

PRODRY

Walker Filtration's range of lower 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 PRODRY 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, PRODRY models PD004 to PD035 are supplied as standard with 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 in-built energy management, allowing the purge flow to be isolated during periods of low demand for efficient use of compressed air. Whatever your application requirement, PRODRY delivers a compressed air drying solution you can trust.



0.01 Micron XA Pre-filter
Supplied as standard

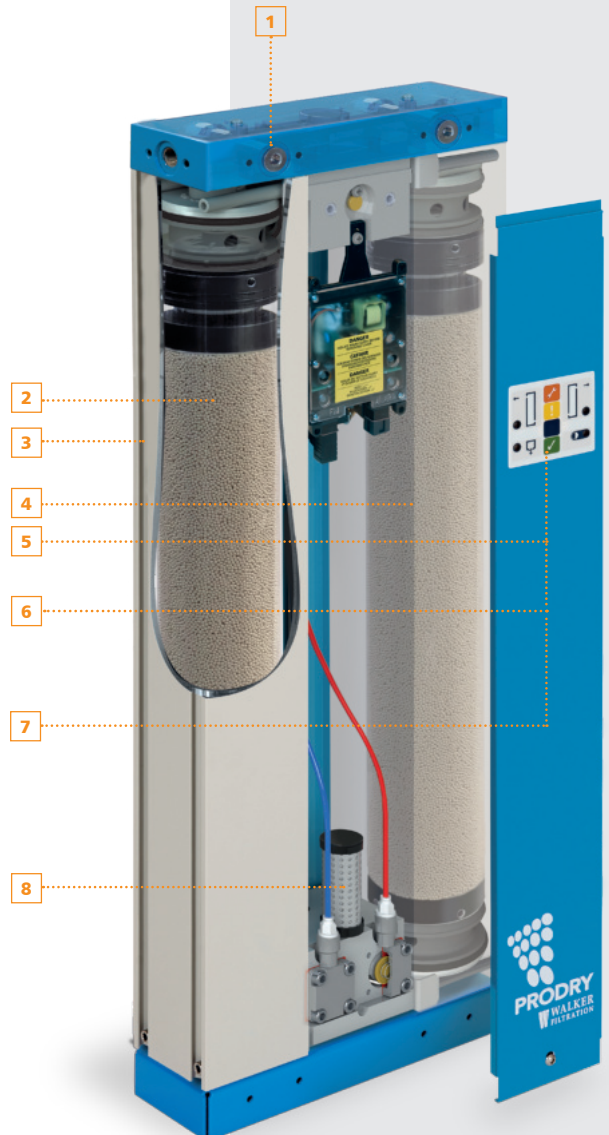


LED Controller
Supplied as standard



1 Micron X1 Dust Filter
Integrated into Desiccant Cartridge

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

Dryer model	Pipe size inches	Inlet flow rate*		Dimensions mm						Weight Kg	No. of cartridges	Included filter model
		Nm ³ /hr	SCFM	A	B	C	D	E	F			
PD004	3/8	7	4	445	280	92	22	160	415	13.0	2	A30032XA
PD006	3/8	10	6	504	280	92	22	160	475	14.0	2	A30032XA
PD008	3/8	14	8	564	280	92	22	160	535	15.0	2	A30032XA
PD010	3/8	17	10	634	280	92	22	160	605	17.0	2	A30032XA
PD015	3/8	25	15	814	280	92	22	160	785	20.0	2	A30032XA
PD025	3/8	42	25	1204	280	92	22	160	1035	24.0	2	A30032XA
PD035	3/8	59	35	1569	280	92	22	160	1430	31.0	2	A30032XA

* Stated flows are for an inlet pressure of 7 barg (100 psig) with reference to 20°C, 1 barg (abs.), 0% relative water vapour pressure. For flow at other pressures apply the appropriate correction factors, terms and dewpoint.

Specification		
Standard pressure dewpoint	-40°C*	-40°F*
Optional pressure dewpoint ISO Class (ISO 8573-1:2010)	-70°C**	-94°F**
Electronic control	12VDC - 24VDC or 100 - 240 VAC at 50 - 60Hz	
Minimum inlet temperature	1.5°C	34°F
Maximum inlet temperature	50°C	122°F
Minimum working pressure	4 barg	58 psig
Maximum working pressure	16 barg	232 psig

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

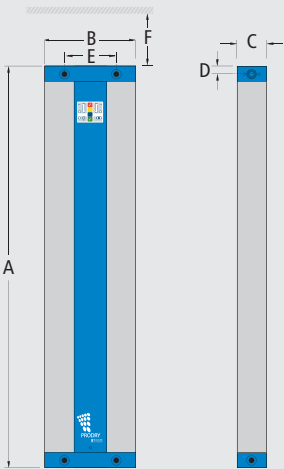
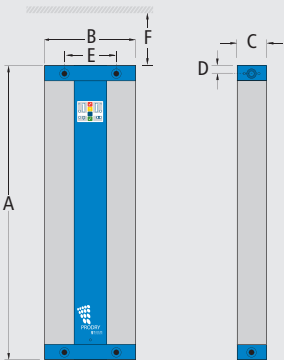
** ISO Class 1 (ISO 8573-1:2010)

Dryer correction factors

Operating pressure (PCF)															
barg	4	5	6	7	8	9	10	11	12	13	14	15	16		
psig	58	72	87	100	116	130	145	160	174	189	203	218	232		
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)					Pressure Dewpoint (DCF) ^(6.)		
Celsius (°C)	20	25	30	35	40	45	50
Fahrenheit (°F)	68	77	86	95	104	113	122
Correction factor	1.07	1.06	1.04	1.00	0.88	0.78	0.55

Pressure Dewpoint (DCF) ^(6.)		
Celsius (°C)	-40	-70
Fahrenheit (°F)	-40	-94
Correction factor	1.00	0.70



Models PD004-PD035

PRODRY Sizing Example

To correctly select the PRODRY 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	-
Actual minimum inlet pressure to the dryer	6 barg	PCF = 0.87
Maximum inlet temperature	25°C (77°F)	TCF = 1.06
Pressure dewpoint (PDP)	-70°C (-94°F)	DCF = 0.7
Corrected dryer flow rate	$\frac{\text{Inlet flow rate}}{\text{PCF} \times \text{TCF} \times \text{DCF}} = \frac{15}{(0.87 \times 1.06 \times 0.7)} = 23.2 \text{ scfm (39Nm}^3\text{/hr)}$	
Appropriate Dryer Size	Dryer model is selected based on the corrected flow rate, i.e. PD0025.	

Technical notes

- Models PD004 – PD035 supplied complete with XA (0.01 micron) pre-filter.
- An appropriate Water Separator must be installed. If bulk water enters the adsorption dryer it can cause heat expansion to the desiccant, substantial rise in the dryer differential pressure, lead to poor outlet dewpoint and cause potential dryer failure. Dryer warranty will be deemed invalid if a high efficiency Water Separator with an efficient condensate drain is not used.
- All dryer applications and sizing should be confirmed by Walker Filtration. Please contact nearest sales team for information on recommended sizing and air quality for your application need.
- Models PD004 – PD035 feature easy removable desiccant cartridges with integral 1 micron Dust Filter.
- For additional security, Walker Filtration recommends fitting an RX1 (1 micron) Dust Filter to the outlet.
- High Performance Cartridges are required for applications where -70°C/-94°F dewpoints are required.

