



ULTRAFILTER
THE FILTRATION MANUFACTURER

Kronsbein ultrafilter®



**ultrapure ALD / MSD
Heatless regenerated
adsorption dryer**

Purification Package HED/ALD/MSD.

Complete purification package with heatless adsorption dryer, pre-, afterfilter and level-controlled electronic condensate drain.

Compressed air is lead through the inlet of the dryer and across the prefilter. At this stage, the air is cleaned from particles and condensate. The condensate is removed via the level-controlled electronic condensate drain. Via the lower shuttle valve, the air is lead into the adsorption vessel, in which the air is dried down to the required dewpoint.

Via the upper shuttle valve, the air is let into an afterfilter, in which possibly released particles from the desiccant bed are retained. Via the outlet, the clean and dry air is lead into the compressed air network and to the point of use. While one vessel is in the drying phase (adsorption), the other vessel is being dried again (regeneration). A partial stream of dried air is expanded to atmospheric pressure via a nozzle and lead across the desiccant bed for regeneration and via a solenoid valve and a silencer to the atmosphere.

Features	Benefits
Purification package complete with pre- and afterfilter and condensate drain	Turnkey system, no additional installation required, all components from one hand, technically perfectly matched to each other
Prefilter with electronic , level controlled drain ultra.drain	No air losses due to condensate removal, therefore reduction of operating costs
All dryers in cabinet construction	Protection against mechanical damage and against dirt
Generously dimensioned filters	Large filtration surface, therefore low pressure drop and low operating costs
Display of operating status by LED	High operating safety, since all operating status can be detected easily at any time
ultra.conomy capacity control	Determines the actual amount of moisture and asses the optimum time when the dryer requires regenerating - saves up to 70% energy
17 sizes available, matched to the compressor flows, with 3 pressure dew points each for choice	Custom made solutions possible, matching exactly customer's requirements, no oversizing of compressors necessary since lowest possible regeneration air requirements
Comprehensive option package: Dewpoint depending control, start-up device, bypass, pneumatic control, charge-over-control etc.	Flexibility in application, well thought package for economical operation and safe system installation in the compressed air network

Medium:
Compressed air / nitrogen

Pressure dewpoint:
ALD: -40°C at 100% load
MSD: -70°C at 100% load

Operating pressure:
min. 4 bar(g), max. 16 bar (g)

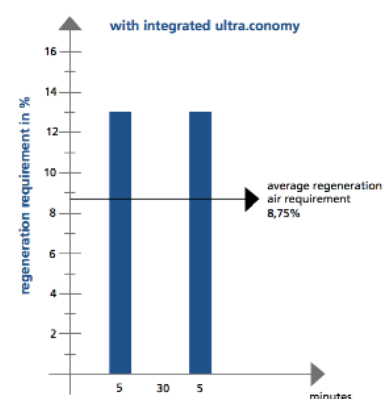
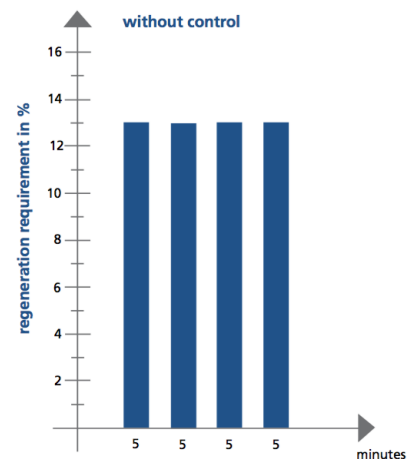
Medium temperature:
max. +50°C

Ambient temperature:
min. +4°C, max. +50°C

Power supply:
230V/115V AC/50-60Hz, 24V DC

Power consumption:
approx. 40W

Declaration of conformity:
Type 0005-1000: acc. to 73/23/EEC



Technical Data:

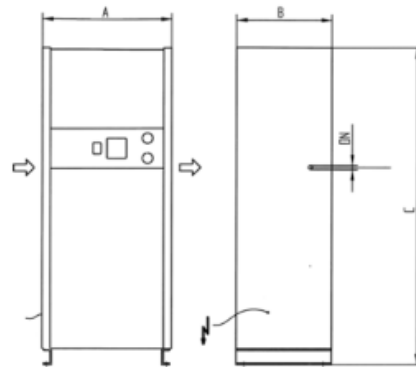
type	volume flow at 7 bar g m ³ /h	connec-tion	dimensions in mm			weight in kg	average regeneration air consumption in m ³ /h (1 bar abs., 20 °C)		initial Δp mbar
			height	width	depth		ALD	MSD	
0050	50	G 3/4	1610	670	450	107	7,5	10	90
0080	80	G 3/4	1610	670	450	140	12,0	16	110
0100	100	G 1	1610	670	450	169	15,0	20	120
0150	150	G 1	1980	770	600	200	23,0	30	170
0175	175	G 1	1980	770	600	255	26,3	35	100
0225	225	G 1 1/2	1980	770	600	277	34,0	45	125
0300	300	G 1 1/2	1980	770	600	321	45,0	60	160
0375	375	G 1 1/2	2190	950	700	398	56,0	75	190
0550	550	G 2	2190	950	700	431	83,0	110	180
0650	650	G 2	2190	950	700	506	98,0	130	220
0850	850	G 2	2350	1100	800	595	128,0	170	260
1000	1000	G 2 1/2	2350	1100	800	676	150,0	200	180

In accordance with ISO 7183 related to 1 bar, 20° C, operating pressure 7 bar g, compressed air inlet temperature 35°, ambient temperatures 25°C and dewpoint -40°C(ALD), -70°C(MSD).

Operating parameter:

max. operating pressure: 16 bar
 max. ambient temperature: 50°C
 max. compressed air inlet temperature: 50°C.
 Power supply: 230V / 50 Hz.

Conversion factors:
 PERFORMANCE = nominal flow (7 bar) / (K1 x K2 x K3 x K4).



Operating pressure	bar	4	5	6	7	8	9	10	11	12	13	14	15	16
Conversion factor	K1	0,63	0,75	0,88	1	1,12	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13

Type	dewpoint	residual water content	inlet temperature °C	20	25	30	35	40	45	50
ALD	-40°C	0,11 g/m ³	conv. factor	1,2	-1,2	1,1	1,0	-	-	-
			dewpoint	-40	-40	-40	-40	-	-	-

Type	dewpoint	residual water content	inlet temperature °C	20	25	30	35	40	45	50
MSD	-70°C	0,0027 g/m ³	conv. factor	1,0	1,0	1,0	1,0	0,8	0,7	0,5
			dewpoint	-70	-70	-70	-70	-65	-55	-50

Technical alterations reserved.



ultrafilter gmbh

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