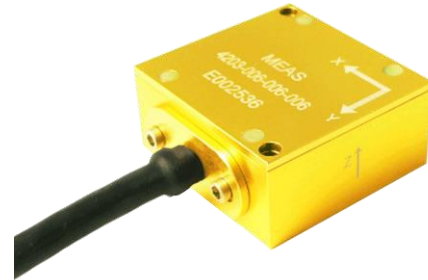


Model 4203 Accelerometer



Triaxial Motorsport Accelerometer
Critically Gas Damped
Temperature Compensation
EMI/RFI Protection
Custom 8-Pole LP Filters



The Model 4203 is a triaxial motorsport accelerometer designed for harsh installations. The rugged, gas damped accelerometer is ideally tailored for motorsport applications and road vehicle testing. The model 4203 features an 8-pole low-pass filter to ensure no high frequency engine noise will leak into the passband. A heavy-duty shielded cable and an EMI/RFI module protects the accelerometer from the harsh operating environment. Available in ranges from $\pm 6g$ to $\pm 50g$, the model 4203 will provide reliable measurements from -40°C to $+125^{\circ}\text{C}$.

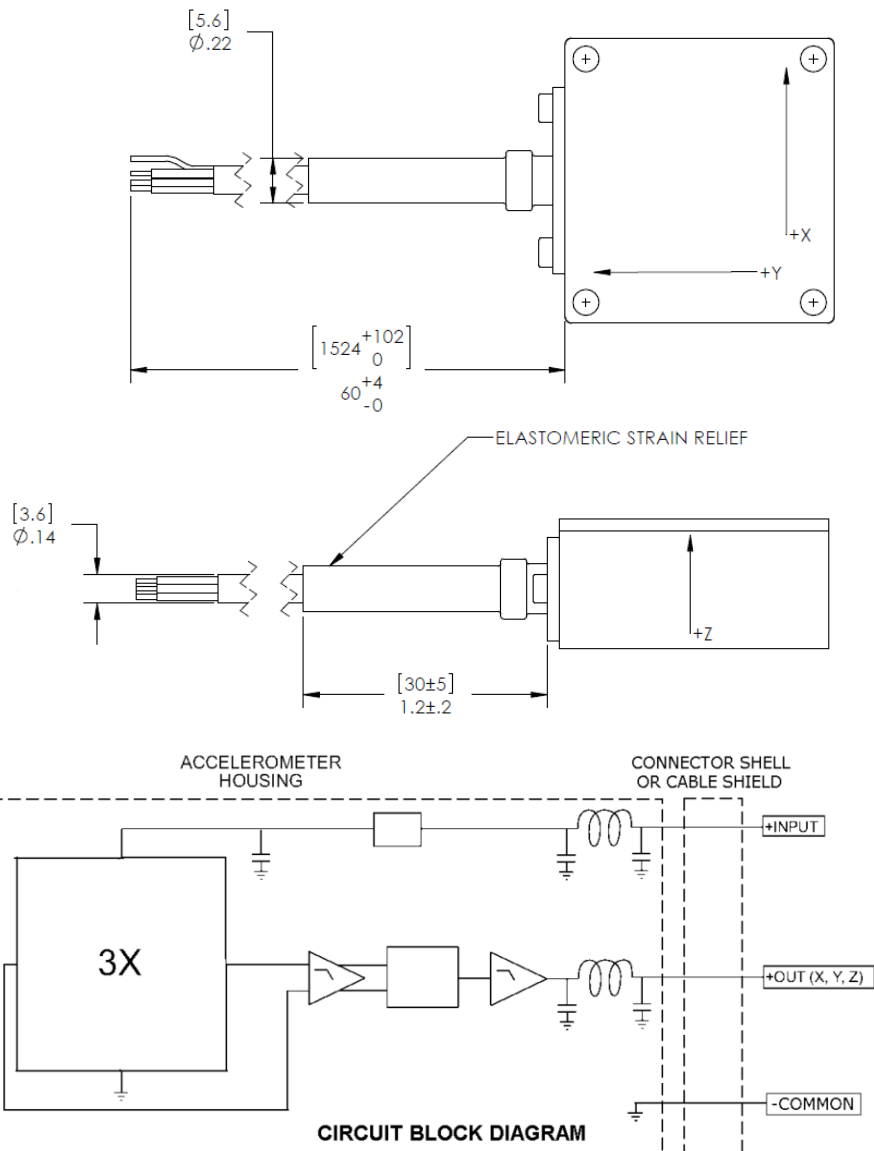
FEATURES

- 8-16 Vdc Excitation
- Ranges up to $\pm 50 g$'s full scale
- Measures static & dynamic acceleration
- Over shock protection to $\pm 5,000 g$'s
- Operating range from -40 to $+125^{\circ}\text{C}$
- Built-in 8-pole low-pass filter
- EMI/RFI protection

APPLICATIONS

- Motorsport Racing
- Engine Testing
- Road Vehicle Testing
- Formula One
- Indy Racing League

dimensions



Model 4203 Accelerometer

performance specifications

All values are typical at +24°C, 80Hz and 12Vdc 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							Notes
DYNAMIC							
Range (g)	±6	±7.5	±10	±20	±30	±50	
Sensitivity (mV/g)	333	267	200	100	67	40	±10%
-3dB Cutoff Frequency (Hz)	100 ±15	100 ±15	100 ±15	100 ±15	100 ±15	100 ±15	See alternate options below
Rolloff Above Cutoff Frequency (dB/dec)	-160	-160	-160	-160	-160	-160	
Non-Linearity (%FSO)	±1.0	±1.0	±1.0	±1.0	±1.0	±1.0	
Transverse Sensitivity (%)	<3	<3	<3	<3	<3	<3	<1.5% Option
Damping Ratio	0.7	0.7	0.7	0.7	0.7	0.7	
Shock Limit (g)	5000	5000	5000	5000	5000	5000	
Resolution (mg RMS)	0.5	0.5	0.5	1.0	1.0	3.0	Passband
ELECTRICAL							
Zero Acceleration Output (V)	2.50 ±0.10						Single-ended
Excitation Voltage (Vdc)	8 to 16						
Excitation Current (mA)	<30						
Full Scale Output Voltage Swing (Vdc)	0.5 to 4.5						
Output Resistance (Ω)	<100						
Insulation Resistance (MΩ)	>100						@100Vdc
Turn On Time (msec)	<100						
Ground Isolation	Isolated from Mounting Surface						
ENVIRONMENTAL							
Thermal Zero Shift (%FSO/°C)	±0.012						
Thermal Sensitivity Shift (%/°C)	±0.020						
Operating Temperature (°C)	-40 to +125						
Storage Temperature (°C)	-40 to +125						
Humidity	Epoxy Encapsulated, IP65						
PHYSICAL							
Case Material	Anodized Aluminum						
Cable	5x #24 AWG Conductors, ETFE Insulated, Braided Shield, Crosslinked ETFE Jacket						
Weight (grams)	60 (cable not included)						
Mounting	4x #4 or M3 Screws						
Mounting Torque	6 lb-in (0.7 N-m)						
Calibration supplied:	CS-LFREQ-0010	NIST Traceable Amplitude Calibration from 1Hz to 100Hz					
Optional accessories:	121	3-Channel Precision Low Noise DC Amplifier					

北京赛斯维测控技术有限公司
 北京市朝阳区望京西路48号
 金隅国际D座302
 电话：+86 010 8477 5646
 传真：+86 010 5894 9029
 邮箱：sales@sensorway.cn
<http://www.sensorway.cn>

The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. Measurement Specialties, Inc. reserves the right to make changes without further notice to any product herein. Measurement Specialties, Inc. makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does Measurement Specialties, Inc. assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Typical parameters can and do vary in different applications. All operating parameters must be validated for each customer application by customer's technical experts. Measurement Specialties, Inc. does not convey any license under its patent rights nor the rights of others.

ordering info

PART NUMBERING Model Number+Range+Filter Option

4203-XX-YY-ZZ-WW-C

| |
 | | Filter Option (A1 Standard)
 | Range (06-06-10 is ±6g-X, ±6g-Y, ±10g-Z)

Example: 4203-06-06-10-A1-C
 Model 4203, 6g X-axis, 6g Y-axis, 10g Z-axis, 60Hz Low-pass Filter

Dash Number	Filter Cutoff Frequency
-A1	60 Hz
-A2	40 Hz
-A4	47 Hz
-A5	80 Hz
-A6	50 Hz
-A7	100 Hz