

**UKL COMPRESSED AIR TRAP :-**

UKL Compressed Air trap removes the moisture from compressed air lines, which works on the principle of Buoyancy, [densities difference of Water and Air]. The rising moisture level elevates the Float and open the valve and discharges the moisture. When the level of moisture drops, the float falls down and the valve close the trap.

It is commonly used for compressed air lines and can also be used in various gases lines to drain moisture or liquid. It is a continuous discharge type trap. This trap can handle very high as well as fluctuating loads.

**MATERIAL OF CONSTRUCTION:**

UCA-14 CAST IRON MODEL

UCA-14 Model- IS 210 Fg260

UCA-20 CAST CARBON STEEL MODEL

UCA-20 Model- ASTM A216 Gr. WCB

**SIZES AVAILABLE:-**

UCA-14 Model: 15 NB, 20 NB, 25 NB, 40 NB and 50 NB

UCA-20 Model: 15 NB, 20 NB, 25 NB, 40 NB and 50 NB

**END CONNECTIONS:**

**UCA-14 MODEL**

Threaded to NPT, BSP and BSPT.

**UCA-20 MODEL:-**

Threaded to NPT, BSP and BSPT.

Socket Weld to ASME B 16.11

Flanged End #150/#300 (On Request)

**INSTALLATION :-**

Horizontal/Vertical position.

**OPERATING CONDITIONS:-****UCA-14 MODEL**

Max Operating Pressure :- 13.26 Kg/cm<sup>2</sup>

Max Operating Temperature :- 220 °C

**UCA-20 MODEL**

Max Operating Pressure :- 32 Kg/cm<sup>2</sup>

Max Operating Temperature :- 425 °C

**OPTIONAL:-**

Inbuilt Strainer

Flanged End #150/#300

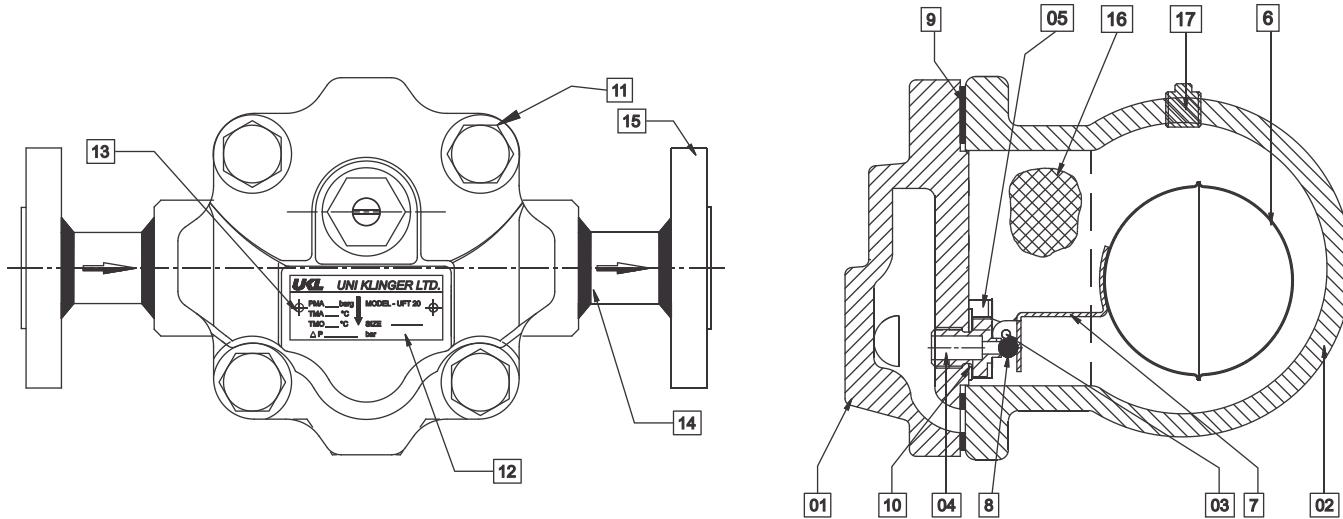
Available Diff. Pressure (Kg/cm<sup>2</sup>)

UCA-14 Model :- 4.5/10/14

UCA-20 Model :-4.5/10/14/21/32

# Compressed Air Trap

## UCA-14/UCA-20

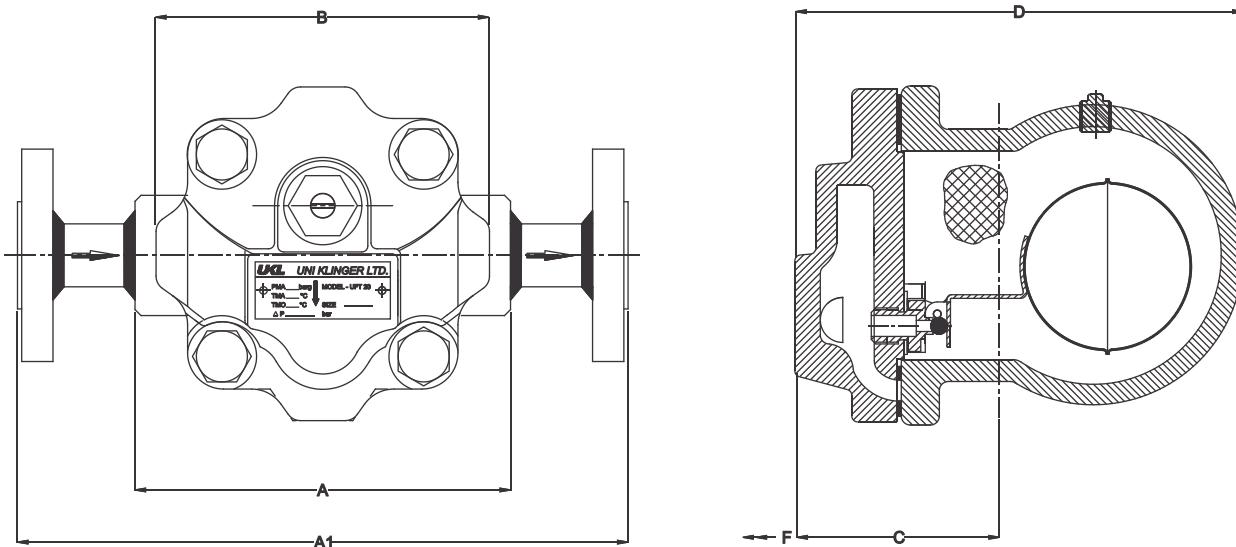


### BILL OF MATERIAL:

No.	Part Name	UCA-20 Model		UCA-14 Model	
		Material	Material Code	Material	Material Code
01	Body	Cast Steel	ASTM A 216 Gr WCB	Cast Iron	IS 210 FG 260
02	Cover	Cast Steel	ASTM A 216 Gr WCB	Cast Iron	IS 210 FG 260
03	Pivot Pin	Stainless Steel	AISI 304	Stainless Steel	AISI 304
04	Valve Seat	Stainless Steel	AISI 304	Stainless Steel	AISI 304
05	Pivot Bracket	Stainless Steel	AISI 304	Stainless Steel	AISI 304
06#	Float	Stainless Steel	AISI 304	Stainless Steel	AISI 304
07#	Lever	Stainless Steel	AISI 304	Stainless Steel	AISI 304
08#	Steel Ball	Stainless Steel	SS 440C	Stainless Steel	SS 440C
09#	Cover Gasket	CAF	CAF	CAF	CAF
10#	Valve Seat Gasket	Stainless Steel	AISI 304	Stainless Steel	AISI 304
11	Cover Bolt (M10)	Carbon Steel	Gr. 8.8	Carbon Steel	Gr. 8.8
12	Name Plate	Stainless Steel	AISI 304	Stainless Steel	AISI 304
13#	Rivets	Alluminium	---	Alluminium	---
14	Pipe	Carbon Steel	ASTM A 106 Gr B	Carbon Steel	ASTM A 106 Gr B
15#	Flanges-SWRF	Carbon Steel	ASTM A 105	Carbon Steel	ASTM A 105
16	Strainer	Stainless Steel	AISI 304	Stainless steel	AISI 304
17#	End Plug	Carbon Steel	ASTM A 105	Carbon Steel	ASTM A 105
#- AVAILABLE AS SPARES					

# Compressed Air Trap

## UCA-14/UCA-20



### DIMENSIONS (mm) :-

Screwed / Socket Weld End Connections							
Size	Diff Pressure	A	B	C	D	F	Weight (kg)
15 NB	4.5/10/14 Kg/cm <sup>2</sup>	128	111	68	150	110	3.500
20 NB		128	111	68	150	110	3.500
25 NB		153	111	75	172	130	5.000

### Flanged End Connections

Size	#150		#300	
	A1 (mm)	Weight(kg)	A1 (mm)	Weight(kg)
15 NB	278	4.5	278	5.1
20 NB	278	5.0	278	6.1
25 NB	303	7.0	303	8.0

### Installation :-

The trap must be fitted with the float arm in a horizontal plane so that it rises and falls vertically. Hence the arrow on the name plate must point downwards.

Traps will be generally supplied in horizontal connections with flow from left to right outlet (L-R) & horizontal connections with flow R-L (rotating cover 180° w.r.t L-R) or vertical connections with top inlet and bottom outlet (rotating cover 90° w.r.t L-R) if specified.

The connection orientation can be changed from L-R and R-L in horizontal connections on site itself only by undoing 4 bolts and rotating the cover to required direction and then assembling.

### STORAGE

UNI KLINGER UCA and the respective spares should be stored only in enclosed dry rooms in a non-aggressive atmosphere. Fully assembled Compressed Air Trap must be stored as supplied by UNI KLINGER. Spare parts must be handled with care and should be stored in their original packing. Request

### INSTALLATION :-

Horizontal/Vertical position.

# Compressed Air Trap

## UCA-14/UCA-20

### OPERATING CONDITIONS

Model	Max Diff. Pressure	PMO (Kg/cm <sup>2</sup> )	Sat. Temp °C
UCA 14 -4.5	4.5 Kg/cm <sup>2</sup>	14	193
UCA 14 -10	10 Kg/cm <sup>2</sup>	14	193
UCA 14 -14	14 Kg/cm <sup>2</sup>	14	193
UCA 20 -4.5	4.5 Kg/cm <sup>2</sup>	32	237
UCA 20 -10	10 Kg/cm <sup>2</sup>	32	237
UCA 20 -14	14 Kg/cm <sup>2</sup>	32	237
UCA 20 -21	21 Kg/cm <sup>2</sup>	32	237
UCA 20 -32	32 Kg/cm <sup>2</sup>	32	237

For referring the capacity charts, please note following:

- Select the model of UCA based on P/T range and MOC
- Select flow capacity on Yaxis of the chart for selected model.
- Work out actual differential pressure across the UFT.
- Consider all possible pressure losses in the lines.
- Select differential pressure on Xaxis.
- Move horizontally on Yaxis & vertically on Xaxis.
- The point of cross section will give you the trap size required.

### MOST IMPORTANT:-

Before doing any maintenance on the trap it is necessary to isolate both supply and return lines and any pressure to normalize to atmosphere pressure by opening SLR. Allow the trap to cool before doing any maintenance and clean all sealing faces before assembling it.

### How to order and Specify:

15 NB UKL UCA -20 - 4.5 Kg/cm<sup>2</sup>, TV, Compressed Air Trap, Threaded BSP

Always order spares by stating the type and differential pressure,

specify-

**EXAMPLE :-**

Controller Assembly- valve seat for 15 NB UCA-20 -4.5 Kg/cm<sup>2</sup>

**Other Products :**



Cast / Forged Steel Piston Valves, Bellow seal valves, High Pressure valves (Gate/Globe) , Strainers – “Y” Type, ITVS Steam Traps (Thermodynamic, Thermostatic, Ball Float Traps and IBT), Pressure Reducing Station, Condensate Recovery Products. Level Gauges (Reflex, Transparent, Bicolor), Sight Glass, Hot Water Generation System, Safety and Relief Valves.

**FSD Products :** Compressed Asbestos / Non Asbestos Fiber Sheet / Cut Gaskets, Spiral Wound Gaskets / Gland Packing



**UNI KLINGER LIMITED**

A joint venture of the Neterwala group of companies and KLINGER AG, Switzerland.

In view of technical progress designs and dimensions are subject to change without notice.



AN ISO 9001 : 2015 COMPANY

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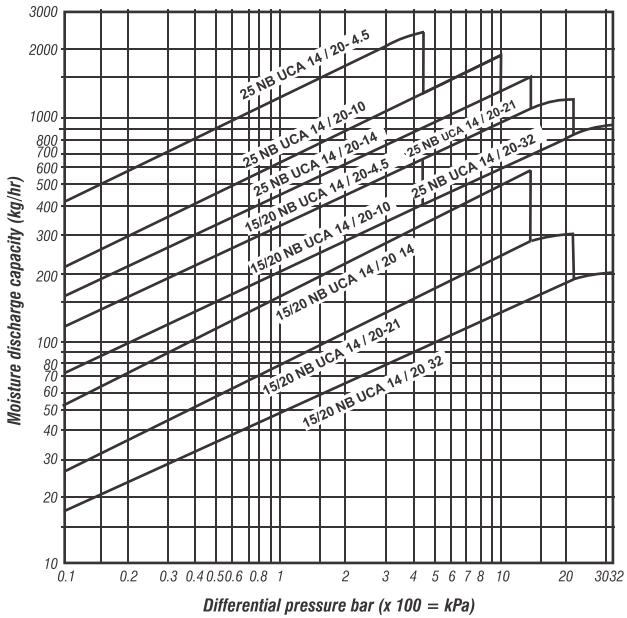
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### CAPACITY CHART



### SPARES AVAILABLE:

SLR Assembly

Float

Main controller assembly

Cover Gasket

Strainer