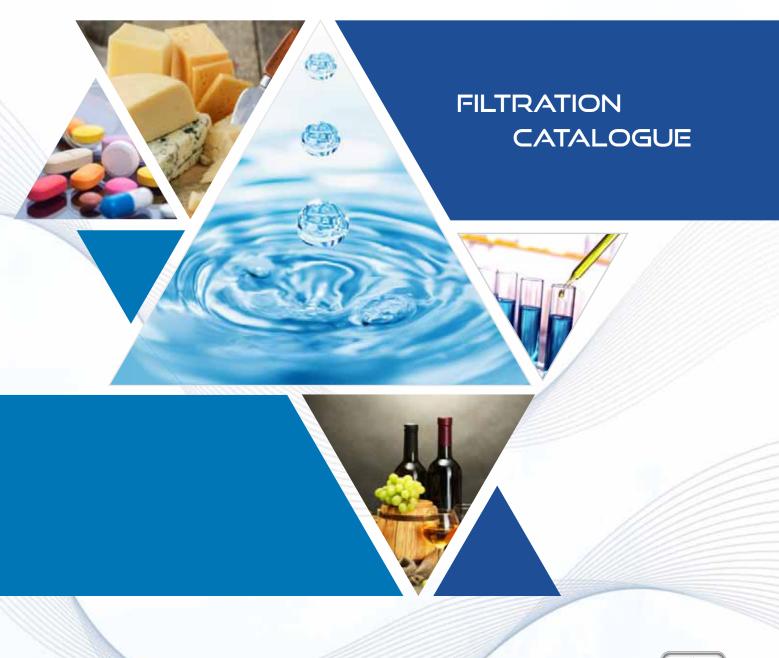
25 YEARS







ISO 9001:2015

ABOUT US

Since 1995, Kitten® has offered solutions for purity to the food and beverage, pharma, chemical and automotive industries. Based in India, Kitten® provides innovative and cost -effective products for companies that need to compete in the aggressive global market.

We manufacture a wide range of products: filter elements, housings and complete systems under our own brand: filtroUNO®. All products are designed to reach maximum purity standards at the highest quality requirements. We listen to our customers' needs and strive to satisfy every requirement with every order.

We produce to global standards such as PED 2014/68/EDU and our quality system is certified to ISO-9001:2015. When customers require customized solutions, our staff designs to their requirements using careful communication and feedback.

Browse through our catalogue to explore how Kitten® can be your global partner for purity!



PRODUCTS

FILTER CARTRIDGES		PRESSES & LENTICULAR HOUSIN	١G
Polyspun™ (Spun) Polytvin™ (Spun) Polyplit™ (Pleated) Polyplit™ XLD (Pleated) Pleated Membrane (Hydrophobic)	4 6 8 10 12	Horizontal Filter Press Lenticular Filter Housing SPECIAL HOUSINGS	58 60
Pleated Membrane (Hydrophilic) Wound Sintered	14 16 18	Lined Housings Custom Housings	62
Pleated Stainless Steel HATTI™ (High Flow)	20 22	DEPTH FILTER MEDIA	
Cartridge Adapters	24	SteriUNO® Filter Papers	64
CARTRIDGE FILTER HOUSINGS		GASKETS	
Single DOE Multi-Round DOE/222 Large-Format DOE/222 Single Sanitary Multi-Round Sanitary HATTI™ (High Flow) PP Housings ("Big Blue")	26 28 30 32 34 36 38	Encapsulated O-Rings	66
FILTER BAGS			
Polypropylene/Polyester accuFLO™ (Absolute PO) Extended Life Mesh POMF™ (Oil Adsorption) Custom Bags	40 42 44 45 46 47		
BAG FILTER HOUSINGS			
Single Top-Entry	48		

50

52

54

56

Single Side-Entry

Multi-Bag Bolted

Strainers

Multi-Bag Clamped



POLYSPUN™

filtrouno®

SPUN FILTER CARTRIDGE

ADVANTAGES

- Filtration media spun from 100% polypropylene
- Multiple filtration zones produce a gradient pore structure: outer section captures larger particles, while inner section removes smaller particles
- Excellent chemical resistance
- High dirt holding capacity
- High flow rate & low differential pressure
- FDA compliant polypropylene material

MATERIALS OF CONSTRUCTION

Filtration Media: Graded density spun polypropylene

Inner Core and Adapters: Polypropylene

Gaskets: Silicone, EPDM, FEP/Silicone, PTFE, Viton®

SPECIFICATIONS

Length: 5", 9.75", 10", 19.75", 20", 30", 40"

ID: 28 mm

Outer Diameter: 64 mm, 114 mm ("Big Blue")

Effective Filtration Area: 0.05 m² per 10"

Adapters: DOE, Code 3, Code 7, Code 6, Code 8, Code 28

TECHNICAL INFORMATION

Maximum Differential Pressure: 2.1 bar @ 60 °C, 4.2 bar @ 30 °C

Maximum Operating Temperature: 80 °C - PP core

APPLICATIONS

Electronic industry: Etching and electroplating solutions

Chemical Industry: Adhesives, solvents, surfactants and chemical liquids

Food & Beverage: Wine, potable water, beer, soft drinks, brewery, edible oils

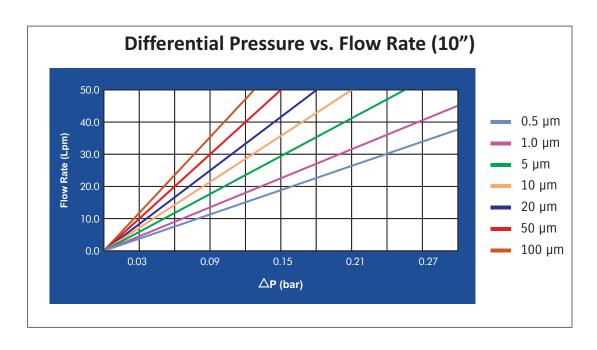
General Process Industry: Pre-filtration for DI and RO systems, process water



POLYSPUN™



SPUN FILTER CARTRIDGE



ORDERING INFORMATION

	Micron	Length	Efficiency	Adapter	Gasket
	05 = 0.5 μm	5 = 5"	N = Nominal	S1 = D0E	S = Silicone (standard)
	1 = 1 μm	975 = 9.75"	A = Absolute	S2 = Code 3	E = EPDM
5	5 = 5 μm	10 = 10"		S3 = Code 7	FS= FEP/Silicone
	10 = 10 μm	1975 = 19.75"		S6 = Code 6	T = PTFE
	20 = 20 μm	20 = 20"		S8 = Code 8	V = Viton [®]
	50 = 50 μm	30 = 30"		S9 = Code 28	
	100 = 100 μm	40 = 40"			
PSN	05	10	N	S 1	S

TO 2T

PTN SERIES

POLYTVIN™

filtrouno®

SPUN FILTER CARTRIDGE

ADVANTAGES

- Polytvin™ is a multi-layer meltblown filter cartridge
- Features a graded density matrix of all-polypropylene fiber
- No media migration
- Thermally bonded without surfactants, binders or adhesives
- Long life & superior pre-filtration

MATERIALS OF CONSTRUCTION

Filtration Media: Graded density spun polypropylene

Inner Core: Polypropylene

Gaskets: Silicone, EPDM, FEP/Silicone, Foamed PE,

PTFE, Viton®

SPECIFICATIONS

Length: 5", 9.75", 10", 19.75", 20", 30", 40"

ID: 28 mm, 30 mm

Outer Diameter: 62 mm, 114 mm ("Big Blue")

Adapters: DOE, Code 3, Code 7, Code 6, Code 8, Code 28

TECHNICAL INFORMATION

Effective Filtration Area: 0.05 m² per 10" Maximum Operating Temperature: 80 °C - PP core

Maximum Differential Pressure: 2.1 bar @ 60 °C, 4.2 bar @ 60 °C

APPLICATIONS

Chemical Industry: Paints, ink, magnetic paints, oil resin, solvents, enzymes plating chemicals,

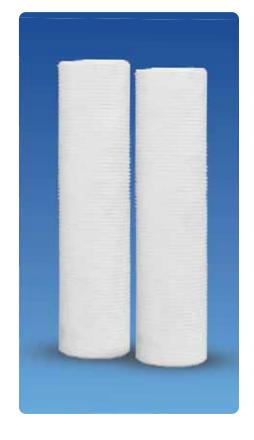
adhesives, resins, photo chemicals, metal working

Food & Beverage: Wine, potable water, beer, soft drinks, brewery, sugary liquids, industrial

edible oils

General process industry: PDP, chemical liquids, water for printing, pre-filtration for RO, slurry UF,

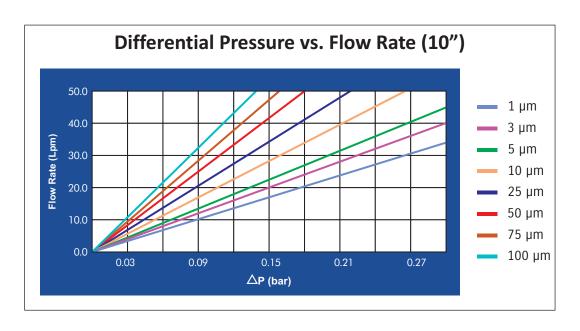
pure water, safety water, safety filter or ion exchange machine



POLYTVIN™



SPUN FILTER CARTRIDGE



ORDERING INFORMATION

	Micron	Length	Efficiency	Adapter	Gasket
	05 = 0.5 μm	5 = 5"	N = Nominal	S1 = DOE	S = Silicone (standard)
	1 = 1 μm	975 = 9.75"		S2 = Code 3	E = EPDM
	2 = 2 μm	10 = 10"		S3 = Code 7	FS = FEP/Silicone
	3 = 3 μm	1975 = 19.75"		S6 = Code 6	P = Foamed PE
	5 = 5 μm	20 = 20"		S8 = Code 8	T = PTFE
	10 = 10 μm	30 = 30"		S9 = Code 28	V = Viton [®]
	25 = 25 μm	40 = 40"			
	30 = 30 μm				
	50 = 50 μm				
	100 = 100 μm				
PTN	1	5	N	S1	S

POLYPLIT™

filtrouno®

PLEATED FILTER CARTRIDGE

ADVANTAGES

- Provide consistent filtration of fluids in a wide range of applications
- Constructed from polypropylene meltblown media, these filters retain particles from 0.1 to 50 µm
- High surface area ensures long service life and low initial pressure drop
- All components are made of 100% polypropylene material for use in critical process applications
- Manufactured and assembled in cleanroom environment to minimize the possibility of contamination
- Wide range of configurations to fit most commercially available filter housings



Filter Media/Components: Polypropylene

Sealing: 100% Thermally Welded

Gasket: Silicone, Buna, EPDM, FEP/Silicone,

PTFE, Viton®



SPECIFICATIONS

Filter Grades (Nominal): 0.1, 0.2, 0.45, 1, 2, 3, 5, 10, 20, 50, 100 μm

FDA Listed Materials: Manufactured from materials which are compliant with US/FDA/21CFR177

requirements for polymers

Sterilization: Multiple autoclaving for 30 min at 121 °C under no end load conditions

May be in-line sanitized with hot water at 82 °C for 1 hour

In-line steam sterilization is not recommended

Purity: Cartridges are free of resins, binders and adhesives

Outside Diameter: 68 mm

Lengths: 5", 9.75", 10", 19.75", 20", 30" & 40"

Adapters: DOE, Code 3, Code 7, Code 6, Code 8

APPLICATIONS

Food and Beverage: Clarification in wine, potable water, beer, soft drink, brewery, edible oils

Chemical Industry: Adhesives, solvents, surfactants, chemicals

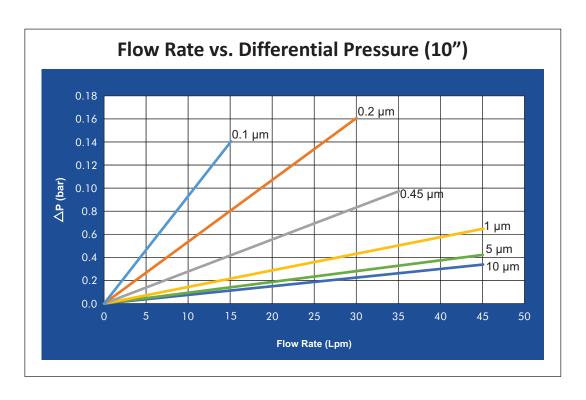
Electronic Industry: Etching solution, electroplating

General process industry: Pre-filtration for DI and RO systems, process water

POLYPLIT™



PLEATED FILTER CARTRIDGE



ORDERING INFORMATION

CF	Product	Material	Micron	Length	Efficiency	Adapter	Gasket
	PPR	PP = Polypropylene	01 = 0.1 μm	5 = 5"	N = Nominal	S1 = D0E	S = Silicone (standard)
			02 = 0.2 μm	975 = 9.75"	A = Absolute	S2 = Code 3	B = Buna
			045 = 0.45 μm	10 = 10"		S3 = Code 7	E = EPDM
Cartridge Filter Element			1 = 1 μm	1975 = 19.75"		S6 = Code 6	FS = FEP/Silicone
Elen			2 = 2 µm	20 = 20"		S8 = Code 8	T = PTFE
lter			3 = 3 µm	30 = 30"			V = Viton [®]
ge Fi			5 = 5 μm	40 = 40"			
tridg			10 = 10 μm				
Car			20 = 20 μm				
			40 = 40 μm				
			50 = 50 μm				
			100 = 100 μm				

CF / PPR - PP 01 - 5 N S1 S

POLYPLIT™ XLD

filtrouno®

PLEATED FILTER CARTRIDGE

ADVANTAGES

- Enhanced dirt holding capacity, gel retention and bioburden reduction using multiple layers of media
- Graded density, high efficiency depth filtration
- Constructed from polypropylene meltblown media, these filters retain particles from 0.2 to 40 μm
- High surface area and media depth ensure long service life and low initial pressure drop
- 100% polypropylene construction
- Manufactured and assembled in cleanroom environment
- Wide range of configurations to fit most commercially available filter housings
- Designed for general liquid filtration purposes where long life and fine particle removal is necessary
- Internal support by PP core
- Thermally welded without adhesives or medium breakage
- Resistance to sanitization of high temperature water and steam



MATERIALS OF CONSTRUCTION

Filter Media/Components: Polypropylene

Gasket: Silicone, Buna, EPDM, FEP/Silicone, PTFE, Viton®

Sealing: 100% Thermally Welded

SPECIFICATIONS

Filter Grades (Nominal): 0.2, 0.45, 1, 3, 5, 10, 20, 40 μm

Outer Diameter: 68 mm

Length: 10", 20", 30", 40"

Adapters: DOE, Code 3, Code 7, Code 6, Code 8

Max. Working Temp.: 80 °C

Max. Differential Pressure: 4.2 bar @ 30 °C

pH Value: 1-13

FDA Listed Materials: Material compliant with US/FDA/21 CFR 177 requirements for polymers

Sterilization: Multiple autoclaving for 30 min @ 121 °C under no end load conditions

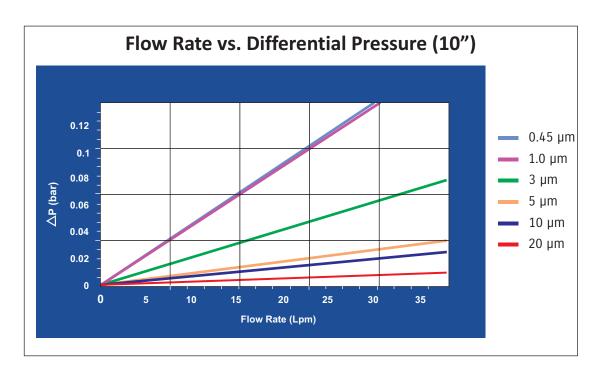
May be in-line sanitized with hot water @ 82 °C for 1 hour

In-line steam sterilization is not recommended

filtrouno®

POLYPLIT™ XLD

PLEATED FILTER CARTRIDGE



APPLICATIONS

Food and Beverage: Clarification in wine, potable water, beer, soft drinks, brewery, edible oils

Pharmaceutical: Pre-filtration and bioburden reduction

Chemical: Adhesives, solvents, surfactants, chemicals

General process industry: Pre-filtration for DI and RO systems, process water

ORDERING INFORMATION

CF	Product	Material	Micron	Length	Efficiency	Adapter	Gasket
+	PPRXLD	PP = Polypropylene	02 = 0.2 μm	10 = 10"	N = Nominal	S1 = D0E	S = Silicone (standard)
mer			045 = 0.45 μm	20 = 20"	A = Absolute	S2 = Code 3	B = Buna
. Ele			1 = 1 μm	30 = 30"		S3 = Code 7	E = EPDM
Cartridge Filter Element			3 = 3 μm	40 = 40"		S6 = Code 6	FS = FEP/Silicone
ge F			5 = 5 μm	50 = 50"		S8 = Code 8	T = PTFE
rtrid			10 = 10 μm	xx = Other			V = Viton®
Cal			20 = 20 μm				
			40 = 40 μm				

CF/PPRXLD - PP 02 - 10 A S1 S

filtrouno®

HYDROPHOBIC

MEMBRANE FILTER CARTRIDGE

ADVANTAGES

- Suitable for removing the bacteria in gas and air
- Certified membrane with filtration efficiency >99.99%
- Minimum pore size is 0.2 μm, suitable for critical gas filtration
- Free of surfactants, resins, binders and adhesives
- Individually packaged in heat-sealed bags

MATERIALS OF CONSTRUCTION

Filter Media: PTFE Membrane
Support Layers: Polypropylene
Inner core: Polypropylene
Outer Support: Polypropylene
Adapter: Polypropylene



SPECIFICATIONS

Outer Diameter: 2.75"
Inner Diameter: 1.30"

Length*: 5", 10", 20", 30", 40"

Adapters: DOE, Code 3, Code 7, Code 6, Code 8, Code 28

TECHNICAL INFORMATION

Normal Operating Temperature: Up to 65 °C

Max. Operating Temperature & 90 °C @ △P≤1.0 bar

Max. Differential Pressure:

Normal Flow direction: 4.2 bar @ $25 \,^{\circ}$ C Reverse Flow direction: 2.1 bar @ $25 \,^{\circ}$ C

pH Value Compatibility: 1-14

Sterilization: Steam Sterilization for 30 min @ 135 °C

Cumulative Time: 50 h

APPLICATIONS

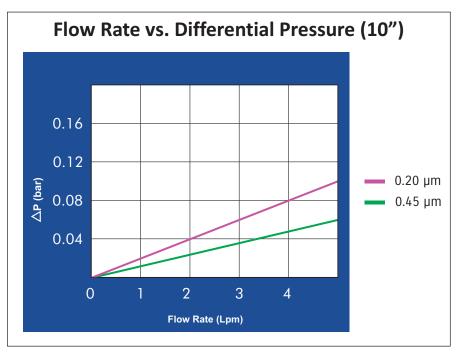
Fermentation air, tank vent, compressed air, sterile process gases, ultrafine particles in air

^{*} Length is based on DOE Adapter



HYDROPHOBIC

MEMBRANE FILTER CARTRIDGE



Liquid Retention Ratings Test (μm)						
Cartridge Code	Bubble Point					
PMH02	0.2	≥0.9 bar				
PMH045	0.45	≥0.4 bar				

Test Liquid: 70%/30% IPA/water @ 23 °C

ORDERING INFORMATION

	Micron	Length	Adapter	Gasket
	02 = 0.2 μm	5 = 5"	S1 = DOE	S = Silicone (standard)
_	045 = 0.45 μm	10 = 10"	S2 = Code 3	B = Buna
H M		20 = 20"	S3 = Code 7	E = EPDM
		30 = 30"	S6 = Code 6	FS = FEP/Silicone
		40 = 40"	S8 = Code 8	T = PTFE
		xx = Other	S9 = Code 28	V = Viton [®]
PMH	02	10	S1	S

filtrouno®

HYDROPHILIC

MEMBRANE FILTER CARTRIDGE

ADVANTAGES

- Best choice for extreme operating conditions
- Free of surfactants, resins, binders and adhesives
- Standard: clean and flushed with pyrogen-free water
- Rinse: up to 17-18 $M\Omega$.cm with a minimum of throughput
- Vacuum-packed

MATERIALS OF CONSTRUCTION

Filter Media: PTFE, PES, Nylon 66 Membrane

Support Layers: Polypropylene
Inner core: Polypropylene
Outer Support: Polypropylene
Adapter: Polypropylene



SPECIFICATION

Outer Diameter: 2.75"
Inner Diameter: 1.30"

Length*: 10", 20", 30", 40"

Adapters: DOE, Code 3, Code 7, Code 6, Code 8, Code 28

TECHNICAL DATA

Normal Operating Temperature: Up to 65 °C

Max. Operating Temperature & 90 °C @ △P≤1.0 bar

Max. Differential Pressure:

Normal Flow Direction: 4.2 bar @ $25 \,^{\circ}$ C Reverse Flow Direction: 2.1 bar @ $25 \,^{\circ}$ C

PH Value compatibility: 1-14

Effective Filtration Area: 0.65 m² per 10"

Sterilization: Steam Sterilization for 30 min @ 135 °C

Cumulative Time: 50 h

APPLICATIONS

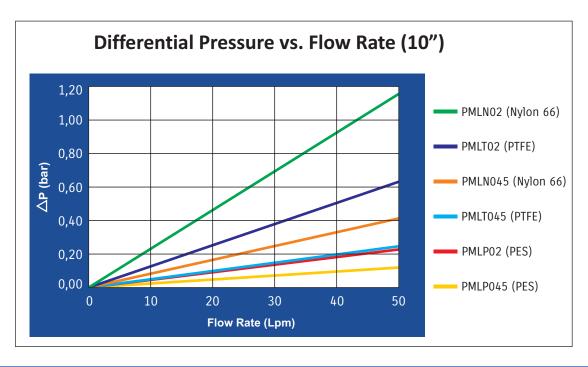
Bacterial removal, strong acid or alkaline solvent, high temperature liquid filtration

^{*} Length is based on DOE Adapter



HYDROPHILIC

MEMBRANE FILTER CARTRIDGE



Technical Specifications for Absolute Cartridges							
Cartridge Code	Retention (≥99.9% Efficiency)	Integrity Test (min. BP, bar)	Test Fluid				
PMLT02 (PTFE)	0.2 μm	1.0	70/30 IPA-Water				
PMLT045 (PTFE)	0.45 μm	0.6	70/30 IPA-Water				
PMLP02 (PES)	0.2 μm	4.2	Water				
PMLP045 (PES)	0.45 μm	2.6	Water				
PMLN02 (Nylon 66)	0.2 μm	3.3	Water				
PMLN045 (Nylon 66)	0.45 μm	1.8	Water				

Test Liquid: 70%/30% IPA/water @ 23 °C

ORDERING INFORMATION

	Material	Micron	Length	Adapter	Gasket
_	T = PTFE	01 = 0.1 μm	10 = 10"	S1 = DOE	S = Silicone (standard)
	P = PES	02 = 0.2 μm	20 = 20"	S2 = Code 3	B = Buna
M	N = Nylon 66	045 = 0.45 μm	30 = 30"	S3 = Code 7	E = EPDM
م			40 = 40"	S6 = Code 6	T = PTFE
			50 = 50"	S8 = Code 8	V = Viton®
			xx = Other	S9 = Code 28	
РМ	T	01	10	59	ς

WOUND FILTER CARTRIDGE



ADVANTAGES

- Continuous string wound around a polypropylene or SS core
- Designed for applications where reliable and consistent depth filtration is required
- High flow rates with excellent particles retention
- Good chemical compatibility at low price
- Ideal for high temperature and high pressure processes
- Easy installation and replacement
- Low maintenance cost
- Available in a wide range of materials and micron ratings

MATERIALS OF CONSTRUCTION

String: Polypropylene, cotton, glass

Core: Polypropylene, SS

SPECIFICATIONS

Pore Size: 1-100 µm

Outer Diameter: 63 mm, 114 mm ("Big Blue")

Length: 5", 9.75", 10", 19.75", 20", 30", 40"

Adapters: DOE, Code 3, Code 7, Code 8

TECHNICAL INFORMATION

Effective Filtration Area (10"): ≥0.04 m²

Maximum Differential Pressure: 4.2 bar @ 25 °C

pH Value: 1-13

Maximum Working Temperature: Polypropylene: 80 °C

Cotton: 150 °C Glass: 300 °C



filtrouno®

WOUND FILTER CARTRIDGE

APPLICATIONS

General Process Industry: Pre-filtration for water purification

Food & Beverage Industry: Coarse filtration for all kinds of beverages (wine, soft drinks, beer),

edible oil, cocoa butter, sugar, saccharin, starch syrup

Chemical Industry: Acids, bases, organic solvents, plating solutions, magnetic

coatings, polyester resins

Oil & Gas Industry: Amine, glycol, lubricating oil

ORDERING INFORMATION

	Material	Micron	Length	Efficiency	Adapter
	PP = Polypropylene	1 = 1 μm	5 = 5"	N = Nominal	S1 = D0E
	C = Cotton	3 = 3 μm	975 = 9.75"		S2 = Code 3
>	G = Glass	5 = 5 μm	10 = 10"		S3 = Code 7
		10 = 10 μm	1975 = 19.75"		S8 = Code 8
		25 = 25 μm	20 = 20"		
		50 = 50 μm	30 = 30"		
		100 = 100 μm	40 = 40"		

PW C 1 10 N S1

PSM SERIES

SINTERED FILTER CARTRIDGE



ADVANTAGES

- Available in titanium or 316L stainless steel
- High temperature rate, excellent structure and good mechanical performance
- Can work under extremely high or low temperatures
- Excellent chemical stability and high resistance to acid and alkali corrosion and anti-oxidation
- Can purify or separate all solids, liquids, air and gas

MATERIALS OF CONSTRUCTION

Filtration Media: Titanium or 316L stainless steel
Core/Support: Titanium or 316L stainless steel

Gasket: Silicone, EPDM, FEP/Silicone, PTFE, Viton®



Pore Size: 1-120 µm

Length: 5", 10", 20", 30", 40"

Adapters: DOE, Code 7, MBSP

TECHNICAL DATA

Effective Filtration Area (10"): ≥0.4 m²
Pressure Resistance: 5-15 bar

Maximum Working Temperature (wet): Titanium (500 °C), 316L SS (400 °C)

Maximum Working Pressure: ≥6 bar (≤25 °C)

Maximum Differential Pressure: 4.2 bar pH Value: 1-14

Sterilization Method: Steam @ 121 °C



SINTERED FILTER CARTRIDGE



APPLICATIONS

Medical Industry: Decarbonization filtration for transfusions, injections and oral

medicine fluids, safety filtration before the end filtration in the

dilution process

Chemical Industry: Dirt and pigments filtration, filtration for returning water in oil fields,

hot gas filtration, catalyst retention

Sewage processing industry: Filtration for ozone after antisepsis & ozone exposure filtration

Food & Beverage Industry: Clarification of liquor, beer, wine, mineral water, vegetable oil, soy

sauce etc

ORDERING INFORMATION

Material	Micron	Length	Efficiency	Adapter	Gasket
TI = Titanium	1 = 1 μm	10 = 10"	N = Nominal	S1 = D0E	S = Silicone (standard)
SS = 316L SS	2 = 2 μm	20 = 20"	A = Absolute	S3 = Code 7	E = EPDM
	3 = 3 μm	30 = 30"		S7 = 1" MBSP	FS = FEP/Silicone
	up to:	40 = 40"			T = PTFE
	120 = 120 μm				V = Viton [®]

PSM TI 1 10 N S1 S

filtrouno®

PLEATED STAINLESS STEEL FILTER CARTRIDGE

ADVANTAGES

- Pleated stainless steel mesh to maximize the filtration area
- Ideal for high temperature and high pressure conditions
- Can be back washed or cleaned for ultra-long life
- High corrosion resistance
- Ideal for filtering viscous liquids from food and beverages

MATERIALS OF CONSTRUCTION

Filtration Media: 304/316L SS mesh

Downstream &

Upstream Drainage: 304/316L SS mesh

Outer Cage: NIL

Core: 304/316L SS

Gasket: Silicone, Buna, EPDM, PTFE, Viton®

SPECIFICATIONS

Pore Size: 1, 3, 5, 10, 20, 25 μm

Outer Diameter: 60 mm or 80 mm Length: 10", 20", 30", 40"

Adapters: DOE, Code 3, Code 6, MBSP

TECHNICAL DATA

Effective Filtration Area (10"): ≥0.4 m²

Maximum Working Temperature: 200 °C

Maximum Working Pressure: ≥6 bar @ ≤25 °C

Maximum Differential Pressure: 6 bar @ 25 °C

pH Value: 1-14





PLEATED STAINLESS STEEL FILTER CARTRIDGE

APPLICATIONS

- Sparger
- Cryogenics
- Beverages
- Highly Viscous Fluids
- Corrosive Liquids and Gas
- Super-heated Steam Processes
- High Temperature Processes
- Valuable Particulate Recovery

ORDERING INFORMATION

	Micron	Length	Adapter	Gasket
STP	1 = 1 μm 2 = 2 μm 3 = 3 μm up to: 100 = 100 μm	1 = 10" 2 = 20" 3 = 30" 4 = 40" xx = Other	S1 = DOE S2 = Code 3 S6 = Code 6 S7 = 1" MBSP	S = Silicone B = Buna E = EPDN T = PTFE V = Viton®
STP	1	1	S1	S

HATTI SERIES

HATTITM



HIGH FLOW PLEATED FILTER CARTRIDGE

ADVANTAGES

- filtroUNO® HATTI™ Filter Cartridge packs filtration performance into a tight, economical package
- The large format (Ø 150 mm, 40") allows for extended surface area in a small operating footprint
- Available in standard efficiency grades, filtroUNO[®] HATTI™
 Cartridge packs more punch into any compact installation

FEATURES

- In-to-out flow captures dirt inside and keep it there for ease of disposal
- Large, rigid body makes horizontal installation possible to eliminate platforms for change-out
- All polypropylene construction for purity and broad chemical compatibility
- Radial o-ring seal eliminates bypass
- Integral handle makes change-out quick and easy

TECHNICAL DATA

Available Length: 10", 20", 30", 40", 60" Maximum Operating Temperature: 80 °C

APPLICATIONS

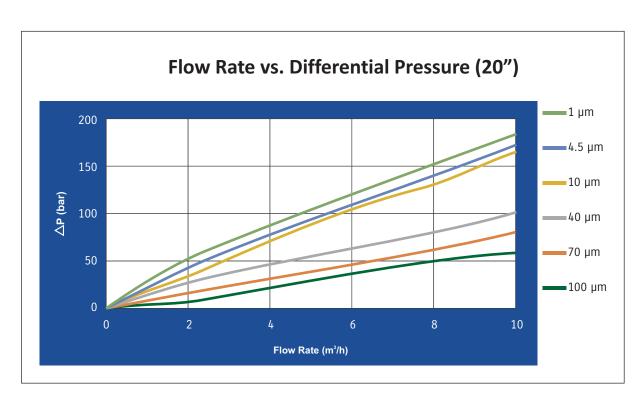
- Pre-filtration for large-scale RO systems
- Condensate re-circulation
- Potable water
- Beverages
- Ink and paints



HATTI™



HIGH FLOW PLEATED FILTER CARTRIDGE



ORDERING INFORMATION

	Micron	Length	Efficiency	Code	Gasket
	1 = 1 μm	10 = 10"	N = Nominal	J5 = Hatti	S = Silicone (standard)
	5 = 5 μm	20 = 20"			B = Buna
	10 = 10 μm	30 = 30"			E = EPDM
	40 = 40 μm	40 = 40"			V = Viton®
	70 = 70 μm	60 = 60"			
	100 = 100 μm				
PPJ	1	10	N	J5	S

CARTRIDGE ADAPTERS

CARTRIDGE ADAPTERS





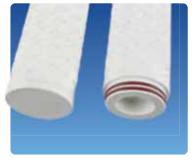
S1 = DOE double open-ended



S2 = Code 3 SOE flat closed end, external 222 o-rings



S3 = Code 7 SOE fin end, external 226 o-rings



S6 = Code 6 SOE flat closed end, external 226 o-rings



S8 = Code 8 SOE fin end, external 222 o-rings



S9 = Code 28

SOE fin end,
3 locking tabs,
external 222 o-rings



S4 = Pall 4463 internal plug seal single 116 o-rings



H5 = HATTI[™] H5 SOE flat closed end, external 435 o-ring



 $H6 = HATTI^{TM} H6$



S7 = 1"MBSP

Complete Range of Filter Cartridges to Keep Your Processes Pure!



filtrouno

SINGLE DOE

SINGLE-CARTRIDGE INDUSTRIAL HOUSING

The SI Series Cartridge Filter Housings are three-piece, all metal housings with clamp closures

- Designed to meet general industrial filtration needs
- SI Models offer a choice in construction materials for wetted surfaces and are available with a 316L stainless steel head, with 304 stainless steel sump or in all 316L stainless steel in one-high, two-high or three-high designs
- Clamps for head to sump sealing are stainless steel
- All SI housings are tapped for either leg or wall mounting
- Legs and brackets are standard options for flexibility in installation

FEATURES

- Rugged all-metals construction provides long service life and quick & easy cartridge change-out
- Design flexibility: 1, 2 or 3-high cartridge models for use with 9.75", 19.5" or 29.25" filter cartridges
- Drilled and tapped mounting holes ready for mounting bracket or leg installation

OPTIONS

- Choice of gasket materials
- Mounting bracket available as accessory equipment
- Stainless steel legs

CARTRIDGE REQUIREMENTS

- The SI101, 102 and 103 Series Cartridge Filter Housings can use one, two or three equivalent single-length filter cartridges respectively
- The SI101 and 103 Models can also use one 19.5" filter cartridge and one 29.25" filter cartridge respectively
- A shorter version of the SI101 that uses a 5" double open-ended cartridge is also available

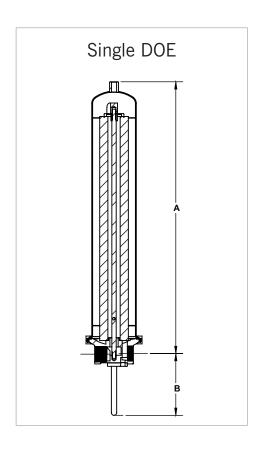






SINGLE DOE

SINGLE-CARTRIDGE INDUSTRIAL HOUSING



Size	I/O	Height (mm)	A (mm)	B (mm)	Volume (L)	Weight (kg)
05	1″	127	200	140	1.4	3.4
10	1"	254	350	140	2.4	3.9
20	1″	508	610	140	4.4	5.0
30	1″	762	865	140	6.3	6.0
40	1"	1016	1095	140	8.3	7.0

Design Pressure	15 bar
Design Temperature	Silicone Rubber: -10 to 250 °C EPR seals: -10 to 121 °C
Steam Sterilization	Silicone Rubber: 3.7 bar/150 °C max EPR seals: 1 bar/121 °C max
Materials of Construction	Wetted parts 316L stainless steel
Housing Seal Options	All standard o-ring materials
Surface Finish	≤0.8 micron Ra
Connections	FBSP, FNPT, Flanged
Filter Cartridge Compatibility	DOE

filtrouno®

MULTI-ROUND DOE/222

3 TO 9-ROUND

Stainless Steel or Carbon Steel Multi-Cartridge Filter Housing for Industrial Applications

- Size: 10", 20", 30" or 40"
- Number of cartridges: 3 to 9
- Housing is designed to accept DOE or 222-style cartridges
- All stainless steel material of construction for corrosion resistance
- Swing-bolt or clamp closure design assures secure sealing and ease of change-outs
- Standard design allows for easy piping
- 10 bar maximum operating pressure allows use in many applications





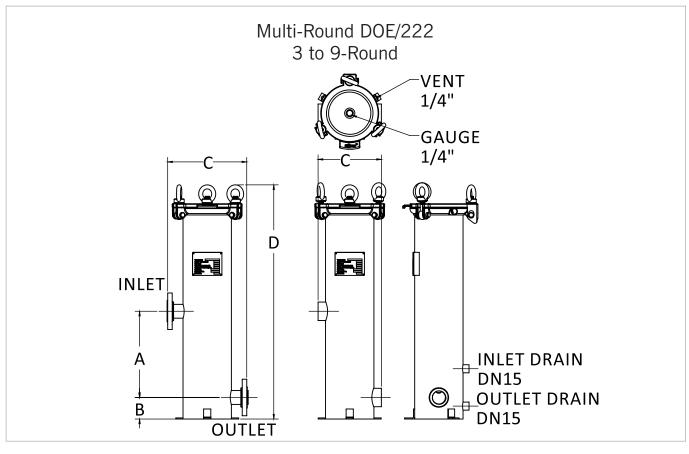
Housing configurations for 3 to 9-Round DOE/222 cartridge connections

Design Pressure	10 bar @ 150 °C
Materials of Construction	Head/Shell/Connections: CS, 304 or 316L SS Bolting: Zinc plated steel or 304 SS
Shell O-rings	Accepts most standard o-ring materials
Customization	Housing can be engineered to meet the specific needs of the process and installation

MULTI-ROUND DOE/222







	Size	I/O (FBSP/FNPT)	A (mm)	B (mm)	C (mm)	D (mm)			
		3-F	Round D	OE					
	10"	DN25	200	65	240	255			
	20"	DN25	300	65	240	510			
	30"	DN40	500	75	270	765			
	40"	DN40	600	75	270	1020			
		5-Round DOE							
THREADED	10"	DN25	225	75	300	550			
A	20"	DN40	355	85	300	815			
器	30"	DN40	465	85	320	1075			
$ \pm $	40"	DN50	585	95	320	1335			
	7-Round DOE								
	20"	DN40	350	70	340	925			
	30"	DN50	500	75	370	1175			
	40"	DN50	600	75	370	1430			
		9-Ro	und DC	E					
	30"	DN65	450	115	420	1200			
	40"	DN65	575	115	420	1450			

Size	I/O	A (mm)	B (mm)	C (mm)	D (mm)
	E				
10"	DN25	200	75	230	240
20"	DN25	300	75	230	500
30″	DN40	500	85	250	755
40"	DN40	600	85	250	1010
	5-Ro	und DO	E		
10"	DN25	225	65	350	540
20"	DN40	355	75	350	800
30″	DN40	465	75	400	1060
40"	DN50	585	85	400	1320
	E				
20"	DN40	350	75	450	935
30″	DN50	500	100	450	1185
40"	DN65	600	125	450	1450
	9-Ro	und DC	E		
30"	DN65	450	115	550	1200
40"	DN65	575	115	550	1450
	10" 20" 30" 40" 10" 20" 30" 40" 30" 40"	3-Rot 10" DN25 20" DN25 30" DN40 40" DN40 5-Rot 10" DN25 20" DN40 30" DN40 40" DN50 7-Rot 20" DN40 30" DN50 40" DN65	Size I/O (mm)	Size I/O (mm) (mm) (mm)	Size I/O (mm) 10" DN25 200 75 230 30" DN40 600 85 250 40" DN25 225 65 350 20" DN40 355 75 350 30" DN40 465 75 400 40" DN50 585 85 400 7-Round DOE 20" DN40 350 75 450 40" DN65 600 125 450 9-Round DOE 30" DN65 450 115 550

filtrouno®

LARGE-FORMAT DOE/222

12 TO 144-ROUND

Flanged Multi-Round Housings for Larger Flow Rates for Industrial Applications

- Sizes: 30", 40"
- Number of Cartridges: 12 to 144
- Mounts accept either DOE or 222-style elements
- Available in all standard materials
- Swing bolt or cast clamp closures for secure sealing and ease of change-out
- Fitted with upper compression plate adjustable for either element style
- Standard 10 bar maximum operating pressure
- Also available in bottom outlet and custom configurations



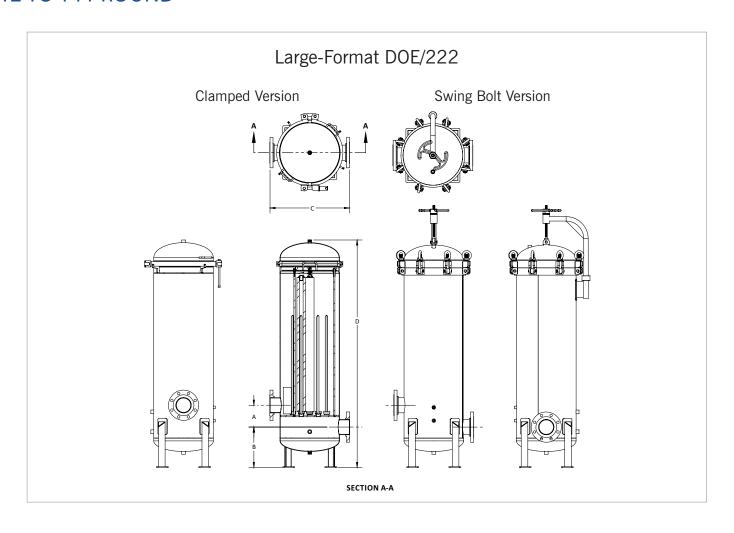


Design Pressure	10 bar @ 150 °C
Materials of Construction	Head/Shell/Connections: CS, 304 or 316L SS Bolting: Zinc plated steel or 304 SS
Shell o-rings	Accepts most standard o-ring materials
Customization	Housing can be engineered to meet the specific needs of the process and installation

filtrouno®

LARGE-FORMAT DOE/222

12 TO 144-ROUND



Size	I/O B16.5 150#	A (mm)	B (mm)	C (mm)	D (mm)			
	12	-Round						
30"	DN80	165	305	500	1438			
40"	DN80	165	305	500	1688			
	22	-Round						
30"	DN100	165	305	600	1468			
40"	DN100	165	305	600	1718			
	33-Round							
30"	DN125	210	375	700	1493			
40"	DN150	210	375	700	1743			

Size	I/O B16.5 150#	A (mm)	B (mm)	C (mm)	D (mm)		
	55	-Round					
30"	DN150	280	375	800	1543		
40"	DN200	280	425	800	1793		
	75	-Round					
30"	DN200	375	425	900	1568		
40"	DN200	375	425	900	1818		
	144-Round						
30"	DN250	425	875	1350	1668		
40"	DN300	475	875	1350	1918		

filtrouno®

SANITARY FILTER HOUSING

SINGLE SANITARY HOUSING

Designed for critical applications that require durability and high purity

- Ideal for liquid filtration in pharma and food & beverage industries
- Enhanced cleanability and microbiological safety due to crevice-free, polished, hygienic design
- Corrosion resistance and durability with high-quality welds while maintaining cost-effectiveness
- Operator-friendly V-clamp closure simplifies handling

FEATURES

- Available with 222 or 226-style cartridge connectors
- Wetted parts are 316L stainless steel
- In-line single cartridge or T-style housing design:
 - In-line design features tri-clamp closure for easy cartridge change outs
 - T-style housing design features tri-clamp closure for single cartridge housing
- Optional sanitary twist valve for easy sampling of process fluid



Single Code 7

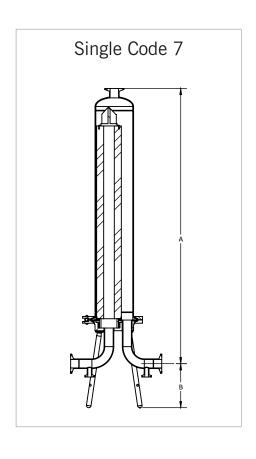


Tri-clamp closure



SANITARY FILTER HOUSING

SINGLE SANITARY HOUSING



Size	I/O	A (mm)	B (mm)	Volume (L)	Weight (Kg)
05	1"	335	116	1.5	4.2
10	1″	460	116	2.5	5.2
20	1"	725	116	4.5	6.4
30	1"	995	116	6.4	7.5
40	1"	1200	116	8.4	8.4

Design Pressure	10.3 bar @ 107 °C
Connections	Inlet/Outlet: Tri-clamp Drain Ports: 1/2" tri-clamp Gauge Port with Vent: 1-1/2" tri-clamp
Materials of Construction	Head/Shell/Connections: 316L SS Closure: Swing bolts or clamp Mounting Legs: 316L SS
Gaskets	Standard: Silicone Optional: Viton®, EPR, NBR, FEP/Silicone, FEP/Viton®
Finish	Internal surfaces: Mechanically-polished RA 0.8µm, Electropolished External surfaces: Mirror-polished
Cartridge Type	222 or 226 Cartridges (Max. 68 mm OD)
Custom Options	Sanitary valve for vent and drains See Ordering Guide for complete listing

filtrouno®

SANITARY FILTER HOUSING

MULTI-ROUND SANITARY HOUSING

Designed and constructed to assure bypass-free filtration at all efficiency levels

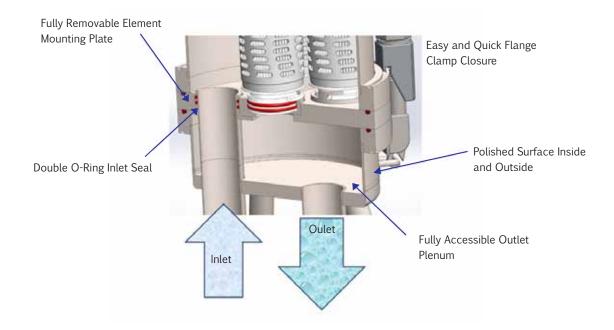
- Change-out, cleaning and sterilization couldn't be easier
- Designed and constructed for quick disassembly-cleaningreassembling

FEATURES

- Available in sizes from 10" to 40" for 222 and 226 connections
- End connections in TC, SMS and flanges
- Fully polished inside and out
- All corners radiused for full cleanability
- No hidden or non-visible crevices or cavities
- Closures with flange clamps or swing bolts
- Can be used with all seals including encapsulated o-rings



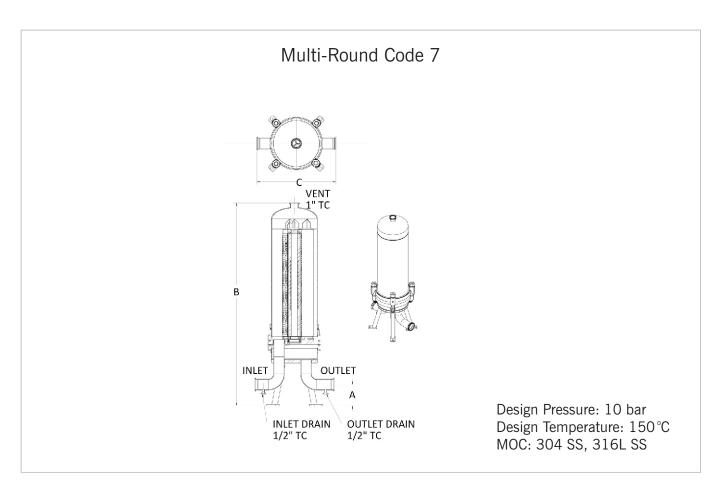
Multi-Round Code 7





SANITARY FILTER HOUSING

MULTI-ROUND SANITARY HOUSING



Model	Length	I/O (TC)	A (mm)	B (mm)	C (mm)
)E	10"	1"	100	683	325
ЭД Р	20"	1"	100	937	325
3-Round DOE	30″	1.5"	100	1191	325
မှ	40"	2″	100	1445	325
)E	10"	1.5"	100	708	375
5-Round DOE	20"	2″	100	962	375
Roun	30"	2″	100	1216	375
5-	40"	3″	100	1470	375
)E	10"	1.5"	100	708	425
7-Round DOE	20"	2"	100	962	425
	30"	3″	100	1216	425
7-	40"	3″	100	1470	425

HATTITM



LARGE FORMAT CARTRIDGE FILTER HOUSING

The best way to handle large flow rates

- Horizontal orientation eliminates the need for large vertical space
- Eliminates the need for platforms or ladders for change-out
- Individual o-ring seal for each cartridge eliminates bypass
- Convenient, economical installations for medium to high flow rates
- For cartridge lengths of 40" and 60"
- Up to 75 m³/hr per single elements



FEATURES

- Horizontal opening of hinged lid
- Flexible nozzle orientation
- Available in all materials and pressure ratings
- Single pressure plate for retaining multiple elements

BENEFITS

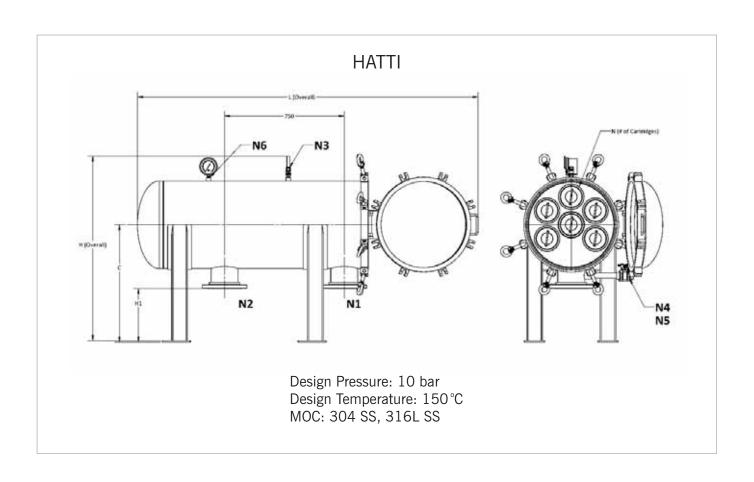
- Eliminates difficult change-out of large numbers of standard elements
- Rigid filter format assures sealing even at high flow rates
- Elements can be changed in just a few minutes

CARTRIDGE FILTER HOUSINGS





LARGE FORMAT CARTRIDGE FILTER HOUSING



# Elements		May Flow (m³/h)	Nola Ci-a	Dimen	sions for 40	Cartridge)	s (mm)
		Max. Flow (III /II)	Nozzle Size	C	H1	Н	L
	1	50	DN80	750	350	865	1530
	3	150	DN125	750	350	1065	1630
	4	200	DN125	750	350	1115	1780
	6	300	DN150	800	450	1165	2116
	8	400	DN200	800	500	2015	2366
	12	600	DN250	850	550	2065	2616

filtrouno®

PP FILTER HOUSINGS

"BIG BLUE"

FEATURES

- Offer an alternative to the customer for corrosive fluids filtration where metallic housings are not permitted
- Ideal for use in a variety of low flow applications
- Optional pressure-relief/bleed button on inlet side of cap
- Thick walls for increased strength
- Outstanding chemical compatibility
- Leak-proof sealing with top-seated Buna o-ring

MATERIALS OF CONSTRUCTION

Standard filter housings are manufactured of a durable polypropylene

SPECIFICATIONS

- Equipped with 0.75", 1" or 1.5" BSP inlet & outlet ports
- Standard filter housings are available in both 10" and 20" lengths and will accommodate a wide range of 2.5" to 4" diameter cartridges
- Reinforced polypropylene housings have excellent chemical resistance and are ideal for many residential, commercial and industrial applications

APPLICATIONS

Wide range of applications including residential, commercial and industrial Under-the-sink and counter-top residential filtration, pre and post-reverse osmosis filtration, recreational vehicle filtration, food services, humidifying systems

ORDERING INFORMATION

I	Inlet/Outlet Connection	Length	Optional
	075 = 0.75"	10 = 10"	BB = Jumbo
<u>م</u>	001 = 1"	20 = 20"	
\Box	015 = 1.5"	30 = 30"	
DDELL	075	10	DD
BPFH	075	10	ВВ

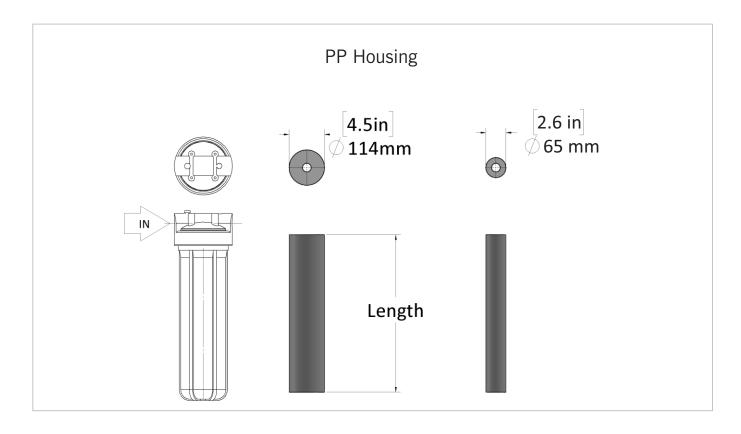


PLASTIC HOUSINGS

filtrouno®

PP FILTER HOUSINGS

"BIG BLUE"



Available Sizes	65 mmØ: 5", 10", 20" 114 mmØ: 10", 20"
Max. Operating Pressure	6 bar
Max. Operating Temperature	60 °C
Materials of Construction	Polypropylene
Sealing Options	EPDM, NBR, FKM, VQM
Connections	65 mmØ: 0.5" BSP or NPT 114 mmØ: 0.75" BSP or NPT
Connection Material	PP Standard Metal Inserts Available on Request
Cartridge Compatibility	All DOE

filtrouno®

POLYPROPYLENE/POLYESTER NEEDLED FELT

ADVANTAGES

- filtroUNO® PO filter bag is one of the most versatile and popular bags in the market
- Made from virgin needled felt with a glazed surface finish, the standard bag incorporates the welded seam design
- F-Neck® ring provides hermetic sealing, preventing steel ring bypass problems
- Welded seam eliminates unfiltered liquid bypass occurring due to needle holes
- filtroUNO® Polyester filter bag is made of virgin needled felt and can be ordered with the F-Neck® ring
- Bags come in a variety of sizes and ring seals to suit your vessel requirements





The bag with the F-Neck® ring fits perfectly into the filter housing



This cross section shows how the F-Neck® seals inside the filter housing



The result is a filter bag with durable performance for the most demanding applications



POLYPROPYLENE/POLYESTER NEEDLED FELT

APPLICATIONS

- Automotive
- Chemical processes
- Food & Beverage
- Paints, dyes, resins and varnishes
- Electronics
- Oil & Gas

- Public water
- Industrial water
- Paper & Cellulose
- Pharmaceuticals
- Lubricants and solvents
- Fluids for metal machining

Filter Dimensions		Maximum Flow Rate	
Size 1	7"Ø x 16"	15 m³/h - 250 Lpm	
Size 2	7"Ø x 32"	25 m³/h - 416 Lpm	
Size 3	4"Ø x 8"	5 m³/h - 83 Lpm	
Size 4	4"Ø x 14"	10 m³/h - 166 Lpm	
Maximum Operating Temperature		90 °C (PO), 135 °C (PE)	
Suggested Maximum Differential Pressure		1.72 bar	

filtrouno

accuFLO™

ABSOLUTE POLYPROPYLENE FILTER BAG

ADVANTAGES

- Efficiencies greater than 99%
- Cost-effective filtration solutions for demanding applications
- Five models ensure particles removal ranging from 1-25 μm
- Long service life

FEATURES

- accuFLO™ polypropylene filter bags are fabricated from hydrophobic microfiber filter material, which require pre-wetting with an aqueous solution
- Highly efficient meltblown filter material in polypropylene graded density profiles to maximize dirt-holding capacity and prolong service life
- No additives such as resins, binders or surface treatments
- Tough downstream cover layer virtually eliminates fiber migration
- The pressure-activated PolySEAL™ ring provides a flexible, chemically resistant seal which adapts to any bag filter housing
- Kitten® strongly recommends the use of an insertion tool that facilitates the insertion of the filter bag into the bag filter housing and ensures the correct alignment of the filter bag inside the restrainer basket



APPLICATIONS

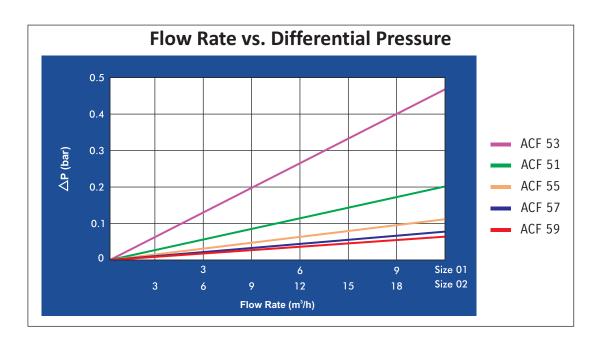
filtroUNO® accuFLO™ filter bags are suitable for a wide range of applications in the beverage industry (beer, wine, spirits), fine particle removal in parts cleaning, activated carbon removal in process systems, final filtration of vinegar, varnishes, hydraulic oils, lubricants and many more

Material	Melt-blown Polypropylene
Spunbond Layers	Polypropylene
Seal Rings	Welded Polypropylene PolySEAL™
Retention Ratings	1.5, 3, 5, 10, 25 µm @ >99% efficiency

accuFLO™



ABSOLUTE POLYPROPYLENE FILTER BAG



Filter	Dimensions	Maximum Flow Rate
Size 1	180 mm Ø x 435 mm	8 m³/h
Size 2 180 mm Ø x 810 mm		15 m³/h
Maximum Operating Temperature		90°C
Maximum Differential Pressure		2.5 bar
Suggested	△P for Change-out	1.5 bar

FDA/EC CONFORMITY

All polypropylene materials used in manufacturing comply with the regulations of the Food and Drug Administration (FDA), title 21 of the Code of Federal Regulations 1935/2004 and EC Directives 2002/72/EC, as applicable for food and beverage contact

	Particle Siz	zes (μm) @	m) @ Common Removal Efficiencies (%)			∆P (bar) Size 02	Max. Operating Temperature
Model	>60%	>90%	>95%	>99%	>99.9%	@ 10 m³/h	(°C)
ACF 51	0.2	0.6	0.8	1.5	5	0.09	90
ACF 53	0.8	1	2	3	5	0.22	90
ACF 55	1	2	3	5	15	0.05	90
ACF 57	2	4	5	10	25	0.04	90
ACF 59	10	20	22	25	35	0.03	90

EXTENDED-LIFE



ADVANTAGES

- filtroUNO® Extended-Life felt filter bag series is designed to provide longer service life resulting in reduced operation costs and process down-time
- The unique blend of fibers in extended life media offers 2 to
 5 times the dirt holding capacity of traditional felt media
- The 100% thermally-bonded construction and PolySEAL™ top retainer provide excellent sealing characteristics in most industry standard filter bag housings
- Available in 1, 5, 10, 25, 50 and 100 μm



Filter Media: POXL = Polypropylene Extended-Life Felt
 PEXL = Polyester Extended-Life Felt

Retainer: PP Ring



Filter Dim	ensions	Maximum Flow Rate		
Size 1	7"Ø x 16"	15 m³/h - 250 Lpm		
Size 2	7"Ø x 32"	25 m³/h - 416 Lpm		
Maximum Operating Temperature		90 °C (POXL), 135 °C (PEXL)		
Suggested Δ	P for Change-out	1.5 bar		

MESH FILTER BAG



ADVANTAGES

- All mesh bags are constructed using a woven or knit fabric
- Whether your particular environment requires a single filament mesh that provides excellent strength with no fiber migration or a woven multi-strand mesh designed for low-cost, disposable bags, we have your needs covered
- The yarn in all of our mesh filter bags is extremely abrasion
 -resistant, resistant to a broad range of chemicals, unaffected
 by metal fatigue or corrosion and boasts high tensile strength

FEATURES

- Available in nylon monofilament, polyester multifilament and polypropylene monofilament offering broad range of chemical compatibility and price ranges
- Monofilament mesh bags provide extra strength and abrasion resistance
- Precision mesh materials produce predictable results for consistent performance
- Offered in standard and custom sizes to provide a perfect fit for standard and unique applications
- Offered in micron ratings 1-1500 µm with plastic and metal rings for versatility
- Silicone free to prevent cratering for a better surface finish



Filter Dim	ensions	Maximum Flow Rate
Size 1	7"Ø x 16"	15 m³/h
Size 2 7"Ø x 32"		30 m ³ /h
Maximum Opera	ating Temperature	93 °C (PPMO), 135 °C (FEM and NMO)
Suggested △	P for Change-out	1.5 bar

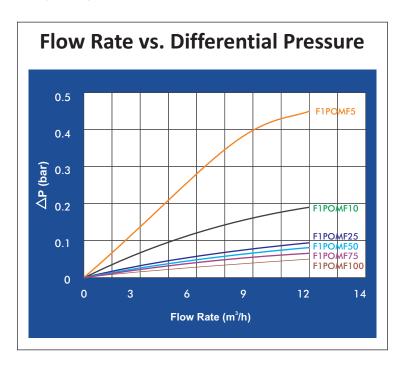
POMF™



OIL ADSORPTION FILTER BAG

ADVANTAGES

- High surface area
- High flow rate
- High dirt and oil-loading capacity
- Multi-layered construction
- 100% polypropylene melt-blown microfiber





Filt	Maximum Flow Rate	
Size 1	7"Ø x 16"	245 Lpm
Size 2	7"Ø x 32"	476 Lpm
Maximum Ope	80 °C	
Recommended Op	≤1.5 kg/cm²	
Suggested Z	1.5 bar	

Material	Model	Filtration Efficiency (µm)				△P(bar)	
Maieriai	Model	>60%	>90%	>95%	>99%	>99.9%	Size 2 @ 10 m³/h
O	F1POMF5	1	2	3	5	10	0.09
pylen	F1POMF10	2	3	5	10	25	0.22
py	F1POMF25	5	10	15	25	50	0.05
pro	F1POMF50	10	25	35	50	75	0.04
Polypi	F1POMF75	15	25	50	75	100	0.03
هـُ	F1POMF100	25	50	75	100	150	0.02

CUSTOM BAGS



ADVANTAGES

filtroUNO® Custom Filter Bags are routine for Kitten

We design and manufacture the right filter bag for your filtration application: oil, lubricants, automotive, electronics, food & beverage, chemical industries and many more liquid filtration processes.

All cloth elements are expertly tailored to assure proper fit and conform to OEM specifications.

Kitten® can provide any style filter bag including bags with covers for strict migration requirement, extended length bags, special shaped bags, multi-layered high efficiency bags, tie-on bags and bags with plastic tops.

Get in touch with your requirements.





filtrouno®

topFLO™

TOP-ENTRY HEAVY-DUTY BAG FILTER HOUSING

The best filter housing for the most demanding applications

- topFLO™ is the finest single bag filter housing available
- From its high-performance design to its heavy-duty investment cast components, topFLO™ can take on the toughest applications
- For filter bags Sizes 1 and 2
- Carbon steel, 304 SS and 316L SS construction for high corrosion resistance
- A smooth, bead-blasted finish, coupled with a 2-weld design, makes it completely easy to clean
- Polished finish available
- Flow enters the side and is guided to the center of the bag, improving flow distribution and pressure loss
- Machined lid directly presses on filter seal ring for bypass-free filtration

FEATURES

- Top inlet with liquid flow through the cover
- Cover seals directly onto the filter bag
- Five year warranty
- Adjustable mounting legs

BENEFITS

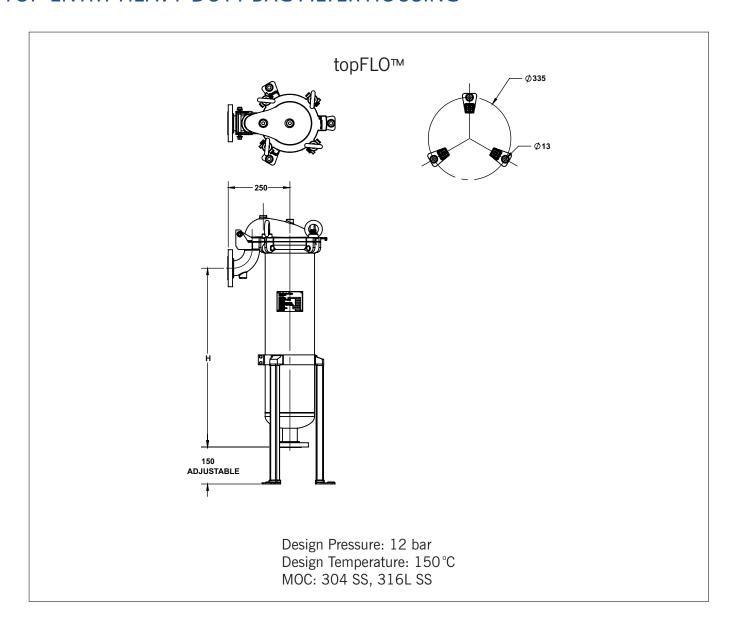
- Reduced headroom for unfiltered liquid makes bag change-out quick and easy
- Perfect sealing for the finest micron bypass-free filtration applications
- Years of trouble and maintenance-free service
- Easy installation



filtrouno

topFLO™

TOP-ENTRY HEAVY-DUTY BAG FILTER HOUSING



Models	Size	Inlet/Outlet	Flow rate* (m³/h)	Volume (L)	Weight (kg)	L (mm)
BF/TE-0101	1	DN 50	15	15.5	25	325
BF/TE-0102	2	DN 50	30	27.0	38	725

^{*} Maximum theoretical flow based on water viscosity, filter-bag specific

filtrouno®

ecoFLO™

SINGLE BAG SIDE-ENTRY FILTER HOUSING

ecoFLO™ is a light-weight design for commercial, OEM, non -hazardous, low-pressure applications that do not require a code stamp

- This single bag filter housing is a highly cost-effective solution for price-sensitive applications
- Robust bolted construction enables long life in demanding industrial settings
- Units come standard with filter bag Size 1-4 and feature stainless steel restrainer baskets

FEATURES

- 8 bar (3 bolts) and 10 bar (4 bolts) operating pressures at 150 °C
- Side entry for easy cleaning and flexible modification
- Evacuation cover to present spillage of unfiltered fluids
- Rigid spring-loaded bag compressor to assure sealing
- Precision all-welded 316L SS restrainer basket
- Integral hubs on lid and flanges for vent and gauge connections
- All welded structure with bead-blasted, electropolished or mechanically-polished surfaces for long life and easy cleaning

OPTIONS

- Available in 316L SS for more demanding applications
- Standard adjustable stainless steel legs for installation flexibility
- Integral differential pressure gauge
- I/O modifications to handle most piping and instrument configurations

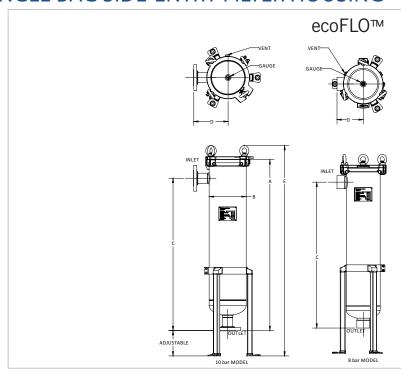




ecoFLO™



SINGLE BAG SIDE-ENTRY FILTER HOUSING



Design Pressure: 8/10 bar Design Temperature: 150°C MOC: 304 SS, 316L SS

Models	Inlet/Outlet	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Ends
			Size: 1,8 k	oar			
BF/SE-0101	DN40	600	200	500	200	665	Flanged
BF/SE-0101	DN50	600	200	500	200	665	Flanged
BF/SE-0101	DN40	587	200	480	150	651	Coupling
BF/SE-0101	DN50	592	200	490	160	655	Coupling
			Size: 2,8 k	oar			
BF/SE-0102	DN40	1001	200	900	200	1065	Flanged
BF/SE-0102	DN50	1001	200	900	200	1065	Flanged
BF/SE-0102	DN40	958	200	857	150	1022	Coupling
BF/SE-0102	DN50	963	200	862	155	1027	Coupling
			Size: 1,10	bar			
BF/SE-0101	DN40	665	219	550	200	720	Flanged
BF/SE-0101	DN50	665	219	550	200	720	Flanged
BF/SE-0101	DN40	609	219	504	160	673	Coupling
BF/SE-0101	DN50	614	219	509	165	678	Coupling
			Size: 2,10	bar			
BF/SE-0102	DN50	1025	219	900	200	1090	Flanged
BF/SE-0102	DN80	1025	219	900	200	1090	Flanged
BF/SE-0102	DN50	994	219	879	165	1058	Coupling
			Size: 3 bo	ar			
BF/SE-0103	DN25	317	114	250	75	380	Coupling
BF/SE-0103	DN32	317	114	250	75	380	Coupling
			Size: 4 bo	ar			
BF/SE-0104	DN32	477	114	400	75	540	Coupling
BF/SE-0104	DN40	477	114	400	75	540	Coupling

SPEED-LOK™



CLAMP CLOSURE MULTI-BAG FILTER HOUSING

Designed for high capacity and rapid, safe change-outs

- This multi-bag filter housing is equipped with the SPEED-LOK™ opening mechanism
- Units are available in 2, 3, 4, 6, 7 and 8-filter bag configurations and come standard with filter bag Size 2 stainless steel restrainer baskets

FEATURES

- Low-profile design with side inlet and tangential outlet provides easy and full drainage and reduces housing height to make filter bag change-outs easier
- Standard 3-point hold down ensures a high quality seal between each filter bag and the housing body
- SPEED-LOK™ opening mechanism allows for fast filter bag change-outs for higher productivity and lower operating costs
- Ideal for processes requiring frequent filter bag changes and minimal down-time
- Interlock with vent valve assures operational safety
- Standard finish: bead-blasted
- Polished option available

ADVANTAGES

- A counter-balanced, spring-assisted cover lifting mechanism provides quick and easy opening of even large covers by one person
- Heavy-duty stainless steel mounting legs are included
- Pressure gauge integrally mounted on housing lid

OPTIONS

- Available in carbon steel, 304 or 316L stainless steel for high corrosion resistance
- Accepts all standard o-ring materials
- Multiple I/O connections to suit every installation





filtrouno®

SPEED-LOK™

CLAMP CLOSURE MULTI-BAG FILTER HOUSING



No. Bags	Inlet/Outlet N1/N2	Flow rate* (m³/h)	Volume (L)	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
2	DN65	60	130.5	141	150	500	375	450	1345
3	DN80	90	151	227	150	500	400	500	1365
4	DN100	120	261	279	150	500	450	550	1385
6	DN125	150	341	367	150	500	475	650	1540
7	DN150	175	391	440	200	500	500	700	1605
8	DN150	200	439	440	200	500	525	750	1630

^{*} Maximum theoretical flow based on water viscosity, filter bag specific

filtrouno®

BOLTED CLOSURE

BOLTED CLOSURE BAG FILTER HOUSING WITH DAVIT

Rugged design offers economy for demanding specifications

- This multi-bag filter housing is equipped with proven and easy
 -to-use rugged eye-bolt cover closure
- The housing volume is optimized to minimize product loss
- Units are available in 2 to 23-bag configurations and come standard with filter bag Size 2 stainless steel restrainer baskets

FEATURES

- Low-profile design with side inlet and tangential outlet provides easy and full drainage and reduces housing height to make filter bag change-outs easier
- Swing bolts with several nut options for rapid, rugged closure
- Positive o-ring sealing provides bypass-free, safe filtration while the unique 3-point hold down ensures a high-quality seal between each filter bag and the housing body
- Robust davit in carbon or stainless steel

ADVANTAGES

- Heavy-duty stainless steel mounting legs are included
- Pressure and DP gauge integrally mounted on housing
- Davit arm with bearings

OPTIONS

- Available in carbon steel, 304 or 316L stainless steel for high corrosion resistance
- Spring-assisted lifter
- Custom fittings, surface finishes, coatings and design code ratings to meet specified applications
- Multiple I/O connections to suit every installation





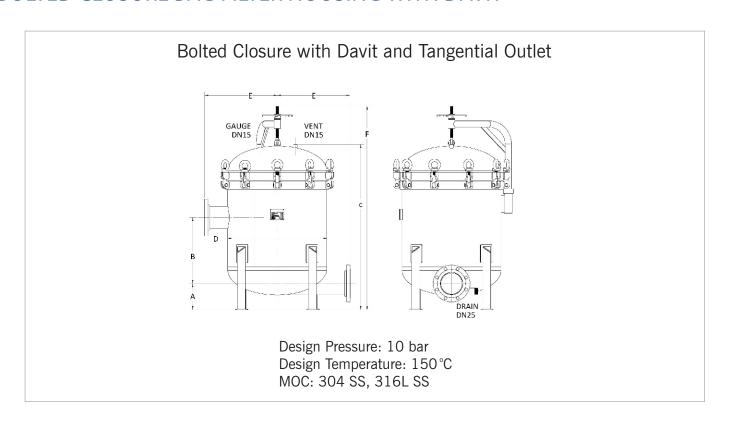
Bolted Housing with Davit





BOLTED CLOSURE

BOLTED CLOSURE BAG FILTER HOUSING WITH DAVIT



No. Bags		Flow rate* (m³/h)	Volume (L)	Weight (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
2	DN65	60	130.5	141	150	500	1040	450	350	1340
3	DN80	90	151	227	150	500	1060	500	375	1360
4	DN100	120	261	279	150	500	1080	600	425	1380
6	DN125	150	341	367	150	500	1240	650	475	1540
7	DN150	175	391	440	200	500	1300	700	500	1600
8	DN150	200	439	440	200	500	1325	750	550	1625

^{*} Maximum suggested flow rate for viscosity of 1 cp

filtrouno

STRAINERS

IN-LINE AND BASKET STYLE

Strainers are ideal for applications where large amounts of coarse solids are expected, leading to frequent cleaning. Or for guard applications to protect sensitive equipment from impact damage. For either case, Kitten® has a strainer to match your requirements.

FEATURES

- Mesh-lined basket to capture and retain particles
- Swing bolts and basket specially designed for fast opening for cleaning
- In-line or full basket design to meet process needs

OPTIONS

- Strainer geometry can be matched to specific applications
- Available in carbon or stainless steel
- In-line or leg mount, depending on requirements
- Available in-line sizes DN50-DN600 in 150# or 300#
- Mesh sizes down to 50 μm
- Custom and OEM versions available on request

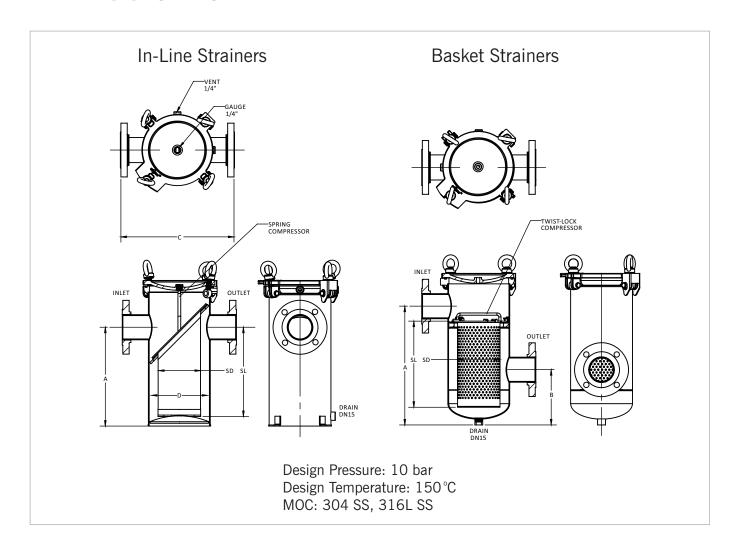




filtrouno®

STRAINERS

IN-LINE AND BASKET STYLE



Model	I/O	A (mm)	B (mm)	C (mm)	D (mm)	SD (mm)	SL (mm)
	DN50	350	350	400	219	150	300
	DN80	350	350	400	219	150	300
i.	DN100	450	450	475	324	200	300
In-Line	DN150	450	450	475	324	200	300
	DN200	650	650	600	450	300	450
	DN300	650	650	650	450	300	450
	DN50	350	200	400	219	150	300
	DN80	350	200	400	219	150	300
ket	DN100	450	250	475	324	200	300
Basket	DN150	450	250	475	324	200	300
	DN200	650	350	600	450	300	450
	DN300	650	350	650	450	300	450

PRESSES & LENTICULAR HOUSINGS

HORIZONTAL FILTER PRESS



filtroUNO® Horizontal Filter Press combines proven filtration with the benefit of easy maintenance due to its flow design. The horizontal arrangement of the plates assures economical operation and uniform clarity by maximizing the distribution of the filter cake. During filtration, all solids are retained on the pads in the press. Cleaning is quick and easy by simply removing the entire bundle.

FEATURES

- Superior, clean filter tank processing
- Efficient for batch or continuous operation
- Internal filter plate cartridge assembly fully contains filter cake
- Fast, easy removal of filter plate
- Positive sealing during increased pressure differential
- Complete recovery of product
- Engineered to be used with or without filter aids
- Wide range of filter media available: paper/sheets and non-wovens/woven cloth
- System can be supplied with or without pump (FLP or Non-FLP)
- Wide variety of connections and plate sizes
- Zero fluid loss
- Fully integrated skid and trolley designs



HFP with AHF Zero Hold-up Filter



Integrated Trolley



PRESSES & LENTICULAR HOUSINGS



HORIZONTAL FILTER PRESS

Model	Plate Diam. x Depth	No. of Plates	Filtering Area (m²)	Cake Holding Cap. (L)		Flow Rate (Lph)
FPR 8	8 x 25 mm	6 8	0.223 0.287		.9 .3	600 800
FPR 14	14 x 25 mm or 14 x 38 mm	8 10 12	0.88 1.075 1.270	25 mm 19.57 24.42 29.31	38 mm 29.70 37.13 44.55	1500 1700 1900
FPR 18	18 x 25 mm or 18 x 38 mm	10 12 15 24	1.79 2.11 2.60 4.06	25 mm 40.63 48.76 60.95 97.52	38 mm 61.76 74.11 92.647 148.235	4000 4600 5500 8200

APPLICATIONS

- Food processing: syrups, cooking oils and shortenings
- Production of beverages: alcoholic drinks, soft drinks and fruit juices
- Metal finishing and other chemical processes
- Refinement and separation of petroleum oils and waxes
- Retention of activated carbon
- Retention of catalysts

PRESSES & LENTICULAR HOUSINGS



LENTICULAR FILTER HOUSING

filtroUNO® Lenticular Filter Housings provide high productivity at low investment costs. Lenticular Filter Systems reduce costs related to cleaning, handling, maintenance and downtime.

FEATURES

- Available in 12" and 16" diameters
- Designs to fit all standard lenticular modules from 1 to 4 high
- Spring-loaded, knife-edge sealing to eliminate bypass
- Industrial or sanitary surface finishes
- All standard connections with or without heating jacket
- Free-standing or skid-mounted

ADVANTAGES

- High productivity at low investment costs
- Incredible cleanability
- Easy to install and remove modules Low maintenance
- Reduced downtime

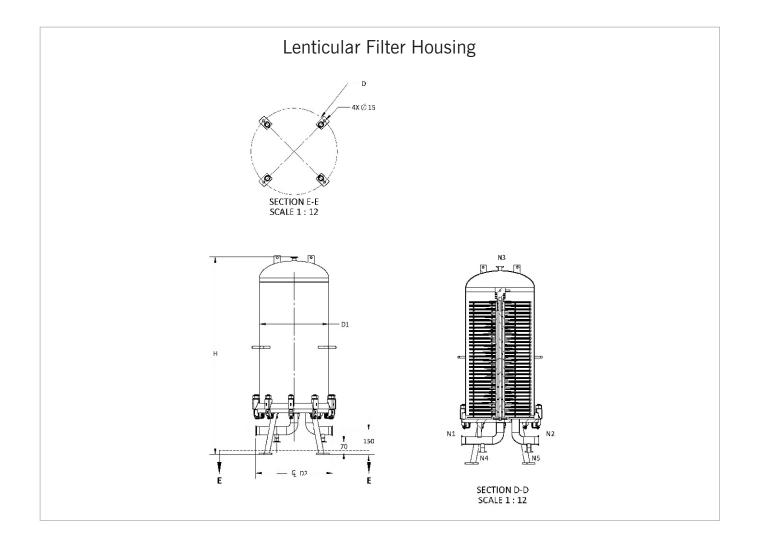
Max. Operating Pressure	8 bar
Max. Operating Temp. (EPDM)	120 °C
Max. Operating Temp. (Silicone)	145 °C
Material of Construction	316L SS







LENTICULAR FILTER HOUSING



Element Size	Nozzle Size	H (mm)	D (mm)	D1 (mm)	D2 (mm)
1x12"	1"	907	450	324	400
2x12"	1"	1282	450	324	400
1x16"	1.5"	907	560	450	500
2x16"	1.5"	1282	560	450	500
3x16"	1.5"	1657	560	450	500
4x16"	2"	2032	560	450	500

LINED HOUSINGS



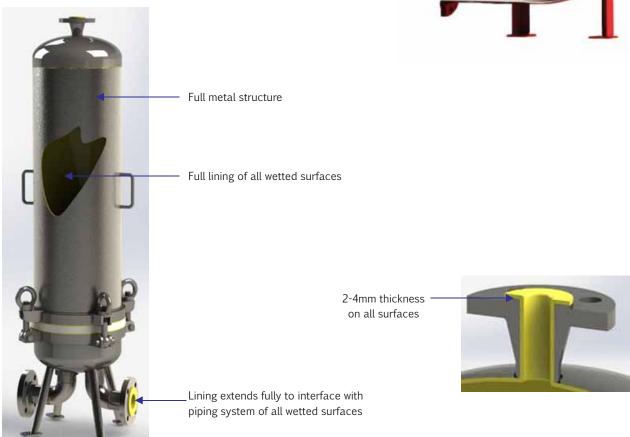
Kitten can build most of our housings using plastic linings for resistance to aggressive chemical and saltwater.

Not to be confused with "coatings," Kitten linings offer 2 to 4 mm thickness in:

- Polyethylene, high molecular weight
- Polypropylene
- TEFZEL®
- PVDF

The base housing can be made from either stainless or carbon steel, to which a lining is applied to cover all wetted surfaces. This robust system uses the strength of steel to withstand pressure, while maintaining chemical resistance with a polymer barrier.





CUSTOM HOUSINGS



Custom Designs to Solve Your Challenges

- Manufacturing flexibility for sizes and materials
- Full 3D design for housings and systems
- Focused functions such as wine skids, integrating multiple processes with automatic or manual operations
- Custom CE-stamped system as required

We offer complete solutions for industrial liquid filtration for:

- Incoming water and effluent mediation
- Ultrapure water filtration
- Haze and yeast removal for fermented products
- Paint, ink, plating and coating
- Refining including catalyst removal and recycling
- Pharmaceutical API and final product purification
- Carbon adsorption in liquids
- Aggressive acid and solvent purification









Integrated Systems

DEPTH FILTER MEDIA

FILTER PAPERS



filtroUNO® offers paper grades suitable for general coarse filtration, fine filtration and retention of specific particle sizes during clarification. Other grades are used as a septa to retain filter aids in filter presses or to remove low-level particulate.

- filtroUNO® Filter Paper ranges from 150 g/m² to 700 g/m²
- All Filter Papers are produced using FDA-certified high-quality pulp resins, creating a filter of absolute reliability
- Attesting the versatility and the quality of our Filter Papers, we can count as our clients the most important companies in the oil sector and in the pharmaceutical and chemical industries
- We can supply any size required by our customers in a circle, square or rectangular shape and in any creasing



AVAILABLE GRADES

- FP 20
- FP 51

APPLICATIONS

- Food processing: syrups, cooking oils and shortenings
- Production of beverages: alcoholic drinks, soft drinks and fruit juices
- Metal finishing and other chemical processes
- Refinement and separation of petroleum oils and waxes
- Retention of activated carbon
- Retention of catalysts



DEPTH FILTER MEDIA



FILTER PAPERS

FP 20							
Characteristic	Units	Method	Min.	Мах.			
Grammage	g/m²	ME/001	193	213			
Thickness at 100 kPa	mm	ME/002	0,37	0,45			
Air Resistance at 20 cm/s (*)	mmwwc	ME/010	220	320			
Max. Pore Pressure (*)	mmwc	ME/015	200				
Burst Strength	kN/m2	ME/020	150				
Wet Burst Strength	KN/m2	ME/020	70				
Micron Rating	Microns		10	12			

FP 51						
Characteristic	Units	Method				
Grammage	g/m²	ME/001	510			
Thickness	μm	ME/002	1000			
Pressure Drop △P 20	mmWC	ME/010	910			
Burst Strength	kPa	ME/020	860			
Wet Burst Strength	kPa	ME/020	300			
Bubble Test – 1BP	mmWC	ME/015	490			
Micron Rating (**)	Microns		5			

^{*} The equipment used to execute these tests is calibrated according to Kitten's Internal Methods.

^{**} This result has been obtained by mathematical correlation.

ENCAPSULATED O-RINGS



An encapsulated o-ring is an o-ring bound by a seamless and uniform FEP/PFA encapsulation, which encloses an elastomeric core, completely protecting it from the media. They combine the energizing properties of an elastomeric o-ring with the resilience to extreme temperatures and hostile chemicals of FEP/PFA.

Vulcan Seals can produce virtually any cross-section and diameter size or shape of seals for your application. Carefully monitored in-house production and multiple levels of electronic inspection ensure high product quality and reliability.



BENEFITS

- Exceptional resistance to aggressive chemicals and gas permeability
- Cost efficient alternative to Kalrez® and similar perfluoroelastomer o-rings
- Low coefficient of friction allowing reduced wear of equipment
- Adaptive sealing force of an elastomeric o-ring
- Resistant to compression set and cold flow issues of solid o-rings
- EC and FDA food-grade compliant

OPTIONS

FEP Encapsulation

Standard material for all applications up to 205 °C, resistant to virtually all chemicals and joined by an advanced heat moulding process to give a seamless encapsulation.

PFA Encapsulation

Same properties as FEP encapsulation but with greater heat resistance for applications above 205 °C. Also resistant to virtually all chemicals and joined seamlessly via advanced heat moulding process.

ENCAPSULATED O-RINGS AND SEALS



INNER CORE OPTIONS

- Silicone: Commercially best material option combined with lower shore hardness and greater elasticity than Viton®, providing an excellent material choice for the majority of applications.
- Viton®: Greater chemical resistance than Silicone. If encapsulation is damaged, Viton® provides greater resilience to chemical attack.
- Silicone Hollow Core: Greater compressibility than solid Silicone core, with a hardness similar to a standard elastomeric o-ring. The hollow core flexibility means less clamping force is required to enable its sealing abilities. Ideal for fragile applications using sensitive materials, such as glass or light plastics. Useful for where the sealing area may require room for movement during operation.
- Custom Core and Ring Shapes Available



Silicone

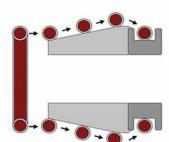


Viton[®]



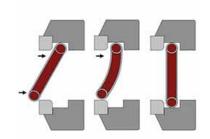
Hollow Core

GROOVE INSTALLATION METHOD



EXTERNAL GROOVE

- Cartridge filters
- Drum/barrel caps
- Valves
- Mechanical Seals



INTERNAL GROOVE

- Mechanical Seals
- Valves

COMPLETED INSTALLATIONS



Internal Groove (Mechanical Seal)



Internal Groove (Drum/Barrel Cap)



External Grooves (Filter Cartridge)

CERTIFICATION

Kitten has worked hard over the years to improve the quality of our products, our business practices and our company structure.

Our quality standard in our manufacturing facility is certified to ISO-9001:2015.

In our filtration division, we design and produce to global standards according to the specifications of the **Pressure Equipment Directive 2014/68/EDU**.

We are also certified to affix the **((** marking for the European Community on our filter housings in accordance to the Quality Assurance System Module H.

With these achievements, we have become a reliable supplier for many high value companies the world round!





Kitten Enterprises Pvt. Ltd.

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