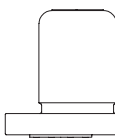


CONA®-Universal
for quick assembly/disassembly on CONA®-Connector or foreign system connectors

CONA®B-Universal
Bimetallic steam trap
ANSI300

(Fig. 604) Stainless steel Fig. 604 Page 2



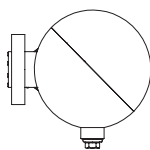
CONA®M-Universal
Thermostatic steam trap
ANSI300

(Fig. 622) Stainless steel Fig. 622 Page 3



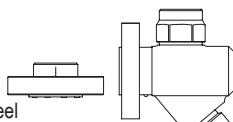
CONA®S-Universal
Ball float steam trap
ANSI300

(Fig. 628) Stainless steel Fig. 628 Page 4



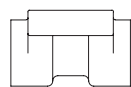
CONA®TD-Universal
Thermodynamic steam trap
ANSI300

- without strainer (Fig. 642) Stainless steel Fig. 642 / Fig. 643 (Y) Page 5
- with outside strainer (Fig. 643)



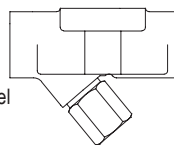
CONA®-Connector 681
System connector
ANSI300

- with screwed sockets (Fig. 681....2) Stainless steel Fig. 681 Page 6
- with socket weld ends (Fig. 681....3)



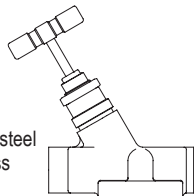
CONA®-Connector 682
System connector with outside strainer
ANSI300

- with flanges (Fig. 682....1) Forged steel Fig. 682 Page 6
- with screwed sockets (Fig. 682....2) Stainless steel
- with socket weld ends (Fig. 682....3) steel
- with butt weld ends (Fig. 682....4)



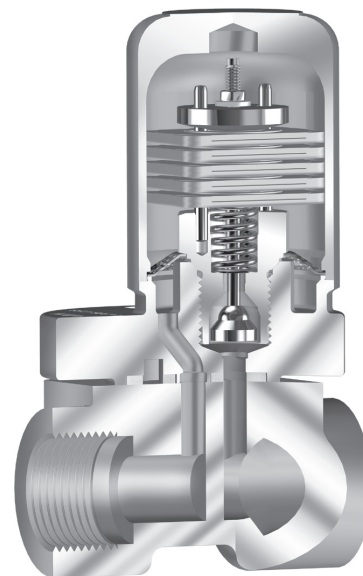
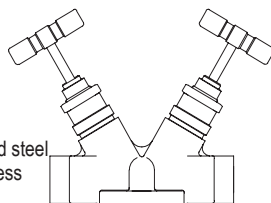
CONA®-Connector 683
System connector
with stop function at inlet
ANSI300

- with flanges (Fig. 683....1) Forged steel Fig. 683 Page 6
- with screwed sockets (Fig. 683....2) Stainless steel
- with socket weld ends (Fig. 683....3) steel
- with butt weld ends (Fig. 683....4)



CONA®-Connector 684
System connector
with stop function at inlet and outlet
ANSI300

- with flanges (Fig. 684....1) Forged steel Fig. 684 Page 6
- with screwed sockets (Fig. 684....2) Stainless steel
- with socket weld ends (Fig. 684....3) steel
- with butt weld ends (Fig. 684....4)



CONA®B-Universal Fig. 604 with CONA®-Connector Fig. 681....2

Features CONA®-Universal:

- For the discharge of
 - Fig. 604 / 622 / 642 / 643: cold condensate
 - Fig. 628: hot condensate
- Robust and resistant to water-hammer
- Automatic air-venting during start up and operation of the plant
- Fig. 604 / 642 / 643: Integrated non return protection
- Mounting position:
 - Fig. 604 / 622: any, except cap upside down
 - Fig. 628: plug always upside down
 - Fig. 642: any position
 - Fig. 643: always with drain plug upside down
- Construction in high quality stainless steel
- Optimized design for quick installation
- Can be combined with all types of CONA-Connector

Features CONA®-Connector:

- Space saving, compact design
- Minimization of installation and maintenance labor
- Material optional in forged steel and stainless steel
- Fig. 682: with outside strainer
- Fig. 683 / 684: with integrated, low-maintenance stop valve with gland seal (on request with maintenance free bellows seal design acc. to german clean air act "TA-Luft")
- Simple replacement of steam traps by shut-off of inlet and outlet
- Optional with blow down valve
- Fig. 683: Recommended in combination with CODI-collector
- Elimination of potential leak points by reduced numbers of pipe joints
- Can be combined with all types of CONA-Universal

CONA®B-Universal - Bimetallic steam trap (Stainless steel)

- Bimetallic steam trap with corrosion resistant and water hammer proofed bimetallic controller
- Automatic air-venting during start up and operation of the plant
- Non return protection
- With inside strainer
- Robust and insensitive to waterhammer
- Installation in any position, except cap upside down
- Optimized design for quick installation
- Can be combined with all types of CONA-Connector (refer to page 6)

Operating limits

Fig. 55.604	ANSI 300 - SA351CF8
Operating pressure PS (bar-g)	22
Operating temperature TS (°C)	400

allowable differential pressure Δ PMX (bar):	22
for controller:	R22

Connection

Universal-Flange	2 x 3/8" UNC-Thread
------------------	---------------------

Dimensions and weights

H	(mm)	78
H1	(mm)	acc. to Connector-Type
Weight approx.	(kg)	0,8

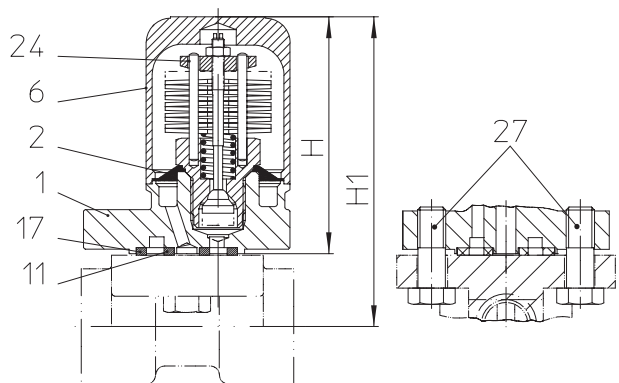
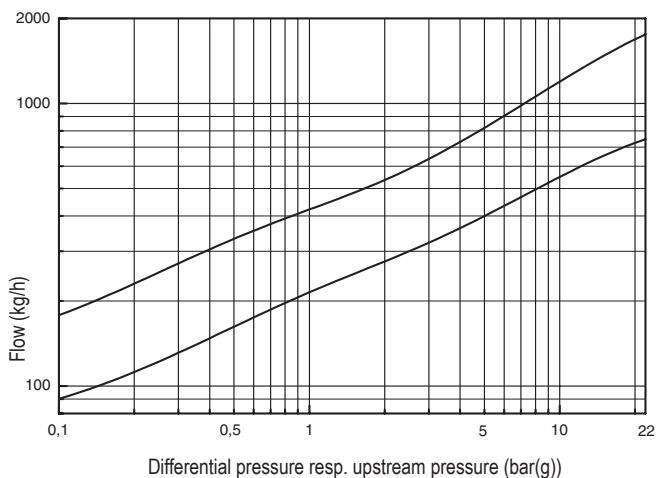


Fig. 604 Universal-Flange with 2 x 3/8" UNC-Thread

Capacity chart



The capacity chart shows the maximum capacity at factory setting.

Curve 1

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

Curve 2

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.

Parts

Pos.	Description	Fig. 55.604
1	Body	SA351CF8
2	Strainer	SA240Gr.304
6	Cap	SA182F321
11	Sealing ring (spiral wounded gasket)	with graphite
17	Sealing ring (spiral wounded gasket)	with graphite
24	Controller	corrosion resistant bimetal TB 102 / 85
27	Hexagon screw	SA193Gr.B16

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.

CONA®M-Universal - Thermostatic steam trap (Stainless steel)

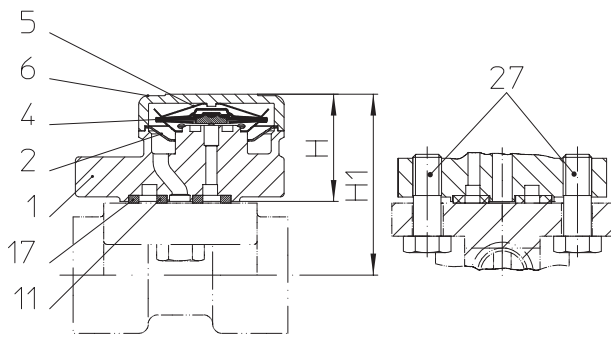


Fig. 622 Universal-Flange with 2 x 3/8" UNC-Thread

- Thermostatic steam trap with noncorrosive and robust water hammer proofed capsule
- With inside strainer
- Robust and insensitive to waterhammer
- Installation in any position, except cap upside down (Filter effect maximised at horizontal installation)
- Optimized design for quick installation
- With capsule for condensate sub-cooling about approx. 10K
- Can be combined with all types of CONA-Connector (refer to page 6)

Operating limits

Fig. 55.622	ANSI300 - SA351CF8
Operating pressure PS (bar-g)	29
Operating temperature TS (°C)	400
allowable differential pressure ΔPMX (bar):	29
for controller:	R32

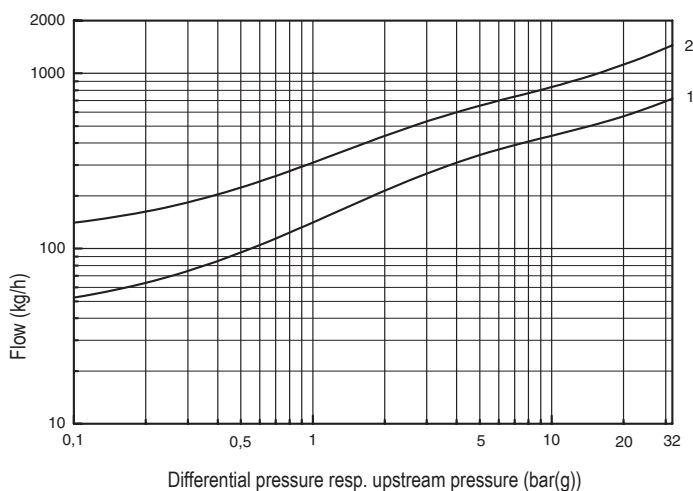
Connection

Universal-Flange	2 x 3/8" UNC-Thread
------------------	---------------------

Dimensions and weights

Dimensions (mm)	H	35
	H1	acc. to Connector-Type
Weight approx. (kg)	0,5	

Capacity chart



The capacity chart shows the maximum flow rates.

Curve 1

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

Curve 2

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

Parts

Pos.	Description	Fig. 55.622
1	Body	SA351CF8
2	Strainer	SA240Gr.304
4	Capsule B (Diaphragm / Capsule)	Hastelloy / SA240Gr.304
5	Flat spring	AISI301
6	Cap	SA182F321
11	Sealing ring (spiral wounded gasket)	with graphite
17	Sealing ring (spiral wounded gasket)	with graphite
27	Hexagon screw	SA193Gr.B16

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.

CONA®S-Universal - Ball float steam trap (Stainless steel)

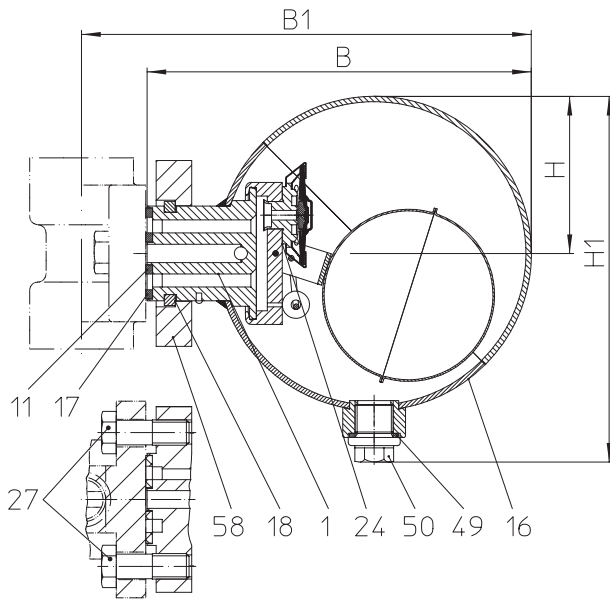


Fig. 628 Universal-Flange with 2 x 3/8" UNC-Thread

- Ball float steam trap with level control for the condensate-discharge from all kinds of steam systems
- Rapid system start-up due to thermostatic air venting capsule
- Immediate discharge of hot boiling condensat
- Robust and insensitive to waterhammer
- Installation always with drain plug (Pos. 50) upside down
- Can be combined with all types of CONA-Connector (refer to page 6)

Operating limits

Fig. 55.628	ANSI300 Body: SA182F321 / Hood: SA240Gr.304
Operating pressure PS (bar-g)	29
Operating temperature TS (°C)	400
allowable differential pressure ΔPMX (bar):	29
for controller:	R32

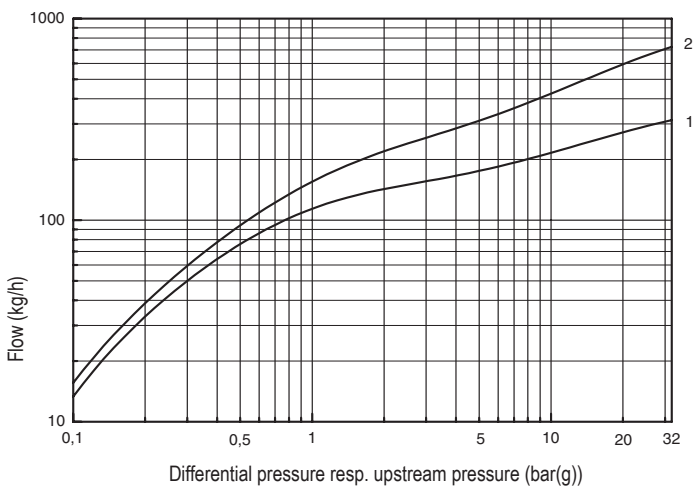
Connection

Universal-Flange	2 x 3/8" UNC-Thread
------------------	---------------------

Dimensions and weights

H	(mm)	58
H1	(mm)	134
B	(mm)	140
B1	(mm)	acc. to Connector-Type
Weight approx.	(kg)	1,4

Capacity chart



The capacity chart shows the maximum flow rates.

Curve 1

Maximaler Flow an hot condensate.

Curve 2

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

Parts

Pos.	Description	Material, Material-Nr.
1	Body	SA182F321
11	Sealing ring (spiral wounded gasket)	with graphite
16	Hood	SA240Gr.304
17	Sealing ring (spiral wounded gasket)	with graphite
18	Retaining ring	A4
24	Capsule B (Diaphragm / Capsule)	Hastelloymembran / SA240Gr.304
27	Hexagon screw	SA193Gr.B16
49	Sealing ring für Plug *	A4
50	Plug (M14x1,5) *	SA182F321
58	Loose flange	SA182F321

* 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.

CONA®TD-Universal - Thermodynamic steam trap (Stainless steel)

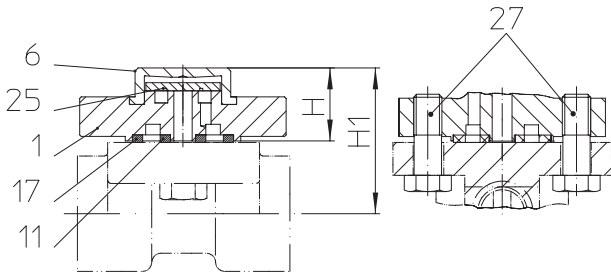


Fig. 642 without strainer
Universal-Flange with 2 x 3/8" UNC-Thread

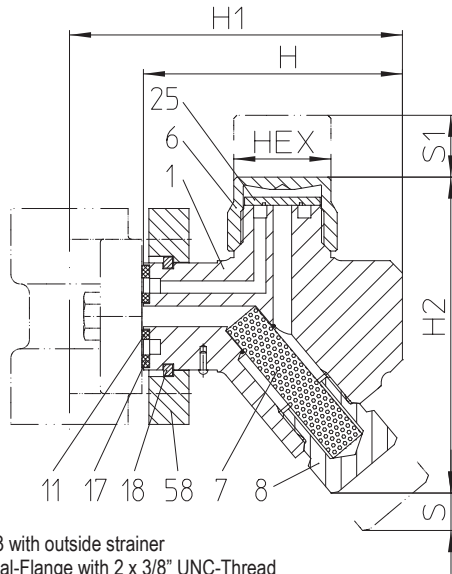


Fig. 643 with outside strainer
Universal-Flange with 2 x 3/8" UNC-Thread

- Thermodynamic steam trap in compact design for the condensate-discharge of steam systems.
- Intermittent mode of operation
- Integrated non return protection
- Robust and insensitive to waterhammer
- Constructions:
 - Fig. 642: without strainer
 - Fig. 643: with outside strainer
- Mounting position:
 - Fig. 642: any position
 - Fig. 643: always with drain plug upside down
- Can be combined with all types of CONA-Connector (refer to page 6)

Operating limits

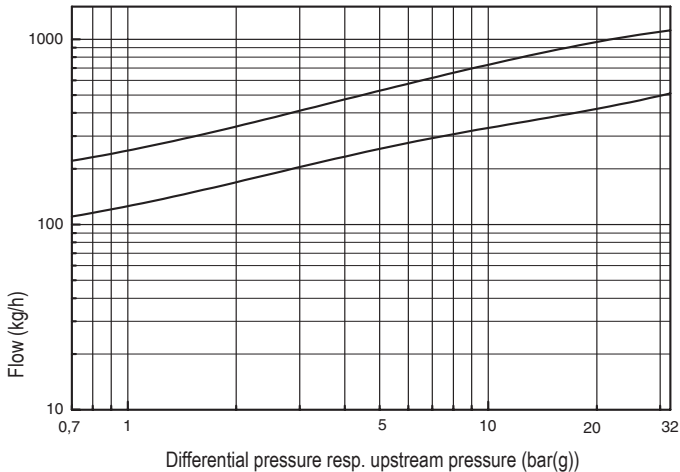
Fig. 55.642 / 55.643 (Y)	ANSI300 - SA470Gr.410 / SA182F6 A
Operating pressure PS (bar-g)	29
Operating temperature TS (°C)	400
allowable differential pressure ΔPMX (bar):	29
permissible pressure ratio (barg):	Back pressure / Inlet press. ≤ 0,8

Connection

Universal-Flange	2 x 3/8" UNC-Thread
------------------	---------------------

Dimensions and weights	Fig. 642	Fig. 643	
Dimensions (mm)	H	24	84
	H1	acc. to Connector-Type	
	H2	--	103
	S	--	45
	S1	--	20
	HEX	--	32
Weight approx. (kg)	0,4	1,3	

Capacity chart



The capacity chart shows the maximum flow rates.

Curve 1

Maximum flow of hot condensate.

Curve 2

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

Parts

Pos.	Description	Fig. 55.642	Fig. 55.643
1	Body	SA470Gr.410	SA182F6 A
6	Cap	SA470Gr.410	SA182F321
7	Strainer screen (Y)	--	SA240Gr.304
8	Strainer plug (Y)	--	SA182F321
11	Sealing ring (spiral wounded gasket)	with graphite	
17	Sealing ring (spiral wounded gasket)	with graphite	
18	Retaining ring	--	A4
25	Disc	AISI440	
27	Hexagon screw	SA193Gr.B16	
58	Loose flange	--	SA182 F321

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.

CONA®-Connector - System connector (Forged steel, Stainless steel)

- System connector for minimization of installation and maintenance space saving and compact design
- Fig. 683 / 684: with integrated, low-maintenance stop valve with gland seal (on request with maintenance free bellows seal design acc. to german clean air act "TA-Luft")
- Optional: - blow down valve

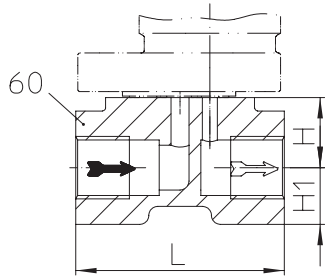


Fig. 681....2 with screwed sockets

Operating limits

Fig. 55.681	ANSI300 - SA351CF8
Operating pressure PS (bar-g)	29
Operating temperature TS (°C)	400

Fig. 45.682 / 45.683 / 45.684	ANSI300 - SA105
Operating pressure PS (bar-g)	32
Operating temperature TS (°C)	400

Fig. 55.682 / 55.683 / 55.684	ANSI300 - SA182F321
Operating pressure PS (bar-g)	32
Operating temperature TS (°C)	400

Types of connection

Flanges1	ANSI300 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.

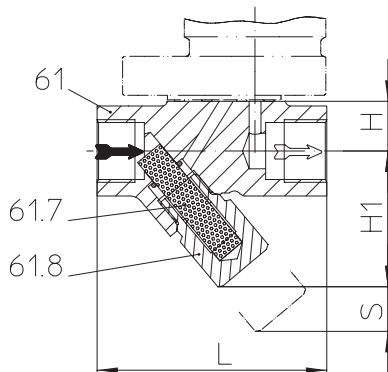


Fig. 682....2 with outside strainer and screwed sockets

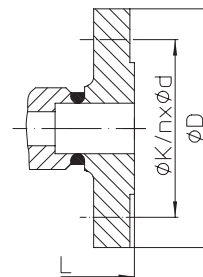


Fig. 682/683/684....1 with flanges

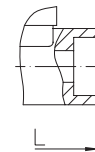


Fig. 681/682/683/684....3 with socket weld ends

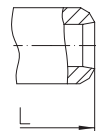


Fig. 682/683/684....4 with butt weld ends

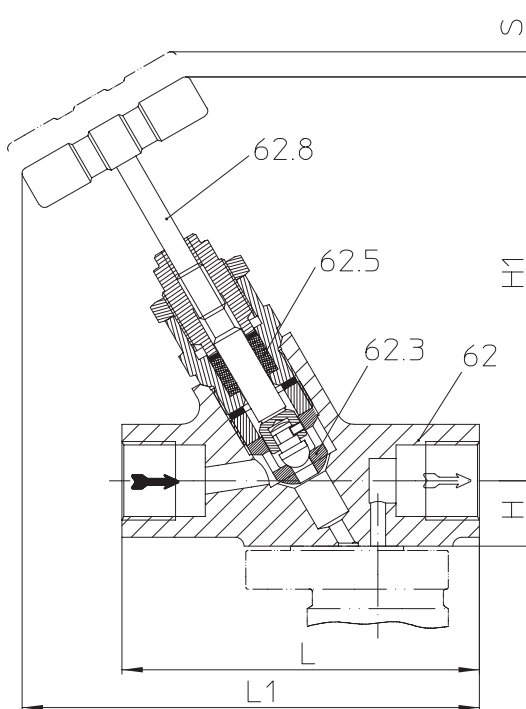


Fig. 683....2 with stop function at inlet and screwed sockets

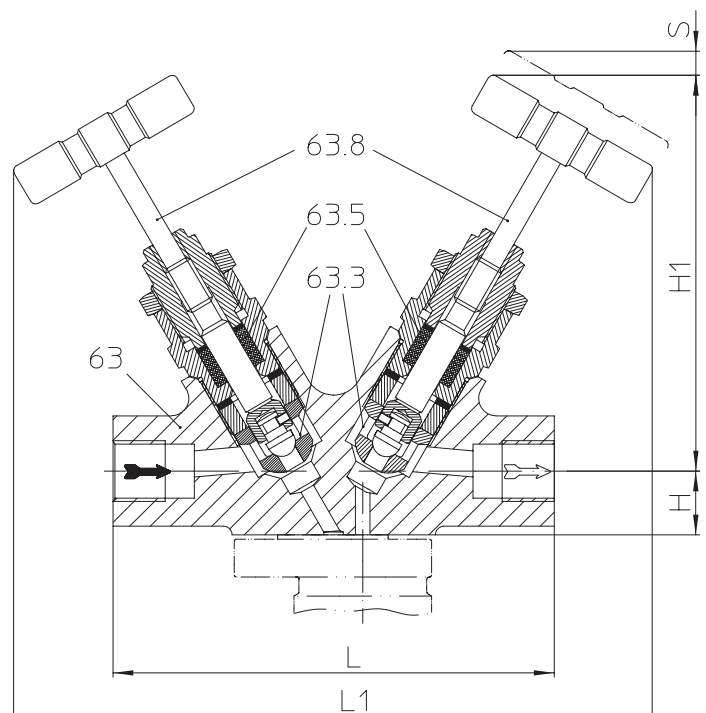


Fig. 684....2 with stop function at inlet and outlet and screwed sockets

Dimensions and weights			Types of connection								
			Flanges			Screwed sockets Socket weld ends			Butt weld ends		
Nominal diameters	mm inch		15 1/2	20 3/4	25 1	15 1/2	20 3/4	25 1	15 1/2	20 3/4	25 1
L*	Fig. 681	(mm)	--	--	--	70	70	--	--	--	--
	Fig. 682	(mm)	150	150	160	95	95	160	250	250	250
	Fig. 683	(mm)	150	150	160	120	120	160	250	250	250
	Fig. 684	(mm)	200	200	205	152	152	205	250	250	250
L1	Fig. 683	(mm)	169	169	174	154	154	174	219	219	219
	Fig. 684	(mm)	220	220	220	220	220	220	220	220	220
H	Fig. 681	(mm)	23,5	23,5	23,5	23,5	23,5	23,5	23,5	23,5	23,5
	Fig. 682	(mm)	21	21	21	21	21	21	21	21	21
	Fig. 683	(mm)	22	22	22	22	22	22	22	22	22
	Fig. 684	(mm)	22	22	22	22	22	22	22	22	22
H1	Fig. 681	(mm)	--	--	--	19	19	--	--	--	--
	Fig. 682	(mm)	58	58	58	58	58	58	58	58	58
	Fig. 683	(mm)	136	136	136	136	136	136	136	136	136
	Fig. 684	(mm)	136	136	136	136	136	136	136	136	136
S	Fig. 682	(mm)	30	30	30	30	30	30	30	30	30
	Fig. 683	(mm)	10	10	10	10	10	10	10	10	10
	Fig. 684	(mm)	10	10	10	10	10	10	10	10	10
Ø D	(mm)	95	117	124	--	--	--	--	--	--	
Ø K	(mm)	66,5	82,5	89	--	--	--	--	--	--	
n x Ød	(mm)	4 x 16	4 x 19	4 x 19	--	--	--	--	--	--	
Weight approx.	Fig. 681	(kg)	--	--	--	0,6	0,6	--	--	--	--
	Fig. 682	(kg)	2,3	2,9	3,5	1,0	1,0	1,2	1,3	1,4	1,5
	Fig. 683	(kg)	3,0	3,5	4,1	1,7	1,6	1,8	1,9	2,0	2,1
	Fig. 684	(kg)	4,0	4,5	5,1	2,7	2,6	2,8	2,9	3,0	3,1

Steam trap acc. to ASTM

- Pressure bearing parts made of ASTM / AISI -materials
- Studs and nuts made of ASTM-materials, with metric or american screw-threads
- Face-to-face acc. to data sheet resp. customer request
- Flanges acc. to ANSI
- Pressure test acc. to API 598

Parts

Pos.	Description	Fig. 45.682 / 683 / 684	Fig. 55.681	Fig. 55.682 / 683 / 684
60	Body (Fig. 681)	--	SA351CF8	--
61 (Y)	Body (Fig. 682)	SA105	--	SA182F321
61.7 (Y)	Strainer screen *	SA240Gr.304		
61.8 (Y)	Strainer plug *	SA182F321		
62	Body (Fig. 683)	SA105	--	SA182F321
62.3	Seat *	AISI303		
62.5	Sealing ring *	Pure graphite		
62.8	Assembly stop valve, cpl. *	SA240		
63	Body (Fig. 684)	SA105	--	SA182F321
63.3	Seat *	AISI303		
63.5	Sealing ring *	Pure graphite		
63.8	Assembly stop valve, cpl. *	SA240		

* 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.

