



Compressed Air Hollow Fiber Membrane Dryers

Bulletin 1300 - 800/USA



Finite®

FMD-Series Hollow Fiber Membrane Technology

Finite®, the world leader in coalescing media development, has combined its proven coalescing filtration with a modern alternative to pressure swing and refrigerant dryer technologies.

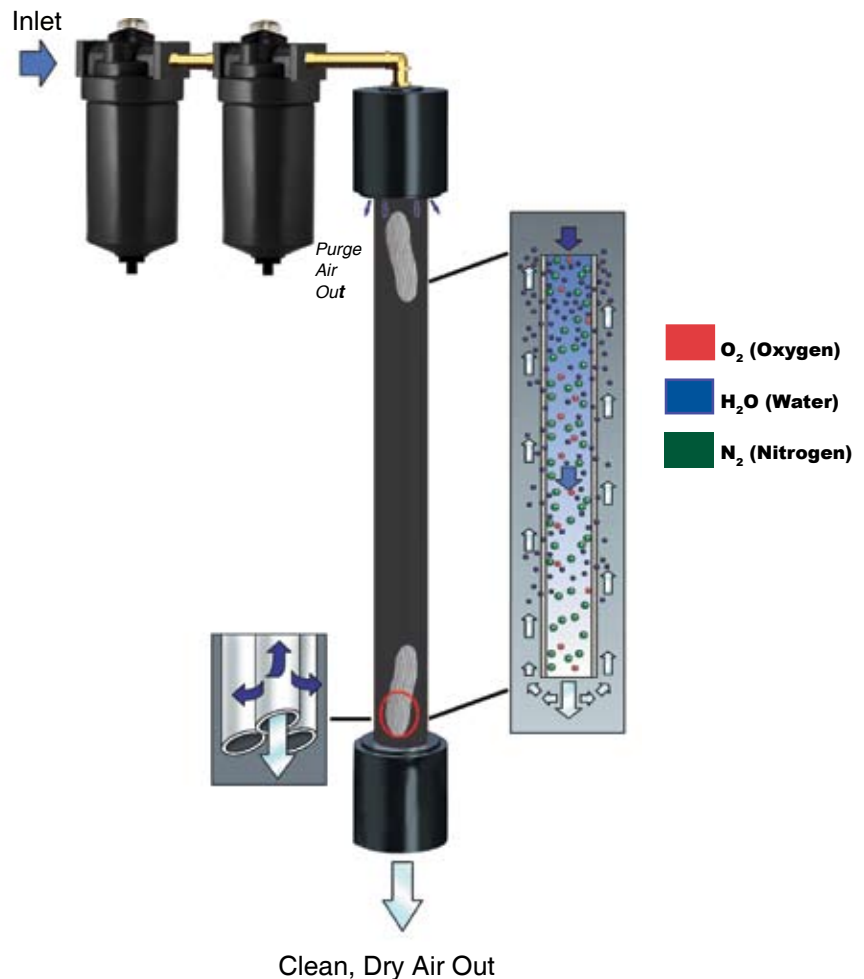
Finite®'s membrane dryers are available in 10 models which can supply clean, dry compressed air with dewpoints as low as -40°F (@10 SCFM) and +35° F (@40 SCFM).

These membrane dryers are engineered for easy installation, minimal maintenance, and long term reliability.

How It Works:

The water vapor in the compressed air is removed by the principle of selective permeation through a membrane. The membrane module consists of bundles of hollow membrane fibers, each permeable to water vapor. As the compressed air passes through the center of these fibers, water vapor permeates through the walls of the fiber. A small portion of the dry air (purge flow) is redirected along the outside of each hollow fiber, carrying away the moisture-laden air which is then exhausted to room atmosphere. The remainder of the dry air is piped to the application.

NOTE: In all cases a Grade 10 prefilter and a Grade 6 coalescer are installed upstream of the dryer module for 99.9985% removal of oil aerosols and mists.



Applications

- Air bearings
- Analytical instrumentation
- Coordinate measurement machines (CMM)
- Dental air
- Dry air for hazardous areas
- Electrostatic painting
- General laboratory air supply
- Laboratory grade air
- Laser and optical purge
- Low dewpoint instrument air
- OEM machine builders
- Pneumatic equipment
- Prevention of air line freeze ups
- Purge air for electronic cabinets
- Purge air for moisture sensitive coatings and adhesives

Features

- No moving parts
- Quiet
- Designed for point of use
- Continuous operation
- Differential pressure indicator (on selected models)
- Hollow fiber technology
- Non oxygen depleting membrane fibers

Advantages


- Nothing to wear out
- Can be installed anywhere
- Lightweight
- No waiting for media changeouts
- Indicates when filter element should be changed
- No electricity
- No U.L. approval required
- No refrigerants
- Low dewpoints
- Only water vapor molecules are allowed to pass through fiber walls

Benefits

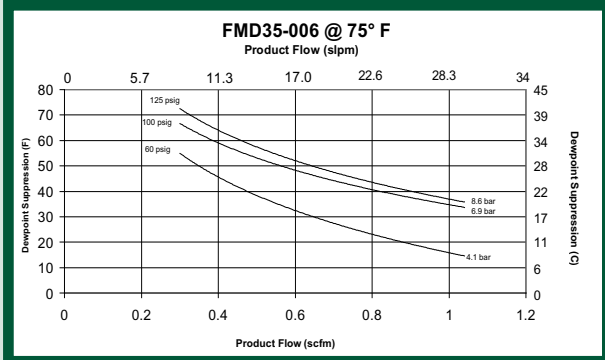
- Less downtime
- Perfect for point-of-use applications
- Ease of installation
- Less downtime
- Dryer protection insurance
- Low operating cost
- OEM cost savings
- Environmentally friendly
- Prevents freezing
- Dryers can be used in medical, dental and breathing air applications

Part Number FMD35-006
+35° F Dewpoint Dryers

Specifications:

Width	5.5" (14.00 cm)	
Height	14.5" (36.83 cm)	
Port Size	1/4" NPT	
Min./Max. Inlet Pressure	60/150 PSIG (4.1-10.3 bar)	
Ambient/Inlet Temp. Range	40°-100° F (4.4°-37.8° C)	
Purge Flow @ 100 PSI	0.25 SCFM (0.43 NM³/H)	
Pre-coalescer Part #	Q1S-10HM06-013	
Replacement element:	10HM06-013	
Coalescer Part #	Q1S-6HM06-013	
Replacement element:	6HM06-013	
Weight	0.7 lbs. (.38 kg)	


FMD35-006 @ 75° F



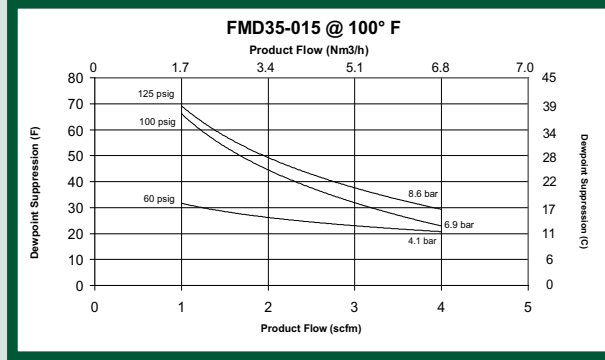
Total Air Consumption = Purge Flow + Product Flow

Part Number FMD35-015
+35° F Dewpoint Dryers

Specifications:

Width	6.5" (16.51 cm)	
Height	15" (38.10 cm)	
Port Size	1/4" NPT	
Min./Max. Inlet Pressure	60/150 PSIG (4.1-10.3 bar)	
Ambient/Inlet Temp. Range	40°-100° F (4.4°-37.8° C)	
Purge Flow @ 100 PSI	0.5 SCFM (0.85 NM³/H)	
Pre-coalescer Part #	Q1S-10HM06-013	
Replacement element:	10HM06-013	
Coalescer Part #	Q1S-6HM06-013	
Replacement element:	6HM06-013	
Weight	1.9 lbs. (.86 kg)	

FMD35-015 @ 100° F



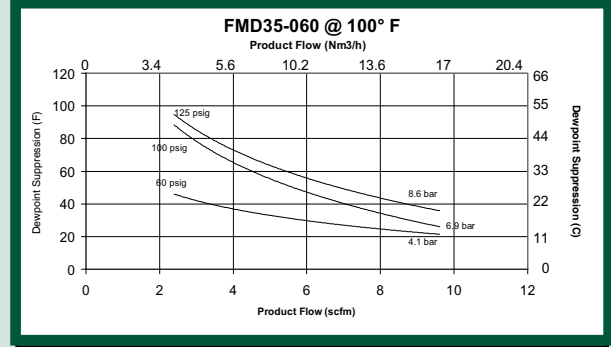
Total Air Consumption = Purge Flow + Product Flow

Part Number FMD35-060

+35° F
Dewpoint
Dryers

Specifications:

Width	10" (25.4 cm)
Height	22" (55.88 cm)
Port Size	1/4" NPT
Min./Max. Inlet Pressure	60/150 PSIG (4.1-10.3 bar)
Ambient/Inlet Temp. Range	40°-100° F (4.4°-37.8° C)
Purge Flow @ 100 PSI	1.5 SCFM (2.55 NM ³ /H)
Pre-coalescer Part #	HN1S-10CW
Replacement element:	10C10-025
Coalescer Part #	HN1S-6CW
Replacement element:	6C10-025
Weight	5.2 lbs. (2.36 kg)



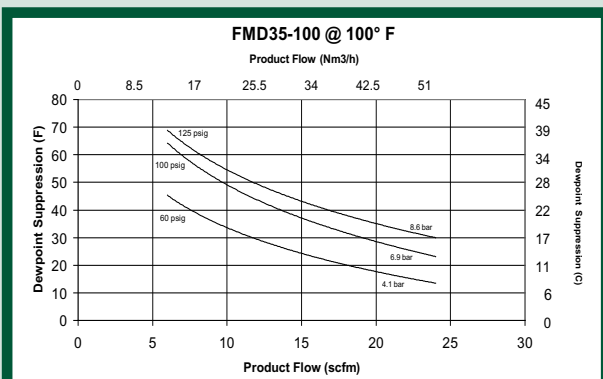
Total Air Consumption = Purge Flow + Product Flow

Part Number FMD35-100

+35° F
Dewpoint
Dryers

Specifications:

Width	11.5" (29.21 cm)
Height	22" (55.88 cm)
Port Size	1/2" NPT
Min./Max. Inlet Pressure	60/150 PSIG (4.1-10.3 bar)
Ambient/Inlet Temp. Range	40°-100° F (4.4°-37.8° C)
Purge Flow @ 100 PSI	3.5 SCFM (5.95 NM ³ /H)
Pre-coalescer Part #	HN2S-10CW
Replacement element:	10C10-025
Coalescer Part #	HN2S-6CW
Replacement element:	6C10-025
Weight	7.1 lbs. (3.22 kg)



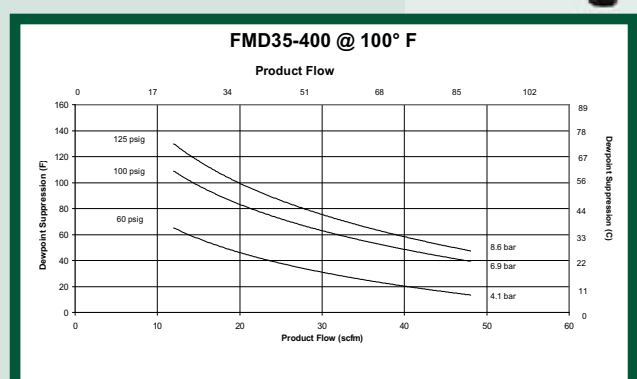
Total Air Consumption = Purge Flow + Product Flow

Part Number FMD35-400

+35° F
Dewpoint
Dryers

Specifications:

Width	14" (35.56 cm)
Height	38" (96.52 cm)
Port Size	1/2" NPT
Min./Max. Inlet Pressure	60/150 PSIG (4.1-10.3 bar)
Ambient/Inlet Temp. Range	40°-100° F (4.4°-37.8° C)
Purge Flow @ 100 PSI	6 SCFM (4.2 NM ³ /H)
Pre-coalescer Part #	HN2L-10CW
Replacement element:	10C10-050
Coalescer Part #	HN2L-6CW
Replacement element:	6C10-050
Weight	18.9 lbs. (8.57 kg)



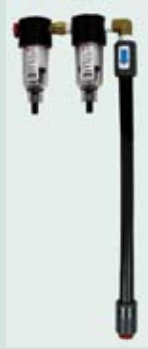
Total Air Consumption = Purge Flow + Product Flow

Part Number FMD40-001

-40° F
Dewpoint
Dryers

Specifications:

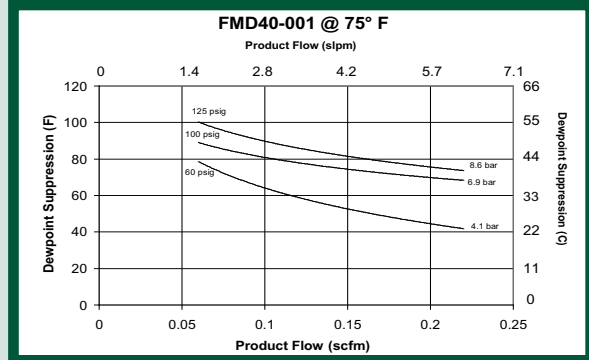
Width	5.5" (14.00 cm)
Height	14.5" (36.83 cm)
Port Size	1/4" NPT
Min./Max. Inlet Pressure	60/150 PSIG (4.1-10.3 bar)
Ambient/Inlet Temp. Range	40°-100° F (4.4°-37.8° C)
Purge Flow @ 100 PSI	0.25 SCFM (0.43 NM³/H)



Pre-coalescer Part # Q1S-10HM06-013
Replacement element: 10HM06-013

Coalescer Part # Q1S-6HM06-013
Replacement element: 6HM06-013

Weight 0.7 lbs.
(.38 kg)



Total Air Consumption = Purge Flow + Product Flow

Part Number FMD40-002

-40° F
Dewpoint
Dryers

Specifications:

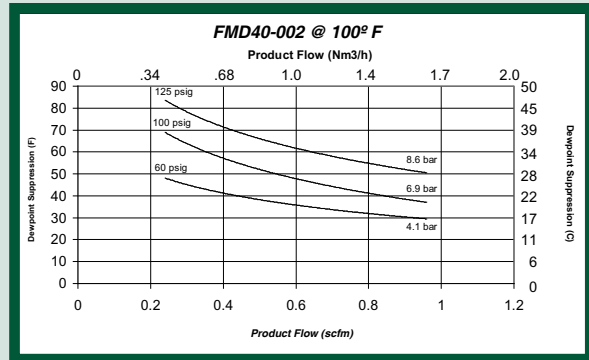
Width	6.5" (16.51 cm)
Height	15" (38.10 cm)
Port Size	1/4" NPT
Min./Max. Inlet Pressure	60/150 PSIG (4.1-10.3 bar)
Ambient/Inlet Temp. Range	40°-100° F (4.4°-37.8° C)
Purge Flow @ 100 PSI	0.2 SCFM (0.34 NM³/H)



Pre-coalescer Part # Q1S-10HM06-013
Replacement element: 10HM06-013

Coalescer Part # Q1S-6HM06-013
Replacement element: 6HM06-013

Weight 1.9 lbs.
(.86 kg)



Total Air Consumption = Purge Flow + Product Flow

Part Number FMD40-020

-40° F
Dewpoint
Dryers

Specifications:

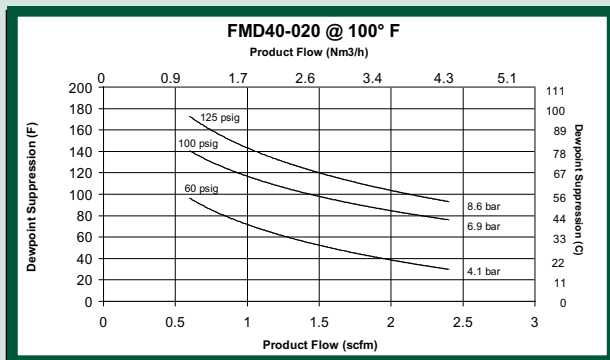
Width	10" (25.4 cm)
Height	22" (55.88 cm)
Port Size	1/4" NPT
Min./Max. Inlet Pressure	60/150 PSIG (4.1-10.3 bar)
Ambient/Inlet Temp. Range	40°-100° F (4.4°-37.8° C)
Purge Flow @ 100 PSI	0.5 SCFM (.85 NM³/H)



Pre-coalescer Part # HN1S-10CW
Replacement element: 10C10-025

Coalescer Part # HN1S-6CW
Replacement element: 6C10-025

Weight 5.2 lbs.
(2.36 kg)



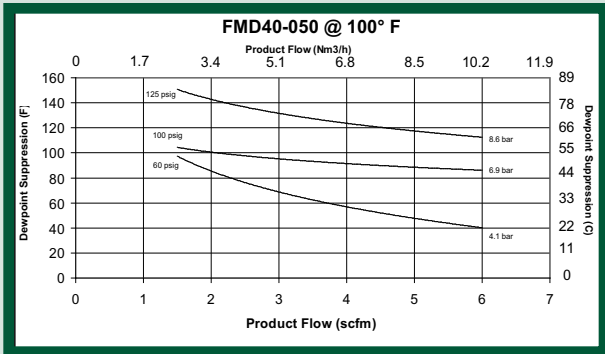
Total Air Consumption = Purge Flow + Product Flow

Part Number FMD40-050

-40° F
Dewpoint
Dryers

Specifications:

Width	14" (35.56 cm)
Height	26" (66.04 cm)
Port Size	1/2" NPT
Min./Max. Inlet Pressure	60/150 PSIG (4.1-10.3 bar)
Ambient/Inlet Temp. Range	40°-100° F (4.4°-37.8° C)
Purge Flow @ 100 PSI	2 SCFM (3.4 NM ³ /H)
Pre-coalescer Part #	HN2S-10CW
Replacement element:	10C10-025
Coalescer Part #	HN2S-6CW
Replacement element:	6C10-025
Weight	13.3 lbs. (3.22 kg)



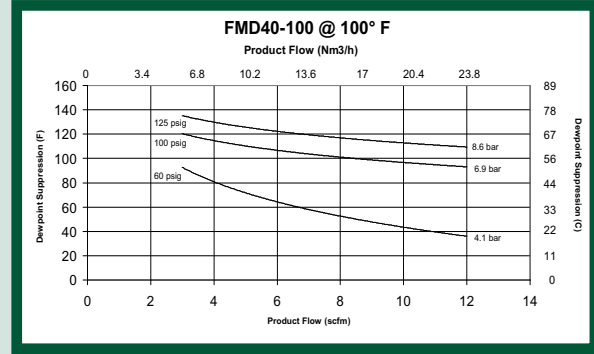
Total Air Consumption = Purge Flow + Product Flow

Part Number FMD40-100

-40° F
Dewpoint
Dryers

Specifications:

Width	14" (35.56 cm)
Height	38" (96.52 cm)
Port Size	1/2" NPT
Min./Max. Inlet Pressure	60/150 PSIG (4.1-10.3 bar)
Ambient/Inlet Temp. Range	40°-100° F (4.4°-37.8° C)
Purge Flow @ 100 PSI	2.5 SCFM (4.25 NM ³ /H)
Pre-coalescer Part #	HN2L-10CW
Replacement element:	10C10-050
Coalescer Part #	HN2L-6CW
Replacement element:	6C10-050
Weight	18.9 lbs. (8.57 kg)



Total Air Consumption = Purge Flow + Product Flow