GVS
FILTER TECHNOLOGY

High Flow Filtration Systems

for Superior Flow Rates & Loading Capacity

FILTER TECHNOLOGY

HIGH FLOW FILTRATION SYSTEMS
FOR SUPERIOR FLOW RATES & LOADING CAPACITY

GVS 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 GVS 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 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.

Applications

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 (vs. Conventional 2.5" Diameter Cartridges)	Less cartridges are required, therefore: • Reduced cartridge handling time, storage space, inventory value, & disposal costs • Reduced filter change-out time • Fewer cartridge sealing points, reduced chance of fluid bypass
Advanced Pleat Design using GVS High Grade Microfiber Polypropylene Media	• High Dirt Holding capacity • Superior chemical compatibility
Compact Design	• Smaller housing envelope minimizes capital expense requirements • Reduces system footprint
Easy to Operate	• Minimum removal tools are required for filter change-out • Push-to-Seat cartridge sealing mechanism provides positive seal • Easy to install design handle facilitates cartridge installation and removal
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	• Superior chemical compatibility • Can withstand higher pressures • Ideal solution for highly saline water • Lower weight of individual housings allow ease of handling
HighFlow Housing Capability versus Conventional Filter Housings	• Saves time during routine servicing • Filter sealing risks can be avoided • Less individual cartridge seal points, reduces chance of fluid bypass • No awkward davit arm or pulley mechanism to deal with to open the unit
IMP- Replacements & Damages	• Smaller housing minimizes capital expense requirements • Reduces system footprint
Ease of Use versus conventional Cartridge Filter Housings	• No davit arm or tie rod issues to deal with. • Easy to set-up by-pass flow connections.
Capacity Scaling	• Additional housings can be added in parallel to scale-up or • scale-down the system flow rate. No need to replace the mounting skid.
Reducing capacity	• Remove Victaulic clamps and put the blind
Flexible Design Porting	• Ports can be oriented at the installer's preferred orientation for maximum flexibility.
Victaulic grooved ends	• Easy to connect and disconnect with our standard Victaulic style grooved ends
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)

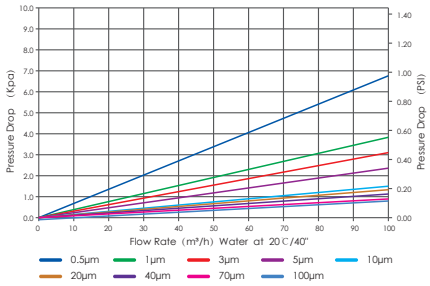
CONSTRUCTION

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

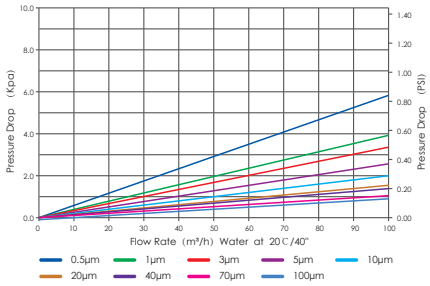
OPERATING CONDITIONS

Maximum recommended flow rate in water (@20° 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

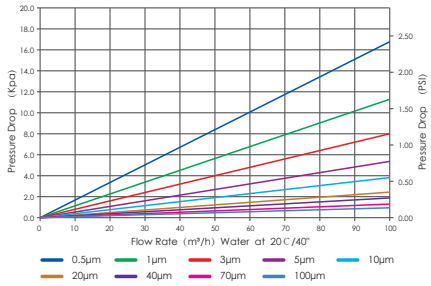
HFN Flow Rate



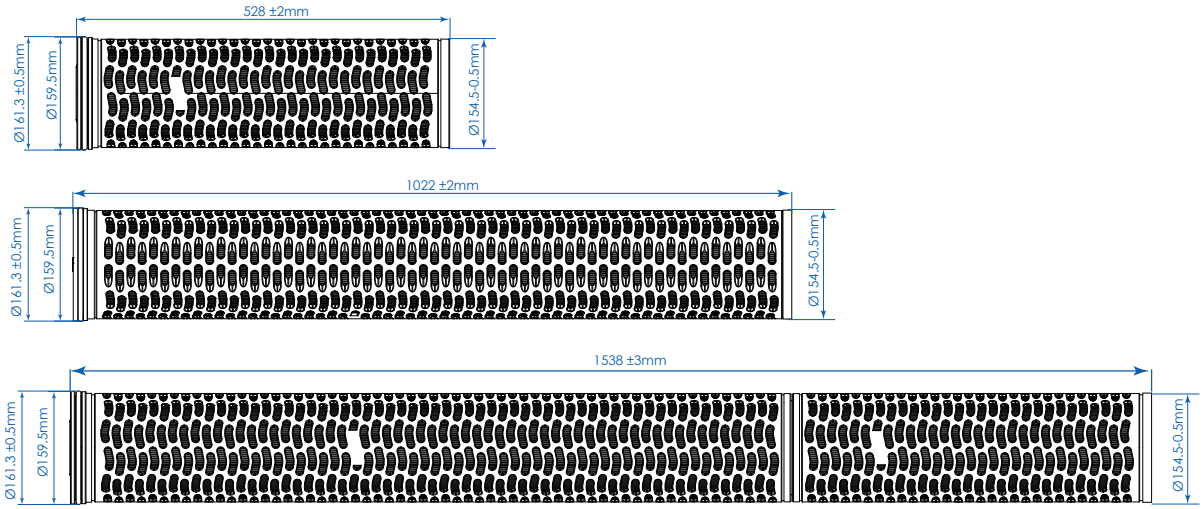
HFE Flow Rate



HFA Flow Rate



DIMENSIONS

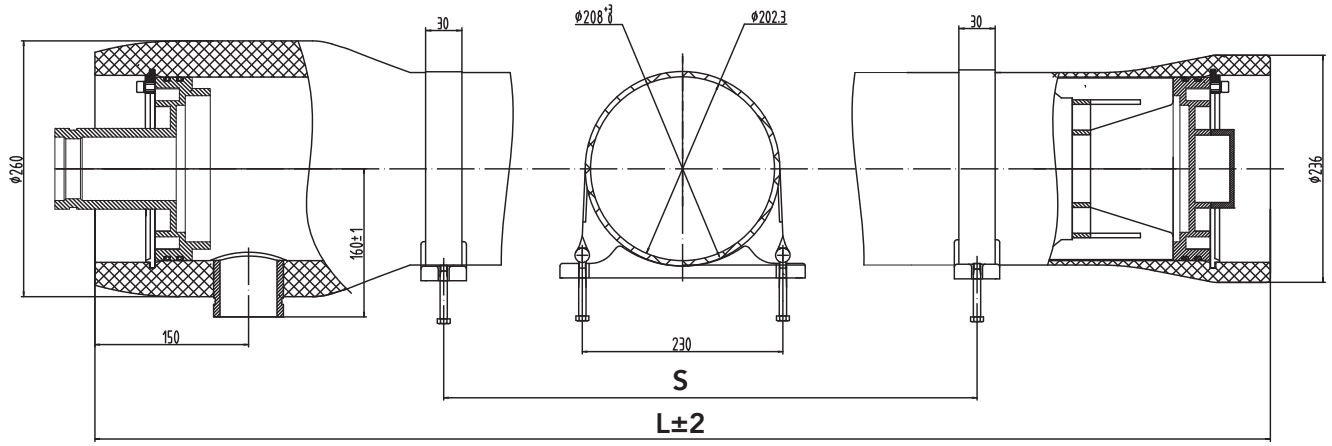


HOUSING SPECIFICATIONS

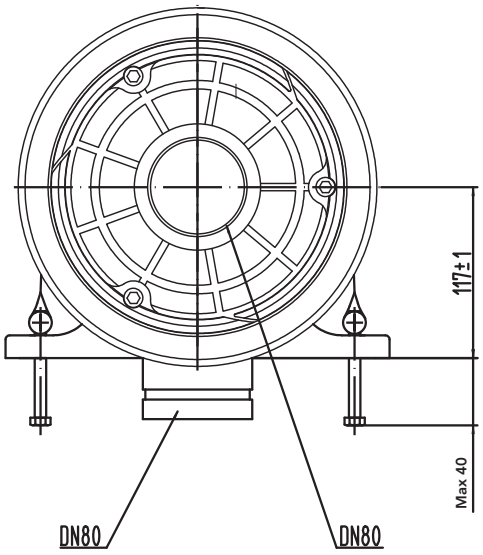
SPECIFICATION

Model	Nominal Diameter	Material	Inlet & Outlet Orientation	Inlet/Outlet Size	Maximum Recommended Flow Rate(m^3/h)	Maximum Temperature	Maximum Pressure
CHDDL80-150S-20	8"	FRP	SIDE PORT	3"	15-25	70℃	150psi
CHDDL80-150S-40	8"	FRP	SIDE PORT	3"	30-60	70℃	150psi
CHDDL80-150S-60	8"	FRP	SIDE PORT	3"	50-110	70℃	150psi

DIMENSIONS



Length	Part Number	L (mm)	S (mm)	Approx Assembly Weight (KG)
20″	CHDDL80-150S-20	792	500	24
40″	CHDDL80-150S-40	1300	800	27
60″	CHDDL80-150S-60	1808	1300	30.5



Eg.=> AHFHG0050C40EP

ORDERING INFORMATION FILTER CARTRIDGE							
Grade	Connection	Media	Removal Rating	Sleeve	Length	Seal Material	Core
A = Absolute N = Nominal E = Economic	HFH	G = PP	0050 = 0.5µm 0100 = 1µm 0300 = 3µm 0500 = 5µm 1000 = 10µm 2000 = 20µm 4000 = 40µm 7000 = 70µm 10000 = 100µm	B = Belt C =Cage	20 = 20" 40 = 40" 60 = 60"	S = Silicone E = EPDM B = NBR V = Viton	Blank = Coreless P = PP Core

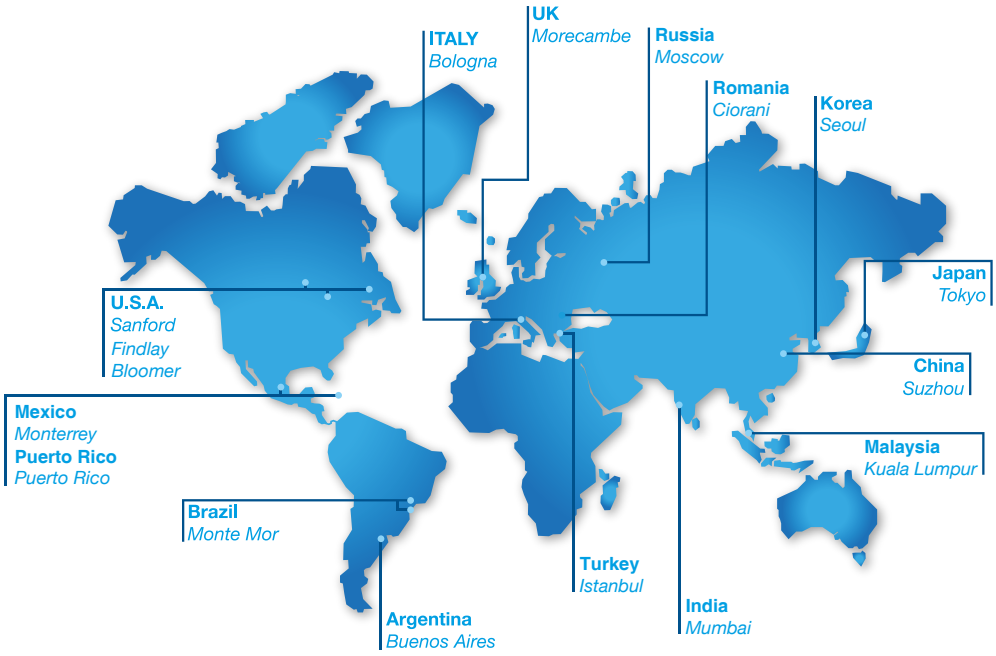
Eg.=> AHFHS0050C40EP

ORDERING INFORMATION FILTER CARTRIDGE							
Grade	Connection	Media	Removal Rating	Sleeve	Length	Seal Material	Core
A = Absolute N = Nominal E = Economic	HFH	S = GF	0050 = 0.5µm 0100 = 1µm 0300 = 3µm 0500 = 5µm 1000 = 10µm 2000 = 20µm	B = Belt C =Cage	20 = 20" 40 = 40" 60 = 60"	S = Silicone E = EPDM B = NBR V = Viton	Blank = Coreless P = PP Core

Eg.=> CHDDL80-150S-20

ORDERING INFORMATION FILTER HOUSING				
Model	Nominal Diameter	Material	Inlet & Outlet Orientation	Inlet & Outlet Orientation
CHDDL80-150S-20	8"	FRP	SIDE PORT	3"
CHDDL80-150S-40	8"	FRP	SIDE PORT	3"
CHDDL80-150S-60	8"	FRP	SIDE PORT	3"

FILTER TECHNOLOGY



WORLDWIDE

EUROPE

Italy Office
Headquarters
GVS S.p.A.
Via Roma 50
40069 Zola Predosa (BO) - Italy
Tel. +39 051 6176311
gvs@gvs.com

Russia
GVS Russia LLC.
Profsoyuznaya Street, 25-A, office 102
117418, Moscow
Russian Federation (Russia)
Tel. +7 495 0045077
gvsrussia@gvs.com

United Kingdom
GVS Filter Technology UK
Vickers Industrial Estate
Mellishaw Lane, Morecambe
Lancashire LA3 3EN
Tel. +44 (0) 1524 847600
gvsuk@gvs.com

Romania
GVS Microfiltrazione srl
Sat Ciorani de Sus 1E - Comuna Ciorani
Prahova România
Tel. (+40) 244 463044
gvsro@gvs.com

Turkey
GVS Türkiye
Nidakule Merdivenköy Mahallesi
Bora Sokak No:1 Kat:7 - 34732 Istanbul
Tel. +90 216 504 47 67
gvsturkey@gvs.com

ASIA

China
GVS Technology (Suzhou) Co., Ltd.
Fengqiao Civil-Run Sci-Tech Park,
602 Changjiang Road,S.N.D.
Suzhou, China 215129
Tel. +86 512 6661 9880
gvschina@gvs.com

GVS YIBO Medical Devices Co. Ltd.
17, Zhongshan East - Yuyao city,
315403 Zhejiang Province, China
Tel. +86 574 6257 5697

Japan
GVS Japan K.K.
KKD Building 4F, 7-10-12 Nishishinjuku
Shinjuku-ku, Tokyo 160-0023 Japan
Tel. +81 3 5937 1447
gvsjapan@gvs.com

Korea
GVS Korea Ltd
#315 Bricks Tower
368 Gyungchun-ro(Gaun-dong),
Namyangju-si, Gyunggi-do,
Tel: +82 31 563 9873
gvskorea@gvs.com

India
GVS Filter India Pvt Ltd
Unit No 35 & 36 on First Floor
Ratna Jyot Industrial Premises Irla Lane,
Irla Vile Parle, Mumbai 400056, India

Malayisia
GVS Filtration Sdn.Bhd
Lot No 10F-2B, 10th Floor, Tower 5 @ PFCC
Jalan Puteri 1/2, Bandar Puteri
47100 Puchong, Selangor, Malaysia

AMERICA

U.S.A.
GVS North America
63 Community Drive
Sanford, ME 04073 - USA
Tel. +1 866 7361250
gvsusa@gvs.com

GVS Filtration Inc.
2150 Industrial Drive
Findlay, OH. 45840 - USA
Tel. +1.419.423.9040
gvsfiltration@gvs.com

2200 W 20th Avenue
Bloomer, WI 54724 - USA
Tel. +1.715.568.5944
gvsfiltration@gvs.com

Puerto Rico
GVS Puerto Rico, LLC
98 Carr 194 - Fajardo,
Puerto Rico, 00738-2988, USA
Tel. +1.787.355.4100
gvspuertorico@gvs.com

México
GVS Filter Technology de Mexico
Universal No. 550, Vynmsa Aeropuerto Apodaca
Industrial Park, Ciudad Apodaca, Nuevo León,
C.P. 66626 - México
Tel. +52 81 2282 9003
gvsmex@gvs.com

Argentina
GVS Argentina S.A.
Francisco Acuña de Figueroa 719 Piso:11 Of: 57
1416 Buenos Aires - Argentina
Tel. +54 11 48614750
gvsarg@gvs.com

Brazil
GVS do Brasil Ltda.
Rodovia Conego Cyriaco Scaranello Pires 251
Jardim Chapadão, CEP 13193-580
Monte Mor (SP) - Brasil
Tel. +55 19 38797200
gvs@gvs.com.br

PRODUCT COLLECTION - High flow filter Housing
Printing History: Version 20052022