



# P-GSL N

## STERILE AIR, STEAM AND LIQUID FILTRATION

Compressed Air & Process Filtration

### HIGHER CAPACITIES AND LONGER FILTER LIFE

Improved steam quality ensures increased efficiency of the entire process and longer service life of the filters to be sterilized. The Donaldson P-GSL N is a regenerable pleated, stainless steel filter element that captures contaminants such as particles, abrasion of valves and sealings, and rust. The P-GSL N can be used in higher capacity applications where low pressure drop and reduced space are critical.

All components meet the USA requirements for Food Contact Use in accordance with the Code of Federal Regulations (CFR) Title 21, and the EU requirements for Food Contact Use according to EC/1935/2004. The filter element is manufactured in accordance with these manufacturing requirement, has no migration of filter media, and is non-fiber releasing.



### FEATURES & BENEFITS

- Filter down to 0.01µm in air/saturated steam
- Pleated, stainless steel media
- Low pressure drop
- Regenerable by back-flushing or ultrasonic cleaning
- Double O-ring
- Reduced operational risk with a 5µm element – users know that their steam meets the 3-A guidelines for culinary steam and approved for food contact use (according to CFR Title 21 and 1935/2004/EC)
- Higher dirt holding capacity at a low pressure drop
- Reduced operating costs allowing for energy savings
- Longer service life which leads to a lower cost of ownership

### COMMON INDUSTRIES

- Processed Food
- Dairy
- Pharmaceutical
- Beverage
- Chemical
- Fermentation

### MATERIAL COMPLIANCE

All components of the P-GSL N filter element are FDA listed for food contact use in the Code of Federal Regulations (CFR), Title 21. All products have been inspected and released by Quality Assurance as meeting the requirements. All filters are fabricated without the use of binders, adhesives, additives or surface-active agents.

<b>Filter matrix</b>	304 Stainless Steel	<b>Filtration Surface</b>	1.9 ft <sup>2</sup> per 9.8 in element 10/30
<b>Support</b>	304 Stainless Steel	<b>Temperature Range</b>	-68°F to 410 °F > 300°F special o-rings are required
<b>End Caps</b>	304 Stainless Steel	<b>Maximum Differential Pressure (Flow direction = outside to inside)</b>	145 psid, independent of the system pressure or temperature
<b>O-rings</b>	EPDM (alternate O-rings available upon request)		

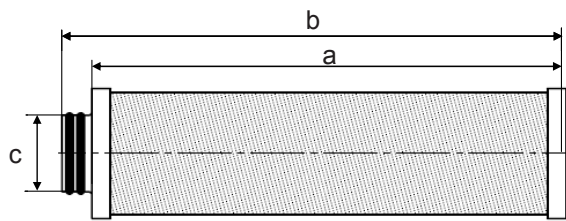
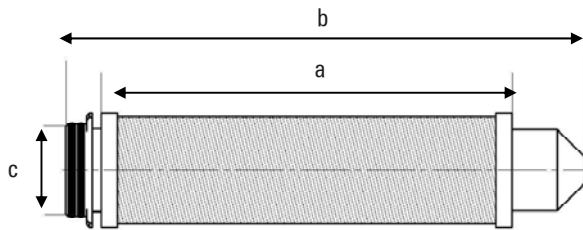
## SPECIFICATIONS & DIMENSIONS

Retention Rates (Air, 68 °F, 155 scfm, 10/30 Element)			
Pore Size (µm)	98% (µm)	>99.9% (µm)	Thickness (cm)
1	0.1	< 1	0.1
5	1	<5	0.04
25	15	25 µm	0.02

Retention Rates (Air, 250 °F, 53 scfm, 10/30 Element)			
Pore Size (µm)	98% (µm)	>99.9% (µm)	Thickness (cm)
1	0.1	< 1	0.1
5	1	<5	0.04
25	15	25 µm	0.02

Retention Rates (Water, 68 °F, 10/30 Element)						
	1 µm	5 µm	25 µm	50 µm	100 µm	250 µm
Nominal (~ 98%)	1 µm (~99.7%)	4 µm	15 µm	40 µm	60 µm	200 µm
Absolute (> 99.98%)	1.5 µm	5 µm	25 µm	60 µm	100 µm	250 µm

Fractional Efficiency P-GSL N, 1µm, Air/Saturated Steam						
Fractional Efficiency [%]						
Pore Size (µm)	0.01 µm	0.07 µm	0.1 µm	0.2 µm	0.3 µm	0.4 µm
1	99.99	99.65	98.69	99.08	99.49	99.74



CODE 7			
Filter Size	Dimensions (in)		
	a	b	c
05/3	5.04	5.91	2
10/3	10.04	10.91	2
20/3	19.61	20.47	2
30/3	29.29	30.16	2

UF – Push-in End Connection				
Filter Size	Dimensions (in)			CF
	a	b	c	
03/10	2.99	3.42	1.18	0.17
04/10	4.09	4.53	1.18	0.26
04/20	4.09	4.64	1.46	0.26
05/20	5.04	5.67	1.46	0.35
07/20	4.25	7.64	1.46	0.52
03/30	2.99	3.62	2.40	0.21
05/30	5.04	5.67	2.40	0.44
07/30	7.08	7.71	2.40	0.67
10/30	10	10.63	2.40	1.00
15/30	15	15.63	2.40	1.57
20/30	20	20.63	2.40	2.13
30/30	30	30.63	2.40	3.27
10/50	10	10.63	3.31	1.45



Donaldson Company, Inc.  
 Compressed Air and Process Filtration  
 PO Box 1299  
 Minneapolis, MN  
 55440-1299 U.S.A.

Tel 800-543-3634 (USA)  
 Tel 800-343-3639 (within Mexico)  
 Fax 952-885-4791  
 processfilters@donaldson.com  
 donaldsonprocessfilters.com



**P-GSL N Sterile Air, Steam & Liquid Filtration (08/14)**

© 2013 Donaldson Co., Inc. All Rights Reserved. Information in the document is subject to change without notice.  
 {Contains Donaldson proprietary technology.}