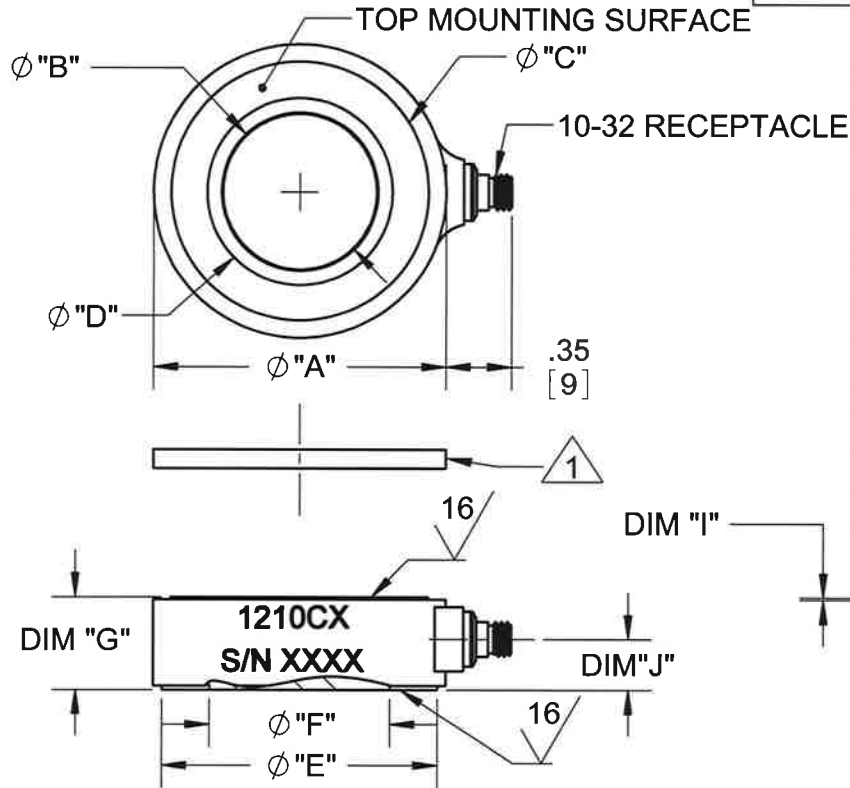


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REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
F	13657	ADDED: SURFACE FINISH ON MOUNTING SURFACES	AM 8/14/2017	LW	AS



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
△ 1	6904	6905	6906	6907	6901	6908	6909



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

△ 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.	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
USED ON	NEXT ASSY	
APPLICATION		
THIRD ANGLE PROJECTION USA		
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.		

CONTRACT NO.	
APPROVALS	DATE
ORIG JS	11/25/08
CHK EP	12/08/08
APP DV	12/08/08
APP	
DO NOT SCALE DRAWING	

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INSTRUMENTS, INC. Chatsworth, CA

TITLE: **OUTLINE DRAWING 1210C SERIES**

SIZE A	CAGE CODE 2W033	DWG. NO. 127-1210C	REV F
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	
1.37	oz	39.00	grams
1.10	Inches	27.94	mm
0.52	Inches	13.21	mm
0.43	Inches	10.92	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
20,000	Lbs.Force	88.96	kN
25,000	Lbs.Force	111.21	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
45	pF	45	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)
1210C1	-18	5,000	10,000	-60 to +400
1210C2	-18	10,000	15,000	-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

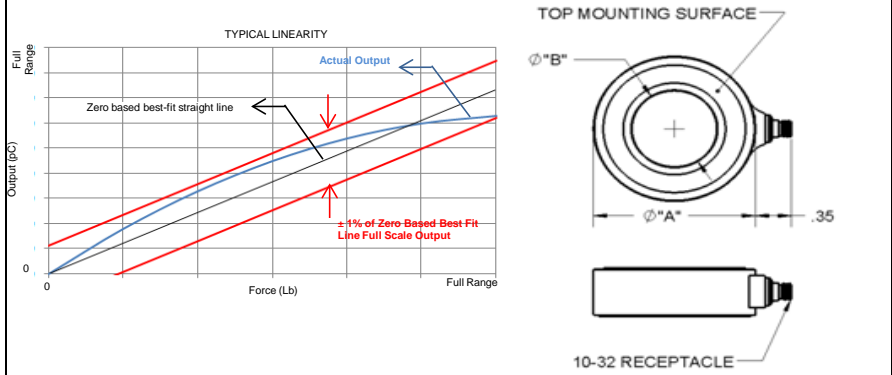
Please, refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Use supplied washer for top mounting surface (Model # 6906)

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
1210C1	0.65 [16.51]	0.26 [6.60]	0.31 [7.87]
1210C2	0.87 [22.09]	0.41 [10.41]	0.39 [9.90]
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.

