

## PROPRIETARY AND CONFIDENTIAL

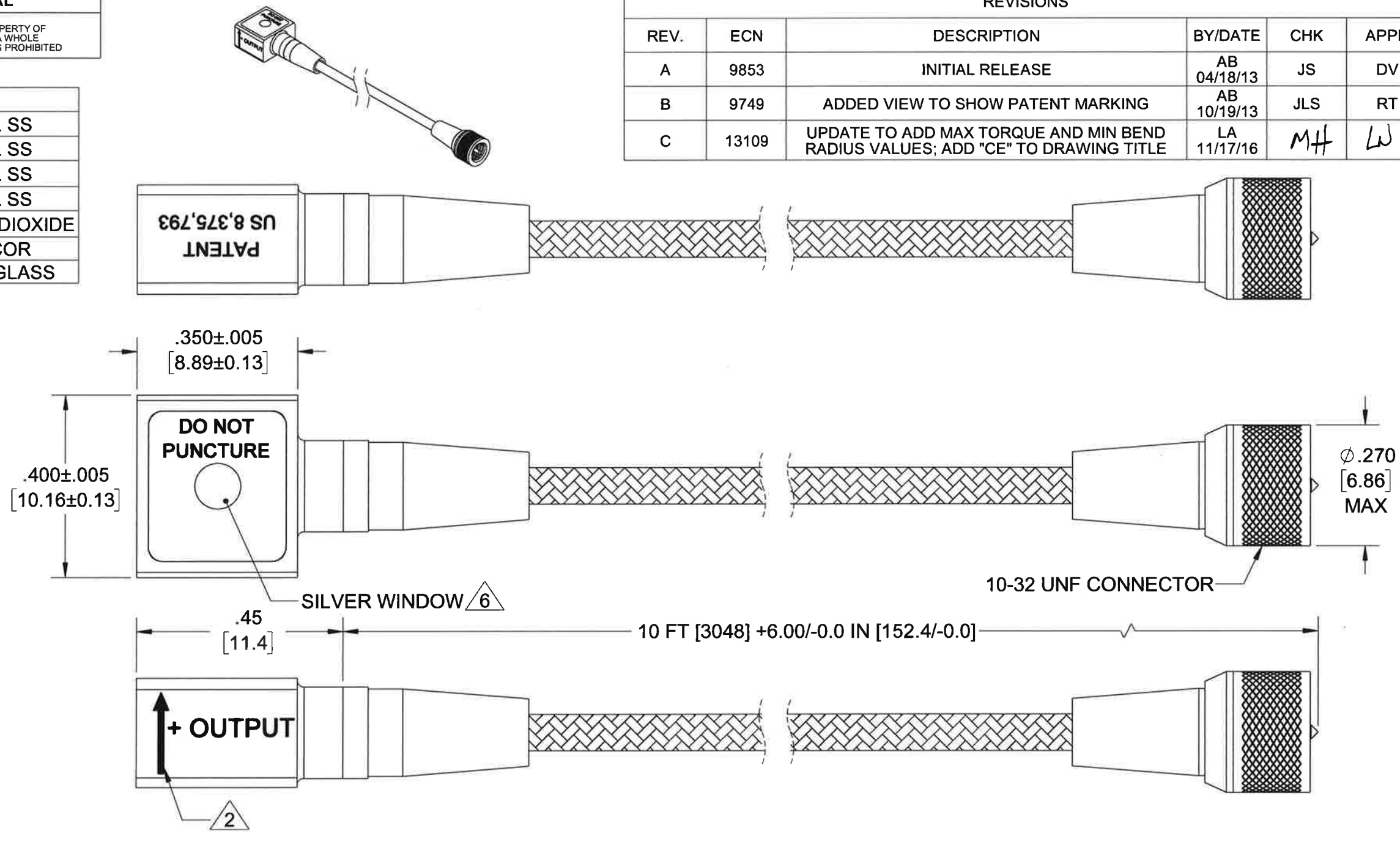
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## MATERIALS

JACKET	304L SS
NUT	304L SS
STRAIN RELIEF	304L SS
PIN	304L SS
CABLE INSULATOR	SILICON DIOXIDE
CONNECTOR INSULATOR	MACOR
SLEEVING	FIBERGLASS

## REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	9853	INITIAL RELEASE	AB 04/18/13	JS	DV
B	9749	ADDED VIEW TO SHOW PATENT MARKING	AB 10/19/13	JLS	RT
C	13109	UPDATE TO ADD MAX TORQUE AND MIN BEND RADIUS VALUES; ADD "CE" TO DRAWING TITLE	LA 11/17/16	MH	W



6. MINIMUM BEND RADIUS: 1.4 INCH.

5. MAXIMUM TORQUE: 8 LB-IN.

6 U.S. PATENT NUMBER US 8,375,793 APPLIES TO THIS UNIT.

5. MAXIMUM OPERATING TEMPERATURE: 1000°F (538 °C).

4. HOUSING MATERIAL: ALLOY 600.

3. WEIGHT (LESS CABLE): 7 GRAMS.

2 ARROW DESIGNATES ACCELERATION DIRECTION FOR POSITIVE OUTPUT.

1. SENSITIVITY: 1 TO 2 pC/g.

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.

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	AB	04/18/13
CHK	JS	07/13/13
APP	DV	07/18/13

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION  
USA

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

TITLE: **OUTLINE/INSTALLATION  
DRAWING, "CE" CERTIFIED,  
3316M5**

SIZE <b>B</b>	CAGE CODE <b>2W033</b>	DWG NO <b>127-3316M5</b>	REV <b>C</b>
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SCALE: 2:1

SHEET 1 OF 1

Model Number 3316M5	PERFORMANCE SPECIFICATION			DOC NO PS3316M5
	SINGLE AXIS CHARGE MODE ACCELEROMETER			REV H, ECN 14095, 03/14/18



- MINIATURE SIZE
- HERMETICALLY SEALED
- HIGH TEMPERATURE OPERATION
- INTEGRAL HARDLINE CABLE

PHYSICAL

Weight, Max (Less Cable)  
Mounting Provision  
Material  
Element Style

Housing  
Material  
Type

ENGLISH		SI	
0.25	oz	7.0	grams
Adhesive Mount		Adhesive Mount	
Alloy 600		Alloy 600	
Single Crystal		Single Crystal	
Planar Shear		Planar Shear	

PERFORMANCE

Sensitivity [1]  
Range F.S for  $\pm 5$  Volts Output  
Frequency Range,  $\pm 10\%$   
Resonant Frequency  
Capacitance  
Linearity [2]  
Phase Response ( $\pm 5^\circ$ )  
Maximum Transverse sensitivity  
Strain Sensitivity  
Insulation resistance, (Connector pin to case)  
  
Coefficient of Thermal Sens.  
Ground Isolation

1 to 2	pC/g	0.10 to 0.20	pC/m/s <sup>2</sup>
[7]	G's	[7]	m/s <sup>2</sup>
[3] to 5000	Hz	[3] to 5000	Hz
> 45	kHz	> 45	kHz
120	pF	120	pF
$\pm 1\%$	% F.S.	$\pm 1\%$	% F.S.
[3] to 3000	Hz	[3] to 3000	Hz
5	%	5	%
0.002	g/ $\mu$ E	0.02	m/s <sup>2</sup> / $\mu$ E
at 75°F >1.0E8	$\Omega$	at 75°F >1.0E8	$\Omega$
at 1000°F >2.5E5	$\Omega$	at 1000°F >2.5E5	$\Omega$
0.02	%F	0.02	%F
Case Ground		Case Ground	

ENVIRONMENTAL

Maximum Vibration  
Maximum Shock  
Temperature Range  
Seal  
Radiation Exposure Limit (Integrated Neutron Flux)  
Radiation Exposure Limit (Integrated Gamma Flux)

$\pm 6000$	G, peak	$\pm 58860$	m/s <sup>2</sup> , peak
$\pm 10000$	G, peak	$\pm 98100$	m/s <sup>2</sup> , peak
-60 to+1000	°F	-51 to+538	°C
Hermetic		Hermetic	
1.0E+10	N/cm <sup>2</sup>	1.0E+10	N/cm <sup>2</sup>
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)

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

Supplied Accessories:

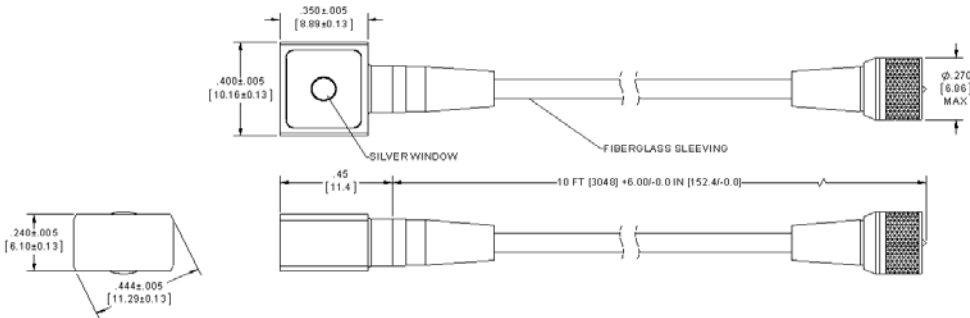
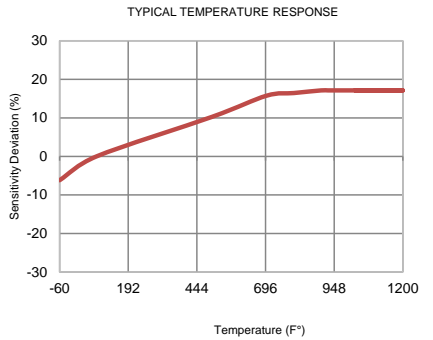
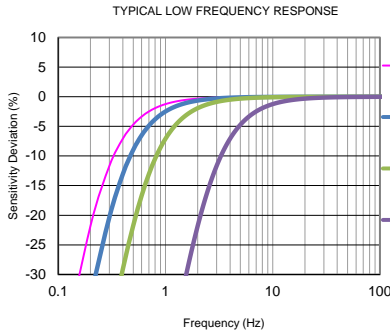
1) Accredited calibration certificate (ISO 17025)

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] Low frequency response and phase response are a function of the discharge time constant of the charge amplifier used.  
See graph below for example.  
[4] In the interest of constant product improvement, we reserve the right to change specifications without notice.  
[5] Recommended charge amplifier: Dytran model 4754B, Series.  
[6] U.S. Patent number US 8,375,793 B2 applies to this unit.  
[7] This parameter depends on the gain settings of the charge amplifier used.

Certifications:

CE certified 



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3316M5 for more information.



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