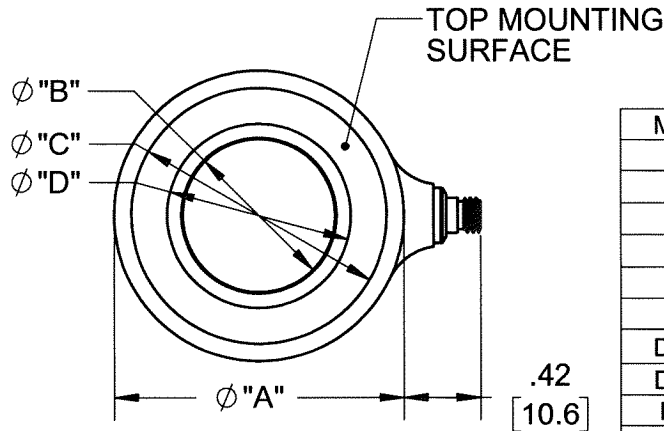


PROPRIETARY AND CONFIDENTIAL

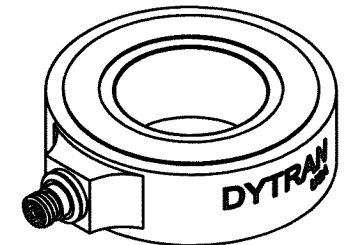
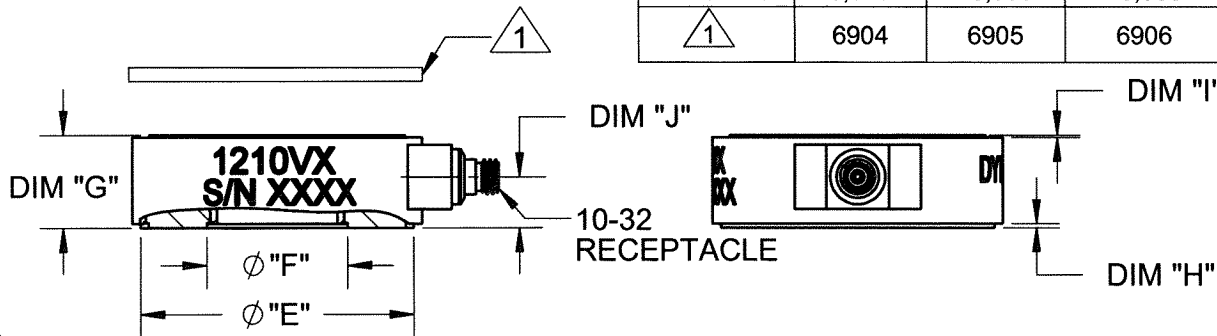
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REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	9467	INITIAL RELEASE	JS 08/27/15	DV	RT
B	12444	1210V1 ϕ "B" WAS: .28 [7.1]	JS 01/18/16	LA	LN
C	14189	SEE ECN	RA, 05/07/18	EM	LN



MODEL	1210V1	1210V2	1210V3	1210V4	1210V5	1210V6	1210V7
ϕ "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]
ϕ "B"	.26 [6.6]	.41 [10.4]	.52 [13.2]	.66 [16.8]	.83 [21.1]	1.03 [26.2]	1.61 [40.9]
ϕ "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]
ϕ "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]
ϕ "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]
ϕ "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 Lbf	5,000	10,000	20,000	40,000	60,000	80,000	100,000
\triangle 1	6904	6905	6906	6907	6901	6908	6909



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

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. THDS PER MIL-S-7742. DIMENSIONS APPLY AFTER FINISHING.	
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.	

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		DATE
ORIG	AB	12/26/12
CHK	DV	09/08/15
APP	RT	09/08/15
APP		

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

TITLE: **OUTLINE/INSTALLATION DRAWING, 1210V SERIES**

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-1210V	C
SCALE: NONE		SOLIDWORKS	SHEET 1 OF 1



- RING STYLE FORCE SENSOR
- HERMETICALLY SEALED
- EXCELLENT LINEARITY

PHYSICAL

Weight, Max Size
 Connector [1]
 Housing
 Sensing Element

ENGLISH		SI	
Outer Dia	0.84 oz	24.00	grams
Inner Dia	0.87 Inches	22.10	mm
Thickness	0.41 Inches	10.41	mm
Type	0.39 Inches	9.91	mm
Material	10-32	10-32	
Material	Stainless steel	Stainless steel	
Isolation	Stainless steel	Stainless steel	
Material	Case grounded	Case grounded	
Mode	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

Sensitivity	0.50 mV/Lb	0.12 mV/N
Range, Full Scale	10,000 Lbs.Force	44.48 kN
Maximum Force	15,000 Lbs.Force	66.72 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	Positive	Positive
Preload	2000 Lbs.Force	8.90 kN

ENVIRONMENTAL

Coefficient Of Thermal Sensitivity
 Operating Temperature
 Environmental Seal
 Insulation Resistance

Coefficient Of Thermal Sensitivity	0.03 %/°F	0.06 %/°C
Operating Temperature	-60 to +250 °F	-51 to +121 °C
Environmental Seal	Hermetic	Hermetic
Insulation Resistance	1 TΩ	1 TΩ

ELECTRICAL

Discharge TC
 Full Scale Output
 Supply Current
 Compliance Voltage
 Bias Voltage
 Output Impedance
 Resolution

Discharge TC	>2000 sec	>2000 sec
Full Scale Output	5 Volts	5 Volts
Supply Current	2-20 mA	2-20 mA
Compliance Voltage	18-30 VDC	18-30 VDC
Bias Voltage	7.5-11.5 VDC	7.5-11.5 VDC
Output Impedance	<100 Ω	<100 Ω
Resolution	0.14 Lb	0.62 kN

This family also includes:

Model	Sensitivity (mV/Lb)	Range (Lbs.Force)	Max.Force (Lbs.Force)	Oper. Temp(°F)
1210V1	1.00	5,000	10,000	-60 to +250
1210V3	0.25	20,000	25,000	-60 to +250
1210V4	0.13	40,000	50,000	-60 to +250
1210V5	0.08	60,000	70,000	-60 to +250
1210V6	0.06	80,000	90,000	-60 to +250
1210V7	0.05	100,000	110,000	-60 to +250

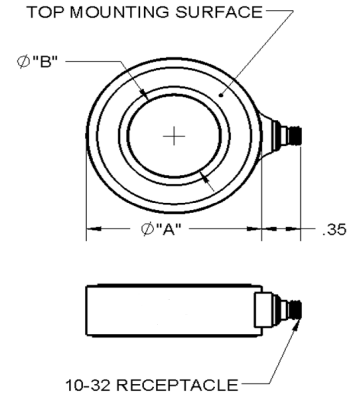
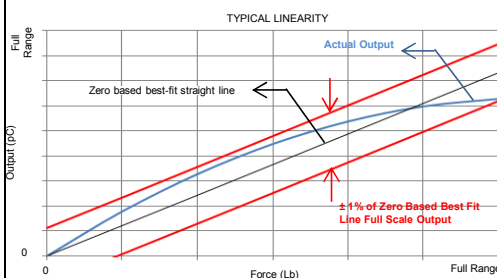
Please, refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Use supplied washer for top mounting surface (Model # 6905)

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
1210V1	0.65 [16.51]	0.26 [6.6]	0.31 [7.87]
1210V2	0.87 [22.09]	0.41 [10.41]	0.39 [9.90]
1210V3	1.10 [27.94]	0.54 [13.72]	0.41 [10.41]
1210V4	1.34 [34.06]	0.66 [16.76]	0.46 [11.68]
1210V5	1.58 [40.13]	0.83 [21.08]	0.49 [12.45]
1210V6	2.05 [52.07]	1.03 [26.16]	0.56 [14.22]
1210V7	2.95 [74.93]	1.61 [40.89]	0.64 [16.26]

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

