



Multi-Purpose Valve (MPV) BAA/ARRA/PSA

302-061

Installation, Operation & Maintenance Manual

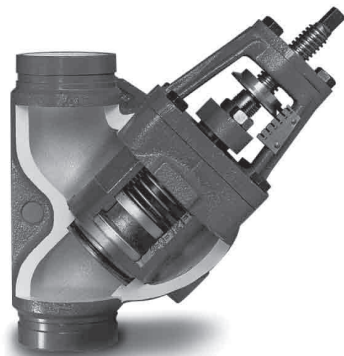
SUPERSEDES: December 1, 2010

EFFECTIVE: May 1, 2011

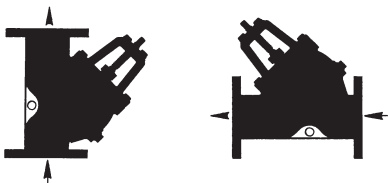
Plant ID No. 001-3993



PMPV
Class 125
Class 300



PMPVG



NOTE:
Valves should be positioned as shown.
Consult factory for downward flow.

Series PMPV, PMPVG

Receiving, Handling and Inspection

1. Unpack and inspect the valve for damage which may have occurred during shipping. Any damage should be reported to the carrier immediately. Store the valve in a dry, clean area until it is installed.
2. Remove shipping covers and inspect for any foreign matter that could be washed downstream when the valve is put into service.
3. Carefully check the pressure and temperature ratings on the valve body or nameplate to be sure that they are correct for the intended application.

Installation

1. Place the valve in the line so that the flow arrow on the side of the body points away from the pump outlet. **DO NOT LIFT** the valve by the yoke or valve stem. Use the hole in the web of the body or slings around the body or flanges.
2. Allow enough room around the valve for easy access to the valve stem.
3. When connecting the valve to the line, be sure that the flanges are the same, flat face to flat face. Flat face flanges require full-face gaskets. The specified face-to-face dimension of the valve is an approximate one due to machining tolerances. Allow adjustment in pre-fabricated piping or request certified dimensions.
4. Check to see that flange gaskets are properly positioned before tightening bolts. Tighten bolts in sequence, crossing to opposites.

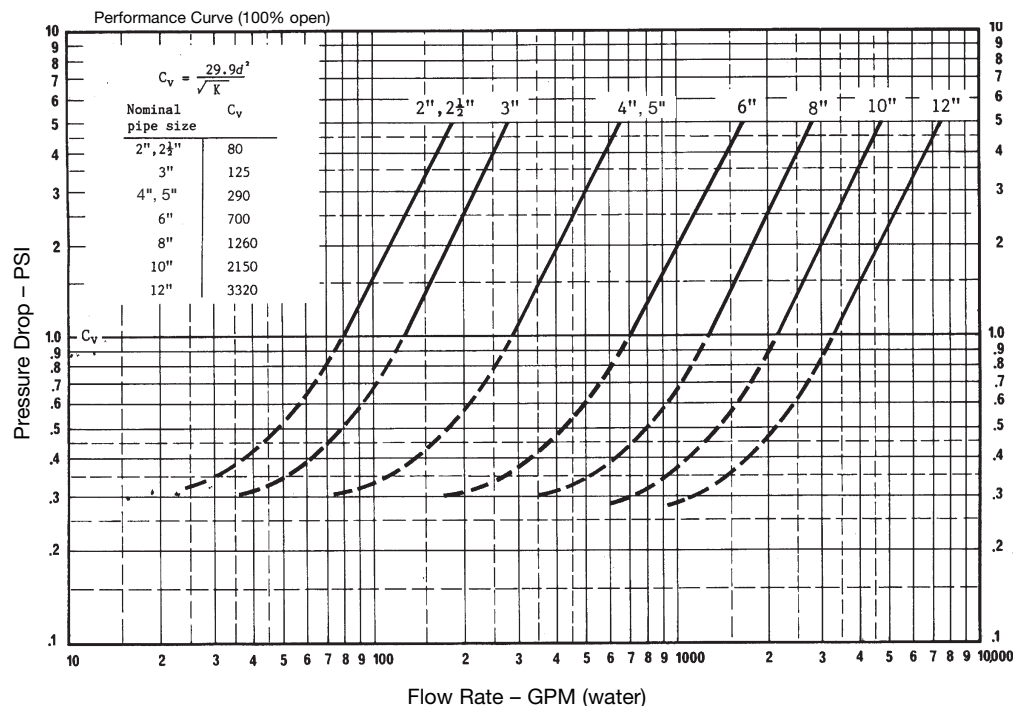
Start Up

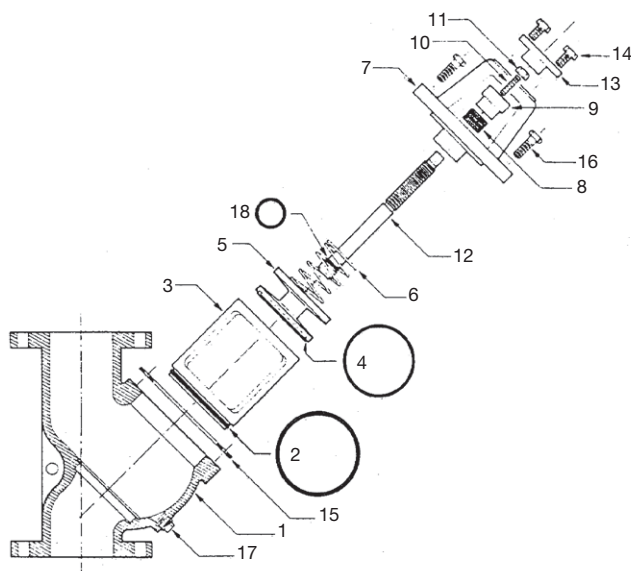
We suggest you "crack" the valve open before starting the pump. Gradually adjust the stem until the proper flow rate is reached.

Packing Replacement

Repacking valve under pressure may cause serious bodily harm or death. Taco strongly discourages this practice. Consult factory for procedures for repacking unpressurized valve.

Pressure Drop Chart





Materials

- 1 Body – cast iron ASTM A126-B
- 2 Seat O-ring – EPDM
- 3 Seat Guide – cast bronze (81-3-7-9)
- 4 Disc O-ring – EPDM
- 5 Disc – cast iron
- 6 Spring – 302 stainless steel
- 7 Yoke Cover – cast iron ASTM A126-B
- 8 Gland Packing – graphite
- 9 Gland Flange – cast iron ASTM A126-B
- 10 Stud – alloy steel ASTM A307B
- 11 Nut – alloy steel ASTM A307B
- 12 Stem – bronze ASTM B21
- 13 Stem Guide – ductile iron ASTM A395
- 14 Hex Head Cap Screws – ASTM A307B or SAE J429-Gr 5
- 15 Cover Gasket – non-asbestos
- 16 Hex Head Cap Screws – ASTM A307B or SAE J429-Gr 5
- 17 NPT Plug – (See table)
- 18 Stem O-ring – EPDM

O-Ring Replacement

Before starting, make a note of the stem indicator.

1. Shut down pump and close isolation valves.
2. Remove NPT plug (17) from body and allow to drain. Adjust stem to topmost position.
3. Loosen cap screws (16) from yoke cover (7) and remove yoke cover subassembly.
4. Remove spring (6), disc (5) and seat guide (3).
5. Remove old O-rings from the disc and seat guide. Do not gouge the grooves with a sharp tool or the new O-rings may be damaged. Be sure O-ring grooves are clean and smooth. Use 200 grit “wet and dry” paper to remove any sharp edges.
6. Lightly grease O-rings. Press the disc O-ring (4) into the dovetail groove at the 12, 3, 6 and 9 o'clock positions and so on until the O-ring is pressed in evenly. Install the seat guide O-ring (2). Carefully pass stem O-ring (18) over the threaded end until seated in groove.
7. Remove old cover gasket (15) (or O-ring) and clean flange face and yoke cover face. (If O-ring is used, see step 6 for proper installation.)
8. Replace the seat guide by firmly pressing it into the body counter bore. Replace the disc (with the O-ring facing down) into the seat guide. Replace spring.
9. Install new “Y” side cover gasket using proper dressing if required.
10. Reinstall yoke cover subassembly, tightening cap nuts by crossing to opposites.
11. Adjust the stem to its original position and restart system, slowly bringing it up to working pressure.

NPT PLUG SIZES

VALVE SIZES		NPT PLUG
IN.	MM	
2	50	1/2" NPT
2 1/2	65	1/2" NPT
3	80	1/2" NPT
4	100	1/2" NPT
5	125	3/4" NPT

NPT PLUG SIZES

VALVE SIZES		NPT PLUG
IN.	MM	
6	150	3/4" NPT
8	200	3/4" NPT
10	250	1" NPT
12	300	1" NPT
14	350	1" NPT

CALIFORNIA PROPOSITION 65 WARNING

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. (California law requires this warning to be given to customers in the State of California.)

LIMITED WARRANTY STATEMENT

Taco, Inc. will repair or replace without charge (at the company's option) any product or part which is proven defective under normal use within one (1) year from the date of start-up or one (1) year and six (6) months from date of shipment (whichever occurs first).

In order to obtain service under this warranty, it is the responsibility of the purchaser to promptly notify the local Taco stocking distributor or Taco in writing and promptly deliver the subject product or part, delivery prepaid, to the stocking distributor. For assistance on warranty returns, the purchaser may either contact the local Taco stocking distributor or Taco. If the subject product or part contains no defect as covered in this warranty, the purchaser will be billed for parts and labor charges in effect at time of factory examination and repair.

Any Taco product or part not installed or operated in conformity with Taco instructions or which

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If in doubt as to whether a particular substance is suitable for use with a Taco product or part, or for any application restrictions, consult the applicable Taco instruction sheets or contact Taco at [401-942-8000].

Taco reserves the right to provide replacement products and parts which are substantially similar in design and functionally equivalent to the defective product or part. Taco reserves the right to make changes in details of design, construction, or arrangement of materials of its products without notification.

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TACO WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF ITS PRODUCTS OR ANY INCIDENTAL COSTS OF REMOVING OR REPLACING DEFECTIVE PRODUCTS.

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Do it Once. Do it Right.®

TACO, INC., 1160 Cranston Street, Cranston, RI 02920 Telephone: (401) 942-8000 FAX: (401) 942-2360.

TACO (Canada), Ltd., 8450 Lawson Road, Unit #3, Milton, Ontario L9T 0J8. Telephone: 905/564-9422. FAX: 905/564-9436.

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