MMD-P SERIES
PNEUMATIC COMPRESSED AIR DRYER

mikropor

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Manufacturing Forward

mikropor

Mikropor began its journey in 1987 with a passion to create "Tomorrow's Technology" and has become one of the leading manufacturers of atmospheric air filtration solutions and compressed air treatment systems for a variety of industries.

By closely following the latest developments in technology, Mikropor's "Best in Class" products and solutions are appreciated by customers in more than 100 countries.

The company's sustainable growth has been provided by its passion for innovation and commitment to quality, as well as its dedication to technology. Mikropor is an environmentally conscious company that values people, while developing products that extend the needs and expectations of customers.

With this mission, Mikropor continues to become one of the most recognized brands in the world by expanding its global penetration in the field of technological filtration and contributes to a healthier planet.

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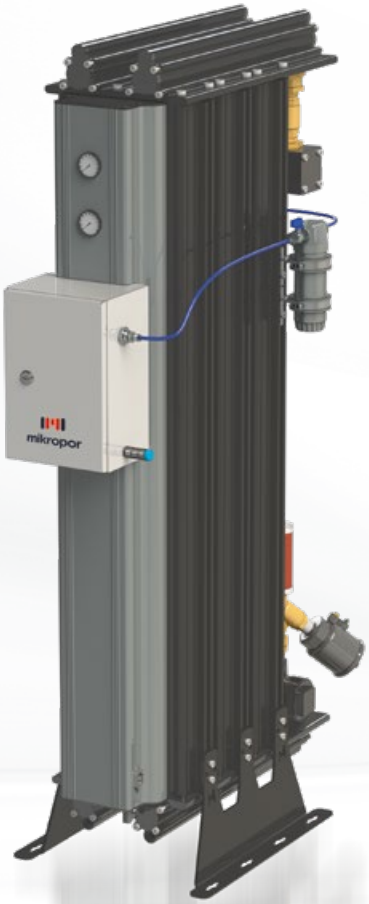
MMD-P SERIES PNEUMATIC MODULAR DESICCANT

The water inside the compressed air is always a problem. Atmospheric air includes water vapor, oil, and dust particles inside it. When the air is compressed the particles inside the air are also densified and produced unwanted condensate inside the compressed air. This condensate is generally acidic, and it could easily harm the pneumatic component of the system. It can damage the piping line and cause gas leakage, damage the end-product quality, or create undesired maintenance costs. For preventing these kinds of problems compressed air dryers should be used.

Mikropor Modular Pneumatic Compressed Air Dryer- MMD-P produces -40°C dew point compressed dry air without needing any power supply. MMD-P doesn't need any electrical connection for producing dry compressed air. For that reason, it can install in any place.



Advantages

- **No Electricity Required**
  - It could be installed in almost any industrial location as they do not require additional energy to operate. It could also be used in a hazardous area.
- **Low Cost**
  - Require no electricity thus lowering operating costs. Also, it needs only pre-defined maintenance.
- **High Efficiency**
  - It can supply dry compressed air immediately. It removes the water vapor and lowers the dew point to -40°C (optionally -70°C).
- **Compact Design**
  - It could be placeable in narrow spaces due to its modular design.

As operating in environments prone to explosive substances, it is imperative to adhere to the EU ATEX directives. The entities in charge must evaluate the premises for potential areas where explosive gas or dust mixtures could form. If deemed necessary, these areas should be categorized into specific zones. This zone classification enables the selection of appropriate machinery and equipment suitable for operation in those designated areas. The labels provided below outline the zone classifications within an installation where potentially explosive atmospheres might arise and labeling of hazardous locations, the classification of explosion groups and temperature classes, differentiation of gases, mists, and dusts.

User			Appropriate machinery and equipment		
Gas Zone	Dust Zone	Presence of a potentially explosive atmospheric environment	Equipment group*	Equipment category	Application Area (not mining)
0		Constantly, often, approx. >1000 h/year	II	1G	Gases, mist, vapor
	20		II	1D	Dust
1		Occasionally, sometimes, approx. 10 – 1000 h/year	II	2G	Gases, mist, vapor
	21		II	2D	Dust
2		Rarely, infrequently, in the event of an error, approx. <10 h/year	II	3G	Gases, mist, vapor
	22		II	3D	Dust

* Equipment group states that the equipment is for use in areas that might be dangerous due to an explosive atmosphere/conditions.

In this context, Mikropor kindly states that the MMD-P Series is approved according to ATEX 2014/34/EU Directive with the scopes stated below. The classifications shown below show the approved protection classes of the MMD-P Series.

II 2G Exh IIC T6
II 2D Exh IIC T85

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Technical Specifications

Model	Capacity		Connection Size
	(Nm^3/h)	(scfm)	
MMD-P-3	5	3	1/2"
MMD-P-5	10	5	1/2"
MMD-P-10	20	10	1/2"
MMD-P-15	25	15	1/2"
MMD-P-20	35	20	1/2"
MMD-P-25	45	25	1/2"
MMD-P-30	50	30	1/2"
MMD-P-40	70	40	1 1/2"
MMD-P-50	85	50	1 1/2"
MMD-P-60	100	60	1 1/2"
MMD-P-75	130	75	1 1/2"
MMD-P-100	170	100	1 1/2"
MMD-P-120	200	120	1 1/2"
MMD-P-180	300	180	1 1/2"
MMD-P-240	400	240	1 1/2"

Pressure Dew Point	Nominal Inlet Temperature	Nominal Working Pressure	Maximum Inlet Temperature	Maximum Working Pressure	Maximum Ambient Temperature
-40°C / -70°C (opt)	35°C	7 bar	50°C	16 bar	50°C

* Given flows are at 7 barg pressure with reference to 20°C and 1 bar atmospheric air suction as per ISO7183.

Correction Factor for MMD-P Series

Pressure (bar)	F1	Inlet Temp. (°C)	F2
4.5	0.69	20	1
5	0.75	25	1
6	0.88	30	1
7	1	35	1
8	1.12	40	0.80
9	1.25	45	0.73
10	1.37	50	0.59
11	1.50	-	-
12	1.62	-	-
13	1.74	-	-
14	1.87	-	-
15	1.99	-	-
16	2.11	-	-

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