

IT'S TIME TO ELIMINATE OLD TECHNOLOGY AND GO WITH THE V-BALL

Clogged valves result in considerable downtime and difficult maintenance problems.

PBM's V-Ball 2-way control valve accurately controls the flow of liquids or thick media in industrial and sanitary throttling, keeping media flowing smoothly and giving accurate control through the entire valve stroke with openings designed specifically for your process. This economical, low-cost valve design translates into efficient, straight through flow, with a live-loaded rotary shaft sealing and tight shutoff in both directions.

Look beyond traditional globe valves to a valve technology that gives you high pressure drop capacity with straight-through flow, precision control, shearing action, erosion control and bubble-tight shutoff. The flow characteristic is precision machined to a "V" shape to meet any control requirement. The controlling element is a 316L stainless steel ball with a choice of resilient seat options, but is also available in hastelloy, titanium, inconel, and bronze.

V-Balls have equal percentage flow characteristics, while the slotted balls have linear flow characteristics. As the ball rotates, desired flow rates can be achieved by positioning the ball anywhere between 0° and 90°. This provides high flow capacity and outstanding repeatability in manufacturing processes. Custom openings are available to meet your unique control needs and provides an economical solution to more expensive rising stem control valves. These valves also feature characterized balls with various port shapes, including V or slotted either manual or automated. PBM V-Ball is available in any PBM 2-way series valve (ANSI, Industrial, Sanitary) and can combine with features such as purge ports, crown flats and polishing.

A P P L I C A T I O N S

STEAM CONTROL

Controlling steam pressure is not easy. Typical problems associated with globe control valves in steam service have been stem leakage, sticking, poor shutoff and high maintenance. Linear stem valves require frequent packing adjustment and tightened packing sometimes means overshoot, oscillation and deviation from the setpoint. Further, Class IV shutoff is usually too much leakage for many applications that required tight shutoff.

PBM's V-Ball valves solve these problems with tight shutoff live-loaded stem seals and tailored ball characteristics providing ramp up condition quickly while maintaining precision low flow control.

pH CONTROL

Low flow rates associated with pH process control loops require valves with very small openings. This creates a major problem in traditional rising stem control valves if any solids larger than the valve opening are in the system. Unfortunately, in most pH systems, it is impossible to eliminate solids in the liquid stream. They often clog control valves. This results in having to shut the line down and disassemble the valve.

The V-Ball is the ideal control valve for pH control when using a low flow opening and solid removal hole. The special opening of the pH control seats provides the most ideal throttling characteristics while allowing solids to move through the ball valve's larger opening.

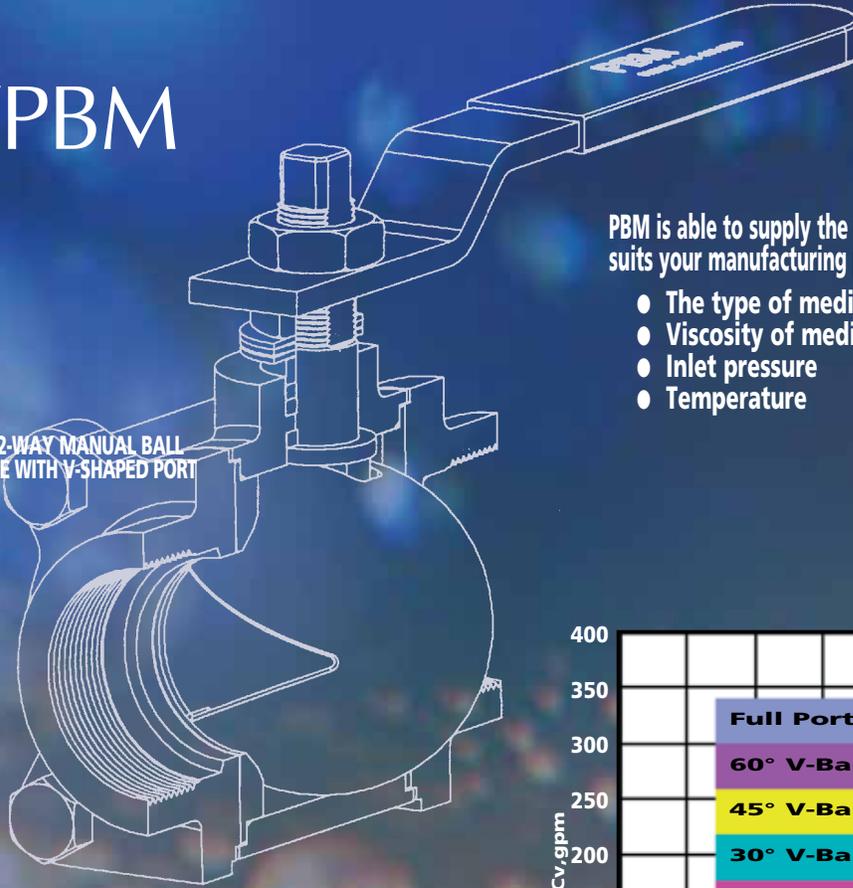
TEMPERATURE & PRODUCT MIXING CONTROL

V-Balls are for temperature and product mixing control because of their quick responses to process controllers' signals and the precision to which they can control flow. Their accuracy at low and high flow demands enhance their effectiveness.



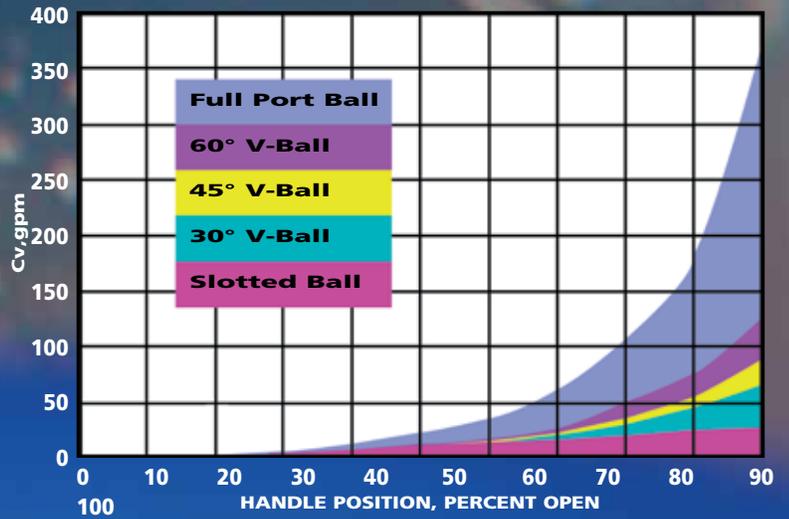


PBM 2-WAY MANUAL BALL VALVE WITH V-SHAPED PORT



PBM is able to supply the valve size and ball configuration that best suits your manufacturing process with the following information:

- The type of media
- Viscosity of media
- Inlet pressure
- Temperature
- Allowable pressure drop
- Line size in and out of valve
- Flow rate



SIZES AVAILABLE: 1/2" THROUGH 6" AND 8" REDUCED PORT

PBM, Inc.
1070 Sandy Hill Road, Irwin, PA 15642
Toll Free: 1.800.967.4PBM
Phone: 724.863.0550 • Fax: 724.864.9255
e-mail: info@pbmvalve.com

www.pbmvalve.com

