



CF SERIES

COMPRESSED AIR FILTRATION



COMPRESSED AIR FILTERS
20-21250 SCFM



**SOME COMPANIES ARE FOUNDED ON HARD WORK.
OTHERS ARE FOUNDED ON IDEALS.**

FS-CURTIS WAS FOUNDED ON BOTH.

A HISTORY OF

1854

Curtis & Co. –
Empire Saw founded
in St. Louis, MO, USA

1857

Earned Agricultural
and Mechanical Fair
award for excellence
and quality

1876

Named Curtis
and Co.
Manufacturing

1897

Built first
reciprocating
air compressor
that later evolved
into the Master
Line Series

1914

Supported U.S.
Government efforts
by producing more
than 2 million Howitzer
shell forgings

1940

Designed and
developed
mobile oxygen
compressors to be
used in Aerospace
applications

1955

Merged with U.S.
Air Compressor
Company, Central
Petroleum Company,
Lewis Machine
Company



REAL-WORLD PEOPLE

When you're successful, we're successful.
That's why FS-Curtis listens.

Trust and dependability are the foundations of our past
and the fabric of our future, so you can count on being
treated with the personal touch you deserve.

More than 150 years ago, the FS-Curtis way of doing business was established through two key commitments: a dedication to building quality products and a dedication to responsive customer service.

Over the decades, the company and its products have evolved through innovation and new technologies. But those commitments to quality and service remain unchanged. Today, just as in 1854, FS-Curtis customers can depend on our products for reliable, long-term service. Equally as important, they can depend on getting the same from our people.

EXCELLENCE

1976

Merged with Toledo Tools as Curtis-Toledo Inc.

1979

Introduction of Challenge Air Series reciprocating air compressors

1995

Began manufacturing and assembling Rotary Screw compressors

2005

Expanded global market reach by joining forces with Fusheng Industrial

2006

U.S. Headquarters certified as ISO9001:2000 and ISO14001:2004

2010

Introduced next generation GSV Variable Speed Rotary Screw compressors



REAL-WORLD PRODUCTS

Take more than a century of experience building quality compressors, add in a staff that's listening to the needs of the market, and the result is a product lineup that's built for tough working conditions. No wonder so many customers around the world depend on FS-Curtis compressors day in and day out.

HIGH STANDARD OF PERFORMANCE



FS-Curtis CF series compressed air filtration further protects your investment with lower pressure drop.

Designed utilizing innovative air filtration media and manufacturing techniques, CF Series compressed air filters and elements from FS-Curtis increase performance and minimize pressure drop. The result is a savings in operating costs while further protecting your downstream process. Compact and efficient, CF Series filters and mist eliminators are built to FS-Curtis world-class quality standards with comprehensive third-party testing, including ISO and PNEUROP.

ISO 8573.1 QUALITY CLASSES

Class	Solid Particles - Maximum Numbers of Particles per m ³			Humidity and Liquid Water		Oil
	Particle Size (micron)			Pressure Dew Point		Total concentration, Aerosol, Liquid, and Vapor
	0.10 - 0.5	0.5 - 1.0	1.0 - 5.0	°C	°F	mg/m ³
0	As Specified			As Specified		≤ 0.01
1	100	1	0	≤ -70	≤ -94	≤ 0.1
2	100,000	1,000	10	≤ -40	≤ -40	≤ 1
3	-	10,000	500	≤ -20	≤ -4	≤ 5
4	-	-	1,000	≤ +3	≤ +38	
5	-	-	20,000	≤ +7	≤ +45	
6				≤ +10	≤ +50	

THE PERFECT FILTER FOR YOUR APPLICATION



CF FILTERS
(20-21250 SCFM)

With a choice of seven filtration grades, you can design a filter system that delivers the air quality you need with the efficient performance you desire. Operation and maintenance are a breeze, and the long-lasting filter life and low pressure drop give you outstanding performance.

- Low pressure drop delivers energy savings
- Piston-type element to housing seal keeps unfiltered air from bypassing the element
- Corrosion-resistant cores
- With a large, effective surface area, the “Matrix-blended fiber” media improves capture rate and ensures high efficiency
- Coated, closed-cell foam sleeve resists chemical corrosion from oils and acids



CFH HIGH-TEMPERATURE FILTERS
(100-11400 SCFM)

For high inlet temperature applications, such as a reciprocating compressor without an aftercooler, the CFH filters has you covered. Able to handle temperatures up to 450° F, CFH filters feature efficient operation and a low pressure drop for reduced operating costs.

- High dust-loading capacity
- Three filtration techniques maximize cartridge life
- Removes solid particles one micron and larger



CFE MIST ELIMINATORS
(125-3000 SCFM)

Enjoy the peace of mind of extra protection for your system. FS-Curtis CFE mist eliminators cut energy costs while removing oil and water aerosols from compressed-air systems.

- Captures large slugs of oil and water for extra protection should compressor’s drain trap fail
- Long-life mist eliminator element lasts 8 to 15 years
- 0.5 to 1 psi pressure drop reduces energy consumption
- Superior installation flexibility thanks to a variety of inlet positions for easy adaption to your piping arrangement
- Heavy-duty ASME pressure vessel
- Floor stand
- Dedicated vent port for demand-type drains



TECHNICAL DATA

CF COMPRESSED AIR FILTERS

"X" represents the filter grade, refer to the "Choose From Seven Filtration Grades" chart below when ordering the corresponding filter.

MODELS	Max. Flow @ 100 psig (scfm)	INLET/OUTLET (npt. male)	MAX. PRESSURE @ 150°F WITH MANUAL DRAIN (psi)	DIMENSIONS (WxH-In.)	WEIGHT (Lbs.)	
Modular type housings						
CF(X)-12	20	3/8" NPT or 1/2" NPT	300	4 x 8	4.2	
CF(X)-16	35			4 x 11	8.1	
CF(X)-20	60			4 x 13	8.5	
CF(X)-24	100	3/4" NPT or 1" NPT		5 x 15	6.3	
CF(X)-28	170			5 x 20	6.9	
CF(X)-32	250	1" NPT or 1 1/4" NPT		6 x 23	10.2	
CF(X)-36	375			6 x 27	11.3	
CF(X)-40	485	2" or 2 1/2" NPT		8 x 31	28	
CF(X)-44	625	2 1/5" NPT		8 x 37	33	
CF(X)-48	780			8 x 43	38	
ASME stamped pressure vessels						
CF(X)-52	625	3" NPT or DN 80 Flange	300	10 x 41	37	
CF(X)-54	1,000			16 x 48	93	
CF(X)-56	1,250			16 x 49	93	
CF(X)-60	1,875	3" NPT		16 x 49	123	
CF(X)-64	2,500			20 x 52	185	
CF(X)-68	3,125	4" ANSI Fig.		225	24 x 55	189
CF(X)-72	5,000	6" ANSI Fig.			28 x 63	285
CF(X)-76	6,875				33 x 69	537
CF(X)-80	8,750				39 x 68	599
CF(X)-84	11,875	8" ANSI Fig.			46 x 71	742
CF(X)-88	16,250		39 x 68		936	
CF(X)-92	21,250	10" ANSI Fig.	46 x 71		1471	

Use the corresponding number to fill in the "X" in the model number above

CHOOSE FROM SEVEN FILTRATION GRADES

You can design a filter system that delivers the air quality you need with the efficient performance you desire.

Air Quality / Pressure Drop Data						
GRADE	ELEMENT TYPE	SOLID PARTICLES (Micron)	REMAINING OIL CONTENT (PPM by Weight)	PRESSURE DROP AT RATED CONDITIONS (psig)		APPLICATIONS AND SPECIFICATION
				Dry	Wet	
11	Moisture Separator	10	-	0.8	0.8	Bulk liquid
9	Separator	3	5	1	1.5	Large liquid particles
7	General Purpose Filter	1	1	1	2	Tools, motors, cylinders
6	Dry Particulate Filter	1	-	1	-	Pipeline protection from abrasive desiccant dust
5	High Efficiency Oil Removal Filter	0.01	0.008	1	3	Painting, injection molding, instruments, control valves
3	Ultra High Efficiency Oil Removal Filter	0.01	0.0008	2	6	Where air contacts product, conveying, electronics manufacturing, nitrogen replacement
1	Oil Vapor Removal Filter	0.01	0.003	1	N/A	Food and drug manufacturing, gas processing

THE NAME TO KNOW IS FS-CURTIS.
 For a complete selection of top-quality,
 reliable air compressors, dryers and
 accessories, the only name you need
 to remember is FS-Curtis.



CFH HIGH TEMPERATURE COMPRESSED AIR FILTER

MODELS	Max. Flow @ 100 psig (scfm)	INLET/OUTLET ¹ (npt. male)	MAX. PRESSURE @ 450°F (psi)	DIMENSIONS (WxH-in.)	WEIGHT (Lbs.)
CFH100	100	1" NPT	250	4 x 14	13
CFH200	200			4 x 24	19
CFH400	400	3" NPT	165	10 x 40	97
CFH600	600			16 x 41	159
CFH1200	1,200			16 x 43	219
CFH1800	1,800			20 x 55	236
CFH2400	2,400	4" ANSI Fig.	165	24 x 53	319
CFH3000	3,000			28 x 62	548
CFH4800	4,800	6" ANSI Fig.	165	33 x 68	772
CFH6600	6,600			8" ANSI Fig.	548
CFH8400	8,400			8" ANSI Fig.	548
CFH11400	11,400	8" ANSI Fig.	165	33 x 68	772

Pressure drop: At rated flow conditions pressure drop will be less than 1 psig. Pressure drop will increase only as the filter cartridges become loaded with solid particles.
 Filter cartridge replacement: Filter cartridges should be replaced annually or, when pressure drop across the cartridge exceeds acceptable differential pressure. Maximum temperature: 450°F
¹ BSP connections and DIN Flanges are available.

CFE MIST ELIMINATOR

MODELS	Max. Flow @ 100 psig (scfm)	INLET/OUTLET ¹ (npt. male)	MAX. PRESSURE @ 150°F (psi)	DIMENSIONS (WxH-in.)	WEIGHT (Lbs.)
CFE125	125	2" NPT	150	17 x 40	194
CFE250	250			18 x 52	200
CFE500	500	2 1/2" NPT	150	26 x 77	231
CFE1100	1,100	4" ANSI Fig.		27 x 85	368
CFE1500	1,500			33 x 94	410
CFE2100	2,100			735	
CFE2400	2,400	751			
CFE3000	3,000	767			

Maximum operating temperature: 150°F
¹ BSP connections and DIN Flanges are available.

CAPACITY CORRECTION FACTORS To find the maximum flow at pressures other than 100 psig, multiply the Max. Flow (from table below) by the Correction Factor corresponding to the minimum pressure at the inlet of the filter.

CORRECTION FACTORS (MULTIPLIERS) FOR INLET PRESSURE

Minimum Inlet Pressure (psig)	20	30	40	60	80	100	120	150	200	250	300
Correction Factor	0.30	0.39	0.48	0.65	0.82	1.00	1.17	1.43	1.87	2.31	2.74

* Do not select filters by pipe size; use flow rate and operating pressure.