



HFX™ Series – Housing Filtration Excellence Engineered for Performance

HFX-SS-CF-SC™ – Stainless Steel Standard Flow Single Cartridge Housing Technical Overview

Filtracore Asia's **HFX-SS-CF-SC™ – Stainless Steel Standard Flow Single Cartridge Housings** are designed for **industry-standard 2.5" OD cartridges** in **10", 20", 30", and 40"**

lengths, providing a **robust, code-compliant solution** for point-of-use and low-to-medium flow applications. Constructed from **SS304 or SS316L (standard)**, with **Duplex SS 2205/2507** available for chloride-rich environments and **Titanium (Grades 2 or 7)** offered on request for highly aggressive chemistries, these housings deliver **mechanical strength, chemical resistance, and long service life**.



Precision-machined cartridge adaptors accommodate **DOE, 222, or 226 end connections**, ensuring **positive sealing and minimal bypass**. **Internal stainless-steel supports** provide stability under operating pressure, while **vent and drain ports** facilitate safe depressurization and full vessel emptying for **CIP/SIP service**.

All housings are **hydrostatically tested per ASME VIII UG-99 / PED** and may be supplied with **ASME Section VIII Div. 1 or PED 2014/68/EU certification**. Available finishes include **industrial bead-blast (standard)**, **sanitary polish (≤ 0.6 Ra μ m)**, or **electropolish (≤ 0.4 Ra μ m)** for hygienic duties in food, beverage, and pharmaceutical processes. **Food-contact compliant variants** are available when specified and documented; **USP Class VI elastomers** are offered for biopharmaceutical use.

Engineered for **vertical installation only** (industry standard for single-cartridge housings), the HFX-SS-CF-SC™ delivers **consistent performance, secure sealing, and reliable operation** across industrial and sanitary processes. **OEM-compatible dimensions** enable functional interchangeability with leading single-cartridge housings, provided dimensional and rating compatibility are verified for each installation (including ports, footprint, nozzle class, and MAWP).

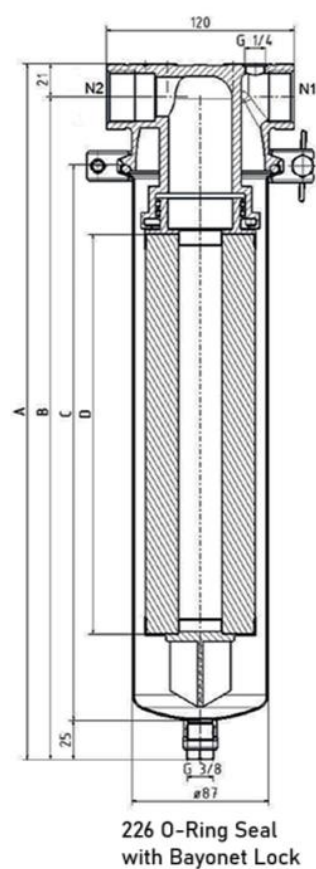
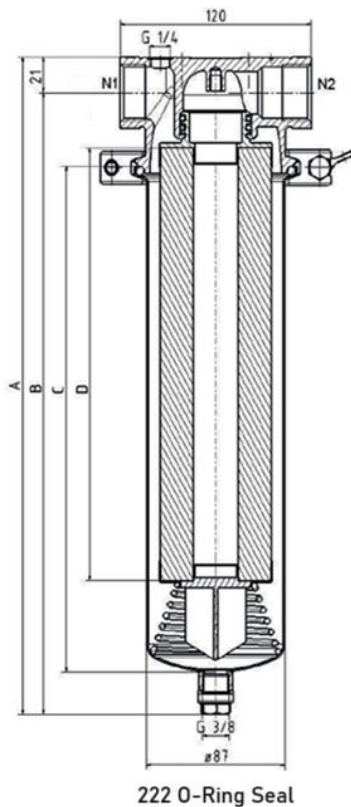
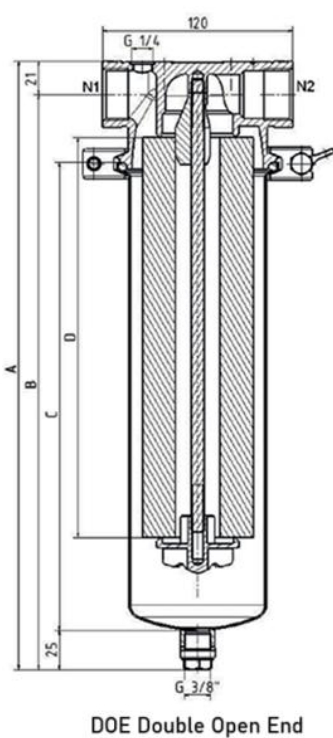
Compact. Code-Compliant. Proven in Critical Applications.

Technical Specifications

- **Model:** HFX-SS-CF-SC™ – Stainless Steel Standard Flow Single Cartridge Housing
- **Cartridge Compatibility:** 2.5" OD cartridges in 10", 20", 30", and 40" lengths; supports DOE, 222, and 226 end-cap styles for secure sealing and minimal bypass
- **Housing Material:** SS304 or SS316L (standard); optional Duplex SS 2205/2507 or Titanium Grades 2 and 7 for aggressive or chloride-bearing chemistries
- **Internals:** Stainless steel cartridge supports and adaptors; precision-machined, electropolished option for hygienic service
- **Seal Options:** Buna-N, EPDM, Viton®, Silicone, PTFE, PTFE-encapsulated elastomers (USP Class VI available for biopharma)
- **Closure Options:** Clamp, swing-bolt, or eye-bolt; all closures designed for repeatable, safe sealing
- **Inlet/Outlet Connections:** ½"-2" threaded – NPT (ASME B1.20.1), BSPT (ISO 7-1), or BSPP (ISO 228-1) standard; optional sanitary Tri-Clamp (ISO 2852) or flanged – ASME B16.5 Class 150 / EN 1092-1 PN16 (other standards such as JIS B2220 on request)
- **Vent & Drain Ports:** ¼"-½" BSPT/NPT vent (top); ½"-1" BSPT/NPT drain (bottom) to facilitate safe depressurisation and drainage
- **Pressure Ratings:** 10 bar (145 psi) @ 20 °C (standard); 6 bar (87 psi) economy for utility/non-critical duties; 16 bar (232 psi) high-performance for demanding services
- **Temperature Range:** -20 °C to +120 °C (standard); up to 150 °C with PTFE/silicone seals for SIP duty (seal-dependent)
- **Design Codes & Testing:** Designed in accordance with ASME Section VIII Div. 1 or PED 2014/68/EU (optional code stamping); hydrostatically tested per ASME VIII UG-99 / PED prior to dispatch
- **Surface Finish:** Industrial bead-blast (standard); sanitary polish ≤0.6 Ra µm; electropolish ≤0.4 Ra µm optional
- **Orientation:** Vertical installation only (industry standard for single-cartridge housings)
- **Compliance:** Food-contact compliant variants available when specified and documented; USP Class VI elastomers optional; weld-only construction (no adhesives)
- **OEM Compatibility:** Compatible with industry-standard 2.5" DOE/222/226 formats used by Shelco®, Amazon Filters®, Eaton®, Parker Hannifin® and others; verify port centres, nozzle class, footprint/height, hold-down and MAWP/temperature class before retrofit



HFX-SS-CF-SC™ – Stainless Steel Standard Flow Single Cartridge Housing



Adapter Filter Cartridge	I/O Connections	Cartridge Length (in)	Housing Weight (kg)	Dimensions –mm			
				A	B	C	D
DOE/SOE 222	BSPP (ISO 228-1)	10	3.8 – 3.9	386	365	297	254
DOE/SOE 222	BSPP (ISO 228-1)	20	4.4 – 4.5	643	622	554	508
DOE/SOE 222	BSPP (ISO 228-1)	30	4.9 – 5.1	900	879	811	762
DOE/SOE 222	BSPP (ISO 228-1)	40	5.7	1,157	1,136	1,068	1,016
SOE 226	BSPP (ISO 228-1)	10	4.2	442	421	353	254
SOE 226	BSPP (ISO 228-1)	20	4.9	681	660	610	508
SOE 226	BSPP (ISO 228-1)	30	5.5	956	935	867	762
SOE 226	BSPP (ISO 228-1)	40	6.1	1,213	1,192	1,124	1,016

Dimensions for reference only and approximate. Exact dimensions for installation purposes available on request.

All data, dimensions, and ratings are provided for general reference only. FiltraCore housings are designed and hydrotested in accordance with relevant industry standards; however, actual performance will vary with process conditions, media, and installation. Maximum operating pressure and temperature are subject to material selection, gasket/elastomer choice, and design code (ASME/PED, where applicable). Standard rating is 10 bar (145 psi) @ 20 °C, with a maximum operating temperature of 120 °C, or up to 150 °C with PTFE/silicone seals for SIP duty.

Chemical compatibility of housing materials, seals, and gaskets with the process fluid is the sole responsibility of the user; data provided are general guidelines derived from industry sources and laboratory testing, and actual performance may vary with concentration, temperature, and process variables.

Wetted parts in SS304/SS316L (optional Duplex SS 2205/2507 or Titanium Grade 2) provide broad resistance to aqueous solutions, hydrocarbons, and process chemicals not corrosive to stainless steel, while elastomer options (EPDM, Viton®, PTFE, PTFE-encapsulated) extend compatibility across most industrial and sanitary applications. For specific chemical resistance, consult the FiltraCore Chemical Resistance Guide or contact our technical team.

FiltraCore assumes no liability for improper use, chemical incompatibility, installation, or operation beyond published ratings. Specifications are subject to change without notice as part of continuous product improvement.

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