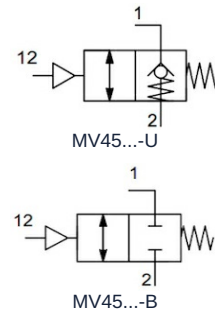
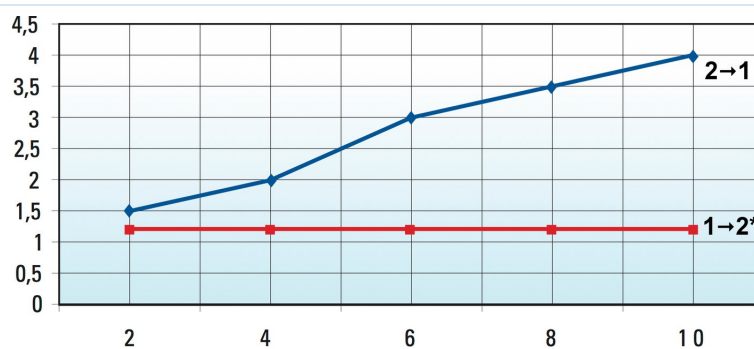


## Banjo bolt shut-off valve Series MV45



|                       |                                                                                                                                                                                                                             |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design type           | Banjo bolt shut-off valve, pneumatically unlockable, optionally with push-in fitting, threaded fitting or female-thread ring piece                                                                                          |
| Material              | Body Brass nickel-plated, Piston Stainless steel, Stainless steel spring, Seals NBR-PU, Sealing ring Polyamide (PA)                                                                                                         |
| Function              | U: free flow in one direction, Prevention of flow in the opposite direction, with pneumatic signal free flow in both directions<br>B: double pilot operated check valve, with pneumatic signal free flow in both directions |
| Threaded connections  | G1/8" ... G1/2" after ISO228/1                                                                                                                                                                                              |
| Hose outside diameter | 6mm, 8mm, 10mm and 12mm                                                                                                                                                                                                     |
| recommended materials | Polyamide (PA), Polyurethane (PU/CP), Polyethylene (PE), PTFE (PT)                                                                                                                                                          |
| Hose tolerances       | +/-0,05mm up to Diameter 10mm, +/-0,1mm from diameter 12mm                                                                                                                                                                  |
| Mounting position     | any                                                                                                                                                                                                                         |
| Medium                | Compressed air, neutral gases                                                                                                                                                                                               |
| Medium temperature    | -5...+70°C                                                                                                                                                                                                                  |
| Operating pressure    | 2...10bar                                                                                                                                                                                                                   |

### Control pressure diagram

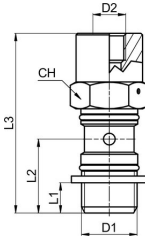


Vertical axis: Control pressure in bar  
Horizontal axis: Inlet pressure in bar

\*only for series MV45...-B



## Dimensions without ring piece



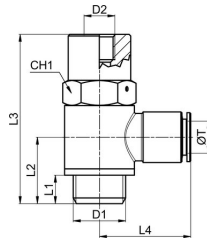
| D1    | D2    | L1 | L2   | L3   | Flow rate<br>[Nl/min] | CH | Weight [g] | Type         |
|-------|-------|----|------|------|-----------------------|----|------------|--------------|
| G1/8" | M5    | 6  | 15,5 | 42   | 170                   | 13 | 24         | MV45-00-18-U |
| G1/4" | M5    | 8  | 18,5 | 47   | 345                   | 17 | 47         | MV45-00-14-U |
| G3/8" | G1/8" | 9  | 21   | 53,5 | 700                   | 20 | 78         | MV45-00-38-U |
| G1/2" | G1/8" | 10 | 24,5 | 60   | 1050                  | 25 | 139        | MV45-00-12-U |

| D1    | D2    | L1 | L2   | L3   | Flow rate<br>[Nl/min] | CH | Weight [g] | Type         |
|-------|-------|----|------|------|-----------------------|----|------------|--------------|
| G1/8" | M5    | 6  | 15,5 | 42   | 440                   | 13 | 24         | MV45-00-18-B |
| G1/4" | M5    | 8  | 18,5 | 47   | 660                   | 17 | 47         | MV45-00-14-B |
| G3/8" | G1/8" | 9  | 21   | 53,5 | 965                   | 20 | 78         | MV45-00-38-B |
| G1/2" | G1/8" | 10 | 24,5 | 60   | 1450                  | 25 | 139        | MV45-00-12-B |

\*Flow rate at inlet pressure 6 bar and 1 bar pressure drop

## Dimensions with Push-in fitting ring piece



| D1    | D2    | ØT<br>Hose outer diameter | L1 | L2   | L3   | L4   | Flow rate<br>[Nl/min] | CH1 | Weight [g] | Type             |
|-------|-------|---------------------------|----|------|------|------|-----------------------|-----|------------|------------------|
| G1/8" | M5    | 6                         | 6  | 15,5 | 42   | 22,5 | 170                   | 13  | 40         | MV45MA35-06-18-U |
| G1/4" | M5    | 6                         | 8  | 18,5 | 47   | 24   | 345                   | 17  | 69         | MV45MA35-06-14-U |
| G1/4" | M5    | 8                         | 8  | 18,5 | 47   | 24,5 | 345                   | 17  | 70         | MV45MA35-08-14-U |
| G3/8" | G1/8" | 8                         | 9  | 21   | 53,5 | 26,5 | 700                   | 20  | 116        | MV45MA35-08-38-U |
| G3/8" | G1/8" | 10                        | 9  | 21   | 53,5 | 29   | 700                   | 20  | 117        | MV45MA35-10-38-U |
| G1/2" | G1/8" | 12                        | 10 | 24,5 | 60   | 31,5 | 1050                  | 25  | 196        | MV45MA35-12-12-U |

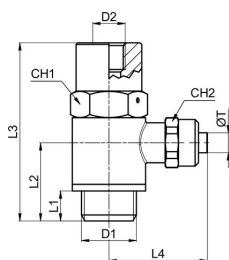
  

| D1    | D2    | ØT<br>Hose outer diameter | L1 | L2   | L3   | L4   | Flow rate<br>[Nl/min] | CH1 | Weight [g] | Type             |
|-------|-------|---------------------------|----|------|------|------|-----------------------|-----|------------|------------------|
| G1/8" | M5    | 6                         | 6  | 15,5 | 42   | 22,5 | 440                   | 13  | 40         | MV45MA35-06-18-B |
| G1/4" | M5    | 6                         | 8  | 18,5 | 47   | 24   | 660                   | 17  | 69         | MV45MA35-06-14-B |
| G1/4" | M5    | 8                         | 8  | 18,5 | 47   | 24,5 | 660                   | 17  | 70         | MV45MA35-08-14-B |
| G3/8" | G1/8" | 8                         | 9  | 21   | 53,5 | 26,5 | 965                   | 20  | 116        | MV45MA35-08-38-B |
| G3/8" | G1/8" | 10                        | 9  | 21   | 53,5 | 29   | 965                   | 20  | 117        | MV45MA35-10-38-B |
| G1/2" | G1/8" | 12                        | 10 | 24,5 | 60   | 31,5 | 1450                  | 25  | 196        | MV45MA35-12-12-B |

\*Flow rate at inlet pressure 6 bar and 1 bar pressure drop



## Dimensions with Compression fitting ring piece



| D1    | D2    | Hose diameter<br>ØT D/d [mm] | L1 | L2   | L3   | L4   | Flow rate<br>[Nl/min] | CH1 | CH2 | Weight [g] | Type             |
|-------|-------|------------------------------|----|------|------|------|-----------------------|-----|-----|------------|------------------|
| G1/8" | M5    | 6/4                          | 6  | 15,5 | 42   | 25   | 170                   | 13  | 12  | 43         | MV45MC23-06-18-U |
| G1/4" | M5    | 6/4                          | 8  | 18,5 | 47   | 26,5 | 345                   | 17  | 12  | 72         | MV45MC23-06-14-U |
| G1/4" | M5    | 8/6                          | 8  | 18,5 | 47   | 27,5 | 345                   | 17  | 14  | 74         | MV45MC23-08-14-U |
| G3/8" | G1/8" | 8/6                          | 9  | 21   | 53,5 | 29,5 | 700                   | 20  | 14  | 117        | MV45MC23-08-38-U |
| G3/8" | G1/8" | 10/8                         | 9  | 21   | 53,5 | 30,5 | 700                   | 20  | 16  | 119        | MV45MC23-10-38-U |

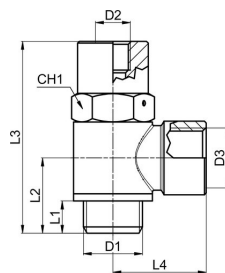
\*Flow rate at inlet pressure 6 bar and 1 bar pressure drop

| D1    | D2    | Hose diameter<br>ØT D/d [mm] | L1 | L2   | L3   | L4   | Flow rate<br>[Nl/min] | CH1 | CH2 | Weight [g] | Type             |
|-------|-------|------------------------------|----|------|------|------|-----------------------|-----|-----|------------|------------------|
| G1/8" | M5    | 6/4                          | 6  | 15,5 | 42   | 25   | 440                   | 13  | 12  | 43         | MV45MC23-06-18-B |
| G1/4" | M5    | 6/4                          | 8  | 18,5 | 47   | 26,5 | 660                   | 17  | 12  | 72         | MV45MC23-06-14-B |
| G1/4" | M5    | 8/6                          | 8  | 18,5 | 47   | 27,5 | 660                   | 17  | 14  | 74         | MV45MC23-08-14-B |
| G3/8" | G1/8" | 8/6                          | 9  | 21   | 53,5 | 29,5 | 965                   | 20  | 14  | 117        | MV45MC23-08-38-B |
| G3/8" | G1/8" | 10/8                         | 9  | 21   | 53,5 | 30,5 | 965                   | 20  | 16  | 119        | MV45MC23-10-38-B |

\*Flow rate at inlet pressure 6 bar and 1 bar pressure drop



Dimensions with Female threaded ring fitting



| D1    | D2    | D3    | L1 | L2   | L3   | L4 | Flow rate<br>[Nl/min] | CH1 | Weight [g] | Type              |
|-------|-------|-------|----|------|------|----|-----------------------|-----|------------|-------------------|
| G1/8" | M5    | G1/8" | 6  | 15,5 | 42   | 18 | 170                   | 13  | 39         | MV45RA042-18-18-U |
| G1/4" | M5    | G1/4" | 8  | 18,5 | 47   | 22 | 345                   | 17  | 72         | MV45RA042-14-14-U |
| G3/8" | G1/8" | G3/8" | 9  | 21   | 53,5 | 26 | 700                   | 20  | 118        | MV45RA042-38-38-U |
| G1/2" | G1/8" | G1/2" | 10 | 24,5 | 60   | 32 | 1050                  | 25  | 205        | MV45RA042-12-12-U |

| D1    | D2    | D3    | L1 | L2   | L3   | L4 | Flow rate<br>[Nl/min] | CH1 | Weight [g] | Type              |
|-------|-------|-------|----|------|------|----|-----------------------|-----|------------|-------------------|
| G1/8" | M5    | G1/8" | 6  | 15,5 | 42   | 18 | 440                   | 13  | 39         | MV45RA042-18-18-B |
| G1/4" | M5    | G1/4" | 8  | 18,5 | 47   | 22 | 660                   | 17  | 72         | MV45RA042-14-14-B |
| G3/8" | G1/8" | G3/8" | 9  | 21   | 53,5 | 26 | 965                   | 20  | 118        | MV45RA042-38-38-B |
| G1/2" | G1/8" | G1/2" | 10 | 24,5 | 60   | 32 | 1450                  | 25  | 205        | MV45RA042-12-12-B |

\*Flow rate at inlet pressure 6 bar and 1 bar pressure drop

Illustrations non-binding  
Design, dimensional and material changes reserved

Pneumatics / Flow control valves / Bidirectional valves / Bidirectional stop valve Series MV45MA35-B