

Industrial tri-axial accelerometer

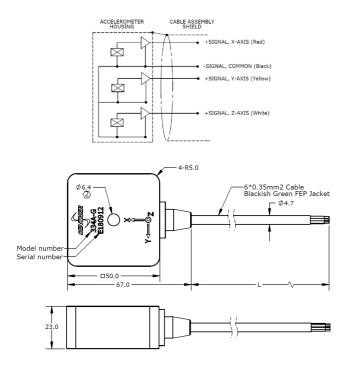


Features

- · Central hole mounting
- · Low frequency response
- · Tri-axial output
- · High sensitivity
- · Hermetic seal
- EMI / RFI shielded

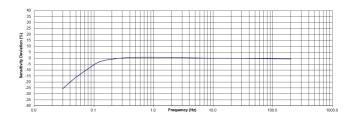
Application

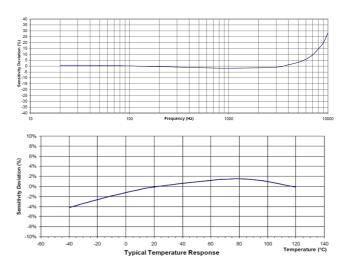
- · High speed train
- · Heavy-duty bearing
- · High structure monitoring



Description

Model 334A is a general purpose tri-axial IEPE accelerometer permitting low frequency vibration measurements. 334A features an annular shear ceramic crystal which exhibits excellent output stability over time. The accelerometer incorporates an internal circuit with in a two-wire IEPE system which transmits its low impedance voltage output through the same cable that supplies the constant current power. Signal ground is internal shielded and isolated from the outer case of the unit. Polarity inversion protection for the amplify circuit is inherent in the circuit design. The welded stainless-steel construction provides a hermetic housing. Integrated cable provides long-term reliable performance over the operating temperature range. In addition to adhesive mounting, 334A offer Ø6.4 central through holes for screw mounting on the test object, cable outgoing direction can be discretional for install convenience. The 334A provides low frequency response and shock resistance, which is ideal for high structure vibration monitoring under incidental shockenvironment.







Specification

Typical at +24°C (+75°F), 24Vdc, 4 mA and 100Hz, unless otherwise stated.

Dash NO.	-5-LF	-10-LF	-20	-50	-500	
Dynamic Range	±5	±10	±20	±50	±500	g, peak
Sensitivity ±10%	1000	500	250	100	10	mV/g
Freq. Resp. ±10%	0.3-4000	0.3-4000	1-6000	1-6000	1-6000	Hz
Freq. Resp. ±3dB	0.1-6000	0.1-6000	0.5-8000	0.3-8000	0.3-8000	Hz
Resonant Frequency	20	20	32	32	32	kHz
Transverse Sensitivity	<5	<5	<5	<5	<5	%
Temp. Resp., -55 to +125°C	±10	±10	±10	±10	±10	%
Non-Linearity	±1	±1	±1	±1	±1	%FSO
Residual Noise	0.00015	0.0002	0.0005	0.0005	0.0010	g RMS
Shock Limit	2000	2000	5000	5000	5000	g
Warm-up Time	<5	<5	<2	<2	<2	second
Weight (Excluding Cable)	367	367	360	360	360	Gram

Specifications	Standard	Units
Bias Voltage	10 to 14	Vdc
Supply Voltage	18 to 30	Vdc
Supply Current	2 to 10	mA
Output Impedance	<100	Ω
Case Insulation (@100Vdc)	>100	ΜΩ
Operating Temperature	-40 to +125	°C
Humidity	Hermetically Sealed	
Case Material	Stainless Steel 316L	
Protection Grade	IP67	
Mounting Torque	2.2 (19.5)	N-m (lb-in)

Accessories

Calibration certificate included.

Part Number	Description	Availability		
PM0244	M6x35 Hex head screw	1no Included		
PM0118	1/4-28x11/4 Hex head screw	1pc Included		
IN-03	3 channels IEPE signal conditioner	Optional		
IN-91	Portable vibration analyzer	Optional		
IN-3062	8 channels data acquisition system	Optional		



Measurement configuration

Sensor	Signal conditioner	BNC cable	Data acquisition	Computer
			[1	

Ordering information

334	Α	-	10	-	LF	-	3	-	Α
Model	Output signal	-	Range	-	Low frequency option	-	Cable length	-	Mounting screw
334	A=IEPE output	-	5=5g	-	LF=Low frequency	-	3=3 meters	-	A=1/4-28x11/4 Hex head screw
			10=10g						B=M6x35 Hex head screw
			20=20g						
			50=50g						
			500=500g						









