ultradry UFM
Membrane Dryer

ULTRAFILTER
THE FILTRATION MANUFACTURER
ultraair ultrafilter ®

Why drying compressed air?

■ Compressed air is used in almost all areas of industrial manufacturing processes as a source of energy or processing. Compressed air needs to be dry, oilfree and clean in order to prevent costly production downtimes and losses in the production quality. The atmospheric air drawn in contains harmful substances, dirt particles and moisture in the form of water vapour, which condenses out in compressed air pipes and can lead to considerable costs (corrosion, freezing etc.). The performance of the compressed air installation can be ensured by using a compressed air dryer. For smaller volume flows and point of use drying, membrane dryers are the most efficient and reliable solution.

ultradry UFM membrane dryer

■ ultradry UFM membrane dryer are qualified for point of use applications and for small volume flows. The compressed air flows through a bundle of hollow fibres. As the humid compressed air flows down the bore of the fibre, water vapour diffuses through the walls of the fibres. At the outlet of the unit, a small volume of the dry compressed air is expanded and released into the space surrounding the outside of the fibres. The dry air sweeps the moisture away from the outside of the fibres and exhausts to the atmosphere as a humid air stream.

Easy to install

■ ultradry UFM membrane dryer are designed with ease-of-installation and operation in mind. Simple to connect the inlet and outlet by 1/2" BSP connection (up to type 125) or 1/4" BSP (type 150 + 180).

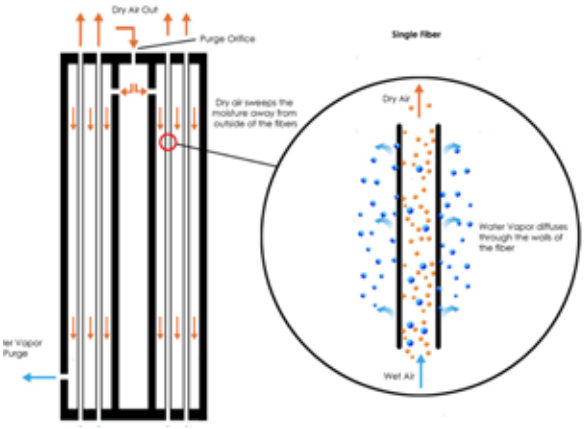
Maintenance-free operation

■ ultradry UFM membrane dryers are maintenance free, reliable and provide the lowest overall operating costs.

The proper addition

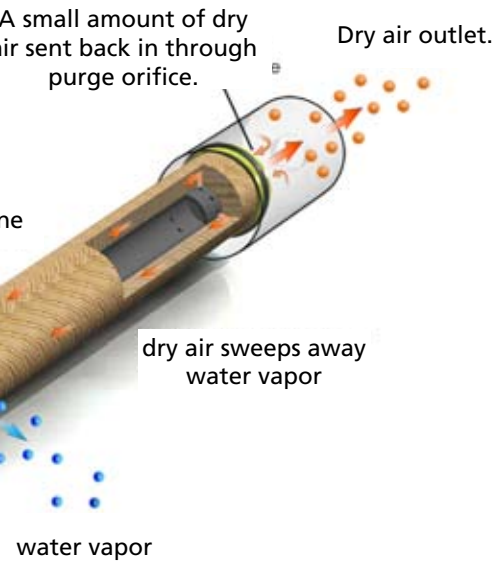
■ To ensure and extend the life-time of the membranes, we recommend the installation of an ultrafilter MF microfilter with nanofibre technology as a pre-filter.

compressed
air inlet



Safe installation

■ ultradry UFM membrane dryers can be installed quite easy and safe. Pre-filter, either a single housing or a combination of housings, can be assembled directly with the membrane dryer by a wall mounting bracket.



ultradry UFM – The membrane dryer with unique features:

■ 14 different sizes with performances between 2 and 180 m^3/h (at a dewpoint reduction of 15 °C) ensure perfect match to the required performance flow.

■ ultradry UFM membrane dryer achieve pressure dewpoints down to - 100 °C covering a wide range of applications.

■ Each membrane dryer is equipped with a calibrated purge air blend. No further further adjustments are necessary.

■ Due to the non fibre-releasing membrane, ultradry UFM membrane dryers are suitable for medical air applications.

■ ultradry UFM membrane dryers are extemely efficient due to their new, improved hollow fibre technology. Even with low pressure dewpoints only a relatively small purge air requirements is necessary.

Advantages:

- reliable and consistent performance
- low purge air consumption
- un-attended, maintenance-free 24-hour operation possible
- compact and lightweight
- fast response time
- easy installation
- no electricity required
- silent operaton
- no consumables required
- explosion proof

Technical data ultradry UFM membrane dryer

type UFM	volume flow at 7 bar g in m^3/h				connect. R BSP	dimensions in mm		
	PDP 15 °C	PDP 0 °C	PDP -20 °C	PDP -40 °C		length	Ø membrane	Ø inlet/outlet
0003	3	2	1,5	1	1/4"	224	43,2	58,4
0006	6	4	3,5	2	1/4"	325	43,2	58,4
0010	10	6	4,5	3	1/4"	427	43,2	58,4
0015	15	9	6,0	4	1/4"	503	43,2	58,4
0020	20	13	8,5	6	1/2"	312	61	81,3
0025	25	17	11,5	8	1/2"	376	61	81,3
0035	35	26	17	12	1/2"	465	61	81,3
0050	50	34	23	16	1/2"	592	61	81,3
0065	65	45	30	22	1,2"	411	88,9	109,2
0080	80	58	38	28	1,2"	462	88,9	109,2
0100	100	73	48	35	1,2"	549	88,9	109,2
0125	125	87	58	42	1,2"	640	88,9	109,2
0150	150	107	71	51	3/4"	483	114,3	132,1
0180	180	128	85	62	3/4"	533	114,3	132,1

The operating data refer to an operting pressure of 7 bar g and a compressed inlet temperature of 35 °C.

Max. operating temperature: +60° C (140°F)
Max. operating pressure: 10 barg
average differential pressure: Dp ~0.2 barg

We recommend appropriate pre-filtration by a 0,01 µ high performance microfilter MF made by utrafilter GmbH.

operating pressure	bar	4	5	6	**7**	8	9	10	11	12
correction factor	K1	0,41	0,56	0,76	**1**	1,22	1,48	1,76	1,86	2,22

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ultrafilter gmbh
Otto-Hahn-Str. 1 • 40721 Hilden • Germany
Tel: +49 (0) 21 03.33 36 0 • Fax +49 (0) 21 03.33 36 36
e-Mail: info@ultra-filter.de • **www.ultra-filter.de**

Your compressed air specialist: