



Graver Technologies

Filtration | Separation | Purification

High Flow Series Filter Housings

Filter Housings for High Flow Applications

Graver High Flow Series filter housings are designed to accept Graver and competitive High Flow Series large geometry filter elements. Available in both vertical and horizontal orientations, the High Flow housings can accept from 1 to 7 filter elements. Also available is a single round tipped horizontal design that allows easier removal without the need for a platform and readily drains from back of vessel to eliminate fluid spills.

Features–Benefits

- Industrial grade housings available in 304, 316 and carbon steel wetted parts
- ASME U code available
- Designs for 1, 3, 4 or 7 filters per housing for flows up to 3500 GPM*
- 150 psig designs
- Accepts 20", 40" and 60" High Flow cartridges
- Vertical and horizontal designs offered
- Hold down plate prevents elements from unseating due to back pressure
- Filter removal tool available to facilitate element changeout
- Swing bolts on 150 psig design
- Equipped with 1" vent and 2" drain (1" drain on tipped horizontal style).

Product Specifications

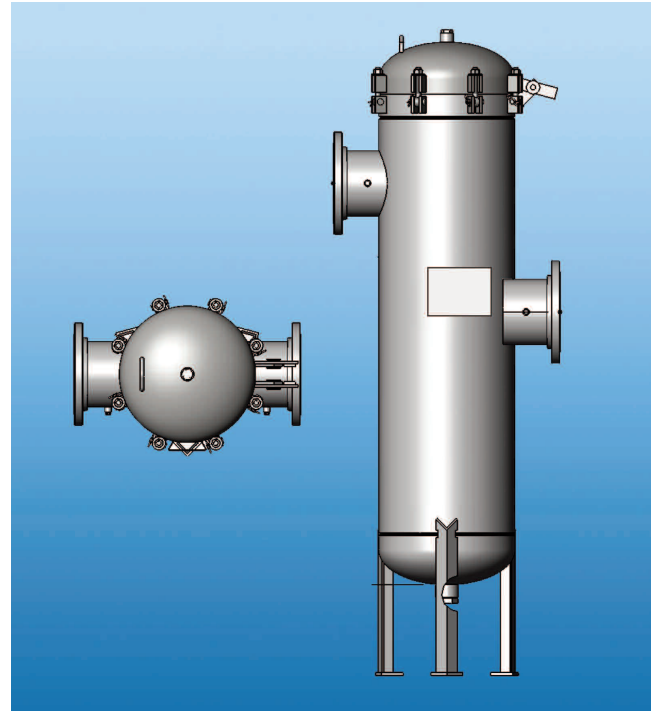
Shell O-ring	Buna N, Viton, EPDM, Silicone
Optional	300 psig (20.6 bar) Flanged Head designs available – Consult Factory Not for use with compressed gases

Operating Parameters

Maximum operating pressure:	
Carbon Steel	150 psig (10.3 bar) @ 500°F (260°C) in liquid service
Stainless Steel	150 psig (10.3 bar) @ 300°F (149°C) in liquid service
Not for use with compressed gases	

Note:

1. Flow capacity based on light dirt load and low viscosity. Actual flow rate may be lower with vessel sizing based on fluid dirt loads, nature of contaminant, viscosity, micron rating and temperature.



Available Options

- Vertical Housing Inlet/outlet
Side in/side out, Side in/bottom out
- Horizontal Housing Inlet/Outlet
Side in/bottom out
- Tilted Horizontal
Side in/side out, Side in/bottom out
- Gauge ports
- Hinged cover
- Davit arm

Typical Applications

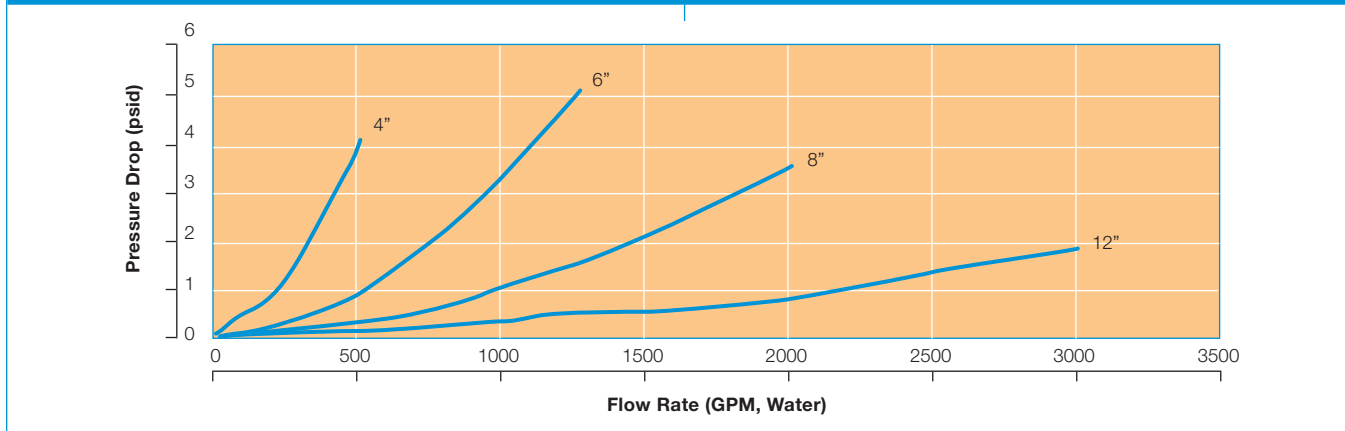
- Pre RO
- Water
- Desalination
- Food and Beverage
- Pulp and Paper
- Oil and Gas
- Petrochemicals

HFH Nomenclature Information

HFH	1	H	40	T	4	SS	150	-S	-H
Model HFH Series		Orientation V Vertical H Horizontal HT Tipped Horizontal (1 round only)			Inlet/Outlet Size 4, 6, 8, 12			Gasket B Buna-N S Silicone E EPDM V Viton	Options H Hinge DA Davit arm
# of Filters 1 1 3 3 4 4 7 7		Cartridge Height (inches) 20, 40, 60			Inlet/Outlet Config. SS Side in/side out SB Side in/bottom out				
		Material of Construction R 304L SS C Carbon Steel T 3016L SS			Pressure Rating 150 150 psig 300 150 psig (consult factory)				

Example: HFH 1H40T4SS150-S-H

HFH Pressure Drop for various Pipe Sizes



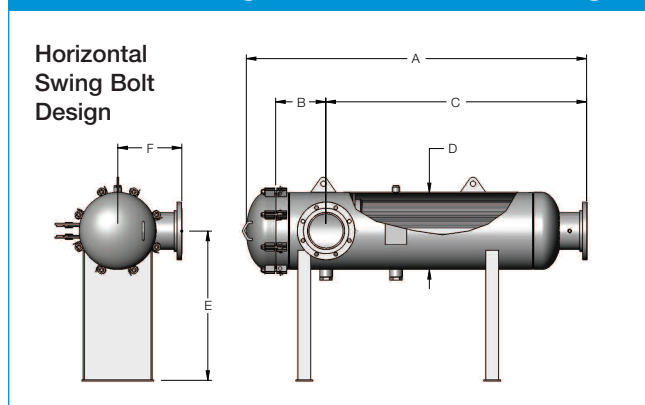
HFH Dimensional Data - Horizontal/Swing Bolt

Model	Rate Flow Capacity GPM (LPM)	No. 10" Elements	Filter Lengths	Dim. "A" inches (cm)	Dim. "B" inches (cm)	Dim. "C" ¹ inches (cm)	Dim. "D" ¹ inches (cm)	Dim. "E" inches (cm)	Dim. "F" ¹ inches (cm)	Max. Flange size (in)	Drain	Vent	Gauge
HFH 3H-40	1050 (3975)	3	40	79 3/4" (203)	11 3/4" (30)	61 1/2" (155)	18" (46)	44" (112)	15" (38)	8	2" NPT	1" NPT	1/4" NPT
HFH 4H-40	1400 (5300)	4	40	80 1/4" (204)	11 3/4" (30)	61 1/2" (155)	20" (51)	46" (117)	16" (41)	8	2" NPT	1" NPT	1/4" NPT
HFH 7H-40	2450 (9275)	7	40	91 7/8" (233)	15 1/2" (39)	68" (173)	24" (61)	48" (122)	18" (46)	12	2" NPT	1" NPT	1/4" NPT
HFH 1H-60	500 (1893)	1	60	85" (216)	8" (20)	73" (185)	8 3/8" (22)	40" (102)	9" (23)	4	2" NPT	1" NPT	1/4" NPT
HFH 3H-60	1500 (5680)	3	60	99 3/4" (253)	11 3/4" (30)	81 1/2" (206)	18" (46)	44" (112)	15" (38)	8	2" NPT	1" NPT	1/4" NPT
HFH 4H-60	2000 (7570)	4	60	100 1/4" (255)	11 3/4" (30)	81 1/2" (206)	20" (51)	46" (117)	16" (41)	8	2" NPT	1" NPT	1/4" NPT
HFH 7H-60	3500 (13248)	7	60	111 7/8" (284)	15 1/2" (39)	88" (224)	24" (61)	48" (122)	18" (46)	12	2" NPT	1" NPT	1/4" NPT

Notes:

1. Dimensions are based on the maximum connection sizes.
2. Dimensions include support legs.
3. Dim. "A" will increase by approx. 3" for S.S. swing bolt housings.

HFH Housing Dimensional Drawing



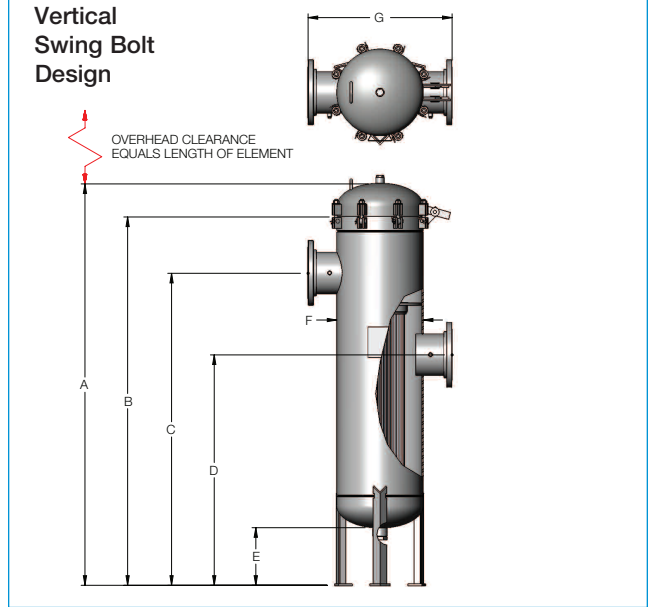
HFH Dimensional Data - Vertical/Swing Bolt

Model	Rate Flow Capacity GPM (LPM)	No. 10" Elements	Filter Lengths	Dim. "A" inches (cm)	Dim. "B" inches (cm)	Dim. "C" 1 inches (cm)	Dim. "D" 1 inches (cm)	Dim. "E" inches (cm)	Dim. "F" 1 inches (cm)	Dim. "G" inches (cm)	Max. Flange size (in)	Drain	Vent	Gauge
HFH 1V-20	175 (662)	1	20	51 1/8" (132)	48" (122)	40" (102)	28" (71)	12" (30)	8 5/8" (22)	18" (46)	4	2" NPT	1" NPT	1/4" NPT
HFH 3V-20	525 (1986)	3	20	63 3/8" (162)	56 3/4" (144)	45" (114)	28" (71)	12" (30)	18" (46)	30" (76)	8	2" NPT	1" NPT	1/4" NPT
HFH 1V-40	350 (1325)	1	40	71 7/8" (183)	68" (173)	60" (152)	48" (122)	12" (30)	8 5/8" (22)	18" (46)	4	2" NPT	1" NPT	1/4" NPT
HFH 3V-40	1050 (3975)	3	40	83 3/8" (212)	76 3/4" (195)	65" (165)	48" (122)	12" (30)	18" (46)	30" (76)	8	2" NPT	1" NPT	1/4" NPT
HFH 4V-40	1400 (5300)	4	40	84 1/8" (214)	76 3/4" (195)	65" (165)	48" (122)	12" (30)	20" (51)	32" (81)	8	2" NPT	1" NPT	1/4" NPT
HFH 7V-40	2450 (9275)	7	40	95 1/8" (244)	87 1/2" (222)	72" (183)	52" (132)	12" (30)	24" (61)	36" (91)	12	2" NPT	1" NPT	1/4" NPT

Notes:

1. Dimensions are based on the maximum connection sizes.
2. Dimensions include support legs.
3. Dim. "A" will increase by approx. 3" for S.S. swing bolt housings.

HFH Housing Dimensional Drawing



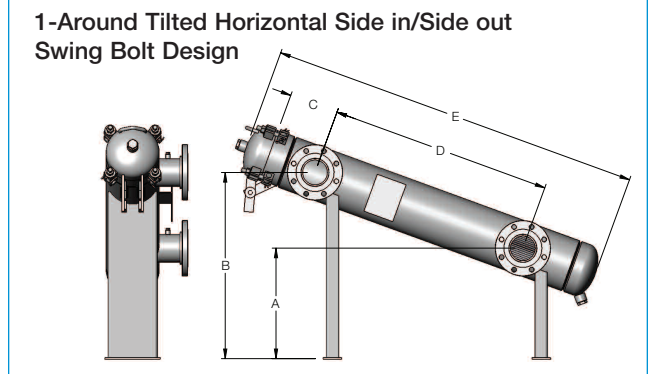
HFH Dimensional Data - Horizontal Tipped (Side in/Side out, Swing Bolt)

Model	Rate Flow Capacity GPM (LPM)	No. 10" Elements	Filter Lengths	Dim. "A" inches (cm)	Dim. "B" inches (cm)	Dim. "C" inches (cm)	Dim. "D" inches (cm)	Dim. "E" 1 inches (cm)	Max. Flange size (in)	Drain	Vent	Gauge
HFH 1HT-20	175 (662)	1	20	18" (46)	23 1/2" (60)	8" (20)	16" (41)	40 1/2" (103)	4	1" NPT	1" NPT	1/4" NPT
HFH 1HT-40	350 (1325)	1	40	18" (46)	30 5/8" (77)	8" (20)	36" (91)	60 1/2" (154)	4	1" NPT	1" NPT	1/4" NPT
HFH 1HT-60	525 (1986)	1	60	18" (46)	37 1/8" (94)	8" (20)	56" (142)	80 1/2" (204)	4	1" NPT	1" NPT	1/4" NPT

Notes:

1. Dim. "E" will increase by approx. 3" for S.S. swing bolt housings.

HFH Housing Dimensional Drawing



HFH Dimensional Data - Horizontal Tipped (Side in/Bottom out, Swing Bolt)

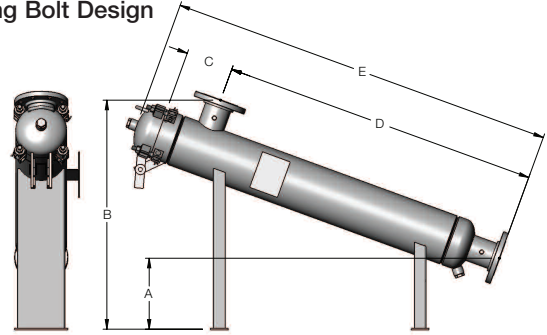
Model	Rate Flow Capacity GPM (LPM)	No. 10" Elements	Filter Lengths	Dim. "A" inches (cm)	Dim. "B" inches (cm)	Dim. "C" inches (cm)	Dim. "D" inches (cm)	Dim. "E" 1 inches (cm)	Max. Flange size (in)	Drain	Vent	Gauge
HFH 1HT-20	175 (662)	1	20	12" (30)	31 ¹⁵ / ₁₆ " (81)	8" (20)	33 ¹ / ₂ " (85)	45 ³ / ₈ " (115)	4	1" NPT	1" NPT	¹ / ₄ " NPT
HFH 1HT-40	350 (1325)	1	40	12" (30)	38 ³ / ₄ " (98)	8" (20)	53 ¹ / ₂ " (136)	65 ³ / ₈ " (166)	4	1" NPT	1" NPT	¹ / ₄ " NPT
HFH 1HT-60	525 (1986)	1	60	12" (30)	45 ⁵ / ₈ " (116)	8" (20)	73 ¹ / ₂ " (187)	85 ³ / ₈ " (217)	4	1" NPT	1" NPT	¹ / ₄ " NPT

Notes:

- Dim. "E" will increase by approx. 3" for S.S. swing bolt housings.

HFH Housing Dimensional Drawing

1-Around Tilted Horizontal Side in/Bottom out Swing Bolt Design



For more information

Graver Technologies Customer Service: **1-888-353-0303**

Technical Support: **1-888-353-0303**

E-mail us at **info@gravertech.com**

Graver Technologies Europe (UK): **+44-1424-777791**

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Graver Technologies

200 Lake Drive
Glasgow,
DE 19702 U.S.A.

302-731-1700
800-249-1990
Fax: 302-369-0938

e-mail: info@gravertech.com
web site: www.gravertech.com

