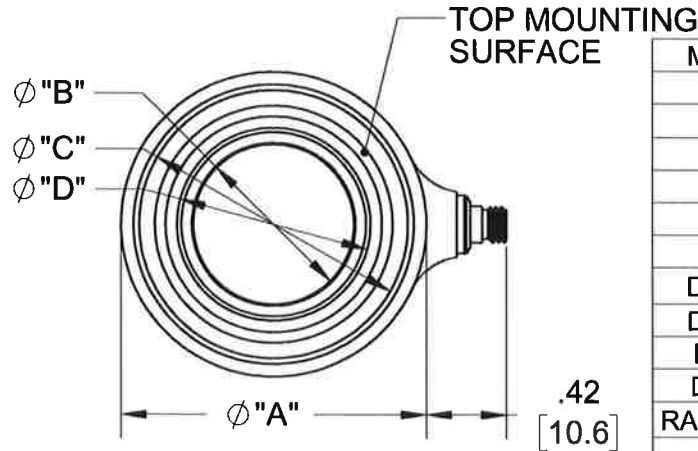


PROPRIETARY AND CONFIDENTIAL

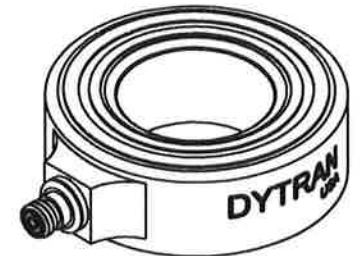
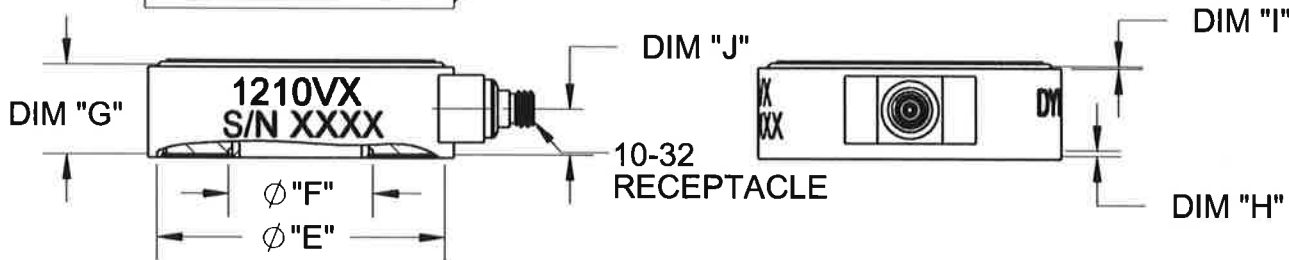
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REVISIONS

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	LW



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]	.54 [13.7]	.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]	1.87 [47.3]	2.73 [69.3]
ϕ "D"	.35 [8.89]	.52 [13]	.65 [16.5]	.82 [20.8]	1.00 [25.4]	1.22 [30.9]	1.85 [47]
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]	.41 [10.4]	.46 [11.7]	.49 [12.4]	.56 [14.2]	.64 [16.3]
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

USED ON	NEXT ASSY	APPLICATION	THIRD ANGLE PROJECTION USA
<p>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.</p>			
<p>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.</p>			

<p>UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS. TOLERANCES ARE:</p>		
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	

MASTER ONLY IF IN RED
 Chatsworth, CA

DYTRAN INSTRUMENTS, INC.

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

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



- RING STYLE FORCE SENSOR
- HERMETICALLY SEALED
- EXCELLENT LINEARITY

PHYSICAL

Weight, Max Size	Outer Dia	oz	12.00	grams
	Inner Dia	Inches	16.51	mm
	Thickness	Inches	6.60	mm
Connector [1]	Type		7.87	mm
	Material		10-32	
Housing	Material		Stainless Steel	
	Isolation		Stainless Steel	
Sensing Element	Material		Case grounded	
	Mode		Quartz	
			Compression	

ENGLISH		SI	
1.00	mV/Lb	0.25	mV/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
Positive		Positive	
2000	Lbs.Force	8.90	kN

PERFORMANCE

Sensitivity, ± 15 %	1.00	mV/Lb
Range, Full Scale	5,000	Lbs.Force
Maximum Force	10,000	Lbs.Force
Maximum Unloaded Vibration	2,000	g's, Peak
Linearity [2]	± 1	% Full Scale
Resonant Frequency, No Load	75	kHz
Stiffness	160	Lb/μin
Output Polarity for Compression Force	Positive	
Preload	2000	Lbs.Force

1.00	mV/Lb	0.25	mV/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
Positive		Positive	
2000	Lbs.Force	8.90	kN

ENVIRONMENTAL

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

0.03	%/°F	0.06	%/°C
-60 to +250	°F	-51 to +121	°C
Hermetic		Hermetic	
1	TΩ	1	TΩ

ELECTRICAL

Discharge TC	>2000	sec
Full Scale Output	5	Volts
Supply Current	2-20	mA
Compliance Voltage	18-30	VDC
Bias Voltage	7.5-11.5	VDC
Output Impedance	<100	Ω
Resolution	0.07	Lb

>2000	sec	>2000	sec
5	Volts	5	Volts
2-20	mA	2-20	mA
18-30	VDC	18-30	VDC
7.5-11.5	VDC	7.5-11.5	VDC
<100	Ω	<100	Ω
0.07	Lb	0.31	kN

This family also includes:

Model	Sensitivity (mV/Lb)	Range (Lbs.Force)	Max.Force (Lbs.Force)	Oper. Temp(°F)
1210V2	0.50	10,000	15,000	-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

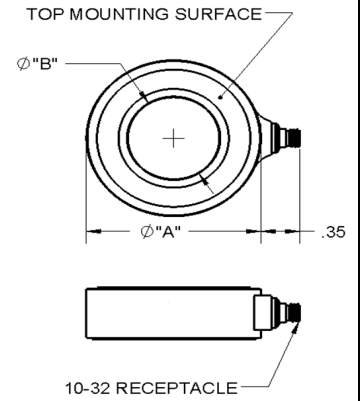
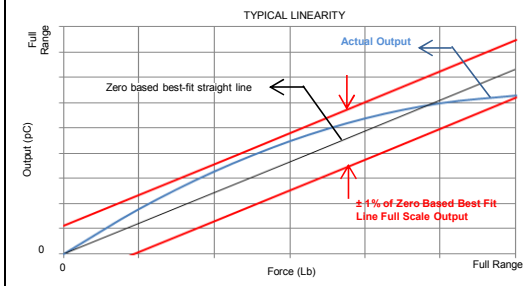
Please, refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

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

