

USF Series

ASME Code Multi-Cartridge Filter Housings-Four through Fifty-Two Round



- ASME "U" code design housings for commercial and industrial filtration needs
- Heavy-duty 304L or 316L stainless steel construction for maximum durability
- 150 psig (10.3 bar) @ 300°F (149°C) design pressure
- Swing bolt closure with lifting davit for easy cartridge change-outs and secure sealing
- Holds four (4) to fifty-two (52) cartridges up to 40" lengths to service a wide range of flow rates
- Accepts standard double open-ended (DOE) style cartridges (222 and 226 style adapters are optional)
- Knife edge seals eliminate bypass on DOE cartridges
- Top spring seals allow for cartridge length variations
- Flange inlet and outlet connections allow for easy piping
Drain connections permit quick evacuation of housing
- Equipped with heavy-duty stainless steel mounting legs
- For information on filter cartridges, flow charts and drawings visit our website or call the factory

Applications

Water	Desalination
Chemicals	Food & Beverage
Electronics	Oil / Gas
Power	Inks / Paints / Coatings
Coolants	Pulp & Paper

Specifications & Operating Parameters

Maximum Operating Pressure

150 psig (10.3 bar) @ 300°F (149°C)

Inlet and Outlet Connections

Inlet /Outlet: 2"-6" Flange

Drain Ports: 1/2"-3/4" FNPT

Vent Ports: 1/4"-1/2" FNPT

Materials of Construction

Head and Shell: 304L or 316L Stainless Steel

Connections: 304L or 316L Stainless Steel

Vent and Drain Plugs: 304L or 316L Stainless Steel

Mounting Legs: 304L Stainless Steel

Swing Bolts: Zinc Plated Steel

Gaskets

Buna N (FDA Grade)

Optional: EPR, Silicone, Viton or Teflon

Encapsulated Silicone

Finish

Glass Bead

Optional: Electro-polish, passivate or 134 epoxy coating

Cartridge Type

DOE style cartridges (maximum 2 5/8" diameter)

Optional: 222 and 226 adapters. For 2 3/4" diameter cartridges... order as 21USF, 32USF or 50USF housings

Custom Options

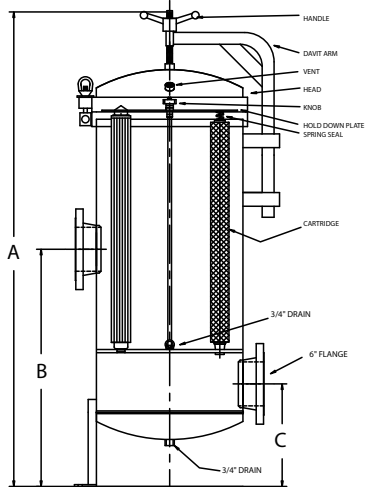
- Gauge Ports or Gauge Ports with Pressure Gauges

See Ordering Guide for complete selection of options

MODEL	QUANTITY (LENGTH) OF CARTRIDGES +	RATED FLOW CAPACITY* GPM(LPM)	INLET / OUTLET (PIPE SIZE)			
				A	B	C
4USF4/ 5USF4	4/5 (10"-40")	28-140 (106-530)	2"	-	-	-
7USF4	7 (10"-40")	49-196 (185-742)	2"	-	-	-
12USF4	12 (20"-40")	168-336 (636-1272)	3"	68 1/2" (174.0 cm)	15 3/8" (39.1 cm)	10" (25.4 cm)
22USF4	22 (30"-40")	462-616 (1749-2332)	4"	62 3/16" (158 cm)	15 1/4" (38.7 cm)	9 1/2" (24.1 cm)
36USF4**	36 (30"-40")	756-1008 (2862-3816)	6"	74 3/4" (189.9 cm)	32 3/8" (82.2 cm)	14" (35.6 cm)
52USF4	52 (30"-40")	1092-1456 (4134-5512)	6"	75 15/16" (192.9 cm)	32 3/8" (82.2 cm)	14" (35.6 cm)

+ Housings will accept cartridge lengths: 30" = (29 1/4" or 30") and 40" = (39" or 40")
* Based upon 7 gpm per 10" length with a 25 micron wound cartridge at 2 PSID clean and viscosity of 1 cps. Flow rates are for guidelines only. Actual flow rates are based on fluid, viscosity, cartridge type, micron ratings and other factors.
** When using 222 or 226 connectors with 2 3/4" OD filter cartridges in a 36USF housing, you must change to a 21USF housing (21 round).
When using 222 or 226 connectors with 2 3/4" OD filter cartridges in a 36USF housing, you must change to a 32USF housing (32 round).
When using 222 or 226 connectors with 2 3/4" OD filter cartridges in a 52USF housing, you must change to a 50USF housing (50 round).
Note: Dimensions are for reference purposes only. Detailed dimensional drawings are available. Please contact Shelco's technical support staff for additional information.

Dimensions



Ordering Guide (Example: 12USF3SB-316-222-6F-GP-B)

12USF	3	SB	-	316	-	222	-	6	F	-	GP	-	B
MODEL	LENGTH OF CARTRIDGES	CLOSURE STYLE	MATERIAL	CARTRIDGE CONFIGURATION	CONNECTION SIZE	CONNECTION TYPE	OPTIONS	GASKET					
4USF	1 = 1 High*	SB = Swing Bolt	304 = 304L	Blank = DOE Style Cartridges (Standard)	2 = 2"	F = Flange	GP = Gauge Ports GPA = Gauge ports with Gauges EP = Electro-Polish GB = Glass Bead P = Passivate UP = Universal Parts	B = Buna N (Standard) E = EPR S = Silicone V = Viton TS = Teflon Encapsulated Silicone					
5USF	2 = 2 High*		316 = 316L	222 = 222 Fin/Flat Style Cartridges	3 = 3"								
7USF	3 = 3 High		226 = 226 Fin/Flat Style Cartridges	4 = 4"									
12USF	4 = 4 High			6 = 6"									
22USF				8 = 8**									
36USF													
52USF													

* Available in 4USF, 5USF and 7USF models

Customization

Housings may be customized to meet your precise requirements. Contact Shelco's technical support staff or your distributor for more information.