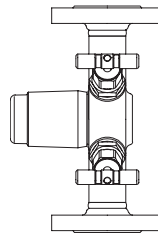
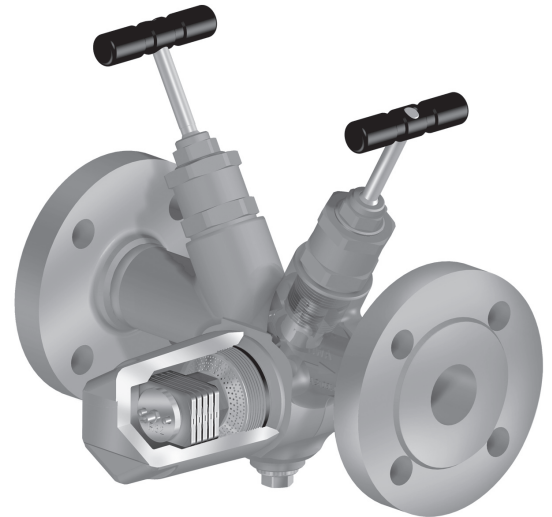


CONA® All-in-one - Steam trap station with integrated inlet and outlet valves
**CONA®B All-in-one
Bimetallic steam trap
PN40**

- with flanges (Fig. 60A....1)
- with screwed sockets (Fig. 60A....2)
- with socket weld ends (Fig. 60A....3)
- with butt weld ends (Fig. 60A....4)

 Forged steel
Stainless steel
Fig. 60A


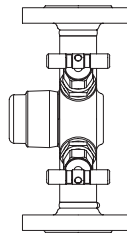
Page 2



CONA®B All-in-one

**CONA®M All-in-one
Thermostatic steam trap
PN40**

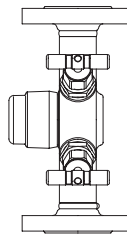
- with flanges (Fig. 61A....1)
- with screwed sockets (Fig. 61A....2)
- with socket weld ends (Fig. 61A....3)
- with butt weld ends (Fig. 61A....4)

 Forged steel
Stainless steel
Fig. 61A


Page 4

**CONA®TD All-in-one
Thermodynamic steam trap
PN40**

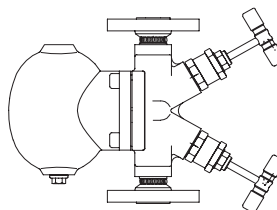
- with flanges (Fig. 64A....1)
- with screwed sockets (Fig. 64A....2)
- with socket weld ends (Fig. 64A....3)
- with butt weld ends (Fig. 64A....4)

 Forged steel
Stainless steel
Fig. 64A


Page 6

**CONA®SC All-in-one
Ball float steam trap
PN40**

- with flanges (Fig. 63A....1)
- with screwed sockets (Fig. 63A....2)
- with socket weld ends (Fig. 63A....3)
- with butt weld ends (Fig. 63A....4)

 Forged steel
Stainless steel
Fig. 63A


Page 10

Features:

- Robust and resistant to waterhammer
- Integrated non-return protection
- Maybe installed in horizontal and vertical positions
- The controller maybe changed without disturbing the pipe work

CONA®B/M/TD All-in-one:

- For discharge of condensate sub-cooled up to 30K
- Internal strainer
- Optimized design for quick installation
- Gasket-free sealing of the screw cap

CONA®S All-in-one:

- Back pressure-free condensate discharge
- Rapid system start-up due to thermostatic airventing capsule

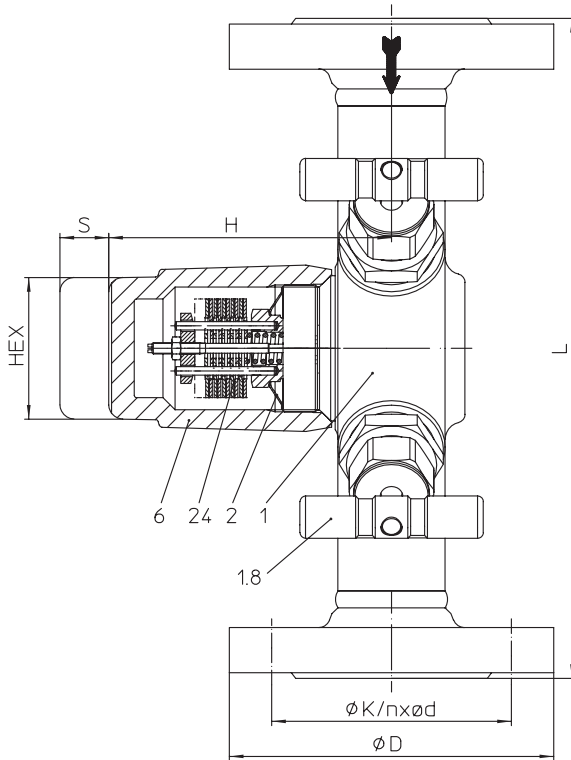
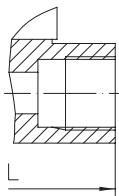
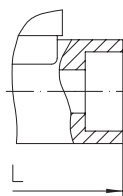
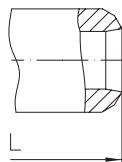
CONA®B All-in-one - Bimetallic steam trap station with integrated inlet and outlet valves
(Forged steel, Stainless steel)


Fig. 60A....1 with flanges


 Fig. 60A....2
 with screwed sockets

 Fig. 60A....3
 with socket weld ends

 Fig. 60A....4
 with butt weld ends

- Thermostatic steam trap with non-corrosive and robust water hammer proof bimetallic controller
- Maybe installed in horizontal and vertical positions
- User-friendly handling, easy and quick access to the controller
- Automatic air venting during start up and operation of the plant
- Integrated non return protection
- Internal strainer
- Subcooling of condensate is continuously adjustable (observe the operation instructions)
- Maintenance simplified due to screwed cap without sealing gasket
- The controller may be changed without disturbing the pipe work
- Available controllers:
 - Controller R13 - to 13 bar inlet pressure
 - Controller R22 - to 22 bar inlet pressure
 - Controller R32 - to 32 bar inlet pressure
- Options:
 - Drain valve (Pos. 51)
 - Ball valve for blow down (Pos. 56)
 - Stop valve with bellows seal (Pos. 8)

Operating limits

Fig. 45.60A	PN40 - 1.0460		
Operating pressure PS (bar-g)	32	22	14,5
Operating temperature TS (°C)	250	385	450

allowable differential pressure ΔPMX (bar):	32	22	13
for controller:	R32	R22	R13

Fig. 55.60A	PN40 - 1.4541		
Operating pressure PS (bar-g)	32	22	
Operating temperature TS (°C)	350	400	

allowable differential pressure ΔPMX (bar):	32	22	13
for controller:	R32	R22	R13

Types of connection

Flanges1	PN40 acc. to DIN2501
Screwed sockets2	Rp- and NPT-thread acc. to DIN EN 10226-1
Socket weld ends3	acc. to DIN EN 12760
Butt weld ends4	acc. to DIN EN 12627

Other types of connection on request.

For ANSI versions refer to data sheet CONA®All-in-one-ANSI

Dimensions and Weights		Types of connection								
		Flanges			Screwed sockets Socket weld ends			Butt weld ends		
Nominal diameter	(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*	(mm)	210	210	230	150	150	230	160	160	160
H	(mm)	100	100	100	100	100	100	100	100	100
S	(mm)	70	70	70	70	70	70	70	70	70
HEX	(mm)	50	50	50	50	50	50	50	50	50
Weight	(kg)	5,6	6,1	6,6	4,1	4	6,6	4,1	4	3,9

Flange dimensions refer to page 12.

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

Parts

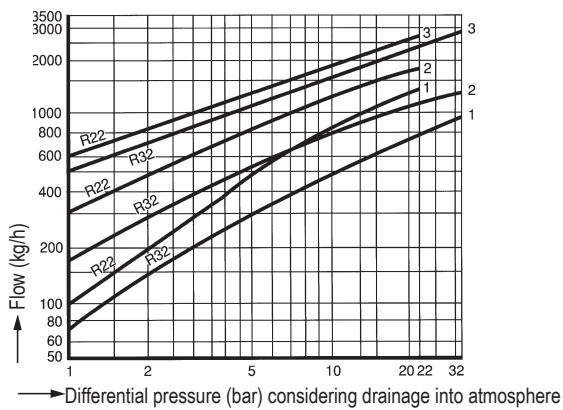
Pos.	Description	Fig. 45.60A	Fig. 55.60A
1	Body	P250 GH, 1.0460	X6CrNiTi18-10, 1.4541
1.8	Unit Stop valve, cpl. *	X6CrNiMoTi17-12-2, 1.4571	
2	Strainer *	X5CrNi18-10, 1.4301	
6	Screwed cap	P250 GH, 1.0460	X6CrNiTi18-10, 1.4541
24	Controller *	TB 102 / 85 (corrosion resistant bimetal)	
49	Sealing ring *	X6CrNiTi18-10, 1.4541	
50	Plug (M14x1,5) *	X6CrNiTi18-10, 1.4541	
51	Drain valve *	X8CrNiS18-9, 1.4305	
56	Ball valve for blow down *	GX5CrNiMo19-11-2, 1.4408	

* 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.

Curve 1

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

Curve 2

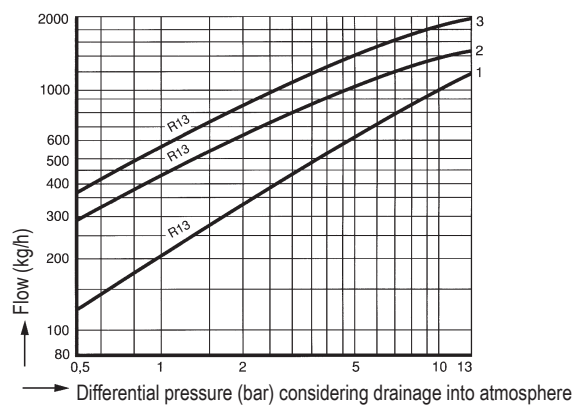
Maximum flow of sub-cooled condensate at approx. 30 K below saturation temperature (with back-up of condensate).

Curve 3

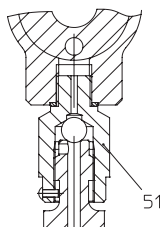
Maximum flow quantity of cold condensate at about 20°C (during start-up of a cold installation).

The condensate temperature determines the opening of the controller.

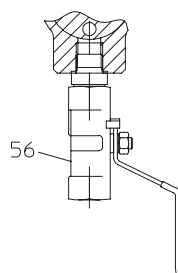
Capacity is increased with the sub-cooling temperature of the condensate.



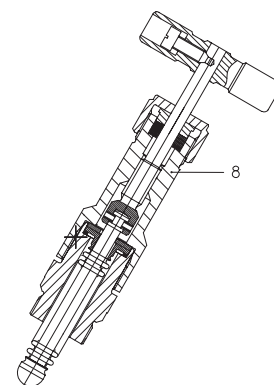
Options



Drain valve



Ball valve with adapter for blow down
(restricted to 16 bar, 210°C)



Stop valve with bellows seal

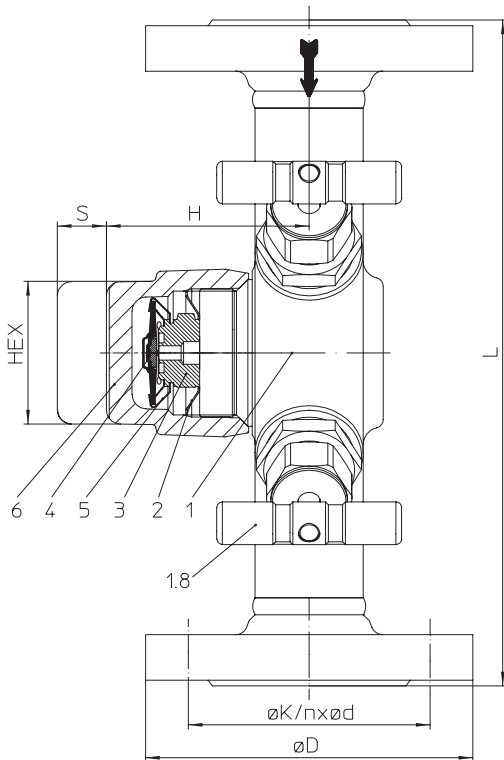
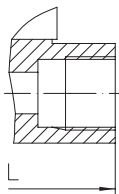
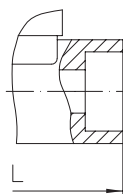
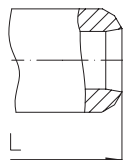
CONA®M All-in-one - Thermostatic steam trap station with integrated inlet and outlet valves
 (Forged steel, Stainless steel)


Fig. 61A...1 with flanges


 Fig. 61A...2
 with screwed sockets

 Fig. 61A...3
 with socket weld ends

 Fig. 61A...4
 with butt weld ends

- Thermostatic steam trap with non-corrosive and robust water hammer proofed capsule
- Maybe installed in horizontal and vertical positions
- User-friendly handling, easy and quick access to the controller
- Integrated non return protection
- Internal strainer
- Filter effect maximised at horizontal installation
- Design optimized for quick installation
- Maintenance simplified due to screwed cap without sealing gasket
- The controller may be changed without disturbing the pipe work
- Available capsules:
 - Capsule No. 1 - for condensate discharge at boiling temperature (only on request)
 - Capsule No. 2 - for condensate sub-cooling about approx. 10K (Standard)
 - Capsule No. 3 - for condensate sub-cooling about approx. 30K
- Options:
 - Drain valve (Pos. 51)
 - Ball valve for blow down (Pos. 56)
 - Stop valve with bellows seal (Pos. 8)

Operating limits

Fig. 45.61A	PN40 - 1.0460		
Operating pressure PS (bar-g)	32	22	14,5
Operating temperature TS (°C)	250	385	450

allowable differential pressure ΔPMX (bar):	32
for controller:	R32

Fig. 55.61A	PN40 - 1.4541	
Operating pressure PS (bar-g)	32	22
Operating temperature TS (°C)	350	400

allowable differential pressure ΔPMX (bar):	32
for controller:	R32

Types of connection

Flanges1	PN40 acc. to DIN2501
Screwed sockets2	Rp- and NPT-thread acc. to DIN EN 10226-1
Socket weld ends3	acc. to DIN EN 12760
Butt weld ends4	acc. to DIN EN 12627

Other types of connection on request.

For ANSI versions refer to data sheet CONA®All-in-one-ANSI

Dimensions and Weights		Types of connection								
		Flanges			Screwed sockets Socket weld ends			Butt weld ends		
Nominal diameter	(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*	(mm)	210	210	230	150	150	230	160	160	160
H	(mm)	70	70	70	70	70	70	70	70	70
S	(mm)	40	40	40	40	40	40	40	40	40
HEX	(mm)	50	50	50	50	50	50	50	50	50
Weight	(kg)	4,8	5,3	5,8	3,3	3,2	5,8	3,4	3,3	3,2

Flange dimensions refer to page 12.

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

Parts

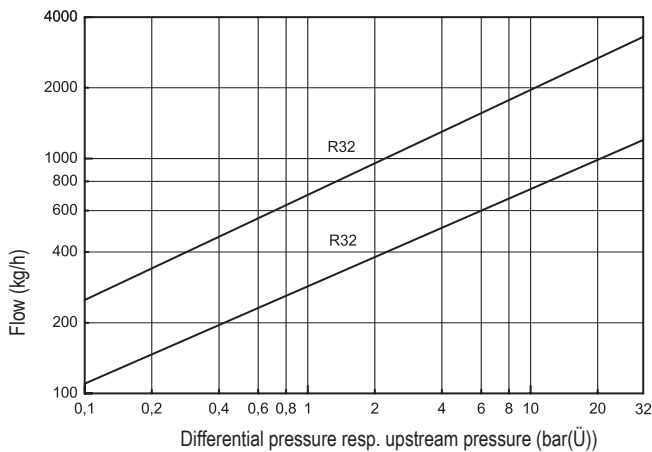
Pos.	Description	Fig. 45.61A	Fig. 55.61A
1	Body	P250 GH, 1.0460	X6CrNiTi18-10, 1.4541
1.8	Unit Stop valve, cpl. *	X6CrNiMoTi17-12-2, 1.4571	
2	Strainer *	X5CrNi18-10, 1.4301	
3	Seat *	X8CrNiS18-9, 1.4305	
4	Capsule (Diaphragm / Capsule) *	Hastelloy / X5CrNi18-10, 1.4301	
5	Spring actuated clip *	X10CrNi18-8, 1.4310	
6	Screwed cap	P250 GH, 1.0460	X6CrNiTi18-10, 1.4541
49	Sealing ring *	X6CrNiTi18-10, 1.4541	
50	Plug (M14x1,5) *	X6CrNiTi18-10, 1.4541	
51	Drain valve *	X8CrNiS18-9, 1.4305	
56	Ball valve for blow down *	GX5CrNiMo19-11-2, 1.4408	
57	Non return protection	X5CrNi18-10, 1.4301	

* 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.

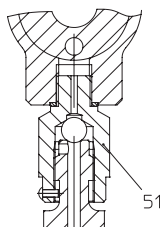
Capacity chart



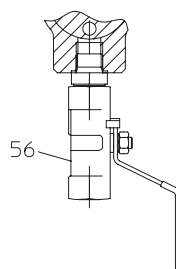
Curve 1
Maximum flow of hot condensate for capsule No 1, 2, and 3.

Curve 2
Maximum flow at cold condensate at about 20°C.

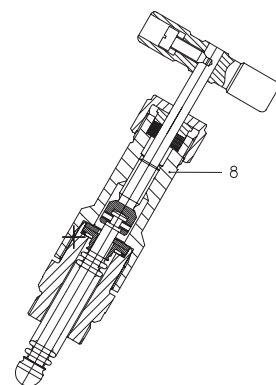
Options



Drain valve



Ball valve with adapter for blow down
(restricted to 16 bar, 210°C)



Stop valve with bellows seal

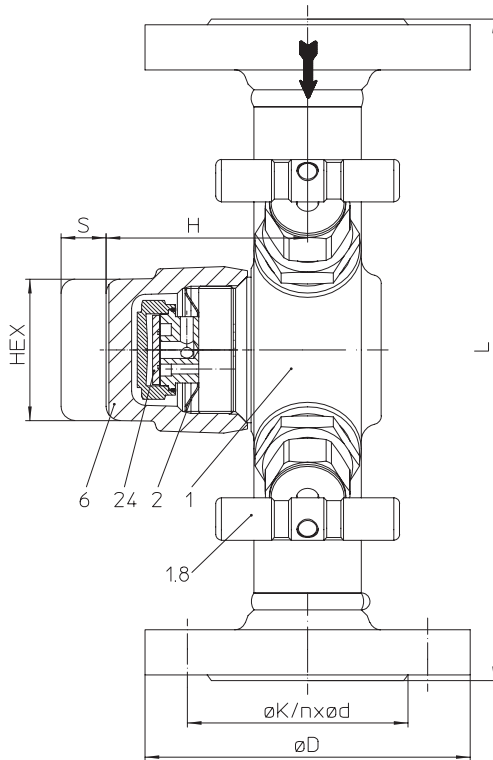
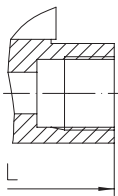
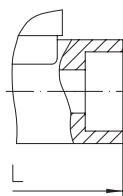
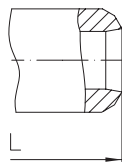
CONA®TD All-in-one - Thermodynamic steam trap station with integrated inlet and outlet valves
 (Forged steel, Stainless steel)


Fig. 64A....1 with flanges


 Fig. 64A....2
 with screwed sockets

 Fig. 64A....3
 with socket weld ends

 Fig. 64A....4
 with butt weld ends

- Thermodynamic steam trap with replaceable controller-unit and cap. It's heat chamber minimizes the impact of weather conditions on the trap's performance; conditions such as low ambient temperature, rain, wind etc.
- Maybe installed in horizontal and vertical positions
- User-friendly handling, easy and quick access to the controller
- Cyclic operation
- Heat chamber minimizes the impact of weather conditions on the trap's performance
- Robust and water hammer proof design
- Integrated non return protection
- Internal strainer
- Design optimized for quick installation
- Maintenance simplified due to screwed cap without sealing gasket
- The controller may be changed without disturbing the pipe work
- Options:
 - Drain valve (Pos. 51)
 - Ball valve for blow down (Pos. 56)
 - Stop valve with bellows seal (Pos. 8)

Operating limits

Fig. 45.64A	PN40 - 1.0460		
Operating pressure PS (bar-g)	32	22	14,5
Operating temperature TS (°C)	250	385	450

allowable differential pressure Δ PMX (bar):	32
permissible pressure ratio (barg):	Back pressure / Inlet pressure \leq 0,8

Fig. 55.64A	PN40 - 1.4541	
Operating pressure PS (bar-g)	32	22
Operating temperature TS (°C)	350	400

allowable differential pressure Δ PMX (bar):	32
permissible pressure ratio (barg):	Back pressure / Inlet pressure \leq 0,8

Types of connection

Flanges1	PN40 acc. to DIN2501
Screwed sockets2	Rp- and NPT-thread acc. to DIN EN 10226-1
Socket weld ends3	acc. to DIN EN 12760
Butt weld ends4	acc. to DIN EN 12627

Other types of connection on request.

For ANSI versions refer to data sheet CONA®All-in-one-ANSI

Dimensions and Weights		Types of connection								
		Flanges			Screwed sockets Socket weld ends			Butt weld ends		
Nominal diameter	(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*	(mm)	210	210	230	150	150	230	160	160	160
H	(mm)	70	70	70	70	70	70	70	70	70
S	(mm)	40	40	40	40	40	40	40	40	40
HEX	(mm)	50	50	50	50	50	50	50	50	50
Weight	(kg)	4,8	5,3	5,8	3,3	3,2	5,8	3,4	3,3	3,2

Flange dimensions refer to page 12.

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

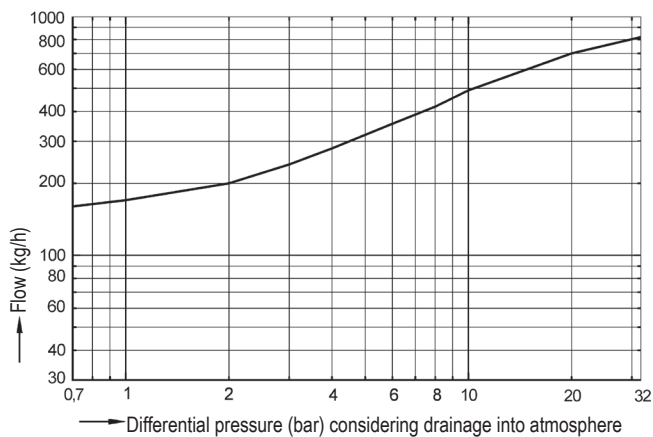
Parts

Pos.	Description	Fig. 45.64A	Fig. 55.64A
1	Body	P250 GH, 1.0460	X6CrNiTi18-10, 1.4541
1.8	Unit Stop valve, cpl. *	X6CrNiMoTi17-12-2, 1.4571	
2	Strainer *	X5CrNi18-10, 1.4301	
6	Screwed cap	P250 GH, 1.0460	X6CrNiTi18-10, 1.4541
24	Controller *	X39CrMo17-1+QT, 1.4122+QT	
49	Sealing ring *	X6CrNiTi18-10, 1.4541	
50	Plug (M14x1,5) *	X6CrNiTi18-10, 1.4541	
51	Drain valve *	X8CrNiS18-9, 1.4305	
56	Ball valve for blow down *	GX5CrNiMo19-11-2, 1.4408	

* Spare part

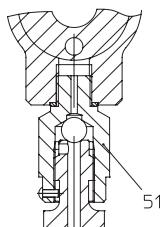
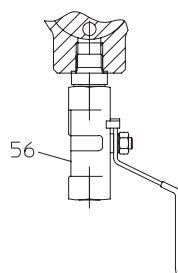
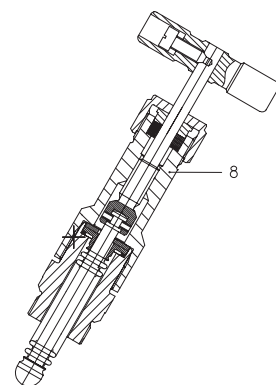
Information / restriction of technical rules need to be observed!

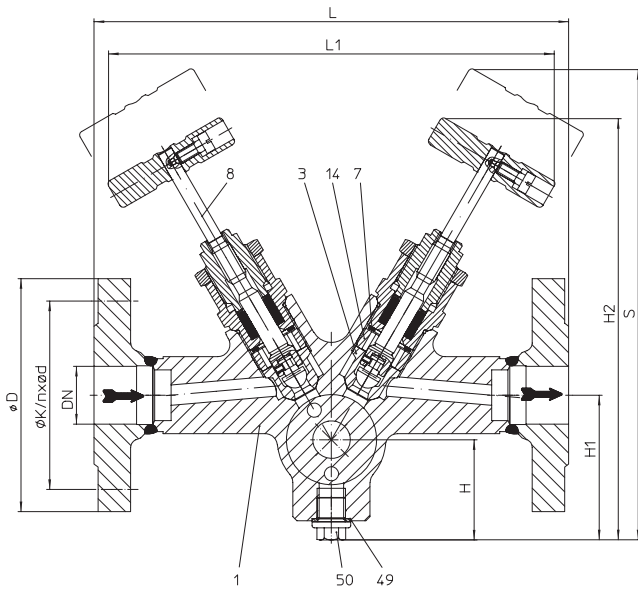
Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

Capacity chart


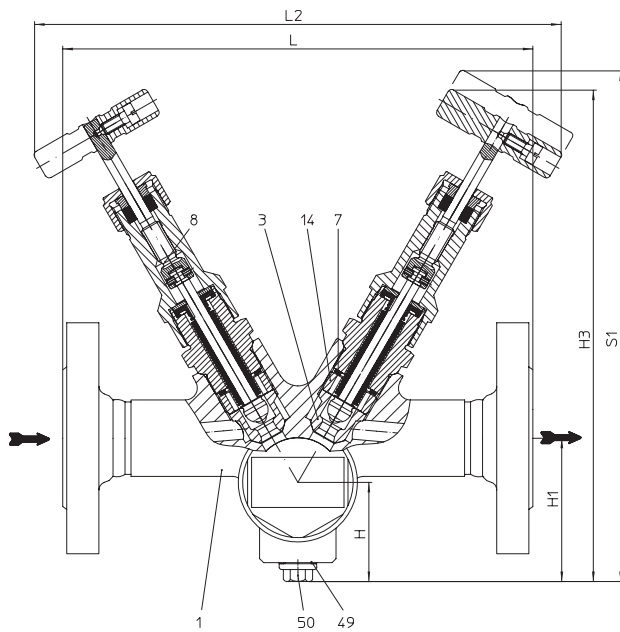
Capacity chart: The capacity chart shows the maximum flow of hot condensate for the standard controller.

Flow rate of cold condensate at 20°C is about 1,5 times the volume of hot condensate.

Options

Drain valve

Ball valve with adapter for blow down
 (restricted to 16 bar, 210°C)

Stop valve with bellows seal

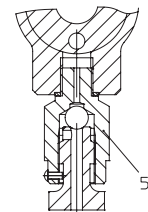


Stop valve with gland packing

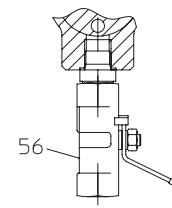


Stop valve with bellows seal

Options



Drain valve



Ball valve



Dimensions and Weights		Types of connection								
		Flanges			Screwed sockets Socket weld ends			Butt weld ends		
Nominal diameter	(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*	(mm)	210	210	230	150	150	230	160	160	160
L1	(mm)	220	220	220	220	220	220	220	220	220
L2 (Bellows seal)	(mm)	259	259	259	259	259	259	259	259	259
H	(mm)	50	50	50	50	50	50	50	50	50
H1	(mm)	72	72	72	72	72	72	72	72	72
H2	(mm)	208	208	208	208	208	208	208	208	208
H3 (Bellows seal)	(mm)	241	241	241	241	241	241	241	241	241
S	(mm)	217	217	217	217	217	217	217	217	217
S1 (Bellows seal)	(mm)	250	250	250	250	250	250	250	250	250

Flange dimensions refer to page 12.

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

Parts

Pos.	Description	Forged steel	Stainless steel
1.1	Body	P250GH, 1.0460	X2CrNiMo17-12-2, 1.4404
1.3	Seat *	X8CrNiS18-9, 1.4305	
1.7	Sealing ring	Graphit	
1.8	Unit Stop valve, cpl. *	X6CrNiMoTi17-12-2, 1.4571	
1.14	Banjo bolt	X8CrNiS18-9, 1.4305	
1.49	Sealing ring *	X6CrNiTi18-10, 1.4541	
1.50	Plug (M14x1,5) *	X6CrNiTi18-10, 1.4541	
1.51	Drain valve (M14x1,5) *	X39CrMo17-1+QT, 1.4122+QT	
1.56	Ball valve for blow down *	GX5CrNiMo19-11-2, 1.4408	

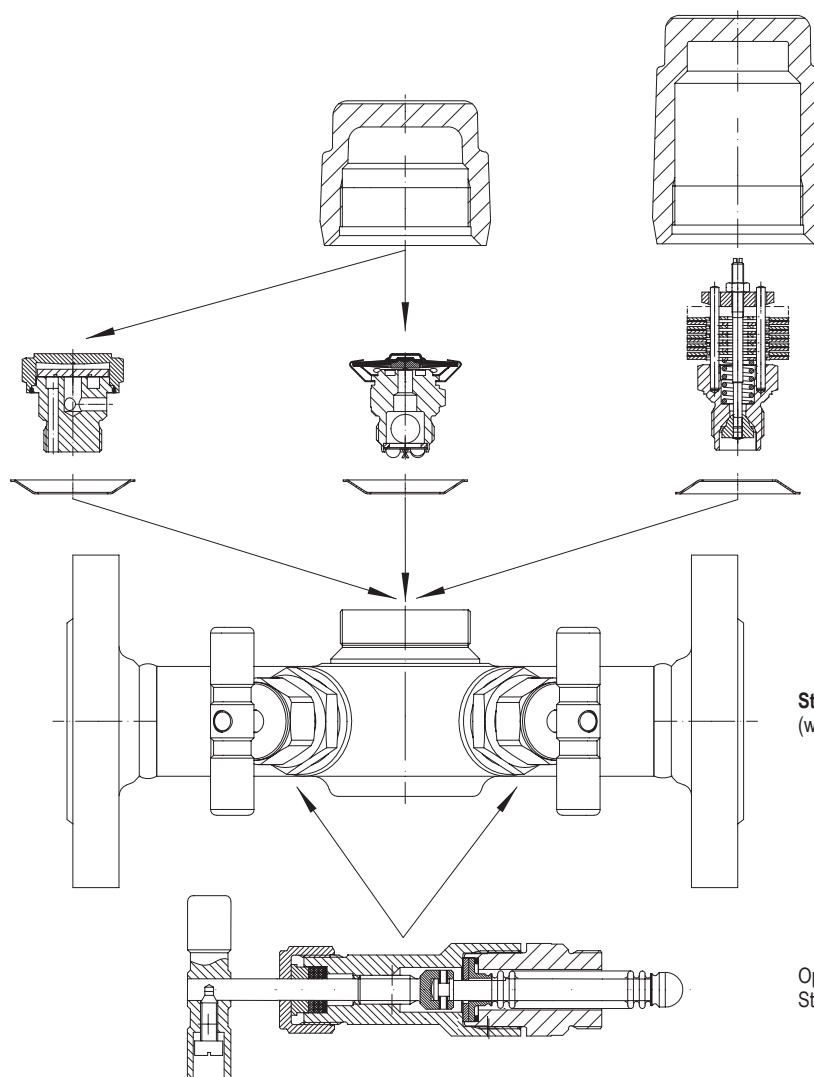
* Spare part

Combinations

CONA®TD All-in-one

CONA®M All-in-one

CONA®B All-in-one



Stop valve with gland packing
(with flanges, screwed sockets, socket weld ends, butt weld ends)

Options:
Stop valve with bellows seal

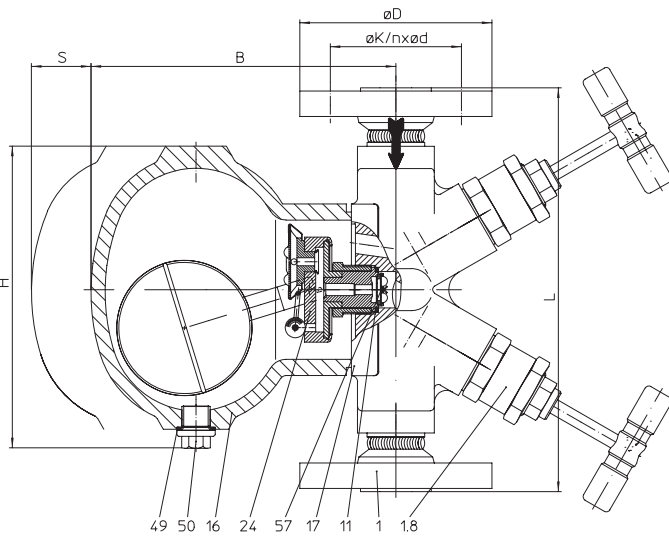
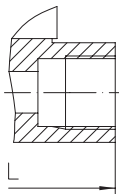
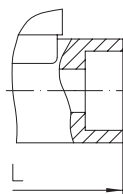
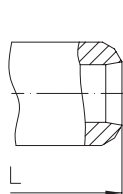
CONA®SC All-in-one - Ball float steam trap station with integrated inlet and outlet valves
(Forged steel, Stainless steel)


Fig. 63A...1 with flanges


 Fig. 63A...2
 with screwed sockets

 Fig. 63A...3
 with socket weld ends

 Fig. 63A...4
 with butt weld ends

- 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
- Standard installation position: - vertical
- Optional installation position: - horizontal with inlet from right or left (Please indicate when ordering).
- User-friendly handling, easy and quick access to the controller
- Immediate discharge of condensate at saturation temperature
- Discharge of high volumes of condensate even quantities at low differential pressure
- Body with flanged hood
- Integrated non return protection
- The controller may be changed without disturbing the pipe work
- Installation position may be changed on-site (see operating instructions)
- Options: - Vent plug (Pos. 47)
 - Plug (Pos. 50)
 - Manual air vent valve (Pos. 51)
 - Ball valve for blow down (Pos. 56)
 - Stop valve with bellows seal (Pos. 8)

Operating limits

Fig. 45.63A	PN40 - Hood: 1.0619+N			
Operating pressure PS (bar-g)	4	14	21	32
Operating temperature TS (°C)	400			250
allowable differential pressure ΔPMX (bar):	4	14	21	32
for controller:	R4	R14	R21	R32

Fig. 55.63A	PN40 - Hood: 1.4308			
Operating pressure PS (bar-g)	4	14	21	32
Operating temperature TS (°C)	300			250
allowable differential pressure ΔPMX (bar):	4	14	21	32
for controller:	R4	R14	R21	R32

Types of connection

Flanges1	PN40 acc. to DIN2501
Screwed sockets2	Rp- and NPT-thread acc. to DIN EN 10226-1
Socket weld ends3	acc. to DIN EN 12760
Butt weld ends4	acc. to DIN EN 12627

Other types of connection on request.

For ANSI versions refer to data sheet CONA®All-in-one-ANSI

Dimensions and Weights		Types of connection								
		Flanges			Screwed sockets Socket weld ends			Butt weld ends		
Nominal diameter	(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*	(mm)	210	210	230	150	150	230	160	160	160
H	(mm)	150	150	150	150	150	150	150	150	150
B	(mm)	156	156	156	156	156	156	156	156	156
S	(mm)	112	112	112	112	112	112	112	112	112
Weight	(kg)	7	7,7	8,2	5,6	5,5	8,2	5,5	5,4	5,3

Flange dimensions refer to page 12.

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

Parts

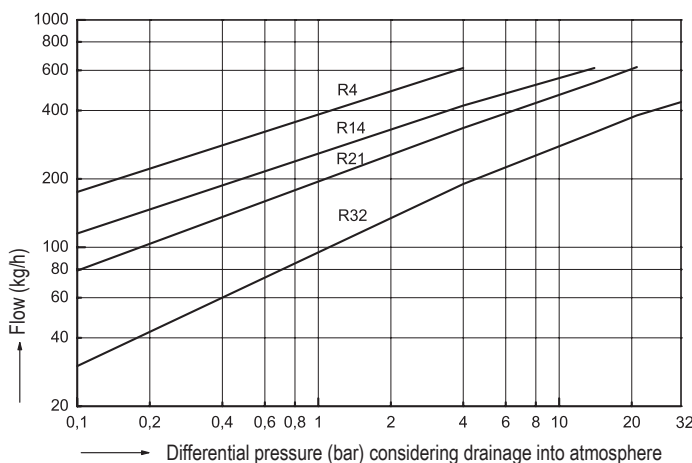
Pos.	Description	Fig. 45.63A	Fig. 55.63A
1	Body	P250 GH, 1.0460	X6CrNiTi18-10, 1.4541
1.8	Unit Stop valve, cpl. *	X6CrNiMoTi17-12-2, 1.4571	
11	Sealing ring *	A4	X6CrNiTi18-10, 1.4541
16	Hood	GP240GH+N, 1.0619+N	
17	Gasket *	GRAPHIT (CrNi laminated with graphite)	
24	Retaining ring *	X5CrNi18-10, 1.4301 / Hastelloy	
27	Cheese head screw	21CrMoV 5-7, 1.7709	X6CrNiTi18-10, 1.4541
47	Vent plug (M14x1,5)	21CrMoV 5-7, 1.7709	X6CrNiTi18-10, 1.4541
49	Sealing ring *	A4	X6CrNiTi18-10, 1.4541
50	Plug (M14x1,5) *	21CrMoV 5-7, 1.7709	X6CrNiTi18-10, 1.4541
51	Drain valve *	X8CrNiS18-9, 1.4305	
56	Ball valve for blow down *	GX5CrNiMo19-11-2, 1.4408	
57	Non return protection *	X5CrNi18-10, 1.4301	

* 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 quantities of hot condensate.

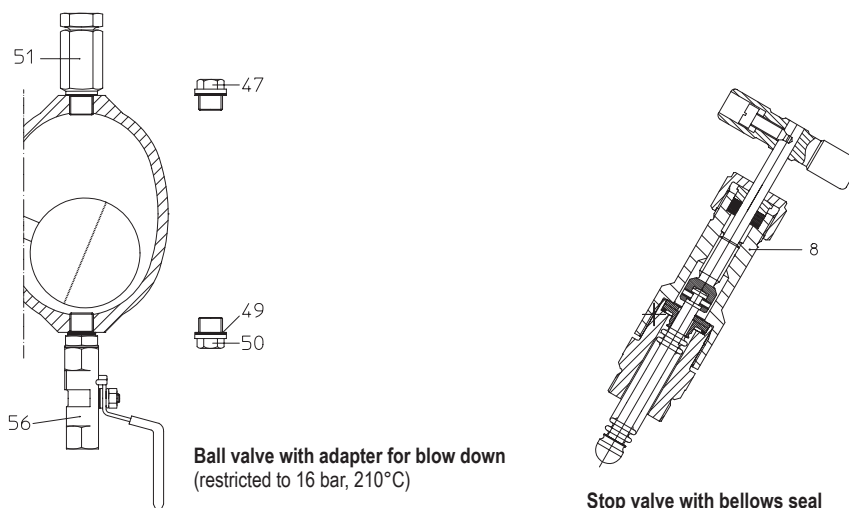
During start-up:

- The capacity of the trap is increased by 1,2 x the value shown in the capacity chart.
- The thermostatic air vent is open, provided additional capacity as shown in the table

Additional cold water-flow quantity of the thermostatic steam trap at starting conditions

Δp in bar	1	2	3	4	5	6	8	10	21
Q (ca. 20°C) in kg/h	280	360	440	490	550	590	640	710	990

Options



Ball valve with adapter for blow down
(restricted to 16 bar, 210°C)

Stop valve with bellows seal

Standard-flange dimensions

Flanges acc. to DIN2501

DN		(mm)	15	20	25
PN16	ØD	(mm)	95	105	115
PN16	ØK	(mm)	65	75	85
PN16	n x Ød	(mm)	4 x 14	4 x 14	4 x 14
PN40	ØD	(mm)	95	105	115
PN40	ØK	(mm)	65	75	85
PN40	n x Ød	(mm)	4 x 14	4 x 14	4 x 14