

Related Products (Acoustic Measurement Related Products)

Check the performance characteristics of floor surface materials

Tapping Machine Light Floor Impact Sound Generator

FI-01A 



- Light and hard impact source imitating walking with shoes, designed for on-site use in measuring impact sound levels of flooring
- Allows checking insulation performance of floor surface materials mainly in medium and high frequency range

ISO 10140-5, ISO 16283-2, JIS A 1418-1 Standard Light Impact Sound Source

Specifications

Applicable standards	ISO 10140-5, ISO 16283-2, JIS A 1418-1
Hammers Number and Spacing	5 hammers are arrayed at 100 mm intervals in a straight line
Average time between floor impacts of each hammer	100 ms ± 5 ms
Interface	RS-232C
Power requirements	AC power supply 100 V to 240 V Built-in rechargeable lithium ion battery (Under continuous operation Approx. 45 minutes)
Dimensions, Weight	230 (H) × 265 (W) × 557 (D) mm, approx. 10 kg

For testing the acoustic properties of floor construction

Heavy Floor Impact Source

FI-02



- Heavy and soft impact source suitable for floor impact sound level measurement, simulating events such as children jumping up and down
- Can be used to evaluate mainly the medium and low frequency range insulation aspect in the acoustic performance of floor structures

JIS A 1418-2: 2000 Standard Heavy Impact Source (impact force characteristics 1)

Octave band impact force exposure level and tolerance values for impact force characteristics 1

Octave band center frequency Hz	Octave band impact force exposure level dB	Tolerance dB
31.5	47.0	±1.0
63	40.0	±1.5
125	22.0	±1.5
250	11.5	±2.0
500	5.5	±2.0

For sound insulation testing of floors in buildings

Impact Ball

YI-01

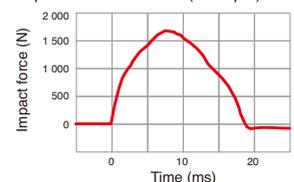


- Designed for sound insulation testing in lightweight structures where a standard heavy impact sound source (bang machine) with characteristics (1) would create too much impact force
- By performing a free drop from a height of 1 meter, a stable impact force of about 1 500 N (Newton) can be created
- Light mass of 2.5 kg allows for easy carrying

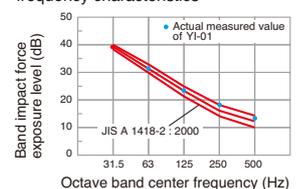
Specifications

Equivalent mass	2.5 ± 0.1 kg
Drop height	1 m
Major rubber compound	Silicone rubber
Shape	Hollow sphere with 32 mm thick wall and 178 mm external diameter
Rebound coefficient	0.8 ± 0.1

Impact force waveform (example)



Impact force exposure level frequency characteristics



Sound source for all kinds of acoustic measurements

Random Noise Generator

SF-06



- Generates white noise and pink noise and uses a 1/1 octave filter to produce band noise
- White noise and pink noise covers the 20 Hz to 20 kHz frequency range, and octave band noise uses center frequencies from 31.5 Hz to 8 kHz
- Applications include architectural acoustic measurements, sound absorption factor measurements in anechoic chambers, and sound insulation measurements

Specifications

Output frequency range	White noise, Pink noise (bandwidth 20 Hz to 20 kHz), Octave band noise
Output signal level	Approx. 5.6 Vrms
Output level range	0 dB to -60 dB
Octave bands	31.5 Hz to 8 kHz
Power	100 to 250 V AC (50/60 Hz), approx. 20 VA
Dimensions, Weight	168 (H) × 198 (W) × 270 (D) mm, approx. 3 kg

※Contact RION distributors for recommendations on suitable powered speakers.