

3-WAY VALVES FOR REFRI- GERATION

WVR, WVB

02.07.2026



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.....	9
6	WVR SE NIRO	10
7	WVR SE NIRO	11
8	WVR SE Herl T19A	12
9	WVB materials.....	13
10	WVB FL.....	14
11	WVB FL NIRO.....	15
12	WVB SE.....	16
13	WVB SE NIRO	17
14	WVR AL materials	18
15	WVR FL.....	19
16	WVR FL.....	21
17	WVR FL Herl T25V.....	23
18	Accessories	24
19	WVR illustration of the opened port.....	25
20	Valve stem sealing system	26
21	Handwheel / Cap	27
22	Comparison of European / American materials	29
23	Welding neck flanges - DIN 2634/2635	30
24	Welding neck flanges - DIN 2634/2636/2637	32
25	Welding neck flanges - DIN EN 1092-1.....	34
26	Welding neck flanges - DIN EN 1092-1.....	36
27	Welding neck flanges - ANSI B16.5 raised face	38
28	Welding neck flanges - AWP.....	39
29	Legal notices.....	40

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

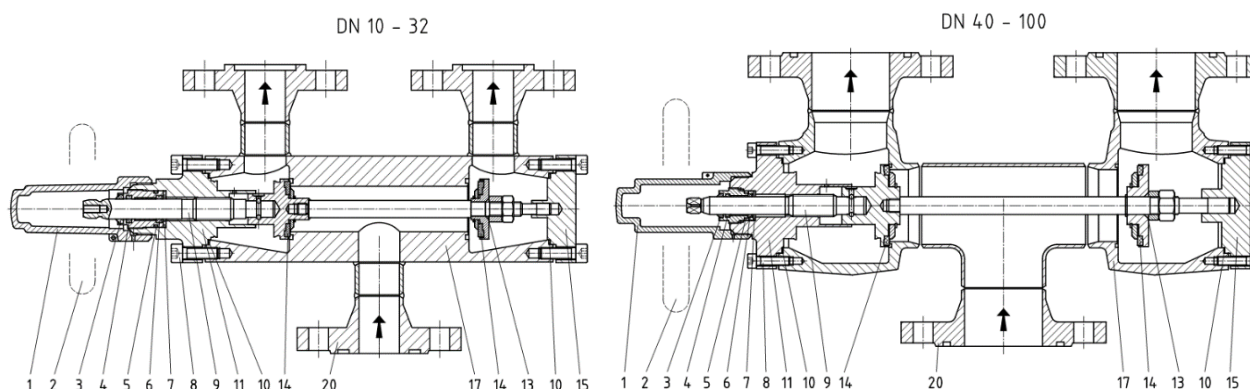
WVR AL	Connection	Form	Material	Valve type
WVR AL	Materials			
WVR AL PS25 / PS40	Flanged ends		Alu/St	WVR AL FL
			Alu/Niro	WVR AL FL NIRO
WVR AL Herl T25V PS25 / PS40	Flanged ends		Alu/St	WVR AL FL Herl
Information	SV UM + ST / WVR DM screwed ends			
	Illustration of the opened port			
	Valve stem 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



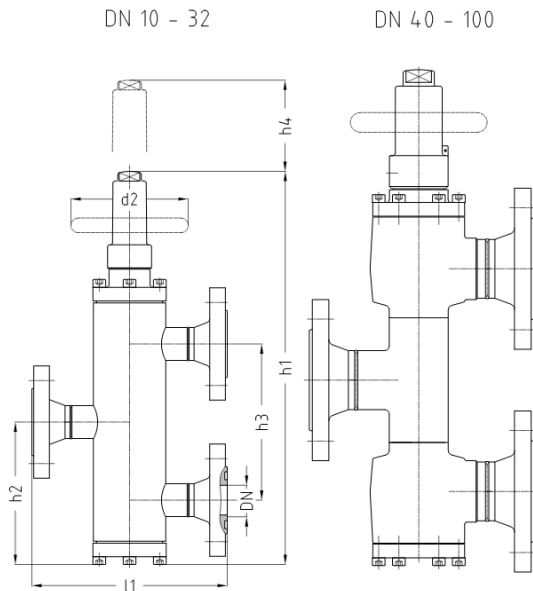
Part		Material for steel valves	Material for stainless steel valves
1	Cap	Aluminium AISi10Mg	Aluminium AISi10Mg
2	Handwheel	Steel	Steel
3	Wiper ring	NBR	NBR
4	O-ring A	CR, NBR, HNBR, EPDM, FPM*	CR, NBR, HNBR, EPDM, FPM*
5	O-ring B	CR, NBR, HNBR, EPDM, FPM*	CR, NBR, HNBR, EPDM, FPM*
6	Spring-loaded U-ring	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. allowable operating pressure in bar

TS: Permissible operating temperature in °C corresponding to 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:										
		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						
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
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

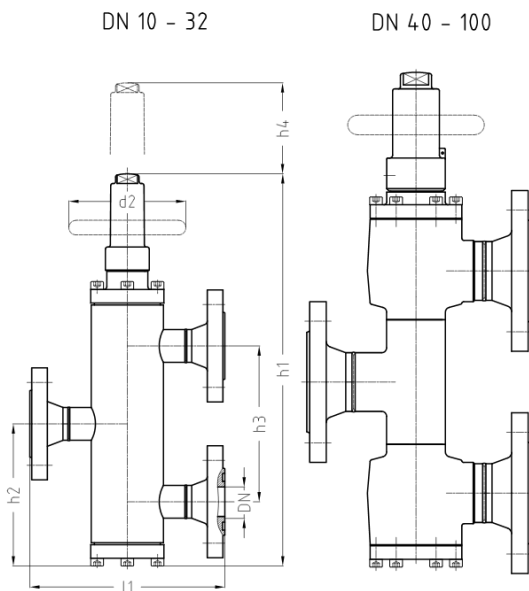
Table 1: Dimensions

*) 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. allowable operating pressure in bar

TS: Permissible operating temperature in °C corresponding to 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:										
		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
80	3"	294	304	304		345	743	289	325		530	180
100	4"		356	356		397	812	329	393		600	180

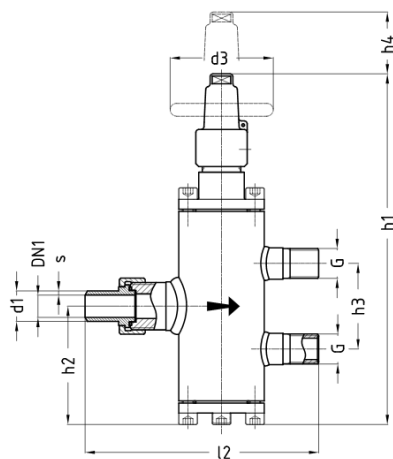
Table 2: Dimensions

*) 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

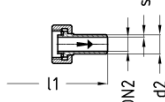


Zubehör / fittings: Ausgänge/fittings

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



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



Pressure/temperature operating limits:

PS: Max. allowable operating pressure in bar

TS: Permissible operating temperature in °C corresponding to 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 228h4 = dismantling dimension

Available accessories:

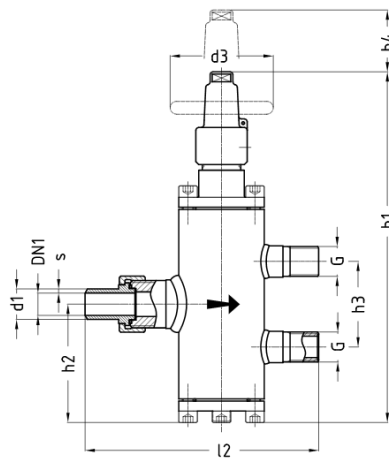
Inlet: UM+ST = union nut with welding sleeve and gasket G1"/21,3x2,0

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

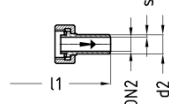


Zubehör / fittings: Ausgänge/fittings

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. allowable operating pressure in bar

TS: Permissible operating temperature in °C corresponding to 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								
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 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
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 228h4 = dismantling dimension

Available accessories:

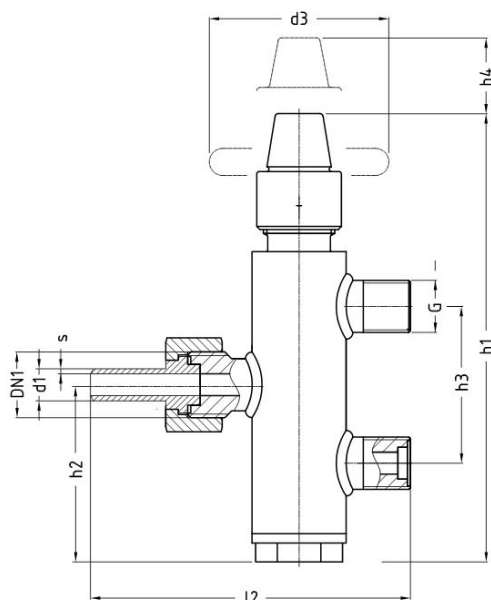
Inlet: UM+ST NIRO = union nut with welding sleeve and gasket G1"/21,3x2,0

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

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. allowable operating pressure in bar

TS: Permissible operating temperature in °C corresponding to 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								
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 DIN ISO 228h4 = dismantling dimension

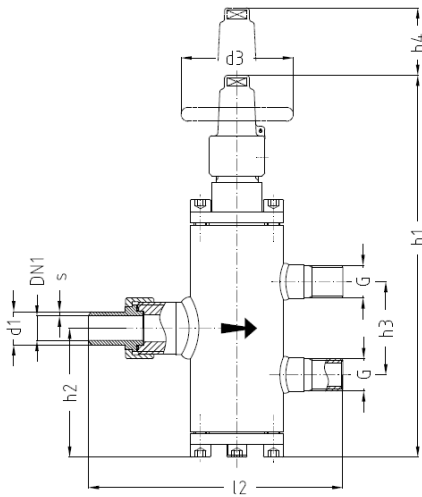
Available accessories:

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. allowable operating pressure in bar

TS: Permissible operating temperature in °C corresponding to the permissible operating pressures (PS)

PN: Nominal pressure rating

DN	PN	-60	-40	-25	-10	+50	+150	TS [°C]
DN15	PN25	6.25	12.5	18.7	25	25	25	PS [bar]
G1"/G1/2"	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 228h4 = dismantling dimension

Available accessories:

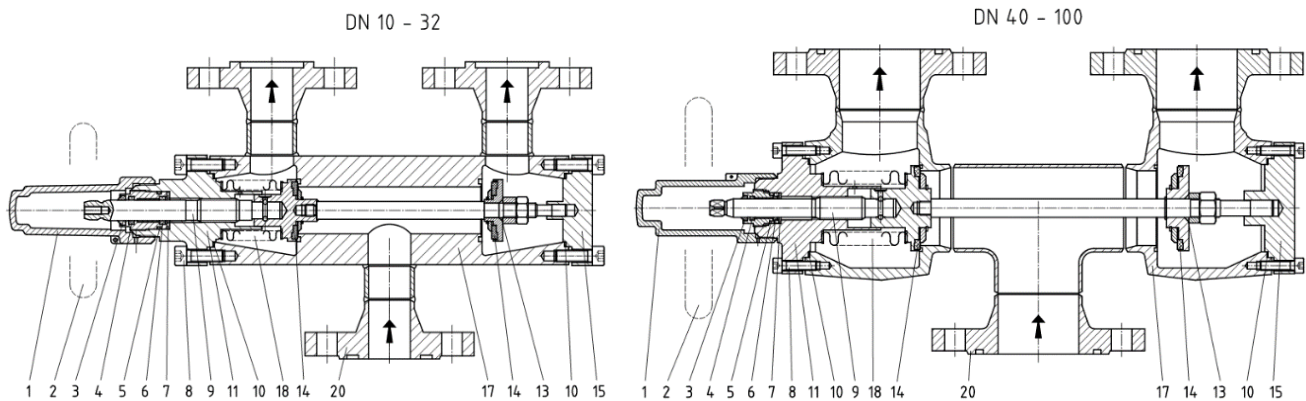
Inlet: UM+ST = union nut with welding sleeve and gasket G1"/21,3x2,0

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



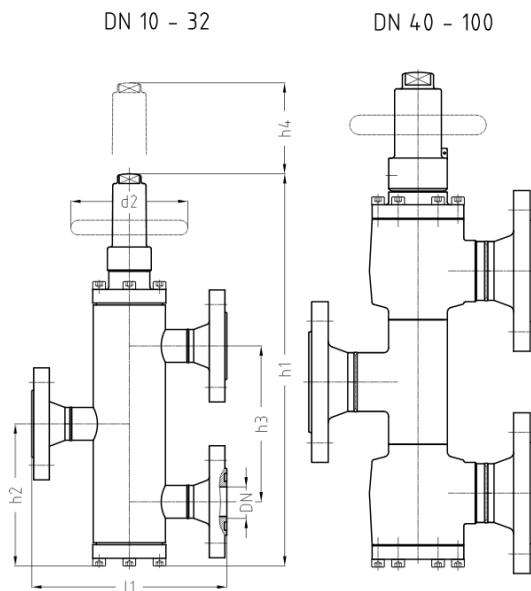
Part	Material for steel valves	Material for stainless steel valves
1 Cap	Aluminium AISi10Mg	Aluminium AISi10Mg
2 Handwheel	Steel	Steel
3 Wiper ring	NBR	NBR
4 O-ring A	CR, NBR, HNBR, EPDM, FPM*	CR, NBR, HNBR, EPDM, FPM*
5 O-ring B	CR, NBR, HNBR, EPDM, FPM*	CR, NBR, HNBR, EPDM, FPM*
6 Spring-loaded U-ring	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. allowable operating pressure in bar

TS: Permissible operating temperature in °C corresponding to 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:								
		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
100	4"		356	356	397	812	329	393	600	180

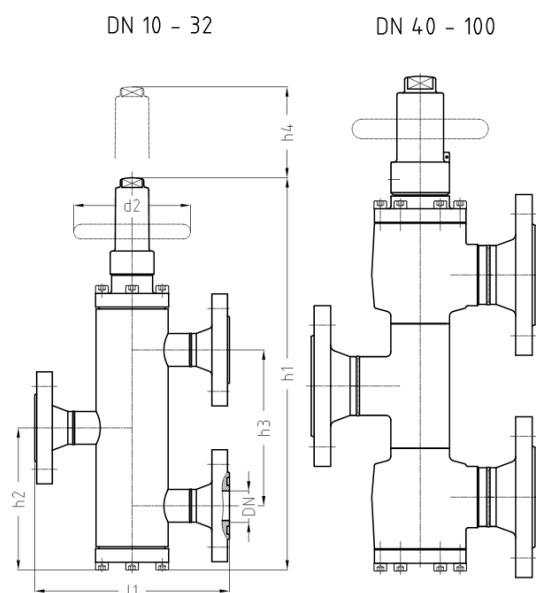
Table 9: Dimensions

*) 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. allowable operating pressure in bar

TS: Permissible operating temperature in °C corresponding to 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:								
		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
100	4"		356	356	397	812	329	393	600	180

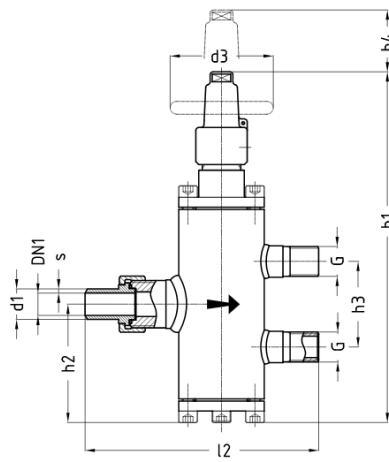
Table 10: Dimensions

*) 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 WVB SE

SE: Screwed 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

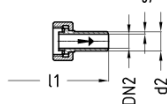


Zubehör / fittings: Ausgänge/fittings

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. allowable operating pressure in bar

TS: Permissible operating temperature in °C corresponding to the permissible operating pressures (PS)

PN: Nominal pressure rating

DN	PN	-60	-40	-25	-10	+50	+150	TS [°C]
DN15	PN25	6.25	12.5	18.7	25	25	25	PS [bar]
G1"/G1/2"	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 228h4 = dismantling dimension

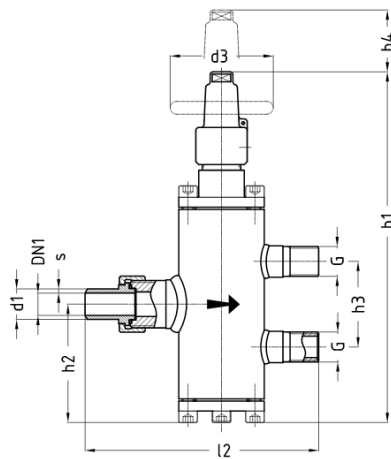
Available accessories: Inlet: UM+ST = union nut with welding sleeve and gasket G1"/21,3x2,0

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

13 WVB SE NIRO

SE: Screwed 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

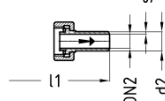


Zubehör / fittings: Ausgänge/fittings

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



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



Pressure/temperature operating limits:

PS: Max. allowable operating pressure in bar

TS: Permissible operating temperature in °C corresponding to 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]

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

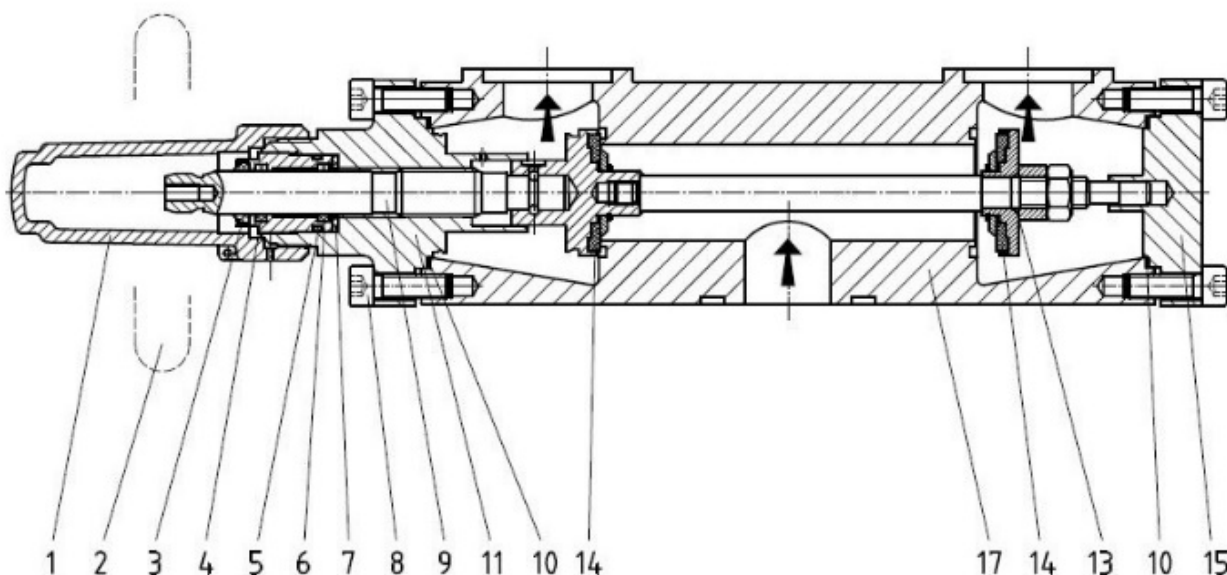
Outlet: DM NIRO = double nut right-hand/left-hand with gasket G1/2"-G1/2"L

14 WVR AL materials

Designation and materials

WVR AL – change-over valve, compact design

DN 15 – 100



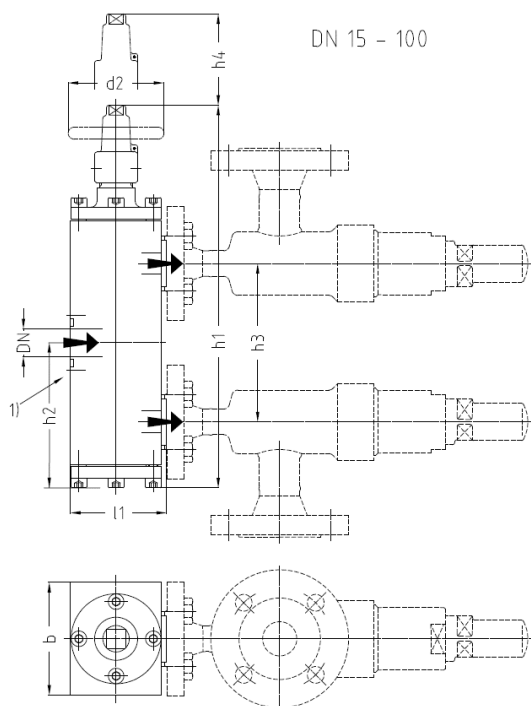
Part	Material – in steel design	Material – in stainless steel design
1 Cap	Aluminium AlSi10Mg	Aluminium AlSi10Mg
2 Handwheel	Steel	Steel
3 Wiper ring	NBR	NBR
4 O-ring A	CR, NBR, HNBR, EPDM, FPM*	CR, NBR, HNBR, EPDM, FPM*
5 O-ring B	CR, NBR, HNBR, EPDM, FPM*	CR, NBR, HNBR, EPDM, FPM*
6 Spring-loaded U-ring	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	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. allowable operating pressure in bar

TS: Permissible operating temperature in °C corresponding to the permissible operating pressures (PS)

PN: Nominal pressure rating

DN / INCH	PN	-60	-40	-25	-10	+50	+120	TS [°C]
DN 15 ...100 1/2" ... 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:															
		AWP DN15-20 PN25 DN25-32 PN40	PN25/40 DIN 2635 EN1092-1	PN63 DIN 2636 EN1092-1	ANSI 300 RF										
DN	INCH	l1	l1	l1	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	100	115	100	406	446	146.5	166.5	160	192	240	115	115	120
32	1 1/4"	100	100	115	100	446	446	166.5	166.5	194	184	240	140	140	120
40	1 1/2"	124	124	129	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
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

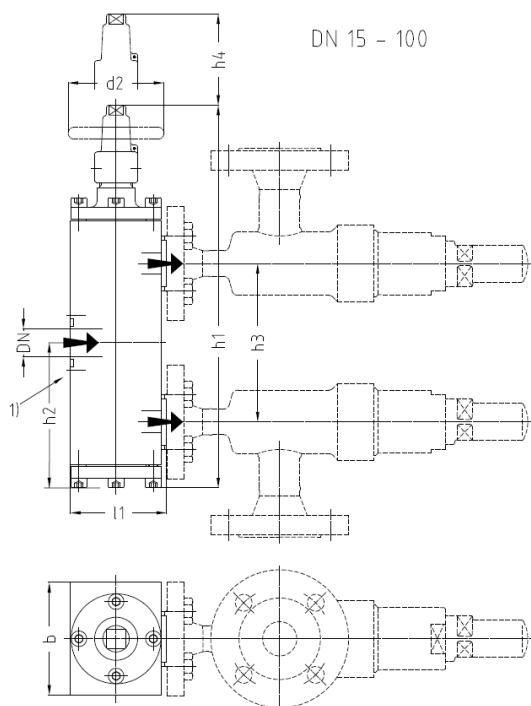
DIN/EN-flange facings as standard: inlet with groove and outlet with tongue according to DIN 2512, others on request.

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. allowable operating pressure in bar

TS: Permissible operating temperature in °C corresponding to the permissible operating pressures (PS)

PN: Nominal pressure rating

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

Nominal size: Flanged ends acc. to:															
		AWP DN15-20 PN25 DN25-32 PN40	PN25/40 DIN 2635 EN1092-1	PN63 DIN 2636 EN1092-1	ANSI 300 RF										
DN	INCH	l1	l1	l1	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	100	115	100	406	446	146.5	166.5	160	192	240	115	115	120
32	1 1/4"	100	100	115	100	446	446	166.5	166.5	194	184	240	140	140	120
40	1 1/2"	124	124	129	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
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

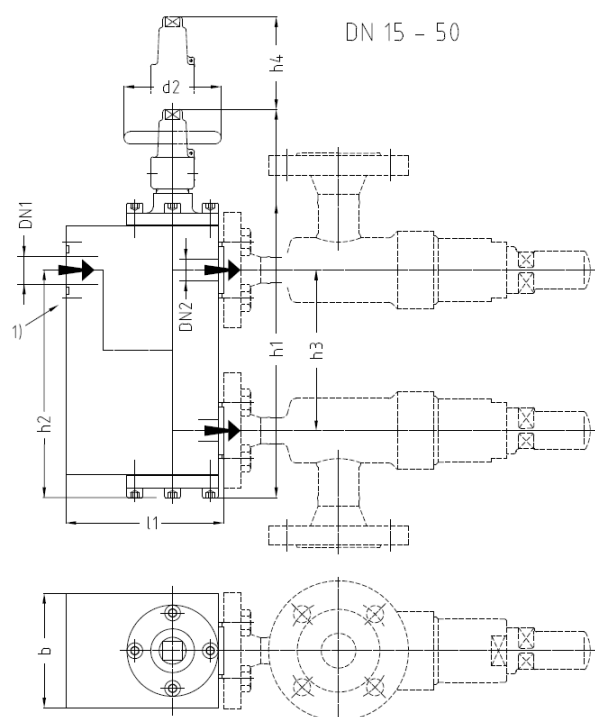
DIN/EN-flange facings as standard: inlet with groove and outlet with tongue according to DIN 2512, others on request.

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. allowable operating pressure in bar

TS: Permissible operating temperature in °C corresponding to 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:							
			PN25/40 DIN 2635 EN1092-1	ANSI 300 RF						
DN1	DN2	INCH	l1	l1	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.

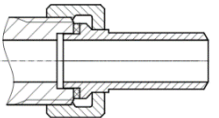
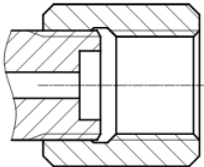
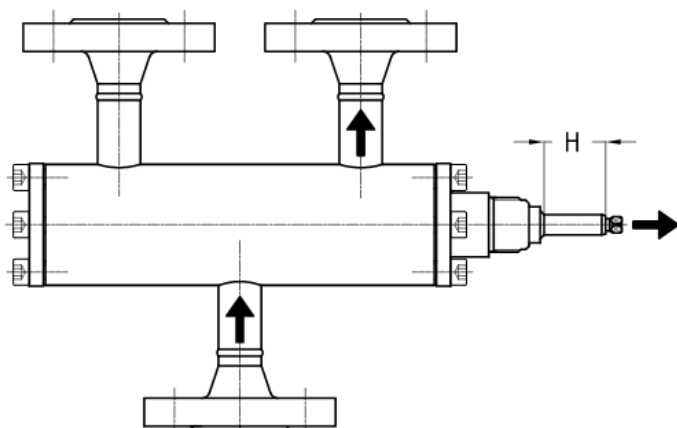
Accessory group	Valve designation	Code fittings	Connections	
UM + ST Union nut with welding nipple				
	SVUA SE G1/2" / G1/2" SVUB SE G1/2" / G1/2"	44660E10.5/10001	I: O:	G1/2" with UM + ST 15.0x1.5 mm
	SVUA SE G1/2" / G1" SVUB SE G1/2" / G1"	44660E10.5/10001 00060F07A5A0B601	I: O:	G1/2" with UM + ST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

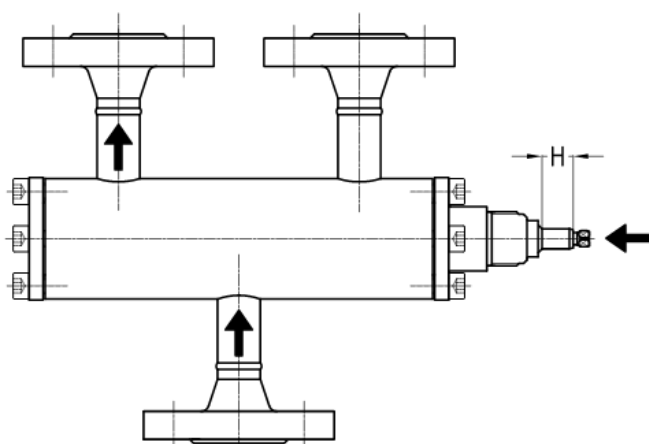
I: = inlet/ O: = outlet

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

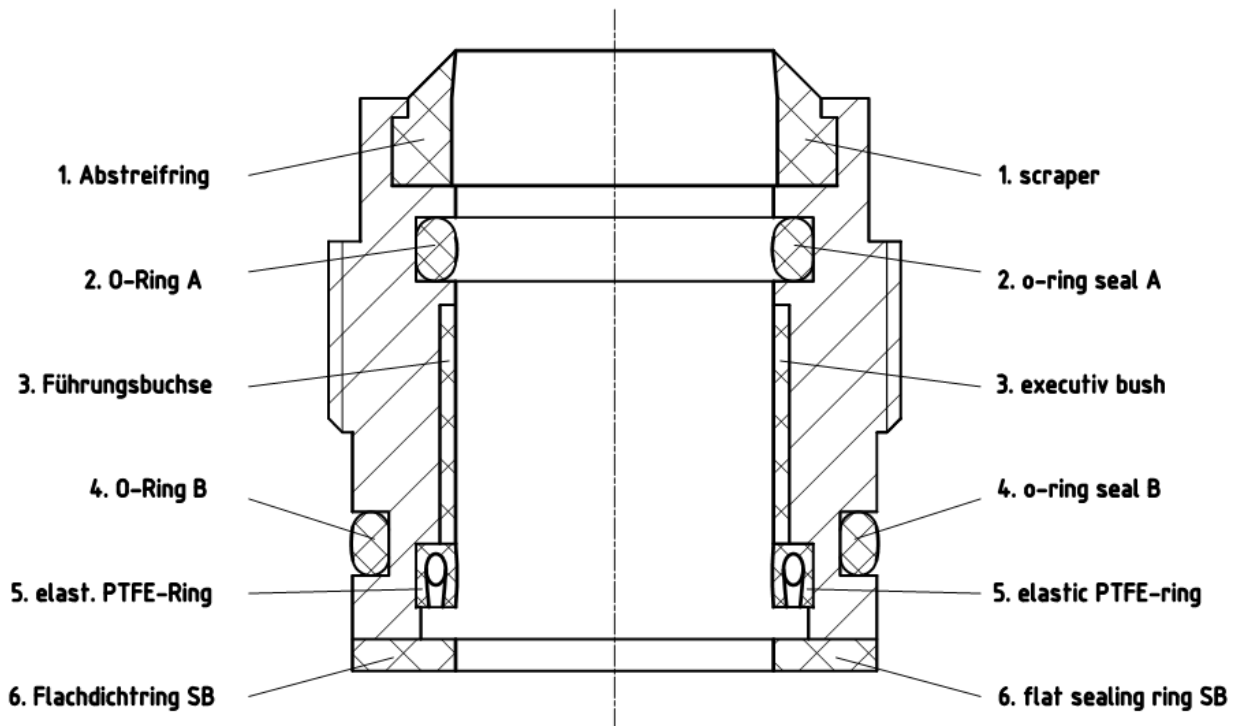


DN	H in [mm]
10-20	15
25-32	24
40-50	22
65	14
80-100	17

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.

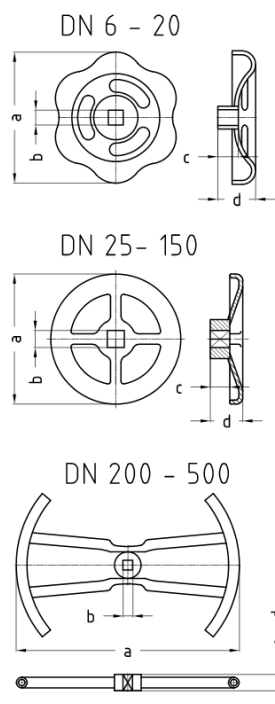
6. Flat sealing ring SB

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

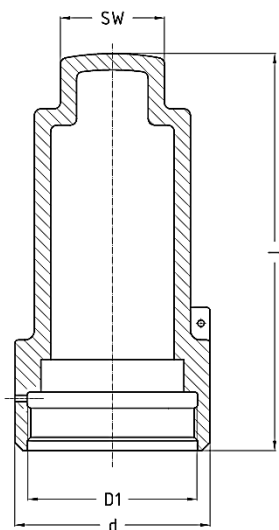


HR
handwheel

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.

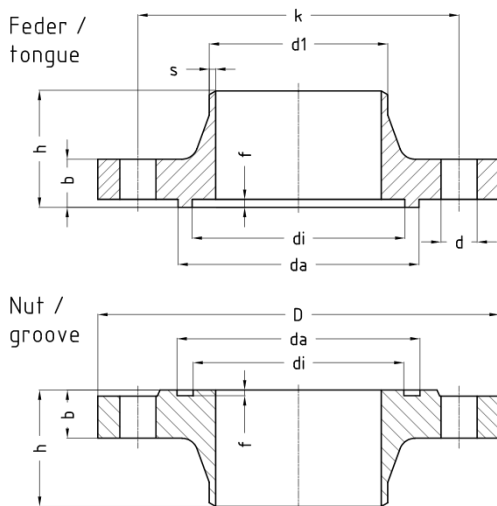
European material			American equivalent material	
Material number	Short name	Standard	Material standard	Grade
Valves made of carbon steel				
1.0345	P235GH, TC1 +N	DIN EN 10216-2	ASTM A106	A + B
1.0038	S235JR +N	DIN EN 10025-2	ASTM A570	36
1.0425	P265GH	DIN EN 10028-2	ASTM A516	60
1.0577	S355J2 +N	DIN 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								
DN	d1	s	d1	s	b	k	h	d	D	di	da	f	di	da	f	Quantity	Thread	Length	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	
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	

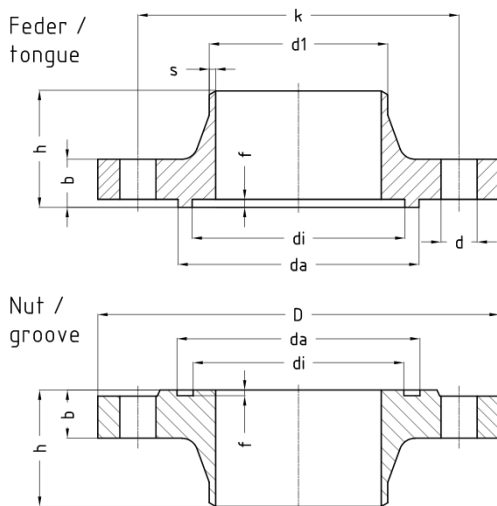
DIN2634 PN25 DN10-150 / DIN 2635 PN40 DN10-400																					
200	219.1	6.3			34	320	88	30	375	238	260	3.0	239	259	4.5	12		M 27	100	239	259
250	273.0	7.1			38	385	105	33	450	291	313	3.0	292	312	4.5	12		M 30	110	292	312
300	323.9	8.0			42	450	115	33	515	342	364	3.0	343	363	4.5	16		M 30	120	343	363
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 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																		
Welding ends			Flange facing design											Screws DIN 931			Sealing ring DIN 2691	
Series 1			Groove															
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	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
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	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

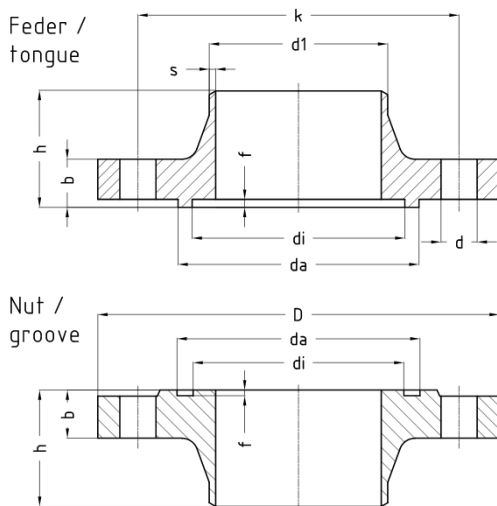
DIN 2634 PN25 DN200-500																		
32	42.4	2.9	24	110	60	22	155	50	66	2.5	51	65	4.0	4	M 20	70	51	65
40	48.3	2.9	26	125	62	22	170	60	76	2.5	61	75	4.0	4	M 20	70	61	75
DIN 2636 PN63 DN50-125																		
DN	d1	S	b	k	h	d	D	di	da	f	di	da	f	Quantity	Thread	Length	di	da
50	60.3	2.9	26	135	62	22	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 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								
DN	d1	s	d1	s	b	k	h	d	D	di	da	f	di	da	f	Quantity	Thread	Length	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	
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	

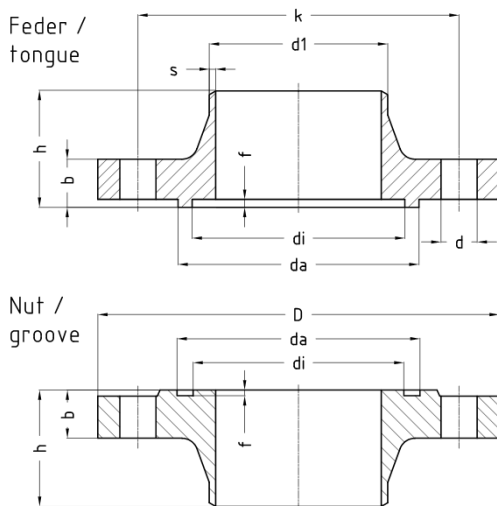
DIN EN 1092-1 PN25 DN10-150 / PN40 DN10-400																					
200	219.1	6.3			34	320	88	30	375	238	260	4.5	239	259	5.0	12		M 27	100	239	259
250	273.0	7.1			38	385	105	33	450	291	313	4.5	292	312	5.0	12		M 30	110	292	312
300	323.9	8.0			42	450	115	33	515	342	364	4.5	343	363	5.0	16		M 30	120	343	363
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 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



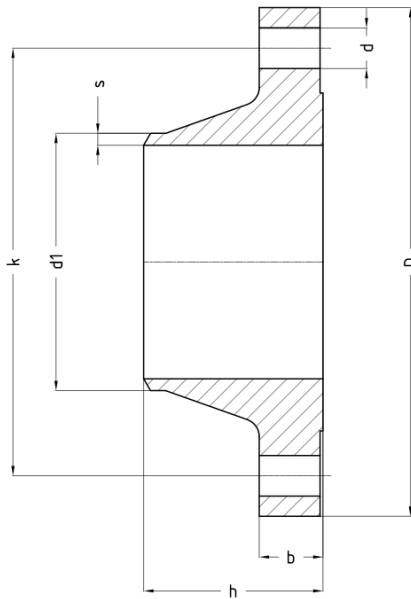
DIN EN 1092-1 PN25 DN200-500																		
Welding ends			Flange facing design											Screws DIN 931			Sealing ring DIN 2691	
Series 1			Groove											Tongue				
DN	d1	s	b	k	h	d	D	di	da	f	di	da	f	Quantity	Thread	Length	di	da
200	219.1	6.3	30	310	80	26	360	238	260	4.5	239	259	5.0	12	M 24	90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

DIN EN 1092-1 PN25 DN200-500																			
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

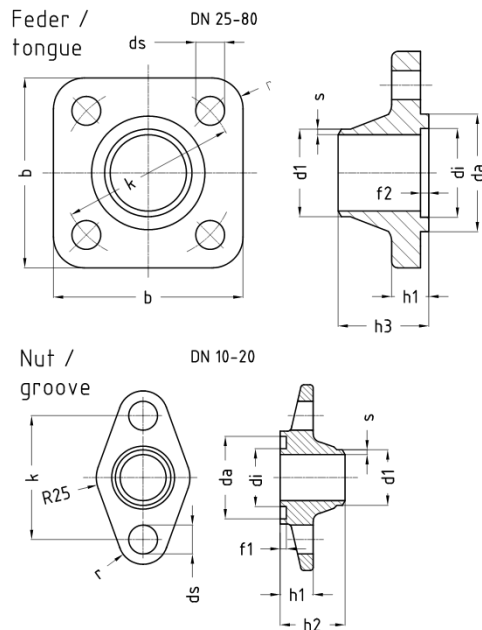


Nominal size		Welding ends acc. to:													
DN	INCH	ANSI		ANSI-FL 150lbs RF / sq. in					Screws DIN 931 Quantity	ANSI-FL 300lbs RF / sq. in					Screws DIN 931 Quantity
		d1	s	b	k	h	d	D		b	k	h	d	D	
15	1/2"	21.3	2.8	11.2	60.5	47.8	15.7	88.9	4	14.2	66.5	52.3	15.7	95.2	4
20	3/4"	26.7	2.9	12.7	69.9	52.3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