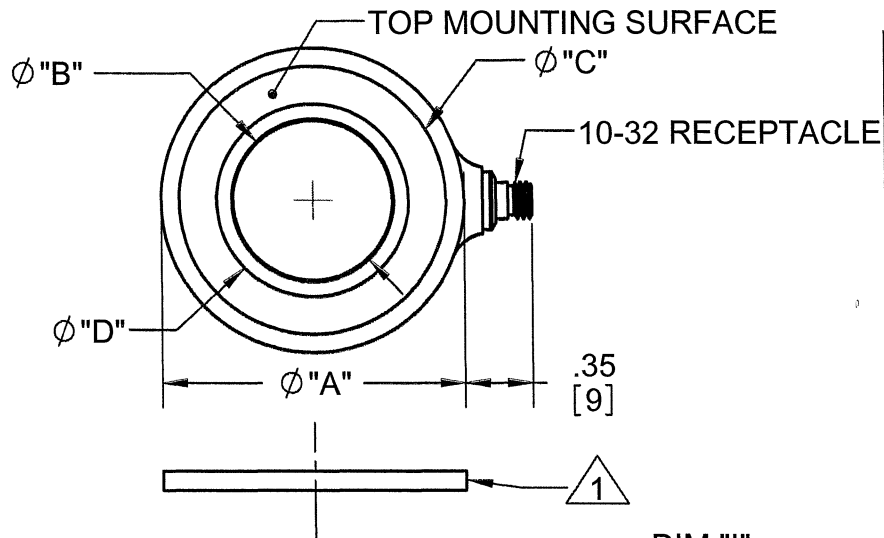


PROPRIETARY AND CONFIDENTIAL

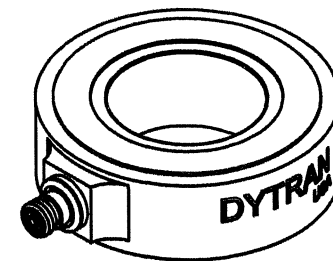
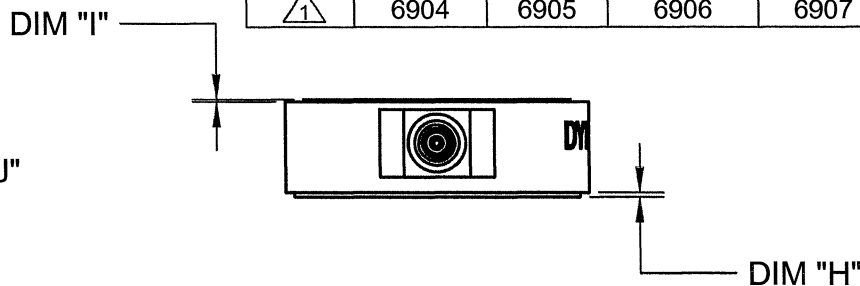
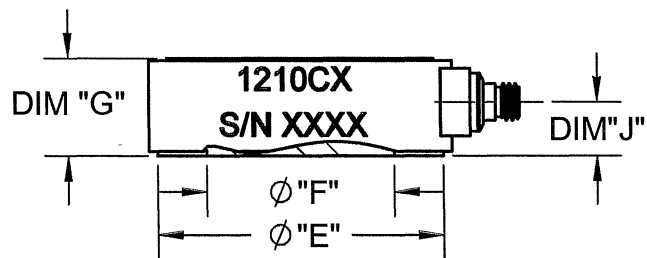
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REVISIONS

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	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
APPLICATION	MATERIAL
THIRD ANGLE PROJECTION USA	FINISH
	DO NOT SCALE DRAWING
	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.

CONTRACT NO.	
APPROVALS	DATE
ORIG JS	11/25/08
CHK EP	12/08/08
APP DV	12/08/08
APP	

DYTRAN INSTRUMENTS, INC. Chatsworth, CA

MASTER ONLY IF IN RED

TITLE: **OUTLINE DRAWING 1210C SERIES**

SIZE A	CAGE CODE 2W033	DWG. NO. 127-1210C	REV E
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	
Weight, Max	1.37 oz	39.00 grams	
Outer Dia	1.10 Inches	27.94 mm	
Inner Dia	0.52 Inches	13.21 mm	
Thickness	0.43 Inches	10.92 mm	
Connector [1]	10-32	10-32	
Material	Stainless steel	Stainless steel	
Housing	Stainless steel	Stainless steel	
Isolation	Case grounded	Case grounded	
Sensing Element	Quartz	Quartz	
Mode	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

Sensitivity, ± 15 %	-18 pC/Lb	-4.45 pC/N	
Range, Full Scale	20,000 Lbs.Force	88.96 kN	
Maximum Force	25,000 Lbs.Force	111.21 kN	
Maximum Unloaded Vibration	2,000 g's,Peak	19,600 m/s^2 Peak	
Linearity [2]	± 1 % Full Scale	± 1 % Full Scale	
Resonant Frequency., No Load	75 kHz	75 kHz	
Stiffness	160 Lb/µin	27.72 kN/µm	
Output Polarity for Compression Force	Negative	Negative	
Preload	2000 Lbs.Force	8.90 kN	
Capacitance, Nominal	45 pF	45 pF	

ENVIRONMENTAL

Coefficient Of Thermal Sensitivity
Operating Temperature
Environmental Seal
Insulation Resistance

Coefficient Of Thermal Sensitivity	0.03 %/°F	0.03 %/°C	
Operating Temperature	-60 to +400 °F	-51 to +204 °C	
Environmental Seal	Hermetic	Hermetic	
Insulation Resistance	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

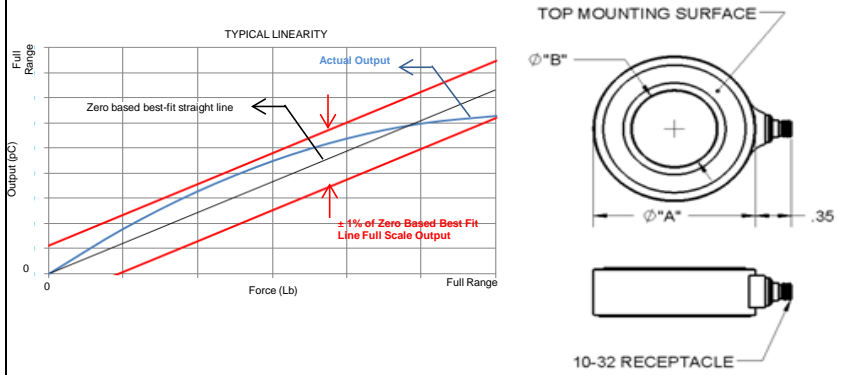
Please, refer to the performance specifications of the products in this family for detailed description

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.

