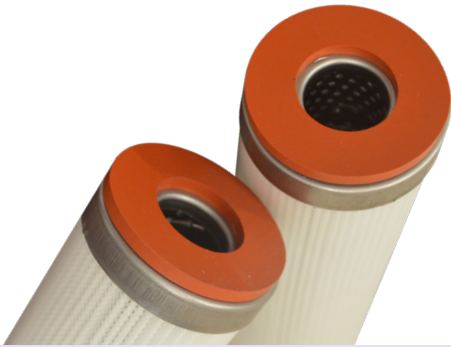




Graver Technologies

FILTRATION | SEPARATION | PURIFICATION



# GSS™ Series Filter Cartridges

## *High Temperature Glass Fiber Cartridges*

### Product Specifications

**Media:** Borosilicate Microfiberglass  
with Acrylic Binder

**Core/Cage:** 304 SS

**Support Layers:** Polyester

**End Caps:** 304 SS with epoxy bond

**Gaskets/O-Rings:**

Buna-N, EPDM, Silicone, Teflon, Viton

**Micron rating:**

0.2, 0.45, 1, 10, 30 µm

### Dimensions

**Nominal lengths:**

9.75" 10" 20" 30" 40"

24.8 25.4 50.8 76.2 101.6 cm

**Outside diameter:** 2.55" (6.86 cm)

**Inside diameter:** 1.0" (2.54 cm)

### Operating Parameters

**Maximum operating**

**temperature:** 250°F (121°C)

**Maximum differential pressure:**

75 psid @ 250°F (5.2 bar @ 121°C)

**Maximum reverse pressure:**

30 psid @ 70°F (2.0 bar @ 21°C)

**Recommended change-out pressure:**

35 psid (2.4 bar)

This high efficiency, economical filter element is constructed of pleated Borosilicate Microfiberglass media to combine excellent flow rates with exceptional service life. The 304 stainless steel core and end caps of the GSS filter cartridge provide excellent thermal tolerance for higher temperature applications. The 90% nominally-rated borosilicate microfiber depth matrix has a natural positive charge that aids in the retention of negatively charged particles, and combined with the depth characteristics of glass media, works well in the removal of both deformable and non-deformable particles. The GSS filter cartridge is an economical solution for both liquids and gases in a wide variety of filtration applications.

### FEATURES & BENEFITS

- 304 stainless steel center core and end caps — allows for high temperature applications
- Micron ratings from 0.2 to 30 µm — Broad application range
- Uniform pore size — High removal efficiency
- High surface area — High flow capability and dirt holding capacity
- Long service life — Minimizes maintenance costs
- Small diameter fibers — High flow rates at low pressure drops

### TYPICAL APPLICATIONS

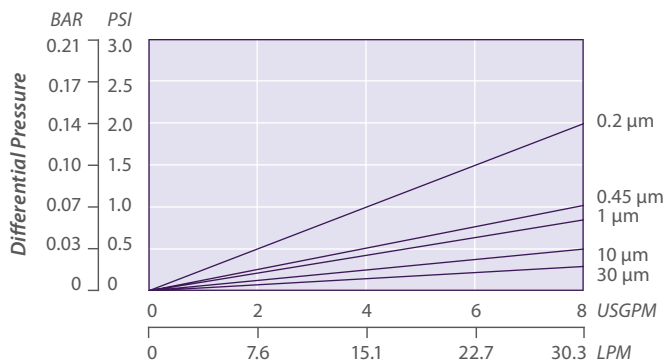
- Petrochemicals
- Injection Wells
- Discharge Water
- Boiler Water
- Oil & Gas
- Lube Oil

## GSS NOMENCLATURE INFORMATION

Filter Type	Retention Rating (microns)		Nominal Length (inches)		End Configuration	Gasket or O-Ring
GSS Series	0.2	10	-9.75	-29.25	P Double Open End	B Buna-N
	0.45	30	-10	-30		E EPDM
	1		-19.5	-39		S Silicone
			-20	-40		T Teflon (gaskets)
				V Viton		
<b>Example: GSS 1-10PB</b>						
GSS	1		-10		P	B

### GSS FLOW RATE

**Typical Flow Rate Clean Water at Ambient Temperature  
(per 10" cartridge)**



*For liquids other than water, multiply pressure drop by the fluid viscosity in centipoise*

### REMOVAL EFFICIENCY

Beta Ratio Efficiency	Beta 10	Beta 20	Beta 100	Beta 1000	Beta 5000
0.2 μm	90%	95%	99%	99.9%	99.98%
0.45 μm	0.2	0.3	0.6	0.8	1.0
1 μm	0.45	0.6	0.8	1.8	2.0
10 μm	1.0	1.3	2.0	3.5	4.0
10 μm	10.0	12.0	15.0	17.0	18.0
30 μm	30.0	35.0	38.0	42.0	45.0

$$\text{Beta Ratio} = \frac{\text{Upstream particle counts}}{\text{Downstream particle counts}}$$

The micron ratings shown at various efficiency and beta ratio value levels were determined through laboratory testing, and can be used as a guide for selecting cartridges and estimating their performance. Under actual field conditions, results may vary somewhat from the values shown due to the variability of filtration parameters.

Testing was conducted using the single-pass test method, water at 2.5 gpm/10" cartridge. Contaminants included latex beads, coarse and fine test dust. Removal efficiencies were determined using dual laser source particle counters.

#### FOR MORE INFORMATION

Customer Service/Technical Support: 1-888-353-0303  
 Europe (UK): +44-1424-777791 | China: +86-21-5238-6576  
 Asia: +65-9635-7690

GTX-368 8-20



#### DISTRIBUTED BY

All information and recommendations appearing in this bulletin concerning the use of products described herein are based on tests believe to be reliable. However, It is the user's responsibility to determine the suitability for his own use of such products. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by Graver Technologies as to the effects of such use or the results to be obtained. Graver Technologies assumes no liability arising out of the use by others of such products. Nor is the information herein to be construed as absolutely complete, since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations. GSS is a trademark of Graver Technologies, LLC.



Graver Technologies | 200 Lake Drive, Glasgow, DE 19702 | 302-731-1700 | 800-249-1990  
 Fax: 1-302-369-0938 | info@gravertech.com | www.gravertech.com

A member of The Marmon Group—A Berkshire Hathaway Company