





Zero Gravity Filters Pneumatic Phoenix

SPECIFICATION SHEET

Filter System			
Filter Element	Stainless steel 316L with stainless steel 316 cage assemblies		
Filter Body	Stainless steel 304L.		
Indexing Valve	Stainless steel 304 with polyacetal shoe.		
Indexing Actuator	Double acting, developing 150 in/lb at 80 psi. Manufactured by Bray Valve and Controls, series 90, size 48.		
Proximity Switch	Inductive proximity switch. Manufactured by IFM Efector, Inc.		
Dog Clutches	Hardened nickel bronze casting.		
Backwash Valve	3/4" stainless steel 316 ball valve, stainless steel ball and PTFE seals and RPTFE seats.		
Backwash Valve Actuator	Double acting, developing 199 in/lb at 80 psi. Manufactured by Assured Automation, size PD030.		
Connections	Inlet and outlet are 3" stainless steel 304 ANSI raised faced 150# flanges. Backwash connection is $\frac{3}{4}$ " NPT female.		
O-rings and seats	Viton standard.		

Controls			
Turck Controls	Field Logic Controller with 4.3" TFT color display HMI on panel door. Adjustments for backwash duration, backwash interval, and manual backwash push button. Controls operate valve movement, with dome light for visual indication of power, backwash, and fault		
Enclosure	Stainless Steel 304, NEMA 4X (IP66).		
Panel Supply	24 VDC, 1.3 Amp transformer, UL Approved.		
Air Valve Manifold	SMC VV5F3 series, 2-station manifold, 24VDC solenoid valves.		
Pressure Transducers	1/4" connection, stainless steel 316 housing. IP 67 protection. 420mA analog output. IO Link.		

The Most Advanced, Automatic, Non-Disposable Liquid Filtration System FILTERS



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Operating Parameters				
Number of Elements	6 per unit.			
Flowrate (Based on clean differential pressure of less than 3 psi)	35 gpm (132 LPM) minimum, 250 gpm (946 LPM) maximum per Phoenix. 20μ: 60 gpm, 35μ: 110 gpm, 50μ: 150 gpm, 75μ: 180 gpm, 100-400μ: 250 gpm. Note: Maximum solids loading not to exceed 500 ppm.			
Operating Pressures	120 psi (827 kPa/0.83 MPa) maximum, 230 psi (1,586 kPa/1.58 MPa) test pressure. Minimum of 35 psi (241 kPa/0.24 mPa) on filter's discharge during backwash. Maximum differential pressure of 50 psi (0.34 MPa).			
Operating Temperature	170°F (77°C) maximum.			
Micron Ratings	20, 35, 50, 75, 100, 150, 200 and 400 micron absolute gap.			
Backwash Control	Automatically using interval timer and/or differential pressure or manually using push button.			
Energy Consumption (per backwash)	Air: 14 cubic inches Electrical: 15 watts			
Approximate Backwash Volume	5 gallons			

Site Requirements				
Air Supply	60 to 80 psi, clean and dry. Airline connection on bottom of control panel is ¼" OD push-in bulkhead fitting.			
Electrical Supply	120 or 240 VAC, 5 amps.			
Outputs	Volt free contacts (normally open), maximum 2 amps			
Pneumatic Pipework	5/32" pneumatic flexible tubing with push-in connectors			
Approximate Dimensions and Weight	22 x 16 x 17" (55 x 40 x 44 cm) Dry: 75 lb, Wet: 109 lb (34, 49.4 kg)			
Fluid Volume	4.1 Gallons			

Materials	Standard	Upgrade	Upgrade
Temperature	170ºF (77ºC) maximum.	190ºF (88ºC) maximum.	
Backwash Valve Actuator	Double Acting	Spring Return	
Filter Elements – Holder	30% Glass Filled Polypropylene	SS304	SS316
O-rings	Viton	Buna, EPDM	Options
Valve Seats	RPTFE	Options	

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