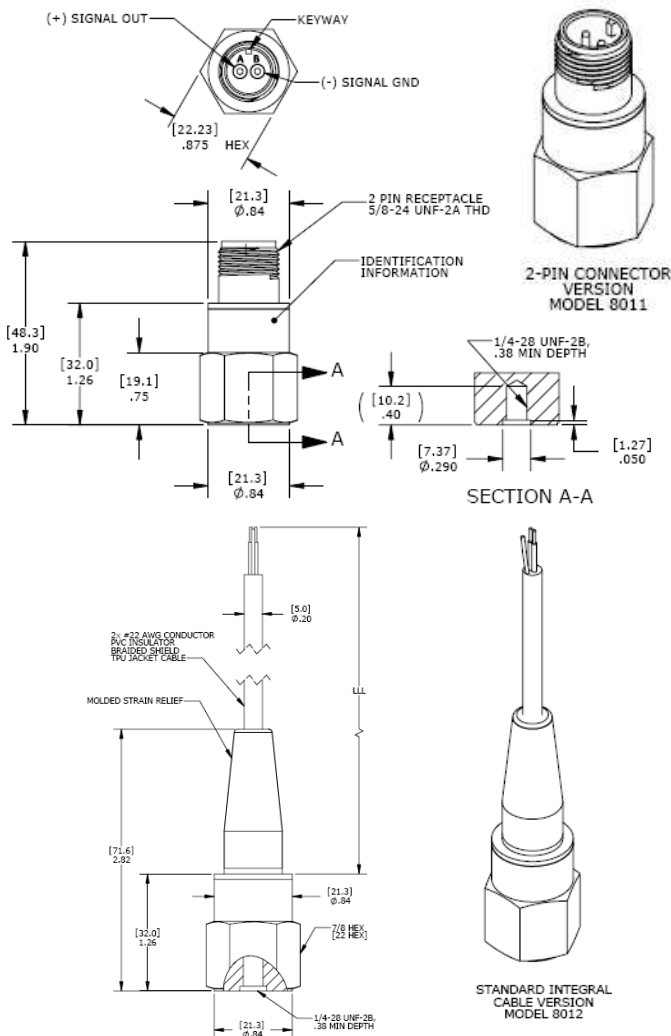


MODEL 8011-01 & 8012-01 ACCELEROMETER



dimensions



SPECIFICATIONS

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

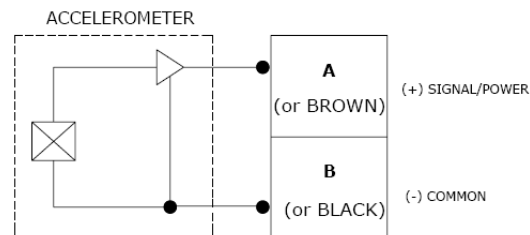
The Model 8011-01 & 8012-01 are internally shielded rugged IEPE accelerometers designed for harsh environments. The accelerometers are available in $\pm 10g$, $\pm 80g$ & $\pm 500g$ dynamic ranges and have a flat bandwidth up to greater than 16kHz. The model 8011-01 features a top exit MIL-C-5015 connector 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)

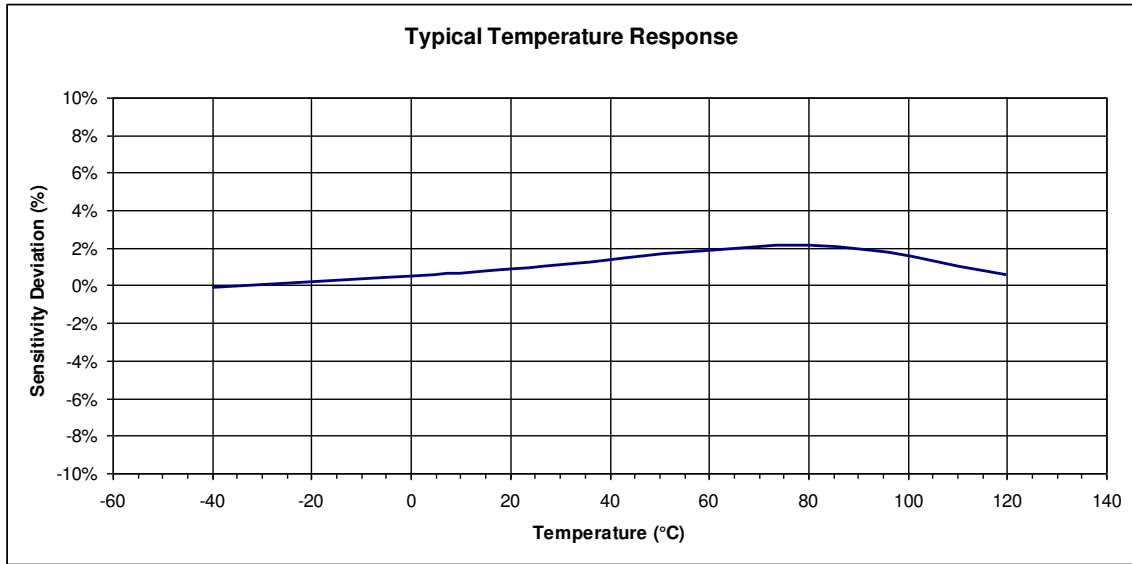
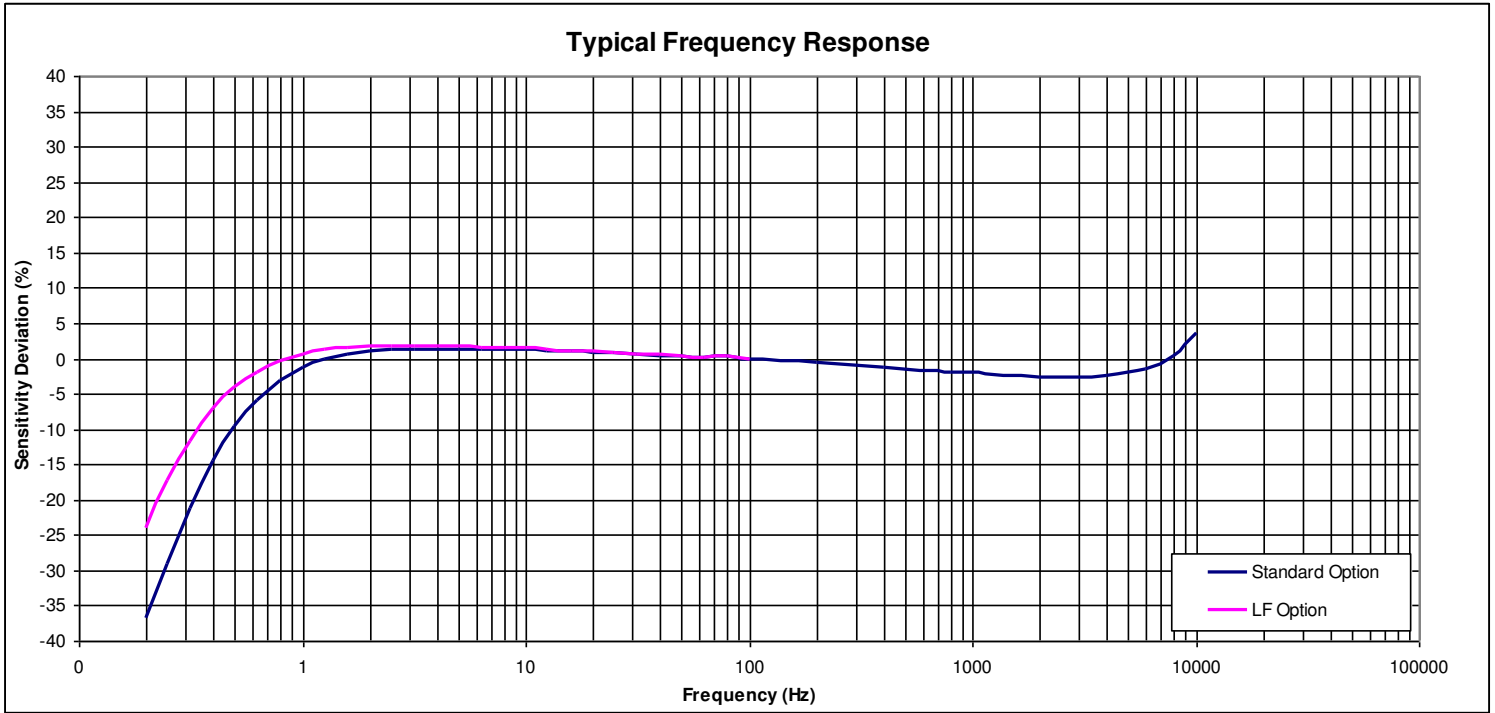
¹ For full dynamic range a minimum compliance voltage of 24Vdc is recommended

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

The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. Measurement Specialties, Inc. reserves the right to make changes without further notice to any product herein. Measurement Specialties, Inc. makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does Measurement Specialties, Inc. assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Typical parameters can and do vary in different applications. All operating parameters must be validated for each customer application by customer's technical experts. Measurement Specialties, Inc. does not convey any license under its patent rights nor the rights of others.



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