Filter Housing Catalog

2019 | Housings Come Hassle-Free and Ready-to-Use

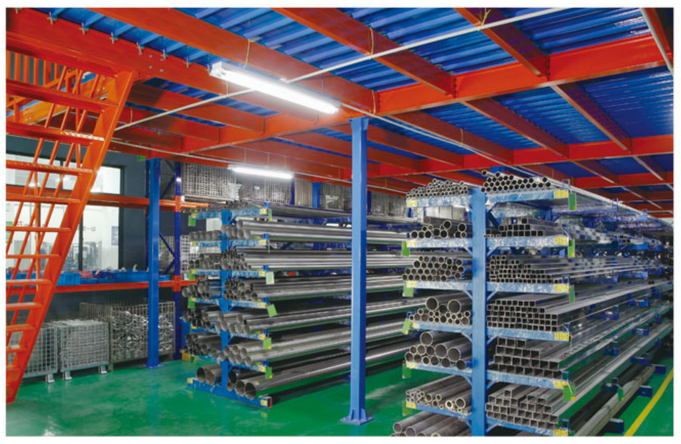
cobetter®
filtration

Cartridge Filter Housings
Gas & Vent Filter Housings
Membrane-pad Housings
Bag Filter Housings
Inline Filter Housings

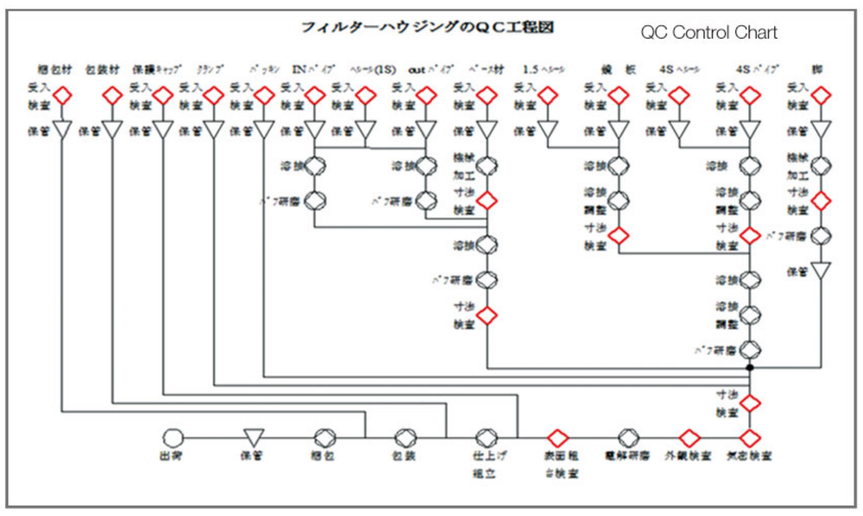
Purifying the Environment & Delivering Peace of Mind

About Cobetter

Cobetter Filtration Group is one of the leading manufacturers of filtration products in Asia. We are experts in microfiltration membrane, filter cartridges, capsule filters, and industrial and sanitary filter housings. Our filter housing division, Cobetter Filter Housing, is an integral part of our company.



Here we have offered customers specially designed and engineered cartridge and bag filter housings.Our housings meet the necessary requirements including Pressure Equipment Directive (PED97/23/EC) and ASME Code certified.


フィルターハウジングのＱＣ工程図
QC Control Chart
出荷
保管
梱包
包装
仕上げ
組立
表面粗
#検査
電解研磨
外観検査
気密検査


iPAQ

Our Advantages

Application of Japanese Quality Control Methods in Housing Production Process

Our Quality is Unparalleled

As a manufacturer of membrane technology for industrial applications including chemical, food & beverage, microelectronic, and pharmaceutical applications, all our products are manufactured in accordance with ISO: 9001 and CE standards. We also have a strong emphasis on performance and quality standards.

Advanced QC inspection Equipment to Ensure Quality

- Use of standard raw materials - Materials analyzed with X-Met5000 Fluorescence Spectrometer
- Use of standard spare parts from well-known brands – Able to provide certifications for high pressure flanges connection
- Housing Surface Roughness tested by Mitutoyo SJ-401 Surface Roughness Tester

Full Range of QC Test Reports Provided to Customer before Leaving the Factory

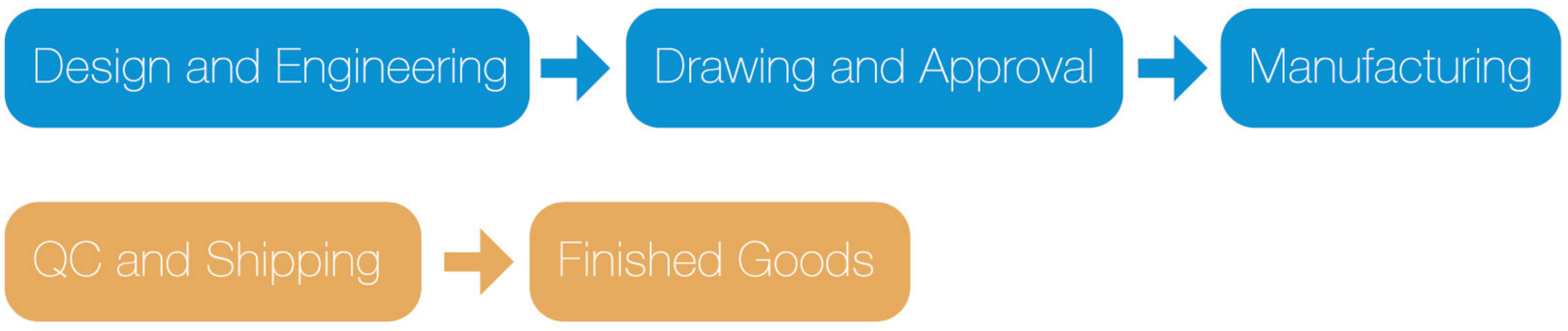
- Material Certifications
- Surface Roughness Certificates for Different Parts
- Pressure Endurance Test Certificates
- Acid /Alkali Cleaning Certificates

Customize Your Housing without Hassle

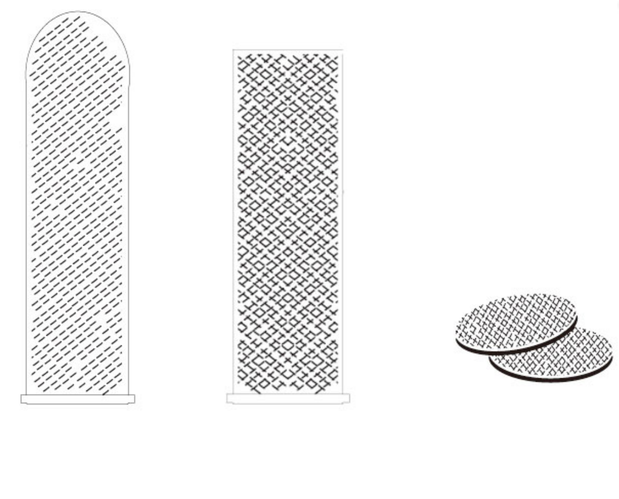
Cobetter is able to manufacture housings for your specific applications or your specific requirements; Cobetter Engineering reviews and evaluates all customized designs to ensure the best possible design and performance.

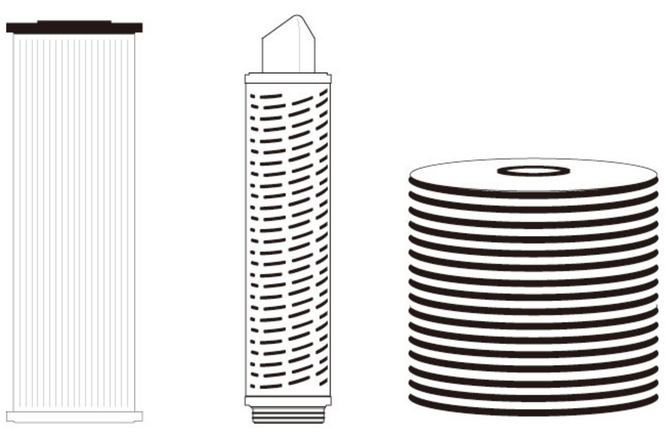
Provide Etch Marking on Each Housing for Full Traceability

Cobetter provides etching nameplate on the housing for better traceability. Housing parameters are clearly marked on the nameplate including a specialized lot number for tracing.



Index





Sanitary Filter Housings

Gas/Vent Filter Housings

H-SCF-A/B Single-Round Sanitary Housings

Single-round, T-style, Easy in Cleaning

H-SCF-A Sanitary Filter Housing specifically designed as a single-round filter housing for low volume liquid filtration. It is part of the H-SCF Filter Housing Series.

Strongly recommended for use in life science filtration applications, it meets sanitary requirements and GMP standards. Features include mechanical polishing with a Ra of 0.3μm, easy-to-clean, and thorough drainage, which eliminates concerns about remaining liquids. In addition, electro-polishing finish is also an available option.

Design Features

- Quality surface finishing - Internal Ra: 0.3μm; External Ra: 0.4μm. Sanitary design prevents entrapment or build-up of contaminants. All electro-polishing is also available.
- Vent & Drain: Threaded sleeve is separated by a stepped thread so that the connection tube will not wave when in draining or venting operation.
- Enlarged vent and drain - internal diameter connects with an 8mm tube.
- Quick-release closure clamp allows for quick disassembly – our sectional closure clamps increase pressure endurance by 20% compared to normal clamps.
- When running at high operating pressure, quick-release closure clamps provide perfecting sealing for PTFE o-rings. Max. Operating Pressure can reach 10 bar.
- Adjustable nut on the legs allows for filter length to be adjusted.

Surface Finish

Polish Type	Mirror Polish; Internal Electro-polished
Surface Option	Internal Ra: 0.38μm; External Ra: 0.4μm

Operating Conditions

Max. Operating Pressure	0.6Mpa (6bar)
Max. Operating Temperature	90°C (194°F) / Design Temperature: 140°C
Steam Sterilization	In-situ / Autoclave @ 121°C / 30 min

Material of Construction

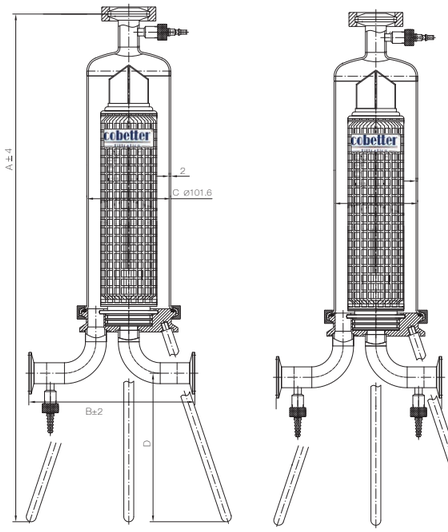
Housing Body	304;316L
Vent/Drain	304;316L
Clamp	304
Leg	304
O-ring / Gaskets	Silicon, Viton, EPDM, PTFE

Connection

Body Connection	Tri-clamp, Strengthened clamp
Inlet / Outlet	1 inch (DN 25) clamp
Vent	4mm can connect with 8mm tube
Drain	4mm can connect with 8mm tube
Pressure Gauge	1.5 inch Tri-clamp

Drawings & Dimensions

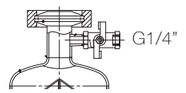
For Pharmaceutical & Food and Beverage

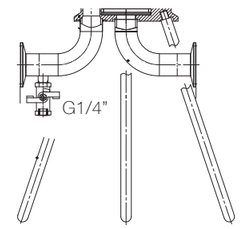


H-SCF-A

H-SCF-B

For Chemical Application





	1 round 5 inch	1 round 10 inch	1 round 20 inch	1 round 30 inch	1 round 40 inch
A	496	614	864	1114	1364
B	201	201	201	201	201
C	101.6	101.6	101.6	101.6	101.6
D	180	180	180	180	180

Ordering Information

H-SCF-A
H-SCF-B
(Two Drains)

Number of Filters	Filter Length	Material	End Cap	Housing Connection	Inlet / Outlet	Sealing Materials	Surface Finish	Design Pressure	Application
1	**05**	**F**	**S**	**T**	**T25**	**S**	**A**	**X**	**P**
1 1 round	**05** 5 inch **10** 10 inch **20** 20 inch **30** 30 inch	**F** 304 **S** 316L	**S** 226 **T** 222 **D** DOE	**T** Tri-clamp	**T25** Tri-clamp DN 25	**S** Silicone **E** EPDM **V** Viton **F** PTFE	**A** Mirror Polish **B** Internal Electro-polished	**X** 0.6MPa **Y** 1.0MPa	**P** Pharmaceutical **F** Food and Beverage **C** Chemical

PED 2014/68/EU

H-SCF / SDF / SEF / SFF Multi-Round Sanitary Housings

High Flow Rate Sanitary Grade

H-SCF Multi-Round Sanitary Filter Housing designed for liquid filtration with varying flow rates.

Strongly recommended for use in life science filtration applications, it meets sanitary requirements and GMP standards. Features include mechanical polishing with a Ra of 0.3μm, easy-to-clean, and thorough drainage, which eliminates concerns about remaining liquids. In addition, the filter housing is available with a detachable plate for thorough cleaning with strict cleaning requirements.

It is also available in an electro-polish finish for filter housings with 12 rounds or less.

Configurations

H-SCF: bottom-opening; fixed plated; bottom-in bottom-out flow pattern

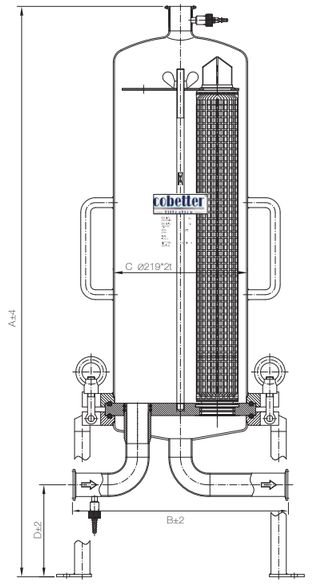
H-SDF: top-opening and bottom-opening; fixed plate; bottom-in bottom-out flow pattern

H-SEF: bottom-opening; detachable plate; bottom-in bottom-out flow pattern

H-SFF: top-opening and bottom-opening; detachable plate; bottom-in bottom-out flow pattern

Design Features

- Ultra-fine polishing - Internal Ra: 0.38μm; External Ra: 0.4 μm. Absolute sanitary polish - all electro-polished finish is available for filter housings with 12 rounds or less.
- Tri-clamp connection for vent, - no blind spots
- Adjustable nuts on legs ensure stable operation
- Detachable plate – optional for complete cleaning in critical applications



Drawings & Dimensions

	3 round				5 round				7 round			
	10"	20"	30"	40"	10"	20"	30"	40"	10"	20"	30"	40"
A	680	930	1180	1430	700	950	1200	1450	720	970	1220	1470
B	350	350	350	350	400	400	400	400	420	420	420	420
C	219	219	219	219	250	250	250	250	273	273	273	273
D	150	150	150	150	150	150	150	150	150	150	150	150

9 round		12 round	
30"	40"	30"	40"
1280	1530	1300	1500
480	480	500	500
325	325	350	350
150	150	150	150

Surface Finish

Polish Type	Mirror Polish; Internal Electro-polished
Surface Option	Internal Ra: 0.38μm; External Ra: 0.4μm

Operating Conditions

Max. Operating Pressure	0.6 Mpa (6 bar) / 1.0 Mpa (10 bar)
Max. Operating Temperature	90°C(194°F)/ Design Temperature: 140°C
Steam Sterilization	In-situ / Autoclave @ 121°C / 30 min

Material of Construction

Housing Body	304; 316L
Vent / Drain	304; 316L
Vent Clamp	304
Eyebolt	304
Leg	304
O-ring/Gaskets	Silicon, Viton, EPDM

Connection

Body Connection	Flange / Swing Bolt
Inlet / Outlet	Tri-clamp
Vent	Tri-clamp; ID 4mm and for 8mm tube
Pressure Gauge	1.5 inch Tri-clamp

Ordering Information

	Number of Filters	Filter Length	Material	End Cap	Housing Connection	Inlet / Outlet	Sealing Material	Surface Finish	Design Pressure	Application
H-SCF H-SDF H-SEF H-SFF	3 **03** 3 round **05** 5 round **07** 7 round **09** 9 round **12** 12 round	10 **10** 10 inch **20** 20 inch **30** 30 inch **40** 40 inch	F **F** 304 **S** 316L	S **S** 226 **T** 222 **D** DOE	D **D** Swing Bolt **C** C-Clamp	T38 **T38** Tri-clamp DN38 (3-5 round) **T50** Tri-clamp DN50 (7-12 round) **F32** Flange DN32 (3-5 round) **F40** Flange DN40 (7-12 round)	S **S** Silicone **E** EPDM **V** Viton **P** Encapsulated Viton Note: Encapsualted Viton is not applicable for H-SEF&H-SFF type Housing	A **A** Mirror Polish **B** Internal Electro-polished	X **X** 0.6MPa **Y** 1.0MPa	P **P** Pharmaceutical **F** Food and Beverage **C** Chemical

PED 2014/68/EU

H-SCFC / SDFC / SEFC Multi-Round Sanitary Liquid Filter Housing

High Flow Rate Sanitary Grade

H-SCFC Multi-Round Sanitary Filter Housing specially designed for filtration requiring over 12 filter elements.

Flow redesign with flow pattern of side-in and bottom-out reduce cost when compared to bottom-in bottom-out flow pattern. In addition, top-inlet opening eliminates the need to move the housing body while installing the filter elements, thus reducing filter change-out time.

Rocker arm design makes it easier to move the top cap of the filter housing.

The three-part design and detachable plate allow for a complete cleaning when rigorous cleaning requirements are necessary.

Configurations

H-SCFC: top-opening; fixed plate; side-in and bottom-out flow pattern
H-SDFC: top-opening and bottom-opening; fixed plate; side-in and bottom-out flow pattern
H-SFFC: top-opening and bottom-opening; detachable plate ; side-in and bottom-out flow pattern

Surface Finish

Polish Type	Mirror Polish; Internal Electro-polished
Surface Option	Internal Ra: 0.38μm; External Ra: 0.4μm

Material of Construction

Housing Body	304; 316L
Vent / Drain	304; 316L
Vent Clamp	304
Eyebolt	304
Leg	304
O-ring/Gaskets	Silicon, Viton, EPDM

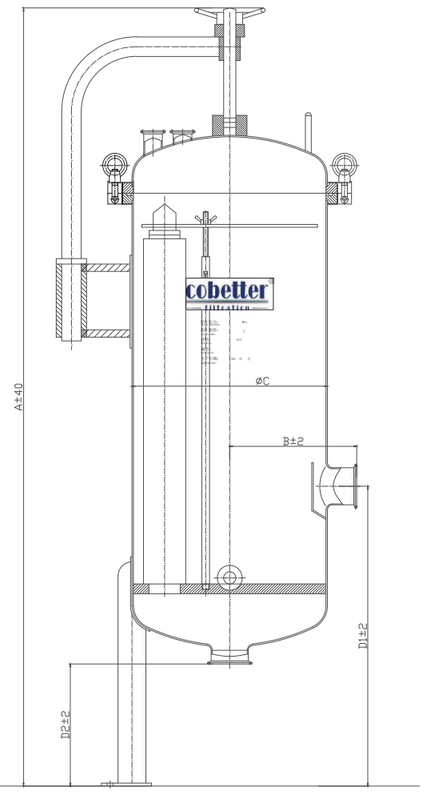
Operating Conditions

Max. Operating Pressure	1.0 Mpa (10 bar)
Max. Operating Temperature	90°C(194°F) / Design Temperature: 140°C
Steam Sterilization	In-situ / Autoclave @ 121°C / 30 min

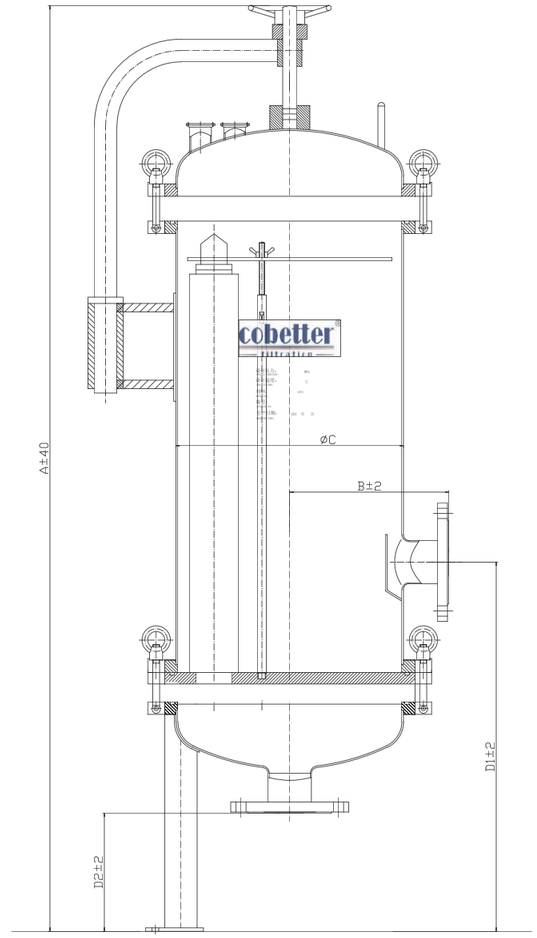
Connection

Body Connection	Flange (Eyebolt)
Inlet / Outlet	Tri-clamp
Vent	Tri-clamp; ID 4mm and for 8mm tube
Pressure Gauge	1.5 inch Tri-clamp

Drawings & Dimensions



H-SCFC Liquid Filter Housing



H-SDFC Liquid Filter Housing

Ordering Information

	Number of Filters	Filter Length	Material	End Cap	Housing Connection	Inlet / Outlet	Sealing Material	Surface Finish	Design Pressure	Application
H-SCFC H-SDFC H-SEFC	3	10	F	S	D	T50	S	A	X	P
	15 15 round **18** 18 round **21** 21 round **24** 24 round **27** 27 round **30** 30 round **33** 33 round **36** 36 round **...**	**10** 10 inch **20** 20 inch **30** 30 inch **40** 40 inch	**F** 304 **S** 316L	**S** 226 **T** 222 **D** DOE	**D** Swing Bolt **C** C-Clamp	**T50** Flange DN50 (15Round) **T65** Flange DN65 (18-24Round) **F80** Flange DN80 (27-30Round) **F100** Flange DN100 (33Round)	**S** Silicone **E** EPDM **V** Viton **P** Encapsulated Viton	**A** Mirror Polish **B** Internal Electro-polished	**X** 0.6MPa **Y** 1.0MPa	**P** Pharmaceutical **F** Food and Beverage **C** Chemical

PED 2014/68/EU

H-SPF/H-SPFII/H-SPFIII In-line Sanitary Filter Housing

Single-Round,Inline-Style, Easy in Cleaning

H-SPF In-line Sanitary Filter Housing designed and manufactured according to sanitary-grade requirements and GMP standards. Widely used in life-science applications.

Due to the compact design of the top-in and bottom-out flow pattern, we recommend to use the filter housings as vent or pipe connector.

HSPF II Filter Housing designed for filtration with low volume requirements. Small filter elements with 56mm diameter will fit in this housing.

Surface Finish

Polish Type	Mirror Polish; Internal Electro-polished
Surface Option	Internal Ra: 0.38μm; External Ra: 0.4μm

Operating Conditions

Max. Operating Pressure	0.6Mpa (6bar) / 1.0Mpa (10bar)
Max. Operating Temperature	90°C （194°F) / Design Temperature: 140°C
Steam Sterilization	In-situ / Autoclave @ 121°C / 30 min

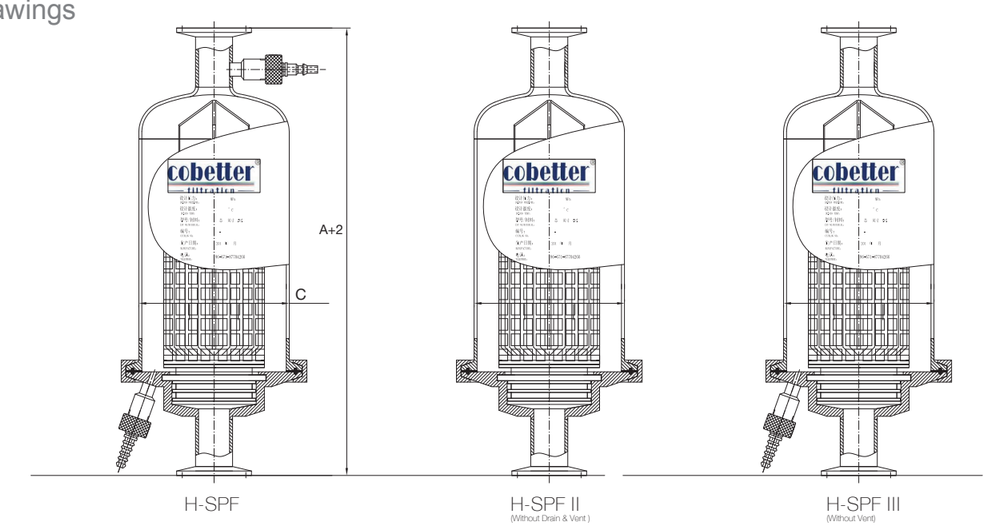
Material of Construction

Housing Body	304;316L
Vent / Drain	304;316L
Clamp	304
O-ring / Gaskets	Silicon, Viton, EPDM

Connection

Body Connection	Tri-clamp, Strengthened clamp
Inlet / Outlet	1 inch (DN 25) clamp
Vent	4mm can connect with 8mm tube
Drain	4mm can connect with 8mm tube

Drawings



Dimensions

		1 round 2.5 inch	1 round 5 inch	1 round 10 inch	1 round 20 inch	1 round 30 inch
A	Height	240	315	425	685	935
C	Diameter	101.6	101.6	101.6	101.6	101.6

Design Features

- Quality surface finishing - Internal Ra: 0.3μm; External Ra: 0.4μm. Sanitary design prevents entrapment or build-up of contaminants.All electro-polishing is also available.
- Vent & Drain: Threaded sleeve is separated by a stepped thread so that the connection tube will not wave when in draining or venting operation.
- Enlarged vent and drain - internal diameter connects with an 8mm tube.
- Quick-release closure clamp allows for quick disassembly – our sectional closure clamps increase pressure endurance by 20% compared to normal clamps.
- When running at high operating pressure, quick-release closure clamps provide perfecting sealing for PTFE o-rings. Max. Operating Pressure can reach 10 bar.
- Adjustable nut on the legs allows for filter length to be adjusted.

Ordering Information

	Number of Filters	Filter Length	Material	End Cap	Housing Connection	Inlet / Outlet	Sealing Material	Surface Finish	Design Pressure	Application
H-SPF H-SPF II (Without Drain & Vent) H-SPF III (Without Vent)	1	05	F	S	T	T25	S	A	X	P
	1 1 round	**05** 5 inch **10** 10 inch **20** 20 inch **30** 30 inch	**F** 304 **S** 316L	**S** 226 **T** 222 **D** DOE	**T** Tri-clamp	**T25** Tri-clamp DN 25 **T38** Tri-clamp DN 38 **T50** Tri-clamp DN 50	**S** Silicone **E** EPDM **V** Viton	**A** Mirror Polish **B** Internal Electro-polished	**X** 0.6MPa **Y** 1.0MPa	**P** Pharmaceutical **F** Food and Beverage **C** Chemical

PED 2014/68/EU

H-GCF Gas Filter Housing

Low Pressure

Cobetter H-GCF Filter Housing designed air/gas filtration in biotechnology, chemical, electronic and food & beverage industries.

The housings are compatible with Cobetter]GPFL (PTFE membrane), GGFP (GF media), and Stainless Steel Filter Cartridges to meet the requirements for air/gas filtration.

Endcap design of the housing is Code7 (external 226 double o-ring with 2 locking tabs) which provides safe and secure sealing.

Design Features

- External 226 double o-ring with 2 locking tabs Endcap ensures safe and secure sealing.
- Housings flange connection designed in accordance with international standards.

Surface Finish

Polish Type	Mirror Polish; Internal Electro-polished
Surface Option	Internal Ra: 0.38μm; External Ra: 0.4μm

Material of Construction

Housing Body	304;316L
Vent / Drain	304;316L
Clamp	304
Leg	304
O-ring/Gaskets	Silicon, Viton, EPDM

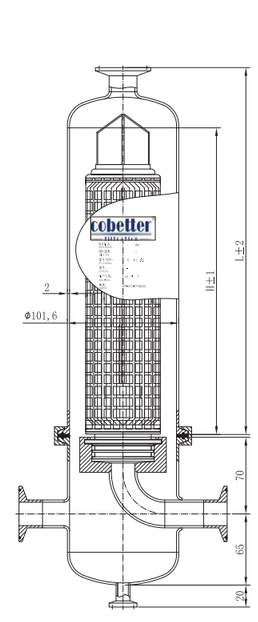
Operating Conditions

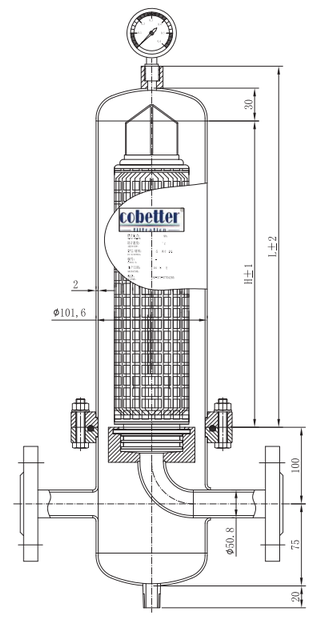
Max. Operating Pressure	0.6 Mpa (6 bar) / 1.0Mpa (10 bar)
Max. Operating Temperature	90°C （194°F) / Design Temperature: 140°C
Steam Sterilization	In-situ / Autoclave @ 121°C / 30 min

Connection

Body Connection	Flange / Tri-clamp
Inlet / Outlet	Flange / Tri-clamp
Vent	_
Drain	G1/4"
Pressure Gauge	M14*1.5

Drawings & Dimensions





Ordering Information

	Number of Filters	Filter Length	Material	End Cap	Housing Connection	Inlet / Outlet	Sealing Material	Surface Finish	Design Pressure	Application
H-GCF	1	05	F	S	T	T38	S	A	X	P
	1 1 round 3 3 round	05 5 inch 10 10 inch 20 20 inch 30 30 inch	F 304 S 316L	S 226	T Tri-clamp F Flange	T25 Tri-clamp DN 25 T38 Tri-clamp DN 38 T50 Tri-clamp DN 50	S Silicone E EPDM V Viton	A Mirror Polish B Internal Electro-polished	X 0.6MPa Y 1.0MPa	P Pharmaceutical F Food and Beverage C Chemical

PED 2014/68/EU

H-GCF II
Gas Filter Housing

Suitable for medium-pressure and high-pressure conditions

H-GCFII Gas Filter Housings are designed for medium-pressure and high-pressure conditions.

Each filter-housing component complies with GMP standards to ensure that the housing meets necessary requirements.

Design Features

- Each filter housing has been designed by the Design Institute and the drawings are marked with a red seal to ensure their validity
- Welded seams have been checked and tested using X-ray flaw detector to ensure its security and safety
- The Quality and Technical Supervision Bureau will verify/confirm the filter housing after completion and provide the pressure vessel certificate
- All materials and components are equipped with a pressure vessel certificate which fully complies with pressure equipment standards
- Filter housings with more than three rounds will be provide with the pressure vessel certificate and serial number for easy traceability
- Filter housings are available with a polished finish to meet cleanliness requirements where necessary

(压力容器制造许可证)

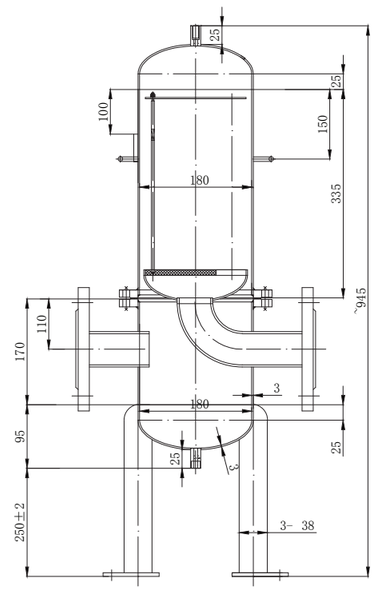
Surface Finish

Polish Type	Mirror Polish; Sand Blasting
Surface Option	Internal Ra 0.38μm; External Ra 0.6μm

Material of Construction

Housing Body	304;316L
Vent / Drain	304;316L
Screws	304
Leg	304
O-ring/Gaskets	Silicon, Viton, EPDM

Drawings & Dimensions



Operating Conditions

Max. Operating Pressure	According to Pressure Design
Max. Operating Temperature	150°C
Sterilization	In-situ / Autoclave @ 121°C / 30 min

Connection

Body Connection	Flange
Inlet / Outlet	Flange
Vent / Drain	Flange

Pressure Vessel Standards

Working Pressure	⩾1.0MPa
Internal Diameter (non-circular cross-section refers to its maximum size)	⩾0.15m
Volume	⩾0.025m³
Work Pressure-Volume	⩾2.5MPa/L

The contained medium is gas/liquefied gas or liquid who's temperature is greater than its standard boiling point

Ordering Information

	Number of Filters	Filter Length	Material	End Cap	Housing Connection	Inlet / Outlet	Sealing Material	Design Pressure	Surface Finish	Application
H-GCF II	1	05	F	S	T	F50	S	Y	A	P
	1 1 round 3 3 round	05 5 inch 10 10 inch 20 20 inch 30 30 inch	F 304 S 316L	S 226	F Flange	F25 Flange DN 25 F50 Flange DN 50	S Silicone E EPDM V Viton	Y 1.0MPa	A Mirror Polish B Internal Electro-polished C Sand Blasted	P Pharmaceutical F Food and Beverage C Chemical

PED 2014/68/EU

H-VCF Vent Filter Housing

Air Filter Housing Especially for Use on Top of a Storage Tank

H-VCF Vent Filter Housing used in food & beverage and pharmaceutical applications to sterilize the air before it flows into the tank, while maintaining pressure balance inside and outside the housing.

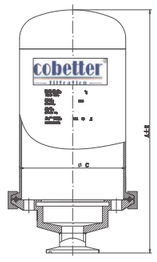
All sanitary and GMP standards are met. The housing is easy to clean. Electro-polish surface finish is available upon request.

Surface Finish

Polish Type	Mirror Polish; Internal Electro-polished
Surface Option	Internal Ra: 0.38μm; External Ra: 0.4μm

Material of Construction

Housing Body	304;316L
Clamp	304
O-ring / Gaskets	Silicon, Viton, EPDM, PTFE



Operating Conditions

Max. Operating Pressure	Ambient Temperature
Max. Operating Temperature	130 °C (266 °F)
Steam Sterilization	In-situ /Autoclave @ 121°C / 30 min

Connection

Body Connection	Tri-clamp, Strengthened clamp
Outlet	1 inch (DN 25) clamp

Drawings & Dimensions

	1 round 5 inch	1 round 10 inch	1 round 20 inch
A	232	262	622
C	102	102	102

Ordering Information

	Number of Filters	Filter Length	Material	End Cap	Housing Connection	Inlet / Outlet	Sealing Material	Design Pressure	Surface Finish	Application
H-VCF	1	05	F	S	T	T25	S	O	A	P
	1 1 round	**05** 5 inch **10** 10 inch **20** 20 inch **30** 30 inch	**F** 304 **S** 316L	**S** 226 **T** 222	**T** Tri-clamp	**T25** Tri-clamp DN 25 **T38** Tri-clamp DN 38 **T50** Tri-clamp DN 50	**S** Silicone **E** EPDM **V** Viton	**O** Ambient Pressure	**A** Mirror Polish **B** Internal Electro-polished	**P** Pharmaceutical **F** Food and Beverage **C** Chemical

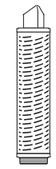
ASME U CE SGS PED 2014/68/EU

▲ **H-VCF III**
No vent, with stainless steel cage cover

▶ **H-VCF II**
No vent, with tube elbow

H-VCF II In-line Vent Housing

Vent Filter Housing with Heated Jacket



H-VCF II Vent Filter Housing is superior vent filter housing with an anti-condensation function for air filtration and with stricter requirements.

It is composed of the following parts: vent, heated jacket, jacket protection layer, and constant electronic temperature system.

The advantages when compared to vent filter housings are:

- Filter cartridges are kept dry by heat which helps guarantee their flow rates.
- High temperature environment prevents germ growth.
- An advanced constant electronic temperature system.
- Elbow design prevents particles from flowing into the vent housing, thus protecting the filter housing from damage.

Additionally, H-VCF III Vent Housing meets the requirements for use in a clean room.The heated jacket is placed in a sealed column to keep dust and bacteria from flowing into the housing. This also makes the housing easy to clean.

Operating Conditions

Max. Operating Pressure	0.6Mpa (6bar)
Max. Operating Temperature	130 °C (266°F)
Steam Sterilization	In-situ / Autoclave @ 121°C / 30 min

Connection

Body Connection	Tri-clamp, Strengthened clamp
Outlet	1 inch (DN 25) clamp

Surface Finish

Polish Type	Mirror Polish; Internal Electro-polished
Surface Option	Internal Ra: 0.38μm; External Ra: 0.4μm

Material of Construction

Housing Body	304;316L
Clamp	304
O-ring / Gaskets	Silicon, Viton, EPDM, PTFE

Drawings & Dimensions

	1 round 5 inch	1 round 10 inch	1 round 20 inch
A	277	397	647
C	102	102	102

Ordering Information

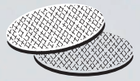
	Number of Filters	Filter Length	Material	End Cap	Housing Connection	Inlet / Outlet	Sealing Material	Design Pressure	Surface Finish	Application
H-VCF II H-VCF III	1	05	F	S	T	T25	S	X	A	P
	1 1 round	**05** 5 inch **10** 10 inch	**F** 304 **S** 316L	**S** 226 **T** 222	**T** Tri-clamp	**T25** Tri-clamp DN 25 **T38** Tri-clamp DN 38 **T50** Tri-clamp DN 50	**S** Silicone **E** EPDM **V** Viton	**X** 0.6MPa	**A** Mirror Polish **B** Internal Electro-polished	**P** Pharmaceutical **F** Food and Beverage **C** Chemical

ASME U CE SGS PED 2014/68/EU

H-DMF Stainless Steel Membrane Holder

Batch Testing

Sanitary Grade and Pressure Filtration



H-DMF Stainless Steel Membrane Holder designed for liquid/gas classification or sterilization by pressure filtration. Tri-clamp sanitary inlet/outlet connections have no screw heads to trap contaminants and are easy to clean.

Available in 47mm, 60mm, 90mm, 142mm, 150mm, and 200mm diameter configurations. Each component can be completely disassembled and cleaned.

Design Features

- Quality surface finishes; Internal Ra 0.3μm; External Ra 0.4μm - True sanitary design prevents trapping or build-up of contaminants. All electro-polished surface is available
- Each component can be completely disassembled and cleaned
- Optimal sealing design – can be installed with a single or double membrane according to requirements

Surface Finish

Polish Type	Mirror Polish; Internal Electro-polished
Surface Option	Internal Ra: 0.38μm; External Ra: 0.4μm

Material of Construction

Housing Body	304;316L
Vent / Drain	304;316L
Clamp	304
Leg	304
O-ring / Gaskets	Silicon, Viton, EPDM

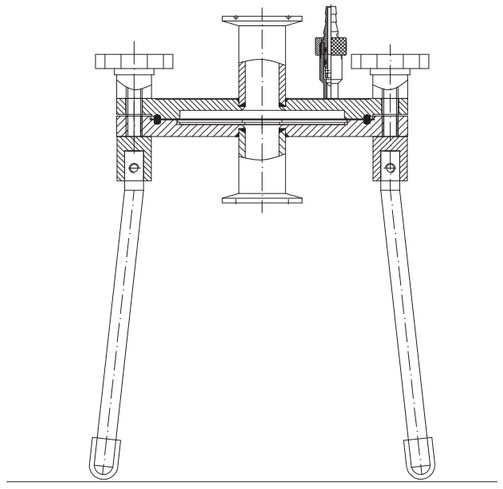
Operating Conditions

Max. Operating Pressure	0.6Mpa (6bar)
Max. Operating Temperature	90°C (194°F) / Design Temperature: 140°C
Steam Sterilization	In-situ / Autoclave @ 121°C / 30 min

Connection

Body Connection	Screwed Connection
Inlet / Outlet	Tri-Clamp
Vent	4mm can connect with 8mm tube

Drawings & Dimensions



Single Membrane

Ordering Information

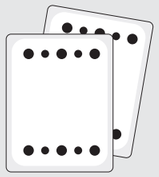
	Number of Membrane	Membrane O.D	Material	Housing Connection	Inlet / Outlet	Sealing Material	Surface Finish	Design Pressure	Application
H-DMF	01	47	F	T	T25	S	A	X	P
	01 1Membrane 02 2Membrane	47 47mm 90 90mm 142 142mm 200 200mm 293 293mm	F 304 S 316L	L Screwed Connection T Tri-Clamp	T25 Tri-clamp DN25	S Silicone E EPDM V Viton	A Mirror Polish B Internal Electro-polished	X 0.6MPa	P Pharmaceutical F Food and Beverage C Chemical

Pilot System
processing capacity(50-500L)

H-CFH Ultra-filtration System

Tangential Flow Ultra Filtration holder

Cobetter Ultra Flow Filtration holder, in conjunction with cassettes, is widely used in laboratory, pilot and large-scale production of bio-pharmaceutical process for vaccines, coupling agents, monoclonal antibodies, recombinant proteins, blood products, etc. In addition, they can complete technological operation such as concentration, dialysis, purification, recovery, buffer replacement, clarification, and endotoxin removal.



Lab System
processing capacity(1-40L)

Small Stainless Steel Holder

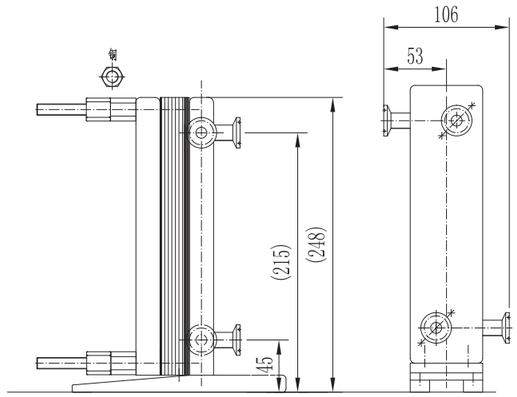
- Accommodate 1-3 pieces of 0.1m2 small cassettes which are primarily sued for process development and small pharmaceutical production.

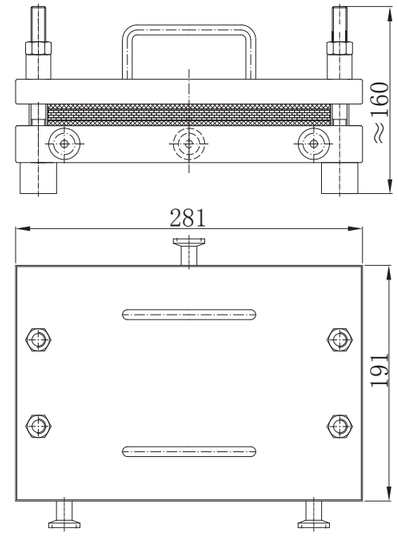
  Cobetter Ultra-filtration System is unique and completely conforms with the strict demands of the bio-pharmaceutical industry:
- Reasonable flow design with the roughness of the wetting surface ⩽ 0.4μm which guarantees minimum holdup volume
- High material strength ensures no leakage
- Generic size design to match other cassettes on the market
- Meet the requirements of GMP, FDA, and other regulations
- Available in manual, semiautomatic and automatic. Can be customized to your specific requirements

Large Stainless Steel Holder

- Accommodate 0.5-2.5m2 cassettes with a capacity up to 5m2 (requires a longer fixed screw)

Drawings & Dimensions





Ordering Information

	Cassettes Area	Materials	Inlet/Outlet	Sealing Material	Surface Finish	Design Pressure	Application
H-CFH	1	S	T15	S	A	X	P
	01 0.1 m²	S 316L	T15 DN15	S Sanitary Grade Silicone	A Mirror Polish	X 0.6MPa	P Pharmaceutical
	05 0.5 m²		T20 DN20		B Internal Electro-polished		F Food and Beverage
	25 2.5 m²		T38 DN38				
	...						

H-SCFII/H-SPFII 126 Mini Filter Housing Series

Low Residual Filters with Low Flow Rates

Cobetter 126 Mini Filter Housing Series and 126 Mini Filter Cartridges meet the high filtration demands of pharmaceutical customers. 316L stainless steel cage guarantees durable and reliable performance and perfect corrosion resistance. With a simple design and appearance, these filters are easy to use and clean and eliminate residual loss.

Surface Finish

Polish Type	Mirror Polish; Internal Electro-polished
Surface Option	Internal Ra: 0.38μm; External Ra: 0.4μm

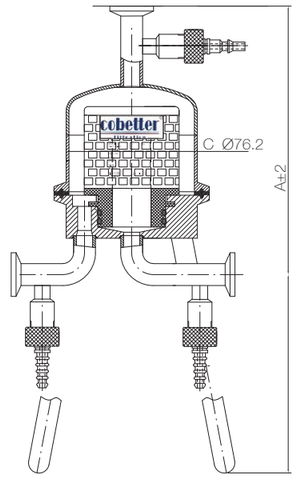
Operating Conditions

Max. Operating Pressure	0.6Mpa (6bar)
Max. Operating Temperature	90°C (194°F) / Design Temperature: 140°C
Steam Sterilization	In-situ / Autoclave @ 121°C / 30 min

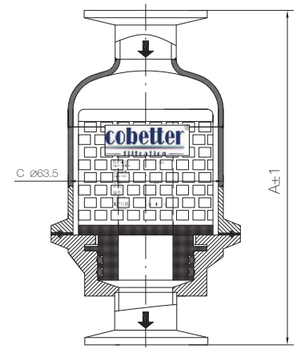
Material of Construction

Housing Body	304;316L
Vent/Drain	304;316L
Clamp	304
O-ring / Gaskets	Silicon, Viton, EPDM

Drawings & Dimensions



H-SCF II



H-SPF II

H-SCF II		1 round 2 inch	1 round 4 inch
A	High total	142	212
C	Diameter	76.2	76.2

H-SPF II		1 round 2 inch	1 round 4 inch
A	High total	137	207
C	Diameter	63.5	63.5

Ordering Information

	Number of Filters	Filter Length	Material	End Cap	Housing Connection	Inlet / Outlet	Sealing Material	Application
H-SCF II H-SPF II	1	2	F	S	T	T25	S	P
	01 1 round	**02** 2 inch **04** 4 inch	**F** 304 **S** 316L	**W** 126	**T** Tri-clamp	**T25** Tri-clamp DN 25	**S** Silicone **E** EPDM **V** Viton	**P** Pharmaceutical **F** Food and Beverage **C** Chemical

PED 2014/68/EU

H-DMF-T Stainless Steel Membrane Holder

Batch Testing

Sanitary Grade and Pressrue Filtration

H-DMF-T Stainless Steel Membrane Holder is designed for use in liquid filtration when a high level of cleanliness is required including lab anaylsis and product research/development.

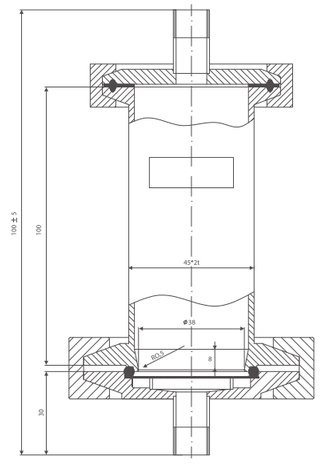
Surface Finish

Polish Type	Mirror Polish; Internal Electro-polished
Surface Option	Internal Ra: 0.38μm; External Ra: 0.4μm

Operating Conditions

Max. Operating Pressure	0.6Mpa (6bar)
Max. Operating Temperature	135°C (266°F)
Steam Sterilization	In-situ / Autoclave @ 121°C / 30 min

Drawings & Dimensions



Material of Construction

Housing Body	304;316L
Vent / Drain	304;316L
Clamp	304
O-ring / Gaskets	Silicon, Viton, EPDM , PTFE , PFA
Body Connection	Tri-Clamp
Inlet / Outlet	1/4"FNPT

Ordering Information

H-DMF-T	Number of Membrane	Membrane O.D	Material	Housing Connection	Inlet / Outlet	Sealing Material	Design Pressure	Surface Finish	Application
	01	47	F	T	FN1/4	S	X	A	P
	01 1Membrane	**47** 47mm **90** 90mm **142** 142mm **200** 200mm **293** 293mm	**F** 304 **S** 316L	**T** Tri-Clamp	**FN1/4** 1/4" FNPT	**S** Silicone **E** EPDM **V** Viton **P** Encapsulated Viton **F** PTFE	**X** 0.6MPa	**A** Mirror Polish Internal Electro-polished **B**	**P** Pharmaceutical **F** Food and Beverage **C** Chemical

PED 2014/68/EU

H-TMF Stainless Steel Membrane Holder

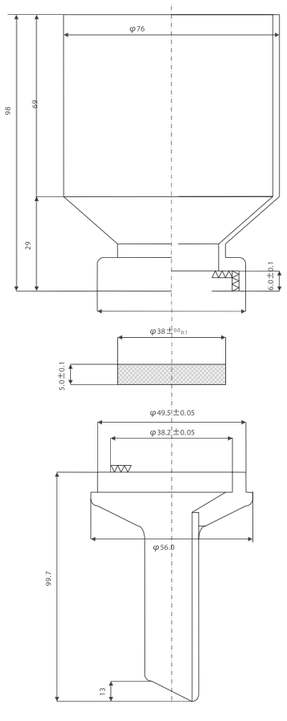
Laboratory Testing

Sanitary Grade H-TMF Stainless Steel Membrane Holder Series designed to meet GMP standards and cleanliness.All components are detachable for a complete cleaning. Internal surface finishing is Ra 0.3μm.

The body and internal membrane support are composed of stainless and the mechanical sealing eliminates the need of a gasket.

It is suitable for vacuum filtration in combination with vacuum bottle and the simple structure and easy operation allow analysis for all kinds of fluids.

Drawings & Dimensions



Surface Finish

Polish Type	Mirror Polish; Internal Electro-polished
Surface Option	Internal Ra: 0.38μm; External Ra: 0.4μm

Material of Construction

Housing Body	304;316L

Ordering Information

H-TMF	Number of Membrane	Membrane O.D	Material	Surface Option	Application
	01	47	F	A	P
	01 1Membrane	**47** 47mm	**F** 304 **S** 316L	**A** Mirror Polish **B** Internal Electro-polished	**P** Pharmaceutical **F** Food and Beverage **C** Chemical

PED 2014/68/EU

H-CPF PTFE Coated Filter Housing

Corrosive Chemical Resistant

H-CPF PTFE Coating Filter Housing is compatible with all kinds of corrosive fluids in fine chemical applications. Fluid contact area is composed of PTFE and it solves chemical compatibility issues with stainless steel filter housings, especially for aggressive acids.

The filter housing is customizable for flow rate requirements.

Material of Construction

All Surfaces	Outer: carbon steel; Internal: PTFE coated
Internal Surface (Fluid Contact Area)	PTFE
Legs	Carbon Steel
O-ring/Gaskets	PTFE

Operating Conditions

Design Pressure	0.6 Mpa
Max. Operation Temp	150°C

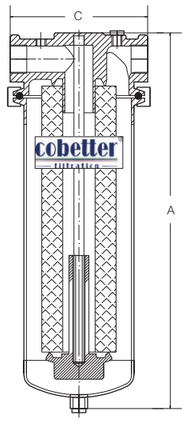
Chemical Compatibility

Fluids	PTFE
Nitric Acid (conc.)	R
Sulfuric Acid (conc.)	R
Sodium Hydroxide (conc.)	R
THF	R
TFA	R

R= Recommend NR= Not Recommend

Ordering Information

H-CPF	Number of Filter	Filter Length	Material	Endcap	Housing Body Connection	Inlet/outlet	Sealing Material	Design Pressure	Design Pressure	Application
	1	05	C	T	F	F	F	O	X	P
	1 1round	05 5 inch	C carbon steel coated with PTFE	T 222	F Flange	F Flange	F PTFE	O PTFE	X 0.6MPa	P Pharmaceutical
	3 3round	10 10 inch	F 304 coated with PTFE		L Screwed Connection				Y 1.0MPa	F Food and Beverage
	5 5round	20 20 inch								C Chemical
	7 7round	30 30 inch								
	··· ···	40 40 inch								



H-CCF Single-Round

Industrial Liquid Filter Housing

Casting and Easy Installation

H-CCF Filter Housing features a top-inlet and top-outlet, which allows for easy fitting with various connections and adaptors.

The housing body is sanitary grade and has a finished polishing of Ra < 0.6μm. This makes it suitable for various applications. Since the housing is a compact structure, the top of the filter housing can be fixed to the connection tube. To replace the filter, please twist the body. This ensures that there is no liquid spillover during the replacement process.

In addition, the drain valve located on the bottom of the filter housing allows for easy drainage.

Design Features

- Top inlet and top outlet can be connected by the tube
- No liquid spillover when replacing the filter cartridges
- Drain valve on the bottom is easy to drain
- Design allows for safe sealing

Surface Finish	Polishing Type	Base: Cast Housing body: Mechanical Polished
	Surface Option	Internal Ra: 0.38μm; External Ra: 0.4μm
Material of Construction	All surfaces	304 / 316L
	Drain	304 / 316L
	O-ring / Gaskets	Silicon, Viton, EPDM, PTFE
Operating Conditions	Max. Differential Pressure	0.6Mpa (6bar)
	Max. Temperature	90°C (194°F) / Design Temperature: 140°C
Connection	Body Connection	Tri-clamp
	Inlet / Outlet	3/4"FNPT
	Drain	1/2"NPT

	1 round 5"	1 round 10"	1 round 20"
A	250	375	625
C	110	110	110

Ordering Information

H-CCF	Number of Filters	Filter Length	Material	End Cap	Housing Connection	Inlet / Outlet	Sealing Material	Surface Finish	Design Pressure	Application
	1	05	F	S	T	G3/4	S	S	X	P
	1 1 round	10 10 inch	F 304	S 226	T Tri-clamp	G3/4 FNPT3/4	S Silicone	S Brushed	X 0.6MPa	P Pharmaceutical
		20 20 inch	S 316L	T 222			E EPDM			F Food and Beverage
		30 30 inch		D DOE			V Viton			C Chemical
							F PTFE			

H-CP &130 H-CP Resin Constructed Filter Housing

Broad Chemical Compatibility

H-CPP&130H-CPP Filter Housing Series constructed of 100% natural Polypropylene without any coloring agents or chemicals. These housings provide broad chemical compatibiliy and are ideally suited for food&beverage, ultrapure water, and other high purity chemical applications.

Typical Applications

- HCl
- Pharmaceutical Industry
- Deionized Water, Alcohol, Solvents

Design Features

H-CPP Filter Housings are compatible with Ø68mm and Ø83mm filter cartridges

- 130H-CPP Filter Housings are compatible with Ø130mm filter cartridges
- Able to use filter cartridges with SOE (222/226) endcap configurations

Materials of Construction

Housing Body	PP/PVDF/MABS/PFA
Closure Cap	PP/PVDF(PFA)
Spanner	PVC/PP
Sealing	EPDM/FEP/FKM/FFKM(PFA)
Closure Nut	PP

Operation Conditions

Max Operation Temperature	30°C (MABS/PC housing) 40°C (PP/PVDF housing)
Max Operation Pressure	**MABS/PC housing** 0.4 Mpa@20°C 0.3 MPa@30°C **PP/PVDF housing** 0.6 Mpa@25°C 0.4 MPa@40°C **PFA housing** 0.75MPa/25°C 0.30MPa/100°C

Cartridge Specification

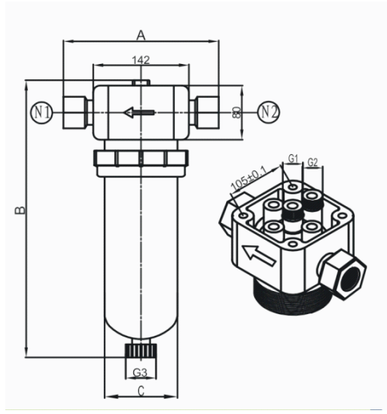
Number	1
Diameter	68mm/83mm/130mm
Length	10"/ 20"

Maximum Flow Rate

Filter Length	Max. Flow Rate(LPM) - Water
10 inch	15
20 inch	30

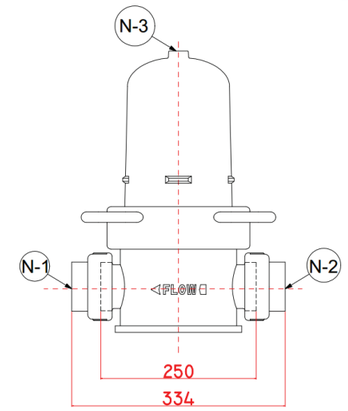
83/68

Inlet / Outlet (N1/N2)	3/4"NPT,1"NPT 1"union,1-1/2"union (JIS Standard)	222 226
Vent (G1/G2)	3/8"NPT	
Drain (G3)	1/4"NPT	
Inlet / Outlet Distance(A)	229.5mm	
Height (B)	10"=419mm 20"=677mm	
Body Diameter (C)	104mm	



130

Inlet / Outlet (N1/N2)	40A/50A/65A	334
Drain (N3)	1/4"NPT	
Drain (G3)	1/4"NPT	
Height (A)	334mm	
Height (B)	10"=430mm	
Body Diameter (C)	104mm	



Ordering Information

	Housing Body	Length of Filter	Code	Inlet/Outlet	Sealing Material	Application
HCP	**P** P PP M MABS C PC	**10** 10 10 inch 20 20 inch	C 222 K 226	A 3/4"NPT B 1"NPT N DIN25 C 1"union D 1-1/2"union	**E** E EPDM K FFKM	**P** P Pharmaceutical F Food and Beverage C Chemical
	V PVDF	10 10 inch	C 222	B 1"NPT	K FFKM	
130HCP	P PP M MABS C PC	10 10 inch	N 334	E 40A F 50A G 65A	E EPDM K FFKM	

	Housing Body	Length of Filter	End Cap	Code	Inlet/Outlet	Sealing Material	Application
HCP	A PFA	10 10 inch 20 20 inch	C 222	C1 C2	In/Out : 3/4" CFL Vent : 1/2" CFL Drain : 1/4" CFL In/Out : 1" CFL Vent : 1/2" CFL Drain : 1/4" CFL	K FFKM	P Pharmaceutical F Food and Beverage C Chemical

PED 2014/68/EU

H-SICF Multi-Round
Industrial Filter Housing
Pre-RO Guard Housing

Cobetter H-SICF Filter Housing designed for use in pre-filtration and clarification processes for beverage including drinking water, fine chemicals, pharmaceutical, and other industrial applications. Constructed of 304 or 316L stainless steel, the housing also has a mechanically polished surface finish and can accept filter cartridges with DOE, 222 or 226 end connections, as well as cartridges in 10", 20", 30", or 40" configurations.

In addition, it features a swing bolt closure at the top of the filter housing for easy access and installation. Mirror finishing and internal polishing of 0.6μm Ra are ensured by mechanically polishing the filter housing 5 to 7 times.

Design Features

- Mirror polishing; Internal polishing 0.6μm Ra; Sanitary grade requirement
- Use of spring to hold filters in place when installed

Surface Finish

Polish Type	Mirror Polish
Surface Option	Internal Ra: 0.6μm; External Ra: 0.8μm

Operating Conditions

Max. Operating Pressure	0.6Mpa (6bar) / 1.0Mpa (10bar)
Max. Operating Temperature	90°C (194°F) / Design Temperature: 140°C

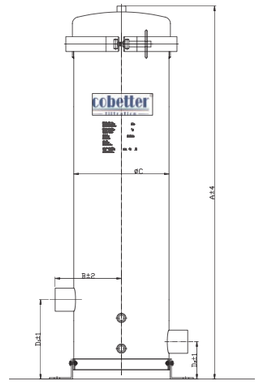
Material of Construction

Housing Body	304;316L
Vent / Drain	304;316L
Clamp / Swing Bolt	304
Leg	304
O-ring/Gaskets	Silicon, Viton, EPDM

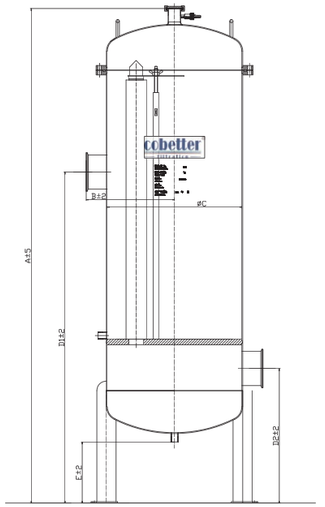
Connection

Body Connection	Swing Bolt / C-Clamp / NPT
Inlet / Outlet	Clamp / Flange
Vent	G1/2"(<12round) ; G1"(>15round)
Drain	G3/4"(<12round) ; G1"(>15round)
Pressure Gauge	M14*1.5

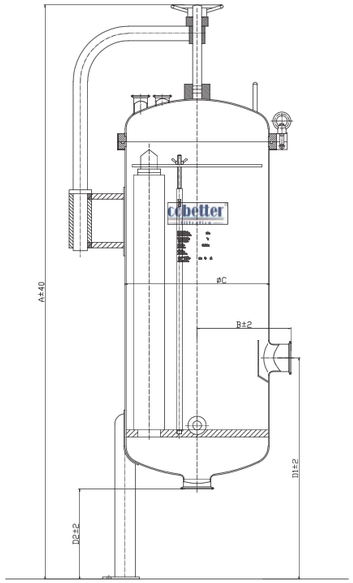
Drawings & Dimensions



3-7 round



9-15 round



>18 round

	3 round			5 round		7 round		11 round		15 round		18 round		24 round	
	20"	30"	40"	30"	40"	30"	40"	30"	40"	30"	40"	30"	40"	30"	40"
A	777	1027	1277	1027	1277	1037	1287	1396	1646	1463	1713	1710	1960	1720	1970
B	132	132	132	132	132	155	155	215	215	240	240	240	240	290	290
C	204	204	204	204	204	250	250	350	350	400	400	400	400	500	500
D1	170	170	170	170	170	170	170	961	961	980	980	635	635	660	660
D2	125	125	125	125	125	125	125	360	360	400	400	250	250	250	250

Ordering Information

H-SICF

Number of Filters	Filter Length	Material	End Cap	Housing Connection	Inlet / Outlet	Sealing Material	Surface Finish	Design Pressure	Application
3	30	F	S	D	T38	S	A	X	P
03 3 round	10 10 inch	F 304	P DOE	D Swing Bolt	T38 Tri-clamp DN38 (3-5elements)	S Silicon	A Mirror Polish	X 0.6MPa	P Pharmaceutical
05 5 round	20 20 inch	S 316L	S 226	C C-Clamp	T50 Tri-clamp DN50 (7-12elements)	E EPDM		Y 1.0MPa	F Food and Beverage
07 7 round	30 30 inch		T 222	L NPT	F32 Flange DN32 (3-5elements)	V Viton			C Chemical
09 9 round	40 40 inch		J DOE&222		F40 Flange DN40 (7-12elements)	F PTFE			
11 11 round						P Encapsulated Viton			
12 12 round									
15 15 round									
18 18 round									
...									
75 75 round									

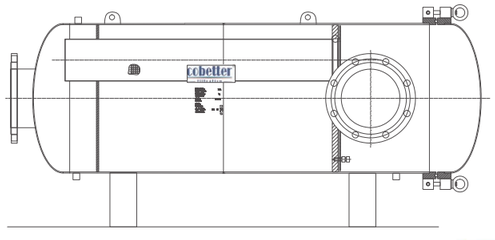
H-HF150 Series High Flow Rate Industrial Filter Housing

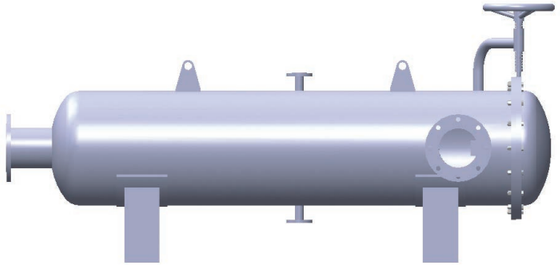
Large High Flow
Rate Filter Housing

Cobetter H-HF150 Series Industrial Filter Housing designed for use with HF150 Series Filter Cartridges and mainly used for large fluid (liquid/water) flow rate applications, especially in water treatment. Designed for large flow rates, this filter housing requires a small area for installation. It is cost efficient and easy to operate when compared to traditional filter housings.

It is available in 304 or 316L stainless steel, which ensures strong corrosion resistance for a wide range of applications.

In addition, it is available in a horizontal or vertical configuration. Normally, a vertical configuration is composed of 10 round 40" filters. For large flow rates over 1000m3/h, we recommend choosing a horizontal configuration with 60" HF150 filter cartridges as it satisfies large flow rate applications and relatively easy to change.





Surface Finish

Polish Type	Mirror Finish; Internal Mirror Finish Outer sand Blast
Surface Option	Internal Ra: 0.6μm; External Ra: 0.8μm

Operating Conditions

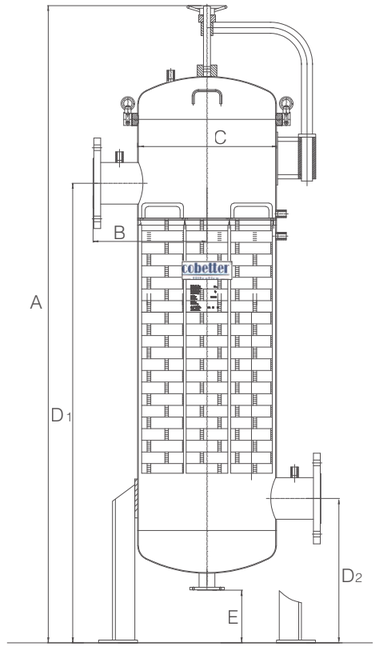
Max. Operating Pressure	0.6Mpa(6bar) / 1.0Mpa(10bar)
Max. Operating Temperature	90°C (194°F) / Design Temperature: 140°C

Material of Construction

Housing Body	304;316L
Vent / Drain	304;316L
Screw Bolt	304
Leg	304
O-ring / Gaskets	Silicon, Viton, EPDM

Connection

Body Connection	Swing Bolt / C-Clamp
Inlet / Outlet	Flange
Vent	G1/2"
Drain	G1"
Pressure Gauge	M14*1.5



Drawings & Dimensions

	1round		3round		4round		5round		6round		7round	
	40"	60"	40"	60"	40"	60"	40"	60"	40"	60"	40"	60"
A	1555	2055	2170	2670	2200	2700	2580	3080	2600	3100	2600	3100
B	250	250	380	380	400	400	410	410	455	455	455	455
C	219	219	400	400	450	450	550	550	550	550	550	550
D1	1355	1855	1655	2155	2175	2675	1840	2340	1860	2360	1860	2360
D2	335	335	405	405	420	420	550	550	570	570	570	570
E	150	150	150	150	200	200	200	200	200	200	200	200

Ordering Information

H-HF150

Number of Filters	Filter Length	Material	End Cap	Housing Connection	Inlet / Outlet	Sealing Material	Design Pressure	Surface Finish	Configuration	Application
3	**10**	**F**	**H**	**D**	**F80**	**S**	**X**	**A**	**V**	**P**
01 1 round	20 20 inch	F 304	H HF150	D Screw Bolt	F80 Flange DN80 (1round)	S Silicone	X 0.6MPa	A Mirror Polish	V Vertical	P Pharmaceutical
02 2 round	30 30 inch	S 316L		C C-Clamp	F125 Flange DN125 (2-3round)	E EPDM	Y 1.0MPa	C Internal Mirror Finish Outer Sand Blast	H Horizontal	F Food and Beverage
03 3 round	40 40 inch				F150 Flange DN150 (4round)	V Viton				C Chemical
04 4 round	60 60 inch				F200 Flange DN200 (5-6round)					
05 5 round					F250 Flange DN250 (7round)					
06 6 round					F250 Flange DN250 (8round)					
07 7 round					F250 Flange DN250 (9round)					

PED 2014/68/EU

H-FRP Housing

High Anti-Corrosive Performance
Economical Design

Cobetter H-FRP Filter Housing designed for use with Cobetter HF-150 High Flow Filter.Since it is a separate unit, it can easily be connected and used in conjunction with a reverse osmosis system. Due to its high anti-corrosive ability and high strength glass fiber reinforced plastic (FRP), this housing is suitable and advantageous for use in seawater desalination.

Features and Benefits

- Modular Design - provides easy connection and disassembly
- Attractive Appearance
- Valve on Branch Tube Allows for Filter Change-out – system remains running
- Available in Horizontal or Vertical Design

Filter Cartridge Specifications

Number of Filter	1
Filter Length	1028mm/1540mm
Filter Diameter	152mm
Flow Direction	From Inside to Outside
Design Flow Rate	35m³/h

Operating Conditions

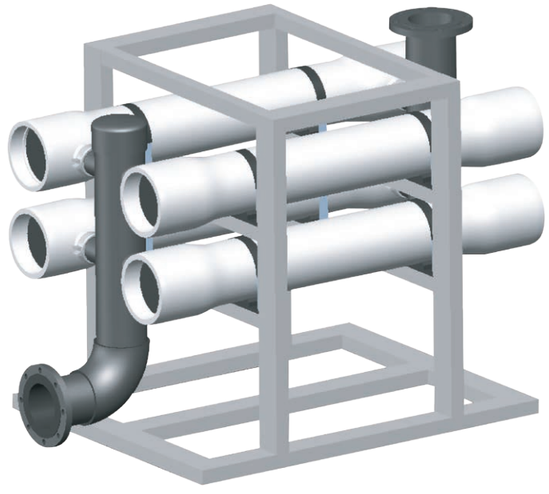
Operating Pressure	0.6Mpa / 1.0Mpa
Operating Temperature	-10°C ~ 65°C

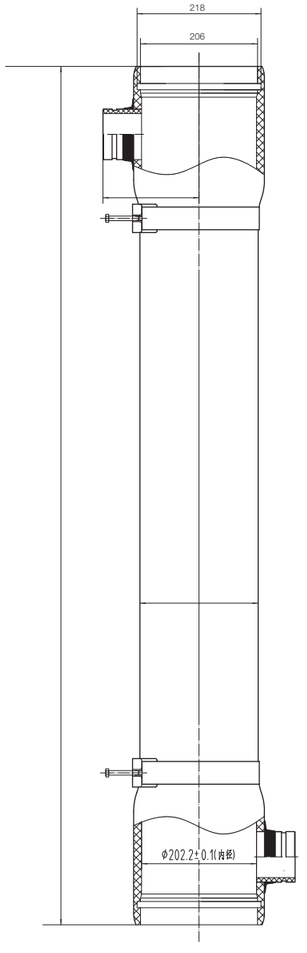
Material of Construction

Housing Material	FRP
Inlet	FRP
Saddle	Rubber
Support Strap	Stainless Steel & Rubber & Brass
Strap Bolt	Stainless Steel
Seal Material	EPDM / Silicon/Viton

Remark: The system will be custom designed and manufactured per customer site conditions if flow rate exceeds 300m³/h.

Drawings & Dimensions





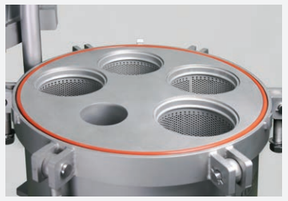
Ordering Information

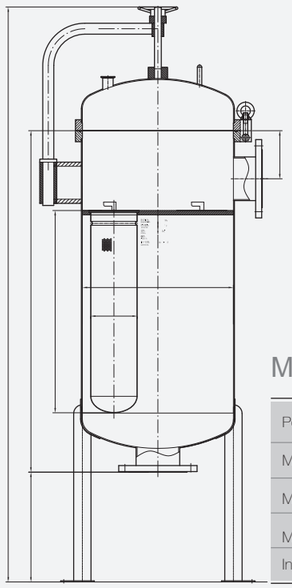
	Number of Filters	Filter Length	Material	Filter Type	Inlet / Outlet	Sealing Material	Design Pressure	Application
H-FRP150	1	60	F	H	C80	S	X	P
	01 1 round	20 20 inch 40 40 inch 60 60 inch	F FRP	H HF150	C65 Coupling DN65 C80 Coupling DN80 C100 Coupling DN100	S Silicone E EPDM V Viton	X 0.6MPa Y 1.0MPa Z Customize	P Pharmaceutical F Food and Beverage C Chemical

H-MBF (Standard Version)

Easy to Operate; High Efficiency Bag Filter Housing; Suitable for High Flow Rate Filtration Requirements

- Filter bag housing utilizes a davit style design.
- Side inlet/outlet design makes it suitable for use with various application requirements. Stainless steel grid mesh directly presses on the bag filter connection, which creates a tight seal and allows for a quick and efficient change-out of filter elements.
- Compact design means less liquid loss.
- 3-bag to 12-bag filter housings is available depending on required flow rates.





Material of Construction

Polish Type	Mirror Polish;Sand-Blasted; Wire Drawing
Max. Pressure	1.0Mpa
Max Temp.	150°C
Material	SS304,SS316L
Inlet / Outlet	Flange

H-EMBF (Precise Version)

High Flow Bag Filter Housing; Suitable for Use in a Clean Production/Environment

- Exterior and interior are mechanically polished for sanitary filtration requirements.
- Integrated lid and sealing design; Stainless steel grid mesh directly presses on the bag filter connection, which creates a tight seal and allows for a quick and efficient change-out of filter elements.
- Spring-assisted lid, which keeps the weight, balanced when opening the lid. This ensures that the lid is easy to open, lift, and
- anchor.
  Side inlet/outlet design makes it suitable for use with various
- application requirements
- Compact design means less liquid loss.
  3-bag to 12-bag filter housings is available depending on required flow rates.

Material of Construction

Polish Type	Mirror Polish;Sand-Blasted;Wire Drawing
Max. Pressure	1.0Mpa
Max Temp.	150°C
Material	SS304,SS316L
Inlet / Outlet	Flange

Drawings & Dimensions

	NO.3	NO.4	NO.6	NO.8	NO.12
Total Height	1800	1800	1860	1980	2220
Diameter	550	550	650	750	950
Inlet to Ground	1120	1120	1280	1420	1200
Outlet to Ground	400	400	400	400	500

Remarks: Dimensions above are limited to Size 2 filter bag.

Ordering Information

	Number of Bags	Bag Size	Material	Housing Connection	Inlet /outlet	Sealing Material	Surface Finish	Design Pressure	Application
H-MBF H-EMBF	1 03 3 bag 04 4 bag 06 6 bag 08 8 bag 10 10 bag 12 12 bag	02 01 180*430 02 180*810 03 Customerize	F F 304 S 316L	D D Swing Bolt C C-Clamp	F80 F80 Flange DN80 (2 bags) F125 Flange DN125 (3 bags) F150 Flange DN150 (4 bags) F200 Flange DN200 (5-6 bags) F250 Flange DN250 (7 bags)	S S Silicone E EPDM V Viton F PTFE P Encapsulated Viton	A A Mirror Polish C Sand Blasted S Brushed	X X 0.6MPa Y 1.0MPa	P P Pharmaceutical F Food and Beverage C Chemical

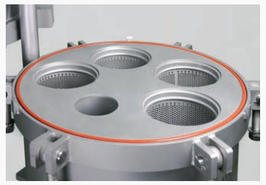
PED 2014/68/EU

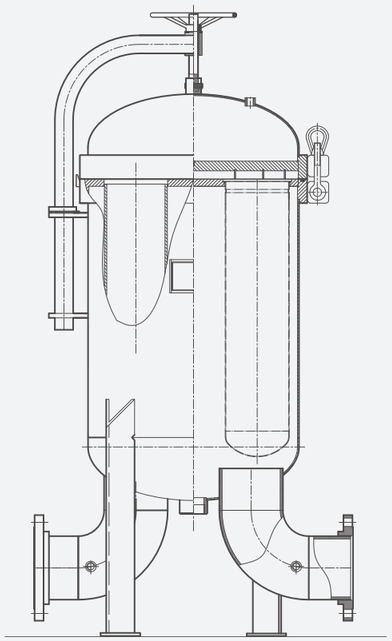
Multi-Bag Filter Housing (Compact Version)

H-LMBF

Easy Installation and Bag Filter Housing Operation;
Suitable for Guard Filtration and
Industrial High Flow Filtration

- Integrated lid and sealing design; Stainless steel grid mesh directly presses on the bag filter connection, which creates a tight seal and allows for a quick and efficient change-out of filter elements.
- Bottom inlet/outlet design makes it suitable for use with various application requirements.
- Compact design means less liquid loss.
- 3-bag to 12-bag filter housings is available depending on required flow rates.





Operating Instructions

1. Use a wrench to loosen the swing bolts or screws when changing out the bag filters
2. Turn the davit handle and lift the lid open
3. Turn over the lid
4. Change out filter elements
5. Move the lid back to the correct position and turn the handle to drop the lid.
6. Use a wrench to tighten the swing bolts and screws

Surface Finish

Polish Type	Mechanical Polish / Sand-Blasted / Wire Drawing
Max. Pressure	1.0Mpa
Max Temp.	150°C
Material	SS304,SS316L
Inlet / Outlet	Flange

Drawings & Dimensions

	NO.3	NO.4	NO.6	NO.8	NO.12
Total Height		1640	1760	1820	2100
Diameter		550	650	750	950
Inlet to Ground	180	180	250	152	190
Outlet to Ground	180	180	250	12	190

Ordering Information

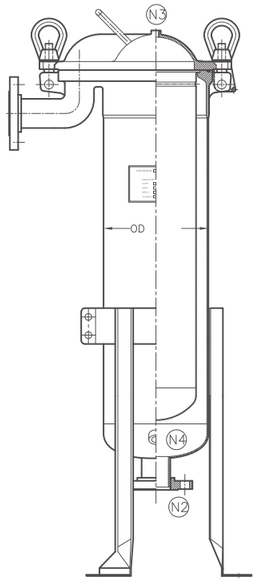
H-LMBF	Number of Bags	Bag Size	Material	Housing Connection	Inlet /outlet	Sealing Material	Surface Finish	Design Pressure	Application
	1	02	F	D	F80	S	A	X	P
	03 3 bag	01 180*430	F 304	D Swing Bolt	F80 Flange DN80 (2 bags)	S Silicone	A Mirror Polish	X 0.6MPa	P Pharmaceutical
	04 4 bag	02 180*810	S 316L	C C-Clamp	F125 Flange DN125 (3 bags)	E EPDM	C Sand Blasted	Y 1.0MPa	F Food and Beverage
	06 6 bag	03 Customerize			F150 Flange DN150 (4 bags)	V Viton	S Brushed		C Chemical
	08 8 bag				F200 Flange DN200 (5-6 bags)	F PTFE			
	10 10 bag				F250 Flange DN250 (7 bags)	P Encapsulated Viton			
	12 12 bag								

PED 2014/68/EU

Top-Inlet Bag Filter Housing H-TBF

Recommended Configuration, Meets All Filtration Requirements

- H-TBF is our recommendation for single bag filter housings as it's suitable for various filtration requirements.
- With a Top-Inlet design, liquid flows into the filter housing from the side inlet to the top of the filter, which helps to establish a pressure balance and reduction and free from turbulence, thus, protecting the filter bag.
- During filtration, liquid flow directly from the top to the bag filter, this keeps volume low above the bag filter.The lid is pressed firmly against the bag filter, thus, providing excellent sealing.
- Mechanical polish and sand blast are available according to customer's requirements.



Material of Construction

Polish Type	Mirror Polish; Sand-Blasted; Wire Drawing
Max. Pressure	1.0Mpa
Max Temp.	150°C
Material	SS304,SS316L
Inlet / Outlet	Flange,Tri-Clamp,Thread

Drawings & Dimensions

	NO.1	NO.2
Total Height	742	1130
Diameter	219	219
Inlet to Ground	549	938
Outlet to Ground	150	150

Ordering Information

H-TBF	Number of Bags	Bag Size	Material	Housing Connection	Inlet /outlet	Sealing Material	Surface Finish	Design Pressure	Application
	1	02	F	D	T38	S	A	X	P
	01 1 bag	01 180*430 02 180*810	F 304 S 316L	D Swing Bolt	T38 Tri-clamp DN38 T50 Tri-clamp DN50 F50 Flange DN50	S Silicone E EPDM V Viton P Encapsulated Viton	A Mirror Polish C Sand Blasted S Brushed	X 0.6MPa Y 1.0Mpa	P Pharmaceutical F Food and Beverage C Chemical

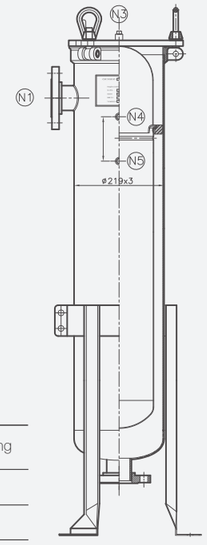
ASME U CE SGS PED 2014/68/EU

Side-Inlet Single Bag Filter Housing (Standard Version)

H-SBF

Economical; Suitable for the Majority of Filtration Applications

- Using a triangle shaped lid, one side is fixed to the filter housing, which makes it convenient to use and maintain.
- Using a clamp ring and spring to compress the bag filter, thus, ensuring a 360° sealing between the housing and filter bag.
- The Z-type support allows for equal pressure against the basket.
- Mechanical polish and sand blast are available according to customer's requirements.



Material of Construction

Polish Type	Mirror Polish;Sand-Blasted;Wire Drawing
Max. Pressure	1.0Mpa
Max Temp.	150°C
Material	SS304,SS316L
Inlet / Outlet	Flange,Tri-Clamp,Thread

Drawings & Dimensions

	NO.1	NO.2
Total Height	820	1214
Diameter	219	219
Inlet to Ground	600	993
Outlet to Ground	150	150

Ordering Information

H-SBF	Number of Bags	Bag Size	Material	Housing Connection	Inlet /outlet	Sealing Material	Surface Finish	Design Pressure	Application
	1	02	F	D	T38	S	A	X	P
	01 1 bag	01 180*430 02 180*810	F 304 S 316L	D Swing Bolt	T38 Tri-clamp DN38 T50 Tri-clamp DN50 F50 Flange DN50	S Silicone E EPDM V Viton P Encapsulated Viton	A Mirror Polish C Sand Blasted S Brushed	X 0.6MPa Y 1.0MPa	P Pharmaceutical F Food and Beverage C Chemical

ASME U CE SGS PED 2014/68/EU

Side-Inlet Single Bag Filter Housing (Economical Version)

H-EBF

Lighter and A More Economical Bag Filter Housing

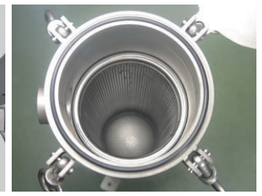
- H-EBF is the most economical bag filter housing manufactured by Cobetter, it handles most industrial filtration requirements in low-pressure operations.
- Using a triangle shaped lid, one side is fixed to the filter housing, which makes it convenient to use and maintain.
- Using a clamp ring and spring to compress the bag filter, thus, ensuring a 360° sealing between the housing and filter bag.
- Mechanical polish and sand blast are available according to customer's requirements.

Material of Construction

Polish Type	Mirror Polish;Sand-Blasted;Wire Drawing
Max. Pressure	1.0Mpa
Max Temp.	150°C
Material	SS304,SS316L
Inlet / Outlet	Thread

Drawings & Dimensions

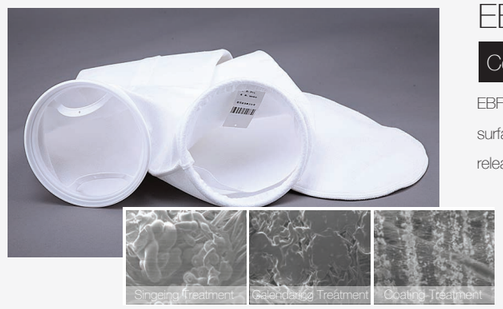
	NO.1	NO.2
Total Height	746	1141
Diameter	195	195
Inlet to Central	137	137
Inlet to Ground	649	1044
Outlet to Ground	150	150



Ordering Information

	Number of Bags	Bag Size	Material	Housing Connection	Inlet /outlet	Sealing Material	Surface Finish	Design Pressure	Application
H-EBF	1	02	F	D	T38	S	A	X	P
	01 1 bag	**01** 180*430 **02** 180*810	**F** 304 **S** 316L	**D** Screw Bolt	**T38** Tri-clamp DN38 **T50** Tri-clamp DN50 **F50** Flange DN50	**S** Silicone **E** EPDM **V** Viton **P** Encapsulated Viton	**A** Mirror Polish **C** Sand Blasted **S** Brushed	**X** 0.6MPa **Y** 1.0Mpa	**P** Pharmaceutical **F** Food and Beverage **C** Chemical

ASME U CE SGS PED 2014/68/EU



EBF Filter Bag Series

Cost-Effective /Needle Felt

EBF economic filter bags are made of high efficiency needle felt, processed by the surface treatments of singeing, calendaring and coating, eliminate the risk of fiber releasing. The seamless thermal bonding technology ensures no side leakage.

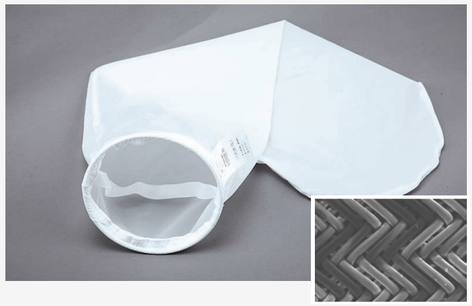
EBF is available in double layer structure that increases the effective filtration, dirt holding capacity and enhanced retention efficiency. EBF is the cost effective solution for medium-low viscous fluids.

Optional media: PP and PET

SBF Nylon Mesh Filter Bag Series

Surface Filtration / Nylon Mesh

SBF nylon mesh filter bags are designed to withstand higher solid loading, high flow rate and are suitable for applications not needing high precision removal rating.



1 Polypropylene Prefilter Layer
2 Ultrafine Melt-blown Polypropylene Filter Layer
3 Polypropylene Protection Layer of Fiber Releasing

High Efficiency HEBF Filter Bag Series

Melt-blown Polypropylene/ oil absorption

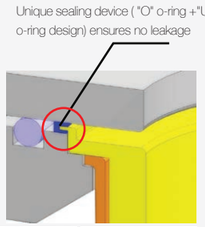
HEBF high efficiency filter bags are made of ultrafine polypropylene fibers. The melt-blown technology provides extremely high filtration efficiency reaching the absolute rates. The media provide high hydrophobicity with water, but high hydrophlicity with Oil. So it is used as oil adsoption filter bag.

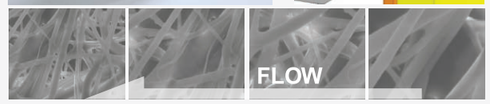
The 100% pure polypropylene construction doesn't contain any extractable contaminants of silicone oil, adhesive, etc. It fully conforms to the food contact regulations of FDA and GMP requirements for pharmaceutical use.

BG160 Bag Filter Cartridge

Cartridge Filter Sytle/ Large Filter Area

Cobetter BG160 Filter cartridge is design for replace filter bags. Its O.D..160mm and endcap O.D. Is 180mm which is same with standard filter bags. Cobetter BG160 filter 's filtration area is 8 times of normal filter bag. It can fit most Size 1 and Size 2 bags with no hardware changes.





H-CSD /H-CSD-SD(Split Dome) Filter Housing

An Innovative Substitute to Plate and Frame Filters

H-CSD Lenticular Housing Series specially designed for use with CSD lenticular filter modules.

Designed according to sanitary require-ments,the well-polished housing leaves no residual liquids and has an easy throughput for cleaning.

The bottom in/bottom out flow pattern eliminates turbulent flow; thus, enhancing filtration efficiency.

Maximum height stack of 4 meets high flow rates requirements.

Design Features

- Bottom in/bottom out structure allows for easy cleaning; Drain port is available on the inlet line, which is convenient for drainage.
- Excellent sealing.
- Top and middle opening options; easy module change out reduce liquid spoilage.
- Satisfies EC Pressure Equipment Directive: PED 97/23/CE.

Surface Finish

Polish Type	Mechanical Polish; Electro-Polish
Finish	Internal Ra: 0.38μm; External Ra: 0.4μm

Operating Conditions

Design Pressure	0.6Mpa (6bar)
Max Temp.	90°C (194°F) / Design Temperature: 140°C
Sterilization	Inline / Autoclave @ 121°C

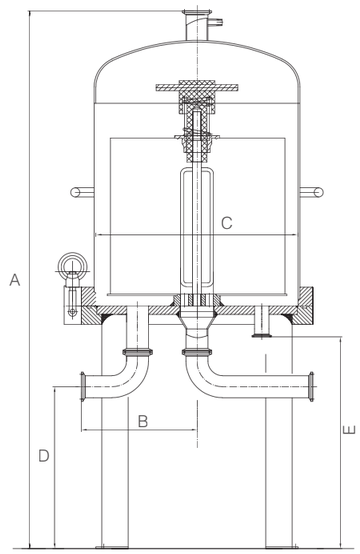
Material of Construction

Housing Body	304，316L
Vent / Drain	304，316L
Swing Bolt	304
Feet Support	304
Sealing	Silicon, Viton, EPDM, PFA

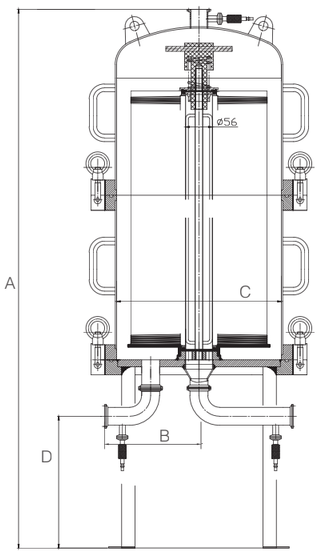
Connection

Housing Connection	Swing Bolt
Inlet / Outlet	Tri-clamp
Vent	1.2"NPT
Drain	Tri-clamp 0.5 S
Pressure Gauge	1.5S Tri-clamp

Drawings & Dimensions



H-CSD



H-CSD-SD (Split Dome)

	12" 16Lenses	12" 32Lenses	12" 48Lenses	12" 64Lenses
A	800	1070	1340	1610
B	200	200	200	200
C	350	350	350	350
D	150	150	150	150
E	245	245	245	245

Ordering Information

	Number of Filters	Filter Specification	Material	End Cap	Housing Connection	Inlet / Outlet	Sealing Material	Surface Finish	Design Pressure	Application
H-CSD H-CSD-SD	1	12-1	F	D	D	T38	S	A	X	P
	01 1 round	**12-1** 12" 16Lenses **12-2** 12" 32Lenses **12-3** 12" 48Lenses **12-4** 12" 64Lenses **16-1** 16" 16Lenses **16-2** 16" 32Lenses **16-3** 16" 48Lenses **16-4** 16" 64Lenses	**F** 304 **S** 316L	**D** DOE	**D** Swing Bolt	**T38** Tri-clamp DN 38	**S** Silicone **E** EPDM **V** Viton **P** Encapsulated Viton	**A** Mirror Polish **B** Internal Electro-polished	**X** 0.6MPa	**P** Pharmaceutical **F** Food and Beverage **C** Chemical

PED 2014/68/EU

S-SIF Filtration System

Cobetter S-SIF Filtration System Series specifically designed and engineered for industrial fluid filtration.They contain all the necessary components including pressure source (pump), filter housings, stainless steel pipes, pressure gauge, drain valve, and filtration trolley.Customer must connect tube on inlet for operation as the filtration system comes completely assembled.

The system is a multi-stage filtration system and the filter housings can meet specific requirements and needs.Cobetter can also provide the filter cartridges inside the system to meet application requirements.

In addition,Cobetter can supply different pressure sources: stainless steel water pump, gear pumps, pneumatic pump,air diaphragm pump.

Single-round filter housing system uses tri-clamp connection, while other will use a flange connection. Design pressure can reach 10bar.

S-SIF Ⅰ: 3 Stages - meet the needs of fluids that contain a low solid content but require a high filter retention.

S-SIF Ⅱ: 1st Stage Bag Housing Series; 2nd- 3rd Stages Liquid Filter Housing – meet the needs of fluids with a high solid content. Use of filter bags in the first stage is a more economical method of removing large pore size particles and yields higher filter retention in the latter two stages.

S-SIF Ⅲ: Customized Filtration System

Design Features

- All systems are mirror polished. Internal surfaces polished to 0.6μm Ra; Easy to clean
- Economical design; Minimum fluid loss





Surface Finish

Polishing Type	Mechanical Polished			
Surface Option	Sanitary Grade	Internal Ra<0.3μm External Ra<0.4μm	Industrial Grade	External Ra<0.4μm External Ra<0.6μm

System Design

For Low Viscosity and Low Solid Content Fluid

Item (P/N)	Recommended Specifications	Reference Flow Rate (<50cp)
S-SIF0010	3 Stage Filtration System H-SCF Housing Series / H-CCF Housing Series (Single-Round)	0.1-0.3T/hr
S-SIF0030	3 Stage Filtration System H-SCF Housing Series / H-CCF Housing Series (3-Round)	0.3-1.5T/hr
S-SIF0050	3 Stage Filtration System H-SCF Housing Series / H-CCF Housing Series (5-Round)	1.5-3.0T/hr
S-SIF0070	3 Stage Filtration System H-SCF Housing Series / H-CCF Housing Series (7-Round)	3.0-5.0T/hr

Remark: filter length can be adjusted to meet the flow rate requirement.

For High Viscosity and High Solid Content Fluid

Item (P/N)	Recommended Specifications	Reference Flow Rate (≈100cp)
S-SIF Ⅱ 0030	H-TBF (Size1 Bag Housing)+H-ICF(3-Round)+H-ICF (3-Round)	100-300 kgs / hr
S-SIF Ⅱ 0050	H-TBF (Size1 Bag Housing)+H-ICF(5-Round)+H-ICF (5-Round)	300-1500kgs / hr
S-SIF Ⅱ 0070	H-TBF (Size2 Bag Housing)+H-ICF(7-Round)+H-ICF (7-Round)	1500-3000kgs / hr
S-SIF Ⅱ 0090	H-TBF (Size2 Bag Housing)+H-ICF(9-Round)+H-ICF (9-Round)	3000-5000kgs / hr

Remark: filter length can be adjusted to meet the flow rate requirement.

S-SIF Filtration System Series Operating Conditions

Parameter	Model Selection
Model Selection	0.65Mpa, 0.65-1.0Mpa
Design Flow Rate	<1000kgs/hr;1000-3000kgs/hr;3000-5000kgs/hr; 5000-8000kgs/hr; >10000kgs/hr
Operating Pressure	Ambient,80℃，100℃，＞120℃
Final Stage Filter Pore Size	0.1μm, 0.2μm, 0.45μm……150μm

PED 2014/68/EU

S-SIF Filtration System Spare Parts Introduction

Parameter	Model Selection	
Pressure Source	Stainless Steel Water Pump; Pneumatic Pump;Air Diaphragm Pump, Gear Pumps	
Material	Filter Housing	304; 316L
	Pipes / Tube	304; 316L
	Spare Parts（Coupling, screw bolt）	304
	O-ring / Gaskets	Silicon; EPDM; Viton; PTFE; Encapsulated Viton
Connection	Tube Connection	Tri-clamp; Flange; Thread
	Housing Body Connection	Tri-clamp; Flange; Swing Bolt
Pipes	Housing Inlet & Outlet	DN25; DN38; DN50; DN80
Dimension	Tube	DN25; DN38; DN50; DN80
	Drain Valve	1/ 2"; 1"; 2"
Spare Parts	Pressure Gauge	Stainless Steel ;Sanitary ;with silicone oil
	Drain Valve	Tri-clamp; Thread
	Vent	Standard
Filter Cartridge	Endcap	DOE; 222; 226
	Length	5"; 10"; 20"; 30"; 40"
Open method	Housing Open method	Open in the bottom ;Open in the top;Open in the bottom and top

Ordering Information

S-SIF0010
S-SIF0030
S-SIF0050
S-SIF0070
S-SIF II 0030
S-SIF II 0050
S-SIF II 0070
S-SIF II 0090

Pump	Filter Length	Material	End Cap	Tube Connection	Tube Size
W	05	F	S	F	1
W SS Water Pump **M** Air Diaphragm Pump **G** Gear Pumps	**10** 10 inch **20** 20 inch **30** 30 inch **40** 40 inch	**F** 304 **S** 316L	**S** 226 **T** 222 **P** DOE	**T** Tri-clamp **F** Flange	**1** 1 inch **1.5** 1.5 inch **2** 2 inch **2.5** 2.5 inch **3** 3 inch

Sealing Material	Design Pressure	Surface Finish	Application
S	X	A	P
S Silicone **E** EPDM **V** Viton	**X** 0.6MPa	**A** Mirror Polish **B** Internal Electro-polished	**P** Pharmaceutical **F** Food and Beverage **C** Chemical

PED 2014/68/EU

Stainless Steel Housing Parameter List

Material

CHINA GB	TAIWAN CNS	JAPAN JIS	US ASTM	CHARACTERISTICS
0Cr19Ni9	304	SUS304	304	Resistant to corrosion and high temperatures, good mechanical strength in low temperature environments and workability for punching and bending, no hardening after hot treatment process, no magnetism and a working temperature of -196°C ~ 800°C.
00Cr19Ni10	304L	SUS304L	304L	Low carbon content stainless steel has a similar corrosion resistance to that of 304, but better resistance to inter-crystalline corrosion after welding or stress relieving. It has a good corrosion resistance even before heat treatment and a working temperature of -196°C ~ 800°C.
0Cr17Ni12Mo2	316	SUS316	316	Excellent resistance to corrosion, atmospheric corrosion, and high temperature and suitable for harsh environments, good workability for hardening, and no magnetism.
00Cr17Ni14Mo2	316L	SUS316L	316L	Low carbon content stainless steel, which has the same characteristics 316 and additionally, it has a good resistance to inter-crystalline corrosion.

Pressure Resistance and Wall Thickness (only for φ68 cartridges with 226/222 adaptor)

Body Diameter	No. of Cartridges	Wall Thickness of Corresponding Pressure Resistance (if no corrosion on body)		
		0.6Mpa	1.0Mpa	1.6Mpa
ϕ200	3	2	2	2
ϕ219	3	2	2.5	3
ϕ250	5-6	2	2.5	4
ϕ273	7	2.5	3	4
ϕ300	8～9	2.5	3	4
ϕ325	10-11	2.5	3	4
ϕ350	12	2.5	3	4
ϕ400	15-18	3	4	5
ϕ450	21	3	4	5
ϕ500	24-30	3	4	6

$Q=(\pi D^2) / 4*V*3600$

Q：Flow Rate^3 (m3/h) - Volume or Weight of Fluids that Pass Through a Cross-Section in a Certain Time

D：Pipe ID (m))

V：Average velocity of fluids (m/s) – Distance Passed in a Certain Time When the Fluids Flow into the Pipe; Estimated Value for Liquids is 2 and for Gases is 10

Relation between Flow Rate and Pipe Diameter

Nominal ID	Inch	Estimated Flow Rate -Liquids $m^3/h/2m/s$	Estimated Flow Rate - Gas$m^3/h@10m/s$
DN15	1/2	1.3	6.3
DN20	3/4	2.3	11.3
DN25	1	3.0	17.6
DN32	1.25	5.9	28.9
DN40	1.5	9.0	45.2
DN50	2	14.1	70.6
DN65	2.5	23.9	119.4
DN80	3	36.2	180.8
DN100	4	56.5	282.6
DN125	5	88.4	441.6
DN150	6	127.2	635.9
DN200	8	226.2	1130.4

Stainless Steel Housing Parameter List

Roughness (Polishing Rating)

Mesh(3#)	Rating Ra (um)
300	0.3-0.4
250	0.4-0.6
200	0.6-0.8
150	0.8-1.6
100	1.6-3.2

Cobetter Standard

Housing Type	Internal Surface	External Surface
Sanitary Grade	<0.3μm	<0.4μm
Fine Industrial Grade	<0.4μm	<0.6μm
General Industrial Grade	<0.6μm	<0.8μm

Tri-clamp Inlet/Outlet Dimensions

Nominal ID	Inch	Chuck OD	Pipe OD
DN15	1/2	25	12.7
DN20	3/4	25	19
DN25	1	50.4	25.4
DN32	1.25	50.4	32
DN38	1.5	50.4	38.1
DN50	2	63.9	50.8
DN65	2.5	77.4	63.5

Flange Inlet / Outlet Dimensions

Nominal ID	Bolt Circle Diameter	Flange OD	Pipe OD
DN25	85	115	32
DN32	100	140	38
DN40	110	150	45
DN50	125	165	57
DN65	145	185	76
DN80	160	200	89
DN100	180	220	108
DN125	210	250	133
DN150	240	285	159
DN200	295	340	219

合作创造
美好未来
COoperation Makes
better Future