

Model 4020 & 4030 Accelerometer



DC Response, Silicon MEMS
Dual & Triaxial Output Options
Low Cost, Great Value
 $\pm 2g$ & $\pm 6g$ Measurement Range
Rugged Construction



The Model 4020 & 4030 are low noise, signal conditioned DC accelerometers packaged in a durable molded housing. The accelerometers are offered in $\pm 2g$ & $\pm 6g$ ranges with a nominal 0-200Hz bandwidth. The model 4020 is a dual axis configuration while model 4030 is a triaxial configuration. The capacitive silicon MEMS sensing element offers high resolution and long term stability for critical measurement applications.

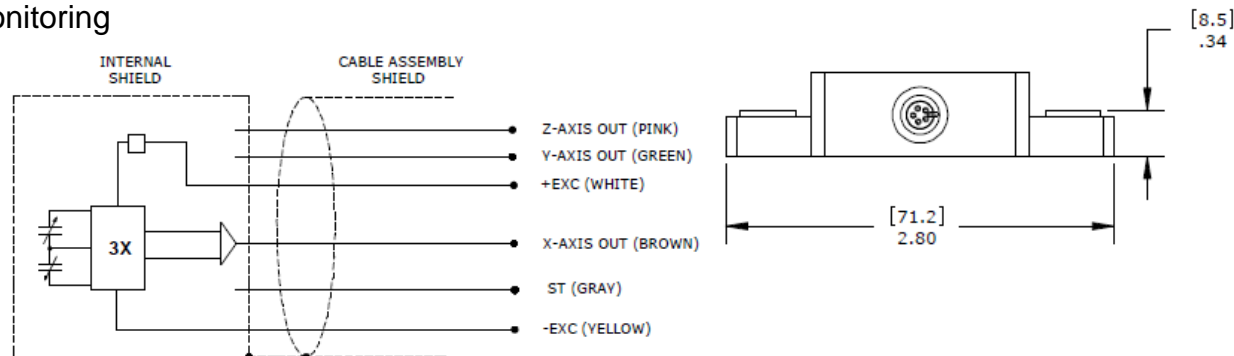
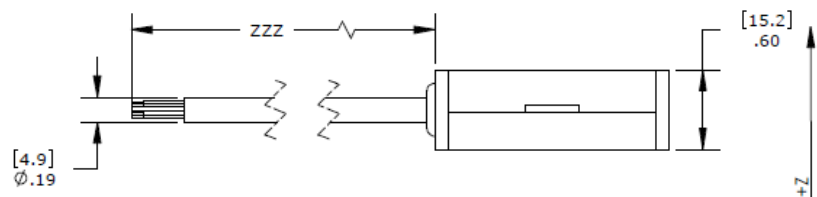
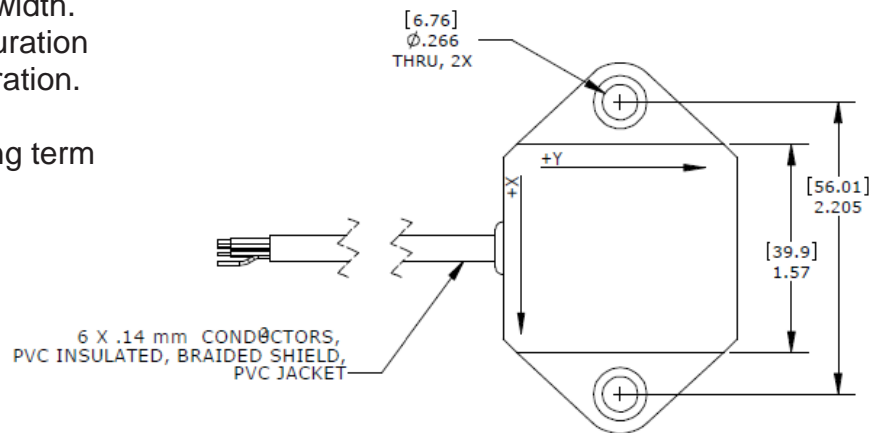
FEATURES

- 5-30Vdc Excitation Voltage
- Environmentally Sealed
- Low Pass Filtered Output
- Capacitive Silicon MEMS Element
- Integral #24 AWG Cable
- Temperature Compensated

APPLICATIONS

- Low Frequency Vibration Monitoring
- Tilt & Inclination Measurement
- Motion Measurements
- Structural Monitoring

dimensions



Model 4020 & 4030 Accelerometer

performance specifications

All values are typical at +24°C, 10Hz and 5Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice. Standard product parameters are described in PSC-1004 for Plug & Play DC Accelerometers.

Parameters

DYNAMIC

	±2	±6	Notes
Range (g)			
Sensitivity (mV/g)	1000	333	±10%
Frequency Response (Hz)	0-200	0-200	±5%
Non-Linearity (%FSO)	±1	±1	
Transverse Sensitivity (%)	<3	<3	
Shock Limit (g)	2000	2000	
Residual Noise (mV RMS)	1.2	1.2	Passband

ELECTRICAL

Zero Acceleration Output (V)	2.5 ±0.1		
Excitation Voltage (Vdc)	5 to 30		
Excitation Current (mA)	5		
Full Scale Output Voltage (Vdc)	±2		
Self Test Output Change (mg)	X = 200 ±100, Y = -200 ±100, Z = 350 ±200		Ground ST Lead
Ground Isolation	Isolated from Mounting Surface		

ENVIRONMENTAL

Thermal Zero Shift (%FSO)	±4		-40° to +85°C
Thermal Sensitivity Shift (%)	±4		-40° to +85°C
Operating Temperature (°C)	-40 to 85		
Humidity	Epoxy Sealed, IP65		

PHYSICAL

Case Material	PA6.6 Polyamide
Weight (grams)	44
Mounting	2x 1/4 or M6 Screws
Mounting Torque	18 lb-in (2.0 N-m)

Calibration supplied: CS-LFREQ-0010 NIST Traceable Amplitude Calibration from 1Hz to 30Hz

Optional accessories: 121 3-Channel Precision Low Noise DC Amplifier

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ordering info

PART NUMBERING Model Number+Range+Cable Length

40XX-GGG-CCC

| | | Cable Length (120 is 120 inches)

| | Range (002 is ±2g)

| Dual or Triaxial Configuration (4020; Dual Axis, 4030; Triaxial)

Example: 4030-002-120

Model 4030 (triaxial), ±2g range, 120 inch cable length

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