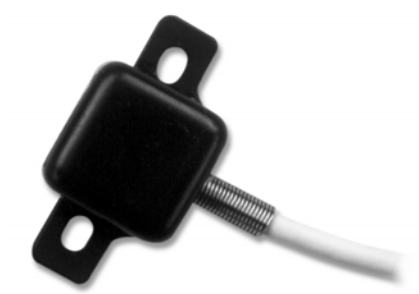
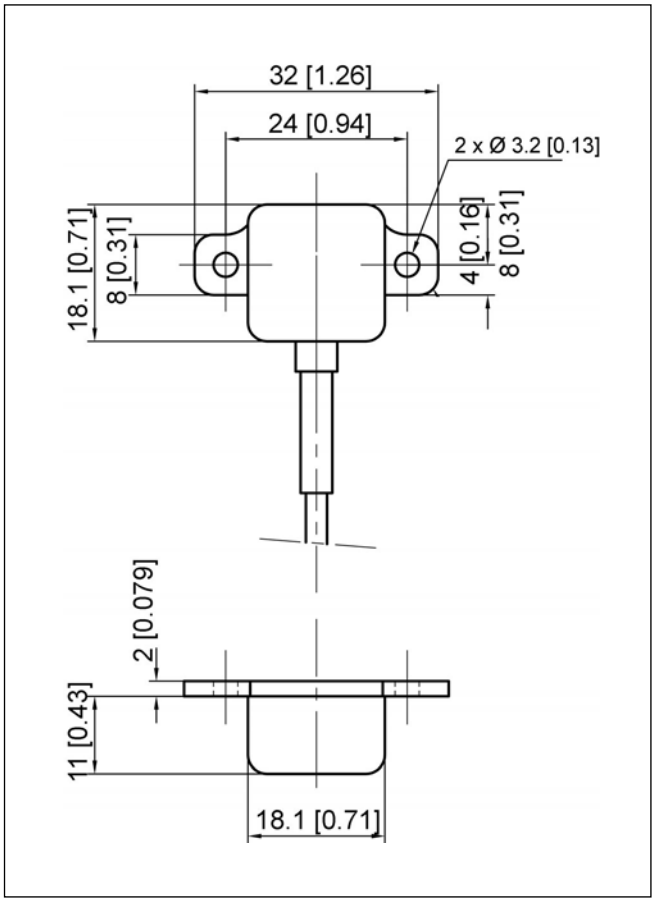
FA108 SERIES

Accelerometer





- **Full Scale Range ±2 g to ±500 g**
- **DC Response**
- **Integrated Over-range Stops**
- **Solid State Reliability**
- **High Level Output Model with Integrated Amplifier**
- **Mounting Brackets**

The FA108 is a general purpose accelerometer that is especially useful for measuring very low frequencies. Its small size and light weight facilitate testing where these conditions are necessary. With two lateral brackets, the FA108 accelerometers are designed for easy mechanical mounting. They are also available with built-in A1/A2 module, providing internal signal conditioning.

With many years of experience as a designer and manufacturer of sensors, FGP Sensors often works with customers to design or customize sensors for specific uses and testing environments.
To meet your needs we also offer complete turnkey systems. The matched components (sensor, power, amplifier and digital display) are formatted, calibrated and ready for immediate use.

Characteristics

Measurement Range (g)	**±2**	**±5**	**±10**	**±20**	**±50**	**±100**	**±200**	**±500**
Over-range (g)	400	400	400	400	1000	2000	2000	2000
Frequency Response ±5% (Hz) FA108/FA108-A2	0-200	0-250	0-300	0-500	0-750	0-1000	0-1200	0-1250
Frequency Response ±5% (Hz) FA108-A1	0-100	0-150	0-250	0-400	0-700	0-700	0-700	0-700

Performance specifications subject to change without notice. October 12, 2006

Technical Specifications

Range (F. S.)

From ±2 to ±500 g (see table on reverse side)

Over-range

From 400 to 2000 g (see table on reverse side)

Accuracy

Linearity : <±2% F.S.
Transverse Sensitivity : <3% F.S.

Temperature Range

Operating Temperature Range (OTR) : -20 to 80 °C [-4 to 176°F]
Compensated Temperature Range (CTR) : 0 to 60 °C [32 to 140 °F]
Zero Shift in CTR : <2% F.S. / 108 °F
Sensitivity Shift in CTR : <2% of reading / 108 °F

Electrical Characteristics

Reference	**FA108**	**FA108-A1**	**FA108-A2**
Supply Voltage	10 Vdc	10 to 30 Vdc	±15 Vdc
F.S. Output	±20 to ±100 mV	±2 V (±250 mV)	±5 V ±5% F.S.
Zero Offset	<±10 mV	2.5 V (±250 mV)	0 V ±5% of F.S.
Input Impedance/Consumption	10 kΩ	<30 mA	-
Output Impedance	<5 kΩ	<90 Ω	-
Insulation under 50 Vdc	≥100 MΩ	≥100 MΩ	≥100 MΩ

Electrical Termination

Shielded cable, standard length 2 m [6.5 ft] with strain relief spring
Shielding isolated from case

Mechanical Characteristics

Housing Material : Aluminium alloy
Weight w/o cable : <12 grams

Product References

Low Level Output Sensor

Model
Full Scale Range (F.S.)
In g
Option(s)
L : Linearity ≤±1% F.S.
ZI : Zero shift ≤±1% F.S. in the standard CTR
ET1 : CTR -20 to 100 °C [-4 to 212 °F] OTR=CTR
ET2 : CTR -40 to 120 °C [-40 to 248 °F] OTR=CTR

FA108	2	ET1

High Level Output Sensor

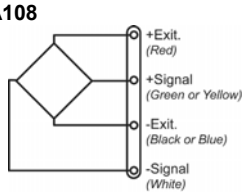
Model
Power Supply Reference
A1 : Unipolar-tension
A2 : Bipolar-tension
Full Scale Range (F.S.)
In g
Option(s)
L : Linearity ≤±1% F.S.
ZI : Zero shift ≤±1% F.S. in the standard CTR
ET1 : CTR -20 to 100 °C [-4 to 212 °F] OTR=CTR
ET2 : CTR -40 to 120 °C [-40 to 248 °F] OTR=CTR
LC"X" : Additional cable length in ft

FA108	A1	2	ET1

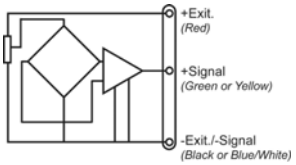
"X" = Custom value

Wiring Schematic

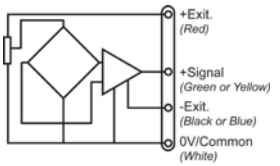
FA108



FA108-A1



FA108-A2



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