



Model 2225

Piezoelectric accelerometer

MEGGITT
smart engineering for
extreme environments

Specifications

The following performance specifications conform to ISA-RP-37.2 (1964) and are typical values, referenced at +75°F (+24°C) and 100 Hz, unless otherwise noted. Calibration data, traceable to National Institute of Standards and Technology (NIST), is supplied.

Dynamic characteristics

	Units	2225
Charge sensitivity		
Typical	pC/g	0.75
Minimum	pC/g	0.60
Frequency response		See typical amplitude response
Resonance frequency [1]	kHz	100
Amplitude response		
±10%	Hz	1 to 10 000
±1 dB (ref)	Hz	1 to 10 000
Temperature response		
-67°F (-55°C) max/min	%	-15/0
+350°F (+177°C) max/min	%	+25/0
Transverse sensitivity	%	≤ 5
Amplitude linearity [2]	%	0.5 per 1000 g, 0 to 20 000 g

Electrical characteristics

Output polarity		Acceleration directed into base produces positive output
Resistance	GΩ	≥ 10
at 350°F (+177°C)	GΩ	≥ 1
Grounding		Signal return connected to case
Capacitance	pF	800

Environmental characteristics

Temperature range		-67°F to +350°F (-55°C to +177°C)
Humidity		Epoxy sealed, non-hermetic
Sinusoidal vibration limit	g pk	10 000
Shock range [3]	g pk	20 000
Base strain sensitivity	equiv. g pk/μ strain	0.03
Thermal transient sensitivity	equiv. g pk/°F [1/°C]	0.005 (0.009)

Physical characteristics

Dimensions		See outline drawing
Weight	gm (oz)	13 (0.46)
Case material		Stainless steel
Connector		Coaxial, 10-32 thread, mates with Endevco 3000 series cables
Mounting torque	lbf-in (Nm)	18 (2)

Calibration

Supplied:		
Frequency response	%	20 Hz to 10 000 Hz
	dB	10 000 to 50 000 Hz
Charge sensitivity	pC/g	
Maximum transverse sensitivity	%	
Capacitance	pF	

Accessories

Product	Description	2225
3090C-120	Cable assembly, 10 ft	Included
2981-12	Mounting stud, 10-32, Hex I.D.	Included
EHM464	Wrench, hex key	Included
2981-3	Stud, 10-32 adapter	Optional
2982-1	Mounting stud 10-32 to 6-32 adapter	Optional
EJ3	Connector	Optional
133	Signal conditioner	Optional
2771C	In-line charge convertor	Optional
2775B	Signal conditioner	Optional
6634C	Signal conditioner	Optional
4990A-X	Oasis 2000 computer-controlled system with cards 428 and/or 433	Optional

Notes:

1. Minor resonances between 30 kHz and 80 kHz exist.
2. Low-end response of the transducer is a function of its associated electronics.
3. Short duration shock pulses, such as those generated by metal-to-metal impacts, may excite transducer resonance and cause linearity errors. See TP290 for more details.
4. Maintain high levels of precision and accuracy using Meggitt's factory calibration services. Call Meggitt's inside sales force at 800-982-6732 for recommended intervals, pricing and turnaround time for these services as well as for quotations on our standard products. calibration services. Call Meggitt's inside sales force at 800-982-6732 for recommended intervals, pricing and turnaround time for these services as well as for quotations on our standard products.



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