Ball float steam trap

CONA [®] SC Ball float steam trap with capsule for rapid syst	tem start-up			
ANSI150 / 300 - with flanges - with screwed sockets - with socket weld ends - with butt weld ends	(Fig. 6341) (Fig. 6342) (Fig. 6343) (Fig. 6344)	Forged steel/ Cast steel		
		Stainless steel Fig. 634	Page 2	Fig. 6342

Ball float steam trap with capsule for rapid system start-up ANSI150 / 300 - with flanges (Fig. 635....1) - with screwed sockets (Fig. 635....2) Forged steel Fig. 635 Page 4

Fig. 635....1

CONA® SC

CONA® SC Plus

Ball float steam trap for drainage of water from compressed air and gas systems ANSI150 / 300

- with flanges
- with screwed sockets
- with socket weld ends
- with butt weld ends

(Fig. 636....1) (Fig. 636....2) (Fig. 636....3) Forged steel/ (Fig. 636....4)

Cast steel Stainless steel Fig. 636

Features:

Page 6

- · Back pressure-free condensate discharge even at extreme pressure- and quantity fluctuations
- · Controller with integrated automatic ventilation (except Fig. 636)
- · Robust and insensitive to waterhammer
- Non return protection (except Fig. 635)
- · Union for pressure compension line and bypass possible
- · On-site change of the installation position is possible according to the operating instructions
- · The controller maybe changed without disturbing the pipe work
- · Pressure test acc. to API 598
- · CRN approved



Ball float steam trap (Forged steel/SG iron, Forged steel/Cast steel, Stainless steel)





Fig. 634....2 (ANSI150) with screwed sockets - vertical installation





Fig. 634....2 (ANSI300) with screwed sockets - horizontal installation



ANSI150/300 - 1/2"-1"

CONA®SC 634 ANSI

Fig. 634....1 with flanges



with socket weld ends



Figure	Nominal pressure	Material	NPS (DN)	Operating pressure PS	Inlet temperature TS	allowable differential pressure ΔPMX	for controller
10 621	ANG1150	Body: SA105 /	1/0" 1"	5,5 barg	427 °C	4 bar	R4
42.034	ANSI150	Hood: SA216WCB	1/2 - 1	14 barg	199 °C	14 bar	R14
				28 bara	407 °C	4 bar	R4
15 621 (V)	4161200	Body: SA105 /	1/0" 1"	20 baig	427 0	14 bar	R14
45.054 (1)	ANSISUU	Hood: SA216WCB	1/2 - 1	22 hora	111 °C	21 bar	R 21
				52 barg	411 50	32 bar	R32
			1/2" - 1"	2,4 barg	510 °C	4 bar 12,8 bar	D4
52.634	ANSI150	Body: SA182F321 / Hood:SA351CF8		4 barg	467 °C		K4
				12,8 barg	218 °C		K 14
				26.2 barg	510 °C	4 bar	R4
55 624 (V)	4161200	Body: SA182F321 /	1/0" 1"	20,2 baig	510 C	14 bar	R14
55.054 (1)	ANGIGUU	Hood: SA351CF8	1/2 - 1	22 hora	262 °C	21 bar	R 21
				52 bary	202 0	32 bar	R32
DIN/EN-Cons	tructions refer to	data sheet CONA®SC/SC-	Plus				
Types of con	nection					Other types of c	connection on request.
 Flanges[*] 	1a	acc. to ASME B16.5					

 Screwed sockets2 	NPT thread acc. to ANSI B1.20.1 or Rp thread acc. to DIN EN 10226-1	

Socket weld ends3 ___acc. to ASME B16.11 and B16.34

Butt weld ends4 _____ ASME B16.25 (Note restriction on operating pressure / inlet temperature depending to design!)

Features

Features	
Ball float steam trap with level control for the condensate-discharge	Discharge of great condensate quantities even at low differential pressure
from all kinds of steam systems	 ANSI150 without strainer / ANSI300 with outside strainer - Fig. 634 (Y)
Rapid system start-up due to thermostatic air venting capsule (for condensate with temperatures > 100°C)	Body with flanged hood
(for condensate with temperatures ≥ 100 C)	Non return protection
Immediate discharge of not boiling condensat	The controller maybe changed without disturbing the pipe work
Mounting position	
Standard: vertical	Please indicate when ordering!
Optional: horizontal with inlet from right or left	Refer to: Information about the different installation positions (Page 13) On-site change of the installation position is possible according to the operating instructions.
Options	
Vent plug (Pos. 47)	Manual air vent valve (Pos. 51)
• Plug (Pos. 50)	Ball valve for blow down (Pos. 56)

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CONA®SC 634 ANSI

ANSI150/300 - 1/2"-1"

Types of connectio	n		Flanges		S	Screwed socke	ts ds		Butt weld ends	3
NPS (DN)		1/2"	3/4"	1"	1/2"	3/4"	1"	1/2"	3/4"	1"
Face-to-face acc. to	data sheet	t resp. custome	er request							
L	(mm)	150	150	160	95	95	95	200 (250)	200 (250)	200 (250)
Dimensions								Standard-flan	ige dimensions i	refer to page 11
Н	(mm)	140	140	140	140	140	140	140	140	140
В	(mm)	155	155	155	155	155	155	155	155	155
B1	(mm)	97	97	97	97	97	97	97	97	97
B2	(mm)	53	53	53	53	53	53	53	53	53
DI / DA	(mm)				22,0	27,4	34,1	21,3	26,7	33,4
SM / SE	(mm)				4,1	4,3	5,1	2,8	2,9	3,4
S	(mm)	120	120	120	120	120	120	120	120	120
S1	(mm)	10	10	10	10	10	10	10	10	10
Т	(mm)				10	13	13			
Weights										
(approx.)	(kg)	6,7	6,9	7,1	4,7	4,9	5,1	5,1	5,4	5.8

Parts						
Pos.	Sp.p.	Description	Fig. 42.634	Fig. 45.634 (Y)	Fig. 52.634	Fig. 55.634 (Y)
1		Body	SA105		SA182F321	
7	х	Strainer		SA240Gr.304		SA240Gr.304
8		Strainer plug		SA276Gr.321		SA276Gr.321
11	x	Sealing ring	SA240Gr.316Ti			
16		Hood	SA216WCB		SA351CF8	
17	x	Gasket	GRAPHIT (CrNi laminated	with graphite)		
24	х	Controller / Capsule, cpl.	SA240Gr.304 / Hastelloy			
27		Cheese head screw	SA193Gr.B16 (with metric s	screw-thread)		
47		Vent plug (M14x1,5)	SA276Gr.321 (with metric s	crew-thread)		
49	x	Sealing ring	SA240Gr.316Ti			
50		Plug (M14x1,5)	SA276Gr.321 (with metric s	crew-thread)		
51	x	Manual air vent valve	SA276Gr.321 (with metric s	crew-thread)		
56	x	Ball valve for blow down	SA351CF8M (with metric screw-thread)			
57		Rückflusssicherung	SA240Gr.430			
	L Spar	e 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



Temperature °F





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Ball float steam trap (Forged steel)







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

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

Figure	Nominal pressure	Material	NPS (DN)	Operating pressure PS	Inlet temperature TS	allowable differential pressure ΔPMX	for controller	
				5,5 barg	427 °C			
42.635	ANSI150	Body: SA105 / Hood ⁻ SA216WCB	1"	10 barg	306 °C	5 bar	R5	
				14 barg	199 °C	10 bar	R10	
45.635	ANSI300	Body: SA105 / Hood: SA216WCB	1"	14 barg	427 °C	14 Dai	K14	
DIN/EN-Construct	ons refer to data sh	eet CONA®SC/SC-Plus						
Types of connect	ion					Other types of con	nection on request.	
• Flanges1	acc. to A	SME B16.5						
Screwed sockets	s2 NPT three	ad acc. to ANSI B1.20.1 or	Rp thread acc. to D	IN EN 10226-1				
Features								
Ball float steam	rap with level contro	ol for the condensate-discha	arge from	Discharge of great condensate quantities even at low differential pressure				
all kinds of stear	n systems			 Body with flanged h 	Body with flanged hood			
 Rapid system sta (for condensate) 	art-up due to thermo with temperatures ≥	ostatic air venting capsule : 100°C)		The controller maybe changed without disturbing the pipe work				
Immediate disch	arge of hot boiling o	ondensat						
Mounting positio	n							
• Standard	vertical			Please indicate whe	n ordering!			
				Refer to: Information	about the different inst	allation positions (Page 1	3)	
Optional:	horizontal with inle	t from right or left		On-site change of the instructions.	installation position is	possible according to the	e operating	
Options								
Air vent - (Pos 5	1) or blow down va	lve (Pos. 46) manual opera	ted					

CONA®SC Plus 635 ANSI ANSI150 / 300 - 1"

CONA®SC Plus 635 ANSI

ANSI150 / 300 - 1"

Types of connection		Flanges	Screwed sockets
NPS (DN)		1"	1"
Face-to-face acc. to o	lata sheet	resp. customer request	
L	(mm)	230	160
Dimensions			Standard-flange dimensions refer to page 11.
Н	(mm)	193	193
H1	(mm)	107	107
В	(mm)	197	197
B1	(mm)	136	136
S	(mm)	160	160
Weights			
(approx.)	(kg)	11,8	9,3

Parts				
Pos.	Sp.p.	Description	Fig. 42.635	Fig. 45.635
1		Body	SA105	
11	x	Sealing ring	SA240Gr.316Ti	
16		Hood	SA216WCB	
17	x	Gasket	GRAPHIT (CrNi laminated with graphite)	
24	x	Controller / Capsule, cpl.	SA240Gr.304 / Hastelloy	
27		Stud	SA193Gr.B16 (with metric screw-thread)	
46	x	Blow down valve, cpl.	SA276Gr.321 (with metric screw-thread)	
49	x	Sealing ring	SA240Gr.316Ti	
50		Plug (M14x1,5)	SA276Gr.321 (with metric screw-thread)	
51	x	Manual air vent valve	SA276Gr.321 (with metric screw-thread)	
	L Spar	e 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.





Edition 06/19 - Data subject to alteration - Regularly updated data on www.ari-armaturen.com!

CONA®SC 636 ANSI ANSI150/300 - 1/2"-1"

Ball float steam trap (Forged steel/SG iron, Forged steel/Cast steel, Stainless steel)





Fig. 636....2 (ANSI150) with screwed sockets - vertical installation

Nominal





Fig. 636....1 with flanges



Fig. 636....3 with socket weld ends



Fig. 636....4 with butt weld ends

for

allowable differential

Fig. 636....1 (ANSI300) with screwed sockets - horizontal installation

Inlet temperature

Figure Material NPS (DN) pressure PS TS pressure ΔPMX controller 427 °C 5,5 barg 4 bar R4 Body: SA105 / 42.636 ANSI150 1/2" - 1" Hood: SA216WCB 14 barg 199 °C 14 bar R14 4 bar R4 28 barg 427 °C 14 bar R14 Body: SA105 / ANSI300 45.636 (Y) 1/2" - 1" Hood: SA216WCB 21 bar R 21 32 barg 411 °C 32 bar R32 2,4 barg 510 °C 4 bar R4 Body: SA182F321 / 52.636 ANSI150 1/2" - 1" 467 °C 4 barg Hood:SA351CF8 12,8 bar R14 12,8 barg 218 °C 4 bar R4 510 °C 26,2 barg 14 bar R14 Body: SA182F321 / ANSI300 1/2" - 1" 55.636 (Y) Hood: SA351CF8 21 bar R 21 32 barg 262 °C 32 bar R32 DIN/EN-Constructions refer to data sheet CONA®SC/SC-Plus Types of connection Other types of connection on request. acc. to ASME B16.5 Flanges1 Screwed sockets2 NPT thread acc. to ANSI B1.20.1 or Rp thread acc. to DIN EN 10226-1 Socket weld ends3 ____ acc. to ASME B16.11 and B16.34 Butt weld ends4 ASME B16.25 (Note restriction on operating pressure / inlet temperature depending to design!) Features · ANSI150 without strainer / ANSI300 with outside strainer - Fig. 636 (Y) · Ball float steam trap with level controller for the condensate-discharge from compressed air and gas systems · Body with flanged hood (acc. to PED 2014/68/EU fluid group 1, subject to suitability for medium · Non return protection and material resistance) · The controller maybe changed without disturbing the pipe work · Discharge of great condensate quantities even at low differential pressure Mounting position · Standard: vertical Please indicate when ordering! · horizontal with inlet from right or left Refer to: Information about the different installation positions (Page 11) Optional: · horizontal with adapter for recovery pipe (union joint). On-site change of the installation position is possible according to the operating instructions. Example for installation ref. to page 10 Options • Union (Pos. 52) for recovery pipe · Manual air vent valve (Pos. 51) (for connecting pipes with outside-Ø 8 acc. to EN 10305-4 steel or EN 10216-5 stainless steel,

B2

Operating pressure

Ball valve for blow down (Pos. 56)

compression type fitting acc. to DIN 2353) Softsealing ball FKM (Viton), max. 120°C

CONA®SC 636 ANSI

ANSI150/300 - 1/2"-1"

Types of connect	ction		Flanges			Screwed socke Socket weld end	ts ds		Butt weld ends	;
NPS (DN)		1/2"	3/4"	1"	1/2"	3/4"	1"	1/2"	3/4"	1"
Face-to-face acc. to c	lata sheet	resp. custome	r request							
L	(mm)	150	150	160	95	95	95	200 (250)	200 (250)	200 (250)
Dimensions								Standard-flan	ge dimensions r	efer to page 11.
Н	(mm)	156	156	156	156	156	156	156	156	156
В	(mm)	155	155	155	155	155	155	155	155	155
B1	(mm)	97	97	97	97	97	97	97	97	97
DI / DA	(mm)				22,0	27,4	34,1	21,3	26,7	33,4
SM / SE	(mm)				4,1	4,3	5,1	2,8	2,9	3,4
S	(mm)	120	120	120	120	120	120	120	120	120
Т	(mm)				10	13	13			
Weights										
(approx.)	(kg)	6,7	6,9	7,1	4,7	4,9	5,1	5,1	5,4	5,8

Parts						
Pos.	Sp.p.	Description	Fig. 42.636	Fig. 45.636 (Y)	Fig. 52.636	Fig. 55.636 (Y)
1		Body	SA105		SA182F321	
7	х	Strainer		SA240Gr.304		SA240Gr.304
8		Strainer plug		SA276Gr.321		SA276Gr.321
11	x	Sealing ring	SA240Gr.316Ti			
16		Hood	SA216WCB		SA351CF8	
17	x	Gasket	GRAPHIT (CrNi laminated	l with graphite)		
24	х	Controller, cpl.	SA240Gr.304			
27		Cheese head screw	SA193Gr.B16 (with metric	screw-thread)		
47		Vent plug (M14x1,5)	SA276Gr.321 (with metric	screw-thread)		
49	х	Sealing ring	SA240Gr.316Ti			
50		Plug (M14x1,5)	SA276Gr.321 (with metric	screw-thread)		
51	х	Manual air vent valve	SA276Gr.321 (with metric	screw-thread)		
52	х	Union for recovery pipe	AISI303 (with metric screw-thread)			
56	x	Ball valve for blow down	SA351CF8M (with metric screw-thread)			
57		Rückflusssicherung	SA240Gr.430			
	L Spar	e 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.





CONA[®] SC ANSI / SC Plus ANSI

Informations about pipe welding / Non return protection / Recovery pipe

Informations about pipe welding

Welding groove acc. to ASME B16.25

The material used for ARI valves with butt weld ends are:

SA105 SA182F321

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!

Integrated non return protection







Selection criteria:		Example for order data:		
Steam pressure	 Type of connection 			
Back pressure	 Material 	Ball float steam trap CONA® SC.		
Quantity of condensate Place of service or kind		Fig. 634, ANSI150, NPS 1", SA105/SA216WCB, R14,		
Flow medium	of steam consumer	with flanges, Face-to-face dimension 160 mm		
Nominal diameter / pressure				
Other installation positions than	standard (vertical) have to be indic	cated together with the information about the flow		
direction i.e. inlet from left or rig	ht	-		

CONA® SC ANSI / SC Plus ANSI d-flange dimensions / Information about the different installation positions

Standard-flange dimensions / Information about the dif	fferent installation positions
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Standard-flange dimensions acc. to ASME B16.5						
NPS (DN)		1/2"	3/4"	1"		
ANSI150	ØD	(mm)	89	99	108	
	ØK	(mm)	60	70	79	
	n x Ød	(mm)	4 x 16	4 x 16	4 x 16	
ANSI300	ØD	(mm)	95	117	124	
	ØK	(mm)	66,5	82,5	89	
	n x Ød	(mm)	4 x 16	4 x 19	4 x 19	



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.



CONA® SC ANSI / SC Plus ANSI

Accessories / further components



AWH ARMATUREN-WERK HALLE GMBH A member of the ARI group



ISO 9001 WHG §19 I

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