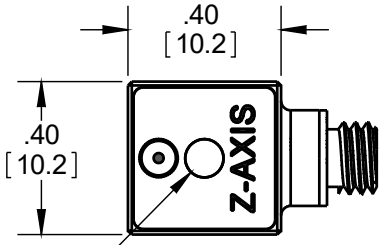
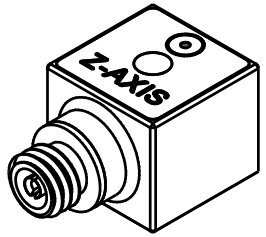
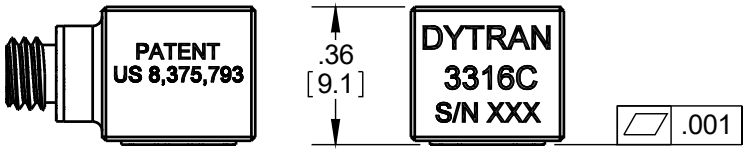
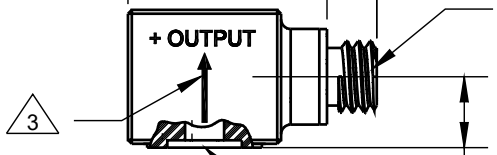
REVISIONS

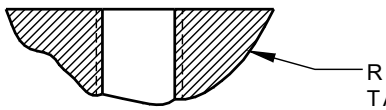
REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
F	15602	REVISED RECOMMENDED ACCESSORIES	KG 02/24/20	DP	LN
G	15702	REVISED TOP MARKINGS	DP 04/22/20	SEE PDM	SEE PDM











RECOMMENDED MOUNTING PREPARATION:
TAP 10-32 X .140 MIN DEEP. ASSURE THE SURFACE FLATNESS BETTER THAN .001 TIR.
MOUNTING TORQUE: 6-8 Lb-in

10. U.S. PATENT NUMBER US 8,375,793 APPLIES TO THIS UNIT.
9. ISOLATION BASE MODEL 6998 & 6759 AVAILABLE
8. RECOMMENDED CHARGE AMP: DYTRAN MODEL 4752BX & 4754BX
7. MAXIMUM OPERATING TEMPERATURE: 900°F (482°C)
6. MATES WITH DYTRAN MODEL 60016AXX HARDLINE CABLE & 6979AXX HARDLINE INSULATED CABLE
5. HOUSING MATERIAL: ALLOY 600
   CONNECTOR MATERIAL: ALLOY X-750
4. WEIGHT: 6 GRAMS MAX
3. ARROW DESIGNATES ACCELERATION DIRECTION FOR POSITIVE OUTPUT
2. MOUNTING STUD 6584 (5-40 TO 10-32) SUPPLIED
1. SENSITIVITY: 1 TO 2 pC/g

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	DV	09/10/08
CHK	DV	12/06/11
APP	ANS	12/06/11
APP		

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

TITLE:

OUTLINE/INSTALLATION DRAWING, 3316C SERIES

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-3316C	G

SCALE: NONE | SOLIDWORKS | SHEET 1 OF 1

Model Number 3316C	PERFORMANCE SPECIFICATION	DOC NO PS3316C
	SINGLE AXIS CHARGE MODE ACCELEROMETER	REV K, ECN 15702, 04/23/20

- **MINIATURE SIZE**
- **HERMETICALLY SEALED**
- **HIGH TEMPERATURE OPERATION**

This family also includes:

Model	Sensitivity (pC/g)	Output Polarity	Temperature (°F)
3316C1	1 to 2	Negative when mounted on its base	-60 to +900

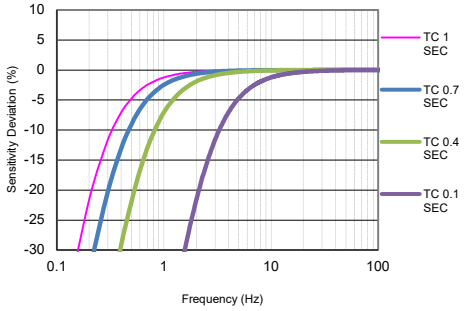
Refer to the performance specifications of the products in this family for detailed description.

Supplied Accessories:
1) Accredited calibration certificate (ISO 17025)
2) Model 6584 mounting stud (5-40 to 10-32), qty 1

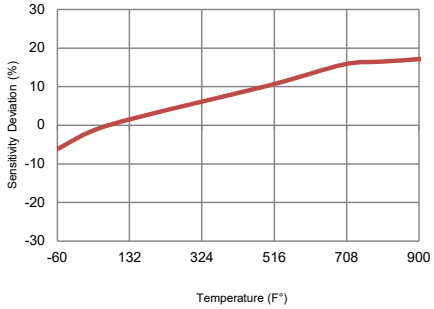
Notes:
[1] Measured at 100Hz, 10 Grms per ISA RP 37.2
[2] Measured using zero-based straight line method, % of F.S. or any lesser range.
[3] Mates with Dytran cable 60016AXX hardline cable and 6979AXX hardline insulated cable.
[4] Low frequency response and phase response are a function of the discharge 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] Isolation mounting base model 6759 (triaxial) and 6998 (uniaxial) are available.
[8] U.S. Patent number US 8,375,793 B2 applies to this unit.
[9] This parameter depends on the gain settings of the charge amplifier used.

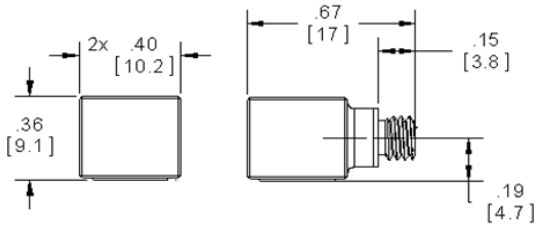
		ENGLISH		SI	
PHYSICAL					
Weight, Max		0.21	oz	6.0	grams
Size	Square x Height	.40 x .36	Inches	10.16 x 9.10	mm
Connector [3]	Type	10-32 Coaxial		10-32 Coaxial	
Mounting Provision : Tapped Hole		5-40 UNC-2B		5-40 UNC-2B	
Material	Housing	Alloy 600		Alloy 600	
	Connector	Alloy X-750		Alloy X-750	
Element 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		[9]	G's	[9]	m/s^2
Frequency Range, ±10%		[4] to 10000	Hz	[4] to 10000	Hz
Resonant Frequency		> 45	kHz	> 45	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	%
Strain Sensitivity, Max		0.003	g/με	0.03	m/s^2/με
Insulation resistance, (Connector pin to case)		at 75 °F > 5	MΩ	at 75 °F > 5	MΩ
		at 900 °F > 0.25	MΩ	at 900 °F > 0.25	MΩ
Coefficient of Thermal Sensitivity		0.02	%F	0.02	%F
Ground Isolation		Case Ground		Case Ground	
ENVIRONMENTAL					
Maximum Vibration		±6000	G, peak	±5886	m/s^2, peak
Maximum Shock		±10000	G, peak	±49050	m/s^2, peak
Temperature Range		-60 to+900	°F	-51 to+482	°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

TYPICAL LOW FREQUENCY RESPONSE



TYPICAL TEMPERATURE RESPONSE





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

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