

Hall Pyke



Backwashing and self-cleaning filters

F Series

The SMART choice for filtration

For liquid filtering that requires unattended operation, maximum uptime, and solids removal from 1 to 1,700 microns, the F-Series delivers unbeatable performance.

The key to the F-Series' versatility is its modular design that enables future capacity and configuration flexibility. F-Series systems can include 2 to 20 body tubes on a single framed skid and can be ordered with blank stations to allow low-cost expanded capacity.

The F-Series uses cleanable media. This further reduces life cycle costs and maximizes productivity by eliminating the labor, replacement, and disposal costs of bags and cartridges. Three types of elements are offered: single element with 0.23 m² of surface area, the Tri-Cluster[®] with 0.33 m² of surface area, or the Accuflux[®] 7 with 0.51 m² of surface area.

The F-Series features 3-way ball valves, automated cleaning with direct mounted actuators and solenoids, and available blank stations for easy future expansion.

HOW THE F-SERIES WORKS

When cleaning is required, triggered by time or pressure differential, a single valve removes the tube to be back-washed from the incoming flow stream. The resulting pressure drop redirects a portion of the clean process flow downward, flushing the contaminants to the drain manifold. When process liquids are very valuable or hazardous, an external back-wash configuration, which uses a small amount of cleaning liquid introduced through a separate manifold, is recommended. External backwashing is also recommended when operating pressures are expected to be less than 3.1 bar.

FEATURES

- Solids removal from 1 to 1,700 microns
- Single system flow rates up to 681 m³/h
- Smooth pipe and nozzle connection transitions to avoid dead spots in the fluid stream and minimize pressure drop
- Broad selection of filter media materials and retentions suitable for a wide range of applications
- Proprietary 3-way, full-ported valves allow fast, frequent sequencing and maximum cleaning force during backwashing
- Isolated top-to-bottom backwash flow ensures complete and efficient media cleaning while continuing to deliver filtered product downstream
- Numerous automated backwash options for operator-free service and minimal backwash effluent (<2% of system volume)
- Available ACCUFLUX[™] media dramatically increases filter surface area in the same footprint

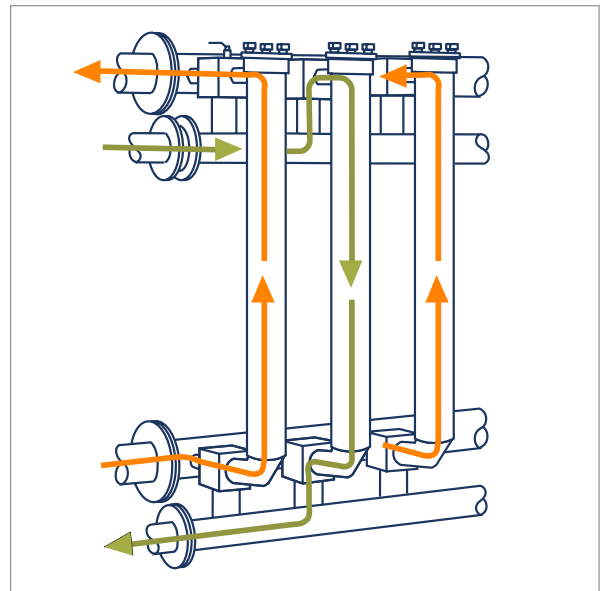
OPTIONS

- Internal or external backwashing
- Media-cleaning diffusers for more effective cleaning at low operating pressures or volumes
- Drain header trap
- Quick coupler valve connectors for ease of body tube removal
- 304 stainless steel frame material
- ASME code vessels



TYPICAL APPLICATIONS

- city water lines
- hot condensate
- chiller water
- fresh water
- whitewater / shower water
- cip fluids
- papermaking wet end starch
- pelletizer water
- single and duo tubular filters for a wide range of applications up to 69 bar and high viscosity applications



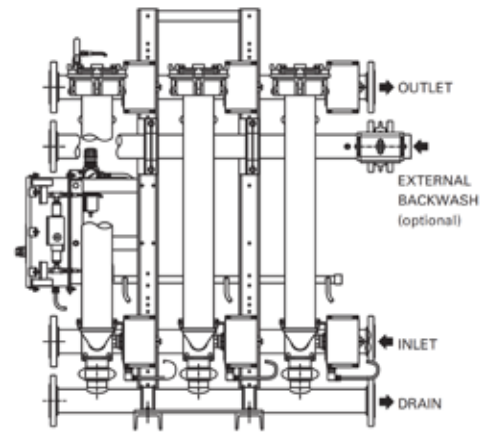
External backwash system shown. Secondary header at the top of the unit introduces cleaning fluid, typically water, (green arrows) to loosen and discharge debris to the drain header at the bottom.

Specifications	
Body Inlet/Outlet Size - mm	76.2
Inlet/Outlet Header Size ¹ - mm	76.2, 101.8, 203.2, 254, 304.8
Body Diameter - mm	114.3
Screen Length - mm	914.4
Element Styles Available ²	82.6 dia. single, Tri-Cluster, Accuflux-7
Pressure Rating ³ - bar	17.2
Temperature - °C	177 system maximum (determined by screen material and elastomer seals)
Air Requirement - auto units - bar	4.1-8.3 @ 5 cfm, for sequencing
Electrical Requirement	110/220V, 50/60 Hz, single phase
Backwash minimum flow	340 l/min. for single and Tri-Cluster media; 567 l/min. for ACCUFLUX™ media

¹Drain header size 3" (76.2). Consult factory for custom sizes

²Consult media availability chart for specific retentions and types available

³Teflon gaskets limit pressure maximum to 5.5 bar. ASME code units are limited to 10.3 bar



Model	Weight (dry) kg	Height mm	Footprint w x l mm	Volume l	Configuration # of tubes
F202	204	1575	725 x 1145	68	2
F203	272	1575	725 x 1220	87	3
F204	340	1575	725 x 1600	114	4
F205	408	1575	725 x 1980	140	5
F206	544	1575	725 x 2360	246	6
F207	612	1575	725 x 2745	284	7
F208	680	1575	725 x 3125	322	8
F209	816	1575	725 x 3505	470	9
F210	885	1575	725 x 3885	522	10
F211	952	1575	725 x 4265	572	11
F212	1089	1575	725 x 4650	625	12



3-way ball valves

To ensure positive sealing and maximum flow, our F-Series filters feature the industry's best 3-way ball valves. These important components were developed specifically for the demands of industrial filtration. Their full-ported design reduces pressure drop and requires no additional linkages for actuation.

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www.hallpyke.ie

Head Office, 3A Sunbury Industrial Estate, Ballymount Road, Walkinstown, Dublin 12.
T. +353-1-4501411 F. +353-1-4507960 E. info@hallpyke.ie W. www.hallpyke.ie