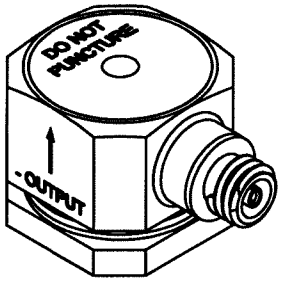
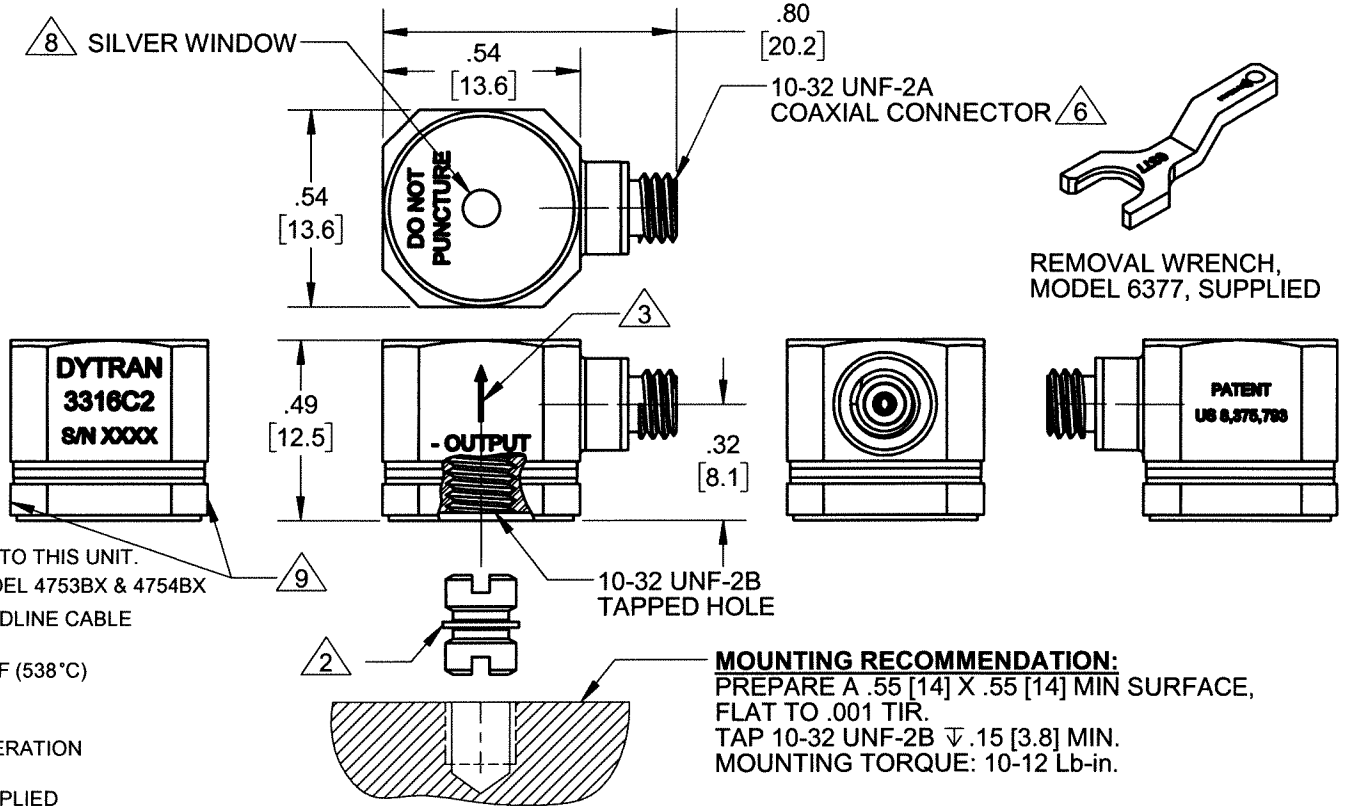
REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
C	13509	NOTE 4: CONNECTOR MATERIAL: WAS: 304L PASSIVATED IS: ALLOY X-750	AM 06/14/17	LN	AS
D	15602	REVISED RECOMMENDED ACCESSORIES	KG 02/27/20		





10. TRIAXIAL MOUNTING PLATE MODEL 6460 AVAILABLE
9. APPLY TORQUE ONLY ON BOTTOM FLATS FOR INSTALLATION & REMOVAL.
8. U.S. PATENT NUMBER US 8,375,793 APPLIES TO THIS UNIT.
7. RECOMMENDED CHARGE AMP: DYTRAN MODEL 4753BX & 4754BX
6. MATES WITH DYTRAN MODEL 60016AXX HARDLINE CABLE & 6979AXX HARDLINE INSULATED CABLE
5. MAXIMUM OPERATING TEMPERATURE: 1000°F (538°C)
4. HOUSING MATERIAL: ALLOY 600
   CONNECTOR MATERIAL: ALLOY X-750
3. ARROW DESIGNATES DIRECTION OF ACCELERATION FOR NEGATIVE OUTPUT
2. MOUNTING STUD 6200S (10-32 TO 10-32) SUPPLIED
1. WEIGHT: 13 GRAMS MAX

NOTES: UNLESS OTHERWISE SPECIFIED

USED ON	NEXT ASSY
APPLICATION	

THIRD ANGLE PROJECTION USA

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.
THDS PER MIL-S-7742.
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:

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

MATERIAL

FINISH

DO NOT SCALE DRAWING

CONTRACT NO.

APPROVALS		DATE
ORIG	LN	07/16/14
CHK	EP	10/08/15
APP	RT	10/08/15
APP		

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

MASTER ONLY IF IN RED

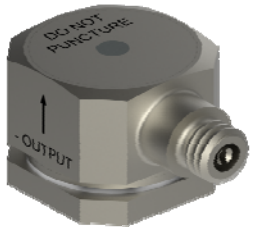
TITLE:

OUTLINE/INSTALLATION DWG, MODEL 3316C2

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-3316C2	D

SCALE: NONE | SOLIDWORKS | SHEET 1 OF 1

Model Number 3316C2	PERFORMANCE SPECIFICATION	DOC NO PS3316C2
	SINGLE AXIS CHARGE MODE ACCELEROMETER	REV F, ECN 15602, 03/02/20



- **Z-AXIS DIRECTIONAL OUTPUT**
- **BASE ISOLATED**
- **HERMETICALLY SEALED**
- **HIGH TEMPERATURE OPERATION**
- **LOW BASE STRAIN SENSITIVITY**

		ENGLISH		SI	
PHYSICAL					
Weight, Max.		0.46	oz	13	grams
Connector [3]	Type	10-32 Coaxial		10-32 Coaxial	
Mounting Provision	Tapped Hole	10-32 UNF-2B		10-32 UNF-2B	
Material	Housing	Alloy 600		Alloy 600	
	Connector	Alloy X-750		Alloy X-750	
Element Style	Material	Single Crystal		Single Crystal	
	Type	Planar Shear		Planar Shear	
PERFORMANCE					
Sensitivity [1]		1 to 2	pC/g	0.10 to 0.20	$pC/m/s^2$
Range F.S for ± 5 Volts Output		[7]	g	[7]	m/s^2
Frequency Range, ±5%		[4] to 3000	Hz	[4] to 3000	Hz
Frequency Range, ±10%		[4] to 5000	Hz	[4] to 5000	Hz
Resonant Frequency		> 17	kHz	> 17	kHz
Capacitance		120	pF	120	pF
Linearity [2]		± 1%	% F.S.	± 1%	% F.S.
Phase Response (±5°)		[4] to 3000	Hz	[4] to 3000	Hz
Maximum Transverse Sensitivity		5	%	5	%
Base Strain Sensitivity, Max.		0.0005	g/με	0.005	$m/s^2/\mu\varepsilon$
Insulation Resistance, (Connector pin to case)		at 75°F >1.0	MΩ	at 24°C >1.0	MΩ
		at 1000°F >0.25	MΩ	at 538°C >0.25	MΩ
Insulation Resistance (Case to Base)		at 75°F >10	MΩ	at 24°C >10	MΩ
		at 1000°F >1.0	MΩ	at 538°C >1.0	MΩ
Ground Isolation		Base Isolated		Base Isolated	
Output Polarity		Negative		Negative	
ENVIRONMENTAL					
Maximum Vibration		±6000	G, peak	±58860	m/s^2, peak
Maximum Shock		±10000	G, peak	±98100	m/s^2, peak
Temperature Range		-60 to+1000	°F	-51 to+538	°C
Seal		Hermetic		Hermetic	
Radiation Exposure Limit (Integrated Neutron Flux)		1.0E+10	N/cm^2	1.0E+10	N/cm^2
Radiation Exposure Limit (Integrated Gamma Flux)		1.0E+08	rad	1.0E+08	rad

This family also includes:

Model	Sensitivity (pC/g)	Range F.S (G's)	Output Polarity	Temperature (°F)
3316D1	1 to 2	[4] to 5000	X- Negative	-60 to +1000
3316D2	1 to 2	[4] to 5000	Y- Negative	-60 to +1000

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

Supplied Accessories:

1) Accredited calibration certificate (ISO 17025)
2) Model 6200S mounting stud (10-32 to 10-32), Qty. 1
3) Model 6377 Removal wrench, Qty. 1

Notes:

[1] Measured at 100Hz, 1 Grms per ISA RP 37.2

[2] Measured using zero-based straight line method, % of F.S. or any lesser range.

[3] Mates with Dytran cable 60016AXX hardline cable and 6979AXX hardline insulated cable.

[4] Low frequency response and phase response are a function of the discharge time constant of the charge amplifier used. See graph below for example.

[5] 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.

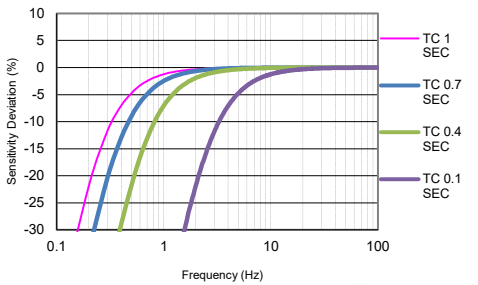
[6] Recommended charge amplifier: Dytran Models 4753B & 4754B, Series.

[7] This parameter depends on the gain settings of charge amplifier used

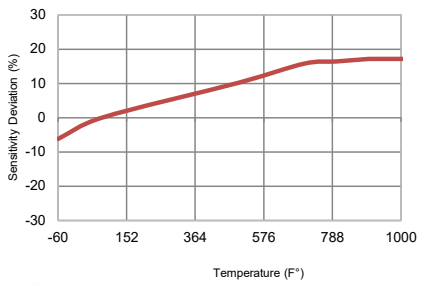
[8] U.S. Patent number US 8,375,793 B2 applies to this unit.

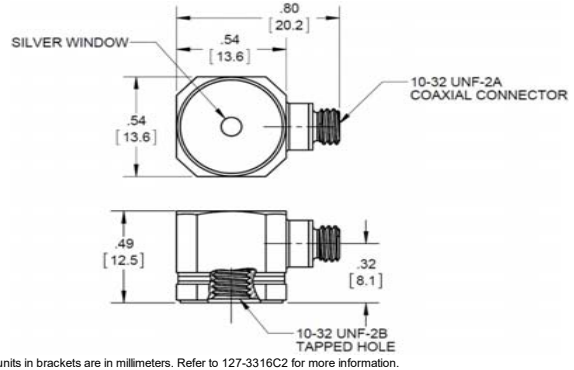
[9] Triaxial mounting base model 6460 available.

TYPICAL LOW FREQUENCY RESPONSE



TYPICAL TEMPERATURE RESPONSE





Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3316C2 for more information.

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