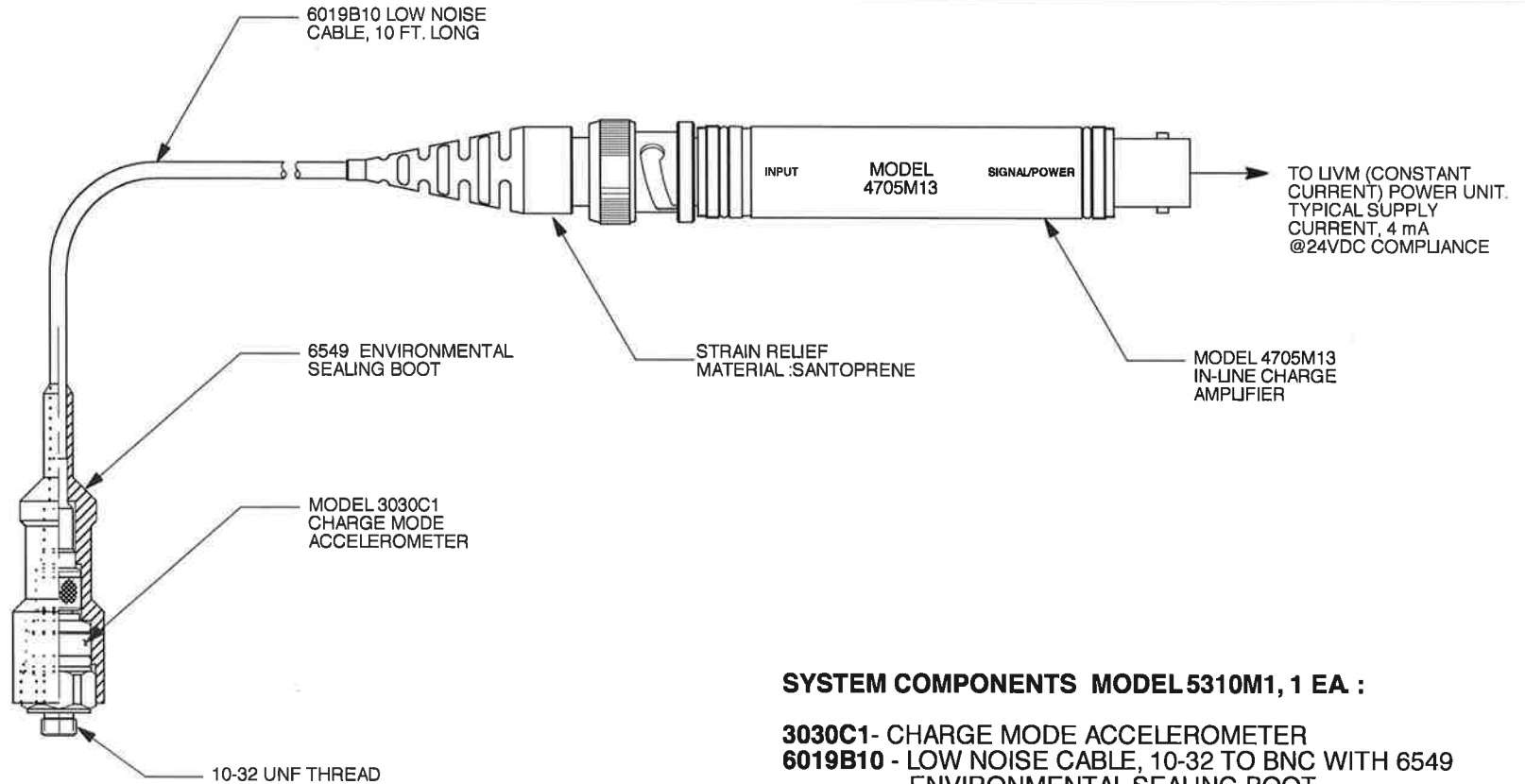
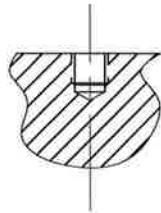


REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	12356	ADDED VIEW OF STRAIN RELIEF AND CALL OUT	JS 11/23/15	LA	LN



**SYSTEM COMPONENTS MODEL 5310M1, 1 EA :**

- 3030C1** - CHARGE MODE ACCELEROMETER
- 6019B10** - LOW NOISE CABLE, 10-32 TO BNC WITH 6549 ENVIRONMENTAL SEALING BOOT
- 4705M13** - IN-LINE CHARGE AMPLIFIER



**PORT PREPARATION:**  
 PREPARE FLAT SURFACE OVER Ø .500 AREA.  
 AT CENTER DRILL #21(Ø .159) X .25 DEEP MIN  
 BOTTOM TAP #10-32 UNC-2B X .150 DEEP MIN

**ALL PART NUMBER LETTER SUFFIXES ARE TO BE INTERPRETED AS FOLLOWS:**  
 I.E. - 107-0000-01(X)

M - MACHINED ONLY (UNPLATED)  
 P - PLATED/PAINTED  
 H - HEAT TREATED

G - MATERIAL HAS BEEN GRAINED  
 S - MATERIAL HAS BEEN SAWCUT  
 E - ENVIRONMENTAL TEST

EXCEPT AS OTHERWISE NOTED	
ALL DIMENSIONS IN INCHES	
TOLERANCE: XXX ± .005	XX ± .01
SURFACE FINISH EXCEPT AS NOTED	63
BREAK EDGES TO DEBURR RADIUS OR CHAMFER	.003
FILLETES -	.005 MAX RAD.
THESE DIAS ⊙ TO	T.I.R.

		<h1>MASTER ONLY IF IN RED</h1>		CHATSWORTH, CA	
SCALE	1X	REV	-	DATE	-
DATE	7/1/99	PART NO.	MODEL 5310M1		
DRAWN	N.C.	CHECKED	R.A.	MAT'L	
APPROVED		NEXT ASSEMBLY		USED ON	5310M1
TITLE				DWG NO.	
<b>OUTLINE/INSTALLATION DRAWING, SYSTEM MODEL 5310M1</b>				<b>127-5310M1</b>	
SHEET 1 OF 1					

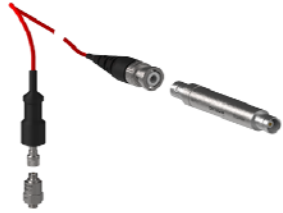
Model Number  
5310M1

## PERFORMANCE SPECIFICATIONS

DOC NO  
PS5310M1

Single Axis Accelerometer with In-line Charge Amplifier

REV A, ECN 13788, 10/10/17



- HIGH TEMPERATURE VIBRATION MEASUREMENT SYSTEM
- HERMETICALLY SEALED ACCELEROMETER
- MINITURE SIZE

This family also includes:

Model	Sensitivity (mV/g)	Frequency Response (Hz)	Time Constant (Sec)	Operating Temp (°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] Measure at 100 Hz., 1 Grms per ISA RP 37.2.
- [2] Measured using zero-based best 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

### PHYSICAL

Weight (Accelerometer), Max  
Weight (Charge Amplifier), Max  
Mounting Provision, Integral Stud  
Cable Length, From Accelerometer to Charge Amplifier  
Cable Type  
Charge Amplifier Connector  
Material, Accelerometer

ENGLISH		SI	
0.2	oz	7	grams
1.4	oz	40	grams
10-32		10-32	
10	feet	3.0	meters
Low Noise Coaxial		Low Noise Coaxial	
BNC Jack		BNC Jack	
300 Series S.S.		300 Series S.S.	

### PERFORMANCE (SYSTEM)

Sensitivity, ±10% [1]  
Range F.S. For ± 5 Volts Output  
Frequency Range, ± 5%  
Resonant Frequency  
Broad Band Resolution  
Spectral Noise  
Linearity [2]  
Maximum Transverse Sensitivity

10	mV/g	1.0	mV/m/s <sup>2</sup>
±500	g peak	±4905	m/s <sup>2</sup> peak
10-10,000	Hz	10-10,000	Hz
> 30	kHz	> 30	kHz
0.022	Grms	0.22	m/s <sup>2</sup> rms
1Hz	Grms/√(Hz)	0.02	m/s <sup>2</sup> rms /√(Hz)
10Hz	Grms/√(Hz)	0.02	m/s <sup>2</sup> rms /√(Hz)
100Hz	Grms/√(Hz)	0.008	m/s <sup>2</sup> rms /√(Hz)
1000Hz	Grms/√(Hz)	0.002	m/s <sup>2</sup> rms /√(Hz)
10000Hz	Grms/√(Hz)	0.001	m/s <sup>2</sup> rms /√(Hz)
± 2	% F.S.	± 2	% F.S.
5	%	5	%

### ENVIRONMENTAL

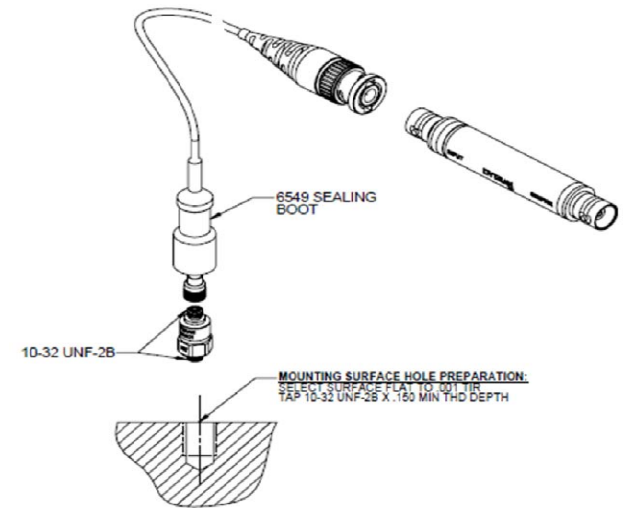
Maximum Vibration  
Maximum Shock  
Temperature Range (Accelerometer)  
Temperature Range (Charge Amplifier)  
Seal, (Accelerometer and Charge Amplifier)  
Coefficient of Thermal Sensitivity

600	Gpeak	5886	m/s <sup>2</sup> peak
3000	Gpeak	29430	m/s <sup>2</sup> peak
-148 to +500	°F	-100 to 260	°C
-50 to +185	°F	-46 to 85	°C
Hermetic		Hermetic	
.03	%/°F	0.05	%/°C

### ELECTRICAL

Supply Current, Max [3]  
Compliance Voltage Range  
Output Impedence, TYP.  
Bias Voltage  
Discharge Time Constant  
Output Signal Polarity (Acceleration Toward Top)

2 to 20	mA	2 to 20	mA
+14 to +30	Volts	+14 to +30	Volts
100	Ω	100	Ω
8 to 12	VDC	8 to 12	VDC
0.05 to 0.2	Sec	0.05 to 0.2	Sec
Positive		Positive	



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-5310M1 for more information.



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