

CVS Series Control Valve Silencer

Provides Up To 50dBA Noise Attenuation for Natural Gas Control Valves and Regulators

Description

The Control Valve Silencer CVS is a noise attenuating device that is installed immediately downstream of any regulator to provide up to 50 dBa of noise reduction. The CVS is available in a variety of configurations and designs to accommodate nearly any natural gas regulation facility.



Figure 1 - CVS

The CVS may be designed for minimal pressure drop, allowing maximum flow capacity while providing necessary noise attenuation.

Usage

- · All clean natural gas control valve applications
- All natural gas regulator applications
- · May be specified for new regulation applications
- Retrofit to existing regulator stations to eliminate noise problems
- · Compact designs for retrofit with minimal piping alterations

Compatibility

- Becker T-Ball[™] Noise Attenuating Control Valves
- Becker Below Ground Regulator Concept
- Becker Globe Control Valves
- Grove Flexflo® Regulators
- · Other manufacturers' control valves and regulators

Features

- Reduces noise up to 50 dBA
- · Minimal pressure drop and maximum flow capacity
- · Effective over full range of flows and pressures
- Easily retrofit to existing RedQ Flexflo[®] Regulators or other manufacturer's regulators
- · Maximum noise attenuation available for regulator applications
- · Zero maintenance and long-life
- Custom engineering ensures minimal pressure drop resulting in maximum flow capacity
- · Pressure Equipment Directive compliant under "SEP" parameters

Custom Acoustic Performance

Computer aided design allows infinite variations in the slot width parameters and distribution. An optimum combination of these elements is selected to provide the required noise reduction.

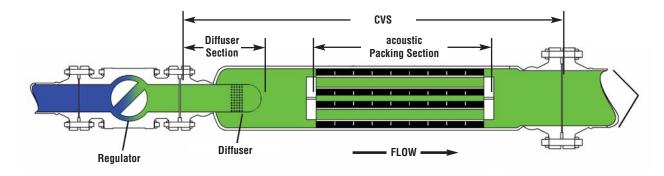
Custom Flow Performance

The CVS utilizes diffusers and absorbitive packed sections which provides the exact amount of pressure drop required for each application:

- For high pressure and high noise applications, diffusers can be designed to efficiently share pressure drop with the control valve or regulator.
- For low pressure drop requirements, diffusers can be designed to minimize pressure loss through the regulator station.

Figure 2 - Typical Installation of CVS Silencer

The CVS is installed immediately downstream of the control valve or regulator. This source attenuating device prevents harmful noise and vibration. The CVS is comprised of two major components: a diffuser section and an acoustic packing section.



CVS Silencers are Available in a Variety of Configurations to Perfectly Suit Application Needs

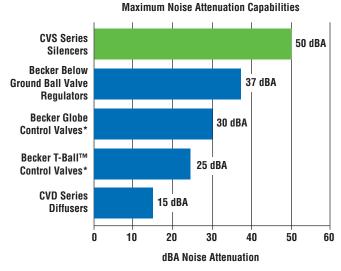


Figure 3 - Maximum Noise Attenuation Capabilities

* Based upon inclusion of maximum performance noise attenuation trim

Need More Attenuation?

Becker offers a variety of noise attenuation products which can be utilized individually or combined for optimum noise attenuation. The CVD Series may be combined with the following to meet the specific needs of natural gas regulating stations:

- Becker T-Ball[™] Noise Attenuating Control Valves
- Becker Below Ground Regulator Concept
- Becker Globe Control Valves

Table 1 - CVS Specifications and Materials of Construction

Specifications	
Max. Noise Attenuation	50 dBA
Available Sizes	1" (25mm) - 48" (1220mm)
	Diameter Inlet/Outlet (nominal)
ANSI Ranges	150 ANSI - 1500 ANSI
End Connections	RFFE
	Weld
	RTJ
	Combination
Manufacture	ANSI B31.3 Piping Code
Specifications	ASME VIII, Div. 1
	Pressure Equipment Directive
	compliant under "SEP" parameters
	of PED Directive of 1999
Options	Custom coatings
	Various testing
Materials of Construction	
Shell	Rolled carbon steel plate
Head	Carbon steel plate
Diffuser	Drilled carbon steel pipe
	(A-53 Grade B material
	or equivalent)
Acoustical Packing	Long-strand glass fiber contained
	by carbon steel acoustical facing.

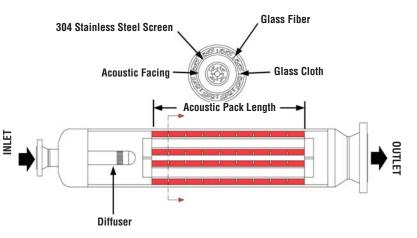


Figure 4 - Details of Becker CVS

CVS utilizes a custom designed combination of an integral diffuser and an absorptive packing section to achieve a noise attenuation of up to 50 dBA.

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