

ULTRAFILTER
THE FILTRATION MANUFACTURER
THE SCANDINAVIAN FILTRATION PARTNER

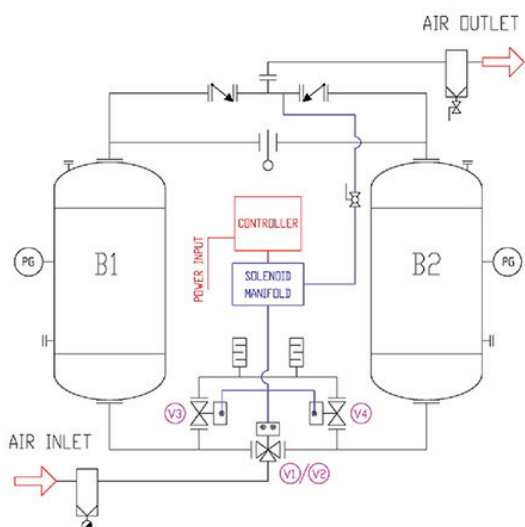


HLD HEATLESS ADSORPTION DRYER

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Heatless Adsorption dryer

HLD



Technical Data

- 6 bar
- 40°C Inlet Temperature.
- 140 - 4200 m³/h
- Pressure Dewpoint: -40°C

Drying compressed air through adsorption represents a purely physical process in the course of which water vapour is bound to the drying medium (desiccant) through binding forces of molecular adhesion. For adsorption to take place, moist air is directed through the adsorber at various operating pressures. During this process, the moist compressed air comes into contact with the hydrophilic desiccant molecules when it flows from the bottom to the top of the vessel. The desiccant molecules will retain the moisture which results in dry compressed air leaving the vessel.

Applications and Main Benefits

- Proven technology
- Robust construction
- Reliable performance
- Easy maintenance

Features

- Welded vessels designed according to ASME VIII Div1. Standards
- Usage of self cleaning stainless steel wedge wire in the wet area allows an even distribution of air flow with low differential pressure across the system.
- Indication lights for dryer ON/OFF mode, adsorption, re-generation and LED display available for the dew point (if dew point meter is installed).
- Usage of high performance molecular sieve which are suitable for application in a wide range of operating conditions.
- Usage of standard industrial valves which are readily available and easily maintained.
- Load Control System (LCS) display available as an economical and energy saving option.

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Technical Data for HLD Series

Model	Volume Flow Rate ¹			Dimensions in mm (ca.)			Conn.	Weight
	l/s	m3/min	m3/h	D	W	H	inch	kg (ca.)
HLD0190	53	3,17	190	610	1300	1960	1"	251
HLD0240	67	4,00	240	610	1300	2120	1"	273
HLD0380	106	6,33	380	610	1380	2000	1"	417
HLD0540	150	9,00	540	610	1500	2220	1½"	487
HLD0650	181	10,83	650	610	1500	2320	1½"	513
HLD0850	236	14,67	850	610	1550	2090	1½"	610
HLD1050	292	17,50	1050	790	1700	2370	2"	729
HLD1400	389	23,33	1400	740	1510	2150	DN80/3"	959
HLD1700	472	28,33	1700	760	1620	2180	DN80/3"	1136
HLD2050	569	34,17	2050	790	1670	2220	DN80/3"	1272
HLD2400	667	40,00	2400	860	1720	2270	DN80/3"	1404
HLD2800	778	46,67	2800	920	1770	2340	DN80/3"	1547
HLD3200	889	53,33	3200	930	2100	2380	DN100/4"	1739
HLD3700	1028	61,67	3799	970	2160	2400	DN100/4"	1903
HLD4200	1167	70,00	4200	1020	2270	2400	DN100/4"	2074

¹. Based on -40 °C pressure dew point with inlet conditions of 7 bar g and 35 °C

Correction factors for Sizing of HLD Dryers for different operating temperatures and pressures

Pressure bar g	Temperature °C					
	25	30	35	40	45	50
4	0,66	0,64	0,62	0,59	0,55	0,50
5	0,80	0,77	0,75	0,71	0,67	0,63
6	0,94	0,90	0,87	0,84	0,79	0,76
7	1,07	1,03	1,00	0,96	0,92	0,87
8	1,16	1,14	1,11	1,08	1,04	1,00
9	1,23	1,21	1,18	1,14	1,10	1,07
10	1,32	1,30	1,27	1,24	1,20	1,16

Example	
Flow rate	550 m3/h
Pressure	9 bar
Inlet temperature	35°
Pressure dew point	-40°

Dryer capacity = $550/1,18 = 437 \text{ m}^3$

Therefore, selected dryer model:

HLD0150



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At www.ultra-filter.com you will find a wide selection of filtration products ready for you to order.



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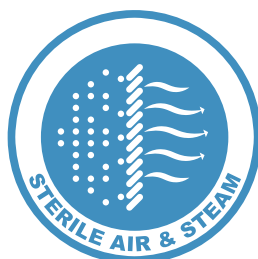
ABOUT US

Ultrafilter Scandinavia offers a wide selection of filtration products for compressed air, liquids and gas. We have stock in Denmark and from here we distribute all of our products to Scandinavia and the Baltic countries.

Ultrafilter Scandinavia is a part of the Ultrafilter group. Our production facility is in Germany and we have several subsidiaries in Europe and the United States.

You can buy our products on local websites. Information about our products as well as brochures and manuals can be found on our website (www.ultra-filter.com).

We can adapt all of our filtration products to your needs, and we offer visits from our consultants in order to find the right solution for you. We also offer on going service on our products once they are installed.



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