

Model Number 1022V	PERFORMANCE SPECIFICATION	Doc No PS1022V
	MINIATURE LOW MASS IEPE FORCE SENSORS	REV C, ECN 11370, 10/20/14



- MINIATURE DYNAMIC FORCE SENSOR
- LOW MASS
- EXCELLENT LINEARITY

	ENGLISH		SI	
PHYSICAL				
Weight (less cable)	0.16	oz	4.50	grams
Size Height X Diameter	0.49 x 0.40	Inches	12.44 x 10.16	mm
Connector [1]	10-32		10-32	
Housing	Type		Ti 6Al-4V	
	Material		Ti 6Al-4V	
Mounting Provision	Material		Ti 6Al-4V	
	Isolation	Case grounded		Case grounded
Sensing Element		[2]		[2]
	Material	Quartz		Quartz
	Mode	Compression		Compression
PERFORMANCE				
Sensitivity, ± 10 %	100	mV/LbF	22.5	mV/N
Range, Full Scale	± 50	LbF	± 222	N
Stiffness	26	Lb/μin	2039	kN/μm
Linearity [3]	± 1	% Full Scale	± 1	% Full Scale
Max Shock, Unloaded	5000	g's	5000	g's
Max Vibration, Unloaded	± 2500	g's	± 2500	g's
Mounted Resonant Frequency, Unloaded	50	kHz	50	kHz
Noise Resolution	0.0004	LbF rms	0.0018	N rms
Strain Sensitivity @250/μs	0.006	LbF/με	0.027	N/με
Transverse Sensitivity, Max	5	%	5	%
ELECTRICAL				
Supply Current Range [4]	2 to 20	mA	2 to 20	mA
Compliance Voltage Range	18 to 30	Volts	18 to 30	Volts
Output Impedence, Typ	150	Ω	150	Ω
Bias Voltage	+7.5 to +9.5	VDC	+7.5 to +9.5	VDC
Discharge Time Constant	>100	Sec	>100	Sec
F.S.Output Voltage, Nom	5	Volts, peak	5	Volts, peak
Output Signal Polarity	Compression	Positive		Positive
	Tension	Negative		Negative
ENVIRONMENTAL				
Operating Temperature	-100 to +250	°F	-73 to +121	°C
Environmental Seal	Welded/Epoxy		Welded/Epoxy	

This family also includes:

Model	Sensitivity (mV/LbF)	Range (LbF)	Linearity (% Full Scale)	Oper. Temp(°F)

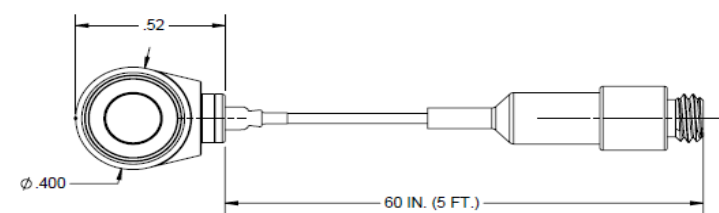
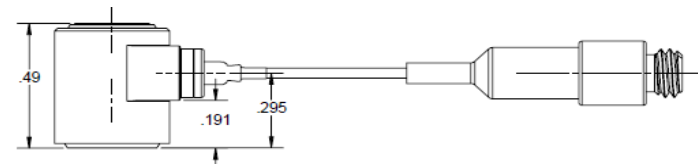
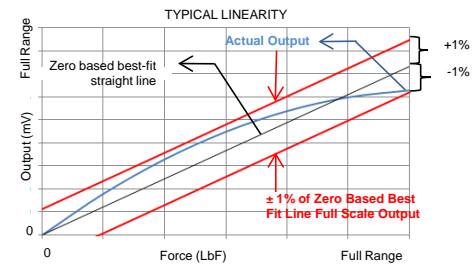
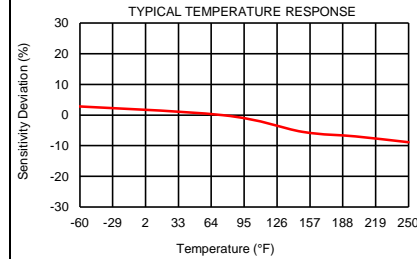
Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Model # 6200 Be Cu Mounting Stud (2)
- 3) 6742 Removal tool

Notes:

- [1] Connector mounted at end of 5 FT integral cable
- [2] 10-32 tapered hole at top and bottom
- [3] Percent of full scale or of any lesser range, zero based best fit straight line method.
- [4] Do not apply power to this unit without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier.
- [5] In the interest of constant product improvement, we reserve the right to change specifications without notice.



Units on the line drawing are in inches, Refer to 127-1022V for more information.



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