

GESTRA Steam Systems

Product Range A1

Steam Traps

UNA 23, UNA 25, UNA 26

UNA 23

UNA 25

UNA 26

Description

Ball float traps with rolling ball valve and Duplex control (thermostatic bellows for automatic air-venting) for draining large condensate flowrates from steam systems.

With Simplex control (without bellows) and hand vent valve for the discharge of cold condensate or distillates and for draining superheated steam, gas or compressed-air lines.

UNA 2...h for horizontal lines

UNA 2...v for vertical lines.

Body with flanged cover. After removing the cover the control unit is easily accessible without removing the trap from the line.

On request:

Float lifting lever

Sightglass cover (only for UNA 23, PN 16)

Hand vent valve for traps with Duplex control.

Pressure / Temperature Rating

	UNA 23 PN 16 GG-25		UNA 25 PN 40 GGG-40.3			UNA 26 PN 40 DN 15-25 C 22.8			UNA 26 PN 40 DN 40/50 GS-C25		
Max. service pressure PMA [barg]	16	13	38	32	25	40	32	21	33	26	21
[psig]	232	189	550	465	360	580	464	305	479	377	305
Max. temperature TMA [°C]	120	300	120	250	350	120	250	400	120	250	400
[°F]	248	572	248	482	662	248	482	752	248	482	752
Max. differential pressure ΔPMX (inlet pressure minus outlet pressure) [barg]	13 (8, 4, or 2)		32 (22, 13, 8, 4, or 2)								
Max. temperature for design with sight-glass cover*)	240 °C (464 °F)										

*) Please note: pH values above 9 and temperatures exceeding 200 °C (392 °F) may reduce the life of the sightglass.

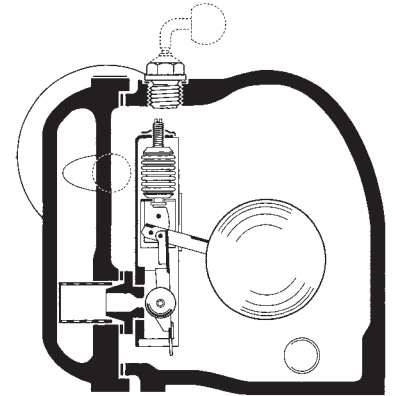
Connections

- UNA 23 h and UNA 23 v
Flanges to EN 1092-2, form B
- UNA 25 h and UNA 25 v
Flanges to DIN 2545, form C
- UNA 26 h and 26 v
Flanges to DIN 2545, form C
- UNA 26 h
Flanges to ASME B 16.5 150 RF or 300 RF
Socket-weld ends
Butt-weld ends
Screwed sockets to BSP or NPT

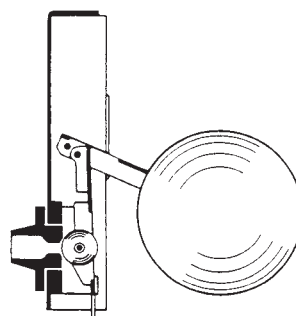
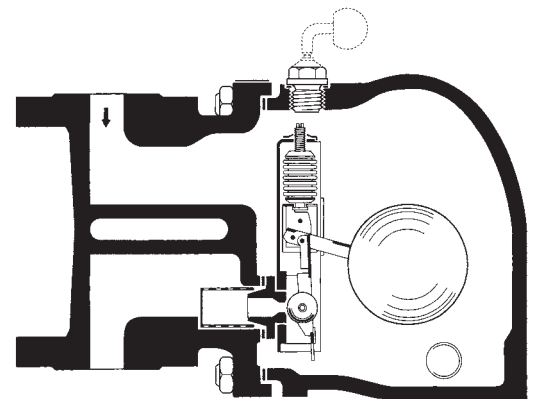


The products meet the requirement of the EC Pressure Equipment Directive (PED) No. 97/23. DN 40/50 with CE marking. DN 15-25 is excluded from the scope of the PED and **not entitled** to bear the marking.

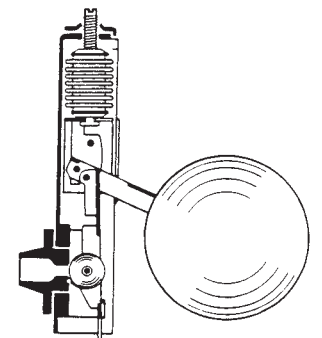
UNA 23 h, UNA 25 h, UNA 26 h (horizontal)
for horizontal installation



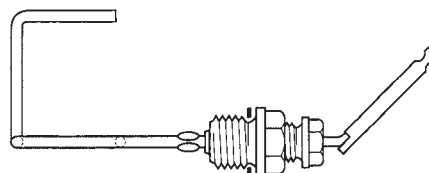
UNA 23 v, UNA 25 v, UNA 26 v (vertical)
for vertical installation



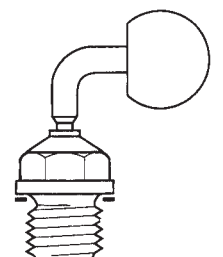
Control unit Simplex
(without thermostatic bellows)



Control unit Duplex
(with thermostatic bellows for automatic air-venting)



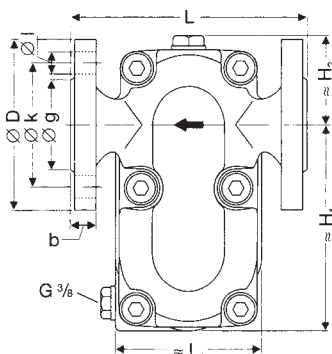
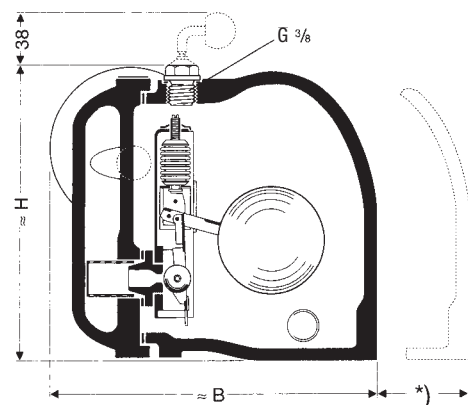
Float lifting lever
(on request)



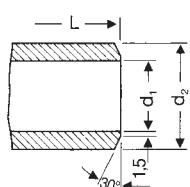
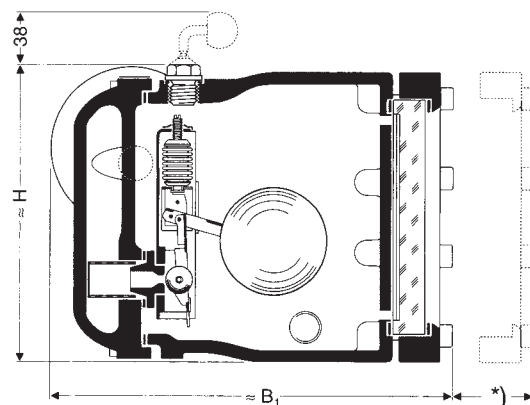
Hand vent valve
(standard for Simplex design)

Dimensions and Weights UNA 23 h, UNA 25 h, UNA 26 h

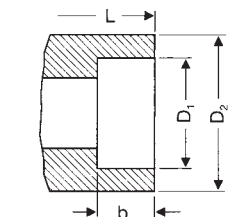
with closed cover



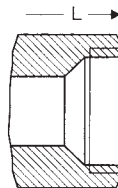
with sightglass cover (only UNA 23, PN 16)



Butt-weld ends (UNA 26 h)



Socket-weld ends (UNA 26 h)



Screwed sockets (UNA 26 h)

*) Space required for opening trap
DN 15 – 25 ≈ 130
DN 40 u. 50 ≈ 200

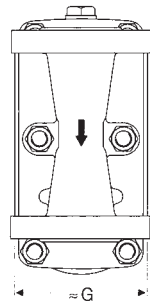
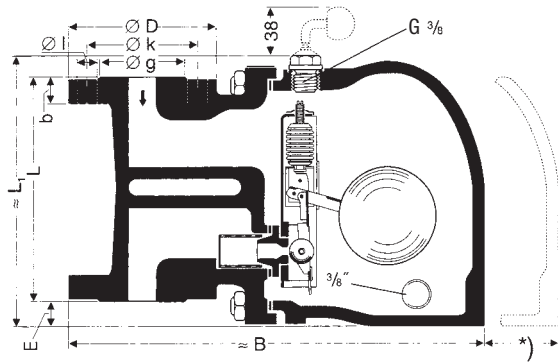
Nominal sizes DN	[mm]	15	20	25	40	50	
	[inch]	½	¾	1	1½	2	
Overall length [mm] all types flanged to DIN	L ¹⁾	150	150	160	230	230	
	flanged to ASME L ²⁾	210	210	230	320	320	
	UNA 26 h	Butt-weld ends L ³⁾	200	200	200	230	230
		Socket-weld ends L	200	200	200	230	230
		Screwed sockets L	200	200	200	255	255
Dimensions [mm]	L ₁	94	94	94	154	154	
	B	187	192	197	294	302	
	B ₁	232	237	242	341	349	
	H	184	184	184	318	318	
	H ₁	126	126	126	219	219	
	H ₂	58	58	58	99	99	
	UNA 26 h	Socket-weld end	D ₂	35	40	45	62
D ₁			22	27.5	34.3	49	61.5
Butt-weld ends		b	10	13	13	13	16
		d ₂ ³⁾	22	28	34	54	67
		d ₁	17	22	28.5	43	54
		for pipe	21.3 x 2	26.9 x 2.3	33.7 x 2.6	48.3 x 2.6	60.3 x 3.2
Weight	with closed cover	9	9.5	10	29	30	
	UNA 23 h [kg] with sightglass cover	11	11.5	12	34.5	35.5	
Weight UNA 25 h, UNA 26 h		[kg]	9.5	10	10.5	30	31

1) Face-to-face dimensions to DIN EN 26554 (ISO 6554) series 1
 2) Face-to-face dimensions to DIN EN 26554 (ISO 6554) series 3
 3) Butt-weld ends to DIN EN 12627-R1, weld joint geometry to DIN 2559, code number 22

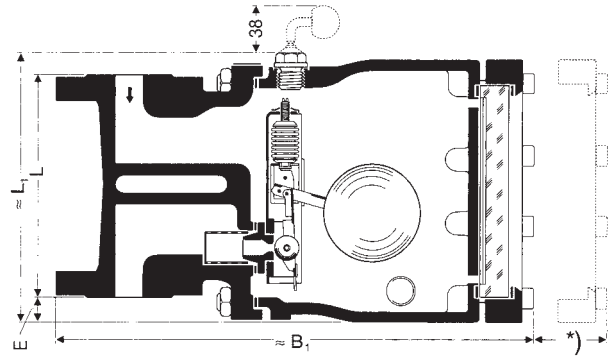
Flange dimensions in [mm] to DIN 2545/EN 1092-2		DN	15	20	25	40	50
UNA 23 h and v UNA 25/26 h and v	D	95	105	115	150	165	
	b	14	16	16	18	20	
	b	16	18	18	18	20	
	k	65	75	85	110	125	
	g	45	58	68	88	102	
	l	14	14	14	18	18	
Number of bolts			4	4	4	4	4

Dimensions and Weights UNA 23 v, UNA 25 v, UNA 26 v

with closed cover



with sightglass cover (only UNA 23, PN 16)



Nominal sizes DN	[mm]	15	20	25	40	50
	[inch]	½	¾	1	1½	2
Overall lengths in [mm] with flanges to DIN L ¹⁾		150	150	160	230	230
Dimensions in [mm]	L ₁	184	184	184	318	318
	B	267	272	227	403	411
	B ₁	310	315	320	451	459
	E	18	18	13	42	42
	G	94	94	94	154	154
Weight UNA 23 v [kg]	with closed cover	8.5	9	10	30	31
	with sightglass cover	10.5	11	12	35.5	36.5
Weight UNA 25 v, UNA 26 v	[kg]	9	9.5	10.5	31	32

¹⁾ Face-to-face dimensions to DIN EN 26554 (ISO 6554), series 1

Materials		New DIN designation		Old DIN designation		ASTM equivalent ⁴⁾	
		Short designation	Number	Short designation	Number		
Body	UNA 23	EN-GJL-250	EN-JL 1040	GG-25	0.6025	A 126 Cl.B	
	UNA 25	EN-GJS-400-18-LT	EN-JS 1025	GGG-40.3	0.7043	FGS 370-17	
	UNA 26 h	DN 15-25		C 22.8	1.0460	A 105	
	UNA 26 h	DN 40 + 50	GP 240 GH	1.0619	GS-C 25	1.0619	A 216 WCB
	UNA 26 v		GP 240 GH	1.0619	GS-C 25	1.0619	A 216 WCB
Cover	UNA 23	EN-GJL-250	EN-JL 1040	GG-25	0.0625	A 126 Cl.B	
	UNA 25	EN-GJS-400-18-LT	EN-JS 1025	GGG-40.3	0.7043	FGS 370-17	
	UNA 26		GP 240 GH	GS-C 25	1.0619	A 216 WCB	
Bolts		DN 15-25 (h)		24 CrMo 5	1.7258	A 193 B 16	
		DN 15-25 (v)		21 CrMoV 57	1.7709	A 193 B 16	
	UNA 23	DN 40 + 50		5.6-2			
	UNA 25, 26	DN 40 + 50		21 CrMoV 57	1.7709	A 193 B 16	
Nuts		DN 15-25 (v)		24 CrMo 5	1.7258	A 193 B 16	
	UNA 23	DN 40 + 50		5.2			
	UNA 25, 26	DN 40 + 50		24 CrMo 5	1.7258	A 193 B 16	
Seat				X 8CrNiS 18-9	1.4305	AISI 303	
Ball valve				X 6CrNiMoTi 17-12-2	1.4571	AISI 316 Ti	
Ball float				X 6CrNiMoTi 17-12-2	1.4571	AISI 316 Ti	
Bellows				X 6CrNiTi 18-10	1.4541	A 182 F 321	
Other internals				X 6CrNi 18-10	1.4301	A 182 F 304	
Body and seat gasket				Graphite-CrNi			

⁴⁾ Physical and chemical properties comply with DIN grade. ASTM nearest equivalent grade is stated for guidance only.

Steam Traps UNA 23, UNA 25, UNA 26

Capacity Chart

The chart shows the maximum capacities of hot condensate for the range of orifices and sizes available for the float-controlled traps. The cold water capacities are: Capacity of hot condensate multiplied by factor F.

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

The maximum admissible differential pressure is dependent on the cross-sectional area of the orifice and the density of the fluid to be discharged.

The standard designs of the traps are available for the following maximum differential pressures:

- UNA 23: up to 2, 4, 8 or 13 bar.
- UNA 25/26: up to 2, 4, 8, 13, 22 or 32 bar.

Orifice	DN 15-25 mm (½"-1")	
	k _{vs} -value [m³/h]	Ø of bore [mm]
Orifice 2	1.5	8
Orifice 4	0.9	6
Orifice 8	0.58	4.8
Orifice 13	0.44	4.1
Orifice 22	0.38	3.5
Orifice 32	0.31	3
DN 40 + 50 mm (1½" + 2")		
Orifice 2	6	15
Orifice 4	4.1	12.5
Orifice 8	3.2	10
Orifice 13	2.1	8.5
Orifice 22	1.5	7
Orifice 32	1.1	6.5

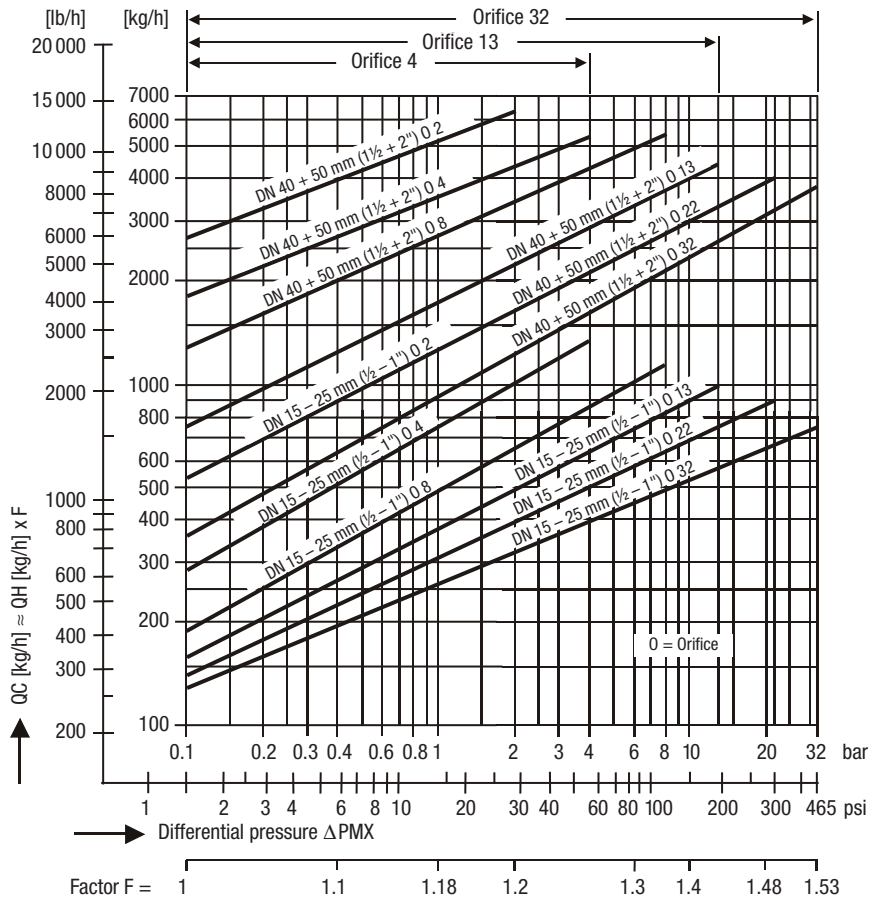
When ordering please state:

Inlet pressure, outlet pressure, quantity of condensate to be discharged, design, size and desired orifice, position of trap and details of application.

The following test certificates can be issued on request, at extra cost:

In accordance with EN 10204-2.2 for UNA 23. For UNA 25 and UNA 26 also 3.1A, 3.1B and 3.1C. All inspection requirements have to be stated with the order. After supply of the equipment certification cannot be established. For test and inspection charges please consult us.

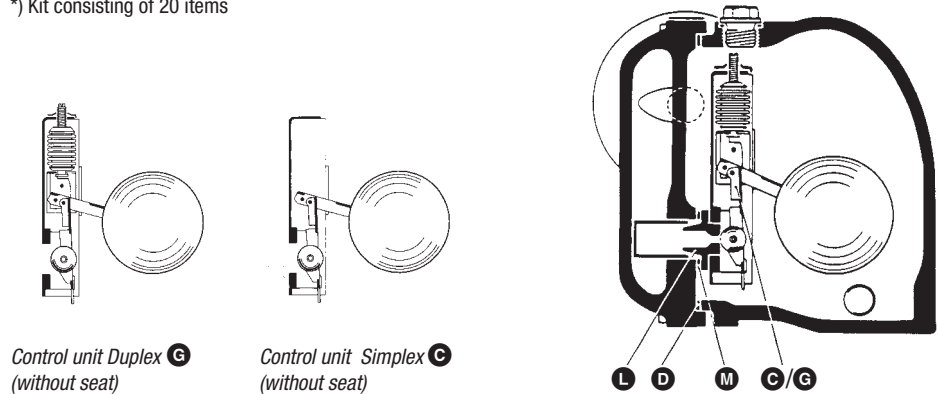
Supply in accordance with our general terms of business.



Spare Parts

Item no.	Designation	Ref. no.		
		DN 15-25	DN 40 + 50	
M	Seat gasket*) DN 15-25: 18.5 x 35 x 1, DN 40 + 50: 27 x 40 x 1	560 489	560 490	
C	Control unit Simplex including seat gasket M two socket-head screws K and cover gasket D, without seat	560 079	560 094	
G	Control unit Duplex up to 13 barg (185 psig), otherwise as above	560 080	560 095	
G	Control unit Duplex above 13 barg (185 psig), otherwise as above	560 081	560 096	
D	Cover gasket*)	560 491	560 492	
L	Seat including gasket M and two socket-head screws K	Orifice 32	560 045	560 051
		Orifice 22	560 044	560 050
		Orifice 13	560 043	560 049
		Orifice 8	560 042	560 048
		Orifice 4	560 041	560 047
		Orifice 2	560 040	560 046

*) Kit consisting of 20 items



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