

Ultramat[®]

UFM-D30 / UFM-D130



The zero-loss condensate drain

Product description:

The UFM-D's are compressed air zero-loss, electronically controlled condensate drains.

The diaphragm operation and the large internal cross-sections for draining ensure reliable operation even when dealing with dirty, particle polluted condensate:

Less downtime, less trouble and more safety for the application.

Additionally the condensate becomes less emulsified – when compared with time controlled solenoid valves which spray/atomise the condensate. Less emulsification results in better function of oil/ water separators: longer compliance with legal discharge limits, less running costs! As there is no air-loss whilst purging these drains work silent – a very important feature when this drain is installed within a working area: No noise nuisance anymore!

The electronic control of the drain monitors the proper operation continuously. Automatic malfunction routines and a potential free contact for remote control ensures safe operation at all times. You can react to malfunctions before they are obvious by water in the condensate line at the point of use!



Applications:

Compressed air zero-loss draining of condensate at:

- compressors
- aftercoolers
- receiver-vessels
- pre- and after-filters of fridge dryers
- pre-filters of adsorption dryers
- condensate- and oil-removal filters
- pipe bends



Features:	Benefits:
Electronically level-controlled	No expensive compressed air losses, condensate drain depending upon resulting condensate amount, sensor detects each kind of condensate (also pure oil), also in case of strong contamination the draining works problem-free
Electronic control	Permanent function control via LED display, automatic emergency programs in the alarm mode, potential-free alarm contact function test via test button
Generously dimensioned cross sections	Easy maintenance, small inclination to emulsification, small noise during draining procedure, insensitive to dirt
Service Unit	All maintenance parts in one unit, minimum expenditure with service and maintenance
Materials corrosion resistant	Aluminum corrosion-resistant, glass-fiber reinforced plastics steadily against oil-contaminated and oil-free condensate (special equipments for particularly aggressive condensate available)
Condensate inlet vertically or horizontal	Flexible and easy montage on different pipings possible

Materials:	
Top (thread)	Aluminium, KTL coated

Potential free contact:	
Connection data AC	< 250 V / < 1A
Connection data DC	> 5 VDC / > 10 mA

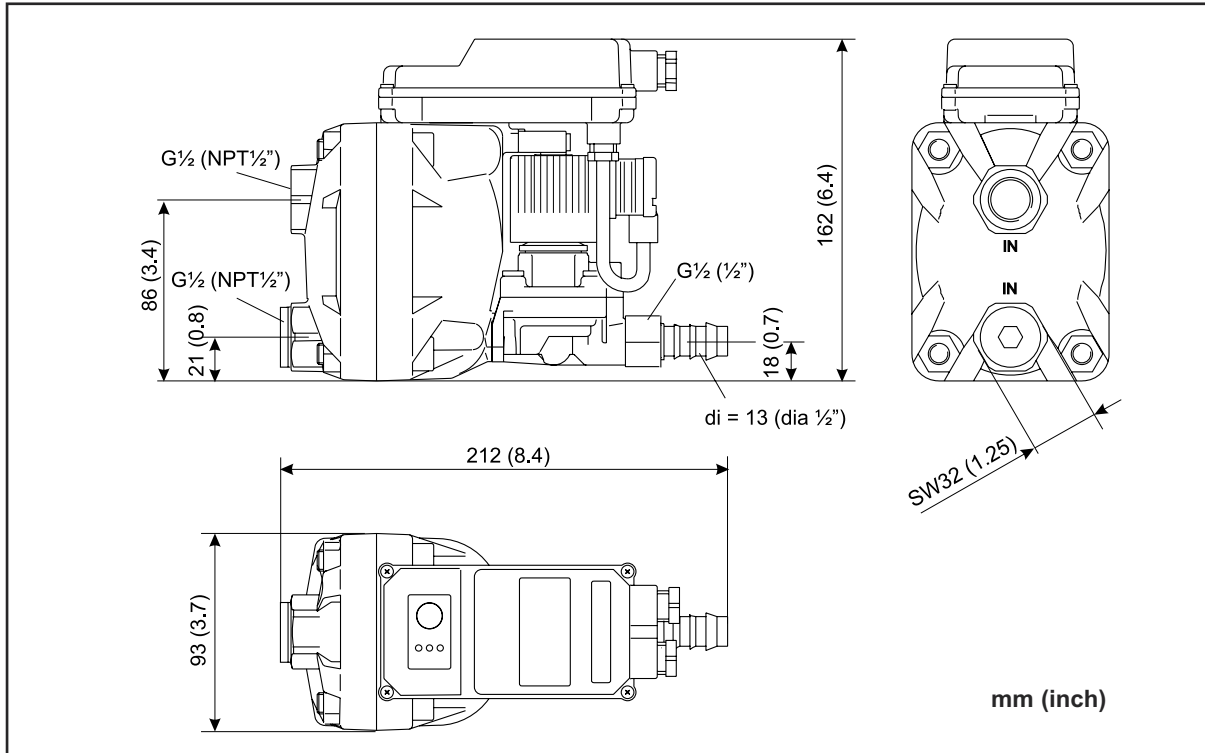
Option:	
Heater	24 V; 110 V; 230 V
Insulation cover	
Bracket	

Technical Data	D30	D130
min./max. operating pressure	0,8 - 16 bar (12-230 psi)	
min./max. temperature	+1°C / +60°C (+34°F / +140°F)	
Condensate inlet	2 x G 1/2 (1/2")	3 x G 3/4 (3/4")
Condensate outlet	G 1/2 - a (di = 13 mm / 1/2")	
Condensate	oil contaminated + oil free	
Weight (empty)	2,0 kg (4.4 lbs)	2,9 kg (6.4 lbs)
max. compressor performance ¹⁾	30 m ³ /min (1,060 scfm)	130 m ³ /min (4,590)
max. fridge dryer performance ¹⁾	60 m ³ /min (2,120 scfm)	260 m ³ /min (9,180 scfm)
max. filter performance ¹⁾	300 m ³ /min (10,600 scfm)	1300 m ³ /min (45,900 scfm)
Supply voltage (see type plate)	230 / 115 / 24 VAC ± 10%, 50-60 Hz / 24 VDC -10/+25%	
Power consumption	P < 2,0 VA (W)	
Recommended cable-jacket diameter	Ø 5,8 - 8,5 mm (0.23" - 0.34")	
Recommended wire cross-section	3x 0,75 -1,5 mm ² / 5 x 0,25 mm ²	
Recommended fusing	0,5 A medium time-lag (AC) / 10 mA medium time-lag (DC)	
Protection class	IP 65	

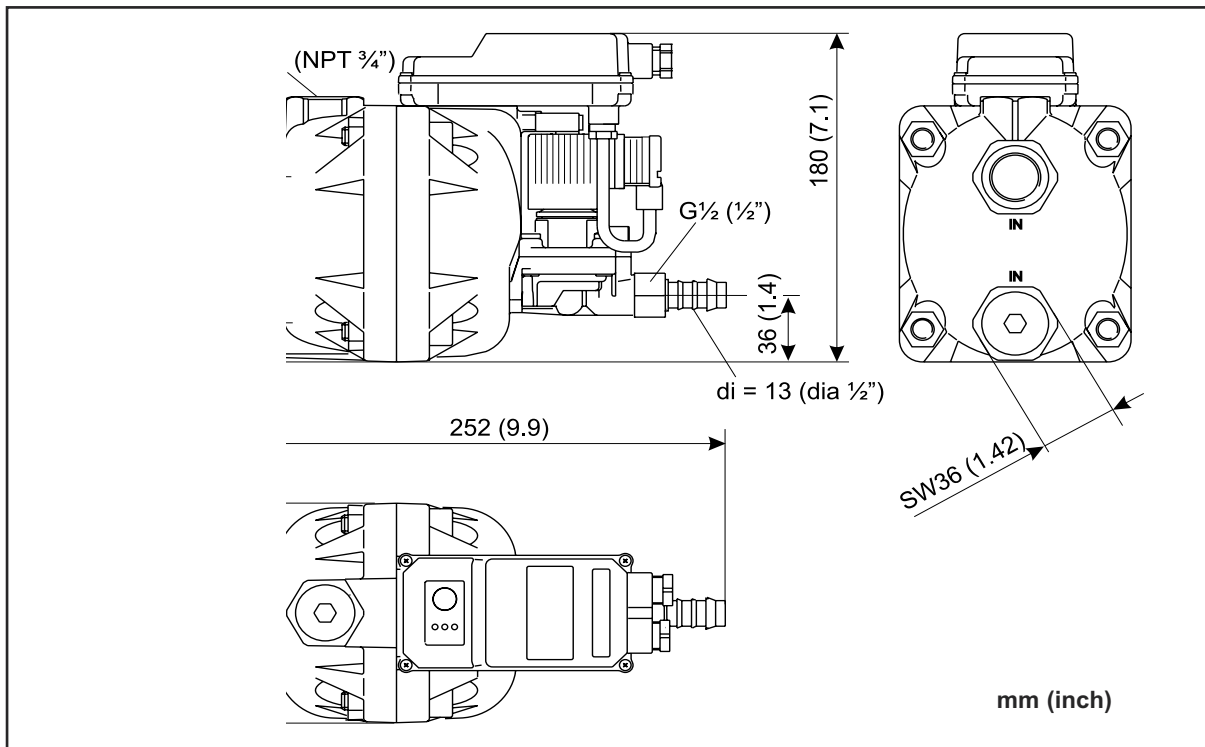
¹⁾ Max. performance for ambient temperature 20°C. 50% r. h.

Dimensions

UFM-D30



UFM-D130



Ultrasep Superplus® UFS-SP/ UFS-SP N

Oil/water separator
for air compressor condensate

Function

A pressure relief chamber separates condensate and expanding air. The condensate then passes a sedimentation compartment – easy to remove and therefore easy to clean.

The next step is the coalescing filter with its additional oil separation effect. Free floating oil is siphoned off into an oil can. The water is purified in the activated carbon adsorber from the last oil droplets. Pure water leaves the unit ready to be drained according to the rules of law.



Safety

The activated carbon is protected by a preadsorber.

A bright yellow floater warns about the beginning of a blockade of the carbon by oil sludge.

The water quality is checked visibly with a simple turbidity comparison. The incorporated oil canister can only be changed if the oil flow is interrupted.

Application:

UFS-SP are oil/water separators for the purification of air compressor condensate to legal discharge limits.

Construction

The range of UFS-SP/ UFS-SP N are in total 7 sizes: 5 single units of 2 or 4 separated UFS.

Ultrasep Superplus® UFS-SP/ UFS-SP N

Features:	Benefits:
Coalescing filter	Improves oil separation for longer compliance with legal discharge limits.
Sizing	Long residence time ensures excellent gravity separation. Extreme generous filling with activated carbon ensures long service intervals.
Service label on the lid	This service guideline for checking filtrate quality and carbon change procedure can't get lost.
Modular design for UFS-SP 120N and 240N	Quick availability exstock with standard units

UFS-SP	Nom. compressor performance
	Nm ³ /h
5	120
10N	250
15N	450
30N	900
60N	1800
120N	3600
240N	7200

Materials:	
Body and lid	PE-LLD, recycleble
Filter/ Demister	PUR-foam
Adsorber	PP Activated carbon

Temperature range:	
without heater	+1°C to +60°C
with heater	-25°C to +60°C

Options:	
Heater	230 V/ 50 Hz or 110 V/ 60 Hz

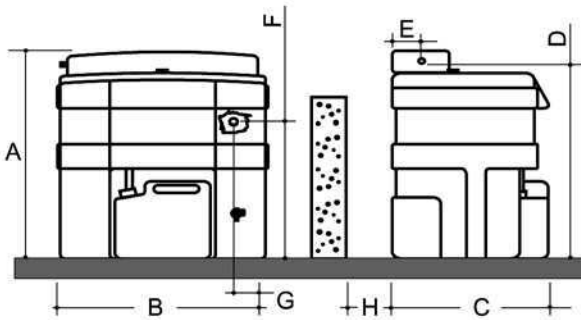
Max. compressor performance for moderate climate (Nm ³ /min.)				
UFS-SP	Screw- and rotation compressor with oil injection cooling		Piston compressor	
	Mineral oil	Synthetic oil	Mineral oil	Synthetic oil
5	2	2	2	2
10N	4	4	4	3
15N	4-8	3-6	3-6	2.5-5
30N	8-16	6-12	6-12	5-10
60N	16-32	12-24	12-24	10-20
120N	32-64	24-48	24-48	20-40
240N	64-128	48-96	48-96	40-80

Max. compressor performance for tropical climate (Nm ³ /min.)				
UFS-SP	Screw- and rotation compressor with oil injection cooling		Piston compressor	
	Mineral oil	Synthetic oil	Mineral oil	Synthetic oil
5	0.5-1	0,5-1	0.5-1	0.5-1
10N	1.5-3	1-2	1-2	1-2
15N	2.5-5	2.5-5	1.5-3	1,5-3
30N	5.5-11	4-8	3,5-7	3,5-7
60N	10.5-21	7-14	7-14	6.5-13
120N	21.5-43	16-32	13.5-27	13.5-27
240N	42.5-85	32-64	27.5-55	26.5-53

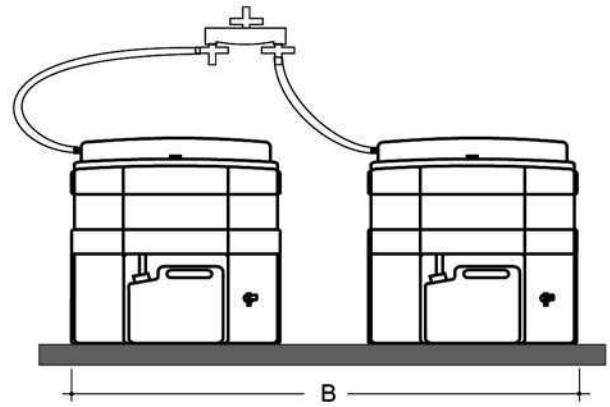
Example:

Screw compressors, mineral oil, total 20 Nm³/min.:
select UFS-SP 60N

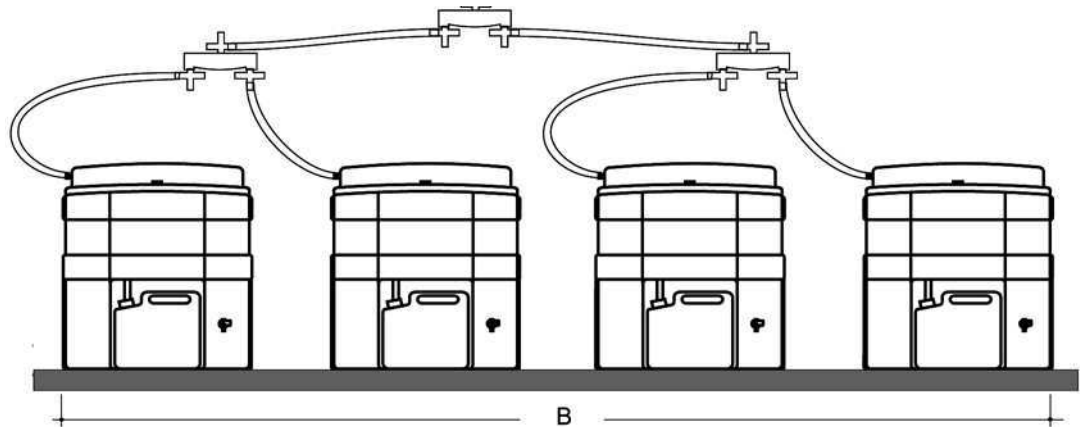
Ultrasep Superplus® UFS-SP/ UFS-SP N



UFS-SP 5/ 10N-60N



UFS-SP 120N



UFS-SP 240N

Condensate exit:
 UFS-SP 5: 1/2"
 UFS-SP 10N - 60N: 1"

Type	Dimensions								Volumes				Freight weight
	A	B	C	D	E	F	G	H	Vessel	Activated carbon	Pre-adsorber	Oil can	
	mm	mm	mm	mm	mm	mm	mm	mm	Liters	Liters	Liters	Liters	
5	555	345	320	505	100	380	145	100	25	3,1	0.9	2.5	8.5
10N	655	445	430	610	60/120	400	250	170	50	8	3.2	5	19.5
15N	735	495	460	670	60/120	465	275	170	75	12	3.8	10	23.5
30N	840	680	510	790	60/120	555	145	170	150	2x11	4.9	20	35.0
60N	985	790	660	960	70/130	690	167	250	300	2x15	5.7	20	67.0
120N	985	1780	660	960	70/130	690	167	250	600	4x15	2x5.7	2x20,0	136.0
240N	985	3760	660	960	70/130	690	167	250	1200	8x15	4x5.7	4x20,0	272.0