

# Model 801X-AR/-AP Accelerometer



4-20mA Loop Power  
 True RMS or Peak Output  
 -40°C to +85°C Operating Range  
 Top Exit Connector or Integral Cable



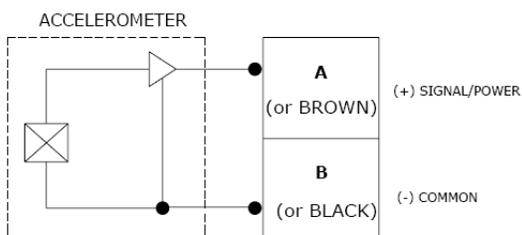
The Model 8011 & 8012 are internally shielded rugged 4-20mA accelerometers. The accelerometers are available in ranges from  $\pm 5g$  to  $\pm 50g$ , in either RMS or Peak acceleration output options. The model 8011 features a top exit MIL-C-5015 connector while the model 8012 features an integral cable. The units are hermetically sealed and are designed for operating in temperature ranges from -40°C to +85°C.

## FEATURES

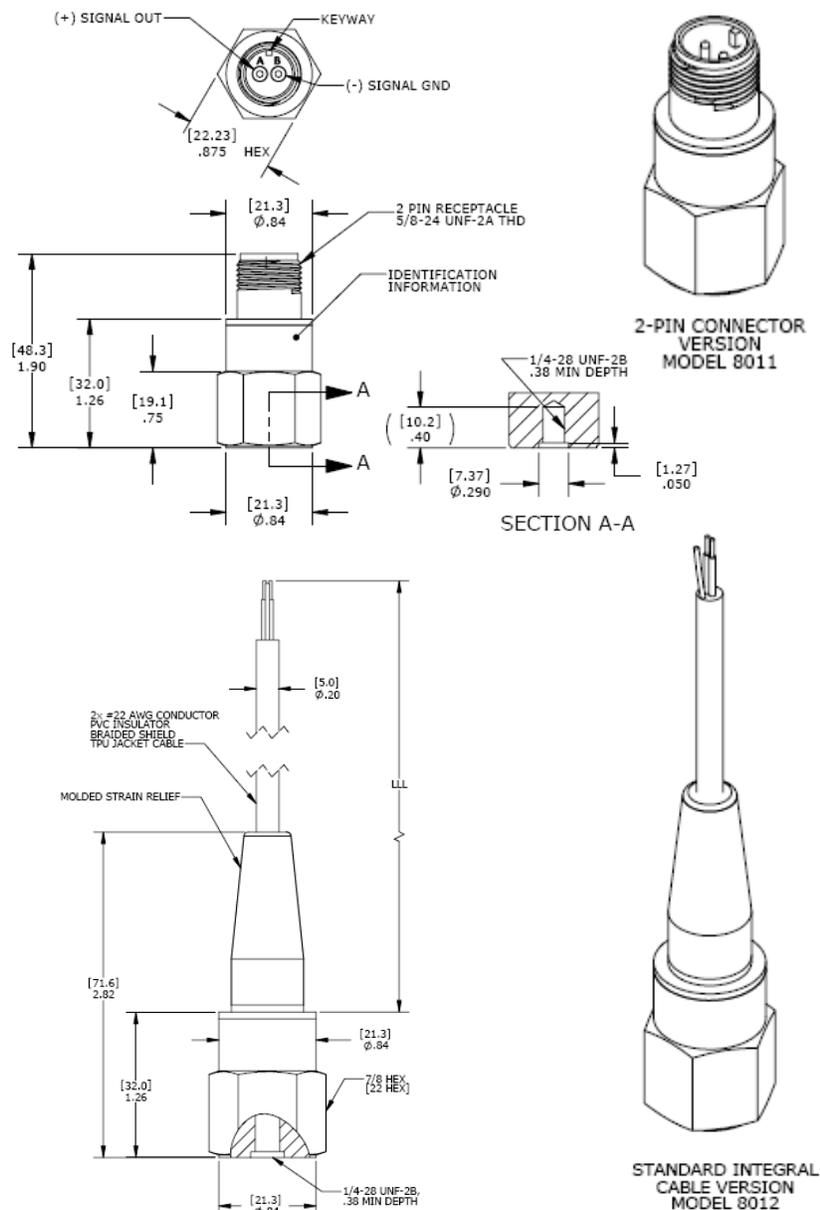
- $\pm 5g$  to  $\pm 50g$  Dynamic Range
- 10-5000Hz Bandwidth
- Case Isolated, Internally Shielded
- Hermetically Sealed, Welded
- Annular Shear Mode
- Reverse Wiring Protection
- Stable Temperature Response
- 2-Pin MIL-C-5015 Connector

## APPLICATIONS

- General Purpose
- Machine Monitoring
- Rotary Compressors
- Motors and Pumps
- Rotating Machinery



## dimensions



# Model 801X-AR/-AP Accelerometer

All values are typical at +24°C, 100Hz and 15Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice. Standard product parameters are described in PSC-1003 for Plug & Play AC Accelerometers.

Parameters					Notes
<b>DYNAMIC</b>					
Range (g Peak or RMS)	±5	±10	±20	±50	
Output (mA)	4 to 20	4 to 20	4 to 20	4 to 20	
Frequency Response (cpm)	600-300000	600-300000	600-300000	600-300000	±10%
Frequency Response (Hz)	10-5000	10-5000	10-5000	10-5000	±10%
Non-Linearity (%FSO)	±1	±1	±1	±1	
Transverse Sensitivity (%)	<5	<5	<5	<5	
Shock Limit (g)	5000	5000	5000	5000	
<b>ELECTRICAL</b>					
Excitation Voltage (Vdc)	12 to 30				
Loop Resistance (Ohms)	900 max				See Note 1
Turn on Time (sec)	<10				
Grounding	Case Isolated, Internally Shielded				
<b>ENVIRONMENTAL</b>					
Operating Temperature (°C)	-40 to +85				
Storage Temperature (°C)	-40 to +85				
<b>PHYSICAL</b>					
Sensing Element	Ceramic (shear mode)				
Case Material	Stainless Steel				
Weight (grams)	93				
Mounting Torque	24 lb-in (2.7 N-m)				
<b>Calibration supplied:</b>	CS-FREQ-0100	NIST Traceable Amplitude Calibration from 20Hz to ±10% Frequency Response Limit			
<b>Supplied accessories:</b>	AC-A03663	¼-28 to ¼-28 mounting stud			
<b>Optional accessories:</b>	316-XXX	Cable Assembly, Straight (XXX designates length in inches, 10ft standard)			
	318-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			
	AC-A04209	Magnetic Mounting Adaptor			

Note 1

Maximum Loop Resistance = (Excitation Voltage – 12Vdc) / 20mA

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## ordering info

PART NUMBERING Model Number+Range

801X-ZZ-GGG-CCC

| | | | Cable length (120 is 120 inches)

| | | Range (050 is 50g)

| | Range Type (AR is RMS Acceleration)

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

-ZZ

AR = RMS

AP = Peak

Example: 8011-AR-050

Model 8011, 2-pin connector, RMS acceleration output, 50g range