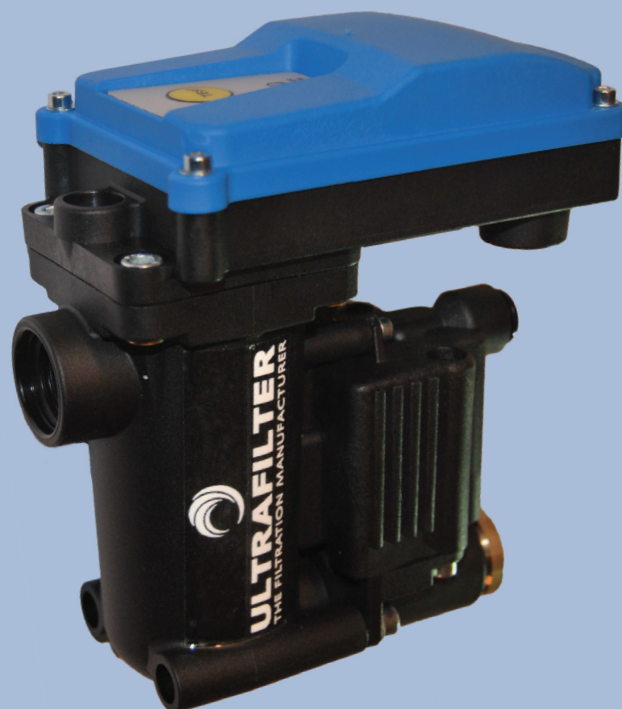


# Condensate Drain ULTRADRAIN UAD S012

Raise the Level





## ULTRADRAIN Condensate Removal – Zero Air Loss

Compressed air is an essential operating and process energy required in all divisions of industrial production. Generally compressed air must be purified after generation in order to avoid costly production downtimes. Compressed air is generated by compressing ambient air. The ambient air contains in addition to contaminants and dirt particles also water vapor, which condenses in the compressor aftercooler or during the purification process (e.g. in the fridge dryer) afterwards. A huge amount of condensate is accumulated in this process. The condensate is usually contaminated by oil and always charged with dirt particles. In order to avoid a contamination of the compressed air net a reliable removal of condensate is mandatorily required. Time controlled solenoid valves are mainly used to remove the condensate. The timing of these solenoid valves must be adjusted to the maximum

expected condensate amount. Consequently also compressed air is discharged, because depending on many factors the amount of condensate varies, but the valve keeps open when condensate is already removed releasing compressed air continuously. So the compressor load (running time and partial load operation) and especially ambient temperature and humidity, to say the climatic conditions and day and night operation, has impact to the amount of condensate. The variable amount of condensate consequently requires an amount adapted condensate removal. The condensate drains **ULTRADRAIN UAD S012** fulfill these requirements fully. They are equipped with capacitive sensors and smart electronic controls. The condensate is removed securely without losing compressed air. Consequently the return of invest for an **ULTRADRAIN UAD S012** is just a few month.

## ULTRADRAIN Features and Key Benefits

### ■ Well-protected electronics

The circuit board is installed in a separate terminal enclosure isolated from the condensate chamber. Through this the condensation of ambient humidity on the circuit board (risk of short circuit) is avoided, even with cold condensate (usually generated by fridge dryers) in tropical or semi-tropical regions.

### ■ Dirt-proof

The **ULTRADRAIN UAD S012** with its large blow off opening is absolutely reliable, contrary to float type drains loosing frequently a lot of compressed air because of being very sensitive to dirt particles. The self-cleaning direct-acting solenoid valve guarantees a good performance at any time. Bigger particles are retained by the strainer at the condensate inlet of the valve. The strainer can be replaced easily (the strainer is part of the service kit).

### ■ Low-maintenance

Because of the new valve technology a sensitive membrane like applied in ordinary electronic condensate drains is omitted.

### ■ Reliable sensor

The condensate is securely detected and the condensate level is observed by a sensor.

### ■ Combined operation and malfunction light

### ■ Zero air loss

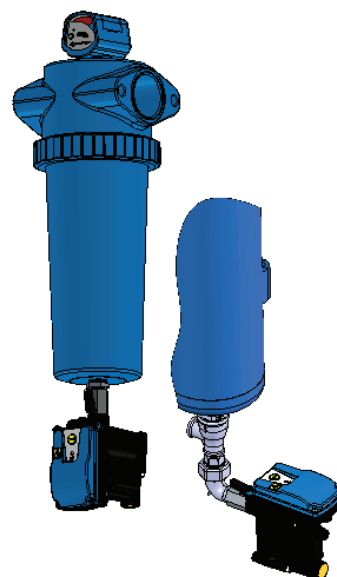
### ■ Simple manual draining by pushing the drain button

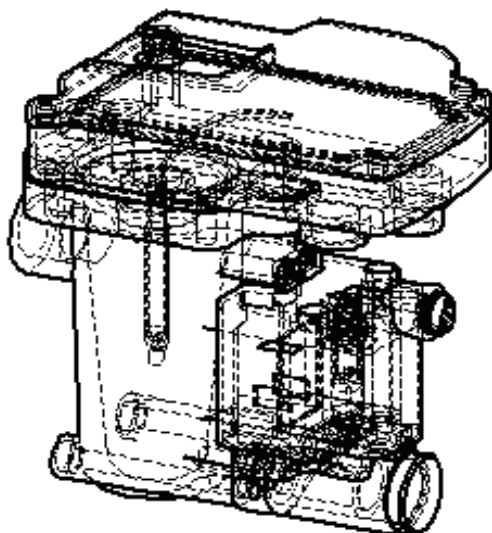
### ■ Operator friendly plug connection for flexible tubes at the condensate outlet

### ■ Attractive ergonomic design

### ■ Horizontal or vertical installation

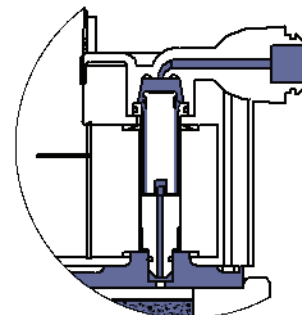
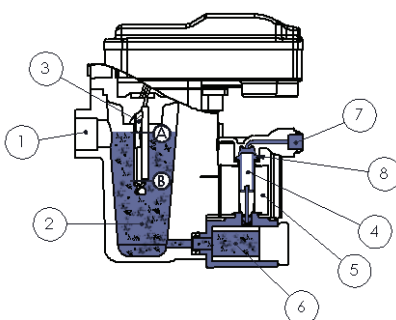
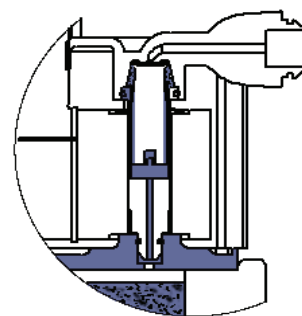
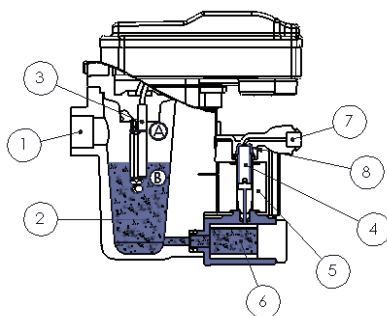
Below a vessel or water separator (fridge dryer) the horizontal installation is highly recommended. Underneath a filter the drain can also be installed vertically.





## ULTRADRAIN Functional Description

The condensate trickles via the inlet (1) into the condensate chamber (2) and is collected there. As soon as the condensate chamber (2) is filled up with condensate the maximum level (A) is detected by the capacitive level sensor (3) and lifting of the valve piston (4) is effected by activation of the solenoid (5). Due to the pressure in the chamber (2) the condensate is discharged via the strainer (6) and the valve piston (4) to the condensate outlet (7). The condensate chamber (2) is drained. Reaching the minimum level (B) detected by the capacitive level sensor (3) the activation of the solenoid is abolished. Reset by a spring (8) the valve piston (4) locks the condensate outlet (7) again. This ensures that condensate drainage can be accomplished with zero air loss.



# ULTRADRAIN Technical Data and Dimensions

## ■ Technical data

Type <b>ULTRADRAIN</b>	Discharge Quantity l/h	Connection		Electr. Connection V/Hz	Power Input  W	Operating Pressure bar	Operating Temperature °C	Weight  kg
		Inlet	Outlet					
<b>UAD 012</b>	12	G 1/2	Ø 8	230 / 50-60*	10	0,8-16	+1/65	0,55
<b>UAD S012</b>	12	G 1/2	Ø 8	230 / 50-60*	10	0,8-16	+1/65	0,55

\*also available in 115 V/50-60 Hz version

■ **ULTRADRAIN UAD S012** inclusive potential free alarm contact,  
power supply: max. 39 V, max. 200 mA  
(**ULTRADRAIN UAD 012** without potential free alarm contact)

■ with plug connection for  
flexible tubes Ø 8 mm at the  
condensate outlet

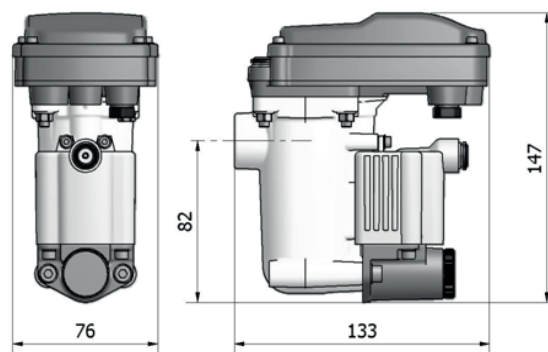
## ■ Protection class IP54

## ■ Performance data

		UAD 012	UAD S012
Compressor Capacity (compressed air 7 bar g) m³/min	I	8,8	8,8
	II	7,4	7,4
	III	4,6	4,6
Dryer Capacity (compressed air 7 bar g) m³/min	I	18,6	18,6
	II	14,9	14,9
	III	9,3	9,3
Filter Capacity (compressed air 7 bar g) m³/min	I	92,8	92,8
	II	74,4	74,4
	III	46,4	46,4
Power of compressor	kW	up to 20	up to 20

I	North Europe, North Amerika, Central Asia
II	Central and South Europe, Central Amerika
III	South East Asia, Oceanian, Africa

## ■ Dimensions (LxWxH) in mm: 133 x 76 x 147





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