

# **Filters**

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# **GO Regulator**





# F-4 Series In-line Filter



This filter is designed to be used as a standard in-line filter or it may easily be threaded into a pressure regulator or valve body for inlet protection. If desired, we will install this filter for you into any of our standard pressure control products prior to shipment.

For your special requirements, this filter can be custom manufactured from almost any machinable alloy. Let us know your requirement.

### **Features & Specifications**

- Compact size
- Economical design
- Easily changed filter elements
- Stainless steel body (316 series) with Teflon® seals
- Nominal micron (μ) ratings of filtration available:
   10μ sintered 316 stainless steel
   20μ sintered 316 stainless steel
   50μ sintered 316 stainless steel
   70μ sintered 316 stainless steel
   100μ 316 stainless steel mesh
   200μ 316 stainless steel mesh
   300μ 316 stainless steel mesh
- Pressures up to 6,000 psig (41.37 MPa)



# F-4 Series In-line Filter

## **How to Order**

Part No. 102120-10

Standard filter with 10 micron nominal filtration

If other than the standard 10 micron (μ) filtration is desired, specify by the use of a dash number. For example: 102120-20 for 20 micron sintered 316 stainless steel filtration or 102120-200 for 200 micron stainless steel mesh filtration.

F4 102120 - 10

FILTER STYLE

**102120** Stainless steel, ¼" FNPT inlet, ¼" MNPT outlet

- FILTER RATING

10 10μ sintered 316 stainless steel

20µ sintered 316 stainless steel

50µ sintered 316 stainless steel

**70** 70μ sintered 316 stainless steel

100 100 µ 316 stainless steel mesh

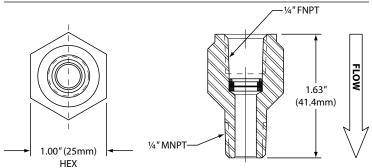
200 200 µ 316 stainless steel mesh

300 300 µ 316 stainless steel mesh

## Maximum Temperature & Operating Inlet Pressures

Maximum Temperature	@	Operating Inlet Pressure
450° F (232° C)	@	6,000 psig (41.37 MPa)

# **Outline Dimensions**



## Repair Kit Information

Part Number	Description
100089	Screen filter kit (specify porosity)
G100089-10	10μ nominal filtration
G100089-20	20μ nominal filtration
G100089-50	50µ nominal filtration
G100089-70	70μ nominal filtration
G100089-100	100μ nominal filtration
G100089-150	150µ nominal filtration
G100089-200	200μ nominal filtration
G100089-300	300µ nominal filtration



# F-6K In-line or Bypass Filter



The F-6K in-line or bypass filter has been designed with bar stock construction to provide reliable and economical filtration of streams having pressures up to 6,000 psig (41.37 MPa) at 70° F (20° C).

Materials of construction (standard) are 316 stainless steel and Teflon® for maximum service capability at economical prices. If a greater level of corrosion protection is required, this unit can be made (option) from Monel® or Hastelloy® C-276. The sintered 316 stainless steel filter element, with filtration ranges between 2 and 55 microns ( $\mu$ ), can be easily changed without removing the filter from the line. Standard connections are  $\frac{1}{4}$ ° FNPT. The optional bypass port is standard as  $\frac{1}{8}$ ° FNPT.

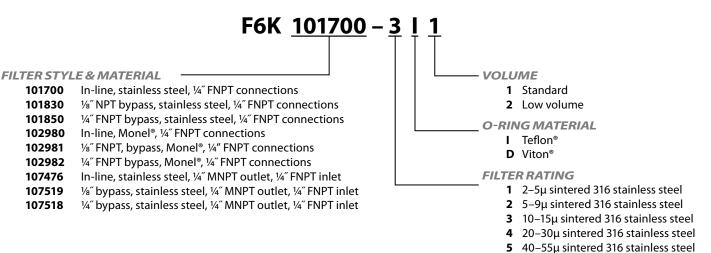
### **Features & Specifications**

- Nominal ratings of filtration available:
   2–5μ sintered 316 stainless steel
   5–9μ sintered 316 stainless steel
   10–15μ sintered 316 stainless steel
   20–30μ sintered 316 stainless steel
   40–55μ sintered 316 stainless steel
   100μ 316 stainless steel mesh
   150μ 316 stainless steel mesh
- Available with optional bypass



# F-6K In-line or Bypass Filter

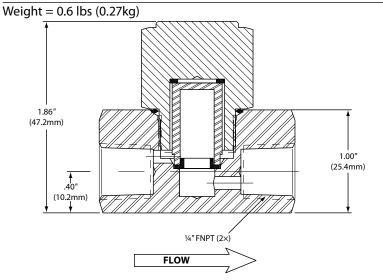
### How to Order



Maximum Temperature & **Operating Inlet Pressures** 

Seal Material	Maximum Temperature	@	Operating Inlet Pressure
\/:4 ~ \~ ®	70° F (20° C)	@	6,000 psig (41.37 MPa)
Viton®	175 ° F (80° C)	@	3,600 psig (24.82 MPa)
Teflon®	70° F (20° C)	@	6,000 psig (41.37 MPa)
	150° F (66° C)	@	3,600 psig (24.82 MPa)

**Outline Dimensions** 



6 100µ 316 stainless steel mesh 7 150µ 316 stainless steel mesh

# Repair Kit Information

Stainless Steel	
Part Number	Description
101705	In-line 2–5μ range
101706	In-line 5–9μ range
101707	In-line 10–15μ range
101708	In-line 20–30μ range
101709	In-line 40–50μ range
101855	In-line 100µ mesh element
101833	Bypass 2–5μ range
101832	Bypass 5–9μ range
101834	Bypass 10–15μ range
101835	Bypass 20–30μ range
101836	Bypass 40–55μ range

Monel®	
Part Number	Description
103861	In-line 2–5μ range
103862	In-line 5–9μ range
103863	In-line 10–15μ range
103864	In-line 20–30μ range
103865	In-line 40–50μ range
103866	Bypass 2–5μ range
103867	Bypass 5–9μ range
103868	Bypass 10–15µ range
103869	Bypass 20–30µ range
103870	Bypass 40–55μ range

Monel® is a registered trademark of Special Metals Corporation. Hastelloy® C-276 is a registered trademark of Haynes International, Inc. Viton® is a registered trademark of DuPont Dow Elastomers Teflon® is a registered trademark of the DuPont Company.



# **Cyclone Single or Dual Element Bypass-type Filter**



The Cyclone filter's unique design provides an unsurpassed combination of rapid response, minimum dead volume and high efficiency filtration. Using the proven bypass design, a large sample flow is passed through the filter body so the sample transport lag time is minimized. Only that portion of the sample needed for the process analyzer passes through the filter element. In this manner, low filtration rate and rapid response are both achieved. Careful flow design causes the unfiltered portion of the sample to sweep the filter element's surface to greatly extend the element's life. With the simple installation of a pipe plug in the bypass port, the Cyclone bypass filter can be converted to an in-line filter. All Cyclone filters have back-up screens to support the filter element and can be supplied with an optional stainless steel mounting bracket. Cyclone filters are available in three materials: 316L stainless steel, Monel®, and Hastelloy® C-276. On special order, filters can be supplied in most other machinable materials

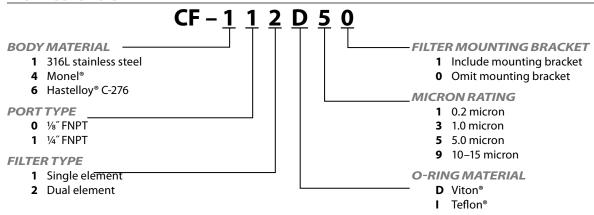
### **Features & Specifications**

- Materials of construction are 316L stainless steel and Monel® (standard)
- Available in Hastelloy® C-276 and other machinable materials (optional)
- Filter element material is a Teflon® membrane
- O-ring seal material is available in either Viton® or Teflon®
- Available filter element porosities are 0.2, 1.0, 5.0 and 10–15 micron
- Minimum sample flow rate on filtered side is 100cc/min of vapor or 50ml/min of liquid
- Minimum process flow rate on bypass side should be about 10 times the filtered sample flow rate



# **Cyclone Single or Dual Element Bypass-type Filter**

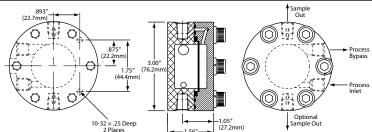
### **How to Order**

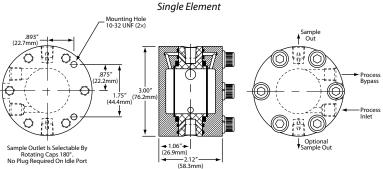


**Specifications** 

	Single Element	Dual Element	
Body Material	316L stainless steel, Monel®, (Hastelloy® C-276)		
Filter Element Material	Teflon® membrane		
O-ring Seal Material	Teflon	® or Viton®	
Filter Element Pore Sizes	0.2, 1.0, 5.0	& 10–15 microns	
Effective Filter Area	1.78 in <sup>2</sup> (11.3 cm <sup>2</sup> )	3.56 in <sup>2</sup> (22.6 cm <sup>2</sup> )	
Internal Volume Filtered Side Bypass Side	0.45 in³ (6.8 cm³) 1.56 in³ (25.3 cm³)	0.9 in³ (13.6 cm³) 1.8 in³ (30.0 cm³)	
Pressure & Temperature Ratings		@ 70° F (20° C) @ 175° F (80° C)	
Recommended Flow Rates Filtered Side Bypass Side	Minimum sample flow rate of 100 cc/min vapor or 50 ml/min liquid to minimize sample transport lag  Process flow should be about 10 times sample flow		
Connections	All connections are 1/8" or 1/4" female NPT		
Weight	2.5 lbs (1.13 kg)	3.2 lbs (1.45 kg)	

# **Outline Dimensions**





**Dual Element** 

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# Maximum Temperature & Operating Inlet Pressure

Seal Material	Maximum Temperature	@	Maximum Operating Inlet Pressure
Viton®	70° F (20° C)	@	3,600 psig (24.82 MPa)
viton	175 ° F (80° C)	@	1,500 psig (10.35 MPa)
Teflon®	70° F (20° C)	@	3,600 psig (24.82 MPa)
	150° F (66° C)	@	1,500 psig (10.35 MPa)

# Repair Kit Information

#### Single Cyclone **Part Number** 100622-11 St. steel filter kit with Teflon® o-rings, 0.2µ filter element St. steel filter kit with Viton® o-rings, $0.2\mu$ filter element 100622-12 100622-21 St. steel filter kit with Teflon® o-rings, 1.0µ filter element 100622-22 St. steel filter kit with Viton® o-rings, 1.0µ filter element 100622-31 St. steel filter kit with Teflon® o-rings, 5.0µ filter element 100622-32 St. steel filter kit with Viton® o-rings, 5.0µ filter element 100622-41 St. steel filter kit with Teflon® o-rings, 10–15µ filter element

100622–42 St. steel filter kit with Viton® o-rings, 10–15μ filter element

#### **Dual Cyclone**

Part Number	Description
100623-11	St. steel filter kit with Teflon® o-rings, 0.2µ filter element
100623-12	St. steel filter kit with Viton® o-rings, 0.2µ filter element
100623-21	St. steel filter kit with Teflon® o-rings, 1.0µ filter element
100623-22	St. steel filter kit with Viton® o-rings, 1.0µ filter element
100623-31	St. steel filter kit with Teflon® o-rings, 5.0µ filter element
100623-32	St. steel filter kit with Viton® o-rings, 5.0µ filter element
100623-41	St. steel filter kit with Teflon® o-rings, 10–15µ filter element
100623-42	St. steel filter kit with Viton® o-rings, 10–15µ filter element



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