



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

STAINLESS STEEL PROCESS FILTER HOUSINGS

Our Gas and Liquid Process Filters protect equipment from sample impurities by removing solids and liquids from gases up to 99.999% efficiency at 0.01 micron. This series of filters is also ideal to use in liquid sample process applications by simply employing our pleated liquid elements, or stainless steel elements. A 1 micron efficiency can be reached in liquids with the aforementioned elements.

To satisfy the extreme wide range of requirements for process sample filters, we supply a complete line of filter elements in stainless steel, polypropylene, and other corrosion-resistant materials. A choice of high efficiency borosilicate microfiber filter elements, which are inert to most liquids and gases, are also offered.

Our 150 and 160 series of high-pressure 316L stainless steel filter housings offer exceptional value and performance. The threaded head to bowl connection with captured o-ring provides positive sealing even in very corrosive and demanding applications. The 1500 PSIG rating covers the majority of gas and liquid applications.



Features:

- Filters Gases & Liquids
- 316L Stainless Steel
- 1,500 PSIG / 400°F - Standard
- 6,000 PSIG & Flanges Available
- 3-Port Housings For Coalescing
- Particulate Or Bypass Filtration

Applications:

- CNG Filtration
- Blow Molding Equipment
- Gas Production
- Food And Dairy Processing
- High Pressure Liquid Filters

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 "CS". We recommend starting with the 70CS which is rated at 95% efficient at 0.01 micron which provides outstanding filtration, at high flow rates.



Stainless Steel 5-Layer Mesh Elements

Stainless steel elements (SS) are designed for the filtration of heavily contaminated gas samples, CNG, and liquid streams since they are recleanable by back flushing or ultrasonic cleaning. Standard microns available: 1, 3, 10, 25, 50, 100, and 200.



Pleated Cartridges

Pleated Cartridges have up to 3 times the surface area of standard depth filters offering exceptional life. These are ideal pre-filters to be used in systems with heavy particulate loads to reduce the frequency that the cartridges need to be changed. We also recommend a pleated cartridge to be used as an after filter for Desiccant Dryers.

- United Filtration Systems offers a variety of pleated filter cartridges for both gaseous and liquid applications. These cartridges are available in Stainless Steel, Micro-Glass, Cellulose & Polypropylene to cover a broad range of applications.

STAINLESS STEEL PROCESS FILTER HOUSINGS

- Ideal Compressed Natural Gas Filter
- NACE Complaint MR-01-75 For Sour Service
- Mechanical Seal Filter
- Seal Gas Filtration
- Accepts Microfiber, Stainless Steel, & Pleated Glass Filter Elements



TECHNICAL INFORMATION

Housing Model	150*	151	152
Port Size (NPT)	1"	1 1/2"	2"
Drain Type (NPT)	1/4"	1/4"	1/4"
Maximum Pressure (psig)	1500	1500	1500
Internal Volume (cc)	1500	1500	1500
Maximum Temp. -Buna-N (250°F)	BN150	BN150	BN150
Maximum Temp. -EPDM (300°F)	GE150	GE150	GE150
Maximum Temp. -Viton (400°F) Standard	GV150	GV150	GV150
Maximum Temp. -Silicone (450°F)	GS150	GS150	GS150
Maximum Temp. -Kalrez (600°F)	KZ150	KZ150	KZ150
Weight of Housing (lbs)	22.0	22.0	22.0
Principle Dimensions: (inches)			
Center Of Port To Head	1.18	1.18	1.61
Head Diameter	4.33	4.33	4.52
Overall Length	15.04	15.04	15.83
Element Removal Clearance	9.72	9.72	9.72
Filter Element Codes: (1)			
Disposable Element	51-230-□	51-230-□	51-230-□
Stainless Steel Element	SS-51-230-□	SS-51-230-□	SS-51-230-□
Pleated Glass Element	CA-51-230-□PLGS-R	CA-51-230-□PLGS-R	CA-51-230-□PLGS-R
Materials Of Construction: (2)			
Head & Internals	316LSS	316LSS	316LSS
Bowl	316LSS	316LSS	316LSS
O-Rings (Standard)	Viton	Viton	Viton
Accessories:			
Mounting Bracket	MB150	MB150	MB150
Support Core	SC150	SC150	SC150

FLOW RATE IN SCFM FOR ABOVE ASSEMBLIES WITH GRADE 50CS⁽³⁾ or 70CS⁽⁴⁾

Air Line Pressure (PSIG)	150 Series	
	50CS	70CS
15	38	79
30	56	116
60	93	198
100	151	314
150	209	430
250	319	667
500	650	1334
1500	1897	3944

- Notes: (1) Replace '□' with grade required, e.g. 51-230-50CS
 (2) Replace '□' with 3 or 10 micron, e.g. CA-51-230-03PLGS-R
 (3) Material abbreviations, 316LSS = 316L Stainless Steel
 (4) Flow rates for Grade 50CS rated at 99.99% against 0.01 micron
 (5) Flow rates for Grade 70CS rated at 95% against 0.01 micron
 (*) Also available in 3/4" ports

STAINLESS STEEL PROCESS FILTER HOUSINGS

TECHNICAL INFORMATION

Housing Model	160*	161	162
Port Size (NPT)	1"	1 1/2"	2"
Drain Type (NPT)	1/4"	1/4"	1/4"
Maximum Pressure (psig)	1500	1500	1500
Internal Volume (cc)	2700	2700	2700
Maximum Temp. -Buna-N (250°F)	BN160/2	BN160/2	BN160/2
Maximum Temp. -EPDM (300°F)	GE160/2	GE160/2	GE160/2
Maximum Temp. -Viton (400°F) Standard	GV160/2	GV160/2	GV160/2
Maximum Temp. -Silicone (450°F)	GS160/2	GS160/2	GS160/2
Maximum Temp. -Kalrez (600°F)	KZ160/2	KZ160/2	KZ160/2
Weight of Housing (lbs)	38.0	38.0	38.0
Principle Dimensions: (inches)			
Center Of Port To Head	1.18	1.18	1.61
Head Diameter	4.33	4.33	4.52
Overall Length	24.49	24.49	25.27
Element Removal Clearance	19.37	19.37	19.37
Filter Element Codes:			
Disposable Element (1)	51-476-□	51-476-□	51-476-□
Stainless Steel Element	SS-51-476-□	SS-51-476-□	SS-51-476-□
Pleated Glass Element (2)	CA-51-476-□PLGS-R	CA-51-476-□PLGS-R	CA-51-476-□PLGS-R
Materials Of Construction: (3)			
Head & Internals	316LSS	316LSS	316LSS
Bowl	316LSS	316LSS	316LSS
O-Rings (Standard)	Viton	Viton	Viton
Accessories:			
Mounting Bracket	MB150	MB150	MB150
Support Core	SC160	SC160	SC160

FLOW RATE IN SCFM FOR ABOVE ASSEMBLIES WITH GRADE 50CS ⁽⁴⁾ or 70CS ⁽⁵⁾

Air Line Pressure (PSIG)	160 Series	
	50CS	70CS
15	64	87
30	125	143
60	160	221
100	256	354
150	354	488
250	546	754
500	1091	1508
1500	3248	4466

- Notes: (1) Replace '□' with grade required, e.g. 51-476-50CS
 (2) Replace '□' with 3 or 10 micron, e.g. CA-51-476-03PLGS-R
 (3) Material abbreviations, 316LSS = 316L Stainless Steel
 (4) Flow rates for Grade 50CS rated at 99.99% against 0.01 micron
 (5) Flow rates for Grade 70CS rated at 95% against 0.01 micron
 (*) Also available in 3/4" ports

Our wide range of filter element materials and micron sizes allow multiple uses for these housings:

Gas Service Applications:

Coalescing and/or Particulate
 CNG Filtration
 Blow Molding Equipment
 Food Plant Caustic Service
 High Pressure Compressor Service
 General High Pressure Air Service
 Adsorption Cartridges; Carbon, Silica Gel, 13X, etc.
 Pleated for High Dirt Holding Capacity

Liquid Service Applications:

Particulate
 High Flow Sample Service
 Fuel Filtration
 Solvents / Coolants
 Cryogenic Service
 Corrosive Environmental Service
 Lubricants
 C.I.P. Service (Clean In Place)