

Fisher™ Vee-Ball™ with Whisper™ NXV Trim



Fisher Vee-Ball Series valves (V150, V200 and V300) with the Whisper Trim combines the efficiency of a rotary valve with the acoustical attenuation capability of Whisper technology to provide improved performance in applications where aerodynamic noise is a concern. The Fisher Whisper Trim can be utilized in gas and vapor service to reduce noise effects that cause pipeline vibration. See Table 1 for a competitive comparison.

The noise reduction technology includes the Vee-Ball Series splined drive shaft, which combines with a variety of power operated and manual actuators to provide reliable, high-performance throttling or on-off operation for many different applications in the process industries.

Unless otherwise noted, all NACE references are to NACE MR0175-2002.

Features

- **Whisper NXV Fabrication**—The additively manufactured attenuator features a rugged fabrication weld to provides structural integrity with the ball.
- **Whisper NXV Performance**—Up to -20 dBA acoustical attenuation is achievable depending on service conditions.
- **Excellent Flow Characteristic**—Precise contouring of the V-notch ball provides an approximately equal percentage flow characteristic.
- **Application Versatility**—The Vee-Ball valves are available as standard with ISA S75.04 face-to-face dimensions as well as ASME B16.10-short face-to-face dimensions for CL150 valves. IEC 60534-3-2 face-to-face dimensions are also available (60534-3-2 face-to-face dimensions are equivalent to S75.04).
- **Long Service Life**—Solid HD metal seal construction (Figure 2) provides long service life in demanding applications. The constant wiping action of the seal across the ball's sealing surface prevents scale and sludge buildup and provides excellent service on steam, gases and vapors.
- **Smooth Valve Operation**—Precision machined parts and pressure balanced seal designs allow smooth, precise movement of the ball.
- **Improved Environmental Capabilities**—The optional ENVIRO-SEAL packing system is designed with very smooth shaft surfaces and live-loading provides improved sealing, guiding and loading force transmission. The seal of the ENVIRO-SEAL™ system can control emissions to below the Environmental Protection Agency (EPA) limit of 100 parts per million (ppm) for valves.
- **Ease of Maintenance**—The Vee-Ball valve ball seals can be inspected simply by removing two screws on the valve body inlet. There is no need to remove the actuator or disassemble the valve. No special tools are required for valve maintenance procedures, such as removing the packing, ball seal and shafts.

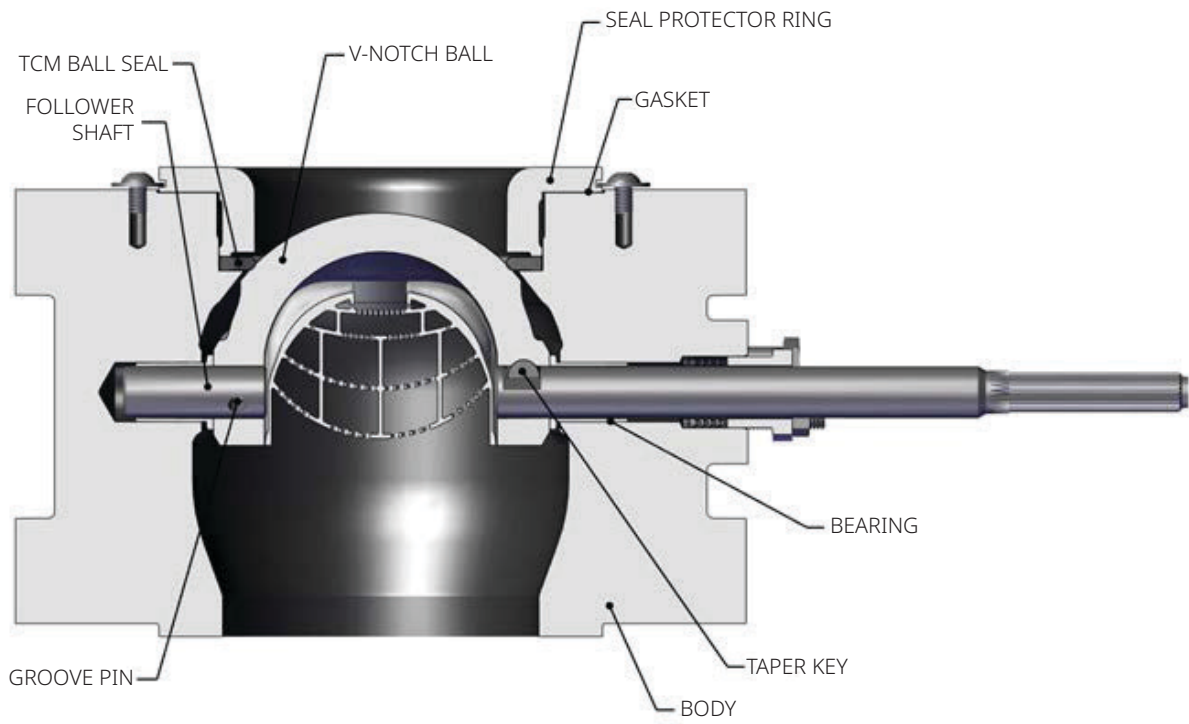
Figure 1. Fisher Whisper NXV Trim



Specifications

Valve Sizes and End Connection Styles	Flow Coefficients
NPS ■ 4, ■ 6, ■ 8, ■ 10, ■ 12, ■ 14 and ■ 16 valves that mate with CL150 through CL600 raised-face flanges	See Fisher Catalog 12
Maximum Inlet Pressures ⁽¹⁾	Flow Characteristic
Consistent with applicable pressure-temperature ratings, but do not exceed the material temperature capabilities and pressure drop limitations listed in Fisher Vee-Ball Bulletin (D101363X012).	Modified equal percentage (See Figure 3)
Maximum Shutoff Pressure/Temperature Ratings ⁽¹⁾	Face-to-Face Dimensions
Composition (TCM Plus or TCM Ultra) Seals, Flat Metal, HD (Heavy-Duty) and High Temperature HD Metal Ball Seals: See Vee-Ball Bulletin (D101363X012) Flow Ring Constructions: Contact your Emerson sales office for more information.	Vee-Ball Bulletin (D101363X012)
Shutoff Classification	Standard Flow Direction
See Vee-Ball Bulletin (D101363X012)	Forward flow direction is into the convex face of the V-notch ball. The valve with the attenuator must be placed in the forward flow direction for the attenuator to be effective.
Attenuator Ball Material	Maximum Ball Rotation
<ul style="list-style-type: none"> ■ Standard Whisper NXV material is S31603 ■ Compatible with CG8M, CF3M and CF8M Vee-Balls ■ For other valve parts, refer to the appropriate valve bulletin 	90 degrees
Temperature Capabilities ⁽¹⁾	Options
Vee-Ball Bulletin (D101363X012)	Refer to Vee-Ball Bulletin (D101363X012) or contact your Emerson sales office.
Packing Constructions	
Vee-Ball Bulletin (D101363X012)	
1. The pressure/temperature limits in this bulletin and any applicable standard or code limitation for valve should not be exceeded.	

Figure 2. Fisher Vee-Ball Series Whisper NXV Construction



X1960

COMPLETE VALVE WITH TCM BALL SEAL

Table 1. Segmented Ball with Whisper NXV Benefits Analysis Comparison

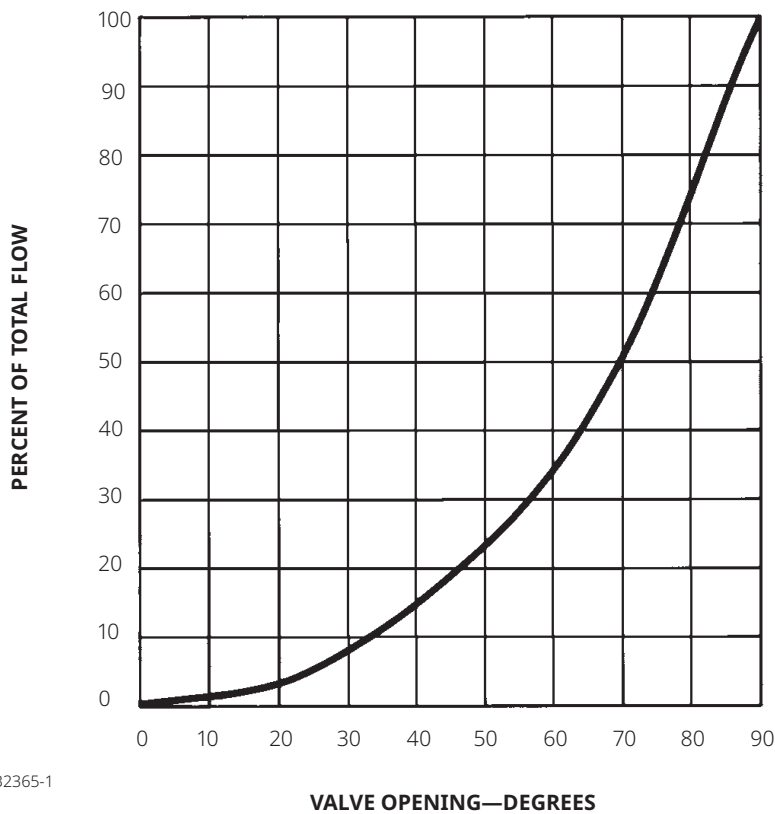
Benefits	Typical Competitive Device	Fisher Whisper NXV ⁽¹⁾
Predictable Performance	No	Yes
-20 dBA Aerodynamic Noise Attenuation	No	Yes
Superior Attenuation Effect at Critical Opening Position	No	Yes
Maximum Pressure Drop Capability	No	Yes
Heavy Duty, Integrally Welded Attenuator/Ball Assembly	No	Yes
Valve Splined Shaft Connects to Clamped Actuator Lever to Minimize Lost Motion	No	Yes
Superior Soft Seats for Tight Shutoff	No	Yes
Trunnion Mounted Ball for Superior Wear Resistance	Yes	Yes
Heavy Duty Metal Seats for Demanding Applications	Yes	Yes
1. See Figure 3 for valve characteristics.		

Other Considerations


When a rotary noise attenuator is installed in a Vee-Ball valve, the V-notch is no longer a point of high-velocity erosion. As a result, the CoCr-A V-notch option is not required when a rotary noise attenuator is used. The rotary attenuator and CoCr-A V-notch options are not available together.

The Whisper NXV is not intended for liquid applications. If the process generates condensation that can induce water hammer, consult your [Emerson sales office](#).

Figure 3. Valve Characteristics



B2365-1

 [LinkedIn.com/groups/3941826](https://www.linkedin.com/groups/3941826)
 [Fisher.com](https://www.fisher.com)

 [Facebook.com/FisherValves](https://www.facebook.com/FisherValves)
 [X.com/FisherValves](https://www.x.com/FisherValves)

D104761X012 © 2023, 2025 Emerson. All rights reserved. The Emerson logo is a trademark and service mark of Emerson Electric Co. Fisher, Whisper, Vee-Ball, and ENVIRO-SEAL are marks of an entity in the Emerson family of businesses. All other marks are the property of their respective owners.

Neither Emerson nor any of its affiliated entities assume responsibility for the selection, use or maintenance of any product. Responsibility for proper selection, use, and maintenance of any product remains solely with the purchaser and end user.

The contents of this publication are presented for informational purposes only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available upon request. We reserve the right to modify or improve the designs or specifications of such products at any time without notice.

Emerson
Marshalltown, Iowa 50158 USA
Sorocaba, 18087 Brazil
Cernay 68700 France
Dubai, United Arab Emirates
Singapore 128461 Singapore

www.fisher.com

FISHER™


EMERSON™