

SAFETY VALVES FOR REFRIGERATION

SVA, SVU

05.02.2026



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1 SVA / SVU

SVA: Safety valve - back-pressure dependent

SVA	Connection	Form	Material	Valve type
SVA	Materials			
SVAA / SVAB PS25 / PS40 / PS63	Flanged ends		St	SVAA / SVAB FL
			NIRO	SVAA / SVAB FL NIRO
	Screwed ends		St	SVAA / SVAB SE
			NIRO	SVAA / SVAB SE NIRO

SVU: Safety overflow valve - back-pressure independent

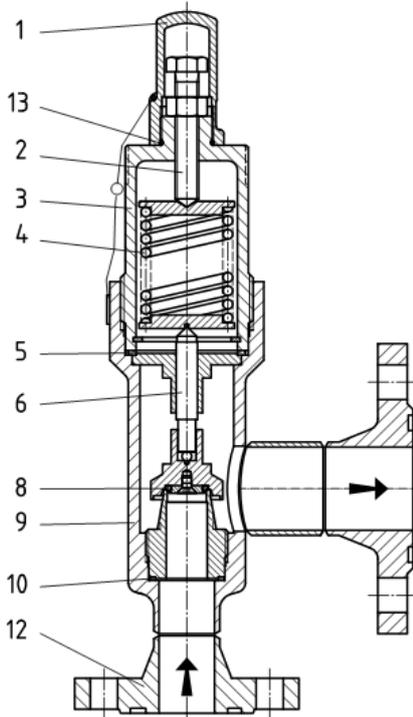
SVU	Connection	Form	Material	Valve type	
SVU	Materials				
SVUA / SVUB PS25 / PS40 / PS63	Welding ends		St	SVUA / SVUB AE	
			NIRO	SVUA / SVUB AE NIRO	
	Flanged ends		St	SVUA / SVUB FL	
			NIRO	SVUA / SVUB FL NIRO	
			St	SVUA / SVUB P FL	
			NIRO	SVUA / SVUB P FL NIRO	
	Soldering ends		St	SVUA / SVUB LE	
			NIRO	SVUA / SVUB LE NIRO	
	Screwed ends		St	SVUA / SVUB SE	
			NIRO	SVUA / SVUB SE NIRO	
			St	SVUA / SVUB P SE	
			NIRO	SVUA / SVUB P SE NIRO	
	Information	SV UM + ST / WVR DM screwed ends			
		Pressure range springs safety valves			
		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

2 SVA materials

Designation and materials

SVA - safety valve



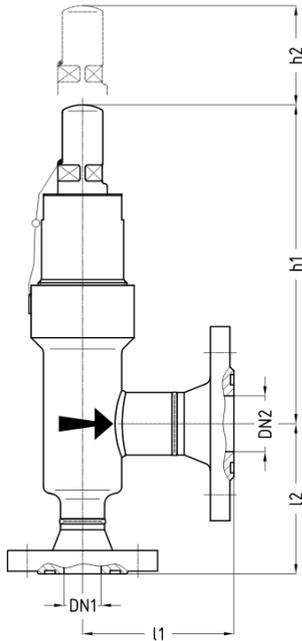
Part		Material for steel valves	Material for stainless steel valves
1	Cap	Aluminium AlSi10Mg	Aluminium AlSi10Mg
2	Adjustment screw	8.8	8.8
3	Bonnet	S355J2 1.0577	X8CrNiS18-9 1.4305 X5CrNi18-10 1.4301 X2CrNi19-11 1.4306
4	Tongue	SH	SH
5	Flat sealing ring for bonnet	Alu	Alu
6	Stem	X8CrNiS18-9 1.4305	X8CrNiS18-9 1.4305
8	Valve disc O-ring	CR, NBR, HNBR, EPDM, PTFE*	CR, NBR, HNBR, EPDM, PTFE*
9	Body	S355J2 1.0577 P235GH 1.0345	X5CrNi18-10 1.4301
10	Flat sealing ring SS	AFM30	AFM30
12	Flange	P250GH 1.0460 P355NL1 1.0566	X6CrNiTi18-10 1.4541
13	Cap O-ring	CR, NBR, HNBR, EPDM, FPM*	CR, NBR, HNBR, EPDM, FPM*

* depending on the refrigerant used

3 SVAA FL / SVAB FL

O: PTFE seat seal, **B:** elastomer seat seal, **FL:** Flanged ends

SVA steel safety valve - back-pressure dependent for natural refrigerants (NH₃, CO₂) and non-corrosive gases 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 SVAA	PN	-60	-10	+50	+180	TS [°C]
DN / INCH SVAB	PN	-50	-10	+50	+110	TS [°C]
SVAA/SVAB	PN25	18.7	25	25	25	PS [bar]
DN 15/25...25/40	PN40	30	40	40	40	PS [bar]
1/2"-1"...1"-1 1/2"	PN63	47.2	63	63	63	PS [bar]
SVAA/SVAB	PN25	18.7	25	25	25	PS [bar]
DN 32/50...40/65	PN40	30	40	40	40	PS [bar]
1 1/4"-2"...1 1/2-2 1/2"						

Nominal size:				Flanged ends acc. to:								Response pressure range						
DN*		Base valve	Type *	AWP	PN25	PN40	PN63	ANSI							h1*)			
				DN10-20	DIN	DIN	DIN	300 RF							for			
				PN25	2634	2635	2636											
				DN25-80	EN1092-	EN1092	EN1092											
				PN40	1	-1	-1											
DN1/ DN2	INCH	Base	Type	l1	l2	l1	l2	l1	l2	l1	l2	l1	l2	h1	h1*)	h2	bar	bar
15/25	1/2"-1"	15/25		100	90	96	96	96	96	11	103	11	11	20	7	50	5-63	

Nominal size:			Flanged ends acc. to:											Response pressure range				
15/25	1/2"-1"	15/25	HB			95	95	95	95					20	50	5-40		
20/25	3/4"-1	15/25	HB			95	95	95	95					20	50	5-40		
25/25	1"-1"	15/25	HBJ			100	100	100	100					20	50	5-40		
20/32	3/4"-1 1/4"	20/32		110	100	108	108	108	108	126	116	131	125	238	258	50	5-63	40-63
25/32	1"-1 1/4"	20/32	HB			100	100	100	100					238	50	5-40		
32/32	1 1/4"-1 1/4"	20/32	HB			105	105	105	105					238	50	5-40		
25/40	1"-1 1/2"	25/40		110	120	116	116	116	116	133	134	139	138	246	266	50	5-63	25-63
32/40	1 1/4"-1 1/2"	25/40	HB			105	105	105	105					246	266	50	5-40	25-40
40/40	1 1/2"-1 1/2"	25/40	HB			115	115	115	115					246	266	50	5-40	25-40
32/50	1 1/4"-2"	32/50		117	130	128	128	128	128			144	151	278	60	5-40		
40/50	1 1/2"-2"	32/50	HB			115	115	115	115					278	60	5-40		
50/50	2"-2"	32/50	HB			125	125	125	125					278	60	5-40		
40/65	1 1/2"-2 1/2"	40/65		149	130	136	136	136	136			171	159	281	60	5-40		
50/65	2"-2 1/2"	40/65	HB			125	125	125	125					281	60	5-40		
65/65	2 1/2"-2 1/2"	40/65	HB			145	145	145	145					281	60	5-40		

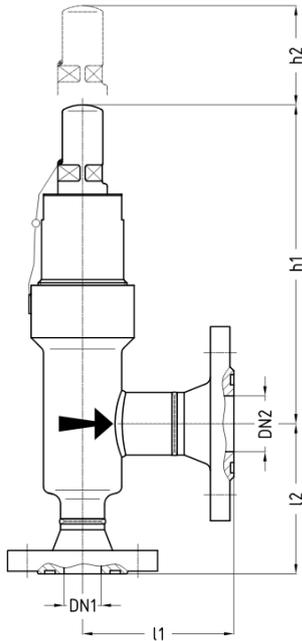
Table 1: Dimensions

DN*: Flange connection variants consisting of base valve. Discharge capacity and component mark as base valve.
 Type*: HB = installation lengths according to EN-standard, h2 = dismantling dimension, DIN/EN flange facings with DIN 2512 groove as standard

4 SVAA FL NIRO / SVAB FL NIRO

O: PTFE seat seal, **B:** elastomer seat seal, **FL:** Flanged ends

SVA stainless steel safety valve - for natural refrigerants (NH₃, CO₂) and non-corrosive gases 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 SVAA	PN	-60	-10	+50	+180	TS [°C]
DN / INCH SVAB	PN	-50	-10	+50	+110	TS [°C]
SVAA/SVAB DN 15/25...25/40 1/2"-1"...1"-1 1/2"	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]
	PN63	63	63	63	63	PS [bar]
SVAA/SVAB DN 32/50...40/65 1 1/4"-2"...1 1/2-2 1/2"	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]

Nominal size:				Flanged ends acc. to:										Response pressure range				
DN*		Base valve	Type *	AWP		PN25		PN40		PN63		ANSI 300 RF					h1*) for	
DN1/ DN2	INCH	Base	Type	l1	l2	l1	l2	l1	l2	l1	l2	l1	l2	h1	h1*)	h2	bar	bar
15/25	1/2"-1"	15/25		100	90	96	96	96	96	114	103	118	110	20	7	50	5-63	

Nominal size:			Flanged ends acc. to:											Response pressure range				
15/25	1/2"-1"	15/25	HB			95	95	95	95					207	50	5-40		
20/25	3/4"-1	15/25	HB			95	95	95	95					207	50	5-40		
25/25	1"-1"	15/25	HBJ			100	100	100	100					207	50	5-40		
20/32	3/4"-1 1/4"	20/32		110	100	108	108	108	108	126	116	131	125	238	258	50	5-63	40-63
25/32	1"-1 1/4"	20/32	HB			100	100	100	100					238	50	5-40		
32/32	1 1/4"-1 1/4"	20/32	HB			105	105	105	105					238	50	5-40		
25/40	1"-1 1/2"	25/40		110	120	116	116	116	116	133	134	139	138	246	266	50	5-63	25-63
32/40	1 1/4"-1 1/2"	25/40	HB			105	105	105	105					246	266	50	5-40	25-40
40/40	1 1/2"-1 1/2"	25/40	HB			115	115	115	115					246	266	50	5-40	25-40
32/50	1 1/4"-2"	32/50		117	130	122	128	122	128			144	151	278	60	5-40		
40/50	1 1/2"-2"	32/50	HB			115	115	115	115					278	60	5-40		
50/50	2"-2"	32/50	HB			125	125	125	125					278	60	5-40		
40/65	1 1/2"-2 1/2"	40/65		149	130	147	136	147	136			171	159	281	60	5-40		
50/65	2"-2 1/2"	40/65	HB			125	125	125	125					281	60	5-40		
65/65	2 1/2"-2 1/2"	40/65	HB			145	145	145	145					281	60	5-40		

Table 2: Dimensions

DN*: Flange connection variants consisting of base valve. Discharge capacity and component mark as base valve.

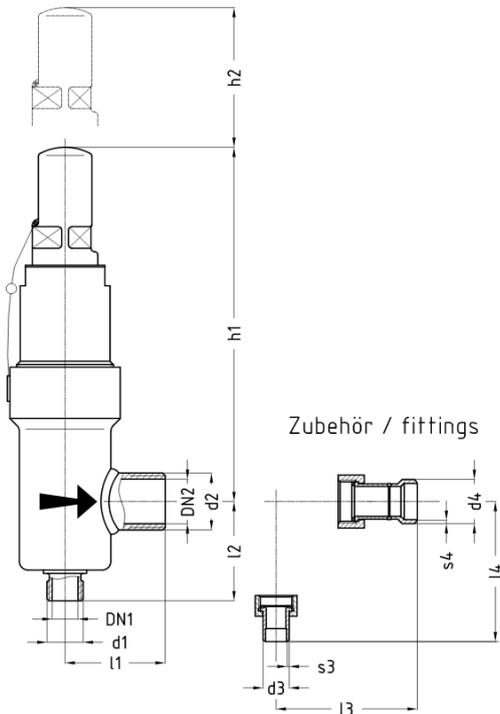
Type*: HB = installation lengths according to EN-standard, h1*) PN63 h2 = dismantling dimension

DIN/EN flange facings with DIN 2512 groove as standard

5 SVAA SE / SVAB SE

O: PTFE seat seal, **B:** elastomer seat seal, **SE:** Screwed ends

SVA steel safety valve - back-pressure dependent for natural refrigerants (NH₃, CO₂) and non-corrosive gases 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 SVAA	PN	-60	-10	+50	+180	TS [°C]
DN / INCH SVAB	PN	-50	-10	+50	+110	TS [°C]
SVAA/SVAB DN 15/25	PN25	18.7	25	25	25	PS [bar]
	PN40	30	40	40	40	PS [bar]
	PN63	47.2	63	63	63	PS [bar]

Nominal size: Screwed ends acc. to:															Response pressure range	
DN1	DN2	Male thread	d1	d2	d3	s3	d4	s4	l1	l2	l3	l4	h1	h1*)	h2	bar
15	25	G1/2"-G1"	G1/2"	G1"	20	2.0	34	3.0	58	58	73	83	148	175	32	5-63

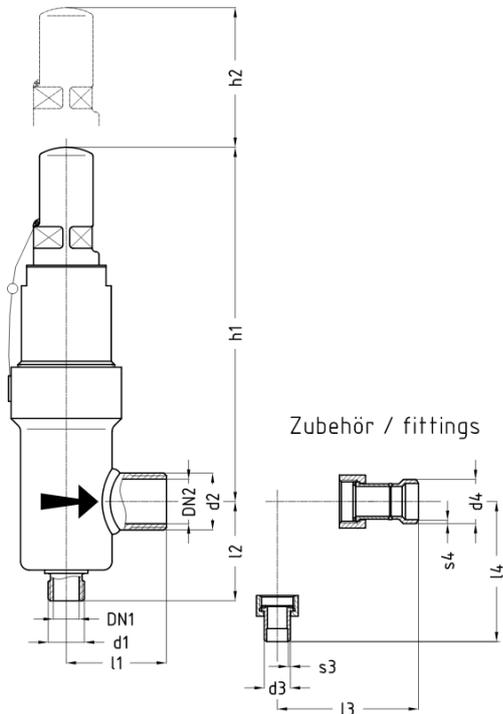
Table 3: Dimensions

h1*) PN63 h2 = dismantling dimension

6 SVAA SE NIRO / SVAB SE NIRO

O: PTFE seat seal, **B:** elastomer seat seal, **SE:** Screwed ends

SVA stainless steel safety valve - for natural refrigerants (NH₃, CO₂) and non-corrosive gases 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 SVAA	PN	-60	-10	+50	+180	TS [°C]
DN / INCH SVAB	PN	-50	-10	+50	+110	TS [°C]
SVAA/SVAB DN 15/25	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 acc. to:										Response pressure range				
DN1	DN2	Male thread	d1	d2	d3	s3	d4	s4	l1	l2	l3	l4	h1	h1*)	h2	bar
15	25	G1/2"-G1"	G1/2"	G1"	20.0	2.0	34.0	3.0	58	58	73	83	148	175	32	5-63

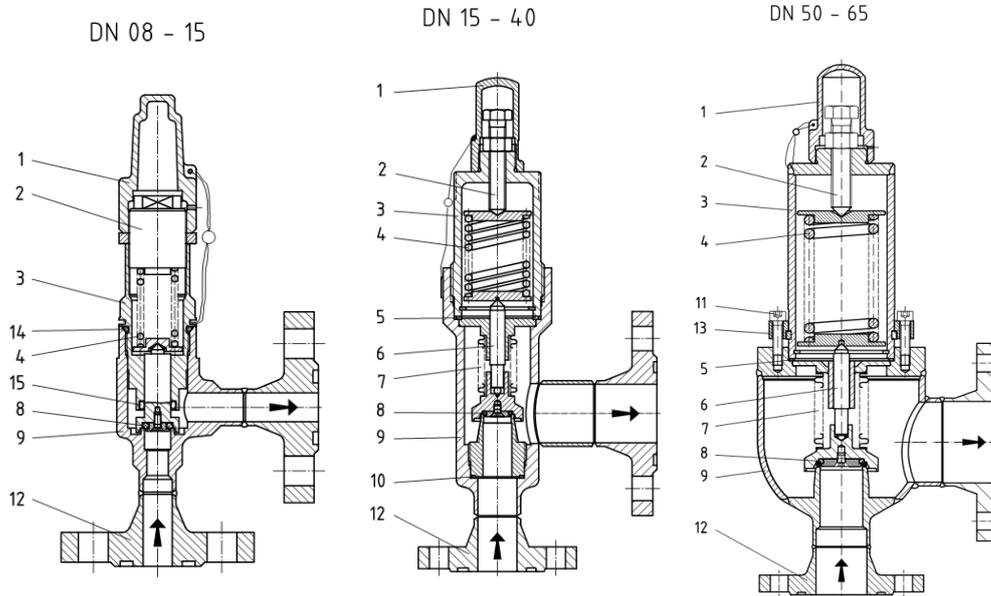
Table 4: Dimensions

h1*) PN63 h2 = dismantling dimension

7 SVU materials

Designation and materials

SVU - safety overflow valve



Part		Material for steel valves	Material for stainless steel valves
1	Cap	Aluminium AlSi10Mg	Aluminium AlSi10Mg
2	Adjustment screw	8.8 X8CrNiS18-9 1.4305	A2-70 X8CrNiS18-9 1.4305
3	Bonnet	S355J2 1.0577	X8CrNiS18-9 1.4305 X5CrNi18-10 1.4301 X2CrNi19-11 1.4306
4	Tongue	SH	SH
5	Flat sealing ring for bonnet	Alu	Alu
6	Stem	X8CrNiS18-9 1.4305	X8CrNiS18-9 1.4305
7	Metal bellows	X6CrNiMoTi17-12-2 1.4571	X6CrNiMoTi17-12-2 1.4571
8	Valve disc O-ring	CR, NBR, HNBR, EPDM, PTFE*	CR, NBR, HNBR, EPDM, PTFE*
9	Body	P235GH 1.0345 S355J2 1.0577 P355N 1.0562	X5CrNi18-10 1.4301 GX5CrNiMoNb19-11-2 1.4581
10	Flat sealing ring SS	AFM30	AFM30
11	Bonnet screw	8.8	
12	Flange	P250GH 1.0460 P355NL1 1.0566	X6CrNiTi18-10 1.4541
13	Bonnet flange	S355J2 1.0577	

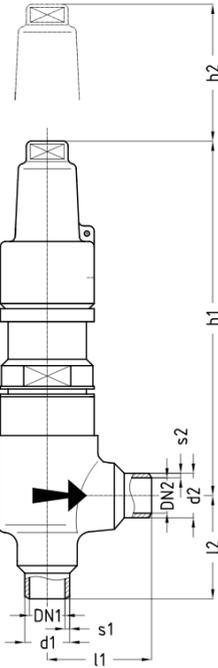
Part		Material for steel valves	Material for stainless steel valves
14	Bonnet O-ring	CR, NBR, HNBR, EPDM, FPM*	CR, NBR, HNBR, EPDM, FPM*
15	Spring-loaded U-ring	PTFE	PTFE

* depending on the refrigerant used

8 SVUA AE / SVUB AE

O: PTFE seat seal, **B:** elastomer seat seal, **AE:** Welding ends

SVU steel safety overflow valve - back-pressure independent for natural refrigerants (NH₃, CO₂) and non-corrosive gases 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 SVUA	PN	-60	-10	+50	+180	TS [°C]
DN / INCH SVUB	PN	-50	-10	+50	+110	TS [°C]
SVUA/SVUB DN 8/10...15/15 1/4"-3/8"...1/2"-1/2"	PN25	18.7	25	25	25	PS [bar]
	PN40	30	40	40	40	PS [bar]
	PN63	47.2	63	63	63	PS [bar]

Nominal size:			Welding ends acc. to:											Response pressure range					
DN*		Base valve	ISO Series 1						ANSI Sched 40										h1*) for
DN1/ DN2	INCH	Base	d1	s11)	s12)	d2	s21)	s22)	d1	s1	d2	s2	l1	l2	h1	h1*)	h2	bar	bar
8/10	1/4"-3/8"	15/15	13.5	1.8	1.8	13.5	1.8	1.8	13.7	2.2	17.1	2.3	40	40	14 8	175	32	4-63	28-63
10/10	3/8"-3/8"	15/15	17.2	1.8	1.8	17.2	1.8	1.8	17.1	2.3	17.1	2.3	40	40	14 8	175	32	4-63	28-63
15/15	1/2"-1/2"	15/15	21.3	2.0	2.0	21.3	2.0	2	21.3	2.8	21.3	2.8	40	40	14 8	175	32	4-63	28-63

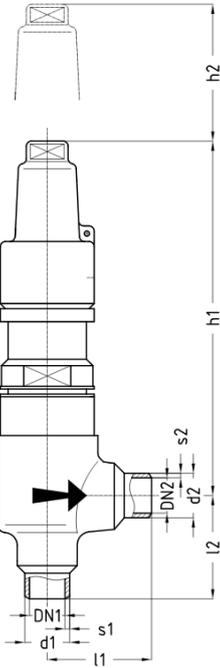
Table 5: Dimensions

DN*: Flange connection variants consisting of base valve. Discharge capacity and component mark as base valve.
1) PN25 / PN40 2) PN63 h2 = dismantling dimension

9 SVUA AE NIRO / SVUB AE NIRO

O: PTFE seat seal, **B:** elastomer seat seal, **AE:** Welding ends

SVU stainless steel safety overflow valve - back-pressure independent for natural refrigerants (NH3, CO2) and non-corrosive gases 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 SVUA	PN	-60	-10	+50	+180	TS [°C]
DN / INCH SVUB	PN	-50	-10	+50	+110	TS [°C]
SVUA/SVUB	PN25	25	25	25	25	PS [bar]
DN 8/10...15/15	PN40	40	40	40	40	PS [bar]
1/4"-3/8"...1/2"-1/2"	PN63	63	63	63	63	PS [bar]

Nominal size:			Welding ends acc. to:												Response pressure range				
DN*		Base valve	ISO Series 1						ANSI Sched 40										
DN1/ DN2	INCH	Base	d1	s11)	s12)	d2	s21)	s22)	d1	s1	d2	s2	l1	l2	h1	h1*)	h2	bar	bar
8/10	1/4"-3/8"	15/15	13.5	1.8	1.8	13.5	1.8	1.8	13.7	2.2	17.1	2.3	40	40	14 8	175	32	4-63	28-63
10/10	3/8"-3/8"	15/15	17.2	1.8	1.8	17.2	1.8	1.8	17.1	2.3	17.1	2.3	40	40	14 8	175	32	4-63	28-63
15/15	1/2"-1/2"	15/15	21.3	2.0	2.0	21.3	2.0	2	21.3	2.8	21.3	2.8	40	40	14 8	175	32	4-63	28-63

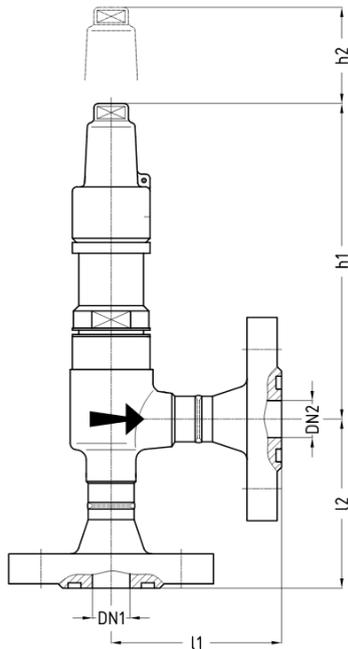
Table 6: Dimensions

DN*: Flange connection variants consisting of base valve. Discharge capacity and component mark as base valve.
1) PN25 / PN40 2) PN63 h2 = dismantling dimension

10 SVUA FL / SVUB FL

O: PTFE seat seal, **B:** elastomer seat seal, **FL:** Flanged ends

SVU steel safety overflow valve - back-pressure independent for natural refrigerants (NH₃, CO₂) and non-corrosive gases 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 SVUA	PN	-60	-10	+50	+180	TS [°C]
DN / INCH SVUB	PN	-50	-10	+50	+110	TS [°C]
SVUA/SVUB DN 10/10...15/15 3/8"-3/8" ...1/2"-1/2"	PN25	18.7	25	25	25	PS [bar]
	PN40	30	40	40	40	PS [bar]
	PN63	47.2	63	63	63	PS [bar]
SVUA/SVUB DN 15/15...25/25 1/2"-1/2" ...1"-1"	PN25	18.7	25	25	25	PS [bar]
	PN40	30	40	40	40	PS [bar]

Nominal size:				Flanged ends acc. to:										Response pressure range				
DN*		Base valve	Type *	AWP		PN25 DIN 2634 EN1092-1		PN40 DIN 2635 EN1092-1		PN63 DIN 2636 EN1092-1		ANSI 300 RF						h1*) for
DN1/ DN2	INCH	Base	Type	l1	l2	l1	l2	l1	l2	l1	l2	l1	l2	h1	h1*)	h2	bar	bar
10/10	3/8"-3/8"	10/10		72	72	76	76	76	76	86	86			14 8	175	32	4-63	28-63

Nominal size:			Flanged ends acc. to:											Response pressure range				
15/15	1/2"-1/2"	15/15		72	72	79	79	79	79	86	86	93	93	148	175	32	4-63	28-63
15/15	1/2"-1/2"	15/15	HB			90	90	90	90					148	175	32	4-40	28-40
15/20	1/2"-3/4"	15/15	HBK			80	90	80	90					148	175	32	4-40	28-40
15/25	1/2"-1"	15/15	HB			95	95	95	95					148	175	32	4-40	28-40
15/25	1/2"-1"	15/15	HBK			80	90	80	90					148	175	32	4-40	28-40
15/25	1/2"-1"	15/15	HBJ			100	100	100	100					148	175	32	4-40	28-40
20/20	3/4"-3/4"	15/15	HB			95	95	95	95					148	175	32	4-40	28-40
20/20	3/4"-3/4"	15/15	HBK			80	90	80	90					148	175	32	4-40	28-40
20/25	3/4"-1"	15/15	HB			95	95	95	95					148	175	32	4-40	28-40
20/25	3/4"-1"	15/15	HBK			80	90	80	90					148	175	32	4-40	28-40
25/25	1"-1"	15/15	HBK			80	90	80	90					148	175	32	4-40	28-40
25/25	1"-1"	15/15	HBJ			100	100	100	100					148	175	32	4-40	28-40

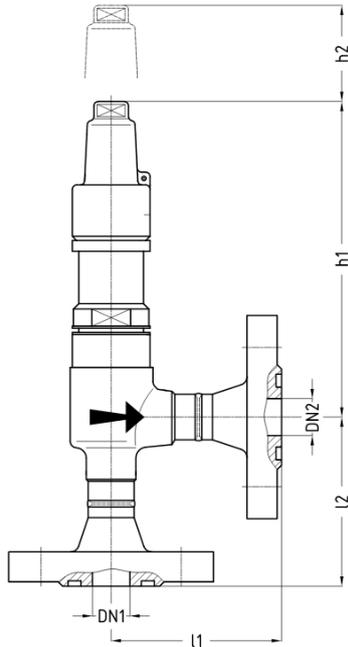
Table 7: Dimensions

DN*: Flange connection variants consisting of base valve. Discharge capacity and component mark as base valve.
 Type*: HB/HBK/HBJ = installation lengths according to EN-standard, h2 = dismantling dimension, DIN/EN flange facings with DIN 2512 groove as standard

11 SVUA FL NIRO / SVUB FL NIRO

O: PTFE seat seal, **B:** elastomer seat seal, **FL:** Flanged ends

SVU stainless steel safety overflow valve - back-pressure independent for natural refrigerants (NH₃, CO₂) and non-corrosive gases 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 SVUA	PN	-60	-10	+50	+180	TS [°C]
DN / INCH SVUB	PN	-50	-10	+50	+110	TS [°C]
SVUA/SVUB DN 10/10...15/15 3/8"-3/8" ...1/2"-1/2"	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]
	PN63	63	63	63	63	PS [bar]
SVUA/SVUB DN 15/15...25/25 1/2"-1/2" ...1"-1"	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]

Nominal size:				Flanged ends acc. to:										Response pressure range				
DN*		Base valve	Type *	AWP		PN25		PN40		PN63		ANSI						h1*)
				DN10-20		DIN 2634		DIN 2635		DIN 2636		300 RF					for	
				PN25		EN1092-1		EN1092-1		EN1092-1								
				DN25-80														
				PN40														
DN1/ DN2*	INCH	Base	Type	l1	l2	l1	l2	l1	l2	l1	l2	l1	l2	h1	h1*)	h2	bar	bar
10/10	3/8"-3/8"	10/10		72	72	76	76	76	76	86	86			14	175	32	4-63	28-63

Nominal size:			Flanged ends acc. to:											Response pressure range				
15/15	1/2"-1/2"	15/15		72	72	79	79	79	79	86	86	93	93	148	175	32	4-63	28-63
15/15	1/2"-1/2"	15/15	HB			90	90	90	90					148	175	32	4-40	28-40
15/20	1/2"-3/4"	15/15	HBK			80	90	80	90					148	175	32	4-40	28-40
15/25	1/2"-1"	15/15	HB			95	95	95	95					148	175	32	4-40	28-40
15/25	1/2"-1"	15/15	HBK			80	90	80	90					148	175	32	4-40	28-40
15/25	1/2"-1"	15/15	HBJ			100	100	100	100					148	175	32	4-40	28-40
20/20	3/4"-3/4"	15/15	HB			95	95	95	95					148	175	32	4-40	28-40
20/20	3/4"-3/4"	15/15	HBK			80	90	80	90					148	175	32	4-40	28-40
20/25	3/4"-1"	15/15	HB			95	95	95	95					148	175	32	4-40	28-40
20/25	3/4"-1"	15/15	HBK			80	90	80	90					148	175	32	4-40	28-40
25/25	1"-1"	15/15	HBK			80	90	80	90					148	175	32	4-40	28-40
25/25	1"-1"	15/15	HBJ			100	100	100	100					148	175	32	4-40	28-40

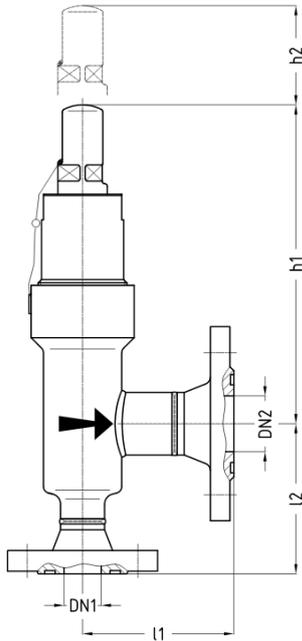
Table 8: Dimensions

DN*: Flange connection variants consisting of base valve. Discharge capacity and component mark as base valve.
 Type*: HB/HBK/HBJ = installation lengths according to EN-standard, h2 = dismantling dimension, DIN/EN flange facings with DIN 2512 groove as standard

12 SVUA P FL / SVUB P FL

O: PTFE seat seal, **B:** elastomer seat seal, **P:** high-performance, **FL:** Flanged ends

SVU steel safety overflow valve - back-pressure independent for natural refrigerants (NH₃, CO₂) and non-corrosive gases 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 SVUA	PN	-60	-40	-25	-10	+50	+180	TS [°C]
DN / INCH SVUB	PN	-50	-40	-25	-10	+50	+110	TS [°C]
SVUA/SVUB DN 15/25...40/40 1/2"-1"...1 1/2"-1 1/2"	PN25	18.7	18.7	18.7	25	25	25	PS [bar]
	PN40	30	30	30	40	40	40	PS [bar]
	PN63	47.2	47.2	47.2	63	63	63	PS [bar]
SVUA/SVUB DN 32/50...65/65 1 1/4"-2"...2 1/2"-2 1/2"	PN25	18.7	18.7	18.7	25	25	25	PS [bar]
	PN40	30	30	30	40	40	40	PS [bar]
SVUA/SVUB DN 50/80...65/100 2"-3"...2 1/2"-4"	PN25	6.25	12.5	18.7	25	25	25	PS [bar]
	PN28	7	14	21	28	28	28	PS [bar]

Nominal size:				Flanged ends acc. to:					Response pressure range	
DN*		Base valve	Type *	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		h1*) for

Nominal size:		Flanged ends acc. to:												Response pressure range				
DN1/ DN2	INCH	Base	Type	l1	l2	l1	l2	l1	l2	l1	l2	l1	l2	h1	h1*)	h2	bar	bar
15/25	1/2"-1"	15/25	HB			95	95	95	95					207		50	5-40	
15/25	1/2"-1"	15/25		100	90	96	96	96	96	114	103	118	110	207		50	5-63	
20/25	3/4"-1"	15/25	HB			95	95	95	95					207		50	5-40	
25/25	1"-1"	15/25	HBJ			100	100	100	100					207		50	5-40	
25/25	1"-1"	15/25	HBK			80	90	80	90					207		50	5-40	
20/32	3/4"-1 1/4"	20/32		110	100	108	108	108	108	126	116	131	125	238	258	50	5-63	40-63
25/32	1"-1 1/4"	20/32	HB			100	100	100	100					238		50	5-40	
32/32	1 1/4"-1 1/4"	20/32	HB			105	105	105	105					238		50	5-40	
25/40	1"-1 1/2"	25/40		110	120	116	116	116	116	133	134	139	138	246	266	50	5-63	24-63
32/40	1 1/4"-1 1/2"	25/40	HB			105	105	105	105					246	266	50	5-40	24-40
40/40	1 1/2"-1 1/2"	25/40	HB			115	115	115	115					246	266	50	5-40	24-40
32/50	1 1/4"-2"	32/50		117	130	122	128	122	128			144	151	278		60	5-40	
40/50	1 1/2"-2"	32/50	HB			115	115	115	115					278		60	5-40	
50/50	2"-2"	32/50	HB			125	125	125	125					278		60	5-40	
40/65	1 1/2"-2 1/2"	40/65		149	130	147	136	147	136			171	159	281		60	5-40	
50/65	2"-2 1/2"	40/65	HB			125	125	125	125					281		60	5-40	
65/65	2 1/2"-2 1/2"	40/65	HB			145	145	145	145					281		60	5-40	
50/80	2"-3"	50/80		155	145	160	150	160	150			181	172	402		110	5-28	
65/100	2 1/2"-4"	65/100		202*	190	202	189	202	189			223	213	595		120	5-28	

Table 9: Dimensions

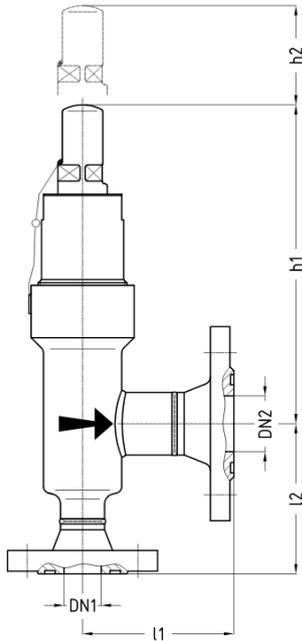
DN*: Flange connection variants consisting of base valve. Discharge capacity and component mark as base valve.

*DIN-flange at the outlet, h2 = dismantling dimension DIN/EN flange facings with DIN 2512 groove as standard

13 SVUA P FL NIRO / SVUB P FL NIRO

O: PTFE seat seal, **B:** elastomer seat seal, **P:** high-performance, **FL:** Flanged ends

SVU stainless steel safety overflow valve - back-pressure independent for natural refrigerants (NH3, CO2) and non-corrosive gases 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 SVUA	PN	-60	-10	+50	+180	TS [°C]
DN / INCH SVUB	PN	-50	-10	+50	+110	TS [°C]
SVUA/SVUB DN 15/25...40/40 1/2"-1"...1 1/2"-1 1/2"	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]
	PN63	63	63	63	63	PS [bar]
SVUA/SVUB DN 32/50...65/65 1 1/4"-2"...2 1/2"-2 1/2"	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]

Nominal size:				Flanged ends acc. to:										Response pressure range				
DN*		Base valve	Type *	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									h1*) for	
DN1/ DN2	INCH	Base	Type	l1	l2	l1	l2	l1	l2	l1	l2	l1	l2	h1	h1*)	h2	bar	bar
15/25	1/2"-1"	15/25	HB			95	95	95	95					20 7	50		5-40	

Nominal size:		Flanged ends acc. to:												Response pressure range				
15/25	1/2"-1"	15/25		100	90	96	96	96	96	114	103	118	110	207	50	5-63		
20/25	3/4"-1"	15/25	HB			95	95	95	95					207	50	5-40		
25/25	1"-1"	15/25	HBJ			100	100	100	100					207	50	5-40		
25/25	1"-1"	15/25	HBK			80	90	80	90					207	50	5-40		
20/32	3/4"-1 1/4"	20/32		110	100	108	108	108	108	126	116	131	125	238	258	50	5-63	40-63
25/32	1"-1 1/4"	20/32	HB			100	100	100	100					238	50	5-40		
32/32	1 1/4"-1 1/4"	20/32	HB			105	105	105	105					238	50	5-40		
25/40	1"-1 1/2"	25/40		110	120	116	116	116	116	133	134	139	138	246	266	50	5-63	24-63
32/40	1 1/4"-1 1/2"	25/40	HB			105	105	105	105					246	266	50	5-40	24-40
40/40	1 1/2"-1 1/2"	25/40	HB			115	115	115	115					246	266	50	5-40	24-40
32/50	1 1/4"-2"	32/50		117	130	122	128	122	128			144	151	278	60	5-40		
40/50	1 1/2"-2"	32/50	HB			115	115	115	115					278	60	5-40		
50/50	2"-2"	32/50	HB			125	125	125	125					278	60	5-40		
40/65	1 1/2"-2 1/2"	40/65		149	130	147	136	147	136			171	159	281	60	5-40		
50/65	2"-2 1/2"	40/65	HB			125	125	125	125					281	60	5-40		
65/65	2 1/2"-2 1/2"	40/65	HB			145	145	145	145					281	60	5-40		

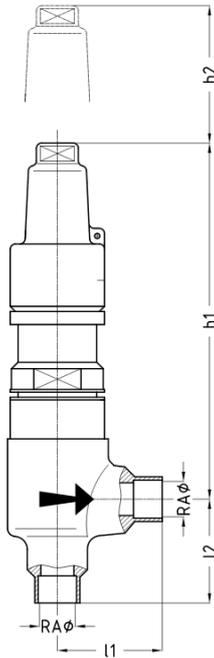
Table 10: Dimensions

DN*: Flange connection variants consisting of base valve. Discharge capacity and component mark as base valve.
 Type*: HB = installation lengths according to EN-standard, h2 = dismantling dimension, DIN/EN flange facings with DIN 2512 groove as standard

14 SVUA LE / SVUB LE

O: PTFE seat seal, **B:** elastomer seat seal, **LE:** Soldering ends

SVU steel safety overflow valve - back-pressure independent for natural refrigerants (NH₃, CO₂) and non-corrosive gases 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 SVUA	PN	-60	-10	+50	+180	TS [°C]
DN / INCH SVUB	PN	-50	-10	+50	+110	TS [°C]
SVUA/SVUB DN 15/15	PN25	18.7	25	25	25	PS [bar]
	PN40	30	40	40	40	PS [bar]
	PN63	47.2	63	63	63	PS [bar]

Nominal size: Soldering ends acc. to:								Response pressure range	
DN	RAØ	l1	l2	h1	h1*)	h2	bar	bar	
15/15	15	40	40	148	175	32	4-63	28-63	
15/15	18	40	40	148	175	32	4-63	28-63	

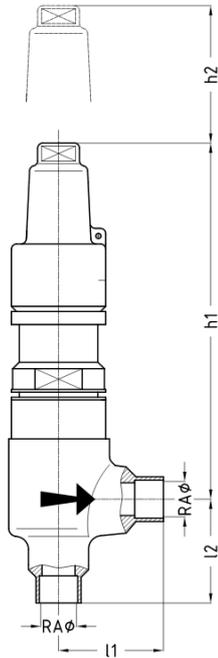
Table 11: Dimensions

h2 = dismantling dimension

15 SVUA LE NIRO / SVUB LE NIRO

O: PTFE seat seal, **B:** elastomer seat seal, **LE:** Soldering ends

SVU stainless steel safety overflow valve - back-pressure independent for natural refrigerants (NH₃, CO₂) and non-corrosive gases 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 SVUA	PN	-60	-10	+50	+180	TS [°C]
DN / INCH SVUB	PN	-50	-10	+50	+110	TS [°C]
SVUA/SVUB DN 15/15	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]
	PN63	63	63	63	63	PS [bar]

Nominal size:	Soldering ends acc. to:	Response pressure range							
									h1*) for
DN	RAφ	l1	l2	h1	h1*)	h2	bar	bar	bar
15/15	15	40	40	148	175	32	4-63	28-63	28-63
15/15	18	40	40	148	175	32	4-63	28-63	28-63

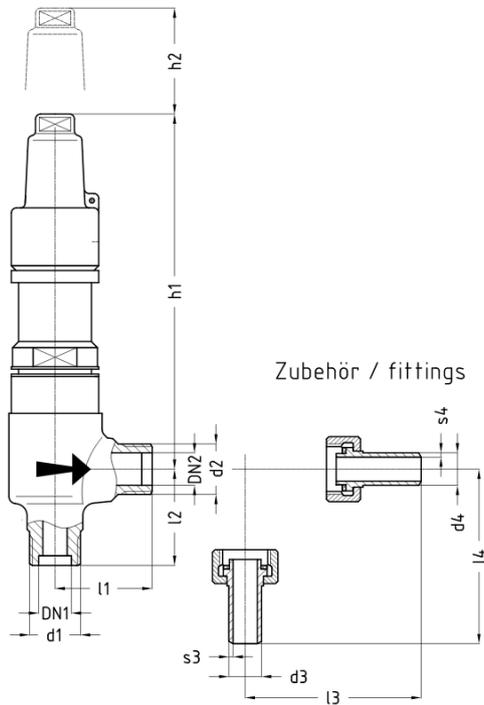
Table 12: Dimensions

h2 = dismantling dimension

16 SVUA SE / SVUB SE

O: PTFE seat seal, **B:** elastomer seat seal, **SE:** Screwed ends

SVU steel safety overflow valve - back-pressure independent for natural refrigerants (NH₃, CO₂) and non-corrosive gases 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 SVUA	PN	-60	-10	+50	+180	TS [°C]
DN / INCH SVUB	PN	-50	-10	+50	+110	TS [°C]
SVUA/SVUB DN 15/15	PN25	18.7	25	25	25	PS [bar]
	PN40	30	40	40	40	PS [bar]
	PN63	47.2	63	63	63	PS [bar]

Nominal size:			Screwed ends acc. to:													Response pressure range				
Base valve			Type *																	h1*) for
DN 1	DN 2	Base	Type	Male thread	d1	d2	d3	s3	d4	s4	l1	l2	l3	l4	h1	h1*)	h2	bar	bar	
15	15	15/15		G1/2"-G1/2"	G1/2"	G1/2"	15	1.5	15.0	1.5	40	40	73	73	14.8	175	32	4-6.3	28-63	
15	15	15/15	HB	G1/2"-G1"	G1/2"	G1"	15	1.5	21.3	2.0	50	40	73	83	14.8	175	32	4-4.0	28-40	
15	15	15/15		M22x1.5 L RA15	M22x1.5	M22x1.5	15	2.0	15.0	2.0	40	40	73	73	14.8	175	32	4-6.3	28-63	

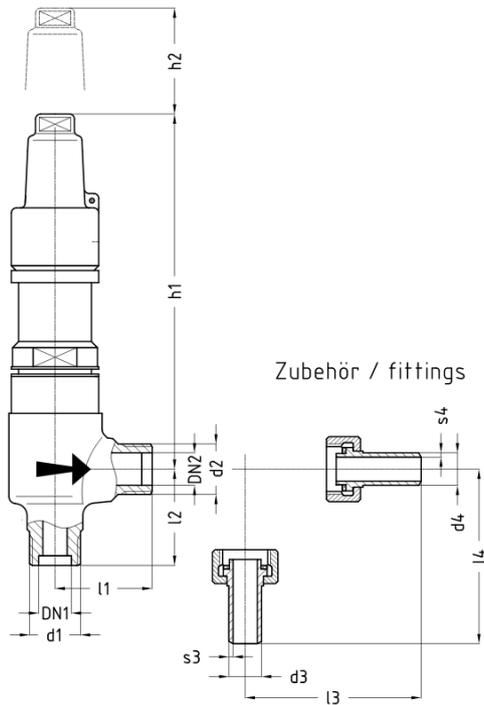
Table 13: Dimensions

Type*: HB = installation lengths according to EN-standard h2 = dismantling dimension

17 SVUA SE NIRO / SVUB SE NIRO

O: PTFE seat seal, **B:** elastomer seat seal, **SE:** Screwed ends

SVU stainless steel safety overflow valve - back-pressure independent for natural refrigerants (NH3, CO2) and non-corrosive gases 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 SVUA	PN	-60	-10	+50	+180	TS [°C]
DN / INCH SVUB	PN	-50	-10	+50	+110	TS [°C]
SVUA/SVUB DN 15/15	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 acc. to:														Response pressure range		
Base valve		Type *															h1*) for		
DN 1	DN 2	Base	Type	Male thread	d1	d2	d3	s3	d4	s4	l1	l2	l3	l4	h1	h1*)	h2	bar	bar
15	15	15/15		G1/2"-G1/2"	G1/2"	G1/2"	15.0	1.50	15.0	1.50	40	40	73	73	148	175	32	4-63	28-63
15	15	15/15	HB	G1/2"-G1"	G1/2"	G1"	15.0	1.53	21.0	2.00	50	40	73	83	148	175	32	4-40	28-40
15	15	15/15		M22x1.5 L RA15	M22x1.5	M22x1.5	15.0	2.00	15.0	2.00	40	40	73	73	148	175	32	4-63	28-63

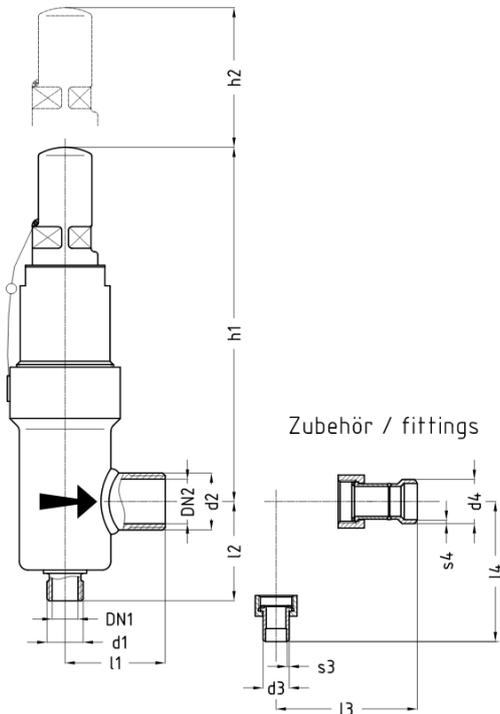
Table 14: Dimensions

Type*: HB = installation lengths according to EN-standard h2 = dismantling dimension

18 SVUA P SE / SVUB P SE

O: PTFE seat seal, **B:** elastomer seat seal, **P:** high-performance, **SE:** Screwed ends

SVU steel safety overflow valve - back-pressure independent for natural refrigerants (NH₃, CO₂) and non-corrosive gases 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 SVUA	PN	-60	-10	+50	+180	TS [°C]
DN / INCH SVUB	PN	-50	-10	+50	+110	TS [°C]
SVUA/SVUB DN 15/25	PN25	18.7	25	25	25	PS [bar]
	PN40	30	40	40	40	PS [bar]
	PN63	47.2	63	63	63	PS [bar]

Nominal size: Screwed ends acc. to:														Response pressure range		
DN1	DN2	Male thread	d1	d2	d3	s3	d4	s4	l1	l2	l3	l4	h1	h1*)	h2	bar
15	25	G1/2"-G1"	G1/2"	G1"	20	2.0	34.0	3.0	58	58	73	83	148	175	32	5-63

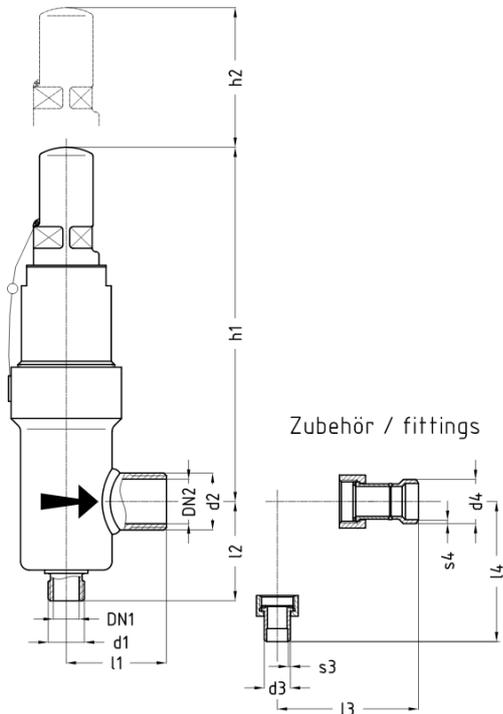
Table 15: Dimensions

h1*) PN63 h2 = dismantling dimension

19 SVUA P SE NIRO / SVUB P SE NIRO

O: PTFE seat seal, **B:** elastomer seat seal, **P:** high-performance, **SE:** Screwed ends

SVU stainless steel safety overflow valve - back-pressure independent for natural refrigerants (NH₃, CO₂) and non-corrosive gases 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 SVUA	PN	-60	-10	+50	+180	TS [°C]
DN / INCH SVUB	PN	-50	-10	+50	+110	TS [°C]
SVUA/SVUB DN 15/25	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 acc. to:											Response pressure range			
DN1	DN2	Male thread	d1	d2	d3	s3	d4	s4	l1	l2	l3	l4	h1	h1*)	h2	bar
15	25	G1/2"-G1"	G1/2"	G1"	20.0	2.0	34.0	3.0	58	58	73	83	148	175	32	5-63

Table 16: Dimensions

h1*) PN63 h2 = dismantling dimension

20 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.

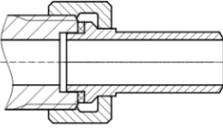
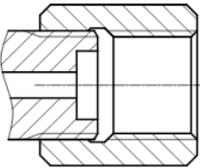
Accessory group	Valve designation	Code fittings	Connections	
UM + ST Union nut with welding nipple				
	SVUA SE G1/2" / G1/2"	44660E10.5/10001	I:	G1/2" with UM + ST 15.0x1.5 mm
	SVUB SE G1/2" / G1/2"		O:	
	SVUA SE G1/2" / G1"	44660E10.5/10001	I:	G1/2" with UM + ST 15.0x1.5 mm
	SVUB SE G1/2" / G1"	00060F07A5A0B601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

Table 17: Accessories relief / change-over valves

I: = inlet/ O: = outlet

21 Set pressure ranges of springs for safety valves

Valve type SVAA / SVAB					
PS	DN 15/25	DN 20/32	DN 25/40	DN 32/50	DN 40/65
25	5.0-6.9	5.0-6.9	5.0-5.9	5.0-5.9	5.0-6.9
	7.0-8.9	7.0-8.9	6.0-8.9	6.0-6.9	7.0-7.9
	9.0-10.9	9.0-9.9	9.0-10.9	7.0-7.9	8.0-8.9
	11.0-14.9	10.0-12.9	11.0-13.9	8.0-8.9	9.0-9.9
	15.0-19.9	13.0-17.9	14.0-17.9	9.0-10.9	10.0-11.9
	20.0-25.0	18.0-19.9	18.0-19.9	11.0-11.9	12.0-13.9
		20.0-25.0	20.0-21.9	12.0-13.9	14.0-15.9
			22.0-24.9	14.0-15.9	16.0-18.9
			25.0	16.0-18.9	19.0-20.9
				19.0-22.9	21.0-24.9
40	25.0-31.9	20.0-25.9	25.0-33.9	23.0-27.9	25.0-29.9
	32.0-39.9	26.0-27.9	34.0-39.9	28.0-29.9	30.0-35.9
	40.0	28.0-32.9	40.0	30.0-33.9	36.0-40.0
		33.0-40.0		34.0-40.0	
63	40.0-49.9	40.0-43.9	40.0-47.9		
	50.0-63	44.0-54.9	48.0-63.0		
		55.0-63.0			

Table 18: Response pressure range in bar

PS	Valve type SVUA / SVUB	Valve type SVUA P / SVUB P						
		DN 15/25	DN 20/32	DN 25/40	DN 32/50	DN 40/65	DN 50/80	DN 65/100
25	4.0-7.9	5.0-8.9	5.0-8.9	5.0-8.9	5.0-6.9	5.0-8.9	5.0-8.9	5.0-9.9
	8.0-11.9	9.0-10.9	9.0-10.9	9.0-10.9	7.0-7.9	9.0-9.9	9.0-10.9	10.0-11.9
	12.0-19.9	11.0-13.9	11.0-11.9	11.0-13.9	8.0-8.9	10.0-10.9	11.0-12.9	12.0-13.9
	20.0-25.0	14.0-18.9	12.0-15.9	14.0-14.9	9.0-10.9	11.0-11.9	13.0-15.9	14.0-15.9
		19.0-21.9	16.0-19.9	15.0-17.9	11.0-12.9	12.0-12.9	16.0-17.9	16.0-16.9
		22.0-23.9	20.0-23.9	18.0-18.9	13.0-14.9	13.0-14.9	18.0-21.9	17.0-19.9
		24.0-25.0	24.0-25.0	19.0-21.9	15.0-15.9	15.0-16.9	22.0-25.0	20.0-20.9
				22.0-23.9	16.0-18.9	17.0-18.9		21.0-25.0
				24.0-25.0	19.0-22.9	19.0-20.9		
					23.0-25.0	21.0-24.9		
40	20.0-27.9	24.0-31.9	24.0-27.9	24.0-33.9	23.0-26.9	25.0-27.9	22.0-28.0	21.0-28.0
	28.0-35.9	32.0-39.9	28.0-32.9	34.0-40.0	27.0-31.9	28.0-30.9		
	36.0-40.0	40.0	33.0-40.0		32.0-35.9	31.0-40.0		
					36.0-40.0			
63	36.0-44.9	40.0-49.9	40.0-43.9	34.0-41.9				

Valve type SVUA / SVUB		Valve type SVUA P / SVUB P						
45.0-63.0	50.0-63.0	44.0-54.9	42.0-49.9					
		55.0-63.0	50.0-63.0					

Table 19: Response pressure range in bar

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.

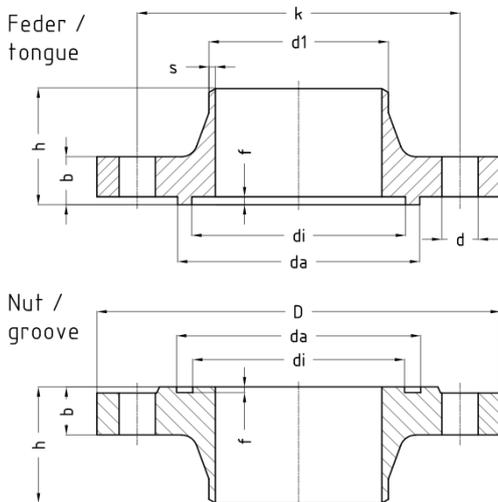
European material			American equivalent material	
Material number	Short name	Standard	Material standard	Grade
Valves made of carbon steel				
1.0345	P235GH, TC1 +N	DIN EN 10216-2	ASME SA-106	A + B
1.0038	S235JR +N	DIN EN 10025-2	ASME SA-570	36
1.0425	P265GH	DIN EN 10028-2	ASME SA-516	60
1.0577	S355J2 +N	DIN EN 10025-2	ASME SA-516	65
1.0562	P355N	DIN EN 10028-3		
1.0460	C22.8	VdTÜV 350/3	ASME SA-105	-
Valves made of low-temperature steel				
1.0451	P215NL +N	DIN EN 10216-4	ASME SA-333	6
1.0452	P255QL +QT	DIN EN 10216-4		
1.0566	P355NL1 +N	DIN EN 10028-3	ASME SA-662	B
		DIN 17103	ASME SA-420	WPL6
		VdTÜV 354/3	ASME SA-350	LF2
1.0488	TStE 285	DIN 17103	ASME SA-662	A
		VdTÜV 352/3	ASME SA-350	LF2
Valves made of stainless steel				
1.4301	X5CrNi18-10	DIN EN 10216-5	ASME SA-312	TP304
		DIN EN 10028-7	ASME SA-240	304
		DIN EN 10222-5		
		DIN EN 1092-1	ASME SA-182	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

DN	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
d1	s	d1	s	b	k	h	d	D	di	da	f	di	da	f	Quant- ity					
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

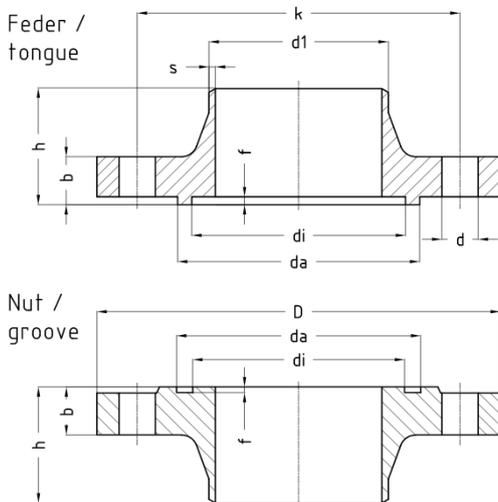
DIN2634 PN25 DN10-150 / DIN 2635 PN40 DN10-400																				
32	42.4	2.6	38.0	3.0	1 8	10 0	42	1 8	14 0	50	66	2. 5	51	65	4. 0	4	M 16	55	51	65
40	48.3	2.6	45.0	3.0	1 8	11 0	45	1 8	15 0	60	76	2. 5	61	75	4. 0	4	M 16	55	61	75
50	60.3	2.9	57.0	3.2	2 0	12 5	48	1 8	16 5	72	88	2. 5	73	87	4. 0	4	M 16	60	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 20: 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	
	Series 1		Groove						Tongue					Quantity	Thread	Length	di	da
	d1	s	b	k	h	d	D	di	da	f	di	da	f					
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

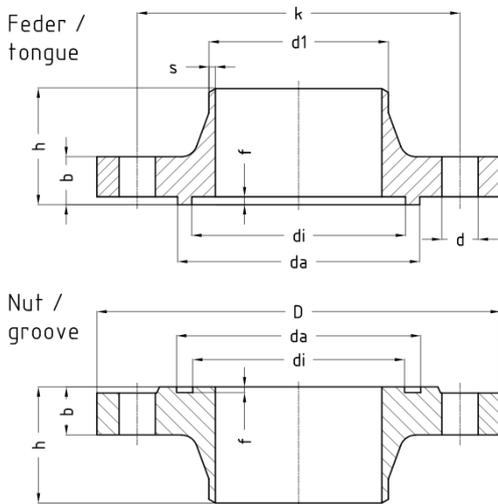
DIN 2634 PN25 DN200-500																		
400	406.4	8.8	40	550	110	36	620	446	474	3.5	447	473	5.0	16	M 33	120	447	473
500	508.0	10.0	44	660	125	36	730	548	576	3.5	549	575	5.0	20	M 33	130	549	575
DIN2636 PN63 DN10-40 / DIN 2637 PN100 DN10-40																		
DN	d1	s	b	k	h	d	D	di	da	f	di	da	f	Quant-ity	Thread	Lengt h	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	Quant-ity	Thread	Lengt h	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 21: 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	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

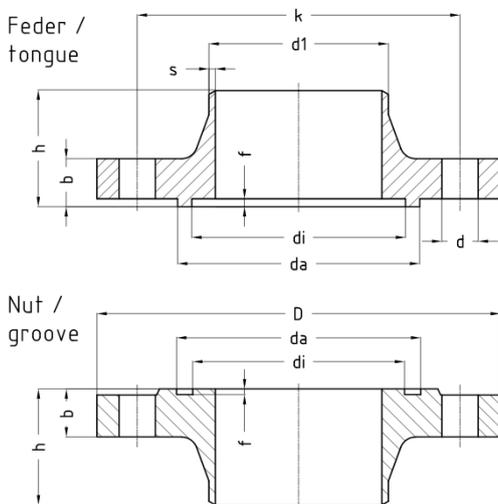
DIN EN 1092-1 PN25 DN10-150 / PN40 DN10-400																				
32	42.4	2.6	38.0	3.0	1 8	10 0	42	1 8	14 0	50	66	4. 0	51	65	4. 5	4	M 16	55	51	65
40	48.3	2.6	45.0	3.0	1 8	11 0	45	1 8	15 0	60	76	4. 0	61	75	4. 5	4	M 16	55	61	75
50	60.3	2.9	57.0	3.2	2 0	12 5	48	1 8	16 5	72	88	4. 0	73	87	4. 5	4	M 16	60	73	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 22: 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



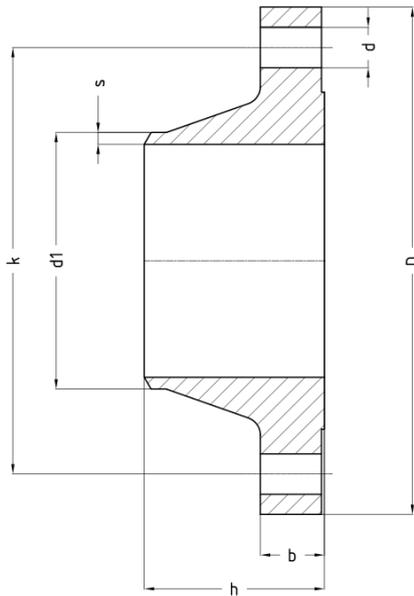
DIN EN 1092-1 PN25 DN200-500																			
Welding ends			Flange facing design											Screws DIN 931			Sealing ring DIN 2691		
Series 1			Groove						Tongue										
DN	d1	s	b	k	h	d	D	di	da	f	di	da	f	Quantity	Thread	Length h	di	da	
200	219.1	6.3	30	310	80	26	360	238	260	4.5	239	259	5.0	12	M 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 23: 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



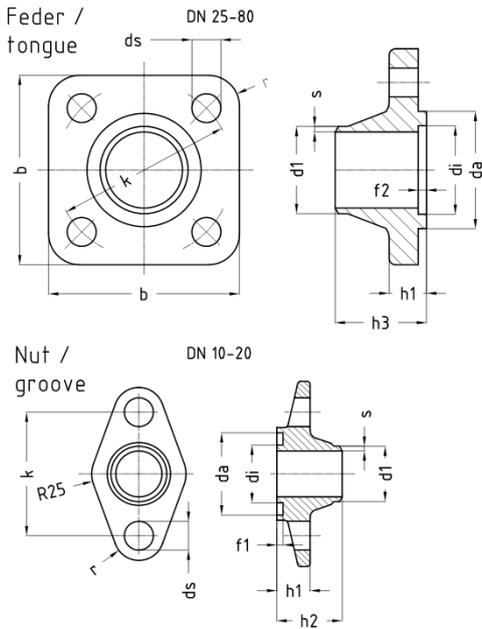
Nominal size		Welding ends acc. to:													
		ANSI		ANSI-FL 150lbs RF / sq. in				Screws DIN 931	ANSI-FL 300lbs RF / sq. in				Screws DIN 931		
DN	INCH	d1	s	b	k	h	d	D	Quantity	b	k	h	d	D	Quantity
15	1/2"	21.3	2.8	11.2	60.5	47.8	15.7	88.9	4	14.2	66.5	52.3	15.7	95.2	4
20	3/4"	26.7	2.9	12.7	69.9	52.3	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 24: 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	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	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 25: 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.
- Our general terms and conditions apply.

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