

3-WAY VALVES FOR REFRI- GERATION

WVR, WVB

05.02.2026



Table of contents

| | | |
|----|---|----|
| 1 | WVR / WVB / WVR AL..... | 4 |
| 2 | WVR materials..... | 5 |
| 3 | WVR FL..... | 6 |
| 4 | WVR FL NIRO..... | 8 |
| 5 | WVR SE..... | 10 |
| 6 | WVR SE NIRO | 12 |
| 7 | WVR SE NIRO | 14 |
| 8 | WVR SE Herl T19A | 15 |
| 9 | WVB materials..... | 16 |
| 10 | WVB FL..... | 17 |
| 11 | WVB FL NIRO..... | 19 |
| 12 | WVB SE..... | 21 |
| 13 | WVB SE NIRO | 22 |
| 14 | WVR AL materials | 23 |
| 15 | WVR FL..... | 25 |
| 16 | WVR FL..... | 27 |
| 17 | WVR FL Herl T25V..... | 29 |
| 18 | Accessories | 31 |
| 19 | WVR illustration of the opened port..... | 32 |
| 20 | Valve stem sealing system..... | 33 |
| 21 | Handwheel / Cap | 34 |
| 22 | Comparison of European / American materials | 36 |
| 23 | Welding neck flanges - DIN 2634/2635 | 37 |
| 24 | Welding neck flanges - DIN 2634/2636/2637 | 39 |
| 25 | Welding neck flanges - DIN EN 1092-1..... | 41 |
| 26 | Welding neck flanges - DIN EN 1092-1..... | 43 |
| 27 | Welding neck flanges - ANSI B16.5 raised face | 45 |
| 28 | Welding neck flanges - AWP..... | 47 |
| 29 | Legal notices..... | 49 |

1 WVR / WVB / WVR AL

WVR: Change-over valves - stem seal threaded bush with resilient PTFE ring

| WVR | Connection | Form | Material | Valve type |
|------------------------------|--------------|------|--------------|--------------|
| WVR | Materials | | | |
| WVR PS25 / PS40 / PS63 | Flanged ends | | St | WVR FL |
| | | | NIRO | WVR FL NIRO |
| | Screwed ends | | Screwed ends | Screwed ends |
| | | | NIRO | WVR SE NIRO |
| WVR SE NIRO PS63 | Screwed ends | | NIRO | WVR SE NIRO |
| WVR Herl T19V PS25 / PS40 | Screwed ends | | St | WVR SE Herl |

WVB: Change-over valves - stem seal metal bellows and threaded bush

| WVB | Connection | Form | Material | Valve type |
|--------------------|--------------|------|----------|-------------|
| WVB | Materials | | | |
| WVB PS25 / PS40 | Flanged ends | | St | WVB FL |
| | | | Niro | WVB FL NIRO |
| | Screwed ends | | St | WVB SE |
| | | | NIRO | WVB SE NIRO |

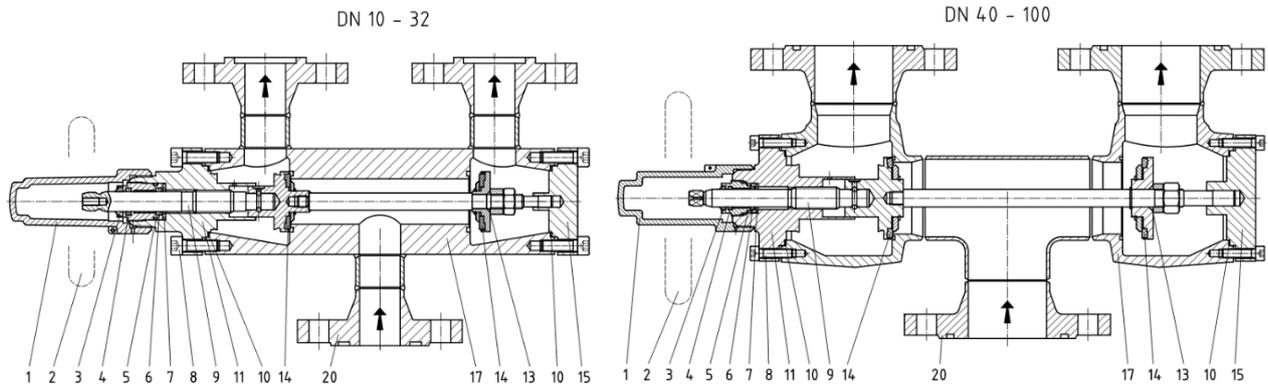
WVR AL: Change-over valves, compact design - stem seal threaded bush with resilient PTFE ring

| WVR AL | Connection | Form | Material | Valve type |
|-----------------------------------|---|------|----------|----------------|
| WVR AL | Materials | | | |
| WVR AL PS25 / PS40 | Flanged ends | | Alu/St | WVR AL FL |
| | | | Alu/Niro | WVR AL FL NIRO |
| WVR AL Herl T25V PS25 / PS40 | Flanged ends | | Alu/St | WVR AL FL Herl |
| Information | SV UM + ST / WVR DM screwed ends | | | |
| | Illustration of the opened port | | | |
| | Valve stem sealing system | | | |
| | HR / K Handwheel / Cap | | | |
| | Comparison of European/American materials | | | |
| | DIN-FL welding neck flanges - DIN | | | |
| | EN-FL welding neck flanges - EN | | | |
| | ANSI-FL welding neck flanges - smooth | | | |
| AWP-FL welding neck flanges - AWP | | | | |
| Legal notices | | | | |

St = steel , SS = stainless steel, Alu = aluminium

2 WVR materials

Designation and materials
WVR - change-over valve



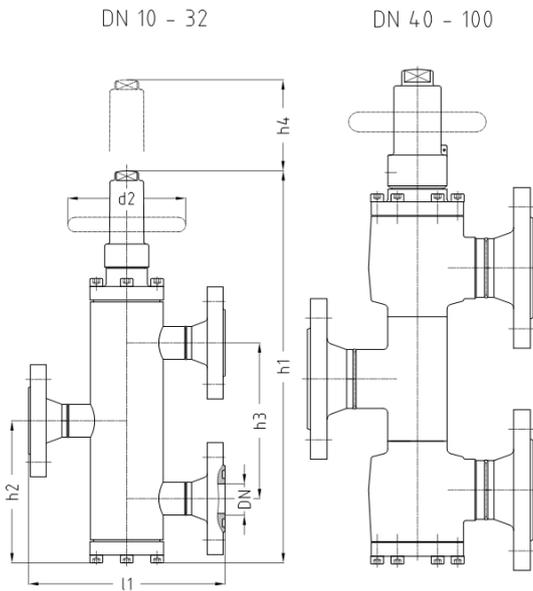
| Part | | Material for steel valves | Material for stainless steel valves |
|------|-------------------------------------|---------------------------------|--|
| 1 | Cap | Aluminium AISi10Mg | Aluminium AISi10Mg |
| 2 | Handwheel | Steel | Steel |
| 3 | Wiper ring | NBR | NBR |
| 4 | O-ring A | CR, NBR, HNBR, EPDM, FPM* | CR, NBR, HNBR, EPDM, FPM* |
| 5 | O-ring B | CR, NBR, HNBR, EPDM, FPM* | CR, NBR, HNBR, EPDM, FPM* |
| 6 | Spring-loaded U-ring | PTFE | PTFE |
| 7 | Flat sealing ring for threaded bush | AFM30 | AFM30 |
| 8 | Bonnet screw | 8.8 | A2-70 |
| 9 | Stem | X8CrNiS18-9 1.4305 | X8CrNiS18-9 1.4305 |
| 10 | Flat sealing ring for bonnet | AFM30 | AFM30 |
| 11 | Bonnet | S355J2 1.0577 | X8CrNiS18-9 1.4305 X5CrNi18-10 1.4301 X2CrNi19-11 1.4306 |
| 13 | Valve disc | S355J2 1.0577 | X8CrNiS18-9 1.4305 X5CrNi18-10 1.4301 |
| 14 | Flat sealing ring for valve disc | PTFE | PTFE |
| 15 | Bonnet 2 | S355J2 1.0577 | X8CrNiS18-9 1.4305 X5CrNi18-10 1.4301 X2CrNi19-11 1.4306 |
| 17 | Body | S355J2 1.0577 P235GH 1.0345 | X5CrNi18-10 1.4301 |
| 20 | Flanges | P250GH 1.0460 P355NL1 1.0566 | X6CrNiTi18-10 1.4541 |

* depending on the refrigerant used

3 WVR FL

FL: Flanged ends

WVR steel change-over valve for natural refrigerants (freons , CO2) and non-corrosive gases and liquids according to EN 378-1 as well as brines



Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

TS: Permissible operating temperature in °C associated with the permissible operating pressures (PS)

PN: Nominal pressure rating

| DN / INCH | PN | -60 | -40 | -25 | -10 | +50 | +150 | TS [°C] |
|---------------------------|------|-------|------|------|-----|-----|------|----------|
| DN 10...100 3/8" ...4" | PN25 | 6.25 | 12.5 | 18.7 | 25 | 25 | 25 | PS [bar] |
| | PN40 | 10 | 20 | 30 | 40 | 40 | 40 | PS [bar] |
| | PN63 | 15.75 | 31.5 | 47.2 | 63 | 63 | 63 | PS [bar] |

| Nominal size: | | Flanged ends acc. to: | | | | | | | | | | | |
|---------------|--------|---|------------------------------|------------------------------|------------------------------|----------------|-----|-----|-----|-----|------|-----|-----|
| DN | INCH | AWP DN10-20 PN25 D N25-80 PN40 | PN25 DIN 2634 EN1092-1 | PN40 DIN 2635 EN1092-1 | PN63 DIN 2636 EN1092-1 | ANSI 300 RF | l1 | h1 | h2 | h3 | h3*) | h4 | d2 |
| 10 | 3/8" | | 204 | 204 | 224 | | 198 | 294 | 107 | 108 | 135 | 185 | 60 |
| 15 | 1/2" | | 204 | 204 | 218 | 233 | 192 | 307 | 114 | 120 | 145 | 200 | 60 |
| 20 | 3/4" | | 228 | 228 | 244 | 262 | 212 | 337 | 129 | 150 | 160 | 230 | 60 |
| 25 | 1" | | 202 | 202 | 238 | 246 | 210 | 405 | 146 | 160 | 175 | 240 | 120 |
| 32 | 1 1/4" | | 206 | 206 | 242 | 252 | 210 | 405 | 146 | 180 | 185 | 240 | 120 |
| 40 | 1 1/2" | | 216 | 216 | 250 | 263 | 203 | 496 | 184 | 214 | 214 | 315 | 140 |
| 50 | 2" | | 230 | 230 | 258 | 274 | 220 | 510 | 191 | 228 | 228 | 330 | 140 |

| Nominal size: | | Flanged ends acc. to: | | | | | | | | | | |
|---------------|--------|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65 | 2 1/2" | 268 | 265 | 265 | 297 | 313 | 581 | 231 | 276 | 276 | 405 | 140 |
| 80 | 3" | 294 | 304 | 304 | 332 | 345 | 743 | 289 | 325 | 325 | 530 | 180 |
| 100 | 4" | | 356 | 356 | 382 | 397 | 812 | 329 | 393 | 393 | 600 | 180 |

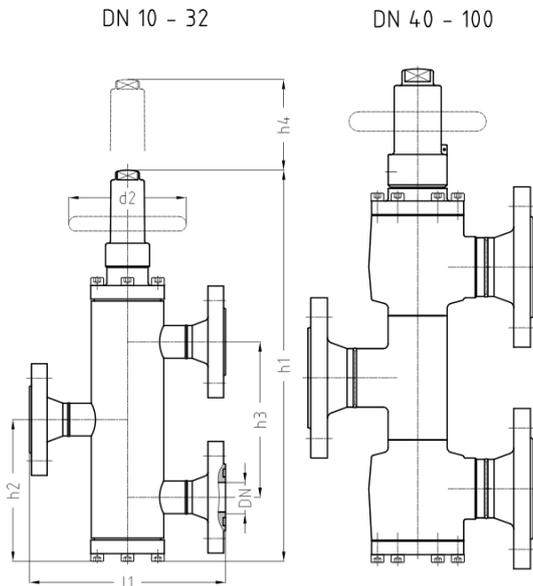
Table 1: Dimensions

*) only for PN63 h4 = dismantling dimension, DIN/EN-flange facings as standard: inlet with groove and outlet with tongue according to DIN 2512, others on request.

4 WVR FL NIRO

FL: Flanged ends

WVR stainless steel change-over valve for natural refrigerants (freons , CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines



Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

TS: Permissible operating temperature in °C associated with the permissible operating pressures (PS)

PN: Nominal pressure rating

| DN / INCH | PN | -60 | -10 | +50 | +150 | TS [°C] |
|---------------------------|------|-----|-----|-----|------|----------|
| DN 10...100 3/8" ...4" | PN25 | 25 | 25 | 25 | 25 | PS [bar] |
| | PN40 | 40 | 40 | 40 | 40 | PS [bar] |
| | PN63 | 63 | 63 | 63 | 63 | PS [bar] |

| Nominal size: | | Flanged ends acc. to: | | | | | | | | | | | |
|---------------|--------|-------------------------------------|------------------------------|------------------------------|------------------------------|----------------|-----|-----|-----|-----|------|-----|----|
| DN | INCH | AWP DN10-20 PN25 DN25-80 PN40 | PN25 DIN 2634 EN1092-1 | PN40 DIN 2635 EN1092-1 | PN63 DIN 2636 EN1092-1 | ANSI 300 RF | l1 | h1 | h2 | h3 | h3*) | h4 | d2 |
| 10 | 3/8" | 198 | 204 | 204 | 224 | | 294 | 107 | 108 | 135 | 185 | 60 | |
| 15 | 1/2" | 192 | 204 | 204 | 218 | 233 | 307 | 114 | 120 | 145 | 200 | 60 | |
| 20 | 3/4" | 212 | 228 | 228 | 244 | 262 | 337 | 129 | 150 | 160 | 230 | 60 | |
| 25 | 1" | 210 | 202 | 202 | 238 | 246 | 405 | 146 | 160 | 175 | 240 | 120 | |
| 32 | 1 1/4" | 210 | 206 | 206 | | 252 | 405 | 146 | 180 | | 240 | 120 | |
| 40 | 1 1/2" | 203 | 216 | 216 | | 263 | 496 | 184 | 214 | | 315 | 140 | |
| 50 | 2" | 220 | 230 | 230 | | 274 | 510 | 191 | 228 | | 330 | 140 | |
| 65 | 2 1/2" | 268 | 265 | 265 | | 313 | 581 | 231 | 276 | | 405 | 140 | |

| Nominal size: | | Flanged ends acc. to: | | | | | | | | | | |
|---------------|----|-----------------------|-----|-----|--|-----|-----|-----|-----|--|-----|-----|
| 80 | 3" | 294 | 304 | 304 | | 345 | 743 | 289 | 325 | | 530 | 180 |
| 100 | 4" | | 356 | 356 | | 397 | 812 | 329 | 393 | | 600 | 180 |

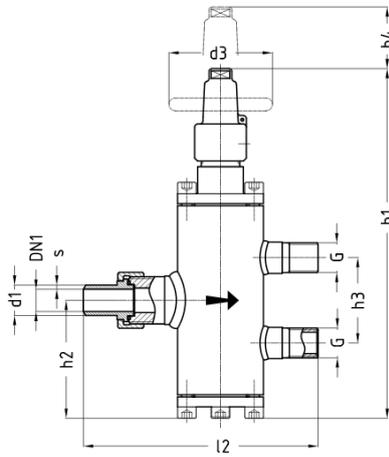
Table 2: Dimensions

*) only for PN63 h4 = dismantling dimension, DIN/EN-flange facings as standard: inlet with groove and outlet with tongue according to DIN 2512, others on request.

5 WVR SE

SE: Screwed ends

WVR steel change-over valve for natural refrigerants (freons , CO2) and non-corrosive gases and liquids according to EN 378-1 as well as brines

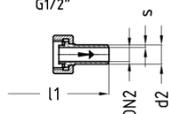


Zubehör / fittings: Ausgänge/fittings

Doppelmutter
links/rechts G1/2"
double nut
left/right G1/2"



Überwurfmutter und Schweißfülle
G1/2"
cap nut and tail
G1/2"



Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

TS: Permissible operating temperature in °C associated with the permissible operating pressures (PS)

PN: Nominal pressure rating

| DN | PN | -60 | -40 | -25 | -10 | +50 | +150 | TS [°C] |
|-------------------|------|-------|------|------|-----|-----|------|----------|
| DN15 G1"/G1/2" | PN25 | 6.25 | 12.5 | 18.7 | 25 | 25 | 25 | PS [bar] |
| | PN40 | 10 | 20 | 30 | 40 | 40 | 40 | PS [bar] |
| | PN63 | 15.75 | 31.5 | 47.2 | 63 | 63 | 63 | PS [bar] |

| Nominal size: | Screwed ends | | Welding nipples | | | | | | | | | | |
|---------------|--------------|--------|-----------------|-----|--------|-----|-----|-----|-----|----|----|-----|----|
| | Inlet | Outlet | Inlet | | Outlet | | | | | | | | |
| DN1/DN2 | G* | G* | d1 | s | d2 | s | l1 | l2 | h1 | h2 | h3 | h4 | d3 |
| 15/8 | 1" | 1/2" | 21.3 | 2.0 | 13.5 | 1.8 | 195 | 164 | 246 | 83 | 60 | 140 | 60 |
| 15/8 | 1" | 1/2L | 21.3 | 2.0 | -- | -- | -- | 152 | 264 | 83 | 60 | 140 | 60 |

Table 3: Dimensions WVR SE for SVU design

| Nominal size: | Screwed ends | | Welding nipples | | | | | | | | | | |
|---------------|--------------|--------|-----------------|-----|--------|-----|-----|-----|-----|-----|-----|-----|----|
| | Inlet | Outlet | Inlet | | Outlet | | | | | | | | |
| DN1/DN2 | G* | G* | d1 | s | d2 | s | l1 | l2 | h1 | h2 | h3 | h4 | d3 |
| 15/8 | 1" | 1/2" | 21.3 | 2.0 | 13.5 | 1.8 | 195 | 164 | 307 | 113 | 120 | 140 | 60 |
| 15/8 | 1" | 1/2L | 21.3 | 2.0 | -- | -- | -- | 152 | 307 | 113 | 120 | 140 | 60 |

Table 4: Dimensions WVR SE for SVA/SVU P design

*) pipe thread DIN ISO 228 ...h4 = dismantling dimension

Available accessories:

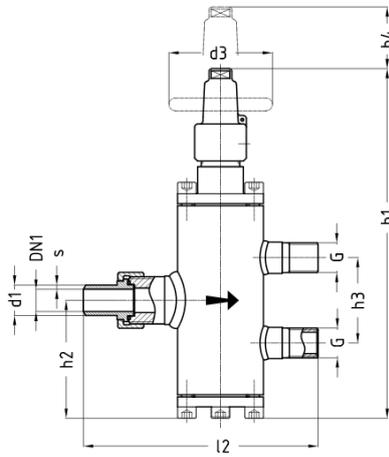
Inlet: UM+ST = union nut with welding sleeve and gasket G1"/21,3x2,0

Outlet: DM = double nut right-hand/left-hand with gasket G1/2"-G1/2"L

6 WVR SE NIRO

SE: Screwed ends

WVR stainless steel change-over valve for natural refrigerants (freons , CO2) and non-corrosive gases and liquids according to EN 378-1 as well as brines

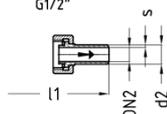


Zubehör / fittings: Ausgänge/fittings

Doppelmutter
links/rechts G1/2"
double nut
left/right G1/2"



Überwurfmutter und Schweißfülle
G1/2"
cap nut and tail
G1/2"



Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

TS: Permissible operating temperature in °C associated with the permissible operating pressures (PS)

PN: Nominal pressure rating

| DN | PN | -60 | -10 | +50 | +150 | TS [°C] |
|-------------------|------|-----|-----|-----|------|----------|
| DN15 G1"/G1/2" | PN25 | 25 | 25 | 25 | 25 | PS [bar] |
| | PN40 | 40 | 40 | 40 | 40 | PS [bar] |
| | PN63 | 63 | 63 | 63 | 63 | PS [bar] |

| Nominal size: | Screwed ends | | Welding nipples | | | | | | | | | | |
|---------------|--------------|--------|-----------------|-----|--------|-----|-----|-----|-----|----|----|-----|----|
| | Inlet | Outlet | Inlet | | Outlet | | l1 | l2 | h1 | h2 | h3 | h4 | d3 |
| DN1/DN2 | G* | G* | d1 | s | d2 | s | | | | | | | |
| 15/8 | 1" | 1/2" | 21.3 | 2.0 | 13.5 | 1.8 | 195 | 164 | 246 | 83 | 60 | 140 | 60 |
| 15/8 | 1" | 1/2L | 21.3 | 2.0 | -- | -- | -- | 152 | 264 | 83 | 60 | 140 | 60 |

Table 5: Dimensions WVR SE NIRO for SVU design

| Nominal size: | Screwed ends | | Welding nipples | | | | | | | | | | |
|---------------|--------------|--------|-----------------|-----|--------|-----|-----|-----|-----|-----|-----|-----|----|
| | Inlet | Outlet | Inlet | | Outlet | | l1 | l2 | h1 | h2 | h3 | h4 | d3 |
| DN1/DN2 | G* | G* | d1 | s | d2 | s | | | | | | | |
| 15/8 | 1" | 1/2" | 21.3 | 2.0 | 13.5 | 1.8 | 195 | 164 | 307 | 113 | 120 | 140 | 60 |
| 15/8 | 1" | 1/2L | 21.3 | 2.0 | -- | -- | -- | 152 | 307 | 113 | 120 | 140 | 60 |

Table 6: Dimensions WVR SE NIRO for SVA/SVU P design

*) pipe thread DIN ISO 228 ...h4 = dismantling dimension

Available accessories:

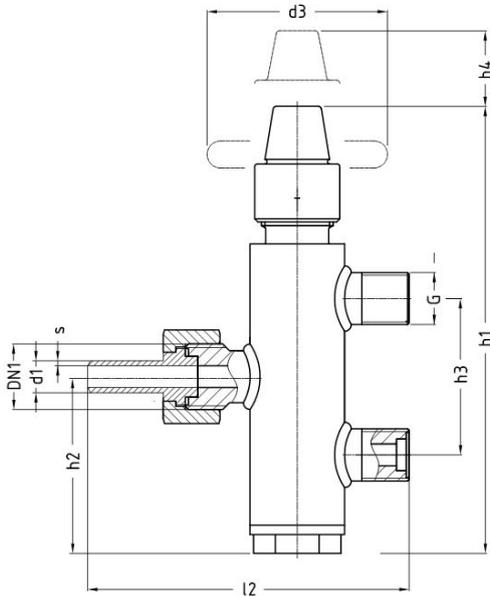
Inlet: UM+ST NIRO = union nut with welding sleeve and gasket G1"/21,3x2,0

Outlet: DM NIRO= double nut right-hand/left-hand with gasket G1/2"-G1

7 WVR SE NIRO

SE: Screwed ends

WVR stainless steel change-over valve for natural refrigerants (freons , CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines



Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

TS: Permissible operating temperature in °C associated with the permissible operating pressures (PS)

PN: Nominal pressure rating

| DN / INCH | PN | -60 | -10 | +50 | +150 | TS [°C] |
|----------------------|------|-----|-----|-----|------|----------|
| DN15/10 1/2 / 3/8 | PN63 | 63 | 63 | 63 | 63 | PS [bar] |

| Nominal size: | Screwed ends | | Welding nipples | | | | | | | | | |
|---------------|--------------|--------|-----------------|-----|--------|---|-----|-----|------|----|----|----|
| | Inlet | Outlet | Inlet | | Outlet | | l2 | h1 | h2 | h3 | h4 | d3 |
| DN1/DN2 | G* | G* | d1 | s | d2 | s | | | | | | |
| 15/8 | 1/2" | 3/8" | 10.2 | 1.6 | - | - | 102 | 143 | 56.5 | 50 | 20 | 60 |

Table 7: Dimensions

*) Whitworth DIN ISO 228h4 = dismantling dimension

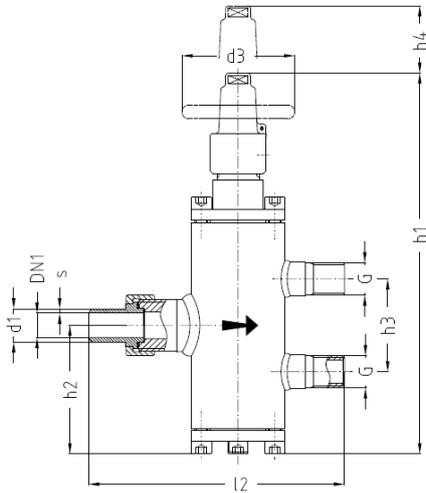
Available accessories:

Inlet: UM+ST NIRO = Union nut with welding sleeve and gasket G1/2"/10.2x1.6

8 WVR SE Herl T19A

SE: Screwed ends

WVR steel change-over valve for natural refrigerants (freons , CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines



Zubehör / fittings: Ausgänge/fittings

Doppelmutter
links/rechts G1/2"
double nut
left/right G1/2"



Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

TS: Permissible operating temperature in °C associated with the permissible operating pressures (PS)

PN: Nominal pressure rating

| DN | PN | -60 | -40 | -25 | -10 | +50 | +150 | TS [°C] |
|-------------------|------|------|------|------|-----|-----|------|----------|
| DN15 G1"/G1/2" | PN25 | 6.25 | 12.5 | 18.7 | 25 | 25 | 25 | PS [bar] |
| | PN40 | 10 | 20 | 30 | 40 | 40 | 40 | PS [bar] |

| Nominal size: | Screwed ends | | Welding nipples | | | | | | | | | | |
|---------------|--------------|--------|-----------------|-----|--------|----|----|-----|-----|----|----|-----|----|
| | Inlet | Outlet | Inlet | | Outlet | | | | | | | | |
| DN1/DN2 | G* | G* | d1 | s | d2 | s | l1 | l2 | h1 | h2 | h3 | h4 | d3 |
| 15/8 | 1" | 1/2" | 12.3 | 2.6 | -- | -- | -- | 150 | 251 | 83 | 70 | 140 | 60 |

Table 8: Dimensions WVR SE for SVU design

*) pipe thread DIN ISO 228 ...h4 = dismantling dimension

Available accessories:

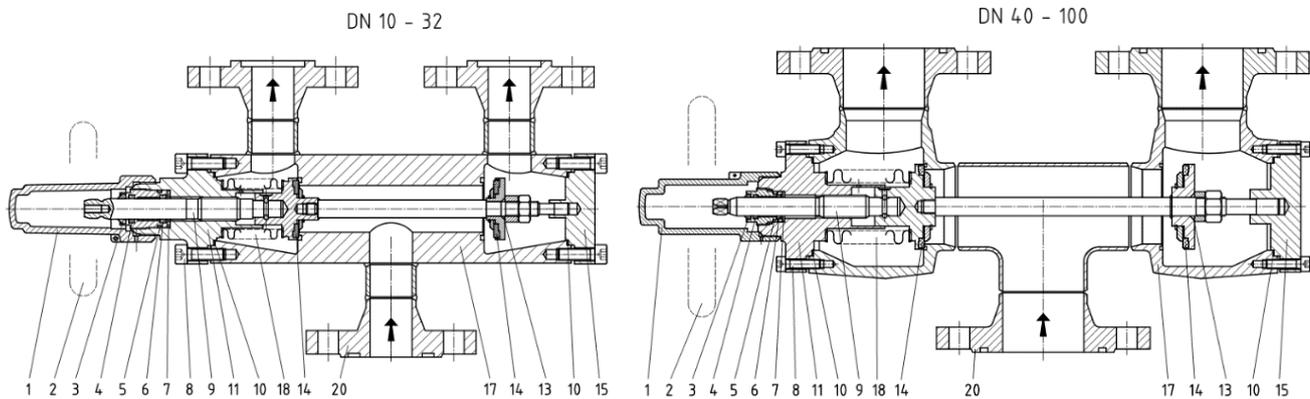
Inlet: UM+ST = union nut with welding sleeve and gasket G1"/21,3x2,0

Outlet: DM = double nut right-hand/left-hand with gasket G1/2"-G1/2"L

9 WVB materials

Designation and materials

WVB - change-over valve with metal bellows



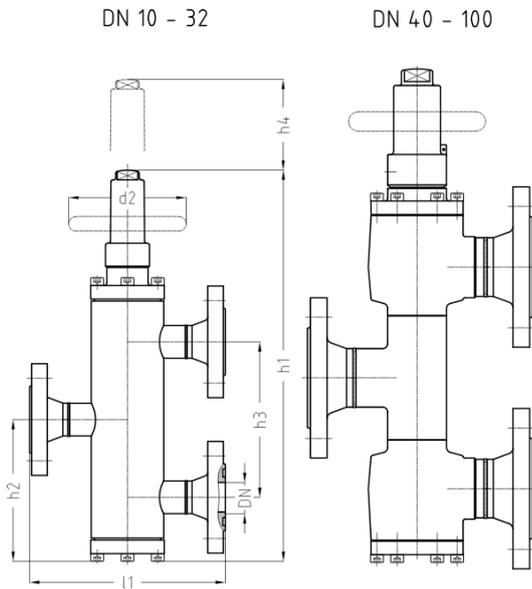
| Part | Material for steel valves | Material for stainless steel valves |
|---------------------------------------|---------------------------------|--|
| 1 Cap | Aluminium AISi10Mg | Aluminium AISi10Mg |
| 2 Handwheel | Steel | Steel |
| 3 Wiper ring | NBR | NBR |
| 4 O-ring A | CR, NBR, HNBR, EPDM, FPM* | CR, NBR, HNBR, EPDM, FPM* |
| 5 O-ring B | CR, NBR, HNBR, EPDM, FPM* | CR, NBR, HNBR, EPDM, FPM* |
| 6 Spring-loaded U-ring | PTFE | PTFE |
| 7 Flat sealing ring for threaded bush | AFM30 | AFM30 |
| 8 Bonnet screw | 8.8 | A2-70 |
| 9 Stem | X8CrNiS18-9 1.4305 | X8CrNiS18-9 1.4305 |
| 10 Flat sealing ring for bonnet | AFM30 | AFM30 |
| 11 Bonnet | S355J2 1.0577 | X8CrNiS18-9 1.4305 X5CrNi18-10 1.4301 X2CrNi19-11 1.4306 |
| 13 Valve disc | S355J2 1.0577 | X8CrNiS18-9 1.4305 X5CrNi18-10 1.4301 |
| 14 Flat sealing ring for valve disc | PTFE | PTFE |
| 15 Bonnet 2 | S355J2 1.0577 | X8CrNiS18-9 1.4305 X5CrNi18-10 1.4301 X2CrNi19-11 1.4306 |
| 17 Body | S355J2 1.0577 P235GH 1.0345 | X5CrNi18-10 1.4301 |
| 18 Metal bellows | X6CrNiMoTi17-12-2 1.4571 | X6CrNiMoTi17-12-2 1.4571 |
| 20 Flanges | P250GH 1.0460 P355NL1 1.0566 | X6CrNiTi18-10 1.4541 |

* depending on the refrigerant used

10 WVB FL

FL: Flanged ends

WVB steel change-over valve - with metal bellows for natural refrigerants (NH₃, CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines



Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

TS: Permissible operating temperature in °C associated with the permissible operating pressures (PS)

PN: Nominal pressure rating

| DN / INCH | PN | -60 | -40 | -25 | -10 | +50 | +150 | TS [°C] |
|-------------|------|------|------|------|-----|-----|------|----------|
| DN 10...100 | PN25 | 6.25 | 12.5 | 18.7 | 25 | 25 | 25 | PS [bar] |
| 3/8"...4" | PN40 | 10 | 20 | 30 | 40 | 40 | 40 | PS [bar] |

| Nominal size: | | Flanged ends acc. to: | | | | | | | | |
|---------------|--------|-------------------------------------|------------------------------|------------------------------|----------------|-----|-----|-----|-----|-----|
| DN | INCH | AWP DN10-20 PN25 DN25-80 PN40 | PN25 DIN 2634 EN1092-1 | PN40 DIN 2635 EN1092-1 | ANSI 300 RF | h1 | h2 | h3 | h4 | d2 |
| 10 | 3/8" | 198 | 204 | 204 | | 294 | 107 | 108 | 185 | 60 |
| 15 | 1/2" | 192 | 204 | 204 | 233 | 307 | 114 | 120 | 200 | 60 |
| 20 | 3/4" | 212 | 228 | 228 | 262 | 337 | 129 | 150 | 230 | 60 |
| 25 | 1" | 210 | 202 | 202 | 246 | 405 | 146 | 160 | 240 | 120 |
| 32 | 1 1/4" | 210 | 206 | 206 | 252 | 405 | 146 | 180 | 240 | 120 |
| 40 | 1 1/2" | 203 | 216 | 216 | 263 | 496 | 184 | 214 | 315 | 140 |
| 50 | 2" | 220 | 230 | 230 | 274 | 510 | 191 | 228 | 330 | 140 |
| 65 | 2 1/2" | 268 | 265 | 265 | 313 | 581 | 231 | 276 | 405 | 140 |
| 80 | 3" | 294 | 304 | 304 | 345 | 743 | 289 | 325 | 530 | 180 |

| Nominal size: | | Flanged ends acc. to: | | | | | | | | |
|---------------|----|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 100 | 4" | | 356 | 356 | 397 | 812 | 329 | 393 | 600 | 180 |

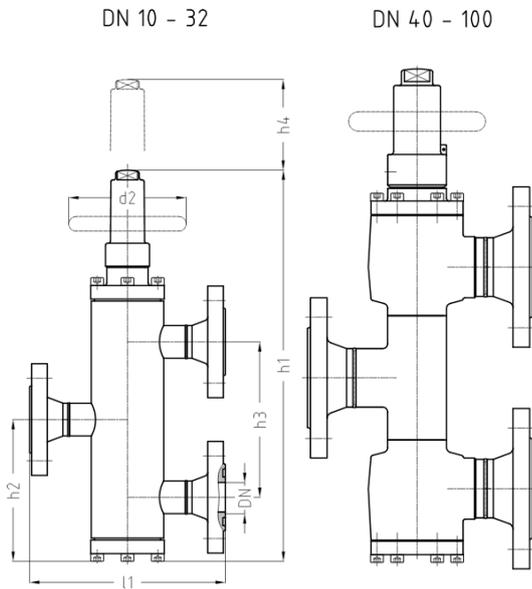
Table 9: Dimensions

*) only for PN63, h4 = dismantling dimension, DIN/EN-flange facings as standard: inlet with groove and outlet with tongue according to DIN 2512, others on request.

11 WVB FL NIRO

FL: Flanged ends

WVB stainless steel change-over valve - with metal bellows for natural refrigerants (NH₃, CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines



Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

TS: Permissible operating temperature in °C associated with the permissible operating pressures (PS)

PN: Nominal pressure rating

| DN / INCH | PN | -60 | -10 | +50 | +150 | TS [°C] |
|-------------|------|-----|-----|-----|------|----------|
| DN 10...100 | PN25 | 25 | 25 | 25 | 25 | PS [bar] |
| 3/8"...4" | PN40 | 40 | 40 | 40 | 40 | PS [bar] |

| Nominal size: | | Flanged ends acc. to: | | | | | | | | |
|---------------|--------|-------------------------------------|------------------------------|------------------------------|----------------|-----|-----|-----|-----|-----|
| DN | INCH | AWP DN10-20 PN25 DN25-80 PN40 | PN25 DIN 2634 EN1092-1 | PN40 DIN 2635 EN1092-1 | ANSI 300 RF | h1 | h2 | h3 | h4 | d2 |
| 10 | 3/8" | 198 | 204 | 204 | | 294 | 107 | 108 | 185 | 60 |
| 15 | 1/2" | 192 | 204 | 204 | 233 | 307 | 114 | 120 | 200 | 60 |
| 20 | 3/4" | 212 | 228 | 228 | 262 | 337 | 129 | 150 | 230 | 60 |
| 25 | 1" | 210 | 202 | 202 | 246 | 405 | 146 | 160 | 240 | 120 |
| 32 | 1 1/4" | 210 | 206 | 206 | 252 | 405 | 146 | 180 | 240 | 120 |
| 40 | 1 1/2" | 203 | 216 | 216 | 263 | 496 | 184 | 214 | 315 | 140 |
| 50 | 2" | 220 | 230 | 230 | 274 | 510 | 191 | 228 | 330 | 140 |
| 65 | 2 1/2" | 268 | 265 | 265 | 313 | 581 | 231 | 276 | 405 | 140 |
| 80 | 3" | 294 | 304 | 304 | 345 | 743 | 289 | 325 | 530 | 180 |

| Nominal size: | | Flanged ends acc. to: | | | | | | | | |
|---------------|----|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 100 | 4" | | 356 | 356 | 397 | 812 | 329 | 393 | 600 | 180 |

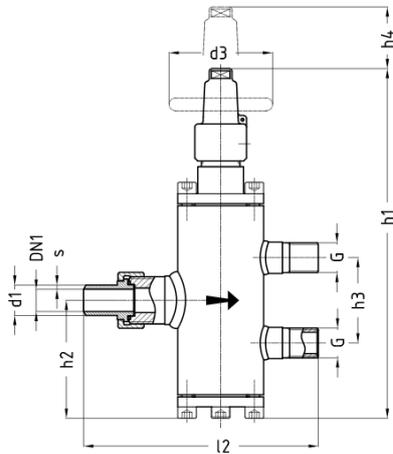
Table 10: Dimensions

*) only for PN63, h4 = dismantling dimension, DIN/EN-flange facings as standard: inlet with groove and outlet with tongue according to DIN 2512, others on request.

12 WVVB SE

SE: Screwed ends

WVVB steel change-over valve - with metal bellows for natural refrigerants (NH₃, CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines

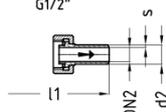


Zubehör / fittings: Ausgänge/fittings

Doppelmutter
links/rechts G1/2"
double nut
left/right G1/2"



Überwurfmutter und Schweißstüle
G1/2"
cap nut and tail
G1/2"



Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

TS: Permissible operating temperature in °C associated with the permissible operating pressures (PS)

PN: Nominal pressure rating

| DN | PN | -60 | -40 | -25 | -10 | +50 | +150 | TS [°C] |
|-------------------|------|------|------|------|-----|-----|------|----------|
| DN15 G1"/G1/2" | PN25 | 6.25 | 12.5 | 18.7 | 25 | 25 | 25 | PS [bar] |
| | PN40 | 10 | 20 | 30 | 40 | 40 | 40 | PS [bar] |

| Nominal size: | Screwed ends | | Welding nipples | | | | | | | | | | |
|---------------|--------------|--------|-----------------|-----|--------|-----|-----|-----|-----|----|----|-----|----|
| | Inlet | Outlet | Inlet | | Outlet | | | | | | | | |
| DN1/DN2 | G* | G* | d1 | s | d2 | s | l1 | l2 | h1 | h2 | h3 | h4 | d3 |
| 15/8 | 1" | 1/2" | 21.3 | 2.0 | 13.5 | 1.8 | 195 | 164 | 246 | 83 | 60 | 140 | 60 |

Table 11: Dimensions

*) pipe thread DIN ISO 228 ...h4 = dismantling dimension

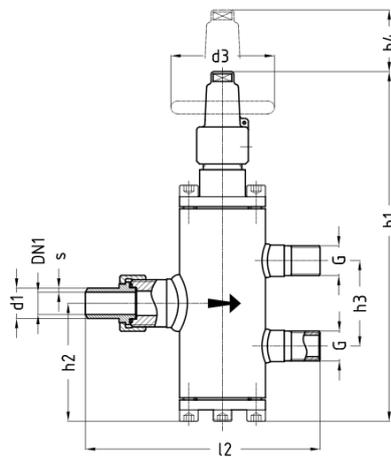
Available accessories: Inlet: UM+ST = union nut with welding sleeve and gasket G1"/21,3x2,0

Outlet: Double nut right-hand/left-hand with gasket G1/2"-G1/2"L

13 WV B SE NIRO

SE: Screwed ends

WV B stainless steel change-over valve - with metal bellows for natural refrigerants (NH₃, CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines

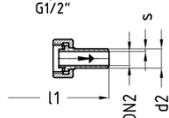


Zubehör / fittings: Ausgänge/fittings

Doppelmutter
links/rechts G1/2"
double nut
left/right G1/2"



Überwurfmutter und Schweißfülle
G1/2"
cap nut and tail
G1/2"



Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

TS: Permissible operating temperature in °C associated with the permissible operating pressures (PS)

PN: Nominal pressure rating

| DN | PN | -60 | -10 | +50 | +150 | TS [°C] |
|-----------|------|-----|-----|-----|------|----------|
| DN15 | PN25 | 25 | 25 | 25 | 25 | PS [bar] |
| G1"/G1/2" | PN40 | 40 | 40 | 40 | 40 | PS [bar] |

| Nominal size: | Screwed ends | | Welding nipples | | | | | | | | | | |
|---------------|--------------|--------|-----------------|-----|--------|-----|-----|-----|-----|----|----|-----|----|
| | Inlet | Outlet | Inlet | | Outlet | | | | | | | | |
| DN1/DN2 | G* | G* | d1 | s | d2 | s | l1 | l2 | h1 | h2 | h3 | h4 | d3 |
| 15/8 | 1" | 1/2" | 21.3 | 2.0 | 13.5 | 1.8 | 195 | 164 | 246 | 83 | 60 | 140 | 60 |

Table 12: Dimensions

*) pipe thread DIN ISO 228h4 = dismantling dimension

Available accessories:

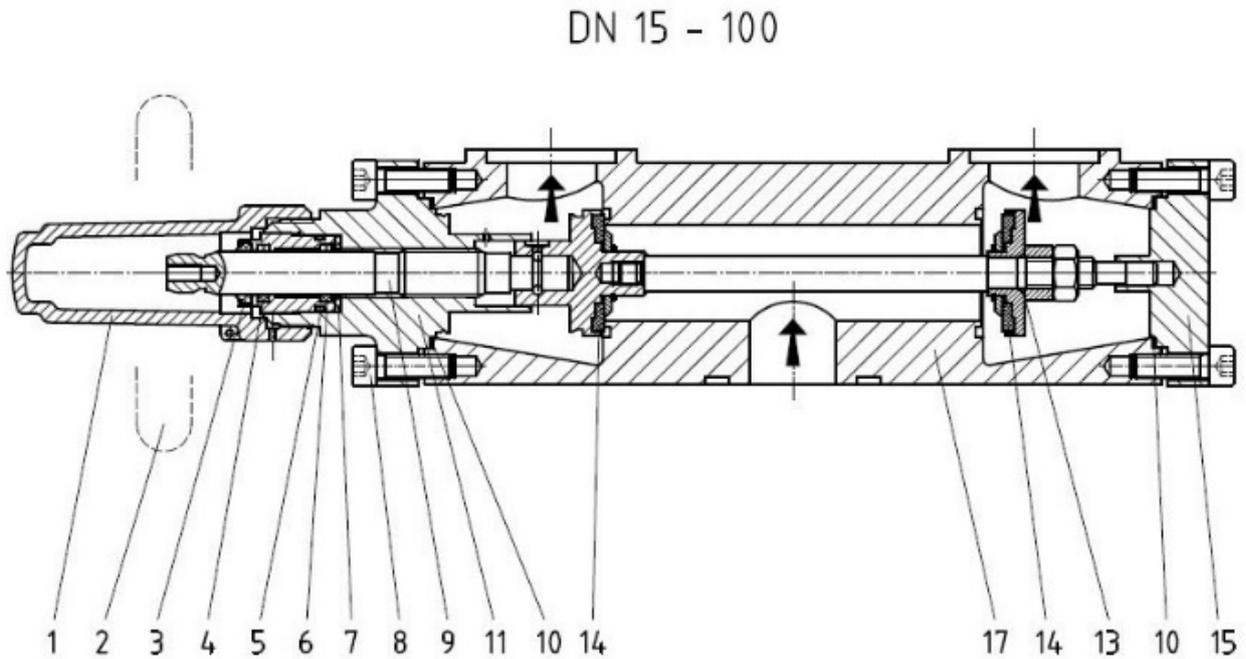
Inlet: UM+ST NIRO = union nut with welding sleeve and gasket G1"/21,3x2,0

Outlet: DM NIRO = double nut right-hand/left-hand with gasket G1/2"-G1/2"L

14 WVR AL materials

Designation and materials

WVR AL – change-over valve, compact design



| Part | Material – in steel design | Material – in stainless steel design |
|---------------------------------------|----------------------------|--|
| 1 Cap | Aluminium AISi10Mg | Aluminium AISi10Mg |
| 2 Handwheel | Steel | Steel |
| 3 Wiper ring | NBR | NBR |
| 4 O-ring A | CR, NBR, HNBR, EPDM, FPM* | CR, NBR, HNBR, EPDM, FPM* |
| 5 O-ring B | CR, NBR, HNBR, EPDM, FPM* | CR, NBR, HNBR, EPDM, FPM* |
| 6 Spring-loaded U-ring | PTFE | PTFE |
| 7 Flat sealing ring for threaded bush | AFM30 | AFM30 |
| 8 Bonnet screw | 8.8 | A2-70 |
| 9 Stem | X8CrNiS18-9 1.4305 | X8CrNiS18-9 1.4305 |
| 10 Flat sealing ring for bonnet | AFM30 | AFM30 |
| 11 Bonnet | S355J2 1.0577 | X8CrNiS18-9 1.4305 X5CrNi18-10 1.4301 X2CrNi19-11 1.4306 |
| 13 Valve disc | S355J2 1.0577 | X8CrNiS18-9 1.4305 X5CrNi18-10 1.4301 |
| 14 Flat sealing ring for valve disc | PTFE | PTFE |
| 15 Bonnet 2 | S355J2 1.0577 | X8CrNiS18-9 1.4305 X5CrNi18-10 1.4301 X2CrNi19-11 1.4306 |

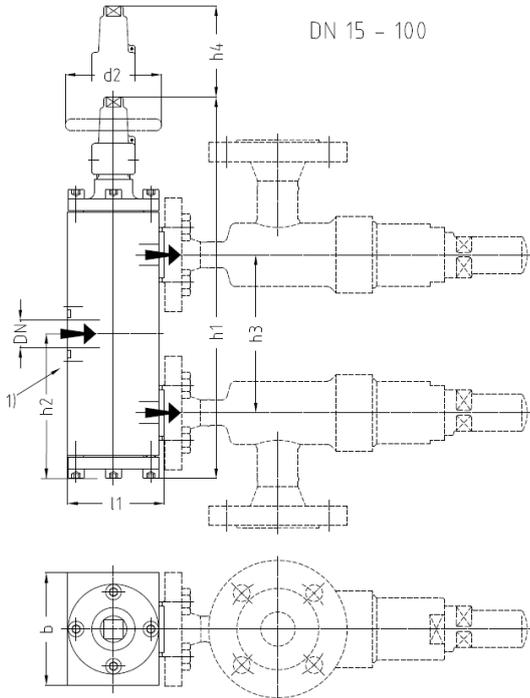
| Part | | Material – in steel design | Material – in stainless steel design |
|------|------|----------------------------|--------------------------------------|
| 17 | Body | AlMg4.5Mn0.7 EN AW-5083 | AlMg4.5Mn0.7 EN AW-5083 |
| | | | |

* depending on the refrigerant used

15 WVR FL

FL: Flanged ends

WVR AL aluminium change-over valve, compact design – aluminium body, steel bonnet for natural refrigerants (freons , CO2) and non-corrosive gases and liquids according to EN 378-1 as well as brines



Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

TS: Permissible operating temperature in °C associated with the permissible operating pressures (PS)

PN: Nominal pressure rating

| DN / INCH | PN | -60 | -40 | -25 | -10 | +50 | +120 | TS [°C] |
|--------------|------|-------|------|------|-----|-----|------|----------|
| DN 15 ...100 | PN25 | 6.25 | 12.5 | 18.7 | 25 | 25 | 25 | PS [bar] |
| 1/2" ... 4" | PN40 | 10 | 20 | 30 | 40 | 40 | 40 | PS [bar] |
| | PN63 | 15.75 | 31.5 | 47.2 | 63 | 63 | 63 | PS [bar] |

| Nominal size: | | Flanged ends acc. to: | | | | | | | | | | | | | | |
|---------------|--------|--|---------------------------------|------------------------------|-------------|-----|-----|------|-------|-------|-----|------|-----|-----|-----|-----|
| DN | INCH | AWP DN15-20 PN25 DN25-32 PN40 | PN25/40 DIN 2635 EN1092-1 | PN63 DIN 2636 EN1092-1 | ANSI 300 RF | l1 | h1 | h1*) | h2 | h2*) | h3 | h3*) | h4 | b | b* | d2 |
| 15 | 1/2" | 80 | 80 | 80 | 80 | 80 | 319 | 332 | 121 | 127.5 | 120 | 145 | 200 | 94 | 105 | 60 |
| 20 | 3/4" | 80 | 80 | 80 | 80 | 80 | 345 | 380 | 134 | 152 | 150 | 175 | 230 | 104 | 104 | 60 |
| 25 | 1" | 100 | 100 | 115 | 100 | 100 | 406 | 446 | 146.5 | 166.5 | 160 | 192 | 240 | 115 | 115 | 120 |
| 32 | 1 1/4" | 100 | 100 | 115 | 100 | 100 | 446 | 446 | 166.5 | 166.5 | 194 | 184 | 240 | 140 | 140 | 120 |
| 40 | 1 1/2" | 124 | 124 | 129 | 124 | 124 | 517 | 517 | 194.5 | 194.5 | 225 | 220 | 315 | 150 | 170 | 140 |
| 50 | 2" | 129 | 129 | 129 | 129 | 129 | 537 | 537 | 204.5 | 204.5 | 234 | 234 | 330 | 165 | 180 | 140 |
| 65 | 2 1/2" | 174 | 174 | 174 | 174 | 174 | 623 | 623 | 249 | 249 | 277 | 270 | 405 | 185 | 205 | 140 |

| Nominal size: | | Flanged ends acc. to: | | | | | | | | | | | | | |
|---------------|----|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 80 | 3" | 194 | 194 | 204 | 194 | 704 | 704 | 274 | 274 | 285 | 285 | 530 | 200 | 215 | 180 |
| 100 | 4" | 250 | 250 | 260 | 250 | 716 | 716 | 285 | 285 | 280 | 280 | 600 | 235 | 250 | 180 |

Table 13: Dimensions

*) only for PN63, h4 = dismantling dimension

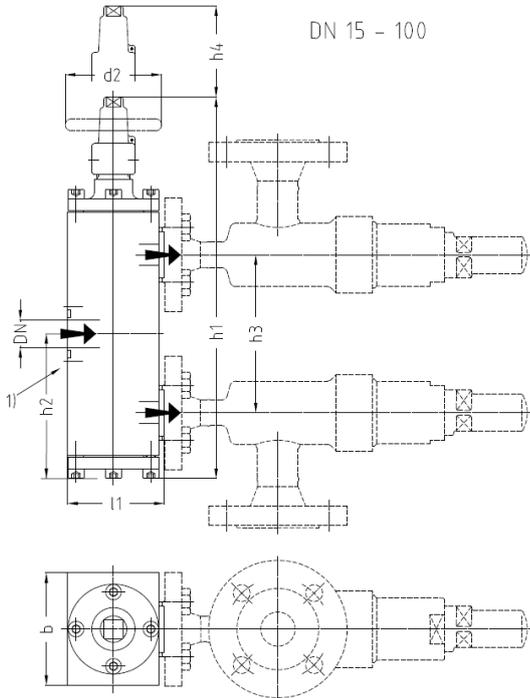
DIN/EN-flange facings as standard: inlet with groove and outlet with tongue according to DIN 2512, others on request.

1) threaded holes for the hole pattern according to EN 1092-1 PN25/40 are provided

16 WVR FL

FL: Flanged ends

WVR AL aluminium change-over valve, compact design – aluminium body, stainless steel bonnet for natural refrigerants (freons , CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines



Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

TS: Permissible operating temperature in °C associated with the permissible operating pressures (PS)

PN: Nominal pressure rating

| DN / INCH | PN | -60 | -40 | -25 | -10 | +50 | +120 | TS [°C] |
|--------------|------|-----|-----|-----|-----|-----|------|----------|
| DN 15 ...100 | PN25 | 25 | 25 | 25 | 25 | 25 | 25 | PS [bar] |
| 1/2" ... 4" | PN40 | 40 | 40 | 40 | 40 | 40 | 40 | PS [bar] |
| | PN63 | 63 | 63 | 63 | 63 | 63 | 63 | PS [bar] |

| Nominal size: | | Flanged ends acc. to: | | | | | | | | | | | | | | |
|---------------|--------|---|------------------------------------|---------------------------------|----------------|-----|-----|------|-------|-------|-----|------|-----|-----|-----|-----|
| DN | INCH | AWP DN15-20 PN25 DN25-32 PN40 | PN25/40 DIN 2635 EN1092-1 | PN63 DIN 2636 EN1092-1 | ANSI 300 RF | l1 | h1 | h1*) | h2 | h2*) | h3 | h3*) | h4 | b | b* | d2 |
| 15 | 1/2" | | 80 | 80 | 80 | 80 | 319 | 332 | 121 | 127.5 | 120 | 145 | 200 | 94 | 105 | 60 |
| 20 | 3/4" | | 80 | 80 | 80 | 80 | 345 | 380 | 134 | 152 | 150 | 175 | 230 | 104 | 104 | 60 |
| 25 | 1" | | 100 | 115 | 100 | 100 | 406 | 446 | 146.5 | 166.5 | 160 | 192 | 240 | 115 | 115 | 120 |
| 32 | 1 1/4" | | 100 | 115 | 100 | 100 | 446 | 446 | 166.5 | 166.5 | 194 | 184 | 240 | 140 | 140 | 120 |
| 40 | 1 1/2" | | 124 | 129 | 124 | 124 | 517 | 517 | 194.5 | 194.5 | 225 | 220 | 315 | 150 | 170 | 140 |
| 50 | 2" | | 129 | 129 | 129 | 129 | 537 | 537 | 204.5 | 204.5 | 234 | 234 | 330 | 165 | 180 | 140 |
| 65 | 2 1/2" | | 174 | 174 | 174 | 174 | 623 | 623 | 249 | 249 | 277 | 270 | 405 | 185 | 205 | 140 |

| Nominal size: | | Flanged ends acc. to: | | | | | | | | | | | | | |
|---------------|----|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 80 | 3" | 194 | 194 | 204 | 194 | 704 | 704 | 274 | 274 | 285 | 285 | 530 | 200 | 215 | 180 |
| 100 | 4" | 250 | 250 | 260 | 250 | 716 | 716 | 285 | 285 | 280 | 280 | 600 | 235 | 250 | 180 |

Table 14: Dimensions

*) only for PN63, h4 = dismantling dimension

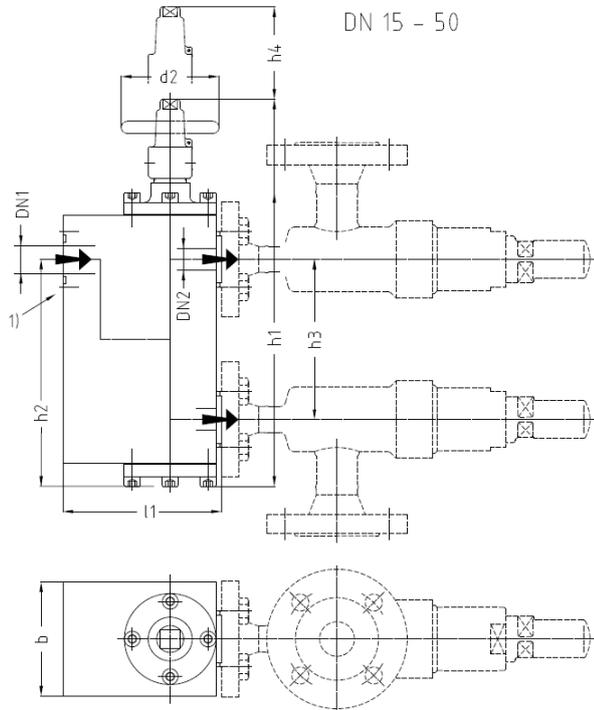
DIN/EN-flange facings as standard: inlet with groove and outlet with tongue according to DIN 2512, others on request.

1) threaded holes for the hole pattern according to EN 1092-1 PN25/40 are provided

17 WVR FL Herl T25V

FL: Flanged ends

WVR AL aluminium change-over valve, compact design – aluminium body, steel bonnet for natural refrigerants (freons , CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines



Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

TS: Permissible operating temperature in °C associated with the permissible operating pressures (PS)

PN: Nominal pressure rating

| DN / INCH | PN | -60 | -40 | -25 | -10 | +50 | +120 | TS [°C] |
|-------------|------|------|------|------|-----|-----|------|----------|
| DN 15 ...50 | PN25 | 6.25 | 12.5 | 18.7 | 25 | 25 | 25 | PS [bar] |
| 1/2" ... 2" | PN40 | 10 | 20 | 30 | 40 | 40 | 40 | PS [bar] |

| Nominal size: | | | Flanged ends acc. to: | | | | | | | |
|---------------|-----|-----------------|---------------------------------|----------------|-----|-------|-----|-----|-----|-----|
| DN1 | DN2 | INCH | PN25/40 DIN 2635 EN1092-1 | ANSI 300 RF | h1 | h2 | h3 | h4 | b | d2 |
| 15 | 15 | 1/2" / 1/2" | 150 | | 317 | 183.5 | 125 | 205 | 94 | 60 |
| 20 | 20 | 3/4" / 3/4" | 150 | | 317 | 183.5 | 125 | 205 | 104 | 60 |
| 25 | 25 | 1" / 1" | 160 | | 375 | 198 | 133 | 220 | 115 | 120 |
| 32 | 25 | 1 1/4" / 1" | 180 | | 425 | 243 | 173 | 270 | 140 | 120 |
| 32 | 32 | 1 1/4" / 1 1/4" | 180 | | 425 | 243 | 173 | 270 | 140 | 120 |
| 40 | 32 | 1 1/2" / 1 1/4" | 200 | | 485 | 272 | 193 | 310 | 150 | 140 |
| 40 | 40 | 1 1/2" / 1 1/2" | 200 | | 485 | 272 | 193 | 310 | 150 | 140 |
| 50 | 40 | 2" / 1 1/2" | 230 | | 497 | 278 | 193 | 320 | 165 | 140 |
| 50 | 50 | 2" / 2" | 230 | | 497 | 278 | 193 | 320 | 165 | 140 |

Table 15: Dimensions

h4 = dismantling dimension

DIN/EN-flange facings as standard: inlet with groove and outlet with tongue according to DIN 2512, others on request.

1) threaded holes for the hole pattern according to EN 1092-1 PN25/40 are provided

18 Accessories

SV UM + ST / WVR DM screwed ends

GEA AWP – valves with screwed ends can be ordered with a variety of screw connections to meet the respective requirements. The list below shows accessories / valve combinations that are currently manufactured.

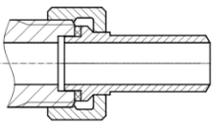
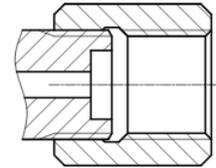
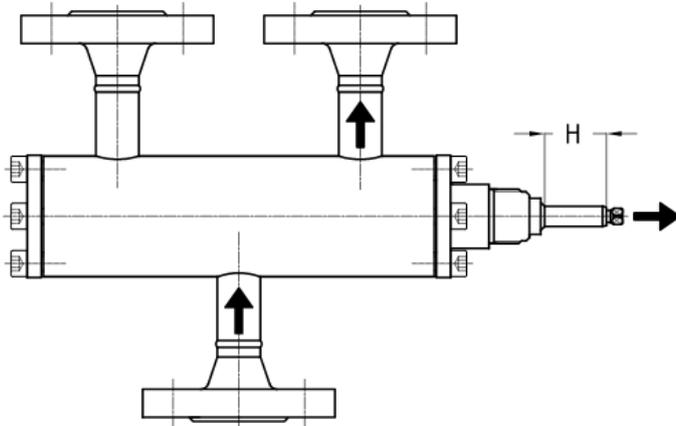
| Accessory group | Valve designation | Code fittings | Connections | |
|--|--|--------------------------------------|-------------|--|
| UM + ST Union nut with welding nipple | | | | |
|  | SVUA SE G1/2" / G1/2" SVUB SE G1/2" / G1/2" | 44660E10.5/10001 | I: O: | G1/2" with UM + ST 15.0x1.5 mm |
| | SVUA SE G1/2" / G1" SVUB SE G1/2" / G1" | 44660E10.5/10001 00060F07A5A0B601 | I: O: | G1/2" with UM + ST 15.0x1.5 mm G1" with UM + ST 21.3x2.0 mm |
| | SVUA P SE G1/2" / G1" SVUB P SE G1/2" / G1" | 45760E10.5/10001 15760E10.5/01001 | I: O: | G1/2" with UM + ST 20.0x2.0 mm G1" with UM + ST 34.0x3.0 mm |
| | SVAA SE G1/2" / G1" SVAB SE G1/2" / G1" | 45760E10.5/10001 15760E10.5/01001 | I: O: | G1/2" with UM + ST 20.0x2.0 mm G1" with UM + ST 34.0x3.0 mm |
| DM accessory combination with double nut right-hand/left-hand | | | | |
|  | WVR SE G1" / G1/2-LH" for SVUA/B SE | 00060F07A5A0B601 00060F07A5A1A203 | I: O: | G1" with UM + ST 21.3x2.0 mm G1/2"-LH with DM (short) |
| | WVR SE G1" / G1/2-LH" for SVUA/B P SE | 00060F07A5A0B601 00060F07A5A1A203 | I: O: | G1" with UM + ST 21.3x2.0 mm G1/2"-LH with DM |

Table 16: Accessories relief / change-over valves

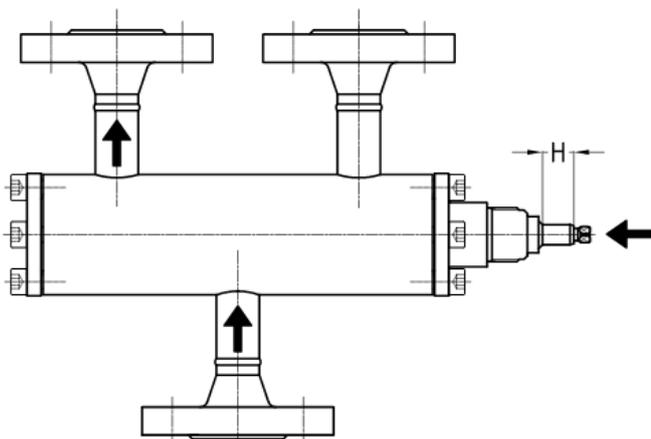
I: = inlet/ O: = outlet

19 WVR illustration of the opened port

Illustration of the opened port depending on the stem length



| DN | H in [mm] |
|--------|-----------|
| 10-20 | 22 |
| 25-32 | 34 |
| 40-50 | 38 |
| 65 | 32 |
| 80-100 | 48 |

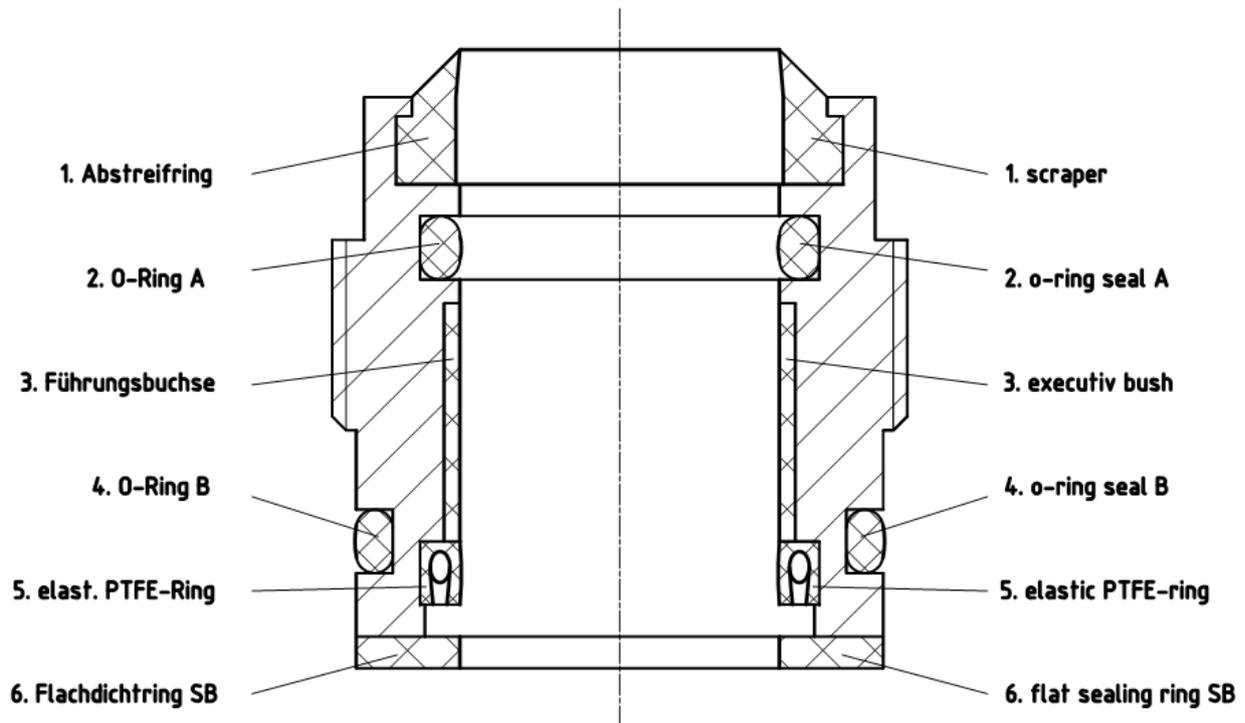


| DN | H in [mm] |
|--------|-----------|
| 10-20 | 15 |
| 25-32 | 24 |
| 40-50 | 22 |
| 65 | 14 |
| 80-100 | 17 |

20 Valve stem sealing system

The valve stem sealing system is maintenance-free.

The sealing system consists of the following components:



1. Wiper ring

The wiper ring prevents the ingress of dirt and water from the outside.

2. O-ring A

O-ring A makes the valve vacuum-tight. (Valve operation in the vacuum range at low temperatures)

3. Guide bush

The guide bush prevents damage to the stem.

4. O-ring B

O-ring B seals the outer part of the sealing system in addition to the flat sealing ring SB.

5. Resilient PTFE ring

The resilient PTFE ring is the primary seal of the sealing system. It consists of a high-performance PTFE compound with a wound stainless steel spring. This seal seals the valve to the atmosphere.

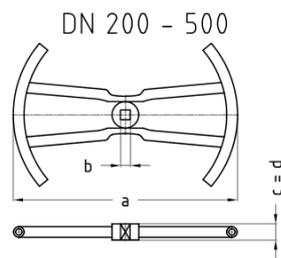
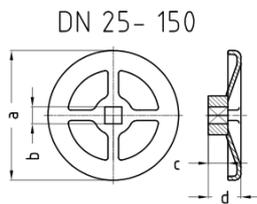
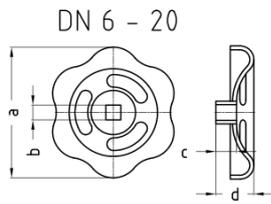
6. Flat sealing ring SB

The flat sealing ring SB seals the outer part of the sealing system.

Note: GEA AWP valves have a back seal. Therefore, the removal and replacement of the sealing system is possible during operation of the plant. Please observe the instructions in our operating regulations regarding this.

21 Handwheel / Cap

HR / K

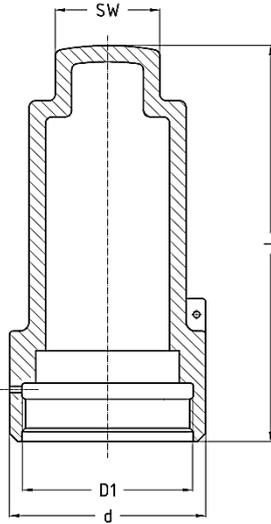


HR
handwheel

| for type: HRS AVR AVB HRAR HRAB RVA RVAK | | | | |
|--|----------|------------|------------|--------|
| | Diameter | Hub square | Hub height | Height |
| DN | a | b | c | d |
| 6-20 | 60 | 6 | 9 | 15 |
| 25-32 | 120 | 11 | 14 | 31.0 |
| 40-65 | 140 | 12 | 16 | 32.5 |
| 80-100 | 180 | 14 | 22 | 42.0 |
| 125 | 300 | 22 | 28 | 55 |
| 150 | 400 | 22 | 28 | 60 |
| 200-500 | 630 | 28 | 46 | 46 |

Table 17: Dimensions DN 6 - 500

DN 6 - 500



K
Cap

| for type: AVR AVB HRAR HRAB RVA RVAK | | | | |
|--------------------------------------|--------|----------|--------|-------------|
| | Height | Diameter | Thread | Wrench size |
| DN | l | d | D1 | SW |
| 6-20 | 65 | 36 | M27x2 | 19 |
| 25-32 | 99 | 45 | M36x2 | 24 |
| 40-65 | 122 | 60 | M52x3 | 32 |
| 80-100 | 148 | 72 | M60x3 | 41 |
| 125-150 | 165 | 90 | M76x3 | 50 |
| 200-350 | 260 | 100 | M80x3 | 60 |
| 400 | 319 | 100 | M80x3 | 90 |
| 500 | 325 | 100 | M80x3 | 90 |

Table 18: Dimensions DN 6 - 500

22 Comparison of European / American materials

GEA AWP valves contain individual parts in different materials. The following table contains all materials that GEA AWP uses for pressure-retaining parts and lists the equivalent American materials.

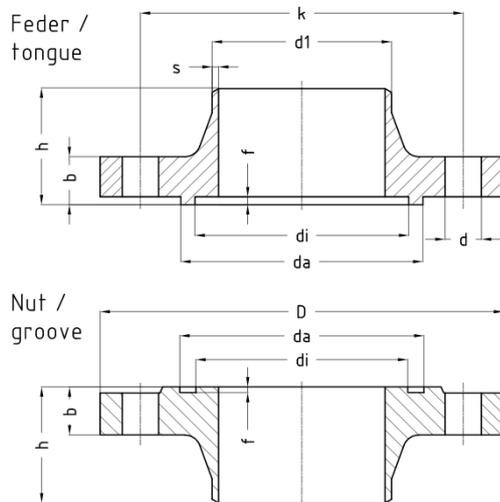
| European material | | American equivalent material | | |
|--------------------------------------|----------------|---|---|--------------------------|
| Material number | Short name | Standard | Material standard | Grade |
| Valves made of carbon steel | | | | |
| 1.0345 | P235GH, TC1 +N | DIN EN 10216-2 | ASTM A106 | A + B |
| 1.0038 | S235JR +N | DIN EN 10025-2 | ASTM A570 | 36 |
| 1.0425 | P265GH | DIN EN 10028-2 | ASTM A516 | 60 |
| 1.0577 | S355J2 +N | DIN EN 10025-2 | ASTM A516 | 65 |
| 1.0460 | C22.8 | VdTÜV 350/3 | ASTM A105 | - |
| Valves made of low-temperature steel | | | | |
| 1.0451 | P215NL +N | DIN EN 10216-4 | ASTM A333 | 6 |
| 1.0452 | P255QL +QT | DIN EN 10216-4 | | |
| 1.0566 | P355NL1 +N | DIN EN 10028-3 DIN 17103 VdTÜV 354/3 | ASTM A662 ASTM A420 ASTM A350 | B WPL6 LF2 |
| 1.0488 | TStE 285 | DIN 17103 VdTÜV 352/3 | ASTM A662 ASTM A350 | A LF2 |
| Valves made of stainless steel | | | | |
| 1.4301 | X5CrNi18-10 | DIN EN 10216-5 DIN EN 10028-7 DIN EN 10222-5 DIN EN 1092-1 | ASTM A312 ASTM A240 ASTM A182 | TP304 304 F304 |

Straight-way valves in non-standard design (e.g. deviating materials, third-party inspection) are only available in angle-seat form.

23 Welding neck flanges - DIN 2634/2635

- DIN-FL
- DIN-FL N
- DIN-FL F
- DIN-FL C
- DIN-FL D
- FL - flange
- Form N - groove, DIN 2512
- Form F - tongue, DIN 2512
- Form C - smooth flange facing, (Rz 160) DIN 2526
- Form D - smooth flange facing (Rz 40) DIN 2526

DN 10-150 DIN 2635 PN 40,
DN 200 DIN 2634 PN 25



| DIN2634 PN25 DN10-150 / DIN 2635 PN40 DN10-400 | | | | | | | | | | | | | | | | | | | | |
|--|------|----------|------|-----|----------------------|----|----|--------|---------|----|--------|---------|----|----|---------|-------------------|--------|------------|--------------------------|----|
| Welding ends | | | | | Flange facing design | | | | | | | | | | | Screws DIN 931 | | | Sealing ring DIN 2691 | |
| Series 1 | | Series 2 | | | Groove | | | | | | Tongue | | | | | Quant- ity | Thread | Lengt h | di | da |
| DN | d1 | s | d1 | s | b | k | h | d | D | di | da | f | di | da | f | | | | | |
| 10 | 17.2 | 1.8 | 15.0 | 2.5 | 1 6 | 60 | 35 | 1 4 | 90 | 23 | 35 | 2. 5 | 24 | 34 | 4. 0 | 4 | M 12 | 45 | 24 | 34 |
| 15 | 21.3 | 2.0 | 20.0 | 2.5 | 1 6 | 65 | 38 | 1 4 | 95 | 28 | 40 | 2. 5 | 29 | 39 | 4. 0 | 4 | M 12 | 45 | 29 | 39 |
| 20 | 26.9 | 2.3 | 25.0 | 2.5 | 1 8 | 75 | 40 | 1 4 | 10 5 | 35 | 51 | 2. 5 | 36 | 50 | 4. 0 | 4 | M 12 | 50 | 36 | 50 |
| 25 | 33.7 | 2.6 | 32.0 | 3.0 | 1 8 | 85 | 40 | 1 4 | 11 5 | 42 | 58 | 2. 5 | 43 | 57 | 4. 0 | 4 | M 12 | 50 | 43 | 57 |

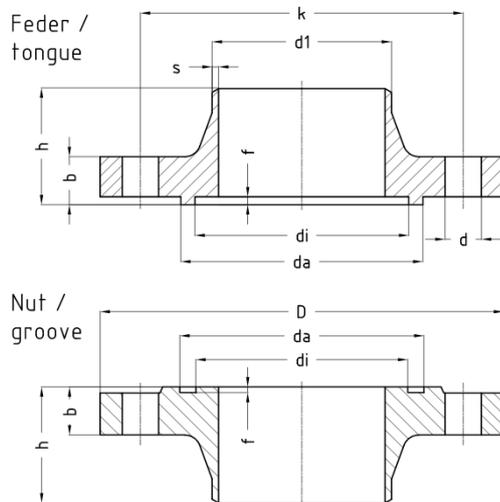
| DIN2634 PN25 DN10-150 / DIN 2635 PN40 DN10-400 | | | | | | | | | | | | | | | | | | | | |
|--|-------|------|-------|-----|--------|---------|-----|--------|---------|---------|---------|---------|---------|---------|---------|----|------|-----|-----|-----|
| 32 | 42.4 | 2.6 | 38.0 | 3.0 | 1 8 | 10 0 | 42 | 1 8 | 14 0 | 50 | 66 | 2. 5 | 51 | 65 | 4. 0 | 4 | M 16 | 55 | 51 | 65 |
| 40 | 48.3 | 2.6 | 45.0 | 3.0 | 1 8 | 11 0 | 45 | 1 8 | 15 0 | 60 | 76 | 2. 5 | 61 | 75 | 4. 0 | 4 | M 16 | 55 | 61 | 75 |
| 50 | 60.3 | 2.9 | 57.0 | 3.2 | 2 0 | 12 5 | 48 | 1 8 | 16 5 | 72 | 88 | 2. 5 | 73 | 87 | 4. 0 | 4 | M 16 | 60 | 73 | 87 |
| 65 | 76.1 | 2.9 | 76.1 | 3.6 | 2 2 | 14 5 | 52 | 1 8 | 18 5 | 94 | 11 0 | 2. 5 | 95 | 10 9 | 4. 0 | 8 | M 16 | 60 | 95 | 109 |
| 80 | 88.9 | 3.2 | 88.9 | 4.0 | 2 4 | 16 0 | 58 | 1 8 | 20 0 | 10 5 | 12 1 | 2. 5 | 10 6 | 12 0 | 4. 0 | 8 | M 16 | 65 | 106 | 120 |
| 100 | 114.3 | 3.6 | 108.0 | 4.0 | 2 4 | 19 0 | 65 | 2 2 | 23 5 | 12 8 | 15 0 | 3. 0 | 12 9 | 14 9 | 4. 5 | 8 | M 20 | 70 | 129 | 149 |
| 125 | 139.7 | 4.0 | 133.0 | 4.0 | 2 6 | 22 0 | 68 | 2 6 | 27 0 | 15 4 | 17 6 | 3. 0 | 15 5 | 17 5 | 4. 5 | 8 | M 24 | 80 | 155 | 175 |
| 150 | 168.3 | 4.5 | 159.0 | 4.5 | 2 8 | 25 0 | 75 | 2 6 | 30 0 | 18 2 | 20 4 | 3. 0 | 18 3 | 20 3 | 4. 5 | 8 | M 24 | 80 | 183 | 203 |
| 200 | 219.1 | 6.3 | | | 3 4 | 32 0 | 88 | 3 0 | 37 5 | 23 8 | 26 0 | 3. 0 | 23 9 | 25 9 | 4. 5 | 12 | M 27 | 100 | 239 | 259 |
| 250 | 273.0 | 7.1 | | | 3 8 | 38 5 | 105 | 3 3 | 45 0 | 29 1 | 31 3 | 3. 0 | 29 2 | 31 2 | 4. 5 | 12 | M 30 | 110 | 292 | 312 |
| 300 | 323.9 | 8.0 | | | 4 2 | 45 0 | 115 | 3 3 | 51 5 | 34 2 | 36 4 | 3. 0 | 34 3 | 36 3 | 4. 5 | 16 | M 30 | 120 | 343 | 363 |
| 350 | 355.6 | 8.8 | | | 4 6 | 51 0 | 125 | 3 6 | 58 0 | 39 4 | 42 2 | 3. 5 | 39 5 | 42 1 | 5. 0 | 16 | M 33 | 130 | 395 | 421 |
| 400 | 406.4 | 11.0 | | | 5 0 | 58 5 | 135 | 3 9 | 66 0 | 44 6 | 47 4 | 3. 5 | 44 7 | 47 3 | 5. 0 | 16 | M 36 | 140 | 447 | 473 |

Table 19: Installation lengths

24 Welding neck flanges - DIN 2634/2636/2637

- DIN-FL
- DIN-FL N
- DIN-FL F
- DIN-FL C
- DIN-FL D
- FL - flange
- Form N - groove, DIN 2512
- Form F - tongue, DIN 2512
- Form C - smooth flange facing, (Rz 160) DIN 2526
- Form D - smooth flange facing, (Rz 40) DIN 2526

DN 10-150 DIN 2635 PN 40,
DN 200 DIN 2634 PN 25



| DIN 2634 PN25 DN200-500 | | | | | | | | | | | | | | | | | | |
|-------------------------|--------------|-----|----|-----|-----|----|-----|----------------------|-----|-----|--------|-----|-----|----------------|--------|--------|-----------------------|-----|
| DN | Welding ends | | | | | | | Flange facing design | | | | | | Screws DIN 931 | | | Sealing ring DIN 2691 | |
| | d1 | s | b | k | h | d | D | Groove | | | Tongue | | | Quant-ity | Thread | Length | di | da |
| 200 | 219.1 | 6.3 | 30 | 310 | 80 | 26 | 360 | 238 | 260 | 3.0 | 239 | 259 | 4.5 | 12 | M 24 | 90 | 239 | 259 |
| 250 | 273.0 | 7.1 | 32 | 370 | 88 | 30 | 425 | 291 | 313 | 3.0 | 292 | 312 | 4.5 | 12 | M 27 | 90 | 292 | 312 |
| 300 | 323.9 | 8.0 | 34 | 430 | 92 | 30 | 485 | 342 | 364 | 3.0 | 343 | 363 | 4.5 | 16 | M 27 | 100 | 343 | 363 |
| 350 | 355.6 | 8.0 | 38 | 490 | 100 | 33 | 555 | 394 | 422 | 3.5 | 395 | 421 | 5.0 | 16 | M 30 | 110 | 395 | 421 |

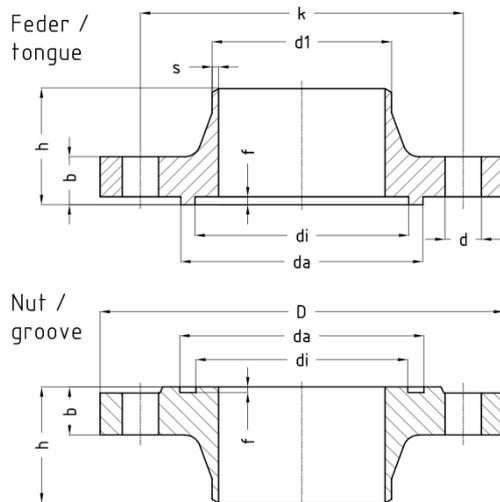
| DIN 2634 PN25 DN200-500 | | | | | | | | | | | | | | | | | | |
|---|-------|------|----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|----------|--------|--------|-----|-----|
| 400 | 406.4 | 8.8 | 40 | 550 | 110 | 36 | 620 | 446 | 474 | 3.5 | 447 | 473 | 5.0 | 16 | M 33 | 120 | 447 | 473 |
| 500 | 508.0 | 10.0 | 44 | 660 | 125 | 36 | 730 | 548 | 576 | 3.9 | 549 | 575 | 5.0 | 20 | M 33 | 130 | 549 | 575 |
| DIN2636 PN63 DN10-40 / DIN 2637 PN100 DN10-40 | | | | | | | | | | | | | | | | | | |
| DN | d1 | s | b | k | h | d | D | di | da | f | di | da | f | Quantity | Thread | Length | di | Da |
| 10 | 17.2 | 2.0 | 20 | 70 | 45 | 14 | 100 | 23 | 35 | 2.5 | 24 | 34 | 4.0 | 4 | M 12 | 55 | 24 | 34 |
| 15 | 21.3 | 2.0 | 20 | 75 | 45 | 14 | 105 | 28 | 40 | 2.5 | 29 | 39 | 4.0 | 4 | M 12 | 55 | 29 | 39 |
| 20 | 26.9 | 2.6 | 22 | 90 | 48 | 18 | 130 | 35 | 51 | 2.5 | 36 | 50 | 4.0 | 4 | M 16 | 60 | 36 | 50 |
| 25 | 33.7 | 2.6 | 24 | 100 | 58 | 18 | 140 | 42 | 58 | 2.5 | 43 | 57 | 4.0 | 4 | M 16 | 65 | 43 | 57 |
| 32 | 42.4 | 2.9 | 24 | 110 | 60 | 22 | 150 | 50 | 66 | 2.5 | 51 | 65 | 4.0 | 4 | M 20 | 70 | 51 | 65 |
| 40 | 48.3 | 2.9 | 26 | 120 | 62 | 22 | 170 | 60 | 76 | 2.5 | 61 | 75 | 4.0 | 4 | M 20 | 70 | 61 | 75 |
| DIN 2636 PN63 DN50-125 | | | | | | | | | | | | | | | | | | |
| DN | d1 | S | b | k | h | d | D | di | da | f | di | da | f | Quantity | Thread | Length | di | da |
| 50 | 60.3 | 2.9 | 26 | 130 | 62 | 22 | 180 | 72 | 88 | 2.5 | 73 | 87 | 4.0 | 4 | M 20 | 75 | 73 | 87 |
| 65 | 76.1 | 3.2 | 26 | 160 | 68 | 22 | 200 | 94 | 110 | 2.5 | 95 | 109 | 4.0 | 8 | M 20 | 75 | 95 | 109 |
| 80 | 88.9 | 3.6 | 28 | 170 | 72 | 22 | 210 | 105 | 121 | 2.5 | 106 | 120 | 4.0 | 8 | M 20 | 75 | 106 | 120 |
| 100 | 114.3 | 4.0 | 30 | 200 | 78 | 26 | 250 | 120 | 150 | 3.0 | 129 | 149 | 4.5 | 8 | M 24 | 90 | 129 | 149 |
| 125 | 139.7 | 4.5 | 34 | 240 | 88 | 30 | 290 | 150 | 175 | 3.0 | 155 | 175 | 4.5 | 8 | M 27 | 100 | 155 | 175 |

Table 20: Installation lengths

25 Welding neck flanges - DIN EN 1092-1

- DIN EN-FL
- DIN EN-FL D
- DIN EN-FL C
- DIN EN-FL B1
- DIN EN-FL B2
- FL - flange
- Form D - groove, DIN EN 1092-1
- Form C - tongue, DIN EN 1092-1
- Form B1 - raised face (Rz 50) DIN EN 1092-1
- Form B2 - raised face (Rz 12.5) DIN EN 1092-1

DN 10-150 DIN 2635 PN 40,
DN 200 DIN 2634 PN 25



| DIN EN 1092-1 PN25 DN10-150 / PN40 DN10-400 | | | | | | | | | | | | | | | | | | | | |
|---|------|----------|------|-----|----------------------|----|----|--------|---------|----|--------|---------|----|----|---------|----------------|--------|---------|-----------------------|----|
| Welding ends | | | | | Flange facing design | | | | | | | | | | | Screws DIN 931 | | | Sealing ring DIN 2691 | |
| Series 1 | | Series 2 | | | Groove | | | | | | Tongue | | | | | Quant-ity | Thread | Lengt h | di | da |
| DN | d1 | s | d1 | s | b | k | h | d | D | di | da | f | di | da | f | | | | | |
| 10 | 17.2 | 1.8 | 15.0 | 2.5 | 1 6 | 60 | 35 | 1 4 | 90 | 23 | 35 | 4. 0 | 24 | 34 | 4. 5 | 4 | M 12 | 45 | 24 | 34 |
| 15 | 21.3 | 2.0 | 20.0 | 2.5 | 1 6 | 65 | 38 | 1 4 | 95 | 28 | 40 | 4. 0 | 29 | 39 | 4. 5 | 4 | M 12 | 45 | 29 | 39 |
| 20 | 26.9 | 2.3 | 25.0 | 2.5 | 1 8 | 75 | 40 | 1 4 | 10 5 | 35 | 51 | 4. 0 | 36 | 50 | 4. 5 | 4 | M 12 | 50 | 36 | 50 |
| 25 | 33.7 | 2.6 | 32.0 | 3.0 | 1 8 | 85 | 40 | 1 4 | 11 5 | 42 | 58 | 4. 0 | 43 | 57 | 4. 5 | 4 | M 12 | 50 | 43 | 57 |

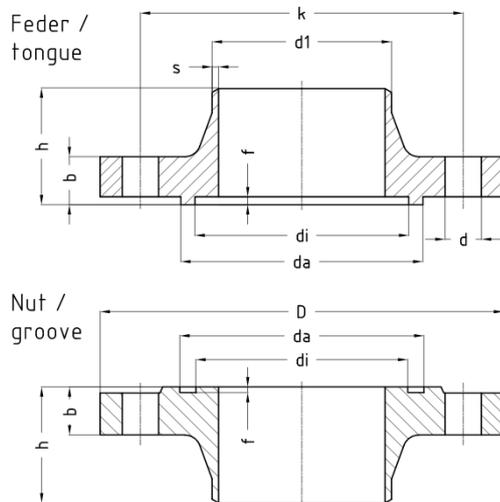
| DIN EN 1092-1 PN25 DN10-150 / PN40 DN10-400 | | | | | | | | | | | | | | | | | | | | |
|---|-------|------|-------|-----|--------|---------|-----|--------|---------|---------|---------|---------|---------|---------|---------|----|------|-----|-----|-----|
| 32 | 42.4 | 2.6 | 38.0 | 3.0 | 1 8 | 10 0 | 42 | 1 8 | 14 0 | 50 | 66 | 4. 0 | 51 | 65 | 4. 5 | 4 | M 16 | 55 | 51 | 65 |
| 40 | 48.3 | 2.6 | 45.0 | 3.0 | 1 8 | 11 0 | 45 | 1 8 | 15 0 | 60 | 76 | 4. 0 | 61 | 75 | 4. 5 | 4 | M 16 | 55 | 61 | 75 |
| 50 | 60.3 | 2.9 | 57.0 | 3.2 | 2 0 | 12 5 | 48 | 1 8 | 16 5 | 72 | 88 | 4. 0 | 73 | 87 | 4. 5 | 4 | M 16 | 60 | 73 | 87 |
| 65 | 76.1 | 2.9 | 76.1 | 3.6 | 2 2 | 14 5 | 52 | 1 8 | 18 5 | 94 | 11 0 | 4. 0 | 95 | 10 9 | 4. 5 | 8 | M 16 | 60 | 95 | 109 |
| 80 | 88.9 | 3.2 | 88.9 | 4.0 | 2 4 | 16 0 | 58 | 1 8 | 20 0 | 10 5 | 12 1 | 4. 0 | 10 6 | 12 0 | 4. 5 | 8 | M 16 | 65 | 106 | 120 |
| 100 | 114.3 | 3.6 | 108.0 | 4.0 | 2 4 | 19 0 | 65 | 2 2 | 23 5 | 12 8 | 15 0 | 4. 5 | 12 9 | 14 9 | 5. 0 | 8 | M 20 | 70 | 129 | 149 |
| 125 | 139.7 | 4.0 | 133.0 | 4.0 | 2 6 | 22 0 | 68 | 2 6 | 27 0 | 15 4 | 17 6 | 4. 5 | 15 5 | 17 5 | 5. 0 | 8 | M 24 | 80 | 155 | 175 |
| 150 | 168.3 | 4.5 | 159.0 | 4.5 | 2 8 | 25 0 | 75 | 2 6 | 30 0 | 18 2 | 20 4 | 4. 5 | 18 3 | 20 3 | 5. 0 | 8 | M 24 | 80 | 183 | 203 |
| 200 | 219.1 | 6.3 | | | 3 4 | 32 0 | 88 | 3 0 | 37 5 | 23 8 | 26 0 | 4. 5 | 23 9 | 25 9 | 5. 0 | 12 | M 27 | 100 | 239 | 259 |
| 250 | 273.0 | 7.1 | | | 3 8 | 38 5 | 105 | 3 3 | 45 0 | 29 1 | 31 3 | 4. 5 | 29 2 | 31 2 | 5. 0 | 12 | M 30 | 110 | 292 | 312 |
| 300 | 323.9 | 8.0 | | | 4 2 | 45 0 | 115 | 3 3 | 51 5 | 34 2 | 36 4 | 4. 5 | 34 3 | 36 3 | 5. 0 | 16 | M 30 | 120 | 343 | 363 |
| 350 | 355.6 | 8.8 | | | 4 6 | 51 0 | 125 | 3 6 | 58 0 | 39 4 | 42 2 | 5. 0 | 39 5 | 42 1 | 5. 5 | 16 | M 33 | 130 | 395 | 421 |
| 400 | 406.4 | 11.0 | | | 5 0 | 58 5 | 135 | 3 9 | 66 0 | 44 6 | 47 4 | 5. 0 | 44 7 | 47 3 | 5. 5 | 16 | M 36 | 140 | 447 | 473 |

Table 21: Installation lengths

26 Welding neck flanges - DIN EN 1092-1

- DIN EN-FL
- DIN EN-FL D
- DIN EN-FL C
- DIN EN-FL B1
- DIN EN-FL B2
- FL - flange
- Form D - groove, DIN EN 1092-1
- Form C - tongue, DIN EN 1092-1
- Form B1 - raised face, (Rz 50) DIN EN 1092-1
- Form B2 - raised face, (Rz 12.5) DIN EN 1092-1

DN 10-150 DIN 2635 PN 40,
DN 200 DIN 2634 PN 25



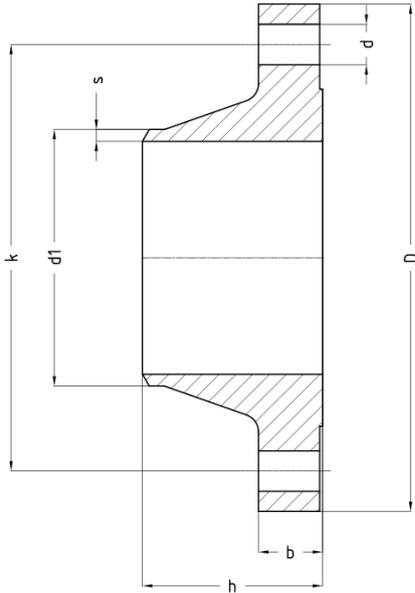
| DIN EN 1092-1 PN25 DN200-500 | | | | | | | | | | | | | | | | | | | |
|------------------------------|-------|-----|-----|-----|-----|-----|-----|-------|----------------------|-----|-------|--------|-----|----------|-------------------|---------------|-------|--------------------------|--|
| Welding ends | | | | | | | | | Flange facing design | | | | | | Screws DIN 931 | | | Sealing ring DIN 2691 | |
| Series 1 | | | | | | | | | Groove | | | Tongue | | | | | | | |
| DN | d_1 | s | b | k | h | d | D | d_i | d_a | f | d_i | d_a | f | Quantity | Thread | Length h | d_i | d_a | |
| 200 | 219.1 | 6.3 | 30 | 310 | 80 | 26 | 360 | 238 | 260 | 4.5 | 239 | 259 | 5.0 | 12 | M 24 | 90 | 239 | 259 | |
| 250 | 273.0 | 7.1 | 32 | 370 | 88 | 30 | 425 | 291 | 313 | 4.5 | 292 | 312 | 5.0 | 12 | M 27 | 90 | 292 | 312 | |
| 300 | 323.9 | 8.0 | 34 | 430 | 92 | 30 | 485 | 342 | 364 | 4.5 | 343 | 363 | 5.0 | 16 | M 27 | 100 | 343 | 363 | |
| 350 | 355.6 | 8.0 | 38 | 490 | 100 | 33 | 555 | 394 | 422 | 5.0 | 395 | 421 | 5.5 | 16 | M 30 | 110 | 395 | 421 | |

| DIN EN 1092-1 PN25 DN200-500 | | | | | | | | | | | | | | | | | | |
|--|-------|------|----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|----------|--------|--------|-----|-----|
| 400 | 406.4 | 8.8 | 40 | 550 | 110 | 36 | 620 | 446 | 474 | 5.0 | 447 | 473 | 5.5 | 16 | M 33 | 120 | 447 | 473 |
| 500 | 508.0 | 10.0 | 44 | 660 | 125 | 36 | 730 | 548 | 576 | 5.0 | 549 | 575 | 5.5 | 20 | M 33 | 130 | 549 | 575 |
| DIN EN 1092-1 PN63 DN10-40 / PN100 DN10-40 | | | | | | | | | | | | | | | | | | |
| DN | d1 | s | b | k | h | d | D | di | da | F | di | da | f | Quantity | Thread | Length | di | Da |
| 10 | 17.2 | 2.0 | 20 | 70 | 45 | 14 | 100 | 23 | 35 | 4.0 | 24 | 34 | 4.5 | 4 | M 12 | 55 | 24 | 34 |
| 15 | 21.3 | 2.0 | 20 | 75 | 45 | 14 | 105 | 28 | 40 | 4.0 | 29 | 39 | 4.5 | 4 | M 12 | 55 | 29 | 39 |
| 20 | 26.9 | 2.6 | 22 | 90 | 48 | 18 | 130 | 35 | 51 | 4.0 | 36 | 50 | 4.5 | 4 | M 16 | 60 | 36 | 50 |
| 25 | 33.7 | 2.6 | 24 | 100 | 58 | 18 | 140 | 42 | 58 | 4.0 | 43 | 57 | 4.5 | 4 | M 16 | 65 | 43 | 57 |
| 32 | 42.4 | 2.9 | 24 | 110 | 60 | 22 | 155 | 50 | 66 | 4.0 | 51 | 65 | 4.5 | 4 | M 20 | 70 | 51 | 65 |
| 40 | 48.3 | 2.9 | 26 | 125 | 62 | 22 | 170 | 60 | 76 | 4.0 | 61 | 75 | 4.5 | 4 | M 20 | 70 | 61 | 75 |
| DIN EN 1092-1 PN63 DN50-125 | | | | | | | | | | | | | | | | | | |
| DN | d1 | S | b | k | h | d | D | di | da | f | di | da | F | Quantity | Thread | Length | di | da |
| 50 | 60.3 | 2.9 | 26 | 135 | 62 | 22 | 180 | 72 | 88 | 4.0 | 73 | 87 | 4.5 | 4 | M 20 | 75 | 73 | 87 |
| 65 | 76.1 | 3.2 | 26 | 160 | 68 | 22 | 205 | 94 | 110 | 4.0 | 95 | 109 | 4.5 | 8 | M 20 | 75 | 95 | 109 |
| 80 | 88.9 | 3.6 | 28 | 170 | 72 | 22 | 215 | 105 | 121 | 4.0 | 106 | 120 | 4.5 | 8 | M 20 | 75 | 106 | 120 |
| 100 | 114.3 | 4.0 | 30 | 200 | 78 | 26 | 250 | 128 | 150 | 4.5 | 129 | 149 | 5.0 | 8 | M 24 | 90 | 129 | 149 |
| 125 | 139.7 | 4.5 | 34 | 240 | 88 | 30 | 295 | 154 | 176 | 4.5 | 155 | 175 | 5.0 | 8 | M 27 | 100 | 155 | 175 |

Table 22: Installation lengths

27 Welding neck flanges - ANSI B16.5 raised face

- ANSI-FL
- ANSI-FL 150lbs RF
- ANSI-FL 300lbs RF
- FL - flange
- Facing with large and small male / female
- Facing with large and small tongue / groove according to ANSI B16.5



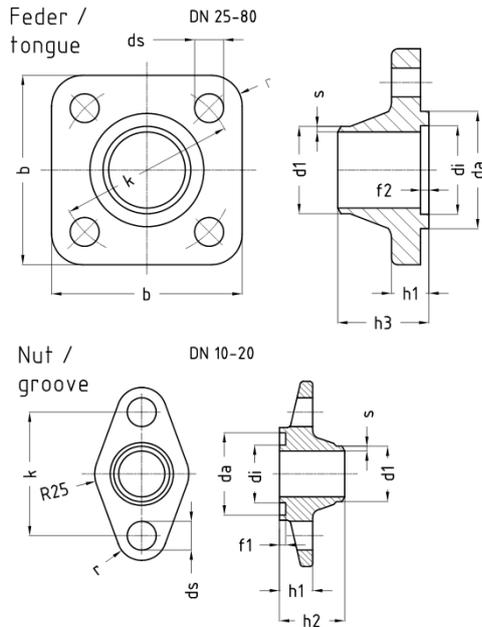
| Nominal size | | Welding ends acc. to: | | | | | | | | | | | | | |
|--------------|--------|-----------------------|-----|----------------------------|-------|-------|------|-------|-------------------|----------------------------|-------|-------|------|-------|-------------------|
| | | ANSI | | ANSI-FL 150lbs RF / sq. in | | | | | Screws DIN 931 | ANSI-FL 300lbs RF / sq. in | | | | | Screws DIN 931 |
| DN | INCH | d1 | s | b | k | h | d | D | Quantity | b | k | h | d | D | Quantity |
| 15 | 1/2" | 21.3 | 2.8 | 11.2 | 60.5 | 47.8 | 15.7 | 88.9 | 4 | 14.2 | 66.5 | 52.3 | 15.7 | 95.2 | 4 |
| 20 | 3/4" | 26.7 | 2.9 | 12.7 | 69.9 | 52.3 | 15.7 | 98.6 | 4 | 15.7 | 82.5 | 57.1 | 19.0 | 117.3 | 4 |
| 25 | 1" | 33.4 | 3.4 | 14.2 | 79.2 | 55.6 | 15.7 | 108.0 | 4 | 17.5 | 88.9 | 62.0 | 19.0 | 123.9 | 4 |
| 32 | 1 1/4" | 42.2 | 3.6 | 15.7 | 88.9 | 57.2 | 15.7 | 117.3 | 4 | 19.0 | 98.5 | 65.0 | 19.0 | 133.3 | 4 |
| 40 | 1 1/2" | 48.3 | 3.7 | 17.5 | 98.6 | 62.0 | 15.7 | 127.0 | 4 | 20.6 | 114.3 | 68.3 | 22.3 | 155.4 | 4 |
| 50 | 2" | 60.3 | 3.9 | 19.1 | 120.7 | 63.5 | 19.1 | 152.4 | 4 | 22.3 | 127.0 | 69.8 | 19.0 | 165.1 | 6 |
| 65 | 2 1/2" | 73.0 | 5.2 | 22.4 | 139.7 | 69.9 | 19.1 | 177.8 | 4 | 25.4 | 149.3 | 76.2 | 22.3 | 190.5 | 8 |
| 80 | 3" | 88.9 | 5.5 | 23.9 | 152.4 | 69.9 | 19.1 | 190.5 | 4 | 28.4 | 168.1 | 79.2 | 22.3 | 209.5 | 8 |
| 100 | 4" | 114.3 | 6.0 | 23.9 | 190.5 | 76.2 | 19.1 | 228.6 | 8 | 31.7 | 200.1 | 85.8 | 22.3 | 254.0 | 8 |
| 125 | 5" | 141.3 | 6.6 | 23.9 | 215.9 | 88.9 | 22.4 | 254.0 | 8 | 35.0 | 234.9 | 98.5 | 22.3 | 279.4 | 8 |
| 150 | 6" | 168.3 | 7.1 | 25.4 | 241.3 | 88.9 | 22.4 | 279.4 | 8 | 36.5 | 269.7 | 98.5 | 22.3 | 317.5 | 12 |
| 200 | 8" | 219.1 | 8.2 | 28.4 | 298.5 | 101.6 | 22.4 | 342.9 | 8 | 41.1 | 330.2 | 111.2 | 25.4 | 381.0 | 12 |
| 250 | 10" | 273.0 | 9.3 | 30.2 | 362.0 | 101.6 | 25.4 | 406.4 | 12 | 47.7 | 387.3 | 117.3 | 28.4 | 444.5 | 16 |

| Nominal size | | Welding ends acc. to: | | | | | | | | | | | | | |
|--------------|-----|-----------------------|------|------|-------|-------|------|-------|----|------|-------|-------|------|-------|----|
| 300 | 12" | 323.8 | 10.3 | 31.8 | 431.8 | 114.3 | 25.4 | 482.6 | 12 | 50.8 | 450.8 | 130.0 | 31.7 | 520.7 | 16 |
| 350 | 14" | 355.6 | 11.1 | 35.1 | 476.3 | 127.0 | 28.4 | 533.4 | 12 | 53.8 | 514.3 | 142.7 | 31.7 | 584.2 | 20 |
| 400 | 16" | 406.4 | 12.7 | 36.6 | 539.8 | 127.0 | 28.4 | 596.9 | 16 | 57.1 | 571.5 | 146.0 | 35.0 | 647.7 | 20 |

Table 23: Installation lengths

28 Welding neck flanges - AWP

- AWP-FL
- AWP-FL N
- AWP-FL F
- FL - flange
- N - groove
- F - tongue


AWP-FL PN25 DN10-20 / PN40 DN25-80

| | | Welding ends | | | | | Flange facing design | | | | | | | | | | Screws DIN 931 | | | Sealing ring DIN 2691 | | | | | |
|----|---|--------------|-----|----------|-----|------|----------------------|--------|----|----|----|----|--------|----|----|------|----------------|-----------|--------|--------------------------|----|------|----|----|----|
| | | Series 1 | | Series 2 | | ANSI | | Groove | | | | | Tongue | | | | | Quant-ity | Thread | Lengt h | di | da | | | |
| D | N | d1 | s | d1 | s | d1 | s | b | k | r | h1 | ds | di | da | f1 | h2 | di | | | | | | da | f2 | h3 |
| 10 | 2 | 17.2 | 1.8 | 15.0 | 2.5 | 17.1 | 2.3 | 88 | 60 | 13 | 16 | 14 | 28 | 40 | 3 | 31.5 | 29 | 39 | 4 | 32.0 | 2 | M 12 | 45 | 29 | 39 |
| 15 | 3 | 21.3 | 2.0 | 20.0 | 2.5 | 21.3 | 2.8 | 88 | 60 | 13 | 16 | 14 | 28 | 40 | 3 | 31.5 | 29 | 39 | 4 | 32.0 | 2 | M 12 | 45 | 29 | 39 |
| 20 | 9 | 26.9 | 2.3 | 25.0 | 2.5 | 26.7 | 2.9 | 88 | 60 | 13 | 16 | 14 | 28 | 40 | 3 | 31.5 | 29 | 39 | 4 | 32.0 | 2 | M 12 | 45 | 29 | 39 |
| 25 | 7 | 33.7 | 2.6 | 32.0 | 3.0 | 33.4 | 3.4 | 92 | 85 | 15 | 18 | 14 | 42 | 58 | 3 | 44.0 | 43 | 57 | 4 | 44.0 | 4 | M 12 | 50 | 43 | 57 |
| 32 | 4 | 42.4 | 2.6 | 38.0 | 3.0 | 42.2 | 3.6 | 92 | 85 | 15 | 18 | 14 | 42 | 58 | 3 | 44.0 | 43 | 57 | 4 | 44.0 | 4 | M 12 | 50 | 43 | 57 |
| 40 | 3 | 48.3 | 2.6 | 45.0 | 3.0 | 48.3 | 3.7 | 92 | 85 | 15 | 18 | 14 | 42 | 58 | 3 | 38.5 | 43 | 57 | 4 | 38.5 | 4 | M 12 | 50 | 43 | 57 |

| AWP-FL PN25 DN10-20 / PN40 DN25-80 | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|------|-----|------|-----|------|-----|------|------|----|----|----|----|----|---|------|----|----|---|------|---|------|----|---------|
| 50 | 60.3 | 2.9 | 57.0 | 3.2 | 60.3 | 3.9 | 13.2 | 13.5 | 20 | 28 | 18 | 84 | 96 | 3 | 43.0 | 85 | 95 | 4 | 43.0 | 4 | M 16 | 75 | A85x95* |
| 65 | 76.1 | 2.9 | 76.1 | 3.6 | 73.0 | 5.2 | 13.2 | 13.5 | 20 | 28 | 18 | 84 | 96 | 3 | 53.5 | 85 | 95 | 4 | 53.5 | 4 | M 16 | 75 | A85x95* |
| 80 | 88.9 | 3.2 | 88.9 | 4.0 | 88.9 | 5.5 | 13.2 | 13.5 | 20 | 28 | 18 | 84 | 96 | 3 | 53.5 | 85 | 95 | 4 | 53.5 | 4 | M 16 | 75 | A85x95* |

Table 24: Installation lengths

* = acc. to DIN 7603

29 Legal notices

- GEA AWP valves must be handled in accordance with the GEA AWP operating regulations.
- The safety instructions mentioned in the operating regulations must be observed.
- A hazard analysis is available for GEA AWP valves.
- GEA AWP valves must only be handled by authorised persons.
- The instructions for the use of personal protective equipment (PPE) must be observed.
- GEA AWP valves must be used for their intended purpose.
- This catalogue has been carefully created and checked; however, it may still contain errors. The technical specifications given in the catalogue are not contractually guaranteed properties. Technical specifications are only binding if they have been confirmed by us in writing.
- We reserve the right to make technical changes.
- Further information on our declarations of conformity, operating regulations, calculation software and the general terms and conditions can be found on our website www.awpvalves.com under the Tools/Downloads tab.
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