



- RING STYLE FORCE SENSOR
- HERMETICALLY SEALED
- EXCELLENT LINEARITY

PHYSICAL

Weight, Max Size	Outer Dia	oz	24.00	grams
	Inner Dia	Inches	22.10	mm
	Thickness	Inches	10.41	mm
Connector [1]	Type		9.91	mm
	Material		10-32	
Housing	Material		Stainless steel	
	Isolation		Stainless steel	
Sensing Element	Material		Case grounded	
	Mode		Quartz	
			Compression	

ENGLISH		SI	
0.84	oz	24.00	grams
0.87	Inches	22.10	mm
0.41	Inches	10.41	mm
0.39	Inches	9.91	mm
10-32		10-32	
Stainless steel		Stainless steel	
Stainless steel		Stainless steel	
Case grounded		Case grounded	
Quartz		Quartz	
Compression		Compression	

PERFORMANCE

Sensitivity, ± 15 %	0.50	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

0.50	mV/Lb	0.12	mV/N
10,000	Lbs.Force	44.48	kN
15,000	Lbs.Force	66.72	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	0.06	%/°C
Operating Temperature	-60 to +250	°F	-51 to +121	°C
Environmental Seal	Hermetic		Hermetic	
Insulation Resistance	1	TΩ	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	>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

>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
0.14	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

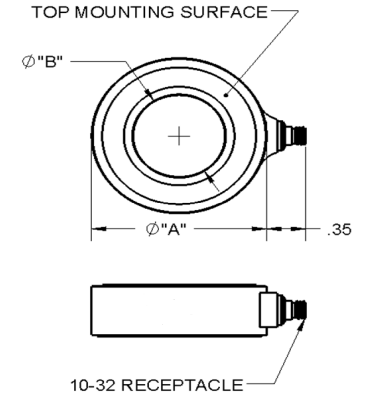
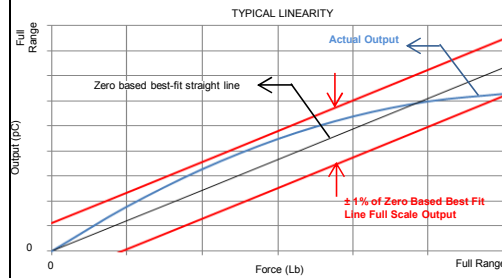
Please, refer to the performance specifications of the products in this family for detailed description

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.

