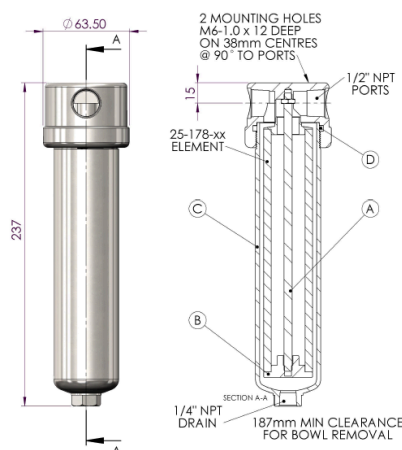


RF-H-142

316L Stainless Steel Filter Housing · ½" NPT · 100 bar · 200 °C · Drainable Sump



Cross-section · Do not scale · All dimensions in mm

TECHNICAL SPECIFICATIONS

Model	RF-H-142
Housing Type	Inline particulate / coalescing filter housing
Port Connections	½" NPT, inlet / outlet in line
Drain	¼" NPT drainable sump
Maximum Pressure	100 bar (1450 psi)
Maximum Temperature	200 °C (392 °F)
Internal Volume	265 cc
Weight	1.1 kg
Head Diameter	Ø 63.5 mm
Overall Length	237 mm
Min. Clearance (element change)	187 mm
Element Size	25 × 178 mm (25-178 series)
Mounting	2 × M6-1.0 tapped holes, 38 mm centres

MATERIALS OF CONSTRUCTION

Head, Bowl & Internals	316L stainless steel
Standard Gasket	Viton® (FKM)
Seals for H ₂ / KOH Service	PTFE (recommended for this application)
Optional Seals	Kalrez® (FFKM) for aggressive media

APPLICATION NOTES

Typical Service	Particulate and coalescing filtration of high-pressure process gases and liquids
Design Principle	Permanent 316L housing — only the element is replaced
Sump	Drainable ¼" NPT sump for collected liquids

COMPATIBLE ELEMENTS (25-178)

Article	Type
RF-TF-25178-003	Sintered PTFE, 3 µm
RF-TF-25178-025	Sintered PTFE, 25 µm
RF-SS-25178-NNN	Sintered 316L stainless steel
RF-C-25178-XX	Coalescing (C-Type)
RF-P-25178-XX	Particulate (glass microfibre)

25178 = element Ø 25 × 178 mm. NNN = micron rating (3 digits). XX = fibre grade.

HIGHER-PRESSURE VARIANTS

Article	Max Pressure
RF-H-142	100 bar (standard)
RF-H-142-HP	200 bar (high pressure)
RF-H-142-VP	400 bar (very high pressure)

HP / VP variants share the same footprint and element size; specify on order.

SPARE PARTS

Article	Description
RF-A-SK142V	Seal kit, Viton®
Seal kit	On request — state seal material
RF-A-SC140	Element support core

Housing supplied complete with seal kit; filter element ordered separately.

Selection note: For hydrogen / KOH aerosol duty, R+F recommends the RF-H-142 in 316L with a seal material confirmed for the medium, fitted with a sintered PTFE element RF-TF-25178-003 (depth filter) for particle separation. Long-term KOH resistance must be verified in a customer test (Δp log, element and seal inspection). Combine with a downstream RF-GMS-170 membrane separator for liquid / aerosol removal.