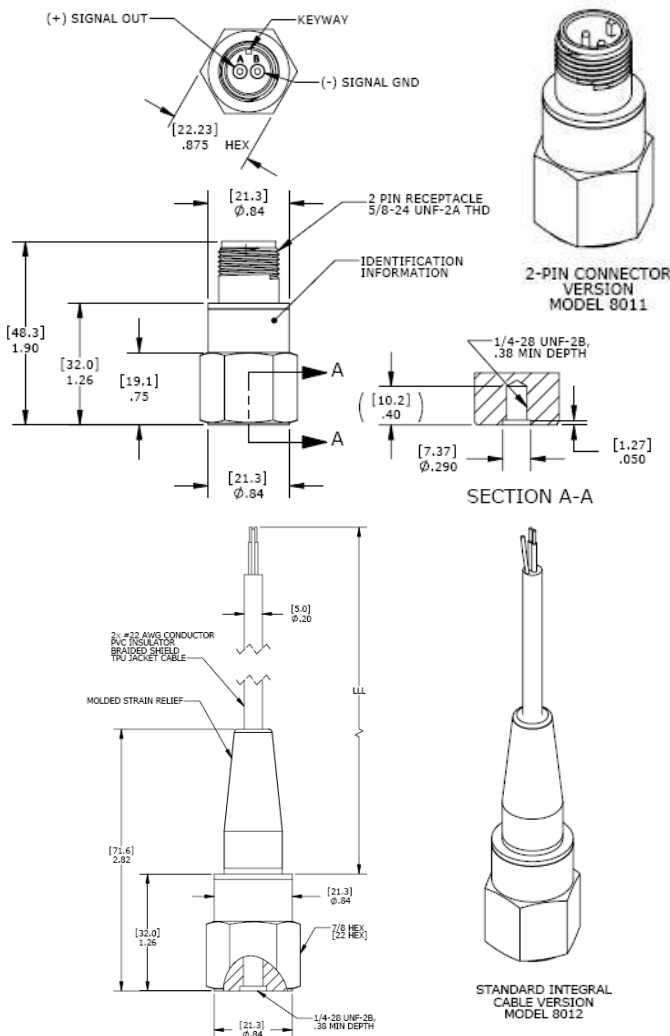


MODEL 8011-01 & 8012-01 ACCELEROMETER



dimensions



SPECIFICATIONS

- ◆ IEPE Accelerometer
- ◆ 16kHz Bandwidth
- ◆ -55°C to +125°C Operating Range
- ◆ Top Exit Connector or Integral Cable

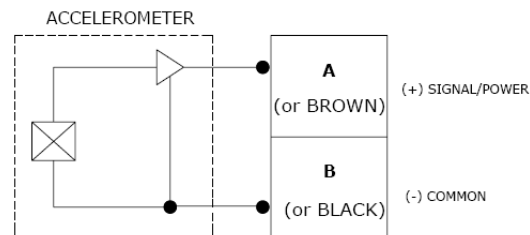
The Model 8011-01 & 8012-01 are internally shielded rugged IEPE accelerometers designed for harsh environments. The accelerometers are available in $\pm 10g$, $\pm 80g$ & $\pm 500g$ dynamic ranges and have a flat bandwidth up to greater than 16kHz. The model 8011-01 features a top exit MIL-C-5015 connector while the model 8012-01 features an integral cable. The units are hermetically sealed and are designed to operating in temperature ranges from -55°C to +125°C.

FEATURES

- ◆ $\pm 10g$, $\pm 80g$ & $\pm 500g$ Dynamic Ranges
- ◆ Wide bandwidth up to 16kHz
- ◆ Case Isolated, Internally Shielded
- ◆ Hermetically Sealed, Welded
- ◆ Annular Shear Mode
- ◆ Reverse Wiring Protection
- ◆ Stable Temperature Response

APPLICATIONS

- ◆ General Purpose
- ◆ Machine Monitoring
- ◆ Industrial Applications
- ◆ Harsh Environments
- ◆ Gearbox Monitoring



MODEL 8011-01 & 8012-01 ACCELEROMETER

PERFORMANCE SPECIFICATIONS

All values are typical at +24°C, 80Hz and 4mA excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

Parameters

DYNAMIC

	±10	±80	±500	Notes
Range (g)	±10	±80	±500	
Sensitivity (mV/g)	500	100	10	±10% (±5% Option)
Frequency Response (Hz)	1-4000	1-10000	1-10000	±10%
Frequency Response (Hz) ²	0.5-7000	0.5-16000	0.5-18000	±3dB
Natural Frequency (Hz)	28000	32000	42000	
Non-Linearity (%FSO)	±1	±1	±1	
Transverse Sensitivity (%)	<5	<5	<5	
Shock Limit (g)	5000	5000	5000	

ELECTRICAL

Compliance Voltage (Vdc)	18 to 30	18 to 30	18 to 30	See Note 1
Excitation Current (mA)	2 to 10	2 to 10	2 to 10	
Bias Voltage (Vdc)	8 to 12	8 to 12	8 to 12	Room Temperature
Output Impedance (Ω)	<100	<100	<100	
Insulation Resistance (MΩ)	>100	>100	>100	@100Vdc
Residual Noise (g RMS)	0.00005	0.0001	0.0003	
Warm-up Time (sec)	<1	<1	<1	
Grounding	Case Isolated, Internally Shielded			

ENVIRONMENTAL

Temperature Response (%)	±5 (see typical temperature response on following page)
Operating Temperature (°C)	-55 to +125
Storage Temperature (°C)	-55 to +125

PHYSICAL

Sensing Element	Ceramic (shear mode)
Case Material	Stainless Steel
Weight (grams)	93
Mounting Torque	24 lb-in (2.7 N-m)

¹ For full dynamic range a minimum compliance voltage of 24Vdc is recommended

² LF option offers a low frequency response to 0.1Hz

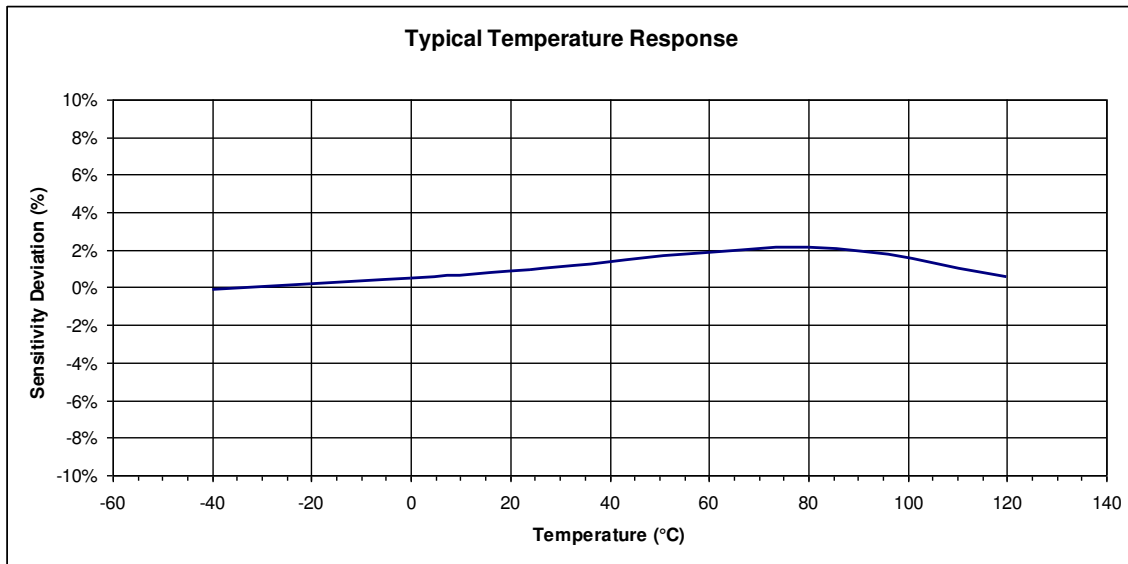
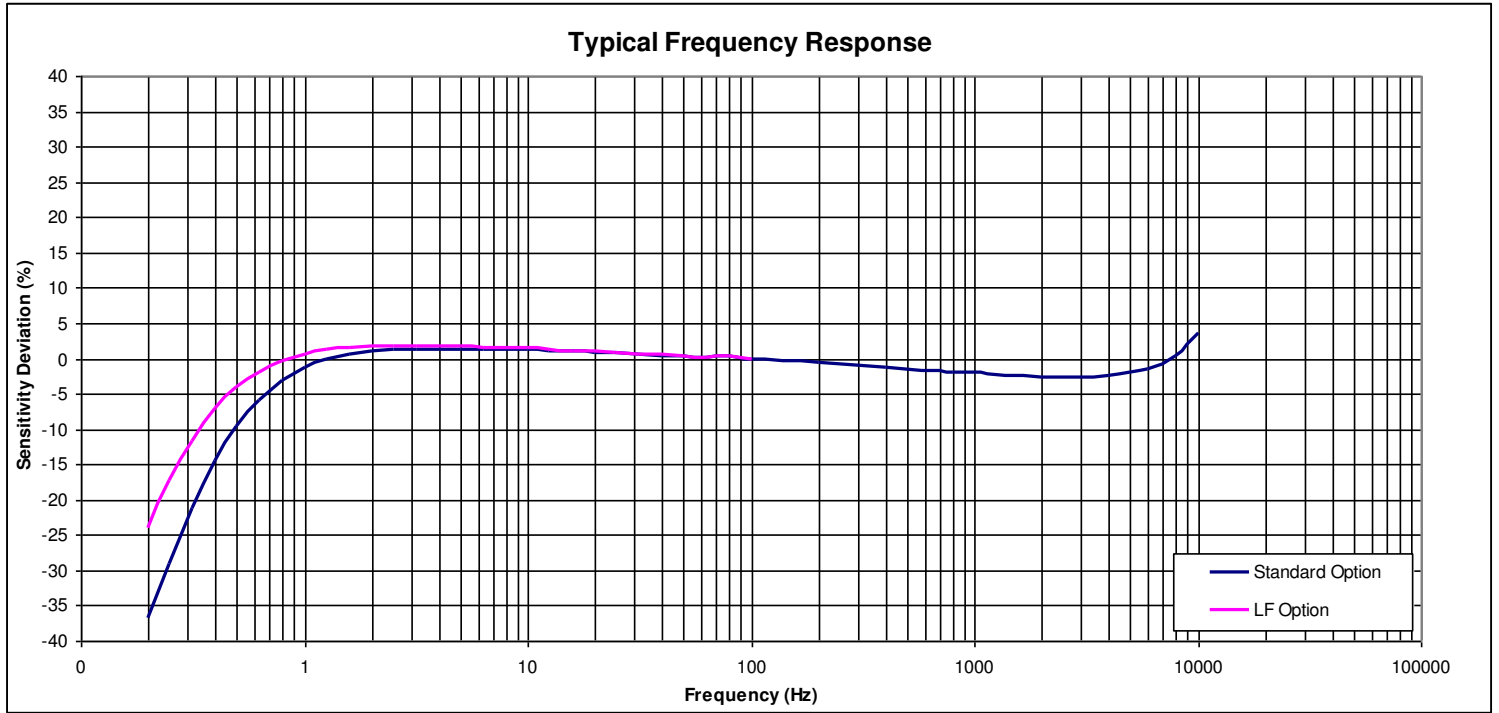
³ Contact factory for Hazardous Area Approval options

Calibration supplied: CS-FREQ-0100 NIST Traceable Amplitude Calibration from 20Hz to ±10% Frequency Response Limit

Supplied accessories: AC-A03663 ¼-28 to ¼-28 mounting stud

Optional accessories: 316A-XXX Cable Assembly, Straight (XXX designates length in inches, 10ft standard)
318A-XXX Cable Assembly, 90 Degrees (XXX designates length in inches, 10ft standard)
AC-D03664 ¼-28 to M5 mounting stud
AC-D03665 ¼-28 to M6 mounting stud

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MODEL 8011-01 & 8012-01 ACCELEROMETER

ORDERING INFORMATION

PART NUMBERING Model Number+Range

801XLF-01-GGG

| | | Range (080 is 80g)

| | Low frequency option, otherwise leave blank

| Electrical Connection Option (1 for 2-pin connector, 2 for integral cable)

Example: 8011-01-080

Model 8011-01, 2-pin connector, 80g range

STANDARD CONFIGURATIONS

Part Number	Electrical Connection	Range	Cable Length
8011LF-01-010	Connector	10g	Not Applicable
8011-01-080	Connector	80g	Not Applicable
8011-01-500	Connector	500g	Not Applicable
8012LF-01-010-120	Integral Cable	10g	10 Feet
8012LF-01-010-240	Integral Cable	10g	20 Feet
8012LF-01-010-360	Integral Cable	10g	30 Feet
8012-01-080-120	Integral Cable	80g	10 Feet
8012-01-080-240	Integral Cable	80g	20 Feet
8012-01-080-360	Integral Cable	80g	30 Feet
8012-01-500-120	Integral Cable	500g	10 Feet
8012-01-500-240	Integral Cable	500g	20 Feet
8012-01-500-360	Integral Cable	500g	30 Feet