

**Bimetallic Steam Trap PN63/PN100 , ANSI400/600**

**Fig. 600**

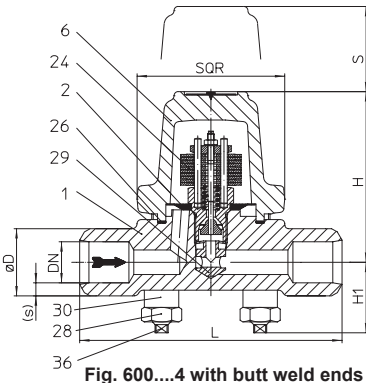


Fig. 600...4 with butt weld ends

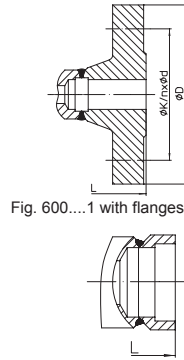


Fig. 600...3 with socket weld ends

- 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 at PN100 available for operating range:
  - Controller R56 - to 56 bar inlet pressure
  - Controller R90 - to 90 bar inlet pressure

**Types of Connection**

<b>Flanges ....1</b>	PN63 / PN100 acc. to DIN 2501	ANSI400 / 600 acc. to ASME B16.5
<b>Socket weld ends ....3</b>	acc. to DIN EN 12760	acc. to ASME B16.11
<b>Butt weld ends ....4</b>	acc. to DIN EN 12627	acc. to ASME B16.25

**Dimensions PN63/PN100**

Dimensions and Weights	Types of connection	Types of connection								
		Flanges		Socket weld ends			Butt weld ends			
Nominal diameter	(mm) (inch)	15 1/2	25 1	15 1/2	20 3/4	25 1	15 1/2	20 3/4	25 1	
L*	(mm)	210	230	160	160	160	160	160	160	
H	(mm)	104	104	104	104	104	104	104	104	
H1	(mm)	42	42	42	42	42	42	42	42	
S	(mm)	70	70	70	70	70	70	70	70	
SQR	(mm)	90	90	90	90	90	90	90	90	
Weight approx.	(kg)	6.2	9.3	4.6	4.5	4.4	4.6	4.5	4.4	

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

**Material**

Pos.	Description	Fig. 86.600 / 87.600 (PN63/PN100)	Fig. 86.600 / 87.600 (ANSI400/600)
1	Body	16Mo3, 1.5415	SA182F12Cl.2
2	Strainer *	X5CrNi18-10, 1.4301	SA240Gr.304
6	Cover	16Mo3, 1.5415	SA182F12Cl.2
24	Controller *	TB 102 / 85 (corrosion resistant bimetal)	
26	Sealing ring *	Graphite (CrNi laminated with graphite)	
28	Hexagonal nut	21CrMoV 5-7, 1.7709	SA193Gr.B16 (with metric screw-thread)
29	Erosion deflector *	X17CrNi16-2, 1.4057	AISI431
30	Extension sleeve	21CrMoV 5-7, 1.7709	SA193Gr.B16
36	Stud	21CrMoV 5-7, 1.7709	SA193Gr.B16 (with metric screw-thread)

\* Spare part

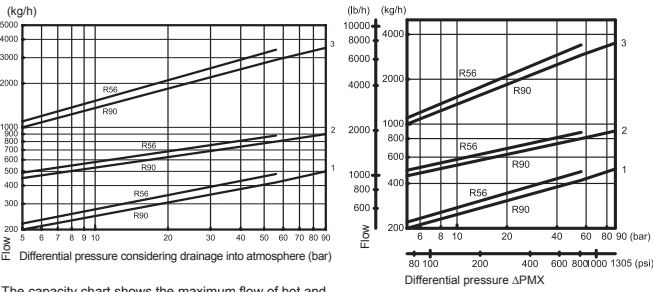
**Dimensions ANSI400/600**

Dimensions and weights	Types of connection	Types of connection								
		Flanges		Socket weld ends			Butt weld ends			
NPS	(inch)	1/2	3/4	1	1/2	3/4	1	1/2	3/4	1
L*	(inch)	8.27	8.27	9.06	6.30	6.30	6.30	6.30	6.30	6.30
H	(inch)	4.09	4.09	4.09	4.09	4.09	4.09	4.09	4.09	4.09
H1	(inch)	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65
S	(inch)	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76
SQR	(inch)	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54
Weight appr.	(lb)	13.67	14.3	20.5	9.48	9.92	9.7	10.14	9.92	9.7

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

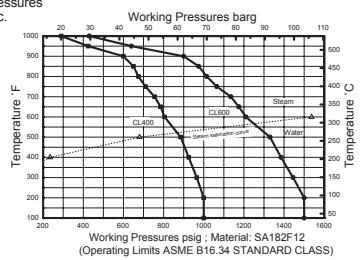
Dimensions and weights	Types of connection	Types of connection								
		Flanges		Socket weld ends			Butt weld ends			
DN	(mm)	15	20	25	15	20	25	15	20	25
L*	(mm)	210	210	230	160	160	160	160	160	160
H	(mm)	104	104	104	104	104	104	104	104	98
H1	(mm)	42	42	42	42	42	42	42	42	42
S	(mm)	70	70	70	70	70	70	70	70	70
SQR	(mm)	90	90	90	90	90	90	90	90	90
Weight appr.	(kg)	6.1	6.5	9.3	4.3	4.5	4.4	4.6	4.5	4.4

**Capacity chart**



The capacity chart shows the maximum flow of hot and cold condensate 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 quantity of hot condensate at approx. 15 K below boiling temperature.  
**Curve 2:** Maximum flow of sub-cooled condensate at approx. 30 K below boiling temperature (through back up of condensate).  
**Curve 3:** Maximum flow quantity of cold condensate at about 20°C (during startup of a cold installation).  
 The condensate temperature determines the opening of the controller. Capacity is increased with the sub-cooling temperature of the condensate.



**Operating limits**

Fig. 86.600	PN63 - 16Mo3	ANSI400 - SA182F12Cl.2
Operating pressure PS (psig)		812 290
Inlet temperature TS (°F)		591 1000
Operating pressure PS (bar-g)	56 47 45	56 20
Operating temperature TS (°C)	300 400 450	311 538
allow. diff. press. ΔPMX (psi):		812
allow. diff. press. ΔPMX (bar):	56	56
for controller:	R56	R56
Fig. 87.600	PN100 - 16Mo3	ANS600 - SA182F12Cl.2
Operating pressure PS (psig)		1203 812 430
Inlet temperature TS (°F)		610 917 1000
Operating pressure PS (bar-g)	90 56 27	83 56 30
Operating temperature TS (°C)	450 500 530	321 492 538
allow. diff. press. ΔPMX (psi):		812 1203
allow. diff. press. ΔPMX (bar):	56 90	56 83
for controller:	R56 R90	R56 R90

\*last updated 10/16