



MAIN FEATURES & BENEFITS

- High dirt holding capacity at low differential pressure and high flow rate
- Regenerable by Back-flushing or ultrasonication
- For the filtration of air, gas & steam
- Down to 0.01 µm in saturated steam
- Approved for food contact use acc. to CFR Title 21 & EC/1935/2004

PRODUCT DESCRIPTION

The LifeTec™ (P)-GSL N filter consists of a regenerable pleated stainless-steel filter matrix in a stainless-steel cartridge. The retention rate extends from 1 µm to 25 µm.

The LifeTec™ (P)-GSL N filter retains contaminants, such as particles, abrasion of valves and sealings as well as rust. An improved steam quality ensures longer service life of the filters to be sterilized and increases the efficiency of the entire process. The LifeTec™ (P)-GSL N filter element offers the possibility of a particularly economic filtration, since the filter medium can be regenerated by ultrasonic bath or by back-flushing. This is especially essential at high particle loads. The pleated stainless-steel filter matrix ensures a very low differential pressure even at high contamination loads.

The heavy-duty construction of the LifeTec™ (P)-GSL N filter is designed to withstand a maximum differential pressure up to 10 bar. The filter may also be used in a temperature range of -20°C up to 210°C for the filtration of air, gases or liquids. For temperatures higher than 180°C special O-Rings are required.

All components of the version with welded end caps meet the USA requirements for Food Contact Use in accordance

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

INDUSTRIES



- Dairies



- Food



- Breweries



- Pharmaceutical



- Chemical

PRODUCT SPECIFICATIONS

Features	Specifications
Filtration surface	0,18 m ² per 10" element (250 mm) For other element sizes see correction factor CF in section "Available end cap configurations"
Temperature Range	-20°C (-4°F) bis +210°C (+410°F) > 180°C (356°F) special O-rings are required
Maximum Differential Pressure (Flow: Outside to Inside)	10 bar (145 psid), independent of the system pressure or temperature

APPLICATIONS

Typical applications for LifeTec™ (P)-GSL N filter elements include:

Filtration of Steam

- Breweries
- Chemical industry
- Pharmaceutical industry
- Food and beverage
- Aseptic packaging
- Electronic industry
- Dairy industry
- Plastic industry

Filtration of gas

- Compressed air
- Carbon dioxide
- Nitrogen
- Tank Ventilation
- Highly aggressive gases

MATERIAL DECLARATION (US & EU)

All components of the LifeTec™ (P)-GSL N filter element are FDA listed and are suitable for food contact according to Code of Federal Regulations (CFR) Title 21. Donaldson Filtration Deutschland GmbH hereby certifies that the materials and articles used, which may come into contact with food when used, as intended conform to the general requirements of Regulation (EC) No. 1935/2004.

Filter Materials		CFR Title 21
Filter Matrix	Stainless Steel 1.4301	211.65
Support	Stainless Steel 1.4301	211.65
End caps	Stainless Steel 1.4301	211.65
O-Rings	EPDM	177.2600
Alternative O-Rings	Fluoraz	177.2600
	Silicone	177.2600
	PTFE über Silikon	177.1550
	PTFE über Viton	177.1550

QUALITY ASSURANCE

All products have been inspected and released by Quality Assurance as having met the following requirements:

- All filters are fabricated without the use of binders, adhesives, additives or surface-active agents
- A factory certificate (2.2) according to DIN EN 10204 is available on request.

RETENTION RATES

AIR, 20 °C, 90 NM³/H, 10/30 ELEMENT

Pore Size	Retention Rate		Min. media thickness
	98%	>99.9%	
1 µm	0.1 µm	< 1	0.37 mm
5 µm	1 µm	< 5	0.35 mm
25 µm	15 µm	25	0.17 mm

SATURATED STEAM, 121°C, 90 KG/H, 10/30 ELEMENT

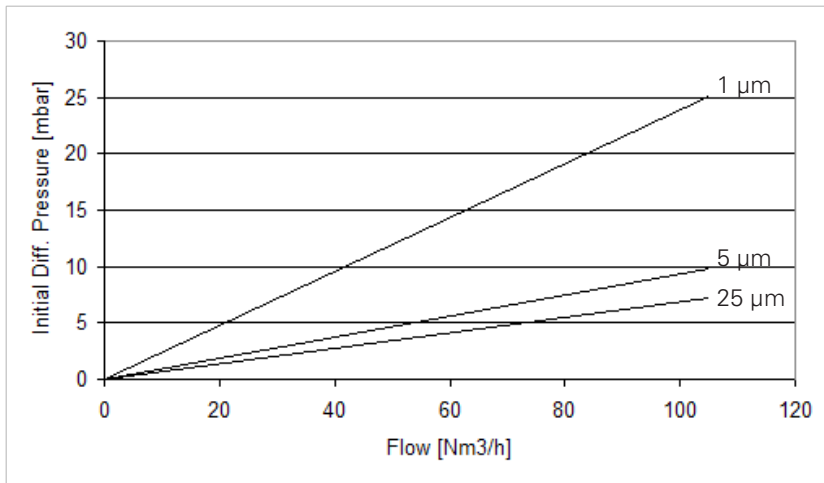
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FRACTIONAL EFFICIENCY

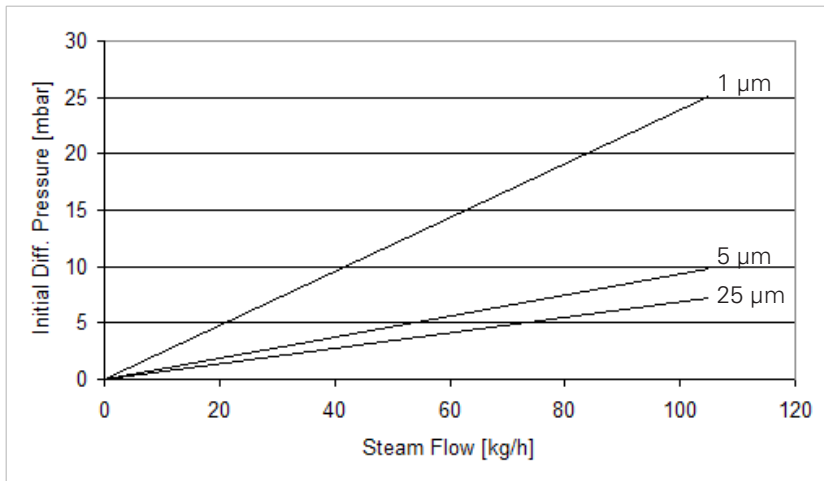
LIFETEC™ (P)-GSL N 1 µM, AIR / SATURATED STEAM

Pore Size of element	Particle Size	Fractional Efficiency
1 µm	0.01 µm	99.99 %
	0.07 µm	99.65 %
	0.1 µm	98.69 %
	0.2 µm	99.08 %
	0.3 µm	99.49 %
	0.4 µm	99.74 %

FLOW CHARACTERISTICS



LifeTec™ (P)-GSL N
10/30, Air, 20°C, 1 bar absolute



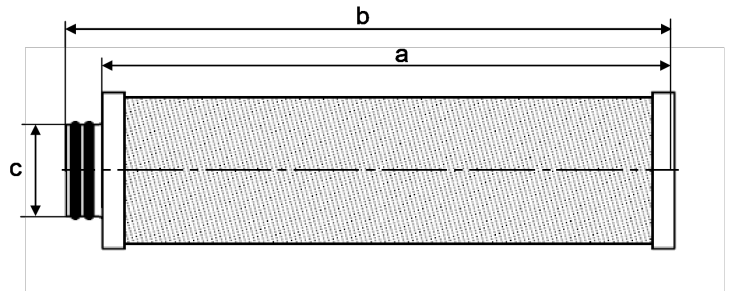
LifeTec™ (P)-GSL N
10/30, saturated steam, 121°C, 2 bar absolute

AVAILABLE END CAP CONFIGURATIONS

Dimensions uf-plug connection							
Size	a		b		c*		CF**
	mm	inch	mm	inch	mm	inch	
03/10	76	2.99	87	3.42	30	1.18	0.17
04/10	104	4.09	115	4.53	30	1.18	0.26
04/20	104	4.09	118	4.64	37	1.46	0.26
05/20	128	5.04	142	5.59	37	1.46	0.35
07/20	180	7.08	194	7.64	37	1.46	0.52
03/30	76	2.99	92	3.62	61	2.40	0.21
05/30	128	5.04	144	5.67	61	2.40	0.44
07/30	180	7.08	196	7.71	61	2.40	0.67
10/30	254	10	270	10.63	61	2.40	1.00
15/30	381	15	397	15.63	61	2.40	1.57
20/30	508	20	524	20.63	61	2.40	2.13
30/30	762	30	778	30.63	61	2.40	3.27
10/50	254	10	270	10.63	89	3.50	1.45

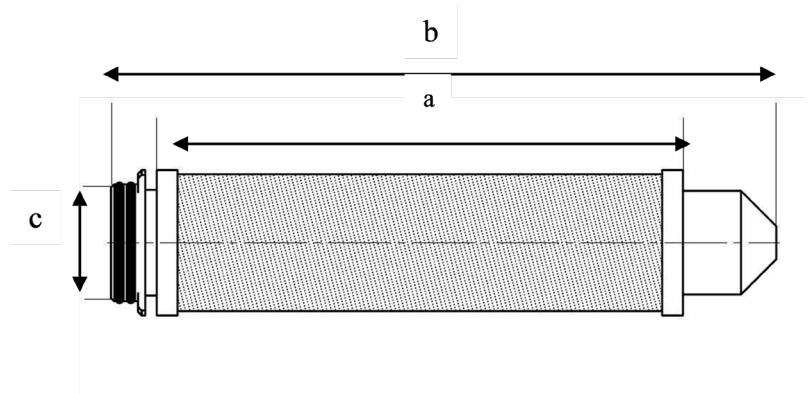
* Uf-plug connection with double-o-ring

** Correction factor filtration surface



Dimensions Code 7 connection							
Size	a		b		c		
	mm	inch	mm	inch	mm	inch	
5"	128	5.04	192	7.56	56.5	2.22	
10"	255	10.04	319	12.56	56.5	2.22	
20"	498	19.61	542	21.34	56.5	2.22	
30"	744	29.29	802	31.57	56.5	2.22	

CODE 7: 2 x 226 o-rings, bayonet 2 locking tabs, locating fin



Other end cap configurations on request

- For more information, please contact your Donaldson Sales Engineer and visit our website at www.donaldson.com!