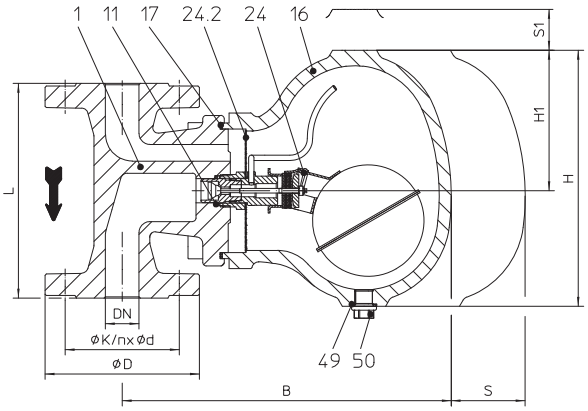
Ball float steam trap (Grey cast iron, SG iron, Forged steel/Cast steel, Stainless steel)



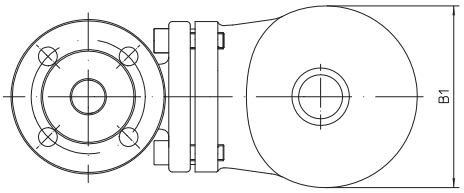
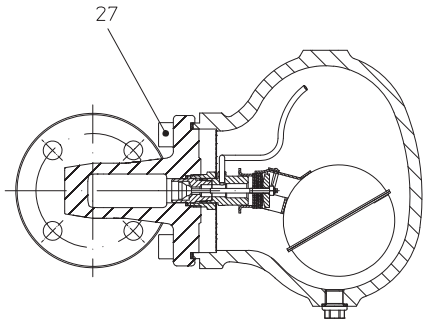


Fig. 631....1 with flanges - vertical installation



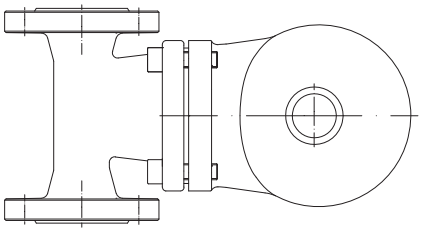


Fig. 631....1 with flanges - horizontal installation

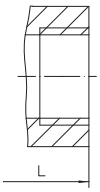


Fig. 631....2
with screwed sockets

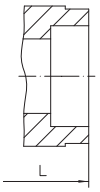


Fig. 631....3
with socket weld ends

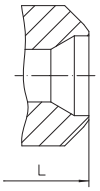


Fig. 631....4
with butt weld ends

Figure	Nominal pressure	Material	Nominal diameter / NPS	Operating pressure PS	Inlet temperature TS	allowable differential **pressure ΔPMX**	for controller	
12.631	PN16	Body/Hood: EN-JL1040	15 - 50 / 1/2" - 2"	12,8 barg	200 °C	2 bar 4 bar 8 bar 13 bar	R2 R4 R8 R13	≥ DN40 / ≥ NPS 1 1/2": R2-S R4-S R8-S R13-S
				9,6 barg	300 °C			
25.631	PN40	Body/Hood: EN-JS1049	15 - 50 / 1/2" - 2"	32 barg	250 °C	2 bar 4 bar 8 bar 13 bar ≥ PN40: 22 bar 32 bar	R2 R4 R8 R13 PN40: R22 R32	≥ DN40 / ≥ NPS 1 1/2": R2-S R4-S R8-S R13-S
				22 barg	350 °C			
45.631	PN40	Body: 1.0460 / Hood: 1.0619+N	15 - 100 / 1/2" - 4"	32 barg	250 °C			
				21 barg	400 °C			
55.631	PN40	Body: 1.4541 / Hood:1.4308	15 - 100 / 1/2" - 4"	32 barg	250 °C			
				28 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) 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	
• Socket weld ends ....3 ___	acc. to DIN EN 12760	
• Butt weld ends ....4 _____	Weld preparation acc. to EN ISO 9692 identification No. 1.3 and 1.5 (Note restriction on operating pressure / inlet temperature depending to design!)	
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 control element • Inside strainer • Body with flanged hood		• Non return protection • The controller maybe changed without disturbing the pipe work • On-site change of the installation position is possible according to the operating instructions
Mounting position		
• Standard:	vertical	Please indicate when ordering! Refer to: Information about the different installation positions (Page 21) 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 [1] Socket weld ends [2]					Butt weld ends [2]				
DN	(mm)	15	20	25	40	50	65 [2]	80 [2]	100 [2]	15	20	25	40	50	15	20	25	40	50
NPS	(inch)	1/2"	3/4"	1"	1 1/2"	2"	2 1/2" [2]	3" [2]	4" [2]	1/2"	3/4"	1"	1 1/2"	2"	1/2"	3/4"	1"	1 1/2"	2"

[1] DN50 (2") not in EN-JL/EN-JS [2] not in EN-JL / EN-JS

Face-to-face acc. to data sheet resp. customer request																			
L (EN-JL1040)	(mm)	150	150	160	230	230	--	--	--	150	150	160	230	--	--	--	--	--	--
L (EN-JS1049)	(mm)	150	150	160	230	230	--	--	--	150	150	160	230	--	--	--	--	--	--
L (1.0460, 1.4541)	(mm)	150	150	160	230	230	290	310	350	150	150	160	210	210	160	160	160	250	250

Dimensions																			Standard-flange dimensions refer to page 21.
H	(mm)	162	162	193	274	274	274	274	274	162	162	193	274	274	162	162	193	274	274
H1	(mm)	87	87	107	157	157	157	157	157	87	87	107	157	157	87	87	107	157	157
B (EN-JS1049)	(mm)	215	215	245	289	289	--	--	--	215	215	245	289	--	--	--	--	--	--
B (Steel)	(mm)	217	217	249	292	292	292	292	292	170	170	197	292	292	170	170	197	292	292
B1	(mm)	114	114	135	194	194	194	194	194	114	114	135	194	194	114	114	135	194	194
S	(mm)	180	180	200	300	300	300	300	300	180	180	200	300	300	180	180	200	300	300
S1	(mm)	150	150	180	200	200	200	200	200	150	150	180	200	200	150	150	180	200	200

Weights																			
Fig. 631 (approx.)	(kg)	8,1	8,3	12,1	28,5	29,1	31	33	36,5	7,5	7,5	9,7	23,8	24,3	7,1	8,1	10,2	24,8	25,8

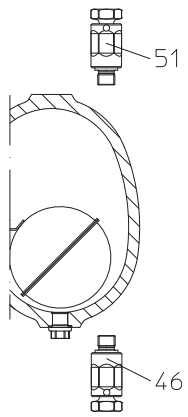
Parts						
Pos.	Sp.p.	Description	Fig. 12.631	Fig. 25.631	Fig. 45.631	Fig. 55.631
1		Body	EN-GJL-250, EN-JL1040	EN-GJS-400-18U-LT, EN-JS1049	P250 GH, 1.0460	X6CrNiTi18-10, 1.4541
11	x	Sealing ring	CU	A4		
16		Hood	EN-GJL-250, EN-JL1040	EN-GJS-400-18U-LT, EN-JS1049	GP240GH+N, 1.0619+N	GX5CrNi19-10, 1.4308
17	x	Gasket	Graphite (CrNi laminated with graphite)			
24	x	Controller, cpl.	X5CrNi18-10, 1.4301 / TB102/85 (corrosion resistant bimetal)			
24.2		Strainer	X5CrNi18-10, 1.4301			
27		Cheese head screw	A2-70 / 8.8	21CrMoV 5-7, 1.7709	21CrMoV 5-7, 1.7709	< DN40: A4-80 ≥ DN40: X6CrNiTi18-10, 1.4541
46	x	Blow down valve, cpl.	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	X8CrNiS18-9, 1.4305			
	└ 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

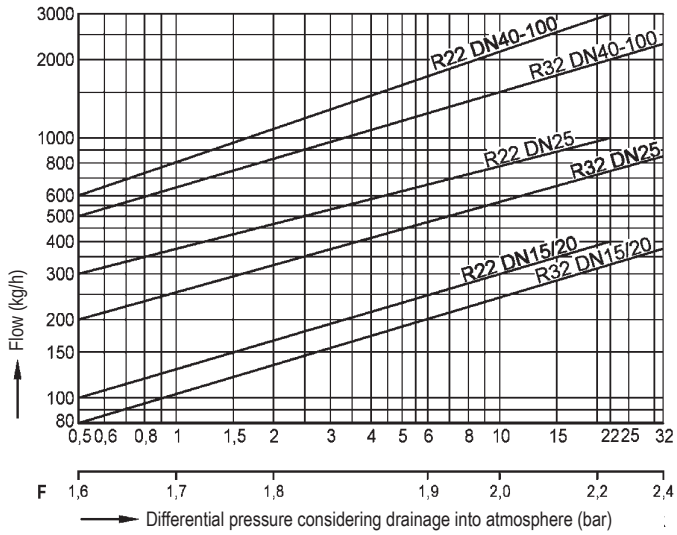


Air vent - (Pos. 51) or blow down valve (Pos. 46), manual operated

Capacity chart

Standard R22 and R32

DN15 - DN100



The capacity chart shows the maximum flow quantities of hot condensate for the different controllers and steam trap sizes

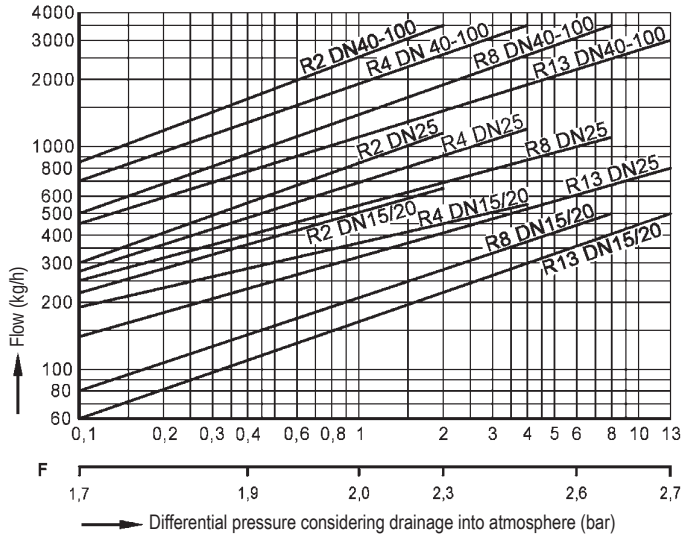
In commen, the steam traps are fitted out with an controller as shown in the flow diagrams of this page acc. to the differential pressures and flow rates.

For very large flow rates with low differential pressures, steam traps at sizes DN40 up to DN100 can be fitted out with a super-controller

The maximum flow quantity of cold condensate at about 20°C can be determined by multiplication of the appropriate factor F (in the scale below the diagrams) with the hot condensate quantity determined by the capacity chart. (Factor F is related to the differential pressure)

Standard R2 to R13

DN15 - DN100



The capacity chart shows the maximum flow quantities of hot condensate for the different controllers and steam trap sizes

In commen, the steam traps are fitted out with an controller as shown in the flow diagrams of this page acc. to the differential pressures and flow rates.

For very large flow rates with low differential pressures, steam traps at sizes DN40 up to DN100 can be fitted out with a super-controller

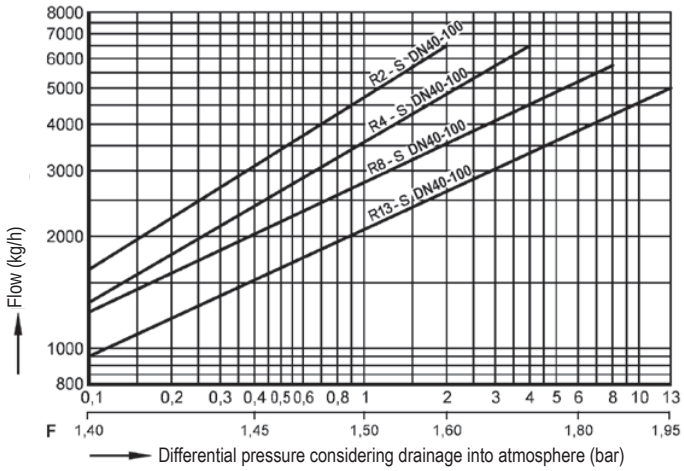
The maximum flow quantity of cold condensate at about 20°C can be determined by multiplication of the appropriate factor F (in the scale below the diagrams) with the hot condensate quantity determined by the capacity chart. (Factor F is related to the differential pressure)

Capacity chart

Special design: Super-controller for very large flow rates with low differential pressures

R2-S to R13-S

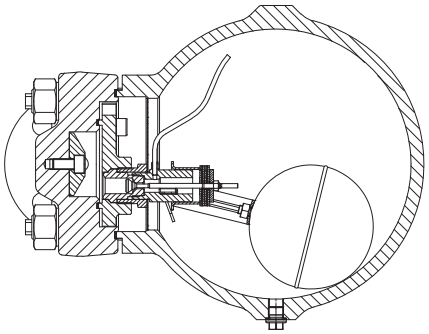
DN 40 - 100



The capacity chart shows the maximum flow quantities of hot condensate for the Super-controller versions.

The maximum flow quantity of cold condensate at about 20°C can be determined by multiplication of the appropriate factor F (in the scale below the diagrams) with the hot condensate quantity determined by the capacity chart. (Factor F is related to the differential pressure)

Ball float steam trap (High temperature steel)



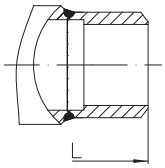


Fig. 631....4
with butt weld ends

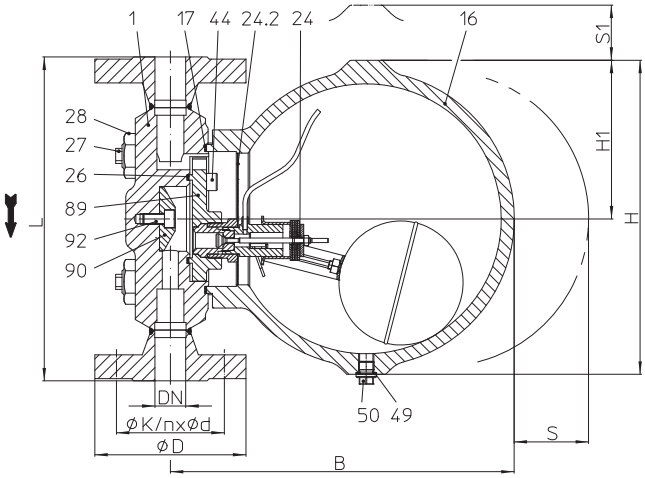


Fig. 631....1 with flanges - vertical installation (PN100)

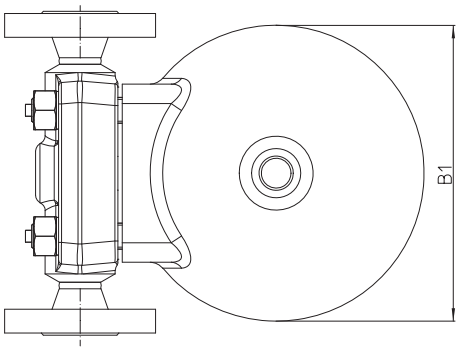


Fig. 631....1 with flanges - horizontal installation (PN100)

Figure	Nominal pressure	Material	Nominal diam. / NPS	Operating pressure PS	Inlet temperature TS	allowable differential **pressure ΔPMX**	for controller
86.631	PN63	Body: 16Mo3 / Hood: G17CrMo5-5	15 - 50 / 1/2" - 2"	56 barg	300 °C	50 bar	R50
				50 barg	350 °C		
				45 barg	450 °C		
87.631	PN100	Body: 16Mo3 / Hood: G17CrMo5-5	15 - 50 / 1/2" - 2"	64 barg	400 °C	64 bar	R64
				50 barg	450 °C	50 bar	R50
87.631	PN100	Body: 13CrMo4-5 / Hood: G17CrMo5	15 - 50 / 1/2" - 2"	80 barg	480 °C	80 bar	R80
				64 barg	504 °C	64 bar	R64
				50 barg	515 °C	50 bar	R50
				30 barg	525 °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 1092-1 • Butt weld ends ....4 _____ Weld preparation acc. to EN ISO 9692 identification No. 1.3 and 1.5 (Note restriction on operating pressure / inlet temperature depending to design!)		
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 control element (for condensate with temperatures ≥ 100°C) • Inside strainer		• Body with flanged hood • Non return protection • 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 21) 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					Butt weld ends				
DN	(mm)	15	20	25	40	50	15	20	25	40	50
NPS	(inch)	1/2"	3/4"	1"	1 1/2"	2"	1/2"	3/4"	1"	1 1/2"	2"

Face-to-face acc. to data sheet resp. customer request											
L	(mm)	300	300	300	420	416	216	216	216	240	250

Dimensions											Standard-flange dimensions refer to page 21.
H	(mm)	300	300	300	300	300	300	300	300	300	300
H1	(mm)	147	147	147	147	147	147	147	147	147	147
B	(mm)	319	319	319	319	319	319	319	319	319	319
B1	(mm)	274	274	274	274	274	274	274	274	274	274
S	(mm)	300	300	300	300	300	300	300	300	300	300
S1	(mm)	250	250	250	250	250	250	250	250	250	250

Weights											
Fig. 631 (approx.)	(kg)	41	43	44	48	52	39	39	39	39	39

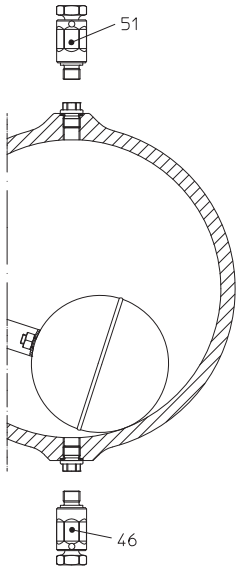
Parts				
Pos.	Sp.p.	Description	Fig. 86.631 / 87.631	Fig. 87.631
1		Body	16Mo3, 1.5415	13CrMo4-5, 1.7335
16		Hood	G17CrMo5-5, 1.7357	
17	x	Gasket	Graphite (CrNi laminated with graphite)	
24	x	Controller, cpl.	X5CrNi18-10, 1.4301 / TB102/85 (corrosion resistant bimetal)	
24.2		Strainer	X5CrNi18-10, 1.4301	
26	x	Gasket	Graphite (CrNi laminated with graphite)	
27		Stud	21CrMoV 5-7, 1.7709	X22CrMoV12-1, 1.4923
28		Hexagonal nut	21CrMoV 5-7, 1.7709	X22CrMoV12-1, 1.4923
44		Cheese head screw	A4-70	
46	x	Blow down valve, cpl.	X39CrMo17-1+QT, 1.4122+QT	
49	x	Sealing ring	X6CrNiTi18-10, 1.4541	
50		Plug (M14x1,5)	21CrMoV 5-7, 1.7709	
51	x	Manual air vent valve	X39CrMo17-1+QT, 1.4122+QT	
89		Adapter	X8CrNi 18-9, 1.4305	
90		Baffle plate	X39CrMo17-1+QT, 1.4122+QT	
92		Cheese head screw	A4-70	
	└ 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).

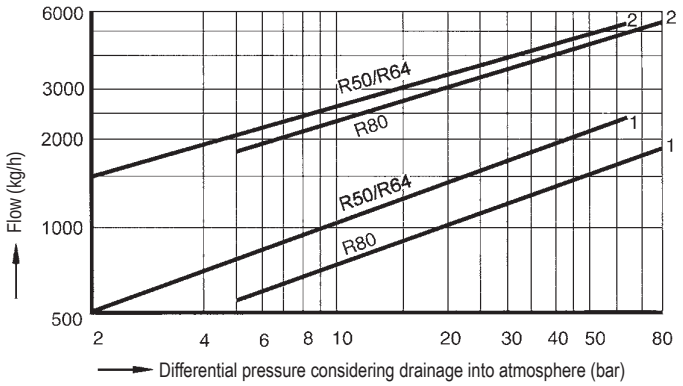
Operating and installation instructions can be downloaded at www.ari-armaturen.com.

Options



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

Capacity chart



The capacity chart shows the maximum flow rates.

Curve 1:
Maximum flow quantities of hot condensate.

Curve 2:
Maximum flow quantities of cold condensate of about 20°C (during system start-up).