

MODEL 4332 ACCELEROMETER

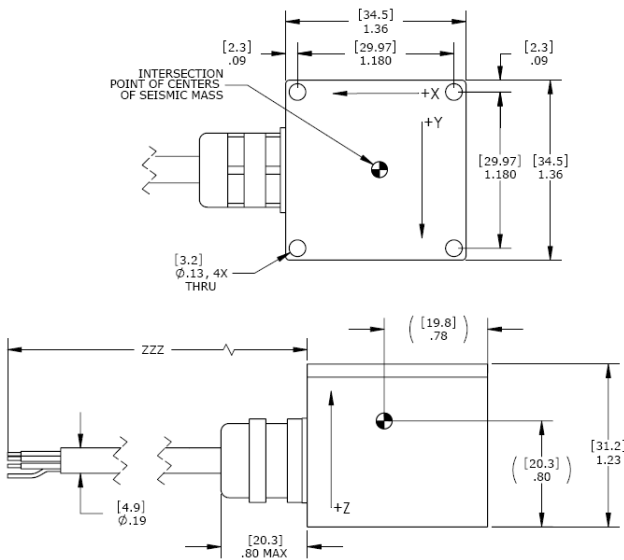


SPECIFICATIONS

- MEMS Triaxial Accelerometer
- Temperature Calibrated
- IP68 Protection
- Low Noise, High Resolution

The **Model 4332** is a low noise triaxial accelerometer offering both static and dynamic response. The accelerometer is packaged in an anodized aluminum housing and is offered in $\pm 2g$ to $\pm 20g$ range. The **model 4332** features an integral cable and is certified to IP68 protection. The accelerometer incorporates a 50Hz LP filter and an operating temperature range of -40°C to $+85^{\circ}\text{C}$.

DIMENSIONS



WIRE DESIGNATIONS: WHITE = INPUT (EXCITATION)
 BROWN = OUTPUT X AXIS
 GREEN = OUTPUT Y AXIS
 PINK = OUTPUT Z AXIS
 YELLOW = COMMON (CIRCUIT GROUND)
 GRAY = NO CONNECTION

FEATURES

- Micro-g Resolution
- Three Independent Circuits
- Low Current Consumption
- $\pm 2g$ to $\pm 20g$ Dynamic Range
- DC Response
- Temperature Compensation

APPLICATIONS

- Transportation Measurements
- Structural Monitoring
- Bridge Monitoring
- Low Frequency Applications
- Motion Analysis

PERFORMANCE SPECIFICATIONS

All values are typical at +24°C, 10Hz and 12Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

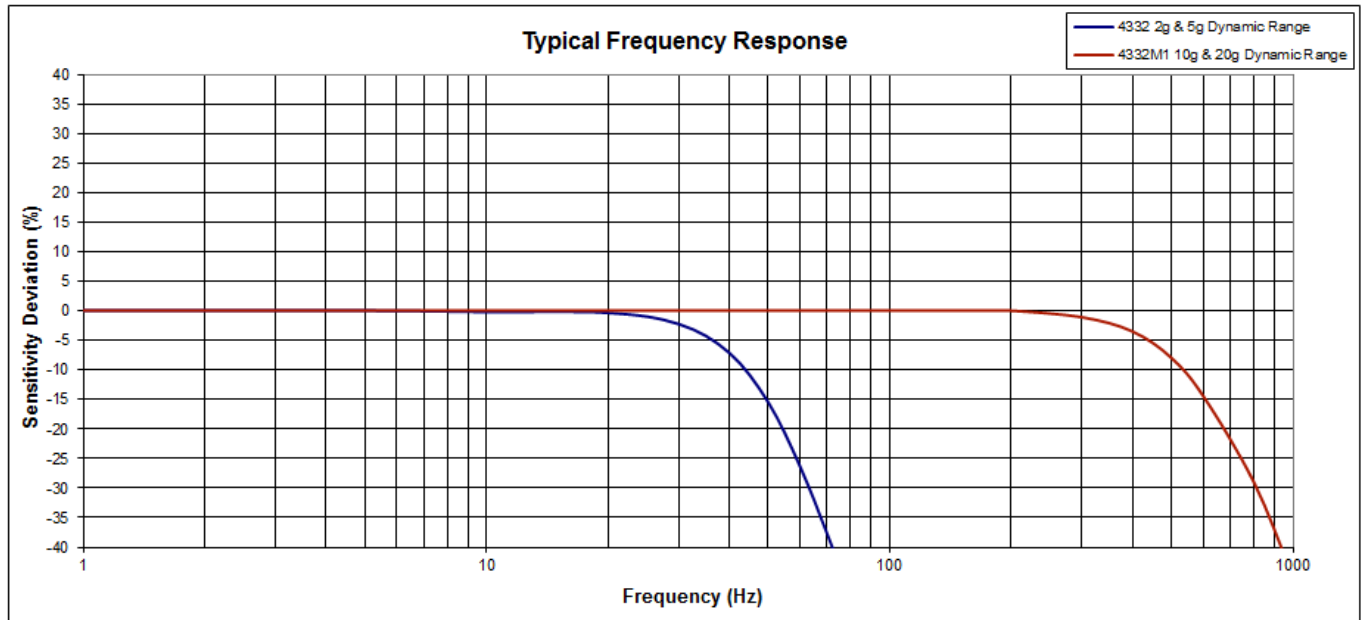
Parameters					Notes
DYNAMIC					
Model Number	4332-002	4332-005	4332M1-010	4332M1-020	
Range (g)	±2	±5	±10	±20	
Sensitivity (mV/g)	1000	400	200	100	±10%
Frequency Response (Hz)	0-20	0-20	0-200	0-200	±5%
-3dB Cutoff Frequency (Hz)	50 +20/-0	50 +20/-0	800 ±50	800 ±50	
Rolloff Above Cutoff Frequency (dB/dec)	-40	-40	-40	-40	
Natural Frequency (Hz)	700	800	1000	1500	
Non-Linearity & Hysteresis (%FSO)	±0.5	±0.5	±0.5	±0.5	
Transverse Sensitivity (%)	<3	<3	<3	<3	<2 Typical
Damping Ratio	0.7	0.7	0.7	0.7	
Shock Limit (g)	5000	5000	5000	5000	
Residual Noise (µV RMS)	80	50	200	200	0.1 to 100Hz
Residual Noise (µg/√Hz RMS)	8	13	71	141	Spectral
ELECTRICAL					
Zero Acceleration Output (V)	2.5 ±0.1				
Excitation Voltage (Vdc)	5 to 30				
Excitation Current (mA)	<15				
Full Scale Output Voltage Swing (Vdc)	0.5 to 4.5				
Output Impedance (Ω)	<100				
Insulation Resistance (MΩ)	>100				@100Vdc
Turn On Time (msec)	<100				
Ground Isolation	Isolated from Mounting Surface				
ENVIRONMENTAL					
Thermal Zero Shift (%FSO/°C)	±0.04				0 to +65°C
Thermal Sensitivity Shift (%/°C)	±0.04				0 to +65°C
Operating Temperature (°C)	-40 to 85				
Compensated Temperature (°C)	0 to 65				
Storage Temperature (°C)	-40 to 85				
Humidity	IP68, 40m Depth				
PHYSICAL					
Case Material	Anodized Aluminum				
Cable	PVC Insulated Leads, Braided Shield, PVC Jacket				
Weight (grams)	<100				
Mounting	4x #4 or M3 Screws				
Mounting Torque	6 lb-in (0.7 N-m)				
AWG (model 4332)	6x 0.14 mm ²				

Calibration supplied: CS-FREQ-0100 NIST Traceable Amplitude Calibration from 1Hz to 100Hz

Supplied accessories: 4x #4-40 (1 ½" length) Socket Head Cap Screw and Washer

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

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 INFORMATION

PART NUMBERING Model Number+Range+ Cable Length

4332-GGG-CCC

| | | Cable Length (-120 is 120 inches)

| | Range (002 is 2g)

| Model (4332 for 2g & 5g range, 4332M1 for 10g & 20g range)

Example: 4332-002-120

Model 4332, 2g, 120" Cable

NORTH AMERICA

Measurement Specialties, Inc.,
 a TE Connectivity Company
 1000 Lucas Way
 Hampton, VA 23666
 Sales and Customer Service
 Tel: +1-800-745-8008 or
 +1-757-766-1500
 Fax: +1-757-766-4297
 t&m@meas-spec.com

EUROPE

MEAS France SAS
 a TE Connectivity Company
 26 Rue des Dames
 F78340 Les Clayes-sous-Bois
 France
 Sales and Customer Service
 Tel: +33 (0) 1 79 33 00
 Fax: +33(0)1 34 81 03 59
 t&m@meas-spec.com

ASIA

Measurement Specialties (China), Ltd.,
 a TE Connectivity Company
 No. 26 Langshan Road
 Shenzhen High-Tech Park (North)
 Nanshan District, Shenzhen 518057
 China
 Sales and Customer Service
 Tel: +86 755 3330 5088
 Fax: +86 755 3330 5099
 t&m@meas-spec.com

TE.com/sensorsolutions

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties, TE Connectivity, 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.

© 2015 TE Connectivity Ltd. family of companies All Rights Reserved.