

g AAA545
Servo Accelerometer

FEATURES

- Ranges $\pm 2g$ to $\pm 50g$
- Essentially zero temperature coefficient of damping ratio
- Integral temperature compensation
- DC input - DC output
- High reliability



BENEFITS

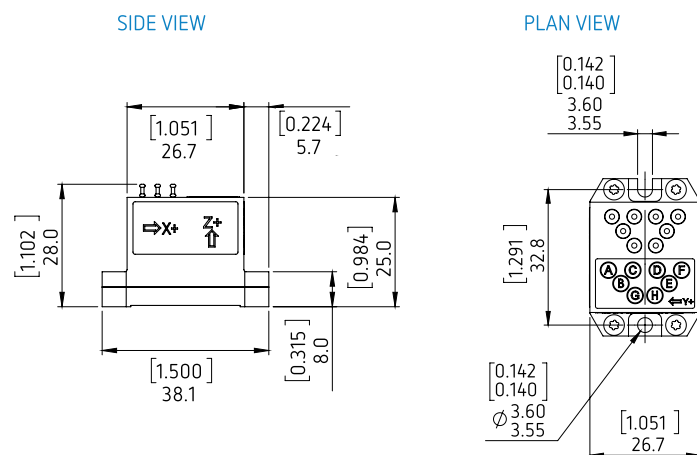
- Compact size
- Wide temperature range -40 to $+105$ °C
- Low weight 40 grams

APPLICATIONS

- Data acquisition Systems
- Crash recorders
- Road bed analysis
- Railways
- Simulators

APPLICATIONS

Pin A	+ dc excitation
Pin B	0V dc excitation
Pin C	- Signal
Pin D	+ Signal
Pin E	Not connected
Pin F	Not connected





SPECIFICATIONS

Specifications by Range @ 25°C		± 2g	± 5g	± 10g	± 20g	± 50g
Output Impedance	Ω (max)			1.2 to 6.5		
Output Noise	V rms (max)			10		
Non-linearity (see note 2)	% FRO (max)			±0.5		
Hysteresis	% FRO (max)			0.02		
Resolution	% FRO (min)			0.0005		
Cross-axis Sensitivity (see note 3)	% FRO (max)			±1		
Zero Offset (see note 4)	Volts dc (max)			±2		
Damping Ratio				0.7 (±0.2)		
Thermal Zero Shift	%FRO/°C (max)			±0.02		
Thermal Sensitivity Shift	%Reading/°C (max)			±0.02		
Sensitive Axis Alignment				Vertical to mounting face		
Weight	grams (max)			40		

Electrical

Input Voltage	Volts dc	14.5 to 27
Input Current	mA dc (max)	5

Environmental Characteristics

Operating Temperature Range	°C	-40 to 105
Compensated Temperature Range	°C	0 to 50
Storage Temperature Range	g	-55 to 130
Humidity/Immersion		IP65
Insulation Resistance	MΩ (@50V dc)	20

NOTES

1. Full Range Output (FRO) is defined as the full acceleration excursion from positive to negative, i.e. ±2g = 4g
2. Non-linearity is determined by the method of least squares
3. Cross-axis sensitivity is the output of unit when subjected to full range acceleration in cross-axis
4. Zero offset is specified under

MODEL DESIGNATION & ORDERING CODE

A 5 4 5 - 0 0 0 1 - g
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g Range