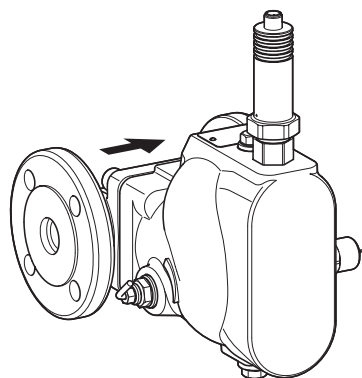
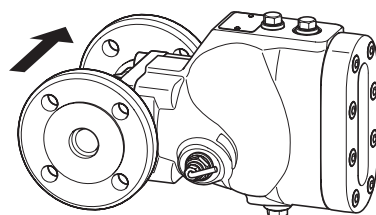


UNA 45 hl, UNA 46 hl, UNA 46A hl
Standard cover with two holes top/bottom



UNA 45 hl cover for mounting electrodes



UNA 45 hl sightglass cover

End connections

We reserve the right to design connections as welding neck flanges, socket-weld ends via transition pieces or butt-weld ends via transition pieces.

- Flange EN 1092-1 B1, PN 40
- Flange ASME B16.5, Class 150 RF
- Flange ASME B16.5, Class 300 RF
- Screwed socket ISO 228-1, G
- Screwed socket ASME B16.11, NPT
- Socket-weld end DIN EN 12760
- Socket-weld end ASME B16.11, Class 3000
- Butt-weld end via transition pieces EN 12627, welded joint geometry ISO 9692-1, code no. 1.3 (30° chamfer)
- Butt-weld end via transition pieces ASME B16.25, ASME B36.10

Ball Float Steam Trap

UNA 45, UNA 46, UNA 46A

PN 40/Class 300

DN 15, 20, 25, 40, 50, 65 / NPS ½", ¾", 1", 1½", 2", 2½"

System description

Type UNA 45, UNA 46 and UNA 46A ball float steam traps are used to discharge condensate in steam and other gases or gaseous mixtures. UNA 45, UNA 46 and UNA 46A are steam traps with a ball float and sealing unit with rolling ball. As their operation is unaffected by backpressure, the equipment is suitable for universal use.

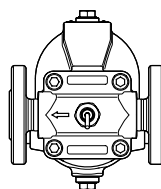
If the equipment is used outside its admissible pressure and temperature ratings, chemical and corrosive influences must be taken into consideration.

- Suitable for large condensate flowrates

Design

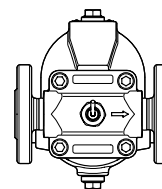
The equipment consists of a body with flange-mounted cover and a control unit.

The different equipment versions allow you to adjust the direction of flow of the equipment to suit your system. The equipment can subsequently be converted from the "h" to the "v" version and vice versa by rotating the cover and the controller.



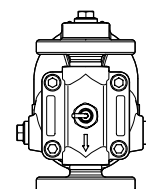
Position "hl"

Direction of flow to the left
for a horizontal pipe



Optional position "hr"

Direction of flow to the right
for a horizontal pipe



Position "v"

Downward flow for vertical
pipes

Design

The control unit is available with different venting options and orifices.

- Duplex (level-dependent float control and automatic, temperature-dependent venting by the GESTRA "5N2" membrane regulator capsule): for saturated steam systems. For models with DUPLEX control unit, the membrane regulator capsule must not be exposed to superheated steam above 5 K.
- Simplex (level-dependent float control): float control especially suitable for cold condensate and distillate, including manual vent valve.
- Internal bypass, adjustable from the outside (level-dependent float control and continuous ventilation via internal bypass/"tube"): suitable for draining rotating cylinders, for example.

Orifices

The maximum admissible differential pressure (ΔPMX) of the equipment depends on the orifice used and the type of end connection.

Orifice (AO)	ΔPMX bar (psi)	Hole diameter mm (")	
		DN 15-25	DN 40-65
2	2 (29)	8 (0.32")	15.0 (0.59")
4	4 (58)	6 (0.24")	12.5 (0.49")
8	8 (116)	4.8 (0.19")	10.0 (0.39")
13	13 (188)	4.1 (0.16")	8.5 (0.36")
22	See table of pressure and temperature ratings	3.5 (0.14")	7.0 (0.28")
32	See table of pressure and temperature ratings	3.0 (0.12")	6.5 (0.26")

Optional extras

- Cover without holes (without sealing plugs)
- Manual lifting lever for manually lifting the ball float
- DUPLEX control unit also with manual vent valve for manually venting the pipe
- Float lifting lever and manual vent valve
- Perbunan rolling ball for DN 15-25
- Internal strainer
- UNA 45 cover for mounting NRG 16-19 or NRG 16-27 measuring electrodes
- UNA 45 sightglass cover PN 16/CL 150
- Internal bypass adjustable from the outside
- Overall length for UNA 26h ASME flange for NPS ½" – 2"
- Smart ready

Ball Float Steam Trap
UNA 45, UNA 46, UNA 46A
PN 40/Class 300
DN 15, 20, 25, 40, 50, 65 /
NPS ½", ¾", 1", 1½", 2", 2½"

Fluids

The equipment is designed for the following fluids (in accordance with the EU Pressure Equipment Directive or Pressure Equipment (Safety) Regulations in the UK):

UNA 45

- Group 2 fluids

UNA 46, UNA 46A

- Group 1 fluids
- Group 2 fluids

Chemical and corrosive influences must be taken into consideration.

Use in potentially explosive atmospheres

The equipment does not have its own potential source of ignition (as per ATEX Directive). Please note the following:

During operation, avoid excessive surface temperatures caused by the fluid.

The equipment itself does not generate higher surface temperatures.

Once installed, static electricity may arise between the equipment and the connected system. If the equipment is used in potentially explosive atmospheres, the plant manufacturer or owner is responsible for discharging or preventing possible static charge.

If it is possible for fluid to escape, e.g. through actuating mechanisms or leaks in threaded joints, the plant manufacturer or owner must take this into consideration when dividing the area into zones.

Function

The control unit opens the orifice (AO) based on the fill level. This regulates the drainage rate.

With the orifice opened to maximum, the drainage rate depends on the diameter of the orifice.

Materials

Component	EN	ASME / ASTM
Body of UNA 45, UNA 46	1.0460	SA105
Body of UNA 46A (stainless steel)	1.4404	SA182-F316L
Cover, sightglass cover, cover of UNA 45 for mounting electrodes	5.3103	A395 ¹
Cover of UNA 46	1.0619	SA216-WCB
Cover of UNA 46A (stainless steel)	1.4408	SA351-CF8M
Body gasket, controller gasket	Graphite/CrNi	
Membrane regulator capsule 5N2	Hastelloy/stainless steel	
Other controller parts, sealing ring	Stainless steel	

¹ ASME/ASTM material is comparable to EN material. Pay attention to differences in chemical and physical properties.

Ball Float Steam Trap

UNA 45, UNA 46, UNA 46A

PN 40/Class 300

DN 15, 20, 25, 40, 50, 65 /

NPS ½", ¾", 1", 1½", 2", 2½"

Operating data

Equipment with DUPLEX control unit:

The maximum service temperature is equal to the saturated steam temperature +5 K.

Equipment with SIMPLEX-P control unit with

Perbunan rolling ball:

Maximum service temperature 40 °C

Equipment with measuring electrode:

NRG 16–19 or NRG 16–27,

PN 40/Class 300: maximum service temperature 238 °C at 32 bar service pressure

Models with sightglass cover:

PN 16: Maximum service temperature 240 °C at 12.3 bar service pressure

Class 150: Maximum service temperature 240 °C at 12.4 bar service pressure. If the pH value is above 9.0 and the fluid temperature exceeds 200 °C, the glass will wear down faster.

Pressure and temperature ratings

UNA 45 standard cover, cover for mounting electrodes

Flange PN40, screwed socket G, socket-weld end EN (DN 65), butt-weld end EN

p Pressure ¹	barg	40.0	35.2	33.3	30.4	27.6	25.7
T Temperature ¹	°C	-10 — 50	150	200	250	300	350
ΔPMX Maximum admissible differential pressure	barg	(2, 4, 8, 13, 22, 32)*					

¹ Ratings for strength of body/cover to EN 1092-1

* Depending on the orifice

UNA 45 standard cover, cover for mounting electrodes

Flange CL150

p Pressure ¹	barg	19.6	17.7	13.8	12.1	10.2	8.4
T Temperature ¹	°C	-29 — 38	100	200	250	300	350
ΔPMX Maximum admissible differential pressure	bar	(2, 4, 8, 13)* (19.6 bar with orifice 22, 32)					
p Pressure ¹	psig	285	260	200	170	140	125
T Temperature ¹	°F	-20—100	200	400	500	600	650
ΔPMX Maximum admissible differential pressure	psi	(29, 58, 116, 188)* (284 psi with orifice 22, 32)					

¹ Ratings for strength of body/cover to ASME B16.5

* Depending on the orifice

UNA 45 standard cover, cover for mounting electrodes

Flange CL300, screwed socket NPT, socket-weld end EN/ASME, butt-weld end ASME (DN65), butt-weld end ASME

p Pressure ¹	barg	51.1	46.6	43.8	41.9	39.8	37.6
T Temperature ¹	°C	-29—38	100	200	250	300	350
ΔPMX Maximum admissible differential pressure	bar	(2, 4, 8, 13, 22, 32)*					
p Pressure ¹	psig	740	680	635	605	570	550
T Temperature ¹	°F	-20—100	200	400	500	600	650
ΔPMX Maximum admissible differential pressure	psi	(29, 58, 116, 188, 320, 465)*					

¹ Ratings for strength of body/cover to ASME B16.5

* Depending on the orifice

Sightglass cover of UNA 45

Flange PN16, screwed socket G, socket-weld end EN (DN 65), butt-weld end EN

p Pressure ¹	barg	16	16	14.8	14	13.3	12.3 ²
T Temperature ¹	°C	-10	50	100	150	200	240 ²
ΔPMX Maximum admissible differential pressure	barg	(2, 4, 8, 13)* (16 bar with orifice 22, 32)					

¹ Ratings for strength of body/cover to EN 1092-1

² Interpolated values due to the limiting sightglass cover

* Depending on the orifice

Ball Float Steam Trap

UNA 45, UNA 46, UNA 46A

PN 40/Class 300

DN 15, 20, 25, 40, 50, 65 /

NPS ½", ¾", 1", 1½", 2", 2½"

Operating data

Equipment with DUPLEX control unit:
The maximum service temperature is equal to the saturated steam temperature +5 K.

Equipment with SIMPLEX-P control unit with
Perbunan rolling ball:
Maximum service temperature 40 °C

Models with sightglass cover:

PN 16: Maximum service temperature 240 °C at 12.3 bar service pressure

Class 150: Maximum service temperature 240 °C at 12.4 bar service pressure. If the pH value is above 9.0 and the fluid temperature exceeds 200 °C, the glass will wear down faster.

Pressure and temperature ratings

Sightglass cover of UNA 45
Flange CL150, screwed socket NPT, socket-weld end EN/ASME, butt-weld end ASME (DN65), butt-weld end ASME

p Pressure ¹	barg	19.6	19.6	17.7	15.8	13.8	12.4 ²
T Temperature ¹	°C	-29	38	100	150	200	240 ²
ΔPMX Maximum admissible differential pressure	bar	(2, 4, 8, 13)* (19.6 bar with orifice 22, 32)					
p Pressure ¹	psig	285	285	260	230	200	180 ²
T Temperature ¹	°F	-20	100	200	300	400	465 ²
ΔPMX Maximum admissible differential pressure	psi	(29, 58, 116, 188)* (284 psi with orifice 22, 32)					

¹ Ratings for strength of body/cover to ASME B16.5
² Interpolated values due to the limiting sightglass cover
* Depending on the orifice

UNA 46 (carbon steel)
Flange PN40, screwed socket G, socket-weld end EN (DN 65), butt-weld end EN

p Pressure ¹	barg	40.0	33.3	27.6	25.7	23.8	17.1
T Temperature ¹	°C	-10—50	200	300	350	400	420
ΔPMX Maximum admissible differential pressure	barg	(2, 4, 8, 13, 22, 32)*					

¹ Ratings for strength of body/cover to EN 1092-1
* Depending on the orifice

UNA 46 (carbon steel)
Flange CL150

p Pressure ¹	barg	19.6	17.7	13.8	10.2	8.4	5.5
T Temperature ¹	°C	-29—38	100	200	300	350	425
ΔPMX Maximum admissible differential pressure	bar	(2, 4, 8, 13)* (19.6 bar with orifice 22, 32)					
p Pressure ¹	psig	285	260	200	140	125	80
T Temperature ¹	°F	-20—100	200	400	600	650	800
ΔPMX Maximum admissible differential pressure	psi	(29, 58, 116, 188)* (284 psi with orifice 22, 32)					

¹ Ratings for strength of body/cover to ASME B16.5
* Depending on the orifice

UNA 46 (carbon steel)
Flange CL300, screwed socket NPT, socket-weld end EN/ASME, butt-weld end ASME (DN65), butt-weld end ASME

p Pressure ¹	barg	51.1	46.6	43.8	39.8	37.6	28.8
T Temperature ¹	°C	-29—38	100	200	300	350	425
ΔPMX Maximum admissible differential pressure	bar	(2, 4, 8, 13, 22, 32)*					
p Pressure ¹	psig	740	680	635	570	550	410
T Temperature ¹	°F	-20—100	200	400	600	650	800
ΔPMX Maximum admissible differential pressure	psi	(29, 58, 116, 188, 319, 464)*					

¹ Ratings for strength of body/cover to ASME B16.5
* Depending on the orifice

Ball Float Steam Trap
UNA 45, UNA 46, UNA 46A
PN 40/Class 300
DN 15, 20, 25, 40, 50, 65 /
NPS ½", ¾", 1", 1½", 2", 2½"

Operating data

Equipment with DUPLEX control unit:
The maximum service temperature is equal to the saturated steam temperature +5 K.

Equipment with SIMPLEX-P control unit with
Perbunan rolling ball:
Maximum service temperature 40 °C

Pressure and temperature ratings

UNA 46A (stainless steel)
Flange PN40, screwed socket G, socket-weld end EN (DN 65), butt-weld end EN

p Pressure ¹	barg	40.0	37.9	31.8	27.6	25.7	25.0
T Temperature ¹	°C	-10—50	100	200	300	400 ²	450 ²
ΔPMX Maximum admissible differential pressure	barg	(2, 4, 8, 13, 22, 32)*					

- ¹ Ratings for strength of body/cover to EN 1092-1
² If the service temperature exceeds 300 °C, intercrystalline corrosion may occur. Do not expose the equipment to service temperatures above 300 °C unless intercrystalline corrosion can be ruled out.
* Depending on the orifice

UNA 46A (stainless steel)
Flange CL150

p Pressure ¹	barg	15.9	13.3	11.2	10	6.5	5.5
T Temperature ¹	°C	-29—38	100	200	300	400 ²	425 ²
ΔPMX Maximum admissible differential pressure	bar	(2, 4, 8, 13)* (15.9 bar with orifice 22, 32)					
p Pressure ¹	psig	230	195	160	140	95	80
T Temperature ¹	°F	-20—100	200	400	600 ²	750 ²	800 ²
ΔPMX Maximum admissible differential pressure	psi	(29, 58, 116, 188)* (230 psi with orifice 22, 32)					

- ¹ Ratings for strength of body/cover to ASME B16.5
² If the service temperature exceeds 300 °C, intercrystalline corrosion may occur. Do not expose the equipment to service temperatures above 300 °C unless intercrystalline corrosion can be ruled out.
* Depending on the orifice

UNA 46A (stainless steel)
Flange CL300, screwed socket NPT, socket-weld end EN/ASME, butt-weld end ASME (DN65), butt-weld end ASME

p Pressure ¹	barg	41.4	34.8	29.2	26.1	24.3	23.9
T Temperature ¹	°C	-29—38	100	200	300	400 ²	425 ²
ΔPMX Maximum admissible differential pressure	bar	(2, 4, 8, 13, 22, 32)*					
p Pressure ¹	psig	600	510	420	370	355	345
T Temperature ¹	°F	-20—100	200	400	600 ²	750 ²	800 ²
ΔPMX Maximum admissible differential pressure	psi	(29, 58, 116, 188, 320, 465)*					

- ¹ Ratings for strength of body/cover to ASME B16.5
² If the service temperature exceeds 300 °C, intercrystalline corrosion may occur. Do not expose the equipment to service temperatures above 300 °C unless intercrystalline corrosion can be ruled out.
* Depending on the orifice

Ball Float Steam Trap
UNA 45, UNA 46, UNA 46A
PN 40/Class 300
DN 15, 20, 25, 40, 50, 65 /
NPS ½", ¾", 1", 1½", 2", 2½"

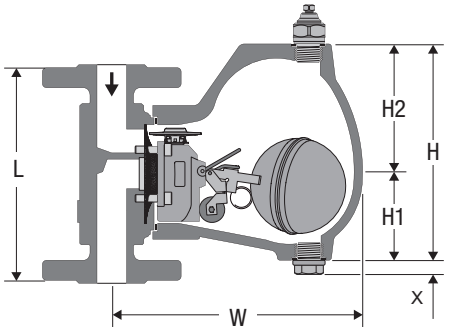
No.	Designation
2	Body
3	Body gasket
4	SIMPLEX control unit
13	Manual vent valve
27	Controller gasket

Control units

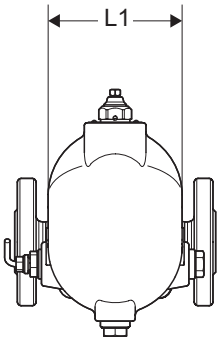
No.	Designation
4	SIMPLEX control unit
18	DUPLEX control unit
28	Membrane regulator capsule
19	SIMPLEX-P control unit with Perbunan rolling ball
20	DUPLEX control unit with internal bypass adjustable from the outside

Optional extras

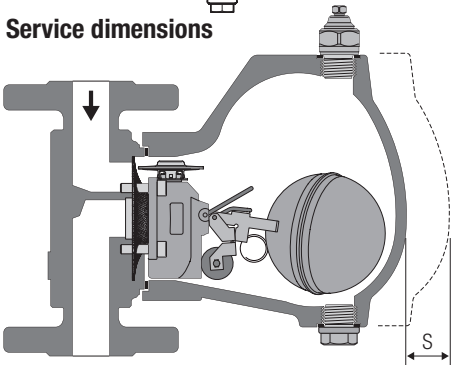
No.	Designation
13	Manual vent valve for DUPLEX control unit
16	Manual float lifting lever



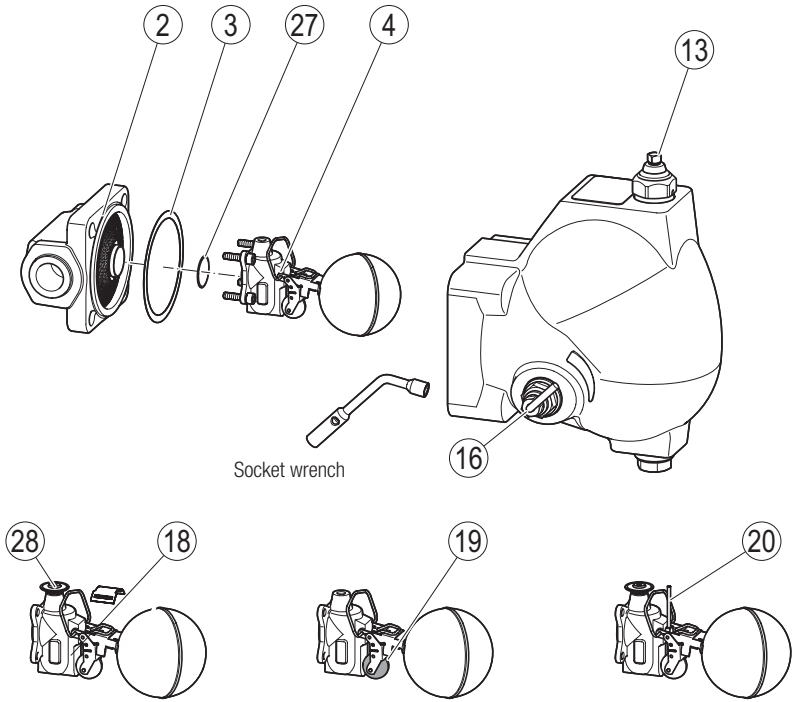
UNA 45 v, UNA 46 v, UNA 46A v
DUPLEX control unit
Flange



Service dimensions



Equipment overview



Dimensions and weights

Equipment with flange PN10–40

Nominal size		DN 15	DN 20	DN 25	DN 40	DN 50	DN 65
		(½")	(¾")	(1")	(1½")	(2")	(2½")
L	mm (")	150 (5.9")		160 (6.3")	230 (9.1")		290 (11.4")
W	mm (")	171 (6.7") 213 (8.4") 186 (7.3")			287 (11.3") 333 (13.1") 306 (12.0")		
Standard cover							
Sightglass cover							
Cover for mount- ing electrodes							
H1	mm (")	60 (2.4")			107 (4.2")		
H2	mm (")	90 (3.5") ¹			151 (5.9") ¹		
H	mm (")	150 (5.9") ¹			258 (10.2") ¹		
L1	mm (")	110 (4.3") ²			170 (6.7") ²		
X	mm (")	13 (0.5")					
S	mm (")	150 (5.9")			240 (9.5")		
Weight	kg						
Standard cover		6.8	7.3	7.8	24.8	26.2	28.6
Sightglass cover		9.7	10.2	10.7	30.5	31.9	34.3
Cover for mount- ing electrodes		8.5	9.0	9.5	28.0	29.4	31.8
Weight	lb						
Standard cover		15.0	16.1	17.2	54.7	57.8	63.1
Sightglass cover		21.4	22.5	23.6	67.2	70.3	75.6
Cover for mount- ing electrodes		18.7	19.8	20.9	61.7	64.8	70.1

¹ Plus 25 mm (1") if fitted with manual vent valve.

² Plus 35 mm (1.4") if fitted with float lifting lever or bypass.

Equipment with attached socket wrench requires additional clearance of 100 mm (3.9").

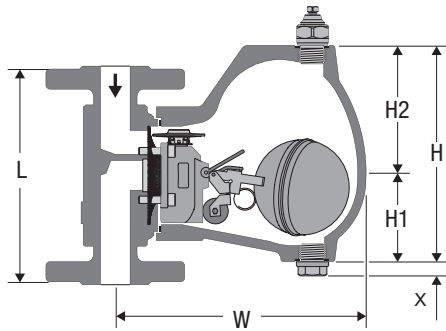
Ball Float Steam Trap

UNA 45, UNA 46, UNA 46A

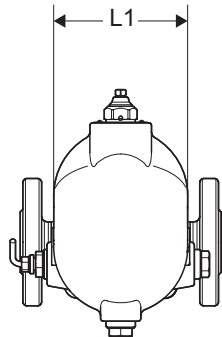
PN 40/Class 300

DN 15, 20, 25, 40, 50, 65 /

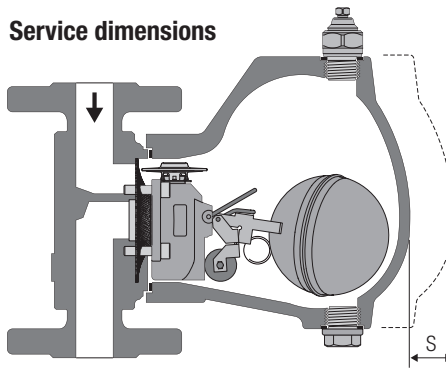
NPS ½", ¾", 1", 1½", 2", 2½"



UNA 45 v, UNA 46 v, UNA 46A v
DUPLEX control unit
Flange



Service dimensions



Dimensions and weights

Equipment with flange CL150/300

Nominal size		DN 15	DN 20	DN 25	DN 40	DN 50	DN 65
		(½")	(¾")	(1")	(1½")	(2")	(2½")
L	mm (")	150 (5.9")		160 (6.3")	241 (9.5")	267 (10.5")	292 (11.5")
W	mm (")	171 (6.7") 213 (8.4") 186 (7.3")			287 (11.3") 333 (13.1") 306 (12.0")		
Standard cover							
Sightglass cover							
Cover for mounting electrodes							
H1	mm (")	60 (2.4")			107 (4.2")		
H2	mm (")	90 (3.5") ¹			151 (5.9") ¹		
H	mm (")	150 (5.9") ¹			258 (10.2") ¹		
L1	mm (")	110 (4.3") ²			170 (6.7") ²		
X	mm (")	13 (0.5")					
S	mm (")	150 (5.9")			240 (9.5")		
Weight of CL150							
Weight	kg						
Standard cover		6.2	6.6	7.2	23.8	25.9	29.4
Sightglass cover		9.1	9.5	10.1	29.5	31.6	35.1
Cover for mounting electrodes		7.9	8.3	8.9	27.0	29.1	32.6
Weight	lb						
Standard cover		13.7	14.6	15.9	52.5	57.1	64.8
Sightglass cover		20.1	20.9	22.3	65.0	69.7	77.4
Cover for mounting electrodes		17.4	18.3	19.6	56.2	60.8	68.6
Weight of CL300							
Weight	kg						
Standard cover		6.6	7.4	8.2	26.0	27.5	31.1
Sightglass cover		9.5	10.3	11.1	31.7	33.2	36.8
Cover for mounting electrodes		8.3	9.1	9.9	29.2	30.7	34.3
Weight	lb						
Standard cover		14.6	16.3	18.1	57.3	60.6	68.6
Sightglass cover		20.9	22.7	24.5	69.9	73.2	81.1
Cover for mounting electrodes		18.3	20.1	21.8	64.4	67.7	75.6

¹ Plus 25 mm (1") if fitted with manual vent valve.

² Plus 35 mm (1.4") if fitted with float lifting lever or bypass.

Equipment with attached socket wrench requires additional clearance of 100 mm (3.9").

Equipment with socket-weld end, socket-weld end via transition pieces

Nominal size		DN 15	DN 20	DN 25	DN 40	DN 50	DN 65
		(½")	(¾")	(1")	(1½")	(2")	(2½")
L	mm (")	95 (3.7")			165 (6.5")	267 (10.5")	292 (11.5")
		(socket-weld end)			(socket-weld end via transition pieces EN, ASME)		
W	mm (")						
Standard cover		171 (6.7")			287 (11.3")		
Sightglass cover		186 (7.3")			306 (12.0")		
Cover for mounting electrodes		213 (8.4")			333 (13.1")		
H1	mm (")	60 (2.4")			107 (4.2")		
H2	mm (")	90 (3.5") ¹			151 (5.9") ¹		
H	mm (")	150 (5.9") ¹			258 (10.2") ¹		
L1	mm (")	110 (4.3") ²			170 (6.7") ²		
X	mm (")	13 (0.5")					
S	mm (")	150 (5.9")			240 (9.5")		
Weight	kg						
Standard cover		5.3	5.2	21.2	21.9	24.6	28.6
Sightglass cover		8.2	8.1	26.9	27.6	30.3	34.3
Cover for mounting electrodes		7.0	6.9	24.4	25.1	27.8	31.8
Weight	lb						
Standard cover		11.7	11.5	46.7	48.3	54.5	63.1
Sightglass cover		18.1	17.9	59.3	60.8	67.0	75.6
Cover for mounting electrodes		15.4	15.2	53.8	55.3	61.5	70.1

¹ Plus 25 mm (1") if fitted with manual vent valve.

² Plus 35 mm (1.4") if fitted with float lifting lever or bypass.

Equipment with attached socket wrench requires additional clearance of 100 mm (3.9").

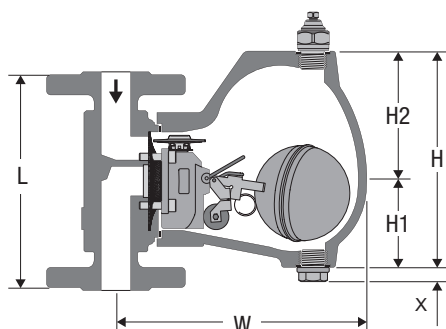
Ball Float Steam Trap

UNA 45, UNA 46, UNA 46A

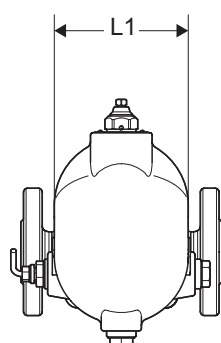
PN 40/Class 300

DN 15, 20, 25, 40, 50, 65 /

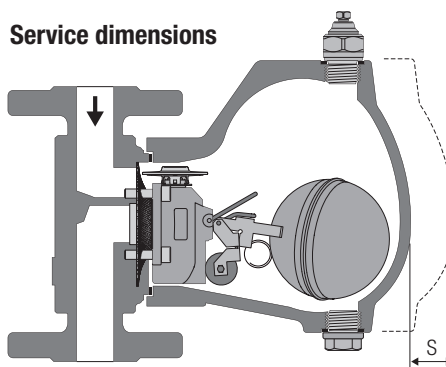
NPS ½", ¾", 1", 1½", 2", 2½"



UNA 45 v, UNA 46 v, UNA 46A v
DUPLEX control unit
Flange



Service dimensions



Dimensions and weights

Equipment with screwed socket

Nominal size		DN 15	DN 20	DN 25	DN 40	DN 50	DN 65
		(½")	(¾")	(1")	(1½")	(2")	(2½")
L	mm (")	95 (3.7")			165 (6.5")		
W	mm (")	171 (6.7") 213 (8.4") 186 (7.3")			287 (11.3") 333 (13.1") 306 (12.0")		
Standard cover							
Sightglass cover							
Cover for mounting electrodes							
H1	mm (")	60 (2.4")			107 (4.2")		
H2	mm (")	90 (3.5") ¹			151 (5.9") ¹		
H	mm (")	150 (5.9") ¹			258 (10.2") ¹		
L1	mm (")	110 (4.3") ²			170 (6.7") ²		
X	mm (")	13 (0.5")					
S	mm (")	150 (5.9")			240 (9.5")		
Weight	kg						
Standard cover		5.3	5.2	5.1	21.2	20.9	29.4
Sightglass cover		8.2	8.1	8.0	26.9	26.6	35.1
Cover for mounting electrodes		7.0	6.9	6.8	24.4	24.1	32.6
Weight	lb						
Standard cover		11.7	11.5	11.2	46.7	46.1	64.8
Sightglass cover		18.1	17.9	17.6	59.3	58.6	77.4
Cover for mounting electrodes		15.4	15.2	15.0	53.8	53.1	68.6

¹ Plus 25 mm (1") if fitted with manual vent valve.

² Plus 35 mm (1.4") if fitted with float lifting lever or bypass.

Equipment with attached socket wrench requires additional clearance of 100 mm (3.9").

Equipment with butt-weld end via transition pieces

Nominal size	DN 15	DN 20	DN 25	DN 40	DN 50	DN 65
	(½")	(¾")	(1")	(1½")	(2")	(2½")
L mm (")	200 (7.9")			241 (9.5")	267 (10.5")	292 (11.5")
W mm (")	171 (6.7") 213 (8.4") 186 (7.3")			287 (11.3") 333 (13.1") 306 (12.0")		
Standard cover						
Sightglass cover						
Cover for mounting electrodes						
H1 mm (")	60 (2.4")			107 (4.2")		
H2 mm (")	90 (3.5") ¹			151 (5.9") ¹		
H mm (")	150 (5.9") ¹			258 (10.2") ¹		
L1 mm (")	110 (4.3") ²			170 (6.7") ²		
X mm (")	13 (0.5")					
S mm (")	150 (5.9")			240 (9.5")		
Weight kg						
Standard cover	5.6	5.7	21.3	21.6	22.5	28.6
Sightglass cover	8.5	8.6	27.0	27.3	28.2	34.3
Cover for mounting electrodes	7.3	7.4	24.5	24.8	25.7	31.8
Weight lb						
Standard cover	12.3	12.6	47.0	47.6	49.6	63.1
Sightglass cover	18.7	19.0	59.5	60.2	62.2	75.6
Cover for mounting electrodes	16.1	16.3	54.0	54.7	56.7	70.1

¹ Plus 25 mm (1") if fitted with manual vent valve.

² Plus 35 mm (1.4") if fitted with float lifting lever or bypass.

Equipment with attached socket wrench requires additional clearance of 100 mm (3.9").

Ball Float Steam Trap

UNA 45, UNA 46, UNA 46A

PN 40/Class 300

DN 15, 20, 25, 40, 50, 65 /

NPS ½", ¾", 1", 1½", 2", 2½"

Capacity chart

The chart shows the maximum capacities for hot condensate for the various orifices (AO).

The capacities are dependent on the differential pressure (working pressure).

The differential pressure is the difference between the inlet and outlet pressures and depends among other things on the run of the condensate line. If the condensate downstream of the trap is lifted, the differential pressure (working pressure) is reduced by approximately 1 bar for 7 m (or 2 psi for 3 feet) lift.

The maximum admissible differential pressure is dependent on the cross-sectional flow area of the orifice and the density of the liquid being discharged.

UNA 45, UNA 46 and UNA 46A steam traps discharge the hot condensate volumes stated here with virtually no banking up.

The cold water throughput is the flowrate multiplied by factor F.

How to order

Ball Float Steam Trap

UNA 45 (steel, spheroidal graphite iron)

Cover design.....

UNA 46 (carbon steel)

UNA 46A (stainless steel)

DN (15, 20, 25, 40, 50, 65)

NPS ½", ¾", 1", 1½", 2", 2½".....

End connection.....

Control unit.....

Orifice.....

Information on nominal pressure, max. admissible overpressure, backpressure, service temperature, fluid, location of use.

Inspection and certification

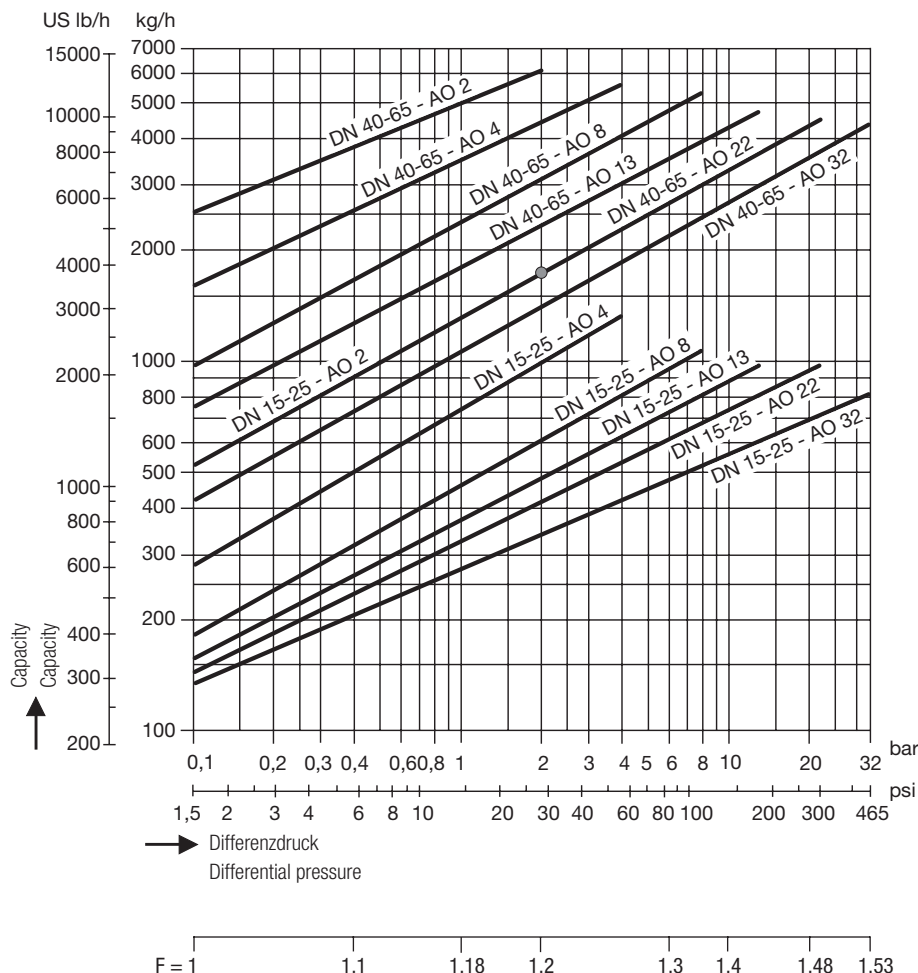
An inspection certificate to EN 10204 can be provided as verification of material and construction tests. All inspection requirements must be included in the request for a quote or in the order. Once a product has been delivered, inspection certificates can no longer be issued. The standard test scope and costs of the above-mentioned test certificates can be found in our price list "Test and Inspection Charges for Standard Equipment". If you require a different inspection scope, please request a separate quote.

Directives and standards

You can find details on the conformity of the equipment and the relevant standards and directives, where applicable, in the Declaration of Conformity and associated certificates or approvals.

Please note our general terms of business.

Capacity chart



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