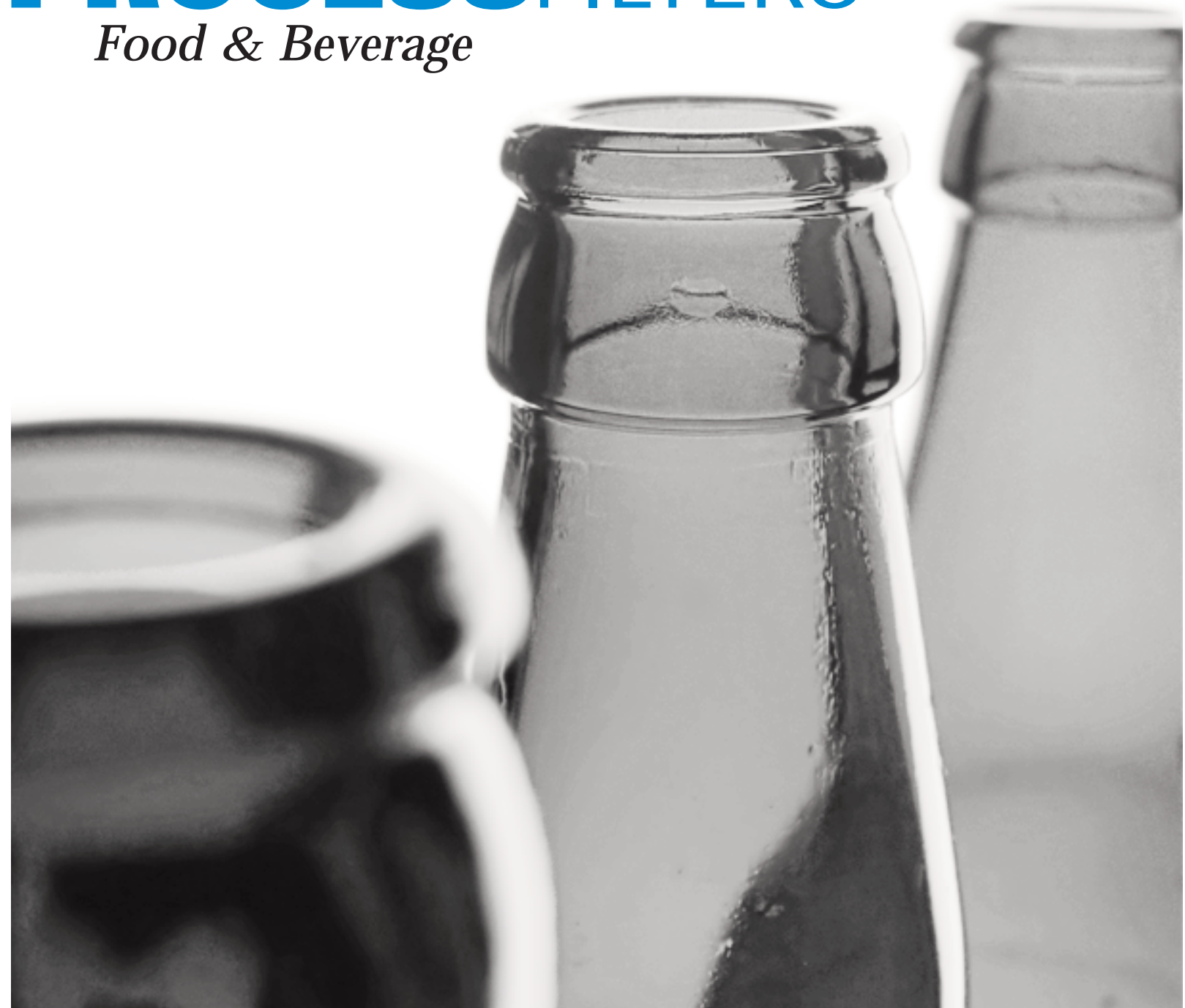




Donaldson®
Filtration Solutions

PROCESSFILTERS

Food & Beverage



Donaldson Process Filtration (formerly Ultrafilter) has been providing the food and beverage industry with quality filtration products around the world since 1972. During that time, and continuing today, we have enhanced our offering with an ever-broadening product portfolio, including sterile air, liquid and steam filtration. From pre-filtration to final, and from low capacity to high, Donaldson Process Filtration has the right product to meet your specific need.

FILTERELEMENTS

Donaldson offers a full range of process filter elements, which are available in a wide variety of materials, micron ratings and end styles to match the specific requirements of your process or existing filter housing. The table below will serve as a quick reference to help select the model that best meets your need. Additional information follows, while detailed information can be seen on the technical data sheets for each element model.

		Filter Name									
		Ultrafiber PP-TF	Ultrex P-GS	Ultrapolylea PP100	Ultrapolylea PP	Ultrateflomem PF-PES	Ultranylomem PF-PT	Ultrapolymem PP-P86	Ultradepth II P-SRF	Ultradepth II P-BE	
Micron Rating	0.01									X	X
	0.03					X					
	0.04									X	
	0.1				X	X	X	X			
	0.2			X	X	X	X	X			
	0.45			X	X	X	X				
	0.65			X			X				
	1	X	X	X		X	X				
	1.2			X							
	2			X							
	3	X		X							
	5	X	X	X	X						
	7			X							
	10	X		X	X						
	20	X		X							
	25		X								
	30	X		X	X						
	40			X							
	50	X									
75	X										
100											
250											
Rating Type	Absolute		X	X		X	X	X	X	X	X
	Nominal	X		X							
Media Type	Depth	X	X	X	X					X	X
	Pleated			X	X	X	X	X	X		
Media Material	Membrane					X	X	X	X		
	SS Mesh										
	Polypropylene	X		X	X					X	
	Sintered SS		X								
	Polyethersulfone					X					
	PTFE						X				
	Nylon 66							X			
	Borosilicate									X	X

- Prefiltration
- Steam Filtration
- Fine Filtration
- Sterile Filtration
- Sterile Air and Vent Filtration



800.543.3634

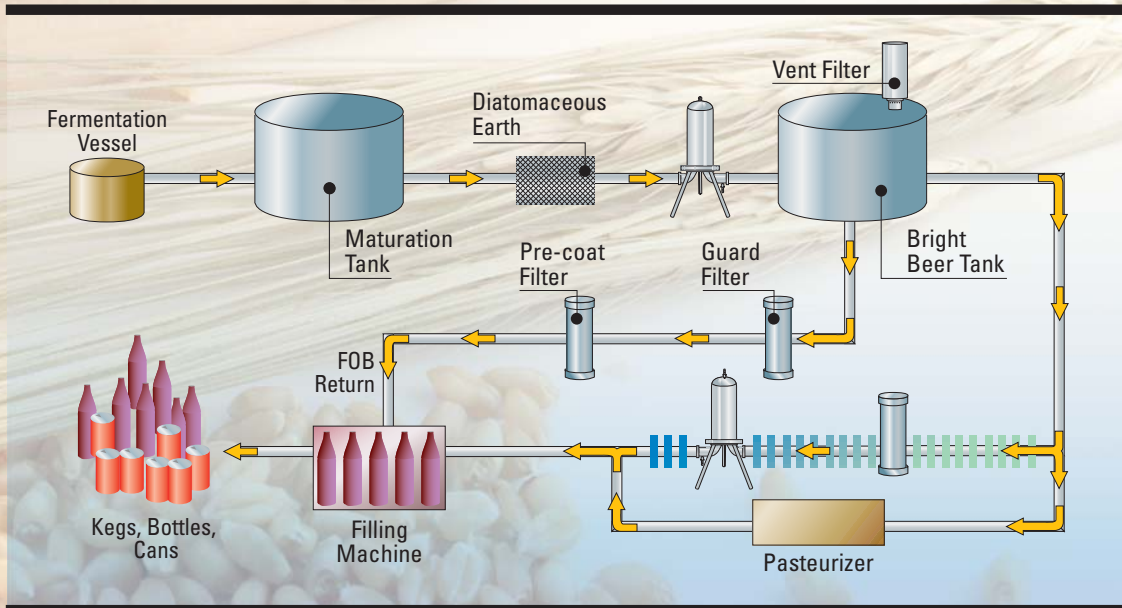
PREFILTRATION

For economical prefiltration to protect downstream fine or sterile filters or other process equipment, Donaldson offers the following filter elements.

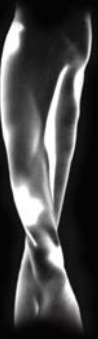
Ultrafiber PP-FC

The Ultrafiber PP-FC filter offers exceptional value for general applications where long life, high purity and low change-out frequency are required.

- Nominal retention rates from 1 to 75 μ m
- 100% polypropylene melt blown depth filter
- Exceptional dirt holding capacity
- Contains no wetting agents, solvents, antistatic agents or binders
- Meets U.S. FDA 21 CFR requirements for food and beverage contact
- Can be incinerated for easy disposal



Beer Production



**LIQUID
FILTRATION**



FINE FILTRATION

For more stringent filtration requirements, Donaldson offers a number of fine filtration alternatives.

Ultrapolyplea PP100

For fine filtration with absolute retention rates down to 0.45 μm , we recommend the Ultrapolyplea PP100 pleated polypropylene filter element.

- Absolute retention rates from 0.45 to 40 μm
- 100% polypropylene construction
- Self-bonded hydrophilic media provides fixed pore structure, high containment of solid materials, no migration of media and no releasing of fibers
- Contains no binders or adhesives
- Each filter is pre-rinsed at the factory
- Meets U.S. FDA 21 CFR requirements for food and beverage contact
- Can be repeatedly sterilized in-line with steam or in an autoclave



Ultrapolyplea PP

For economical fine filtration down to 0.2 μm , the Ultrapolyplea PP filter will provide high dirt holding capacity along with a high flow rate.

- Nominal retention rates from 0.2 to 30 μm
- 100% polypropylene construction
- Self-bonded hydrophilic media provides fixed pore structure, high containment of solid materials, no migration of media and no releasing of fibers
- Contains no binders or adhesives
- Each filter is pre-rinsed at the factory
- Meets U.S. FDA 21 CFR requirements for food and beverage contact



STERILE FILTRATION

For sterile and extra fine filtration down to 0.04 μm , several of membrane filters utilizing various media materials are available for your specific application.

Ultrasulfomem PF-PES



Designed specifically for food and beverage applications, the Ultrasulfomem PF-PES filter utilizes a pleated polyethersulfone membrane media encased in polypropylene inner and outer cores.

- Hydrophilic polyethersulfone membrane media with asymmetrically designed pore structure; pore size steadily decreases toward center of media for high dirt holding capacity and low pressure drop
- Resistant to oxidizing agents
- Absolute retention rates from 0.03 to 0.65 μm
- Contains no binders or adhesives
- 100% integrity tested at factory
- Meets U.S. FDA 21 CFR requirements for food and beverage contact
- Can be repeatedly sterilized in-line with steam or in an autoclave

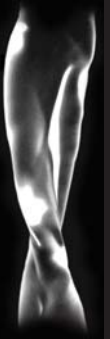
Ultrateflomem PF-PT



Ultrateflomem PF-PT filters utilize Teflon[®] membrane media for use in harsh filtration applications such as highly acidic or highly basic liquids.

- Highly porous, hydrophobic, Teflon membrane media for high flow rates and high adsorption of particles
- Polypropylene end caps and support cores
- Absolute retention rates from 0.1 to 1 μm
- Contains no binders or adhesives
- 100% integrity tested at factory
- Meets U.S. FDA 21 CFR requirements for food and beverage contact
- Can be repeatedly sterilized in-line with steam or in an autoclave

*Teflon is a registered trademark of E.I. du Pont de Nemours and Company



**LIQUID
FILTRATION**



Ultranylomem PP-P66

Ultranylomem PP-P66 filters utilize Nylon 66 membrane media for excellent chemical compatibility, making them the ideal choice for a range of applications, including: high purity water, strong solvents, photoresists and other critical process fluids.



- Serial membrane layer design with large-pore layer followed by fine-pore layer for increased filter life and efficiency
- Polyester support layers and end caps, polypropylene core and cage
- Absolute retention rates from 0.1 to 1 μ m
- Naturally hydrophilic, non-shedding and contain no leachable wetting agents
- Thermoplastic sealing eliminates need for potentially contaminating adhesives
- 100% integrity tested at factory
- Meets U.S. FDA 21 CFR requirements for food and beverage contact
- Can be repeatedly sterilized in-line with steam or in an autoclave

Ultrapolymem PF-PP

The Ultrapolymem PF-PP membrane filter is constructed of 100% polypropylene, including the membrane media, support core and cage, and end caps. It provides maximum durability against chemicals in critical applications.

- Inherently hydrophobic
- Absolute retention rates from 0.04 to 0.2 μ m
- Contains no binders or adhesives
- 100% integrity tested at factory
- Meets U.S. FDA 21 CFR requirements for food and beverage contact
- Can be repeatedly sterilized in-line with steam or in an autoclave
- Cost effective alternative to PTFE membrane filters



Ultradept II P-SRF

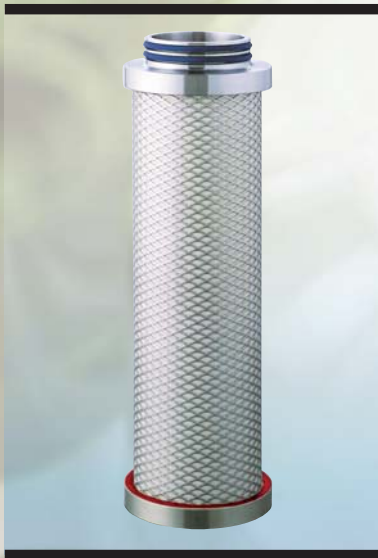
In addition to our line of high quality industrial compressed air drying and filtration products, Donaldson offers one of the finest sterile air filters available—the Ultradept II P-SRF. Although the P-SRF is already widely used around the world in numerous applications, it has recently gone through a redesign to further extend its range of chemical compatibility and pressure drop efficiency. You won't find a better sterile air filter on the market today.

- Absolute retention rate at 0.01 μ m
- Utilizes Ultradept II binder-free borosilicate media
- Stainless steel end caps and support cores
- 100% integrity tested at factory
- Meets U.S. FDA 21 CFR requirements for food and beverage contact
- Can be repeatedly sterilized in-line with steam or in an autoclave



Ultradept II P-BE

Based on the Ultradept II P-SRF design, the Ultradept II P-BE has been engineered specifically for tank vent applications which operate at near ambient pressure and require minimal pressure differential.



- Absolute retention rate at 0.01 μ m
- Utilizes Ultradept II binder-free borosilicate media
- Extremely low pressure differential for adequate tank ventilation
- Stainless steel end caps and support cores
- 100% integrity tested at factory
- Meets U.S. FDA 21 CFR requirements for food and beverage contact
- Can be repeatedly sterilized in-line with steam or in an autoclave

AIR
FILTRATION

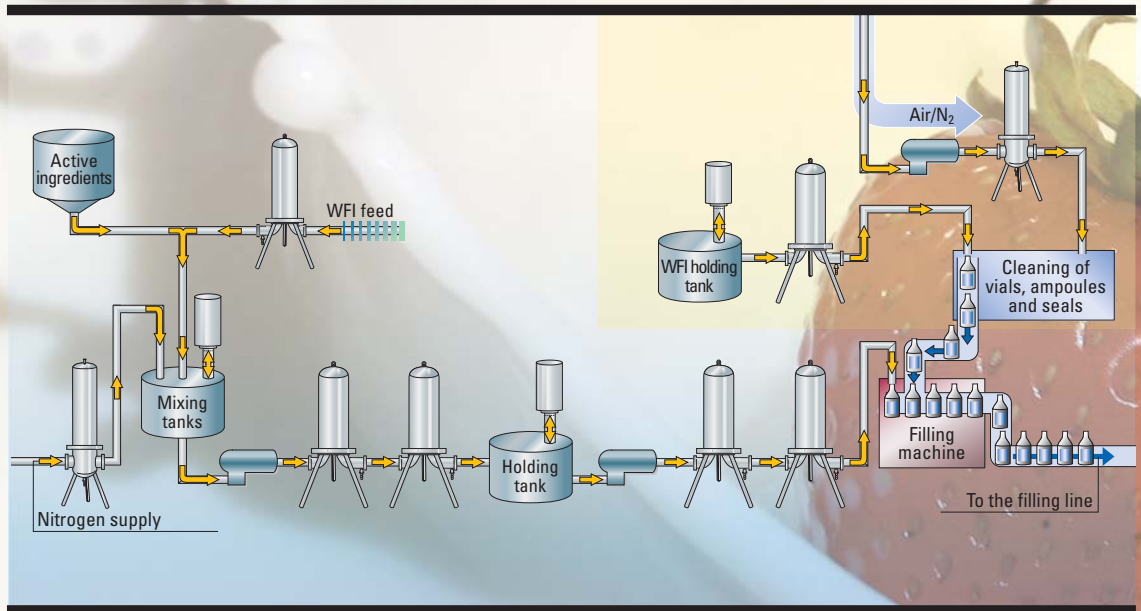


Ultrex P-GS

Improving the quality of steam used for filter sterilization ensures longer service life of those filters. When steam is used in culinary and other food applications such as cooking, sterilization and packaging, purifying that steam is essential to maintain integrity of the product and associated equipment. Ultrex P-GS filters have been designed to filter steam with particle retention rates from 1 to 25 μm .

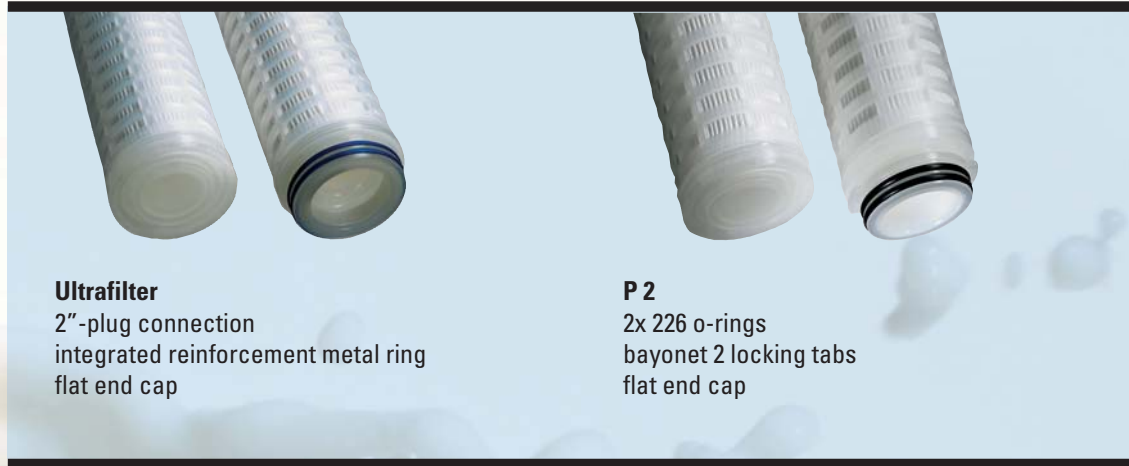
- Filter media is sintered 316L stainless steel with 50% porosity to ensure high dirt holding capacity and low pressure drop.
- End caps are 304 stainless steel
- Can withstand a differential pressure of 75 psi
- Regenerable in an ultrasonic bath
- Absolute retention rates of 1 μm , 5 μm^* and 25 μm

*5 μm element complies with 3-A standard 609-02 (2 μm @ 95% efficiency)



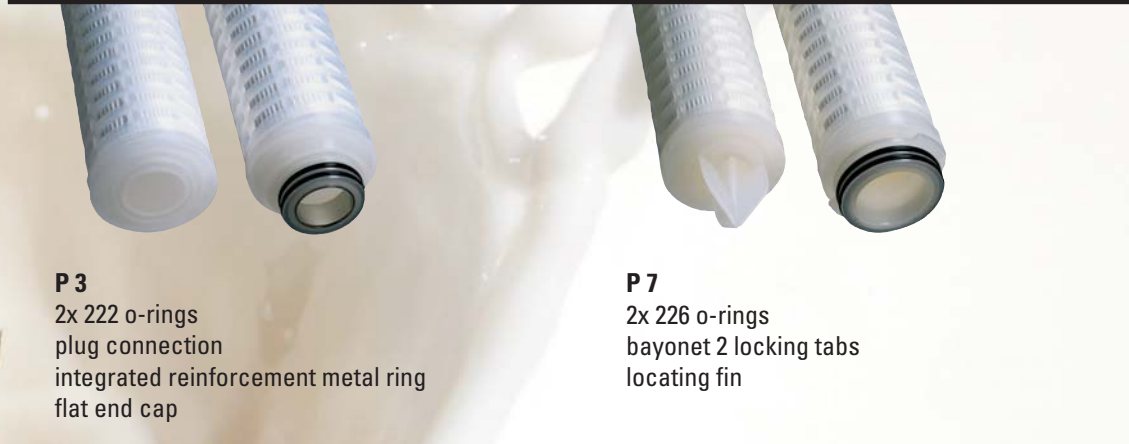
Sterile Filling

Donaldson offers a variety of end adapter styles to fit not only our housings, but competitive units as well.



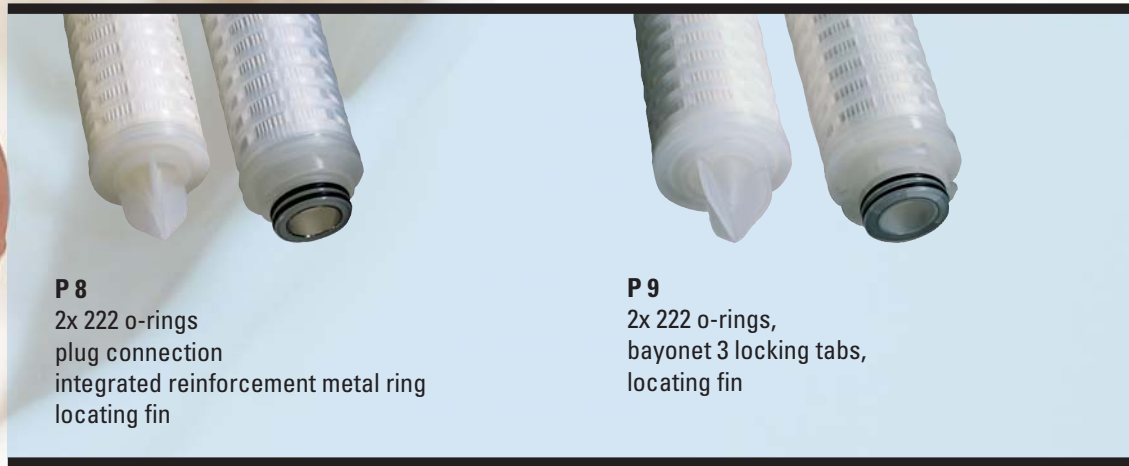
Ultrafilter
2"-plug connection
integrated reinforcement metal ring
flat end cap

P 2
2x 226 o-rings
bayonet 2 locking tabs
flat end cap



P 3
2x 222 o-rings
plug connection
integrated reinforcement metal ring
flat end cap

P 7
2x 226 o-rings
bayonet 2 locking tabs
locating fin



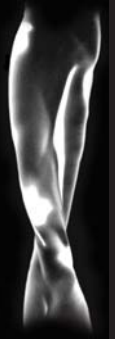
P 8
2x 222 o-rings
plug connection
integrated reinforcement metal ring
locating fin

P 9
2x 222 o-rings,
bayonet 3 locking tabs,
locating fin



DOE
double open end

SOG
single open end,
020 o-ring



ENDCAP
CONFIGURATIONS



Whether your application is liquid, steam or gas, general filtration or sterile, high capacity or low, Donaldson has the filter housing to meet your requirement.

P-EG Industrial Gas Filter Housing

For non-sterile industrial grade filtration of air or gases, the P-EG stainless steel filter housing provides an economical solution.



- Available in 304 or 316L stainless steel
- 18 sizes in flow capacities from 35 to 13,000 scfm
- Low differential pressure at high flow rates
- Inner surface etched and passivated to 30 R_a
- Outer surface etched, passivated and polished to 30 R_a (up to 3" connection size)
- NPT connections

PG-EG Sanitary Gas Filter Housing

The PG-EG filter housing is designed for the purification of compressed air or technical gases in sanitary applications.

- Available in 304 or 316L stainless steel
- 18 sizes in flow capacities from 35 to 13,000 scfm
- Low differential pressure at high flow rates
- Inner surface etched, passivated and polished to 30 R_a
- Outer surface etched, passivated and polished to 30 R_a
- Holds 3-A certification
- Sanitary flange connections



PF-EG Sanitary Liquid Filter Housing

The PF-EG filter housing is designed for the purification of liquids in sanitary applications.

- Available in 304 or 316L stainless steel
- 11 sizes in flow capacities from 0.5 to 360 gpm (subject to filter element rating)
- Low differential pressure at high flow rates
- Inner surface etched, passivated and polished to 30 R_a
- Outer surface etched, passivated and polished to 30 R_a
- Holds 3-A certification



P-BE Vent Filter

The P-BE filter is designed for sterile venting of stationary or mobile storage tanks. The simple two-piece construction incorporates splash protection to prevent liquids from coming into contact with the filter medium.

- Available in 304 or 316L stainless steel
- 12 sizes in flow capacities from 3 to 1,200 cfm at ambient pressure
- Low differential pressure at high flow rates when used with Ultradepth II P-BE filter element
- Will accommodate other filter elements for chemical compatibility



PG-IL In-Line Sanitary Filter

The PG-IL in-line filter housing has been designed for the purification of liquids and gases in sanitary applications.

- Available in 304 or 316L stainless steel
- 4 sizes in gas flow capacities from 50 scfm to 475 scfm (subject to element rating)
- Inner surface etched, passivated and polished to R_a 30
- Outer surface etched, passivated and polished to R_a 30



P-SLF-Box Sterile Air Ventilation System



If your process requires a source of low pressure sterile air for packaging lines, storage tank void volume ventilation or similar applications, the solution is Donaldson's P-SLF-Box sterile air ventilation system.

- Filters out bacteria, viruses, oil mist, dust and other contaminants in ambient air
- Eight sizes with flow ranges from 20 to 530 scfm via integrated blower
- Stainless steel construction
- Integrated steam filter for sterilization

when
PURITY COUNTS...

Technical Product Literature

Product	#	Product	#	Product	#	Product	#
Ultrafiber PP-FC	PRO-200	Ultrateflomem PF-PT	PRO-204	Ultradept II P-BE Sterile Vent Filter	PRO-208	PF-EG Sanitary Grade Liquid Filter	PRO-212
Ultrapolyplea PP100	PRO-201	Ultranylomem PP-P66	PRO-205	Ultrex® P-GS	PRO-209	P-BE Sanitary Grade Vent Filter	PRO-213
Ultrapolyplea PP	PRO-202	Ultrapolymem PF-PP	PRO-206	P-EG Industrial Grade Gas Filter	PRO-210	P-IL Sanitary Grade In-Line Filter	PRO-214
Ultrasulfomem PF-PES	PRO-203	Ultradept II P-SRF Sterile Air Filter	PRO-207	PG-EG Sanitary Grade Gas Filter	PRO-211	P-SLF-Box Sterile Air Ventilation System	PRO-215



Donaldson Company, Inc.
 P.O. Box 1299
 Minneapolis, MN
 55440-1299 U.S.A.
 Tel 800.543.3634 (USA)
 Tel 800.343.3639 (within Mexico)
 processfilters@mail.donaldson.com
 www.donaldson.com

Information in this document is subject to change without notice.

© 2006 Donaldson Co., Inc.
 Printed in U.S.A. on recycled paper
 Brochure No. PRO-100 (Rev 10/06)