

SUCTION FILTERS FOR HEATING TECHNOLOGIES

SF, SF-AVR, SFR, SFR-AVR, SFCS

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1 SF / SFR / SFCS

HT: Temperature up to +200°C

SF: Suction filter

SF	Connection	Form	Material	Valve type
SF	Materials			
SF PS25 / PS40 / PS63	Flange connection	Angle	St	SF FL
			NIRO	SF FL NIRO

SF-AVR: Suction filter combination - with shut-off valve

SF-AVR	Connection	Form	Material	Valve type
SF	Materials			
AVR	Materials			
SF-AVR PS25 / PS40 / PS63	Flange connection	Angle	St	SF-AVR FL
			NIRO	SF-AVR FL NIRO

SFR: Suction filter - with integrated check valve

SFR	Connection	Form	Material	Valve type
SFR	Materials			
SFR PS25 / PS40 / PS63	Flange connection	Angle	St	SFR FL
			NIRO	SFR FL NIRO

SFR-AVR: Suction filter combination - with integrated check valve and shut-off valve

SFR-AVR	Connection	Form	Material	Valve type
SFR	Materials			
AVR	Materials			
SFR-AVR PS25 / PS40 / PS63	Flange connection	Angle	St	SFR-AVR FL
			NIRO	SFR-AVR FL NIRO

SFCS: Suction filter - with shut-off function

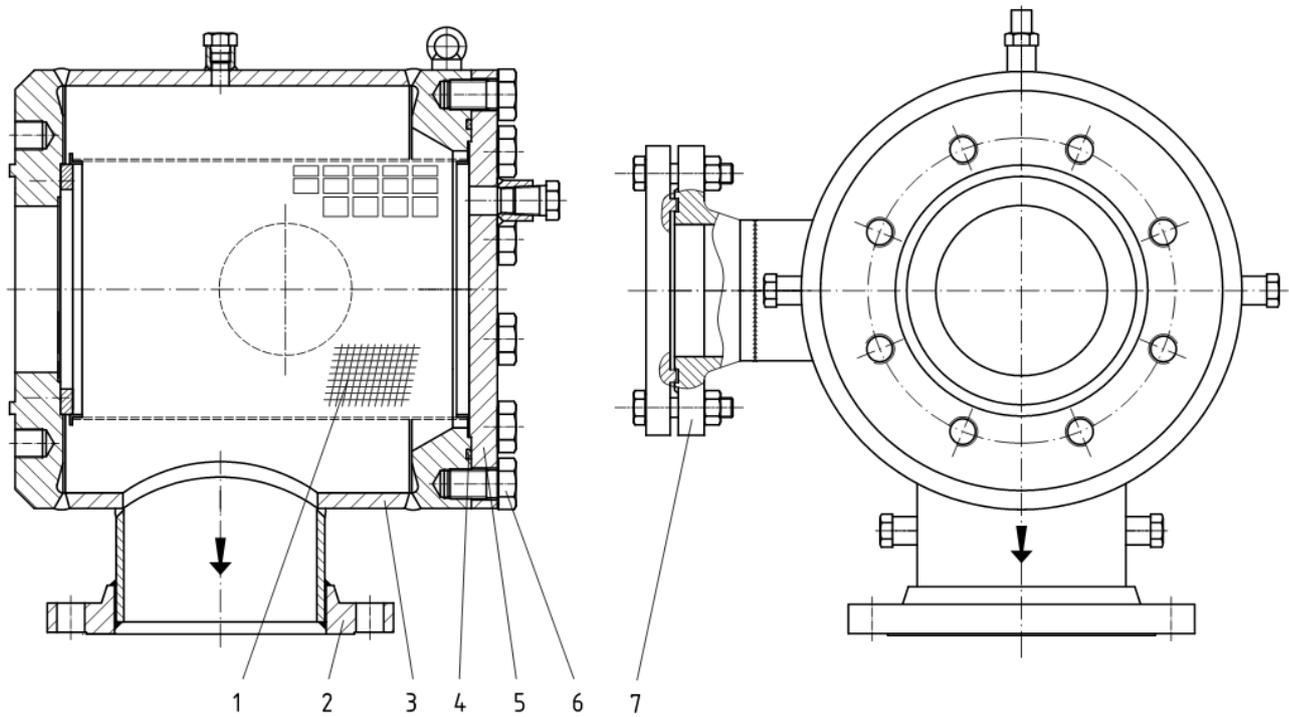
SFCS	Connection	Form	Material	Valve type
SFCS	Materials			
SFCS PS25 / PS40 / PS63	Flange connection	Angle	St	SFCS FL
			NIRO	SFCS FL NIRO
Information	Information on suction filter and suction filter combination for calculation			
	Comparison of European/American materials			
	Coding of connections for small and service valves			
	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 SF materials

Designation and materials

SF HT - suction filter



Materials, connections and approvals on customer request.

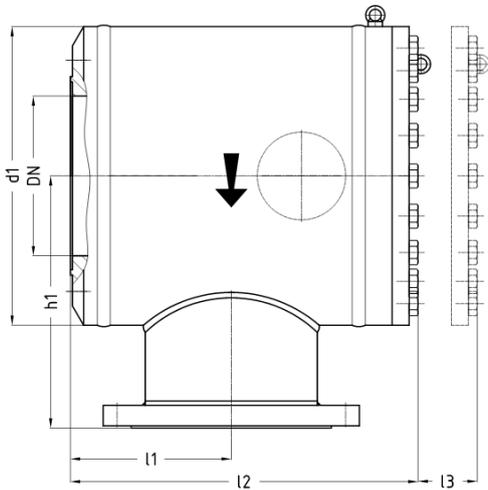
Part	Material for steel valves	Material for stainless steel valves
1 Strainer insert	X5CrNi18-10 1.4301	X5CrNi18-10 1.4301
2 Compressor inlet flange	P250GH 1.0460 P265GH 1.0425	X5CrNi18-10 1.4301
3 Body	S235JR 1.0038 P235GH 1.0345 P355N 1.0562	X5CrNi18-10 1.4301
4 Bonnet O-ring	*CR	*CR
5 Bonnet	S235JR 1.0038	X5CrNi18-10 1.4301
6 Bonnet screw	8.8 / A2-70	A2-70
7 Flange bypass	P250GH 1.0460 P265GH 1.0425	X5CrNi18-10 1.4301

* depending on the refrigerant used

3 SF FL HT

FL: Flanged ends, **HT:** Temperature up to +200°C

SF steel suction filter for natural refrigerants (NH3, CO2) and non-corrosive gases according to EN 378-1



Application: Compressor-suction filters are designed and manufactured to order.

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

Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

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

PN: Nominal pressure rating

DN / INCH	PN	-10	+50	+200	TS [°C]
DN 80...500 3"...20"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]
	PN63	63	63	63	PS [bar]

Nominal size:		Flange at outlet:								
DN	INCH	PN25 DIN 2634 EN1092-1	PN40 DIN 2635 EN1092-1	PN63 DIN 2636 EN1092-1	ANSI 300 RF	h1	l1	l2	l3*	d1
80	3"	230	230		215	130	290	235	220	
100	4"	250	250		235	130	355	275	245	
125	5"	315	315		305	170	410	325	324	
150	6"	325	325		305	170	410	325	356	
200	8"	362	370		355	205	470	375	407	
250	10"	433	450		420	245	600	485	508	
300	12"	485	508		485	285	685	565	610	
350	14"	507	532		485	285	685	565	610	

Nominal size:			Flange at outlet:						
400	16"	685	710		600	380	825	690	711
500	20"	750	765		700	485	1050	700	813

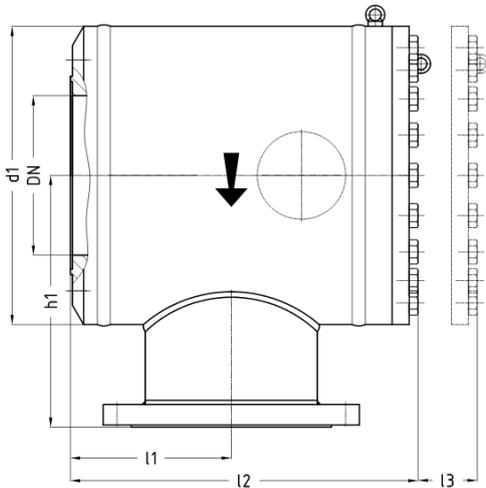
Table 1: Dimensions

I3* = dismantling dimension, DIN/EN flange facings as standard: tongue DIN 2512

4 SF FL NIRO HT

FL: Flanged ends, **HT:** Temperature up to +200°C

SF stainless steel suction filter for natural refrigerants (NH₃, CO₂) and non-corrosive gases according to EN 378-1



Application: Compressor-suction filters are designed and manufactured to order.

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

Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

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

PN: Nominal pressure rating

DN / INCH	PN	-10	+50	+200	TS [°C]
DN 80...500 3"...20"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]
	PN63	63	63	63	PS [bar]

Nominal size:		Flange at outlet:								
DN	INCH	PN25 DIN 2634 EN1092-1	PN40 DIN 2635 EN1092-1	PN63 DIN 2636 EN1092-1	ANSI 300 RF	h1	l1	l2	l3*	d1
80	3"	230	230		215	130	290	235	220	
100	4"	250	250		235	130	355	275	245	
125	5"	315	315		305	170	410	325	324	
150	6"	325	325		305	170	410	325	356	
200	8"	362	370		355	205	470	375	407	
250	10"	433	450		420	245	600	485	508	
300	12"	485	508		485	285	685	565	610	

Nominal size:			Flange at outlet:						
350	14"	507	532		485	285	685	565	610
400	16"	685	710		600	380	825	690	711
500	20"	750	765		700	485	1050	700	813

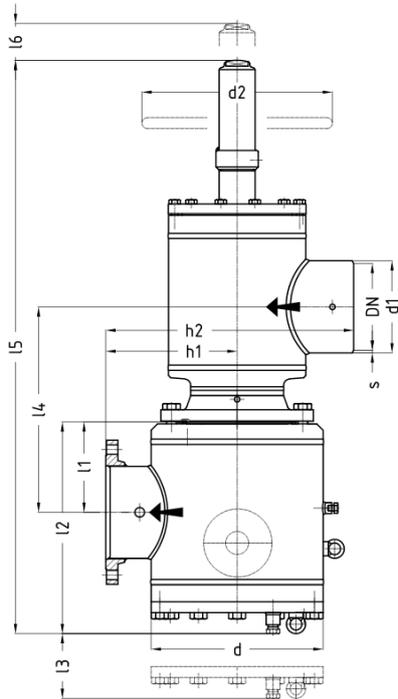
Table 2: Dimensions

I3* = dismantling dimension, DIN/EN flange facings as standard: tongue DIN 2512

5 SF-AVR FL HT

FL: Flanged ends, **HT:** Temperature up to +200°C

SF-AVR steel suction filter combination - with shut-off valve* for natural refrigerants (NH₃, CO₂) and non-corrosive gases according to EN 378-1



Application: Compressor-suction filters are designed and manufactured to order.

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

Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

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

PN: Nominal pressure rating

DN / INCH	PN	-10	+50	+200	TS [°C]
DN 80...250 3"..."10"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]
	PN63	63	63	63	PS [bar]
DN 300...500 12"..."20"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]

Other operating pressures on request

Nominal size:		Flange at outlet:																	
		ISO Series 1		ANSI Sched 40		PS25 DIN 2634 EN1092-1		PS40 DIN 2635 EN1092-1		ANSI 300 RF									
DN	INCH	d1	s	d1	s	h1	h2	h1	h2	h1	h2	l1	l2	l3*	l4	l5	l6*	d	d2
80	3"	88.9	3.2	88.9	5.5	230	330	230	330	215	315	130	290	235	288	800	150	220	180
100	4"	114.3	3.6	114.3	6.0	250	370	250	370	235	355	130	355	275	315	910	150	245	180
125	5"	139.7	4.0	141.3	6.6	315	515	315	515	305	505	170	410	325	373	1070	190	324	300
150	6"	168.3	4.5	168.3	7.1	325	550	325	550	305	530	170	410	325	395	1090	210	356	400

Nominal size:		Flange at outlet:																	
200	8"	219.1	6.3	219.1	8.2	362	637	370	645	355	630	205	470	375	480	1355	240	407	630
250	10"	273.0	7.1	273.0	9.3	433	758	450	775	420	745	245	600	485	569	1555	300	508	630
300	12"	323.9	8.0	323.8	10.3	485	860	508	883	485	860	285	685	565	660	1735	385	610	630
350	14"	355.6	8.0	355.6	11.1	507	932	532	957	485	910	285	685	565	710	1820	485	610	630
400	16"	406.4	8.8	406.4	12.7	685	1160	710	1185	600	1075	380	825	690	855	2135	500	711	630
500	20"	508.0	10	508.0	15.1	750	1325	765	1340	700	1275	485	1050	700	1075	2900	700	813	630

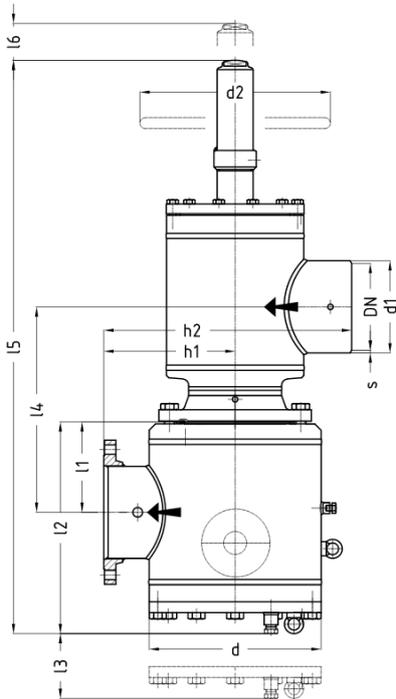
Table 3: Dimensions

l3*+ l6* = dismantling dimension, DIN/EN flange facings as standard: tongue DIN 2512

6 SF-AVR FL NIRO HT

FL: Flanged ends, **HT:** Temperature up to +200°C

SF-AVR stainless steel suction filter combination - with shut-off valve* for natural refrigerants (NH3, CO2) and non-corrosive gases according to EN 378-1



Application: Compressor-suction filters are designed and manufactured to order.

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

Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

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

PN: Nominal pressure rating

DN / INCH	PN	-10	+50	+200	TS [°C]
DN 80...250 3"..."10"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]
	PN63	63	63	63	PS [bar]
DN 300...500 12"..."20"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]

Other operating pressures on request

Nominal size:		Flange at outlet:																	
		ISO Series 1		ANSI Sched 40		PS25 DIN 2634 EN1092-1		PS40 DIN 2635 EN1092-1		ANSI 300 RF									
DN	INCH	d1	s	d1	s	h1	h2	h1	h2	h1	h2	l1	l2	l3*	l4	l5	l6*	d	d2
80	3"	88.9	3.2	88.9	5.5	230	330	230	330	215	315	130	290	235	288	800	150	220	180
100	4"	114.3	3.6	114.3	6.0	250	370	250	370	235	355	130	355	275	315	910	150	245	180
125	5"	139.7	4.0	141.3	6.6	315	515	315	515	305	505	170	410	325	373	1070	190	324	300
150	6"	168.3	4.5	168.3	7.1	325	550	325	550	305	530	170	410	325	395	1090	210	356	400

Nominal size:		Flange at outlet:																	
200	8"	219.1	6.3	219.1	8.2	362	637	370	645	355	630	205	470	375	480	1355	240	407	630
250	10"	273.0	7.1	273.0	9.3	433	758	450	775	420	745	245	600	485	569	1555	300	508	630
300	12"	323.9	8.0	323.8	10.3	485	860	508	883	485	860	285	685	565	660	1735	385	610	630
350	14"	355.6	8.0	355.6	11.1	507	932	532	957	485	910	285	685	565	710	1820	485	610	630
400	16"	406.4	8.8	406.4	12.7	685	1160	710	1185	600	1075	380	825	690	855	2135	500	711	630
500	20"	508.0	10	508.0	15.1	750	1325	765	1340	700	1275	485	1050	700	1075	2900	700	813	630

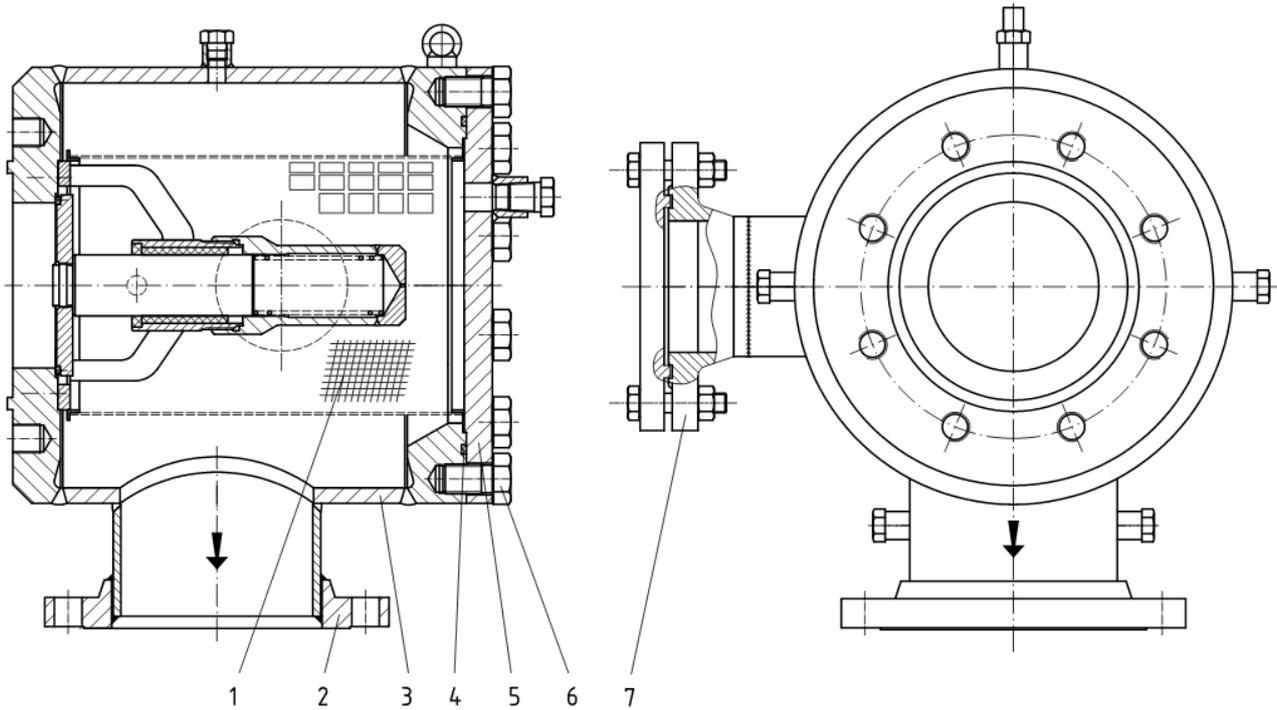
Table 4: Dimensions

l3*+ l6* = dismantling dimension, DIN/EN flange facings as standard: tongue DIN 2512

7 SFR materials

Designation and materials

SFR HT – Suction filter with integrated check valve



Materials, connections and approvals on customer request.

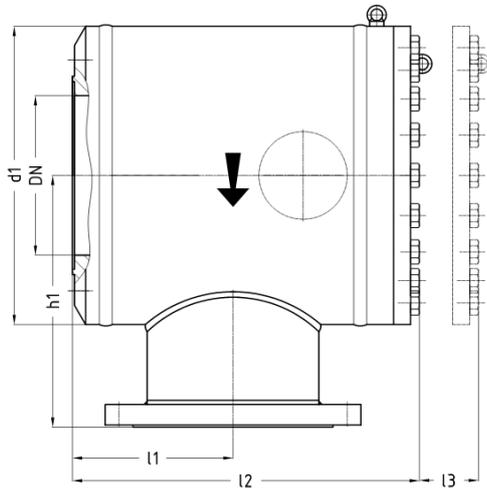
Part	Material for steel valves	Material for stainless steel valves
1 Strainer insert	X5CrNi18-10 1.4301	X5CrNi18-10 1.4301
2 Compressor inlet flange	P250GH 1.0460 P265GH 1.0425	X5CrNi18-10 1.4301
3 Body	P235GH 1.0345 S235JR 1.0038 P355N 1.0562	X5CrNi18-10 1.4301
4 Bonnet O-ring	CR*	CR*
5 Bonnet	S235JR 1.0038	X5CrNi18-10 1.4301
6 Bonnet screw	8.8 / A2-70	A2-70
7 Flange bypass	P250GH 1.0460 P265GH 1.0425	X5CrNi18-10 1.4301

* depending on the refrigerant used

8 SFR FL HT

FL: Flanged ends, **HT:** Temperature up to +200°C

SFR steel suction filter - with integrated check valve for natural refrigerants (NH₃, CO₂) and non-corrosive gases according to EN 378-1



Application: Compressor-suction filters are designed and manufactured to order.

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

Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

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

PN: Nominal pressure rating

DN / INCH	PN	-10	+50	+200	TS [°C]
DN 80...500 3" ...20"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]
	PN63	63	63	63	PS [bar]

Nominal size:		Flange at outlet:							
DN	INCH	PN25 DIN 2634 EN1092-1	PN40 DIN 2635 EN1092-1	PN63 DIN 2636 EN1092-1	ANSI 300 RF	l1	l2	l3*	d1
80	3"	h1 230	h1 230		h1 215	130	290	235	220
100	4"	h1 250	h1 250		h1 235	130	355	275	245

Nominal size:			Flange at outlet:						
125	5"	315	315		305	170	410	325	324
150	6"	325	325		305	170	410	325	356
200	8"	362	370		355	205	470	375	407
250	10"	433	450		420	245	600	485	508
300	12"	485	508		485	285	685	565	610
350	14"	507	532		485	285	685	565	610
400	16"	685	710		600	380	825	690	711
500	20"	750	765		700	485	1050	700	813

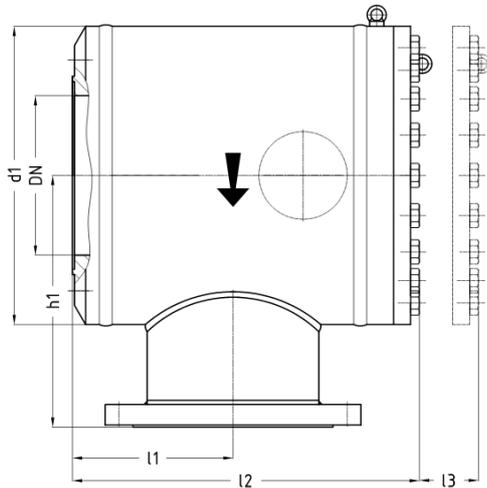
Table 5: Dimensions

l3* = dismantling dimension, DIN/EN flange facings as standard: tongue DIN 2512

9 SFR FL NIRO HT

FL: Flanged ends, **HT:** Temperature up to +200°C

SFR stainless steel suction filter - with integrated check valve for natural refrigerants (NH₃, CO₂) and non-corrosive gases according to EN 378-1



Application: Compressor-suction filters are designed and manufactured to order.

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

Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

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

PN: Nominal pressure rating

DN / INCH	PN	-10	+50	+200	TS [°C]
DN 80...500 3" ...20"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]
	PN63	63	63	63	PS [bar]

Nominal size:		Flange at outlet:								
DN	INCH	PN25 DIN 2634 EN1092-1	PN40 DIN 2635 EN1092-1	PN63 DIN 2636 EN1092-1	ANSI 300 RF	h1	l1	l2	l3*	d1
80	3"	230	230		215	130	290	235	220	
100	4"	250	250		235	130	355	275	245	
125	5"	315	315		305	170	410	325	324	
150	6"	325	325		305	170	410	325	356	
200	8"	362	370		355	205	470	375	407	
250	10"	433	450		420	245	600	485	508	
300	12"	485	508		485	285	685	565	610	

Nominal size:			Flange at outlet:						
350	14"	507	532		485	285	685	565	610
400	16"	685	710		600	380	825	690	711
500	20"	750	765		700	485	1050	700	813

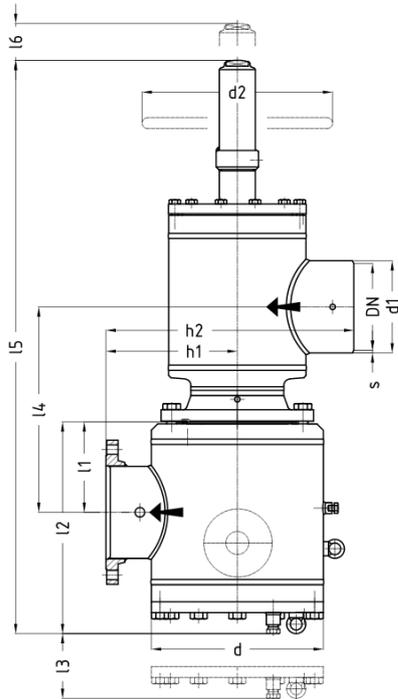
Table 6: Dimensions

l3* = dismantling dimension, DIN/EN flange facings as standard: tongue DIN 2512

10 SFR-AVR FL HT

FL: Flanged ends, **HT:** Temperature up to +200°C

SFR-AVR steel suction filter combination - with integrated check valve and shut-off valve* for natural refrigerants (NH₃, CO₂) and non-corrosive gases according to EN 378-1



Application: Compressor-suction filters are designed and manufactured to order.

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

Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

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

PN: Nominal pressure rating

DN / INCH	PN	-10	+50	+200	TS [°C]
DN 80...250 3" ... 10"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]
	PN63	63	63	63	PS [bar]
DN 300...500 12" ... 20"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]

Other operating pressures on request

Nominal size:		Flange at outlet:																	
DN	INCH	ISO Series 1		ANSI Sched 40		PS25 DIN 2634 EN1092-1		PS40 DIN 2635 EN1092-1		ANSI 300 RF									
		d1	s	d1	s	h1	h2	h1	h2	h1	h2	l1	l2	l3*	l4	l5	l6*	d	d2
80	3"	88.9	3.2	88.9	5.5	230	330	230	330	215	315	130	290	235	288	800	150	220	180
100	4"	114.3	3.6	114.3	6.0	250	370	250	370	235	355	130	355	275	315	910	150	245	180
125	5"	139.7	4.0	141.3	6.6	315	515	315	515	305	505	170	410	325	373	1070	190	324	300
150	6"	168.3	4.5	168.3	7.1	325	550	325	550	305	530	170	410	325	395	1090	210	356	400

Nominal size:		Flange at outlet:																	
200	8"	219.1	6.3	219.1	8.2	362	637	370	645	355	630	205	470	375	480	1355	240	407	630
250	10"	273.0	7.1	273.0	9.3	433	758	450	775	420	745	245	600	485	569	1555	300	508	630
300	12"	323.9	8.0	323.8	10.3	485	860	508	883	485	860	285	685	565	660	1735	385	610	630
350	14"	355.6	8.0	355.6	11.1	507	932	532	957	485	910	285	685	565	710	1820	485	610	630
400	16"	406.4	8.8	406.4	12.7	685	1160	710	1185	600	1075	380	825	690	855	2135	500	711	630
500	20"	508.0	10	508.0	15.1	750	1325	765	1340	700	1275	485	1050	700	1075	2900	700	813	630

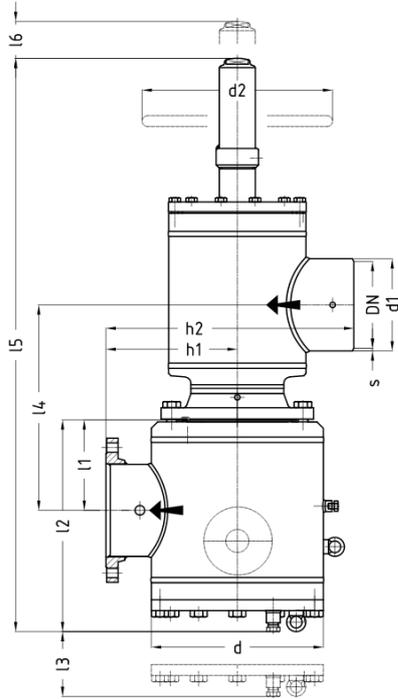
Table 7: Dimensions

l3*+ l6* = dismantling dimension, DIN/EN flange facings as standard: tongue DIN 2512

11 SFR-AVR FL NIRO HT

FL: Flanged ends, **HT:** Temperature up to +200°C

SFR-AVR stainless steel suction filter combination - with integrated check valve and shut-off valve* for natural refrigerants (NH₃, CO₂) and non-corrosive gases according to EN 378-1



Application: Compressor-suction filters are designed and manufactured to order.

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

Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

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

PN: Nominal pressure rating

DN / INCH	PN	-10	+50	+200	TS [°C]
DN 80...250 3" ... 10"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]
	PN63	63	63	63	PS [bar]
DN 300...500 12" ... 20"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]

Other operating pressures on request

Nominal size:		Flange at outlet:																			
DN	INCH	ISO Series 1	ANSI Sched 40	PS25 DIN 2634 EN1092-1	PS40 DIN 2635 EN1092-1	ANSI 300 RF														d	d2
		d1	s	d1	s	h1	h2	h1	h2	h1	h2	l1	l2	l3*	l4	l5	l6*	d	d2		
80	3"	88.9	3.2	88.9	5.5	230	330	230	330	215	315	130	290	235	288	800	150	220	180		
100	4"	114.3	3.6	114.3	6.0	250	370	250	370	235	355	130	355	275	315	910	150	245	180		
125	5"	139.7	4.0	141.3	6.6	315	515	315	515	305	505	170	410	325	373	1070	190	324	300		
150	6"	168.3	4.5	168.3	7.1	325	550	325	550	305	530	170	410	325	395	1090	210	356	400		

Nominal size:		Flange at outlet:																	
200	8"	219.1	6.3	219.1	8.2	362	637	370	645	355	630	205	470	375	480	1355	240	407	630
250	10"	273.0	7.1	273.0	9.3	433	758	450	775	420	745	245	600	485	569	1555	300	508	630
300	12"	323.9	8.0	323.8	10.3	485	860	508	883	485	860	285	685	565	660	1735	385	610	630
350	14"	355.6	8.0	355.6	11.1	507	932	532	957	485	910	285	685	565	710	1820	485	610	630
400	16"	406.4	8.8	406.4	12.7	685	1160	710	1185	600	1075	380	825	690	855	2135	500	711	630
500	20"	508.0	10	508.0	15.1	750	1325	765	1340	700	1275	485	1050	700	1075	2900	700	813	630

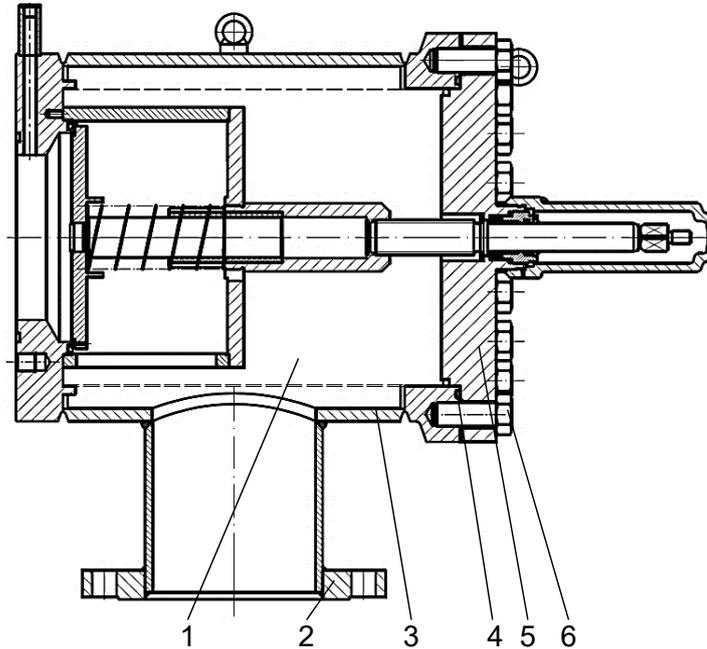
Table 8: Dimensions

l3*+ l6* = dismantling dimension, DIN/EN flange facings as standard: tongue DIN 2512

12 SFCS materials

Designation and materials

SFCS HT – Suction filter with shut-off function



Materials, connections and approvals on customer request.

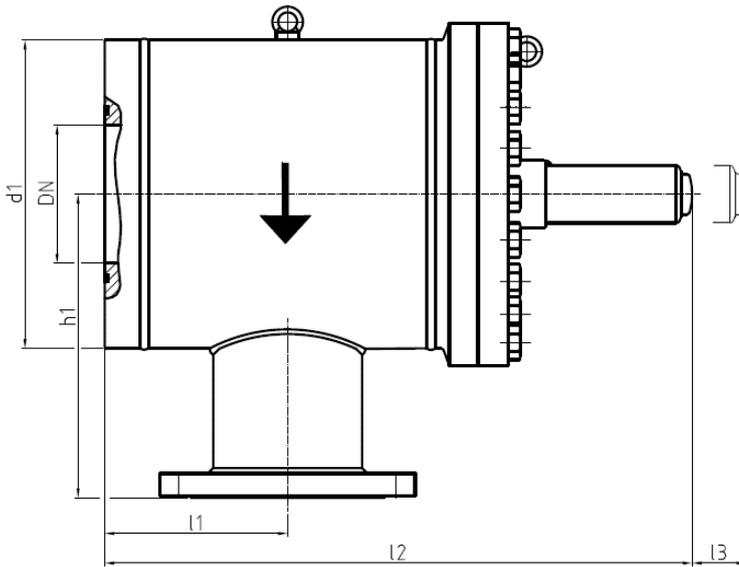
Part	Material for steel valves	Material for stainless steel valves
1 Strainer insert	X5CrNi18-10 1.4301	X5CrNi18-10 1.4301
2 Compressor inlet flange	P250GH 1.0460 P265GH 1.0425 S235JR 1.0038 P355N 1.0562	X5CrNi18-10 1.4301
3 Body	P235GH 1.0345	X5CrNi18-10 1.4301
4 Bonnet O-ring	CR*	CR*
5 Bonnet	S235JR 1.0038	X5CrNi18-10 1.4301
6 Bonnet screw	8.8 / A2-70	A2-70

* depending on the refrigerant used

13 SFCS FL HT

FL: Flanged ends, **HT:** Temperature up to +200°C

SFCS steel suction filter - with shut-off function for natural refrigerants (NH₃, CO₂) and non-corrosive gases according to EN 378-1



Application: Compressor-suction filters are designed and manufactured to order.

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

Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

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

PN: Nominal pressure rating

DN / INCH	PN	-10	+50	+200	TS [°C]
DN 80...500 3"...20"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]
	PN63	63	63	63	PS [bar]

Nominal size:		Flange at outlet:								
DN	INCH	PN25 DIN 2634 EN1092-1	PN40 DIN 2635 EN1092-1	PN63 DIN 2636 EN1092-1	ANSI 300 RF	h1	l1	l2	l3*	d1
80	3"	230	230	230	215	130			240	220
100	4"	250	250	250	235	130			280	245
125	5"	315	315	315	305	170			330	324
150	6"	325	325	325	305	186			330	356
200	8"	362	370	370	355	205			380	407
250	10"	433	450	450	420	272	865		480	457
300	12"	485	508	508	485	285			570	610
350	14"	507	532	532	485	285			570	610
400	16"	685	710	710	600	380	1135		680	711
500	20"	750	765	765	700	485			890	813

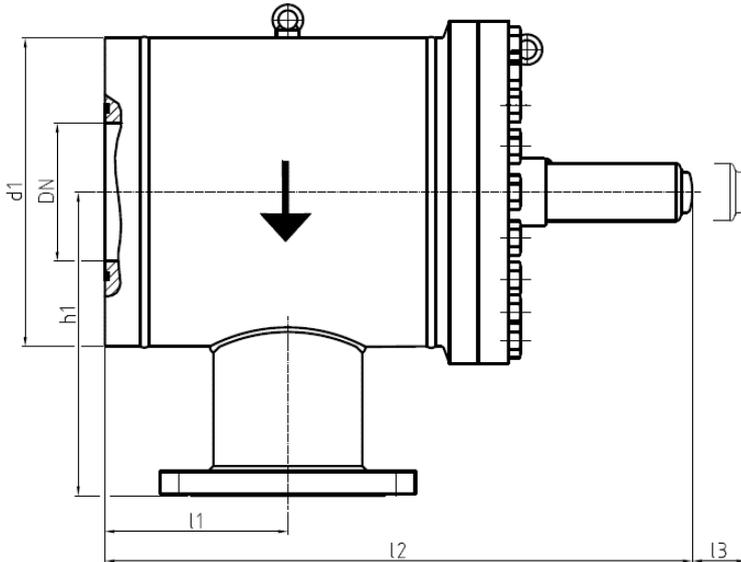
Table 9: Dimensions

l3* = dismantling dimension, DIN/EN flange facings as standard: tongue DIN 2512

14 SFCS FL NIRO HT

FL: Flanged ends, **HT:** Temperature up to +200°C

SFCS stainless steel suction filter - with shut-off function for natural refrigerants (NH₃, CO₂) and non-corrosive gases according to EN 378-1



Application: Compressor-suction filters are designed and manufactured to order.

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

Pressure / temperature operating limits:

PS: Max. permissible operating pressure in bar

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

PN: Nominal pressure rating

DN / INCH	PN	-10	+50	+200	TS [°C]
DN 80...500 3" ...20"	PN25	25	25	25	PS [bar]
	PN40	40	40	40	PS [bar]
	PN63	63	63	63	PS [bar]

Nominal size:		Flange at outlet:								
DN	INCH	PN25 DIN 2634 EN1092-1	PN40 DIN 2635 EN1092-1	PN63 DIN 2636 EN1092-1	ANSI 300 RF	h1	l1	l2	l3*	d1
80	3"	230	230	230	215	130			240	220
100	4"	250	250	250	235	130			280	245
125	5"	315	315	315	305	170			330	324
150	6"	325	325	325	305	186			330	356
200	8"	362	370	370	355	205			380	407
250	10"	433	450	450	420	272	865		480	457
300	12"	485	508	508	485	285			570	610
350	14"	507	532	532	485	285			570	610
400	16"	685	710	710	600	380	1135		680	711
500	20"	750	765	765	700	485			890	813

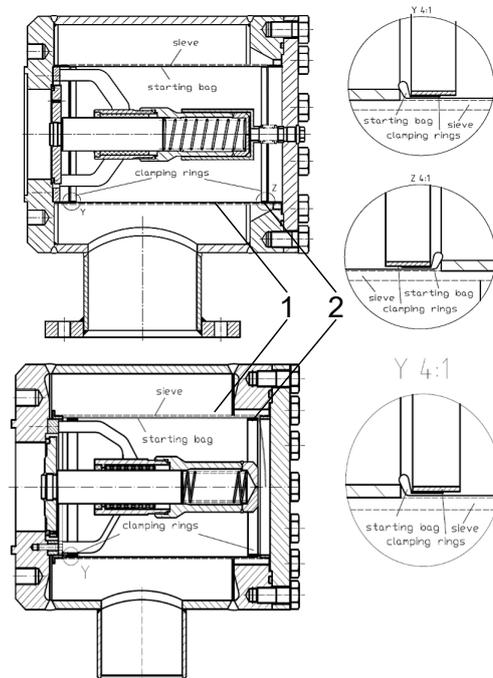
Table 10: Dimensions

l3* = dismantling dimension, DIN/EN flange facings as standard: tongue DIN 2512

15 SF start-up strainer

SF - start-up strainer for suction filter with hot gas connection

SF – start-up strainer for suction filter



	Part	Material for steel valves	Material for stainless steel valves
1	Start-up strainer	Tulona 650g/m ²	Tulona 650g/m ²
2	Clamping ring	CK75 1.1248	CK75 1.1248

16 Information on suction filter and suction filter combination for calculation

For the design of suction filters and suction filter combinations SF/SFR/SFCS we require the following information from you:

Mass flow kg/h
Temperature °C at the valve
Mesh size for SF/SFR/SFCS
SF/SFR/SFCS outlet
SF/SFR/SFCS inlet
Bypass
Hot-gas connection only for SFR
Connections and arrangement
Calculation according to ...
Test report
Quality and inspection plan
Special material
Certifications according to ...
Accessories
Dimensions compressor-suction flange

Note: The nominal size of the suction filter is determined by the nominal size at the inlet of the suction filter or shut-off valve!

Information	Unit	Unit
Mass flow	kg/h	kg/h
Temperature at the valve	°C	°C
Mesh size for SF/SFR	MW	MW
SF/SFR/SFCS outlet	DN	DN
SF/SFR/SFCS inlet	DN	DN
Bypass	DN	DN
Hot-gas connection only for SFR		
Connections and arrangement		
Calculation according to ...		
Test report		
Quality and inspection plan		
Special material		
Certifications according to ...		
Accessories		
Dimensions compressor-suction flange		

17 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.

18 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=1 30 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

DN	Thread	Code	Welding ends		Dimensions	Code
DN8	G1/2"-i	AU		R1 ext. L2=60 C- St.	Ø17.2x1.8	ED
DN8	G1/2" UM *)	AV		18x4 ext.L2=1 40 Niro	Ø18x4.0	EE
DN8	G1/2" **)	AW		18x4 ext.L2=1 40C-St	Ø18x4.0	EF
DN8	G1/2"-taper	AX		18x4 ext.L2=6 0 Niro	Ø18x4.0	EG
DN20	G3/4"	AE		18x4 ext.L2=6 0 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

These connections can be equipped with accessories.

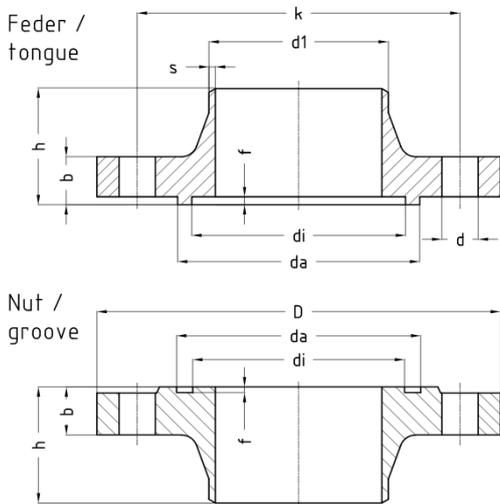
	Accessories	Short designation	Code
UM+ST	Union nut with welding nipple	UM+ST	1
BM	Blind nut	BM	2
DM	Double nut left/right	DM	3
UM+SKB	Union nut with weld ball nipple	UM+SKB	4
UM+SR	Union nut with cutting ring	UM+SR	5

UM+SLT	Union nut with hose nipple	UM+SLT	6
DM+ad- apter	Double nut with adapter G1/2"-a/ G1/4"-i	DM+adapter	7
UM+KKR	Union nut with clamping ring	UM+KKR	9

19 Welding neck flanges - DIN 2634/2635

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

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



DIN2634 PN25 DN10-150 / DIN 2635 PN40 DN10-400																				
Welding ends					Flange facing design											Screws DIN 931			Sealing ring DIN 2691	
Series 1		Series 2			Groove						Tongue					Quant-ity	Thread	Lengt h	di	da
DN	d1	s	d1	s	b	k	h	d	D	di	da	f	di	da	f					
10	17.2	1.8	15.0	2.5	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

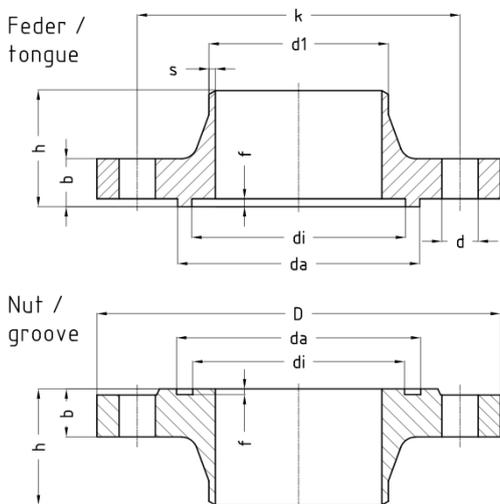
DIN2634 PN25 DN10-150 / DIN 2635 PN40 DN10-400																				
32	42.4	2.6	38.0	3.0	1 8	10 0	42	1 8	14 0	50	66	2. 5	51	65	4. 0	4	M 16	55	51	65
40	48.3	2.6	45.0	3.0	1 8	11 0	45	1 8	15 0	60	76	2. 5	61	75	4. 0	4	M 16	55	61	75
50	60.3	2.9	57.0	3.2	2 0	12 5	48	1 8	16 5	72	88	2. 5	73	87	4. 0	4	M 16	60	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 11: Installation lengths

20 Welding neck flanges - DIN 2634/2636/2637

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

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	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	33	485	342	364	3.0	343	363	4.5	16	M 27	100	343	363	
350	355.6	8.0	38	490	100	35	555	394	422	3.0	395	421	5.0	16	M 30	110	395	421	

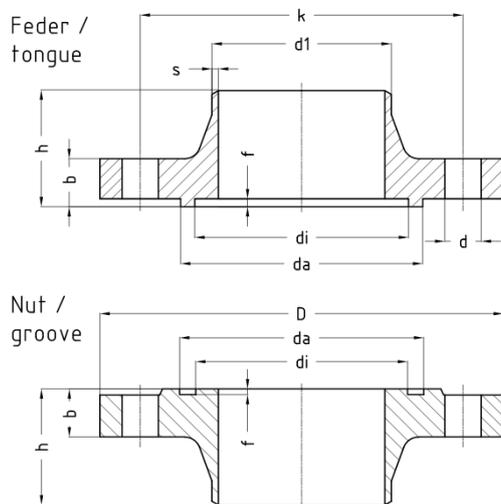
DIN 2634 PN25 DN200-500																		
400	406.4	8.8	40	550	110	36	620	446	474	3.5	447	473	5.0	16	M 33	120	447	473
500	508.0	10.0	44	660	125	36	730	548	576	3.5	549	575	5.0	20	M 33	130	549	575
DIN2636 PN63 DN10-40 / DIN 2637 PN100 DN10-40																		
DN	d1	s	b	k	h	d	D	di	da	f	di	da	f	Quant-ity	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	101	125	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	290	154	176	3.0	155	175	4.5	8	M 27	100	155	175

Table 12: Installation lengths

21 Welding neck flanges - DIN EN 1092-1

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

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

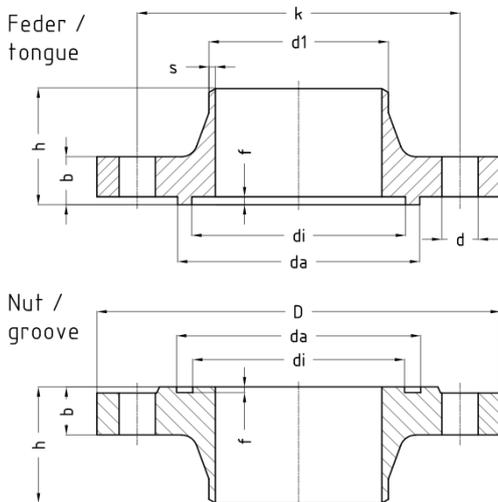
DIN EN 1092-1 PN25 DN10-150 / PN40 DN10-400																				
32	42.4	2.6	38.0	3.0	1 8	10 0	42	1 8	14 0	50	66	4. 0	51	65	4. 5	4	M 16	55	51	65
40	48.3	2.6	45.0	3.0	1 8	11 0	45	1 8	15 0	60	76	4. 0	61	75	4. 5	4	M 16	55	61	75
50	60.3	2.9	57.0	3.2	2 0	12 5	48	1 8	16 5	72	88	4. 0	73	87	4. 5	4	M 16	60	73	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 13: Installation lengths

22 Welding neck flanges - DIN EN 1092-1

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

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



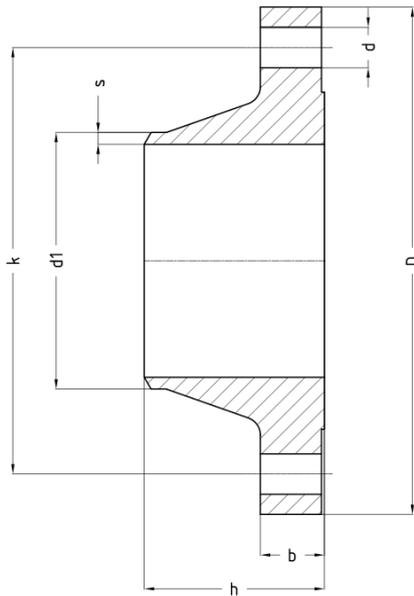
DIN EN 1092-1 PN25 DN200-500																					
Welding ends			Flange facing design											Screws			Sealing ring				
Series 1			Groove								Tongue					DIN 931			DIN 2691		
DN	d1	s	b	k	h	d	D	di	da	f	di	da	f	Quantity	Thread	Lengt h	di	da			
200	219.1	6.3	30	310	80	26	360	238	260	4.5	239	259	5.0	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 14: Installation lengths

23 Welding neck flanges - ANSI B16.5 raised face

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



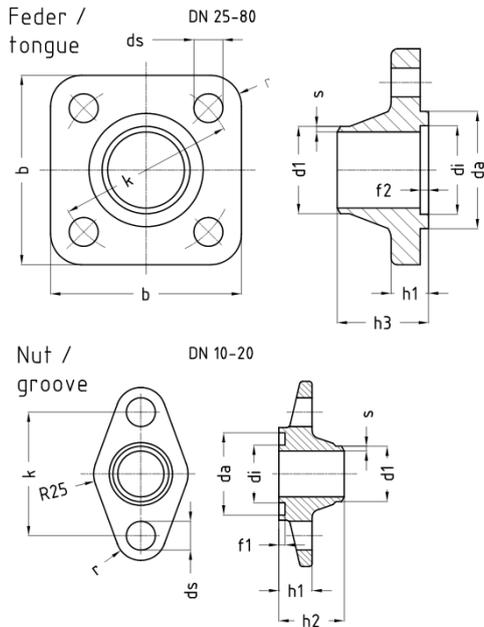
Nominal size		Welding ends acc. to:													
		ANSI		ANSI-FL 150lbs RF / sq. in				Screws DIN 931	ANSI-FL 300lbs RF / sq. in				Screws DIN 931		
DN	INCH	d1	s	b	k	h	d	D	Quantity	b	k	h	d	D	Quantity
15	1/2"	21.3	2.8	11.2	60.5	47.8	15.7	88.9	4	14.2	66.5	52.3	15.7	95.2	4
20	3/4"	26.7	2.9	12.7	69.9	52.3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

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

Table 15: Installation lengths

24 Welding neck flanges - AWP

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



AWP-FL PN25 DN10-20 / PN40 DN25-80																									
Welding ends												Flange facing design								Bolts / screws DIN 931			Sealing ring DIN 2691		
Series 1			Series 2			ANSI		Groove				Tongue				Quant-ity/ Quant-ity	Thread/ Thread	Lengt h/ Lengt h							
D N	d1	s	d1	s	d1	s	b	k	r	h1	ds	di	da	f1	h2	di	da	f2	h3				di	da	
10	17.2	1.80	15.0	2.51	17.1	2.31	88	60	13	16	14	28	40	3	31.5	29	39	4	32.0	2		M 12	45	29	39
15	21.3	2.00	20.0	2.53	21.3	2.83	88	60	13	16	14	28	40	3	31.5	29	39	4	32.0	2		M 12	45	29	39
20	26.9	2.30	25.0	2.57	26.7	2.97	88	60	13	16	14	28	40	3	31.5	29	39	4	32.0	2		M 12	45	29	39
25	33.7	2.60	32.0	3.04	33.4	3.44	92	85	15	18	14	42	58	3	44.0	43	57	4	44.0	4		M 12	50	43	57
32	42.4	2.60	38.0	3.02	42.2	3.62	92	85	15	18	14	42	58	3	44.0	43	57	4	44.0	4		M 12	50	43	57

AWP-FL PN25 DN10-20 / PN40 DN25-80																								
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 16: Installation lengths

* = acc. to DIN 7603

25 Legal notices

- GEA AWP valves must be handled in accordance with the GEA AWP operating regulations.
- The safety instructions mentioned in the operating regulations must be observed.
- A hazard analysis is available for GEA AWP valves.
- GEA AWP valves must only be handled by authorised persons.
- The instructions for the use of personal protective equipment (PPE) must be observed.
- GEA AWP valves must be used for their intended purpose.
- This catalogue has been carefully created and checked; however, it may still contain errors. The technical specifications given in the catalogue are not contractually guaranteed properties. Technical specifications are only binding if they have been confirmed by us in writing.
- We reserve the right to make technical changes.
- Further information on our declarations of conformity, operating regulations, calculation software and the general terms and conditions can be found on our website www.awpvalves.com under the Tools/Downloads tab.
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GEA AWP GmbH
Armaturenstr. 2
17291 Prenzlau
Germany
phone: +49 3984 8559-0
fax: +49 3984 8559-18
e-mail: info@awpvalves.com

