



SULLAIR FILTRATION & MIST ELIMINATION

Activated Carbon; Coalescing; Particulate; High Pressure;
High Temperature; Mist Elimination; Water Separation



THE IMPORTANCE OF RELIABLE FILTRATION

Effectively removing contaminants throughout the air compression cycle is crucial to help maintain part quality, prevent machine damage and ensure employee safety.

Sullair filtration helps remove contaminants, along with humidity and oil from the compressed air stream.

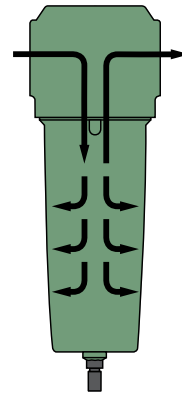
How?

Compressed air enters the filter housing inlet. The inlet design helps optimize air flow as compressed air moves into the physical medium of a filter element.

Then, untreated compressed air passes through filter material designed for retention of particles such as liquid oil, oil aerosols, dirt and scale.

Finally, the treated, clean compressed air flows downstream to other inline components or point-of-use.

Removed condensate moves from the treated air to be easily drained.



SULLAIR FILTRATION SERIES

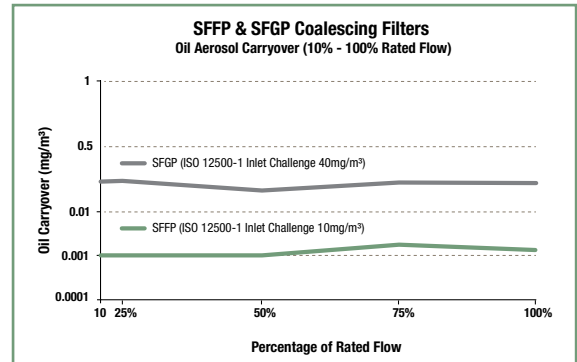
Sullair filtration is built for reliable operation and designed to help you save money.

- Engineered for energy efficiency—helps reduce operating costs
- Durable housing construction for corrosion resistance
- Broad filtration from general purpose to highly stringent applications
- Designed for safe and easy maintenance

- **SFGP — General Purpose Filtration** — 21 to 11,019 cfm
- **SFFP — Fine Particulate Filtration** — 21 to 11,019 cfm
- **SFAC — Activated Carbon Filtration** — 21 to 11,019 cfm
- **SFWS — Water Separation** — 21 to 6300 cfm
- **FH Series — High Pressure Threaded Filtration** — 60 to 1750 cfm
- **FXFRHT — High Temperature Particulate Threaded Filtration** — 25 to 1600 cfm
- **FWFRHT — High Temperature Particulate Flange Filtration** — 1500 to 17,700 cfm

SF SERIES FILTRATION

- Pleated filter design for maximum efficiency and extended filter life
 - Extremely low pressure drop
 - Reduced maintenance and energy costs
 - Increased dirt holding capacity
 - Low oil aerosol carryover
- Designed for applications requiring the highest purity—such as Food & Beverage and Pharmaceuticals



SF SERIES WATER SEPARATORS

- Low maintenance
- Optimized for efficiency—helping save money and energy



SULLAIR ELM MIST ELIMINATORS

RELIABLE PERFORMANCE IN VARYING LOAD CONDITIONS. EXTREMELY LOW PRESSURE DROP.

SULLAIR ELM SERIES
HELPS YOU SAVE ENERGY

ELM Series Mist Eliminators have a .05 psi pressure drop—4 psi lower than conventional filters. Generally, reducing pressure drop by 2 psi saves 1% in compressor energy consumption.
4 psi = 2% compressor power savings

Annual Energy Savings on 100 hp System

$\$0.05/\text{kWh} \times 8760 \text{ hours} \times 74.6 \text{ kW} \times 2\% = \653

$\$0.08/\text{kWh} \times 8760 \text{ hours} \times 74.6 \text{ kW} \times 2\% = \1046

$\$0.10/\text{kWh} \times 8760 \text{ hours} \times 74.6 \text{ kW} \times 2\% = \1307

Annual energy savings based on assumptions of normal operating conditions. Your results may vary.

Element

- Ultra-low differential pressure—.05 psi
- High load factor compared to conventional hand-packed media
 - 9–10x greater surface area and dirt holding capacity
- Special, machine-pleated element construction
 - Increases stability under changing loads
 - Reduces specific surface tension

DESIGNED FOR A
LONGER SERVICE LIFE

Frame

- Engineered to stand up to harsh environments
 - Strong stainless steel support sleeve construction—helps prevent rust and corrosion

TECHNICAL SPECIFICATIONS

SFGP SERIES

GENERAL PURPOSE THREADED/FLANGE FILTERS

Flow Rate (cfm)	Connection Size (NPT)	Housing Width (in)	Housing Height (in)	Weight (lbs)
21	¼"	3	7.1	1.8
21	⅜"	3	7.1	1.8
21	½"	3	7.1	1.8
42	⅜"	3.5	9.4	3.1
42	½"	3.5	9.4	3.1
64	½"	3.5	9.4	3.1
64	¾"	3.5	9.4	3.1
127	¾"	4.7	10.9	5.9
127	1"	4.7	10.9	5.9
233	1"	6.5	14.5	6.6
233	1 ½"	6.5	14.5	6.6
339	1 ½"	6.5	17.3	15.1
466	2"	6.5	20.9	15.8
699	2"	6.5	20.9	15.8
699	2 ½"	6.5	20.9	15.8
911	2 ½"	7.6	25.8	22.4
1314	2 ½"	7.6	33.2	34.8
1314	3"	7.6	33.2	34.8
2119	4" FLG	21.1	56.4	325
2755	4" FLG	21.1	56.4	325
4132	6" FLG	23.8	58.4	425
6887	8" FLG	28.8	62.4	725
11,019	10" FLG	29.1	63.6	850

ELEMENT TYPES

Micron Rating (µm)	Oil Carryover (mg/m³)	Dry Δ Pressure (psi)	Wet Δ Pressure (psi)
1	0.5	1	1.8

CORRECTION FACTORS

Minimum Inlet Pressure <i>psi</i>	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232	248	263	277	290
Correction Factor	2.65	1.87	1.53	1.32	1.18	1.08	1	0.94	0.88	0.84	0.8	0.76	0.73	0.71	0.68	0.66	0.64	0.62	0.61	0.59

Validated in accordance with ISO 12500-1 and 3

ASME/CRN Certified*

Min operating pressure *psi* 22 (float), 15 (manual)

Max operating pressure *psi* 232 (float), 290 (manual)

Min operating temperature °F 35

Max operating temperature °F 149 (float), 176 (manual)

Standard Features

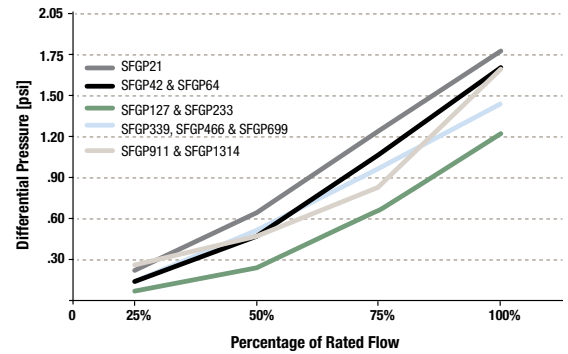
- Versatile housing connections
- Float drain

Options

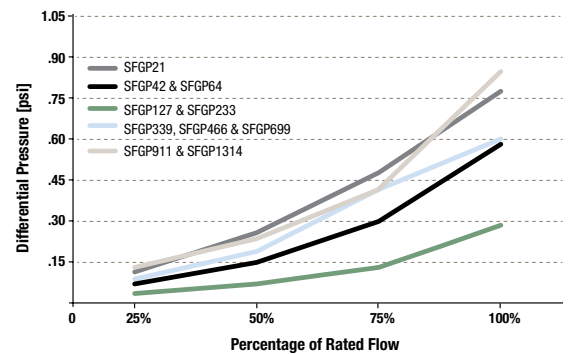
- Manual Drain
- Differential pressure gauge

*Some filter models are not registered in all provinces.

SFGP Coalescing Filter
Initial Saturated Differential Pressure (25% - 100% Rated Flow)
ISO12500-1 Challenge - 40mg/m³



SFGP Dry Particulate Filter
Initial Dry Differential Pressure (25% - 100% Rated Flow)



TECHNICAL SPECIFICATIONS

SFFP SERIES

FINE PARTICULATE THREADED/FLANGE FILTERS

Flow Rate (cfm)	Connection Size (NPT)	Housing Width (in)	Housing Height (in)	Weight (lbs)
21	¼"	3	7.1	1.8
21	⅜"	3	7.1	1.8
21	½"	3	7.1	1.8
42	⅜"	3.5	9.4	3.1
42	½"	3.5	9.4	3.1
64	½"	3.5	9.4	3.1
64	⅜"	3.5	9.4	3.1
127	¾"	4.7	10.9	5.9
127	1"	4.7	10.9	5.9
233	1"	6.5	14.5	6.6
233	1 ½"	6.5	14.5	6.6
339	1 ½"	6.5	17.3	15.1
466	2"	6.5	20.9	15.8
699	2"	6.5	20.9	15.8
699	2 ½"	6.5	20.9	15.8
911	2 ½"	7.6	25.8	22.4
1314	2 ½"	7.6	33.2	34.8
1314	3"	7.6	33.2	34.8
2119	4" FLG	21.1	56.4	325
2755	4" FLG	21.1	56.4	325
4132	6" FLG	23.8	58.4	425
6887	8" FLG	28.8	62.4	725
11,019	10" FLG	29.1	63.6	850

ELEMENT TYPES

Micron Rating (µm)	Oil Carryover (mg/m³)	Dry Δ Pressure (psi)	Wet Δ Pressure (psi)
0.01	0.01	1	1.8

CORRECTION FACTORS

Minimum Inlet Pressure <i>psi</i>	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232	248	263	277	290
Correction Factor	2.65	1.87	1.53	1.32	1.18	1.08	1	0.94	0.88	0.84	0.8	0.76	0.73	0.71	0.68	0.66	0.64	0.62	0.61	0.59

Validated in accordance with ISO 12500-1 and 3
ASME/CRN Certified*

Min operating pressure *psi* 22 (float), 15 (manual)
Max operating pressure *psi* 232 (float), 290 (manual)
Min operating temperature °F 35
Max operating temperature °F 149 (float), 176 (manual)

Standard Features

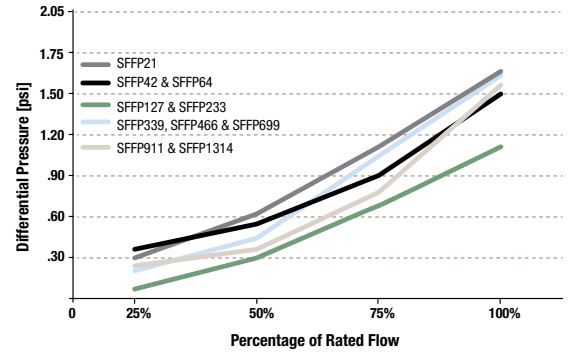
- Versatile housing connections
- Float drain

Options

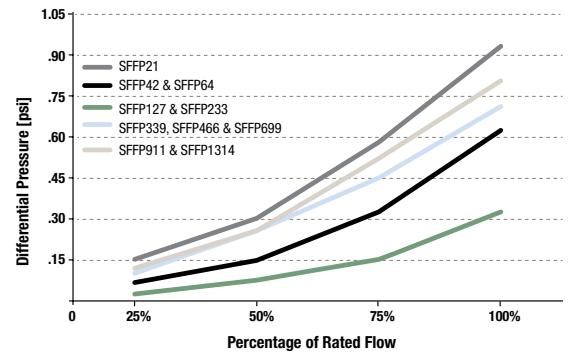
- Manual Drain
- Differential pressure gauge

*Some filter models are not registered in all provinces.

SFFP Coalescing Filter
Initial Saturated Differential Pressure (25% - 100% Rated Flow)
ISO12500-1 Challenge - 10mg/m³



SFFP Dry Particulate Filter
Initial Dry Differential Pressure (25% - 100% Rated Flow)



TECHNICAL SPECIFICATIONS

SFAC SERIES

ACTIVATED CARBON THREADED/FLANGE FILTERS

Flow Rate (cfm)	Connection Size (NPT)	Housing Width (in)	Housing Height (in)	Weight (lbs)
21	¼"	3	7.1	1.8
21	⅜"	3	7.1	1.8
21	½"	3	7.1	1.8
42	⅜"	3.5	9.4	3.1
42	½"	3.5	9.4	3.1
64	½"	3.5	9.4	3.1
64	¾"	3.5	9.4	3.1
127	¾"	4.7	10.9	5.9
127	1"	4.7	10.9	5.9
233	1"	6.5	14.5	6.6
233	1 ½"	6.5	14.5	6.6
339	1 ½"	6.5	17.3	15.1
466	2"	6.5	20.9	15.8
699	2"	6.5	20.9	15.8
699	2 ½"	6.5	20.9	15.8
911	2 ½"	7.6	25.8	22.4
1314	2 ½"	7.6	33.2	34.8
1314	3"	7.6	33.2	34.8
2119	4" FLG	21.1	56.4	325
2755	4" FLG	21.1	56.4	325
4132	6" FLG	23.8	58.4	425
6887	8" FLG	28.8	62.4	725
11,019	10" FLG	29.1	63.6	850

ELEMENT TYPE

Element Type	Micron Rating (µm)	Oil Carryover (mg/m³)	Dry Δ Pressure (psi)
Oil Vapor Reduction Filter	0.003	0.003	1.2

CORRECTION FACTORS

Minimum Inlet Pressure <i>psi</i>	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232	248	263	277	290
Correction Factor	2.65	1.87	1.53	1.32	1.18	1.08	1	0.94	0.88	0.84	0.8	0.76	0.73	0.71	0.68	0.66	0.64	0.62	0.61	0.59

Validated in accordance with ISO 12500-1 and 3
ASME/CRN Certified*

Min operating pressure <i>psi</i>	15
Max operating pressure <i>psi</i>	290
Min operating temperature <i>°F</i>	35
Max operating temperature <i>°F</i>	122

Standard Features

- Versatile housing connections
- Manual Drain

*Some filter models are not registered in all provinces.

TECHNICAL SPECIFICATIONS

SFWS SERIES

THREADED/FLANGE WATER SEPARATORS

Flow Rate (cfm)	Connection Size (NPT)	Housing Width (in)	Housing Height (in)	Weight (lbs)
21	¼"	3	7.1	1.8
21	⅜"	3	7.1	1.8
21	½"	3	7.1	1.8
85	⅜"	3.5	9.4	3.1
85	½"	3.5	9.4	3.1
85	¾"	3.5	9.4	3.1
233	¾"	4.7	10.9	5.9
233	1"	4.7	10.9	5.9
233	1 ½"	4.7	10.9	5.9
742	1 ½"	6.5	17.3	15.1
742	2"	6.5	17.3	15.1
742	2 ½"	6.5	17.3	15.1
1695	2 ½"	7.6	20.3	18.7
1695	3"	7.6	20.3	18.7
2100	6" FLG	24	60.5	325
6300	8" FLG	29	66.7	1250

ELEMENT TYPE	
Element Type	Wet Δ Pressure (psi)
Liquid Separator	1.8

CORRECTION FACTORS																
Minimum Inlet Pressure <i>psi</i>	15	29	44	58	73	87	100	116	131	145	160	174	189	203	218	232
Correction Factor	4	2.63	2	1.59	1.33	1.14	1	0.94	0.89	0.85	0.82	0.79	0.76	0.73	0.71	0.68

Validated in accordance with ISO 12500-1 and 3
ASME/CRN Certified*

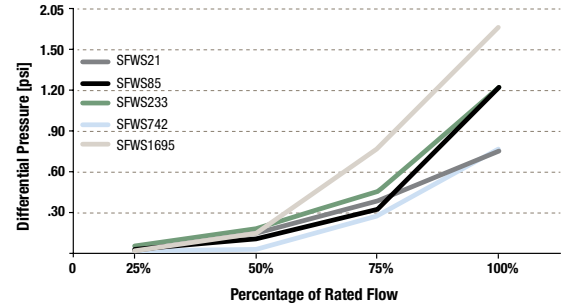
Min operating pressure <i>psi</i>	22
Max operating pressure <i>psi</i>	232
Min operating temperature °F	35
Max operating temperature °F	149

Standard Features

- Versatile housing connections
- Float drain

*Some filter models are not registered in all provinces. SFWS 2100 & 6300 models not certified for Canada.

SFWS Water Separator
Differential Pressure (25% - 100% Rated Flow)



TECHNICAL SPECIFICATIONS

FH SERIES

HIGH PRESSURE THREADED FILTERS

Flow Rate (cfm)	Connection Size (NPT)	Dimension A (in)	Dimension B (in)	Dimension C (in)	Dimension D (in)	Weight (lbs)
60	¼"	4.5	4.5	1	6	7
175	½"	4.5	4.5	1	6.2	7
350	¾"	4.3	4.5	1.3	8.1	9
500	1"	5.2	5.4	1.5	9.8	14
700	1"	5.2	5.4	1.5	12.4	18
950	1 ½"	5	5.4	1.7	14.5	21
1500	2"	5.7	6.2	2	15.5	25
1750	2 ½"	6.3	7	2.3	15.2	28

ELEMENT TYPES

Element Type Designator	Element Type	Package Description	Micron Rating (µm)	Oil Carryover (mg/m³)	Dry Δ Pressure (psi)	Wet Δ Pressure (psi)
F	Fine	General Purpose Filter	1	0.5	0.6	1.2
H	Superfine	Oil Removal Filter	0.01	0.01	1.2	2.3
C	Activated Carbon Element	Activated Carbon Filter	0.01	0.003	2.3	2.3

CORRECTION FACTORS

Operating Pressure <i>psi</i>	290	363	435	508	580	653	725
Correction Factor	0.63	0.7	0.78	0.83	0.9	0.95	1

Validated in accordance with ISO 8573-1

ASME/CRN Certified

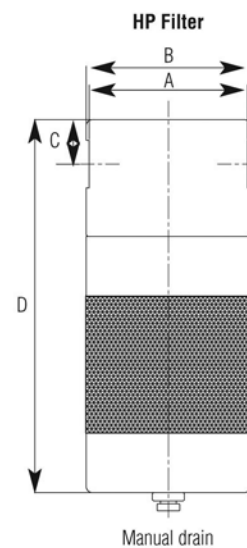
Max operating pressure *psi* 725

Min operating temperature °F 36

Max operating temperature °F 176

Standard Features

- Manual drain ball valve



TECHNICAL SPECIFICATIONS

FXFRHT SERIES

PARTICULATE HIGH TEMPERATURE THREADED FILTERS

Flow Rate (cfm)	Connection Size (FLG)	Dimension A (in)	Dimension B (in)	Dimension C (in)	Weight (lbs)
25	½"	4	8	7	3
45	½"	4	10	9	3
65	¾"	5	10	11	4
130	1"	5	15	14	6
240	1 ½"	5	19	17	7
350	1 ½"	5	21	19	8
475	2"	6	24	22	12
700	2"	6	27	25	12
925	3"	8	29	21	23
1350	3"	8	29	27	26
1600	3"	8	42	40	27

ELEMENT TYPES

Element Type Designator	Element Type	Package Description	Micron Rating (µm)	Oil Carryover (ppm)	Dry Δ Pressure (psi)	Wet Δ Pressure (psi)
F	Fine	Reverse Flow GP Filter	1	0.5	0.6	1.2

CORRECTION FACTORS

Operating Pressure <i>psi</i>	25	40	50	60	75	90	100	110	125	140	150	160	175	200
Correction Factor	0.49	0.62	0.69	0.76	0.86	0.95	1	1.04	1.1	1.17	1.21	1.25	1.31	1.4

Validated in accordance with ISO 8573-1

ASME/CRN Certified

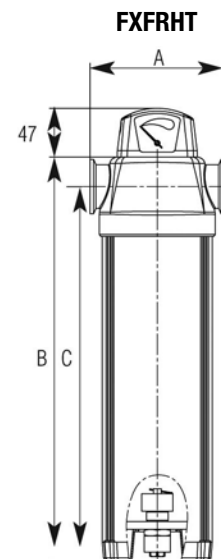
Max operating pressure *psi* 290

Min operating temperature °F 36

Max operating temperature °F 350

Standard Features

- Differential pressure gauge
- Manual drain ball valve



TECHNICAL SPECIFICATIONS

FWFRHT SERIES

PARTICULATE HIGH TEMPERATURE FLANGE FILTERS

DIMENSIONS & WEIGHT							
Flow Rate (cfm)	Connection Size (FLG)	Dimension A (in)	Dimension B (in)	Dimension C (in)	Dimension D (in)	Dimension E (in)	Weight (lbs)
1500	3"	17.7	51	11	29.5	25.5	230
1900	4"	17.7	52.2	11	30.3	25.5	246
2500	4"	20.9	53.2	11.1	30.4	25.5	324
3800	6"	22.8	56.4	13.1	31.4	25.5	450
5000	6"	25.6	57.1	13.3	31.6	25.5	580
6500	8"	29.5	59.6	14.5	32.6	25.5	752
8300	8"	31.5	60.7	15	32.7	25.5	866
10,000	10"	33.5	64	16.3	33.8	25.5	1148
12,400	12"	33.5	66	17.5	34.8	25.5	1214
15,000	14"	39.4	69.7	18.9	35.8	25.5	1716
17,700	14"	39.4	69.7	18.9	35.8	25.5	1730

ELEMENT TYPE						
Sullair Model Nomenclature	Element Type	Package Description	Micron Rating (µm)	Oil Carryover (mg/m ³)	Dry Δ Pressure (psig)	Wet Δ Pressure (psig)
F	Fine	Reverse Flow GP Filter	1	0.5	0.6	1.2

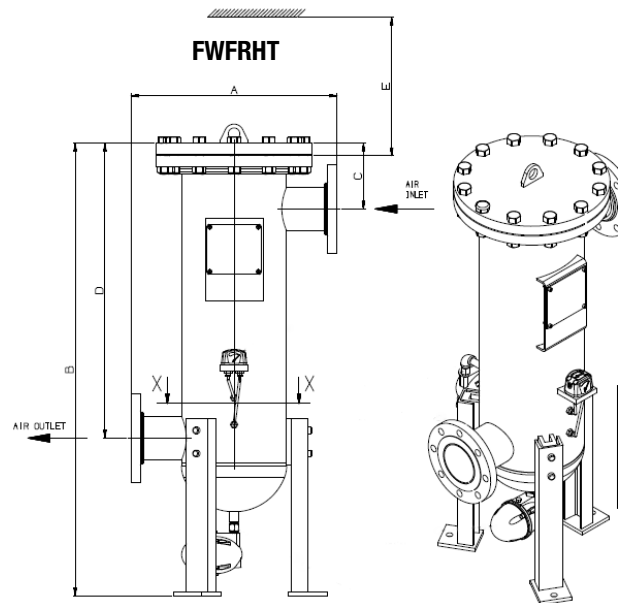
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Max operating pressure *psi* 290

Max operating temperature *°F* 350

Standard Features

- External float drain
- Differential pressure gauge



TECHNICAL SPECIFICATIONS

ELM SERIES

MIST ELIMINATORS

Model	Connection size (FLG)	Width (in)	Height (in)	Min. Clearance for Element Change (in)	Drain Port Size (NPT)	Weight (lbs)
ELM-150	2"	19.7	39.9	13	0.5"	250
ELM-300	2"	19.7	43.9	17	0.5"	264
ELM-600	2"	19.7	57.9	31	0.5"	304
ELM-800	3"	19.7	65.3	37	0.5"	343
ELM-1200	3"	23.6	60.2	31	0.5"	436
ELM-1600	3"	23.6	66.2	37	0.5"	460
ELM-2100	4"	27.6	62.4	31	0.5"	682
ELM-2750	4"	27.6	68.4	37	0.5"	713
ELM-4200	6"	31.5	65.7	31	0.5"	858
ELM-6000	6"	31.5	75.7	41	0.5"	940
ELM-8000	8"	33.5	79.4	41	0.5"	1188
ELM-10,000	10"	39.4	83.5	41	0.5"	1642
ELM-12,000	12"	39.4	105.9	61	0.5"	1914

ASME/CRN Certified

Pressure drop *psi* .05

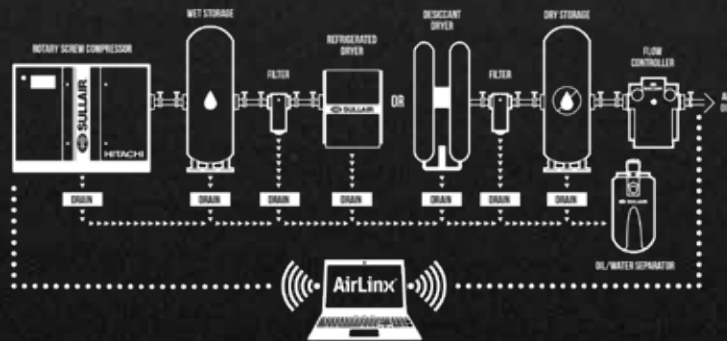
Micron rating *µm* .01

Standard Features

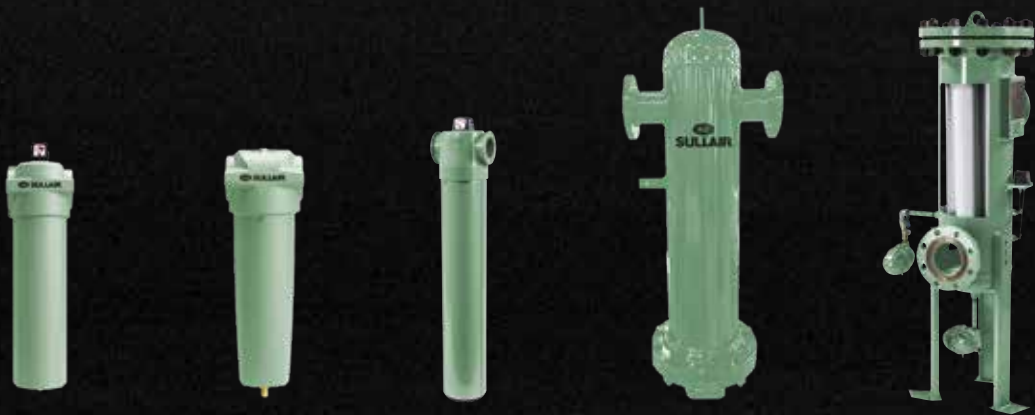
- Float drain
- Differential pressure gauge

FOR MORE INFORMATION, CONTACT YOUR LOCAL AUTHORIZED SULLAIR DISTRIBUTOR.

ADDITIONAL AIR TREATMENT SOLUTIONS



- Desiccant Dryers
- Refrigerated Dryers
- Drains
- Oil/Water Separators



SULLAIR FILTRATION	THREADED FILTERS						FLANGE FILTERS				
	SF SERIES				FH SERIES	FXFRHT	SF SERIES				FWFRHT
Filter Type	General Purpose	Fine Particulate	Activated Carbon	Water Separator	High Pressure	Particulate High Temperature	General Purpose	Fine Particulate	Activated Carbon	Water Separator	Particulate High Temperature
Flow Rates <i>cfm</i>	21-1314	21-1314	21-1314	21-1695	60-1750	25-1600	2119-11,019	2119-11,019	2119-11,019	2100-6300	1500-17,700
Max Operating Pressure <i>psi</i>	232 (float), 290 (manual)	232 (float), 290 (manual)	290	232	725	290	232 (float), 260 (manual)	233 (float), 260 (manual)	260	232	290
Max Operating Temperature <i>°F</i>	149 (float), 176 (manual)	149 (float), 176 (manual)	122	149	176	350	150 (float), 200 (manual)	150 (float), 200 (manual)	200	140	350
Standard Connection	¼"-3" NPT	¼"-3" NPT	¼"-3" NPT	¼"-3" NPT	¼"-2½" NPT	½"-3" NPT	4"-10" FLG	4"-10" FLG	4"-10" FLG	4"-10" FLG	3"-14" FLG
Housing Material	Diecast Aluminum	Diecast Aluminum	Diecast Aluminum	Diecast Aluminum	Aluminum	Diecast Aluminum	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Steel
Drains	Float, Manual	Manual Drain	Manual Drain	Float	Manual Drain	Manual Drain	Float, Manual	Float, Manual	Manual	Float	External Float Drain