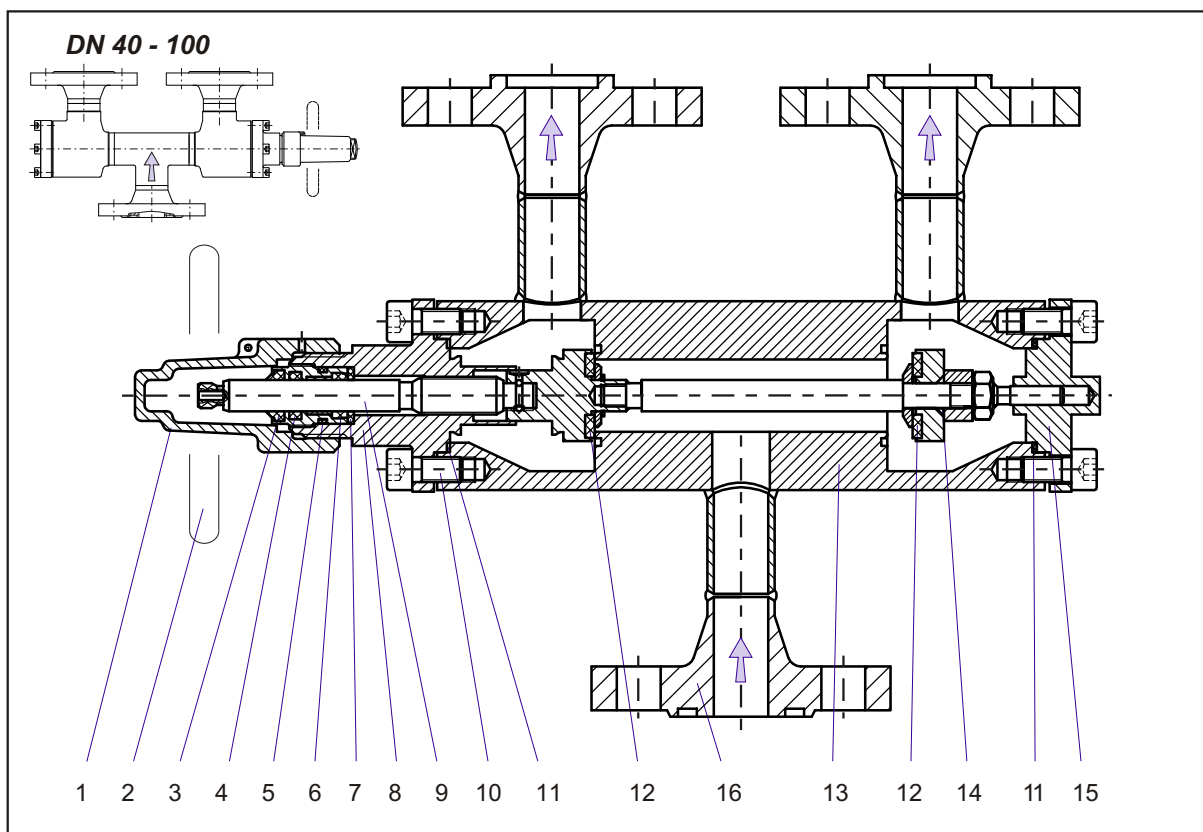


# Wechselventil

# WVR

# 3 - way - valve

|          |      |      |      |       |
|----------|------|------|------|-------|
| TS [°C]  | - 60 | - 10 | + 50 | + 150 |
| PS [bar] | 18,7 | 25   | 25   | 25    |
| PS [bar] | 30   | 40   | 40   | 40    |

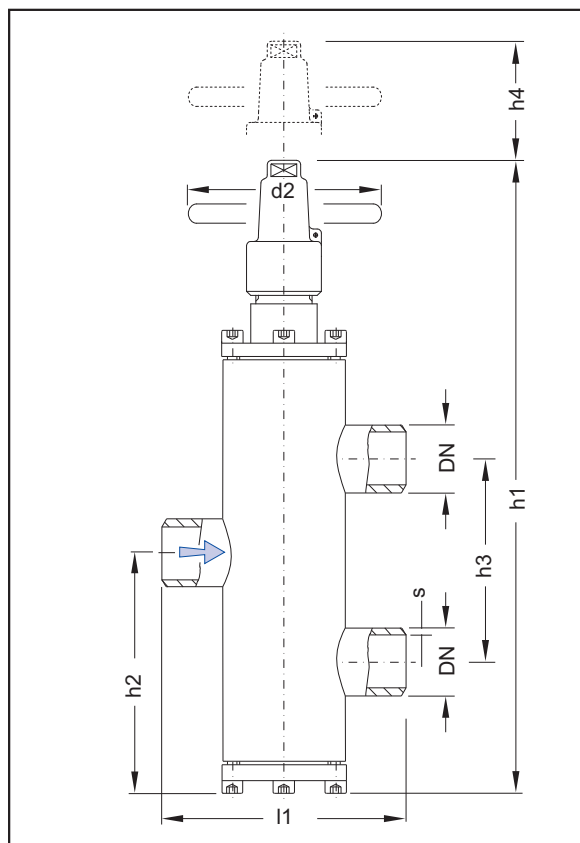


| Pos. | Teil / part      |                      | Material                           |
|------|------------------|----------------------|------------------------------------|
| 1    | Kappe            | cap                  | 3.2341                             |
| 2    | Handrad          | handwheel            | Stahlblech / sheet steel           |
| 3    | Absreifring      | scraper              | NBR-85                             |
| 4    | O-Ring A         | O-ring seal A        | CR-70                              |
| 5    | O-Ring B         | O-ring seal B        | CR-70                              |
| 6    | elast. PTFE-Ring | elastic PTFE-ring    | 1.4571 / PTFE                      |
| 7    | Flachdichtung SB | flat sealing ring SB | AFM - asbestfrei                   |
| 8    | Deckel           | cover                | 1.0038 / 1.0488 / 1.4305           |
| 9    | Spindel kpl.     | stem cmpl.           | 1.4305                             |
| 10   | Schrauben        | screws               | 8.8 / A2 - 70                      |
| 11   | Flachdichtring K | flat sealing ring K  | PTFE                               |
| 12   | Flachdichtring S | flat sealing ring S  | PTFE                               |
| 13   | Gehäuse          | body                 | 1.0305 / 1.0488<br>1.4541 / 1.4301 |
| 14   | O-Ring C         | O-ring C             | CR-70                              |
| 15   | Deckel           | cover                | 1.0038 / 1.0488 / 1.4305           |
| 16   | Flansche         | flanges              | 1.0460                             |

# WVR Wechselventil 3 - way - valve

## WVR AE

AE - Anschweißenden / butt welding ends



### Einbaulängen / lengths in mm :

| DN  | Anschweißenden / welding ends |     |                  |     |               |     |     |     |     |     |     |     |
|-----|-------------------------------|-----|------------------|-----|---------------|-----|-----|-----|-----|-----|-----|-----|
|     | Reihe 1/ range 1              |     | Reihe 2/ range 2 |     | ANSI Sched 40 |     |     |     |     |     |     |     |
|     | d1                            | s   | d1               | s   | d1            | s   | l1  | h1  | h2  | h3  | h4  | d2  |
| 10  | 17,2                          | 1,8 | 15,0             | 2,5 | 17,1          | 2,3 | 132 | 294 | 107 | 108 | 140 | 100 |
| 15  | 21,3                          | 2,0 | 20,0             | 2,5 | 21,3          | 2,8 | 126 | 306 | 113 | 120 | 140 | 100 |
| 20  | 26,9                          | 2,3 | 25,0             | 2,5 | 16,7          | 2,9 | 146 | 337 | 128 | 150 | 140 | 100 |
| 25  | 33,7                          | 2,6 | 32,0             | 3,0 | 33,4          | 3,4 | 120 | 401 | 143 | 160 | 215 | 120 |
| 32  | 42,4                          | 2,6 | 38,0             | 3,0 | 42,2          | 3,6 | 120 | 401 | 153 | 180 | 215 | 120 |
| 40  | 48,3                          | 2,6 | 45,0             | 3,0 | 48,3          | 3,7 | 127 | 496 | 184 | 214 | 240 | 140 |
| 50  | 60,3                          | 2,9 | 57,0             | 3,2 | 60,3          | 3,9 | 134 | 510 | 191 | 228 | 240 | 140 |
| 65  | 76,1                          | 2,9 | 76,1             | 3,6 | 76,1          | 5,2 | 161 | 581 | 231 | 276 | 270 | 140 |
| 80  | 88,9                          | 3,2 | 88,9             | 4,0 | 88,9          | 5,5 | 188 | 743 | 289 | 325 | 290 | 180 |
| 100 | 114,3                         | 3,6 | 108,0            | 4,0 | 114,3         | 6,0 | 228 | 812 | 329 | 393 | 300 | 180 |

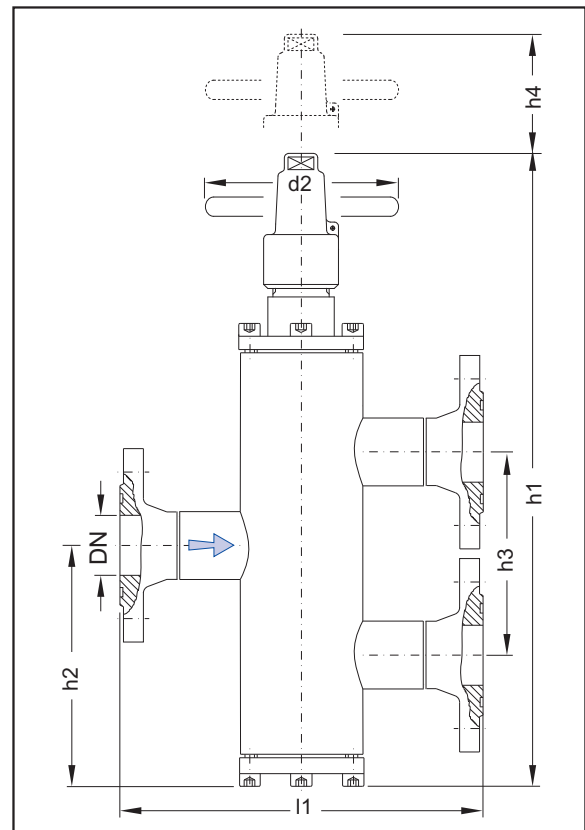
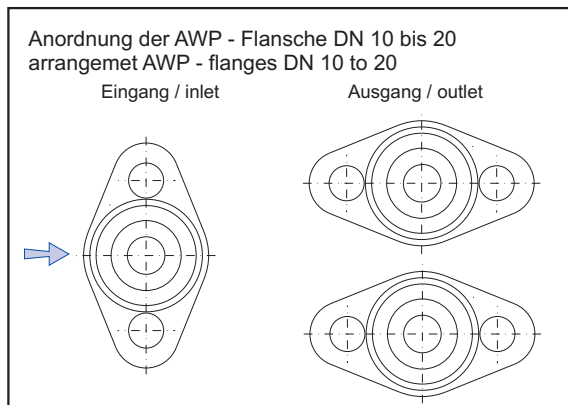
### Varianten / variants :

| DN     | Werkstoff material | Ausführung / design |       | Anschweißenden / butt welding ends                       |                  |
|--------|--------------------|---------------------|-------|----------------------------------------------------------|------------------|
|        |                    |                     |       | Eingang / inlet                                          | Ausgang / outlet |
| 10 40  | 1.0305             | Handrad             | Kappe | Reihe 1/ range 1<br>Reihe 2/ range 2<br>ANSI Schedule 40 |                  |
| 15 50  | 1.4301             | handwheel           | cap   |                                                          |                  |
| 20 65  |                    | -                   | -     |                                                          |                  |
| 25 80  |                    | x                   | -     |                                                          |                  |
| 32 100 |                    | -                   | x     |                                                          |                  |
|        |                    | x                   | x     |                                                          |                  |

# WVR Wechselventil 3 - way - valve

## WVR FL

FL - Flanschanschluß / flange connection



### Einbaulängen / lengths in mm :

| DN  | Flansch / flange |     |      | h1  | h2  | h3  | h4  | d2  |
|-----|------------------|-----|------|-----|-----|-----|-----|-----|
|     | AWP              | DIN | ANSI |     |     |     |     |     |
| 10  | 198              | 204 | -    | 294 | 107 | 108 | 140 | 100 |
| 15  | 192              | 204 | 224  | 306 | 113 | 120 | 140 | 100 |
| 20  | 212              | 228 | 252  | 337 | 128 | 150 | 140 | 100 |
| 25  | 208              | 202 | 232  | 401 | 143 | 160 | 215 | 120 |
| 32  | 208              | 204 | 232  | 421 | 153 | 180 | 215 | 120 |
| 40  | 203              | 219 | 252  | 496 | 184 | 214 | 240 | 140 |
| 50  | 220              | 230 | 267  | 510 | 191 | 228 | 240 | 140 |
| 65  | 267              | 265 | 301  | 581 | 231 | 276 | 270 | 140 |
| 80  | 294              | 304 | 328  | 743 | 289 | 325 | 290 | 180 |
| 100 | -                | 358 | 380  | 812 | 329 | 393 | 300 | 180 |

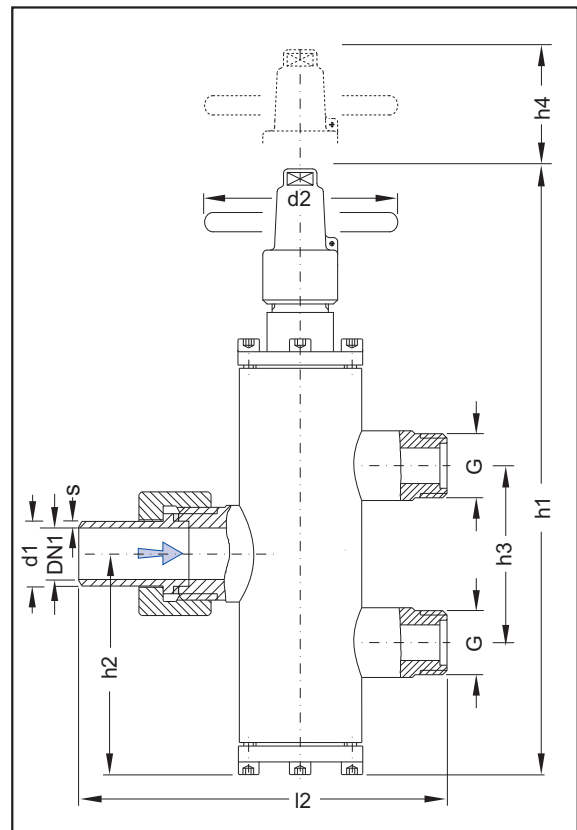
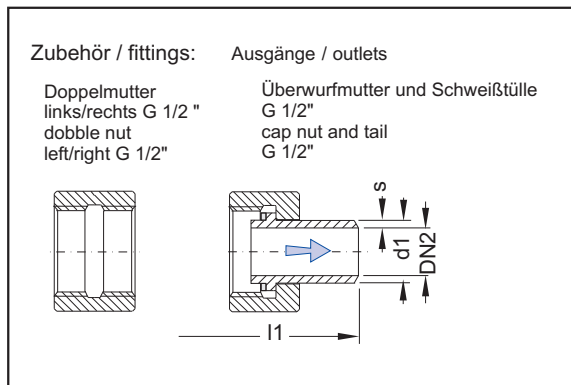
### Varianten / variants :

| DN     | Werkstoff<br>material | Ausführung / design  | Flansche / flanges | Zubehör / fittings                         |
|--------|-----------------------|----------------------|--------------------|--------------------------------------------|
| 10 40  | 1.0305                | Handrad<br>handwheel | DIN                | Flansche kpl/AE<br>flanges cpl/weldingends |
| 15 50  | 1.4301                | Kappe<br>cap         | AWP                | Reihe/range 1                              |
| 20 65  |                       | -                    | ANSI               | Reihe/range 2                              |
| 25 80  |                       | x                    |                    | ANSI Schedule 40                           |
| 32 100 |                       | -                    |                    |                                            |
|        |                       | x                    |                    |                                            |

# WVR Wechselventil 3 - way - valve

## WVR SE

SE - Schraubenden / screwed ends



### Einbaulängen / lengths in mm :

|       | Schraubenden<br>screwed ends |                | Schweißstüllen<br>tails |                |               |                |     |     |     |     |     |     |     |
|-------|------------------------------|----------------|-------------------------|----------------|---------------|----------------|-----|-----|-----|-----|-----|-----|-----|
|       | Eingang/inlet                | Ausgang/outlet | Eingang/inlet           | Ausgang/outlet | Eingang/inlet | Ausgang/outlet | I1  | I2  | h1  | h2  | h3  | h4  | d2  |
| DN1/2 | G*                           | G*             | d1                      | s              | d1            | s              |     |     |     |     |     |     |     |
| 15/8  | 1"                           | 1/2"           | 21,3                    | 2,0            | 13,5          | 1,8            | 195 | 164 | 306 | 113 | 120 | 140 | 100 |

\* Whitworth - Rohrgewinde DIN ISO 228, Whitworth - tube thread ISO 228

### Varianten / variants :

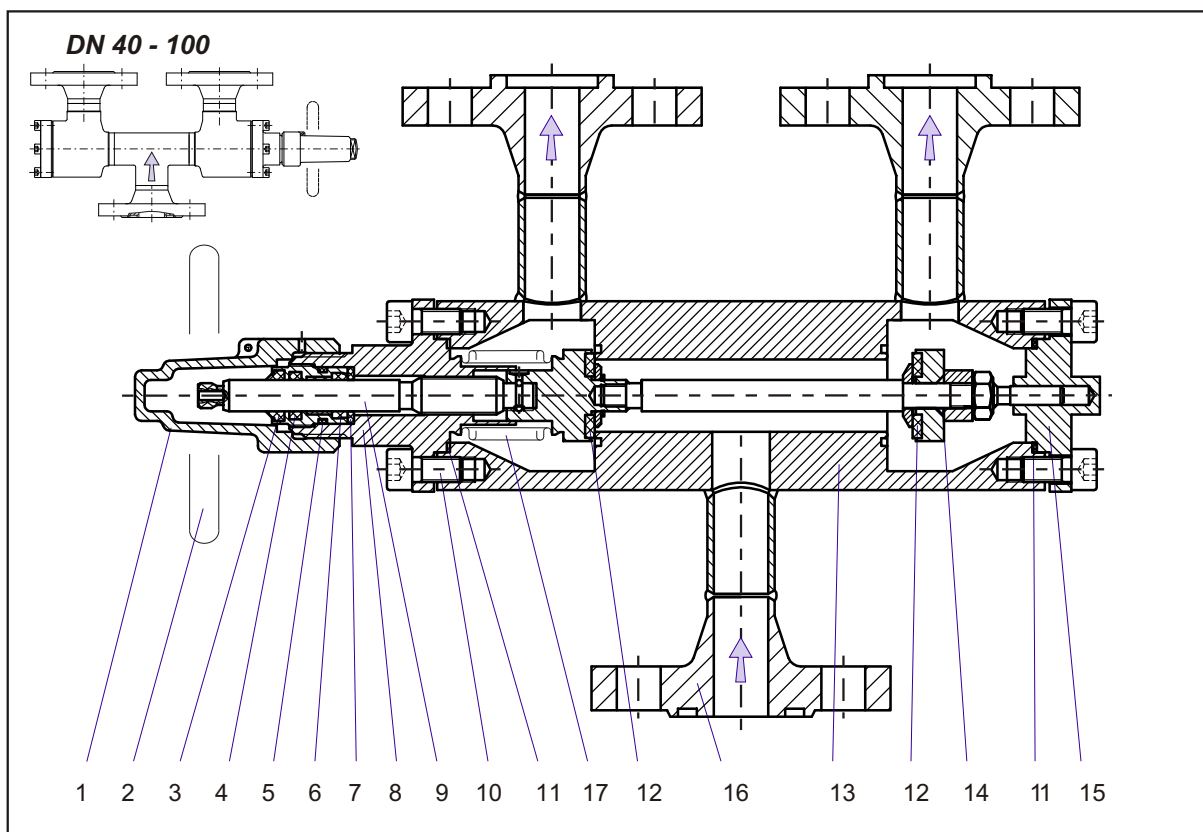
| DN | Werkstoff<br>material | Ausführung/design    |              | Schraubenden<br>screwed connection |                     | Zubehör / fittings                                                                                                               |
|----|-----------------------|----------------------|--------------|------------------------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 15 | 1.0305<br>1.4301      | Handrad<br>handwheel | Kappe<br>cap | Eingang<br>inlet                   | Ausgänge<br>outlets | - Überwurfmutter/ cap nut<br>- Schweißstülle/ tail<br>- Doppelmutter links/rechts<br>G 1/2"L / dobble nut left/<br>right G 1/2"L |
|    |                       | -                    | -            | 1"                                 | 1/2"links           |                                                                                                                                  |
|    |                       | x                    | -            | 1"                                 | 1/2"                |                                                                                                                                  |
|    |                       | -                    | x            |                                    |                     |                                                                                                                                  |
|    |                       | x                    | x            |                                    |                     |                                                                                                                                  |

**Wechselventile -Metallbalg-**

**WVB**

**3 - way - valves -metal bellow-**

|          |      |      |      |       |
|----------|------|------|------|-------|
| TS [°C]  | - 60 | - 10 | + 50 | + 150 |
| PS [bar] | 18,7 | 25   | 25   | 25    |
| PS [bar] | 30   | 40   | 40   | 40    |



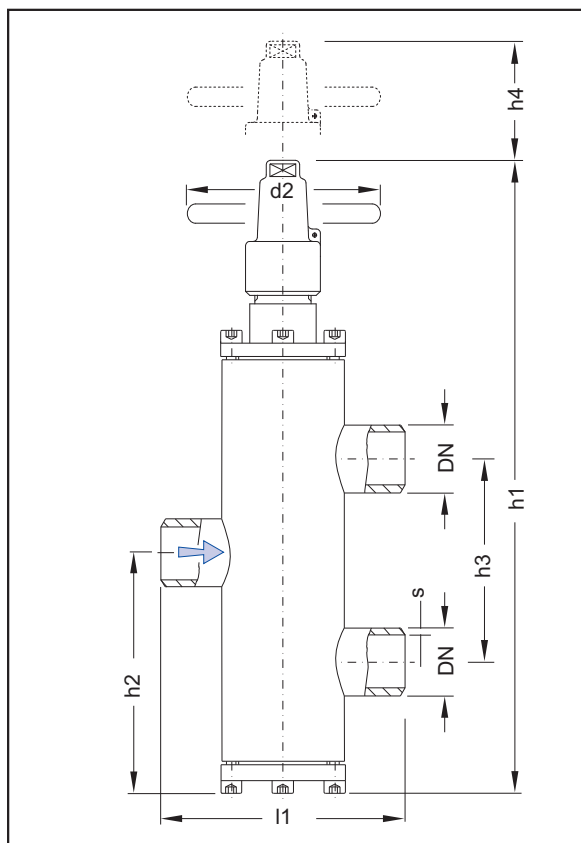
| Pos. | Teil / part      |                      | Material                           |
|------|------------------|----------------------|------------------------------------|
| 1    | Kappe            | cap                  | 3.2341                             |
| 2    | Handrad          | handwheel            | Stahlblech / sheet steel           |
| 3    | Absreifring      | scraper              | NBR-85                             |
| 4    | O-Ring A         | O-ring seal A        | CR-70                              |
| 5    | O-Ring B         | O-ring seal B        | CR-70                              |
| 6    | elast. PTFE-Ring | elastic PTFE-ring    | 1.4571 / PTFE                      |
| 7    | Flachdichtung SB | flat sealing ring SB | AFM - asbestfrei                   |
| 8    | Deckel           | cover                | 1.0038 / 1.0488 / 1.4305           |
| 9    | Spindel kpl.     | stem cmpl.           | 1.4305                             |
| 10   | Schrauben        | screws               | 8.8 / A2 - 70                      |
| 11   | Flachdichtring K | flat sealing ring K  | PTFE                               |
| 12   | Flachdichtring S | flat sealing ring S  | PTFE                               |
| 13   | Gehäuse          | body                 | 1.0305 / 1.0488<br>1.4541 / 1.4301 |
| 14   | O-Ring C         | O-ring C             | CR-70                              |
| 15   | Deckel           | cover                | 1.0038 / 1.0488 / 1.4305           |
| 16   | Flansche         | flanges              | 1.0460                             |
| 17   | Metallbalg       | metal bellows        | 1.4541                             |

**WVB Wechselventil - Metallbalg -**

**3 - way - valve - metal bellow -**

**WVB AE**

*AE - Anschweißenden / butt welding ends*



**Einbaulängen / lengths in mm :**

| DN  | Anschweißenden / butt welding ends |                  |               |     |       |     | l1  | h1  | h2  | h3  | h4  | d2  |
|-----|------------------------------------|------------------|---------------|-----|-------|-----|-----|-----|-----|-----|-----|-----|
|     | Reihe 1/ range 1                   | Reihe 2/ range 2 | ANSI Sched 40 |     |       |     |     |     |     |     |     |     |
|     | d1                                 | s                | d1            | s   | d1    | s   |     |     |     |     |     |     |
| 10  | 17,2                               | 1,8              | 15,0          | 2,5 | 17,1  | 2,3 | 132 | 294 | 107 | 108 | 140 | 100 |
| 15  | 21,3                               | 2,0              | 20,0          | 2,5 | 21,3  | 2,8 | 126 | 306 | 113 | 120 | 140 | 100 |
| 20  | 26,9                               | 2,3              | 25,0          | 2,5 | 16,7  | 2,9 | 146 | 337 | 128 | 150 | 140 | 100 |
| 25  | 33,7                               | 2,6              | 32,0          | 3,0 | 33,4  | 3,4 | 120 | 401 | 143 | 160 | 215 | 120 |
| 32  | 42,4                               | 2,6              | 38,0          | 3,0 | 42,2  | 3,6 | 120 | 401 | 153 | 180 | 215 | 120 |
| 40  | 48,3                               | 2,6              | 45,0          | 3,0 | 48,3  | 3,7 | 127 | 496 | 184 | 214 | 240 | 140 |
| 50  | 60,3                               | 2,9              | 57,0          | 3,2 | 60,3  | 3,9 | 134 | 510 | 191 | 228 | 240 | 140 |
| 65  | 76,1                               | 2,9              | 76,1          | 3,6 | 76,1  | 5,2 | 161 | 581 | 231 | 276 | 270 | 140 |
| 80  | 88,9                               | 3,2              | 88,9          | 4,0 | 88,9  | 5,5 | 188 | 743 | 289 | 325 | 290 | 180 |
| 100 | 114,3                              | 3,6              | 108,0         | 4,0 | 114,3 | 6,0 | 228 | 812 | 329 | 393 | 300 | 180 |

**Varianten / variants :**

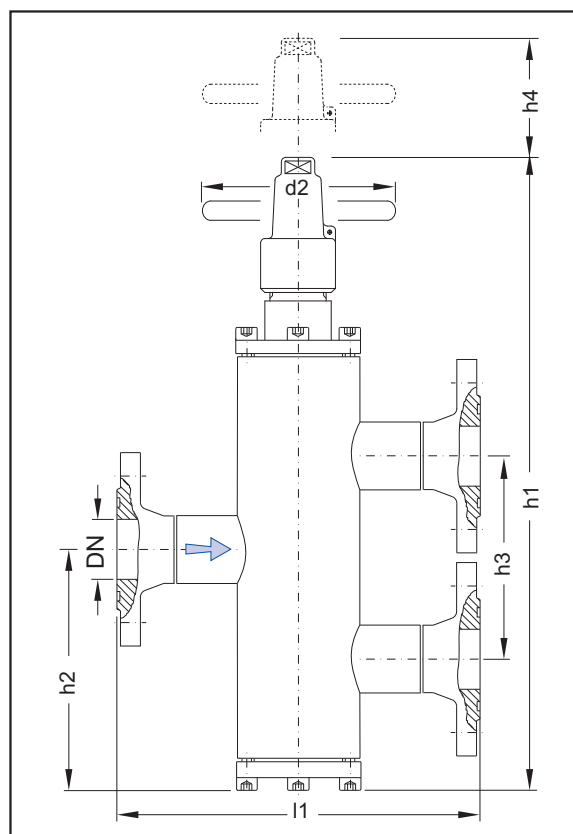
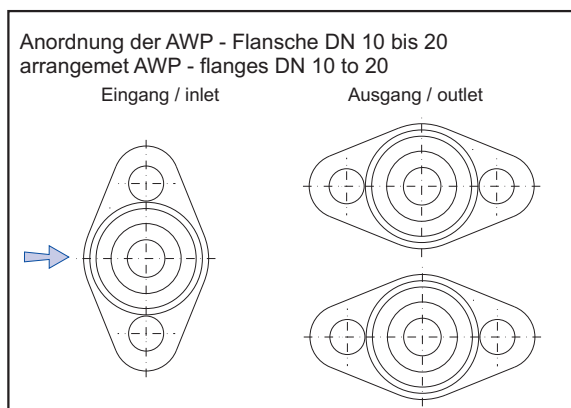
| DN                                                        | Werkstoff material | Ausführung / design                                                                                                            | Anschweißenden / butt welding ends<br>Eingang / inlet      Ausgang / outlet |
|-----------------------------------------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 10    40<br>15    50<br>20    65<br>25    80<br>32    100 | 1.0305<br>1.4301   | Handrad      Kappe<br>handwheel    cap<br>-                -<br>x                -<br>-                x<br>x                x | Reihe 1/ range 1<br>Reihe 2/ range 2<br>ANSI Schedule 40                    |

# WVB Wechselventil - Metallbalg -

# 3 - way - valve - metal bellow -

## WVB FL

FL - Flanschanschluß / flange connection



### Einbaulängen / lengths in mm :

| DN  | Flansch / flange |     |      | h1  | h2  | h3  | h4  | d2  |
|-----|------------------|-----|------|-----|-----|-----|-----|-----|
|     | AWP              | DIN | ANSI |     |     |     |     |     |
| 10  | 198              | 204 | -    | 294 | 107 | 108 | 140 | 100 |
| 15  | 192              | 204 | 224  | 306 | 113 | 120 | 140 | 100 |
| 20  | 212              | 228 | 252  | 337 | 128 | 150 | 140 | 100 |
| 25  | 208              | 202 | 232  | 401 | 143 | 160 | 215 | 120 |
| 32  | 208              | 204 | 232  | 421 | 153 | 180 | 215 | 120 |
| 40  | 203              | 219 | 252  | 496 | 184 | 214 | 240 | 140 |
| 50  | 220              | 230 | 267  | 510 | 191 | 228 | 240 | 140 |
| 65  | 267              | 265 | 301  | 581 | 231 | 276 | 270 | 140 |
| 80  | 294              | 304 | 328  | 743 | 289 | 325 | 290 | 180 |
| 100 | -                | 358 | 380  | 812 | 329 | 393 | 300 | 180 |

### Varianten / variants :

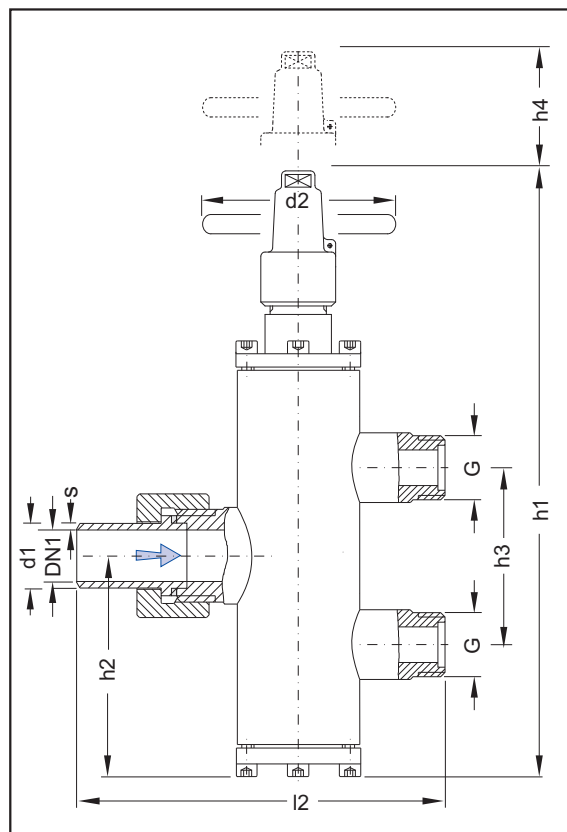
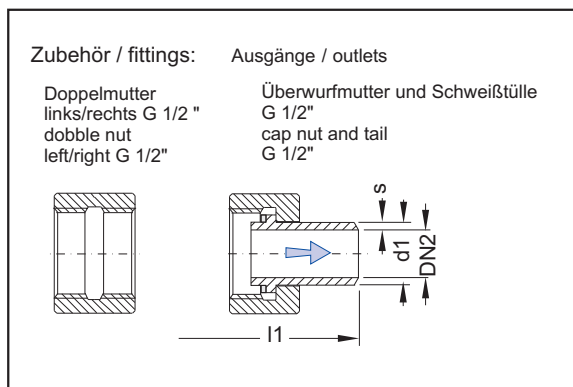
| DN     | Werkstoff<br>material | Ausführung Design    | Flansche / flanges | Zubehör / fittings                            |
|--------|-----------------------|----------------------|--------------------|-----------------------------------------------|
| 10 40  | 1.0305                | Handrad<br>handwheel | DIN                | Flansche kpl/AE<br>flanges cpl / butt welding |
| 15 50  | 1.4301                | Kappe<br>cap         | AWP                | ends                                          |
| 20 65  |                       | -                    | ANSI               | Reihe/range 1                                 |
| 25 80  |                       | x                    |                    | Reihe/range 2                                 |
| 32 100 |                       | -                    |                    | ANSI Schedule 40                              |
|        |                       | x                    |                    |                                               |

# WVB Wechselventil - Metallbalg -

# 3 - way - valve - metal bellow -

## WVB SE

SE - Schraubenden / screwed ends



## Einbaulängen / lengths in mm :

|       | Schraubenden<br>screwed ends |                | Schweißstüllen<br>tails |                |               |                |     |     |     |     |     |     |     |
|-------|------------------------------|----------------|-------------------------|----------------|---------------|----------------|-----|-----|-----|-----|-----|-----|-----|
|       | Eingang/inlet                | Ausgang/outlet | Eingang/inlet           | Ausgang/outlet | Eingang/inlet | Ausgang/outlet | I1  | I2  | h1  | h2  | h3  | h4  | d2  |
| DN1/2 | G*                           | G*             | d1                      | s              | d1            | s              | 195 | 164 | 306 | 113 | 120 | 140 | 100 |
| 15/8  | 1"                           | 1/2"L          | 21,3                    | 2,0            | 13,5          | 1,8            |     |     |     |     |     |     |     |

\* Whitworth - Rohrgewinde DIN ISO 228, Whitworth - tube thread ISO 228

## Varianten / variants :

| DN | Werkstoff<br>material | Ausführung/design    |              | Schraubenden<br>screwed connection |                     | Zubehör / fittings                                                                                                               |
|----|-----------------------|----------------------|--------------|------------------------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 15 | 1.0305<br>1.4301      | Handrad<br>handwheel | Kappe<br>cap | Eingang<br>inlet                   | Ausgänge<br>outlets | - Überwurfmutter/ cap nut<br>- Schweißstülle/ tail<br>- Doppelmutter links/rechts<br>G 1/2"L / dobble nut left/<br>right G 1/2"L |
|    |                       | -                    | -            | 1"                                 | 1/2"links           |                                                                                                                                  |
|    |                       | x                    | -            |                                    |                     |                                                                                                                                  |
|    |                       | -                    | x            |                                    |                     |                                                                                                                                  |
|    |                       | x                    | x            |                                    |                     |                                                                                                                                  |