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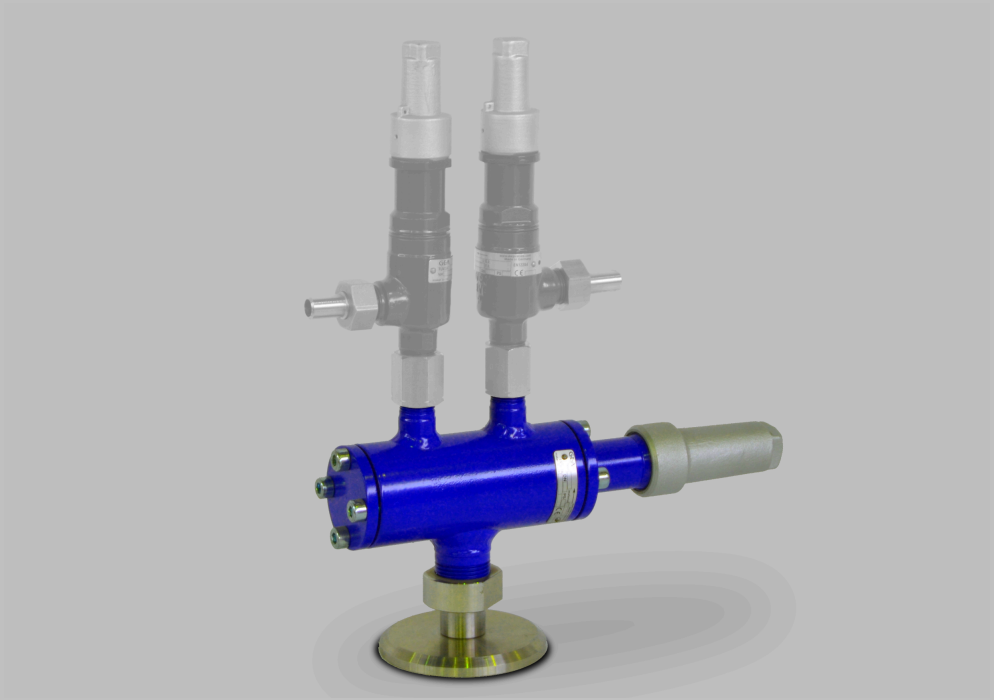
3-WAY VALVES FOR HEATING TECHNOLOGIES

WVR, WVB

05.02.2026



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HT: Temperature up to +200°C

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		St	WVR SE
			NIRO	WVR SE NIRO

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
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	ANSI-FL welding neck flanges - smooth			
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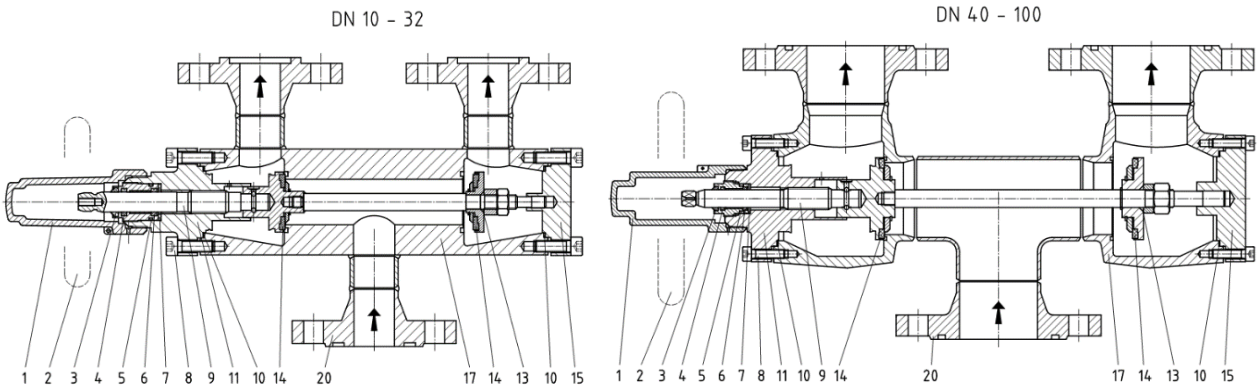
St = steel SS = stainless steel, Alu = aluminium

2 WVR materials

Designation and materials
WVR - change-over valve

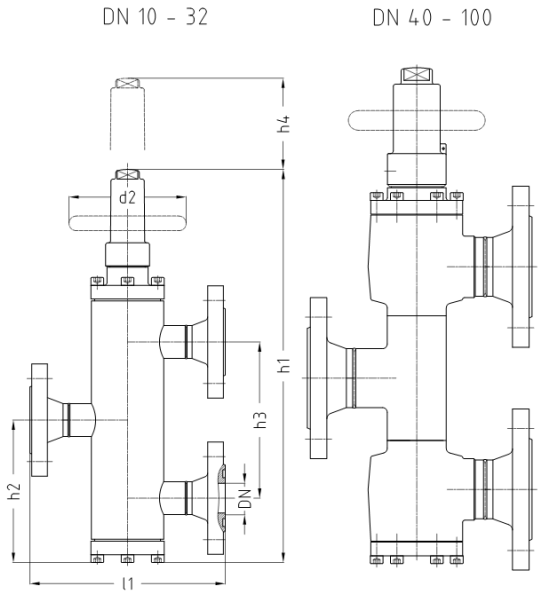


	Part	Material for steel valves	Material for stainless steel valves
1	Cap	Aluminium AlSi10Mg	Aluminium AlSi10Mg
2	Handwheel	Steel	Steel
3	Wiper ring	NBR	NBR
4	O-ring A	CR, NBR, HNBR, EPDM, FPM*	CR, NBR, HNBR, EPDM, FPM*
5	O-ring B	CR, NBR, HNBR, EPDM, FPM*	CR, NBR, HNBR, EPDM, FPM*
6	Spring-loaded U-ring	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 HT

FL: Flanged ends, **HT:** Temperature up to +200°C
WVR steel change-over valve for natural gases and liquids (e.g. NH3, CO2) and non-corrosive media according to EN 378-1



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	-10	+50	+200	TS [°C]
DN 10...100 3/8"...4"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]
	PN63	63	63	63	PS [bar]

Nominal size:		Flanged ends acc. to:										
		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						
DN	INCH	l1	l1	l1	l1	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	242	252	405	146	180	185	240	120
40	1 1/2"	203	216	216	250	263	496	184	214	214	315	140
50	2"	220	230	230	258	274	510	191	228	228	330	140
65	2 1/2"	268	265	265	297	313	581	231	276	276	405	140

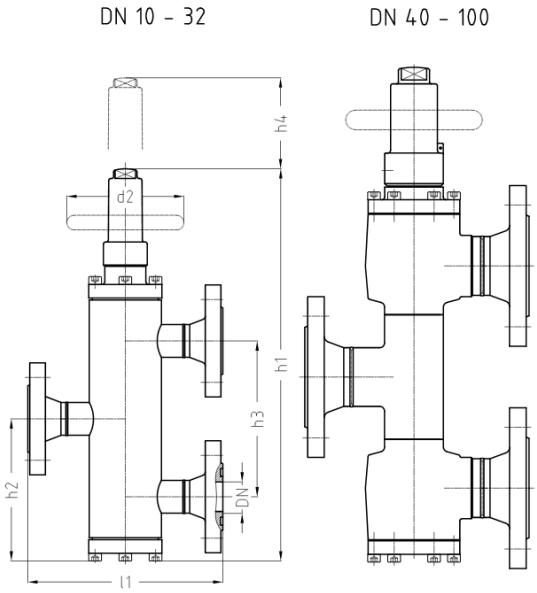
Nominal size:		Flanged ends acc. to:										
80	3“	294	304	304	332	345	743	289	325	325	530	180
100	4“		356	356	382	397	812	329	393	393	600	180

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 HT

FL: Flanged ends, **HT:** Temperature up to +200°C
WVR stainless steel change-over valve for natural gases and liquids (e.g. NH3, CO2) and non-corrosive media according to EN 378-1



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	-10	+50	+200	TS [°C]
DN 10...100 3/8"...4"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]
	PN63	63	63	63	PS [bar]

Nominal size:		Flanged ends acc. to:										
		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						
DN	INCH	l1	l1	l1	l1	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

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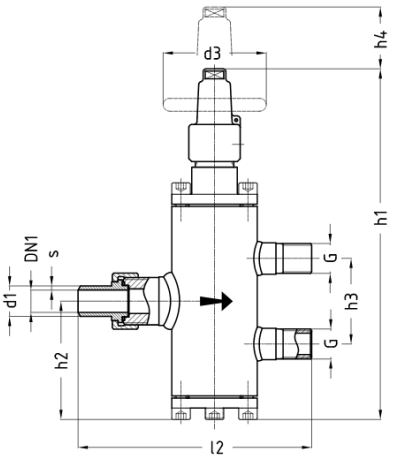
Nominal size:		Flanged ends acc. to:										
80	3“	294	304	304		345	743	289	325		530	180
100	4“		356	356		397	812	329	393		600	180

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 HT

SE: Screwed ends,**HT:** Temperature up to +200°C
WVR steel change-over valve for natural gases and liquids (e.g. NH3, CO2) and non-corrosive media according to EN 378-1



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	-10	+50	+200	TS [°C]
DN15 G1"/G1/2"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]
	PN63	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

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

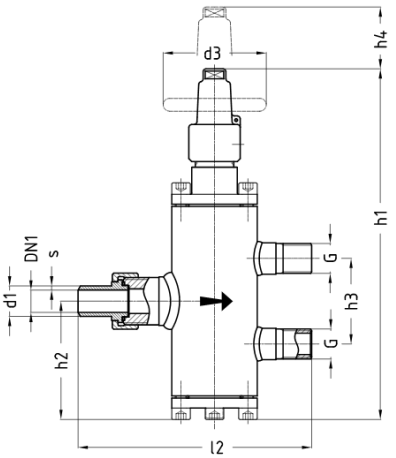
Table 4: Dimensions WVR SE for SVA/SVU P design
*) Whitworth – pipe thread DIN ISO 228 ….h4 = dismantling dimension

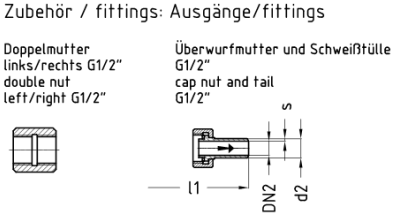
Available accessories:

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 HT

SE: Screwed ends,**HT:** Temperature up to +200°C
WVR stainless steel change-over valve for natural gases and liquids (e.g. NH3, CO2) and non-corrosive media according to EN 378-1





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	-10	+50	+200	TS [°C]
DN15 G1"/G1/2"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]
	PN63	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

Table 5: Dimensions WVR SE NIRO 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

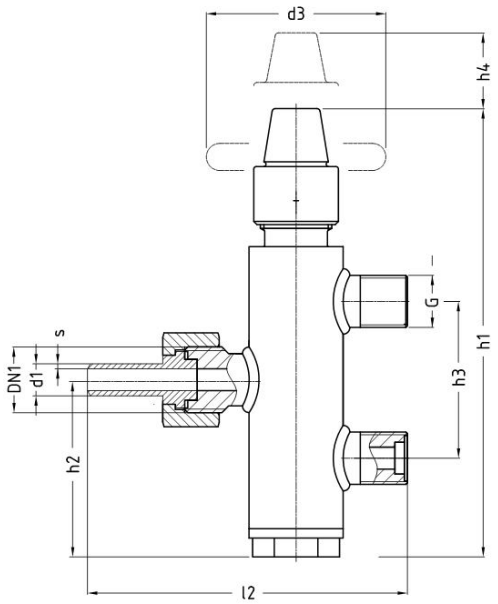
Table 6: Dimensions WVR SE NIRO for SVA/SVU P design
*) Whitworth – pipe thread DIN ISO 228, h4 = dismantling dimension

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

7 WVR SE NIRO HT

SE: Screwed ends,**HT:** Temperature up to +200°C
WVR stainless steel change-over valve for natural gases and liquids (e.g. NH3, CO2) and non-corrosive media according to EN 378-1



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	-10	+50	+200	TS [°C]
DN15/10 1/2 / 3/8	PN63	63	63	63	PS [bar]

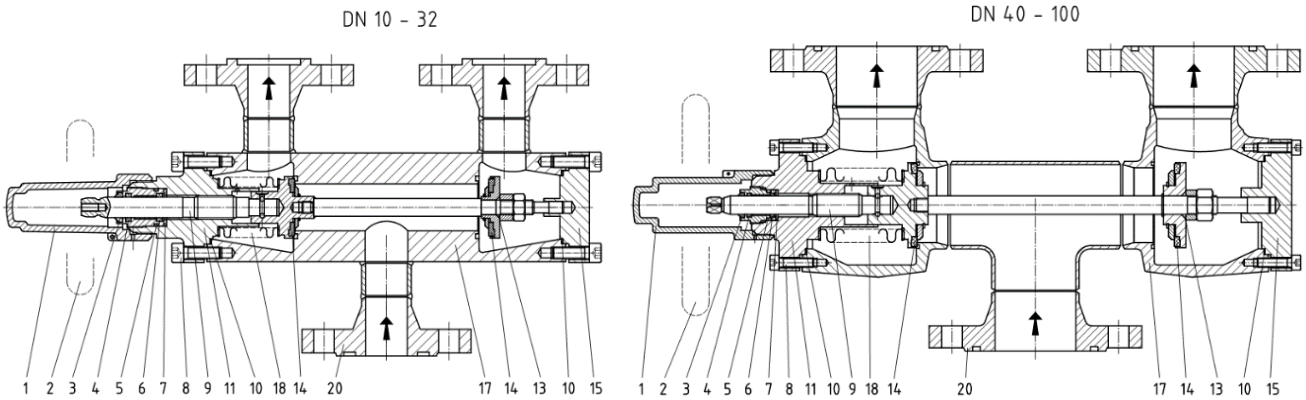
Nominal size:	Screwed ends		Welding nipples										
	Inlet	Outlet	Inlet		Outlet								
DN1/DN2	G*	G*	d1	s	d2	s		l2	h1	h2	h3	h4	d3
15/8	1/2"	3/8"	10.2	1.6	-	-		102	143	56.5	50	20	60

Table 7: Dimensions
*) Whitworth – pipe thread DIN ISO 228 ….h4 = dismantling dimension
Available accessories:
Inlet: **UM+ST NIRO**: Union nut with welding sleeve and gasket G1/2"/10.2x1.6

8 WVB materials

Designation and materials

WVB - change-over valve with metal bellows

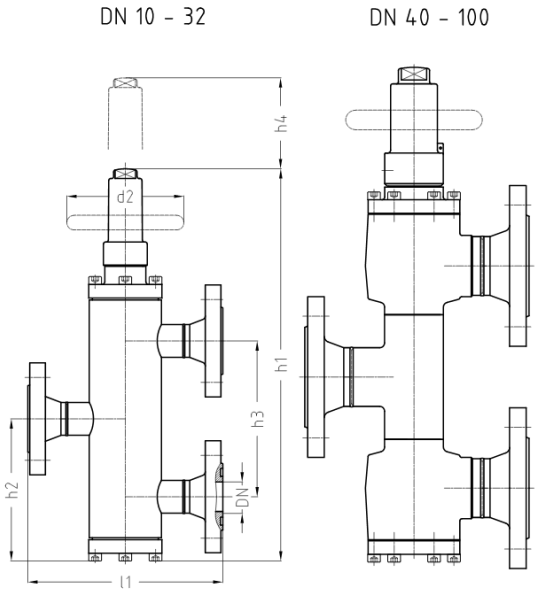


	Part	Material for steel valves	Material for stainless steel valves
1	Cap	Aluminium AlSi10Mg	Aluminium AlSi10Mg
2	Handwheel	Steel	Steel
3	Wiper ring	NBR	NBR
4	O-ring A	CR, NBR, HNBR, EPDM, FPM*	CR, NBR, HNBR, EPDM, FPM*
5	O-ring B	CR, NBR, HNBR, EPDM, FPM*	CR, NBR, HNBR, EPDM, FPM*
6	Spring-loaded U-ring	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

9 WVB FL HT

FL: Flanged ends, **HT:** Temperature up to +200°C
WVR steel change-over valve with metal bellows for natural gases and liquids (e.g. NH3, CO2) and non-corrosive media according to EN 378-1



Pressure / temperature operating limits:
PS: Max. permissible operating pressure in bar
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PN: Nominal pressure rating

DN / INCH	PN	-10	+50	+200	TS [°C]
DN 10...100 3/8"...4"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]

Nominal size:		Flanged ends acc. to:								
		AWP DN10-20 PN25 DN25-80 PN40	PN25 DIN 2634 EN1092-1	PN40 DIN 2635 EN1092-1	ANSI 300 RF					
DN	INCH	l1	l1	l1	l1	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

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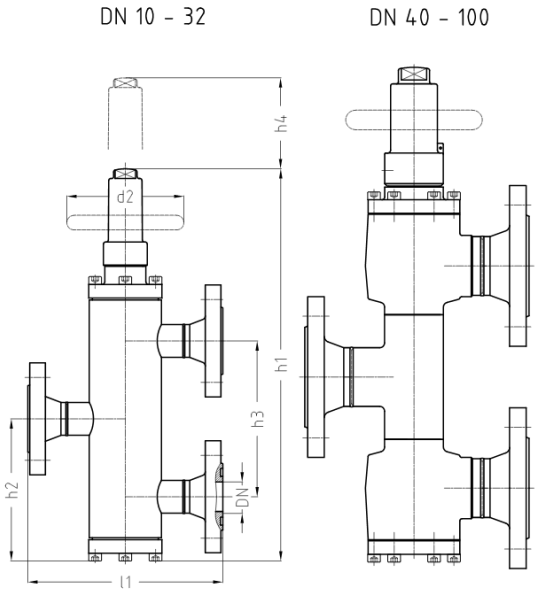
Nominal size:		Flanged ends acc. to:								
100	4"		356	356	397	812	329	393	600	180

Table 8: 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.

10 WVB FL NIRO HT

FL: Flanged ends, **HT:** Temperature up to +200°C
WVR stainless steel change-over valve with metal bellows for natural gases and liquids (e.g. NH3, CO2) and non-corrosive media according to EN 378-1



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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	-10	+50	+200	TS [°C]
DN 10...100 3/8"...4"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]

Nominal size:		Flanged ends acc. to:								
		AWP DN10-20 PN25 DN25-80 PN40	PN25 DIN 2634 EN1092-1	PN40 DIN 2635 EN1092-1	ANSI 300 RF					
DN	INCH	l1	l1	l1	l1	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

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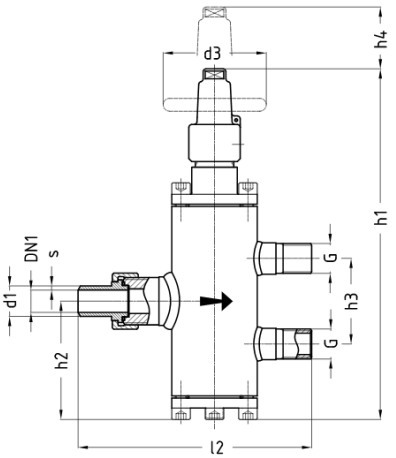
Nominal size:		Flanged ends acc. to:								
100	4"		356	356	397	812	329	393	600	180

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 SE HT

SE: Screwed ends,**HT:** Temperature up to +200°C
WVR steel change-over valve with metal bellows for natural gases and liquids (e.g. NH3, CO2) and non-corrosive media according to EN 378-1



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	-10	+50	+200	TS [°C]
DN15 G1"/G1/2"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]

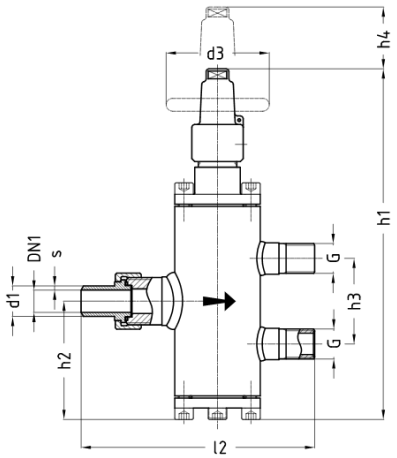
Nominal size:	Screwed ends		Welding nipples										
	Inlet	Outlet	Inlet		Outlet								
DN1/DN2	G*	G*	d1	s	d2	s	l1	l2	h1	h2	h3	h4	d3
15/8	1"	1/2"	21.3	2.0	13.5	1.8	195	164	246	83	60	140	60

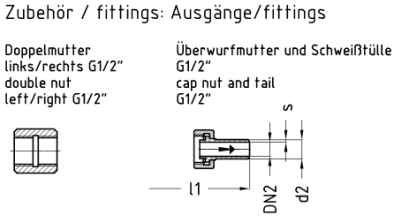
Table 10: Dimensions
*) Whitworth – pipe thread DIN ISO 228, h4 = dismantling dimension
Available accessories:

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

12 WVB SE NIRO HT

SE: Screwed ends,**HT:** Temperature up to +200°C
WVR stainless steel change-over valve with metal bellows for natural gases and liquids (e.g. NH3, CO2) and non-corrosive media according to EN 378-1





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	-10	+50	+200	TS [°C]
DN15 G1"/G1/2"	PN25	25	25	25	PS [bar]
	PN40	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
*) Whitworth – 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"-G1/2"L

13 Appendix

14 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.

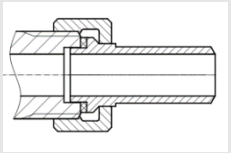
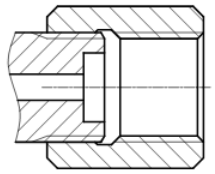
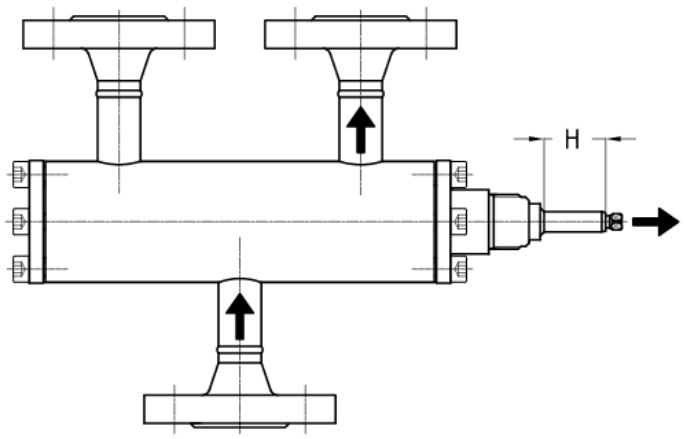
Accessory group	Valve designation	Code fittings	Connections	
UM + ST Union nut with welding nipple				
UM + ST 	SVUA SE G1/2" / G1/2" SVUB SE G1/2" / G1/2"	44660E10.5/10001	I: O:	G1/2" with UM + ST 15.0x1.5 mm
	SVUA SE G1/2" / G1" SVUB SE G1/2" / G1"	44660E10.5/10001 00060F07A5A0B601	I: O:	G1/2" with 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				
DM 	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 12: Accessories relief / change-over valves

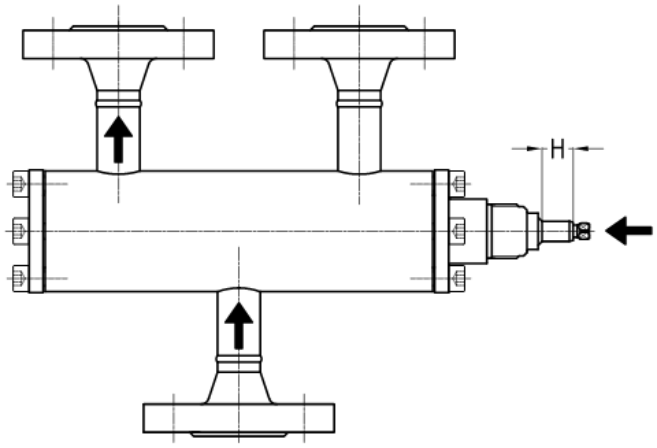
I: = inlet/ O: = outlet

15 WVR illustration of the opened port

Illustration of the opened port depending on the stem length



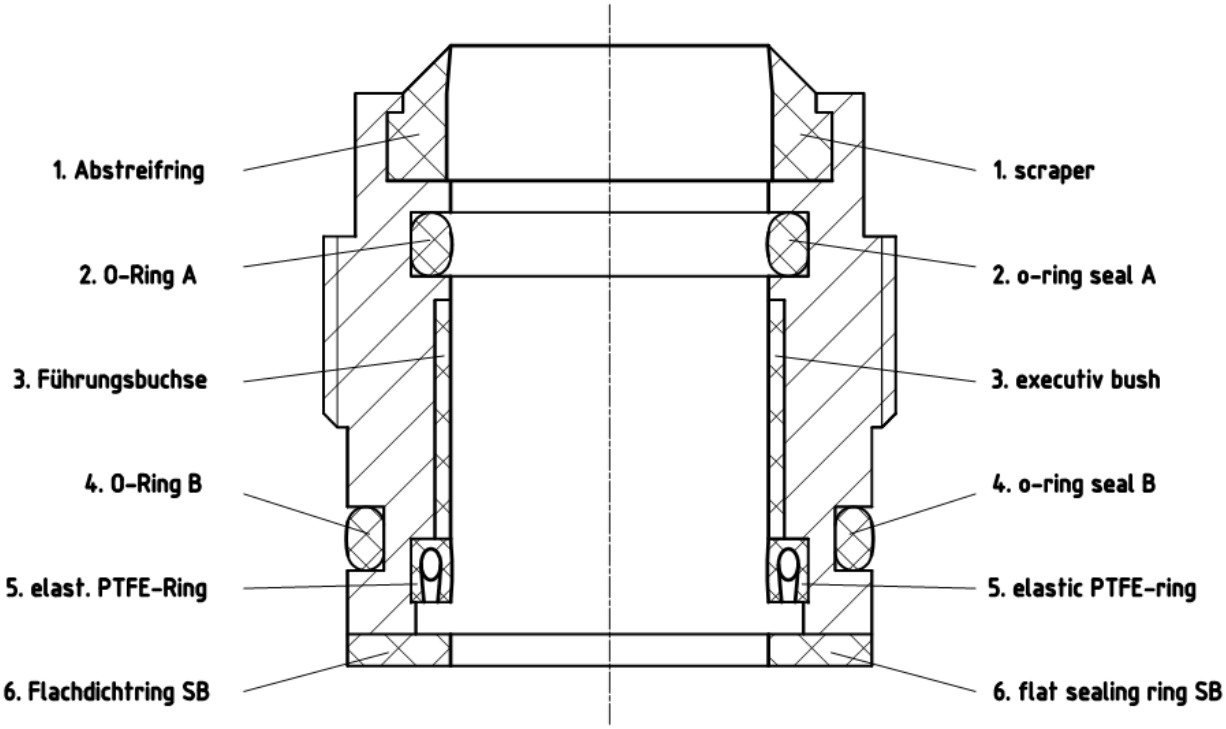
DN	H in [mm]
10-20	22
25-32	34
40-50	38
65	32
80-100	48



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

16 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.

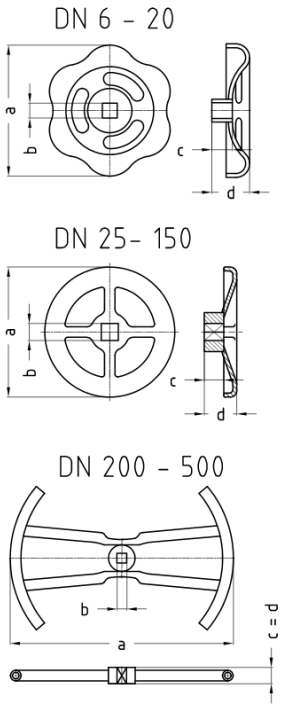
6. Flat sealing ring SB

   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.

17 Handwheel / Cap

HR / K

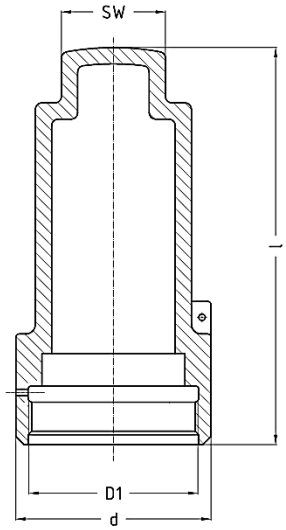


HR
handwheel

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 13: 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 14: Dimensions DN 6 - 500

18 Comparison of European / American materials

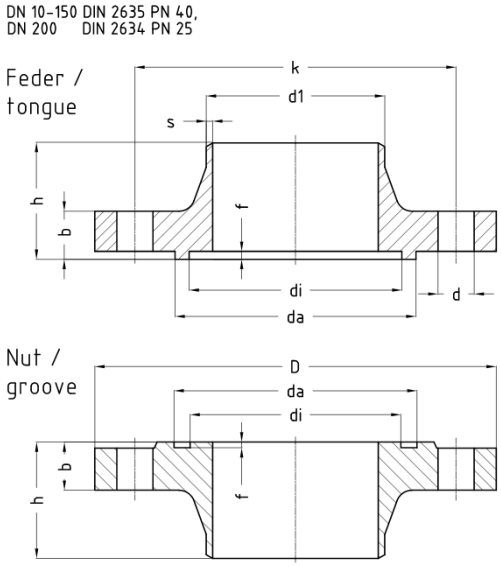
GEA AWP valves contain individual parts in different materials. The following table contains all materials that GEA AWP uses for pressure-retaining parts and lists the equivalent American materials.

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.

19 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



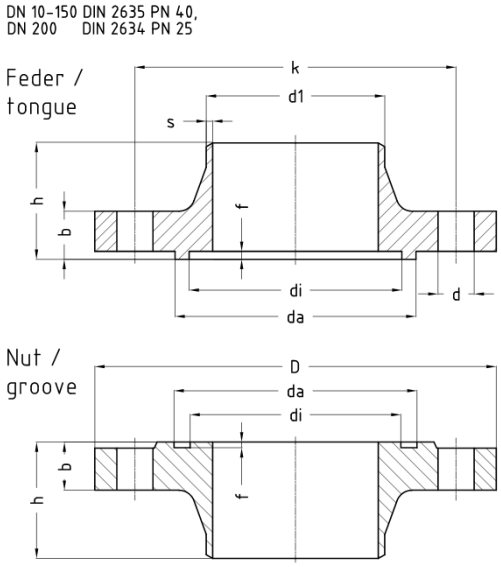
DIN2634 PN25 DN10-150 / DIN 2635 PN40 DN10-400																				
	Welding ends									Flange facing design						Screws DIN 931			Sealing ring DIN 2691	
	Series 1		Series 2							Groove			Tongue							
DN	d1	s	d1	s	b	k	h	d	D	di	da	f	di	da	f	Quant-ity	Thread	Lengt h	di	da
10	17.2	1.8	15.0	2.5	16	60	35	14	90	23	35	2.5	24	34	4.0	4	M 12	45	24	34
15	21.3	2.0	20.0	2.5	16	65	38	14	95	28	40	2.5	29	39	4.0	4	M 12	45	29	39
20	26.9	2.3	25.0	2.5	18	75	40	14	105	35	51	2.5	36	50	4.0	4	M 12	50	36	50
25	33.7	2.6	32.0	3.0	18	85	40	14	115	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	18	100	42	18	140	50	66	2.5	51	65	4.0	4	M 16	55	51	65
40	48.3	2.6	45.0	3.0	18	110	45	18	150	60	76	2.5	61	75	4.0	4	M 16	55	61	75
50	60.3	2.9	57.0	3.2	20	125	48	18	165	72	88	2.5	73	87	4.0	4	M 16	60	73	87
65	76.1	2.9	76.1	3.6	22	145	52	18	185	94	110	2.5	95	109	4.0	8	M 16	60	95	109
80	88.9	3.2	88.9	4.0	24	160	58	18	200	105	121	2.5	106	120	4.0	8	M 16	65	106	120
100	114.3	3.6	108.0	4.0	24	190	65	22	235	128	150	3.0	129	149	4.5	8	M 20	70	129	149
125	139.7	4.0	133.0	4.0	26	220	68	26	270	154	176	3.0	155	175	4.5	8	M 24	80	155	175
150	168.3	4.5	159.0	4.5	28	250	75	26	300	182	204	3.0	183	203	4.5	8	M 24	80	183	203
200	219.1	6.3			34	320	88	30	375	238	260	3.0	239	259	4.5	12	M 27	100	239	259
250	273.0	7.1			38	385	105	33	450	291	313	3.0	292	312	4.5	12	M 30	110	292	312
300	323.9	8.0			42	450	115	33	515	342	364	3.0	343	363	4.5	16	M 30	120	343	363
350	355.6	8.8			46	510	125	36	580	394	422	3.5	395	421	5.0	16	M 33	130	395	421
400	406.4	11.0			50	585	135	39	660	446	474	3.5	447	473	5.0	16	M 36	140	447	473

Table 15: Installation lengths

20 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



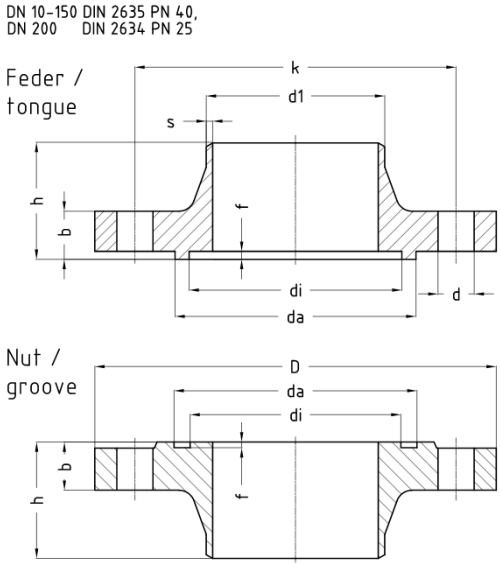
DIN 2634 PN25 DN200-500																		
	Welding ends							Flange facing design						Screws DIN 931			Sealing ring DIN 2691	
	Series 1							Groove			Tongue							
DN	d1	s	b	k	h	d	D	di	da	f	di	da	f	Quant-ity	Thread	Length	di	da
200	219.1	6.3	30	310	80	26	360	238	260	3.0	239	259	4.5	12	M 24	90	239	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	3.5	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	Quant-ity	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	155	50	66	2.5	51	65	4.0	4	M 20	70	51	65
40	48.3	2.9	26	125	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	Quant-ity	Thread	Length	di	da
50	60.3	2.9	26	135	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	205	94	110	2.5	95	109	4.0	8	M 20	75	95	109
80	88.9	3.6	28	170	72	22	215	105	121	2.5	106	120	4.0	8	M 20	75	106	120
100	114.3	4.0	30	200	78	26	250	128	150	3.0	129	149	4.5	8	M 24	90	129	149
125	139.7	4.5	34	240	88	30	295	154	176	3.0	155	175	4.5	8	M 27	100	155	175

Table 16: Installation lengths

21 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



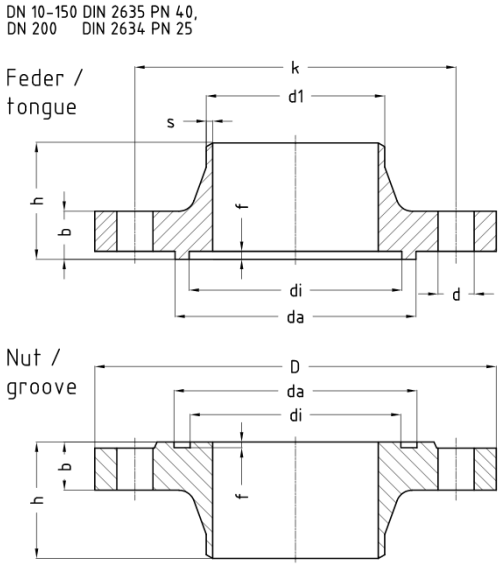
DIN EN 1092-1 PN25 DN10-150 / PN40 DN10-400																				
	Welding ends									Flange facing design						Screws DIN 931			Sealing ring DIN 2691	
	Series 1		Series 2							Groove			Tongue							
DN	d1	s	d1	s	b	k	h	d	D	di	da	f	di	da	f	Quant-ity	Thread	Lengt h	di	da
10	17.2	1.8	15.0	2.5	16	60	35	14	90	23	35	4.0	24	34	4.5	4	M 12	45	24	34
15	21.3	2.0	20.0	2.5	16	65	38	14	95	28	40	4.0	29	39	4.5	4	M 12	45	29	39
20	26.9	2.3	25.0	2.5	18	75	40	14	105	35	51	4.0	36	50	4.5	4	M 12	50	36	50
25	33.7	2.6	32.0	3.0	18	85	40	14	115	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	18	100	42	18	140	50	66	4.0	51	65	4.5	4	M 16	55	51	65
40	48.3	2.6	45.0	3.0	18	110	45	18	150	60	76	4.0	61	75	4.5	4	M 16	55	61	75
50	60.3	2.9	57.0	3.2	20	125	48	18	165	72	88	4.0	73	87	4.5	4	M 16	60	73	87
65	76.1	2.9	76.1	3.6	22	145	52	18	185	94	110	4.0	95	109	4.5	8	M 16	60	95	109
80	88.9	3.2	88.9	4.0	24	160	58	18	200	105	121	4.0	106	120	4.5	8	M 16	65	106	120
100	114.3	3.6	108.0	4.0	24	190	65	22	235	128	150	4.5	129	149	5.0	8	M 20	70	129	149
125	139.7	4.0	133.0	4.0	26	220	68	26	270	154	176	4.5	155	175	5.0	8	M 24	80	155	175
150	168.3	4.5	159.0	4.5	28	250	75	26	300	182	204	4.5	183	203	5.0	8	M 24	80	183	203
200	219.1	6.3			34	320	88	30	375	238	260	4.5	239	259	5.0	12	M 27	100	239	259
250	273.0	7.1			38	385	105	33	450	291	313	4.5	292	312	5.0	12	M 30	110	292	312
300	323.9	8.0			42	450	115	33	515	342	364	4.5	343	363	5.0	16	M 30	120	343	363
350	355.6	8.8			46	510	125	36	580	394	422	5.0	395	421	5.5	16	M 33	130	395	421
400	406.4	11.0			50	585	135	39	660	446	474	5.0	447	473	5.5	16	M 36	140	447	473

Table 17: Installation lengths

22 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



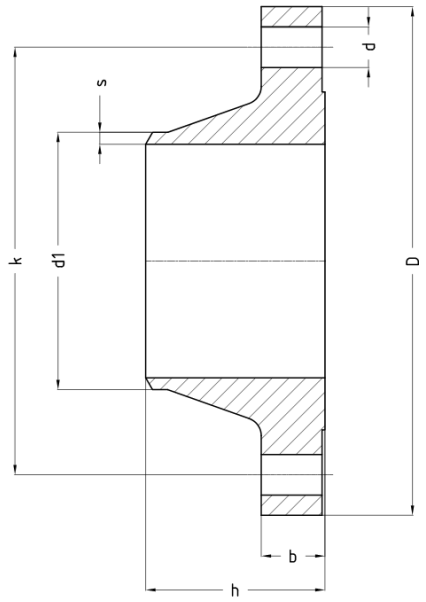
DIN EN 1092-1 PN25 DN200-500																		
	Welding ends							Flange facing design						Screws DIN 931			Sealing ring DIN 2691	
	Series 1							Groove			Tongue							
DN	d1	s	b	k	h	d	D	di	da	f	di	da	f	Quantity	Thread	Length	di	da
200	219.1	6.3	30	310	80	26	360	238	260	4.5	239	259	5.0	12	M 24	90	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 18: Installation lengths

23 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



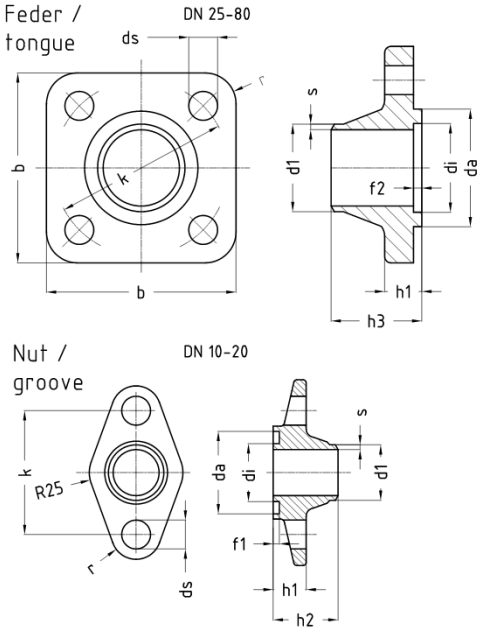
Nominal size		Welding ends acc. to:													
		ANSI		ANSI-FL 150lbs RF / sq. in					Screws DIN 931	ANSI-FL 300lbs RF / sq. in					Screws DIN 931
DN	INCH	d1	s	b	k	h	d	D	Quantity	b	k	h	d	D	Quantity
15	1/2"	21.3	2.8	11.2	60.5	47.8	15.7	88.9	4	14.2	66.5	52.3	15.7	95.2	4
20	3/4"	26.7	2.9	12.7	69.9	52.3	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 19: Installation lengths

24 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	Length		
DN	d1	s	d1	s	d1	s	b	k	r	h1	ds	di	da	f1	h2	di	da	f2	h3				di	da
10	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	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	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	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	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	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	132	135	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	132	135	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	132	135	20	28	18	84	96	3	53.5	85	95	4	53.5	4	M 16	75	A85x95*

Table 20: Installation lengths
* = acc. to DIN 7603

25 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.
- Our general terms and conditions apply.

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