



MODEL 4030 TRIAXIAL MEMS DC ACCELEROMETER

Specifications

- Triaxial Capacitive MEMS Accelerometer
- $\pm 2g$ & $\pm 6g$ Dynamic Ranges
- Low Cost, Great Value
- Rugged Molded Housing
- Self-Test Enabled

Features

- Capacitive Silicon MEMS Sensor
- Low Pass Filtered Output
- Linearity $<0.5\%$
- 5-30Vdc Excitation Voltage
- IP65 Environmentally Sealed
- Integral Rugged Cable

Applications

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

The TE Connectivity model 4030 is a low noise, signal conditioned DC accelerometer packaged in a durable molded housing with brass mounting inserts. The accelerometer is offered in $\pm 2g$ & $\pm 6g$ dynamic ranges with a nominal 0-200Hz bandwidth. The capacitive silicon MEMS sensing element offers high resolution and long term stability with minimal non-linearity.

The model 4030 accelerometer incorporates a rugged integral cable assembly with braided shield and PVC jacket. The sensor is fully encapsulated in potting for environmental sealing in critical measurement applications. The accelerometer also includes a self-test feature for remote verification of sensor integrity.

[CLICK HERE >](#)
CONNECT WITH A SPECIALIST

MODEL 4030 ACCELEROMETER

Performance Specifications

All values are typical at +24°C, 80Hz and 5Vdc excitation unless otherwise stated. TE Connectivity reserves the right to update and change these specifications without notice.

PARAMETERS

DYNAMIC			NOTES
Range (g)	±2	±6	
Sensitivity (mV/g)	1000	333	±10%
Frequency Response (Hz)	0-200	0-200	±5%, All Axes
Frequency Response (Hz)	0-600	0-600	±1dB, All Axes
Transverse Sensitivity (%)	<3	<3	
Non-Linearity (%FSO)	±0.5	±0.5	BFSL
Shock Limit (g)	2000	2000	
Residual Noise (µV rms)	600	240	Passband
Spectral Noise (µg/√Hz rms)	42	51	
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	From -40 to +85°C
Thermal Sensitivity Shift (%)	±5	From -40 to +85°C
Operating Temperature	-40 to +85°C (-40 to +185°F)	
Humidity	Epoxy Sealed, IP65	

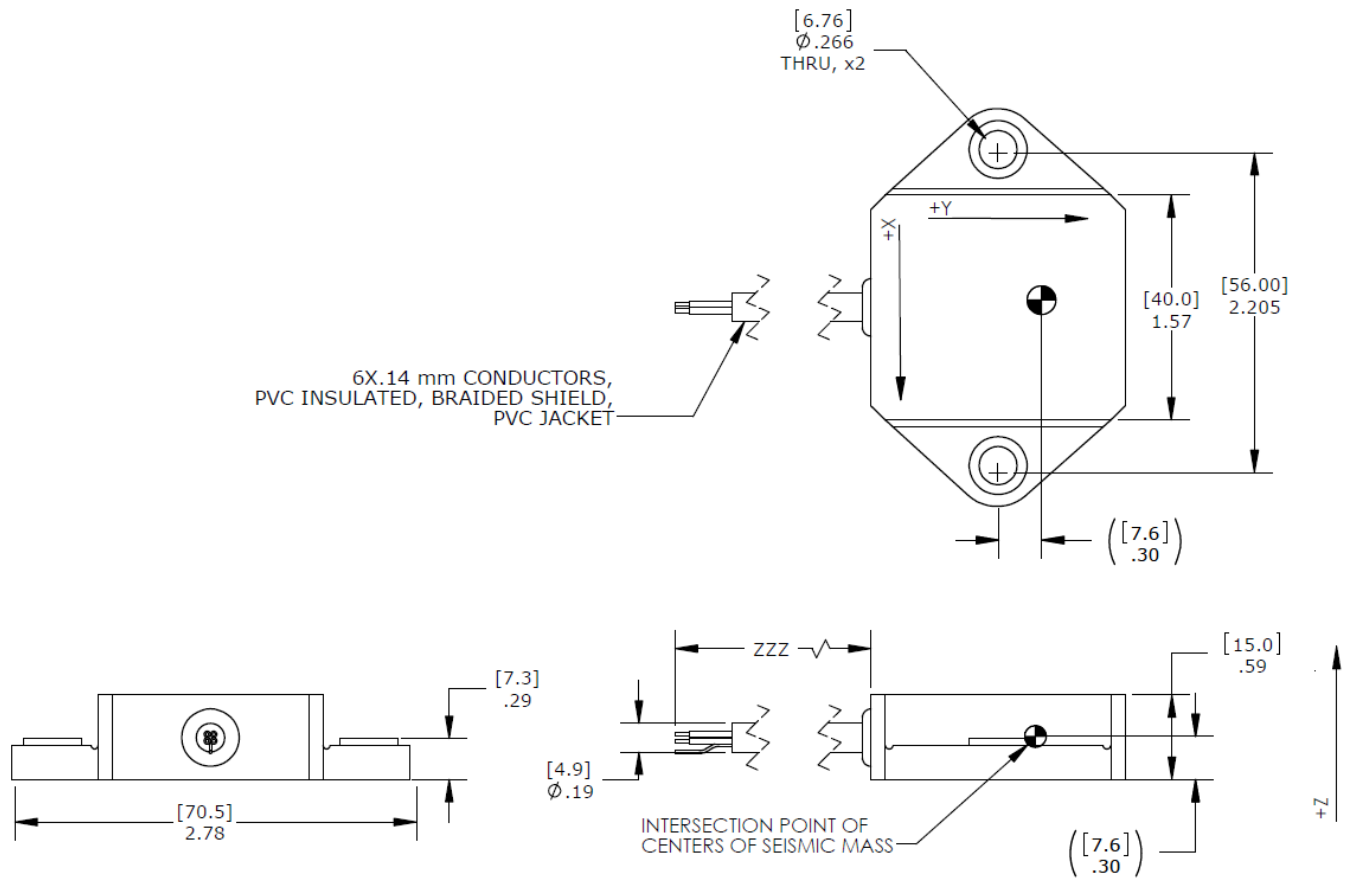
PHYSICAL

Housing Material	Nylon 6-6, 30% GF Molded Housing, Brass Inserts at Mounting Holes	
Cable	6 x 0.14mm Conductors PVC Insulated, Braided Shield, PVC Jacket	
Weight (grams)	50	Cable not included
Mounting	2x 1/4inch or M6 Metric Screws	
Mounting Torque	18 lb-in (2.0 N-m)	

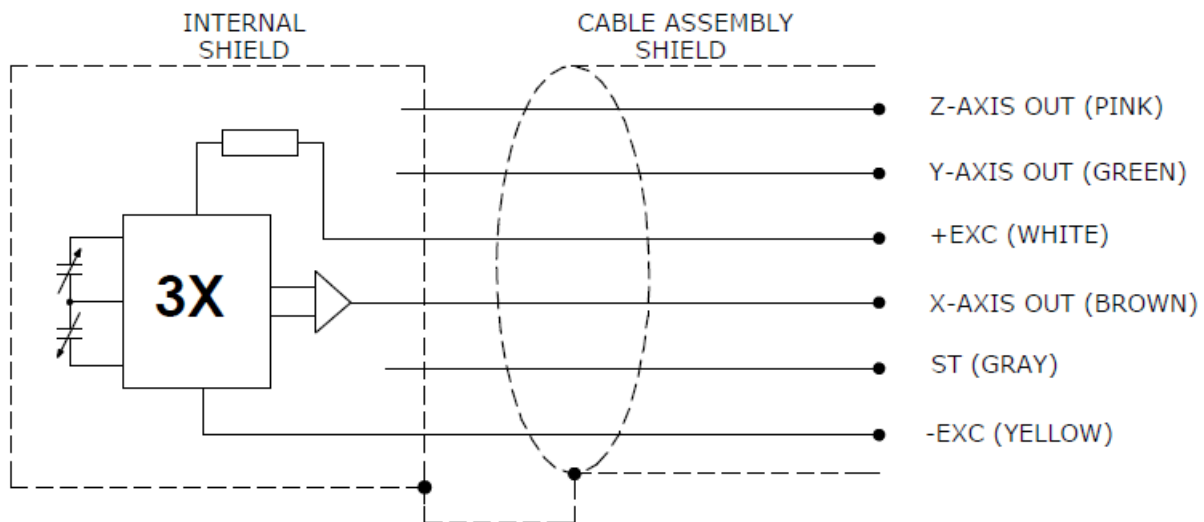
Optional accessories: 121 3-Channel Precision Low Noise DC Amplifier

MODEL 4030 ACCELEROMETER

Dimensions



Schematic



MODEL 4030 ACCELEROMETER

Ordering Information

4030	GGG	ZZZ
Range 002 = 2g 006 = 6g		
Cable length 120 = 120 inches, 10ft		

Example;4030-002-120
Model 4030, 2g range, 120inch (10ft) cable length

CLICK HERE ›
CONNECT WITH A SPECIALIST

NORTH AMERICA

Measurement Specialties, Inc.,
a TE Connectivity Company
Tel: 800-522-6752
customercare.hmpt@te.com

EUROPE

MEAS France SAS
a TE Connectivity Company
Tel: +31 73 624 6999
customercare.lcsb@te.com

ASIA

Measurement Specialties (China), Ltd.,
a TE Connectivity Company
Tel: 0400-820-6015
customercare.shzn@te.com

te.com

TE Connectivity, TE, TE Connectivity (logo) and Every Connection Counts are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2019 TE Connectivity Corporation. All Rights Reserved.

Version # 10/2020

