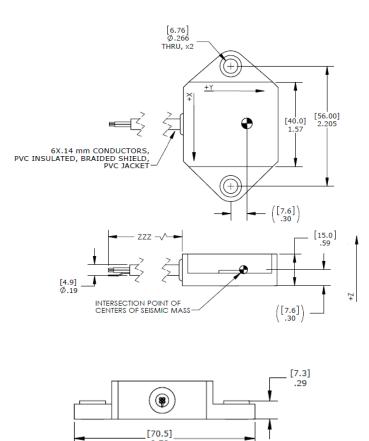




## dimensions



# MODEL 4020 & 4030 ACCELEROMETER

#### **SPECIFICATIONS**

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

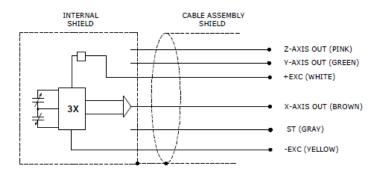
The Model 4020 & 4030 are low noise, signal conditioned DC accelerometers packaged in a durable molded housing. The accelerometers are offered in ±2g & ±6g ranges with a nominal 0-200Hz bandwidth. The model 4020 is a dual axis configuration (X&Y axes) while model 4030 is a triaxial configuration. The 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



#### PERFORMANCE SPECIFICATIONS

Mounting

Mounting Torque

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.

Parameters DYNAMIC Range (g) Sensitivity (mV/g) Frequency Response (Hz) Non-Linearity (%FSO) Transverse Sensitivity (%) Shock Limit (g) Residual Noise (μV RMS)	±2 1000 0-200 ±1 <3 2000 600	±6 333 0-200 ±1 <3 2000 240	Notes ±10% ±5%  Passband
Residual Noise (µg/√Hz RMS) Self Test Output Change (mV)	50 X = +210 ±90 Y = -210 ±90 Z = -340 ±190	42 X = +70 ±30 Y = -70 ±30 Z = -110 ±65	Ground ST Lead
ELECTRICAL Zero Acceleration Output (V) Excitation Voltage (Vdc) Excitation Current (mA) Full Scale Output Voltage (Vdc) Ground Isolation	2.5 ±0.1 5 to 30 4 ±2 Isolated from M	ounting Surface	
ENVIRONMENTAL Thermal Zero Shift (%FSO) Thermal Sensitivity Shift (%) Operating Temperature (°C) Humidity	±4 ±5 -40 to 85 Epoxy Sealed,	IP65	-40° to +85°C -40° to +85°C
PHYSICAL Housing Material Weight (grams)	Nylon 6-6, 30% GF, Brass Inserts at Mounting Holes 50		

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

2x 1/4 or M6 Screws

18 lb-in (2.0 N-m)

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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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