

Mini Modal Hammer

Model 2301

- Ultra-Lightweight (2 grams)
- Ergonomically Designed Grip
- Low Impedance (ISOTRON®) Output

**ENDEVCO
MODEL
2301**



Not actual size

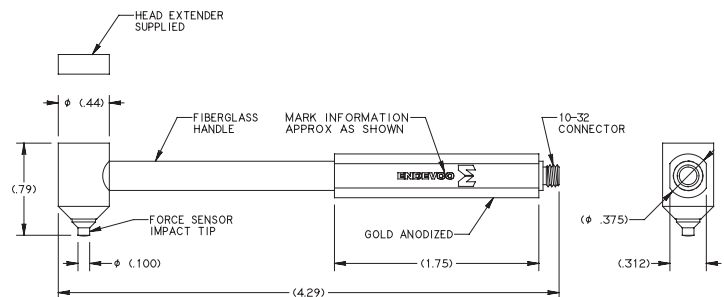
DESCRIPTION

Useful measurements of mode shapes on very light structures require excitation from a very low mass exciter with a high resonance frequency (300 kHz). These outstanding features are available with the Endevco 2301 Mini Modal Hammer. The hammer structure features very high stiffness and low head mass (only 2 grams). The ergonomically designed grip provides optimal hammer control thus reducing the possibilities of "double hits". The sensitivity is 100 mV/lbf (22.7 N).

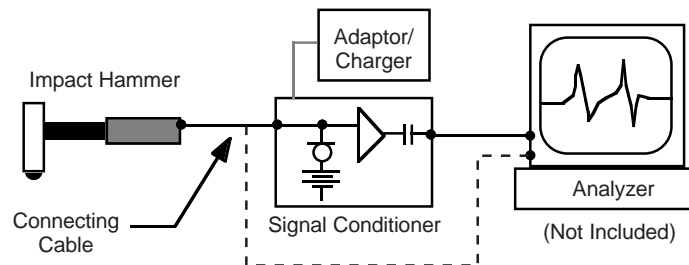
Some applications include disc drive read heads, turbine blades and many other lightweight structures.

The fixed impact tip is manufactured from case hardened 17-4 stainless steel. Frequency response can be controlled by using layers of tape in the impact area, or by the supplied extender mass.

The hammer features an ISOTRON impedance converter providing an IEPE output which is compatible with most FFT analyzers and data acquisition systems. ENDEVCO's 4416B single channel signal conditioner or the model 133 three channel conditioner are recommended for use with this hammer series.. To excite larger structures, see the 2302 general purpose modal hammer and the series of sledge hammers.



BRAYO 230X



Directly into FFT Analyzer IEPE Input

Mini Modal Hammer

SPECIFICATIONS

The following performance specifications are typical values, referenced at +75°F (+24°C), 4 mA, and 100 Hz, unless otherwise noted.

MODEL 2302 MODAL HAMMER	Units	Parameter
RANGE, full scale	lbf (N)	50 (220)
SENSITIVITY, typical	mV/lbf(N)	100(22.7)
MAXIMUM FORCE, typical	lbf (N)	75(334)
RESONANCE FREQUENCY	kHz	300
FREQUENCY RANGE, max.	kHz	60
HEAD MASS	grams	2
HEAD DIAMETER	inches (mm)	0.43 (11)
IMPACT TIP DIAMETER	inches	0.10(2.54)
DC OUTPUT BIAS	Vdc	9 to 12
AMPLITUDE LINEARITY	%FSO	1
OUTPUT IMPEDANCE	Ohms	<100
FULL SCALE OUTPUT	V	±5
SUPPLY VOLTAGE	Vdc	18 to 30
SUPPLY CURRENT	mA	2 to 20
TEMPERATURE RANGE	°F (°C)	-100 to 250 (-55 to 125)
OVERALL LENGTH	in (mm)	4.9 (123)
SENSOR MATERIAL		17-4 PH Stainless Steel
HANDLE MATERIAL		Poly Extension
CONNECTOR	10-32	

ACCESSORIES

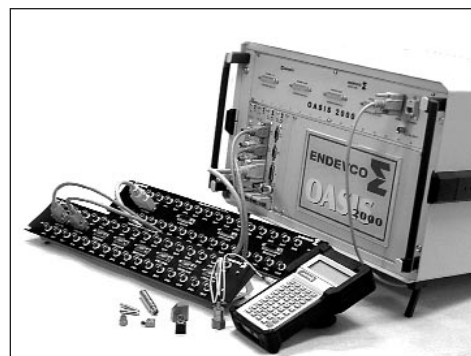
P/N EHM 1669

P/N 34248

HEAD EXTENDER

STORAGE CONTAINER

1. Maintain high levels of precision and accuracy using Endevco's factory calibration services. Call Endevco's inside sales force at 800-982-6732 for recommended intervals, pricing and turn-around time for these services as well as for quotations on our standard products.



Endevco complete Modal Front End System

Continued product improvement necessitates that Endevco reserve the right to modify these specifications without notice. Endevco maintains a program of constant surveillance over all products to ensure a high level of reliability. This program includes attention to reliability factors during product design, the support of stringent Quality Control requirements, and compulsory corrective action procedures. These measures, together with conservative specifications have made the name Endevco synonymous with reliability.