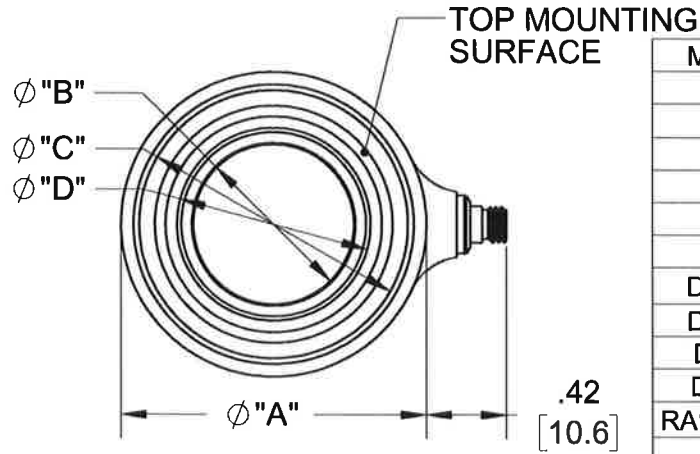


PROPRIETARY AND CONFIDENTIAL

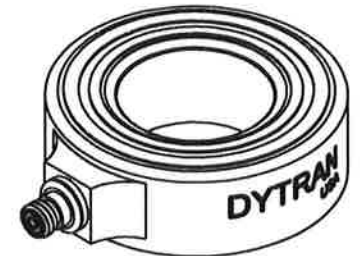
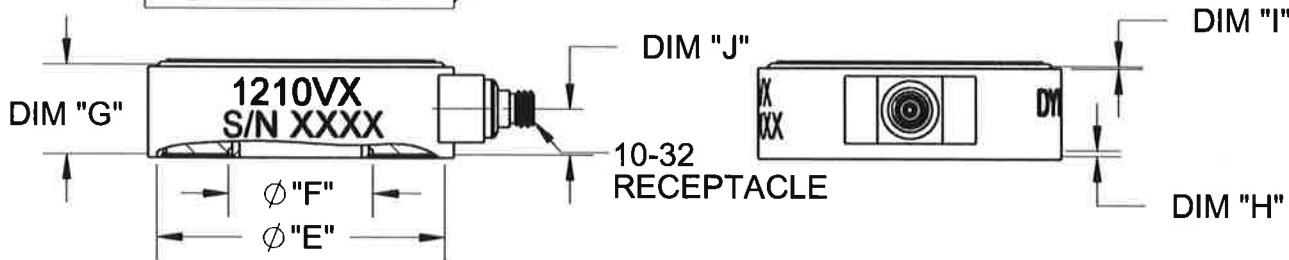
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REVISIONS

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	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
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.	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	

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

		ENGLISH		SI	
Weight, Max Size	Outer Dia	1.37	oz	39.00	grams
	Inner Dia	1.10	Inches	27.94	mm
	Thickness	0.52	Inches	13.21	mm
Connector [1]	Type	0.43	Inches	10.92	mm
	Material	10-32		10-32	
Housing	Material	Stainless steel		Stainless steel	
	Isolation	Stainless steel		Stainless steel	
Sensing Element	Material	Case grounded		Case grounded	
	Mode	Quartz		Quartz	
		Compression		Compression	

PERFORMANCE

Sensitivity, ± 15 %		0.25	mV/Lb	0.06	mV/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		Positive		Positive	
Preload		2000	Lbs.Force	8.90	kN

ENVIRONMENTAL

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		>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		0.28	Lb	1.25	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
1210V2	0.50	10,000	15,000	-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

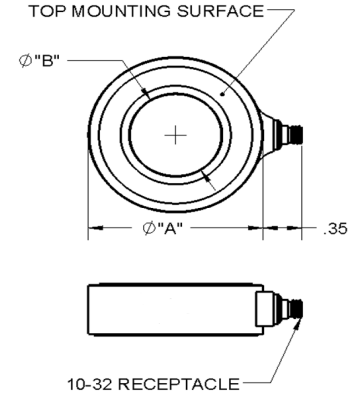
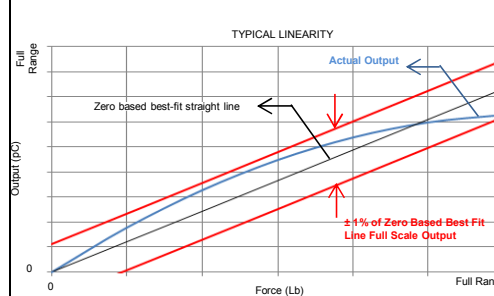
Please, refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

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

