**Description**

**VIBRO-ACOUSTICS’ EX MODEL SILENCERS** are designed with absorptive materials 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.

**Performance Data/Testing**
Vibro-Acoustics’ 5th generation aero-acoustic laboratory was the first laboratory to be NVLAP accredited (Lab Code 100424-0) for the ASTM E-477 silencer test code. NVLAP is administered by the U.S. Dept. of Commerce.

**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.