

Bimetallic steam trap

Bimetallic steam trap ANSI150 / 300

- with flanges (Fig. 600/601....1)
- with screwed sockets (Fig. 600/601....2)
- with socket weld ends (Fig. 600/601....3)
- with butt weld ends (Fig. 600/601....4)

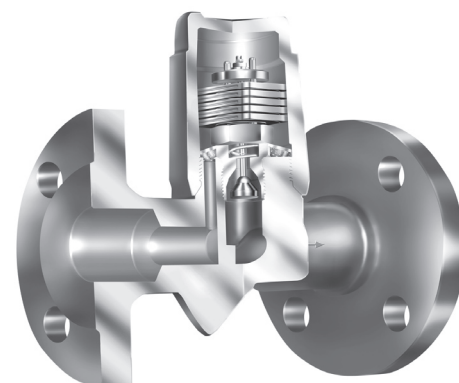
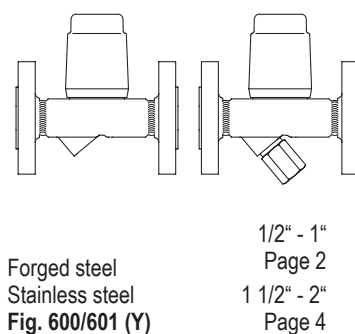
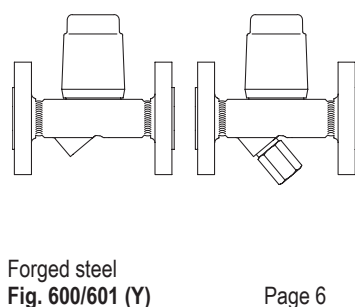


Fig. 600....1

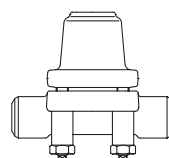
Bimetallic steam trap ANSI600

- with flanges (Fig. 600/601....1)
- with screwed sockets (Fig. 600/601....2)
- with socket weld ends (Fig. 600/601....3)
- with butt weld ends (Fig. 600/601....4)



Bimetallic steam trap ANSI400 / 600

- with flanges (Fig. 600....1)
- with socket weld ends (Fig. 600....3)
- with butt weld ends (Fig. 600....4)

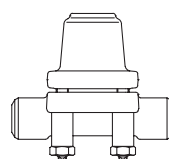


High temperature steel
Fig. 600

Page 8

High pressure bimetallic steam trap ANSI900 / 1500

- with flanges (Fig. 600....1)
- with socket weld ends (Fig. 600....3)
- with butt weld ends (Fig. 600....4)

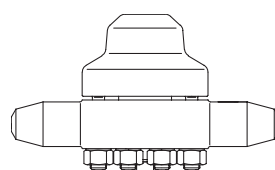


High temperature steel
Fig. 600

Page 10

High pressure bimetallic steam trap ANSI2500

- with flanges (Fig. 600....1)
- with socket weld ends (Fig. 600....3)
- with butt weld ends (Fig. 600....4)



High temperature steel
Fig. 600

Page 12

Features:

- For discharging of slight to highly sub-cooled condensate (to 30K / 54°F)
- Automatic ventilation during start up and operation of the plant
- Robust and resistant to water-hammer
- Integrated non return protection
- Design with internal strainer - Fig. 600
Design with outside strainer (Y) - Fig. 601 (Y)
- Optimized design for quick installation (ANSI150/300, 1/2"-1")
- Gasket-free sealing of the screwed cap (ANSI150/300/600 with Cap, 1/2"-1")
- Installation in any position (except Cover / Cap acc. to bottom)
- Subcooling of condensate is continuously adjustable (observe the operation instructions)
- The exchange of the controller is possible without disturbing the pipe
- Pressure test acc. to API 598
- CRN certified

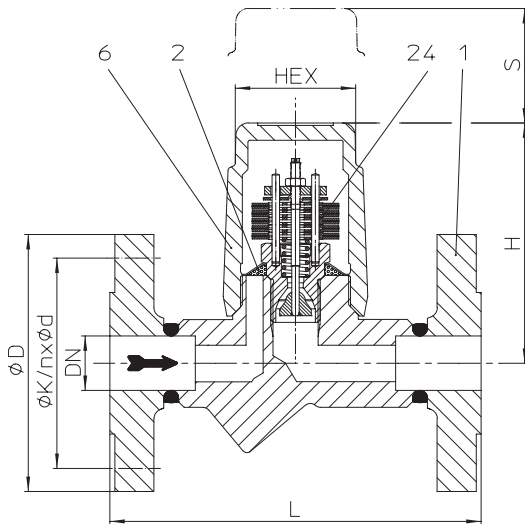
Bimetallic steam trap (Forged steel, Stainless steel)


Fig. 600....1 with flanges

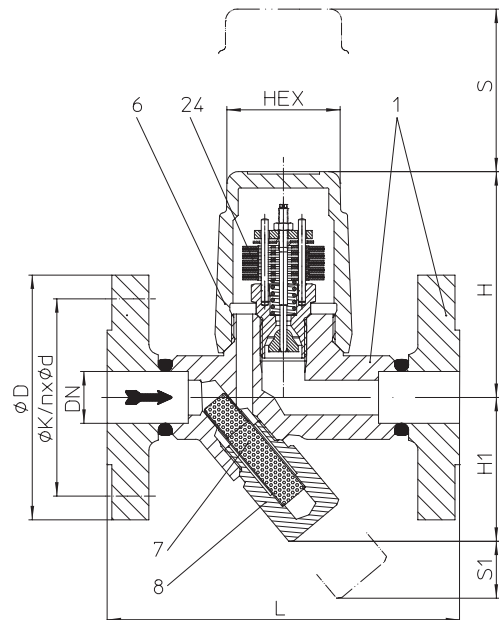


Fig. 601....1 with flanges

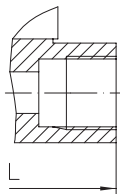


Fig. 600/601....2 with screwed sockets

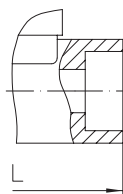


Fig. 600/601....3 with socket weld ends

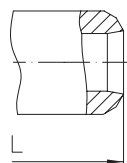


Fig. 600/601....4 with butt weld ends

- Thermostatic steam trap with non-corrosive and robust water hammer proof bimetallic controller
- Automatic air-venting during start up and operation of the plant
- Non return protection
- With inside strainer - Fig. 600
- with outside strainer - Fig. 601 (Y)
- Installation in any position, except screw cap downwards
- Subcooling of condensate is continuously adjustable (observe the operation instructions)
- Maintenance simplified due to screwed cap without sealing
- Available controllers:
 - Controller R13 - to 189 psi / 13 bar Inlet pressure
 - Controller R22 - to 319 psi / 22 bar Inlet pressure
 - Controller R32 - to 464 psi / 32 bar Inlet pressure
- Options:
 - Outside strainer with blow down valve (Pos. 46)
 - Ball valve for blow down (pos. 56) with internal strainer (Observe operating and installation instructions!)

Operating limits

Fig. 42.600 / 42.601	ANSI150 - SA105		
Operating pressure PS (psig)	189	80	
Inlet temperature TS (°F)	437	800	
Operating pressure PS (bar-g)	13	5,5	
Operating temperature TS (°C)	225	427	
Fig. 45.600 / 45.601	ANSI300 - SA105		
Operating pressure PS (psig)	464	319	189
Inlet temperature TS (°F)	771	800	800
Operating pressure PS (bar-g)	32	22	13
Operating temperature TS (°C)	411	427	427
allow. diff. press. ΔPMX (psi):	464	319	189
allow. diff. press. ΔPMX (bar):	32	22	13
for controller:	R32	R22	R13

Fig. 52.600 / 52.601		ANSI150 - SA182 F321	
Operating pressure PS (psig)	189	35	
Inlet temperature TS (°F)	457	950	
Operating pressure PS (bar-g)	13	2,4	
Operating temperature TS (°C)	225	510	
Fig. 55.600 / 55.601		ANSI300 - SA182 F321	
Operating pressure PS (psig)	464	319	
Inlet temperature TS (°F)	710	950	
Operating pressure PS (bar-g)	32	22	
Operating temperature TS (°C)	377	510	
allow. diff. press. ΔPMX (psi):	464	319	189
allow. diff. press. ΔPMX (bar):	32	22	13
for controller:	R32	R22	R13

Types of connection

Flanges1	ANSI150 / 300	(acc. to ASME B16.5)
Screwed sockets2	R- and NPT-thread	(acc. to ASME B1.20.1)
Socket weld ends3	(acc. to ASME B16.11)	
Butt weld ends4	(acc. to ASME B16.25)	
Other types of connection on request.		

Dimensions and weights		Types of connection									Dimensions and weights		Types of connection								
		Flanges			Screwed sockets Socket weld ends			Butt weld ends					Flanges			Screwed sockets Socket weld ends			Butt weld ends		
NPS	(inch)	1/2	3/4	1	1/2	3/4	1	1/2	3/4	1	DN	(mm)	15	20	25	15	20	25	15	20	25
L*	(inch)	5.91	5.91	6.30	3.74	3.74	3.74	9.84	9.84	9.84	L*	(mm)	150	150	160	95	95	95	250	250	250
H	(inch)	3.86	3.86	3.86	3.86	3.86	4.06	3.86	3.86	3.86	H	(mm)	98	98	98	98	98	103	98	98	98
H1	(inch)	2.44	2.44	2.44	2.44	2.44	2.17	2.44	2.44	2.44	H1	(mm)	62	62	62	62	62	55	62	62	62
S	(inch)	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	S	(mm)	70	70	70	70	70	70	70	70	70
S1	(inch)	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	S1	(mm)	30	30	30	30	30	30	30	30	30
HEX	(inch)	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	HEX	(mm)	50	50	50	50	50	50	50	50	50
Weight approx.	(lb)	7.06	8.16	9.26	3.75	3.53	4.63	4.85	5.07	5.29	Weight approx.	(kg)	3,2	3,7	4,2	1,7	1,6	2,1	2,2	2,3	2,4

Standard-flange dimensions refer to page 15.

Larger nominal diameters refer to page 4.

* Face-to-face acc. to data sheet resp. customer request

Parts

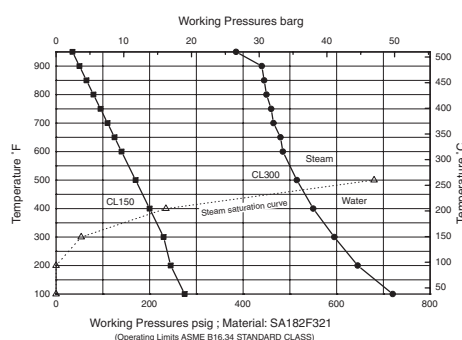
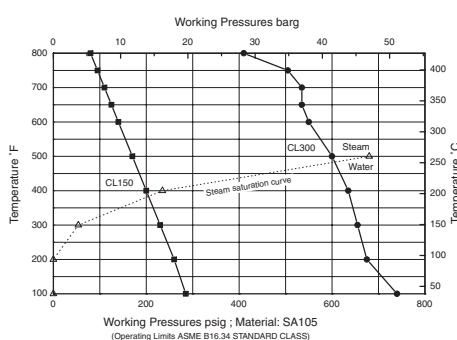
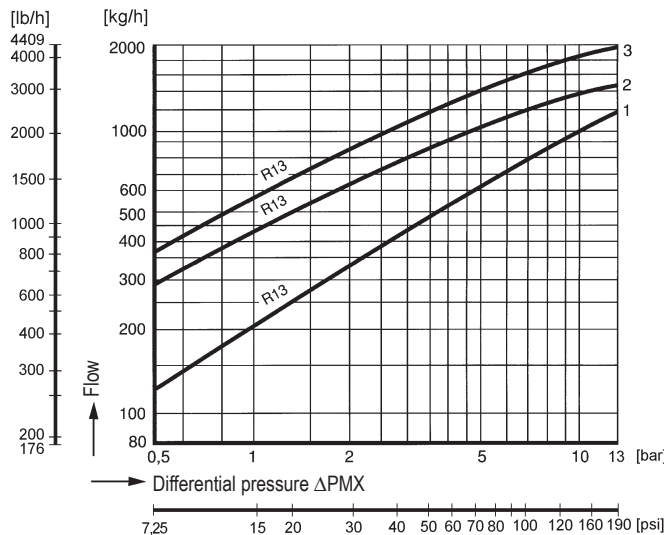
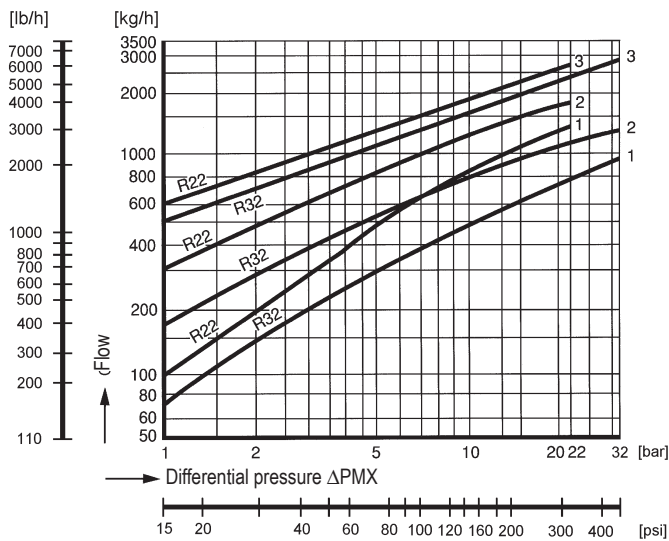
Pos.	Description	Fig. 42./45.600; 42./45.601	Fig. 52./55.600; 52./55.601
1	Body	SA105	SA182F321
2	Strainer *	SA240Gr.304	
6	Cap	SA105	SA182F321
7	Strainer screen *	SA240Gr.304	
8	Strainer plug *	SA182F321	
24	Controller *	TB 102 / 85 (corrosion resistant bimetal)	
46	Blow down valve, cpl. *	SA182F321	
56	Ball valve for blow down (G 3/8") *	SA351CF8M	

* Spare part

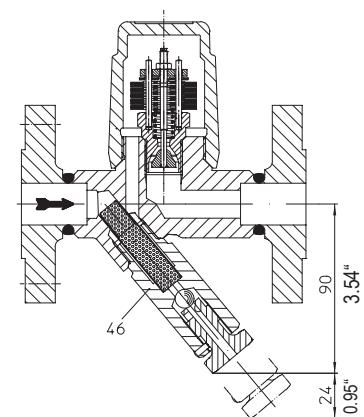
Information / restriction of technical rules need to be observed!

Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

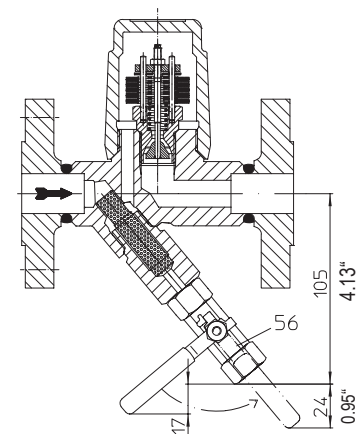
Capacity chart



Options



Outside strainer with blow down valve



Ball valve with adapter for blow down with internal strainer (restricted to 232psi, 410°F / 16 bar, 210°C)

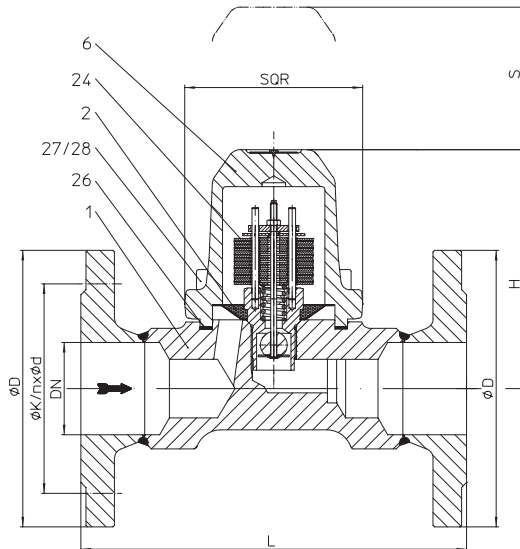
Bimetallic steam trap (Forged steel, Stainless steel)


Fig. 600....1 with flanges

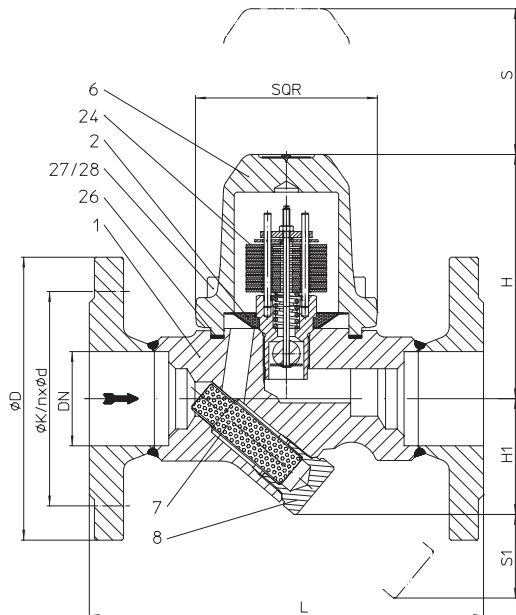


Fig. 601....1 with flanges

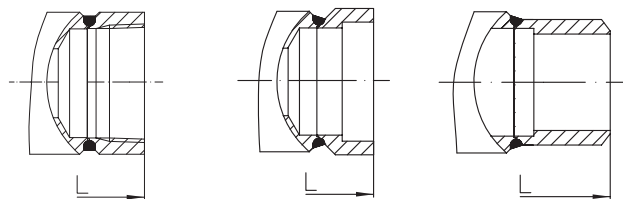

 Fig. 600/601....2
with screwed sockets

 Fig. 600/601....3
with socket weld ends

 Fig. 600/601....4
with butt weld ends

- Thermostatic steam trap with non-corrosive and robust water hammer proof bimetallic controller
- Automatic air-venting during start up and operation of the plant
- Non return protection
- With inside strainer - Fig. 600
- with outside strainer - Fig. 601 (Y)
- Installation in any position, except cover downwards
- Subcooling of condensate is continuously adjustable (observe the operation instructions)
- The controller maybe changed without disturbing the pipe work
- Available controllers:
 - Controller R13 - to 189 psi / 13 bar Inlet pressure
 - Controller R22 - to 319 psi / 22 bar Inlet pressure
 - Controller R32 - to 464 psi / 32 bar Inlet pressure
- Options:
 - Outside strainer with blow down valve (Pos. 46)
 - Ball valve for blow down (pos. 56) with internal strainer (Observe operating and installation instructions!)

Operating limits

Fig. 42.600 / 42.601	ANSI150 - SA105		
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Types of connection

Flanges1	ANSI150 / 300	(acc. to ASME B16.5)
Screwed sockets2	R- and NPT-thread	(acc. to ASME B1.20.1)
Socket weld ends3	(acc. to ASME B16.11)	
Butt weld ends4	(acc. to ASME B16.25)	
Other types of connection on request.		

Dimensions and weights		Types of connection						Dimensions and weights		Types of connection					
		Flanges		Screwed sockets Socket weld ends		Butt weld ends				Flanges		Screwed sockets Socket weld ends		Butt weld ends	
NPS	(inch)	1 1/2	2	1 1/2	2	1 1/2	2	DN	(mm)	40	50	40	50	40	50
L*	(inch)	9.06	9.06	5.12	8.27	9.84	9.84	L*	(mm)	230	230	130	210	250	250
H	(inch)	5.67	5.67	5.67	5.67	5.67	5.67	H	(mm)	144	144	144	144	144	144
H1	(inch)	2.68	2.68	2.68	2.68	2.68	2.68	H1	(mm)	68	68	68	68	68	68
S	(inch)	3.54	3.54	3.54	3.54	3.54	3.54	S	(mm)	90	90	90	90	90	90
S1	(inch)	1.97	1.97	1.97	1.97	1.97	1.97	S1	(mm)	50	50	50	50	50	50
SQR	(inch)	4.33	4.33	4.33	4.33	4.33	4.33	SQR	(mm)	110	110	110	110	110	110
Weight approx.	(lb)	24.91	26.68	17.64	17.64	19.62	21.61	Weight approx.	(kg)	11,3	12,1	8	8	8,9	9,2
Standard-flange dimensions refer to page 15.		1) Screwed sockets = 6.30 inch / 160 mm						Smaller nominal diameters refer to page 2.							

Standard-flange dimensions refer to page 15.

1) Screwed sockets = 6.30 inch / 160 mm

Smaller nominal diameters refer to page 2.

* Face-to-face acc. to data sheet resp. customer request

Parts

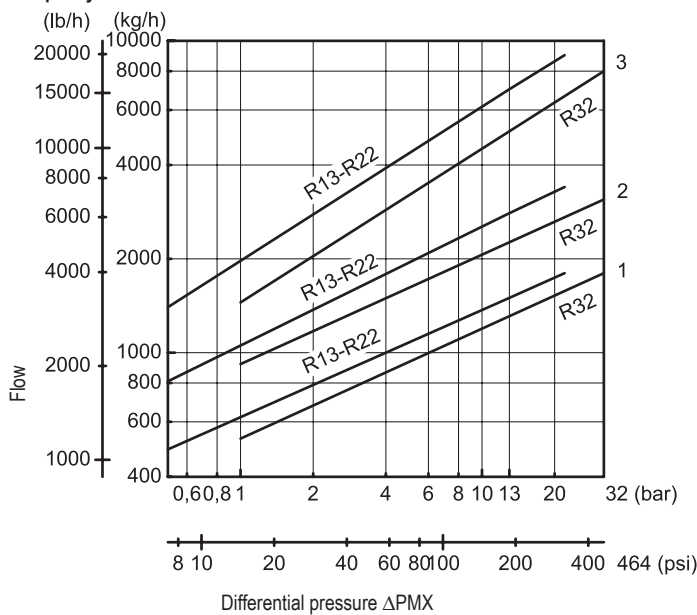
Pos.	Description	Fig. 42./45.600 / 42./45.601	Fig. 52./55.600 / 52./55.601
1	Body	SA105	SA182F321
2	Strainer *	SA240Gr.304	
6	Cap	SA105	SA182F321
7	Strainer screen *	SA240Gr.304	
8	Strainer plug *	SA182F321	
24	Controller *	TB 102 / 85 (corrosion resistant bimetal)	
26	Sealing ring *	Graphite (CrNi laminated with graphite)	
27	Cheese head screw	SA193Gr.B16 (with metric screw-thread)	
28	Hexagonal nut	SA194Gr.4 (with metric screw-thread)	
46	Blow down valve, cpl. *	SA182F321	
56	Ball valve for blow down (G 3/8") *	SA351CF8M	

* Spare part

Information / restriction of technical rules need to be observed!

Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

Capacity chart



The capacity chart shows the maximum flow at factory setting.
(Other factory-settings for the sub-cooling on request.)

Curve 1

Maximum flow of hot condensate approx. 10 K / 18 °F below saturation temperature.

Curve 2

Maximum flow of hot condensate approx. 30 K / 54 °F below saturation temperature
(with back-up of condensate).

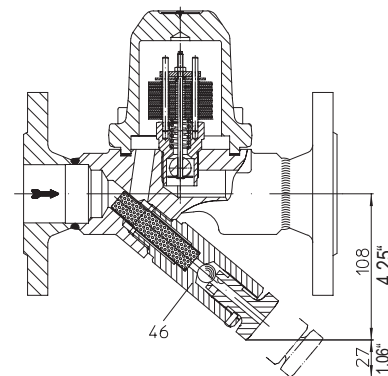
Curve 3

Maximum flow at cold condensate at about 68°F / 20°C
(during start-up of a cold installation).

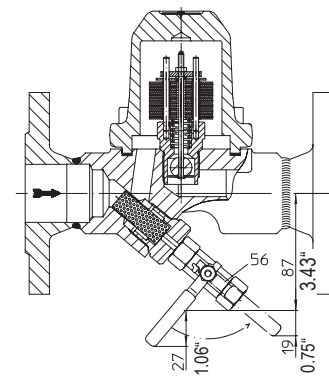
The condensate temperature determines the opening of the controller.

Capacity is increased with the sub-cooling temperature of the condensate.

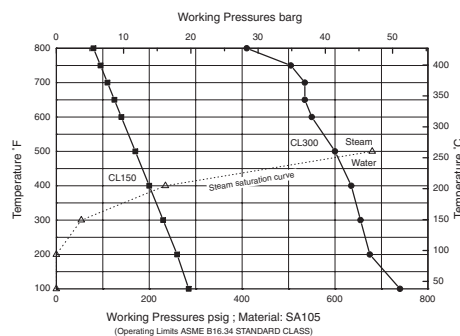
Options



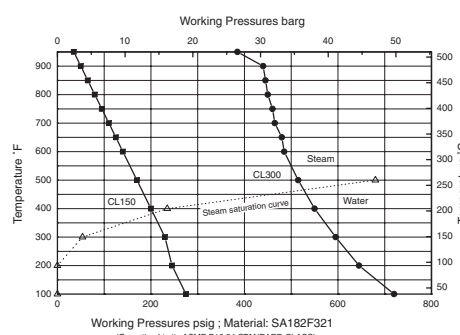
Outside strainer with blow down valve



Ball valve with adapter for blow down with internal strainer
(restricted to 232psi, 410°F / 16 bar, 210°C)



Working Pressures psig : Material: SA105
(Operating Limits ASME B16.34 STANDARD CLASS)



Working Pressures psig : Material: SA182F321
(Operating Limits ASME B16.34 STANDARD CLASS)

Bimetallic steam trap (Forged steel)

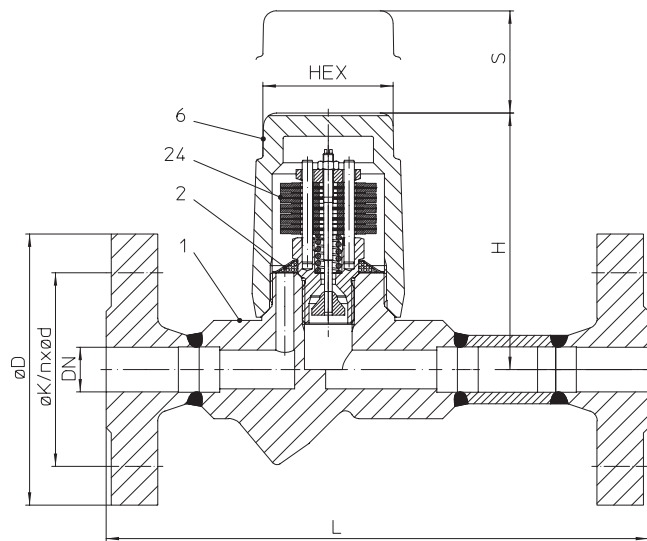


Fig. 600....1 with flanges

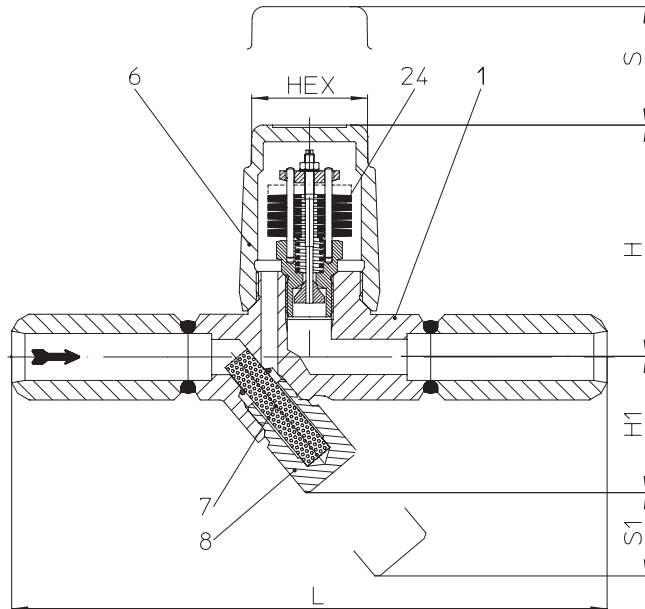


Fig. 601....1 with butt weld ends

- Thermostatic steam trap with non-corrosive and robust water hammer proof bimetallic controller
- Automatic air-venting during start up and operation of the plant
- Non return protection
- With inside strainer - Fig. 600
with outside strainer - Fig. 601 (Y)
- Installation in any position, except screw cap downwards
- Subcooling of condensate is continuously adjustable (observe the operation instructions)
- Maintenance simplified due to screwed cap without sealing

Operating limits

Fig. 47.600 / 47.601	ANSI600 - SA105
Operating pressure PS (psig)	667
Inlet temperature TS (°F)	800
Operating pressure PS (bar-g)	46
Operating temperature TS (°C)	427
allow. diff. press. ΔPMX (psi):	667
allow. diff. press. ΔPMX (bar):	46
for controller:	R46

Types of connection

Flanges1	ANSI600 acc. to ASME B16.5
Screwed sockets2	R- and NPT-thread acc. to ASME B1.20.1
Socket weld ends3	acc. to ASME B16.11
Butt weld ends4	acc. to ASME B16.25

Other types of connection on request.

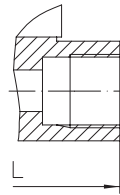


Fig. 600/601....2
with screwed sockets

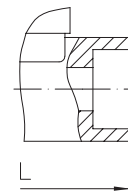


Fig. 600/601....3
with socket weld ends

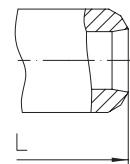


Fig. 600/601....4
with butt weld ends

Dimensions and weights		Types of connection									Dimensions and weights		Types of connection								
		Flanges			Screwed sockets Socket weld ends			Butt weld ends					Flanges			Screwed sockets Socket weld ends			Butt weld ends		
NPS	(inch)	1/2	3/4	1	1/2	3/4	1	1/2	3/4	1	DN	(mm)	15	20	25	15	20	25	15	20	25
L* (Fig. 600)	(inch)	8.27	8.27	9.06	3.74	3.74	3.74	9.84	9.84	9.84	L* (Fig. 600)	(mm)	210	210	230	95	95	95	250	250	250
L* (Fig. 601)	(inch)	5.91	5.91	6.3							L* (Fig. 601)	(mm)	150	150	160						
H	(inch)	3.86	3.86	3.86	3.86	3.86	4.06	3.86	3.86	3.86	H	(mm)	98	98	98	98	98	103	98	98	98
H1	(inch)	2.44	2.44	2.44	2.44	2.44	2.17	2.44	2.44	2.44	H1	(mm)	62	62	62	62	62	55	62	62	62
S	(inch)	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	S	(mm)	70	70	70	70	70	70	70	70	70
S1	(inch)	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	S1	(mm)	30	30	30	30	30	30	30	30	30
HEX	(inch)	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97	HEX	(mm)	50	50	50	50	50	50	50	50	50
Weight appr.	(lb)	7.06	8.16	9.26	3.75	3.53	4.63	4.85	5.07	5.29	Weight appr.	(kg)	3,2	3,7	4,2	1,7	1,6	2,1	2,2	2,3	2,4
Standard-flange dimensions refer to page 15.											Larger nominal diameters refer to page 4.										

Standard-flange dimensions refer to page 15.

Larger nominal diameters refer to page 4.

* Face-to-face acc. to data sheet resp. customer request

Parts

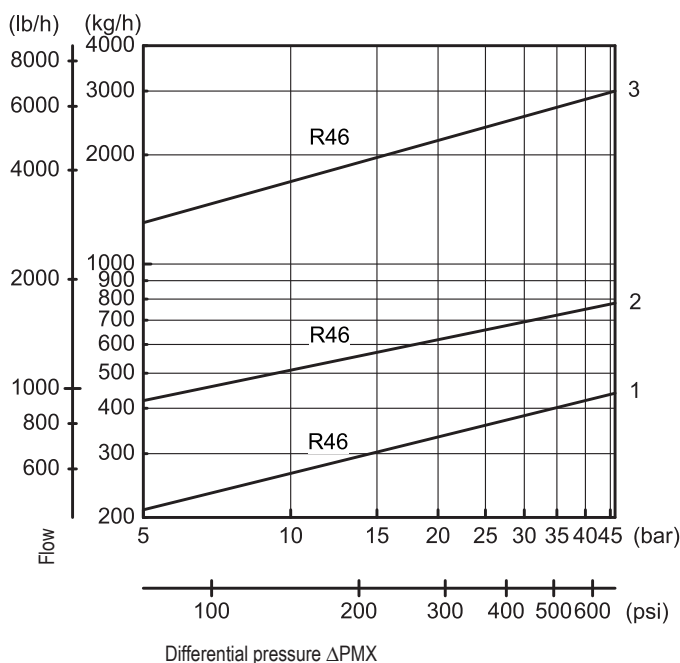
Pos.	Description	Fig. 47.600 / 47.601
1	Body	SA105
2	Strainer *	SA240Gr.304
6	Cap	SA105
7	Strainer screen *	SA240Gr.304
8	Strainer plug *	SA182F321
24	Controller *	TB 102 / 85 (corrosion resistant bimetal)

* Spare part

Information / restriction of technical rules need to be observed!

Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

Capacity chart



The capacity chart shows the maximum flow at factory setting.
(Other factory-settings for the sub-cooling on request.)

Curve 1

Maximum flow of hot condensate approx. 10 K / 18 °F below saturation temperature.

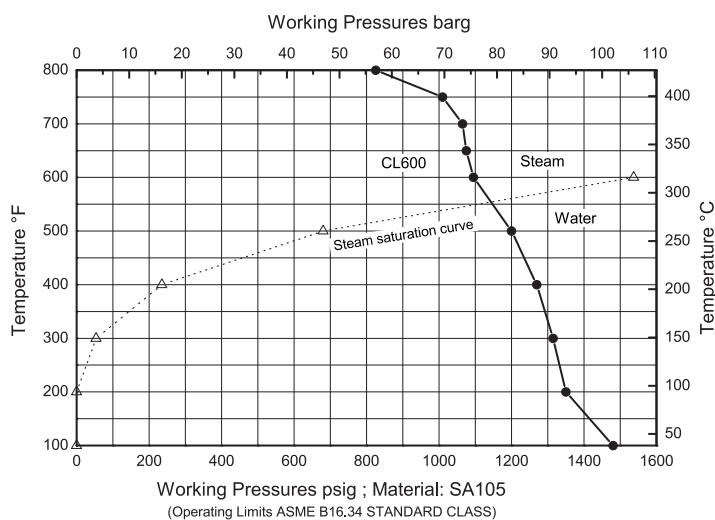
Curve 2

Maximum flow of hot condensate approx. 30 K / 54 °F below saturation temperature
(with back-up of condensate).

Curve 3

Maximum flow at cold condensate at about 68°F / 20°C
(during start-up of a cold installation).

The condensate temperature determines the opening of the controller. Capacity is increased with the sub-cooling temperature of the condensate.



High pressure - Bimetallic steam trap (High temperature steel)

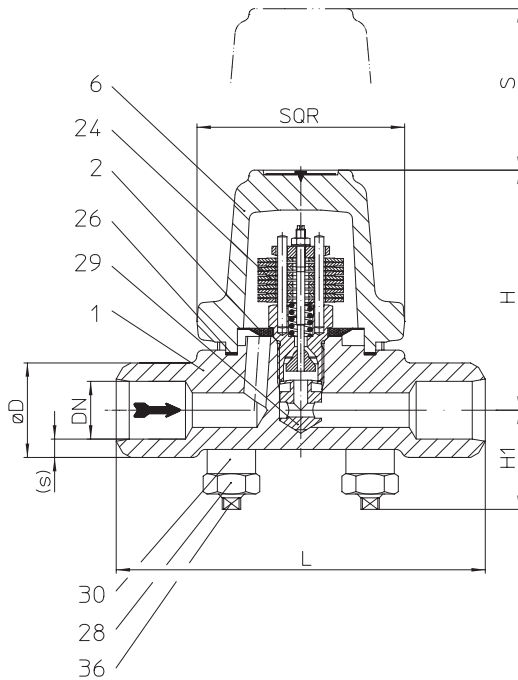


Fig. 600....4 with butt weld ends

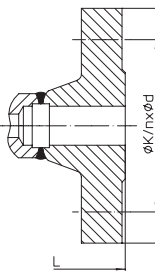


Fig. 600....1
with flanges

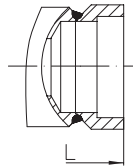


Fig. 600....3
with socket weld ends

- Thermostatic steam trap with non-corrosive and robust water hammer proof bimetallic controller
- Steam trap specially for high pressures
- Automatic air-venting during start up and operation of the plant
- Non return protection
- With inside strainer
- Installation in any position, except cover downwards
- Subcooling of condensate is continuously adjustable (observe the operation instructions)
- The controller maybe changed without disturbing the pipe work
- Controller bei ANSI600 for operating range available:
Controller R56 - to 812 psi / 56 bar Inlet pressure
Controller R90 - to 1305 psi / 90 bar Inlet pressure

Operating limits

Fig. 86.600	ANSI400 - SA182F12Cl.2	
Operating pressure PS (psig)	812	290
Inlet temperature TS (°F)	591	1000
Operating pressure PS (bar-g)	56	20
Operating temperature TS (°C)	311	538
allow. diff. press. ΔPMX (psi):	812	
allow. diff. press. ΔPMX (bar):	56	
for controller:	R56	

Fig. 87.600	ANS600 - SA182F12Cl.2		
Operating pressure PS (psig)	1203	812	430
Inlet temperature TS (°F)	610	917	1000
Operating pressure PS (bar-g)	83	56	30
Operating temperature TS (°C)	321	492	538
allow. diff. press. ΔPMX (psi):	812	1203	
allow. diff. press. ΔPMX (bar):	56	83	
for controller:	R56	R90	

Types of connection

Flanges1	ANSI400 / 600 acc. to ASME B16.5
Socket weld ends3	acc. to ASME B16.11
Butt weld ends4	acc. to ASME B16.25

Other types of connection on request.

Dimensions and weights		Types of connection									Dimensions and weights		Types of connection								
		Flanges			Socket weld ends			Butt weld ends					Flanges			Socket weld ends			Butt weld ends		
NPS	(inch)	1/2	3/4	1	1/2	3/4	1	1/2	3/4	1	DN	(mm)	15	20	25	15	20	25	15	20	25
L*	(inch)	8.27	8.27	9.06	6.30	6.30	6.30	6.30	6.30	6.30	L*	(mm)	210	210	230	160	160	160	160	160	160
H	(inch)	4.09	4.09	4.09	4.09	4.09	4.09	4.09	4.09	4.09	H	(mm)	104	104	104	104	104	104	104	104	98
H1	(inch)	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	H1	(mm)	42	42	42	42	42	42	42	42	42
S	(inch)	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	S	(mm)	70	70	70	70	70	70	70	70	70
SQR	(inch)	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54	SQR	(mm)	90	90	90	90	90	90	90	90	90
Weight appr.	(lb)	13.67	14.3	20.5	9.48	9.92	9.7	10.14	9.92	9.7	Weight appr.	(kg)	6,1	6,5	9,3	4,3	4,5	4,4	4,6	45	4,4
Standard-flange dimensions refer to page 15.																					

Standard-flange dimensions refer to page 15.

* Face-to-face acc. to data sheet resp. customer request

Parts

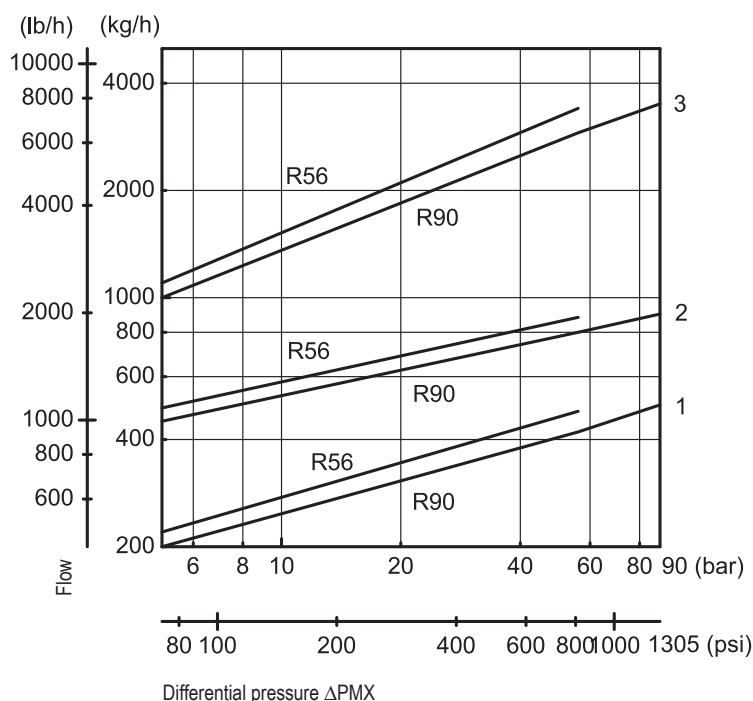
Pos.	Description	Fig. 86.600 / 87.600
1	Body	SA182F12Cl.2
2	Strainer *	SA240Gr.304
6	Cover	SA182F12Cl.2
24	Controller *	TB 102 / 85 (corrosion resistant bimetal)
26	Sealing ring *	Graphite (CrNi laminated with graphite)
28	Hexagonal nut	SA193Gr.B16 (with metric screw-thread)
29	Erosion deflector *	AISI431
30	Extension sleeve	SA193Gr.B16
36	Stud	SA193Gr.B16 (with metric screw-thread)

* Spare part

Information / restriction of technical rules need to be observed!

Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

Capacity chart



The capacity chart shows the maximum capacity at factory setting.
(For operating pressures below 5 bar, a correction of the factory-setting acc. to manufacturers information is recommended.)

Curve 1

Maximum flow of hot condensate approx. 15 K / 27 °F below saturation temperature.

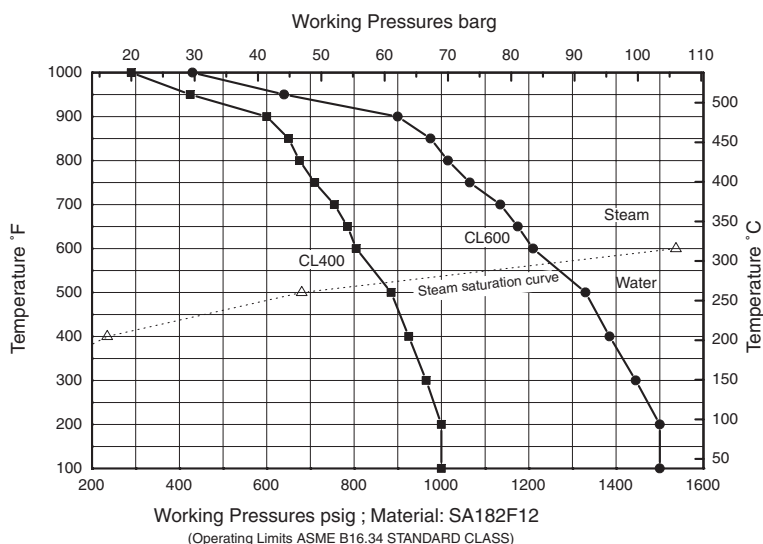
Curve 2

Maximum flow of hot condensate approx. 30 K / 54 °F below saturation temperature (with back-up of condensate).

Curve 3

Maximum flow at cold condensate at about 68°F / 20°C (during start-up of a cold installation).

The condensate temperature determines the opening of the controller. Capacity is increased with the sub-cooling temperature of the condensate.



High pressure - Bimetallic steam trap (High temperature steel)

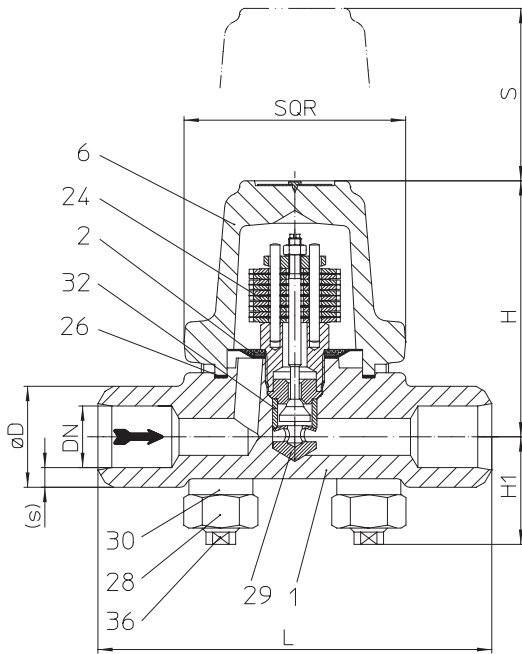


Fig. 600...4 with butt weld ends

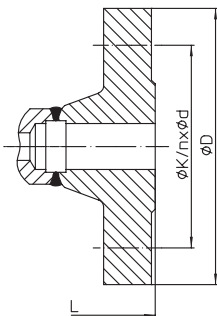


Fig. 600...1
with flanges

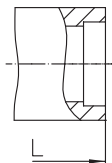


Fig. 600...3
with socket weld ends

- Thermostatic steam trap with non-corrosive and robust water hammer proof bimetallic controller
- **Steam trap specially for high pressures**
- Automatic air-venting during start up and operation of the plant
- Non return protection
- With inside strainer
- Installation in any position, except cover downwards
- Subcooling of condensate is continuously adjustable (observe the operation instructions)
- The controller maybe changed without disturbing the pipe work

Operating limits

Fig. 88.600	ANSI900 - SA182F12Cl.2	
Operating pressure PS (psig)	1595	650
Inlet temperature TS (°F)	750	1000
Operating pressure PS (bar-g)	110	45
Operating temperature TS (°C)	399	538
allow. diff. press. ΔPMX (psi):	1595	
allow. diff. press. ΔPMX (bar):	110	
for controller:	R130	

Fig. 89.600	ANSI1500 - SA182F22Cl.3	
Operating pressure PS (psig)	2175	1305
Inlet temperature TS (°F)	905	1000
Operating pressure PS (bar-g)	150	90
Operating temperature TS (°C)	485	538
allow. diff. press. ΔPMX (psi):	2175	
allow. diff. press. ΔPMX (bar):	154	
for controller:	R150	

SA182F91 on request.

Types of connection

Flanges1	ANSI900 / 1500 acc. to ASME B16.5
Socket weld ends3	acc. to ASME B16.11
Butt weld ends4	acc. to ASME B16.25

Other types of connection on request.

Dimensions and weights		Types of connection									Dimensions and weights		Types of connection								
		Flanges			Socket weld ends			Butt weld ends					Flanges			Socket weld ends			Butt weld ends		
NPS	(inch)	1/2	3/4	1	1/2	3/4	1	1/2	3/4	1	DN	(mm)	15	20	25	15	20	25	15	20	25
L*	(inch)	8.27	8.27	9.06	6.30	6.30	6.30	6.30	6.30	6.30	L*	(mm)	210	210	230	160	160	160	160	160	160
H	(inch)	4.09	4.09	4.09	4.09	4.09	4.09	4.09	4.09	4.09	H	(mm)	104	104	104	104	104	104	104	104	104
H1	(inch)	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	H1	(mm)	42	42	42	42	42	42	42	42	42
S	(inch)	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	S	(mm)	70	70	70	70	70	70	70	70	70
SQR	(inch)	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54	SQR	(mm)	90	90	90	90	90	90	90	90	90
Weight appr.	(lb)	14.11	14.11	21.16	10.58	10.36	10.14	10.58	10.36	10.14	Weight appr.	(kg)	6,4	6,4	9,6	4,8	4,7	4,6	4,8	4,7	4,6

Standard-flange dimensions refer to page 15.

Standard-flange dimensions refer to page 15.

* Face-to-face acc. to data sheet resp. customer request

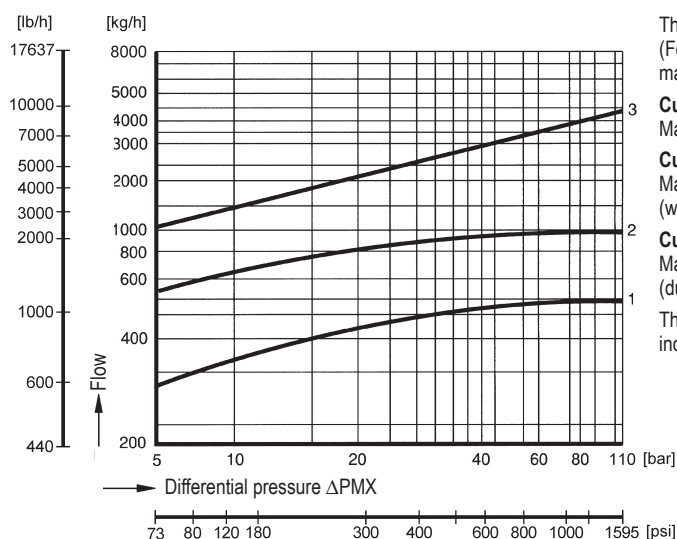
Parts

Pos.	Description	Fig. 88.600	Fig. 89.600
1	Body	SA182F12Cl.2	SA182F22Cl.3
2	Strainer *	SA240Gr.304	
6	Cover	SA182F12Cl.2	SA182F22Cl.3
24	Controller *	TB 102 / 85 (corrosion resistant bimetal)	
26	Sealing ring *	Graphite (CrNi laminated with graphite)	
28	Hexagonal nut	SA453Gr.660b (with metric screw-thread)	
29	Erosion deflector *	AISI431	
30	Extension sleeve	SA453Gr.660b	
32	Clamping sleeve *	AISI431	
36	Stud	SA453Gr.660b (with metric screw-thread)	

* Spare part

Information / restriction of technical rules need to be observed!

Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

Capacity chart ANSI900


The capacity chart shows the maximum capacity at factory setting.

(For operating pressures below 5 bar, a correction of the factory-setting acc. to manufacturers information is recommended.)

Curve 1

Maximum flow of hot condensate approx. 15 K / 27 °F below saturation temperature.

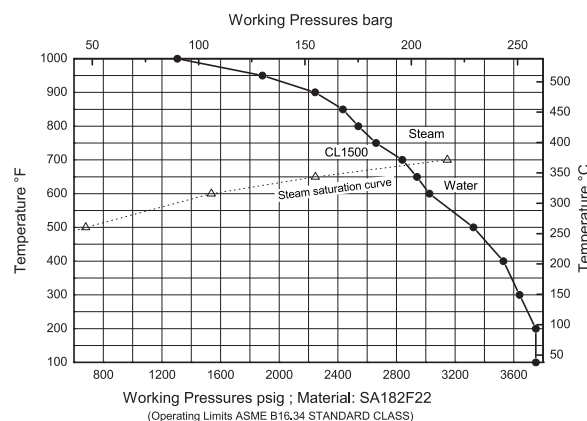
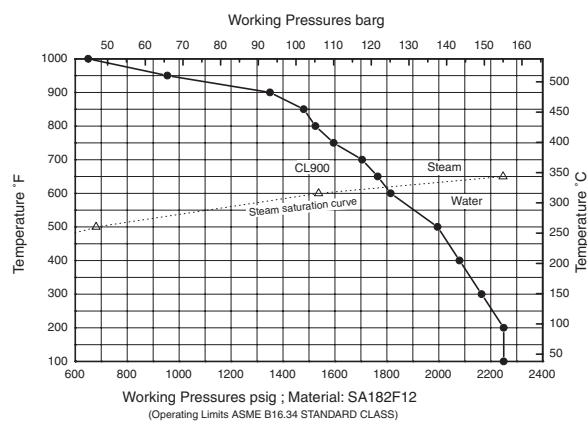
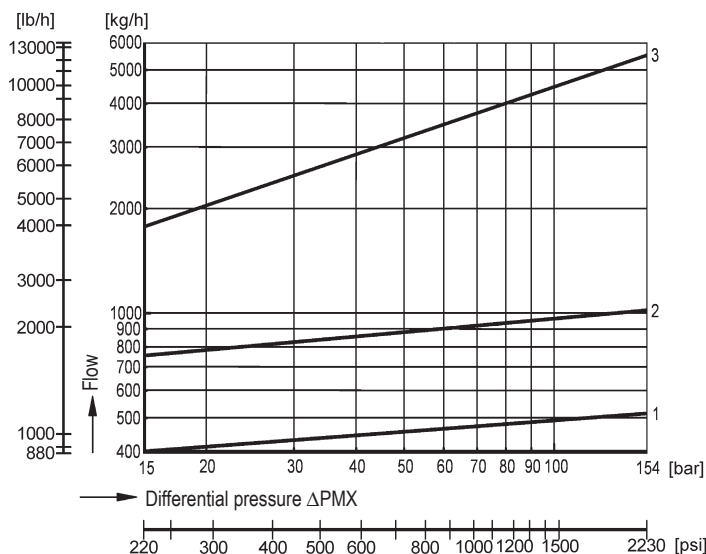
Curve 2

Maximum flow of hot condensate approx. 30 K / 54 °F below saturation temperature (with back-up of condensate).

Curve 3

Maximum flow at cold condensate at about 68 °F / 20 °C (during start-up of a cold installation).

The condensate temperature determines the opening of the controller. Capacity is increased with the sub-cooling temperature of the condensate.

Capacity chart ANSI1500


High pressure - Bimetallic steam trap (High temperature steel)

- Thermostatic steam trap with non-corrosive and robust water hammer proof bimetallic controller
- **Steam trap specially for high pressures**
- Automatic air-venting during start up and operation of the plant
- Non return protection
- With inside strainer
- Installation in any position, except cover downwards
- Subcooling of condensate is continuously adjustable (observe the operation instructions)
- The controller maybe changed without disturbing the pipe work

Operating limits

Fig. 8c.600	ANSI2500 - SA182F22Cl.3	
Operating pressure PS (psig)	3915	915
Inlet temperature TS (°F)	873	1100
Operating pressure PS (bar-g)	270	63
Operating temperature TS (°C)	467	593
allow. diff. press. ΔPMX (psi):	3915	
allow. diff. press. ΔPMX (bar):	270	
for controller:	R270	

Fig. 8c.600	ANSI2500 - SA182F91	
Operating pressure PS (psig)	3915	2515
Inlet temperature TS (°F)	873	1100
Operating pressure PS (bar-g)	270	173
Operating temperature TS (°C)	467	593
allow. diff. press. ΔPMX (psi):	3915	
allow. diff. press. ΔPMX (bar):	270	
for controller:	R270	

Types of connection

Flanges1	ANSI2500 acc. to ASME B16.5
Socket weld ends3	acc. to ASME B16.11
Butt weld ends4	acc. to ASME B16.25

Other types of connection on request.

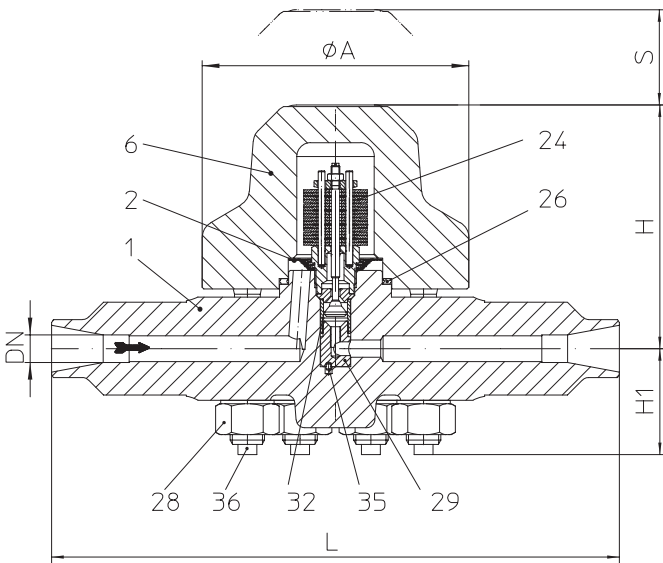


Fig. 600....4 with butt weld ends

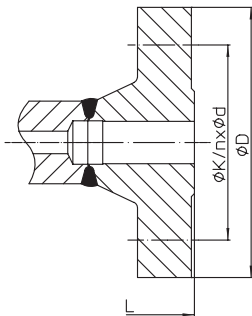


Fig. 600....1 with flanges

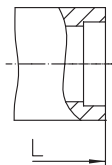


Fig. 600....3 with socket weld ends

Dimensions and weights		Types of connection									Dimensions and weights		Types of connection								
		Flanges			Socket weld ends			Butt weld ends					Flanges			Socket weld ends			Butt weld ends		
NPS	(inch)	1/2	3/4	1	1/2	3/4	1	1/2	3/4	1	DN	(mm)	15	20	25	15	20	25	15	20	25
L*	(inch)	17.13	18.11	18.50	12.99	12.99	12.99	12.99	12.99	12.99	L*	(mm)	435	460	470	330	330	330	330	330	330
H	(inch)	5.32	5.32	5.32	5.32	5.32	5.32	5.32	5.32	5.32	H	(mm)	135	135	135	135	135	135	135	135	135
H1	(inch)	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	H1	(mm)	63	63	63	63	63	63	63	63	63
S	(inch)	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	S	(mm)	95	95	95	95	95	95	95	95	95
A	(inch)	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	S1	(mm)	155	155	155	155	155	155	155	155	155
Weight approx.	(lb)	59.53	63.93	72.75	44.09	44.09	41.89	44.09	44.09	41.89	Weight approx.	(kg)	27	29	33	20	20	19	20	20	19
Standard-flange dimensions refer to page 15.												Smaller nominal diameters refer to page 2.									

Standard-flange dimensions refer to page 15.

Smaller nominal diameters refer to page 2.

* Face-to-face acc. to data sheet resp. customer request

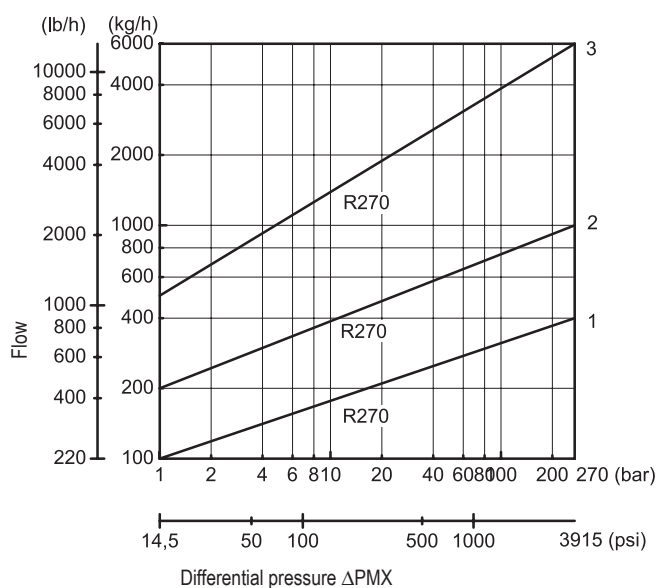
Parts

Pos.	Description	Fig. 8a.600 / 8b.600 / 8c.600	Fig. 8c.600
1	Body	SA182F22Cl.3	SA182F91
2	Strainer *	SA240Gr.304	
6	Cover	SA182F22Cl.3	SA182F91
24	Controller *	TB 102 / 85 (corrosion resistant bimetal)	
26	Sealing ring *	Graphite / SA182F321 (Spiral-wound gasket)	
28	Hexagonal nut	SA453Gr.660b (with metric screw-thread)	
29	Erosion deflector *	AISI440	
32	Clamping sleeve *	AISI431	
35	Straight pin	A4	
36	Stud	SA453Gr.660b (with metric screw-thread)	

* Spare part

Information / restriction of technical rules need to be observed!

Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

Capacity chart


The capacity chart shows the maximum capacity at factory setting.
 (For operating pressures below 5 bar, a correction of the factory-setting acc. to manufacturers information is recommended.)

Curve 1

Maximum flow of hot condensate approx. 15 K / 27 °F below saturation temperature.

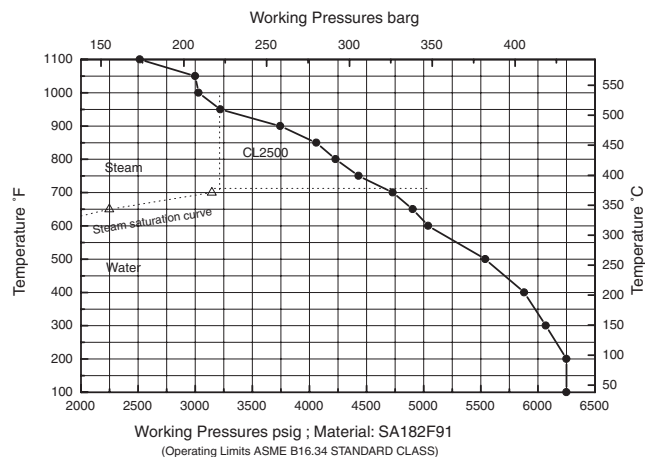
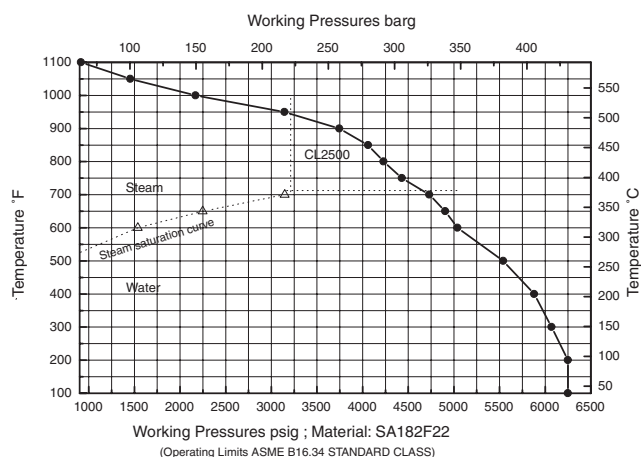
Curve 2

Maximum flow of hot condensate approx. 30 K / 54 °F below saturation temperature (with back-up of condensate).

Curve 3

Maximum flow at cold condensate at about 68 °F / 20 °C (during start-up of a cold installation).

The condensate temperature determines the opening of the controller.
 Capacity is increased with the sub-cooling temperature of the condensate.



Informations about pipe welding

Welding groove acc. to ASME B16.25

The material used for ARI valves with butt weld ends are:

SA105
 SA182F321
 SA182F12Cl.2
 SA182F22Cl.3
 SA182F91

Due to our experience, we recommend to apply an electric welding process.

Because of the different material compositions and wall thickness of the steam traps and the pipe gas welding shall not be applied. Quenching cracks and coarse grain structure may develop.

On bimetallic steam traps face-to-face of 95 mm or less, the bimetallic controller has to be disassembled prior to welding. After the traps have cooled down to the ambient temperature the bimetallic controller shall be fitted again into the body.

Steam traps with socket-weld ends shall only be welded by arc welding.

If during the time of warranty others than the manufacturer or by the manufacturer authorized persons are interfering in the product and/or the setting, the right of claim for warranty will lapse!

Selection criteria:

- | | |
|-------------------------------|--|
| - Steam pressure | - Pipe-connection |
| - Back pressure | - Controller |
| - Quantity of condensate | - Material |
| - Nominal diameter / pressure | - Place of service or kind of steam consumer |

Example for order data:

=> Bimetallic steam trap CONA® B,
 Fig. 600, ANSI300, NPS 1/2", SA105, Controller R22, with Flanschanschluss, Face-to-face dimension 5.91 inch

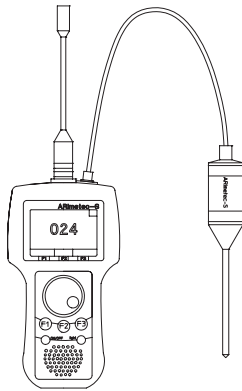
Dimensions in inch
 Weights in lb
 1 bar $\triangleq$ 10⁵ Pa $\triangleq$ 0,1 MPa
 1 bar $\triangleq$ 14,5 psi
 1 inch $\triangleq$ 25,4 mm

Standard-flange dimensions

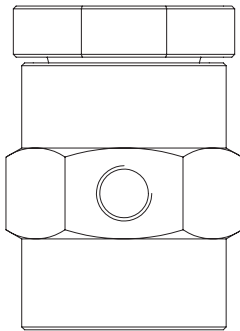
Flanges acc. to ASME B16.5

NPS		(inch)	1/2	3/4	1	1 1/4	1 1/2	2
ANSI150	ØD	(inch)	3.50	3.90	4.25	4.62	5.00	6.00
ANSI150	ØK	(inch)	2.36	2.70	3.10	3.50	3.85	4.76
ANSI150	n x Ød	(inch)	4 x 0.62	4 x 0.62	4 x 0.62	4 x 0.62	4 x 0.62	4 x 0.75
ANSI300	ØD	(inch)	3.75	4.62	4.88	5.25	6.12	6.50
ANSI300	ØK	(inch)	2.62	3.25	3.50	3.88	4.50	5.00
ANSI300	n x Ød	(inch)	4 x 0.62	4 x 0.75	4 x 0.75	4 x 0.75	4 x 0.88	8 x 0.75
ANSI400	ØD	(inch)	3.75	4.62	4.88	5.25	6.12	6.50
ANSI400	ØK	(inch)	2.62	3.25	3.50	3.88	4.50	5.00
ANSI400	n x Ød	(inch)	4 x 0.62	4 x 0.75	4 x 0.75	4 x 0.75	4 x 0.88	8 x 0.75
ANSI600	ØD	(inch)	3.75	4.62	4.88	5.25	6.12	6.50
ANSI600	ØK	(inch)	2.62	3.25	3.50	3.88	4.50	5.00
ANSI600	n x Ød	(inch)	4 x 0.62	4 x 0.75	4 x 0.75	4 x 0.75	4 x 0.88	8 x 0.75
ANSI900	ØD	(inch)	4.75	5.12	5.88	--	--	--
ANSI900	ØK	(inch)	3.25	3.50	4.00	--	--	--
ANSI900	n x Ød	(inch)	4 x 0.88	4 x 0.88	4 x 1.0	--	--	--
ANSI1500	ØD	(inch)	4.75	5.12	5.88	--	--	--
ANSI1500	ØK	(inch)	3.25	3.50	4.00	--	--	--
ANSI1500	n x Ød	(inch)	4 x 0.88	4 x 0.88	4 x 1.0	--	--	--
ANSI2500	ØD	(inch)	5.25	5.50	6.25	--	--	--
ANSI2500	ØK	(inch)	3.50	3.75	4.25	--	--	--
ANSI2500	n x Ød	(inch)	4 x 0.88	4 x 0.88	4 x 1.0	--	--	--

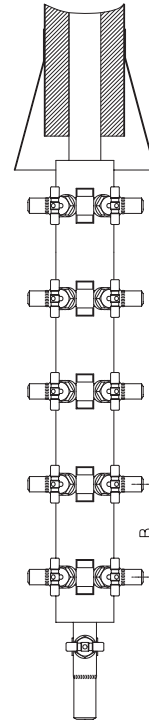
DN		(mm)	15	20	25	32	40	50
ANSI150	ØD	(mm)	89	99	108	117	127	153
ANSI150	ØK	(mm)	60	70	79	78	98	121
ANSI150	n x Ød	(mm)	4 x 16	4 x 16	4 x 16	4 x 16	4 x 16	4 x 19
ANSI300	ØD	(mm)	95	117	124	133	155	165
ANSI300	ØK	(mm)	66,5	82,5	89	99	114	127
ANSI300	n x Ød	(mm)	4 x 16	4 x 19	4 x 19	4 x 19	4 x 22	8 x 19
ANSI400	ØD	(mm)	95	117	127	133	156	165
ANSI400	ØK	(mm)	67	83	89	99	114	127
ANSI400	n x Ød	(mm)	4 x 16	4 x 19	4 x 19	4 x 19	4 x 22	4 x 19
ANSI600	ØD	(mm)	95	117	127	133	156	165
ANSI600	ØK	(mm)	67	83	89	99	114	127
ANSI600	n x Ød	(mm)	4 x 16	4 x 19	4 x 19	4 x 19	4 x 22	4 x 19
ANSI900	ØD	(mm)	121	130	149	--	--	--
ANSI900	ØK	(mm)	83	89	102	--	--	--
ANSI900	n x Ød	(mm)	4 x 22	4 x 22	4 x 25	--	--	--
ANSI1500	ØD	(mm)	121	130	149	--	--	--
ANSI1500	ØK	(mm)	83	89	102	--	--	--
ANSI1500	n x Ød	(mm)	4 x 22	4 x 22	4 x 25	--	--	--
ANSI2500	ØD	(mm)	133	140	159	--	--	--
ANSI2500	ØK	(mm)	89	95	108	--	--	--
ANSI2500	n x Ød	(mm)	4 x 22	4 x 22	4 x 25	--	--	--



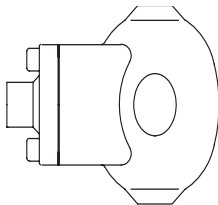
Multifunction tester **ARImetec®-S**



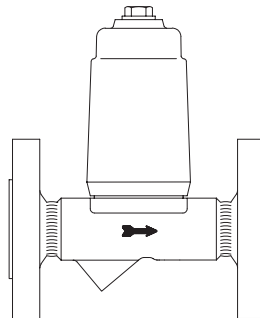
Vacuum breaker Fig. 655



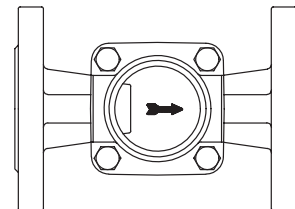
CODI®S with gland packing Fig. 671/672;
CODI®B with bellows seal, maintenance-free Fig. 675/676



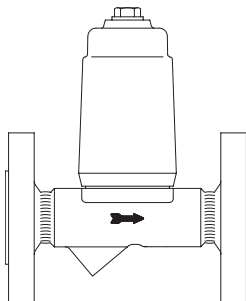
Automatic air vent for liquid systems
Fig. 656



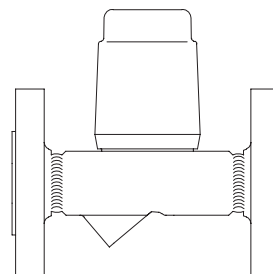
Condensate discharge temperature limiter
Fig. 645/647



Flow indicator
Fig. 660/661



Return temperature limiter Fig. 650



Liquid drainer Fig. 665

(Further informations about the accessories can be found in the appropriate data sheets.)