



Donaldson
FILTRATION SOLUTIONS

PP N **NOMINAL DEPTH** **FILTER ELEMENTS**

Process Filtration

Donaldson LifeTec® PP N filters are nominal rated depth type filters constructed of 100% polypropylene. They contain an asymmetrical polypropylene microfiber filter medium that provides a graded pore structure. The PP N filters deliver outstanding flow rates and high throughput, with nominal submicron particulate retention and high dirt holding capacity. Their all-polypropylene construction provides broad chemical compatibility and low extractable levels in a wide range of fluids and applications.

The PP N filter's polypropylene media is a self-bonded structure comprised of multiple layers of successively finer fibers and smaller pores. This state-of-the-art design results in a highly porous, tapered pore structure consistent of a controlled absolute rated inner layer and several outer prefilter layers which substantially increase the dirt holding capacity.

All components meet the EU and USA requirements for Food Contact Use in accordance with CFR (Code of Federal Regulations) Title 21 and EC/1935/2004 and subsequent amendments. The filter element is manufactured in accordance with the GMP requirements as defined in EC/2023/2006, has no migration of filter media, is non-fiber releasing and is thermally welded.

All materials used do not contain any Substances of Very High Concern (SVHC) as defined in EC/1907/2006 and EC/65/2011.



PP N

FEATURES & BENEFITS

- Extremely durable polypropylene construction
- Outstanding flow rate
- Extremely high dirt holding capacity
- Asymmetrical filter matrix for longer service life
- Approved for Food Contact Use according to CFR Title 21 & EC/1935/2004

APPLICATIONS

INDUSTRIES & APPLICATIONS			FOOD & BEVERAGE PURIFICATION		
Food	Chemical	Environmental	Bottled Water	Beer	Spirits
Beverages	Pharmaceutical		Soft Drinks	Wine	Syrups
PURIFICATION & FILTRATION			CHEMICAL PURIFICATION		
Cosmetics	Lubricants	Jet Printer Inks	Acids	Alcohols, Aldehydes	Photolithographic Liquids
Oils	Paints and Dyes		Bases	Esters and Ketones	

SPECIFICATIONS

QUALITY TEST

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

- All final filter elements are integrity tested to verify compliance with established quality and design specifications and to assure consistent and reliable performance.
- The traceability of each filter element according to EC/1935/2004 is provided by lot number and serial number.
- All filters show no migration of the filter medium and are non-fiber releasing.
- All PP 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 PP N filter element are FDA listed for food contact use in the Code of Federal Regulations (CFR), Title 21.

MATERIALS		CFR TITLE 21
Filter Material	Polypropylene	177.1520
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

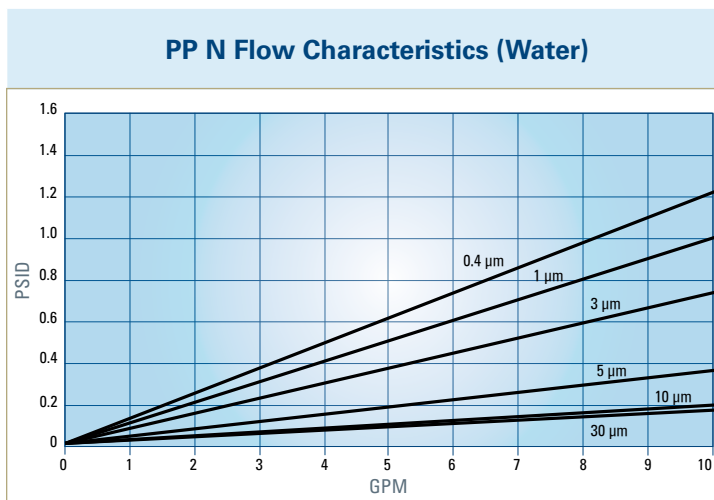
The PP N filter element meets the guideline for Food Contact Use as given in European Regulation (EC) Number 1935/2004. All polymeric components (polypropylene) meet the requirements of EU Directive EC/10/2011 relating to plastic materials and articles intended to come into contact with foodstuffs. Migration tests have been carried out in simulants (B, D1) after flushing or in flow conditions. All materials used do not contain any Substances of Very High Concern (SVHC) as defined in EC/1907/2006 (REACH Guideline) and EC/65/2011 (RoHS Guideline) and are free of any latex-based components. Furthermore the materials do not contain any Animal Derived Ingredient (ADI-free) and thus bear no risk of transmitting TSE and BSE.

INTEGRITY TESTING

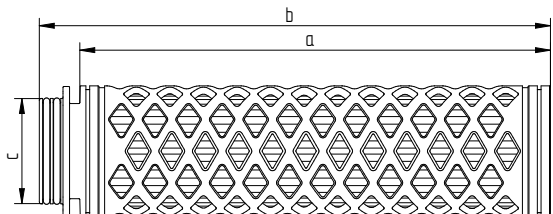
RETENTION			
Retention Rate	Percent Removal		
	98%	90%	80%
0.4	0.5 µm		
1	1 µm	0.5 µm	
3	3 µm	2 µm	1 µm
5	5 µm	3 µm	2 µm
10	10 µm	5 µm	3 µm
30	30 µm	20 - 30 µm	10 - 20 µm

Nominal Retention Rates	0.45 µm, 1 µm, 3 µm, 5 µm, 10 µm, 30 µm	
Filtration Surface	> 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
Cumulative Steaming Time*	250°F Saturated Steam: > 100 cycles (30 minutes)	

* 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.

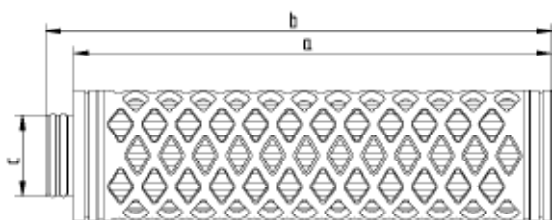


DIMENSIONS



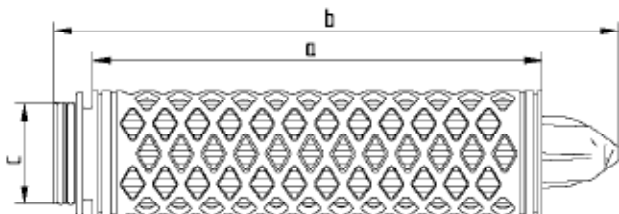
CODE 2 Connection			
Filter Size	Dimensions (in)		
	a	b	c
10"	10.0	10.8	2.2
20"	19.5	20.3	2.2
30"	29.0	29.8	2.2
40"	38.5	39.4	2.2

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



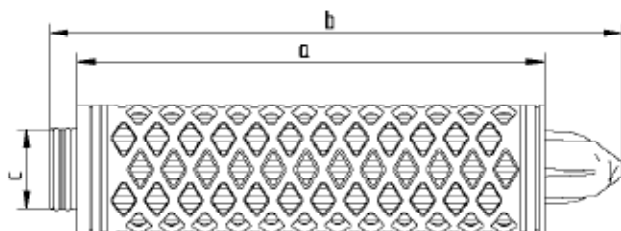
CODE 3 Connection			
Filter Size	Dimensions (in)		
	a	b	c
10"	10.1	10.7	1.7
20"	19.6	20.2	1.7
30"	29.1	29.7	1.7
40"	38.7	39.3	1.7

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



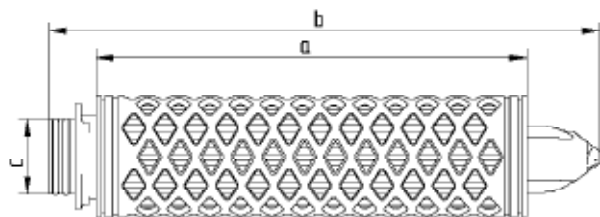
CODE 7 Connection			
Filter Size	Dimensions (in)		
	a	b	c
10"	9.9	12.4	2.2
20"	19.4	21.9	2.2
30"	28.9	31.5	2.2
40"	38.5	41.0	2.2

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



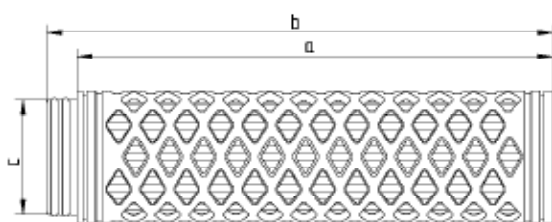
CODE 8 Connection			
Filter Size	Dimensions (in)		
	a	b	c
10"	10.0	12.2	1.7
20"	19.5	21.8	1.7
30"	29.1	31.3	1.7
40"	38.6	40.8	1.7

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



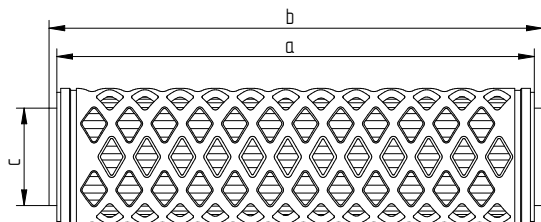
CODE 9 Connection			
Filter Size	Dimensions (in)		
	a	b	c
10"	9.8	12.6	1.7
20"	19.4	22.1	1.7
30"	28.9	31.7	1.7
40"	38.4	41.2	1.7

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.



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