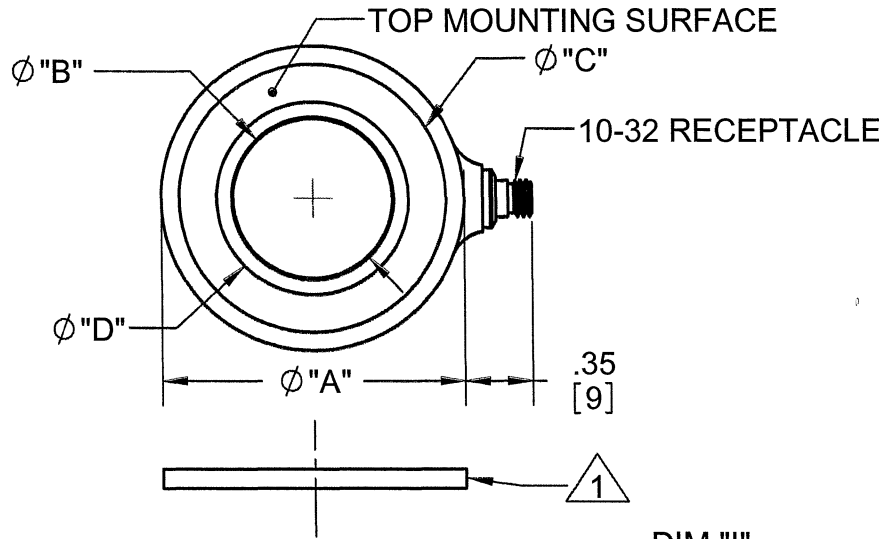


**PROPRIETARY AND CONFIDENTIAL**

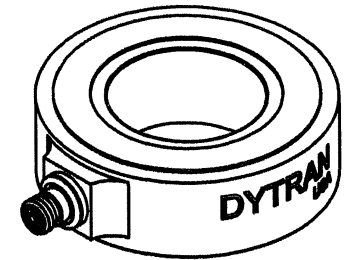
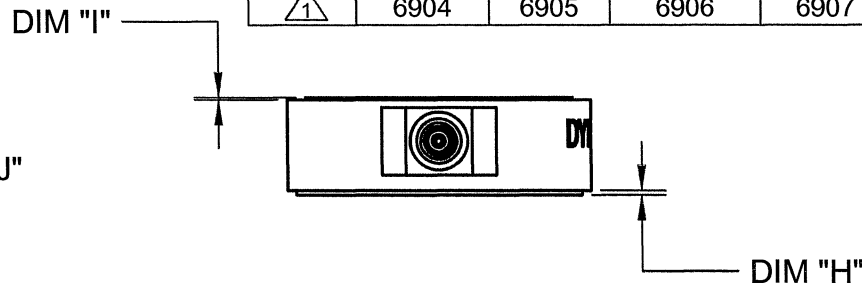
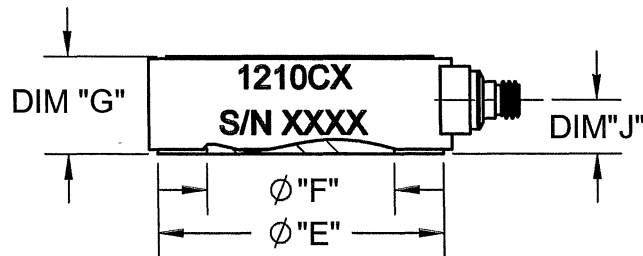
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**REVISIONS**

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
E	7484	ADDED DIMENSIONS ON MOUNTING SURFACES	RT 04/11/2011	<i>[Signature]</i>	<i>[Signature]</i>



MODEL	1210C1	1210C2	1210C3	1210C4	1210C5	1210C6	1210C7
Ø A	.65[16.5]	.87[22.1]	1.10[27.9]	1.34[34]	1.58[40.1]	2.05[52.1]	2.95[74.9]
Ø B	.26[6.6]	.41[10.4]	.52[13.2]	.66[16.8]	.83[21.1]	1.03[26.2]	1.61[40.9]
Ø C	.56[14.2]	.75[19.0]	.97[24.6]	1.18[29.9]	1.39[35.3]	1.86[47.3]	2.73[69.3]
Ø D	.35[8.89]	.51[13.1]	.64[16.4]	.82[20.8]	1.0[25.4]	1.22[30.9]	1.85[46.99]
Ø E	.60[15.1]	.80[20.3]	1.02[25.9]	1.26[32.0]	1.49[37.8]	1.97[50.0]	2.84[72.1]
Ø F	.32[8.0]	.47[11.9]	.58[14.7]	.74[18.7]	.92[23.3]	1.11[28.2]	1.7[43.2]
DIM "G"	.31[7.9]	.39[9.9]	.43[10.9]	.47[11.9]	.51[12.9]	.59[15]	.67[17]
DIM "H"	.010[.25]	.015[.38]	.018[.45]	.018[.45]	.018[.45]	.018[.45]	.018[.45]
DIM "I"	.010[.25]	.020[.50]	.020[.50]	.020[.50]	.020[.50]	.020[.50]	.020[.50]
DIM "J"	.16[4.1]	.20[5.2]	.22[5.7]	.23[6.0]	.27[6.9]	.29[7.3]	.33[8.5]
RANGE	5,000	10,000	20,000	40,000	60,000	80,000	100,000
$\triangle 1$	6904	6905	6906	6907	6901	6908	6909



2. NOMINAL SENSITIVITY -18 pC/lb ON COMPRESSION.

$\triangle 1$  USE APPROPRIATE SUPPLIED WASHER ON TOP MOUNTING SURFACE.

NOTES: UNLESS OTHERWISE SPECIFIED

SEE CHART	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.
USED ON	NEXT ASSY
APPLICATION	
THIRD ANGLE PROJECTION USA	
ALL MACHINED SURFACES. $\checkmark$ 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	
ORIG	DATE
CHK	DATE
APP	DATE
APP	

**DYTRAN INSTRUMENTS, INC.** Chatsworth, CA

**MASTER ONLY IF IN RED**

TITLE: **OUTLINE DRAWING 1210C SERIES**

SIZE	CAGE CODE	DWG. NO.	REV
<b>A</b>	<b>2W033</b>	<b>127-1210C</b>	<b>E</b>
SCALE: 1:1		SOLIDWORKS	SHEET 1 OF 1



- RING STYLE FORCE SENSOR
- HERMETICALLY SEALED
- EXCELLENT LINEARITY

**PHYSICAL**

Weight, Max Size  
Outer Dia  
Inner Dia  
Thickness  
Connector [1]  
Type  
Material  
Housing  
Material  
Isolation  
Sensing Element  
Material  
Mode

ENGLISH		SI	
0.42	oz	12.00	grams
0.65	Inches	16.51	mm
0.26	Inches	6.60	mm
0.31	Inches	7.87	mm
10-32		10-32	
Stainless Steel		Stainless Steel	
Stainless Steel		Stainless Steel	
Case grounded		Case grounded	
Quartz		Quartz	
Compression		Compression	

**PERFORMANCE**

Sensitivity, ± 15 %  
Range, Full Scale  
Maximum Force  
Maximum Unloaded Vibration  
Linearity [2]  
Resonant Frequency., No Load  
Stiffness  
Output Polarity for Compression Force  
Preload  
Capacitance, Nominal

-18	pC/Lb	-4.45	pC/N
5,000	Lbs.Force	22.24	kN
10,000	Lbs.Force	44.48	kN
2,000	g's,Peak	19,600	m/s^2 Peak
± 1	% Full Scale	± 1	% Full Scale
75	kHz	75	kHz
160	Lb/μin	27.72	kN/μm
Negative		Negative	
2000	Lbs.Force	8.90	kN
20	pF	20	pF

**ENVIRONMENTAL**

Coefficient Of Thermal Sensitivity  
Operating Temperature  
Environmental Seal  
Insulation Resistance

0.03	%/°F	0.03	%/°C
-60 to +400	°F	-51 to +204	°C
Hermetic		Hermetic	
1	TΩ	1	TΩ

**This family also includes:**

Model	Sensitivity (pC/Lb)	Range (Lbs.Force)	Max.Force (Lbs.Force)	Oper. Temp(°F)
1210C2	-18	10,000	15,000	-60 to +400
1210C3	-18	20,000	25,000	-60 to +400
1210C4	-18	40,000	50,000	-60 to +400
1210C5	-18	60,000	70,000	-60 to +400
1210C6	-18	80,000	90,000	-60 to +400
1210C7	-18	100,000	110,000	-60 to +400

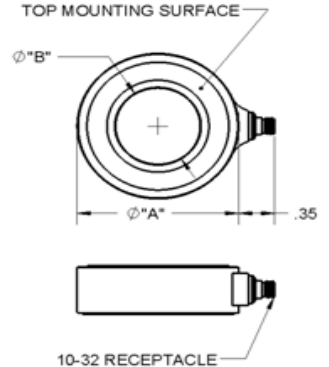
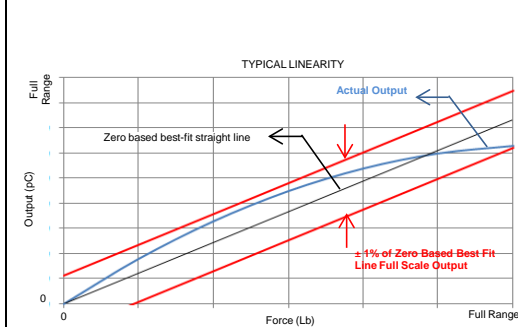
Please, refer to the performance specifications of the products in this family for detailed description

**Supplied Accessories:**

- 1) Accredited calibration certificate (ISO 17025)
- 2) Use supplied washer for top mounting surface (Model # 6904)

**Notes:**

- [1] Radially mounted with 10-32 receptacle micro coaxial connector
- [2] Percent of full scale or any lesser range, Zero based best-fit straight line method.



Model	"A" Outer Dia Inches	"B" Inner Dia Inches	"C" Thickness Inches
1210C2	0.87 [22.09]	0.41 [10.41]	0.39 [9.90]
1210C3	1.10 [27.94]	0.52 [13.20]	0.43 [10.92]
1210C4	1.34 [34.06]	0.66 [16.76]	0.47 [11.93]
1210C5	1.58 [40.13]	0.83 [21.08]	0.51 [12.95]
1210C6	2.05 [52.07]	1.03 [26.16]	0.59 [14.98]
1210C7	2.95 [74.93]	1.61 [40.89]	0.67 [17.01]

Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-1210C for more information.

