

DRYPOINT® M

COMPRESSED AIR MEMBRANE DRYER
SOLID STATE DRYING TECHNOLOGY

DRYING TAILORED TO SIZE

It is most economical to dry only the compressed air that is actually being used by the consumer, and to make it only as dry as he actually needs it to be. Thus the drying relates the specific individual application.

The compressed air user also makes demands with regard to immediate availability and reliability. This applies whether the application is for laboratory areas, or an application in manufacturing shops or outside areas, whether mobile or stationary.

The demand:

Application oriented compressed air drying.

The solution:

DRYPOINT® M from BEKO.

DRYPOINT® M stands for compact efficiency ...

- Low space requirement
- Simple, efficient and compatible with CLEARPOINT® filters
- Smart design

... and safety ...

- All functional components are safely integrated into the housing
- Guaranteed drying, independent of the ambient conditions, humidity is removed regardless of external parameters
- No alteration of compressed air composition

... which pays off.

- lower purge air consumption
- Service-free, as there are no moving parts which may wear (only the pre-filter elements need to be changed at regular intervals)
- no environmentally hazardous drying agents

If you have any questions concerning a specific small or large capacity application, we are sure we can help you with our experienced team of application engineers.

We recommend **DRYPOINT® M** for application oriented compressed air drying.



As is required for all drying methods, pre-filtration is also essential for the reliable function of a membrane dryer.

CLEARPOINT® filters from BEKO go perfectly with the

BEKO go perfectly with the **DRYPOINT® M** membrane dryer.



A turn for the better

What is Twist 60?

Twist 60 represents the unique arranged winding of the membrane fibers: the fibers build up in layers around the center tube of the membrane element, each layer crosses the one before.

What is your advantage?

Lowest purge air consumption, that means low energy costs:

The purge air is distributed effectively in the whole membrane element, thus using maximum available contact surface. This results is a highly efficient drying process.

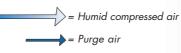
Low space requirements:

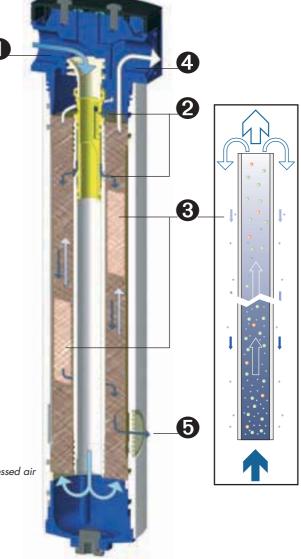
The principle of Twist 60 reduces the total height of the membrane element, thus resulting in a smaller dryer

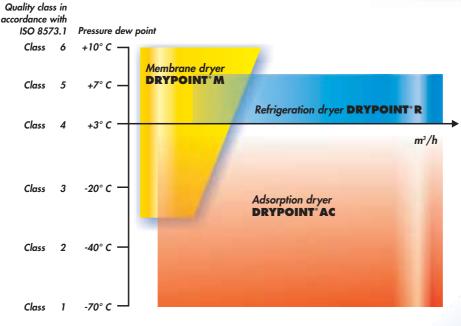
SIMPLE AND EFFECTIVE

CLEARPOINT® Housing model:

- Compressed air runs through the core pipe, and is then diverted to the membrane element in the ground area. The compressed air, which is still humid, flows through the sharply selective hollow fiber membranes of the membrane element inside.
- 2 The purge air, required for drying, diverges continuously at the outlet area of the membrane element, and is expanded atmospherically using a defined nozzle orifice. Due to this expansion, the purge air becomes significantly dryer, as humidity contained in the compressed air now fills the expanded volume. The dry purge air passes the exterior of the membrane fibers.
- 3 As a result, two air flows with a different moisture content move in reverse flow through the membrane element, separated only by the membrane wall. Inside the membranes, humid compressed air flows and dry purge air passes outside. On account of the varying moisture content, moisture from the compressed air diffuses into the purge air. As regards the drying procedure, use of the TWIST 60 technology results in maximum efficiency.
- 4 Compressed air is dry when leaving the membrane element.
- **5** Humid purge air is released into the environment.







Along with filtration, compressed air drying contributes significantly to the enhancement of process reliability. Humidity in compressed air systems causes corrosion, and promotes the growth of micro-organisms. In individual cases, condensate emerges at the point of collection. This represents a permanent risk with regard to the industrial process, e.g. due to failing pneumatic controls, increased wear and tear, or other problems with the production process.

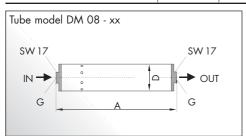
DRYPOINT® M membrane dryers constitute part of the extensive BEKO TECHNOLOGIES dryer program for compressed air processing. We would be happy to give you more advice should you require it.

TECHNICAL DATA

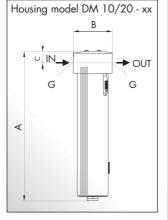
DRYPOINT® M is available in several sizes for different drying levels. As a tube model for the output ranges up to 200 l/min, and as a housing model up to 800 l/min. Higher volume flows are achievable by parallel connection of several membrane dryers.

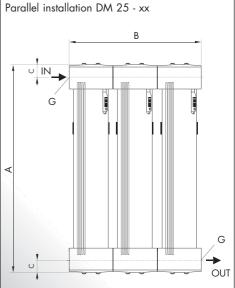
The volume flow, pressure, module size and purge air setting all exert influence on the drying capacity of **DRYPOINT® M** membrane dryers. Depending on these factors, pressure dew point reductions between 20 and 55 K or more can be achieved. Custom design is also offered for special applications.

Module size	Drying performance DRYPOINT® M			Dimensions					Weight
	Inlet in I/min			Α	В	С	D	G	
	Тур А	Тур В	Тур С	mm	mm	mm	mm	mm	kg
DM 08-14 R	50	21	12	140	-	-	45	1/4	0.27
DM 08-19 R	100	35	24	190	-	-	45	1/4	0.35
DM 08-23 R	150	70	35	230	-	-	45	1/4	0.41
DM 08-29 R	200	105	50	290	-	-	45	1/4	0.49
DM 10-41 C	300	155	75	409	75	28	-	3/8	1.7
DM 10-47 C	400	205	115	469	75	28	-	3/8	1.9
DM 20-48 C	600	300	160	482	100	34	-	3/4	3.0
DM 20-53 C	800	430	225	532	100	34	-	3/4	3.3
DM 20-60 C	1050	660	325	602	100	34	-	3/4	3.6
DM 20-67 C	1350	800	400	672	100	34	-	3/4	3.95
DM 25-57 CP2	1600	860	450	564	200	34	-	1	7.5
DM 25-57 CP3	2400	1290	675	564	300	34		1	11.0
DM 25-57 CP4	3200	1720	900	564	400	34		1	14.5
DM 25-57 CP5	4000	2150	1125	564	500	34	-	1	18.0
Inlet PDP	+35° C			The indicated performance data relate to a pressure of 7 bar and an inlet					
Outlet PDP	+15° C	+3° C	-20° C	pressure dew point of 35° C.					
Class	6	4	3	In accordance with DIN ISO 8573-1					



Temperature compressed air +2 to $+60^{\circ}$ C Ambient temperature +2 to $+60^{\circ}$ C 4 - 12.5 bar (ü) Pressure Pressure difference * 0.1 - 0.3 bar 1 μm 0.01 μm Fine filter Super-Fine filter Noise level << 45 dB(A)





Purge air consumption in per cent at nominal capacity: PDP lowering from 35° C to 15° C approx. 10 % PDP lowering from 35° C to 3° C approx. 14 % PDP lowering from 35° C to -20° C approx. 20 %

Subject to technical changes without prior notice, errors not excluded. XP DPM 001 GB Edition: 01.06

^{*} depending on the volume flow and module size