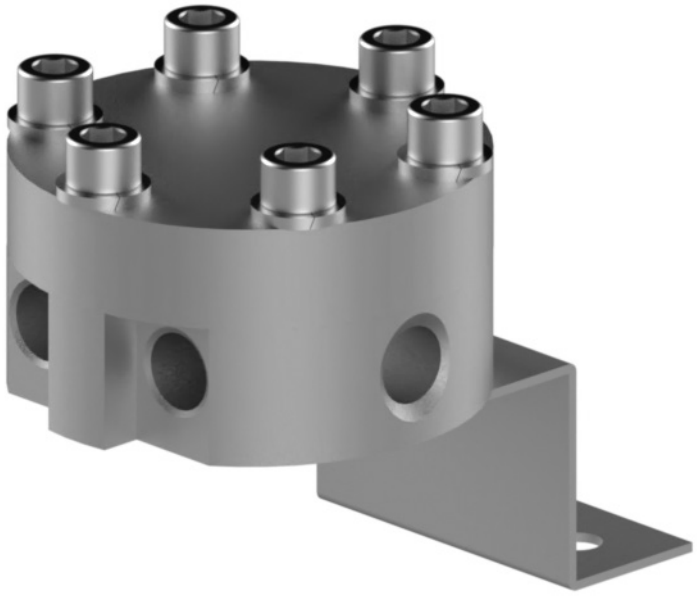
GO REGULATOR

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 0.1, 0.22, 0.45, 1.0, 5.0
- 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

filters

GO Regulator
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Cyclone Single or Dual Element Bypass-type Filter

How to Order

CF – 1 1 2 D 5 0

BODY MATERIAL
- **1** 316L stainless steel
- **4** Monel®
- **6** Hastelloy® C-276

PORT TYPE
- **0** ⅛″ FNPT
- **1** ¼″ FNPT

FILTER TYPE
- **1** Single element
- **2** Dual element

O-RING MATERIAL
- **D** Viton®
- **I** PTFE

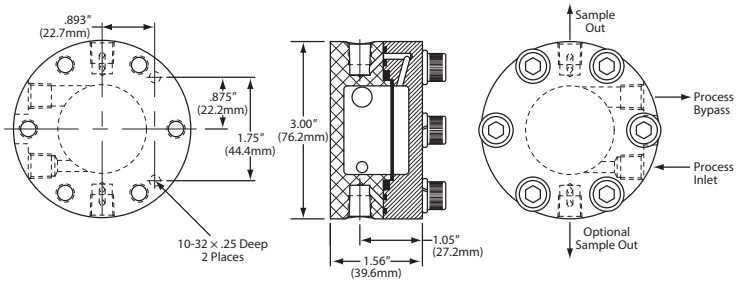
MICRON RATING
- **1** 0.22 micron
- **2** 0.1 micron
- **3** 1.0 micron
- **4** 0.45 micron
- **5** 5.0 micron

FILTER MOUNTING BRACKET
- **1** Include mounting bracket
- **0** Omit mounting bracket

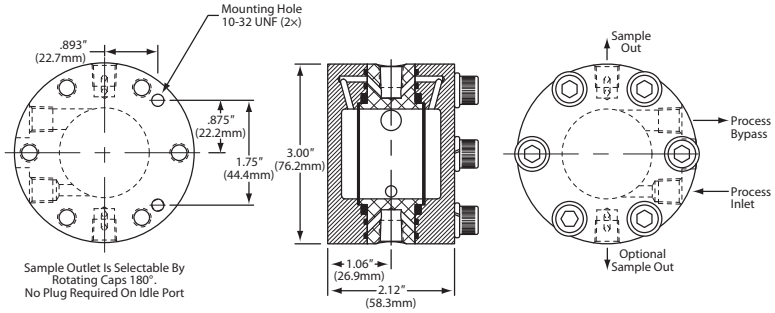
Specifications

	Single Element	Dual Element
Body Material	316L stainless steel, Monel®, (Hastelloy® C-276)	
Filter Element Material	PTFE membrane	
O-ring Seal Material	PTFE or Viton®	
Filter Element Pore Sizes	0.1, 0.2, 0.22, 0.45, 1.0, 5.0microns	
Effective Filter Area	1.78 in^2 (11.3 cm^2)	3.56 in^2 (22.6 cm^2)
Internal Volume		
Filtered Side	0.45 in^3 (6.8 cm^3)	0.9 in^3 (13.6 cm^3)
Bypass Side	1.56 in^3 (25.3 cm^3)	1.8 in^3 (30.0 cm^3)
Pressure & Temperature Ratings	3,600 psig @ 70° F (20° C) 1,500 psig @ 175° F (80° C)	
Recommended Flow Rates		
Filtered Side	Minimum sample flow rate of 100 cc/min vapor or 50 ml/min liquid to minimize sample transport lag	
Bypass Side	Process flow should be about 10 times sample flow	
Connections	All connections are ⅛″ or ¼″ female NPT	
Weight	2.5 lbs (1.13 kg)	3.2 lbs (1.45 kg)

Outline Dimensions



Single Element



Dual Element

Maximum Temperature & Operating Inlet Pressure

Seal Material	Maximum Temperature	@	Maximum Operating Inlet Pressure
Viton®	70° F (20° C)	@	3,600 psig (24.82 MPa)
	175 ° F (80° C)	@	1,500 psig (10.35 MPa)
PTFE	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	Description
100622–11	St. steel filter kit with PTFE o-rings, 0.22µ filter element
100622–12	St. steel filter kit with Viton® o-rings, 0.22µ filter element
100622–21	St. steel filter kit with PTFE 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 PTFE o-rings, 5.0µ filter element
100622–32	St. steel filter kit with Viton® o-rings, 5.0µ filter element
100622–51	St. steel filter kit with PTFE o-rings, 0.1µ filter element
100622–52	St. steel filter kit with Viton® o-rings, 0.1µ filter element
100622–61	St. steel filter kit with PTFE o-rings, 0.45µ filter element
100622–62	St. steel filter kit with Viton® o-rings, 0.45µ filter element

Dual Cyclone

Part Number	Description
100623–11	St. steel filter kit with PTFE 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 PTFE 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 PTFE o-rings, 5.0µ filter element
100623–32	St. steel filter kit with Viton® o-rings, 5.0µ filter element
100623–51	St. steel filter kit with PTFE o-rings, 0.1µ filter element
100623–52	St. steel filter kit with Viton® o-rings, 0.1µ filter element
100623–61	St. steel filter kit with PTFE o-rings, 0.45µ filter element
100623–62	St. steel filter kit with Viton® o-rings, 0.45µ filter element

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.