DWG NO 127-3420A1 SH 1 REV A

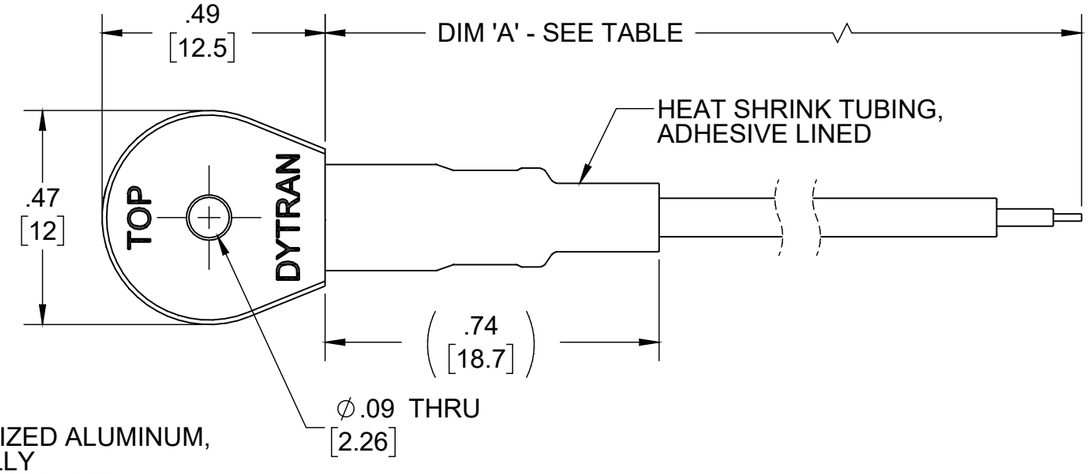
MODEL	SENSITIVITY	CABLE LENGTH - DIM 'A'
3420A1	10 mV/g	20FT + 0.5FT/-0
3420A1-45	10 mV/g	45FT + 2.5FT /-0

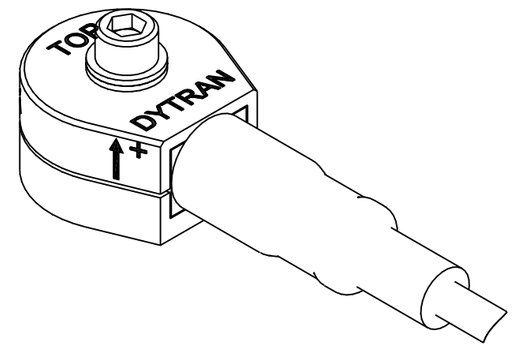
REVISIONS

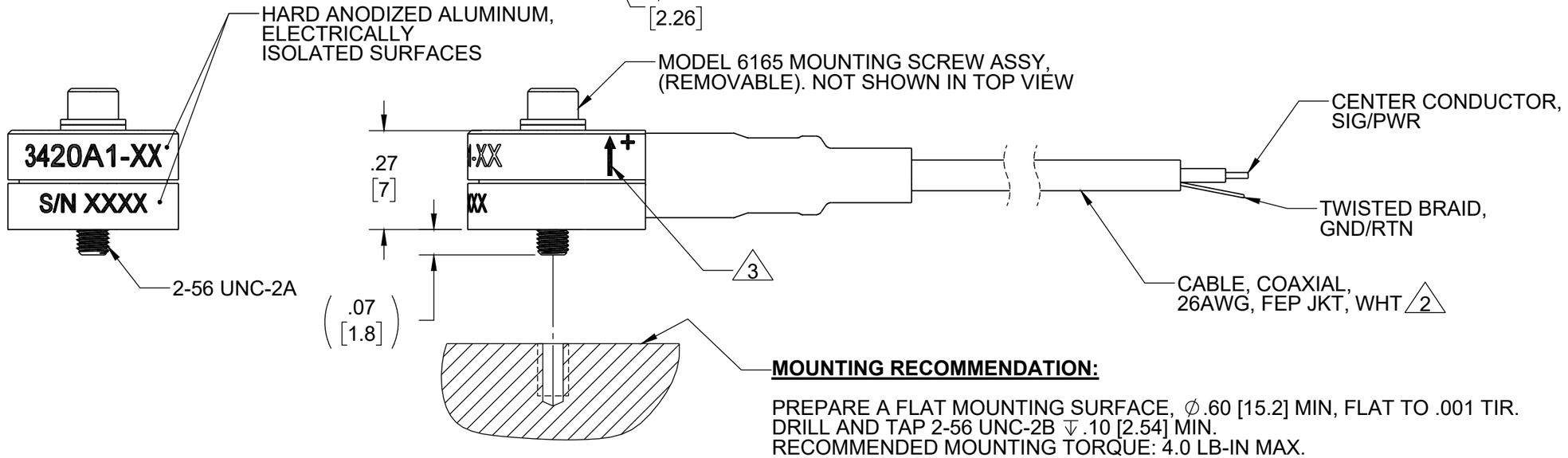
REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	16319	INITIAL RELEASE, SAME AS REV X3	AS 09/03/21	AM	DV

△2 COAXIAL CABLE, M27500-26RC1S09

WIRE	26-19/38 SILVER PLATED COPPER
WIRE INSULATION	PTFE
SHIELD	SILVER PLATED COPPER BRAID, 85% MIN COVERAGE
JACKET	WHITE, EXTRUDED FEP
DIAMETER	Ø.073" NOM
TEMP	200 DEG C WIRE RATED
VOLTAGE	600V







MOUNTING RECOMMENDATION:

PREPARE A FLAT MOUNTING SURFACE, ∅.60 [15.2] MIN, FLAT TO .001 TIR.
DRILL AND TAP 2-56 UNC-2B ↧.10 [2.54] MIN.
RECOMMENDED MOUNTING TORQUE: 4.0 LB-IN MAX.

△3 ARROW INDICATES DIRECTION OF ACCLERATION FOR POSITIVE OUTPUT

△2 SEE TABLE FOR CABLE SPECIFICATIONS

1. WEIGHT, LESS CABLE: 5.0 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.

63
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	02/12/21
CHK	KG	02/12/21
APP		

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION USA

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

TITLE: OUTLINE/INSTALLATION DWG, MODEL 3420A1

SIZE	CAGE CODE	DWG NO	REV
B	2W033	127-3420A1	A

SCALE: 3:1 SHEET 1 OF 1

172-0186 REV A

MODEL NUMBER	PERFORMANCE SPECIFICATION	DOC NO.
3420A1		PS3420A1
	ACCELEROMETER, IEPE,SINGLE AXIS	REV A, ECN 16319, 08/31/21

- **BASE ISOLATED**
- **THROUGH HOLE MOUNT FOR #2 SCREW**
- **INTEGRAL CABLE**
- **HERMETICALLY SEALED**

		ENGLISH		SI	
PHYSICAL					
Weight, Less Cable, Max		0.18	oz	5.0	grams
Mounting Provision		Thru hole for #2 screw		Thru hole for #2 screw	
Connector		Integral Cable		Integral Cable	
Housing	Material	Titanium		Titanium	
	Isolation	Base Isolated		Base Isolated	
Cable Type	Coaxial	26AWG, FEP Jacket		26AWG, FEP Jacket	
PERFORMANCE					
Sensitivity, ±10% [2]		10	mV/g	1.02	mV/ m/s^2
Range F.S. For ± 5 Volts Output		±500	g pk	±4905	m/s^2 pk
Frequency Response	± 5%	0.97 to 5,000	Hz	0.97 to 5,000	Hz
	± 15%	0.52 to 10,000	Hz	0.52 to 10,000	Hz
Resonant Frequency		> 25	kHz	> 25	kHz
Linearity [3]		< 1	%F.S	< 1	%F.S
Transverse Sensitivity, Max.		5	%	5	%
Equivalent Electrical Noise Floor [5]		0.007	g RMS	0.07	m/s^2 RMS
ENVIRONMENTAL					
Maximum Shock		2,000	±g pk	19,620	± m/s^2 pk
Temperature Range (Operational)		-60 to +250	°F	-51 to +121	°C
Seal		Hermetic		Hermetic	
Base Strain Sensitivity		0.03	g/με	0.01	m/s^2 / με
ELECTRICAL					
Supply Current [4]		2 to 20	mA	2 to 20	mA
Compliance Voltage Range		18 to 30	VDC	18 to 30	VDC
Output Impedance		< 100	Ω	< 100	Ω
Bias Voltage		7 to 12	VDC	7 to 12	VDC
Discharge Time Constant		0.5 to 2.0	sec	0.5 to 2.0	sec
Electrical Isolation, Min, Either Wire To Case		1	GΩ	1	GΩ
Output Signal Polarity		Positive		Positive	

This family also includes:

Model	Sensitivity (mV/g)	Range (g pk)	Oper. Temp (°F)	Cable Length (FT)
3420A1-45	10	500	-60 to 250	45

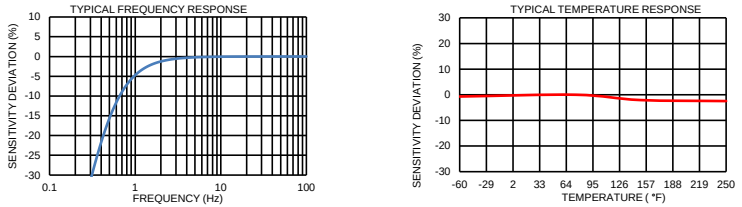
Refer to the performance specifications of the products in this family for detailed description.

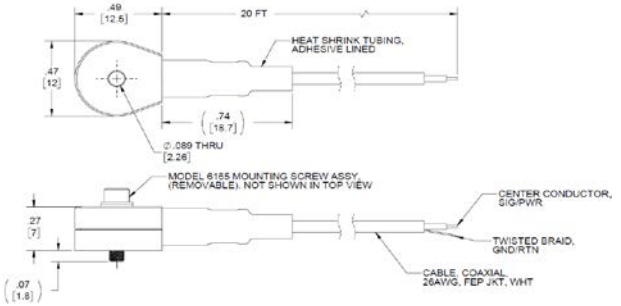
Supplied Accessories:

1) Mounting Screw, Model 6165, 2-56 UNC-2A x .375" long
2) Accredited Calibration Certificate (ISO 17025)

Notes:

[1] All specifications are at room temperature unless otherwise specified.
[2] Measured at 100 Hz, 1 g RMS per ISA RP 37.2.
[3] Measured using zero-based best straight-line method, % of F.S. or any lesser calibrated range in optimal lab conditions.
[4] Do not apply power to this device without current limiting, 20 mA MAX. To do so will destroy the integral IC amplifier.
[5] Typical. Not to exceed .010 g RMS [.10 m/s RMS]
[6] 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.





Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3420A1 for more information.

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