HS-160 Accelerometer
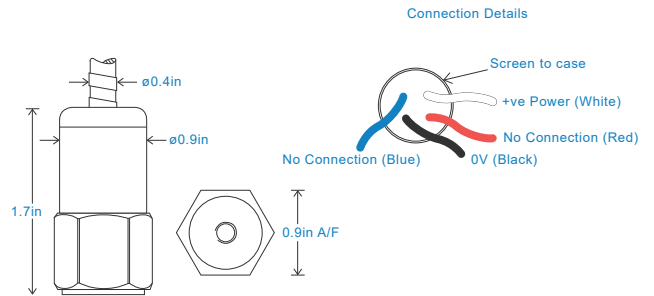## AC velocity output via FEP Cable with Protective Conduit

Key Features
• For use with data collector
• AC velocity output
• Protective Conduit

Industries
Building services, Pulp and Paper, Mining, Metals, Utilities, Automotive, Water, Pharmaceutical

Connection Details

Screen to case
+ve Power (White)
No Connection (Red)
0V (Black)
No Connection (Blue)

ø0.4in
ø0.9in
1.7in
0.9in A/F

Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)
Sensitivity	see: 'How To Order' table ±10%
	Nominal 80Hz at 72°F
Frequency Response	180cpm (3Hz) to 270kcpm (4.5kHz) ± 10%
	120cpm (2Hz) to 360kcpm (6kHz) ± 3dB
Isolation	Base isolated
Range	see: 'How To Order' table
Transverse Sensitivity	Less than 5%

Mechanical

|	
Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	5.9ft. lbs
Weight	3.7 oz. (nominal) body only
Sheilded Cable Assembly	see: www.hansfordsensors.com for options
Maximum Cable Lengths	3,280ft.
Standard Cable Lengths	16ft.
Mounting Threads	see 'How To Order' Table
Conduit Material	304 Stainless Steel
Conduit Length	Conduit Length is approx. 1.6ft shorter than the cable

Electrical

Excitation Voltage	18-30Volts DC
Electrical Noise	0.1mg max
Current Range	0.5mA to 8mA
Bias Voltage	10 - 12 Volts DC
Settling Time	2 seconds
Output Impedance	200 Ohms max.
Case Isolation	>10^8 Ohms at 500 Volts

Environmental

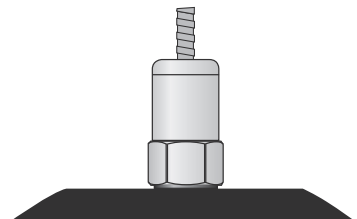|	
Operating Temperature Range	-67 to 284°F
Sealing	IP65
Maximum Shock	5000g
EMC	EN61326-1:2013

Typical Frequency Response

Sensitivity Change %
Frequency Hz
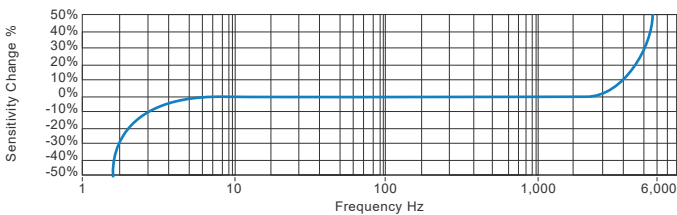
Applications

Fans, Motors, Pumps, Compressors, Centrifuges, Conveyors, Air Handlers, Gearboxes, Rolls, Dryers, Presses, Cooling, VAC, Spindles, Machine Tooling, Process Equipment

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body).

How To Order

Product Prefix
HS - Hansford Sensors

Product Series
160 - Industrial Vibration Sensor

Cable Length (if integral cable)
UXX - length specified in feet

H	S	1	6	0	X	X	X	X	X	X	X	X	X	X	X

Extra Options (if required)
F - Filtered
L - 316L Stainless Steel
RT - Temperature Output PT100
S - 90° Side Exit
T - Temperature Output
Y - 5% tolerance on sensitivity

Sensitivity	Range (pk)	Resonant Frequency
004 - 100mV/in/s	40 IPS	1,320kcpm (22kHz)
025 - 625mV/in/s	10 IPS	1,320kcpm (22kHz)

(other sensitivities available on request)

Cable/Connector
30C - FEP with Protective Conduit

Mounting Threads
02 - ¼-28" UNF Male
06 - M6 x 1mm Male
08 - M8 x 1.25mm Male

Hansford Sensors
Excellence in Vibration Monitoring