Description

VIBRO-ACOUSTICS’ EX MODEL SILENCERS are designed with absorptive materials are partially outboard of the airstream. This increases the silencer’s air passage. EX-RD and EX-RED silencers use acoustic grade glass fiber protected by perforated metal. EX-RFL and EX-REFL silencers incorporate a film liner between the perforated metal and the glass fiber. EX-RNM and EX-RENM silencers do not use glass fiber and are completely void of any fill material.

Applications

> High duct velocity systems
> Average duct velocity systems when more low frequency insertion loss is required at no additional pressure drop
> On the receiver side of valves, dampers, terminal boxes, etc.
> This is used in cases where a silencer with the desired acoustic performance has an unacceptable pressure drop. By the sound absorbing medium out of the airstream, the pressure drop is lowered without compromising the acoustic performance.
Features and Benefits

> External acoustical media allows lower pressure drops without degrading the silencer’s low frequency insertion loss
> Available in any cross-sectional dimensions to “fit-the-duct”
> Can incorporate notches to facilitate cross-over beams, pipes, ducts, etc.
> Can be selected to suit the acoustic, space, or energy-cost requirements
> Construction quality and aerodynamic design optimized to give reliable performance, best acoustics, lowest pressure drop and lowest overall cost
> Available in Dissipative (EX-RD and EX-RED), Film Lined (EX-RFL and EX-REFL) and No-Media (EX-RNM and EX-RENM) options
> When break-out noise is of prime concern EX silencers may be appropriate selections. They may require mass/stiffness added to their outer casing. Refer to Silencer Selection Instructions for proper silencer location.

Cautions/When Not to Use EX Silencers

> EX-Casing silencers are wider than the duct cross section, so they may interfere with structural components, services or other elements in the buildings.

Silencer Selection and Location

Vibro-Acoustics’ EX Silencers need to be carefully selected to optimize performance. Call 1-800-565-8401 for custom selections by our application engineers.

Standard Construction Features

Consult the Standard Construction Features of the Silencer Type using the external acoustic media.

Special Construction Options

> Heavier gauge casings and perforated metal
> Continuously welded casings
> Special materials (e.g. stainless steel, aluminum)
> Flanges
> Access doors
> Media protection: glass fiber cloth
> High transmission loss (HTL) casings to prevent break-out/break-in noise
> Built-in transitions
> Removable splitters
> Flow measuring stations
> For details of above and more special options see Special Construction Options.

Performance Data/Testing

Vibro-Acoustics’ 5th generation aero-acoustic laboratory was the first laboratory to be NVLAP accredited for the ASTM E-477 silencer test code. NVLAP is administered by the U.S. Dept. of Commerce.