



- RING STYLE FORCE SENSOR
- HERMETICALLY SEALED
- EXCELLENT LINEARITY

PHYSICAL

Weight, Max Size		Outer Dia		oz		Inches	
Connector [1]		Type		mm		Inches	
Housing		Material		mm			
Sensing Element		Material					
		Isolation					
		Mode					

ENGLISH		SI	
5.90	oz	168.00	grams
2.05	Inches	52.07	mm
1.03	Inches	26.16	mm
0.59	Inches	14.99	mm
10-32		10-32	
Stainless steel		Stainless steel	
Stainless steel		Stainless steel	
Case grounded		Case grounded	
Quartz		Quartz	
Compression		Compression	

PERFORMANCE

Sensitivity, ± 15 %	0.06	mV/Lb
Range, Full Scale	80,000	Lbs.Force
Maximum Force	90,000	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

0.01	mV/N
355.86	kN
400.34	kN
19,600	m/s ² Peak
± 1	% Full Scale
75	kHz
27.72	kN/µm
Positive	
8.90	kN

ENVIRONMENTAL

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

0.06	%/°C
-51 to +121	°C
Hermetic	
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	1.17	Lb

>2000	sec
5	Volts
2-20	mA
18-30	VDC
7.5-11.5	VDC
<100	Ω
5.20	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
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	90,000	-60 to +250
1210V7	0.05	100,000	110,000	-60 to +250

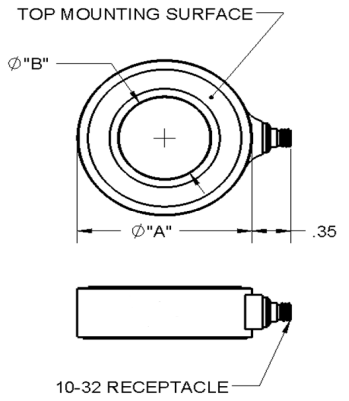
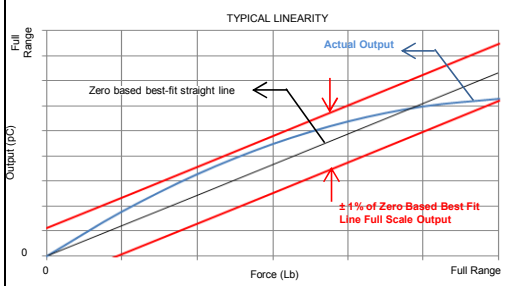
Please, refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Use supplied washer for top mounting surface (Model # 6908)

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.

