

Elastomeric Panel Isolators

Application and Selection Guide



- Exceptional Noise Performance
- Broad Load Range
- Fail Safe Design
- Meets all Aircraft Flammability and Toxicity Requirements



Elastomeric Panel Isolators

Product Overview

The desire to control aircraft interior noise for enhanced passenger/crew comfort has presented significant challenges for aircraft designers. Industry standard mounts often fail to take advantage of improved features and materials to optimize noise attenuation. Noise testing based on the 4-Pole Test method demonstrates that significant gains in noise isolation are available without sacrificing size, weight or load capacity.

Product Solution

Enidine Incorporated now offers a line of isolators to provide optimized noise/vibration attenuation for a variety of aircraft interior applications. These isolators provide significantly better noise attenuation compared to industry "standard" mounts.

Designed to accommodate a range of mounting configurations and load conditions, Enidine Panel Isolators can be used for sidewall and ceiling panels, as well as for mounting IFE and other equipment.

Typical Applications

- Sidewall Panels
- Dado Panels
- Ceiling Panels
- Interior Trim / Door Panels

Features and Benefits

- Exceptional Noise Performance
- Fail Safe Low-Profile Design
- Improved Composite Frame Noise Attenuation Applications
- Interchangeable with Existing Isolator Sizes
- Multiple Elastomer Stiffnesses Available in the Same Envelope Size



ENIDINE

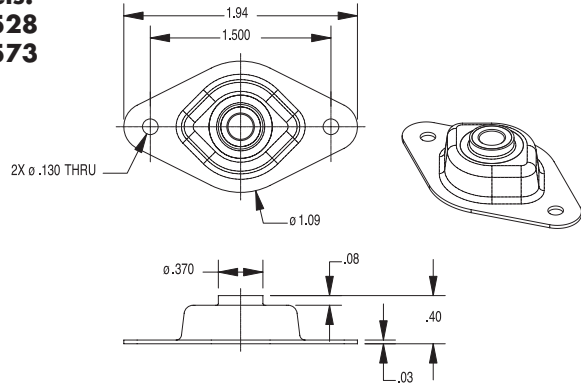
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Elastomeric Panel Isolators

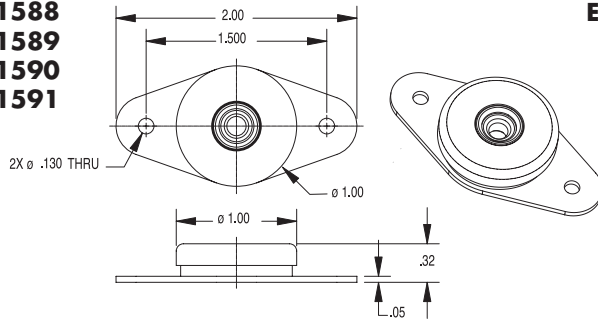
Technical Data

Part Number	Thru Hole	Rated Load (lbs.)	Ultimate Load (lbs.)
EI11588	#10-32 UNJF-3B Self Locking	25	800
EI11589	#10-32 UNJF-3B Self Locking	75	800
EI11590	#10-32 UNJF-3B Self Locking	150	800
EI11591	.290 Thru	150	800
EI11528	.290 Thru	9	200
EI11573	.190-32 UNJF-2B Self Locking	9	200
EI11579	#10-32 UNJF-38	3	50

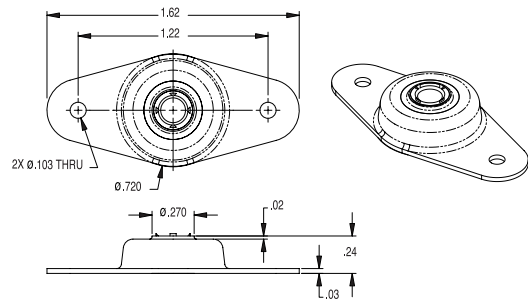
Models:
EI11528
EI11573



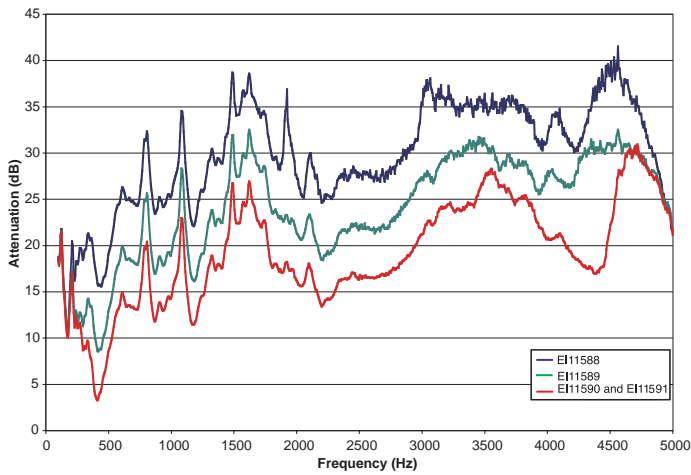
Models:
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EI11589
EI11590
EI11591



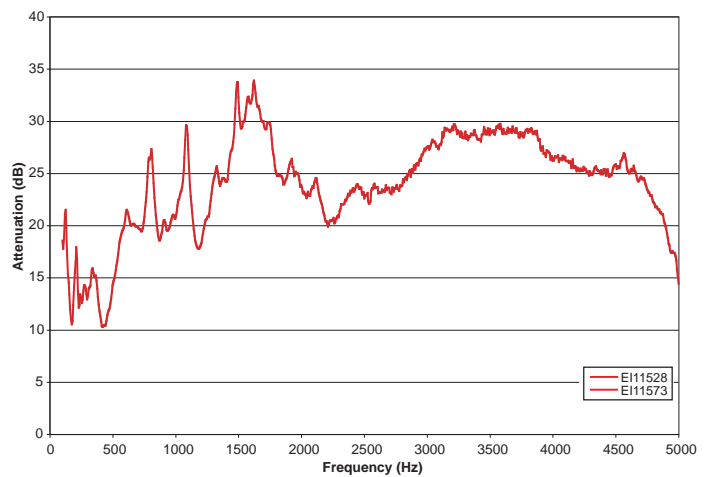
Model:
EI11579



Attenuation Per 4 Pole Test Method



Attenuation Per 4 Pole Test Method



ENIDINE

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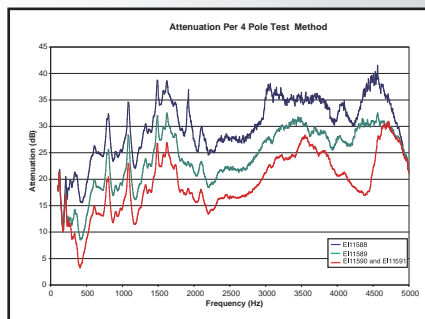
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Enidine is your partner for standard and custom elastomeric isolation systems for shock, vibration and noise reduction solutions. We have a wide range of engineering analysis, materials, and testing capabilities that allow us to engineer, develop and qualify your system.

Analysis- We have custom developed mathematical software and industry leading multi-body dynamic software that allow us to model your system prior to committing to hardware and system testing.

- MDOF System Analysis
- Linear and Non-Linear Isolators
- Shock and Drop Simulation
- Enclosure Interference Detection
- Contact Analysis
- Visual Evaluation of System Behavior
- Application Development



Design- Enidine completes all of its designs using an industry leading 3D modeling software package.

- Parts, Assemblies and Drawings
- FEA Analysis of Solid Models
- Communication of Design Intent
- Accurate Physical Properties
- Integrated PDM System
- AS-9100
- ISO-9001

Material Development- We have a number of excellent elastomeric compounds specifically developed for optimum noise reduction, cold temperature, shock, NBC washdown, fluid compatibility, high temperature performance and fatigue critical applications. Enidine has the material technology needed to suit your most demanding application.

- Natural Rubber (NR)
- Chloroprene - Neoprene (CR)
- Polyisoprene (IR)
- Styrene Butadiene (SBR)
- Polybutadiene (BR)
- Nitrile (NBR)
- Butyl (IIR)
- Ethylene Propylene (EPDM)
- Silicone (ECO)
- Polysulfide (T)
- Epichlorohydrin (ECO)
- Custom Blends



Testing- Our test lab engineers and technicians are equipped to complete testing on a wide variety of products from the qualification testing phase through production acceptance testing.

- Noise Testing – Per 4 pole method
- Vibration – Electromechanical shakers with digital controllers
- Dynamic Testing – Up to 500,000 lbs. at 80 in./sec.
- Static Testing – Including precision electromechanical machines with programmable controllers
- Drop Testing – Up to 4,000 lbs. and 600 in./sec.

ENIDINE PRODUCTS

Standard and Custom Elastomeric Products • APU Isolators • Wire Rope/Compact Wire Rope Isolators • Interior Noise Isolators
 UltraLOC® Seat Recline Controls • Stow Bin Actuators/Rate Controls • Hydraulic and Mechanical Energy Absorption Devices
 Recoil Attenuators • Rotary Actuators/Dampers • Semi-Active Systems