

The ultimate filtration & drying technology



# **PRODRY**

Walker Filtrations 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

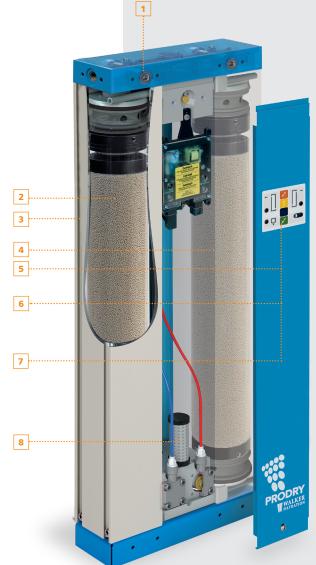
- Multi-ported manifold and compact design allows for flexible installation
- PD004 to PD035 feature 16 barg standard operating pressure
- Controlled desiccant bed geometry ensures consistant and reliable dewpoint performance
- Intelligent LED controller with built-in energy management (supplied as standard)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













## Technical Specification PD004 - PD035

Dryer	Pipe size	Inlet flow rate*		Dimensions mm							No. of	Included filter
model	inches	Nm³/hr	SCFM	Α	В	С	D	E	F	Kg	cartridges	model
PD004	3/8	7	4	445	280	92	22	160	415	13	2	A3031XA
PD006	3/8	10	6	504	280	92	22	160	475	14	2	A3031XA
PD008	3/8	14	8	564	280	92	22	160	535	15	2	A3031XA
PD010	3/8	17	10	634	280	92	22	160	605	17	2	A3031XA
PD015	3/8	25	15	814	280	92	22	160	785	20	2	A3031XA
PD025	3/8	42	25	1204	280	92	22	160	1035	24	2	A3031XA
PD035	3/8	59	35	1569	280	92	22	160	1430	31	2	A3031XA

\* 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.



<sup>\*</sup> 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)								
Celsius (°C)	20	25	30	35	40	45	50	
Fahrenheit (°F)	68	77	86	95	104	113	122	
<b>Correction factor</b>	1.07	1.06	1.04	1.00	0.88	0.78	0.55	

Pressure Dewpoint (	ewpoint (DCF)							
Celsius (°C)	-40	-70						
Fahrenheit (°F)	-40	-94						
<b>Correction factor</b>	1.00	0.70						

#### **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	$\frac{\text{Inlet flow rate}}{\text{PCF x TCF x DCF}} = {(0.8)}$	15 7 x 1.06 x 0.7) = 23.2 scfm (39Nm³/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.



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Models PD004-PD035