

Additional Info

Ports:	15° V-Port, 30°V-Port, 60° V-Port, 90° V-Port, Custom Slotted
	Port, Custom V-Port
Body Style:	Threaded, Socket Weld, Butt Weld, & Flanged End
Size Range:	1/4" - 12" (6mm - 300mm)
Pressure Ratings	: Class 150, Class 300, Class 600
End Connections	: Threaded (NPT), Socket Weld, Butt Weld, Quick Clamp, Raised Face Flanges
Body Materials:	Stainless Steel & Carbon Steel
Seat Materials:	Tek-Fil®, PEEK, Metal
Applications:	Temperature Control, Flow Control, Steam Control, Cavitation, Level Control & PH Service



V-Control Ball Valves with Pneumatic, Electro-Pneumatic and Electric Actuation

A bubble tight shut off valve and precision control valve combined in one.

Standard round ported ball valves have been used, and continue to be used, for many control applications such as services involving moderate pressure drops. Now, with the development of characterized V-balls, a full range of control applications is available with superior flow control. These 1/4 turn control ball valves are more compact, lighter weight and much less expensive than comparably sized globe valves and segmented control valves offered by other companies. Valve solution control valves offer fast response times to control signals due to advanced digital control of actuation and the inherent strengths of ball valves. These valves exceed Class VI offering bubble tight shut off with zero leakage. Other features include superior rangeability and repeatability, high flow capacity, the ability to function with fluids containing solids and fibers, ease of maintenance and exceptional interface with PLCs and computer command signals. Valve solution high quality pneumatic and electric control actuators are very durable and efficient.

Increased Linear Response

Due to the in-line design inherent with characterized control ball valves, line media flows linearly through the piping system. The direct pattern provides increased media control and rapid response times to controller commands.

Exceptional Characterized Control

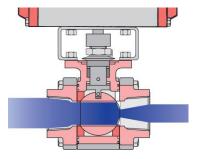
Valve solution's characterized balls provide predictable and accurate control of downstream flow rates. These precision cut balls match the control performance of globe valves while offering the economy, features and reduced size and weight of ball valves. Valve solution offers a wide range of V-Port and Slotted Port characterized balls. The standard characterized balls and an example of a custom ball are shown above. The 90° and 60° balls, like standard round hole balls, offer an equal percentage inherent flow characteristic. A slotted ball and a V-Port ball with



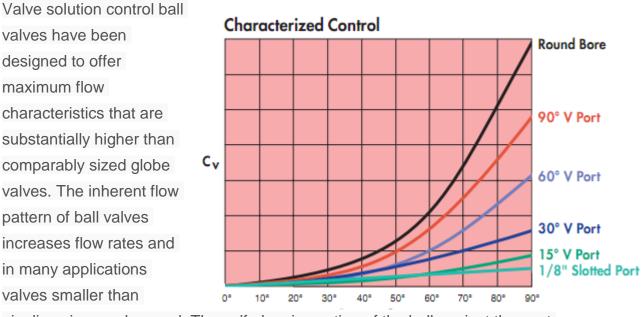
a small angle opening, such as a 15° ball, furnish a linear inherent flow characteristic. medium angle V-Port valves such as a 30° ball furnish a modified equal percentage inherent flow characteristic. Custom ports are also available to meet special control requirements. designed with flexibility in process conditions in mind, the Cv and control characteristics are easily changed by simply changing the ball.

High Rangeability

The characterized ball delivers controllable flow characteristics from the nearly closed to the fully open position of the valve. Though port type and valve size affects the rangeability, Valve solution characterized balls have a minimum rangeability of 200 to 1 and can exceed 800 to 1. Flow rates are highly repeatable within the normal 20% – 80% range of travel.



High Flow Capacity



pipeline size can be used. The self-cleaning action of the ball against the seat makes the ball valve acceptable for slurry and high fiber media services.

High Pressure Drops

Engineered to withstand high pressure drops while providing leak free operation, the V-Control Series delivers the precision control required by today's process industries. The δP limit for liquids is up to 500psi and steam is up to 300psi. Please consult the factory or your distributor for information on control valve sizing and pressure drop limitations.

Bidirectional Bubble Tight Shut Off

V-Control Series ball valves offer bidirectional bubble tight Class VI shut off in compliance with FCI 70-2 standards.