



The ultimate filtration & drying technology



# PRO XF

Introducing PRO XF Compressed Air Filters  
Innovative modular design. Exceptional engineering. Customer focus.



## Where engineering excellence meets innovative filtration design

Established in 1983 and operating out of a 130,000 ft<sup>2</sup> global manufacturing facility in Washington Tyne & Wear, UK, Walker Filtration is a specialist manufacturer of high efficiency compressed air filtration and drying equipment.

Our commitment to exceptional and innovative design, along with a proven record of accomplishment in engineering excellence, has enabled us to remain at the forefront of compressed air filtration and drying technology for over 30 years.

We pride ourselves in designing products that meet the many challenges faced by businesses today; from environmental impacts and operating efficiency, through to the health and safety of your people.

In today's world where 'time equals money' our engineering team set out to design products that deliver energy efficiency and are easy to service and maintain, resulting in reduced down time and total life cost.

Working to exacting manufacturing standards, Walker Filtration delivers high quality products and tailored solutions worldwide.



## NEW PRO XF

**Walker Filtration's PRO XF high efficiency compressed air filters feature an innovative modular design and provide a flexible, reliable, and compact compressed air filtration solution.**

Designed for high flow applications and operating pressures up to 232 psig (16 barg), PRO XF takes a revolutionary approach to the traditional fabricated flanged market – providing a compact and flexible modular design that is ideal for use in multi compressor installations and skid based packages. Available as individual threaded and flanged filters, by integrating a filter 'module' with slim-line connectors, the entire package is ideal for a multi-banked solution. PRO XF's space efficient design is up to 65% lighter and 45% smaller when compared to comparative fabricated models.

The range includes all coalescing, particulate, vapor and dust filtration grades, and Water Separator models, providing a comprehensive compressed air filtration solution for high flow applications with flow rates from 700 to 3000 scfm (1189 to 5097 Nm<sup>3</sup>/h).

Ease of installation and maintenance has been a prime consideration in the design of PRO XF, minimizing system downtime associated with servicing and maintenance and providing hugely improved operating efficiencies. Through innovative design and lean manufacturing, Walker Filtration has been able to significantly reduce lead time when compared to conventional fabricated vessels, holding all components in stock.



**PRO XF's modular design provides a flexible and compact solution for multi-banking filters.**



## Compressed Air in Industry



Versatile compressed air solutions for any industry

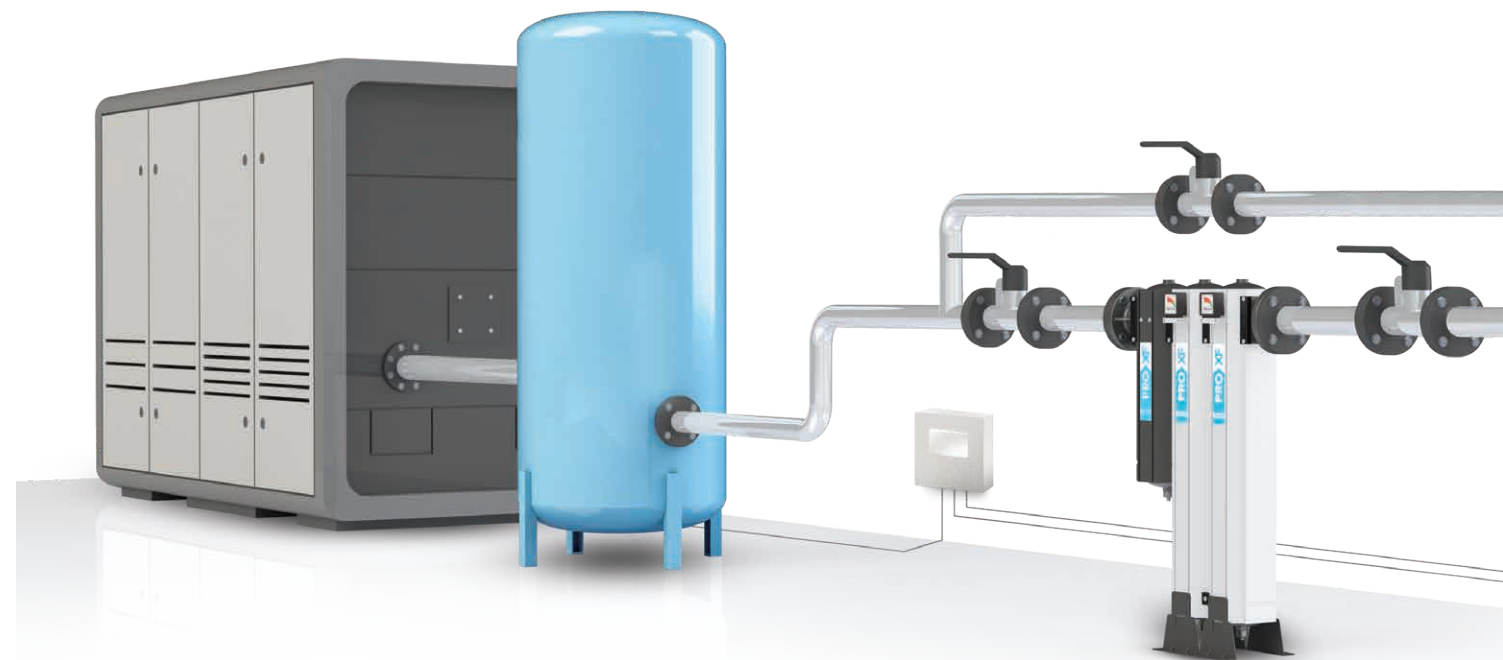


Compressed air in industry is considered the 'fourth utility' and provides an essential power source for many manufacturing operations where other power sources are deemed unsafe or inappropriate.

Used as a motive force for powering tools and automated machinery, the requirement for a compressed air supply to be clean, dry and contaminate free is crucial to ensuring safe, efficient, and profitable operation and manufacturing. The presence of dust, oil, moisture, and particulates within a compressed air line can significantly reduce the performance and lifespan of end-use equipment and lead to damage of the finished goods being manufactured. Therefore, correct air filtration is essential to delivering high quality compressed air to the quality required for the end application.

PRO XF's robust, high quality design ensures that clean and oil free compressed air is delivered contaminant free, to the exacting specifications required for end use. Suitable for worldwide installation and ideally suited for multi-compressor installations and skid based packages, the new PRO XF range will meet and exceed the highest standards of air purity when tested in accordance with ISO8573-1: 2010 air quality classes.

**Maintenance  
made easy  
up to 80%  
saving in service  
time**



# PRO XF Features & Benefits

## New PRO XF Technology: Redefining compressed air filtration



Top Loading  
Filter Element Design



Modular Construction



Externally Accessible  
Drain Valve



Flexible Installation - Floor  
and Wall Mounting Brackets  
Available

The all new PRO XF combines innovative design with high efficiency filter elements to deliver a market leading filtration solution for high flow applications.

Available in 2", 2 1/2" and 3" NPT and BSPP threaded, and 150 lb (3" and 4") flanged housings, the new PRO XF filter provides a robust and compact range of compressed air filters that is suitable for installation worldwide.

Through combining revolutionary construction features and high quality materials, Walker Filtration has created a safe and reliable filter range that minimizes system downtime associated with servicing and maintenance.

Experience up to a 80% saving in servicing and installation time with flanged PRO XF filters.



Approved to International Standards including PED and CRN directives.



**Reduced Service Time** Top loading design for easy access to the filter element, PRO XF filters offer up to 80% savings in service and installation time\*.

**Safe Handling** New 'Easy Grip' element handle for quick and clean element changeout and high efficiency filtration media for improved operating efficiencies.

**Energy Efficient Design** The PRO XF filter element features a unique air directing endcap and high efficiency filtration media for optimum filtration and air flow.

**Modular Construction** The PRO XF filter range is available in both Complete Filter and Modular Filter housings.

**Simple 'Slim-line' Housing Connectors** Filter housings can be installed individually or banked together using slim-line connectors, significantly reducing footprint.

**Compact Design** PRO XF's space efficient slim-line design is up to 65% lighter and 45% smaller than comparative fabricated models. When multi-banking product, even greater space savings can be made with the requirement of only one set of inlet and outlet ports.

**Corrosion Protection** Durable and hard wearing Electrophoretic (EP) coating on both internal and external faces of the filter housing and external powder coating prevents corrosion and contamination of upstream air supply.

**Externally Accessible Drain** Unique easy access drain can be removed externally and is supplied as standard on all models - eliminating the need to gain access to the internal of the filter bowl to remove the drain. Top loading element design eliminates the need for the drain to be removed during servicing allowing for quicker maintenance.

**Flexible Installation** Floor mounting and wall mounting brackets available.

\* When comparing PRO XF flanged filters with traditional fabricated vessels



65% lighter and  
45% smaller  
than comparative  
fabricated models



Threaded & flanged  
connections available

# Filter Elements

Walker Filtration's filter elements are designed using the highest quality materials, providing optimum performance, minimal pressure drop and reduced whole life costs.



Pleated construction  
X1/RX1 (1 micron),  
XA/RXA (0.01 micron) and  
X5/RX5 (5 micron) grades



Wrapped construction  
AC/RAC (0.01 micron  
Activated Carbon) grade

PRO XF is designed to deliver optimum performance in line with the highest standards of air purity, meeting quality standard ISO 8573-1:2010, providing a reliable compressed air filtration solution, for use in industrial applications.

Available in four filtration grades, from 5 micron to 0.01 micron, for both particulate, vapor and coalescing filters, PRO XF filter elements utilize either pleated or wrapped media. Walker Filtration's technical design engineers have selected the most appropriate method of construction for each element grade, ensuring PRO XF filter elements deliver optimum performance every time.

## Features & Benefits

**'Easy-Grip' element** minimizes risk of contact with contaminated filtration media and enables quick and clean servicing (Patent pending)

**Engineered profiled seal** prevents contamination bypass and allows for clean element change out

**Flow directing endcap** for enhanced air flow and reduced differential pressure

**'Drop and lock' element** design eliminates the need for tie rods, improving air flow through the filter element and simplifying element installation

**Color coded corrosion resistant endcaps** for easy and accurate filtration grade identification

**High efficiency** hydrophobic and oleophobic custom engineered filter media for improved efficiencies and coalescence

**Custom outer drainage layer** prevents oil carryover

**Pleated and wrapped** media based on most efficient construction for filtration grade required. Wrapped construction for AC/RAC grades, pleated construction for high efficiency filtration



# Modular Construction Explained



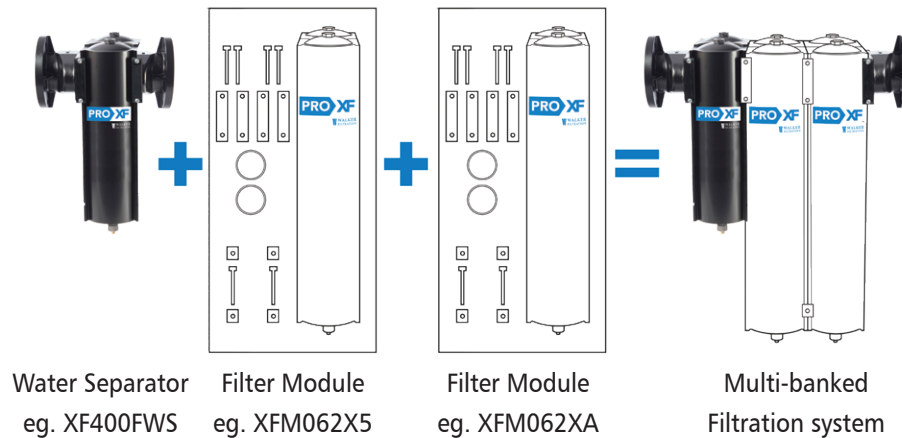
The PRO XF range is available in both Complete and Modular Filter housings which, when combined, deliver a compact and cost effective multi-banked filtration solution.

The PRO XF modular design always starts with a Complete Filter Vessel (Particulate Filter, Coalescing Filter, Vapor Filter or Water Separator), which includes either threaded or flanged inlet and outlet ports. Additional Filter Modules, which are supplied with slim-line connectors and no inlet and outlet ports, can then be added to create a compact and versatile multi-banked solution.

\* Cost saving based on equivalent sized complete filter unit

## Multi-banked filtration solutions:

Example: Air Purity Classification 1,-,1



Achieve a **30% saving** on each Filter Module when multi-banking with a Complete Filter\*

## Compressed Air Purity Classes ISO 8573-1

The table below summarizes the maximum contaminant levels specified in ISO 8573 Part 1 (2010) for the various compressed air quality classes. Each compressed air classification can be achieved by installing a specific filter grade or a combination of filter grades, depending upon required performance.

Purity class	Particle				Water		Oil
	Maximum number of particles per cubic meter as a function of particle size, d <sup>a</sup>				Vapor	Liquid <sup>b</sup>	Total oil <sup>a</sup>
	0.1µm < d ≤ 0.5µm	0.5µm < d ≤ 1.0µm	1.0µm < d ≤ 5.0µm	Mass concentration Cp mg/m <sup>3</sup>	Pressure dewpoint °C / °F	Concentration liquid water Cw g/m <sup>3</sup>	Liquid, aerosol, vapor mg/m <sup>3</sup> / ppm
0	As specified by the equipment user or supplier and more stringent than class 1						
1	≤ 20,000	≤ 400	≤ 10	-	≤ -70 / -94	-	≤ 0.01 / 0.01
2	≤ 400,000	≤ 6,000	≤ 100	-	≤ -40 / -40	-	≤ 0.1 / 0.08
3	-	≤ 90,000	≤ 1,000	-	≤ -20 / -4	-	≤ 1 / 0.80
4	-	-	≤ 10,000	-	≤ +3 / 37	-	≤ 5 / 4.1
5	-	-	≤ 100,000	-	≤ +7 / 45	-	-

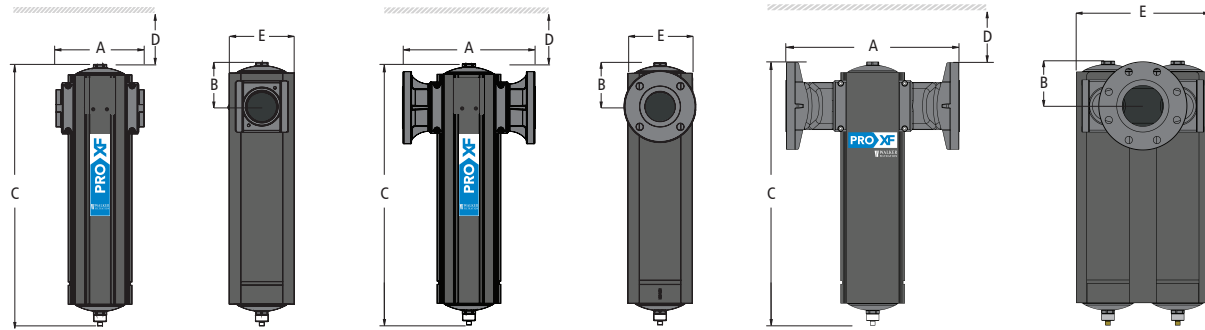
Filter grade	Grade X5 5 micron	Grade X1 1 micron	Grade XA 0.01 micron	Grade AC 0.01 micron
Maximum particle size class to ISO 8573-1:2010	Class 3	Class 2	Class 1	Class 1
Maximum oil content class to ISO 8573-1:2010	Class 4	Class 2	Class 1	Class 1



# Technical Specification

## PRO XF Water Separators

Filter model	Pipe size	Inlet flow rate		Dimensions inches (mm)						Weight	
		SCFM	Nm <sup>3</sup> /hr	A	B	C	D	E	F	lbs	Kg
XF200WS	2"	700	1189	9.13 (232)	4.57 (116)	25.59 (650)	11.81 (300)	6.73 (171)	N/A	26.0	11.8
XF250WS	2 1/2"	850	1444	9.13 (232)	4.57 (116)	25.59 (650)	11.81 (300)	6.73 (171)	N/A	26.0	11.8
XF300WS	3"	1500	2550	9.13 (232)	4.57 (116)	25.59 (650)	11.81 (300)	6.73 (171)	N/A	26.0	11.8
XF300FWS	3" flanged	1500	2550	13.86 (352)	4.57 (116)	25.59 (650)	11.81 (300)	6.73 (171)	N/A	34.6	15.7
XF400FWS	4" flanged	3000	5097	18.00 (457)	4.57 (116)	25.59 (650)	11.81 (300)	13.50 (343)	N/A	64.6	29.3



Model XF200WS - XF300WS

Model XF300FWS

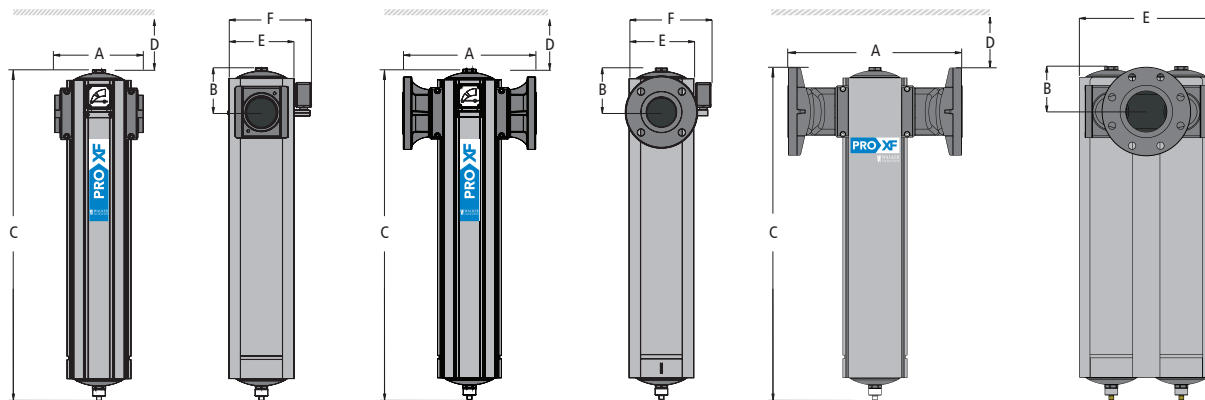
Model XF400FWS

## PRO XF Complete Filter

Filter model	Pipe size	Inlet flow rate*		Dimensions inches (mm)						Weight		Element model	No. of elements
		SCFM	Nm <sup>3</sup> /hr	A	B	C	D	E	F	lbs	Kg		
XF241 (grade)	2"	700	1189	9.13 (232)	4.57 (116)	25.59 (650)	21.65 (550)	6.73 (171)	8.54 (217)	28.2	12.8	E1142 (grade)	1
XF251 (grade)	2 1/2"	850	1444	9.13 (232)	4.57 (116)	25.59 (650)	21.65 (550)	6.73 (171)	8.54 (217)	28.2	12.8	E1142 (grade)	1
XF341 (grade)	3"	900	1529	9.13 (232)	4.57 (116)	25.59 (650)	21.65 (550)	6.73 (171)	8.54 (217)	28.2	12.8	E1142 (grade)	1
XF361 (grade)	3"	1250	2124	9.13 (232)	4.57 (116)	34.25 (870)	29.53 (750)	6.73 (171)	8.54 (217)	36.4	16.5	E1162 (grade)	1
XF371 (grade)	3"	1500	2550	9.13 (232)	4.57 (116)	40.43 (1027)	37.40 (950)	6.73 (171)	8.54 (217)	42.0	19.0	E1172 (grade)	1
XF341F (grade)	3" flanged	900	1529	13.86 (352)	4.57 (116)	25.59 (650)	21.65 (550)	6.73 (171)	8.54 (217)	37.0	16.7	E1142 (grade)	1
XF361F (grade)	3" flanged	1250	2124	13.86 (352)	4.57 (116)	34.25 (870)	29.53 (750)	6.73 (171)	8.54 (217)	45.0	20.4	E1162 (grade)	1
XF371F (grade)	3" flanged	1500	2550	13.86 (352)	4.57 (116)	40.43 (1027)	37.40 (950)	6.73 (171)	8.54 (217)	50.5	22.9	E1172 (grade)	1
XF442F (grade)	4" flanged	1800	3058	18.00 (457)	4.57 (116)	25.59 (650)	21.65 (550)	13.50 (343)	N/A	68.0	30.8	E1142 (grade)	2
XF462F (grade)	4" flanged	2500	4248	18.00 (457)	4.57 (116)	34.25 (870)	29.53 (750)	13.50 (343)	N/A	83.1	37.7	E1162 (grade)	2
XF472F (grade)	4" flanged	3000	5097	18.00 (457)	4.57 (116)	40.43 (1027)	37.40 (950)	13.50 (343)	N/A	93.3	42.3	E1172 (grade)	2

\*Rated flow at 100 psig (7 barg), referenced conditions 14 psig (1 barg) (a) 68°F (20°C)

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



Model XF241 - XF371

Model XF341F - XF371F

Model XF442F - XF472F

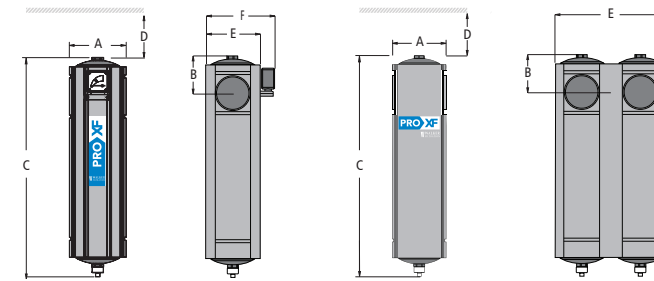
# Modular Specification

## PRO XF Filter Module



Filter module	Inlet flow rate*		Dimensions inches (mm)						Weight		Element model	No. of elements
	SCFM	Nm <sup>3</sup> /hr	A	B	C	D	E	F	lbs	Kg		
XFM041 (grade)	900	1529	6.61 (168)	4.57 (116)	25.59 (650)	21.65 (550)	6.73 (171)	8.54 (217)	24.7	11.2	E1142 (grade)	1
XFM061 (grade)	1250	2124	6.61 (168)	4.57 (116)	34.25 (870)	29.53 (750)	6.73 (171)	8.54 (217)	32.8	14.9	E1162 (grade)	1
XFM071 (grade)	1500	2550	6.61 (168)	4.57 (116)	40.43 (1027)	37.40 (950)	6.73 (171)	8.54 (217)	38.4	17.4	E1172 (grade)	1
XFM042 (grade)	1800	3058	6.61 (168)	4.57 (116)	25.59 (650)	21.65 (550)	13.50 (343)	N/A	45.0	20.4	E1142 (grade)	2
XFM062 (grade)	2500	4248	6.61 (168)	4.57 (116)	34.25 (870)	29.53 (750)	13.50 (343)	N/A	60.1	27.3	E1162 (grade)	2
XFM072 (grade)	3000	5097	6.61 (168)	4.57 (116)	40.43 (1027)	37.40 (950)	13.50 (343)	N/A	70.3	31.9	E1172 (grade)	2

\*Rated flow at 100 psig (7 barg), referenced conditions 14 psig (1 barg) (a) 68°F (20°C)



Model XFM041 - XFM071

Model XFM042 - XFM072

	X5	X1	XA	AC
Particle removal	5 micron	1 micron	0.01 micron	0.01 micron
Maximum particle size class***	3	2	1	1
Maximum oil content	4	2	1	1
Maximum oil carryover at 68°F (20°C)	5 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>	0.01 mg/m <sup>3</sup>	0.003 mg/m <sup>3</sup>
Pressure loss: clean and dry	0.6 psi / 40 mbar	1.1 psi / 75 mbar	1.5 psi / 100 mbar	1.1 psi / 75 mbar
Pressure loss: saturated	1.1 psi / 75 mbar	2.2 psi / 150 mbar	4.4 psi / 300 mbar	-
Pressure loss: element change	6 psi / 400 mbar	6 psi / 400 mbar	6 psi / 400 mbar	1000 hours / 6 months
Maximum temperature	176°F / 80°C	176°F / 80°C	176°F / 80°C	122°F** / 50°C**
Maximum working pressure	232 psig / 16 barg	232 psig / 16 barg	232 psig / 16 barg	232 psig / 16 barg
Element end cap color	green	red	blue	black

	RX5	RX1	RXA	RAC
Particle removal	5 micron	1 micron	0.01 micron	0.01 micron
Maximum particle size class***	3	2	1	1
Maximum temperature	176°F / 80°C	176°F / 80°C	176°F / 80°C	122°F** / 50°C**
Pressure loss: clean & dry	0.6 psi / 40 mbar	1.1 psi / 75 mbar	1.5 psi / 100 mbar	1.1 psi / 75 mbar
Pressure loss: element change	6 psi / 400 mbar	6 psi / 400 mbar	6 psi / 400 mbar	at least every 6 months
Maximum working pressure	232 psig / 16 barg	232 psig / 16 barg	232 psig / 16 barg	232 psig / 16 barg
Element end cap color	green	red	blue	black

\*\* Recommended operating temperature 122°F (50°C)

\*\*\*To ISO 8573-1:2010(E)

## Technical notes

- Direction of air flow is inside to out through the filter element for Coalescing Filter grades X5, X1, XA, AC.
- Direction of air flow is outside to in through the filter element for Particulate Filter grades RX5, RX1, RXA and RAC.
- Differential pressure indicators (65DPIG) fitted as standard to Complete Filters XF241 to XF371F and Filter Modules XFM041 to XFM071. Activated Carbon filters do not include differential pressure equipment.
- 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<sub>2</sub>).
- Flanged connections are ANSI compatible 150lb (3" and 4") flange as standard. For DN type flanges contact your sales representative.
- Threaded connections are NPT to ANSI B2.1. as standard. RP (BSP Parallel) to ISO 7/1 are also available upon request.
- 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).
- Water Separators and Coalescing Filters are fitted with float operated automatic external drain valves. When high quantities of liquids are anticipated, Walker Filtration recommends the use of electronic drain valves. Particulate Filters and Activated Carbon Filters are fitted with manual external drain valves as standard.
- Filter Modules are supplied without threaded or flanged connection ports and include one set of slim-line connectors to allow multi-banking of filter housings. A Complete Filter or Water Separator must be purchased alongside Filter Module Units for multi-banking.
- Floor mounting brackets available for all models (XFMBK2 and XFMBK3). Wall mounting brackets (XFMBK1) available for Complete Filters XF241 to XF371, and Water Separators XF200WS to XF300WS. See price guide for further information.



# **W** WALKER FILTRATION

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THE QUEEN'S AWARDS  
FOR ENTERPRISE:  
INNOVATION  
2016



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