CARTRIDGE FILTERS

Stainless Steel Cartridge Filter

Washable surface filter in which AISI 304 or 316 woven mesh media is joined by full welding to a perforated stainless steel support body, cleaned and reused. With a 5–4000 µm range, it is used for hot, viscous and aggressive chemical fluids and on solvent, oil and resin lines.



MATERIAL	FILTRATION	MAX. TEMPERATURE	LENGTH
AISI 304/316	**5–4000 µm**	**260 °C**	**5″ – 40″**
Optional 316Ti / 904L	Fine filtration to coarse straining	Nominal 200 °C · gasket-dependent	Standard and Big diameter

Technical specifications

Filter media	AISI 304 · AISI 316 / 316L stainless steel mesh · optional 316Ti / 904L
Micron ratings	5 · 10 · 25 · 40 · 50 · 75 · 100 · 200 · 250 · 500 · 1000 µm · coarse grades up to 4000 µm
Construction type	Cylindrical plain mesh · Pleated mesh · Sintered multi-layer; 3-layer mesh structure
Support structure	Perforated cylindrical stainless steel body; fully welded, solid end caps and closures
Outer diameter	63 mm ±1 (Big: 112 mm ±1)
Inner diameter	28 mm ±1
Length options	5″ · 10″ · 20″ · 30″ · 40″ · custom length
End cap type	DOE · SOE (222 / 226 O-ring, with or without locking tabs)
Connection / cap	Fin 1 · Hex head · Bayonet / spear end · NPT / BSP threaded · Flanged · PE end cap
O-ring material	EPDM · Silicone · Viton · NBR · PTFE
Operating temperature	Nominal 200 °C · Max. 260 °C (varies with the gasket material)
Max. differential pressure (ΔP)	4.2 bar @ 25 °C · Reverse flow 3.0 bar @ 25 °C
Cleaning	Backwashing · Ultrasonic bath · Chemical cleaning
pH range	1–14
Quality	ISO 9001:2015 · Certificate No: 06009/PR09U

Standard dimensions

SIZE	LENGTH	AREA OF USE
5″	127 mm	Sampling, low-flow lines
10″	254 mm	Standard housing; hot, viscous fluid
20″	508 mm	Medium-flow process lines
30″	762 mm	High flow, frequent cleaning
40″	1016 mm	Multi-cartridge housings

All lengths fully welded; custom lengths available.

End cap and connection options

DOE
Double open end; gasket at both ends.

SOE · O-ring
222 / 226 O-ring, with or without locking tabs, Fin 1.

Custom ends
Hex head, bayonet, NPT / BSP threaded, flanged, PE end cap.

Chemical compatibility

CHEMICAL GROUP	AISI 304	AISI 316
Water-based processes	E	E
Organic acids	F	G
Alkalis (bases)	E	E
Salt solutions	F	G
Oxidising agents	F	G
Nitric acid	F	G
Aromatic hydrocarbons	F	G
Chlorinated solvents	F	G

E: Excellent · G: Good · F: Fair · P: Poor · N/R: Not recommended. Dilute HCl / H_2SO_4 / H_3PO_4: AISI 316 F.

Gasket selection

Silicone / EPDM
Water-based processes, alcohols and food lines.

Viton / PTFE
Hydrocarbons, aggressive chemicals; high-temperature lines.

Nitrile (NBR)
Oil and solvent applications.

Use and maintenance

- Choose AISI 316 on lines with chlorides, aggressive acids, solvents or oxidising agents.
- The mesh withstands 260 °C; check the gasket limit.
- Plan cleaning by ΔP: backwash, ultrasonic or chemical.
- Reverse flow pressure must not exceed 3.0 bar.
- For 30″ and 40″ cartridges, leave a service clearance above the housing of at least the cartridge length.

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.

PROSES T.İ.M.®
Proses Ticaret İmalat Mühendislik Ltd. Şti.
Musa Gündüz Cad. No:14 Taşköprü, Çiftlikköy / Yalova, Türkiye

+90 226 353 35 70 · Head office
sales@prosestim.com
prosestim.com/en

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