WALKER FILTRATION MEDICAL

Medical Vacuum

Models | A30025MV to A31500MV

Third party tested and validated in accordance with HTM 02-01, NFPA 99, ISO 7396-1 and AS 2896

Designed for use in critical medical applications to remove solid, liquid and bacterial contamination in vacuum systems, Walker Filtration's Medical Vacuum Filters guarantee a safe and reliable product that is trusted by hospitals worldwide.

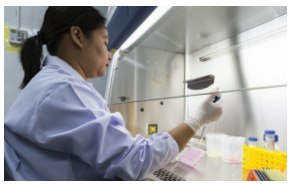
Situated on the suction side of a vacuum pump, Alpha Series Medical Vacuum Filters are essential to avoiding damage to vacuum pumps and preventing potentially hazardous biological contagions from being exhausted into the surrounding environment.

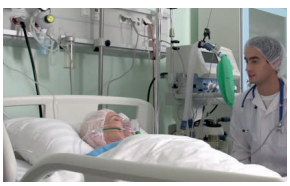
NEW Filtration Technology
Filtration efficiency in excess of 99.9999% (HTM 02-01 specifies >99.995%)

Product Safety in Mind
Easily removable sterilisable drain flask and Differential Pressure monitor supplied as standard

Push Fit Element Design
Quick and easy maintenance with unique push fit element design

- **High Efficiency Medical Grade Filter Element** Custom engineered filter media and deep pleat element technology provides minimal pressure loss and filtration efficiencies in excess of international medical gas standards
- **International Medical Gas Standards** Fully compliant with global medical gas pipeline systems standards ISO 7396-1, HTM 02-01, NFPA 99 and AS 2896
- **Quick and Easy Maintenance** Unique push fit element design allows for easy maintenance, significantly reducing service time and contact time for service engineers with contaminated filter elements
- **Advanced Filtration Technology** Low pressure loss borosilicate glass microfiber-media and open cell reticulated foam pre-filtration layer captures particulates, bacteria and liquid aerosols reducing energy consumption and overall system costs for low total cost of ownership
- **Corrosion Protection** Internal and external electrophoretic painting followed by a tough exterior polyester powder coating
- **Product Safety in Mind** Quality design and build. Guaranteed safe housing closure with rotational safety stop





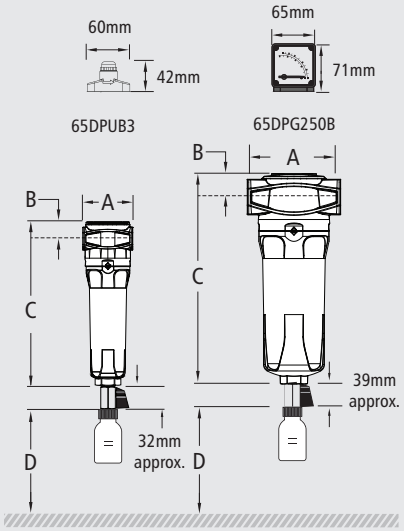
For further information please visit www.walkerfiltration.com

For further information please call: +44 (0) 191 417 7816

Technical Specification

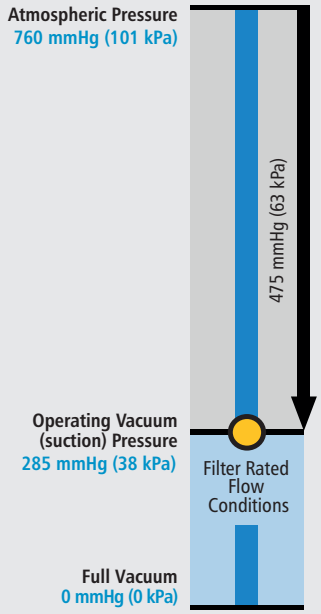
Filter model	Pipe size inches	Maximum Rated Flow at Atmospheric pressure		Maximum Rated Flow at an Operating Vacuum (Suction)Pressure of 475 mmHg (63 kPa) [383.25 mbar(a)]				Dimensions mm				Weight Kg	Element model
		Free Air Aspirated (FAA)		Free Air Aspirated (FAA)		Rarified Air Flow							
		Nl/min	SCFM	Nl/min	SCFM	L/min	CFM	A	B	C	D		
A30025MV	¼	48	1.7	25	0.9	66	2.3	70	23	231	70	0.6	E30408MV
A30032MV	⅜	82	2.9	45	1.6	119	4.2	70	23	231	70	0.6	E30408MV
A30050MV	½	187	6.6	105	3.7	278	9.8	70	23	231	70	0.6	E30412MV
A30070MV	½	340	12.0	190	6.7	502	17.7	127	32	285	80	1.7	E30612MV
A30085MV	¾	420	14.8	235	8.3	621	21.9	127	32	285	80	1.7	E30612MV
A30105MV	1	495	17.5	275	9.7	727	25.7	127	32	285	80	1.7	E30612MV
A30175MV	1	870	30.7	485	17.1	1282	45.3	127	32	370	80	2.0	E30621MV
A30280MV	1¼	1285	45.4	720	25.4	1904	67.2	140	41	476	85	3.0	E30731MV
A30320MV	1½	1340	47.3	720	26.5	1983	70.0	140	41	476	85	3.0	E30731MV
A30400MV	1½	1875	66.2	1050	37.1	2776	98.0	170	53	508	100	4.9	E30831MV
A30450MV	2	1965	69.4	1100	38.8	2908	102.7	170	53	508	100	4.9	E30831MV
A30700MV	2	2770	97.8	1550	54.7	4098	144.7	170	53	708	100	5.5	E30850MV
A30850MV	2½	4700	166.0	2630	92.9	6953	245.6	220	70	736	100	10.5	E31140MV
A30900MV	3	5360	189.3	3000	105.9	7932	280.1	220	70	736	100	10.5	E31140MV
A31250MV	3	5985	211.4	3350	118.3	8857	312.8	220	70	857	100	11.5	E31160MV
A31500MV	3	6340	223.9	3550	125.4	9386	331.4	220	70	1005	100	12.5	E31175MV

NOTE: Rated flows are stated at HTM 02-01 conditions. For flows at other operating vacuum pressures, please consult Walker Filtration Ltd. Operating vacuum (suction) pressure is stated at the filter outlet (i.e. vacuum pump or suction side) Standard (reference) atmosphere: 101.325 kPa (1013.25 mbar(a)), 20°C



A30025MV to A30050MV

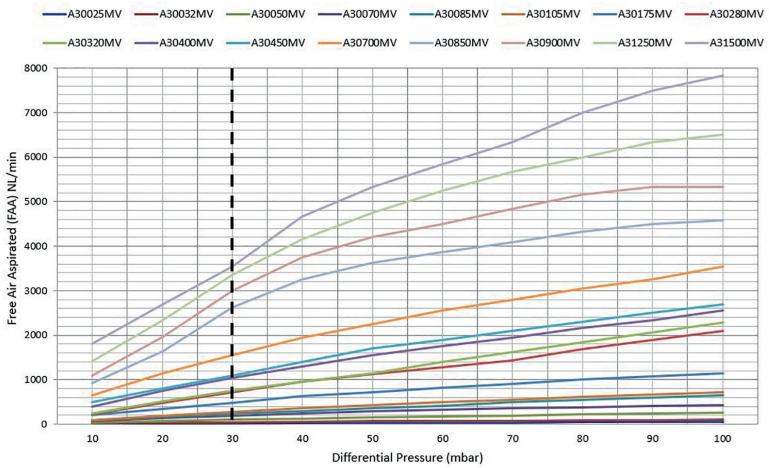
A30070MV to A31500MV



Grade	MV
Element end cap colour	Black
Particle removal efficiency	> 99.9999% (HTM 02-01 specifies >99.995%)*
Maximum temperature	60°C (140°F)
Pressure loss - clean & dry	≤ 3 kPa (30 mbar / 0.44 psig)
Maximum working pressure	0.5 barg (7 psig)
Maximum working vacuum	Full Vacuum

*In accordance with BS 3928:1969. Fully validated to ISO 7396-1, AS 2896 and NFPA 99. Certificates available on request

Differential Pressure (ΔP) mbar v. Flow Rate (NL/min) at 63kPa (475mmHg)



Technical Notes

1. Direction of flow is outside to inside through the element.
2. Filter elements should be replaced at least every 6 months.
3. Pop Up Indicator (65DPUB3) is fitted to models A30025 to A30050 as standard. Differential pressure gauges (65DPG250B) are fitted to models A30070 to A31500 as standard. Volt free contact options are available - see price guide.
4. Manual drain valves (MDVE25B) are fitted to all models. Sterilisable glass drain flasks are supplied as standard, 100ml for models A30025MV to A30105MV and 250ml for models A30175MV to A31500MV.
5. Threaded connections are Rp (BSPP parallel) to ISO 7-1 or NPT to ANSI/ASME B1.20.1 if supplied within North America. Rc (BSP Taper) to ISO 7-1 also available.
6. For NPT connections, add the suffix 'N' e.g. A30070**N**MV. For Rc threads add the suffix 'C' e.g. A30070**C**MV - see price guide.

CRN

ISO 9001

MEMBER OF CAGI Compressed Air & Gas Institute

bcas BRITISH COMPRESSED AIR SOCIETY LIMITED

THE QUEEN'S AWARDS FOR ENTERPRISE: INNOVATION 2016

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WALKER FILTRATION MEDICAL

PRO MV
Medical Vacuum

Models | XM241MV to XM472FMV

Designed to comply with HTM 02-01, NFPA 99, ISO 7396-1 and AS 2896

Designed to meet the requirements of global medical gas pipeline standards, PRO MV offers an innovative and compact alternative to fabricated flanged Medical Vacuum Filters. By expanding the range to include threaded variants, PRO MV delivers a comprehensive product range for use in medical vacuum installations.

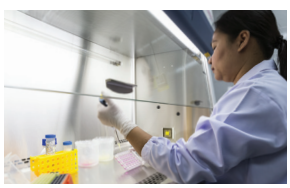
Situated on the suction side of a vacuum pump, the PRO MV is designed for use in critical medical applications to remove solid, liquid and bacterial contamination. Providing complete peace of mind that potentially hazardous biological contagions are prevented from entering the vacuum pump and being exhausted into the surrounding environment.

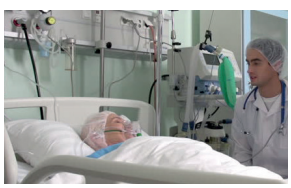
Top loading design
For easy access to the filter element via top endcap for quick and simple change out

Threaded and Flanged Filters
2" to 3" Rp (BSPP) and NPT, and DN80 (3") to DN100 (4") flanged connections

Unique Filter Element
New patented endcap enhances air flow and reduces differential pressure

- **High Efficiency Medical Grade Filter Element** PRO MV's unique filtration media and deep pleat element technology provides minimal pressure loss and improved dirt holding capacity. Low pressure loss borosilicate glass microfiber-media reduces energy consumption for low total cost of ownership
- **Quick and Easy Maintenance** Engineered profiled O-ring seal prevents air bypass, protecting the 'Easy Grip' filter element handle from coming into contact with contaminants, allowing clean and efficient element change out
- **Exceptional Build Quality** Manufactured using the highest quality materials, our PRO MV Medical Vacuum range provides complete reassurance that required standards are met
- **'Drop and Lock' Filter Element** 'Easy Grip' element handle and 'drop and lock' feature simplifies element change out - offering up to 80% savings in service and installation time*





*when comparing PRO MV flanged filters with traditional fabricated vessels

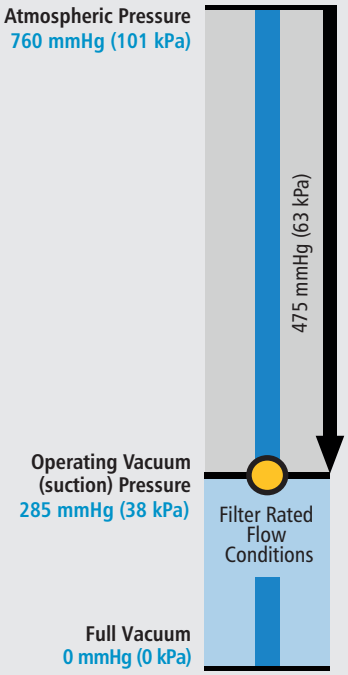
For further information please visit www.walkerfiltration.com

For further information please call: +44 (0) 191 417 7816

Technical Specification

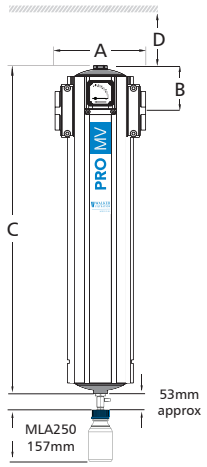
Filter model	Pipe size inches	Maximum Rated Flow at an Operating Vacuum (Suction) Pressure of 475 mmHg (63 kPa) [383.25 mbar(a)]						Dimensions mm					Weight Kg	Element model	No. of Elements
		Free Air Aspirated (FAA)			Rarified Air Flow										
		NL/min	Nm³/h	SCFM	L/min	m³/h	CFM	A	B	C	D	E			
XM241MV	2"	2300	138	81	6081	365	215	232	116	620	550	171	12.8	E1142MV	1
XM251MV	2 1/2"	3000	180	106	7932	476	280	232	116	620	550	171	12.8	E1142MV	1
XM341MV	3"	3300	198	117	8725	523	308	232	116	620	550	171	12.8	E1142MV	1
XM361MV	3"	4000	240	141	10575	635	373	232	116	840	750	171	16.5	E1162MV	1
XM371MV	3"	4500	270	159	11897	714	420	232	116	998	950	171	19.02	E1172MV	1
XM341FMV	3" Flanged	3300	198	117	8725	523	308	352	116	620	550	171	16.7	E1142MV	1
XM361FMV	3" Flanged	4000	240	141	10575	635	373	352	116	840	750	171	20.4	E1162MV	1
XM371FMV	3" Flanged	4500	270	159	11897	714	420	352	116	998	950	171	22.92	E1172MV	1
XM442FMV	4" Flanged	6600	396	233	17449	1047	616	457	116	670	550	343	30.8	E1142MV	2
XM462FMV	4" Flanged	8000	480	283	21151	1269	747	457	116	890	750	343	37.65	E1162MV	2
XM472FMV	4" Flanged	9000	540	318	23795	1428	840	457	116	1048	950	343	42.29	E1172MV	2

NOTE: Rated flows are stated at HTM 02-01 conditions. For flows at other operating pressures, please consult Walker Filtration Ltd.
Operating vacuum (suction) pressure is stated at the filter outlet (i.e. vacuum pump or suction side) Standard (reference) atmosphere: 101.325 kPa (1013.25 mbar(a)), 20°C

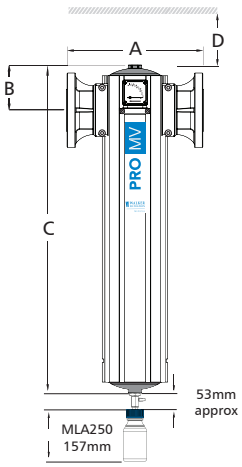


Grade	MV
Element end cap colour	Black
Particle removal efficiency	>99.995%*
Maximum temperature	60°C (140°F)
Pressure loss - clean & dry	≤ 3 kPa (30 mbar / 0.44 psig)
Maximum working pressure	0.5 barg (7 psig)
Maximum working vacuum	Full Vacuum

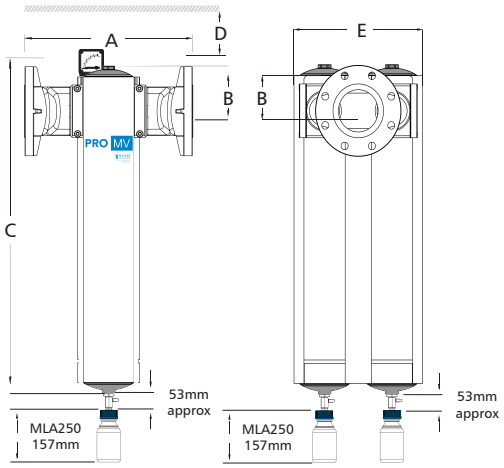
*In accordance with BS3928:1969



XM241MV - XM371MV



XM341FMV - XM371FMV



XM442FMV - XM472FMV

Technical notes

1. Direction of flow is outside to inside through the element.
2. Filter elements should be replaced at least every 6 months.
3. Differential pressure gauges (65DPG250B) are fitted to all models as standard. Volt free contact options are available - see price guide.
4. Manual drain valves (MDV25XM) are fitted to all models. Sterilisable glass drain flasks are supplied as standard, 250ml for all models.
5. Threaded connections are Rp (BSPP parallel) to ISO 7-1 or NPT to ANSI/ASME B1.20.1 if supplied within North America. Rc (BSP Taper) to ISO 7-1 also available.
6. For NPT connections add the suffix 'N' e.g. XM241**N**MV.
7. Flanged connections are EN 1092, DN80 PN16 (3") and DN100 PN16 flanged (4"), or ANSI B16.5 class 150 (3") and 150lb (4"). Filters supplied as standard, i.e. XM341FMV, will be supplied with DN type flanges. For 3" ANSI 150lb and 4" ANSI 150lb flanges add the suffix 'P' to the part number e.g. XM341F**P**MV.
8. Floor mounting brackets (XMMBK2 and XMMBK3) are available for all models - see price guide.

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THE QUEEN'S AWARDS FOR ENTERPRISE: INNOVATION 2016

WFL 1002 Rev-B-UK 1217

The ultimate filtration & drying technology

Compressed Air Flanged Filters

As a filtration solution for larger flow applications of up to 25500 Nm³/h (15000 SCFM), our range of flanged filters offers 8 models with connections ranging from DN80 to DN300.

Constructed from robust carbon steel with an anti corrosion Walker E-Coat finish. All flanged housings are fitted with dual sided differential pressure indicators for easy viewing. Permanent drainage is provided via a side mounted drain port.

Ideal solution for larger flow applications

Oleophobic borosilicate media and a custom engineered anti re-entrainment layer guarantees exceptional dirt holding and drainage capabilities. The unique material construction also minimises pressure drop.

Custom engineered media for exceptional performance

Five grades of filter elements are available, from fine to coarse including activated carbon. Designed to EN 286-1 and compliant to SPVD (87/404/EEC).

Applications include

- Chemical
- Electronics
- Food & Beverage
- Manufacturing
- Military
- Oil & Gas
- Paint Applications
- Pharmaceutical Manufacturing
- Pneumatic Conveying

THE QUEEN'S AWARDS FOR ENTERPRISE: INTERNATIONAL TRADE 2012

www.walkerfiltration.com

Compressed Air Flanged Filters

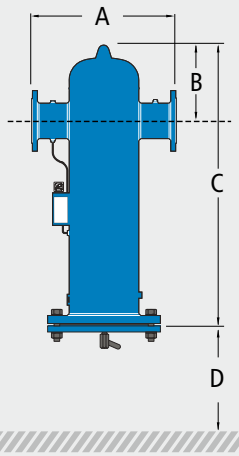
Technical Specification

filter model	pipe size	flow rate*		dimensions (mm)				weight Kg	element model	no. of elements
		Nm^3/h	SCFM	A	B	C	D			
A391 (grade)	DN80	2160	1270	450	265	1205	700	58	E139 (grade)	1
A483 (grade)	DN100	3100	1824	520	285	1245	700	74	E88 (grade)	3
A484 (grade)	DN100	4250	2500	520	285	1245	700	74	E88 (grade)	4
A686 (grade)	DN150	6500	3824	680	400	1400	700	165	E88 (grade)	6
A688 (grade)	DN150	8720	5130	780	400	1430	700	208	E88 (grade)	8
A8810 (grade)	DN200	11000	6470	780	400	1460	700	260	E88 (grade)	10
A10816 (grade)	DN250	17000	10000	900	550	1570	700	450	E88 (grade)	16
A12824 (grade)	DN300	25500	15000	900	600	1620	700	740	E88 (grade)	24

* Rated flow at 7 barg, reference conditions 1 bar (a) 20°C

	X25		X5		X1		XA		AC	
Particle removal	25 micron		5 micron		1 micron		0.01 micron		0.01 micron	
Maximum particle size class**	-		3		2		1		1	
Maximum temperature	120°C	248°F	120°C	248°F	120°C	248°F	120°C	248°F	50°C*	122°F*
Pressure loss - clean & dry	30 mbar	0.4 psi	40 mbar	0.6 psi	75 mbar	1.1 psi	100 mbar	1.5 psi	75 mbar	1.1 psi
Pressure loss - change element	400 mbar	6 psi	400 mbar	6 psi	400 mbar	6 psi	400 mbar	6 psi	at least every 6 months	
Maximum working pressure	16 barg	232 psig	16 barg	232 psig	16 barg	232 psig	16 barg	232 psig	16 barg	232 psig
Element end cap colour A391	black		green		red		blue		black	
Element end cap colour A483 - A12824	black									

** to ISO 8573-1:2010 (E)



A391 (grade) to A12824 (grade)

pressure correction factors

for maximum flow rate, multiply model flow rate by the correction factor corresponding to the minimum operating pressure

Operating pressure barg (psig)	4 (58)	5 (72)	6 (87)	7 (100)	8 (115)	10 (145)	12 (174)	14 (203)	16 (232)
7 barg - correction factor	0.76	0.84	0.92	1.00	1.07	1.19	1.31	1.41	1.51

technical notes

1	Direction of air flow is inside to out through the filter element.
2	Differential pressure indicators (65DPIG) are fitted to models A391 to A12824. AC grade filters do not include DP equipment.
3	Flanged filters are fitted with manual drain valves. On models A391 to A8810, ½" are fitted; ¾" on models A10816 to A12824.
4	An additional ½" side entry port is included on models A391 to A8810, ¾" for A10816 and A12824.
5	Activated carbon filters must not operate in oil saturated conditions and will not remove certain types of gases including carbon monoxide (CO) and carbon dioxide (CO_2).
6	Flanged filters are fabricated from carbon steel and carry the CE mark where applicable.
7	Flanged vessels are designed and manufactured in accordance with BS EN 286 Part 1 and meet the Simple Pressure Vessels Directive.
8	Cross port dimensions on flanged vessels are subject to a manufacturing tolerance of +/- 3mm and a squareness tolerance of 1 degree.
9	Flanged connections are complete with mating flanges to BS4504, PN16.
10	Filter elements should be changed every 12 months / 8000 hours (whichever comes first). Activated carbon filter elements should be changed every 6 months / 1000 hours (whichever comes first).
11	*Recommended operating temperature 25°C (77°F)

WALKER FILTRATION

www.walkerfiltration.com

WALKER FILTRATION
MEDICAL

Medical Sterile Filters

Models | A30015MS to A31500MS

Flow Rates 15 SCFM (25 Nm^3/hr) to 1500 SCFM (2550 Nm^3/hr)

Designed to exceed the requirements of UK Health Technical Memorandum, HTM 02-01

When it comes to patient care, quality and reliability of compressed air is paramount. Walker Filtration's range of Alpha Medical Sterile Filters guarantees reliable and outstanding air purity that meets internationally certified medical performance levels.

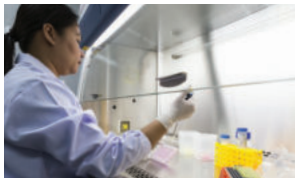
100% integrity tested, Alpha Medical Sterile elements are guaranteed for a minimum of 100 sterilisations at 120ºC (248ºF), ensuring your compressed air is free from live bacteria and other submicron particles.

Stainless Steel End Caps
Specially designed for autoclave sterilisation compatibility

100% Integrity Tested
Each element is supplied with an Air Sterilisation Certificate to guarantee the highest quality to our customers

Product Safety in Mind
Lock indication arrows assure effective sealing

- **International Validation** Designed to exceed the requirements of HTM 02-01 medical gas pipeline systems
- **Simplified Serviceability** Ribbed bowl design and unique push fit elements ensure quick and reliable maintenance
- **Product Safety in Mind** Guaranteed safe housing closure with rotational safety stop
- **Corrosion Protection** Internal and external electrophoretic paint finish followed by a tough polyester powder coating
- **Flexible Installation** Modular design and accessible fixings enable simple close coupling assembly
- **Robust and Sterilisable Materials** Manufactured from cast aluminium alloy for enhanced strength and protection



For further information please visit www.walkerfiltration.com

For further information please call: +44 (0) 191 417 7816

Technical Specification

Filter model	Pipe size inches	Inlet flow rate*		Dimensions mm				Weight Kg	Element model
		Nm³/hr	SCFM	A	B	C	D		
A30015MS	¼	25	15	50	17	157	60	0.3	E30306SR
A30025MS	¼	42	25	70	23	231	70	0.6	E30408SR
A30032MS	⅜	54	32	70	23	231	70	0.6	E30408SR
A30050MS	½	85	50	70	23	231	70	0.6	E30412SR
A30070MS	½	119	70	127	32	285	80	1.7	E30612SR
A30085MS	¾	144	85	127	32	285	80	1.7	E30612SR
A30175MS	1	297	175	127	32	370	80	2.0	E30621SR
A30280MS	1¼	476	280	140	41	476	85	3.0	E30731SR
A30320MS	1½	544	320	140	41	476	85	3.0	E30731SR
A30400MS	1½	680	400	170	53	508	100	4.9	E30831SR
A30450MS	2	765	450	170	53	508	100	4.9	E30831SR
A30700MS	2	1189	700	170	53	708	100	5.5	E30850SR
A30850MS	2½	1444	850	220	70	736	100	10.5	E31140SR
A30900MS	3	1529	900	220	70	736	100	10.5	E31140SR
A31250MS	3	2125	1250	220	70	857	100	11.5	E31160SR
A31500MS	3	2550	1500	220	70	1005	100	12.5	E31175SR

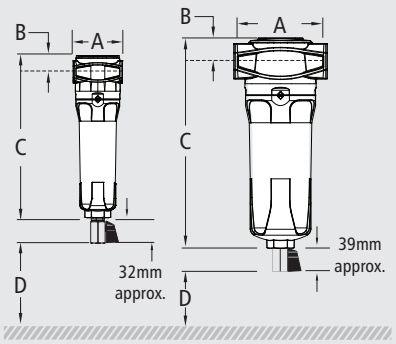
* Rated flow at 7 barg, reference conditions 1 bar (a) 20°C

Grade	SR	
DOP efficiency**	>99.9999%	
Particle removal	0.01 micron	
Maximum operating temperature	120°C	248°F
Recommended operating temperature	50°C	122°F
Maximum autoclave temperature	134°C	273°F
Pressure Loss - clean & dry	100 mbar	1.5 psi
Maximum working pressure	20.7 barg	300 psig
Element end cap material	Stainless steel	

** As specified in HTM 02-01 medical gas pipeline systems

Pressure correction factors	For maximum flow rate, multiply model flow rate by the correction factor corresponding to the minimum operating pressure									
Operating pressure barg (psig)	4 (58)	5 (72)	6 (87)	7 (100)	8 (115)	10 (145)	12 (174)	14 (203)	16 (232)	20.7 (300)
7 barg – correction factor	0.76	0.84	0.92	1.00	1.07	1.19	1.31	1.41	1.51	1.73

65DPUG3 65DPIG



A30025MS to A30050MS A30070MS to A31500MS

Technical Notes

1. Filter element end caps are stainless steel.
2. Direction of air flow is outside to in through the filter element.
3. Pop up indicators (65DPUG3) are fitted to models A30025MS to A30050MS as standard. Differential pressure indicators (65DPIG) are fitted to models A30070MS to A31500MS as standard.
4. Manual drain valves (MDV25 on models A30015MS to A30050MS and MDVE25 on models A30070MS to A31500MS) are fitted as standard.
5. Medical Sterile Filter elements must not operate in water or oil saturated conditions.
6. Maximum steam sterilising autoclave temperature refers to the filter element ONLY. Grade SR filter elements can be steam sterilised 100 times. Each element must be autoclaved before commencement of duty.
7. Pre-filtration should be used in conjunction with 0.01 micron sterile filters.
8. Threaded filters are manufactured from cast aluminium alloy and are PED 2014/68/EU compliant for group 2 gases.
9. Standard threaded connections are Rp (BSP Parallel) to ISO 7-1 or NPT to ANSI/ASME B1.20.1 if supplied within North America. Rc (BSP Taper) to ISO 7-1 also available - see price guide.
10. For NPT threads, add the suffix N, e.g., A30070NMS, and for Rc threads add the suffix C, e.g. A30070CMS - see price guide.
11. Filter elements should be changed at least every 6 months.
12. Filters are suitable for use in dry air conditions only, as any liquids passings through the filter could carry bacteria and compromise sterility.

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WFL1059 Rev-A-UK 0220

WALKER FILTRATION MEDICAL

Medical Vacuum

Models | A30025MV to A31500MV

Third party tested and validated in accordance with HTM 02-01, NFPA 99, ISO 7396-1 and AS 2896

Designed for use in critical medical applications to remove solid, liquid and bacterial contamination in vacuum systems, Walker Filtration's Medical Vacuum Filters guarantee a safe and reliable product that is trusted by hospitals worldwide.

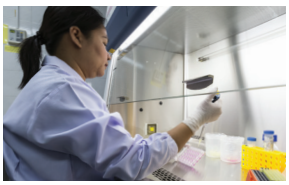
Situated on the suction side of a vacuum pump, Alpha Series Medical Vacuum Filters are essential to avoiding damage to vacuum pumps and preventing potentially hazardous biological contagions from being exhausted into the surrounding environment.

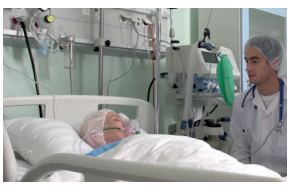
NEW Filtration Technology
Filtration efficiency in excess of 99.9999% (HTM 02-01 specifies >99.995%)

Product Safety in Mind
Easily removable sterilisable drain flask and Differential Pressure monitor supplied as standard

Push Fit Element Design
Quick and easy maintenance with unique push fit element design

- **High Efficiency Medical Grade Filter Element** Custom engineered filter media and deep pleat element technology provides minimal pressure loss and filtration efficiencies in excess of international medical gas standards
- **International Medical Gas Standards** Fully compliant with global medical gas pipeline systems standards ISO 7396-1, HTM 02-01, NFPA 99 and AS 2896
- **Quick and Easy Maintenance** Unique push fit element design allows for easy maintenance, significantly reducing service time and contact time for service engineers with contaminated filter elements
- **Advanced Filtration Technology** Low pressure loss borosilicate glass microfiber-media and open cell reticulated foam pre-filtration layer captures particulates, bacteria and liquid aerosols reducing energy consumption and overall system costs for low total cost of ownership
- **Corrosion Protection** Internal and external electrophoretic painting followed by a tough exterior polyester powder coating
- **Product Safety in Mind** Quality design and build. Guaranteed safe housing closure with rotational safety stop





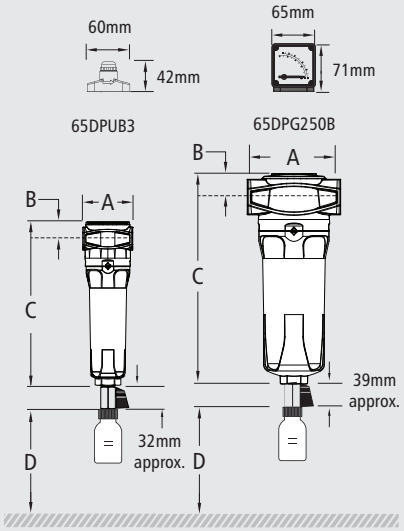
For further information please visit www.walkerfiltration.com

For further information please call: +44 (0) 191 417 7816

Technical Specification

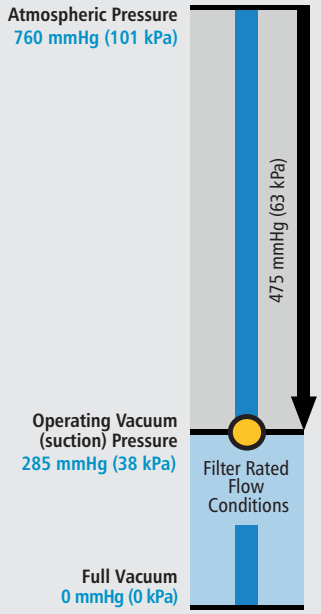
Filter model	Pipe size inches	Maximum Rated Flow at Atmospheric pressure		Maximum Rated Flow at an Operating Vacuum (Suction)Pressure of 475 mmHg (63 kPa) [383.25 mbar(a)]				Dimensions mm				Weight Kg	Element model
		Free Air Aspirated (FAA)		Free Air Aspirated (FAA)		Rarified Air Flow							
		Nl/min	SCFM	Nl/min	SCFM	L/min	CFM	A	B	C	D		
A30025MV	¼	48	1.7	25	0.9	66	2.3	70	23	231	70	0.6	E30408MV
A30032MV	⅜	82	2.9	45	1.6	119	4.2	70	23	231	70	0.6	E30408MV
A30050MV	½	187	6.6	105	3.7	278	9.8	70	23	231	70	0.6	E30412MV
A30070MV	½	340	12.0	190	6.7	502	17.7	127	32	285	80	1.7	E30612MV
A30085MV	¾	420	14.8	235	8.3	621	21.9	127	32	285	80	1.7	E30612MV
A30105MV	1	495	17.5	275	9.7	727	25.7	127	32	285	80	1.7	E30612MV
A30175MV	1	870	30.7	485	17.1	1282	45.3	127	32	370	80	2.0	E30621MV
A30280MV	1¼	1285	45.4	720	25.4	1904	67.2	140	41	476	85	3.0	E30731MV
A30320MV	1½	1340	47.3	720	26.5	1983	70.0	140	41	476	85	3.0	E30731MV
A30400MV	1½	1875	66.2	1050	37.1	2776	98.0	170	53	508	100	4.9	E30831MV
A30450MV	2	1965	69.4	1100	38.8	2908	102.7	170	53	508	100	4.9	E30831MV
A30700MV	2	2770	97.8	1550	54.7	4098	144.7	170	53	708	100	5.5	E30850MV
A30850MV	2½	4700	166.0	2630	92.9	6953	245.6	220	70	736	100	10.5	E31140MV
A30900MV	3	5360	189.3	3000	105.9	7932	280.1	220	70	736	100	10.5	E31140MV
A31250MV	3	5985	211.4	3350	118.3	8857	312.8	220	70	857	100	11.5	E31160MV
A31500MV	3	6340	223.9	3550	125.4	9386	331.4	220	70	1005	100	12.5	E31175MV

NOTE: Rated flows are stated at HTM 02-01 conditions. For flows at other operating vacuum pressures, please consult Walker Filtration Ltd. Operating vacuum (suction) pressure is stated at the filter outlet (i.e. vacuum pump or suction side) Standard (reference) atmosphere: 101.325 kPa (1013.25 mbar(a)), 20°C



A30025MV to A30050MV

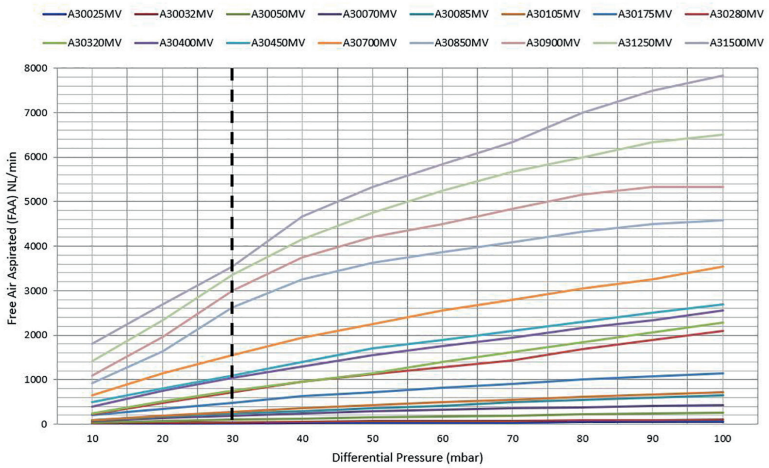
A30070MV to A31500MV



Grade	MV
Element end cap colour	Black
Particle removal efficiency	> 99.9999% (HTM 02-01 specifies >99.995%)*
Maximum temperature	60°C (140°F)
Pressure loss - clean & dry	≤ 3 kPa (30 mbar / 0.44 psig)
Maximum working pressure	0.5 barg (7 psig)
Maximum working vacuum	Full Vacuum

*In accordance with BS 3928:1969. Fully validated to ISO 7396-1, AS 2896 and NFPA 99. Certificates available on request

Differential Pressure (ΔP) mbar v. Flow Rate (NL/min) at 63kPa (475mmHg)



Technical Notes

1. Direction of flow is outside to inside through the element.
2. Filter elements should be replaced at least every 6 months.
3. Pop Up Indicator (65DPUB3) is fitted to models A30025 to A30050 as standard. Differential pressure gauges (65DPG250B) are fitted to models A30070 to A31500 as standard. Volt free contact options are available - see price guide.
4. Manual drain valves (MDVE25B) are fitted to all models. Sterilisable glass drain flasks are supplied as standard, 100ml for models A30025MV to A30105MV and 250ml for models A30175MV to A31500MV.
5. Threaded connections are Rp (BSPP parallel) to ISO 7-1 or NPT to ANSI/ASME B1.20.1 if supplied within North America. Rc (BSP Taper) to ISO 7-1 also available.
6. For NPT connections, add the suffix 'N' e.g. A30070**N**MV. For Rc threads add the suffix 'C' e.g. A30070**C**MV - see price guide.

CRN

ISO 9001

MEMBER OF CAGI Compressed Air & Gas Institute

bcas BRITISH COMPRESSED AIR SOCIETY LIMITED

THE QUEEN'S AWARDS FOR ENTERPRISE: INNOVATION 2016

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WALKER FILTRATION MEDICAL

PRO MV
Medical Vacuum

Models | XM241MV to XM472FMV

Designed to comply with HTM 02-01, NFPA 99, ISO 7396-1 and AS 2896

Designed to meet the requirements of global medical gas pipeline standards, PRO MV offers an innovative and compact alternative to fabricated flanged Medical Vacuum Filters. By expanding the range to include threaded variants, PRO MV delivers a comprehensive product range for use in medical vacuum installations.

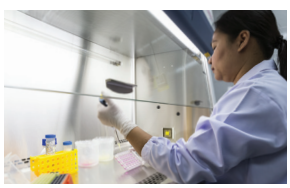
Situated on the suction side of a vacuum pump, the PRO MV is designed for use in critical medical applications to remove solid, liquid and bacterial contamination. Providing complete peace of mind that potentially hazardous biological contagions are prevented from entering the vacuum pump and being exhausted into the surrounding environment.

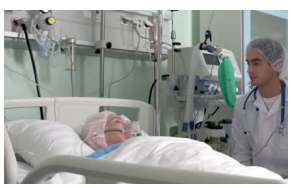
Top loading design
For easy access to the filter element via top endcap for quick and simple change out

Threaded and Flanged Filters
2" to 3" Rp (BSPP) and NPT, and DN80 (3") to DN100 (4") flanged connections

Unique Filter Element
New patented endcap enhances air flow and reduces differential pressure

- **High Efficiency Medical Grade Filter Element** PRO MV's unique filtration media and deep pleat element technology provides minimal pressure loss and improved dirt holding capacity. Low pressure loss borosilicate glass microfiber-media reduces energy consumption for low total cost of ownership
- **Quick and Easy Maintenance** Engineered profiled O-ring seal prevents air bypass, protecting the 'Easy Grip' filter element handle from coming into contact with contaminants, allowing clean and efficient element change out
- **Exceptional Build Quality** Manufactured using the highest quality materials, our PRO MV Medical Vacuum range provides complete reassurance that required standards are met
- **'Drop and Lock' Filter Element** 'Easy Grip' element handle and 'drop and lock' feature simplifies element change out - offering up to 80% savings in service and installation time*





*when comparing PRO MV flanged filters with traditional fabricated vessels

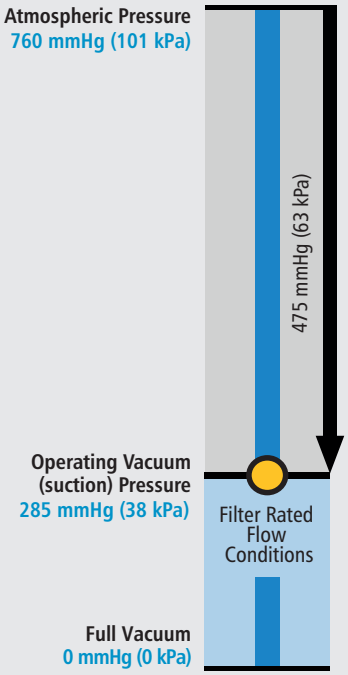
For further information please visit www.walkerfiltration.com

For further information please call: +44 (0) 191 417 7816

Technical Specification

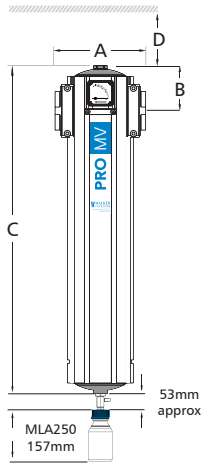
Filter model	Pipe size inches	Maximum Rated Flow at an Operating Vacuum (Suction) Pressure of 475 mmHg (63 kPa) [383.25 mbar(a)]						Dimensions mm					Weight Kg	Element model	No. of Elements
		Free Air Aspirated (FAA)			Rarified Air Flow										
		NL/min	Nm³/h	SCFM	L/min	m³/h	CFM	A	B	C	D	E			
XM241MV	2"	2300	138	81	6081	365	215	232	116	620	550	171	12.8	E1142MV	1
XM251MV	2 1/2"	3000	180	106	7932	476	280	232	116	620	550	171	12.8	E1142MV	1
XM341MV	3"	3300	198	117	8725	523	308	232	116	620	550	171	12.8	E1142MV	1
XM361MV	3"	4000	240	141	10575	635	373	232	116	840	750	171	16.5	E1162MV	1
XM371MV	3"	4500	270	159	11897	714	420	232	116	998	950	171	19.02	E1172MV	1
XM341FMV	3" Flanged	3300	198	117	8725	523	308	352	116	620	550	171	16.7	E1142MV	1
XM361FMV	3" Flanged	4000	240	141	10575	635	373	352	116	840	750	171	20.4	E1162MV	1
XM371FMV	3" Flanged	4500	270	159	11897	714	420	352	116	998	950	171	22.92	E1172MV	1
XM442FMV	4" Flanged	6600	396	233	17449	1047	616	457	116	670	550	343	30.8	E1142MV	2
XM462FMV	4" Flanged	8000	480	283	21151	1269	747	457	116	890	750	343	37.65	E1162MV	2
XM472FMV	4" Flanged	9000	540	318	23795	1428	840	457	116	1048	950	343	42.29	E1172MV	2

NOTE: Rated flows are stated at HTM 02-01 conditions. For flows at other operating pressures, please consult Walker Filtration Ltd.
Operating vacuum (suction) pressure is stated at the filter outlet (i.e. vacuum pump or suction side) Standard (reference) atmosphere: 101.325 kPa (1013.25 mbar(a)), 20°C

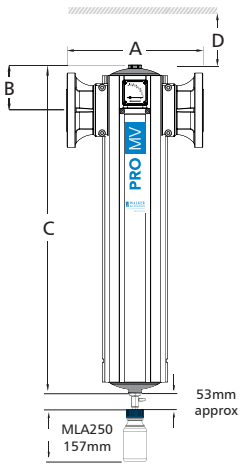


Grade	MV
Element end cap colour	Black
Particle removal efficiency	>99.995%*
Maximum temperature	60°C (140°F)
Pressure loss - clean & dry	≤ 3 kPa (30 mbar / 0.44 psig)
Maximum working pressure	0.5 barg (7 psig)
Maximum working vacuum	Full Vacuum

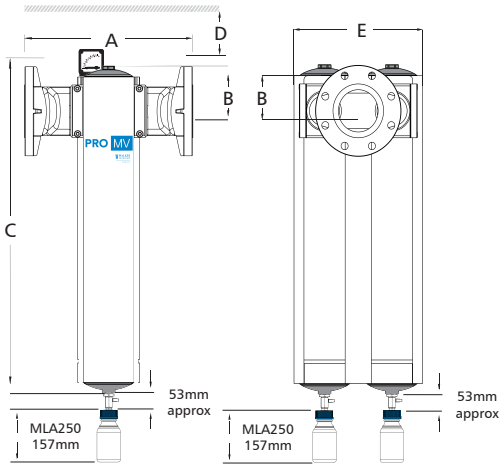
*In accordance with BS3928:1969



XM241MV - XM371MV



XM341FMV - XM371FMV



XM442FMV - XM472FMV

Technical notes

1. Direction of flow is outside to inside through the element.
2. Filter elements should be replaced at least every 6 months.
3. Differential pressure gauges (65DPG250B) are fitted to all models as standard. Volt free contact options are available - see price guide.
4. Manual drain valves (MDV25XM) are fitted to all models. Sterilisable glass drain flasks are supplied as standard, 250ml for all models.
5. Threaded connections are Rp (BSPP parallel) to ISO 7-1 or NPT to ANSI/ASME B1.20.1 if supplied within North America. Rc (BSP Taper) to ISO 7-1 also available.
6. For NPT connections add the suffix 'N' e.g. XM241**N**MV.
7. Flanged connections are EN 1092, DN80 PN16 (3") and DN100 PN16 flanged (4"), or ANSI B16.5 class 150 (3") and 150lb (4"). Filters supplied as standard, i.e. XM341FMV, will be supplied with DN type flanges. For 3" ANSI 150lb and 4" ANSI 150lb flanges add the suffix 'P' to the part number e.g. XM341F**P**MV.
8. Floor mounting brackets (XMMBK2 and XMMBK3) are available for all models - see price guide.

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THE QUEEN'S AWARDS FOR ENTERPRISE: INNOVATION 2016

WFL 1002 Rev-B-UK 1217

WALKER FILTRATION

The ultimate filtration & drying technology

PRODRY

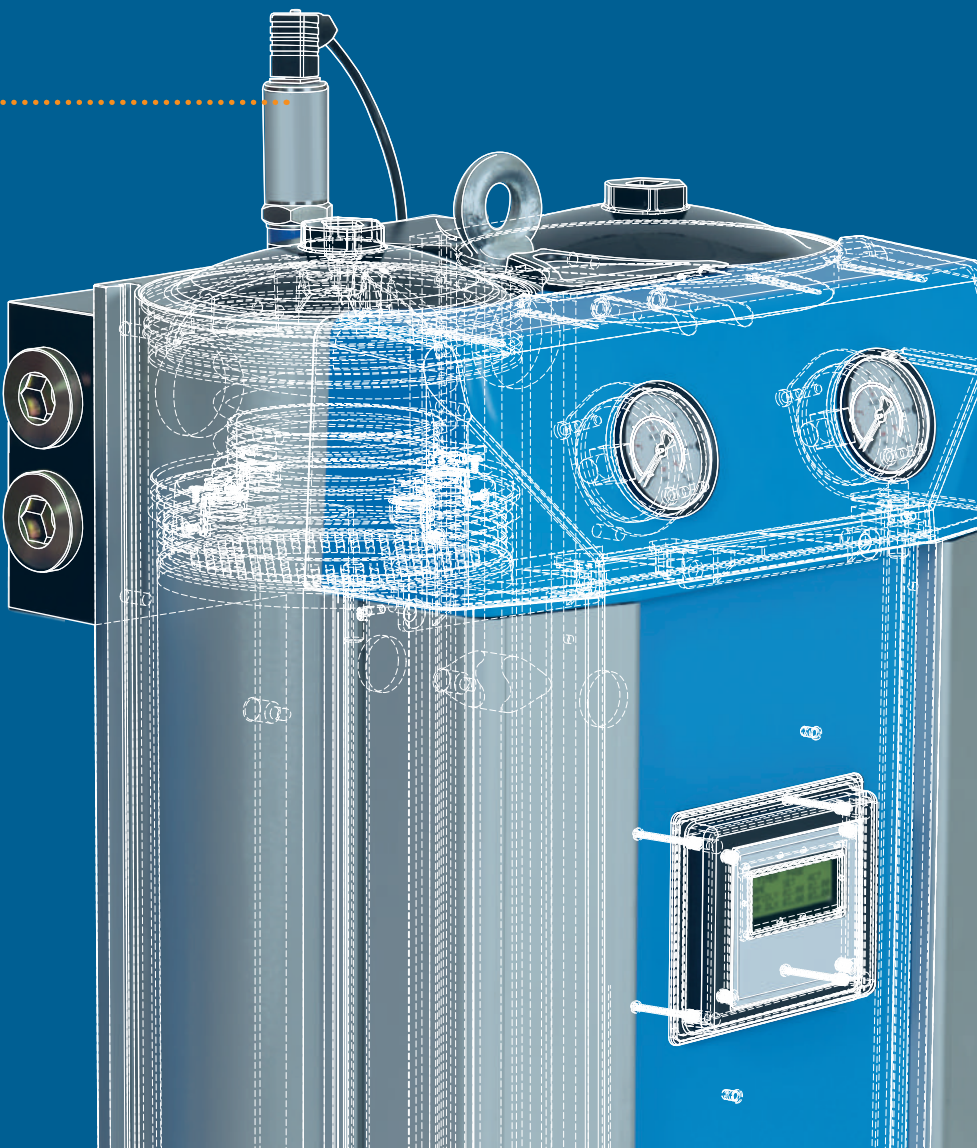
Compressed Air Desiccant Dryer Range

Innovative design. Exceptional engineering. Improved performance

www.walkerfiltration.com

PRODRY

Introducing a new generation of Desiccant Dryers with optional Dewpoint Management Control



Whatever the application

We have the dryer solution for you

Walker Filtration is one of the leading manufacturers of high efficiency compressed air filtration and drying equipment.

At Walker Filtration we take pride in our world-class reputation for designing, developing, and manufacturing products of superior technical performance. Delivering high quality, well-engineered filtration and drying solutions since 1983, all of our products are designed and manufactured on site at our state of the art 12000 m^2 headquarters in the UK.

With a portfolio encompassing both industrial and medical products, our complete product range illustrates the diverse capabilities and expertise of Walker Filtration.

The Need for Clean and Dry Air

Compressed air is a versatile and important power source. The requirement for a compressed air supply to be clean, dry and contaminant free is crucial to ensuring safe, efficient and profitable operation and manufacturing. Any form of moisture or contamination in a compressed air line has the potential to cause costly downtime, machine damage and product spoilage. The Walker Filtration product range, designed and tested to international air quality standards, ensures that compressed air is delivered contaminant free, to exacting specifications, required for the end use.

Energy Efficiency

Compressed air filtration and drying solutions must deliver uncompromising performance and reliability. Ensuring that a compressed air system delivers the required air quality for the end application is crucial to successful daily operation. The more energy required to produce clean, dry and reliable compressed air, the greater the cost. Therefore, installing and maintaining the correct filtration and drying solutions for your compressed air system is critical to guaranteeing optimum performance and ensuring that energy costs are kept to a minimum.

The Solution

Walker Filtration's range of PRODRY desiccant dryers deliver optimum performance and provide a compressed air drying solution you can count on. With built in energy saving features across the range, the PRODRY series of heatless regenerative dryers has been designed to incorporate an energy management system which allows the dryers to be linked with a compressor control system to reduce air consumption during periods of low demand – greatly reducing energy consumption and improving energy efficiency.

Optional Dewpoint Management Control, flexible installation and improved serviceability are central to PRODRY's design, as downtime associated with servicing and installation not only effects productivity but also directly impacts upon costs.

The PRODRY range of heatless desiccant dryers delivers uncompromising performance and air quality. Constructed using extruded aluminium towers which are fully anodised for corrosion protection, this distinguished range of high efficiency dryers has been designed and tested to meet the purity classes specified by ISO 8573-1: 2010.

All dryers are built to be fully compliant with international standards and have multiple voltage options, suitable for worldwide installation.

PRODRY

TiD pnevmatika since 1954

Technical Capability

For more than 30 years, Walker Filtration has built a reputation of high quality, well-engineered filtration and drying products. Founded on sound engineering principles, we continually invest in technology and expertise to stay at the leading edge of innovation. By utilising the latest technology in computer aided design and combining this with the extensive knowledge of our engineering and technical team, we have become the partner of choice and are proud to work with OEM customers on an international scale.

With in-house test facilities and sophisticated on-site laboratories at our UK and USA locations, performance is guaranteed.

Innovative Product Design

Innovation and sound engineering is at the heart of Walker Filtration and focuses all that we do. Continued investment in research and development, new technologies and the latest test standards, allows us to meet the highest demands of both the end user and the OEM customer. Our commitment to exceptional and innovative design, along with a proven track record of engineering excellence, enables us to remain at the forefront of compressed air filtration and drying technology.

Customer Focused

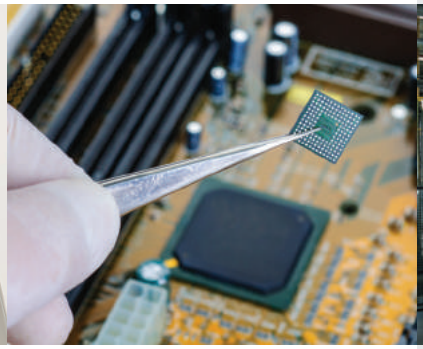
At Walker Filtration our customers' needs are always paramount - we pride ourselves on our customer focused approach and exceptional levels of service. Our approach is straightforward – we enjoy what we do, working with our customers and offering competent advice and sound engineering. With dedicated technical, sales, and support teams globally, we are well placed to ensure a rapid response and fast delivery. We deliver not only highly specified standard product ranges, but also customised solutions designed specifically for our clients' needs.

PD004-PD035 PD0046-PD0360

Walker Filtration products can be found in virtually any industry where compressed air is used.

Applications






The PRODRY range of desiccant dryers, with 17 models, provides flow rates from 4 to 360 scfm (7 to 612 Nm³/hr). This modular series offers a robust and reliable compressed air drying solution.

Designed to suit various applications, the PRODRY range consists of our proven existing low flow models PD004 – PD035, and our new and improved larger flow models PD0046 – PD0360. Utilising the latest in drying technology, this technically advanced range of highly efficient desiccant dryers delivers a compact solution to moisture removal from compressed air.

Whatever your requirement, PRODRY's exceptional performance can deliver - the features and benefits of PRODRY ensure almost every application need is met.

High Quality Applications


Vacuum Packaging


Automotive


Industrial Cleaning


Plastics


Foundries


Medical


Dental


Power Generation


Oil & Gas


Military


Pneumatic Conveying


Transit


Paper & Printing


Laser Cutting


General Industry

Critical Applications


Electronics


Food Production


Pharmaceutical


Beverages & Breweries


Instrumentation


Critical Component Manufacturing

Dewpoint temperature	Application
-74°C (-100°F)	Highly critical applications (e.g.) semiconductor industry / electronic industry
-40°C (-40°F)	Effective point of use (e.g.) general industry (standard pressure dewpoint)
-20°C (-4°F)	Specialist use including some breathing air applications

PRODRY




0.01 Micron XA Pre-filter supplied as standard

Internal Silencer

LED Controller supplied as standard

1 Micron X1 Dust Filter integrated into Desiccant Cartridge

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, meeting the quality classes specified in ISO 8573-1: 2010 (see pg.14 for further information on Air Quality Classifications), PRODRY models PD004 to PD035 are supplied as standard with XA grade 0.01 micron coalescing filter.

PRODRY can be installed vertically and horizontally, providing a flexible solution to your compressed air drying needs

This highly reliable, high efficiency range of dryers is 100% function tested prior to despatch and is supplied with a DIN plug for a fast and efficient installation.

Benefits

Serviceability Ease of service is foremost to the PRODRY design - desiccant columns are easily removed, allowing access to desiccant cartridges for quick and efficient change out.

Reliability The PD004 – PD035 design incorporates highly reliable 12 VDC solenoid control valves which operate diaphragm exhaust valves. The control valves are set to be 'normally closed', a fail safe that ensures that the dryer will still provide compressed air – even in the event of a power failure.

Energy Efficient Design Energy management features are built-in into PRODRY's LED Controller (supplied as standard). The compressor can be linked to the energy management contacts, isolating the purge flow during periods of low demand for efficient use of compressed air.

LED Controller Supplied as Standard Both smaller and larger flow models come with an LED Controller, providing continuous updates on dryer performance via an intelligent built-in central processing unit (CPU). The LED Controller illuminates to alert in the event of low power faults, controller faults, drain valve faults, solenoid failures and when service intervals have been reached. An external alarm process is built-in offering total security and peace of mind.

Low Cost of Ownership Walker Filtration's dryers are designed to deliver optimum performance and financial benefits. Features such as an integral electronic drain, service interval indication and integrated condensate management are included in the standard dryer package.

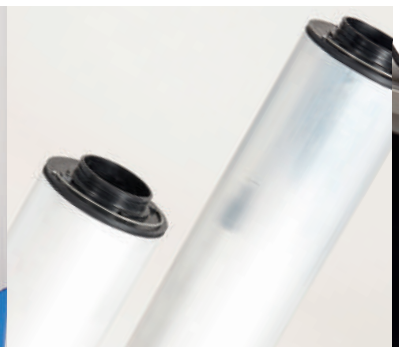
Universal Power Supply PRODRY units PD004 to PD035 can recognise any voltage between 100 – 240 VAC, 50 or 60Hz and also any voltage between 12 to 24 VDC. Dryers feature unique multiple inlet and outlet ports enabling both left-hand and right-hand compressed air supply and greater installation flexibility.

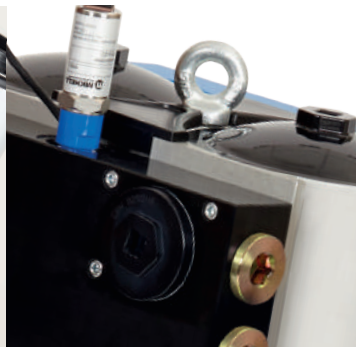
Quiet Operation Internal Walker Filtration designed silencer to reduce noise levels to below 85 dBA.

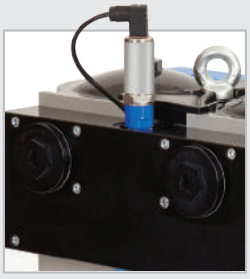
Desiccant Cartridges Cartridge design includes an internal filtration and controlled desiccant bed geometry ensuring consistant dewpoint performance and simple maintenance.

Integrated Condensate Management Essential to maximising dryer efficiency, condensate management features are supplied as standard with all PD004 to PD035 Units. Units are supplied with an integral 12VDC solenoid drain valve which is controlled and operated by the CPU. Two external push-in fittings are provided on the rear panel which can be connected to the drain port of the pre-filter(s).

NEW - PRODRY



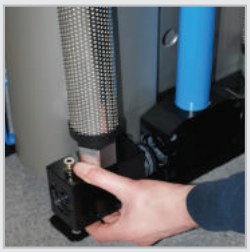




Dewpoint Sensor (DMC)

Adjustable Purge Flow

Pressure Gauges



External Silencer

The all new, larger flow, PRODRY models feature major design changes to include dewpoint management and provide a superior dryer with exceptional performance.

Updated with the latest technology and performance enhancing features, models PD0046 to PD0360 are among the most economical and efficient desiccant dryers on the market today.

The new PRODRY range includes performance enhancing features, improved serviceability, and increased dryer efficiency

Larger flow models incorporate new and enhanced features that deliver significant advantages over the competition in terms of performance and reliability. All models carry an IP protection rating of IP65.

Benefits

Reduced Service Time Serviceable parts have been re-designed to allow easier access for significantly reduced service downtime and improved efficiency. Each unit can be serviced without disturbing surrounding pipe-work or drains.

Energy Efficient Design From start to finish the new PRODRY models have been designed to incorporate the latest in energy saving features, giving lower lifetime costs and greater savings to the end user. PRODRY's standard LED Controller includes in-built energy management and an external pressure switch which can be linked to processor energy management contacts-isolating the purge flow during periods of low demand. By upgrading to the Dewpoint Management Controller (DMC), dryer regeneration can be synchronised to compressed air demand, delivering optimised performance efficiencies and significant cost savings.

Improved Performance New improved desiccant blend and mixed bed technology optimises air velocity through the dryer, resulting in high performance with optimised dewpoint.

Optimised Purge Rate Purge rate has also been reduced when compared to previous models - using less air for dryer regeneration equates to increased operating efficiency and greater lifetime savings.

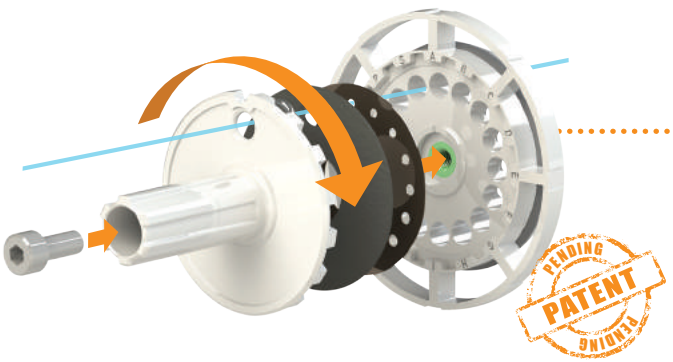
Flexible Worldwide Installation Multi-voltage capabilities - IEC 60529 ingress protection code (IP65 Rated). Dryers also feature multiple inlet and outlet ports for greater installation flexibility.

Quiet Operation Unique, Walker Filtration designed silencers are fitted externally to reduce noise levels to below 85 dBA.

Condensate Management Condensate management is essential to maximise dryer efficiency - a drain valve kit can be purchased alongside PRODRY models PD0046 to PD0360.

Patent Pending Purge Valve New unique design offers significant advantages to the user: The purge valve design incorporates multiple orifice sizes enabling the purge rate to be adjusted to suit customer requirement, eliminating the need to buy additional purge plugs and allowing optimal performance to be achieved.

Compact Design With a 15% reduction in size, PRODRY models offer significant space saving advantages - allowing for more flexible installation.



LED Controller
supplied as standard

Dewpoint Management
Controller *optional*
(DMC with hygrometer)

Significantly Reduced Service Time

New PRODRY delivers a technically superior product with dramatically decreased service time – saving valuable time and money in maintenance and servicing. Key features that contribute to easier maintenance are:-

Servicing

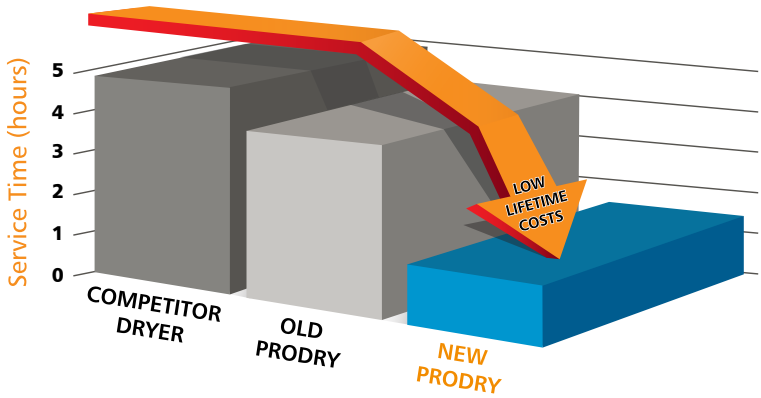
Top Loading Cartridge Design New, 'easy access' design eliminates the need to remove desiccant columns to change desiccant cartridges. Top Caps are ergonomically designed and desiccant cartridges feature a lifting handle, enabling desiccant cartridges to be changed in minutes.

Improved Flow Path Desiccant cartridges are designed to minimise pressure loss and maximise performance.

Unique Purge Plug Design The new, multi-orifice purge plug can be changed to suit the user requirement in minutes; dramatically reducing service time when compared to previous models.

External Silencers Silencers are externally fitted. No panels or extrusions need to be removed, allowing for fast and efficient servicing.

Exhaust Shuttle and Shuttle Valve Change out Each exhaust shuttle and shuttle valve can be changed in minutes with standard tools for servicing. No specialist tools are required.



New Dewpoint Management Control and Monitoring

DMC Controller

The new DMC Controller and hygrometer provides the option of additional energy saving features. With the ability to upgrade and replace the standard PD0046 – PD0360 LED controller to our new DMC Controller, not only will your dryer come with energy management features, it will also be upgraded to include advanced dewpoint control.

Multi-Dewpoint Selection

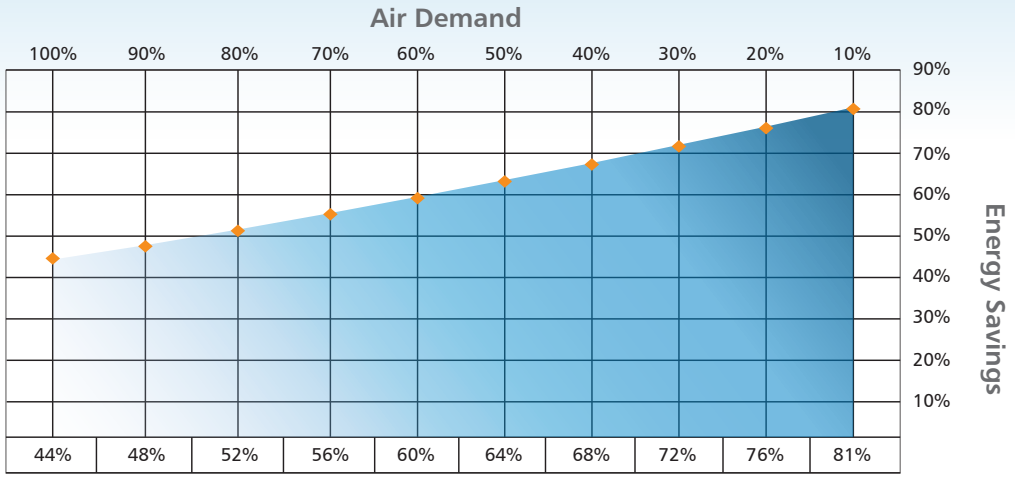
The DMC Controller provides access to a dewpoint switch (located on the exterior of the controller enclosure), enabling dewpoint to be set to application requirements. This feature allows users to choose a dewpoint of -20°C, -40°C and -74°C. Please note -74°C dewpoint cannot be achieved without the use of high performance, critical application, desiccant cartridges.

Purge Control - Set purge to operate within specific dewpoint parameters

When purchased and used in combination with a Hygrometer, the DMC Controller enables moisture in the air stream to be monitored and the dryer to automatically isolate purge flow when preset dewpoint parameters are met. This significantly increases energy savings and reduces operating costs as purge cycles are only initiated when it is necessary to regenerate the desiccant bed.

DMC Installation Example:-

Utilising the new dewpoint control system at £0.07 per kWh - dewpoint management control, would save £4,349 annually when used with a 360 scfm (612 Nm³/hr) heatless dryer operating at 60% load and an inlet temperature of 35°C (95°F) for 6000 hours.



Air Demand (%)	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%
Energy Saving (%)	44%	48%	52%	56%	60%	64%	68%	72%	76%	81%
Energy Saving P/A (KW)	44,416	50,180	54,050	58,032	62,131	66,354	70,705	75,190	78,817	84,591

Savings based upon system flow of 360 scfm (612 Nm³/hr) at 6.9 barg (100 psig) inlet pressure and 35°C (95°F) inlet temperature.

Dewpoint Selection

Dewpoint switch is located behind the front panel, allowing dewpoint to be set to:

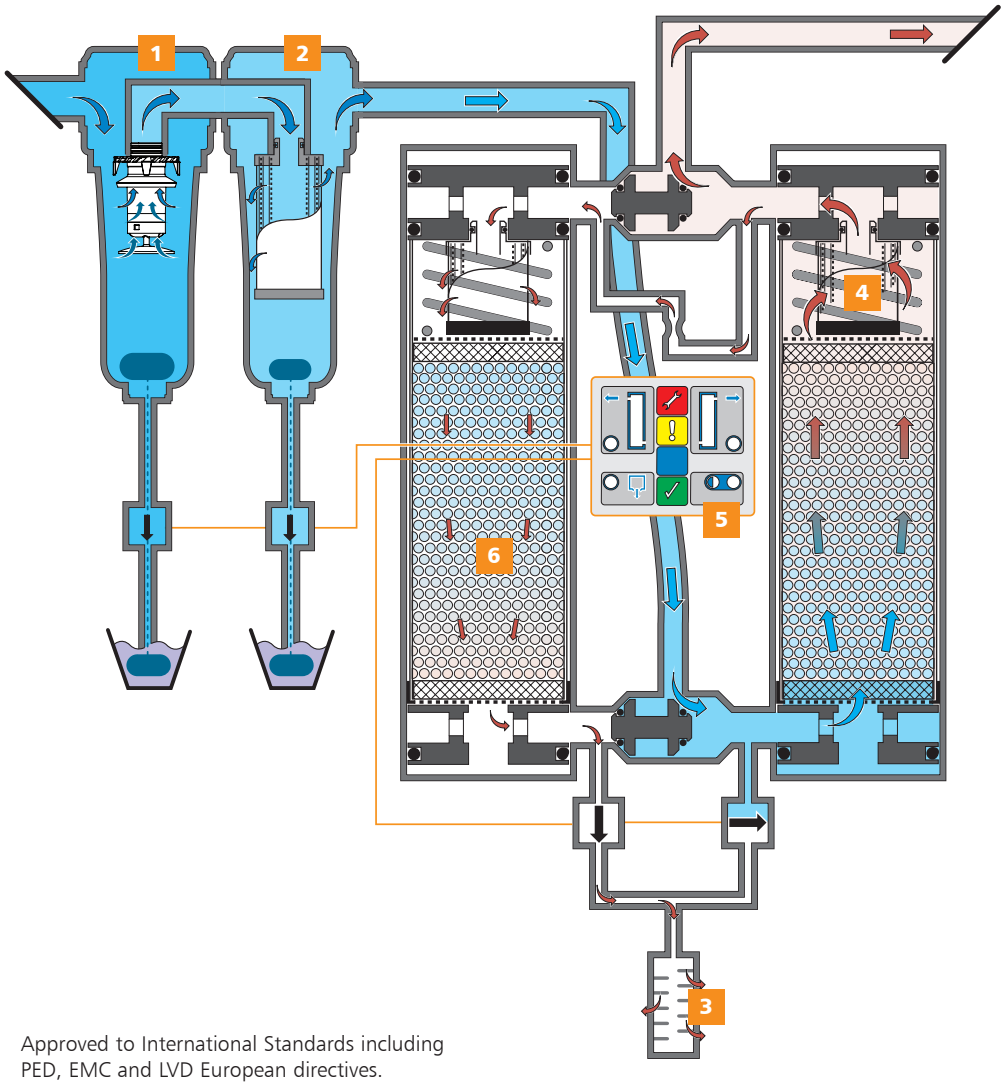
-20°C (4°F) (setting 1)
-40°C (-40°F) (setting 2)
-74°C (-100°F) (setting 3)

-74°C dewpoint selection must be used in conjunction with high performance critical application desiccant cartridges. For further information on -74°C dewpoint requirements please contact your nearest Walker Filtration sales department.

OPTIONAL DMC CONTROLLER DELIVERS UP TO 81% INCREASE IN OPERATING EFFICIENCY

PD004 - PD035 Operation

PRODRY is designed to provide a smooth, controlled, uninterrupted delivery of dry compressed air.



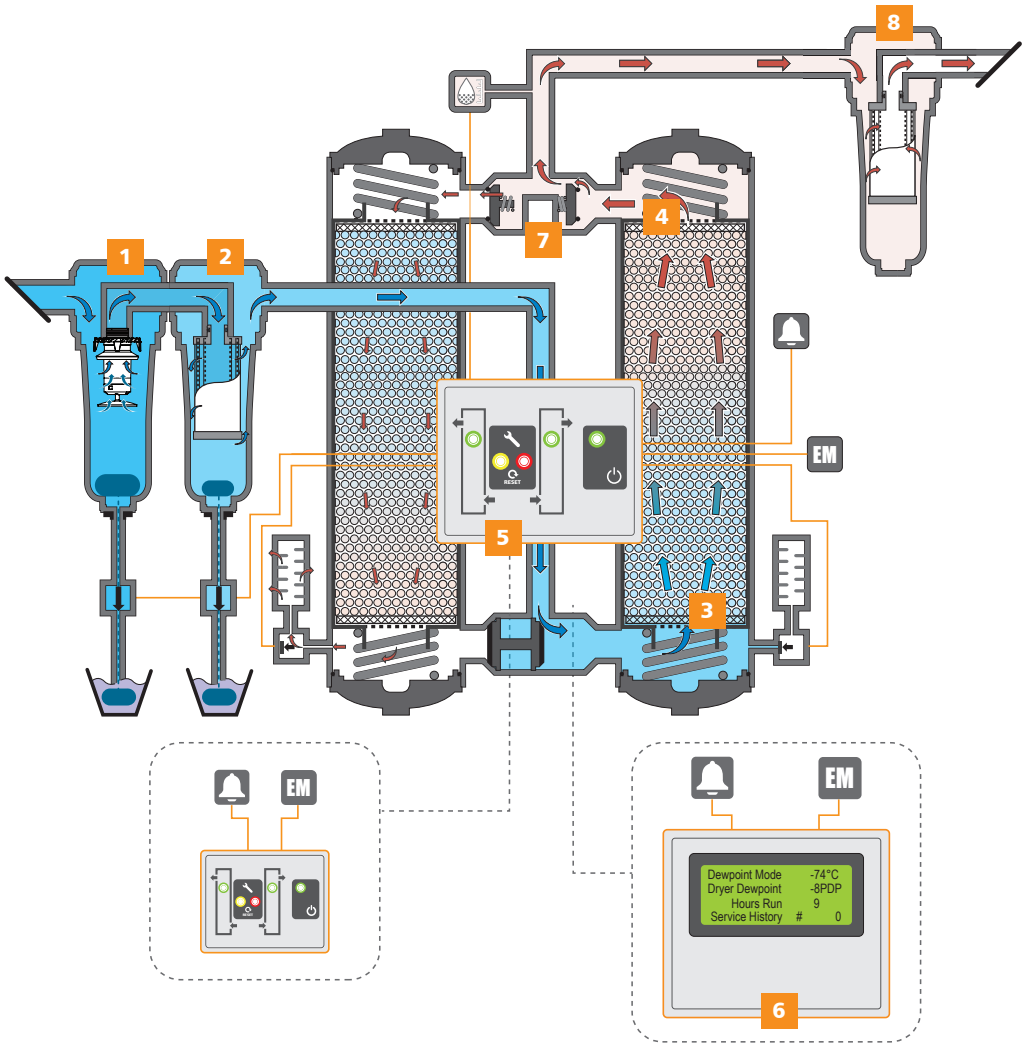
1. **Walker Filtration Water Separator.** Walker Filtration recommends you purchase and fit a Water Separator which removes large quantities of condensate with a centrifugal module.
2. **Walker Filtration XA 0.01 micron grade pre-filter.** Fitted as standard with float drain or recommended optional electronic drain. XA 0.01 micron grade pre-filter removes particulates and oil/liquid aerosols from the air stream. Wet air passes through the filter down to the bottom valve assembly.
3. Purge air passes into the atmosphere through the silencer which is fitted to the exhaust valve.
4. On exit from the desiccant cartridge, air passes through the integral X1 1 micron dust filter, removing particulate in the air stream.
5. The control system cycles the process air between the two desiccant towers.
6. Whilst one chamber is on stream removing water vapour, the other is being regenerated.

Approved to International Standards including PED, EMC and LVD European directives.

Processor specification	
DIN plug	GDS type C, Industry standard
Alarm ready relay rating	3 amp
Alarm connector	GDS type C, Industry standard
Energy management signal	5VDC
Energy management connector	GDS Type C, Industry standard

PD0046 - PD0360 Operation

The updated larger flow models PD0046 - PD0360 utilise exactly the same operating principle. However, with the option of upgrading parts, such as changing the LED Controller for the Dewpoint Management Controller, additional energy saving benefits can be achieved.



Approved to International Standards including PED, EMC and LVD European directives.

Processor specification	
DIN plug	GDS type C, Industry standard
Alarm ready relay rating	0.5 amp
Alarm connector	GDS type C, Industry standard
Energy management signal	24VDC
Energy management connector	GDS type C, Industry standard

1. **Walker Filtration Water Separator.** Walker Filtration Water Separator is supplied as standard to prevent large quantities of condensate from entering your dryer.
2. **Walker Filtration XA 0.01 micron grade pre-filter.** Walker Filtration recommends you purchase and fit an XA 0.01 micron grade pre-filter to remove oil/liquid aerosols from the air stream.
3. Air is fed to the bottom of the desiccant bed and moves through the high performance desiccant.
4. Air passes via the purge non-return valves.
5. Air quality is pre-set by intelligent controller. The LED control system cycles the process air between the two desiccant towers.
6. Optional DMC control system with start / stop technology. Advanced alternative system to LED controller.
7. Unique new purge plug design which offers a significant advantage to the user. The new patent pending concept incorporates a non-return valve to assure equal pressurisation within the chamber. This is an additional safety mechanism, in case of back flow, and prevents against operator error.
8. Recommended RXA 0.01 micron dust filter downstream of the dryer to remove any particulate that may have been added to the airstream by the dryer itself.

Medical & Breathing Air Packages




Whatever the application we have the dryer solution

Our PRODRY range can be adapted to suit critical applications such as Medical, Power Generation, Railway, and MOD, with specific modifications.

Hospital and Medical Air

Hospitals around the world demand a clean, reliable, source of medical air which will deliver consistent pressure levels and flow rates. Medical air must be free from toxic contaminants, flammable or objectionable vapours, liquids, and particulate debris. It must maintain a fluctuation-free and stable oxygen content that conforms to international standards. PRODRY, used in conjunction with Walker Filtration coalescing and gas adsorption filters, can provide this – complying with industry guidelines such as HTM 02-01 and Worldwide Pharmacopoeia.

Breathing Air Packages

The Pro BA breathing air system utilises the dependable design of the PRODRY desiccant compressed air dryers in combination with internal high performance critical application cartridges. These proven cartridges maintain a steady flow of normal ambient oxygen/nitrogen levels and remove water vapour in line with requirements such as EN 12021.

Pro BA units include a three stage filtration system consisting of a 1 micron pre-filter, 0.01 micron coalescing filter and an outlet filter for removing odours, tastes and most crucially carbon monoxide. At the heart of the unit is a fully functional electronic controller complete with an LED control panel, built in self-monitoring diagnostics and energy management. The Pro BA range has been designed and manufactured to exceed current legislation guidelines.

Bespoke Units

Dryer packages for critical applications can be tailored to specific application needs – please contact our sales team for further information.

OEM Design & Capability

Passionate About Original Equipment Manufacturer Partnerships

At Walker Filtration, we are known not only for our highly specified standard product ranges, but also for our customised solutions that are designed to meet exact customer needs. Our exceptional technical development allows us to meet the highest demands of OEM customers – anticipating customer needs and matching technology with market developments.

Providing Unique, Custom Built Solutions

As a flexible, UK based, manufacturer, the filtration, drying and separation solutions we can provide are diverse. We work in complete collaboration with our OEM customers from initial concept designs and engineering, through testing and validation, to branding and aftermarket support. Our focus and dedication is straightforward – we enjoy working with our customers, offering competent advice and sound engineering, to help them realise their desired product. With an enviable reputation for our technical knowledge, and the ability to deliver solutions quickly, we have what it takes for a quick turnaround from development, to prototype, to launch.

Working With OEM Customers to Deliver Intelligent Branding Solutions

We work with our OEM customers to provide options to customise and brand products and packaging, along with a range of supporting marketing materials, to achieve maximum brand identity and recognition. All aspects of the product are considered, including language support, unique part numbers and transport details.

Performance and Validation

To ensure complete product assurance and performance, our OEM developments are extensively tested to the highest standards. Throughout the entire process, excellent levels of customer service are at the heart of everything we do.

OEM branding and bespoke packages available

Air Quality Classification

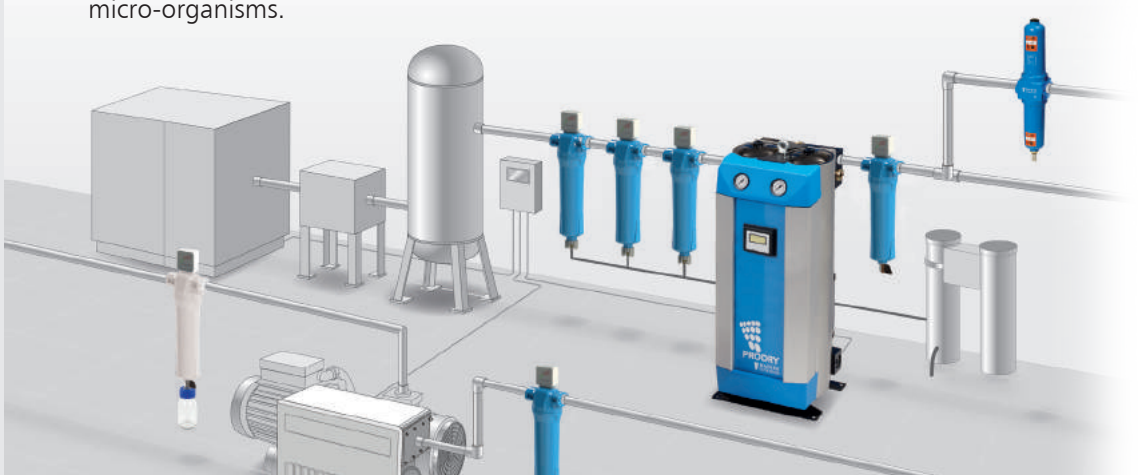
Dryer Operation and ISO 8573-1: 2010 Air Quality Classes

Desiccant dryers remove water vapour but not bulk liquid contamination, oil aerosols, solid particulates, oil vapours, or micro-organisms. Walker Filtration supply a range of compressed air and gas filtration solutions for the removal of these contaminants.

The ISO 8573 group of International Standards is used for the classification of compressed air. The table below summarises the maximum contaminant levels specified in ISO 8573-1: 2010 for the various compressed air quality classes:

Purity class	Particle				Water		Oil
	Maximum number of particles per cubic metre as a function of particle size, d[a]				Vapour	Liquid[a]	Total oil[a]
	0.1μm<d≤0.5μm	0.5μm<d≤1.0μm	1.0μm<d≤5.0μm	Mass concentration Cp mg/m³	Pressure dewpoint °C	Concentration liquid water Cw g/m³	Liquid, aerosol, vapour mg/m³
0	As specified by the equipment user or supplier and more stringent than class 1						
1	≤ 20,000	≤ 400	≤ 10	-	≤-70	-	≤ 0.01
2	≤ 400,000	≤ 6,000	≤ 100	-	≤-40	-	≤ 0.1
3	-	≤ 90,000	≤ 1,000	-	≤-20	-	≤ 1
4	-	-	≤ 10,000	-	≤+3	-	≤ 5
5	-	-	≤ 100,000	-	≤+7	-	-
6	-	-	-	0 < Cp ≤ 5	≤+10	-	-
7	-	-	-	5 < Cp ≤10	-	Cw ≤ 0.5	-
8	-	-	-	-	-	0.5 < Cw ≤ 5	-
9	-	-	-	-	-	5 < Cw ≤ 10	-
X	-	-	-	Cp > 10	-	Cw > 10	>5

- **Water Separators** Remove up to 99% of bulk liquid contamination.
- **Coalescing Filters (Threaded and Flanged)** Designed to remove oil and water aerosols, but will also remove solid particulates.
- **Activated Carbon Filters** Removing oil vapour, smells and odours.
- **Particulate Removal Filters** Fitted down-stream of dryers where no liquid is present. Particulate Filters deliver up to 99.9999% particulate removal efficiency.
- **Medical Sterile Filters** Designed for medical compressed air plants and used in hospitals throughout the world. Designed to remove bacteria and micro-organisms.

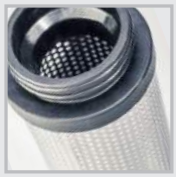


Walker Filtration Product Ranges

Walker Filtration offer a comprehensive range of compressed air filtration and drying products. Our product range includes:


Water Separators


Coalescing Filters


Activated Carbon


Particulate Filters


Medical Vacuum


Duplex Filters


Alternative Elements


Accessories & Spares

For our full product range and further information please visit: **www.walkerfiltration.com** or contact your nearest Walker Filtration sales department.

PRODRY Service Kits

Models PD004 - PD035

Service Kits				
To fit dryer model	6,000 hours Silencer Service Kit	12,000 hours Cartridge and Silencer Service Kit*	18,000 hours Silencer Service Kit	24,000 hours Silencer, Cartridge and Valve Service Kit
PD004	PD1SK01	PD1SK01 PDC004-12000	PD1SK01	PD1SK01 PDC004-12000 VSKS01
PD006	PD1SK02	PD1SK02 PDC006-12000	PD1SK02	PD1SK02 PDC006-12000 VSKS01
PD008	PD1SK02	PD1SK02 PDC008-12000	PD1SK02	PD1SK02 PDC008-12000 VSKS01
PD010	PD1SK02	PD1SK02 PDC010-12000	PD1SK02	PD1SK02 PDC008-12000 VSKS01
PD015	PD1SK02	PD1SK02 PDC015-12000	PD1SK02	PD1SK02 PDC008-12000 VSKS01
PD025	PD1SK02	PD1SK02 PDC025-12000	PD1SK02	PD1SK02 PDC008-12000 VSKS01
PD035	PD1SK02	PD1SK02 PDC035-12000	PD1SK02	PD1SK02 PDC008-12000 VSKS01

Models PD0046 - PD0360

Service Kits					
Voltage	To fit dryer model	6,000 hours Silencer Service Kit	12,000 hours Cartridge and Silencer Service Kit*	18,000 hours Silencer Service Kit	24,000 hours Cartridge, Silencer, Valve, and Purge Valve Service Kit*
DMC 24V	PD0046	PD3SK01	PDSK0046-12000	PD3SK01	PDSK0046-24000-S24
	PD0056		PDSK0056-12000		PDSK0056-24000-S24
	PD0075		PDSK0075-12000		PDSK0075-24000 -S24
	PD0090		PDSK0090-12000		PDSK0090-24000-S24
	PD0110	PD3SK02	PDSK0110-12000	PD3SK02	PDSK0110-24000-S24
	PD0150		PDSK0150-12000		PDSK0150-24000-S24
	PD0180		PDSK0180-12000		PDSK0180-24000-S24
	PD0220	PD3SK03	PDSK0220-12000	PD3SK03	PDSK0220-24000-D24
	PD0300		PDSK0300-12000		PDSK0300-24000-D24
	PD0360		PDSK0360-12000		PDSK0360-24000-D24
LED 115V	PD0046	PD3SK01	PDSK0046-12000	PD3SK01	PDSK0046-24000-S115
	PD0056		PDSK0056-12000		PDSK0056-24000-S115
	PD0075		PDSK0075-12000		PDSK0075-24000-S115
	PD0090		PDSK0090-12000		PDSK0090-24000-S115
	PD0110	PD3SK02	PDSK0110-12000	PD3SK02	PDSK0110-24000-S115
	PD0150		PDSK0150-12000		PDSK0150-24000-S115
	PD0180		PDSK0180-12000		PDSK0180-24000-S115
	PD0220	PD3SK03	PDSK0220-12000	PD3SK03	PDSK0220-24000-D115
	PD0300		PDSK0300-12000		PDSK0300-24000-D115
	PD0360		PDSK0360-12000		PDSK0360-24000-D115
LED 230V	PD0046	PD3SK01	PDSK0046-12000	PD3SK01	PDSK0046-24000-S230
	PD0056		PDSK0056-12000		PDSK0056-24000-S230
	PD0075		PDSK0075-12000		PDSK0075-24000-S230
	PD0090		PDSK0090-12000		PDSK0090-24000-S230
	PD0110	PD3SK02	PDSK0110-12000	PD3SK02	PDSK0110-24000-S230
	PD0150		PDSK0150-12000		PDSK0150-24000-S230
	PD0180		PDSK0180-12000		PDSK0180-24000-S230
	PD0220	PD3SK03	PDSK0220-12000	PD3SK03	PDSK0220-24000-D230
	PD0300		PDSK0300-12000		PDSK0300-24000-D230
	PD0360		PDSK0360-12000		PDSK0360-24000-D230

* Information above relates to standard service kits only. For breathing air & critical applications, such as -70°C PDP, please contact Walker Filtration for more information.

Note: For information on accessories relating to the above model numbers please see the relevant Walker Filtration Product Range and Price Guide.

For further information on our full product range, please contact your nearest sales team or visit www.walkerfiltration.com

WALKER FILTRATION

The ultimate filtration & drying technology

Technical Specification PD004 - PD035

Dryer model	Pipe size inches	Inlet flow rate*		Dimensions mm						Weight Kg	No. of cartridges	Included filter model
		Nm³/hr	SCFM	A	B	C	D	E	F			
PD004	3/8	7	4	445	280	92	22	160	415	13	2	A038XA
PD006	3/8	10	6	504	280	92	22	160	475	14	2	A038XA
PD008	3/8	14	8	564	280	92	22	160	535	15	2	A038XA
PD010	3/8	17	10	634	280	92	22	160	605	17	2	A038XA
PD015	3/8	25	15	814	280	92	22	160	785	20	2	A038XA
PD025	3/8	42	25	1204	280	92	22	160	1035	24	2	A038XA
PD035	3/8	59	35	1596	280	92	22	160	1430	31	2	A038XA

* 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	-70°C	-94°F
ISO Class (ISO 8573-1:2010)	(Class 1) -70°C	(Class 2) -40°C
Minimum working pressure	4 barg	58 psig
Maximum working pressure	16 barg	232 psig
Power supply	12 - 24VDC or 100 - 240VAC (50-60Hz)	
Minimum inlet temperature	1.5°C	35°F
Maximum inlet temperature	50°C	122°F

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	1.12	1.25	1.37	1.5	1.62	1.75	1.87	2.0	2.12

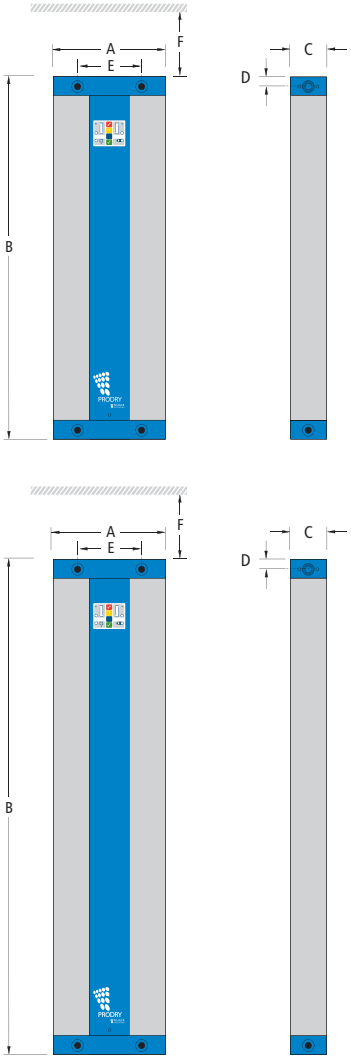
Temperature (TCF)							
Celsius (°C)	20	25	30	35	40	45	50
Fahrenheit (°F)	68	77	86	95	104	113	122
Correction factor	1.07	1.06	1.04	1	0.88	0.78	0.55

Pressure Dewpoint (DCF) ***		
Celsius (°C)	-40	-70
Fahrenheit (°F)	-40	-94
Correction factor	1	0.7

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	$\frac{\text{Inlet flow rate}}{\text{PCF x TCF x DCF}} = \frac{15}{(0.87 \times 1.06 \times 0.7)} =$ 23.2 scfm (39Nm³/hr)	
Appropriate Dryer Size	Dryer model is selected based on the corrected flow rate, i.e. PD0025.	



Models PD004-PD035

Technical notes

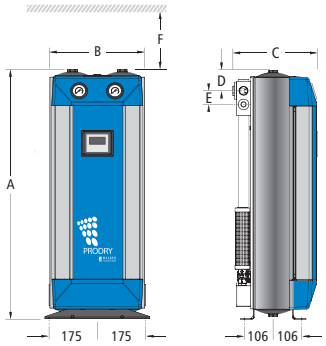
1. Models PD004 – PD035 supplied complete with XA (0.01 micron) pre-filter.
2. Models PD0046 – PD0360 supplied complete with Water Separator to prevent large quantities of condensate from entering the dryer.
3. An appropriate Walker Filtration Water Separator must be installed. If bulk water enters the 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.
4. 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.
5. Floor fixing dimensions for dryer models PD0046 – PD0360 are given in the illustrations on the page opposite.

Technical Specification PD0046 - PD0360

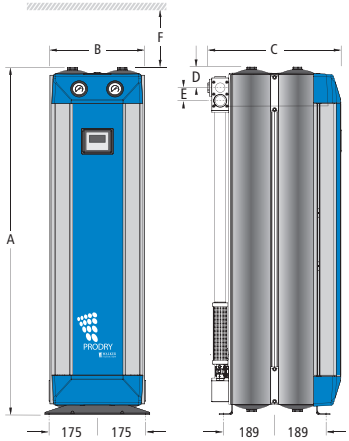
Dryer model	Pipe size inches	Inlet flow rate*		Dimensions mm						Weight Kg	No. of cartridges	Recommended Filter model	Model With Dewpoint Management Control**
		Nm³/hr	SCFM	A	B	C	D	E	F				
PD0046	1	77	45	655	380	310	76	50	600	46	2	A3051XA	PD0046DMC
PD0056	1	94	55	735	380	310	76	50	700	51	2	A3052XA	PD0056DMC
PD0075	1	128	75	905	380	310	76	50	850	62	2	A3071XA	PD0075DMC
PD0090	1	153	90	1030	380	310	76	50	1000	70	2	A3101XA	PD0090DMC
PD0110	1	187	110	1260	380	310	76	50	700	85	4	A3101XA	PD0110DMC
PD0150	1	255	150	1595	380	310	76	50	850	105	4	A3102XA	PD0150DMC
PD0180	1	306	180	1845	380	310	76	50	1000	122	4	A3102XA	PD0180DMC
PD0220	1½	374	220	1260	380	490	76	62	700	154	8	A3122XA	PD0220DMC
PD0300	1½	510	300	1596	380	490	76	62	850	195	8	A3151XA	PD0300DMC
PD0360	1½	612	360	1845	380	490	76	62	1000	225	8	A3151XA	PD0360DMC

* 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.
** For full dewpoint management control state 'DMC with Dewpoint Sensor (hygrometer)' when asked what controller type you require upon placing your order.

Specification		
Standard pressure dewpoint	-40°C	-40°F
Optional pressure dewpoint	-20°C	-4°F
	-74°C	-100°F
Minimum working pressure	4 barg	58 psig
Maximum working pressure	13 barg	188.5 psig
Electronic control (LED)	115 or 230 VAC at 50-60Hz	
Dewpoint control (DMC)	24 VDC	
Minimum inlet temperature	1.5°C	35°F
Maximum inlet temperature	50°C	122°F



Models PD0046-PD0180



Models PD0220-PD0360

Dryer correction factors

Operating pressure (PCF)										
barg	4	5	6	7	8	9	10	11	12	13
psig	58	72	87	100	115	130	145	160	174	189
Correction factor	0.62	0.75	0.87	1	1.12	1.25	1.37	1.5	1.62	1.75

Temperature (TCF)							
Celsius (°C)	20	25	30	35	40	45	50
Fahrenheit (°F)	68	77	86	95	104	113	122
Correction factor	1.3	1.2	1.1	1	0.75	0.65	0.45

Pressure dewpoint (DCF)			
Celsius (°C)	-20	-30	-40
Fahrenheit (°F)	-4	-22	-40
Correction factor	1.23	1.2	1

Pressure dewpoint (DCF) ***		
Celsius (°C)	-70	-74
Fahrenheit (°F)	-94	-100
Correction factor	0.8	0.77

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	56 scfm	-
Actual minimum inlet pressure to the dryer	6 barg	PCF = 0.87
Maximum inlet temperature	25°C (77°F)	TCF = 1.2
Pressure dewpoint (PDP)	-74°C (-100°F)	DCF = 0.77
Corrected dryer flow rate	$\frac{\text{Inlet flow rate}}{\text{PCF x TCF x DCF}} = \frac{56}{(0.87 \times 1.2 \times 0.77)} =$	**69.7 scfm (118 Nm³/hr)**
Appropriate Dryer Size	Dryer model is selected based on the corrected flow rate, i.e. PD0075.	

*** High Performance Cartridges are required for applications where -70°C and -74°C dewpoints are required.

New DMC controller available. To receive the benefits of dewpoint management, quote PD(model)DMC with hygrometer when ordering your dryer

WALKER FILTRATION

The ultimate filtration & drying technology

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THE QUEEN'S AWARDS FOR ENTERPRISE: INNOVATION 2016

bcas BRITISH COMPRESSED AIR SOCIETY LIMITED

MEMBER OF CAGI Compressed Air & Gas Institute

UKAS QUALITY MANAGEMENT 001

WFL1022 Rev-A-UK 1017

n Ltd Birtley Road, Washington, Tyne & Wear, NE38 9DA, United Kingdom.
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WALKER FILTRATION

The ultimate filtration & drying technology

Laservac 750™

Laservac 750™ Electro & Laser Surgery Smoke Evacuation System

Walker Filtration Ltd introduce the Laservac 750™ Smoke Evacuation System, the safest and most effective way to manage surgical smoke plume.

The dangers of smoke plume generated during laser and electrosurgery are well documented. Although laser surgery is now common practice in modern medicine there are no official regulations regarding the management of the associated smoke. However, it is strongly recommended that smoke evacuation units be used to protect both patient and health care staff from the potential hazards.

In the UK, the Royal College of Obstetricians and Gynaecologists have called for obligatory smoke evacuation systems to be supplied with medical lasers and the NATN also advises, "Dedicated smoke evacuators must be used and the filters checked and changed as per the manufacturers recommendations."

The Laservac 750™ is a portable, lightweight machine, incorporating variable flow capacities making it suitable for use in operating theatre and clinic environments. A high efficiency, three stage, filtration system ensures the sub micron removal capacity and the unit's filtration will collect 99.9999% of all vapourised tissue.

LV750 at a glance

- Quiet, with variable flow control
- 99.9999% efficiency at 0.12 micron
- Efficient odour removal
- Conforms to international medical equipment standards.
- Full range of accessories (see reverse)
- Easy filter replacement
- Primary filter life of 2 hours
- Secondary filter life of 6 months
- Comes complete with 'Starter Pack'

The LV750 Starter Kit

- 3 Disposable primary filters
- 1 Collection funnel
- 1 Suction wand
- 1 Tube connector
- 1 Transfer tube
- 2 Catheter tubes (1 of each size)
- Pneumatic footswitch
- Mains lead
- Registration card
- Instruction manual

www.walkerfiltration.com

telephone: (+44) 191 417 7816
email: sales@walkerfiltration.com

For specific information on the entire range of LASERVAC products contact our Sales Department

WALKER FILTRATION

The ultimate filtration & drying technology

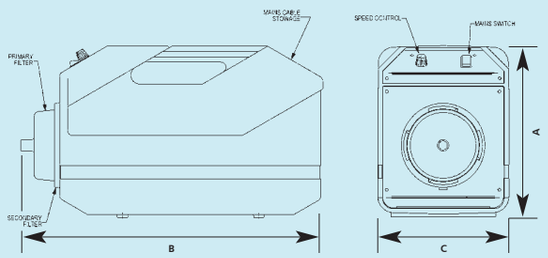
Laservac 750™ Specifications

Laservac 750™ Electro & Laser Surgery Smoke Evacuation System

Specifications

Flow	300L/m (10 scfm) with the speed control on minimum 750 L/m (26 scfm) when on maximum (with standard connection hose of 22mm (7/8”)
Noise	< 60 dbA when measured at 1 metre
Electrical	high capacity motor runs on a single phase 110/120V-60Hz or 220/240V-50Hz electrical supply
Certification	The electrical system conforms to CAN\CSA C22.2 No 601.1-M90 Category 245 & UL-544 /ETL Product Category 6 for Medical and Dental Equipment.
	EMC 89/336/EEC as amended by 92/31/EEC and 93/68/EEC
	EN60601-1-2: 1993

Dimensions



A	320mm	12.6”
B	560mm	22”
C	250mm	9.8”
Weight of unit	13.5kg	30lb

LV750 Accessories	Product Description	Part Number
	**Primary Filter**	LVPF750
	**Secondary Filter**	LVSF750
	**Transfer Tube** (1.5m) **Transfer Tube** (2.0m)	LVTU2215 LVTU2220
	**Catheter Tube** (1.0m) **Catheter Tube** (2.0m)	LVTU0710 LVTU0720
	**Collection Funnel**	LVFU22
	**Tube Connector**	LVTC2207
	**Suction Wand**	LVWA22PL

For specific information on the whole range of LASERVAC products contact our Sales Department

Email: sales@walkerfiltration.com, or call the team on **(+44) 191 417 7816**
or visit **www.walkerfiltration.com**

THE QUEEN'S AWARDS FOR ENTERPRISE: INNOVATION 2016

WALKER FILTRATION

OXYGEN

Medical Sterile Oxygen Filters

Models | O20015MS to O21500MS

Flow Rates 5.7 SCFM (9.5 Nm³/hr) to 1536.0 SCFM (2422.5 Nm³/hr)

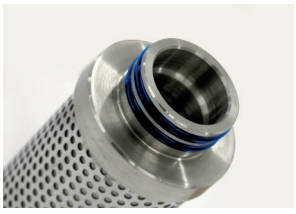
Cleaned in accordance with ASTM G93/G93M

When it comes to patient care, quality and reliability is paramount. Walker Filtration's New Medical Sterile Oxygen Filters are cleaned for oxygen service in accordance with ASTM G93/G93M, providing outstanding purity for applications where oxygen rated medical filtration is required.

Our Oxygen Filters provide high quality inlet air prior to entering an oxygen generator, as well as the required filtration after the generation process, to ensure the gas meets purity standards and does not carry particulate or other contaminants.

100% integrity tested, Alpha Medical Sterile elements are guaranteed for a minimum of 100 sterilisations at 120°C (248°F), ensuring that your oxygen pipeline is free from live bacteria and other sub-micron particles.

Walker Filtration's Oxygen Filters are manufactured on a dedicated line with strict cleaning methods to ensure the removal of all unwanted contaminants.



Stainless Steel End Caps
Specially designed for autoclave sterilisation compatibility

Contaminant Free Manufacturing
All components and materials are thoroughly cleaned and certified for use in oxygen rich environments

Modular Filter
Low cost connecting kits and new filter head design enables easy close coupling assembly

- **International Validation** Designed to exceed the requirements of HTM 02-01 medical gas pipeline systems
- **Simplified Serviceability** Externally accessible drain, profiled bowl design, and unique push fit elements ensure quick and reliable maintenance
- **Flow-Optimised Design** Advanced filter head design for optimised flow performance
- **Corrosion Protection** Internal and external electrophoretic paint finish followed by a tough exterior polyester powder coating
- **Suitable for Oxygen Service** Oxygen Filters are specially designed, cleaned, and packaged, to ensure all combustible components are removed from the filter to prevent risk of ignition
- **Product Safety in Mind** Guaranteed safe housing closure with rotational safety stop

For further information please visit www.walkerfiltration.com

For further information please call: +44 (0) 191 417 7816

Technical Specification

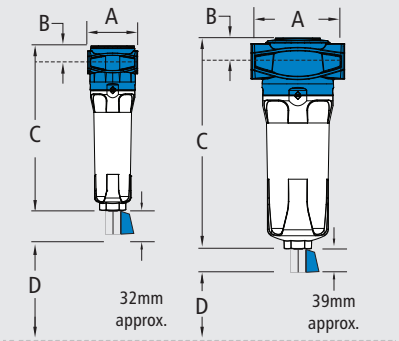
Filter Model	Pipe size inches	Inlet flow rate*		Dimensions mm				Weight Kg	Element model
		Nm³/hr	SCFM	A	B	C	D		
O20006MS	1/8	9.5	5.7	50	17	157	60	0.3	EO20306SR
O20015MS	1/4	23.8	14.3	50	17	157	60	0.3	EO20306SR
O20025MS	1/4	39.9	23.8	70	23	231	70	0.6	EO20408SR
O20032MS	3/8	51.3	30.4	70	23	231	70	0.6	EO20408SR
O20050MS	1/2	80.8	47.5	70	23	231	70	0.6	EO20412SR
O20070MS	1/2	113.1	66.5	127	32	285	80	1.7	EO20612SR
O20085MS	3/4	136.8	80.8	127	32	285	80	1.7	EO20612SR
O20105MS	1	169.1	99.8	127	32	285	80	1.7	EO20612SR
O20125MS	3/4	201.4	118.8	127	32	370	80	2.0	EO20621SR
O20175MS	1	282.2	166.3	127	32	370	80	2.0	EO20621SR
O20280MS	1 1/4	452.2	266.0	140	41	476	85	3.0	EO20731SR
O20320MS	1 1/2	516.8	304.0	140	41	476	85	3.0	EO20731SR
O20400MS	1 1/2	646.0	380.0	170	53	508	100	4.9	EO20831SR
O20450MS	2	726.8	427.5	170	53	508	100	4.9	EO20831SR
O20700MS	2	1129.6	665.0	170	53	708	100	5.5	EO20850SR
O20850MS	2 1/2	1371.8	807.5	220	70	736	100	10.5	EO21140SR
O20900MS	3	1452.6	855.0	220	70	736	100	10.5	EO21140SR
O21250MS	3	2018.8	1187.5	220	70	857	100	11.5	EO21160SR
O21500MS	3	2422.5	1536.0	220	70	1005	100	12.5	EO21175SR

* Rated flow at 7 barg, reference conditions 1 bar (a) 20°C, calculated using 0.95 Gas Density Factor based on 93% oxygen saturation

Grade	SR	
DOP efficiency**	>99.9999%	
Particle removal	0.01 micron	
Maximum operating temperature	120°C	248°F
Recommended operating temperature	50°C	122°F
Maximum autoclave temperature	134°C	273°F
Pressure Loss - clean & dry	100 mbar	1.5 psi
Maximum working pressure	20.7 barg	300 psig
Element end cap material	Stainless steel	

** As specified in HTM 02-01 medical gas pipeline systems

Pressure correction factors	for maximum flow rate, multiply model flow rate by the correction factor corresponding to the minimum operating pressure									
Operating pressure barg (psig)	4 (58)	5 (72)	6 (87)	7 (100)	8 (115)	10 (145)	12 (174)	14 (203)	16 (232)	20.7 (300)
7 barg - correction factor	0.76	0.84	0.92	1.00	1.07	1.19	1.31	1.41	1.51	1.73



O20015MS to O20050MS

O20070MS to O21500MS

Technical Notes

1. Direction of air flow is inside to out through the filter element. Filter element end caps are stainless steel.
2. All Oxygen Filters are fitted as standard with Manual Drain Valves, VMDV25 on models O20006 to O20050, VMDVE25B on models O20070 to O20700, and VMDVE25M on models O20850 to O21500. Standard filters can operate at 20.7 barg (300 psig) range at 120°C (248°F).
3. Alpha Oxygen Filters are manufactured from cast aluminium alloy and are PED 2014/68/EU compliant for group 1 and group 2 gases.
4. Threaded connections are Rp (BSP Parallel) to ISO 7-1 or NPT to ANSI/ASME B1.20.1 if supplied within North America. Rc (BSP Taper) to ISO 7-1 also available.
5. Pre-filtration should be used in conjunction with 0.01 micron sterile filters.
6. Medical Sterile Filter elements must not operate in water or oil saturated conditions and should be changed at least every 6 months.
7. Maximum steam sterilising autoclave temperature refers to the filter element ONLY. Oxygen grade SR filter elements can be steam sterilised 100 times. Each element must be autoclaved before commencement of duty.
8. Each element is supplied with an Air Sterilisation Certificate to guarantee the highest quality to our customers.
9. Oxygen SR grade filters are suitable for use in dry air conditions only, as any liquids passings through the filter could carry bacteria and compromise sterility.
10. Walker Filtration genuine spare and aftermarket parts must be used, failure to do so will void product warranty. Walker Filtration shall not be held liable for damages suffered by the customer if Walker Filtration genuine oxygen rated spare and aftermarket parts are not used.
11. All Walker Filtration Alpha Oxygen Filters are produced from high quality, non-toxic, naturally inert raw materials and constituents, in accordance with FDA requirements for food contact as per Code of Federal Regulation (CFR), Title 21.

CRN

ISO 9001

MEMBER OF CAGI Compressed Air & Gas Institute

bcas BRITISH COMPRESSED AIR SOCIETY LIMITED

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