Model 4020 & 4030 Accelerometer

DC Response, Silicon MEMS
Dual & Triaxial Output Options
Low Cost, Great Value
±2g & ±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 ±2g & ±6g ranges with a nominal 0-200Hz bandwidth. The model 4020 is a dual axis configuration (X&Y axes) while model 4030 is a triaxial configuration.
The capacitive silicon MEMS sensing element offers high resolution and long term stability for critical measurement applications.

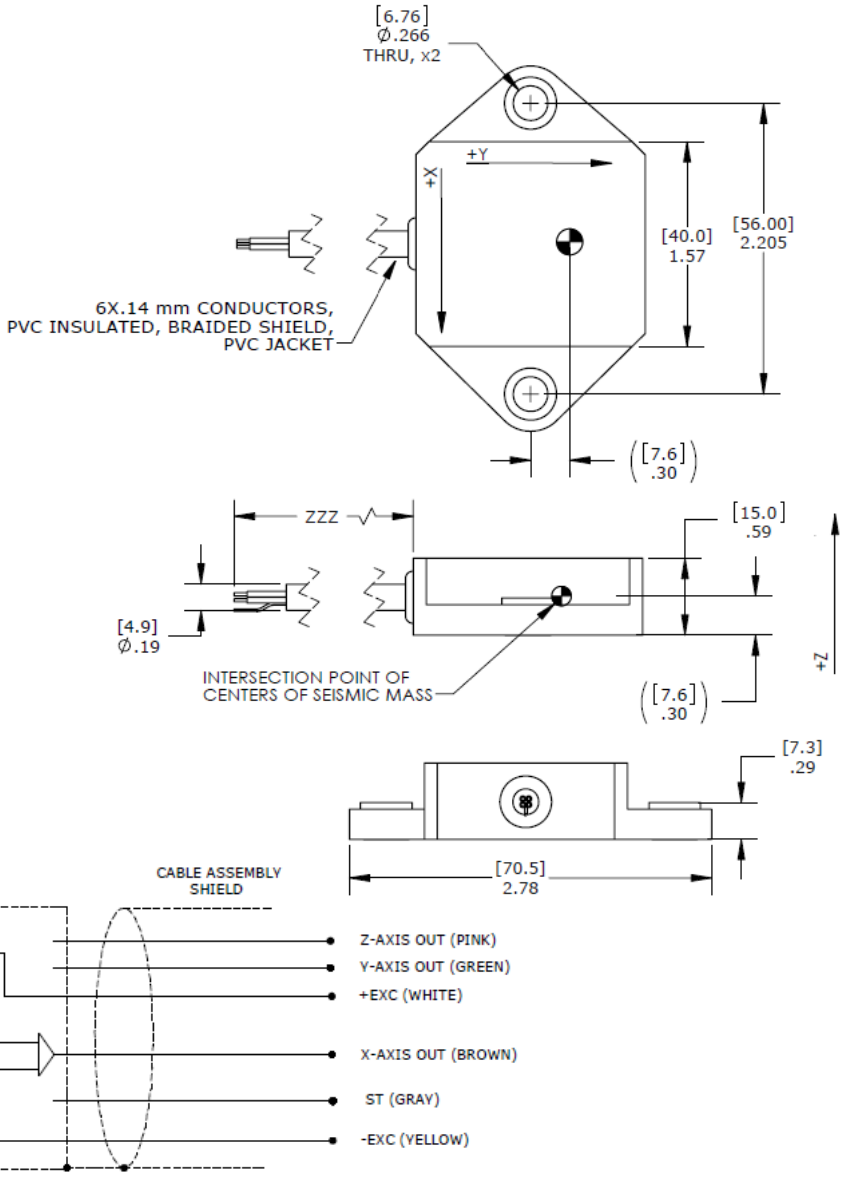
FEATURES

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

APPLICATIONS

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

dimensions



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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			**Notes**
Range (g)	±2	±6	
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 (µV RMS)	600	240	Passband
Residual Noise (µg/√Hz RMS)	50	42	
Self Test Output Change (mV)	X = +210 ±90 Y = -210 ±90 Z = -340 ±190	X = +70 ±30 Y = -70 ±30 Z = -110 ±65	Ground ST Lead
ELECTRICAL			
Zero Acceleration Output (V)	2.5 ±0.1		
Excitation Voltage (Vdc)	5 to 30		
Excitation Current (mA)	4		
Full Scale Output Voltage (Vdc)	±2		
Ground Isolation	Isolated from Mounting Surface		
ENVIRONMENTAL			
Thermal Zero Shift (%FSO)	±4		-40° to +85°C
Thermal Sensitivity Shift (%)	±5		-40° to +85°C
Operating Temperature (°C)	-40 to 85		
Humidity	Epoxy Sealed, IP65		
PHYSICAL			
Housing Material	Nylon 6-6, 30% GF, Brass Inserts at Mounting Holes		
Weight (grams)	50		
Mounting	2x ¼ or M6 Screws		
Mounting Torque	18 lb-in (2.0 N-m)		

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
- l l l____Cable Length (120 is 120 inches)
- l l_____Range (002 is ±2g)
- l_____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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