FILTER HOUSINGS

Stacked Disc Module Filter Housing

Hygienic AISI 304 or 316L stainless steel filter housing in which disc-shaped depth filter modules are stacked on top of one another (lenticular module housing). With crevice-free welds and a co-linear inlet and outlet, it is used in pharmaceutical, beer, wine, beverage and chemical processes.



MODULE DIAMETER	OPERATING PRESSURE	MAX. TEMPERATURE	INNER SURFACE
8″·12″·16″	**10 bar**	**80 °C**	**Ra ≤ 0.3 µm**
Up to 3 or 4 modules	1.0 MPa · 150 psi	SIP suitability depends on model	Outer surface Ra ≤ 0.4 µm

Technical specifications

Body material	AISI 304 · AISI 316L stainless steel
Module diameter	8″ · 12″ · 16″
Module stacking	Up to 3 modules in 8″ housing · up to 4 in 12″ and 16″ housings
Number of cells	8″: 8 · 16 · 24 cells · 12″ and 16″: 16 · 32 · 48 · 64 cells
Operating pressure	Max. 1.0 MPa (10 bar / 150 psi) · Design pressure 1.0 MPa
Operating temperature	Max. 80 °C (176 °F); SIP suitability assessed separately for the selected model
Surface	Inner Ra ≤ 0.3 µm · Outer Ra ≤ 0.4 µm · Electropolishing or mechanical polishing
Weld construction	Smooth, crevice-free weld seams
Inlet / outlet · lid	TC (tri-clamp) sanitary connection, co-linear at body bottom · Lid with eyebolts
Ports	Pressure gauge 1.5″ TC · Vent (integrity test compatible) · Drain (8 mm hose) · Sampling (optional)
Drain valve	Optional on inlet and outlet ports
Gasket material	Silicone · FKM (Viton) · EPDM
Sealing system	Sealing that keeps the clamping force on the module stack constant; prevents bypass
Module arrangement	DOE; stack with support plates and arms · Outside-in filtration
Accessory material	Eyebolts and legs AISI 304 · Vent port AISI 304 / 316L

Body dimensions and capacity

BODY	CELLS	MODULES	H (MM)	L (MM)	FLANGE Ø (MM)	LEGS (MM)
8″	8	1	337 ±3	572 ±5	350 ±2	150 ±2
8″	16	2	477 ±3	712 ±5	350 ±2	150 ±2
8″	24	3	617 ±3	852 ±5	350 ±2	150 ±2
12″	16	1	512 ±3	825 ±5	500 ±2	220 ±2
12″	32	2	792 ±3	1105 ±5	500 ±2	220 ±2
12″	48	3	1072 ±3	1385 ±5	500 ±2	220 ±2
12″	64	4	1352 ±3	1665 ±5	500 ±2	220 ±2
16″	16	1	537 ±3	915 ±5	550 ±2	270 ±2
16″	32	2	817 ±3	1195 ±5	550 ±2	270 ±2
16″	48	3	1097 ±3	1475 ±5	550 ±2	270 ±2
16″	64	4	1377 ±3	1755 ±5	550 ±2	270 ±2

H: body height · L: total height including legs. Cells per module: 8 in 8″ housing, 16 in 12″ and 16″ housings. Leave extra free height above for module replacement.

Body types and options

Body without sampling port
For closed industrial processes where samples are taken from the line.

Body with sampling port
Aseptic samples from the body; chosen at ordering, the port cannot be added later.

Surface finish
Electropolishing for pharma, biological and WFI lines; mechanical polishing for food, beverage, chemicals.

Use and maintenance

- Choose the module type first; the body diameter and number of modules follow from it.
- Seat the modules fully on the support plate and clamp the stack fully; under-clamping causes bypass.
- At commissioning, bleed air through the vent port and raise flow gradually.
- Keep below 10 bar and 80 °C (incl. CIP solution); choose the gasket for product and CIP chemical.
- After each cycle, drain the housing fully through the drain port; check gaskets and O-rings periodically.

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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