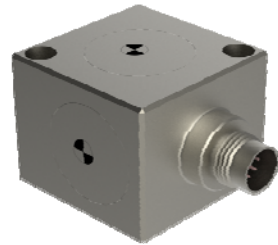
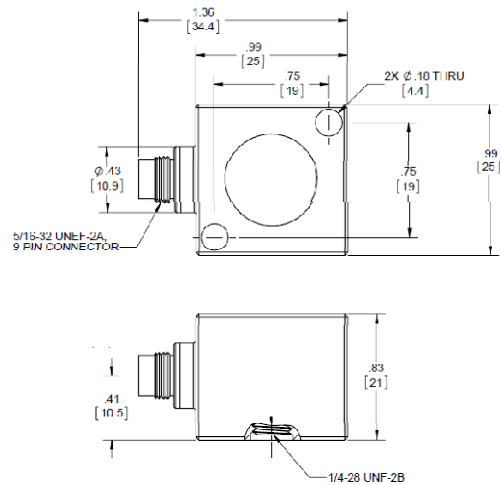
		MASTER ONLY IF IN RED	
TITLE: OUTLINE/INSTALLATION DWG, TRIAxIAL DC ACCELEROMETER, 7503D SERIES			
SIZE B	CAGE CODE 2W033	DWG NO 127-7503D	REV D
SCALE: 2:1		SHEET 2 OF 2	

4

3

2

1

Model Number 7503D1		PERFORMANCE SPECIFICATION				DOC NO PS7503D1	
		TRIAxIAL VARIABLE CAPACITANCE ACCELEROMETER				REV H, ECN 14692, 11/09/18	
		• VARIABLE CAPACITANCE TECHNOLOGY • ± 4V DIFFERENTIAL OUTPUT • HERMETICALLY SEALED • DC RESPONSE					
		ENGLISH		SI			
		Weight, Max	1.3	oz	38	grams	
		Connector	9-pin, 5/16-32 UNEF-2A	9-pin, 5/16-32 UNEF-2A			
		Material	Titanium Alloy	Titanium Alloy			
		Sensing Technology	MEMS	MEMS			
		PHYSICAL					
		Input Range	±2	g	±19.6	m/s ²	
		Frequency Response (±5%)	0 - 200	Hz	0 - 200	Hz	
		Frequency Response (±3dB)	0 - 400	Hz	0 - 400	Hz	
Resonant Frequency	>3000	Hz	>3000	Hz			
Sensitivity Differential, ±5% [1]	2000	mV/g	204	mV/m/s ²			
Output Noise, Differential, Typ	7	µ g rms/√ Hz	69	µ m/s ² /√ Hz			
Non-Linearity, Max [2]	0.5	% F.S	0.5	% F.S			
Cross Axis Sensitivity, Max	3	%	3	%			
Scale Factor Calibration Error, Max.	1	%	1	%			
Zero Measured Output	±50	mV	±50	mV			
ENVIRONMENTAL							
Maximum Mechanical Shock (0.1 ms)	±2000	gpk	±19620	m/s ² peak			
Bias Temperature Shift, Max [3]	111	(ppm of span)/°F	200	(ppm of span)/°C			
Bias Calibration Error, Max	0.5	% of span	0.5	% of span			
Operating Temperature Range	-67 to +257	°F	-55 to +125	°C			
Scale Factor Temperature Shift [3]	-111 to +111	ppm/°F	-200 to +200	ppm/°C			
Seal	Hermetic	Hermetic					
ELECTRICAL							
Output Common Mode Voltage, Typ	2.5	VDC	2.5	VDC			
Output Impedance	<10K	Ω	<10K	Ω			
Operating Voltage	+9 to +36	VDC	+9 to +36	VDC			
Operating Current (AOP & AON open), Max	35	mA Dc	35	mA Dc			
Power Supply Rejection Ratio	>65	dB	>65	dB			
Ground Isolation	>30	MΩ	>30	MΩ			
		This family also includes:					
Model	Input Range (g)	Frequency Response, ±3dB (Hz)	Sensitivity Differential, ±5% (mV/g)	Max.Shock (0.1ms) g (peak)	Noise Differential (µg/√Hz)		
7503D2	±5	0-500	800	2000	12		
7503D3	±10	0-1000	400	5000	18		
7503D4	±25	0-1400	160	5000	25		
7503D5	±50	0-2000	80	5000	50		
7503D6	±100	0-2500	40	5000	100		
7503D7	±200	0-3000	20	5000	200		
7503D8	±400	0-4000	10	5000	400		
7503D9	±5(X&Y), ±25(Z)	0-500(X&Y), 0-1400(Z)	800(X&Y), 160(Z)	2000	12(X&Y), 25(Z)		
7503D10	±5(X&Y), ±50(Z)	0-500(X&Y), 0-2000(Z)	800(X&Y), 80(Z)	2000	12(X&Y), 50(Z)		
Refer to the performance specifications of the products in this family for detailed description.							
Supplied Accessories:							
1) Accredited calibration certificate (ISO 17025)							
2) Mounting stud, Model 6360, 1/4-28 UNF-2A, Qty 1							
3) Mounting stud, Model 6691, 1/4-28 UNF-2A to M6 X 1, Qty 1							
4) Mounting screws, Model 6753A1, 8-32 x 1.0, Qty. 2							
5) Mounting screws, Model 6687A1, M4x0.7 x 25mm, Qty. 2							
6) Flat washers, Model 6754, Qty. 2							
Notes:							
[1] Single ended sensitivity is half of values shown. (Ref. at 100 Hz)							
[2] -90% to +90% of Full Scale.							
[3] Over the rated temperature range.							
[4] In the interest of constant product improvement, we reserve the right to change specifications without notice.							
							
Units on the line drawing are in inches. Refer to 127-7503D 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



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