

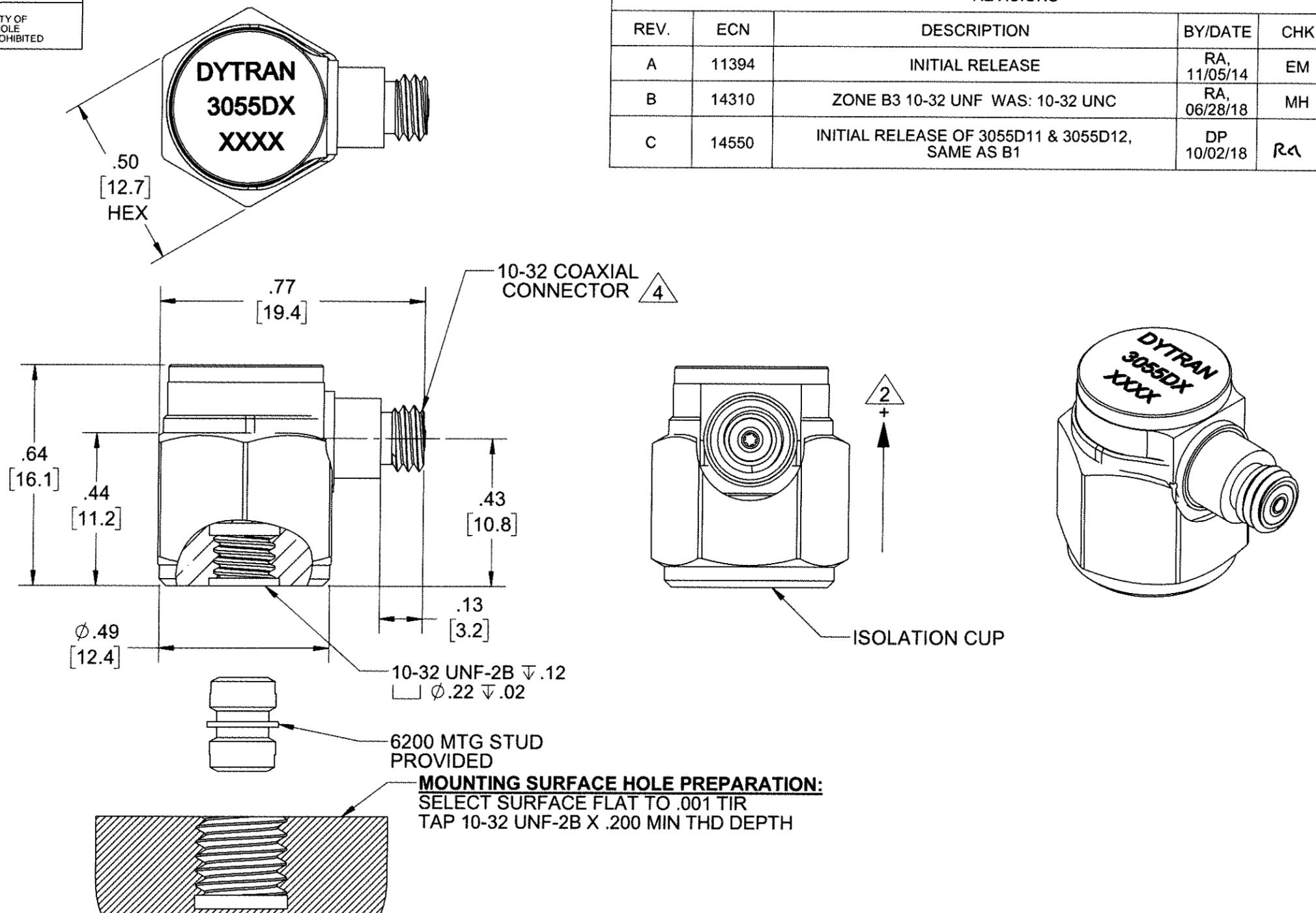
PROPRIETARY AND CONFIDENTIAL

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
A	11394	INITIAL RELEASE	RA, 11/05/14	EM	DV
B	14310	ZONE B3 10-32 UNF WAS: 10-32 UNC	RA, 06/28/18	MH	LN
C	14550	INITIAL RELEASE OF 3055D11 & 3055D12, SAME AS B1	DP 10/02/18	RA	LN

MODEL	SENSITIVITY
3055D1	10 mV/g
3055D2	100 mV/g
3055D3	500 mV/g
3055D4	50 mV/g
3055D5	20 mV/G
3055D6	200 mV/g
3055D11	1 mV/g
3055D12	5 mV/g



- 4 MATES WITH DYTRAN 6010AXX OR 6011AXX CABLE (XX=LENGTH IS FEET)
  - 3. WEIGHT: 10 GRAMS, MAX.
  - 2 ARROW INDICATES ACCELERATION DIRECTION FOR POSITIVE OUTPUT.
  - 1. MATERIAL: TITANIUM ALLOY
- NOTES: UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. DECIMALS TOLERANCES ARE: .XX  $\pm$  .01, .XXX  $\pm$  .005. ANGLES  $\pm$  1°.

APPROVALS		DATE
DRAWN	RA	05/29/14
DESIGN	RA	01/23/14
CHK	EM	12/17/14
APP	DV	12/17/14

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.

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION

**DYTRAN MASTER INSTRUMENTS, INC. Chatsworth, CA IN RED**

TITLE: **OUTLINE/INSTALLATION, ACCEL, ISOLATED, 10 MV/G, SIDE 10-32 CONN**

SIZE B	CAGE CODE 2W033	DWG NO 127-3055D	REV C
SCALE: 3:1	PART NO:	SHEET 1 OF 1	

<b>Model Number</b> 3055D2	<b>PERFORMANCE SPECIFICATIONS</b>	<b>DOC NO</b> PS3055D2
-------------------------------	-----------------------------------	---------------------------

	<b>IEPE ACCELEROMETER</b>		REV F, ECM 16259, 07/20/21
--	---------------------------	--	----------------------------



- HERMETICALLY SEALED
- BASE ISOLATED
- IDEAL LOW FREQUENCY RESPONSE

**PHYSICAL**  
 Weight  
 Connector  
 Mounting Provision  
 Material, Housing/Connector  
 Sensing Element  
 Element Style

ENGLISH		SI	
Weight	0.35 oz	10	grams
Connector	10-32	10-32	
Mounting Provision	10-32 X .150 ↓	10-32 X .150 ↓	
Material, Housing/Connector	Titanium	Titanium	
Sensing Element	Ceramic	Ceramic	
Element Style	Planar Shear	Planar Shear	

**PERFORMANCE**  
 Sensitivity, ± 5% [1] [5]  
 Range for ± 5 Volts Output  
 Frequency Response, ± 10%  
 Resonant Frequency  
 Broad Band Resolution  
 Spectral Noise  
 .1Hz  
 1Hz  
 10Hz  
 100Hz  
 1000Hz  
 10000Hz

Sensitivity, ± 5% [1] [5]	100	mV/g	10	mV/m/s <sup>2</sup>
Range for ± 5 Volts Output	50	g pk	491	m/s <sup>2</sup> pk
Frequency Response, ± 10%	.54 to 10000	Hz	.54 to 10000	Hz
Resonant Frequency	> 36	kHz	> 36	kHz
Broad Band Resolution	0.0004	g RMS	0.004	m/s <sup>2</sup> RMS
Spectral Noise	.1Hz	24.38	239	μm/s <sup>2</sup> RMS/√(Hz)
	1Hz	35.75	351	μm/s <sup>2</sup> RMS/√(Hz)
	10Hz	13.89	136	μm/s <sup>2</sup> RMS/√(Hz)
	100Hz	3.54	35	μm/s <sup>2</sup> RMS/√(Hz)
	1000Hz	1.24	12	μm/s <sup>2</sup> RMS/√(Hz)
	10000Hz	0.817	8	μm/s <sup>2</sup> RMS/√(Hz)
Linearity [2]	± 1	% F.S.	± 1	% F.S.
Maximum Transverse sensitivity	5	%	5	%
Strain Sensitivity @ 250μe	0.002	g/μe	0.02	m/s <sup>2</sup> /μe

**ENVIRONMENTAL**  
 Maximum Shock  
 Temperature Range  
 Seal

Maximum Shock	2000	g pk	19620	m/s <sup>2</sup> pk
Temperature Range	-67 to +225	°F	-55 to +107	°C
Seal	Hermetic		Hermetic	

**ELECTRICAL**  
 Supply Current Range [3]  
 Compliance Voltage Range  
 Output Impedance, Typ  
 Bias Voltage  
 Discharge Time Constant  
 Electrical Isolation

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 1.5	Sec	0.5 to 1.5	Sec
Electrical Isolation	10	GΩ,min	10	GΩ,min

**This family also includes:**

Model	Sensitivity (mV/g)	Frequency Response (Hz)	Time Constant (Sec)	Operating Temp (°F)
3055D1	10	1 to 10000	0.5 to 1.5	-67 to +250
3055D3	500	1 to 10000	0.5 to 1.5	-67 to +225
3055D4	50	1 to 10000	0.5 to 1.5	-67 to +250
3055D5	20	1 to 10000	0.5 to 1.5	-67 to +250
3055D6	200	1 to 10000	0.5 to 1.5	-67 to +225
3055D11	1	1 to 10000	0.5 to 1.5	-67 to +250
3055D12	5	1 to 10000	0.5 to 1.5	-67 to +250

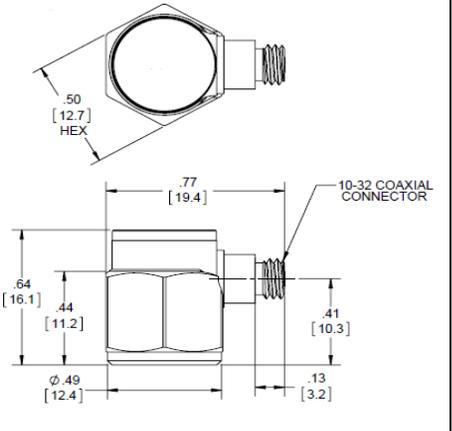
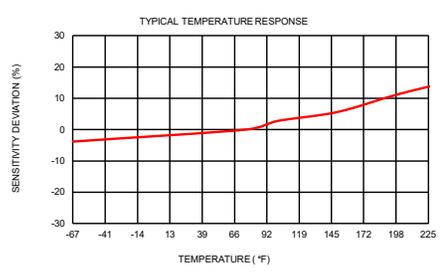
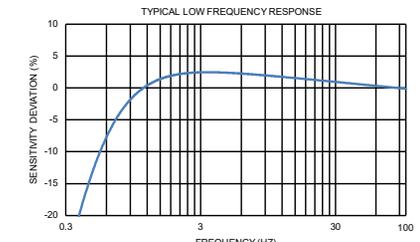
Refer to the performance specifications of the products in this family for detailed description

**Supplied Accessories:**

- 1) Accredited calibration certificate (ISO 17025)
- 2) Model 6200 mounting stud, qty 1

**Notes:**

- [1] Measured at 100Hz, 1 g RMS 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 right to change 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 over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.
- [5] All specifications are at room temperature unless otherwise specified.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3055D for more information.



21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax: 818.698.0362 www.dytran.com  
 For permission to reprint this content, please contact info@dytran.com