



Graver Technologies

Filtration | Separation | Purification

## GSTACK Series Filter Modules

### Lenticular Depth Filter Modules

GStack Series depth filter modules are designed in a lenticular format for fluid clarification applications. Consisting of either cellulose with diatomaceous earth or cellulose with perlite, a formulation is available to achieve excellent particle and haze removal. Grades are also available with water absorbing capability, carbon, high efficiency carbon, or that meet pharmaceutical requirements.

### Features–Benefits

- Proven performance cellulose based filter sheet media
- Choice of DE or perlite filter aids
- Nominal retention ratings from 0.25 to 15 microns
- High efficiency due to positive zeta potential
- Exceptional mechanical strength
- Choice of flat gasket seal or double o-ring seal
- Choice of economical stainless steel bands or rigid molded polypropylene core
- Special water absorbing component is available in the 10 and 15 micron grades
- Steam sterilizable
- Media grade stamped on sheets for easy identification

### Product Specifications

Media/Microns (nominal):

Cellulose/DE -	0.25, 0.3, 0.5, 0.8, 1.0, 2.5, 5, 10
Cellulose/Perlite -	0.5, 1.0, 2.5, 5, 10, 15
Water absorbing -	10, 15
Carbon -	M 35 - Standard M 55 - High Efficiency

Hardware:

End caps & cell edge seals -	Polypropylene
Center support -	Stainless steel bands or polypropylene core

O-Rings:	Buna-N, Silicone, EPDM, Viton, Teflon
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Filtration Area:

12"/9 cell -	10.3 sq ft (0.96 sq m)
12"/16 cell -	18.5 sq ft (1.7 sq m)
16"/16 cell -	40 sq ft (3.7 sq m)
12"/14 cell water absorbing grade -	16.2 sq ft (1.5 sq m)

### Dimensions

Nominal diameter: 12" or 16" (287 mm, 405 mm)

Height: 14/16 cell: 10 7/8" (276 mm) 9 cell: 7 9/16"

### Operating Parameters

Maximum operating temperature: 176°F (80°C)

Maximum differential pressure: 35 psid (2.4 bar)

Steam in place: 266°F (130°C) for 30 minutes at 25 psid maximum (1.7 bar)

Hot water sanitization: 176°F (80°C) for 30 minutes at up to 14 psid (1 bar)



### Certifications

**USP Class V** - Meets USP Class V Biological Test for Plastics.

**FDA Listed Materials** - All Materials comply with FDA Title 21 of the Code of Federal Regulations Section 177.2260, as applicable for food and beverage contact.

### Typical Applications

- Wine/Beer
- Sweeteners
- Silicone oils
- Cosmetics
- Adhesives
- Pharmaceuticals
- Flavors/Fragrances
- Edible oils
- Distilled spirits

## GSTACK Nomenclature Information

<b>GS</b>	<b>2</b>	<b>16</b>	<b>D2.5</b>	<b>P</b>	<b>C</b>	<b>B</b>
<b>Filter Type</b> GSTACK Series Filters		<b>Cells</b> 16 14 (W grade) 09			<b>Core/End Style</b> <b>S</b> SS bands <sup>2,3</sup> <b>C</b> PP core/flat gasket <b>O</b> PP core/O-Ring	<b>Gasket or O-Ring</b> <b>S</b> Silicone <b>B</b> Buna-N <b>E</b> EPDM <b>V</b> Viton <b>T</b> Teflon
<b>Diameter</b> <b>2</b> 12" <b>6</b> 16"						
<b>Media</b>				<b>Grade</b>		
<u>Cellulose/DE</u>	<u>Cellulose</u>	<u>Water</u>	<b>Blank</b> Industrial			
	<u>Perlite</u>	<u>Absorbing</u> <sup>1</sup>	<b>P</b> Pharmaceutical			
D0.25		W10				
D0.3	L0.5	W15				
D0.5	L1					
D0.8	L2.5					
D1	L5	<u>Carbon</u>				
D2.5	L10	M 35				
D5	L15	M 55				
D10						

Example: GS 216D2.5PCB

1. Water grade is only available in 12" with SS bands.
2. Available with 12" only.
3. Not available with carbon.

## GSTACK Flow Rate

Media Grade			Nominal Retention Rating (microns)	Practical Water Flow Rate (GPM)		
Cellulose/DE	Cellulose/Perlite	Speciality		12", 16 cell	16", 16 cell	Speciality
D0.25			0.25 - 0.5	1 - 2	2 - 4	
D0.3			0.3 - 0.5	2 - 3	4 - 6	
D0.5	L0.5		0.5 - 0.8	3 - 4	6 - 8	
D0.8			0.8 - 2	4 - 5	8 - 10	
D1	L1	M 55	1.0 - 3.0	6 - 7	12 - 14	6 - 7
D2.5	L2.5		2.5 - 4	6 - 10	13 - 21	
D5	L5	M 35	5 - 12	20 - 26	43 - 56	15 - 18
D10	L10	W10	10 - 25	25 - 35	50 - 60	18
	L15	W15	15 - 40	40 - 50	60 - 70	18

NOTE: Flow rate applies to water at 70°F at 1 psid clean differential. For different fluid characteristics, testing is highly recommended for proper sizing.

### For more information

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