F-Series Filters

Compressed Air Filtration Solutions

Designed and Built for Exceptional Performance

Ingersoll Rand's advanced F-Series compressed air filters reduce contamination in your air stream to help protect your critical processes and valuable equipment. Our filters are rigorously tested and engineered with superior components to provide years of reliable performance and consistently high-quality air.

Better Quality

Without effective filtration, products and processes that depend on compressed air are subject to increased scrap, poor quality and additional maintenance. Ingersoll Rand F-Series filters address these issues, helping to assure your compressed air system delivers clean, high-quality air throughout your facility.

Better Efficiency

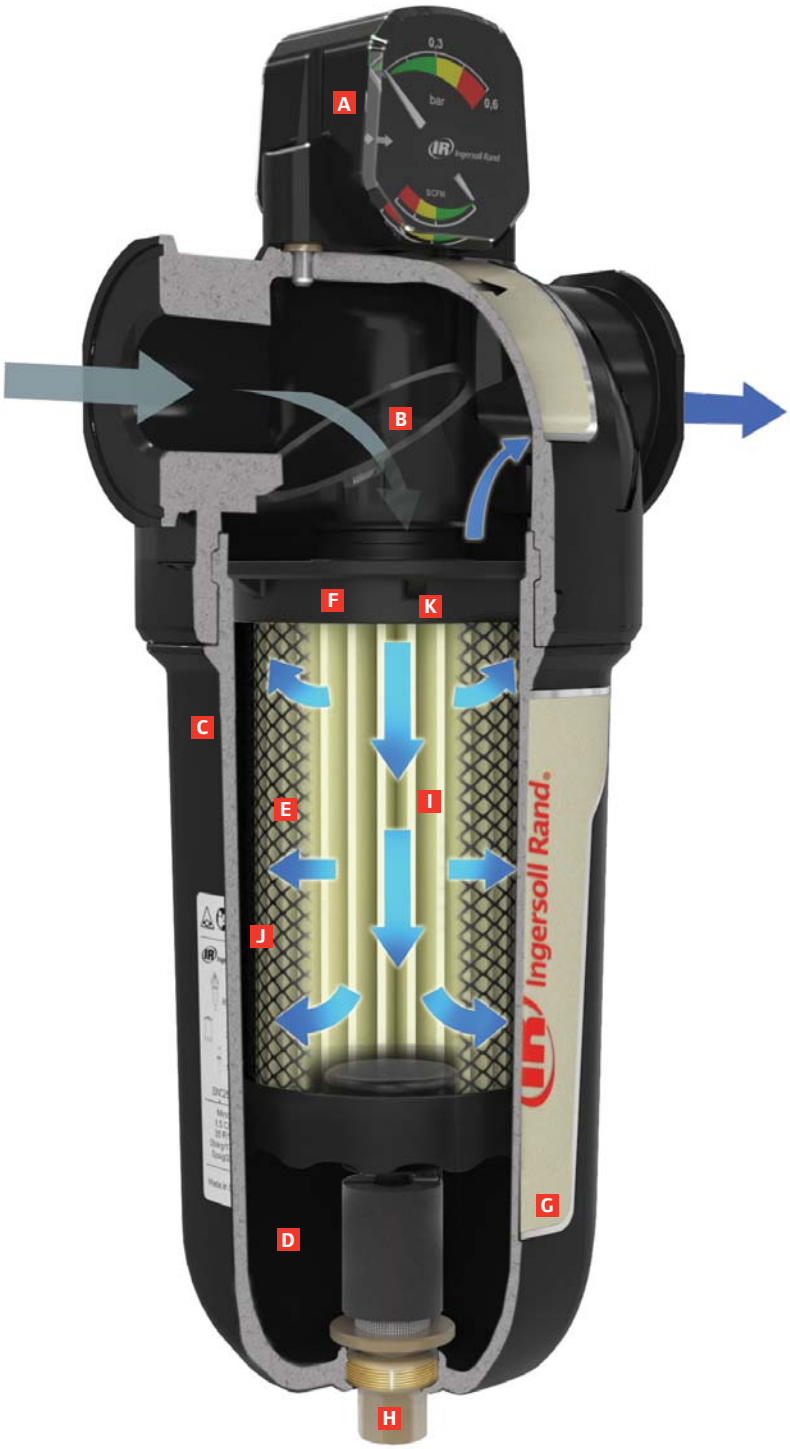
Maintaining a low pressure drop on all compressed air components is critical for an energy-efficient system. Ingersoll Rand F-Series filters have been engineered to deliver low pressure drop throughout the life of the filter element and to provide a unique dual indicator that illustrates the true cost of pressure drop on the system.

Better Choices

Every compressed air system has unique filtration requirements. F-Series filters are available in four different filtration grades, providing complete filtration solutions for all critical compressed air processes.

Superior Filtration Technology

- **A** **Patented dual indicator** shows differential pressure drop and economical operating efficiency
- **B** **Patented smooth bore flow insert** directs air into the filter element, minimizing turbulence and pressure losses
- **C** **All-aluminum, precision die cast body** suitable for 80°C (176 °F) and 17 bar g (250 psig) MAWP applications
- **D** **Proprietary coating** applied to the inside and outside surfaces provides corrosion protection in harsh industrial environments
- **E** **Filter element with stainless steel mesh** withstands high differential pressure while minimizing flow restriction through the element
- **F** **Ergonomic bowl design with no-touch filter element** simplifies element replacement
- **G** **Time strip label** indicates when it's time to change the element (A Grade only)
- **H** **Industrial-grade brass float drain** discharges accumulated condensate and oil more reliably than lesser quality plastic drains (no-loss and manual drains also available)
- **I** **Deep-pleated filter media** reduces air flow velocity to maximize filtration efficiency and minimize pressure losses
- **J** **High-efficiency drainage layer** improves liquid drainage properties and enhances chemical compatibility
- **K** **Simple visual alignment** of the filter head and bowl ensures accurate assembly of components and helps to improve safety



Complete Filtration Solution

F-Series filters are engineered to be a complete filtration solution, incorporating features that address air quality, energy efficiency and ease of maintenance.

The Standard for High-Quality Air

F-Series filters provide clean, high-quality air as defined by ISO 8573-1:2010, and are certified by a third party under ISO 12500-1:2007. With multiple filter element grades available, there is a filtration solution that will meet your unique requirements.

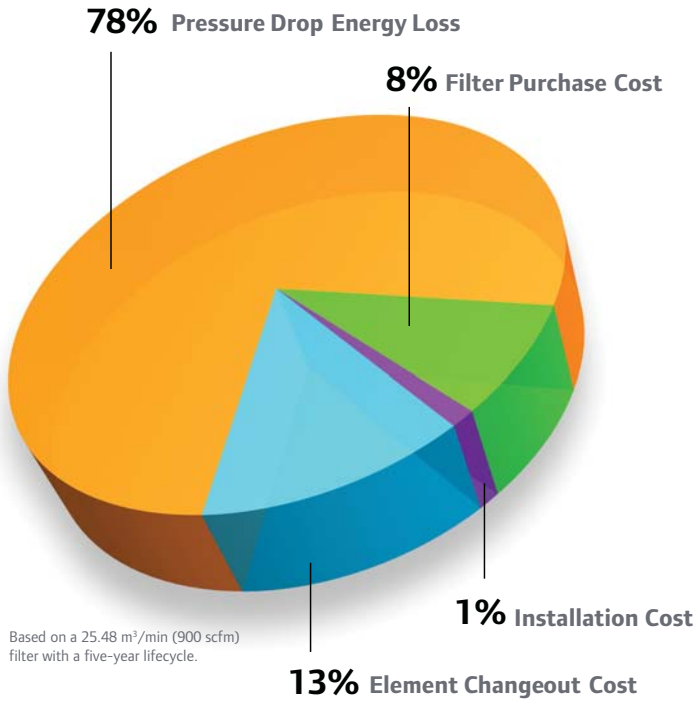
Energy Efficient Through and Through

Pressure drop accounts for over three-quarters of the ownership cost of a compressed air filter. Even when a filter element is clean and dry, it can rob a compressed air system of pressure, causing the air compressor to work harder and increase energy costs. The flow path through the F-Series filter housing reduces turbulence and enhances efficiency, while the deep-pleated element design further minimizes pressure drop.

Designed with Maintenance in Mind

Features such as no-touch element replacement and visual bowl-to-head alignment indicators make maintaining the F-Series filter hassle-free. The "zero-clearance" design requires minimal space around the filter, allowing F-Series filters to be installed where other filters won't fit. Long element life provides efficient operation for up to one year between element change-outs, helping to reduce overall ownership costs*.

*Frequency of element changeout will depend on the unique conditions of each customer's air system.



Based on a 25.48 m³/min (900 scfm) filter with a five-year lifecycle.

Quality Assured by Ingersoll Rand

Ingersoll Rand has more than 20 years of air filtration experience. Our manufacturing facility ensures quality, reliability and outstanding performance. Our filters undergo advanced testing and are uniquely designed and manufactured to work with the full range of Ingersoll Rand products.

F-Series Filter Specifications

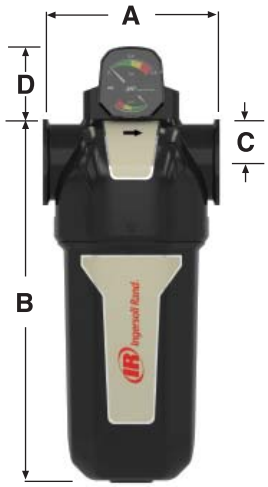
Filter Model Number		Pipe Size	Flow Rates 100 psig/7 bar g		Dimensions A		B		C		D		Weight	
Model	Grade	in	m³/min	scfm	mm	in	mm	in	mm	in	mm	in	kg	lb
FA30I	A, G, H, D	3/8″	0.48	17	76	2.99	173	6.81	16	0.63	53	2.09	0.56	1.2
FA40I	A, G, H, D	1/2″	0.62	22	76	2.99	173	6.81	16	0.63	53	2.09	0.55	1.2
FA75I	A, G, H, D	3/4″	1.27	45	98	3.86	228	8.98	22	0.87	53	2.09	1.07	2.4
FA110I	A, G, H, D	3/4″	1.84	65	98	3.86	228	8.98	22	0.87	53	2.09	1.09	2.4
FA150I	A, G, H, D	1″	2.49	88	129	5.08	267	10.51	32	1.26	53	2.09	2.06	4.5
FA190I	A, G, H, D	1″	3.12	110	129	5.08	267	10.51	32	1.26	53	2.09	2.06	4.5
FA230I	A, G, H, D	1″	3.82	135	129	5.08	267	10.51	32	1.26	53	2.09	2.06	4.5
FA400I	A, G, H, D	1 1/2″	6.66	235	129	5.08	357	14.06	32	1.26	53	2.09	2.36	5.2
FA490I	A, G, H, D	1 1/2″	8.21	290	129	5.08	357	14.06	32	1.26	53	2.09	2.36	5.2
FA600I	A, G, H, D	2″	9.91	350	170	6.69	466	18.35	38	1.50	53	2.09	5.20	11.5
FA800I	A, G, H, D	2″	13.31	470	170	6.69	466	18.35	38	1.50	53	2.09	5.24	11.5
FA1000I	A, G, H, D	2″	16.99	600	170	6.69	466	18.35	38	1.50	53	2.09	5.26	11.6
FA1200I	A, G, H, D	3″	20.11	710	205	8.07	544	21.42	55	2.17	53	2.09	9.31	20.5
FA1560I	A, G, H, D	3″	26.05	920	205	8.07	644	25.35	55	2.17	53	2.09	10.69	23.6
FA1830I	A, G, H, D	3″	30.59	1080	205	8.07	644	25.35	55	2.17	53	2.09	10.69	23.6
FA2300I	A, G, H, D	3″	38.23	1350	205	8.07	876	34.49	55	2.17	53	2.09	13.70	30.2
FA2700I	A, G, H, D	3″	45.31	1600	205	8.07	876	34.49	55	2.17	53	2.09	13.70	30.2

Grade A - Activated Carbon Filtration
Oil vapor and hydrocarbon odor removal, providing a maximum remaining oil content of <0.003 mg/m³ (<0.003 ppm) @ 21°C (60°F). (Precede with Grade H filter)

Grade G - General Purpose Protection
Particle removal down to 1 micron including coalesced liquid, water and oil, providing a maximum remaining oil aerosol content of 0.1 mg/m³ (0.1 ppm) @ 21°C (60°F).

Grade H - High Efficiency Oil Removal Filtration
Particle removal down to 0.01 micron including water and oil aerosols, providing a maximum remaining oil aerosol content of 0.01 mg/m³ (0.01 ppm) @ 21°C (60°F). (Precede with Grade G filter)

Grade D - General Purpose Dust Filtration
Dust particle removal down to 1 micron.



Operating Limitations:
Maximum Operating Pressure 17 bar g (250 psig)
Maximum Recommended Operating Temperature (Grade G, H, D) 80°C (176°F)
Maximum Recommended Operating Temperature (Grade A) 30°C (86°F)
Minimum Recommended Operating Temperature 1°C (34°F)

Line Pressure	bar g	1	2	3	5	7	9	11	13	15	16	17
	psig	15	29	44	73	100	131	160	189	218	232	250
Correction Factors		0.38	0.53	0.65	0.85	1.00	1.13	1.25	1.36	1.46	1.51	1.56

To use correction factors, multiply the filter's capacity by the correction factor to get the new filter flow capacity at the non-standard operating pressure. For example, a 110 SCFM filter operating at 160 psig has a correction factor of 1.25. 1.25 x 110 = 137.5 SCFM capacity at 160 psig.

Ingersoll Rand

ingersollrandproducts.com

Ingersoll Rand (NYSE:IR) advances the quality of life by creating and sustaining safe, comfortable and efficient environments. Our people and our family of brands—including Club Car®, Ingersoll Rand®, Schlage®, Thermo King® and Trane® —work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; secure homes and commercial properties; and increase industrial productivity and efficiency. Ingersoll Rand products range from complete compressed air systems, tools and pumps to material handling systems. The diverse and innovative products, services and solutions enhance our customers' energy efficiency, productivity and operations. We are a $14 billion global business committed to a world of sustainable progress and enduring results.

Ingersoll Rand compressors are not designed, intended or approved for breathing air applications. Ingersoll Rand does not approve specialized equipment for breathing air applications and assumes no responsibility or liability for compressors used for breathing air service. F-Series filters are intended for compressed air applications only. Ingersoll Rand assumes no responsibility or liability for filters used in any application other than compressed air.

Nothing contained on these pages is intended to extend any warranty or representation, expressed or implied, regarding the product described herein. Any such warranties or other terms and conditions of sale of products shall be in accordance with Ingersoll Rand's standard terms and conditions of sale for such products, which are available upon request.

Product improvement is a continuing goal at Ingersoll Rand. Designs, available functions and specifications are subject to change without notice or obligation.