

Accelerometer

Model MAT53



TEMP & VIBRATION OUTPUT

2 Hz to 10 kHz

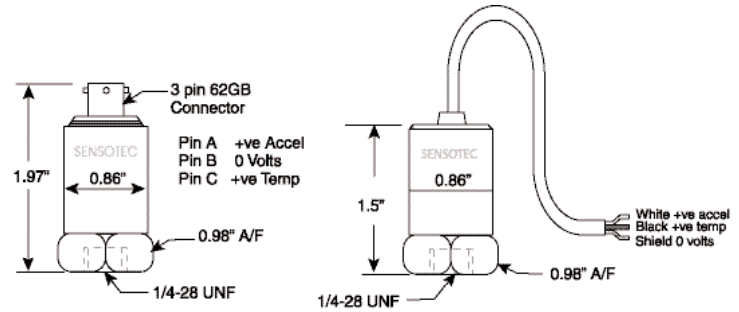
IEPE OUTPUT

CURRENT O/P FOR TEMPERATURE

The SENSOTEC Model MAT53 amplified piezoelectric accelerometers combined with integrated temperature sensors are designed to be used in Industrial test and automation environments; including laboratory test, modal studies and testing cells where simultaneous temperature and velocity vibration are required to be measured. The constant current low output impedance for the velocity vibration combined with the current output for the temperature provide the ability to drive high load capacitance allows long runs of low cost cable without degradation of data. The seismic element is mechanically isolated from the mounting base, resulting in a low base strain sensitivity. The stainless steel materials are non-magnetic resulting in very low magnetic field susceptibility. These features, together with a sealed body, assure accurate and reliable data.

The model MAT53 is available in a number of configurations and options that includes connector or integral stainless steel armored cable (specify length at time of ordering), The Model MAT53 can be supplied in a number of different dynamic ranges to suit the expected temperature and vibration levels.

Dimensions



PERFORMANCE

	Order Code AG930	Order Code AG931
Sensitivity	100 mV/g -10%	100 mV/g -10%
Usable frequency range	2 Hz to 10 KHz -5%	2 Hz to 10 KHz -5%
Mounted base resonance	18kHz	18kHz
Dynamic range	-80 g	-80 g
Temperature sensitivity	1 amp/ K or 10mV/ K	1 amp/ K or 10mV/ K
Transverse sensitivity	Less than 5%	Less than 5%
Amplitude linearity	1% linearity	1% linearity

ENVIRONMENTAL

Temperature range	-10 F to 280 F	-10 F to 280 F
Sealing	IP 67/Nema 4	IP 67/Nema 4

ELECTRICAL

Input	Constant current	Constant current
Current range	0.5 mA to 8 mA	0.5 mA to 8 mA
Bias voltage	10 Vdc	10 Vdc
Cable	-	stainless steel braided PTFE
Standard cable length	-	16 ft.
Mating connector	MH008	-
Electrical noise	0.3 mg max.	0.3 mg max.
Isolation	Base isolated	Base isolated

MECHANICAL

Weight	3.80 oz.	3.80 oz.
Case material	Stainless steel	Stainless steel
Mounting torque	6 ft. lbs.	6 ft. lbs.

OPTIONS

Cable length	-	Specify at time of ordering
Different mounting	Quickfit female	Quickfit female

ACCELERATION / HIGH OUTPUT / TEMPERATURE