

Stainless Steel Housings

### Features

- 316L Stainless Steel Construction
- Up To 15,000 PSIG Ratings
- Coalescing and Particulate Filtration
- Versatile For Liquid Service



High efficiency coalescing and particulate filters provide versatile solutions.

# Miniature 5,000 PSIG Housings

#### Features

- •316L Stainless Steel Construction
- Pressure to 5,000 PSIG, Temperature to 900°F
- •2-Port Housings for Particulate Removal
- •3-Port Housing for Coalescing or Bypass Filtration
- •Compact Designs For Fast Response Times
- •Available in Hastelloy, Monel, and Other Exotic Materials

# Applications

- •Analyzer Filter
- •Sample Conditioning
- •High Pressure Relief Valve

The 110 and 120 series of filters are ideal for use with gaseous and liquid sample process analyzers. The small internal volume, compact design, and positive O-ring sealing mechanism make them perfect for demanding analyzer applications. They are constructed entirely of 316L stainless steel and are free of welds to comply with NACE MR-01-75.

These housings are also available with a PTFE seal, which requires a modified sealing design: simply add an "S" to the housing code, e.g. 112S. PTFE seals cannot be retrofitted into standard housings originally having a Viton O-ring. A high temperature gasket can only be fitted into the S version housing.



Housing Model	110	112	114	116	120	122	124	126
Port Size (NPT) Drain Type (NPT) Maximum Pressure (psig) Internal Volume (cc) Weight Of Housing (lbs)	1/8" 1/8" 5000 25 1.0	1/4" 1/4" 5000 25 1.0	1/8" None 5000 25 1.0	1/4" None 5000 25 1.0	1/8" 1/8" 5000 34 1.0	1/4" 1/4" 5000 34 1.0	1/8" None 5000 34 1.0	1/4" None 5000 34 1.0
Principle Dimensions: (inches) Center Of Port To Head Head Diameter Overall Length Element Removal Clearance	0.39 1.42 2.92 1.57	0.39 1.42 2.92 1.57	0.39 1.42 2.92 1.57	0.39 1.42 2.92 1.57	0.39 1.42 3.98 2.36	0.39 1.42 3.98 2.36	0.39 1.42 3.98 2.36	0.39 1.42 3.98 2.36
Maximum Temp. (400°F) Standard Viton O-Ring	GV110							
Filter Element Codes: (1) Disposable Element (Standard) *Other Elements Available- View Drawing	12-32-□	12-32-□	12-32-□	12-32-□	12-57-□	12-57-□	12-57-□	12-57-□
Drawing **For More Detail & Options**	<u>110</u>	<u>112</u>	<u>114</u>	<u>116</u>	<u>120</u>	<u>122</u>	<u>124</u>	<u>126</u>
Housing w/ PTFE Seals Maximum TempPTFE (400°F) Standard	<u>1105</u>	<u>1125</u>	<u>1145</u>	<u>1165</u>	<u>1205</u>	<u>1225</u>	<u>1245</u>	<u>1265</u>

Notes: (1) Replace 'a' with grade required, e.g. 12-32-50C

# Miniature Ultra High Pressure Housings – 10,000 PSIG

#### Features

- •316L Stainless Steel Construction
- •Pressure to 10,000 PSIG, Temperature to 900°F
- •Compact Designs for Fast Response Times
- •Free From Welds NACE Compliant
- •Available in Hastelloy, Monel, Etc.

# Applications

- •Alternative Fuel Protection
- •Injection Pumps
- CNG Boosters

The 110HP and 120HP series of filters are ideal for use with gaseous and liquid sample process analyzers, fuel cell filtration, as well as other high-pressure requirements. The small internal volume, compact design, and positive O-ring sealing mechanism make them perfect for demanding analyzer applications. They are constructed entirely of 316L stainless steel and are free of welds to comply with NACE MR-01-75.



Housing Model	110HP	112HP	114HP	116HP	120HP	122HP	124HP	126HP
Port Size (NPT) Drain Type (NPT) Maximum Pressure (psig) (1) Internal Volume (cc) Weight of Housing (lbs)	1/8″ 1/8″ 10,000 23 5.0	1/4" 1/4" 10,000 23 5.0	1/8" None 10,000 23 5.0	1/4" None 10,000 23 5.0	1/8" 1/8" 10,000 32 6.0	1/4" 1/4" 10,000 32 6.0	1/8" None 10,000 32 6.0	1/4" None 10,000 32 6.0
Principle Dimensions: (inches) Center Of Port To Head Head Diameter Overall Length Element Removal Clearance	0.87 2.56 4.13 1.57	0.87 2.56 4.13 1.57	0.87 2.56 4.13 1.57	0.87 2.56 4.13 1.57	0.87 2.56 5.12 2.56	0.87 2.56 5.12 2.56	0.87 2.56 5.12 2.56	0.87 2.56 5.12 2.56
Maximum Temp. (400°F) Standard Viton O-Ring	GV110HP							
Filter Element Codes: (1) Disposable Element (Standard) <b>*Other Elements Available-</b> View Drawing	12-32-□	12-32-□	12-32-□	12-32-□	12-57-□	12-57-□	12-57-□	12-57-□
Drawing **For More Detail & Options**	<u>110HP</u>	<u>112HP</u>	<u>114HP</u>	<u>116HP</u>	<u>120HP</u>	<u>122HP</u>	<u>124HP</u>	<u>126HP</u>

Notes: (1) Replace  $\Box'$  with grade required, e.g. 12-32-50C

# 1,500 PSIG – Stainless Steel Housings

#### Features

- •316L Stainless Steel Construction
- •Pressure to 1,500 PSIG, Temperature to 900°F
- •3-Port Housings for Coalesing or Bypass Filtration
- •High Pressure Models Available
- •Available in Hastelloy, Monel, Etc.

### Applications

- CNG Filtration
- High Pressure Gas Production
- •Sample Process Analyzers
- Supercritical CO2
- •Food and Dairy Process

The 130 and 140 series of filters are ideal for use with gaseous and liquid sample process analyzers, as well as other demanding applications. The small internal volume, compact design, and positive O-ring sealing mechanism make them perfect for challenging applications. They are constructed entirely of 316L stainless steel and are free of welds to comply with NACE MR-01-75.

For applications with higher flows and larger ports, please review our Model 150/160 series.



Housing Model	130	132	134	136	140	142	144	146
Port Size (NPT) Drain Type (NPT) Maximum Pressure (psig) Internal Volume (cc) Weight of Housing (lbs)	1/4" 1/4" 1500 100 2.5	1/2" 1/4" 1500 100 2.5	1/4" None 1500 100 2.5	1/2" None 1500 100 2.5	1/4" 1/4" 1500 260 3.5	1/2" 1/4" 1500 260 3.5	1/4" None 1500 260 3.5	1/2" None 1500 260 3.5
Principle Dimensions: (inches) Center Of Port To Head Head Diameter Overall Length Element Removal Clearance	0.59 2.36 4.80 2.95	0.59 2.36 4.80 2.95	0.59 2.36 4.80 2.95	0.59 2.36 4.80 2.95	0.59 2.36 9.33 7.40	0.59 2.36 9.33 7.40	0.59 2.36 9.33 7.40	0.59 2.36 9.33 7.40
Maximum Temp. (400°F) Standard Viton O-Ring	GV130							
Filter Element Codes: (1) Disposable Element (Standard) *Other Elements Available- View Drawing	25-64-□	25-64-□	25-64-□	25-64-□	25-178-□	25-178-□	25-178-□	25-178-□
Drawing **For More Detail & Options**	<u>130</u>	<u>132</u>	<u>134</u>	<u>136</u>	<u>140</u>	<u>142</u>	<u>144</u>	<u>146</u>
Housing w/ PTFE Seals Maximum TempPTFE (400°F) Standard	<u>1305</u>	<u>1325</u>	<u>1345</u>	<u>1365</u>	<u>1405</u>	<u>1425</u>	<u>1445</u>	<u>1465</u>

Notes: (1) Replace 'a' with grade required, e.g. 25-64-50C

# High Pressure Mid-Size Housings – 3,000 PSIG

#### Features

- •316L Stainless Steel Construction
- •Compact Design
- •3,000 PSIG Rated
- •3 Port Housings for Coalescing or Bypass Filtration
- •Ideal for CNG Filtration

### Applications

- •Alternative Fuel Protection
- Cryogenic Production
- •Gas Plant Sampling

The 130HP and 140HP series of filters have a rugged, yet simple design that makes them a faultless solution for CNG applications as well as other high-pressure requirements. The small internal volume and compact design help eliminate carry-over during system startup. For systems with heavy liquid content a shorter element may be easily installed to increase reservoir space.

These housings are readily available with SAE ports and are ideal as second stage filters for CNG Fueling / Dispenser Stations. This series is offered in 1500, 3000, 6000, & 10000 PSIG ratings.

Housing Model	130HP	132HP	134HP	136HP	140HP	142HP	144HP	146HP
Port Size (NPT) Drain Type (NPT) Maximum Pressure (psig) Internal Volume (cc) Weight of Housing (lbs)	1/4" 1/4" 3000 110 4.5	1/2" 1/4" 3000 110 4.5	1/4" None 3000 110 4.5	1/2" None 3000 110 4.5	1/4" 1/4" 3000 270 7.5	1/2" 1/4" 3000 270 7.5	1/4" None 3000 270 7.5	1/2" None 3000 270 7.5
Principle Dimensions: (inches) Center Of Port To Head Head Diameter Overall Length Element Removal Clearance	0.59 2.52 5.04 2.95	0.59 2.52 5.04 2.95	0.59 2.52 5.04 2.95	0.59 2.52 5.04 2.95	0.59 2.52 9.53 7.40	0.59 2.52 9.53 7.40	0.59 2.52 9.53 7.40	0.59 2.52 9.53 7.40
Maximum Temp. (400°F) Standard Viton O-Ring	GV130HP							
Filter Element Codes: (1) Disposable Element (Standard) *Other Elements Available- View Drawing	25-64-□	25-64-□	25-64-□	25-64-□	25-178-□	25-178-□	25-178-□	25-178-□
Drawing **For More Detail & Options**	<u>130HP</u>	<u>132HP</u>	<u>134HP</u>	<u>136HP</u>	<u>140HP</u>	<u>142HP</u>	<u>144HP</u>	<u>146HP</u>

Notes: (1) Replace '□' with grade required, e.g. 25-64-50C



# Ultra High Pressure Mid-Size Housings – 6,000 PSIG

#### Features

- •316L Stainless Steel Construction
- •Compact Design
- •6,000 PSIG Rated
- •3 Port Housings for Coalescing or Bypass Filtration
- •Ideal for CNG Filtration

#### Applications

- •High Pressure Liquid Service
- Chemical Processing
- CNG Dispensers
- •Dry Seal Gas Panels

The 130VP and 140VP series of filters are ideal for use with gaseous and liquid process filtration. Their rugged, yet simple design makes them a faultless solution for CNG applications as well as other high-pressure requirements. For systems with heavy liquid content a shorter element may be easily installed to increase reservoir space.

These housings are readily available with SAE ports and are ideal as second stage filters for CNG Fueling / Dispenser Stations. This series is offered in 1500, 3000, 6000, & 10000 PSIG ratings.

Housing Model	130VP	132VP	134VP	136VP	140VP	142VP	144VP	146VP
Port Size (NPT) Drain Type (NPT) Maximum Pressure (psig) Internal Volume (cc) Weight of Housing (lbs)	1/4" 1/4" 6000 130 10.5	1/2" 1/4" 6000 130 10.5	1/4" None 6000 130 10.5	1/2" None 6000 130 10.5	1/4" 1/4" 6000 270 15.0	1/2" 1/4" 6000 270 15.0	1/4" None 6000 270 15.0	1/2" None 6000 270 15.0
Principle Dimensions: (inches) Center Of Port To Head Head Diameter Overall Length Element Removal Clearance	0.83 3.35 6.44 2.95	0.83 3.35 6.44 2.95	0.83 3.35 6.44 2.95	0.83 3.35 6.44 2.95	0.83 3.35 10.92 7.40	0.83 3.35 10.92 7.40	0.83 3.35 10.92 7.40	0.83 3.35 10.92 7.40
Maximum Temp. (400°F) Standard Viton O-Ring	GV130VP							
Filter Element Codes: (1) Disposable Element (Standard) *Other Elements Available- View Drawing	25-64-□	25-64-□	25-64-□	25-64-□	25-178-□	25-178-□	25-178-□	25-178-□
Drawing **For More Detail & Options**	<u>130VP</u>	<u>132VP</u>	<u>134VP</u>	<u>136VP</u>	<u>140VP</u>	<u>142VP</u>	<u>144VP</u>	<u>146VP</u>

Notes: (1) Replace  $\Box'$  with grade required, e.g. 25-64-50C



## Stainless Steel Process Filter Housings

#### Features

- •Filter Gases and Liquids
- •316L Stainless Steel Construction
- •1,500 PSIG / 400°F Standard
- •6,000 PSIG & Flanges Available
- •3 Port Housings for Coalescing
- •Particulate and Bypass Filtration

### Applications

- CNG Filtration
- •Blow Molding Equipment
- •Gas Production
- •Mechanical Seal Filter
- •LNG (Liquified Natural Gas) / NGL (Natural Gas Liquids) Filter

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 corrosionresistant materials. A choice of high efficiency borosilicate microfiber filter elements, which are inert to most liquids and gases, are also offered.



Housing Model	150	151	152	160	161	162
Port Size (NPT) Drain Type (NPT) Maximum Pressure (psig) Internal Volume (cc) Weight of Housing (lbs)	1" 1/4" 1500 1350 22.0	1 1/2" 1/4" 1500 1350 22.0	2" 1/4" 1500 1350 22.0	1" 1/4" 1500 2400 38.0	1 1/2" 1/4" 1500 2400 38.0	2″ 1/4″ 1500 2400 38.0
Principle Dimensions: (inches) Center Of Port To Head Head Diameter Overall Length Element Removal Clearance	1.18 4.33 15.04 9.72	1.85 4.33 15.04 9.72	1.61 4.57 15.83 9.72	1.18 4.33 24.49 19.37	1.85 4.33 24.49 19.37	1.61 4.57 25.27 19.37
Maximum Temp. (400°F) Standard Viton O-Ring	GV150	GV150	GV150	GV150	GV150	GV150
Filter Element Codes: (1) Disposable Element (Standard) <b>*Other Elements Available-</b> View Drawing	51-230-□	<b>51-230-</b> □	51-230-□	51-476-□	51-476-□	51-476-□
Drawing **For More Detail & Options**	<u>150</u>	<u>151</u>	<u>152</u>	<u>160</u>	<u>161</u>	<u>162</u>

Notes: (1) Replace 'a' with grade required, e.g. 51-230-50CS

## High Pressure Process Filter Housings

#### Features

- •Filter Gases and Liquids
- •316L Stainless Steel
- •3,000 PSIG / 400°F Standard
- •6,000 PSIG & Flanges Available
- •3 Port Housings for Coalescing
- •Particulate and Bypass Filtration

### Applications

- Chemical Processing
- •Aerospace Filtration
- Booster Compressors
- Water Injection
- Diaphragm Compressors

Our 150HP and 160HP 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 3000 PSIG rating covers the majority of gas and liquid applications.

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.



Housing Model	150HP	151HP	152HP	160HP	161HP	162HP
Port Size (NPT) Drain Type (NPT) Maximum Pressure (psig) Internal Volume (cc) Weight of Housing (lbs)	1" 1/4" 3000 1250 34.0	1 1/2" 1/4" 3000 1250 34.0	2" 1/4" 3000 1250 34.0	1" 1/4" 3000 2500 57.0	1 1/2" 1/4" 3000 2500 57.0	2″ 1/4″ 3000 2500 57.0
Principle Dimensions: (inches) Center Of Port To Head Head Diameter Overall Length Element Removal Clearance	1.50 4.72 14.29 9.72	2.05 5.12 15.47 9.72	2.05 5.12 15.47 9.72	1.50 4.76 23.97 19.37	2.05 5.12 25.16 19.37	2.05 5.12 25.16 19.37
Maximum Temp. (400°F) Standard Viton O-Ring	GV150HP	GV150HP	GV150HP	GV160HP/2	GV160HP/2	GV160HP/2
Filter Element Codes: (1) Disposable Element (Standard) *Other Elements Available- View Drawing	51-230-□	<b>51-230-</b> □	51-230-□	51-476-□	51-476-□	51-476-□
<b>Drawing</b> **For More Detail & Options**	<u>150HP</u>	<u>151HP</u>	<u>152HP</u>	<u>160HP</u>	<u>161HP</u>	<u>162HP</u>

Notes: (1) Replace '
'
with grade required, e.g. 51-230-50CS

# Ultra High Pressure Process SS Filters

#### Features

- •Filter Gases and Liquids
- •316L Stainless Steel
- •6,000 PSIG / 400°F Standard
- •Flanges Available
- •3 Port Housings for Coalescing

•Particulate and Bypass Filtration

#### Applications

- •Ultra High Pressure Gas Systems
- Booster Compressors
- Mechanical Seal Filter
- •Critical Process Filtration

Our 150VP and 160VP series of ultra 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 6,000 PSIG rating covers the majority of gas and liquid applications.

The VP version of our 150 and 160 series filters are built to order which allows us to provide a custom product for your specific application. In essence, we can provide differential port taps, vents and exact face to face dimensions if flanges are required. We even have the ability to produce a complete machined filter head with integral flanges. Please contact us at 1-800-311-5561 or sales@unitedfiltration.com for details and a quote.



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.

Housing Model	150VP	151VP	152VP	160VP	161VP	162VP
Port Size (NPT) Drain Type (NPT) Maximum Pressure (psig) Internal Volume (cc) Weight of Housing (lbs)	1" 1/4" 6000 1300 70.0	1 1/2" 1/4" 6000 1300 70.0	2" 1/4" 6000 1300 70.0	1" 1/4" 6000 2500 70.0	1 1/2" 1/4" 6000 2500 70.0	2″ 1/4″ 6000 2500 70.0
Principle Dimensions: (inches) Center Of Port To Head Head Diameter Overall Length Element Removal Clearance	1.97 5.91 17.09 9.72	1.97 5.91 17.09 9.72	2.16 5.91 17.09 9.72	1.97 5.91 26.58 19.37	1.97 5.91 26.58 19.37	2.16 5.91 26.58 19.37
Maximum Temp. (400°F) Standard Viton O-Ring	GV150VP	GV150VP	GV150VP	GV160VP/2	GV160VP/2	GV160VP/2
Filter Element Codes: (1) Disposable Element (Standard) <b>*Other Elements Available-</b> View Drawing	51-230-□	51-230-□	51-230-□	51-476-□	51-476-□	51-476-□
Drawing **For More Detail & Options**	<u>150VP</u>	<u>151VP</u>	<u>152VP</u>	<u>160VP</u>	<u>161VP</u>	<u>162VP</u>

Notes: (1) Replace 'a' with grade required, e.g. 51-230-50CS

