



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

## **HIGH PRESSURE COMPRESSED GAS FILTER FOR ALTERNATIVE FUELING STATIONS**

Our UHPC-SL Filter Series is specially designed for high pressure compressed gas coalescing filtration. These housings are rated for 5,700 PSIG and manufactured to ASME B31.3 specifications. The UHPC-SL Series is machined of carbon steel and completely coated with nickel/chrome plating for rust protection. The assemblies provide high efficiency filtration with a choice of three grades of robust coalescing filter cartridges which remove large quantities of liquids and solids, and being 90%+ void volume, give very long service life. A 1.25" reservoir area allows collection of large volumes of liquid before draining.



Our coalescing microfiber elements have integral inner and outer SS cages, with metal end caps for added strength, and a captured O-ring for a positive seal. The standard element seals are Buna-N. The housing seals are matched to the element seals. When ordering a non-standard seal for the housing, be sure to add the appropriate suffix to end of element part number; V =Viton, E =EPDM, KZ =Kalrez (i.e. SL38-172-70CSX3-V). Five-Layer Stainless Steel elements are also available in a variety of microns, for bulk contaminants.

### **Features:**

- Carbon Steel Housing With Nickel/Chrome Coating For Rust Protection
- 5,700 PSIG Maximum Pressure At 250°F
- Spring Loaded Positive Seal Elements Standard
- Large Capacity Reservoir
- SAE Porting Available

### **Applications:**

- High Pressure CNG Fuel Dispenser Service Filter
- Alternative Fuel Station Filter
- Booster Compressor Service Filter
- Storage Gas Filter

Liquid aerosols, primarily lube oil carryover are common in high pressure compression systems. Our reinforced microfiber coalescing elements are an ideal solution since the glass fiber is excellent at capturing submicron aerosols. The inner and outer stainless steel support cores along with the spring at the base of the cartridge provide protection from dynamic pressure swings.

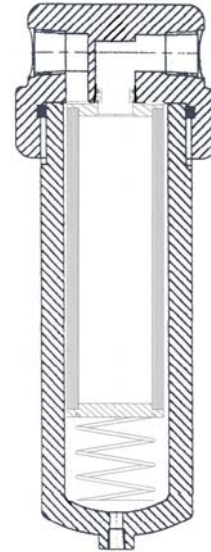
The SL series of spring loaded elements are constructed with inner and outer stainless steel cages to provide higher differential ratings. We recommend using our CS grade (all glass fiber) coalescing spring loaded elements for continuous removal of liquids without the loss of efficiency in natural gas service. For extreme applications we recommend our line of "RC" Reinforced Coalescing Cartridges. These cartridges consist of a borosilicate glass inner layer sandwiched between two, rayon/phenolic layers. The reinforced inner/outer layers provide excellent strength.



**SL-38-172-70CSX3**  
Coalescing Reinforced Caged Element

# HIGH PRESSURE COMPRESSED GAS FILTER FOR ALTERNATIVE FUELING STATIONS

- 100% Machined Housing
- Fuel Gas Filter
- Wellhead Control Panel Filter
- Spring Loaded Positive Seal Elements Standard
- 400 PSID With Stainless Steel Element



## TECHNICAL INFORMATION

Housing Model – 1" NPT, 1/4" NPT Drain

UHPC5-SL

Housing Model – SAE12, SAE6 Drain

UHPCSAE12-SL

Housing Model – SAE16, SAE6 Drain

UHPCSAE16-SL

Maximum Pressure (psig)	5700
Maximum Temperature (°F)	250
Internal Volume (cc) (without element)	775

Principle Dimensions: (inch)	
Center Of Port To Head	1.16
Head Diameter	4.34
Overall Length	12.125
Element Removal Clearance	9.375
Reservoir Depth	1.25

Weight of Housing (lbs)	26.0
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Standard Element Code (1)	SL38-172-□CSX3
Reinforced Element Code	SL38-172-RCX3
Stainless Steel Element (2) Available Microns (01, 03, 10, 25, 50, 100, 200)	SL-SS-51-172-□

Materials Of Construction:

Head& Bowl	Carbon Steel With Nickel/Chrome Coating
Internals	Carbon Steel
O-Ring (Standard)	Buna-N
Element	Stainless Steel, Aluminum, Microfiber, Buna-N, and Epoxy

Accessories:

Buna-N Seal Set	Standard	BNUHPC
EPDM Seal Set		GEUHPC
Kalrez Seal Set		KZUHPC
Viton Seal Set		GVUHPC
Mounting Bracket		MB150 w/M10 x 5/8" Mounting Holes

## (5) FLOW RATE IN SCFM FOR ABOVE ASSEMBLIES WITH GRADE 50CSX3 (3) or 70CSX3 (4) with 2 PSID

Air Line Pressure  
(PSIG)

UHPC Series

	50CSX3	70CSX3	RCX3
500	406	522	444
1500	1194	1536	1305
3000	2376	3057	2598
5000	3952	5085	4322
5700	4503	5794	4925

- Notes:
- (1) Replace "□" with grade required, e.g. SL38-172-70CSX3
  - (2) Replace "□" with micron required, e.g. SL-SS-51-172-01
  - (3) Flow rates for Grade 50CS rated at 99.99% against 0.01 micron
  - (4) Flow rates for Grade 70CS and RC rated at 90+% against 0.01 micron
  - (5) Estimated flow rates in air