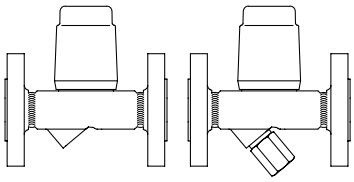
Bimetallic steam trap

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)



Forged steel 1/2" - 1" Page 2
Stainless steel 1 1/2" - 2" Page 4
Fig. 600/601 (Y)

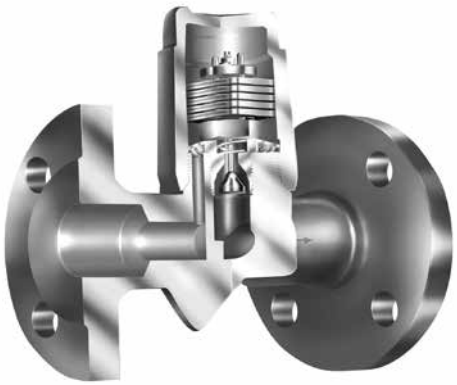
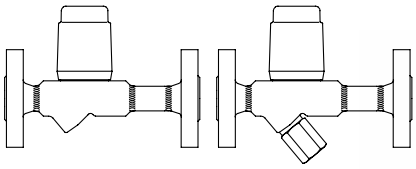


Fig. 600....1 (ANSI300)

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)



Forged steel
Fig. 600/601 (Y) Page 6

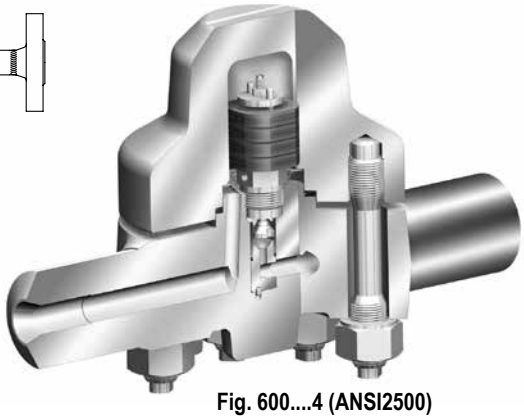
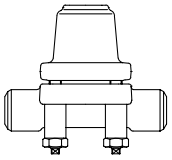


Fig. 600....4 (ANSI2500)

Bimetallic steam trap
ANSI400 / 600

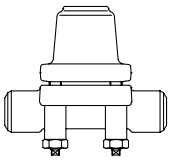
- with flanges (Fig. 600....1)
- with socket weld ends (Fig. 600....3)
- with butt weld ends (Fig. 600....4)



High temperature steel
Fig. 600 Page 8

High pressure bimetallic steam trap
ANSI900 / 1500

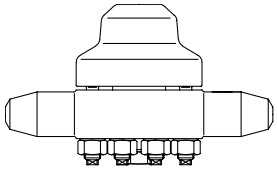
- with flanges (Fig. 600....1)
- with socket weld ends (Fig. 600....3)
- with butt weld ends (Fig. 600....4)



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)
- Automatic air-venting 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)
- Gasket-free sealing of the screwed cap (ANSI150/300/600 with cap)
- Installation in any position (except cover/screwed cap downwards)
- Subcooling of condensate is continuously adjustable (observe the operation instructions)
- The controller maybe changed without disturbing the pipe work
- Pressure test acc. to API 598
- CRN approved (ANSI150-1500)

Bimetallic steam trap (Forged steel, Stainless steel)

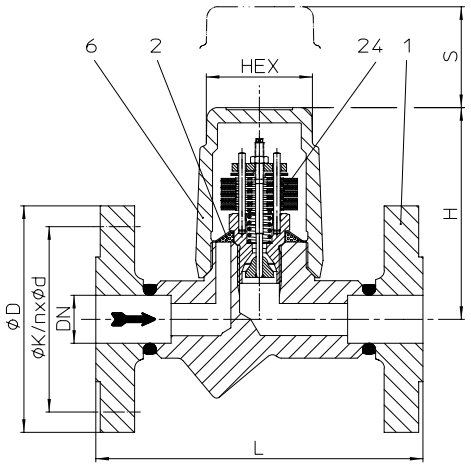


Fig. 600....1 with flanges

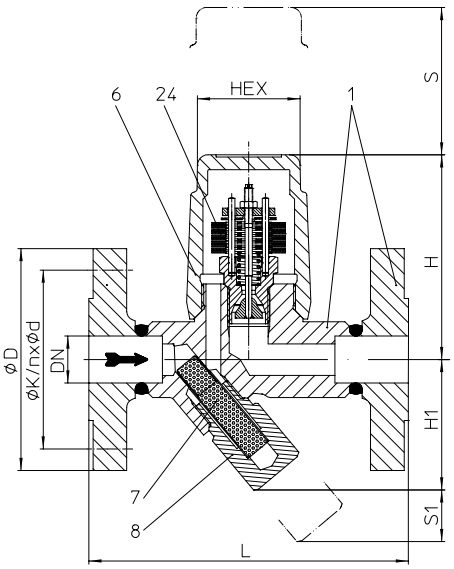


Fig. 601....1 with flanges

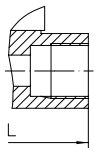


Fig. 600/601....2
with screwed sockets

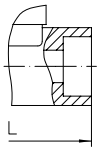


Fig. 600/601....3
with socket weld ends

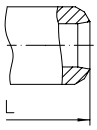


Fig. 600/601....4
with butt weld ends

Figure	Nominal pressure	Material	NPS / Nominal diameter	Operating pressure PS	Inlet temperature TS	allowable differential pressure ΔPMX	for controller
42.600 42.601 (Y)	ANSI150	SA105	1/2" - 1"	13 barg	225 °C	32 bar 22 bar 13 bar	R32 R22 R13
				5,5 barg	427 °C		
45.600 45.601 (Y)	ANSI300	SA105	1/2" - 1"	32 barg	411 °C		
				28,3 barg	427 °C		
52.600 52.601 (Y)	ANSI150	SA182 F321	1/2" - 1"	13 barg	225 °C		
				2,4 barg	510 °C		
55.600 55.601 (Y)	ANSI300	SA182 F321	1/2" - 1"	32 barg	377 °C		
				26,6 barg	510 °C		
DIN/EN-Constructions refer to data sheet CONA®B							

Types of connection — Other types of connection on request.

- Flanges ....1 _____ acc. to ASME B16.5
- Screwed sockets ....2 _____ NPT thread acc. to ANSI B1.20.1 or Rp thread acc. to DIN EN 10226-1
- Socket weld ends ....3 _____ acc. to ASME B16.11
- Butt weld ends ....4 _____ ASME B16.25 (Note restriction on operating pressure / inlet temperature depending to design!)

Features

- 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

Controller — (for operating range choosable)

- Controller R13 _____ up to inlet pressure: 13 bar
- Controller R22 _____ up to inlet pressure: 22 bar
- Controller R32 _____ up to inlet pressure: 32 bar

Options — (Design refer to page 3)

- Outside strainer with blow down valve (Pos. 46)
- Outside strainer with ball valve (pos. 56) for blow down (Observe operating and installation instructions!)

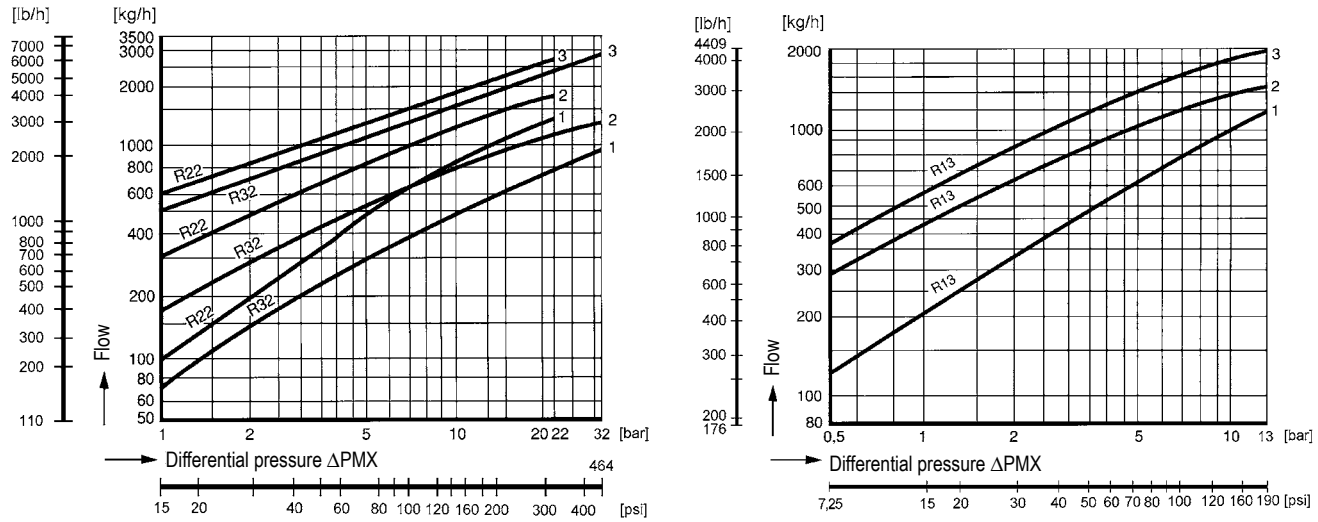
Types of connection		Flanges			Screwed sockets Socket weld ends			Butt weld ends		
NPS		1/2"	3/4"	1"	1/2"	3/4"	1"	1/2"	3/4"	1"
Face-to-face acc. to data sheet resp. customer request										
L	(mm)	150	150	160	95	95	95	250	250	250
Dimensions										
H	(mm)	98	98	103	98	98	103	98	98	103
H1	(mm)	62	62	55	62	62	55	62	62	55
S	(mm)	70	70	70	70	70	70	70	70	70
S1	(mm)	30	30	30	30	30	30	30	30	30
HEX	(mm)	50	50	50	50	50	50	50	50	50
Weights										
(approx.)	(kg)	3,2	3,7	4,2	1,7	1,6	2,1	2,2	2,3	2,4

Parts				
Pos.	**Sp.p.**	**Description**	**Fig. 42./45.600; 42./45.601**	**Fig. 52./55.600; 52./55.601**
1		Body	SA105	SA182F321
2	x	Strainer	SA240Gr.304	
6		Cap	SA105	SA276Gr.321
7	x	Strainer	SA240Gr.304	
8	x	Strainer plug	SA276Gr.321	
24	x	Controller, cpl.	TB 102 / 85 (corrosion resistant bimetal)	
46	x	Blow down valve, cpl.	SA276Gr.321	
56	x	Ball valve for blow down (G 3/8")	SA351CF8M	
		└ Spare parts		

Information / restriction of technical rules need to be observed! / Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview and Resistance list).

Operating and installation instructions can be downloaded at www.ari-armaturen.com.

Capacity chart



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

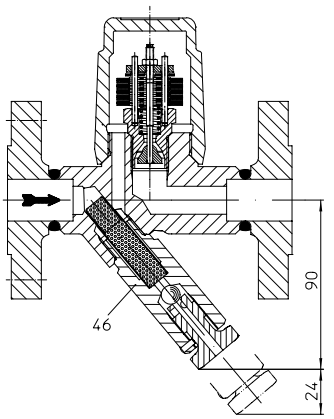
Curve 1: Maximum flow of hot condensate at approx. 10 K below saturation temperature.

Curve 2: Maximum flow of sub-cooled condensate at approx. 30 K below saturation temperature (with back-up of condensate).

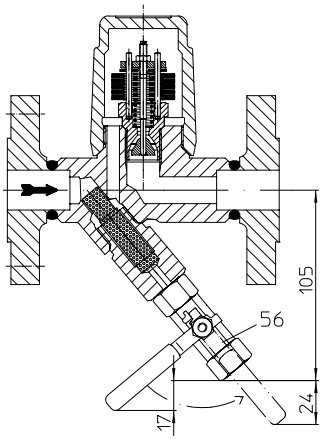
Curve 3: Maximum flow at cold condensate at about 20°C (during start-up of a cold installation).

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

Options

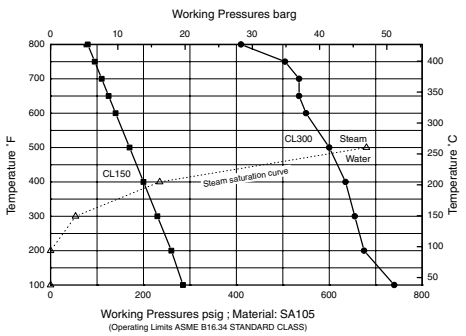


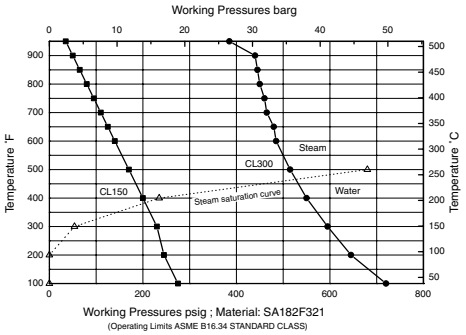
Outside strainer with blow down valve



Outside strainer with ball valve for blow down (restricted to 13 bar, 200°C)

Pressure-Temperature-Diagram





Bimetallic steam trap (Forged steel, Stainless steel)

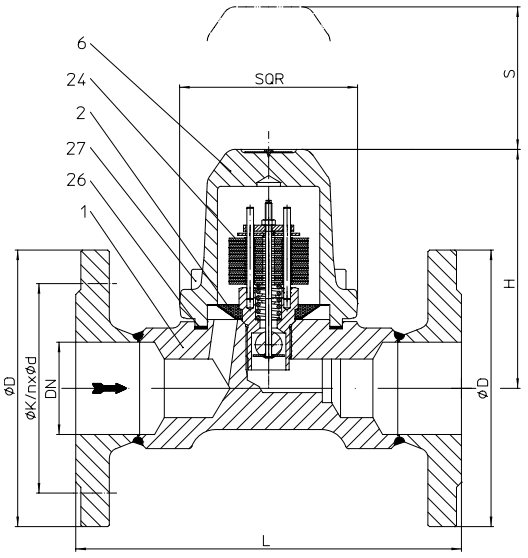


Fig. 600....1 with inside strainer

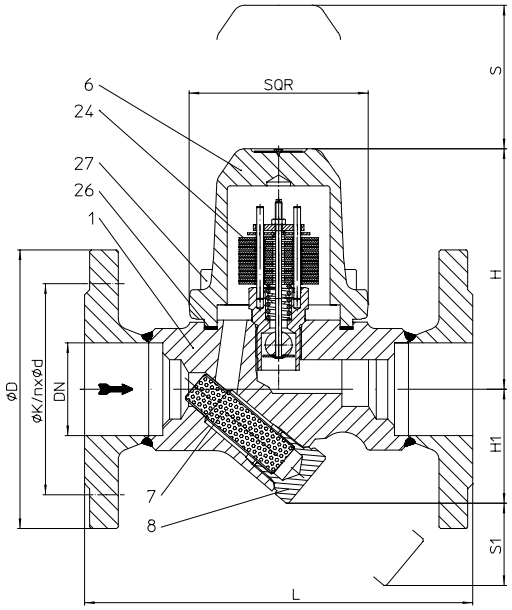


Fig. 601....1 with outside strainer (Y)

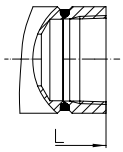


Fig. 600/601....2
with screwed sockets

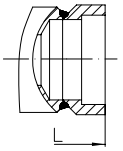


Fig. 600/601....3
with socket weld ends

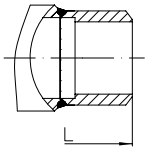


Fig. 600/601....4
with butt weld ends

Figure	Nominal pressure	Material	NPS / Nominal diameter	Operating pressure PS	Inlet temperature TS	allowable differential pressure ΔPMX	for controller
42.600 42.601 (Y)	ANSI150	SA105	1 1/2" - 2"	13 barg	225 °C	32 bar 22 bar 13 bar	R32 R22 R13
				5,5 barg	427 °C		
45.600 45.601 (Y)	ANSI300	SA105	1 1/2" - 2"	32 barg	411 °C		
				28,3 barg	427 °C		
52.600 52.601 (Y)	ANSI150	SA182 F321	1 1/2" - 2"	13 barg	225 °C		
				2,4 barg	510 °C		
55.600 55.601 (Y)	ANSI300	SA182 F321	1 1/2" - 2"	32 barg	377 °C		
				26,6 barg	510 °C		
DIN/EN-Constructions refer to data sheet CONA®B							

Types of connection — Other types of connection on request.

- Flanges ....1 _____ acc. to ASME B16.5
- Screwed sockets ....2 _____ NPT thread acc. to ANSI B1.20.1 or Rp thread acc. to DIN EN 10226-1
- Socket weld ends ....3 _____ acc. to ASME B16.11
- Butt weld ends ....4 _____ ASME B16.25 (Note restriction on operating pressure / inlet temperature depending to design!)

Features

- 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

Controller — (for operating range choosable)

- Controller R13 _____ up to inlet pressure: 13 bar
- Controller R22 _____ up to inlet pressure: 22 bar
- Controller R32 _____ up to inlet pressure: 32 bar

Options — (Design refer to page 5)

- Outside strainer with blow down valve (Pos. 46)
- Outside strainer with ball valve (pos.56) for blow down (Observe operating and installation instructions!)

Types of connection		Flanges		Screwed sockets Socket weld ends		Butt weld ends	
NPS		1 1/2"	2"	1 1/2"	2"	1 1/2"	2"
Face-to-face acc. to data sheet resp. customer request							
L	(mm)	230	230	160 / 130 [1)]	210	250	250

[1)] Screwed sockets = 160 mm / Socket weld ends = 130 mm

Dimensions							Standard-flange dimensions refer to page 15 / Smaller nominal diameters refer to page 2.
H	(mm)	144	144	144	144	144	144
H1	(mm)	68	68	68	68	68	68
S	(mm)	90	90	90	90	90	90
S1	(mm)	50	50	50	50	50	50
SQR	(mm)	110	110	110	110	110	110
Weights							
(approx.)	(kg)	11,3	12,1	8	8	8,9	9,2

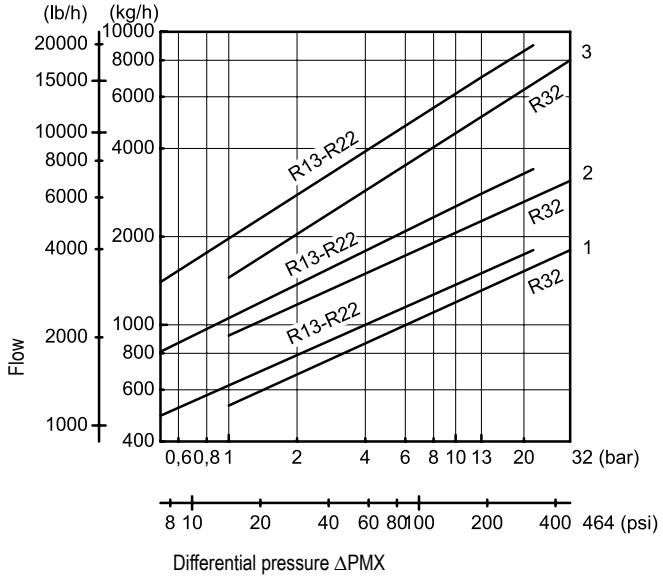
Parts				
Pos.	**Sp.p.**	**Description**	**Fig. 42./45.600 / 42./45.601**	**Fig. 52./55.600 / 52./55.601**
1		Body	SA105	SA182F321
2	x	Strainer	SA240Gr.304	
6		Cover	SA105	SA182F321
7	x	Strainer	SA240Gr.304	
8	x	Strainer plug	SA276Gr.321	
24	x	Controller, cpl.	TB 102 / 85 (corrosion resistant bimetal)	
26	x	Gasket	Graphite (CrNi laminated with graphite)	
27		Cheese head screw	SA193Gr.B16 (with metric screw-thread)	
46	x	Blow down valve, cpl.	SA276Gr.321	
56	x	Ball valve for blow down (G 3/8")	SA351CF8M	
	└ Spare parts			

Information / restriction of technical rules need to be observed!

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview and Resistance list).

Operating and installation instructions can be downloaded at www.ari-armaturen.com.

Capacity chart



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

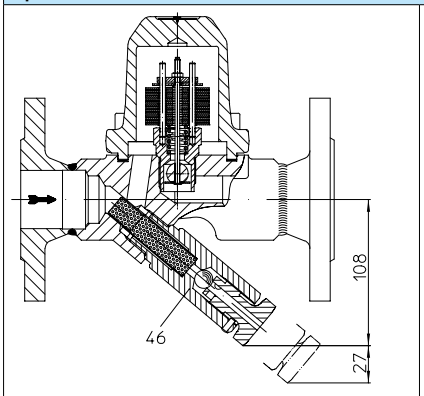
Curve 1: Maximum flow of hot condensate approx. 10 K below saturation temperature.

Curve 2: Maximum flow of sub-cooled condensate at approx. 30 K below saturation temperature (with back-up of condensate).

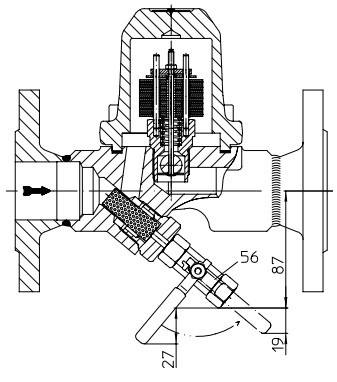
Curve 3: Maximum flow at cold condensate at about 20°C (during start-up of a cold installation).

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

Options

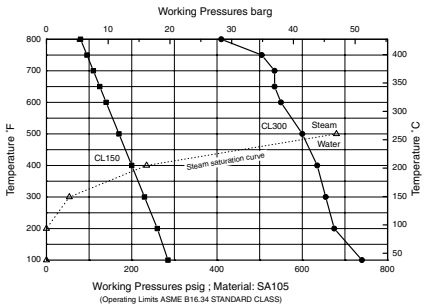


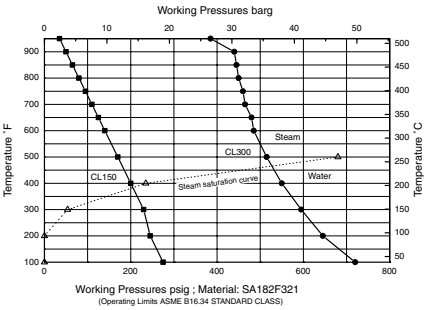
Outside strainer with blow down valve



Outside strainer with ball valve for blow down (restricted to 13 bar, 200°C)

Pressure-Temperature-Diagram





Bimetallic steam trap (Forged steel)

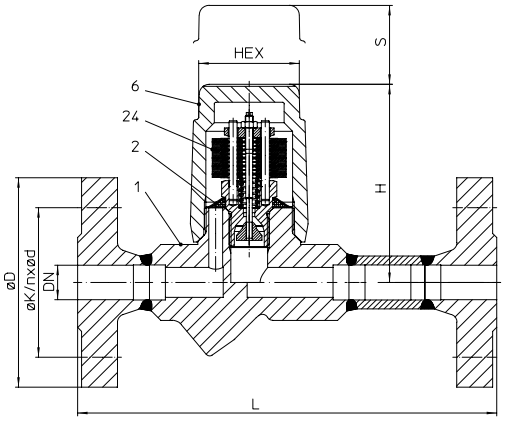


Fig. 600....1 with flanges

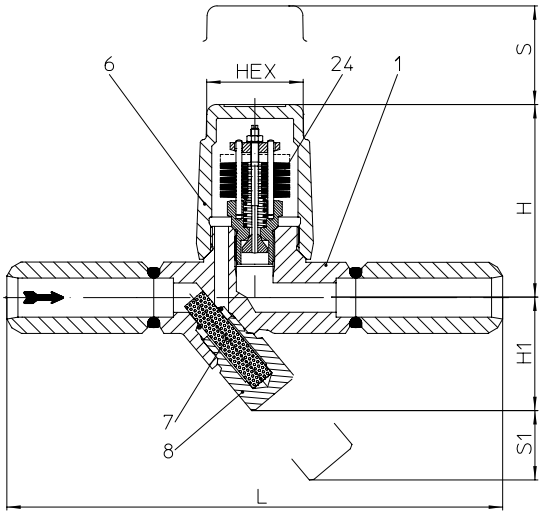


Fig. 601....4 with butt weld ends

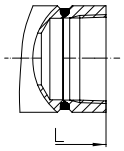


Fig. 600/601....2
with screwed sockets

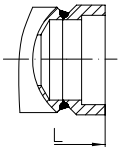


Fig. 600/601....3
with socket weld ends

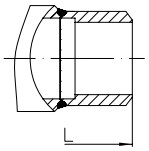


Fig. 600/601....4
with butt weld ends

Figure	Nominal pressure	Material	NPS / Nominal diameter	Operating pressure PS	Inlet temperature TS	allowable differential pressure ΔPMX	for controller
47.600 / 47.601 (Y)	ANSI600	SA105	1/2" - 1"	46 barg	427 °C	46 bar	R46
DIN/EN-Constructions refer to data sheet CONA®B							

Types of connection — Other types of connection on request.

- Flanges ....1 _____ acc. to ASME B16.5
- Screwed sockets ....2 _____ NPT thread acc. to ANSI B1.20.1 or Rp thread acc. to DIN EN 10226-1
- Socket weld ends ....3 _____ acc. to ASME B16.11
- Butt weld ends ....4 _____ ASME B16.25 (Note restriction on operating pressure / inlet temperature depending to design!)

Features

- 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

Controller

- Controller R46 _____ up to inlet pressure: 46 bar

Types of connection		Flanges			Screwed sockets Socket weld ends			Butt weld ends		
NPS		1/2"	3/4"	1"	1/2"	3/4"	1"	1/2"	3/4"	1"
Face-to-face acc. to data sheet resp. customer request										
L (Fig. 600/601)	(mm)	210	210	230	95	95	95	250	250	250
L (Fig. 600)	(mm)	150	150	160						
Dimensions										Standard-flange dimensions refer to page 15.
H	(mm)	98	98	103	98	98	103	98	98	103
H1	(mm)	62	62	55	62	62	55	62	62	55
S	(mm)	70	70	70	70	70	70	70	70	70
S1	(mm)	30	30	30	30	30	30	30	30	30
HEX	(mm)	50	50	50	50	50	50	50	50	50
Weights										
(approx.)	(kg)	3,2	3,7	4,2	1,7	1,6	2,1	2,2	2,3	2,4

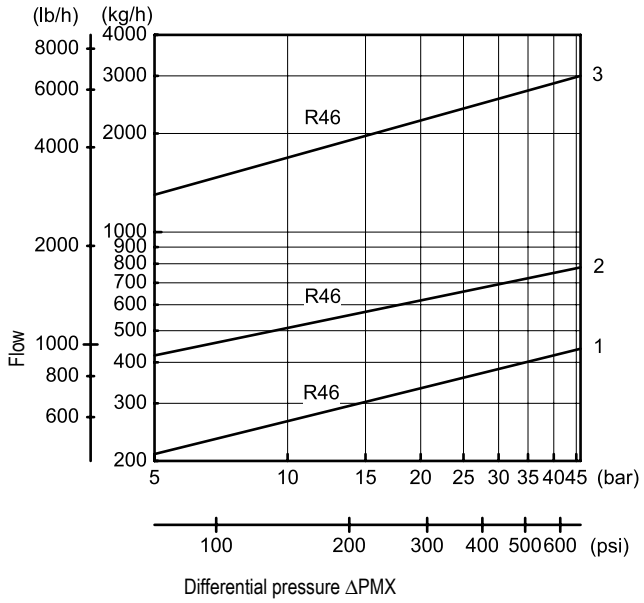
Parts			
Pos.	**Sp.p.**	**Description**	**Fig. 47.600 / 47.601**
1		Body	SA105
2	x	Strainer	SA240Gr.304
6		Cap	SA105
7	x	Strainer	SA240Gr.304
8	x	Strainer plug	SA276Gr.321
24	x	Controller, cpl.	TB 102 / 85 (corrosion resistant bimetal)
		└ Spare parts	

Information / restriction of technical rules need to be observed!

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview and Resistance list).

Operating and installation instructions can be downloaded at www.ari-armaturen.com.

Capacity chart



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

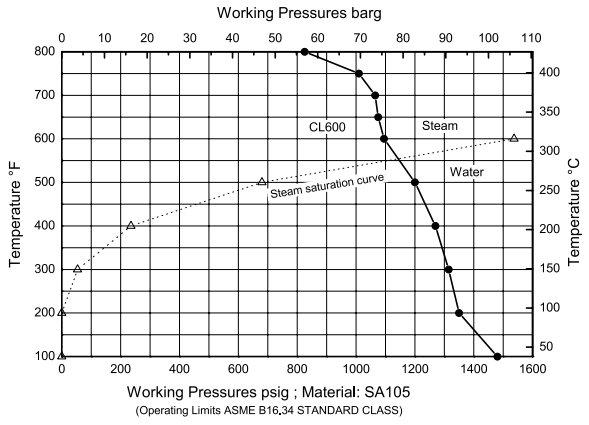
Curve 1: Maximum flow of hot condensate at approx. 10 K below saturation temperature.

Curve 2: Maximum flow of sub-cooled condensate at approx. 30 K below saturation temperature (with back-up of condensate).

Curve 3: Maximum flow at cold condensate at about 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.

Pressure-Temperature-Diagram



High pressure - Bimetallic steam trap (High temperature steel)

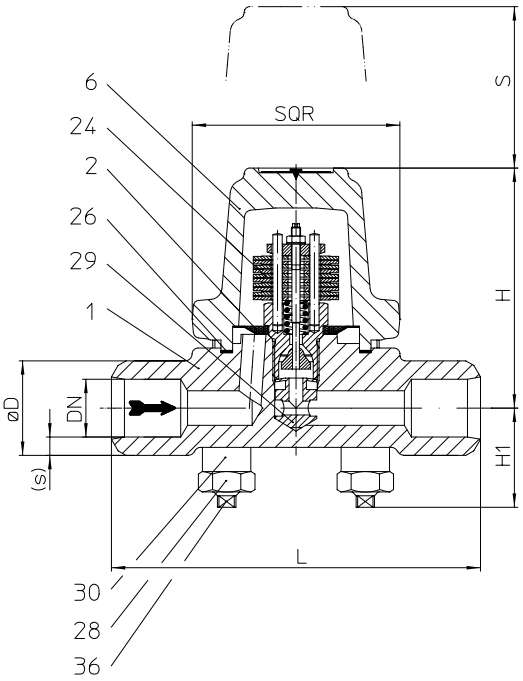


Fig. 600....4 with butt weld ends

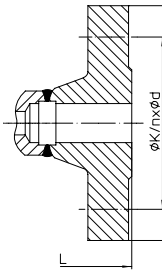


Fig. 600....1
with flanges

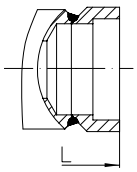


Fig. 600....3
with socket weld ends

Figure	Nominal pressure	Material	NPS / Nominal diameter	Operating pressure PS	Inlet temperature TS	allowable differential pressure ΔPMX	for controller
86.600	ANSI400	SA182F12Cl.2	1/2" - 1"	56 barg	311 °C	56 bar	R56
				18 barg	538 °C		
87.600	ANSI600	SA182F12Cl.2	1/2" - 1"	83 barg	321 °C	56 bar 83 bar	R56 R90
				56 barg	492 °C		
				30 barg	538 °C		
DIN/EN-Constructions refer to data sheet CONA®B							

Types of connection — Other types of connection on request.

- Flanges ....1 _____ acc. to ASME B16.5
- Socket weld ends ....3 _____ acc. to ASME B16.11
- Butt weld ends ....4 _____ ASME B16.25 (Note restriction on operating pressure / inlet temperature depending to design!)

Features

- 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 — (for operating range choosable)

- Controller R56 _____ up to inlet pressure: 56 bar
- Controller R90 _____ up to inlet pressure: 83 bar

Types of connection		Flanges			Socket weld ends			Butt weld ends		
NPS		1/2"	3/4"	1"	1/2"	3/4"	1"	1/2"	3/4"	1"
Face-to-face acc. to data sheet resp. customer request										
L	(mm)	210	210	230	160	160	160	160	160	160
Dimensions										Standard-flange dimensions refer to page 15.
H	(mm)	104	104	104	104	104	104	104	104	104
H1	(mm)	42	42	42	42	42	42	42	42	42
S	(mm)	70	70	70	70	70	70	70	70	70
SQR	(mm)	90	90	90	90	90	90	90	90	90
Weights										
(approx.)	(kg)	6,1	6,5	9,3	4,3	4,5	4,4	4,6	4,5	4,4

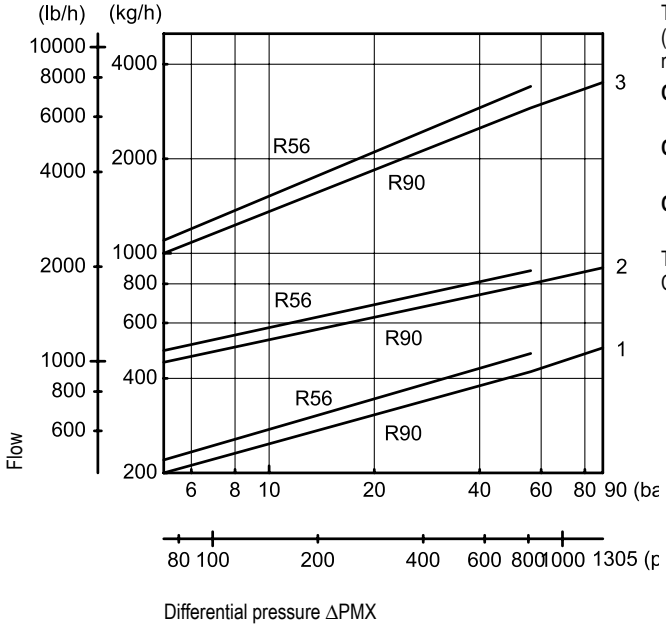
Parts			
Pos.	**Sp.p.**	**Description**	**Fig. 86.600 / 87.600**
1		Body	SA182F12Cl.2
2	x	Strainer	SA240Gr.304
6		Cover	SA182F12Cl.2
24	x	Controller, cpl.	TB 102 / 85 (corrosion resistant bimetal)
26	x	Gasket	Graphite (CrNi laminated with graphite)
28		Hexagonal nut	SA194Gr.7 (with metric screw-thread)
29	x	Erosion deflector	AISI303
30		Extension sleeve	SA193Gr.B16
36		Stud	SA193Gr.B16 (with metric screw-thread)
	└ Spare parts		

Information / restriction of technical rules need to be observed!

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview and Resistance list).

Operating and installation instructions can be downloaded at www.ari-armaturen.com.

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.)

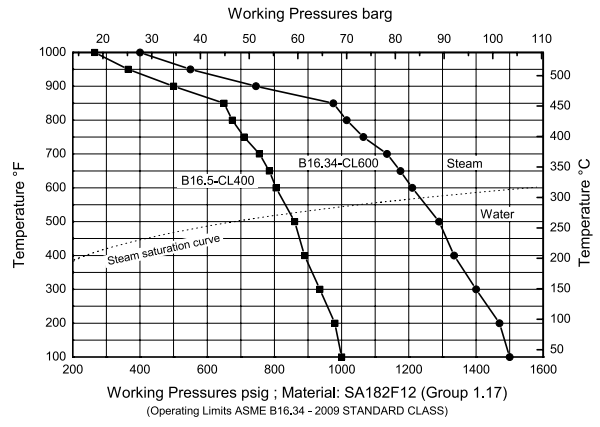
Curve 1: Maximum flow of hot condensate approx. 15 K below saturation temperature.

Curve 2: Maximum flow of sub-cooled condensate at approx. 30 K below saturation temperature (with back-up of condensate).

Curve 3: Maximum flow at cold condensate at about 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.

Pressure-Temperature-Diagram



High pressure - Bimetallic steam trap (High temperature steel)

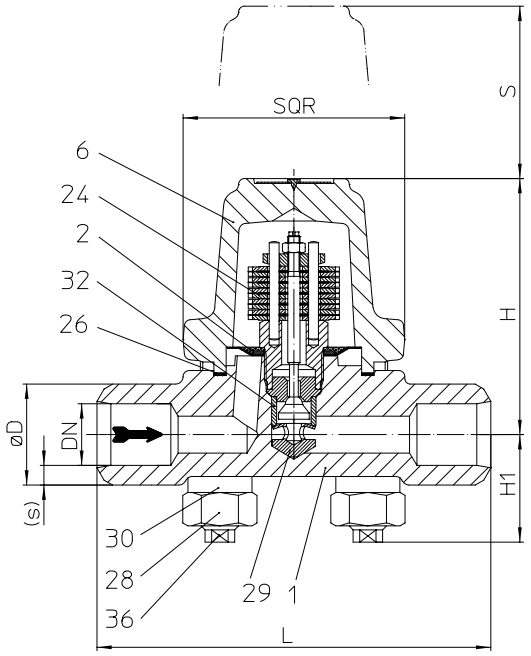


Fig. 600....4 with butt weld ends

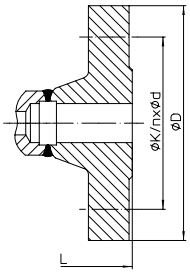


Fig. 600....1
with flanges

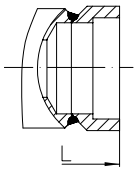


Fig. 600....3
with socket weld ends

Figure	Nominal pressure	Material	NPS / Nominal diameter	Operating pressure PS	Inlet temperature TS	allowable differential pressure ΔPMX	for controller
88.600	ANSI900	SA182F12Cl.2	1/2" - 1" / DN15-25	110 barg	399 °C	110 bar	R130
				41 barg	538 °C		
89.600	ANSI1500	SA182F22Cl.3	1/2" - 1" / DN15-25	150 barg	485 °C	154 bar	R150
				90 barg	538 °C		
DIN/EN-Constructions refer to data sheet CONA®B							**SA182F91 on request**.

Types of connection — Other types of connection on request.

- Flanges ....1 _____ acc. to ASME B16.5
- Socket weld ends ....3 _____ acc. to ASME B16.11
- Butt weld ends ....4 _____ ASME B16.25 (Note restriction on operating pressure / inlet temperature depending to design!)

Features

- 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

- Controller R130 _____ up to inlet pressure: 110 bar
- Controller R150 _____ up to inlet pressure: 154 bar

Types of connection		Flanges			Socket weld ends			Butt weld ends		
NPS		**1/2"**	**3/4"**	**1"**	**1/2"**	**3/4"**	**1"**	**1/2"**	**3/4"**	**1"**
Face-to-face acc. to data sheet resp. customer request										
L	(mm)	210	210	230	160	160	160	160	160	160
Dimensions										Standard-flange dimensions refer to page 15.
H	(mm)	104	104	104	104	104	104	104	104	104
H1	(mm)	42	42	42	42	42	42	42	42	42
S	(mm)	70	70	70	70	70	70	70	70	70
SQR	(mm)	90	90	90	90	90	90	90	90	90
Weights										
(approx.)	(kg)	6,4	6,4	9,6	4,8	4,7	4,6	4,8	4,7	4,6

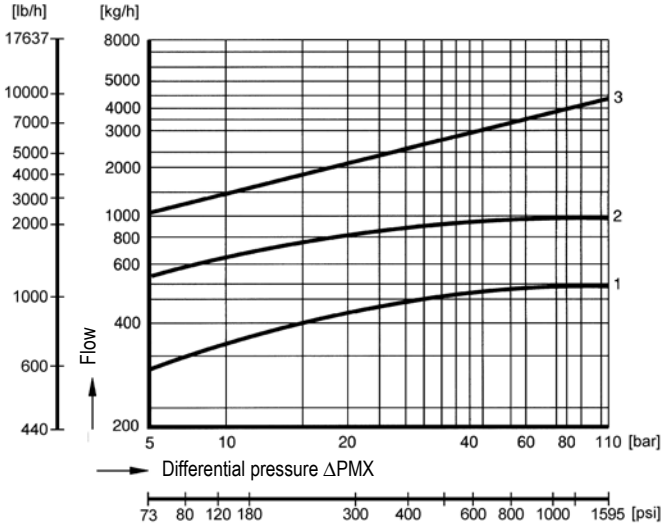
Parts				
Pos.	**Sp.p.**	**Description**	**Fig. 88.600**	**Fig. 89.600**
1		Body	SA182F12Cl.2	SA182F22Cl.3
2	x	Strainer	SA240Gr.304	
6		Cover	SA182F12Cl.2	SA182F22Cl.3
24	x	Controller, cpl.	TB 102 / 85 (corrosion resistant bimetal)	
26	x	Gasket	Graphite (CrNi laminated with graphite)	
28		Hexagonal nut	SA194Gr.7 (with metric screw-thread)	SA453Gr.660B (with metric screw-thread)
29	x	Erosion deflector	AISI303	
30		Extension sleeve	SA193Gr.B16	SA453Gr.660B
32	x	Clamping sleeve	AISI303	
36		Stud	SA193Gr.B16 (with metric screw-thread)	SA453Gr.660B
	└ Spare parts			

Information / restriction of technical rules need to be observed!

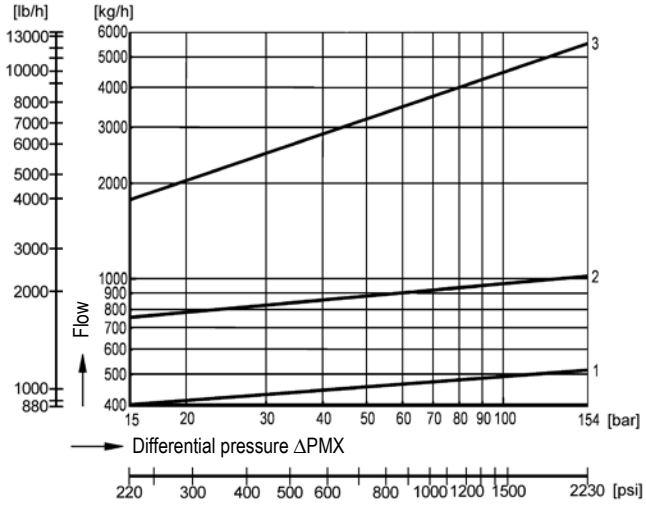
Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview and Resistance list).

Operating and installation instructions can be downloaded at www.ari-armaturen.com.

Capacity chart



ANSI900



ANSI1500

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.)

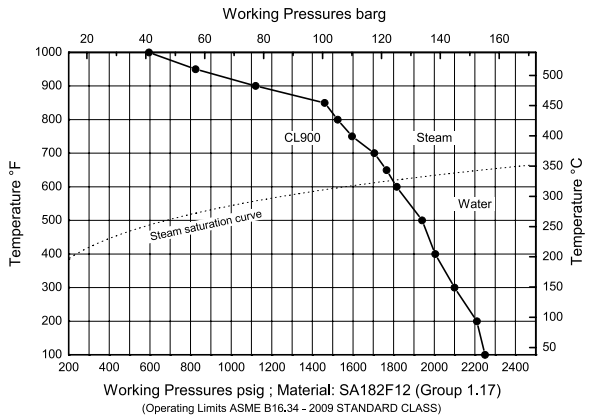
Curve 1: Maximum flow of hot condensate approx. 15 K below saturation temperature.

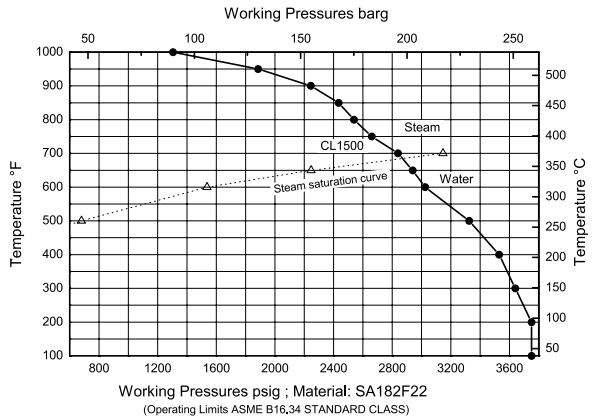
Curve 2: Maximum flow of sub-cooled condensate at approx. 30 K below saturation temperature (with back-up of condensate).

Curve 3: Maximum flow at cold condensate at about 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.

Pressure-Temperature-Diagram





High pressure - Bimetallic steam trap (High temperature steel)

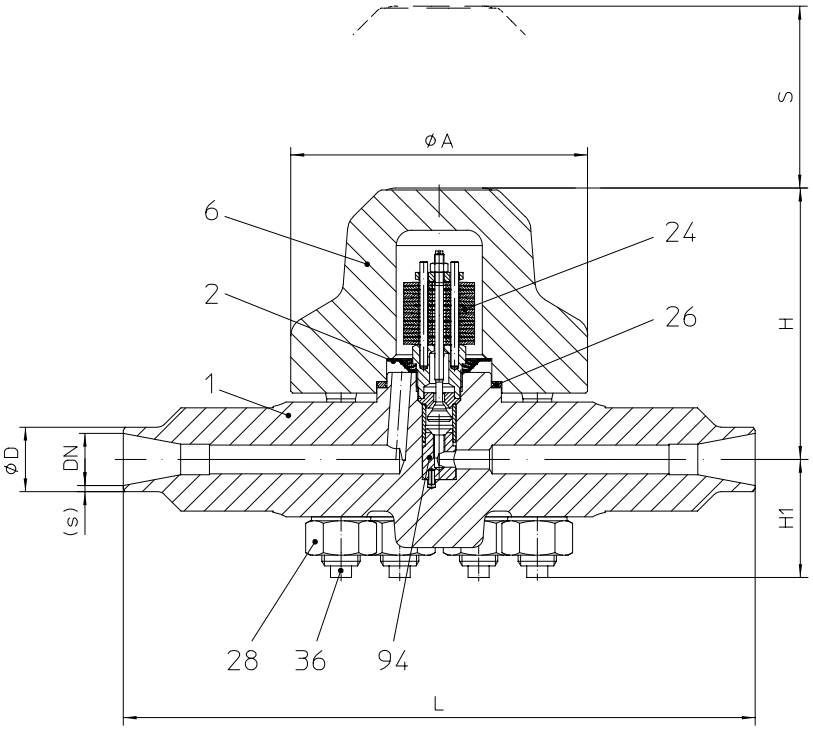


Fig. 600....4 with butt weld ends

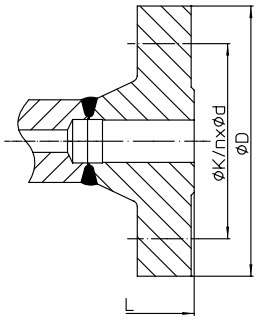


Fig. 600....1
with flanges

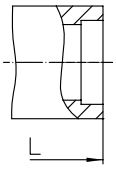


Fig. 600....3
with socket weld ends

Figure	Nominal pressure	Material	NPS / Nominal diameter	Operating pressure PS	Inlet temperature TS	allowable differential pressure ΔPMX	for controller
8c.600	ANSI2500	SA182F22Cl.3	1/2" - 1"	270 barg	467 °C	270 bar	R270
				63 barg	593 °C		
	ANSI2500	SA182F91	1/2" - 1"	270 barg	467 °C		
				173 barg	593 °C		
DIN/EN-Constructions refer to data sheet CONA®B							

Types of connection — Other types of connection on request.

- Flanges ....1 _____ acc. to ASME B16.5
- Socket weld ends ....3 _____ acc. to ASME B16.11
- Butt weld ends ....4 _____ ASME B16.25 (Note restriction on operating pressure / inlet temperature depending to design!)

Features

- 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
- Sizing acc. to DIN, Rating acc. to ASME B16.34
- 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

- Controller R270 _____ up to inlet pressure: 270 bar

Types of connection		Flanges			Socket weld ends			Butt weld ends		
NPS		**1/2"**	**3/4"**	**1"**	**1/2"**	**3/4"**	**1"**	**1/2"**	**3/4"**	**1"**
Face-to-face acc. to data sheet resp. customer request										
L	(mm)	435	460	470	330	330	330	330	330	330
Dimensions										Standard-flange dimensions refer to page 15.
H	(mm)	142	142	142	142	142	142	142	142	142
H1	(mm)	63	63	63	63	63	63	63	63	63
S	(mm)	95	95	95	95	95	95	95	95	95
A	(mm)	155	155	155	155	155	155	155	155	155
Weights										
(approx.)	(kg)	27	29	33	20	20	19	20	20	19

Parts				
Pos.	**Sp.p.**	**Description**	**Fig. 8c.600**	**Fig. 8c.600**
1		Body	SA182F22Cl.3	SA182F91
2	x	Strainer	SA240Gr.304	
6		Cover	SA182F22Cl.3	SA182F91
24	x	Controller, cpl.	TB 102 / 85 (corrosion resistant bimetal)	
26	x	Spiral gasket	MICA/RGF (CrNi laminated with graphite)	
28		Hexagonal nut	SA453Gr.660B (with metric screw-thread)	
36		Stud	SA453Gr.660B (with metric screw-thread)	
94	x	Erosion deflector, cpl.	SA276Gr.420 [1)]	
		└ Spare parts		

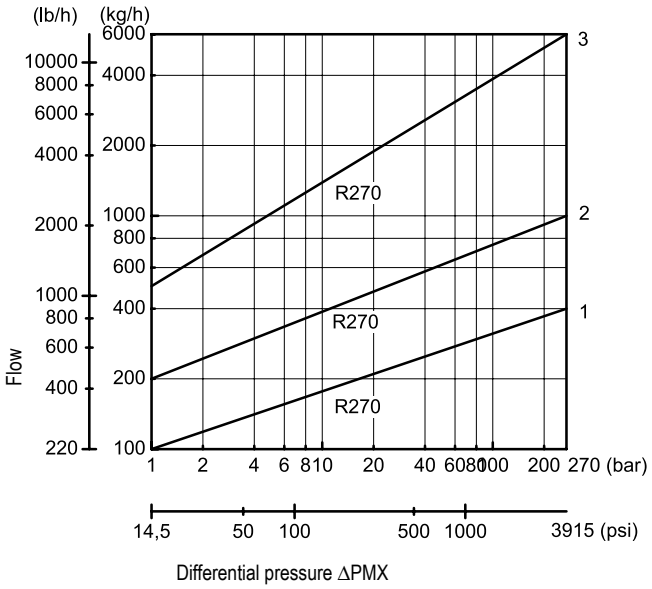
[1)] Heat treatment acc. to EN

Information / restriction of technical rules need to be observed!

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview and Resistance list).

Operating and installation instructions can be downloaded at www.ari-armaturen.com.

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.)

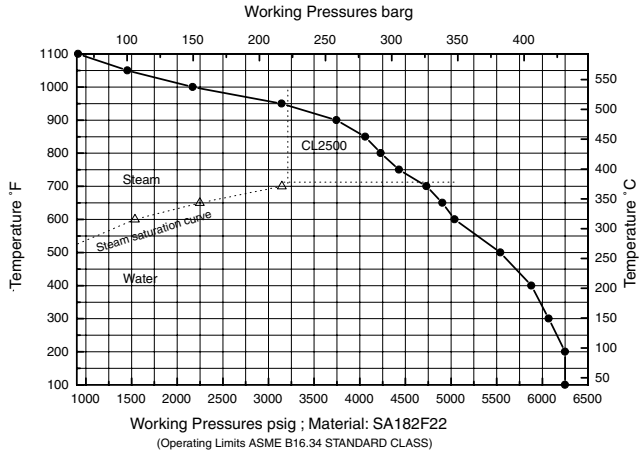
Curve 1: Maximum flow of hot condensate approx. 15 K below saturation temperature.

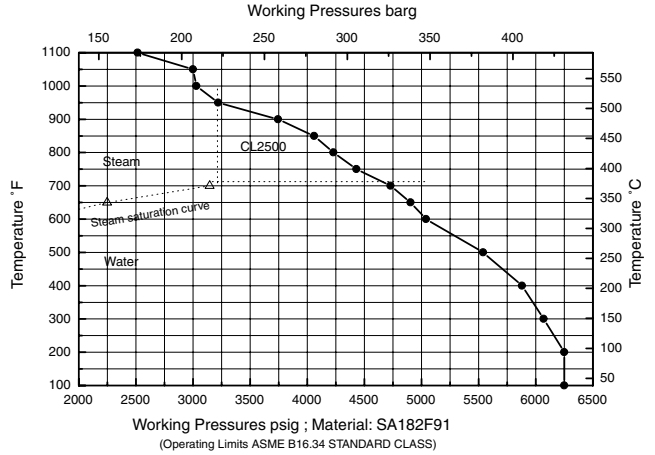
Curve 2: Maximum flow of sub-cooled condensate at approx. 30 K below saturation temperature (with back-up of condensate).

Curve 3: Maximum flow at cold condensate at about 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.

Pressure-Temperature-Diagram





myValve® - Ihr VAlve SIzing-Program.

myValve is a powerful software tool that not only helps you size your system components; it also gives you instant access to all other data about the selected product, such as order information, spare parts drawings, operating instructions, data sheets, etc., whenever you need it.

myValve - VAlve SIzing-Program

Contents:

Module ARI-Steam trap CONA-Calcuation

- Sizing (calculation of steam trap systems with given flow capacity or heat capacity)
- Calculation of nominal diameter acc. to given pressure, condensate quantity, condensate sub-cooling and speed

Media:

- Steam (saturated and superheated)
- Compressed air

Special Features

- Project administration of the calculation and product data incl. spare part drawings concerning to project and tag number
- Direct output or calculation and product data in PDF format
- Product data could be taken for a direct order
- SI- and ANSI-units with direct conversion to another databank
- Settings with over pressure or absolute pressure
- All ARI products are integrated in one databank
- Direct access concerning to the product on data sheets, operating instructions, pressure-temperature-diagram and spare part drawings
- Operation in company networks possible (no complex installations on individually PC's necessary)
- Extensive catalogue extending over several product groups

System Requirements:

Windows operating systems, Linux, etc.

Selection criteria:		Example for order data:
• Steam pressure • Back pressure • Quantity of condensate • Nominal diameter / pressure	• Pipe-connection • Controller • Material • Place of service or kind of steam consumer	**Bimetallic steam trap CONA® B ANSI, Fig. 600, ANSI300, NPS 1/2", SA105, Controller R22, with flanges, Face-to-face dimension 150 mm**

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

Note:

Note restriction on operating pressure / inlet temperature depending to design!

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.

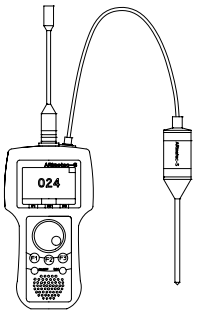
On bimetallic steam traps face-to-face of 95 mm or less, the bimetallic controller has to be disassembled prior to welding. After the traps have cooled down to the ambient temperature the bimetallic controller shall be fitted again into the body.

Steam traps with socket-weld ends shall only be welded by arc welding (welding process 111 acc. to DIN EN 24063).

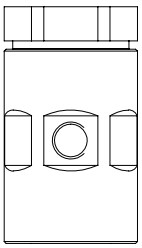
If during the time of warranty others than the manufacturer or by the manufacturer authorized persons are interfering in the product and/or the setting, the right of claim for warranty will lapse!

Standard-flange dimensions acc. to ASME B16.5

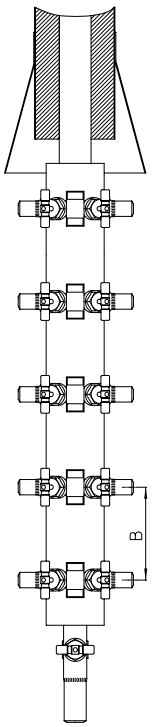
NPS			1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
ANSI150	ØD	(mm)	89	99	108	117	127	153
	ØK	(mm)	60	70	79	78	98	121
	n x Ød	(mm)	4 x 16	4 x 16	4 x 16	4 x 16	4 x 16	4 x 19
ANSI300	ØD	(mm)	95	117	124	133	155	165
	ØK	(mm)	66,5	82,5	89	99	114	127
	n x Ød	(mm)	4 x 16	4 x 19	4 x 19	4 x 19	4 x 22	8 x 19
ANSI400	ØD	(mm)	95	117	127	133	156	165
	ØK	(mm)	67	83	89	99	114	127
	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
	ØK	(mm)	67	83	89	99	114	127
	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	--	--	--
	ØK	(mm)	83	89	102	--	--	--
	n x Ød	(mm)	4 x 22	4 x 22	4 x 25	--	--	--
ANSI1500	ØD	(mm)	121	130	149	--	--	--
	ØK	(mm)	83	89	102	--	--	--
	n x Ød	(mm)	4 x 22	4 x 22	4 x 25	--	--	--
ANSI2500	ØD	(mm)	133	140	159	--	--	--
	ØK	(mm)	89	95	108	--	--	--
	n x Ød	(mm)	4 x 22	4 x 22	4 x 25	--	--	--



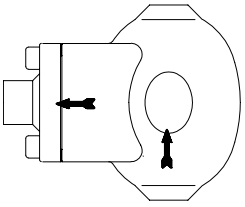
Multifunction tester
ARImetec®-S



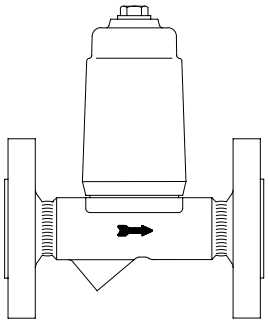
Vacuum breaker
Fig. 655



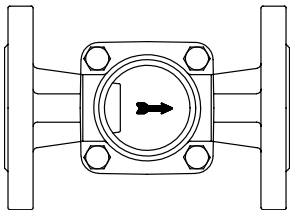
Condensate collection (B = 160), steam distribution (B = 120)
CODI ®S with gland packing Fig. 671/672;
CODI ®B with bellows seal, maintenance-free Fig. 675/676



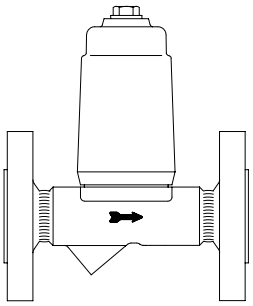
Automatic air vent for liquid systems
Fig. 656



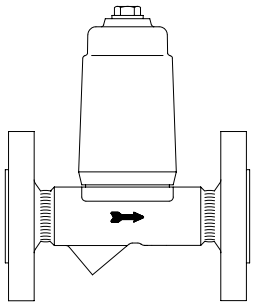
Condensate discharge temperature limiter
Fig. 645/647



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.)

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