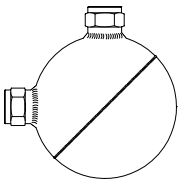
Ball float steam trap

Ball float steam trap
PN16
- with screwed sockets **(Fig. 629....2)**



Stainless steel

Fig. 629 Page 2

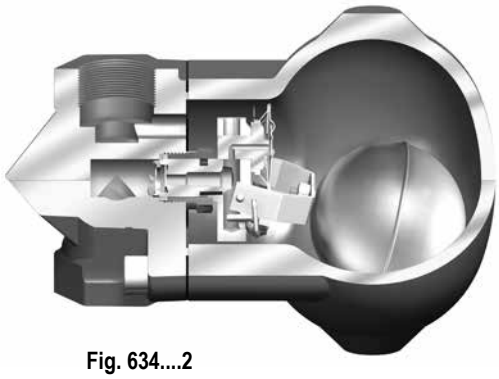
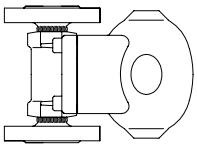
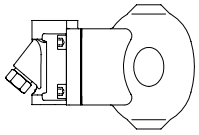


Fig. 634....2

CONA® SC
Ball float steam trap
with capsule for rapid system start-up
PN16 / PN25 / PN40

- with flanges	**(Fig. 634....1)**
- with screwed sockets	**(Fig. 634....2)**
- with socket weld ends	**(Fig. 634....3)**
- with butt weld ends	**(Fig. 634....4)**





Forged steel/ SG iron
Forged steel/ Cast steel
Stainless steel

Fig. 634 Page 4

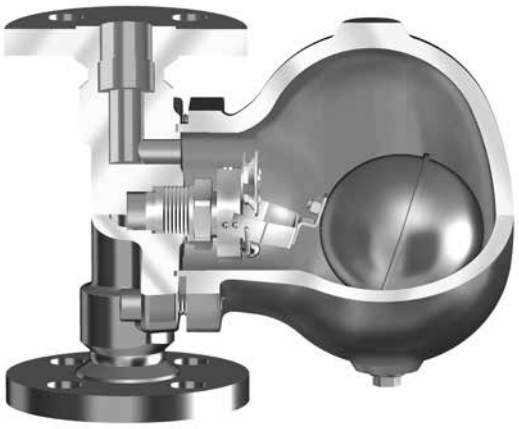
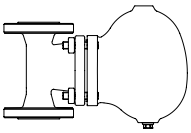


Fig. 635....1

CONA® SC Plus
Ball float steam trap
with capsule for rapid system start-up
PN16 / PN40

- with flanges	**(Fig. 635....1)**
- with screwed sockets	**(Fig. 635....2)**

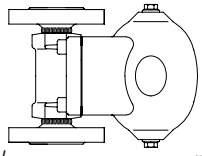


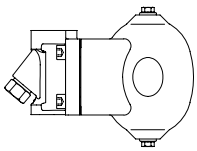
Grey cast iron
SG iron
Forged steel
Stainless steel

Fig. 635 Page 6

CONA® SC
Ball float steam trap for drainage of water from compressed air and gas systems
(acc. to PED 2014/68/EU fluid group 2)
PN16 / PN25 / PN40

- with flanges	**(Fig. 636....1)**
- with screwed sockets	**(Fig. 636....2)**
- with socket weld ends	**(Fig. 636....3)**
- with butt weld ends	**(Fig. 636....4)**





Forged steel/ SG iron
Forged steel/ Cast steel
Stainless steel

Fig. 636 Page 8

Features:

- Back pressure-free condensate discharge even at extreme pressure- and quantity fluctuations
- Controller with integrated automatic ventilation (except Fig. 629/636)
- Robust and insensitive to waterhammer
- Non return protection (except Fig. 629/635)
- Union for pressure compension line and bypass possible (except Fig. 629)
- On-site change of the installation position is possible according to the operating instructions (except Fig. 629)
- The controller maybe changed without disturbing the pipe work (except Fig. 629)

Ball float steam trap (Grey cast iron, SG iron, Forged steel, Stainless steel)

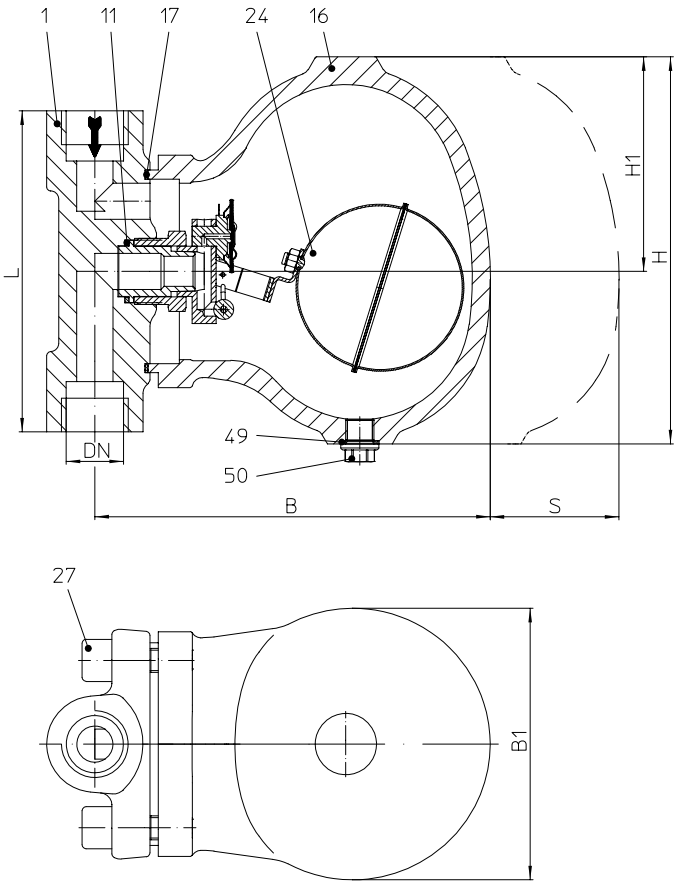


Fig. 635....2 with screwed sockets - vertical installation

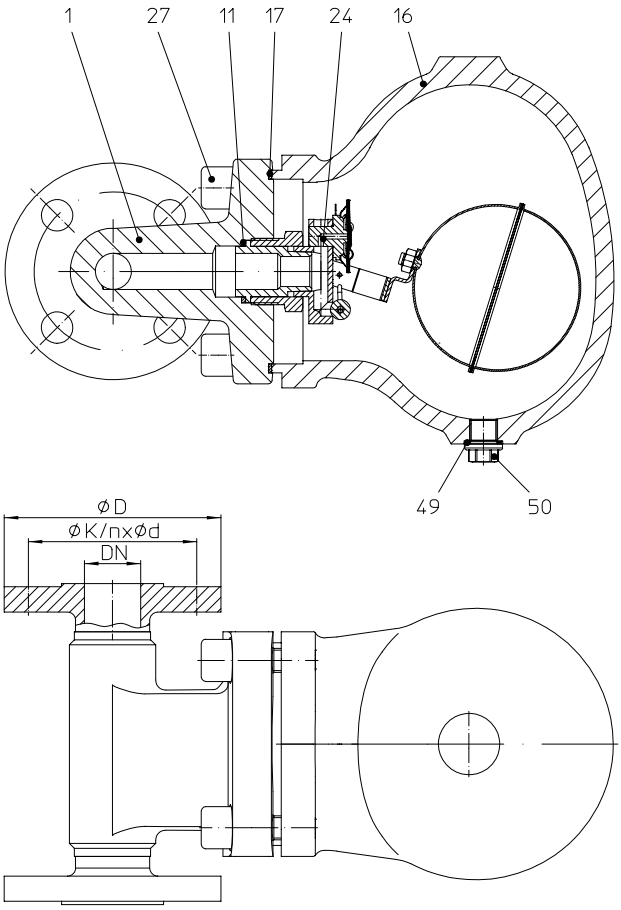


Fig. 635....1 with flanges - horizontal installation

Figure	Nominal pressure	Material	Nominal diam. / NPS	Operating pressure PS	Inlet temperature TS	allowable differential pressure ΔPMX	for controller
12.635	PN16	Body: EN-JL1040 / Hood: EN-JL1040	25 / 1"	12,8 barg	200 °C	5 bar 10 bar 14 bar	R5 R10 R14
				9,6 barg	300 °C		
25.635	PN40	Body: EN-JS1049 / Hood: EN-JS1049	25 / 1"	14 barg	350 °C		
45.635	PN40	Body: 1.0460 / Hood: 1.0619+N	25 / 1"	14 barg	400 °C		
55.635	PN40	Body: 1.4541 / Hood: 1.4308	25 / 1"	14 barg	300 °C		
For ANSI versions refer to data sheet CONA®S-ANSI							

Types of connection		Other types of connection on request.
• Flanges ....1 _____ acc. to DIN EN 1092-2 (EN-JL1040, EN-JS1049) and DIN EN 1092-1 (1.0460, 1.4541)		
• Screwed sockets ....2 ___ Rp thread acc. to DIN EN 10226-1 or NPT thread acc. to ANSI B1.20.1		
Features		
• 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 (for condensate with temperatures ≥ 100°C) • Immediate discharge of hot boiling condensat		• Discharge of great condensate quantities even at low differential pressure • Body with flanged hood • The controller maybe changed without disturbing the pipe work
Mounting position		
• Standard:	vertical	**Please indicate when ordering!** Refer to: Information about the different installation positions (Page 13) On-site change of the installation position is possible according to the operating instructions.
• Optional:	horizontal with inlet from right or left	
Options		
• Air vent - (Pos. 51) or blow down valve (Pos. 46), manual operated		

Types of connection		Flanges	Screwed sockets
DN	(mm)	25	25
NPS	(inch)	1"	1"

Face-to-face acc. to data sheet resp. customer request			
L	(mm)	160	160

Dimensions			Standard-flange dimensions refer to page 13.
H	(mm)	193	193
H1	(mm)	107	107
B (EN-JL1040)	(mm)	250	250
B (Steel)	(mm)	250	197
B1	(mm)	136	136
S	(mm)	160	160

Weights				
Fig. 635	(approx.)	(kg)	11,8	9,3

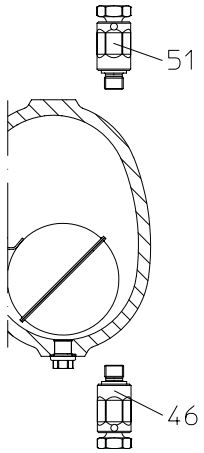
Parts						
Pos.	Sp.p.	Description	Fig. 12.635	Fig. 25.635	Fig. 45.635	Fig. 55.635
1		Body	EN-GJL-250, EN-JL1040	EN-GJS-400-18U-LT, EN-JS1049	P250 GH, 1.0460	X6CrNiTi18-10, 1.4541
11	x	Sealing ring	CU	A4		
16		Hood	EN-GJL-250, EN-JL1040	EN-GJS-400-18U-LT, EN-JS1049	GP240GH+N, 1.0619+N	GX5CrNi19-10, 1.4308
17	x	Gasket	GRAPHIT (CrNi laminated with graphite)			
24	x	Controller / Capsule, cpl.	X5CrNi18-10, 1.4301 / Hastelloy			
27		Cheese head screw	A2-70	21CrMoV 5-7, 1.7709		A4-80
46	x	Blow down valve	X6CrNiTi18-10, 1.4541			
49	x	Sealing ring	CU	A4		
50		Plug (M14x1,5)	C35E, 1.1181			X6CrNiTi18-10, 1.4541
51	x	Manual air vent valve	X6CrNiTi18-10, 1.4541			
		└ 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).

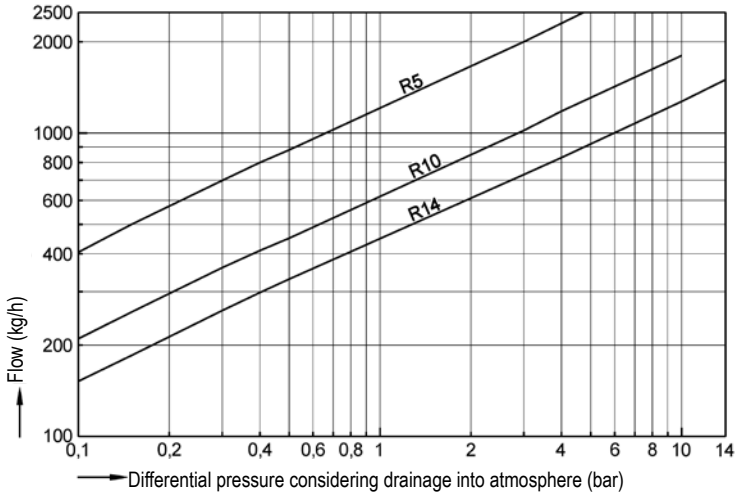
Operating and installation instructions can be downloaded at www.ari-armaturen.com.

Options



Air vent - (Pos. 51) or blow down valve (Pos. 46), manual operated

Capacity chart



The capacity chart shows the maximum flow of hot boiling condensate.

Informations about pipe welding		
Welding groove acc. to DIN 2559		
The material used for ARI valves with butt weld ends are:	1.0460	P250GH acc. to DIN EN 10222-2
Note:	1.4541	X6CrNiTi18-10 acc. to DIN EN 10222-5
Note restriction on operating pressure / inlet temperature depending to design!		

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

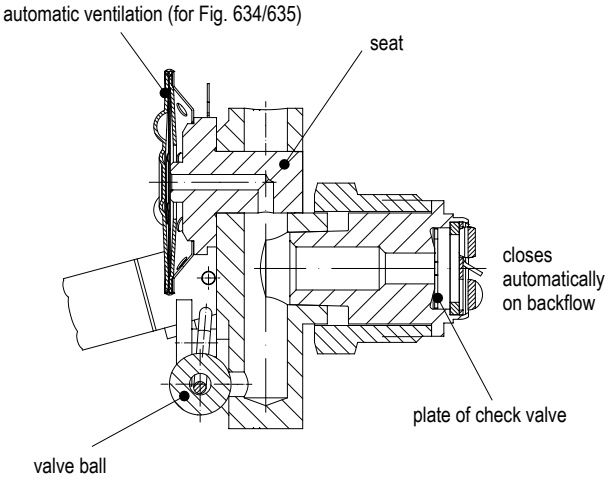
Because of the different material compositions and wall thickness of the steam traps and the pipe gas welding shall not be applied. Quenching cracks and coarse grain structure may develop.

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!

Selection criteria:		Example for order data:
• Steam pressure • Back pressure • Quantity of condensate • Flow medium • Nominal diameter / pressure	• Type of connection • Material • Place of service or kind of steam consumer	**Ball float steam trap CONA® SC, Fig. 634, PN25, DN25, 1.0460/1.0619+N, R14, with flanges, Face-to-face dimension 160 mm**
Other installation positions than standard (vertical) have to be indicated together with the information about the flow direction i.e. inlet from left or right		

Integrated non return protection

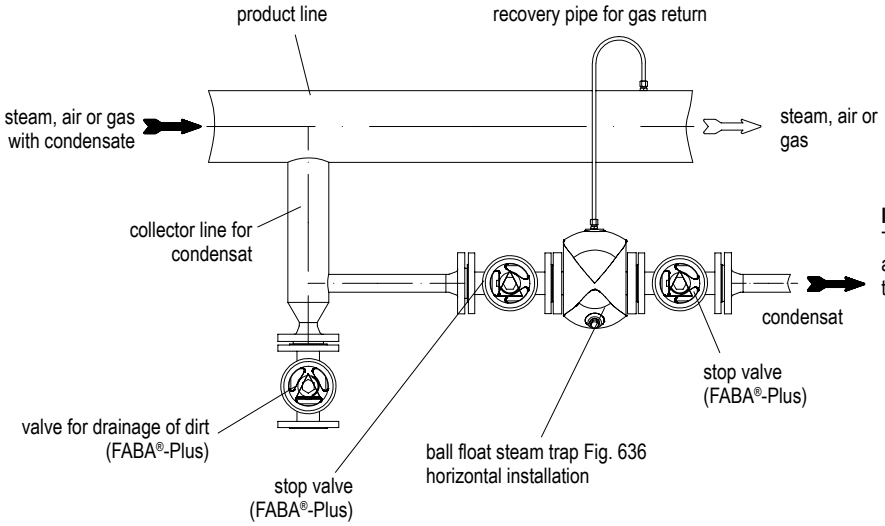


The internal plate acts at series 634 and 636 as integrated check valve.

In case of parallel installed heat exchangers or heater batteries the non return protection prevents a shut down heat-exchanger fror flooding with condensate from the downstream side and reverse heating up.

A check valve which otherwise has to be installed is not necessary.

Installation with recovery pipe



Important:
The installation of a recovery pipe for gas return is always recommended; especially if the ball float steam trap is installed horizontally.

myValve® - Your 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

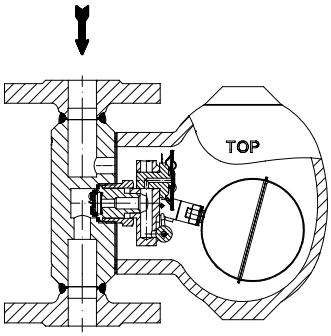
- Project administration of the calculation and product data incl. spare part drawings concerning to project and tag number
- Direct output or calculation and product data in PDF format
- Product data could be taken for a direct order
- SI- and ANSI-units with direct conversion to another databank
- 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:

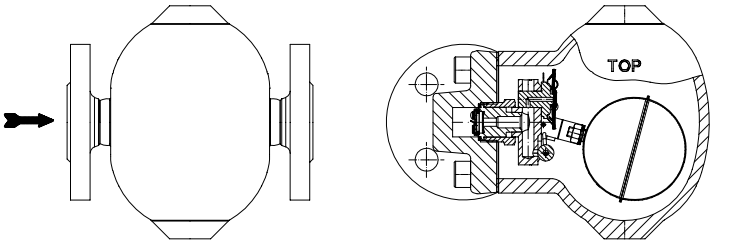
Windows operating systems, Linux, etc.

Standard-flange dimensions acc. to 1092-1 / -2					
DN		(mm)	**15**	**20**	**25**
NPS		(inch)	**1/2"**	**3/4"**	**1"**
PN16	ØD	(mm)	95	105	115
	ØK	(mm)	65	75	85
	n x Ød	(mm)	4 x 14	4 x 14	4 x 14
PN25	ØD	(mm)	95	105	115
	ØK	(mm)	65	75	85
	n x Ød	(mm)	4 x 14	4 x 14	4 x 14
PN40	ØD	(mm)	95	105	115
	ØK	(mm)	65	75	85
	n x Ød	(mm)	4 x 14	4 x 14	4 x 14

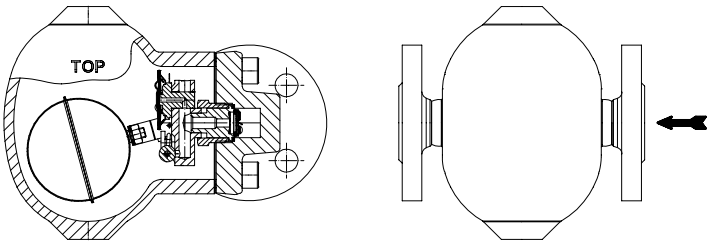
Information about the different installation positions (shown at Fig. 634 CONA SC)



Vertical installation (standard)



Horizontal installation - inlet from the left side (ZL)



Horizontal installation – inlet from the right side (ZR)

Installation (see picture)

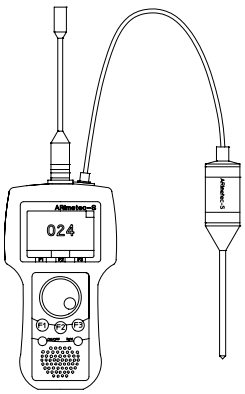
The ball float steam traps can be installed either in vertical (standard) or horizontal position. In case of horizontal installation please indicate whether the inlet is from the left or right side.

The steam trap can also be converted on site to match the different installation positions. Please observe the appropriate operating manuals.

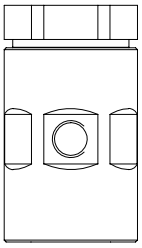
The steam trap must be fitted with the direction of flow as indicated by the arrow on the body.
Enough clearance (refer to dimension S) for the removal of the hood shall be provided.
The steam trap shall preferably be installed at the lowest point of the system and the membrane capsule resp. the bleeding tube shall be installed in an upright position inside of the hood.

For the modification of the installation position observe the operating manual.

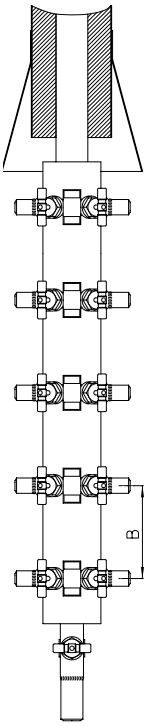
A modification of the installation position during the time of warranty shall be carried out by the AWH-Service or it shall be agreed between the customer and manufacturer.



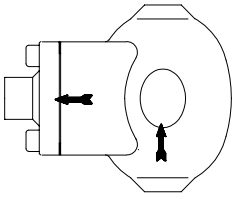
Multifunction tester **ARImetec®-S**



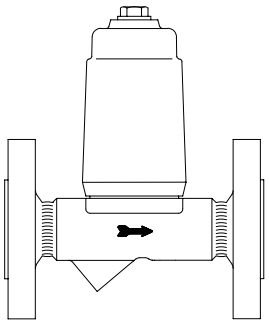
Vacuum breaker
Fig. 655



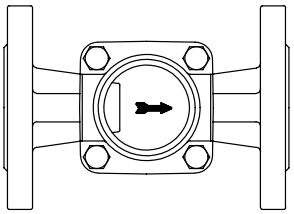
Condensate collection (B = 160), steam distribution (B = 120)
CODI ®S with gland packing Fig. 671/672;
CODI ®B with bellows seal, maintenance-free Fig. 675/676



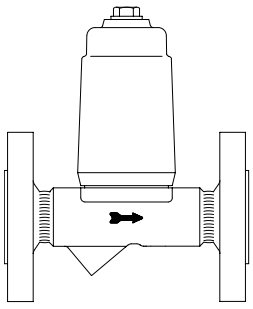
Automatic air vent for liquid systems
Fig. 656



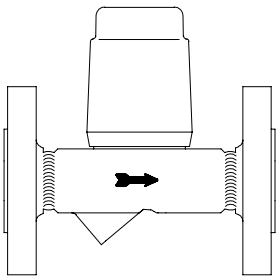
Condensate discharge temperature limiter
Fig. 645/647



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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