

## 2 way ball valve S4 with integrated Praher Labeling System



Symbol photo

### General:

- Material: PVC-U / PP / PVDF
- Seal material: EPDM / FPM
- Ball seating joint: PTFE
- Dimensions: DN10 – DN80  
d16 – d110  
3/8" – 4"

### Connector types:

#### PVC

- Solvent socket DIN / ASTM / JIS
- Solvent spigot DIN
- Threaded socket BSP / NPT
- PE Fusion socket DIN
- PE Fusion spigot DIN
- Fixed flange DIN / ANSI / JIS
- Backing flange (on request) DIN

#### PP

- Fusion socket DIN / ASTM
- Fusion spigot DIN
- Threaded socket BSP / NPT
- PE Fusion socket DIN
- PE Fusion spigot DIN
-  Backing flange (Praher installation length „long“) DIN
- Backing flange (on request) DIN / ANSI
- Fixed flange (on request) DIN / ANSI / JIS

#### PVDF

- Fusion socket DIN / ASTM
- Fusion spigot DIN
- Threaded socket BSP / NPT
- Backing flange (on request) DIN / ANSI

### Operating pressure:

- |                                  |         |
|----------------------------------|---------|
| DN10 d16 3/8" – DN65 d75 d2 1/2" | PN16/10 |
| DN80 d90 3"                      | PN10/6  |
| DN80 d110 4"                     | PN6     |

### Technical features:

- Safety locking handle system
- Radial installation or removal
- Double sided blocked ball
- Machined ball
- Full section area of flow (nominal bore)
- Floating ball

### Safety locking handle system

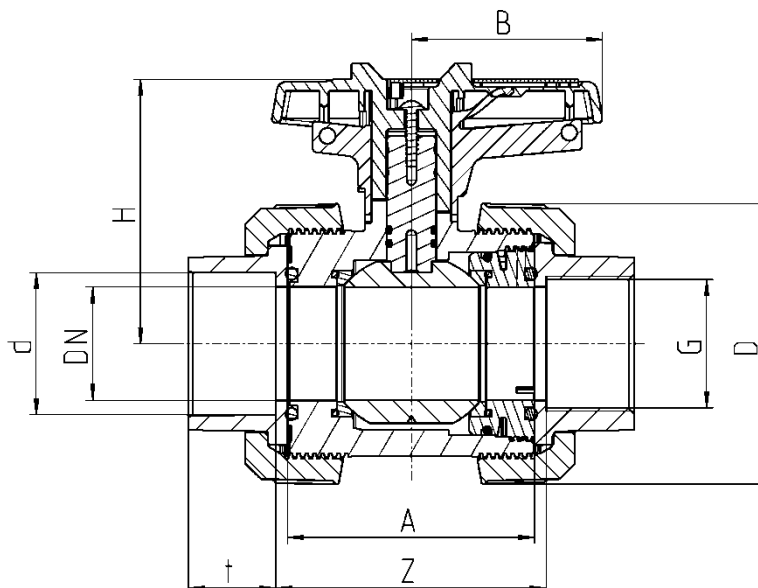


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## 2 way ball valve S4

with integrated Praher Labeling System

### Dimensions:



### PVC-U

#### Connector types

PVC solvent socket / threaded socket

PE fusion socket

| DN                                    | 10   | 15   | 20   | 25   | 32     | 40     | 50    | 65     | 80   | 80   |
|---------------------------------------|------|------|------|------|--------|--------|-------|--------|------|------|
| d                                     | 16   | 20   | 25   | 32   | 40     | 50     | 63    | 75     | 90   | 110  |
| <b>G<sub>TSO</sub><sup>1</sup></b>    | 3/8" | 1/2" | 3/4" | 1"   | 1 1/4" | 1 1/2" | 2"    | 2 1/2" | 3"   | -    |
| <b>A</b>                              | 62   | 62   | 70   | 74   | 84     | 95     | 109   | 137    | 163  | 163  |
| <b>B</b>                              | 40   | 40   | 51,5 | 51,5 | 64     | 73     | 85    | 110    | 132  | 132  |
| <b>D</b>                              | 53   | 53   | 63   | 70   | 85     | 101    | 124,5 | 155    | 188  | 188  |
| <b>H</b>                              | 72   | 72   | 78,5 | 81,5 | 100    | 107,5  | 116,5 | 144    | 163  | 163  |
| <b>t<sub>SSO</sub><sup>1</sup></b>    | 16,5 | 16,5 | 19,5 | 22,5 | 26,5   | 31,5   | 38,5  | 45     | 55,5 | 64   |
| <b>t<sub>FSO</sub><sup>3</sup> PE</b> | 14,5 | 16   | 17   | 19,5 | 22     | 25     | 29    | 34,5   | 37,5 | 41,5 |
| <b>Z<sub>SSO</sub><sup>2</sup></b>    | 68   | 67   | 76   | 80   | 91     | 104    | 120   | 148    | 180  | 173  |
| <b>Z<sub>TSO</sub><sup>1</sup></b>    | 67   | 67   | 77   | 81   | 90     | 104    | 120   | 150    | 185  | -    |
| <b>Z<sub>FSO</sub><sup>3</sup> PE</b> | 71   | 68   | 80   | 79   | 98     | 115    | 137   | 165    | 210  | 210  |
| <b>PN</b>                             | 16   | 16   | 16   | 16   | 16     | 16     | 16    | 16     | 10   | 6    |

Dimensions in mm

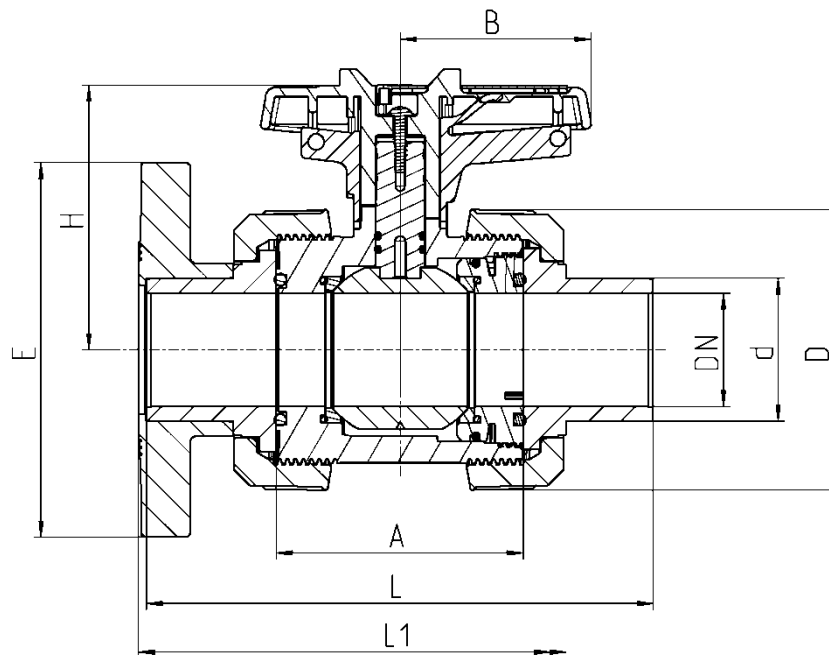
<sup>1</sup> TSO = threaded socket

<sup>2</sup> SSO = solvent socket

<sup>3</sup> FSO = fusion socket

- = currently not realised

## 2 way ball valve S4 with integrated Praher Labeling System



### PVC-U

#### Anschlussvarianten

PVC solvent spigot

PE fusion spigot

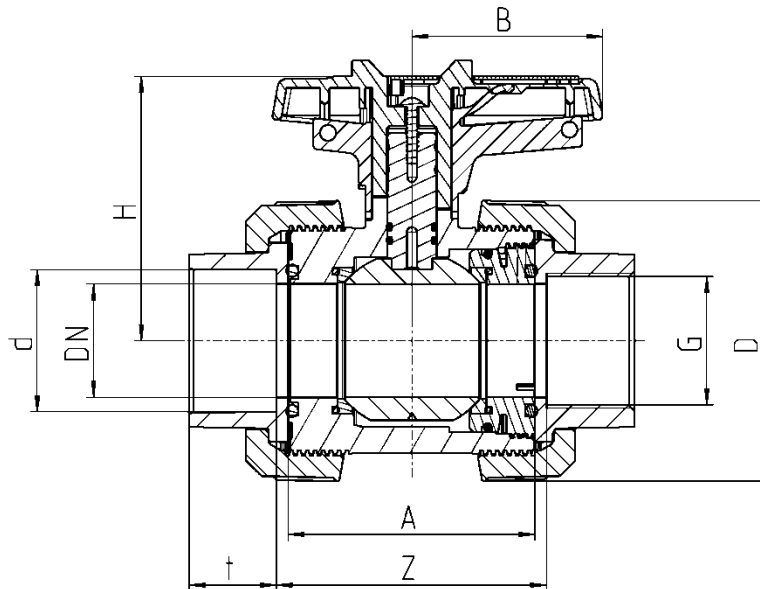
PVC fixed flange

| DN                               | 10  | 15  | 20   | 25   | 32  | 40    | 50    | 65  | 80  | 80  |
|----------------------------------|-----|-----|------|------|-----|-------|-------|-----|-----|-----|
| d                                | 16  | 20  | 25   | 32   | 40  | 50    | 63    | 75  | 90  | 110 |
| A                                | 62  | 62  | 70   | 74   | 84  | 95    | 109   | 137 | 163 | 163 |
| B                                | 40  | 40  | 51,5 | 51,5 | 64  | 73    | 85    | 110 | 132 | 132 |
| D                                | 53  | 53  | 63   | 70   | 85  | 101   | 124,5 | 155 | 188 | 188 |
| H                                | 72  | 72  | 78,5 | 81,5 | 100 | 107,5 | 116,5 | 144 | 163 | 163 |
| E <sub>FF</sub> <sup>1</sup>     | -   | 97  | 105  | 125  | 140 | 150   | 165   | 185 | 200 | 229 |
| L <sub>SSP</sub> <sup>2</sup>    | 115 | 125 | 145  | 154  | 174 | 194   | 223   | 287 | 300 | 341 |
| L <sub>FSP</sub> <sup>3</sup> PE | 112 | 123 | 143  | 151  | 142 | 180   | 197   | 253 | 293 | 323 |
| L1 <sub>FF</sub> <sup>1</sup>    | 120 | 130 | 150  | 160  | 180 | 200   | 230   | 290 | 310 | 350 |
| PN                               | 16  | 16  | 16   | 16   | 16  | 16    | 16    | 16  | 10  | 6   |

Dimensions in mm

- <sup>1</sup> FF = fixed flange  
<sup>2</sup> SSP = solvent spigot  
<sup>3</sup> FSP = fusion spigot  
 - = currently not realised

## 2 way ball valve S4 with integrated Praher Labeling System



### PP

#### Connector types

PP fusion socket / threaded socket

PE fusion socket

| DN                           | 10   | 15   | 20   | 25   | 32     | 40     | 50    | 65     | 80   | 80   |
|------------------------------|------|------|------|------|--------|--------|-------|--------|------|------|
| d                            | 16   | 20   | 25   | 32   | 40     | 50     | 63    | 75     | 90   | 110  |
| <b>G</b> <sup>1</sup> TSO    | 3/8" | 1/2" | 3/4" | 1"   | 1 1/4" | 1 1/2" | 2"    | 2 1/2" | 3"   | -    |
| <b>A</b>                     | 62   | 62   | 69   | 73   | 83     | 94     | 108   | 133    | 160  | 160  |
| <b>B</b>                     | 40   | 40   | 51,5 | 51,5 | 64     | 73     | 85    | 110    | 132  | 132  |
| <b>D</b>                     | 53   | 53   | 64   | 71   | 84,5   | 100    | 120,5 | 155    | 187  | 187  |
| <b>H</b>                     | 71,5 | 71,5 | 77   | 80,5 | 98,5   | 106,5  | 115,5 | 142    | 160  | 160  |
| <b>t</b> <sup>2</sup> FSO PP | 14,5 | 16   | 17,5 | 19,5 | 22     | 25,5   | 29    | 34,5   | 38,5 | 42   |
| <b>t</b> <sup>2</sup> FSO PE | 14,5 | 16   | 17   | 19,5 | 22     | 25     | 29    | 34,5   | 37,5 | 41,5 |
| <b>Z</b> <sup>1</sup> TSO    | 67   | 67   | 74   | 80   | 89     | 103    | 119   | 143    | 180  | -    |
| <b>Z</b> <sup>2</sup> FSO PP | 71   | 68   | 78   | 84   | 97     | 113    | 136   | 162    | 211  | 211  |
| <b>Z</b> <sup>2</sup> FSO PE | 71   | 68   | 79   | 87   | 97     | 114    | 136   | 161    | 207  | 207  |
| <b>PN</b>                    | 10   | 10   | 10   | 10   | 10     | 10     | 10    | 10     | 6    | 6    |

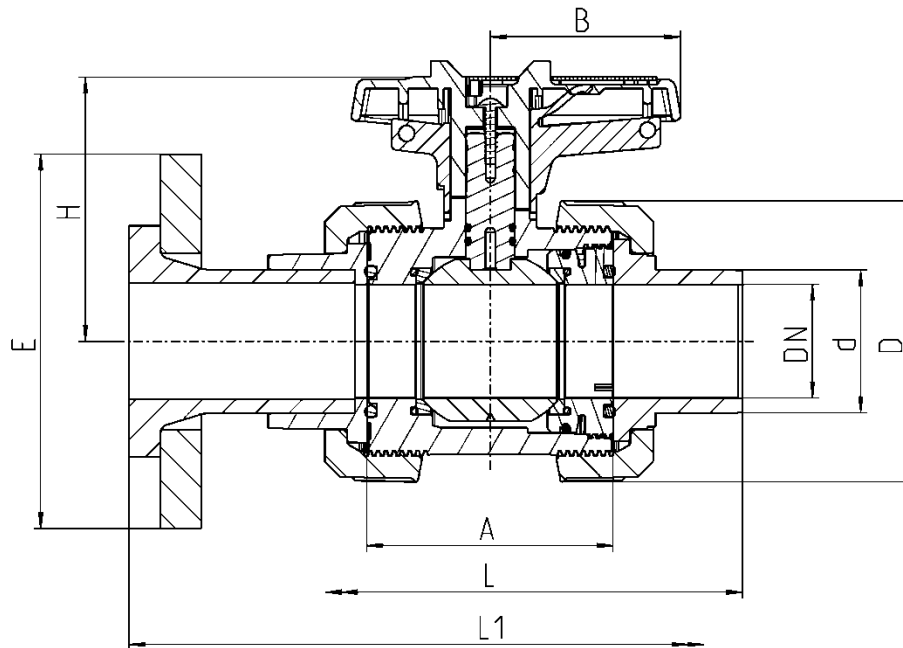
Dimensions in mm

<sup>1</sup> TSO = threaded socket

<sup>2</sup> FSO = fusion socket

- = currently not realised

## 2 way ball valve S4 with integrated Praher Labeling System



### PP

#### Connector types

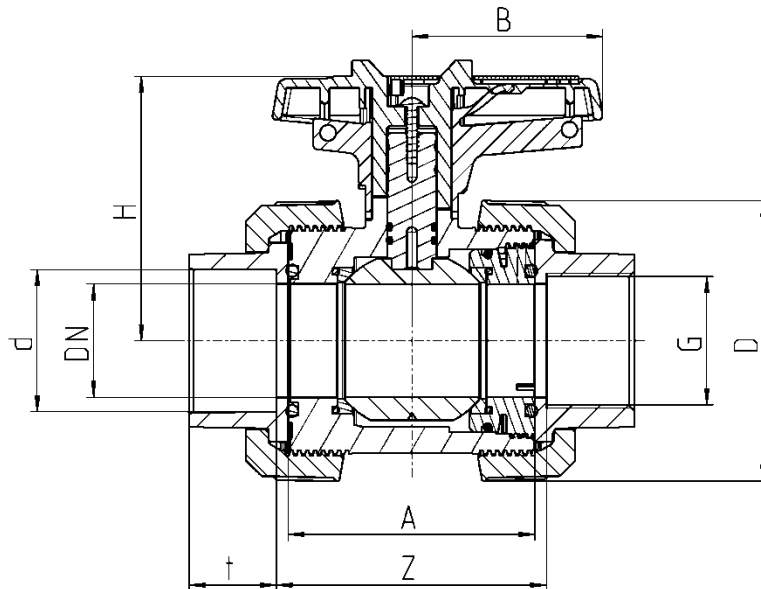
PP fusion spigot  
PE fusion spigot  
PP-GFK backing flange

| DN                               | 10   | 15   | 20   | 25   | 32   | 40    | 50    | 65  | 80  | 80  |
|----------------------------------|------|------|------|------|------|-------|-------|-----|-----|-----|
| d                                | 16   | 20   | 25   | 32   | 40   | 50    | 63    | 75  | 90  | 110 |
| A                                | 62   | 62   | 69   | 73   | 83   | 94    | 108   | 133 | 160 | 160 |
| B                                | 40   | 40   | 51,5 | 51,5 | 64   | 73    | 85    | 110 | 132 | 132 |
| D                                | 53   | 53   | 64   | 71   | 84,5 | 100   | 120,5 | 155 | 187 | 187 |
| H                                | 71,5 | 71,5 | 77   | 80,5 | 98,5 | 106,5 | 115,5 | 142 | 160 | 160 |
| E <sub>BF</sub> <sup>2</sup>     | -    | 95   | 108  | 115  | 140  | 151   | 165   | 186 | 202 | 222 |
| L <sub>FSP</sub> <sup>1</sup> PP | 114  | 125  | 143  | 152  | 171  | 191   | 220   | 277 | 295 | 312 |
| L <sub>FSP</sub> <sup>1</sup> PE | 112  | 123  | 142  | 150  | 141  | 179   | 196   | 249 | 290 | 320 |
| L1 <sub>BF</sub> <sup>2</sup>    | -    | 168  | 185  | 190  | 206  | 321   | 385   | 420 | 380 | 437 |
| PN                               | 10   | 10   | 10   | 10   | 10   | 10    | 10    | 10  | 6   | 6   |

Dimensions in mm

- <sup>1</sup> FSP = fusion spigot  
<sup>2</sup> BF = backing flange  
- = currently not realised

## 2 way ball valve S4 with integrated Praher Labeling System



### PVDF

#### Connector types

PVDF fusion socket

PVDF threaded socket

| DN                                  | 10   | 15   | 20   | 25   | 32     | 40     | 50    | 65     | 80   | 80   |
|-------------------------------------|------|------|------|------|--------|--------|-------|--------|------|------|
| d                                   | 16   | 20   | 25   | 32   | 40     | 50     | 63    | 75     | 90   | 110  |
| <b>G<sub>TSO</sub></b> <sup>1</sup> | 3/8" | 1/2" | 3/4" | 1"   | 1 1/4" | 1 1/2" | 2"    | 2 1/2" | 3"   | -    |
| <b>A</b>                            | 62   | 62   | 69   | 73   | 83     | 94     | 108   | 133    | 160  | 160  |
| <b>B</b>                            | 40   | 40   | 51,5 | 51,5 | 64     | 73     | 85    | 110    | 132  | 132  |
| <b>D</b>                            | 52,5 | 52,5 | 63   | 70   | 85,5   | 98     | 118   | 151    | 183  | 183  |
| <b>H</b>                            | 71,5 | 71,5 | 77   | 80,5 | 98,5   | 106,5  | 115,5 | 142    | 160  | 160  |
| <b>t<sub>FSO</sub></b> <sup>2</sup> | 14,5 | 16   | 17   | 19,5 | 22     | 25     | 29    | 34,5   | 38,5 | 41,5 |
| <b>Z<sub>TSO</sub></b> <sup>1</sup> | 67   | 67   | 74   | 80   | 89     | 103    | 119   | 143    | 180  | -    |
| <b>Z<sub>FSO</sub></b> <sup>2</sup> | 71   | 68   | 78   | 84   | 97     | 113    | 136   | 162    | 207  | 170  |
| <b>PN</b>                           | 16   | 16   | 16   | 16   | 16     | 16     | 16    | 16     | 10   | 6    |

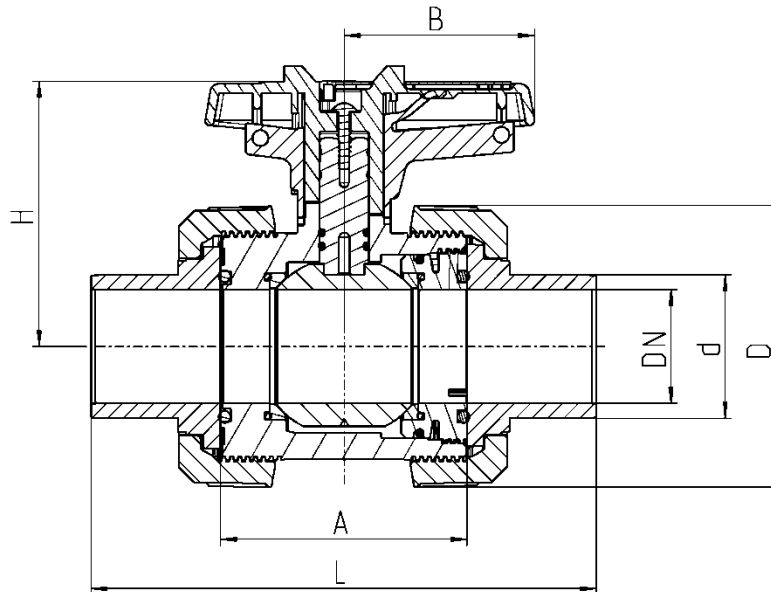
Dimensions in mm

<sup>1</sup> TSO = threaded socket

<sup>2</sup> FSO = fusion socket

- = currently not realised

## 2 way ball valve S4 with integrated Praher Labeling System



**PVDF**  
Connector types  
PVDF fusion spigot

| DN                            | 10   | 15   | 20   | 25   | 32   | 40    | 50    | 65  | 80  | 80  |
|-------------------------------|------|------|------|------|------|-------|-------|-----|-----|-----|
| d                             | 16   | 20   | 25   | 32   | 40   | 50    | 63    | 75  | 90  | 110 |
| A                             | 62   | 62   | 69   | 73   | 83   | 94    | 108   | 133 | 160 | 160 |
| B                             | 40   | 40   | 51,5 | 51,5 | 64   | 73    | 85    | 110 | 132 | 132 |
| D                             | 52,5 | 52,5 | 63   | 70   | 85,5 | 98    | 118   | 151 | 183 | 183 |
| H                             | 71,5 | 71,5 | 77   | 80,5 | 98,5 | 106,5 | 115,5 | 142 | 160 | 160 |
| L <sub>FSP</sub> <sup>1</sup> | 114  | 125  | 143  | 152  | 171  | 191   | 220   | 297 | 295 | 320 |
| PN                            | 16   | 16   | 16   | 16   | 16   | 16    | 16    | 16  | 10  | 6   |

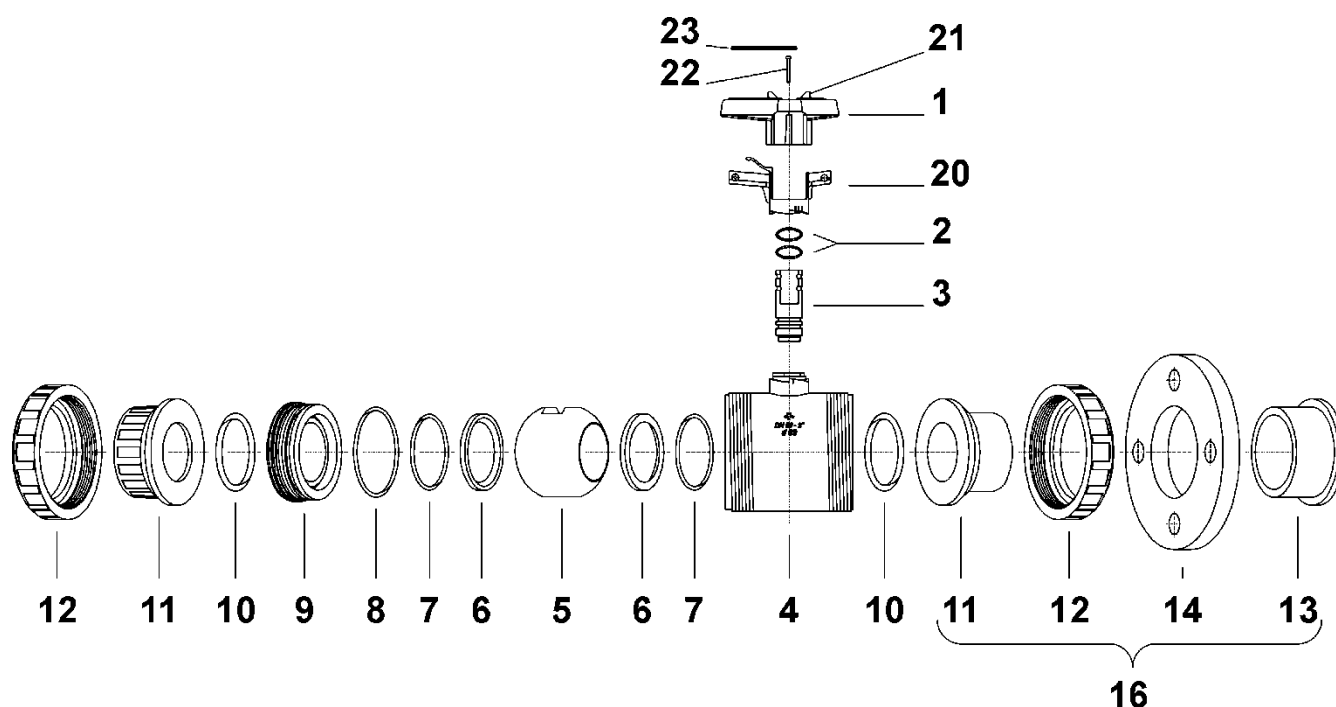
Dimensions in mm

<sup>1</sup> FSP = fusion spigot

## 2 way ball valve S4 with integrated Praher Labeling System

### Exploded drawing:

- |                                 |                                          |
|---------------------------------|------------------------------------------|
| 01. Handel                      | 12. Union nut                            |
| 02. O-Ring                      | 13. Flange adaptor / stub flange         |
| 03. Shaft                       | 14. Backing flange / fixed flange        |
| 04. Body                        | 16. Connection set                       |
| 05. Ball                        | 20. Spring loaded locking sleeve         |
| 06. Ball seating joint          | 21. Stub tenor for opening thrust collar |
| 07. O-Ring                      | 22. Screw                                |
| 08. O-Ring                      | 23. PLS-labeling insert                  |
| 09. Thrust collar               |                                          |
| 10. O-Ring                      |                                          |
| 11. Connector types             |                                          |
| solvent socket / solvent spigot |                                          |
| fusion socket / fusion spigot   |                                          |
| threaded socket                 |                                          |

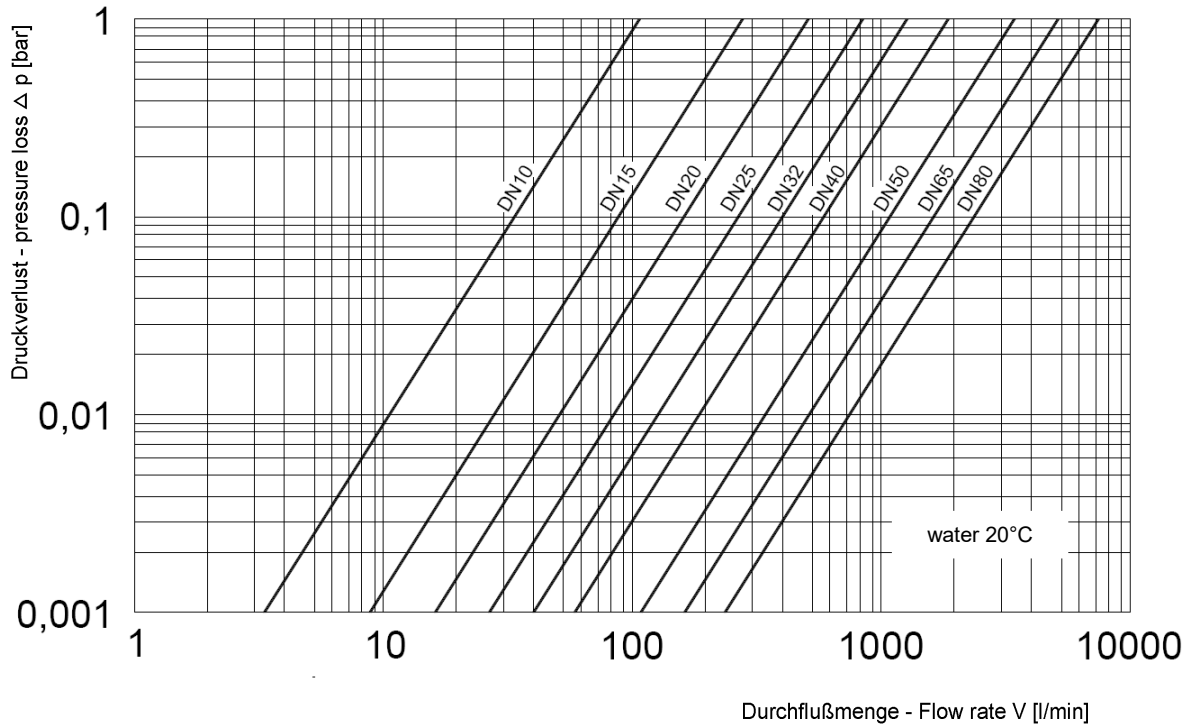




## 2 way ball valve S4 with integrated Praher Labeling System

### Diagrams:

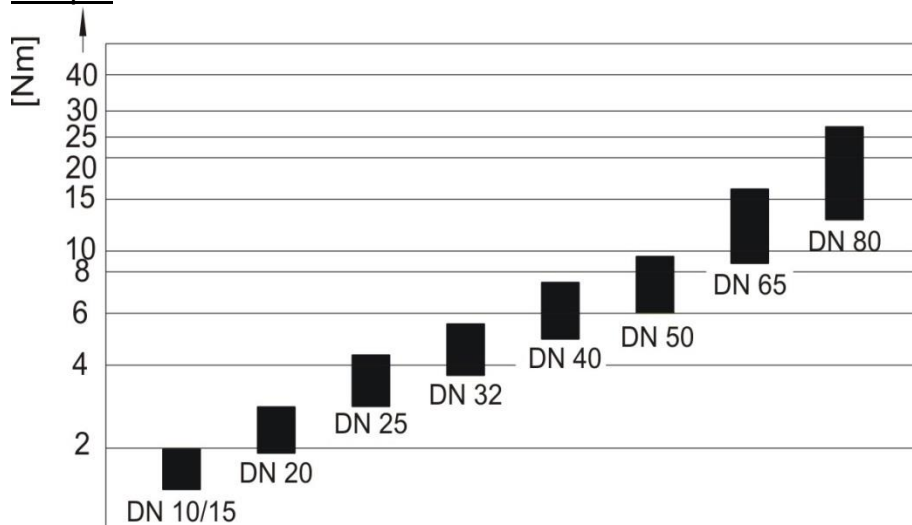
#### Pressure loss diagram



| Cv value table |            |            |
|----------------|------------|------------|
| pressure loss  | 1 bar      | 0,001 bar  |
| <b>DN10</b>    | 107 l/min  | 3,4 l/min  |
| <b>DN15</b>    | 278 l/min  | 8,8 l/min  |
| <b>DN20</b>    | 509 l/min  | 16,1 l/min |
| <b>DN25</b>    | 843 l/min  | 26,7 l/min |
| <b>DN32</b>    | 1269 l/min | 40,1 l/min |
| <b>DN40</b>    | 1858 l/min | 58,7 l/min |
| <b>DN50</b>    | 3424 l/min | 110 l/min  |
| <b>DN65</b>    | 5133 l/min | 165 l/min  |
| <b>DN80</b>    | 7455 l/min | 240 l/min  |

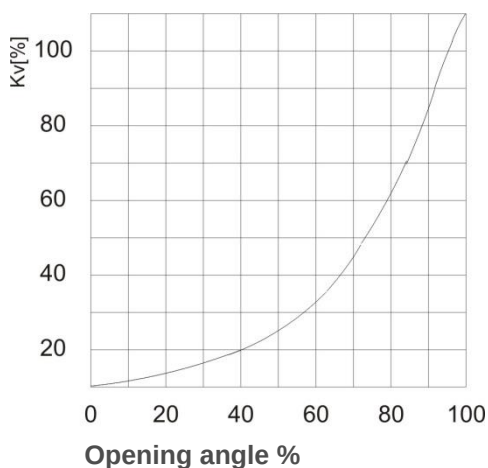
## 2 way ball valve S4 with integrated Praher Labeling System

### Torque

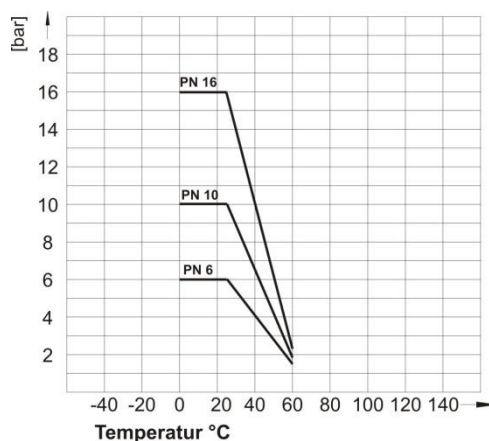


### PVC

#### Flow characteristics

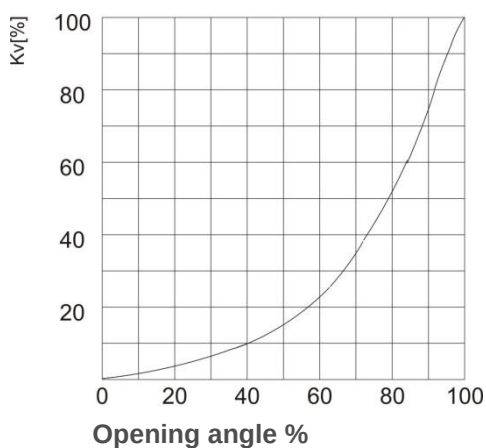


#### Pressure – Temperature – Diagram

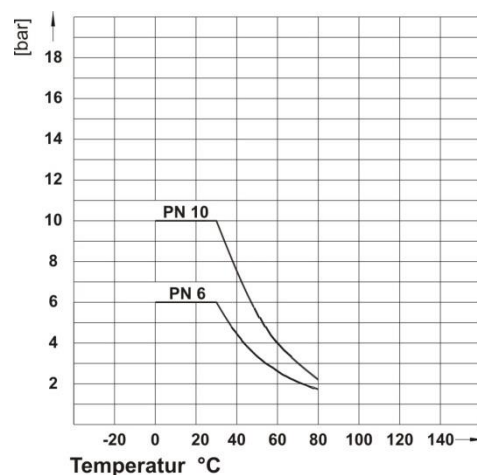


### PP

#### Flow characteristics



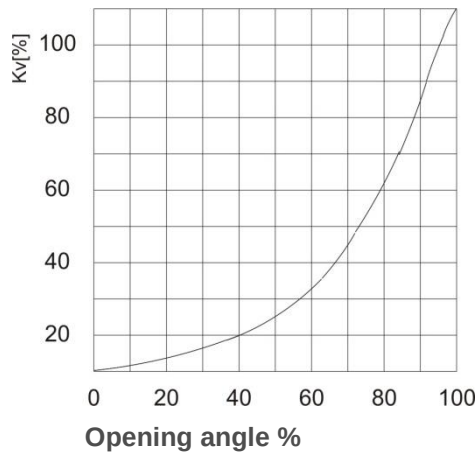
#### Pressure – Temperature – Diagram



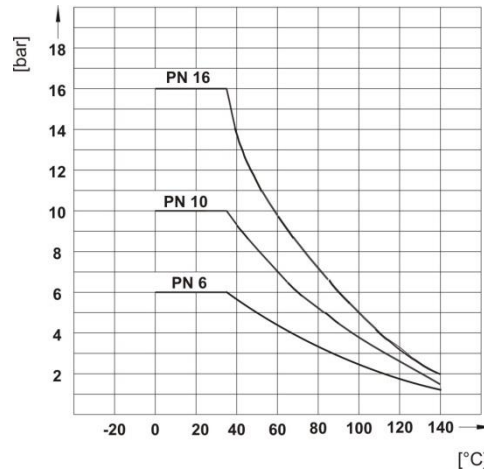
## 2 way ball valve S4 with integrated Praher Labeling System

### PVDF

#### Flow characteristics



#### Pressure – Temperature – Diagram



### PLS – Praher Labeling System

#### Technical features:

- Unique durable label
- Reliable labeling by touch-up pen or laser engraving
- Standard version with yellow plate; other colours in red, blue and green
- Simple and easy to exchange
- Corrosion resistant
- Function of valve 100% guaranteed and not effective by PLS

