FILTER HOUSINGS

Cartridge Filter Housing

Pressurised filter housing with an AISI 304, 304L, 316, 316L or 316Ti stainless steel body that holds 1–60 replaceable cartridges. It works outside-in and is used on food, pharmaceutical, chemical, water treatment and paint lines that need finer filtration than bag filters provide.



CARTRIDGE QUANTITY	FILTRATION	OPERATING PRESSURE	CARTRIDGE LENGTH
1–60	**0.11–10,000**	**10 bar**	**5″–40″**
Single and multi-cartridge body	µm · depending on cartridge type	Up to 40 bar for custom builds	60″–80″ custom-made

Technical specifications

Body material	AISI 304 · 304L · 316 · 316L · 316Ti · 904L stainless steel
Cartridge quantity	Single body (1) · Multi-cartridge body 3 · 5 · 7 · 12 · 24 … 60 cartridges
Cartridge length	5″ · 10″ · 20″ · 30″ · 40″ standard · 60″ · 70″ · 80″ custom-made
Cartridge interface	DOE (flat end with gasket, compression rod) · SOE 215 · 222 · 226 O-ring socket
Filtration precision	0.11–10,000 µm (depending on the cartridge type used)
Filtration direction	Outside-in; from the outer surface of the cartridge to the central core
Inlet / outlet diameter	1″–10″ line diameter
Connection type	DIN / ANSI flange · Muff · Nipple · Union · Clamp (tri-clamp) · Camlock
Operating pressure	10 bar standard · up to 40 bar for custom builds
Test pressure	25 bar hydrostatic
Lid system	Bolted lid · Swing-bolt quick-opening lid (on request) · Davit lifting with handwheel (large bodies)
O-ring / gasket	NBR · Silicone · EPDM · Viton (FKM)
Inner surface	Smoothed by buffing
Flow (10″, clean water)	Standard cartridge ~1 m³/h · Pleated micro cartridge ~0.35 m³/h
Recommended change-out ΔP	2.0 bar
Quality	ISO 9001

Model and capacity

MODEL	CARTRIDGES	PIPE CONNECTION
Single	1	1″
3-cartridge	3	1½″
5-cartridge	5	2″
7-cartridge	7	2″
12-cartridge	12	2½″–3″
24–60-cartridge	24–60	3″–4″ flange

Flow per 10″ cartridge on clean water: standard ~1 m³/h, pleated micro ~0.35 m³/h; 2×/3×/4× with 20″/30″/40″ cartridges. Above 24 cartridges custom-built.

Cartridge length

LENGTH	MM	USE
5″	127	Sampling, laboratory, pilot
10″	254	Standard reference length
20″	508	Medium-flow lines
30″	762	Common in multi-cartridge bodies
40″	1016	Maximum flow, high sediment
50″–80″	1270–2032	Custom-built

Single housing lid and inlet/outlet types

Type 1 · Flanged lid
Bolted flange lid; high durability under frequent, heavy use. Bottom or side outlet.

Type 2 · Flanged lid, swing bolts
Flange lid with swing bolts (wing nuts); opens without tools. On request, bottom or side outlet.

Type 3 · Union lid
Union-connected lid; practical dismantling and reassembly. Bottom or side outlet.

Type 4 · Clamp lid
Clamp lid; fastest cartridge change, for hygienic lines. Bottom or side outlet.

Type 5 · Inline
Inlet and outlet on the same line axis; for tight spaces. Flange, union or clamp lid.

Type 6 · Line type
Connects directly to the line; 5″–40″ length, AISI 304 or 316.

Use and maintenance

- Fit a pressure gauge or differential pressure transmitter at the inlet and outlet; change the cartridges when ΔP reaches 2.0 bar.
- Seat the cartridge fully in the O-ring or gasket socket, leaving no bypass or air pocket.
- Choose the body and internal fixing parts (plate, compression rod) in the same stainless grade; use 316L in chlorinated and acidic media.
- Avoid sudden pressure surges at first start-up and open the air vent nozzle.
- Check O-rings and gaskets periodically; replace hardened or cracked ones.

Values in this data sheet are typical and for information only. Product selection should be made with our engineers based on process fluid, temperature, pressure and flow conditions. Proses T.İ.M. reserves the right to change product specifications without prior notice.

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