

Model 8011-04/-05 Velocity Transmitter



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



The **Model 8011** is an internally shielded rugged 4-20mA velocity transmitter. The transmitter is available in ranges from 0.5 to 5.0 in/sec, in either RMS or Peak velocity output options. The model 8011 features a top exit MIL-C-5015 connector and is designed to operating in temperature ranges from -40°C to +85°C. The unit is hermetically sealed and features the popular stud mount installation.

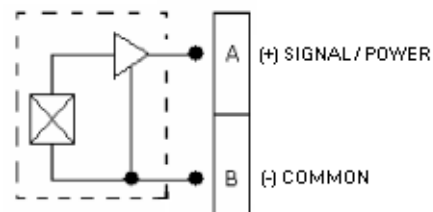
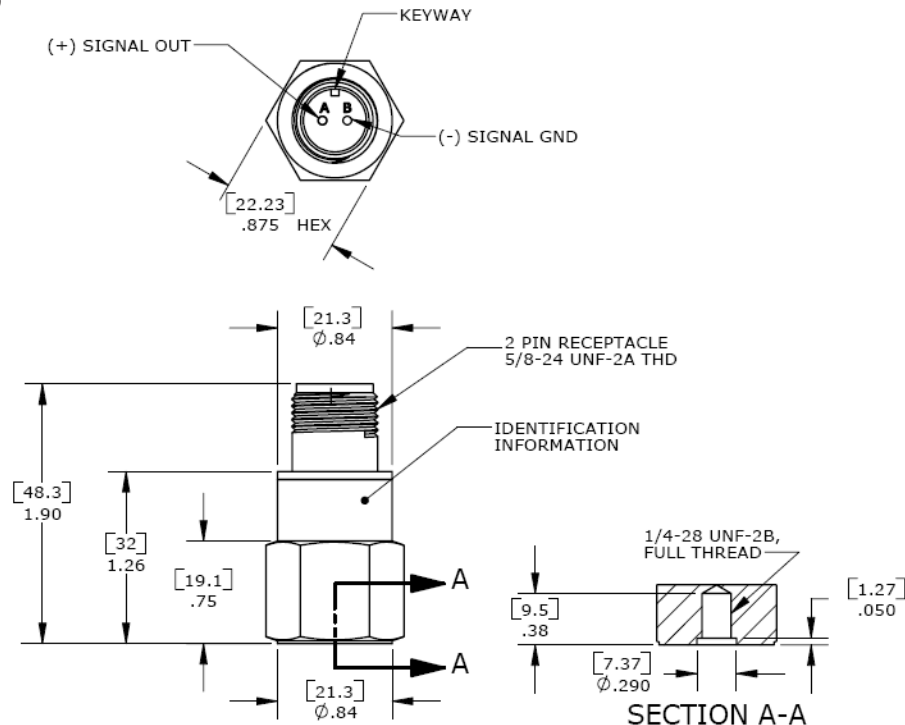
FEATURES

- 0.5 to 5.0 in/sec Dynamic Range
- 3-1000Hz 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
- Industrial Applications
- Harsh Environments
- Gearbox Monitoring

dimensions



Model 8011-04/-05 Velocity Transmitter

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
DYNAMIC						
Measurement Range (in/sec)	0-0.5	0-1.00	0-2.00	0-3.00	0-5.00	
Measurement Range (mm/sec)	0-12.7	0-25.4	0-50.8	0-76.2	0-127	
Output (mA)	4-20	4-20	4-20	4-20	4-20	
Frequency Response (cpm)	180-60000	180-60000	180-60000	180-60000	180-60000	±10%
Frequency Response (Hz)	3-1000	3-1000	3-1000	3-1000	3-1000	±10%
Non-Linearity (%FSO)	±1					
Transverse Sensitivity (%)	<5					
Shock Limit (g)	5000					
ELECTRICAL						
Excitation Voltage (Vdc)	12 to 30					
Loop Resistance (Ohms)	900 max					See Note 1
Turn on Time (sec)	<15					
Grounding	Case Isolated, Internally Shielded					
ENVIRONMENTAL						
Operating Temperature (°C)	-40 to +85					
Storage Temperature (°C)	-40 to +85					
PHYSICAL						
Sensing Element	Ceramic (shear mode)					
Case Material	Stainless Steel					
Weight (grams)	93					
Mounting Torque	24 lb-in (2.7 N-m)					
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:	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				

Note 1

$$\text{Maximum Loop Resistance} = (\text{Excitation Voltage} - 12\text{Vdc}) / 20\text{mA}$$

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ordering info

PART NUMBERING

8011-XX-ZZ

I | I _____ Dynamic Range (05 is 0-0.5 in/sec)
I | _____ Range Type (04 is RMS)

-XX

04 = RMS
05 = Peak

-ZZ

05 = 0-0.5 in/sec (0-12.7 mm/sec)
10 = 0-1.0 in/sec (0-25.4 mm/sec)
20 = 0-2.0 in/sec (0-50.8 mm/sec)
30 = 0-3.0 in/sec (0-76.2 mm/sec)
50 = 0-5.0 in/sec (0-127 mm/sec)

Example: 8011-04-10

Model 8011, RMS velocity output, 0-1.0 in/sec