

FILTERS FOR REFRIGERATION

SS, FT

02.07.2026



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1 SS / FT

SS: Strainer – stainless steel strainer insert in various mesh sizes

SS	Connection	Form	Material	Valve type
SS	Materials			
SS PS25 / PS40 / PS63	Welding ends	Straight-way	St	SS D AE
			NIRO	SS D AE NIRO
		Angle	St	SS E AE
			NIRO	SS E AE NIRO
	Flanged ends	Straight-way	St	SS D FL
			NIRO	SS D FL NIRO
		Angle	St	SS E FL
			NIRO	SS E FL NIRO
	Soldering ends	Straight-way	St	SS D LE
			NIRO	SS D LE NIRO
		Angle	St	SS E LE
			NIRO	SS E LE NIRO
	Screwed ends	Straight-way	St	SS D SE
			NIRO	SS D SE NIRO
		Angle	St	SS E SE
			NIRO	SS E SE NIRO
SS PS160	Welding ends	Straight-way	St	SS D AE
			NIRO	SS D AE NIRO
		Angle	St	SS E AE
			NIRO	SS E AE NIRO
	Soldering ends	Straight-way	St	SS D LE
			NIRO	SS D LE NIRO
		Angle	St	SS E LE
			NIRO	SS E LE NIRO

FT: Filter drier - with/without filter element

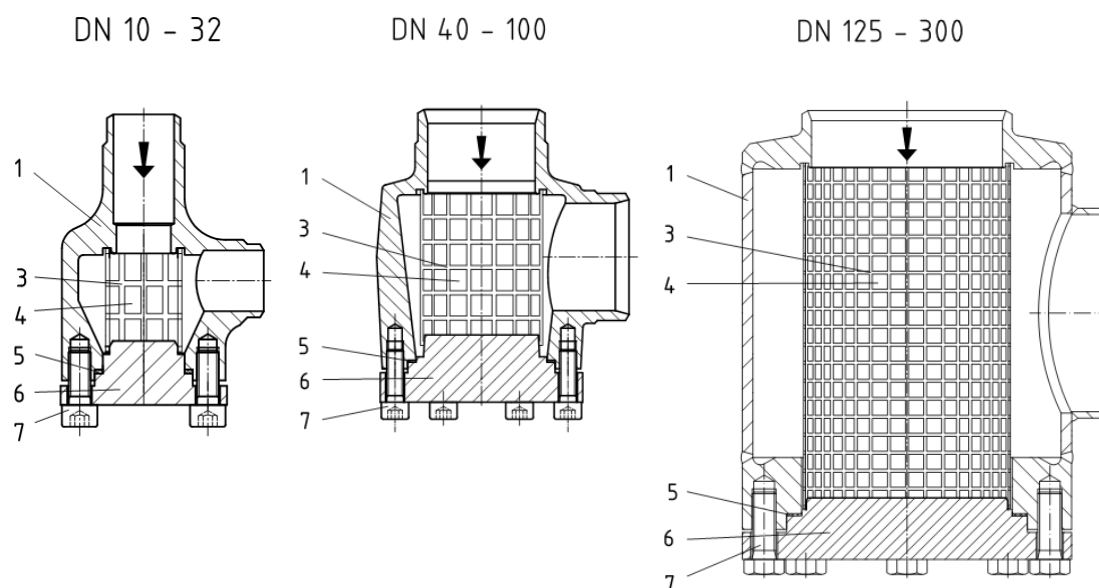
FT	Connection	Form	Material	Valve type
FT	Materials			
FT PS25 / PS40	Welding ends	Straight-way	St	FT AE / IFBL
		Straight-way	NIRO	FT AE / IFBL NIRO
Information	Comparison of European/American materials			
	Coding of connections for small and service valves			
	Accessories/fittings for AVR, HRAR, RV, RVA, RVAK, SS, UVA			
	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 SS materials

Designation and materials

SS HT - strainer



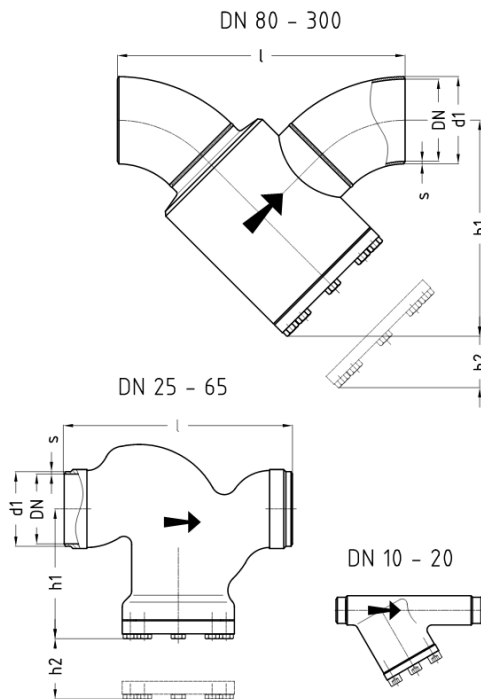
Part:		Material for steel valves	Material for stainless steel valves
1	Body	P235GH 1.0345 S355J2 1.0577 P355N 1.0562 G20Mn5+QT 1.6220	X5CrNi18-10 1.4301 GX5CrNiMoNb19-11-2 1.4581
3	Support screen	X5CrNi18-10 1.4301	X5CrNi18-10 1.4301
4	Fine screen	X5CrNi18-10 1.4301	X5CrNi18-10 1.4301
5	Flat sealing ring for bonnet	AFM30	AFM30
6	Bonnet	S355J2 1.0577	X8CrNiS18-9 1.4305 X5CrNi18-10 1.4301 X2CrNi19-11 1.4306
7	Bonnet screw	8.8	A2-70

3 SS D AE MW

D: Straight-way, **AE:** Welding ends, **MW:** Mesh size

SS steel strainer for natural refrigerants (NH₃, CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines

Optional: Mesh size MW = 25/63/80/100/120/135/150/200/250/500/1000µm



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...20 3/8" ... 3/4"	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]
DN 25...200 1" ... 8"	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	43/63*	PS [bar]
DN 250...300 10" ... 12"	PN25	6.25	12.5	18.7	25	25	25	PS [bar]
	PN40	10	20	30	40	40	40	PS [bar]

* only from DN80

Nominal size:		Welding ends acc. to:												
		ISO Series 1			ISO Series 2		ANSI Sched 40		ANSI Sched 80					
DN	INCH	d1	s1)	s2)	d1	s	d1	s	d1	s	l	h1	h1*)	h2
10	3/8"	17.2	1.8	1.8	15.0	2.5	17.1	2.3	17.1	3.2	130	78		30
15	1/2"	21.3	2.0	2.0	20.0	2.5	21.3	2.8	21.3	3.7	130	78		30
20	3/4"	26.9	2.3	2.6	25.0	2.5	26.7	2.9	26.7	3.9	150	78		30
25	1"	33.7	2.6	2.6	32.0	3.0	33.4	3.4	33.4	4.5	160	88		50
32	1 1/4"	42.4	2.6	2.9	38.0	3.0	42.2	3.6	42.2	4.8	180	89		50

Nominal size:		Welding ends acc. to:												
40	1 1/2"	48.3	2.6	2.9	45.0	3.0	48.3	3.7	48.3	5.1	200	106		75
50	2"	60.3	2.9	2.9	57.0	3.2	60.3	3.9			230	106		75
65	2 1/2"	76.1	2.9	3.2	76.1	3.6	73.0	5.2			290	139		85
80	3"	88.9	3.2	3.6	88.9	4.0	88.9	5.5			304	245		90
100	4"	114.3	3.6	4.0	108.0	4.0	114.3	6.0			386	286		95
125	5"	139.7	4.0	4.5	133.0	4.0	141.3	6.6			461	351	354	145
150	6"	168.3	4.5	5.6	159.0	4.5	168.3	7.1			537	394		150
200	8"	219.1	6.3	7.1			219.1	8.2			708	522		220
250	10"	273.0	7.1				273.0	9.3			875	613		250
300	12"	323.9	8.0				323.8	10.3			1048	718		310

Table 1: Dimensions

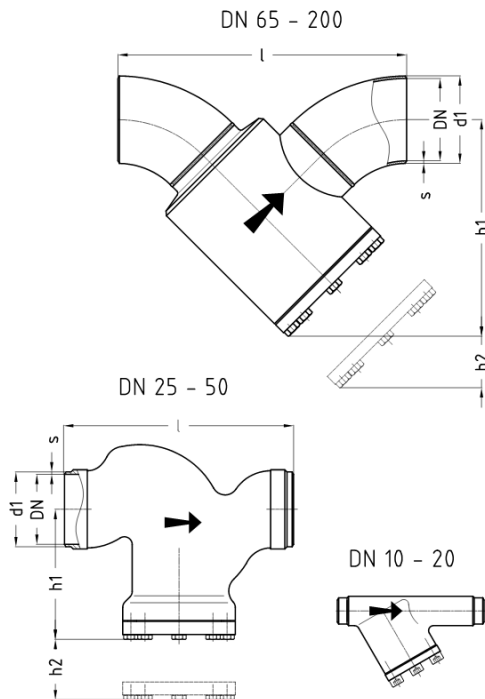
1) PN25 / PN40 2) PN63 *) only for DN125 PN63, h2 = dismantling dimension

4 SS D AE MW NIRO

D: Straight-way, **AE:** Welding ends, **MW:** Mesh size

SS stainless steel strainer for natural refrigerants (NH₃, CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines

Mesh size MW = 25/63/80/100/120/135/150/200/250/500/1000µm



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...20 3/8" ... 3/4"	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]
	PN63	63	63	63	63	PS [bar]
DN 25...200 1" ... 8"	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]
	PN63	63	63	63	50.2/63*	PS [bar]
DN 250...300 10" ... 12"	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]

* only from DN65

Nominal size:		Welding ends acc. to:												
		ISO Series 1			ISO Series 2		ANSI Sched 40		ANSI Sched 80					
DN	INCH	d1	s1)	s2)	d1	s	d1	s	d1	s	l	h1	h1*)	h2
10	3/8"	17.2	1.8	1.8	15.0	2.5	17.1	2.3	17.1	3.2	130	78		30
15	1/2"	21.3	2.0	2.0	20.0	2.5	21.3	2.8	21.3	3.7	130	78		30
20	3/4"	26.9	2.3	2.6	25.0	2.5	26.7	2.9	26.7	3.9	150	78		30
25	1"	33.7	2.6	2.6	32.0	3.0	33.4	3.4	33.4	4.5	160	88		50
32	1 1/4"	42.4	2.6	2.9	38.0	3.0	42.2	3.6	42.2	4.8	180	89		50

Nominal size:		Welding ends acc. to:												
40	1 1/2"	48.3	2.6	2.9	45.0	3.0	48.3	3.7	48.3	5.1	200	106		75
50	2"	60.3	2.9	2.9	57.0	3.2	60.3	3.9			230	106		75
65	2 1/2"	76.1	2.9	3.2	76.1	3.6	73.0	5.2			290	139		85
80	3"	88.9	3.2	3.6	88.9	4.0	88.9	5.5			304	245		90
100	4"	114.3	3.6	4.0	108.0	4.0	114.3	6.0			386	286		95
125	5"	139.7	4.0	4.5	133.0	4.0	141.3	6.6			461	351	354	145
150	6"	168.3	4.5	5.6	159.0	4.5	168.3	7.1			537	394		150
200	8"	219.1	6.3	7.1			219.1	8.2			708	522		220
250	10"	273.0	7.1				273.0	9.3			875	613		250
300	12"	323.9	8.0				323.8	10.3			1048	718		310

Table 2: Dimensions

1) PN25 / PN40 2) PN63 *) only for DN125 PN63, h2 = dismantling dimension

5 SS E AE MW

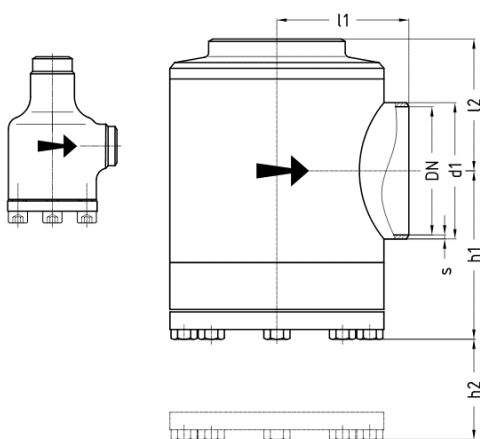
I: Angle, **AE:** Welding ends, **MW:** Mesh size

SS steel strainer for natural refrigerants (NH₃, CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines

Optional: Mesh size MW = 25/63/80/100/120/135/150/200/250/500/1000µm

DN 10 – 65

DN 80 – 300



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...65 3/8" ... 2 1/2"	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]
DN 80...200 3" ... 8"	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]
DN 250...300 10" ... 12"	PN25	6.25	12.5	18.7	25	25	25	PS [bar]
	PN40	10	20	30	40	40	40	PS [bar]

Nominal size:		Welding ends acc. to:														
		ISO Series 1			ISO Series 2		ANSI Sched 40		ANSI Sched 80							
DN	INCH	d1	s1)	s2)	d1	s	d1	s	d1	s	l1	l2	h1	h1*)	h2	
10	3/8"	17.2	1.8	1.8	15.0	2.5	17.1	2.3	17.1	3.2	44	61	53		45	
15	1/2"	21.3	2.0	2.0	20.0	2.5	21.3	2.8	21.3	3.7	44	61	53		45	
20	3/4"	26.9	2.3	2.6	25.0	2.5	26.7	2.9	26.7	3.9	44	61	53		45	
25	1"	33.7	2.6	2.6	32.0	3.0	33.4	3.4	33.4	4.5	60	60	66		50	
32	1 1/4"	42.4	2.6	2.9	38.0	3.0	42.2	3.6	42.2	4.8	60	60	66		50	
40	1 1/2"	48.3	2.6	2.9	45.0	3.0	48.3	3.7	48.3	5.1	70	70	77		75	

Nominal size:		Welding ends acc. to:													
50	2"	60.3	2.9	2.9	57.0	3.2	60.3	3.9			70	70	77		75
65	2 1/2"	76.1	2.9	3.2	76.1	3.6	73.0	5.2			85	85	89		85
80	3"	88.9	3.2	3.6	88.9	4.0	88.9	5.5			100	100	129		135
100	4"	114.3	3.6	4.0	108.0	4.0	114.3	6.0			120	120	137		140
125	5"	139.7	4.0	4.5	133.0	4.0	141.3	6.6			135	135	175	180	225
150	6"	168.3	4.5	5.6	159.0	4.5	168.3	7.1			150	150	192		230
200	8"	219.1	6.3	7.1			219.1	8.2			195	195	256		330
250	10"	273.0	7.1				273.0	9.3			236	236	276		380
300	12"	323.9	8.0				323.8	10.3			283	283	319		460

Table 3: Dimensions

1) PN25 / PN40 2) PN63 *) only for DN125 PN63, h2 = dismantling dimension

6 SS E AE MW NIRO

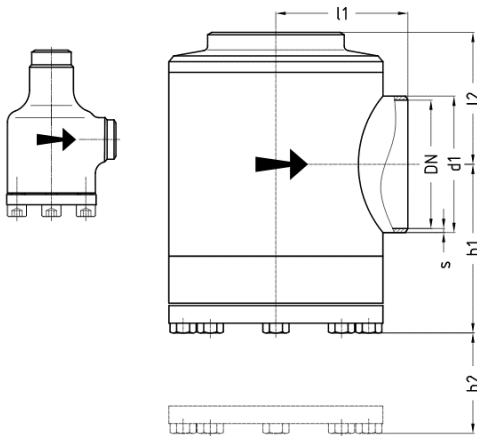
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Optional: Mesh size MW = 25/63/80/100/120/135/150/200/250/500/1000µm

DN 10 – 65

DN 80 – 300



DN / INCH	PN	-60	-10	+50	+150	TS [°C]
DN 10...65 3/8" ... 2 1/2"	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]
	PN63	63	63	63	63	PS [bar]
DN 80...200 3" ... 8"	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]
	PN63	63	63	63	63	PS [bar]
DN 250...300 10" ... 12"	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]

Nominal size:		Welding ends acc. to: s														
		ISO Series 1			ISO Series 2		ANSI Sched 40		ANSI Sched 80							
DN	INCH	d1	s1)	s2)	d1	s	d1	s	d1	s	l1	l2	h1	h1*)	h2	
10	3/8"	17.2	1.8	1.8	15.0	2.5	17.1	2.3	17.1	3.2	44	61	53		45	
15	1/2"	21.3	2.0	2.0	20.0	2.5	21.3	2.8	21.3	3.7	44	61	53		45	
20	3/4"	26.9	2.3	2.6	25.0	2.5	26.7	2.9	26.7	3.9	44	61	53		45	
25	1"	33.7	2.6	2.6	32.0	3.0	33.4	3.4	33.4	4.5	60	60	66		50	
32	1 1/4"	42.4	2.6	2.9	38.0	3.0	42.2	3.6	42.2	4.8	60	60	66		50	
40	1 1/2"	48.3	2.6	2.9	45.0	3.0	48.3	3.7	48.3	5.1	70	70	77		75	
50	2"	60.3	2.9	2.9	57.0	3.2	60.3	3.9			70	70	77		75	
65	2 1/2"	76.1	2.9	3.2	76.1	3.6	73.0	5.2			85	85	89		85	
80	3"	88.9	3.2	3.6	88.9	4.0	88.9	5.5			100	100	129		135	
100	4"	114.3	3.6	4.0	108.0	4.0	114.3	6.0			120	120	137		140	

Nominal size:		Welding ends acc. to: s													
125	5"	139.7	4.0	4.5	133.0	4.0	141.3	6.6			135	135	175	180	225
150	6"	168.3	4.5	5.6	159.0	4.5	168.3	7.1			150	150	192		230
200	8"	219.1	6.3	7.1			219.1	8.2			195	195	256		330
250	10"	273.0	7.1				273.0	9.3			236	236	276		380
300	12"	323.9	8.0				323.8	10.3			283	283	319		460

Table 4: Dimensions

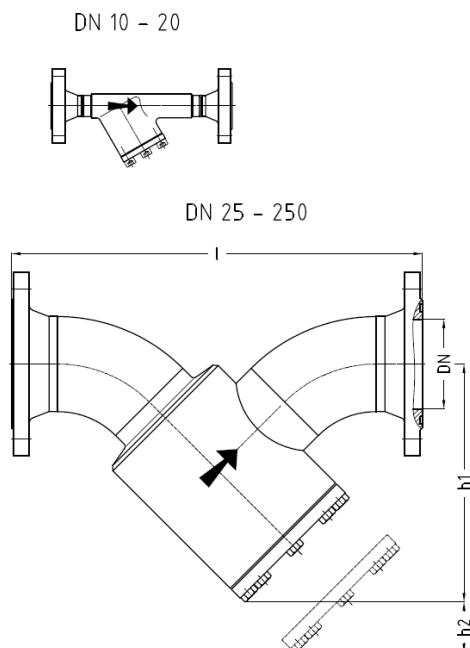
1) PN25 / PN40 2) PN63 *) only for DN125 PN63, h2 = dismantling dimension

7 SS D FL MW

D: Straight-way, **FL:** Flanged ends, **MW:** Mesh size

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Optional: Mesh size MW = 25/63/80/100/120/135/150/200/250/500/1000µm



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PN: Nominal pressure rating

DN / INCH	PN	-60	-40	-25	-10	+50	+150	TS [°C]
DN 10...20 3/8" ... 3/4"	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]
DN 25...200 1" ... 8"	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]
DN 250 10"	PN25	6.25	12.5	18.7	25	25	25	PS [bar]
	PN40	10	20	30	40	40	40	PS [bar]

Nominal size:		Flange connection 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	L	L	L	L	L	h1	h1*)	h2
10	3/8"	196	202	202	222		78		30
15	1/2"	196	208	208	222	237	78		30
20	3/4"	216	232	232	248	266	78		30
25	1"	230	222	222	258	266	127		35
32	1 1/4"	244	240	240	276	286	130		35
40	1 1/2"	235	248	248	282	295	142		55

Nominal size:		Flange connection acc. to:							
50	2"	270	280	280	308	324	147		55
65	2 1/2"	365	362	362	394	410	191		60
80	3"	413	422	422	450	464	245		90
100	4"		518	518	544	560	286		95
125	5"		599	599	639	660	351	354	145
150	6"		689	689	729	736	394		150
200	8"		870	886	930	932	522		220
250	10"		1053	1087		1113	620		360

Table 5: Dimensions

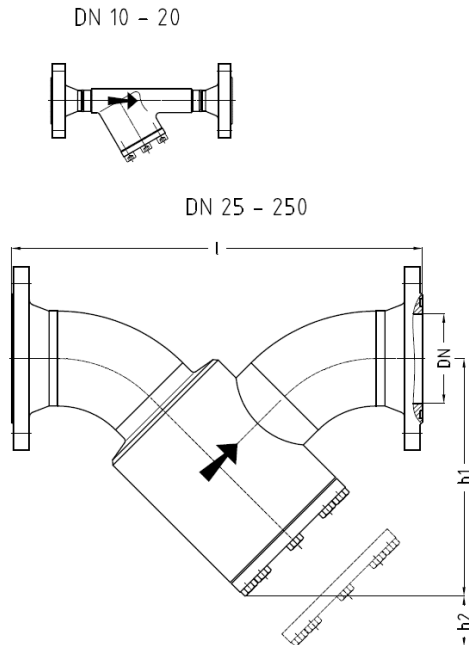
*) only for DN125 PN63, h2 = dismantling dimension

8 SS D FL MW NIRO

D: Straight-way, **FL:** Flanged ends, **MW:** Mesh size

SS stainless steel strainer for natural refrigerants (NH₃, CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines

Optional: Mesh size MW = 25/63/80/100/120/135/150/200/250/500/1000µm



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...20 3/8" ...3/4"	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]
	PN63	63	63	63	63	PS [bar]
DN 25...200 1" ...8"	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]
	PN63	63	63	63	63	PS [bar]
DN 250 10"	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]

Nominal size:		Flange connection 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	L	L	L	L	L	h1	h1*)	h2
10	3/8"	196	202	202	222		78		30
15	1/2"	196	208	208	222	237	78		30
20	3/4"	216	232	232	248	266	78		30
25	1"	230	222	222	258	266	127		35
32	1 1/4"	244	240	240	276	286	130		35
40	1 1/2"	235	248	248	282	295	142		55

Nominal size:		Flange connection acc. to:							
50	2"	270	280	280	308	324	147		55
65	2 1/2"	365	362	362	394	410	191		60
80	3"	413	422	422	450	464	245		90
100	4"		518	518	544	560	286		95
125	5"		599	599	639	660	351	354	145
150	6"		689	689	729	736	394		150
200	8"		870	886	930	932	522		220
250	10"		1053	1087		1113	620		360

Table 6: Dimensions

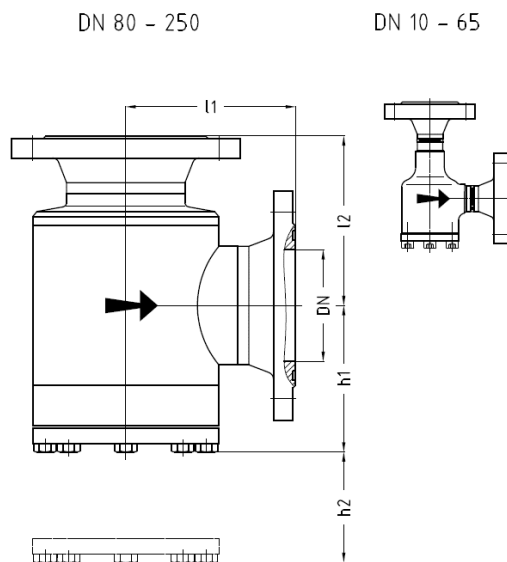
*) only for DN125 PN63, h2 = dismantling dimension

9 SS E FL MW

I: Angle, **FL:** Flanged ends, **MW:** Mesh size

SS steel strainer for natural refrigerants (NH₃, CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines

Optional: Mesh size MW = 25/63/80/100/120/135/150/200/250/500/1000µm



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...65 3/8" ... 2 1/2"	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]
DN 80...200 3" ... 8"	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]
DN 250 10"	PN25	6.25	12.5	18.7	25	25	25	PS [bar]
	PN40	10	20	30	40	40	40	PS [bar]

Nominal size:		Flange connection 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	l2	l1	l2	l1	l2	l1	l2	l1	l2	h1	h1*)	h2
10	3/8"	77	94	80	97	80	97	90	107			53		45
15	1/2"	77	94	83	100	83	100	90	107	97	114	53		45
20	3/4"	77	94	85	102	85	102	93	110	102	119	53		45
25	1"	105	105	101	101	101	101	119	119	123	123	66		50
32	1 1/4"	105	105	103	103	103	103	121	121	126	126	66		50
40	1 1/2"	110	110	116	116	116	116	133	133	139	139	77		75

Nominal size:		Flange connection acc. to:												
50	2"	114	114	119	119	119	119	133	133	141	141	77		75
65	2 1/2"	140	140	138	138	138	138	154	154	162	162	89		85
80	3"	155	155	159	159	159	159	173	173	180	180	129		135
100	4"			186	186	186	186	199	199	207	207	137		140
125	5"			204	204	204	204	224	224	235	235	175	180	225
150	6"			226	226	226	226			250	250	192		230
200	8"			276	276	284	284			307	307	256		330
250	10"			325	325	342	342			354	354	278		450

Table 7: Dimensions

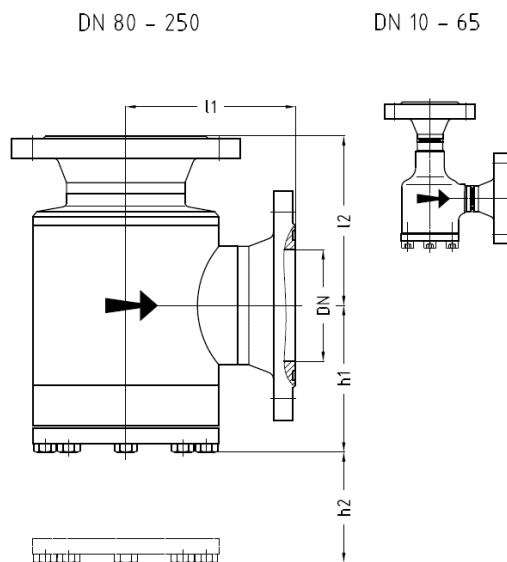
*) only for DN125 PN63, h₂ = dismantling dimension, DIN/EN flange facings with DIN 2512 groove as standard

10 SS E FL MW NIRO

I: Angle, **FL:** Flanged ends, **MW:** Mesh size

SS stainless steel strainer for natural refrigerants (NH₃, CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines

Optional: Mesh size MW = 25/63/80/100/120/135/150/200/250/500/1000µm



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...65 3/8" ... 2 1/2"	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]
	PN63	63	63	63	63	PS [bar]
DN 80...200 3" ... 8"	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]
	PN63	63	63	63	63	PS [bar]
DN 250 10"	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]

Nominal size:		Flange connection 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	l2	l1	l2	l1	l2	l1	l2	l1	l2	h1	h1*)	h2
10	3/8"	77	94	80	97	80	97	90	107			53		45
15	1/2"	77	94	83	100	83	100	90	107	97	114	53		45
20	3/4"	77	94	85	102	85	102	93	110	102	119	53		45
25	1"	105	105	101	101	101	101	119	119	123	123	66		50
32	1 1/4"	105	105	103	103	103	103	121	121	126	126	66		50
40	1 1/2"	110	110	116	116	116	116	133	133	139	139	77		75

Nominal size:		Flange connection acc. to:												
50	2"	114	114	119	119	119	119	133	133	141	141	77		75
65	2 1/2"	140	140	138	138	138	138	154	154	162	162	89		85
80	3"	155	155	159	159	159	159	173	173	180	180	129		135
100	4"			186	186	186	186	199	199	207	207	137		140
125	5"			204	204	204	204	224	224	235	235	175	180	225
150	6"			226	226	226	226			250	250	192		230
200	8"			276	276	284	284			307	307	256		330
250	10"			325	325	342	342			354	354	278		450

Table 8: Dimensions

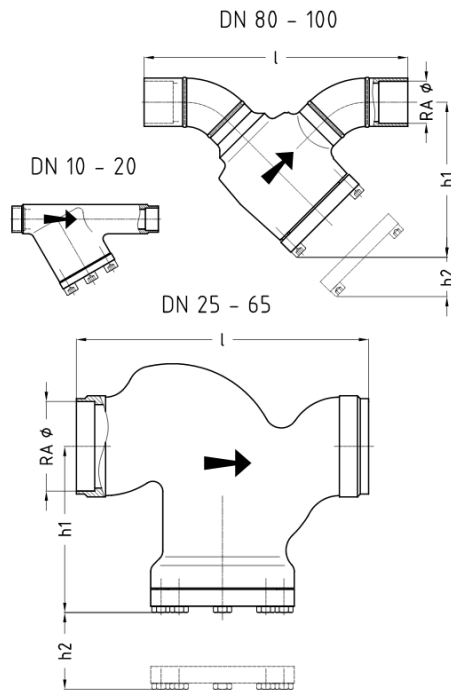
*) only for DN125 PN63, h2 = dismantling dimension, DIN/EN flange facings with DIN 2512 groove as standard

11 SS D LE MW

D: Straight-way, **LE:** Soldering ends, **MW:** Mesh size

SS steel strainer for natural refrigerants (NH₃, CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines

Optional: Mesh size MW = 25/63/80/100/120/135/150/200/250/500/1000µm



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]
DN 10...20	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]
DN 25...100	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	43/63*	PS [bar]

* only from DN80

Nominal size:	Soldering ends acc. to:			
DN	RAØ	l	h1	h2
10	12	130	78	30
15	15	130	78	30
15	18	130	78	30
20	22	150	78	30
25	28	160	88	50
32	35	180	89	50
40	42	200	106	75
50	54	230	106	75
65	64	290	139	85

Nominal size:	Soldering ends acc. to:			
65	76	290	139	85
80	89	406	245	90
100	108	518	286	95

Table 9: Dimensions

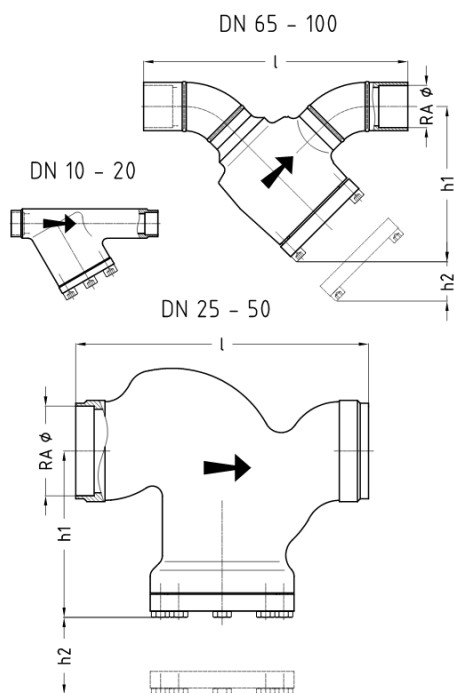
h2 = dismantling dimension

12 SS D LE MW NIRO

D: Straight-way, **LE:** Soldering ends, **MW:** Mesh size

SS stainless steel strainer for natural refrigerants (NH₃, CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines

Optional: Mesh size MW = 25/63/80/100/120/135/150/200/250/500/1000µm



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]
DN 10...20	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]
	PN63	63	63	63	63	PS [bar]
DN 25...100	PN25	25	25	25	25	PS [bar]
	PN40	40	40	40	40	PS [bar]
	PN63	63	63	63	50.2/63*	PS [bar]

* only from DN65

Nominal size:	Soldering ends acc. to:			
DN	RAØ	L	h1	h2
10	12	130	78	30
15	15	130	78	30
15	18	130	78	30
20	22	110	73	30
25	28	160	88	50
32	35	180	89	50
40	42	200	106	75
50	54	230	106	75
65	64	366	191	60

Nominal size:	Soldering ends acc. to:			
65	76	366	191	60
80	89	406	245	90
100	108	518	286	95

Table 10: Dimensions

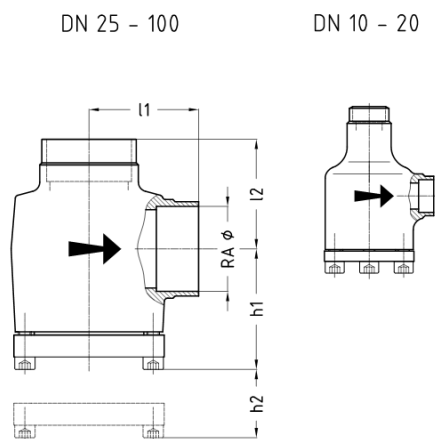
h2 = dismantling dimension

13 SS E LE MW

I: Angle, **LE:** Soldering ends, **MW:** Mesh size

SS steel strainer for natural refrigerants (NH₃, CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines

Optional: Mesh size MW = 25/63/80/100/120/135/150/200/250/500/1000µm



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]
DN 10...100	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:	Soldering ends acc. to:				
DN	RAØ	l1	l2	h1	h2
10	12	44	61	53	45
15	15	44	61	53	45
15	18	44	61	53	45
20	22	44	61	53	45
25	28	60	60	66	50
32	35	60	60	66	50
40	42	70	70	77	75
50	54	70	70	77	75
65	64	140	140	89	85
65	76	140	140	89	85
80	89	151	151	129	135
100	108	186	186	137	140

Table 11: Dimensions

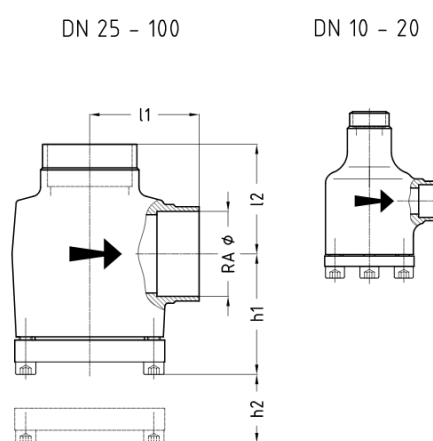
h2 = dismantling dimension

14 SS E LE MW NIRO

I: Angle, **LE:** Soldering ends, **MW:** Mesh size

SS stainless steel strainer for natural refrigerants (NH₃, CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines

Optional: Mesh size MW = 25/63/80/100/120/135/150/200/250/500/1000µm



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]
DN 10...100	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:				
DN	RAØ	l1	l2	h1	h2
10	12	44	61	53	45
15	15	44	61	53	45
15	18	44	61	53	45
20	22	44	61	53	45
25	28	60	60	66	50
32	35	60	60	66	50
40	42	70	70	77	75
50	54	70	70	77	75
65	64	140	140	89	85
65	76	140	140	89	85
80	89	151	151	129	135
100	108	186	186	137	140

Table 12: Dimensions

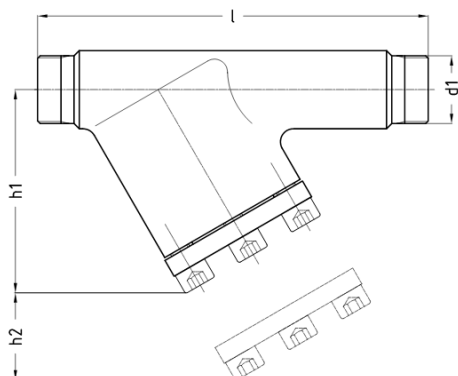
h2 = dismantling dimension

15 SS D SE MW

D: Straight-way, **SE:** Screwed ends, **MW:** Mesh size

SS steel strainer for natural refrigerants (NH₃, CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines

Optional: Mesh size MW = 25/63/80/100/120/135/150/200/250/500/1000µm



NOTICE! Installation lengths (l) may vary due to the different threads.

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]
DN 10...20	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 acc. to:			
DN	d1	l	h1	h2
10	See coding, connections	130	78	30
20		150	78	30

Table 13: Dimensions

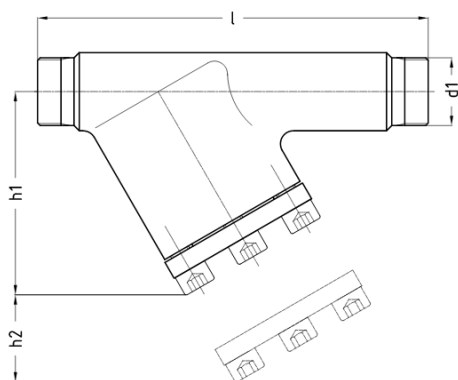
h2 = dismantling dimension

16 SS D SE MW NIRO

D: Straight-way, **SE:** Screwed ends, **MW:** Mesh size

SS stainless steel strainer for natural refrigerants (NH₃, CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines

Optional: Mesh size MW = 25/63/80/100/120/135/150/200/250/500/1000µm



NOTICE! Installation lengths (l) may vary due to the different threads.

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]
DN 10...20	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:			
DN	d1	l	h1	h2
10	See coding, connections	130	78	30
20		150	78	30

Table 14: Dimensions

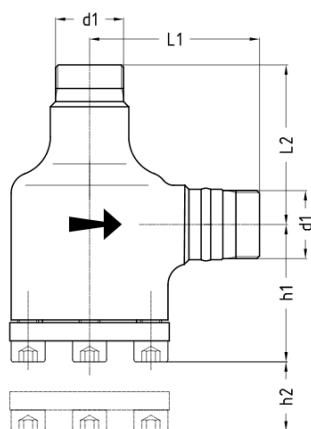
h2 = dismantling dimension

17 SS E SE MW

I: Angle, **SE:** Screwed ends, **MW:** Mesh size

SS steel strainer for natural refrigerants (NH₃, CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines

Optional: Mesh size MW = 25/63/80/100/120/135/150/200/250/500/1000µm



NOTICE! Installation lengths (I) may vary due to the different threads.

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]
DN 10...20	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 acc. to:				
DN	d1	l1	l2	h1	h2
10	See coding, connections	70	61	53	45
20		70	61	53	45

Table 15: Dimensions

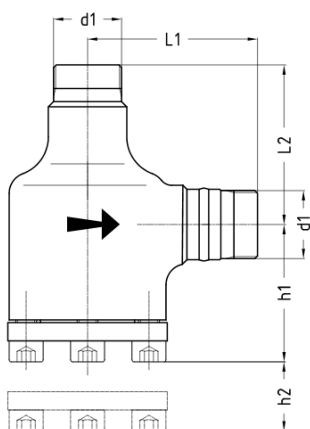
h2 = dismantling dimension

18 SS E SE MW NIRO

I: Angle, **SE:** Screwed ends, **MW:** Mesh size

SS stainless steel strainer for natural refrigerants (NH₃, CO₂) and non-corrosive gases and liquids according to EN 378-1 as well as brines

Optional: Mesh size MW = 25/63/80/100/120/135/150/200/250/500/1000µm



NOTICE! Installation lengths (l) may vary due to the different threads.

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]
DN 10...20	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:				
DN	d1	l1	l2	h1	h2
10	See coding, connections	70	61	53	45
20		70	61	53	45

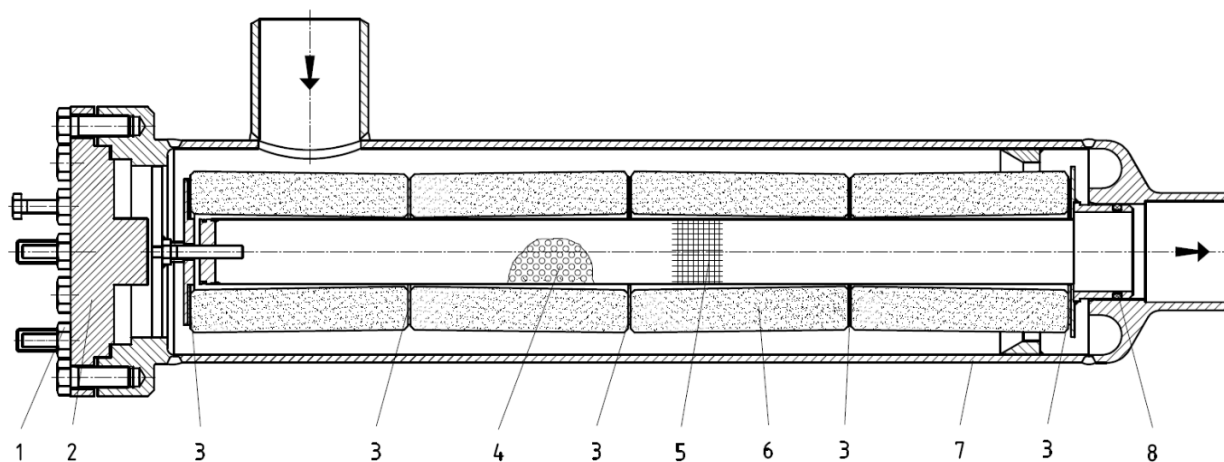
Table 16: Dimensions

h2 = dismantling dimension

19 FT materials

Designation and materials

FT - filter drier



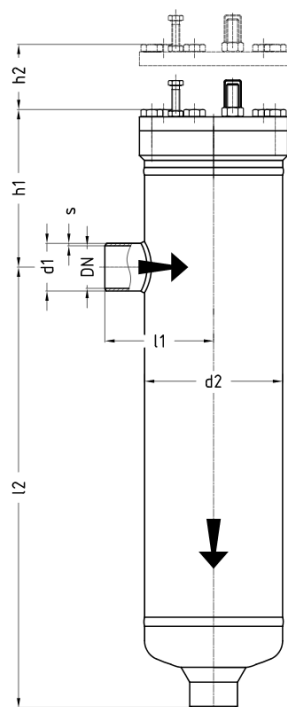
Part	Material for steel valves	Material for stainless steel valves
1 Body screw	8.8	A2-70
2 Bonnet	S355J2 1.0577	X8CrNiS18-9 1.4305
3 Flat sealing ring filter elements	AFM30	AFM30
4 Perforated plate	X5CrNi18-10 1.4301	X5CrNi18-10 1.4301
5 Fine screen	X5CrNiMoTi17-12-2 1.4571	X5CrNiMoTi17-12-2 1.4571
6 Filter block	Molecular sieve Al_2O_3	Molecular sieve Al_2O_3
7 Body	P235GH 1.0345 S355J2 1.0577 P355N 1.0562	X5CrNi18-10 1.4301 X6CrNiTi18-10 1.4541
8 O-ring – seal	Cr, NBR, HNBR, EPDM, FPM *	Cr, NBR, HNBR, EPDM, FPM *

* depending on the refrigerant used

20 FT AE / FT AE IFBL

AE:welding ends, **IFBL:** Filter element

FT steel filter dryer 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	-35	-25	-10	+50	+120	TS [°C]
DN 20...80	PN25	12.5	18.7	25	25	25	PS [bar]
3/4"...3"	PN40	20	30	40	40	40	PS [bar]

Filter drier for high/low temperature in flat gasket design

DN / INCH	PN	-60	-40	-25	-10	+50	+150	TS [°C]
DN 20...200	PN25	6.25	12.5	18.7	25	25	25	PS [bar]
3/4"...8"	PN40	10	20	30	40	40	40	PS [bar]
	PN63	15.75	31.5	47.2	63	63	63	PS [bar]

Nominal size: Welding ends acc. to:								Elements per filter					
		ISO Series 1		ISO Series 2		ANSI Sched 40							
DN	INCH	d1	s1)	d1	s	d1	s	l1	l2	h1	h2	d2	IFBL
20	3/4"	26.9	2.3	25.0	2.5	26.7	2.9	110	175	138	185	140	1 // 760
25	1"	33.7	2.6	32.0	3.0	33.4	3.4	110	175	138	185	140	1 // 760
32	1 1/4"	42.4	2.6	38.0	3.0	42.2	3.6	110	300	160	330	140	2 // 760
40	1 1/2"	48.3	2.6	45.0	3.0	48.3	3.7	110	445	160	470	140	3 // 760
50	2"	60.3	2.9	57.0	3.2	60.3	3.9	110	585	160	610	140	4 // 760
50	2"	60.3	2.9	57.0	3.2	60.3	3.9	125	525	150	545	168	3 // 1480
65	2 1/2"	76.1	2.9	76.1	3.6	73.0	5.2	125	690	161	710	168	4 // 1480
80	3"	88.9	3.2	88.9	4.0	88.9	5.5	175	690	161	710	168	4 // 1480

Nominal size:		Welding ends acc. to:											Elements per filter
													Quantity // type /
80	3"	88.9	3.2	88.9	4.0	88.9	5.5	TBD	TBD	TBD	TBD	TBD	3 // 1480
100	4"	114.3	3.6	108.0	4.0	114.3	6.0	TBD	TBD	TBD	TBD	TBD	4 // 1480
125	5"	139.7	4.0	133.0	4.0	141.3	6.6	251	636	TBD	TBD	406	4 // 5970
150	6"	168.3	4.5	159.0	4.5	168.3	7.1	263	970	TBD	TBD	406	6 // 5970
200	8"	219.1	6.3			219.1	8.2	263	TBD	TBD	TBD	406	8 // 5970

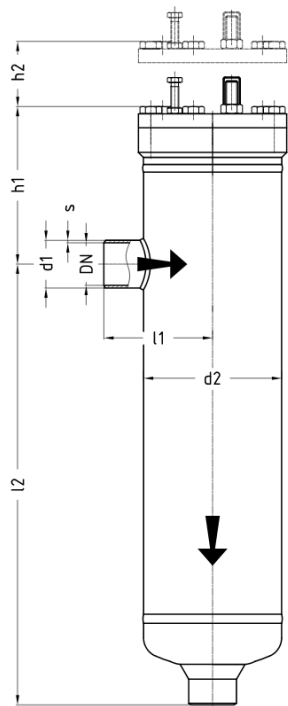
Table 17: Dimensions

h2 = dismantling dimension

21 FT AE NIRO / FT AE IFBL

AE:welding ends, **IFBL:** Filter element

FT stainless steel filter dryer 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	-35	-25	-10	+50	+120	TS [°C]
DN 20...80	PN25	25	25	25	25	25	PS [bar]
3/4"...3"	PN40	40	40	40	40	40	PS [bar]

Filter drier for high/low temperature in flat gasket design

DN / INCH	PN	-60	-10	+50	+150	TS [°C]
DN 20...200	PN25	25	25	25	25	PS [bar]
3/4"...8"	PN40	40	40	40	40	PS [bar]
	PN63	63	63	63	63	PS [bar]

Nominal size:		Welding ends acc. to:						Elements per filter					
		ISO Series 1		ISO Series 2		ANSI Sched 40							Quantity // type /
DN	INCH	d1	s1)	d1	s	d1	s	l1	l2	h1	h2	d2	IFBL
20	3/4"	26.9	2.3	25.0	2.5	26.7	2.9	110	175	138	185	140	1 // 760
25	1"	33.7	2.6	32.0	3.0	33.4	3.4	110	175	138	185	140	1 // 760
32	1 1/4"	42.4	2.6	38.0	3.0	42.2	3.6	110	300	160	330	140	2 // 760
40	1 1/2"	48.3	2.6	45.0	3.0	48.3	3.7	110	445	160	470	140	3 // 760
50	2"	60.3	2.9	57.0	3.2	60.3	3.9	110	585	160	610	140	4 // 760
50	2"	60.3	2.9	57.0	3.2	60.3	3.9	125	525	150	545	168	3 // 1480
65	2 1/2"	76.1	2.9	76.1	3.6	73.0	5.2	125	690	161	710	168	4 // 1480
80	3"	88.9	3.2	88.9	4.0	88.9	5.5	175	690	161	710	168	4 // 1480

Nominal size:		Welding ends acc. to:											Elements per filter
													Quantity // type /
80	3"	88.9	3.2	88.9	4.0	88.9	5.5	TBD	TBD	TBD	TBD	TBD	3 // 1480
100	4"	114.3	3.6	108.0	4.0	114.3	6.0	TBD	TBD	TBD	TBD	TBD	4 // 1480
125	5"	139.7	4.0	133.0	4.0	141.3	6.6	251	636	TBD	TBD	406	4 // 5970
150	6"	168.3	4.5	159.0	4.5	168.3	7.1	263	970	TBD	TBD	406	6 // 5970
200	8"	219.1	6.3			219.1	8.2	263	TBD	TBD	TBD	406	8 // 5970

Table 18: Dimensions

h2 = dismantling dimension

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
1.0562	P355N	DIN EN 10028-3		
1.6220	G20Mn5 +QT	DIN EN 10213	ASTM A352	LCC
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
1.6220	G20Mn5 +QT	DIN EN 10213	ASTM A352	LCC
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
1.4581	GX5CrNiMoNb19-11-2	DIN EN 10213	ASTM A351	CF10M

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

23 Coding of connections for small and service valves

GEA AWP valves can be manufactured with a variety of connection variants:

DN	Thread	Code	Welding ends		Dimensions	Code
DN8	M12x1.5 RA6	AL	DN6	R1	Ø10.2x1.6	C0
DN8	M12x1.5-taper	AY		ANSI 40	Ø1/8"x1.7	C1
DN8	M14x1.5 RA8	A4		ANSI 80	Ø1/8"x2.4	C2
DN8	M16x1.5 RA8	A5				
DN8	M16x1.5 RA10	A6	DN8	R1	Ø13.5x1.8	D0
DN8	M16x1.5-i	AZ		ANSI 40	Ø1/4"x2.2	D1
DN8	M16x1.5-taper	AC		ANSI 80	Ø1/4"x3.0	D2
DN8	M18x1.5 RA10	A7		12x2	Ø12x2.0	D3
DN8	M18x1.5 RA12	A8		12x3	Ø12x3.0	D4
DN8	M20x1.5 RA12	A9		R1 ext. L2=130 Niro	Ø13.5x1.8	D5
DN8	M22x1.5 RA14	AA		R1 ext. L2=130 C-St.	Ø13.5x1.8	D6
DN8	M22x1.5 RA15	AB				
DN8	M22x1.5	A0	DN10	R1	Ø17.2x1.8	E0
DN8	M22x1.5-taper	AD		ANSI 40	Ø3/8"x2.3	E1
DN20	M26x1.5 RA18	AS		ANSI 80	Ø3/8"x3.2	E2
DN20	M30x2 RA22	AT		R2	Ø15x2.5	E3
DN8	G1/4"	AF		18x3	Ø18x3.0	E4
DN8	G1/4"-taper	AG		R1 ext. L2=130 Niro	Ø17.2x1.8	E5
DN8	G1/4"-i	AH		R1 ext. L2=130 C-St.	Ø17.2x1.8	E6
DN8	G3/8"	AK		16x4 ext.L2=130 NIRO	Ø16x4.0	E7
DN8	G3/8"-i	AM		17,2x2	Ø17.2x2.0	E8
DN8	G3/8" RA10	AJ		R1 ext. L2=120 C-St.	Ø17.2x1.8	E9
DN8	G1/2"	A1		R1 ext. L2=140 Niro	Ø17.2x1.8	EA
DN8	G1/2"-LH	A2		R1 ext. L2=140 C-St.	Ø17.2x1.8	EB
DN8	G1/2" RA12	AN		R1 ext. L2=60 Niro	Ø17.2x1.8	EC
DN8	G1/2"-i	AU		R1 ext. L2=60 C-St.	Ø17.2x1.8	ED
DN8	G1/2" UM *)	AV		18x4 ext.L2=140 Niro	Ø18x4.0	EE
DN8	G1/2" **)	AW		18x4 ext.L2=140C-St	Ø18x4.0	EF
DN8	G1/2"-taper	AX		18x4 ext.L2=60 Niro	Ø18x4.0	EG
DN20	G3/4"	AE		18x4 ext.L2=60 C-St.	Ø18x4.0	EH
DN20	G3/4" RA18	AP				
DN8	1/4"NPT-male	A3	DN15	R1	Ø21.3x2.0	F0
DN8	1/4"NPT-female	AR		ANSI 40	Ø1/2"x2.8	F1
DN8	3/8"NPT-male	AI		ANSI 80	Ø1/2"x3.7	F2
DN8	3/8"NPT-female	B2		R2	Ø20x2.5	F3
DN8	1/2"NPT-male	B0		R1 ext. L2=130 Niro	Ø21.3x2.0	F5
DN8	1/2"NPT-female	B1		R1 ext. L2=130 C-St.	Ø21.3x2.0	F6
DN20	3/4"NPT-male	B3		R1 ext. L2=180 NIRO	Ø21.3x2.0	F7
DN8	M10-a	B4		ANSI 80 L2=130 C-St	Ø21.3x3.7	F8
DN20	G1"	B6	*) rotatable, welded to body			
DN8	G3/8" BSPT-male	B7				
DN8	G3/8" BSPT-female	B8	**) for one-piece blind nut			
DN8	3/8-18 NPTF-male	B9				
DN8	R3/8"-taper	BA				

i = female thread, a = male thread

	Accessories	Short designation	Code
UM+ST	Union nut with welding nipple	UM+ST	1
BM	Blind nut	BM	2
DM	Double nut left/right	DM	3
UM+SKB	Union nut with weld ball nipple	UM+SKB	4
UM+SR	Union nut with cutting ring	UM+SR	5
UM+SLT	Union nut with hose nipple	UM+SLT	6
DM+adapter	Double nut with adapter G1/2"-a/G1/4"-i	DM+adapter	7
UM+KKR	Union nut with clamping ring	UM+KKR	9

Table 19: These connections can be equipped with accessories.

24 Accessories for AVR, HRAR, RV, RVA, RVAK, SS, UVA

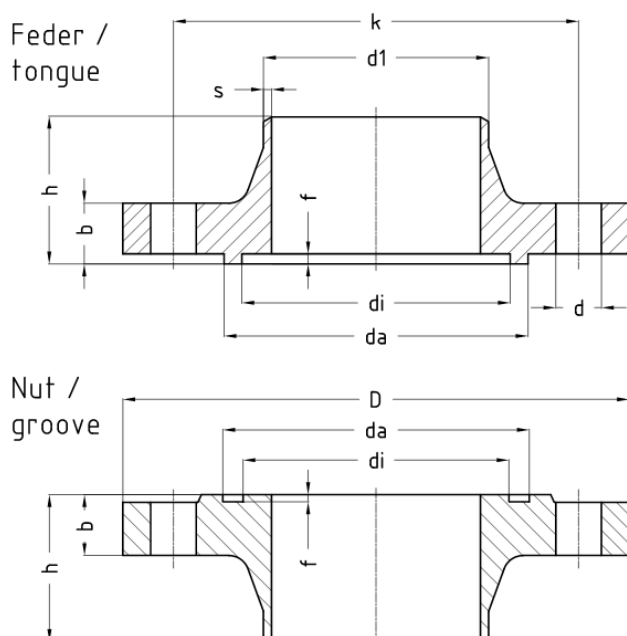
- UM+ST Union nut with welding nipple and gasket
- BM Blind nut with gasket
- DM Double nut right-hand/left-hand with gasket
- UM+SLT Union nut with hose nipple and gasket
- UM+SKB Union nut with weld ball nipple
- UM+SR Union nut with cutting ring

TYPE	AWP code	Description
UM+ST G3/8"	00060F07A5A0AK01	Union nut G3/8", welding nipple 10.2x1.6, gasket 10x13.5x1.5-Al
UM+ST G1/2"	00060F07A5A0A101	Union nut G1/2", welding nipple 13.5x1.8, gasket 13x18x1.5-Al
UM+ST G3/4"	00060F07A5A0AE01	Union nut G3/4", welding nipple 17.2x2.0, gasket 17x22x1.5-Al
UM+ST G1"	00060F07A5A0B601	Union nut G1" + welding nipple 21.3x2.0 + gasket 22x27x1.5-Al
BM 8 (G1/2")	00060F07A5A0A102	Blind nut G1/2", gasket 13x18x1.5-Al G1/2"
BM 10 (G3/4")	00060F07A5A0AE02	Blind nut G3/4", gasket 17x22x1.5-Al G3/4",
DM G1/2"-G1/2"L	00060F07A5A0A203	Left-right nut G1/2", gasket 13x18x1.5-Al
UM+SLT	00060F07A5A0A106	One-piece hose nipple G1/2" + gasket 13x18x1.5-Al
UM+SKB 6 RA6	00060F07A5A0AL04	Union nut M12x1.5 RA6, weld ball nipple SKA 6x1.5
UM+SKB 8 RA10	00060F07A5A0A604	Union nut M16x1.5 RA10, weld ball nipple SKA 10x1.5
UM+BM 8 RA10	00060F07A5A0A602	Union nut with blind plug M16x1.5 RA10
UM+SKB 8 RA12	00060F07A5A0A804	Union nut M18x1.5 RA12, weld ball nipple SKA 12x2.0
UM+BM 8 RA12	00060F07A5A0A802	Union nut with blind plug M18x1.5 RA12
UM+SKB G1/2" RA12	00060F07A5A0AN04	Union nut G1/2" RA12, weld ball nipple SKA 12x2 RA12
UM+BM G1/2" RA12	00060F07A5A0AN02	Union nut with blind plug G1/2" RA12
UM+SR 6 L6	00060F07A5A0AL05	Union nut M12x1.5 RA6, cutting ring L6
UM+SR 8 L10	00060F07A5A0A605	Union nut M16x1.5 RA10, cutting ring L10
UM+SR 8 L12	00060F07A5A0A805	Union nut M18x1.5 RA12, cutting ring L12
UM+SR G1/2" RA12	00060F07A5A0AN05	Union nut G1/2" RA12, cutting ring L12

25 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
- Form F - tongue
- 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

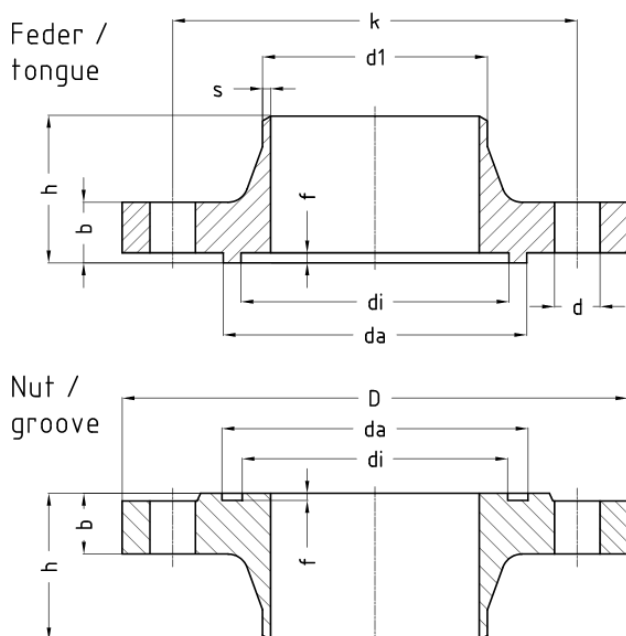
DIN2634 PN25 DN10-150 / DIN 2635 PN40 DN10-400																					
200	219.1	6.3			34	320	88	30	375	238	260	3.0	239	259	4.5	12		M 27	100	239	259
250	273.0	7.1			38	385	105	33	450	291	313	3.0	292	312	4.5	12		M 30	110	292	312
300	323.9	8.0			42	450	115	33	515	342	364	3.0	343	363	4.5	16		M 30	120	343	363
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 20: Installation lengths

26 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

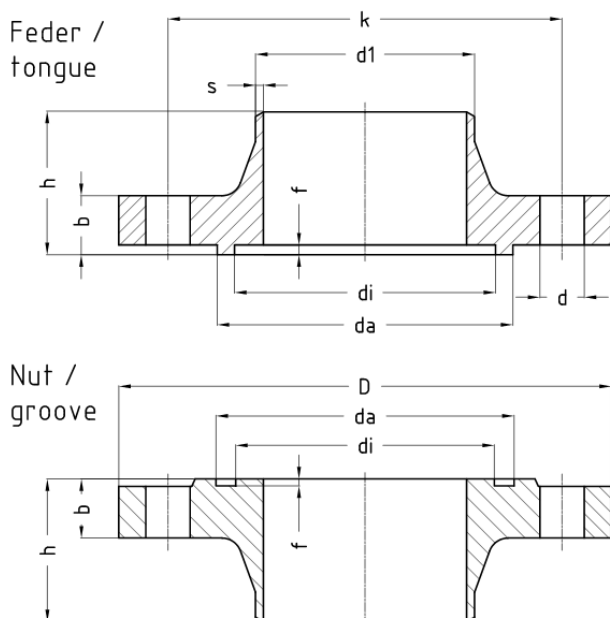
DIN 2634 PN25 DN200-500																			
32	42.4	2.9	24	110	60	22	155	50	66	2.5	51	65	4.0	4	M 20	70	51	65	
40	48.3	2.9	26	125	62	22	170	60	76	2.5	61	75	4.0	4	M 20	70	61	75	
DIN 2636 PN63 DN50-125																			
DN	d1	S	b	k	h	d	D	di	da	f	di	da	f	Quantity	Thread	Length	di	da	
50	60.3	2.9	26	135	62	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 21: Installation lengths

27 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	d _i	d _a	f	d _i	d _a	f	Quantity	Thread	Length	d _i	d _a
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

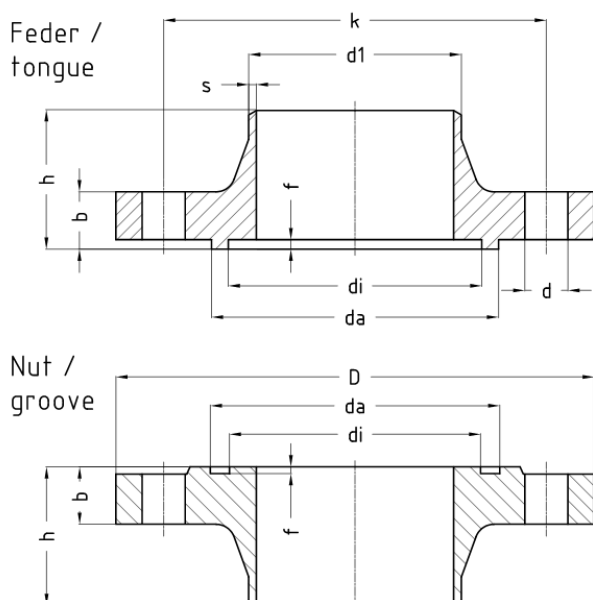
DIN EN 1092-1 PN25 DN10-150 / PN40 DN10-400																					
200	219.1	6.3			34	320	88	30	375	238	260	4.5	239	259	5.0	12		M 27	100	239	259
250	273.0	7.1			38	385	105	33	450	291	313	4.5	292	312	5.0	12		M 30	110	292	312
300	323.9	8.0			42	450	115	33	515	342	364	4.5	343	363	5.0	16		M 30	120	343	363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

28 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



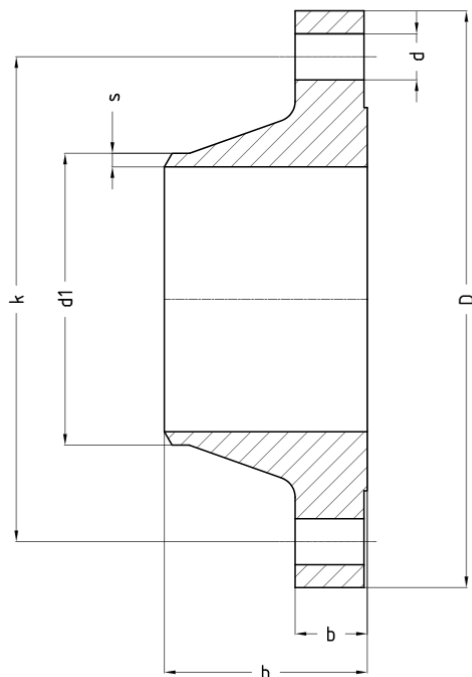
DIN EN 1092-1 PN25 DN200-500																			
	Welding ends							Flange facing design						Screws DIN 931			Sealing ring DIN 2691		
	Series 1							Groove			Tongue								
DN	d1	s	b	k	h	d	D	di	da	f	di	da	f	Quantity	Thread	Length	di	da	
200	219.1	6.3	30	310	80	26	360	238	260	4.5	239	259	5.0	12	M 24	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 23: Installation lengths

29 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

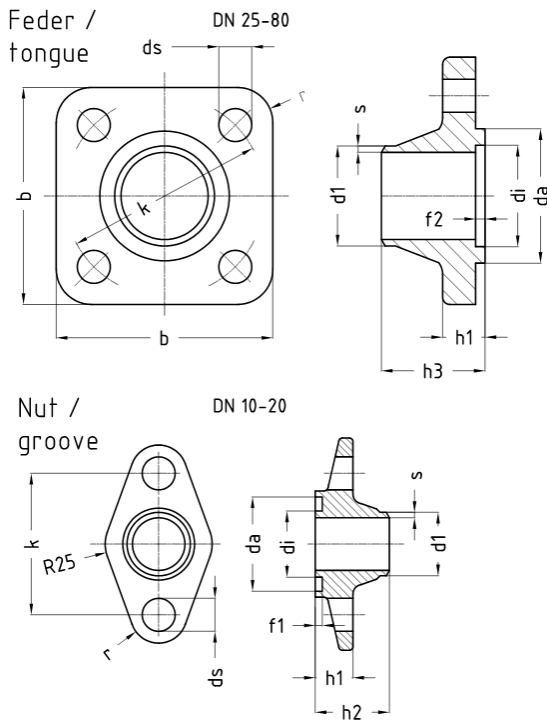


Nominal size		Welding ends acc. to:														
		ANSI		ANSI-FL 150lbs RF / sq. in					Screws DIN 931	ANSI-FL 300lbs RF / sq. in					Screws DIN 931	
DN	INCH	d1	s	b	k	h	d	D	Quantity	b	k	h	d	D	Quantity	
15	1/2"	21.3	2.8	11.2	60.5	47.8	15.7	88.9	4	14.2	66.5	52.3	15.7	95.2	4	
20	3/4"	26.7	2.9	12.7	69.9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

30 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 25: Dimensions

* = acc. to DIN 7603

GEA AWP GmbH
Armaturenstr. 2
17291 Prenzlau
Germany
phone: +49 3984 8559-0
fax: +49 3984 8559-18
e-mail: info@awpvalves.com

