

Product PN 1213160, 1212937, 1212978, 1213155, 1213158, 1213161

Mod. 984

Description Small PTFE (hydrophobic) Capsule Filters

Rev. 02

Calyx

Small PTFE (hydrophobic) Capsule Filters



PRODUCT DESCRIPTION

Hydrophobic PTFE Capsule Filters Capsule Size: small (EFA 0.83 ft²)

Product Code	Pore Size (µm)	Adaptors	Housing Polymer	Sterile
1213160	0.1	RR	polypropylene	No
1212937	0.2	WW	polypropylene	No
1212978	0.2	YY	polypropylene	No
1213155	0.2	MM	polypropylene	No
1213158	0.2	RR	polypropylene	No
1213161	0.45	RR	polypropylene	No

Adaptors: R= ¼ in NPT male; W= ½ in NPT Male; Y= 1.5 in sanitary flange; M= 3/8 in hose barb

EFA is Effective Filtration Area

MANUFACTURER NAME

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eMail: CustomerCareGVSLs@gvs.com - Website: www.gvs.com

INTENDED USE / APPLICATION

Filtration of aggressive chemicals or solvents. Particle removal or filtration of air/gases and vent applications.

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MATERIALS

Description	Details
Filter media	PTFE (hydrophobic)
Filter Media Color	White
Frame/Housing Polymer	Polypropylene
Media Support	Polypropylene
Frame/Housing Color	White
Core/Outer cage	Polypropylene
End cap	Polypropylene
Sealing Method	Thermal bonding

GVS Filter Technology capsules contain no glues or adhesives.

PRODUCT CHARACTERISTIC

Physical/Mechanical:

Diameter: 3.5" (9 cm)

Dimension Table:

Capsule Size	Effective Filtration Area	Adaptors	Length ¹
Small	0.83 ft ² (770 cm ²)	WW	4.3" (11 cm)
		YY	4.7" (12 cm)
		MM	4.0" (10 cm)
		RR	3.5" (9 cm)

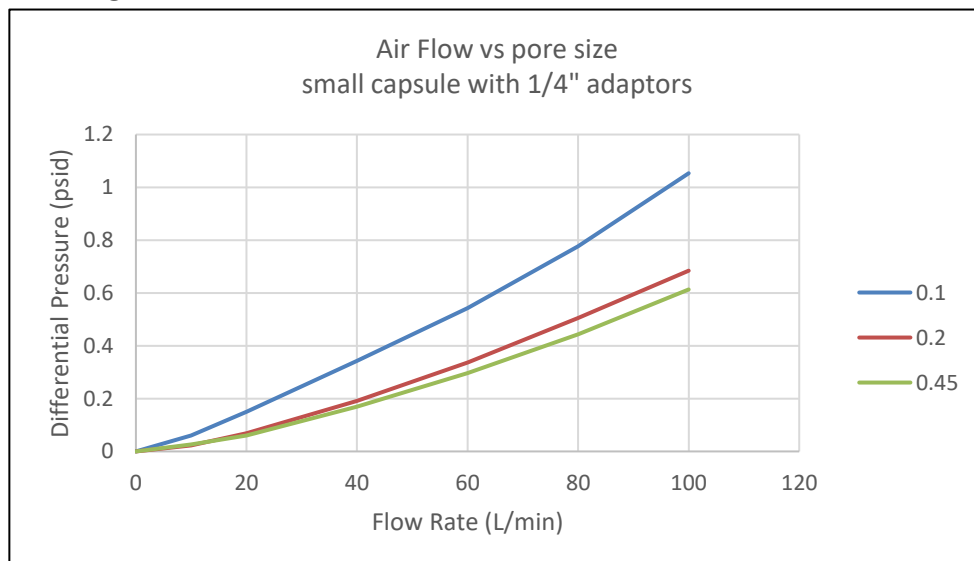
¹ Varies with connection style

Adaptors: W= ½ in NPT Male ; Y= 1.5 in sanitary flange; M= 3/8 in hose barb; R= ¼ in NPT male

Operational Limits

Maximum Operational Pressure	80 psi (5.5 bar) @ 70°F (21°C) in liquid 55 psi (3.8 bar) @ 70°F (21°C) in gas
Maximum Differential Pressure	60 psi (4.1 bar) @ 70°F (21°C)
Maximum Operating Temperature	110°F (43°C) @ ≤ 30 psi (2.1 bar) Operating Pressure

AIR FLOW



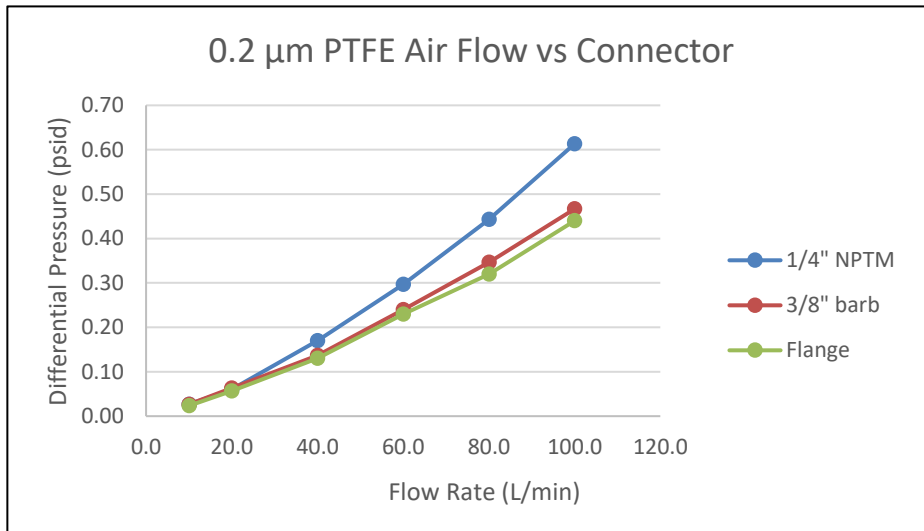
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	<div><p>0.2 μm PTFE Air Flow vs Connector</p><table><caption>Approximate data points from the graph</caption><thead><tr><th>Flow Rate (L/min)</th><th>1/4" NPTM (psid)</th><th>3/8" barb (psid)</th><th>Flange (psid)</th></tr></thead><tbody><tr><td>20.0</td><td>0.05</td><td>0.05</td><td>0.05</td></tr><tr><td>40.0</td><td>0.15</td><td>0.12</td><td>0.10</td></tr><tr><td>60.0</td><td>0.30</td><td>0.22</td><td>0.20</td></tr><tr><td>80.0</td><td>0.45</td><td>0.35</td><td>0.32</td></tr><tr><td>100.0</td><td>0.62</td><td>0.48</td><td>0.45</td></tr></tbody></table></div>	Flow Rate (L/min)	1/4" NPTM (psid)	3/8" barb (psid)	Flange (psid)	20.0	0.05	0.05	0.05	40.0	0.15	0.12	0.10	60.0	0.30	0.22	0.20	80.0	0.45	0.35	0.32	100.0	0.62	0.48	0.45
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<div>INSTRUCTIONS</div> <div>WARNINGS</div>	<table><tr><th colspan="2">Operational Limits</th></tr><tr><td>Maximum Operational Pressure</td><td>80 psi (5.5 bar) @ 70°F (21°C) in liquid 55 psi (3.8 bar) @ 70°F (21°C) in gas</td></tr><tr><td>Maximum Differential Pressure</td><td>60 psi (4.1 bar) @ 70°F (21°C)</td></tr><tr><td>Maximum Operating Temperature</td><td>110°F (43°C) @ ≤ 30 psi (2.1 bar) Operating Pressure</td></tr></table>	Operational Limits		Maximum Operational Pressure	80 psi (5.5 bar) @ 70°F (21°C) in liquid 55 psi (3.8 bar) @ 70°F (21°C) in gas	Maximum Differential Pressure	60 psi (4.1 bar) @ 70°F (21°C)	Maximum Operating Temperature	110°F (43°C) @ ≤ 30 psi (2.1 bar) Operating Pressure																
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<div>STERILIZATION</div>	<p>When applicable, sterile capsule filters are gamma irradiated (dose range is 25-40 kGy). Non-sterile filters may be autoclaved at 121°C for up to a maximum of five, 30 minute cycles. The capsule filters must not be in line steam sterilized.</p>																								
<div>APPLICABLE STANDARDS AND REGULATIONS</div>	<div><div><div>USP Bio-safety</div><div>The materials used to construct these capsule filters meet the test criteria for USP Plastic Class VI.</div></div><div><div>Quality control</div><div>This product is manufactured in an ISO 9001 registered facility.</div></div><div><div>FDA and EU 10/2011Compliance</div><div>GVS Filter Technology PTFE capsules are food compliant (FDA/EU); however as restrictions may apply depending on final application, it is end user's responsibility to determine full compliance.</div></div></div>																								
<div>PACKAGING AND LABELLING</div>	<p>Capsule label includes Operating limits, part number, and lot number. Primary packaging: capsule is sealed in a poly bag</p> <p>Secondary packaging will be to place the completed poly bag/capsule into a labeled box and shrink wrap the box.</p>																								
<div>CERTIFICATE OF COMPLIANCE</div>	<p>The Quality management system is in compliance with ISO 9001.</p> <p>When applicable, GVS NA will provide the CoC with item number, lot number and expiration date.</p>																								

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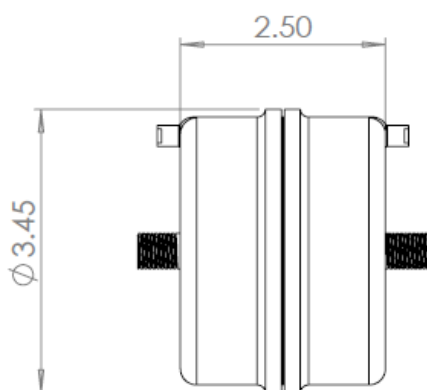
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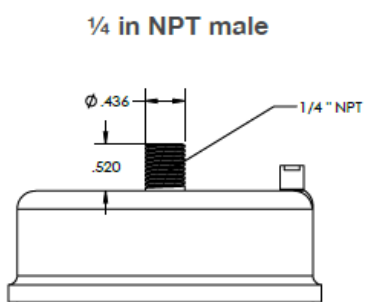
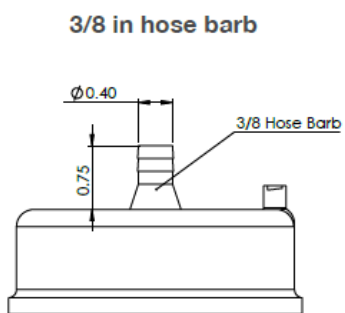
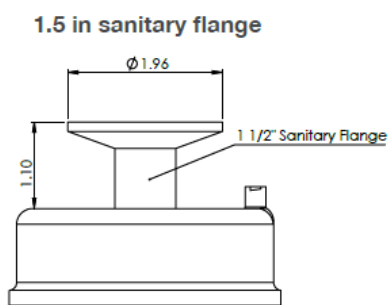
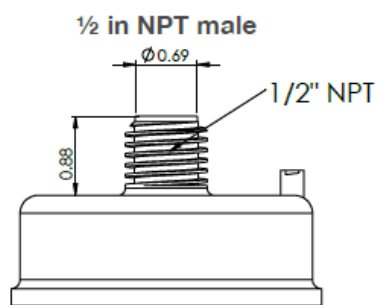
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DRAWING

Example drawing for reference (dimensions in inches):
Small Housing:



Adaptors: W= 1/2 in NPT Male ; Y= 1.5 in sanitary flange; M= 3/8 in hose barb; R= 1/4 in NPT male



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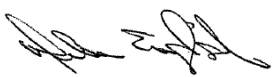
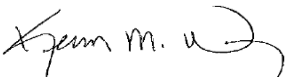
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PERFORMANCE REQUIREMENTS	Acceptance Requirement					Sampling Plan	
	1	Water Intrusion Integrity Test	Product Code	Pore Size (µm)	Water Intrusion Test Pressure (psi)	Max WI Rate (ml/min)	100%
			1213160	0.1	40	7	
			1212937	0.2	30	7	
			1212978				
			1213155				
			1213158				
			1213161	0.45	20	1.4	
	2	Burst testing	All part numbers		@ 95 psi	100%	

This material specification describes the properties of product above indicated.

This document contains general requirements, material description, drawing references, defect specification, biological material requirements.

REVISIONS AND APPROVALS:

DATE	REV.	REASON FOR CHANGE	ISSUED AND CONTROLLED BY: (name /function and signature)	APPROVED BY: (name /function and signature)
March 2, 2021	0	Initial Release	Debra English Manager Biochemistry Applications 	Kevin Wrigley Director, Quality 

CustomerApproval:



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We accept this material specification as a part of the agreed terms of delivery

Company name _____

Approved by: _____
(Name, Function) (Signature)

Date _____
(Company stamp)

Please send back this document signed for approval. If we will not receive this specification signed, we consider the first order placed as implicit approval.