

2 way ball valve M1 with electric actuator



General:

- Valve body: PVC-U
- Seal material: EPDM / FPM
- Ball seating joint: PTFE
- Dimensions: DN10 – DN50
d16 – d63
d3/8" – d2"

Connector types:

- Solvent socket: DIN / ASTM / JIS
- Solvent spigot: DIN
- Threaded socket: BSP / NPT
- Fixed flange: DIN / ANSI / JIS

Operating pressure:

PVC DN10 – DN50 PN16

Technical features:

Ball Valve

- Silicone free
- Buttress thread
- Double axial gasket
- Floating ball
- Double sided blocked ball
- Adjustable ball seating joint
- Integrated bottom mounting stand
- Radial installation or removal
- Maintenance free

Actuator (*)

- Adjustable limit switch
- Mechanical travel stops
- Secured manual override
- Protection IP65
- Torque limiter
- Position feedback

* Technical details see page 5

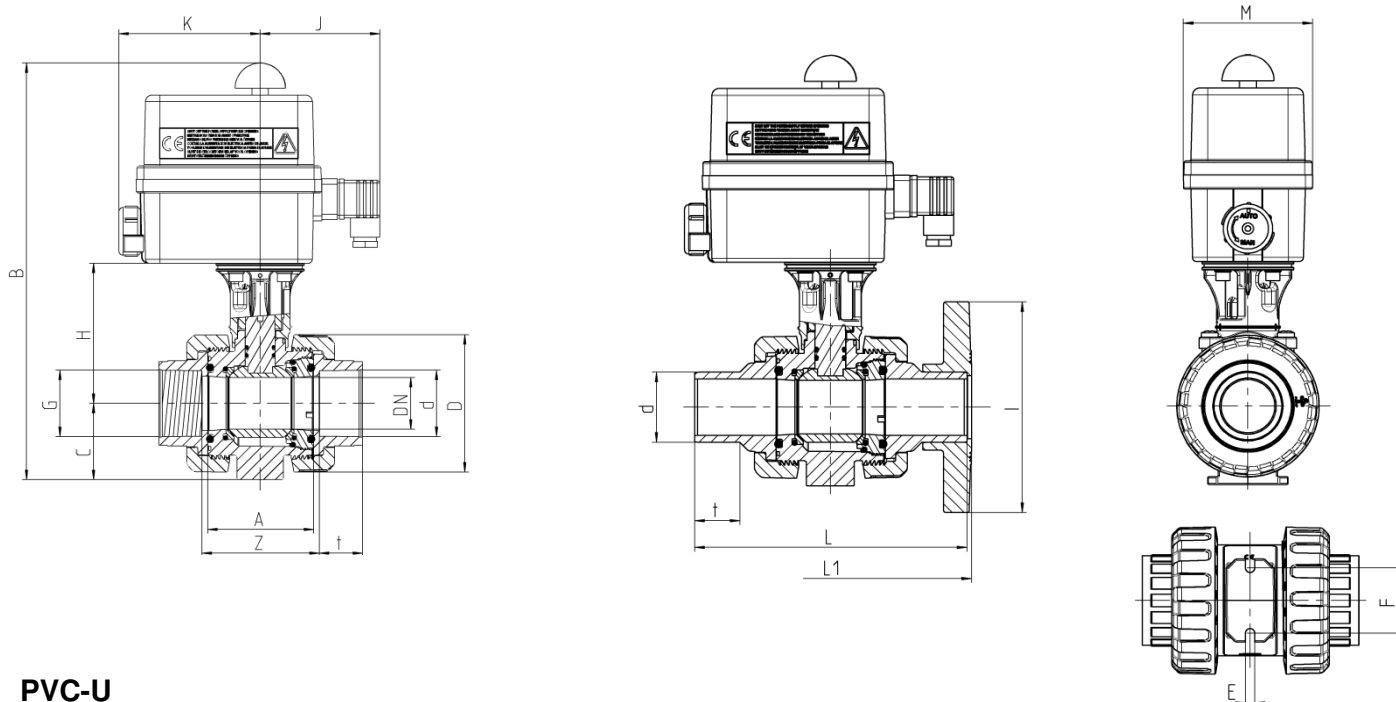
Accessories:

- Clamping / spacing element

This document does not constitute a guarantee, it is for initial information purpose only. The product range is continually upgraded, the designs and types therefore only reflect the state of the art at the time of printing. Subject to technical modifications!

2 way ball valve M1 with electric actuator

Dimensions:



PVC-U

Connector types

PVC solvent socket / solvent spigot / threaded socket / fixed flange

| DN | 10 | 15 | 20 | 25 | 32 | 40 | 50 |
|---------------------------|------|-------|-------|-------|--------|--------|-------|
| d | 16 | 20 | 25 | 32 | 40 | 50 | 63 |
| ISO flange type | F04 | F04 | F04 | F04 | F05 | F05 | F05 |
| G ¹ TSO | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
| A | 45 | 45 | 53,5 | 54 | 62 | 78 | 87 |
| B | 265 | 265 | 277,5 | 283 | 300 | 311 | 325,5 |
| C | 33 | 33 | 40 | 43 | 51 | 56 | 64 |
| D | 55,5 | 55,5 | 62 | 70 | 84 | 101 | 115 |
| E | 5,5 | 5,5 | 5,5 | 6,5 | 6,5 | 6,5 | 6,5 |
| F | 34 | 34 | 36 | 38 | 40 | 45 | 50 |
| H | 80 | 80 | 85,5 | 88 | 97 | 103 | 109,5 |
| I | - | 97 | 105 | 125 | 140 | 150 | 165 |
| J | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| K | 107 | 107 | 107 | 107 | 107 | 107 | 107 |
| t ² SSO | 16 | 16,5 | 19,5 | 23 | 26,5 | 31,5 | 38,5 |
| t ³ SSP | 17 | 16,5 | 19,5 | 23 | 26,5 | 31,5 | 38,5 |
| Z ² SSO | 51 | 50 | 59,5 | 60 | 68,5 | 86 | 98 |
| Z ¹ TSO | 48 | 50 | 60 | 60 | 68 | 87 | 98 |
| L ³ SSP | 98 | 123,5 | 143,5 | 153,5 | 173,5 | 193,5 | 223,5 |
| L1 ⁴ FF | - | 130 | 150 | 160 | 180 | 200 | 230 |
| M | 92 | 92 | 92 | 92 | 92 | 92 | 92 |

dimensions in mm

¹ TSO = threaded socket

⁴ FF = fixed flange

² SSO = solvent socket

- = currently not realised

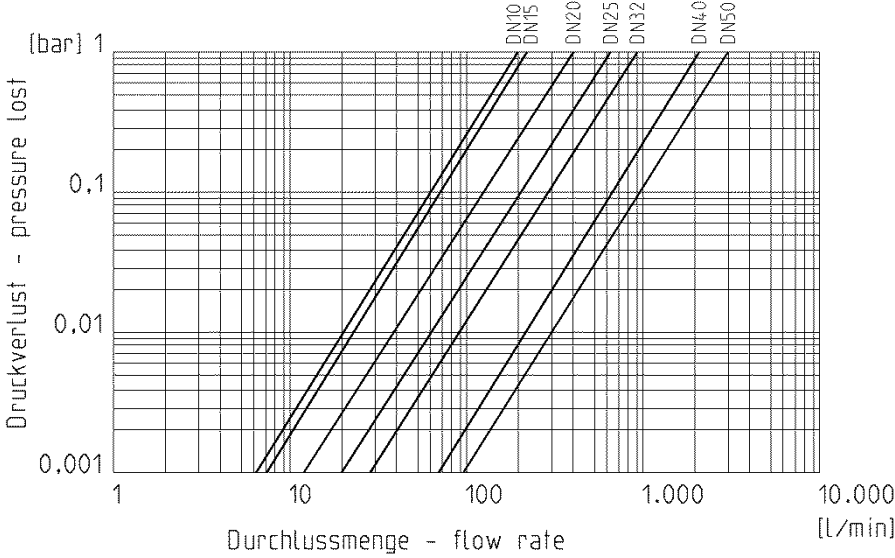
³ SSP = solvent spigot

2 way ball valve M1 with electric actuator

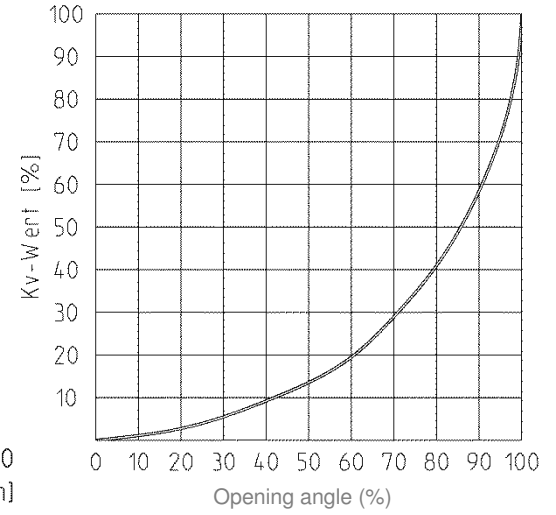


Diagrams:

Pressure loss diagram



Flow characteristics

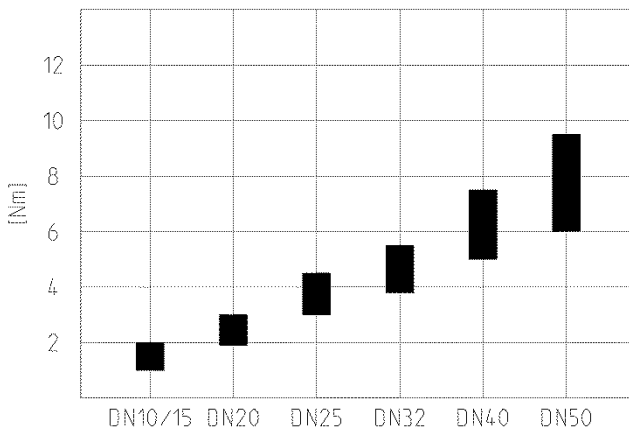


Cv value table

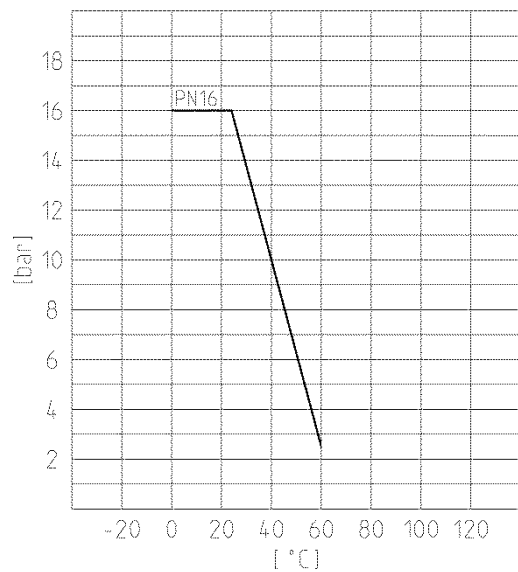
| Pressure loss | DN10 | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 |
|------------------|------|------|------|------|------|------|------|
| 0,001 bar | 6,2 | 7,1 | 12,6 | 19,9 | 28,4 | 67 | 94,2 |
| 1 bar | 198 | 225 | 400 | 630 | 900 | 2120 | 3000 |

Specification in l/min (PN16 Pipe)

Torque



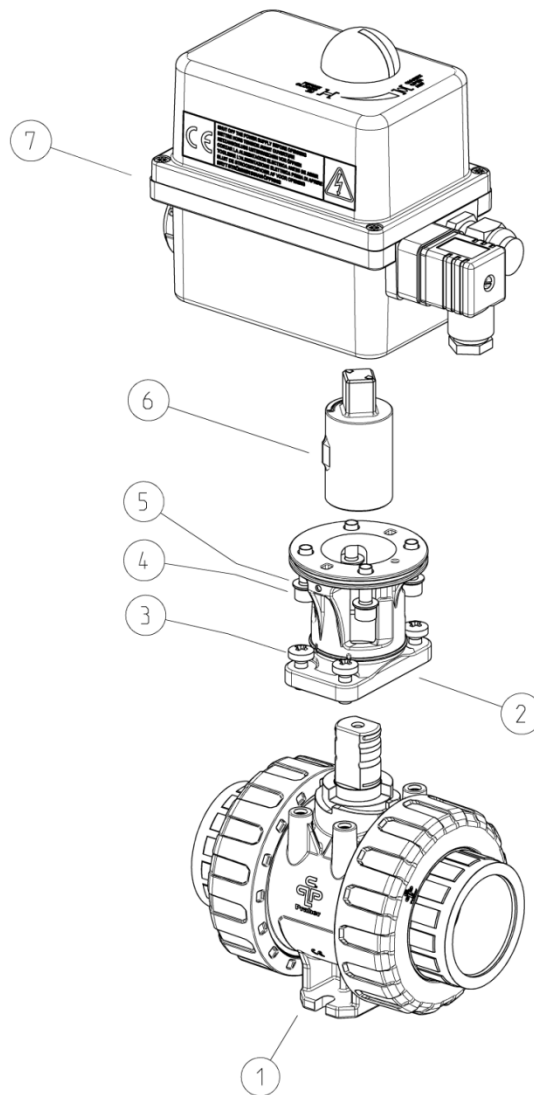
Pressure – temperature



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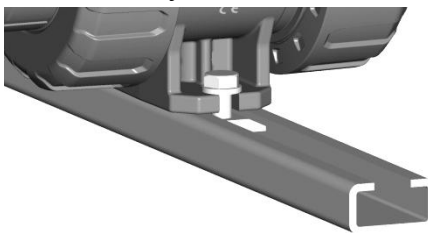
Exploded drawing:

01. ball valve
02. bracket (material: PA-GF)
03. screw
04. hexagon socket screw
05. toothed washer
06. coupling – actuator (material: PA-GF)
07. actuator

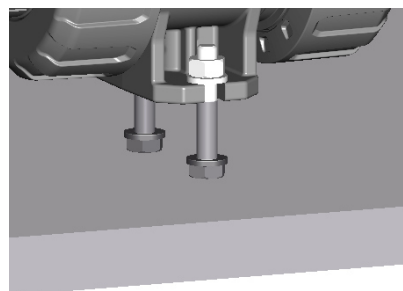


Bottom mounting stand – mounting possibilities:

- Assembly rail



- Plate



- Masonry / Concrete
 - Hanger screw and dowel required



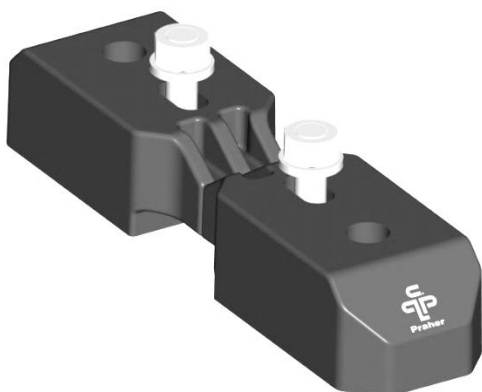
2 way ball valve M1 with electric actuator

Technical data electric actuator:

| Electric actuator | |
|---------------------|--|
| Type | ER20 |
| torque | 20Nm |
| Voltage | 90 - 240V 50/60Hz (90 – 350V DC) 24V 50/60Hz (24V DC) |
| Operating time | 13s |
| Power | 15W |
| ISO flange | F03-F04-F05 |
| Star drive nut | 14 |
| Limit switch | 2 limit switch preadjusted |
| | 2 indicator |
| Mechanical stop | 90° |
| Duration duty | 30% |
| Rotation angle | 90° |
| Protection | IP65 |
| Ambient temperature | Operating: -10°C bis +55°C |
| Weight | 1 kg |

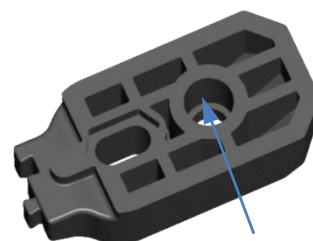
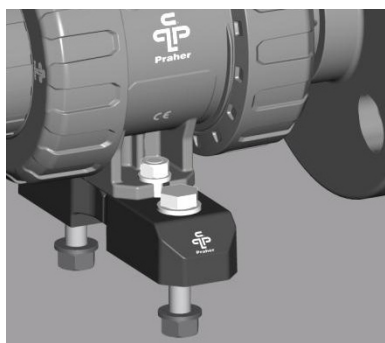
Accessories

Clamping / spacing element:



Technical features:

- Using for fixing as:
 - Clamping element
 - floors, walls, ceilings
 - plate
 - Spacing element
(screws additionally necessary)
 - for flange connection
- Bore for threaded bush

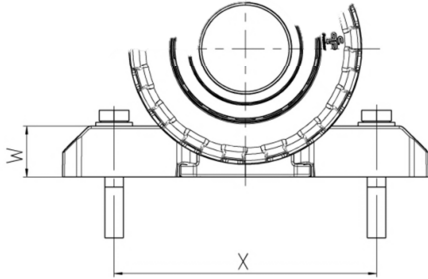


Bore for threaded bush

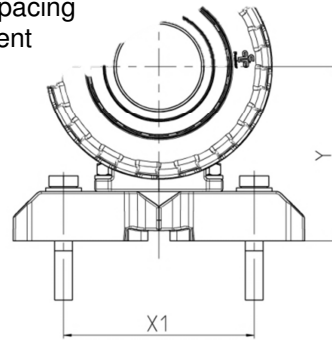
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Dimensions:

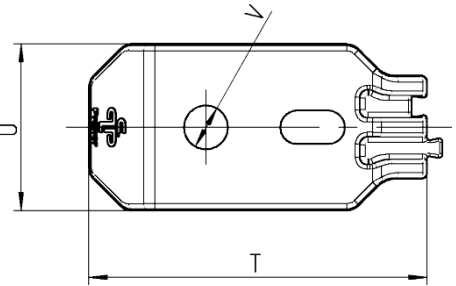
Use as clamping
element



Use as spacing
element



| DN | 10 | 15 | 20 | 25 | 32 | 40 | 50 |
|----|-----|-----|-----|-----|-----|-----|-----|
| d | 16 | 20 | 25 | 32 | 40 | 50 | 63 |
| T | 54 | 54 | 54 | 65 | 65 | 65 | 65 |
| U | 25 | 25 | 25 | 32 | 32 | 32 | 32 |
| V | 6,5 | 6,5 | 6,5 | 8,5 | 8,5 | 8,5 | 8,5 |
| W | 16 | 16 | 16 | 22 | 22 | 22 | 22 |
| X | 90 | 90 | 94 | 107 | 109 | 114 | 119 |
| X1 | 70 | 70 | 70 | 85 | 85 | 85 | 85 |
| Y | 49 | 49 | 56 | 65 | 73 | 78 | 86 |



Dimensions in mm