

VZ DN 10÷50

Foot valve



VZ DN 10÷50

The VZ foot valve allows the passage of fluid in one direction only.

FOOT VALVE

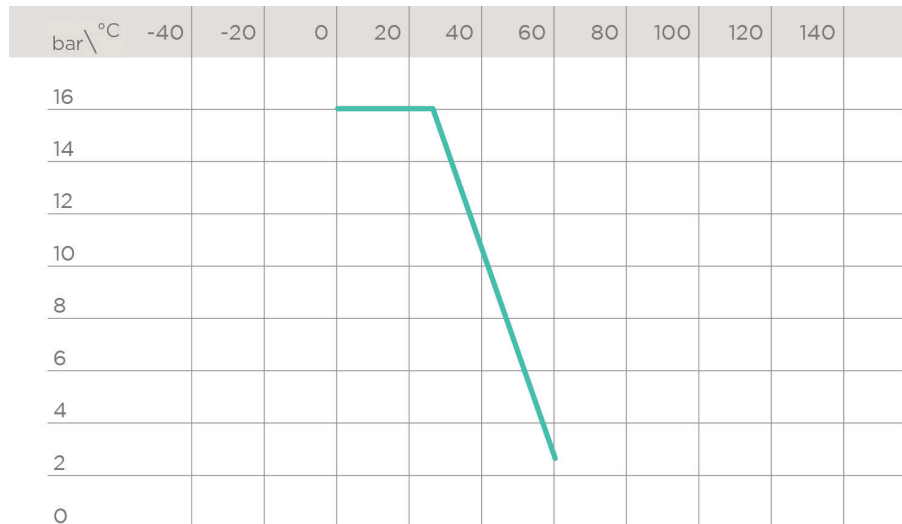
- Connection system for solvent weld and threaded joints
- **No metal parts in contact with the fluid**
- **Piston with incorporated counterweight** able to work with high intensity fluid
- Limited pressure loss. Only minimum back pressure is required for the hermetic seal
- **Valve material compatibility** (PVC-U) with water, drinking water and other food substance conveyance according to **current regulations**
- Can be maintained with the valve body installed

| Technical specifications | |
|--------------------------|--|
| Construction | Foot valve |
| Size range | DN 10 ÷ 50 |
| Nominal pressure | PN 16 with water at 20 °C |
| Temperature range | 0 °C ÷ 60 °C |
| Coupling standards | Solvent welding: EN ISO 1452, EN ISO 15493, BS 4346-1, , NF T54-028. Can be coupled to pipes according to EN ISO 1452, EN ISO 15493, DIN 8062, NF T54-016. Thread: ISO 228-1, EN 10226-1/2. |
| Reference standards | Construction criteria: EN ISO 16137 EN ISO 1452, EN ISO 15493 Test methods and requirements: ISO 9393 Installation criteria: DVS 2204, DVS 2221, UNI 11242 |
| Valve material | PVC-U |
| Seal material | EPDM |

TECHNICAL DATA

PRESSURE VARIATION ACCORDING TO TEMPERATURE

For water and non-hazardous fluids with regard to which the material is classified as CHEMICALLY RESISTANT. In other cases, a reduction of the nominal pressure PN is required. (25 years with safety factor)



MINIMUM PRESSURE REQUIRED TO LIFT THE PISTON

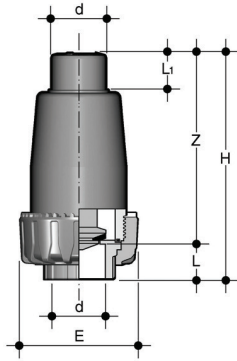
| DN | 10 | 15 | 20 | 25 | 32 | 40 | 50 |
|-----|-------|-------|-------|-------|-------|-------|-------|
| bar | 0,008 | 0,008 | 0,009 | 0,014 | 0,017 | 0,018 | 0,021 |

MINIMUM SEALING PRESSURE (PISTON IN CLOSED POSITION)

| DN | 10 | 15 | 20 | 25 | 32 | 40 | 50 |
|---------------------|-----|-----|-----|-----|-----|-----|-----|
| mm H ₂ O | 150 | 150 | 200 | 350 | 350 | 350 | 350 |

The figures refer to the seals that are not worn.

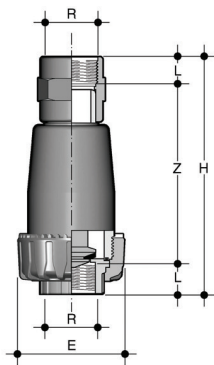
DIMENSIONS



VZIV

Foot valve with male ends for solvent welding, metric series

| d | DN | PN | E | H | L | L ₁ | Z | g | Code |
|----|----|----|-----|-----|----|----------------|-----|------|----------|
| 16 | 10 | 16 | 55 | 101 | 14 | 15 | 87 | 105 | VZIV016E |
| 20 | 15 | 16 | 55 | 103 | 16 | 18 | 87 | 120 | VZIV020E |
| 25 | 20 | 16 | 66 | 125 | 19 | 20 | 106 | 210 | VZIV025E |
| 32 | 25 | 16 | 75 | 150 | 22 | 24 | 128 | 350 | VZIV032E |
| 40 | 32 | 16 | 87 | 171 | 26 | 28 | 145 | 560 | VZIV040E |
| 50 | 40 | 16 | 100 | 187 | 31 | 34 | 156 | 760 | VZIV050E |
| 63 | 50 | 16 | 122 | 223 | 38 | 41 | 185 | 1340 | VZIV063E |



VZFV

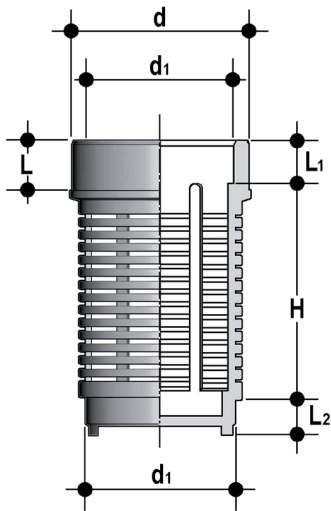
Foot valve with BSP threaded female ends

| R | DN | PN | E | H | L | Z | g | Code |
|--------|----|----|-----|-----|------|-------|------|----------|
| 1/2" | 15 | 16 | 55 | 124 | 15 | 94 | 135 | VZFV012E |
| 3/4" | 20 | 16 | 66 | 149 | 16,3 | 116,4 | 230 | VZFV034E |
| 1 | 25 | 16 | 75 | 175 | 19,1 | 136,8 | 390 | VZFV100E |
| 1" 1/4 | 32 | 16 | 87 | 200 | 21,4 | 157,2 | 620 | VZFV114E |
| 1" 1/2 | 40 | 16 | 100 | 209 | 21,4 | 166,2 | 860 | VZFV112E |
| 2 | 50 | 16 | 122 | 248 | 25,7 | 196,6 | 1520 | VZFV200E |

ACCESSORIES

SZIV

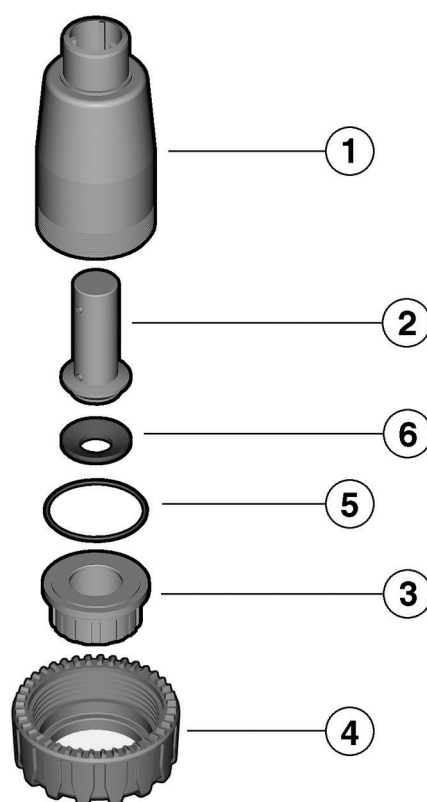
Suction strainer with male and female ends for solvent welding to foot valve VZ



| d ₁ | d | H | L | L ₁ | L ₂ | Code |
|----------------|----|------|------|----------------|----------------|---------|
| 16 | 20 | 34,5 | 8 | 7,5 | 6,5 | SZIV016 |
| 20 | 25 | 44 | 9,5 | 8,5 | 7,5 | SZIV020 |
| 25 | 32 | 57 | 11 | 9,5 | 8,5 | SZIV025 |
| 32 | 40 | 67 | 13 | 11 | 10 | SZIV032 |
| 40 | 50 | 58,5 | 15,5 | 13 | 11,5 | SZIV040 |
| 50 | 63 | 77,5 | 19 | 15 | 13 | SZIV050 |
| 63 | 75 | 93,5 | 22 | 19 | 15,5 | SZIV063 |

COMPONENTS

EXPLODED VIEW



1 Body (PVC-U - 1)
2 Piston (PVC-U - 1)

3 End connector (PVC-U - 1)
4 Union nut (PVC-U - 1)

5 O-Ring (EPDM - 1)*
6 Piston gasket (EPDM - 1)*

* Spare parts
The material of the component and the quantity supplied are indicated between brackets

DISASSEMBLY

- 1) Isolate the valve from the fluid and empty the entire line upstream.
- 2) Unscrew the union nut (4).
- 3) Remove the end connector (3) and O-ring (5).
- 4) Remove the piston (2) and relative gasket (6).

ASSEMBLY

- 1) Position the O-ring (5) and piston gasket (6) in their seatings.
- 2) Insert the piston (2) in the body (1).
- 3) Position the end connector (3).
- 4) Tighten the union nut (4).



Note: during assembly operations, it is advisable to lubricate the rubber seals. Mineral oils are not recommended for this task as they react aggressively with EPDM rubber.

INSTALLATION

The FIP foot valve must always be installed in a vertical position with the union nut at the bottom, as shown in fig.1.

