



**"A leading worldwide supplier of high efficiency filters for a variety of industries and applications."**

## ANALYZER PANEL FILTER

The 170 series of sample process filters offers a unique solution for today's compact sample conditioning systems. The 170 is designed to sit inverted (upside down) or horizontally with all the connections (inlet/out, drain, and/or by-pass) in the head. No connections need to be broken to service the filter element.

Another added feature in this design is the hollow tie rod on the outlet side. This path forces the filtered stream to the highest point within the vessel, which reduces liquid and solid carryover during system start-ups or upsets. As always a wide variety of elements and materials are available.



### Features:

- Compact Footprint Provides Versatile Installation
- Break No Connections When Servicing Filter Element
- Low Internal Volume For Quick Response Time
- Hollow Tie Rod Provides Added Protection To Carry-Over Problems During System Start-Ups

### Applications:

- Ideal For Compact Analyzer Cabinets
- Pre-Filter For Guardian Membranes
- Multi-Port Sample Analyzers

**At the heart of our filter products is the filter element. Choosing the correct element insures proper results for your specific application:**

### Disposable Microfiber Elements

Disposable Microfiber Elements are most commonly used since they offer exceptional filtration, high flows with minimal pressure drops, and excellent chemical compatibility. These are ideal for use in sample conditioning, instrumentation, CNG, and Emission/Environmental service.

- For **Coalescing (liquid removal)** and particle collection use our grade "C". We recommend starting with the 70C which is rated at 95% efficient at 0.01 micron which provides outstanding filtration, at high flow rates.
- For **Particle removal** only use grade "K". We recommend starting with the 70K which is rated at 95% efficient at 0.01 micron which provides outstanding filtration, at high flow rates.
- For **Particulate removal** above 300°F (150°C) use grade "S".



### Other Element Materials

Other element materials are available, however we recommend using the coalescing element with this housing. If you have any questions, please contact us at 1-800-311-5561 or [sales@unitedfiltration.com](mailto:sales@unitedfiltration.com).

# ANALYZER PANEL FILTER

- Sample Conditioning Filter
- Ideal For Panel Mount
- Designed For Coalescing/Liquid Removal  
(Use C Type Coalescing Element)



## TECHNICAL INFORMATION

### Housing Model

### 170 (Four Port)

Port Size (NPT)	1/4"
Drain / By-Pass	1/4"
Maximum Pressure (psig)	1500
Internal Volume (cc)	42
Maximum Temp. -Buna-N (250°F)	BN170
Maximum Temp. -EPDM (300°F)	GE170
<b>Maximum Temp. -Viton (400°F) (Standard)</b>	<b>GV170</b>
Maximum Temp. -Silicone (450°F)	GS170
Maximum Temp. -Kalrez (600°F)	KZ170
Weight of Housing (lbs)	1.5
Principle Dimensions: (inches)	
Center Of Port To Head	0.43
Head Diameter	2.12
Overall Length	3.23
Element Removal Clearance	0.98
Filter Element Codes: (1)	
Disposable Element	22-35-□
Materials Of Construction: (2)	
Head	316LSS
Bowls & Internals	316LSS
O-Rings (Standard)	Viton

## FLOW RATE IN SCFM FOR ABOVE ASSEMBLIES WITH GRADE 50C <sup>(3)</sup> or 70C <sup>(4)</sup>

Air Line Pressure (PSIG)	170 Series	
	50C	70C
15	4	6
30	5	9
60	8	15
100	12	25
150	17	33
250	45	51
500	50	100
1500	163	304

- Notes: (1) Replace '□' with grade required, e.g. 22-35-50C  
 (2) Material abbreviations, 316LSS = 316L Stainless Steel  
 (3) Flow rates for Grade 50C rated at 99.99% against 0.01 micron  
 (4) Flow rates for Grade 70C rated at 95% against 0.01 micron