

# Float Trap UNA • PN 25 DN 80 and 100 mm (3 and 4")

## Description

Float trap with slide valve closing mechanism for draining condensate from steam systems and for the discharge of other cold condensates or distillates.

The slide valve is operated by the ball float as a function of the condensate level in the trap, i.e. the cross-sectional area depends on the amount of condensate formed.

Body with flanged cover. The control unit is connected to the cover. After removal of the cover the control unit is easily accessible without removing the trap from the line.

Standard design with vent valve and lifting lever permitting purging of the trap during operation.

Pressure / Temperature Rating					
Max. service pressure	[barg]	25	22	17	13
	[psig]	360	320	245	185
Related temperature	[°C]	120	200	300	400
	[°F]	248	392	572	752
Max. differential pressure (inlet pressure minus outlet pressure)		22 bar (320 psi)			(16; 12; 8; 5; 3.5; 2)

## Connections

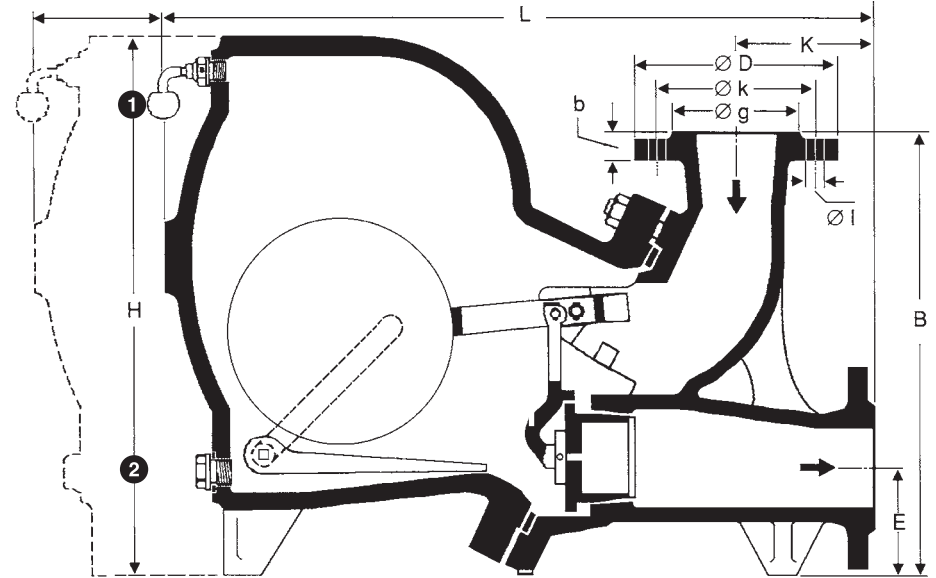
Flanges: DIN (BS 4504) PN 25.

Flanges to ASME 150 on request at extra cost.

## Space required for opening trap

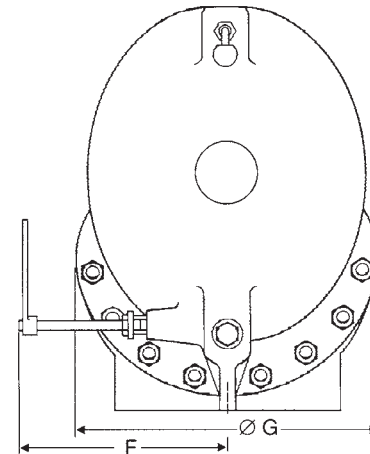
DN 80 mm = 470 mm

DN 100 mm = 550 mm



1 DIN / ISO 228 3/8"

2 DIN / ISO 228 3/4"



Dimensions and Weights			
Nominal sizes	[mm]	DIN flanges	
		80	100
DN	[in]	3	4
Dimensions	L	740	875
	H	545	655
	B	445	520
	G	395	460
	K	140	140
	E	110	120
	F	195	275
Flange dimensions [mm]	D	200	235
	b	24	24
	k	160	190
	g	138	162
	l	18	23
	Number of bolts		8
Approx. weight	[kg]	134	220

Materials	DIN reference	ASTM equivalent <sup>1)</sup>
Body and Cover	GP240GH (1.0619)	A216 WCA
Bolts	24CrMo5 (1.7258)	A193 B7
Nuts	Ck 35 (1.1181)	A194 Gr. 2H
Seat	X46Cr13 (1.4034)	SAE 51420 F
Slide valve	X20Cr13 (1.4021)	A182 F6
Ball float	X8CrTi17 (1.4510)	A268

<sup>1)</sup> Physical and chemical properties comply with DIN grade. ASTM nearest equivalent grade is stated for guidance only.

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### Capacity Chart

The chart shows the maximum capacities of boiling hot condensate for the range of orifices (O) and sizes available. The cold water capacities are: Capacity of boiling hot condensate multiplied by factor F.

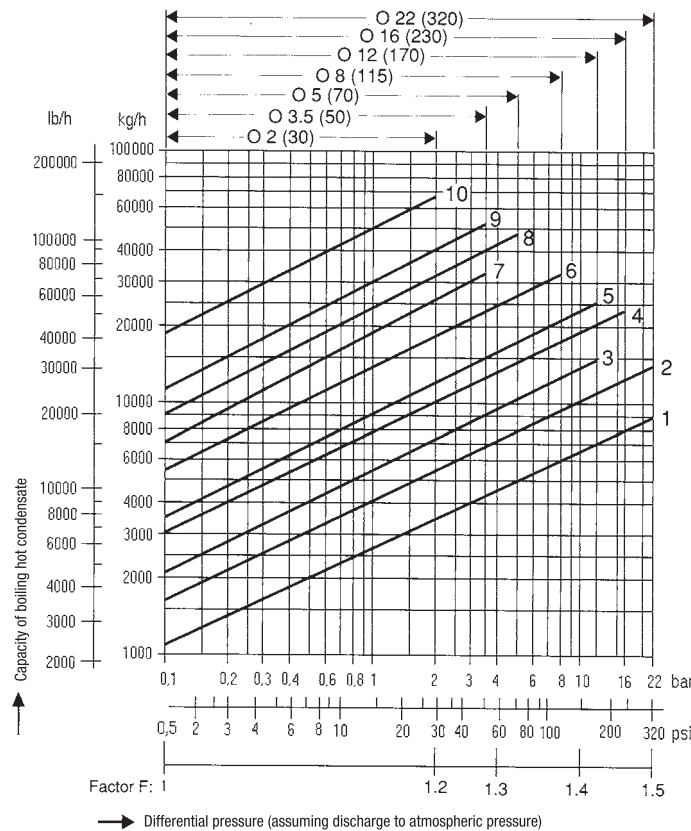
The capacities are dependent on the differential pressure (working pressure). The differential pressure is the difference between inlet and outlet pressures and depends among other things on the run of the pipeline. If the condensate downstream of the trap is lifted, the differential pressure (working 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.

The standard design of the trap is available for a maximum differential pressure of 22 bar (320 psi).

If, however, larger capacities are required, special orifices are available at extra cost for differential pressures of:

- 16 bar (320 psi)
- 12 bar (170 psi)
- 8 bar (115 psi)
- 5 bar (70 psi)
- 3.5 bar (50 psi) or
- 2 bar (30 psi)



Available orifices	
1	DN 80 (3") O 22 (320)
2	DN 80 (3") O 16 (230) DN 100 (4") O 22 (320)
3	DN 80 (3") O 12 (170)
4	DN 100 (4") O 16 (230)
5	DN 80 (3") O 8 (115) DN 100 (4") O 12 (170)
6	DN 80 (3") O 5 (70) DN 100 (4") O 8 (115)
7	DN 80 (3") O 3.5 (50)
8	DN 100 (4") O 5 (70)
9	DN 80 (3") O 2 (30) DN 100 (4") O 3.5 (50)
10	DN 100 (4") O 2 (30)

(Cold-water capacity ≈ capacity of boiling hot condensate x factor F)

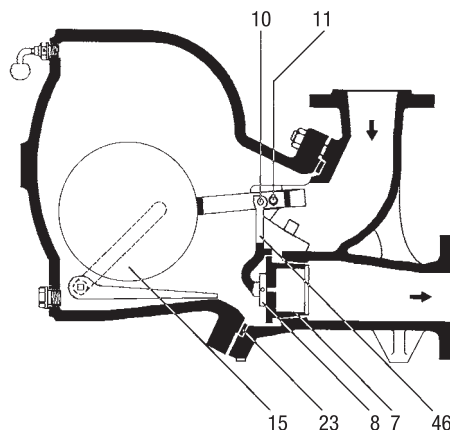
### When ordering please state:

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

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

In accordance with EN 10204-2.2 and -3.1 B.

All inspection requirements have to be stated with the order. After supply of the equipment certificates can no longer be established. Charges and extent of the above mentioned certificates as well as the different tests confirmed therein are listed in our leaflet Test and Inspection Charges for Standard Equipment. For other tests and inspections than those listed above, please consult us.



Spare Parts				
Item No.	Designation		Order No.	
			DN 80	DN 100
7	Seat	Orifice 2	221513	210314
		Orifice 3.5	221515	221525
		Orifice 5	221517	221527
		Orifice 8	209074	221531
		Orifice 12	209086	209087
		Orifice 16	209101	210353
		Orifice 22	209113	209114
8	Slide valve	Orifice 2	221514	210361
		Orifice 3.5	221516	221526
		Orifice 5	221518	221528
		Orifice 8	208915	221532
		Orifice 12	208927	208931
		Orifice 16	208942	210397
		Orifice 22	208954	208955
10	Bolt		210465	
11	Bolt		210477	
46	Slide valve rod	209281	221315	
15	Ball float	209266	210283	
23	Cover gasket	221670	221617	
29	Vent valve		560058	