WALKER FILTRATION

PROSFD

Walker Filtration's range of low flow Desiccant Dryers | PD004 to PD035

Flow rates 4 SCFM (7 Nm³/hr) to 35 SCFM (59 Nm³/hr)

With flow rates from 4 – 35 SCFM, our range of lower flow PROSFD models provide a proven solution for compressed air drying and are ideal for smaller, point of use applications.

Designed to deliver optimum performance in line with the highest standards of air purity, as specified in ISO 8573-1: 2010, PROSFD models PD004 to PD035 are supplied as standard with a XA grade 0.01 micron coalescing filter.

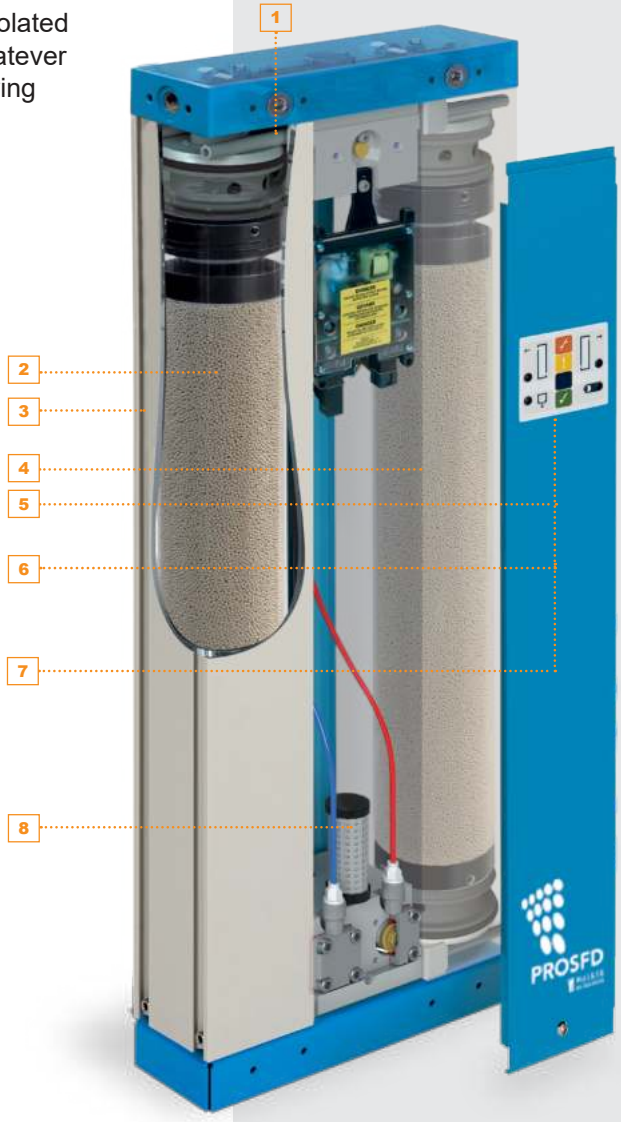
With a compact design and multi-ported manifold, the dryer can be installed vertically and horizontally, providing a flexible solution to your compressed air drying needs. This highly reliable, high efficiency range of dryers features built-in energy management, allowing the purge flow to be isolated during periods of low demand for efficient use of compressed air. Whatever your application requirement, PROSFD delivers a compressed air drying solution you can trust.

0.01 Micron Pre-filter
Supplied as standard

LED Controller
Supplied as standard

1 Micron Dust Filter
Integrated into desiccant cartridge

1	Multi-ported manifold and compact design allows for flexible installation	5	PD004 to PD035 feature 232 psig (16 barg) standard operating pressure
2	Controlled desiccant bed geometry ensures consistant and reliable dewpoint performance	6	Intelligent LED controller with built-in energy management (supplied as standard)
3	Anodized aluminum extrusions provides corrosion protection	7	Energy management feature isolates purge flow during periods of low demand
4	Desiccant columns can be removed for quick and efficient change out.	8	Internal Walker Filtration designed silencer reduces noise levels below 85dBA



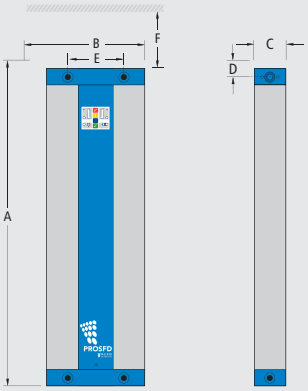
For further information please visit www.walkerfiltration.com

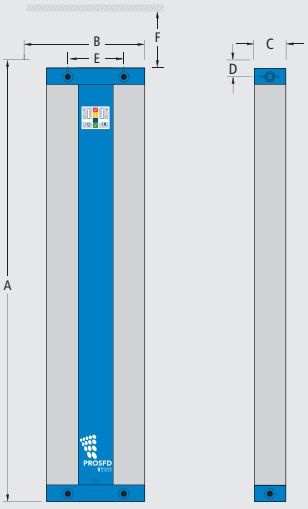
For further information please call: +1 814 836 2900

Technical Specification PD004 - PD035

Dryer model	Pipe size inches	Inlet flow rate*		Dimensions inches (mm)						Weight lb (Kg)	No. of cartridges	Included filter model
		SFCM	Nm/hr	A	B	C	D	E	F			
PD004	3/8	4	7	17.52 (445)	11.02 (280)	3.62 (92)	0.87 (22)	6.30 (160)	16.34 (415)	29 (13)	2	A30032XA
PD006	3/8	6	10	20.00 (504)	11.02 (280)	3.62 (92)	0.87 (22)	6.30 (160)	18.70 (475)	31 (14)	2	A30032XA
PD008	3/8	8	14	22.24 (564)	11.02 (280)	3.62 (92)	0.87 (22)	6.30 (160)	21.06 (535)	33 (15)	2	A30032XA
PD010	3/8	10	17	25.00 (634)	11.02 (280)	3.62 (92)	0.87 (22)	6.30 (160)	23.82 (605)	36 (17)	2	A30032XA
PD015	3/8	15	25	32.09 (814)	11.02 (280)	3.62 (92)	0.87 (22)	6.30 (160)	30.91 (785)	43 (20)	2	A30032XA
PD025	3/8	25	42	47.40 (1204)	11.02 (280)	3.62 (92)	0.87 (22)	6.30 (160)	40.75 (1035)	53 (24)	2	A30032XA
PD035	3/8	35	59	61.77 (1569)	11.02 (280)	3.62 (92)	0.87 (22)	6.30 (160)	56.30 (1430)	68 (31)	2	A30032XA

*Stated flow capacities based on an inlet pressure of 100 psig (7 barg), inlet temp of 95°F (35°C) and outlet pressure dewpoint of -40°F (-40°C). For capacities at other conditions, please refer to the correction factors below. Flow rates referenced to standard conditions, 68°F (20°C) at 14.7 psia (1013.25 mbara), and 0% relative water vapor.





Models PD004-PD035

Specification		
Standard pressure dewpoint	-40°F**	-40°C**
Optional pressure dewpoint	-100°F***	-74°C***
Minimum inlet air pressure	58 psig	4 barg
Maximum inlet air pressure	232 psig	16 barg
Power supply	12 - 24VDC or 100 - 240VAC (50-60Hz)	
Minimum ambient air temperature	41°F	5°C
Minimum inlet temperature	35°F	1.5°C
Maximum inlet temperature	122°F	50°C

** ISO Class 2 (ISO 8573-1:2010) *** ISO Class 1 (ISO 8573-1:2010)

Dryer correction factors

Operating pressure (PCF)													
psig	58	72	87	100	116	130	145	160	174	189	203	218	232
barg	4	5	6	7	8	9	10	11	12	13	14	15	16
Correction factor	0.62	0.75	0.87	1.00	1.12	1.25	1.37	1.50	1.62	1.75	1.87	2.00	2.12

Temperature (TCF)							
Fahrenheit (°F)	68	77	86	95	104	113	122
Celsius (°C)	20	25	30	35	40	45	50
Correction factor	1.07	1.06	1.04	1.00	0.88	0.78	0.55

Pressure Dewpoint (DCF)		
Fahrenheit (°F)	-40	-94
Celsius (°C)	-40	-70
Correction factor	1.00	0.70

PROSFD Sizing Example

To correctly select the PROSFD model suitable for your application the following information is required:
Minimum Inlet Pressure, Maximum Inlet Temperature, Maximum Inlet Flow and Required Pressure Dewpoint (PDP).

Requirements		Correction Factor
Maximum compressor inlet flow	15 SCFM (25 Nm³/hr)	-
Actual minimum inlet pressure to the dryer	87 psig (6 barg)	PCF = 0.87
Maximum inlet temperature	77°F (25°C)	TCF = 1.06
Pressure dewpoint (PDP)	-94°F (-70°C)	DCF = 0.70
Corrected dryer flow rate	$\frac{\text{Inlet flow rate}}{\text{PCF x TCF x DCF}} = \frac{15}{(0.87 \times 1.06 \times 0.70)} =$	23.2 SCFM (39 Nm³/hr)
Appropriate Dryer Size	Dryer model is selected based on the corrected flow rate, i.e. PD0025.	

Technical notes

1. PROSFD features easy removable desiccant cartridges with integral 1 micron dust filter.
2. For additional security, Walker Filtration recommends fitting an RX1 dust filter to the outlet.
3. All models are supplied together with an XA pre-filter.
4. Additional filtration, including a Water Separator, is recommended for high loaded inlet conditions.
5. Standard models operate at 100 psig (7 barg); for other pressures, please specify at time of order.

CRN

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