

# High Flow Filtration Systems

for Superior Flow Rates & Loading Capacity



# HIGH FLOW FILTRATION SYSTEMS FOR SUPERIOR FLOW RATES & LOADING CAPACITY

Aventura High Flow filtration system are styled on the design of corrosion resistant FRP pressure vessels. These provide considerable reduction in capital investment versus stainless steel construction and make use of a quick-acting closure. Each vessel has the convenience of one filter element that can be exchanged in seconds.



High Flow filter elements are available in both polypropylene and glass micro-fiber media in ratings of 0.5 to 100 microns, and in both nominal and absolute retention performance. The unique layered construction provides excellent retention across a wide range of flow rates. Each six inch diameter 60" length cartridge can handle flow rates of up to 500gpm with the inside-to-outside flow path allowing for high contaminant holding capacity. Superior flow and long filter life make Aventura HighFlow filters an ideal choice for a wide variety of critical process filtration applications.

The innovation of advanced German pleating technology allows the filter elements to offer higher surface area resulting in superior flow and media utilization. With a tapered pore structure and fine fiber denier, the result is better dirt holding capacity, low resistance to flow, superior filter performance and overall better value for the user.

The inside-to-outside flow configuration and core-less construction of the Aventura HighFlow filter element allows it to be tightly compacted to minimize disposal costs. Maintenance requirements and production downtime is dramatically reduced in comparison with conventional depth filters. Service personal will find it easy & convenient remove used elements since all solid contamination is trapped inside of the filter cavity.

Desalination Systems Municipal Water Industrial SWRO & BWRO System Pre-filtration Water
Process Water / Wastewater & Reclaimed Waters Irrigation
Storage tanks for Landscaping Sprinklers
Food & Beverage
Pre-filtration or Polishing Filtration
Oil & Gas
Oil/Gas well Injection & Produced Water
Chemicals & Petrochemicals Automobile Finishing
Amine Sweetening
Electronics Manufacturing
Manufacturing of ICs, Memory Drives





#### (HIGH FLOW FILTER CARTRIDGES)

FEATURES	ADVANTAGES			
High Flow Capacity per Cartridge	Less cartridges are required, therefore:			
(vs. Conventional 2.5" Diameter Cartridges)	<ul> <li>Reduced cartridge handling time, storage space, inventory value, &amp; disposal costs</li> <li>Reduced filter change-out time</li> <li>Fewer cartridge sealing points, reduced chance of fluid bypass</li> </ul>			
Advanced Pleat Design using	High Dirt Holding capacity			
Aventura High Grade Microfiber Polypropylene -Media	Superior chemical compatibility			
Compact Design	<ul> <li>Smaller housing envelope minimizes capital expense requirements</li> <li>Reduces system footprint</li> </ul>			
Easy to Operate	<ul> <li>Minimum removal tools are required for filter change-out</li> <li>Push-to-Seat cartridge sealing mechanism provides positive seal</li> <li>Easy to install design handle facilitates cartridge installation and removal</li> </ul>			
Safe Materials of Construction Compliant with US FDA CFR-21 Requirements	Compatible in applications requiring direct food contact in food, beverage, & potable water processing			

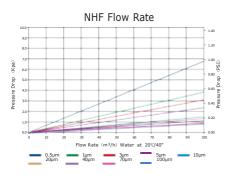
#### (HIGH FLOW FILTER HOUSINGS)

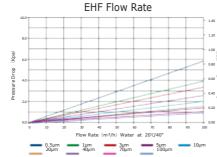
FEATURES	ADVANTAGES
FRP - GRP housings	<ul> <li>Superior chemical compatibility</li> <li>Can withstand higher pressures</li> <li>Ideal solution for highly saline water</li> <li>Lower weight of individual housings allow ease of handling</li> </ul>
HighFlow Housing Capability versus Conventional Filter Housings	<ul> <li>Saves time during routine servicing</li> <li>Filter sealing risks can be avoided</li> <li>Less individual cartridge seal points, reduces chance of fluid bypass</li> <li>No awkward davit arm or pulley mechanism to deal with to open the unit</li> </ul>
IMP- Replacements & Damages	<ul> <li>Smaller housing minimizes capital expense requirements</li> <li>Reduces system footprint</li> </ul>
Ease of Use versus conventional Cartridge Filter Housings	<ul><li>No davit arm or tie rod issues to deal with.</li><li>Easy to set-up by-pass flow connections.</li></ul>
Capacity Scaling	<ul> <li>Additional housings can be added in parallel to scale-up or</li> <li>scale-down the system flow rate. No need to replace the mounting skid.</li> </ul>
Reducing capacity	Remove Victaulic clamps and put the blind
Flexible Design Porting	<ul> <li>Ports can be oriented at the installer's preferred orientation for maximum flexibility.</li> </ul>
Victaulic grooved ends	<ul> <li>Easy to connect and disconnect with our standard Victaulic style grooved ends</li> </ul>
Corrosion-Free Construction	Totally corrosion-free system, so critically important in cases of highly saline SWRO plants

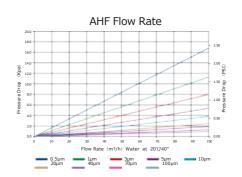


### **CARTRIDGE SPECIFICATIONS**

CARTRIDGE DIMENSIONS			
Outside Diameter	6"		
Length	20" (528mm) 40" (1022mm) 60" (1538mm)		
CONSTRUCTION			
Micron Ratings	0.5,1, 3, 5, 10, 15, 20, 40, 70,100		
Filter media, end caps, outer sleeve	Polypropylene		
Sealing o-ring options	Silicone,EPDM,NBR,Viton		
OPERATING CONDITIONS			
Maximum recommended flow rate in water (@20 $^{\circ}$ C)	50m³/h for 40" filter		
Maximum continuous operating temperature	70°C		
Maximum hot water sanitisation temperature	90°C		
Maximum forward differential pressure	3.4 bar @ 20°C		
Recommended change-out differential pressure	2.4 bar @ 20°C		







#### **DIMENSIONS**



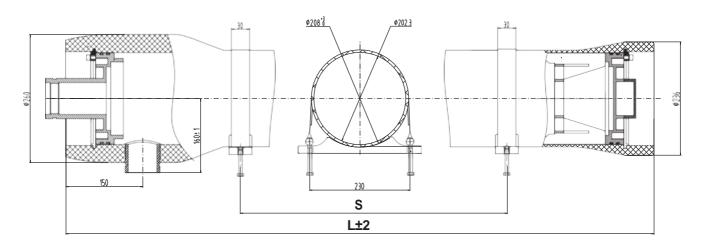


## **HOUSING SPECIFICATIONS**

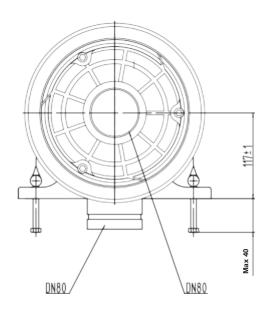
#### SPECIFICATION

Model	Nominal Diameter	Material	Inlet & Outlet Orientation	Inlet/Outlet Size	Maximum Recommended Flow Rate(m³/h)	Maximum Temperature	Maximum Pressure
DL80-150S-20	8"	FRP	SIDE PORT	3"	15-25	70℃	150psi
DL80-150S-40	8"	FRP	SIDE PORT	3"	30-60	70℃	150psi
DL80-150S-60	8"	FRP	SIDE PORT	3"	50-110	70℃	150psi

#### **DIMENSIONS**

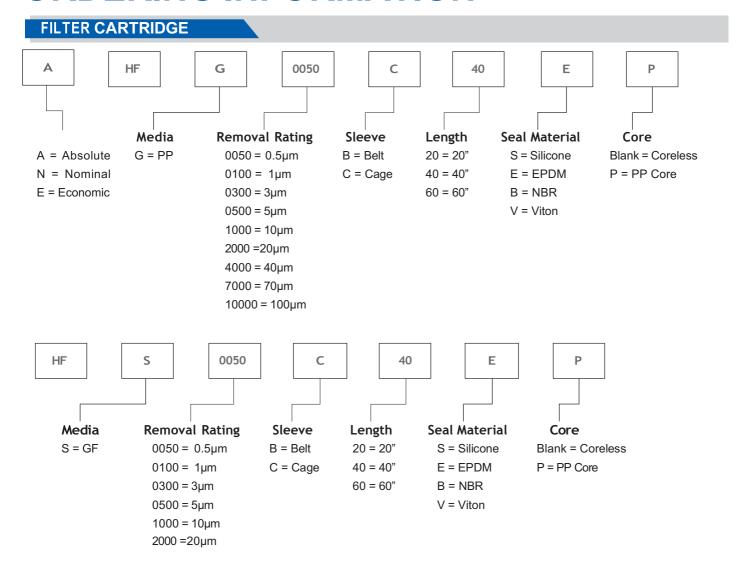


Length	Part Number	L (mm)	S (mm)	Approx Assembly Weight (KG)
20"	DL80-150S-20	792	500	24
40"	DL80-150S-40	1300	800	27
60"	DL80-150S-60	1808	1300	30.5





# **ORDERING INFORMATION**



FILTER HOUSING					
Model	Nominal Diameter	Material	Inlet & Outlet Orientation	Inlet/Outlet Size	
DL80-150S-20	8"	FRP	SIDE PORT	3"	
DL80-150S-40	8"	FRP	SIDE PORT	3"	
DL80-150S-60	8"	FRP	SIDE PORT	3"	



