

PMD 1 - 7 - Membrane dryers

Features and Benefits

- ▶ Lowest total cost of ownership ensuring the highest air quality
- ▶ Compact size and flexible design allows different orientation per application
- ▶ Pneumatech's unique PMD dryer range ensures the lowest pressure drop and the lowest purge air use – providing real energy savings without compromise in production reliability and efficiency. Simple yet eco-friendly technology.
- ▶ Dry air in environments with strict safety or environmental requirements:
 - Low flow environments
 - Areas without electrical supply
 - Areas with explosion proof requirements
 - Noise sensitive areas
 - Corrosion sensitive areas
 - Pneumatech's membrane dryers perform where others won't:
 - Small spaces
 - Areas where flexible mounting is required
 - High vibration areas
 - Widely fluctuating temperatures
- ▶ State of the art fiber technology offering maximum efficiency
 - An engineers unique coating helps the PMD membrane dryers increase the separation efficiency between water vapour, oxygen and nitrogen
 - Extremely low air leakages and lowest purge loss in comparison with other standard membrane dryers
- ▶ Lowest pressure drop thanks to minimal air resistance
 - Simple and longitudinal design ensures steady compressed air flow eliminating unwanted twists and turns inside the housing resulting into minimal pressure drop and utmost efficiency
- ▶ Variants to suit your performance needs
- ▶ Equipped with our Ultimate filters for optimal performance
- ▶ Pneumatech's dryer range includes the P and N model range, each in 7 different sizes
- ▶ P range: Ensures a suppression of 32° C (55° F), giving at the reference conditions an outlet air pressure dew point of 3° C (40° F)
- ▶ N range: Lowers the inlet dew point with 55°C (100° F), giving a pressure dew point of -20°C (-5° F) at the reference conditions



Variants



Version with
purge control



Version without
purge control

Options



Electronic drain



Wall brackets

With its pre-filters, Pneumatech PMD dryers remove oil particles and moisture from compressed air in the most demanding conditions, at the lowest energy cost. Thanks to their special fiber technology, PMD dryers ensure the lowest pressure drop and purge air loss for the highest possible efficiency, saving you time and money.

From small spaces to environments with fluctuating ambient temperatures, PMD dryers can perform in a wide variety of harsh and critical conditions. PMD dryers also come with different types of membranes, allowing you to choose the exact air treatment you need and the dew point your operation requires. With an innovative design, PMD dryers provide the quality of air that will increase the reliability and energy efficiency of your production.

Technical specifications for PMD P																									
Product → Specification ↓	Unit	PMD 1P			PMD 2P			PMD 3P			PMD 4P			PMD 5P			PMD 6P			PMD 7P					
Pressure	bar	7	10	13	7	10	13	7	10	13	7	10	13	7	10	13	7	10	13	7	10	13			
	psi	102	145	190	102	145	190	102	145	190	102	145	190	102	145	190	102	145	190	102	145	190			
Max. inlet flow	m³/h	10.8	14.4	18	18.0	25.2	30.6	32.4	43.2	50.4	50.4	68.4	79.2	68.4	90.0	115.2	90.0	122.4	151.2	126.0	158.4	198.0			
	cfm	5.0	18.0	10.6	10.6	14.8	18.0	19.1	25.4	29.7	29.7	40.3	46.6	40.3	53.0	67.8	53.0	72.1	89.0	74.2	93.3	116.6			
Purge	%	14	10	8	15	11	9	15	11	9	15	14	11	14	11	8	14	10	8	14	11	9			
Pressure drop	mBar	100	100	100	170	170	170	170	170	170	270	270	270	170	175	180	240	240	250	180	200	190			
	psi	1.5	1.5	1.5	2.5	2.5	2.5	2.5	2.5	2.5	3.9	3.9	3.9	2.5	2.5	2.6	3.5	3.5	3.6	2.6	2.9	2.8			
Filter model		PMH G 54, PMH C 54	PMH G 54, PMH C 54	PMH G 54, PMH C 54	PMH G 54, PMH C 54	PMH G 54, PMH C 54	PMH G 54, PMH C 54	PMH G 54, PMH C 54	PMH G 54, PMH C 54	PMH G 54, PMH C 54	PMH G 85, PMH C 85	PMH G 85, PMH C 85	PMH G 85, PMH C 85	PMH G 85, PMH C 85	PMH G 85, PMH C 85	PMH G 119, PMH C 119	PMH G 119, PMH C 119	PMH G 119, PMH C 119	PMH G 119, PMH C 119	PMH G 119, PMH C 119	PMH G 119, PMH C 119				
Connection	G	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	3/4"			
Weight excl. filters	kg	0.6	0.6	0.6	0.6	0.6	0.6	1.7	1.7	1.7	1.7	1.7	1.7	2.8	2.8	2.8	2.8	2.8	2.8	5.0	5.0	5.0			
	lbs	1.3	1.3	1.3	1.3	1.3	1.3	3.7	3.7	3.7	3.7	3.7	3.7	6.2	6.2	6.2	6.2	6.2	6.2	11.0	11.0	11.0			
Weight incl. filters	kg	2.9	2.9	2.9	2.9	2.9	2.9	4.0	4.0	4.0	4.2	4.2	4.2	5.3	5.3	5.7	5.7	5.7	5.7	7.9	7.9	8.9			
	lbs	6.4	6.4	6.4	6.4	6.4	6.4	8.8	8.8	8.8	9.2	9.2	9.2	11.7	11.7	12.5	12.5	12.5	12.5	17.4	17.4	20			
Dimensions	mm	A			99			99			122			122			145			145			170		
	inch	A			3.9			3.9			4.8			4.8			5.7			5.7			6.7		
	mm	B			532			532			733			733			79			709			732		
	inch	B			20.9			20.9			28.9			28.9			27.9			27.9			28.8		
	mm	C			757			757			959			959			934			934			957		
	inch	C			29.8			29.8			37.8			37.8			36.8			36.8			37.7		
	mm	D			264			264			277			277			287			342			355		
	inch	D			10.4			10.4			10.9			10.9			11.3			13.5			14.0		
	mm	E			716			716			906			906			881			936			953		
	inch	E			28.2			28.2			35.7			35.7			34.7			36.9			37.5		
	mm	F			291			291			313			313			334			334			361		
	inch	F			11.5			11.5			12.3			12.3			13.1			13.1			14.2		

Notes:
Add 100mm free space below the filters for easy cartridge exchange
The purge stop option adds 50mm to diameter A and height D

Kp Flow correction factor due to compressed air inlet pressure (e) 7bar							
Operating pressure	bar	4	5	6	7	8	9
Pressure correction factor	Kp	0.61	0.74	0.87	1.00	1.12	1.25

Kp Flow correction factor due to compressed air inlet pressure (e) 10bar						
Operating pressure	bar	8	9	10	11	12
Pressure correction factor	Kp	0.79	0.88	1.00	1.06	1.14

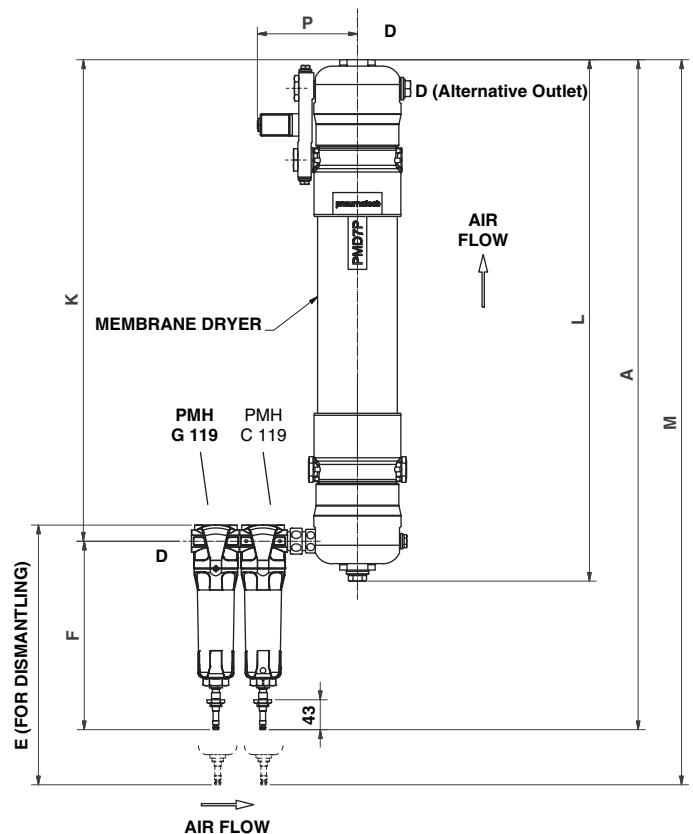
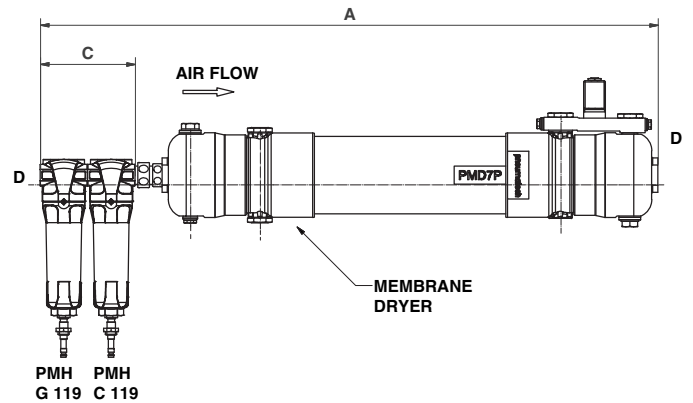
Kp Flow correction factor due to compressed air inlet pressure (e) 13bar					
Operating pressure	bar	11	12	13	14
Pressure correction factor	Kp	0.89	0.97	1.00	1.12

Please contact Pneumatech team for conditions other than the standard.

PMD 1 - 7 - Membrane dryers

General Specifications

- ▶ Standard equipment, complete scope of supply ensuring peace of mind for you
 - Purge block, fitted onto the dryer, controls the purged air
 - Two pre-filters, all interconnection components included, ensure optimal inlet air quality
 - Flexible inlet and outlet caps allow filters and dryer to be mounted in two settings for optimal use of available space
 - Optional equipment
 - Purge air stop to save purge when there is no air consumption
 - Wall mounting
 - Electronic condensate drain
- ▶ Membrane Dryers
 - Pressure dew point suppressions of 15°C (27°F) to as much as 95°C (171°F) are possible. Correction factors give the correct flow
 - Compressed air inlet pressure: 4 - 14bar(g), 58 - 203 psi(g)
 - Ambient temperature range: 1-66°C/34-150°F
 - Inlet temperature range: 1-66°C/34-150°F
 - The achievable PDP of the PMD membrane dryer range is dependent on inlet dew point



Technical specifications for PMD N

Product → Specification ↓	Unit	PMD 1N			PMD 2N			PMD 3N			PMD 4N			PMD 5N			PMD 6N			PMD 7N					
Pressure	bar	7	10	13	7	10	13	7	10	13	7	10	13	7	10	13	7	10	13	7	10	13			
	psi	102	145	190	102	145	190	102	145	190	102	145	190	102	145	190	102	145	190	102	145	190			
Max. inlet flow	m³/h	5.4	7.2	9.0	12.6	16.2	19.8	21.6	28.8	36.0	32.4	43.2	54.0	46.8	64.8	82.8	61.2	79.2	100.8	93.6	126.0	162.0			
	cfm	3.2	4.2	5.3	7.4	9.5	11.7	12.7	17.0	21.2	19.1	25.4	31.8	27.6	38.2	48.8	36.0	46.6	59.4	55.1	74.2	95.4			
Purge	%	18	13	11	19	13	10	17	12	10	17	14	10	17	12	10	19	14	10	18	13	10			
Pressure drop	m bar	80	80	80	250	240	240	160	150	150	250	240	240	180	190	190	250	240	250	250	240	250			
	psi	1.2	1.2	1.2	3.6	3.5	3.5	2.3	2.2	2.2	3.6	3.5	3.5	2.6	2.8	2.8	3.6	3.5	3.6	3.6	3.5	3.6			
Filter model		PMH G 54 PMH C 54	PMH G 54 PMH C 54	PMH G 54 PMH C 54	PMH G 54 PMH C 54	PMH G 54 PMH C 54	PMH G 54 PMH C 54	PMH G 54 PMH C 54	PMH G 54 PMH C 54	PMH G 54 PMH C 54	PMH G 54 PMH C 54	PMH G 54 PMH C 54	PMH G 85 PMH C 85	PMH G 85 PMH C 85	PMH G 85 PMH C 85	PMH G 85 PMH C 85	PMH G 85 PMH C 85	PMH G 85 PMH C 85	PMH G 119 PMH C 119	PMH G 119 PMH C 119	PMH G 119 PMH C 119				
Connection	G	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"			
Weight excl. filters	kg	0.7	0.7	0.7	0.9	0.9	0.9	2.4	2.4	2.4	2.4	2.4	2.4	3.6	3.6	3.6	3.6	3.6	3.6	6.8	6.8	6.8			
	lbs	1.5	1.5	1.5	2.0	2.0	2.0	5.3	5.3	5.3	5.3	5.3	5.3	7.9	7.9	7.9	7.9	7.9	7.9	15.0	15.0	15.0			
Weight incl. filters	kg	3.0	3.0	3.0	3.2	3.2	3.2	4.7	4.7	4.7	4.7	4.7	4.7	6.1	6.1	6.1	6.1	6.1	6.1	9.7	9.7	9.7			
	lbs	6.6	6.6	6.6	7.0	7.0	7.0	10.3	10.3	10.3	10.3	10.3	10.3	13.4	13.4	13.4	13.4	13.4	13.4	21.3	21.3	21.3			
Dimensions	mm	A			99			99			122			122			145			145			170		
	inch	A			3.9			3.9			4.8			4.8			5.7			5.7			6.7		
	mm	B			715			1020			1076			1076			1074			1074			1113		
	inch	B			28.1			40.2			42.4			42.4			42.3			42.3			43.8		
	mm	C			940			1245			1302			1302			1299			1299			1338		
	inch	C			37.0			49.0			51.3			51.3			51.1			51.1			52.7		
	mm	D			264			264			277			277			287			287			355		
	inch	D			10.4			10.4			10.9			10.9			11.3			11.3			14.0		
	mm	E			899			1204			1249			1249			1246			1246			1334		
	inch	E			35.4			47.4			49.2			49.2			49.1			49.1			52.5		
	mm	F			291			291			313			313			334			334			361		
	inch	F			11.5			11.5			12.3			12.3			13.1			13.1			14.2		

Notes: PMD 5P-7: dimensions, filters and weight of PMD 6P
 Add 100mm free space below the filters for easy cartridge exchange
 The purge stop option adds 50mm to diameter A and height D

Kp Flow correction factor due to compressed air inlet pressure (e) 7bar							
Operating pressure	bar	4	5	6	7	8	9
Pressure correction factor	Kp	0.62	0.75	0.88	1.00	1.13	1.26

Kp Flow correction factor due to compressed air inlet pressure (e) 10bar						
Operating pressure	bar	8	9	10	11	12
Pressure correction factor	Kp	0.84	0.94	1.00	1.12	1.22

Kp Flow correction factor due to compressed air inlet pressure (e) 13bar					
Operating pressure	bar	11	12	13	14
Pressure correction factor	Kp	0.96	1.04	1.00	1.20

Please contact Pneumatech team for conditions other than the standard.