

The Donaldson LifeTec™ PT N filter element is a sterile grade, pleated, high performance ePTFE membrane filter, featuring Tetratex™ media. These elements offer excellent performance in critical compressed air and technical gas applications within the processed food and beverage industry. With this exceptional media and polypropylene construction, these elements provide:

- Tetratex ePTFE media is hydrophobic and features a highly porous structure for high flow rates and low pressure drop.
- Log reduction value greater than 7 for 0.2 micron and larger particles
- Thermally welded construction for extraordinary durability and low extractables
- Compliance with EU and USA requirements for food contact use under 1935/2004/EC and CFR Title 21
- Compliance with USP Class VI plastics biological reactivity tests

The LifeTec™ PT N is a premier option for supporting product and process integrity in the processed food and beverage industry.



LifeTec™ PT N

FEATURES	BENEFITS
Tetratex ePTFE membrane media	High porosity for exceptional flow characteristics and low pressure drop, which decrease total cost of ownership
Log reduction value greater than or equal to 7 at 0.2 micron	Helps ensure product and process integrity in critical processed food and beverage applications
Inherently hydrophobic media	Supports high flow rates, low pressure drop, and excellent dewetting characteristics.
Many common sizes and configurations available	Ability to configure elements to meet most processed food and beverage application flow requirements
Integrity testable according to HIMA* and validated retention of bacteria and viruses	Provides assurance of integrity and performance over the life of the element
Non-fiber releasing, biologically inert media	All components comply with EU and USA requirements for food contact use under 1935/2004/EC and CFR Title 21

INDUSTRIES AND APPLICATIONS

INDUSTRIES		APPLICATIONS	
Food	Food Ingredients	Aseptic Packaging	Tank Ventilation
Dairy	Alcoholic Beverages	Fermentation Air	Nitrogen Blanketing

SPECIFICATIONS

CUMULATIVE STEAM CYCLES

The PT N is rated for >100 steam sterilization cycles with 250°F saturated steam.

Figures based on steaming resistance lab tests.

Filter elements must be checked in actual use.

Contact Donaldson for recommended Autoclaving/Steam procedures.

QUALITY TEST

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

- All sterile filters are integrity tested to verify compliance with established quality and design specifications and to assure consistent and reliable performance.
- All PT N filter elements are completely staged, assembled, tested and packaged in Class 7 clean room facility, whose Quality Management System is approved by an accredited registering body to the appropriate ISO 9001 Quality Systems Standard.

MATERIAL COMPLIANCE USA

All components of the PT N filter element are FDA listed for food contact use in the Code of Federal Regulations (CFR), Title 21.

MATERIALS		CFR TITLE 21
Membrane	PTFE	177.1550
Upstream Support	Polypropylene	177.1520
Downstream Support	Polypropylene	177.1520
Outer Guard	Polypropylene	177.1520
Core	Polypropylene	177.1520
End Caps	Polypropylene	177.1520
O-Rings	EPDM	177.2600
	Silicone	177.2600
Sealing Method	Thermal Bonding	

MATERIAL COMPLIANCE EU

The PT N filter element meets the guideline for Food Contact Use as given in European Regulation (EC) Number 1935/2004. All polymeric components (polypropylene, PTFE) meet the requirements of EU Directive EC/10/2011 relating to plastic materials and articles intended to come into contact with foodstuffs.

Migration tests have been carried out in simulant after flushing or in flow conditions.

For specific details on the O-Rings, please contact your Donaldson Sales Engineer.

INTEGRITY TESTING

BACTERIA RETENTION RATES (ACCORDING TO HIMA CHALLENGE PER ASTM)

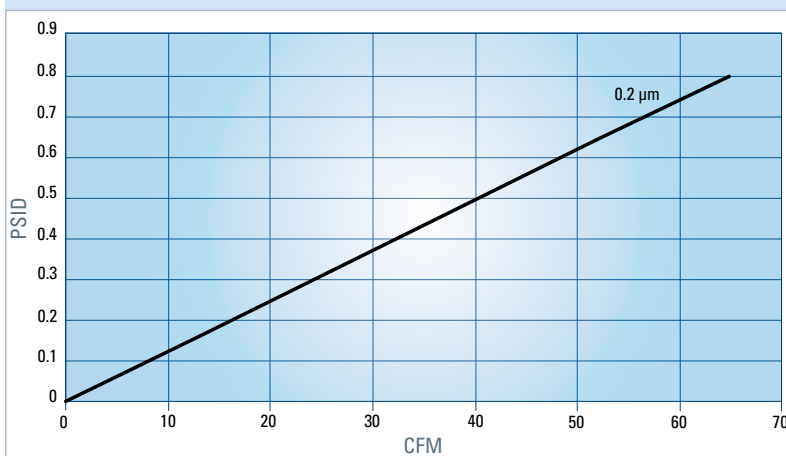
Filter Grade	Microorganism	LRV / cm ²
PT N 0.2 µm	Serratia Marcescens	> 7
	Brevundimonas diminuta	> 7

Filter Grade	0.2 µm (Retention Rates LRV \geq 7 cm ²)	
Filtration Surface	\geq 0.6 m ² per 250 mm element (10")	
Maximum Differential Pressure	Operating Temperature	Differential Pressure
	100°F	80 psi
	150°F	60 psi
	180°F	30 psi

* Figures are based on lab tests to evaluate steaming resistance. Filter elements need to be checked in actual use. Contact Donaldson for recommended Autoclaving/Steaming procedures.

For the filtration of aqueous solutions the PT N membrane filter has to be pre-wetted with a suitable liquid of low surface tension (e.g. IPA).

PT N FLOW CHARACTERISTICS (AIR)

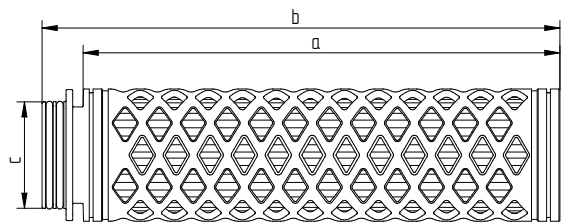


WATER INTRUSION TEST

Filter Grade	Maximum Diffusion Values
0.2 µm	0.60 ml/min per 10" element after 10 min @ 29 psi

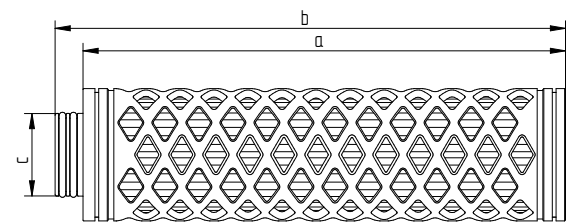
Integrity test to be done by Water Intrusion Test. For information on test equipment or test services, please contact your Donaldson Sales Engineer and visit our website at www.donaldsonprocessfilters.com.

DIMENSIONS



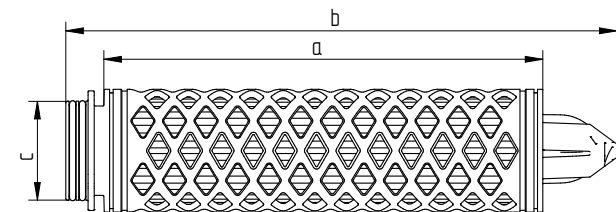
CODE 2 Connection			
Filter Size	Dimensions (in)		
	a	b	c
10"	10.0	10.8	2.2
20"	19.5	20.3	2.2
30"	29.0	29.8	2.2
40"	38.5	39.4	2.2

Code 2: 2 x 226 O-Rings, bayonet 2 locking tabs, flat end cap, integrated reinforcement ring



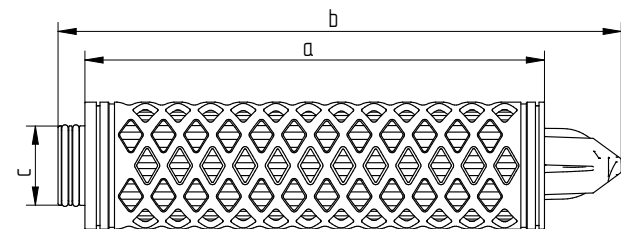
CODE 3 Connection			
Filter Size	Dimensions (in)		
	a	b	c
10"	10.1	10.7	1.7
20"	19.6	20.2	1.7
30"	29.1	29.7	1.7
40"	38.7	39.3	1.7

Code 3: 2 x 222 O-Rings, plug connection, flat end cap, integrated reinforcement ring



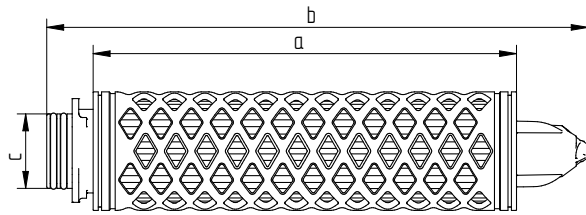
CODE 7 Connection			
Filter Size	Dimensions (in)		
	a	b	c
10"	9.9	12.4	2.2
20"	19.4	21.9	2.2
30"	28.9	31.5	2.2
40"	38.5	41.0	2.2

Code 7: 2 x 226 O-Rings, bayonet 2 locking tabs, locating fin, integrated reinforcement ring



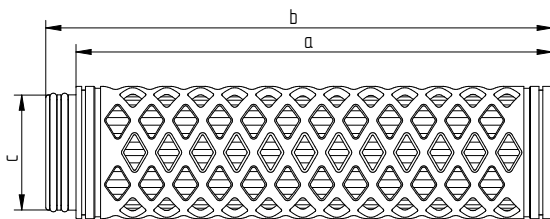
CODE 8 Connection			
Filter Size	Dimensions (in)		
	a	b	c
10"	10.0	12.2	1.7
20"	19.5	21.8	1.7
30"	29.1	31.3	1.7
40"	38.6	40.8	1.7

Code 8: 2 x 222 O-Rings, plug connection, locating fin, integrated reinforcement ring



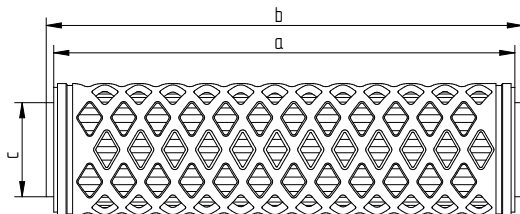
CODE 9 Connection			
Filter Size	Dimensions (in)		
	a	b	c
10"	9.8	12.6	1.7
20"	19.4	22.1	1.7
30"	28.9	31.7	1.7
40"	38.4	41.2	1.7

Code 9: 2 x 222 O-Rings, bayonet 3 locking tabs, locating fin, integrated reinforcement ring



UF Connection			
Filter Size	Dimensions (in)		
	a	b	c
10"	9.9	10.6	2.4
20"	19.4	20.1	2.4
30"	29.0	29.6	2.4

Code UF: 2 x 226 O-Rings, plug connection, flat end cap, integrated reinforcement ring



DOE Connection			
Filter Size	Dimensions (in)		
	a	b	c
10"	9.6	9.8	2.0
20"	19.7	19.9	2.0
30"	29.7	29.9	2.0
40"	39.7	39.9	2.0

DOE: Double open end with EPDM gaskets



Important Notice

Many factors beyond the control of Donaldson can affect the use and performance of Donaldson products in a particular application, including the conditions under which the product is used. Since these factors are uniquely within the user's knowledge and control, it is essential the user evaluate the products to determine whether the product is fit for the particular purpose and suitable for the user's application. All products, specifications, availability and data are subject to change without notice, and may vary by region or country.



Donaldson Company, Inc.
Minneapolis, MN

donaldson.com
shop.donaldson.com

Australasia 61-02-4350-2066
marketing.australia@donaldson.com

Brazil 55-11-4894-6035
vendas.brasil@donaldson.com

China 86-400-921-7032
info.cn@donaldson.com

EMEA 49-2129-569-0
cap-europe@donaldson.com

India 91-124-4807-400
indiaquiries@donaldson.com

Japan 81-42-540-4123
ndl-ultrafilter-web@donaldson.com

Korea 82-2-517-3333
cap-kr@donaldson.com

Latin America 52-449-300-2442
industrialair@donaldson.com

North America 800-543-3634
processfilters@donaldson.com

South Africa 27-11-997-6000
samarketing@donaldson.com

Southeast Asia 65-6311-7373
sea.salesenquiry@donaldson.com

F117022 ENG (11/20) LifeTec™ PT-N Absolute Membrane Filter Elements

© 2018 Donaldson Co., Inc. All Rights Reserved. Donaldson and the color blue are marks of Donaldson Company, Inc. All other marks belong to their respective owners.
{Contains Donaldson proprietary technology.}