

DAV-MBV

Date: 25.7.19

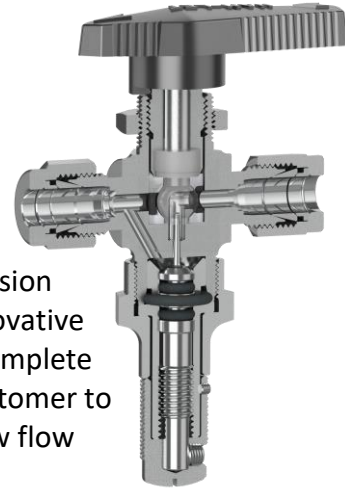
MBV series

Metering Ball Valve

SUMMARY

The Shut-off Metering Ball Valve Series provides the highest degree of precision metering for moderate pressure applications. This valve series features innovative and unique shut-off capability and allows full control of the process from complete shut-off and up to extra fine flow regulation. The MBV Series allows the customer to choose three different precision stem tapers, which enables metering at low flow rates as Cv= 0.001 up to 0.13.

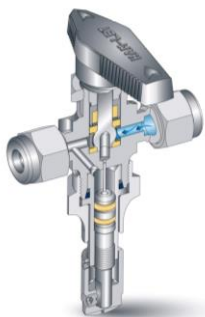
MBV series has a registered Patented.



Features & Benefits

- ✓ PFA Encapsulated Ball Stem design
- ✓ Panel Mounting capability as standard
- ✓ MAWT 300°F (150°C)
- ✓ End Connections: LET-LOK 1/16", 1/8", 1/4", 3/8"; FNPT 1/8"; MNPT 1/8", 1/4"; Male Face Seal 1/4"
- ✓ 1°, 3° and 5° Stem Taper for various rates of flow control
- ✓ Stem with shoulder stopper for long life service
- ✓ 5 O-ring materials options
- ✓ Handle options:
 - ❖ Metering handle - Aluminum handle, Metal slotted and Vernier handle.
 - ❖ Ball Valve handle – ISLT handle, Metal handle, Nylon handle.
- ✓ Shut-off and Metering control in a Single unit
 - ❖ Metering / Shutoff (the traditional config)
 - ❖ Metering / Full flow
 - ❖ Metering / Full Flow / Shut-off

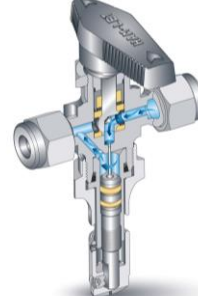
Shut-off Mode
Ball Valve's Handel is closed



Metering Mode
Ball Valve's Handel is closed



Metering Mode
Ball Valve's Handel is Opened



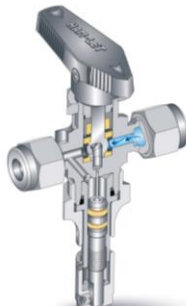
Full-Flow Mode
Ball Valve's Handel is opened



Metering Mode
Ball Valve's Handel is closed to first direction



Shut-off Mode
Ball Valve's Handel is closed to second direction



Full-Flow Mode
Ball Valve's Handel is opened



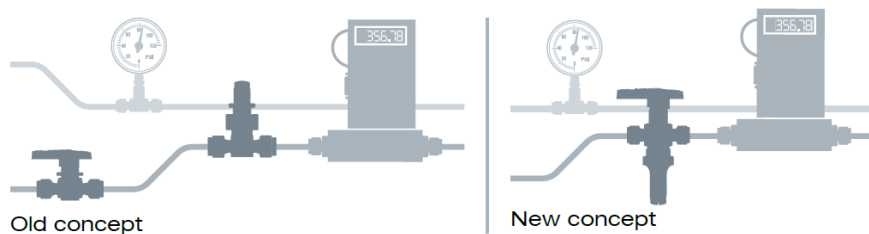
Differentiation Advantage Value

Minimizing leakage and Reduce installation time

D: Ham-Let MBV series features the integration of H-800 series and H-1300 series as a one-piece valve. In most cases when customer install Ball valve and Metering valve in his system, it is required to use 3 pieces of tube and tighten 4 thread or double compression fitting. MBV series reduce by half the installation time.

A: Combinations of Ball Valve and Metering Valve (same as shown in the drawing below) are common in a wide variety of applications. This combination results in six possible leakage areas. Ham-Let has reduced these areas by half by the integration of these two valves in one.

V: One product instead of 2 valves system that consequently reduces customer's total cost of ownership both in valves procurement, installation and maintenance.



Compact Design

D: The MBV series designed as a compact series, based on a one-piece body while other solutions offers 2 valves system which requires considerable space.

A: The compact design allows manufactures to mount the valve at a smaller space claim, allowing better usage of the work space.

V: Utilizing the valve at a limited area allows manufactures and laboratories to reduce the costs of additional equipment and mounting elements

Dead volume

D: Minimal dead volume in MBV series, prevents fluid or gas entrapment which can cause contamination.

A: Application like analytical, can suffer from dead volume effects, that might cause to a fake reading.

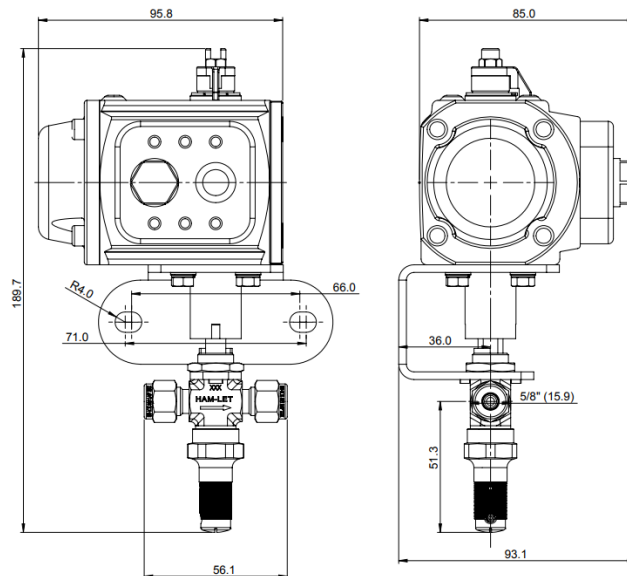
V: Higher reading reliability.

Actuation Option

D: Metering Ball Valve series can be delivered with Ham-Let Pneumatic Actuator (HPA). The HPA series are compact actuators (spring return – 95.8mm) thus allowing even the actuated configuration compact. Competitor's smallest actuator is spring return – 118mm.

A: Reduced space claim for use on panels

V: Compact design saves cabinet space and reduces internal volume



Success Stories

Installation of MBV in Vinci Technologies

Vinci Technologies president Mr. Renaud Presberg explains,
*"In our Catalyst Testing Unit, the main challenge is to achieve the most cost-effective design and to assure reliable operation. With **Ham-Let's Metering Ball Valves** we achieved both. The unique combination of full shut off and fine metering capabilities in one single unit helped us to improve our design by reducing overall skid size and eliminating dead volume in the Catalyst Testing Unit system. Additional benefits are reduced installation labor time and costs as well as more efficient operation for our customers".*



MBV products are installed in Vinci-Technologies Catalyst Testing Unit

Ham-Let MBV Wins Flow Control 2012 innovation award

Flow Control's annual awards competition is designed to showcase the industry's most compelling new offerings in fluid handling technology. Winners represent stand-out solutions that have been proven to increase efficiency, enhance performance, save time, reduce costs, or made other improvements in fluid handling applications.

To the article

<https://www.flowcontrolnetwork.com/flow-control-magazine-names-2012-innovation-award-winners/>

To the magazine

<http://www.flowcontrol-digital.com/201209/Default/0/0#&pageSet=12>

