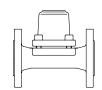


Bimetallic steam trap

Bimetallic steam trap **PN16**

- with flanges (Fig. 600....1) - union with butt weld ends (Fig. 600....5)



Grey cast iron Fig. 600

Page 2

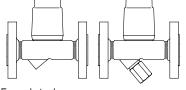
Fig. 600....1 (PN40)

Bimetallic steam trap **PN40**

(Fig. 600/601....1) - with flanges - with screwed sockets (Fig. 600/601....2)

- with socket weld ends (Fig. 600/601....3)

- with butt weld ends (Fig. 600/601....4)



Forged steel High temperature steel Stainless steel

Fig. 600/601 (Y)

DN15-25 Page 4 DN40-50 Page 6



DN15-25

Page 8 DN40-50 Page 12

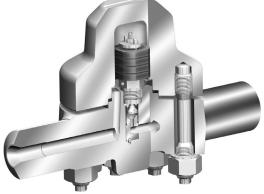


Fig. 600....4 (PN630)

PN63 / PN100 - with flanges

Bimetallic steam trap

- with socket weld ends - with butt weld ends

(Fig. 600....1) (Fig. 600....3)

(Fig. 600....4)

High temperature steel Fig. 600

High pressure bimetallic steam trap PN160 / PN250

- with flanges (Fig. 600....1) - with socket weld ends (Fig. 600....3) - with butt weld ends (Fig. 600....4)



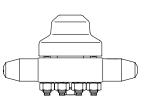
High temperature steel

Fig. 600 Page 14

High pressure bimetallic steam trap PN320 / PN400 / PN630

- with flanges (up to PN400) (Fig. 600....1) - with socket weld ends (Fig. 600....3)

- with butt weld ends (Fig. 600....4)



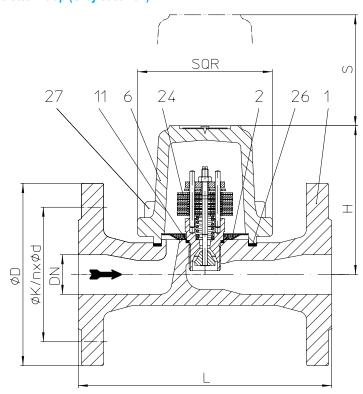
High temperature steel Fig. 600

Page 16

- · For discharging of slight to highly sub-cooled condensate
- · Automatic air-venting during start up and operation of the plant
- · Robust and resistant to water-hammer
- · Integrated non return protection
- Design with internal strainer Fig. 600 Design with outside strainer (Y) - Fig. 601 (Y)
- · Optimized design for quick installation (PN40, PN63 with R46, DN15-25)
- · Gasket-free sealing of the screwed cap (PN40 and PN63 with Cap, DN15-25)
- · Installation in any position (except cover/screwed cap downwards)
- · Subcooling of condensate is continuously adjustable (observe the operation instructions)
- · The controller maybe changed without disturbing the pipe work



Bimetallic steam trap (Grey cast iron)



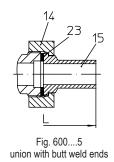


Fig. 600....1 with inside strainer

Figure	Nominal pressure	Material	Nominal diameter / NPS	Operating pressure PS	Inlet temperature TS	allowable differential pressure ΔPMX	for controller
40.000	DNAC	EN 11 4040	DN15-50 /	12,8 barg	200 °C	12 has	D40
12.600	PN16	EN-JL1040	1/2" - 2"	9,6 barg	300 °C	13 bar	R13

For ANSI versions refer to data sheet CONA®B-ANSI

I	Types of	f connect	tion	
---	----------	-----------	------	--

Other types of connection on request.

- Flanges1 _____acc. to DIN 2533 or DIN EN 1092-2
- Union butt weld nipples5 __acc. to data sheet resp. customer request

Features

- Thermostatic steam trap with non-corrosive and robust water hammer proof bimetallic controller
- · Automatic air-venting during start up and operation of the plant
- Non return protection
- · With inside strainer
- · Installation in any position, except cover downwards
- Subcooling of condensate is continuously adjustable (observe the operation instructions)

Controller

(chooseable for operating range)

Controller R13 _____up to inlet pressure: 13 bar

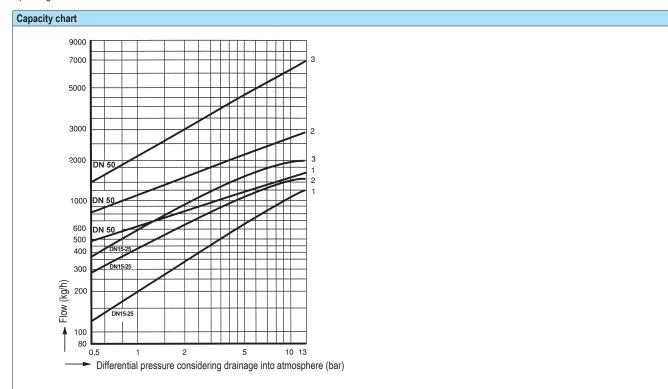


Types of conn	ection		Flar	nges	Union butt v	weld nipples
DN			25	50	15	20
NPS			1	2	1/2	3/4
Face-to-face a	cc. to data sheet i	esp. custom	er request			
L	(mm		160	230	190	190
Dimensions				Standard-flange dime	ensions refer to page 19 / Larger n	ominal diameters refer to page 4.
Н	(mm		100	124	100	100
S	(mm		70	90	70	70
SQR	(mm		85	105	85	85
Weights						
Fig. 600	(approx.) (kg)		4,6	10	2,6	2,3

Parts			
Pos.	Sp.p.	Description	Fig. 12.600
1		Body	EN-GJL-250, EN-JL1040
2	Х	Strainer	X5CrNi18-10, 1.4301
6		Cover	EN-GJL-250, EN-JL1040
11	х	Sealing ring	CU
14		Union nut	11SMn30+C, 1.0715+C
15		Welding end	C15, 1.0401
23	х	Sealing ring	Novapress MULTI
24	Х	Controller, cpl.	TB 102 / 85 (corrosion resistant bimetal)
26	Х	Gasket	Graphite (CrNi laminated with graphite)
27		Cheese head screw	A2-70
	L Spa	re parts	

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.



The capacity chart shows the maximum capacity at factory setting.

(Other factory-settings for the sub-cooling on request.)

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



Bimetallic steam trap (Forged steel, High temperature steel, Stainless steel)

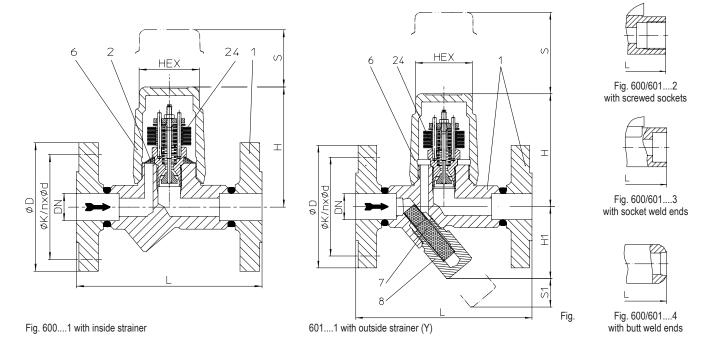


Figure	Nominal pressure	Material	Nominal diameter / NPS	Operating pressure PS	Inlet temperature TS	allowable differential pressure ΔPMX	for controller
				32 barg	250 °C		
45.600 45.601 (Y)	PN40	1.0460	DN15-25 / 1/2" - 1"	22 barg	385 °C		
10.001 (1)				14,5 barg	450 °C		
			DN15-25 / 1/2" - 1"	35 barg	300 °C	32 bar - 22 bar	R32 R22
85.600 85.601 (Y)	PN40	16Mo3		32 barg	335 °C	13 bar	R22 R13
00.001 (1)				28 barg	450 °C	10 501	1110
55.600	DNI40	4.4544	DN15-25 /	32 barg	350 °C	1	
55.601 (Y)	PN40	1.4541	1/2" - 1"	22 barg	400 °C	1	

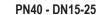
For ANSI versions refer to data sheet CONA®B-ANSI

Types of connection	Other types of connection on request.
• Flanges1acc. to DIN 263	or DIN EN 1092-1
Screwed sockets2Rp thread acc. t	DIN EN 10226-1 or NPT thread acc. to ANSI B1.20.1
Socket weld ends3acc. to DIN EN	2760
	acc. to EN ISO 9692 identification No. 1.3 and 1.5 on operating pressure / inlet temperature depending to design!)

- · Thermostatic steam trap with non-corrosive and robust water hammer proof bimetallic controller
- · Automatic air-venting during start up and operation of the plant
- Non return protection
- With inside strainer Fig. 600 / with outside strainer Fig. 601 (Y)
- · Installation in any position, except screw cap downwards
- Subcooling of condensate is continuously adjustable (observe the operation instructions)

Maintenance simplified due to screwed cap without sealing	
Controller	(chooseable for operating range)
Controller R13up to inlet pressure: 13 bar	
Controller R22up to inlet pressure: 22 bar	
Controller R32up to inlet pressure: 32 bar	
Options	(Design refer to page 5)
Outside strainer with blow down valve (Pos. 46)	

- Ball valve for blow down (pos. 56) with internal strainer (Observe operating and installation instructions!)





Types of connection		Flanges		Screwed sockets Socket weld ends			Butt weld ends			
DN	15	20	25	15	20	25	15	20	25	
NPS	1/2	3/4	1	1/2	3/4	1	1/2	3/4	1	

Face-to-face acc. to data s	sheet resp	o. customer red	quest							
L	(mm)	150	150	160	95	95	95	250	250	250

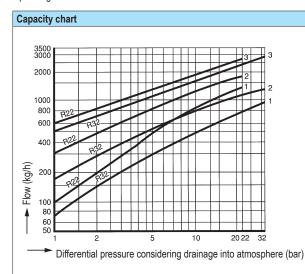
Dimensions					Standard-flar	nge dimensions	refer to page 1	9 / Larger nomi	nal diameters r	efer to page 6.
Н	(mm)	98	98	98	98	98	103	98	98	98
H1	(mm)	62	62	62	62	62	55	62	62	62
S	(mm)	70	70	70	70	70	70	70	70	70
S1	(mm)	30	30	30	30	30	30	30	30	30
HEX	(mm)	50	50	50	50	50	50	50	50	50

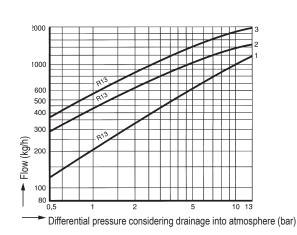
Weights										
Fig. 600 / 601	(approx.) (kg)	3,2	3,7	4,2	1,7	1,6	2,1	2,2	2,3	2,4

Parts									
Pos.	Sp.p.	Description	Fig. 45.600 / 45.601	Fig. 85.600 / 85.601	Fig. 55.600 / 55.601				
1		Body	P250 GH, 1.0460	16Mo3, 1.5415	X6CrNiTi18-10, 1.4541				
2	х	Strainer	X5CrNi18-10, 1.4301						
6		Сар	P250 GH, 1.0460	16Mo3, 1.5415	X6CrNiTi18-10, 1.4541				
7	х	Strainer	X5CrNi18-10, 1.4301						
8	х	Strainer plug	X6CrNiTi18-10, 1.4541						
24	х	Controller, cpl.	TB 102 / 85 (corrosion resistant bi	imetal)					
46	х	Blow down valve, cpl.	X6CrNiTi18-10, 1.4541						
56	x Ball valve for blow down (G 3/8") GX5CrNiMo19-11-2, 1.4408								
	L Spa	re parts							

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.





The capacity chart shows the maximum capacity at factory setting.

(Other factory-settings for the sub-cooling on request.)

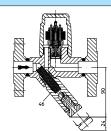
Curve 1: Maximum flow of hot condensate at approx. 10 K below saturation temperature.

Curve 2: Maximum flow of sub-cooled condensate at approx. 30 K below saturation temperature (with back-up of condensate).

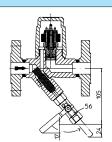
Curve 3: Maximum flow at cold condensate at about 20°C (during start-up of a cold installation).

The condensate temperature determines the opening of the controller. Capacity is increased with the sub-cooling temperature of the condensate.

Options



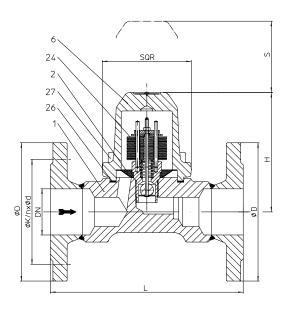
Outside strainer with blow down valve

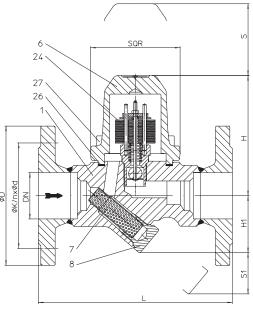


Ball valve with adapter for blow down with internal strainer (restricted to 16 bar, 210°C)



Bimetallic steam trap (Forged steel, High temperature steel, Stainless steel)





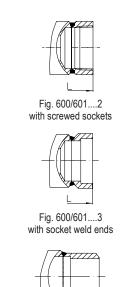


Fig. 600/601....4

with butt weld ends

Fig. 600....1 with inside strainer

Fig. 601....1 with outside strainer (Y)

Figure	Nominal pressure	Material	Nominal diameter / NPS	Operating pressure PS	Inlet temperature TS	allowable differential pressure ΔPMX	for controller	
				32 barg	250 °C		R32 R22 R13	
45.600 45.601 (Y)	PN40	1.0460	DN40-50 / 1 1/2" - 2"	22 barg	385 °C			
			,2	14,5 barg	450 °C	32 bar		
				35 barg	300 °C			
85.600 85.601 (Y)	PN40	16Mo3	DN40-50 / 1 1/2" - 2"	32 barg	335 °C	22 bar 13 bar		
00.001(1)			,2	28 barg	450 °C	_ 13 bai		
55.600	DNAO	4 4544	DN40-50 /	32 barg	350 °C			
55.601 (Y)	PN40	1.4541	1 1/2" - 2"	22 barg	400 °C			

For ANSI versions refer to data sheet CONA®B-ANSI

Types of connection		Other types of connection on request.
Flanges1	_acc. to DIN 2635 or DIN EN 1092-1	
Screwed sockets2	_Rp thread acc. to DIN EN 10226-1 or NPT thread acc. to ANSI B1.20.1	
Socket weld ends3	_acc. to DIN EN 12760	
Butt weld ends4	_Weld preparation acc. to EN ISO 9692 identification No. 1.3 and 1.5	
	(Note restriction on operating pressure / inlet temperature depending to design!)	

- Thermostatic steam trap with non-corrosive and robust water hammer proof bimetallic controller
- Automatic air-venting during start up and operation of the plant
- Non return protection
- With inside strainer Fig. 600 / with outside strainer Fig. 601 (Y)
- · Installation in any position, except cover downwards
- Subcooling of condensate is continuously adjustable (observe the operation instructions)

• Subcooling of condensate is continuously adjustable (observe the operation instructions)	
Controller	(chooseable for operating range)
Controller R13up to inlet pressure: 13 bar	
Controller R22up to inlet pressure: 22 bar	
Controller R32up to inlet pressure: 32 bar	
Options	(Design refer to page 5)
Outside strainer with blow down value (Dec. 46)	

- · Outside strainer with blow down valve (Pos. 46)
- Ball valve for blow down (pos. 56) with internal strainer (Observe operating and installation instructions!)



Types of connection	Flan	nges		l sockets veld ends	Butt weld ends		
DN 40 50		50	40	50	40	50	
NPS	1 1/2 2		1 1/2 2		1 1/2	2	

Face-to-face acc. to data s	Face-to-face acc. to data sheet resp. customer request									
L	(mm)	230	230	130 / 160 ¹⁾	210	250	250			

1) Construction with screwed sockets

Dimensions Standard-flange dimensions refer to pag									
Н	(mm)	144	144	144	144	144	144		
H1	(mm)	68	68	68	68	68	68		
S	(mm)	90	90	90	90	90	90		
S1	(mm)	50	50	50	50	50	50		
SQR	(mm)	110	110	110	110	110	110		

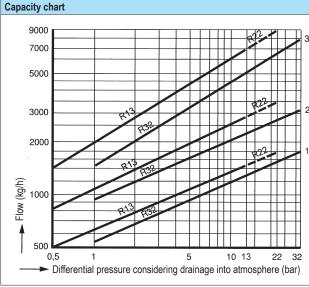
Weights	Weights										
Fig. 600 / 601	(approx.)	(kg)	11,3	12,1	8	8	8,9	9,8			

Parts									
Pos.	Sp.p.	Description	Fig. 45.600 / 45.601	Fig. 85.600 / 85.601	1 Fig. 55.600 / 55.601				
1		Body	P250 GH, 1.0460	16Mo3, 1.5415	X6CrNiTi18-10, 1.4541				
2	Х	Strainer	X5CrNi18-10, 1.4301						
6		Cover	P250 GH, 1.0460 16Mo3, 1.5415 X6CrNiTi18-10, 1.4541						
7	х	Strainer	X5CrNi18-10, 1.4301						
8	Х	Strainer plug	X6CrNiTi18-10, 1.4541						
24	Х	Controller, cpl.	TB 102 / 85 (corrosion resistant bir	metal)					
26	х	Gasket	Graphite (CrNi laminated with grap	phite)					
27		Cheese head screw	21CrMoV 5-7, 1.7709						
46	Х	Blow down valve, cpl.	X6CrNiTi18-10, 1.4541						
56	х	Ball valve for blow down (G 3/8")	GX5CrNiMo19-11-2, 1.4408						
	L _{Spa}	re 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).

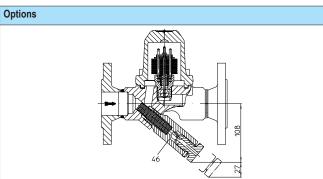
Operating and installation instructions can be downloaded at www.ari-armaturen.com.

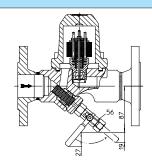


The capacity chart shows the maximum capacity at factory setting. (Other factory-settings for the sub-cooling on request.)

- Curve 1: Maximum flow of hot condensate approx. 15 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 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.





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

Outside strainer with blow down valve



Bimetallic steam trap (High temperature steel)

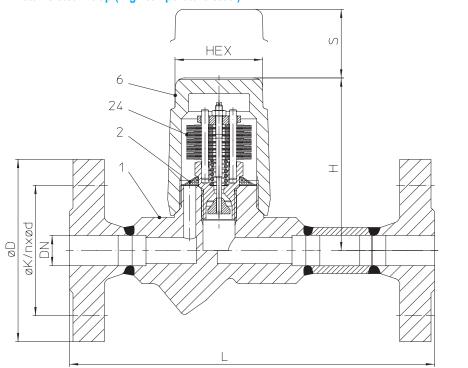




Fig. 600....3 with socket weld ends



Fig. 600....4 with butt weld ends

Fig. 600....1 with inside strainer

Figure	Nominal pressure	Material	Nominal diameter / NPS	Operating pressure PS	Inlet temperature TS	allowable differential pressure ΔPMX	for controller
86.600 PN63	DNICO	16Mo3	DN15-25 / 1/2" - 1"	46 barg	425 °C	46 hor	DAC
	PIN03	TOWOS		45 barg	450 °C	46 bar	R46

For ANSI versions refer to data sheet CONA®B-ANSI

Types of connection		Other types of connection on request.
Flanges1	acc. to DIN 2636 or DIN EN 1092-1	
Socket weld ends3	acc. to DIN EN 12760	
Butt weld ends4	Weld preparation acc. to EN ISO 9692 identification No. 1.3 and 1.5 (Note restriction on operating pressure / inlet temperature depending to design!)	
	(Note restriction on operating pressure / linet temperature depending to design:)	

Features

- Thermostatic steam trap with non-corrosive and robust water hammer proof bimetallic controller
- · Automatic air-venting during start up and operation of the plant
- Non return protection
- · With inside strainer
- Installation in any position, except screw cap downwards
- Subcooling of condensate is continuously adjustable (observe the operation instructions)
- · Maintenance simplified due to screwed cap without sealing

Controller

(chooseable for operating range)

Controller R46 _____up to inlet pressure: 46 bar



Types of connection	Flanges			S	ocket weld end	ds	Butt weld ends 2)		
DN	15	20 1)	25	15	20	25	15	20	25
NPS	1/2	3/4 ¹⁾	1	1/2	3/4	1	1/2	3/4	1
1) acc. to DIN EN 1092-1	1) acc. to DIN EN 1092-1 2) Please indicate dimension of the tube when ordering								

Face-to-face acc. to data s	Face-to-face acc. to data sheet resp. customer request									
L	(mm)	210	210	230	95	95	95	250	250	250

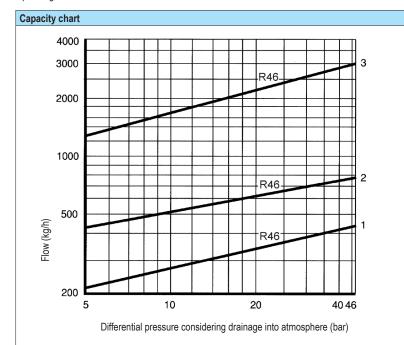
Dimensions	Dimensions Standard-flange dimensions refer to page 1									
Н	(mm)	98	98	98	98	98	103	98	98	98
S	(mm)	70	70	70	70	70	70	70	70	70
HEX	(mm)	50	50	50	50	50	50	50	50	50

Weights										
Fig. 600	(approx.) (kg)	4,1	5,6	7	1,7	1,6	2,1	2,2	2,3	2,4

Parts	Parts								
Pos.	Sp.p.	Description	Fig. 86.600						
1		Body	16Mo3, 1.5415						
2	х	Strainer	X5CrNi18-10, 1.4301						
6		Сар	16Mo3, 1.5415						
24	х	Controller, cpl.	TB 102 / 85 (corrosion resistant bimetal)						
	L Spa	re parts							

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.



The capacity chart shows the maximum capacity at factory setting.

(For operating pressures below 5 bar, a correction of the factory-setting acc. to manufacturers information is recommended.)

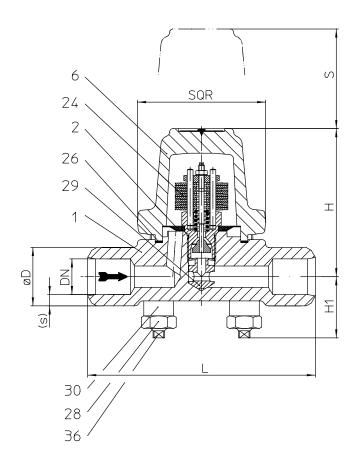
Curve 1: Maximum flow of hot condensate approx. 15 K below saturation temperature.

Curve 2: Maximum flow of sub-cooled condensate at approx. 30 K below saturation temperature (with back-up of condensate).

Curve 3: Maximum flow at cold condensate at about 20°C (during start-up of a cold installation).



High pressure - Bimetallic steam trap (High temperature steel)



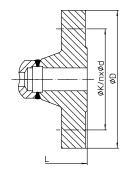


Fig. 600....1 with flanges

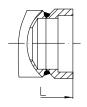


Fig. 600....3 with socket weld ends

Fig. 600....4 with butt weld ends

Nominal pressure	Material	Nominal diameter / NPS	Operating pressure PS	Inlet temperature TS	allowable differential pressure ΔPMX	for controller	
			56 barg	300 °C			
PN63	16Mo3		47 barg	400 °C	56 bar	R56	
			45 barg	450 °C			
			90 barg	450 °C	50.1	D.50	
600 PN100 16Mo3	16Mo3	/lo3 DN15-25 /	56 barg	500 °C		R56 R90	
		.,	27 barg	530 °C	30 Dai	K90	
	PN63	PN63 16Mo3	pressure Material diameter / NPS PN63 16Mo3 DN15-25 / 1/2" - 1"	PN63 Material diameter / NPS PS DN15-25 / 1/2" - 1" 56 barg 47 barg 45 barg PN100 16Mo3 DN15-25 / 1/2" - 1" DN15-25 / 1/2" - 1" 56 barg	PN63 I6Mo3 DN15-25 / 1/2" - 1" FS TS PN100 16Mo3 DN15-25 / 1/2" - 1" 47 barg 400 °C PN100 450 °C 90 barg 450 °C PN100 16Mo3 DN15-25 / 1/2" - 1" 56 barg 500 °C	PN63 I6Mo3 DN15-25 / 1/2" - 1" 45 barg 450 °C 56 bar 90 bar 56 bar 56 bar 90 bar 90 bar 56 bar 90 bar	

For ANSI versions refer to data sheet CONA®B-ANSI

Types of connection		Other types of connection on request.
• Flanges1	acc. to DIN 2636 or DIN EN 1092-1 (PN63) DIN 2637 or DIN EN 1092-1 (PN100)	
Socket weld ends3	acc. to DIN EN 12760	
Butt weld ends4	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

10

- Thermostatic steam trap with non-corrosive and robust water hammer proof bimetallic controller
- · Steam trap specially for high pressures
- · Automatic air-venting during start up and operation of the plant
- Non return protection
- With inside strainer
- · Installation in any position, except cover downwards
- Subcooling of condensate is continuously adjustable (observe the operation instructions)
- The controller maybe changed without disturbing the pipe work

Controller

· Controller R56 up to inlet pressure: 56 bar

Controller R90 up to inlet pressure: 90 bar

(chooseable for operating range)



Types of connection	Flanges			Socket weld ends			Butt weld ends 2)		
DN	15	20 ¹⁾	25	15	20	25	15	20	25
NPS	1/2	3/4 ¹⁾	1	1/2	3/4	1	1/2	3/4	1

1) Flanges acc. to DIN EN 1092-1

2) Please indicate dimension of the tube when ordering

Face-to-face acc. to data sheet resp. customer request										
L	(mm)	210	210	230	160	160	160	160	160	160

Dimensions	Dimensions Standard-flange dimensions refer to page 19 / Larger nominal diameters (PN63) refer to page										
Н	(mm)	104	104	104	104	104	104	104	104	104	
H1	(mm)	42	42	42	42	42	42	42	42	42	
S	(mm)	70	70	70	70	70	70	70	70	70	
SQR	(mm)	90	90	90	90	90	90	90	90	90	

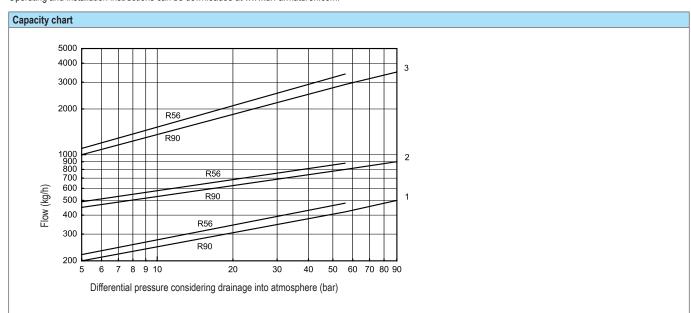
Weights										
Fig. 600	(approx.) (kg)	6,2	7,7	9,3	4,6	4,5	4,4	4,6	4,5	4,4

Parts	arts							
Pos.	Sp.p.	Description	Fig. 86.600 / 87.600					
1		Body	16Mo3, 1.5415					
2	х	Strainer	X5CrNi18-10, 1.4301					
6		Cover	16Mo3, 1.5415					
24	х	Controller, cpl.	TB 102 / 85 (corrosion resistant bimetal)					
26	х	Gasket	Graphite (CrNi laminated with graphite)					
28		Hexagonal nut	21CrMoV 5-7, 1.7709					
29	х	Erosion deflector	X8CrNiS18-9, 1.4305					
30		Extension sleeve	21CrMoV 5-7, 1.7709					
36		Stud	21CrMoV 5-7, 1.7709					
	L Spa	re 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.



The capacity chart shows the maximum flow at factory setting.

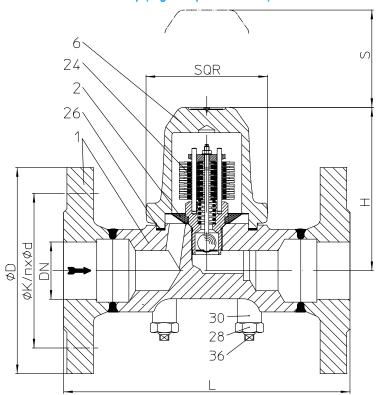
(For operating pressures below 5 bar, a correction of the factory-setting acc. to manufacturers information is recommended.)

Curve 1: Maximum flow of hot condensate approx. 15 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 at cold condensate at about 20°C (during start-up of a cold installation).

High pressure - Bimetallic steam trap (High temperature steel)



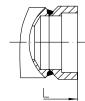


Fig. 600....3 with socket weld ends

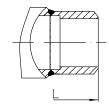


Fig. 600....4 with butt weld ends

Fig. 600....1 with flanges

Figure	Nominal pressure	Material	Nominal diameter / NPS	Operating pressure PS	Inlet temperature TS	allowable differential pressure ΔPMX	for controller
				56 barg	300 °C	50.1	D50
86.600 PN63	PN63	16Mo3	DN40-50 / 1 1/2" - 2"	50 barg	350 °C	56 bar 32 bar	R56 R32
				45 barg	450 °C	JZ Dai	NJZ

For ANSI versions refer to data sheet CONA®B-ANSI

Types of connection		Other types of connection on request.
• Flanges1	_acc. to DIN 2636 or DIN EN 1092-1	
Socket weld ends3	_acc. to DIN EN 12760	
Butt weld ends4	_Weld preparation acc. to EN ISO 9692 identification No. 1.3 and 1.5	
	(Note restriction on operating pressure / inlet temperature depending to design!)	

- Thermostatic steam trap with non-corrosive and robust water hammer proof bimetallic controller
- Automatic air-venting during start up and operation of the plant
- · Non return protection
- With inside strainer
- Installation in any position, except cover downwards
- Subcooling of condensate is continuously adjustable (observe the operation instructions)
- The controller maybe changed without disturbing the pipe work

Controller	(choo	oseable for operating range)
Controller R56	6up to inlet pressure: 56 bar	
Controller R32	2up to inlet pressure: 32 bar	



Types of connection	Flanges		Socket w	veld ends	Butt weld ends 1)		
DN	40	50	40	50	40	50	
NPS	1 1/2	2	1 1/2	2	1 1/2	2	

1) Please indicate dimension of the tube when ordering

Face-to-face acc. to data s	heet resp	. customer request					
L	(mm)	260	300	130	210	250	250

Dimensions	Dimensions Standard-flange dimensions refer to page 19 / Smaller nominal diameters refer to page 1								
Н	(mm)	144	144	144	144	144	144		
S	(mm)	90	90	90	90	90	90		
SQR	(mm)	110	110	110	110	110	110		

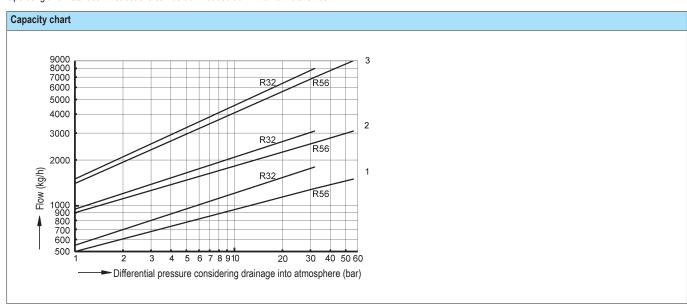
Weights								
Fig. 600	(approx.)	(kg)	13,3	14,1	8	8	8,9	9,8

Parts								
Pos.	Sp.p.	Description	Fig. 86.600					
1		Body	16Mo3, 1.5415					
2	х	Strainer	X5CrNi18-10, 1.4301					
6		Cover	16Mo3, 1.5415					
24	х	Controller, cpl.	TB 102 / 85 (corrosion resistant bimetal)					
26	х	Gasket	Graphite (CrNi laminated with graphite)					
28		Hexagonal nut	21CrMoV 5-7, 1.7709					
30		Extension sleeve	21CrMoV 5-7, 1.7709					
36		Stud	21CrMoV 5-7, 1.7709					
	L Spa	re 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.



The capacity chart shows the maximum flow at factory setting.

(For operating pressures below 5 bar, a correction of the factory-setting acc. to manufacturers information is recommended.)

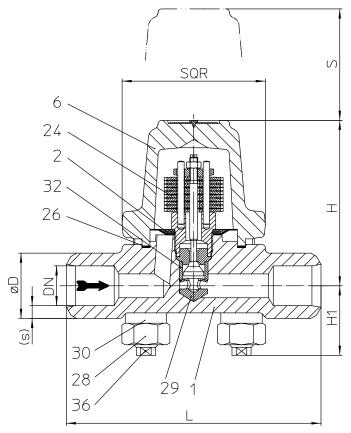
Curve 1: Maximum flow of hot condensate approx. 15 K below saturation temperature.

Curve 2: Maximum flow of sub-cooled condensate at approx. 30 K below saturation temperature (with back-up of condensate).

Curve 3: Maximum flow at cold condensate at about 20°C (during start-up of a cold installation).



High pressure - Bimetallic steam trap (High temperature steel)



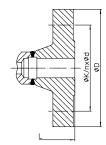


Fig. 600....1 with flanges



Fig. 600....3 with socket weld ends

Other types of connection on request.

(chooseable for operating range)

Fig. 600....4 with butt weld ends

Figure	Nominal pressure	Material	Nominal diameter / NPS	Operating pressure PS	Inlet temperature TS	allowable differential pressure ΔPMX	for controller
			153 barg	350 °C			
88.600	DNI460	13CrMo4-5	DN15-25 /	100 barg	510 °C	110 bar	R130
00.000	88.600 PN160	1/2" - 1"	1/2" - 1"	62 barg	530 °C	110 bar	K130
				35 barg	550 °C		
				184 barg	500 °C		
89.600	PN250	DN15-25 /	DN15-25 /	154 barg	510 °C	1541	D150
09.000	PINZOU	10CrMo9-10	1/2" - 1"	108 barg	530 °C	154 bar	R150
				81 barg	550 °C		

For ANSI versions refer to data sheet CONA®B-ANSI

Types of connection	
• Flanges1	acc. to DIN 2638, DIN 2628 or DIN EN 1092-1

Socket weld ends3 _____acc. to DIN EN 12760

Butt weld ends4 ______ Weld preparation acc. to EN ISO 9692 identification No. 1.3 and 1.5

(Note restriction on expecting pressure / inlet temperature depending to the processor of the pressure o

(Note restriction on operating pressure / inlet temperature depending to design!)

- Thermostatic steam trap with non-corrosive and robust water hammer proof bimetallic controller
- · Steam trap specially for high pressures
- · Automatic air-venting during start up and operation of the plant
- · Non return protection
- With inside strainer
- · Installation in any position, except cover downwards
- · Subcooling of condensate is continuously adjustable (observe the operation instructions)
- The controller maybe changed without disturbing the pipe work

Controller		
Controller R130	up to inlet pressure: 110 bar	
Controller R150	up to inlet pressure: 154 bar	

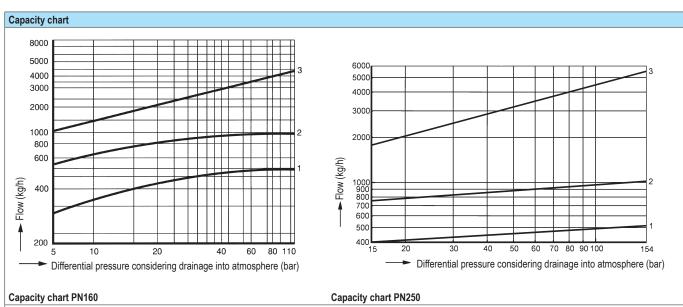


Types of connection		Flai	nges		Socket weld end	S		Butt weld ends ¹	1)
DN		15	25	15	20	25	15	20	25
NPS		1/2	1	1/2	3/4	1	1/2	3/4	1
						1) PI	ease indicate dim	ension of the tub	e when ordering
Face-to-face acc. to	data sheet resp	p. customer requ	iest						
L	(mm)	210	230	160	160	160	160	160	160
Dimensions							Standard-fla	ange dimensions	refer to page 19
Н	(mm)	104	104	104	104	104	104	104	104
H1	(mm)	42	42	42	42	42	42	42	42
S	(mm)	70	70	70	70	70	70	70	70
SQR	(mm)	90	90	90	90	90	90	90	90
Weights									
Fig. 600 (ar	oprox.) (kg)	6,4	9,6	4,8	4,7	4,6	4,8	4,7	4,6

Parts							
Pos.	Sp.p.	Description	Fig. 88.600	Fig. 89.600			
1		Body	13CrMo4-5, 1.7335	10CrMo9-10, 1.7380			
2	х	Strainer	X5CrNi18-10, 1.4301				
6		Cover	13CrMo4-5, 1.7335	10CrMo9-10, 1.7380			
24	х	Controller, cpl.	TB 102 / 85 (corrosion resistant bimetal)				
26	х	Gasket	Graphite (CrNi laminated with graphite)				
28		Hexagonal nut	21CrMoV 5-7, 1.7709	X22CrMoV12-1, 1.4923			
29	х	Erosion deflector	X8CrNiS18-9, 1.4305				
30		Extension sleeve	21CrMoV 5-7, 1.7709	X22CrMoV12-1, 1.4923			
32	х	Clamping sleeve	X39CrMo17-1+QT, 1.4122+QT				
36		Stud	21CrMoV 5-7, 1.7709	X22CrMoV12-1, 1.4923			
	L Spa	re parts					

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.



The capacity chart shows the maximum capacity at factory setting.

(For operating pressures below 15 bar, a correction of the factory-setting acc. to manufacturers information is recommended.)

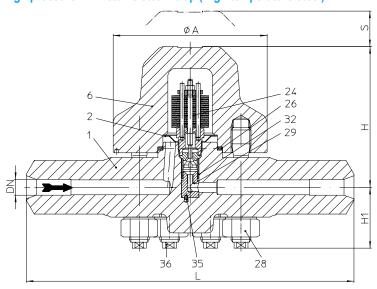
Curve 1: Maximum flow of hot condensate at approx. 10 K below saturation temperature.

Curve 2: Maximum flow of sub-cooled condensate at approx. 30 K below saturation temperature (with back-up of condensate).

Curve 3: Maximum flow at cold condensate at about 20°C (during start-up of a cold installation).



High pressure - Bimetallic steam trap (High temperature steel)



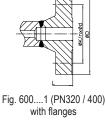




Fig. 600....3 with socket weld ends

Fig. 600....4 with butt weld ends

Figure	Nominal pressure	Material	Nominal diameter / NPS	Operating pressure PS	Inlet temperature TS	allowable differential pressure ΔPMX	for controller
				200 barg	510 °C		
0. 600	PN320	10CrMo9-10,	DN15-25 /	139 barg	530 °C	200 bar	
8a.600	PNSZU	1.7380	1/2" - 1"	121 barg	540 °C	200 bar	
				104 barg	550 °C		
				250 barg	510 °C		
8b.600	PN400	10CrMo9-10,	DN15-25 /	174 barg	530 °C	250 bar	D270
000.00	PN400	1.7380 1/2" - 1"	151 barg	540 °C	250 Dai	R270	
				130 barg	550 °C		
				270 barg	547 °C		R270
		10CrMo9-10,	DN15-25 /	250 barg	550 °C		
		1.7380	1/2" - 1"	216 barg	560 °C		
			162 bar	162 barg	580 °C	070 han	
				298 barg	550 °C	- 270 bar	R2/U
3c.600	PN630	X10CrMo VNb9-1,	DN15-25 /	270 barg	581 °C		
00.000	PINOSU	1.4903	1/2" - 1"	205 barg	590 °C		
				130 barg	600 °C		
				320 barg	600 °C		
		X10CrWMo VNb9-2,	DN15-25 /	300 barg	610 °C	320 bar	D220
		1.4901	1/2" - 1"	220 barg	630 °C	320 Dai	KJZU
		1.1001		160 barg	650 °C		

For ANSI versions refer to data sheet CONA®B-ANSI

Types of connection • Flanges1 ______ acc. to DIN 2629, DIN 2627 or DIN EN 1092-1 • Socket weld ends3 _____ acc. to DIN EN 12760 • Butt weld ends4 _____ Weld preparation acc. to EN ISO 9692 identification No. 1.3 and 1.5 (Note restriction on operating pressure / inlet temperature depending to design!)

- Thermostatic steam trap with non-corrosive and robust water hammer proof bimetallic controller
- · Steam trap specially for high pressures
- Automatic air-venting during start up and operation of the plant
- Non return protection
- · With inside strainer
- · Installation in any position, except cover downwards
- Subcooling of condensate is continuously adjustable (observe the operation instructions)
- The controller maybe changed without disturbing the pipe work

Controller	,	(chooseable for operating range)
Controller R270	up to inlet pressure: 270 bar (or to 200 bar at PN320; 250 bar at PN 400)	
Controller R320	up to inlet pressure: 320 bar	

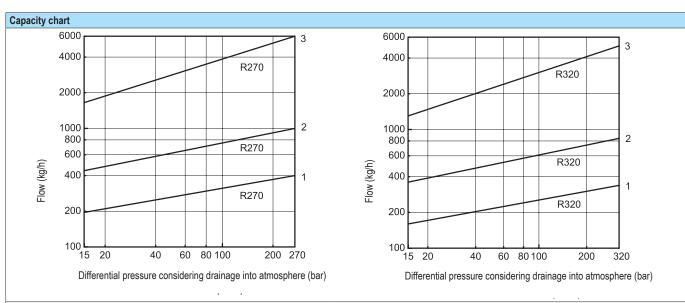


Types of connection		Flar	iges	Socket weld ends		Butt weld ends 1)	
DN		15	25	15	25	15	25
NPS		1/2	1	1/2	1	1/2	1
					1) Please i	ndicate dimension of th	ne tube when ordering
Face-to-face acc. to data sheet resp. customer request							
L	(mm)	435	470	330	330	330	330
Dimensions Standard-flange dimensions refer to page 19							
Н	(mm)	135	135	135	135	135	135
H1	(mm)	63	63	63	63	63	63
S	(mm)	95	95	95	95	95	95
A	(mm)	155	155	155	155	155	155
Weights							
Fig. 600 (approx.)	(kg)	27	33	20	19	20	19

Parts	Parts							
Pos.	Sp.p.	Description	Fig. 8a.600 / 8b.600 / 8c.600 Fig. 8c.600		Fig. 8c.600			
1		Body	10CrMo9-10, 1.7380	X10CrMoVNb9-1, 1.4903	X10CrWMoVNb9-2, 1.4901			
2	х	Strainer	X5CrNi18-10, 1.4301					
6		Cover	10CrMo9-10, 1.7380 X10CrMoVNb9-1, 1.4903 X10CrWMoVNb9-2, 1.49					
24	х	Controller, cpl.	TB 102 / 85 (corrosion resistant bimetal)					
26	х	Spiral gasket	MICA/RGF (CrNi laminated with graphite)					
28		Hexagonal nut	X22CrMoV12-1, 1.4923 X7CrNiMoBNb16-16, 1.4986					
29	х	Erosion deflector	X39CrMo17-1+QT, 1.4122+QT					
32	х	Clamping sleeve	X39CrMo17-1+QT, 1.4122+QT					
35		Taper pin	A2					
36		Stud	X22CrMoV12-1, 1.4923	X7CrNiMoBNb16-16, 1.4986				
	L Spa	re parts						

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.



The capacity chart shows the maximum capacity at factory setting.

(For operating pressures below 15 bar, a correction of the factory-setting acc. to manufacturers information is recommended.)

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



myValve[®] - Ihr VAlve Slzing-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 Slzing-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.



Informations about pipe welding		
Welding groove acc. to DIN 2559		
The material used for ARI valves with butt weld ends are:	1.0619+N	GP240GH+N acc. to DIN EN 10213-2
	1.0460	P250GH acc. to DIN EN 10222-2
	1.0401	C15 acc. to DIN 17210
Note:	1.5415	16Mo3 acc. to DIN EN 10028
Note restriction on operating pressure / inlet temperature depending to	1.4541	X6CrNiTi18-10 acc. to DIN EN 10088
design!	1.7335	13CrMo4-5 acc. to DIN EN 10028
	1.7380	10CrMo 9-10 acc. to DIN EN 10028
	1.4903	X10CrMoVNb 91 acc. to VdTÜV Data sheet 511/3 (06.99)
	1.4901	X10CrWMoVNb9-2, 1.4901 acc. to VdTÜV Data sheet 552/3 (12.2007)

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.

On bimetallic steam traps face-to-face of 95 mm or less, the bimetallic controller has to be disassembled prior to welding. After the traps have cooled down to the ambient temperature the bimetallic controller shall be fitted again into the body.

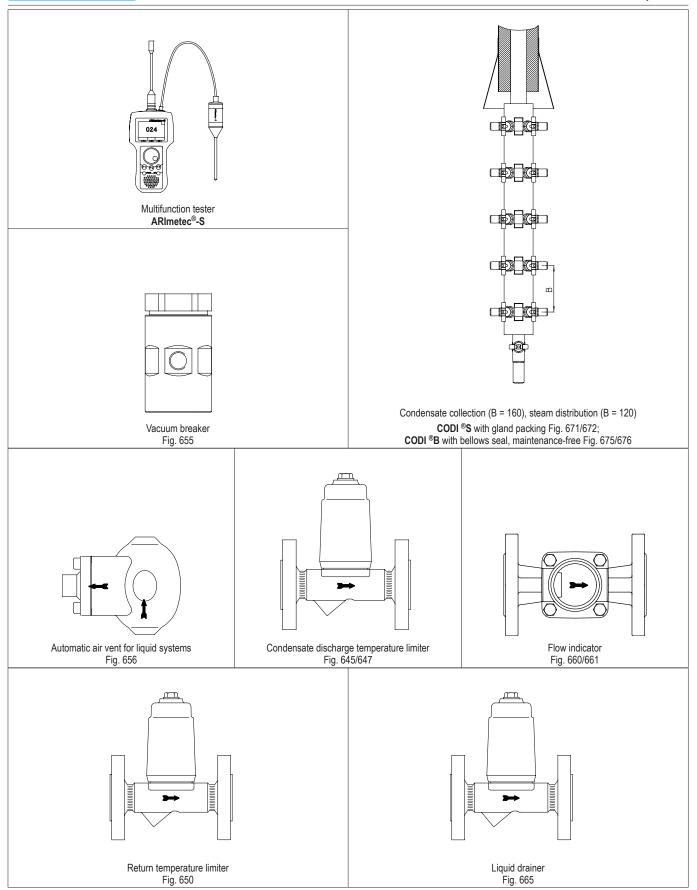
Steam traps with socket-weld ends shall only be welded by arc welding (welding process 111 acc. to DIN EN 24063).

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!

DN		15 2		20 25		32	40	50	
NPS		1/2	3/4		1	1 1/4	1 1/2	2	
PN16	ØD	(mm)	95	1	05	115	140	150	165
	ØK	(mm)	65	7	75	85	100	110	125
	n x Ød	(mm)	4 x 14	4 >	(14	4 x 14	4 x 18	4 x 18	4 x 18
PN40	ØD	(mm)	95	1	05	115	140	150	165
	ØK	(mm)	65	7	75	85	100	110	125
	n x Ød	(mm)	4 x 14	4 >	(14	4 x 14	4 x 18	4 x 18	4 x 18
PN63	ØD	(mm)	105	130		140		170	180
	ØK	(mm)	75	90	1 [100		125	135
	n x Ød	(mm)	4 x 14	4 x 18	acc. to DIN EN	4 x 18		4 x 22	4 x 22
PN100	ØD	(mm)	105	130	1092-1	140			
	ØK	(mm)	75	90		100			
	n x Ød	(mm)	4 x 14	4 x 16		4 x 18			
PN160	ØD	(mm)	105		-	140			
	ØK	(mm)	75			100			
	n x Ød	(mm)	4 x 14			4 x 18			-
PN250	ØD	(mm)	130			150			
	ØK	(mm)	90			105			
	n x Ød	(mm)	4 x 18			4 x 22			-
PN320	ØD	(mm)	130			160			
	ØK	(mm)	90			115			
	n x Ød	(mm)	4 x 18			4 x 22			
	ØD	(mm)	145			180			
PN400	ØK	(mm)	100		-	130			
	n x Ød	(mm)	4 x 22		_	4 x 26			

Selection criteria:		Example for order data:
Steam pressure	Pipe-connection	
Back pressure	 Controller 	Bimetallic steam trap CONA® B,
 Quantity of condensate 	 Material 	Fig. 600, PN40, DN15, 1.0460, Controller R22, with flanges,
Nominal diameter / pressure	 Place of service or kind of steam consumer 	Face-to-face dimension 150 mm





(Further informations about the accessories can be found in the appropriate data sheets.)





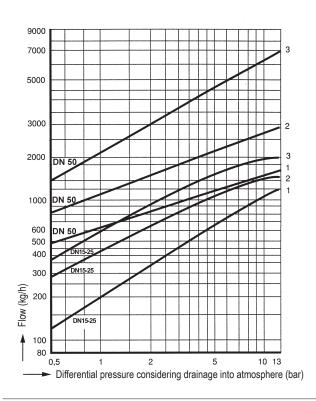






Technology for the Future.

GERMAN QUALITY VALVES





CONA®B - Fig. 600 - PN16 - DN15-50

The capacity chart shows the maximum flow at factory setting. (Other factory-settings for the sub-cooling on request.)

Curve 1:

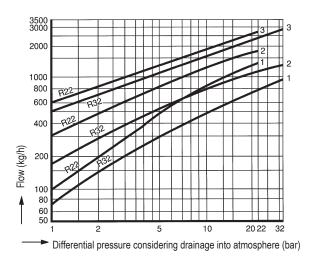
Maximum flow quantity of hot condensate at approx. 10 K below boiling temperature.

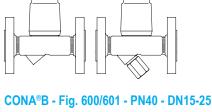
Maximum flow of sub-cooled condensate at approx. 30 K below boiling temperature (through back up of condensate).

Curve 3:

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

The condensate temperature determines the opening of the controller. Capacity is increased with the sub-cooling temperature of the condensate.





The capacity chart shows the maximum flow at factory setting. (Other factory-settings for the sub-cooling on request.)

Curve 1:

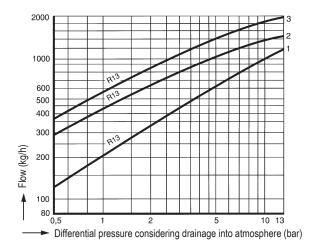
Maximum flow quantity of hot condensate at approx. 10 K below boiling temperature.

Curve 2:

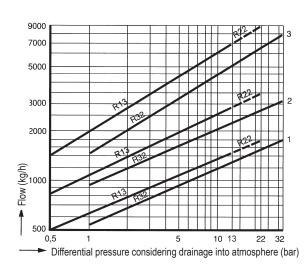
Maximum flow of sub-cooled condensate at approx. 30 K below boiling temperature (through back up of condensate).

Curve 3:

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









CONA®B - Fig. 600/601 - PN40 - DN40-50

The capacity chart shows the maximum flow at factory setting. (Other factory-settings for the sub-cooling on request.)

Curve 1:

Maximum flow quantity of hot condensate at approx. 15 K below boiling temperature.

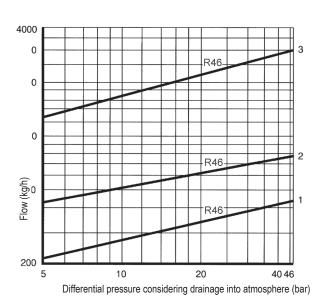
Curve 2

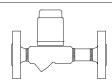
Maximum flow of sub-cooled condensate at approx. 30 K below boiling temperature (through back up of condensate).

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.





CONA®B - Fig. 600 - PN63 - DN15-25

The capacity chart shows the maximum flow at factory setting. For operating pressures below 5 bar, a correction of the factory-setting acc. to manufacturers information is recommended.)

Curve 1:

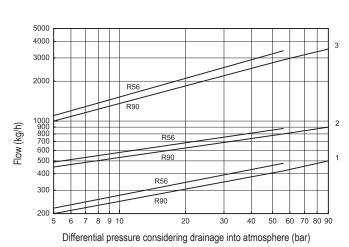
Maximum flow quantity of hot condensate at approx. 15 K below boiling temperature.

Curve 2

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

Curve 3: 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.





CONA®B - Fig. 600 - PN63 / PN100 - DN15-25

The capacity chart shows the maximum flow at factory setting. For operating pressures below 5 bar, a correction of the factory-setting acc. to manufacturers information is recommended.)

Curve 1:

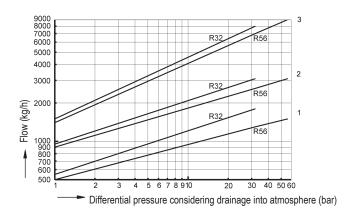
Maximum flow quantity of hot condensate at approx. 15 K below boiling temperature.

Curve 2:

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

Curve 3:

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





CONA®B - Fig. 600 - PN63 - DN40-50

The capacity chart shows the maximum flow at factory setting. For operating pressures below 5 bar, a correction of the factory-setting acc. to manufacturers information is recommended.)

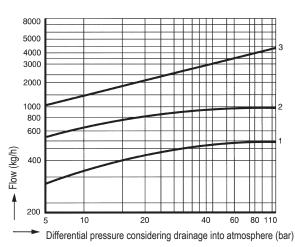
Maximum flow quantity of hot condensate at approx. 15 K below boiling temperature.

Curve 2:

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

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.





CONA®B - Fig. 600 - PN160 / PN250 - DN15-25

The capacity chart shows the maximum flow at factory setting. For operating pressures below 15 bar, a correction of the factory-setting acc. to manufacturers information is recommended.)

Curve 1:

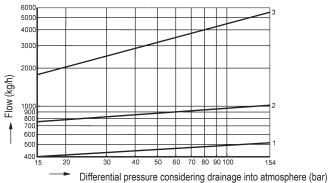
Maximum flow quantity of hot condensate at approx. 10 K below boiling temperature.

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

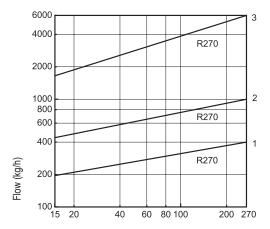
Maximum flow quantity of cold condensate at about 20°C (during start-up of a cold installation).

The condensate temperature determines the opening of the controller. Capacity is increased with the sub-cooling temperature of the condensate.

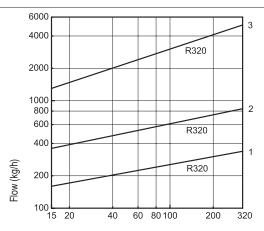
PN160



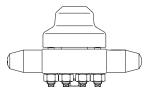
PN250



Differential pressure considering drainage into atmosphere (bar)



Differential pressure considering drainage into atmosphere (bar)



CONA®B - Fig. 600 - PN320 / PN400 / PN630 - DN15-25

The capacity chart shows the maximum flow at factory setting. For operating pressures below 15 bar, a correction of the factory-setting acc. to manufacturers information is recommended.)

Curve 1:

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

Curve 2:

Maximum flow of sub-cooled condensate at approx. 30 K below boiling temperature (through 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.







WHG

