

# MSO Horizontal High Flow Series Filter Housings

# Horizontal ASME Code Multi-Cartridge Filter Housings

- Install on Floor or Suspend From Above for Increased Space Utilization
- Horizontal Positioning Simplifies Cartridge Change Out
- 150 PSIG (10.3 BAR) Maximum Operating Pressure Permits Use in a Wide Range of Applications
- ASME Code Section VIII, Division I "U" Stamp Available
- UNI-SEAL™ System Seals Filter Cartridges in Place Before Closing Housing
- 304 or 316 Stainless Steel Materials of Construction Optional

#### **Housing Specifications**

# Maximum Operating Pressure:

Carbon Steel<sup>1</sup>: 150 psig (10.3 bar) @ 500°F (260°C) Stainless Steel: 150 psig (10.3 bar) @ 200°F (93°C)

**NOTE**: Maximum operating pressure ratings are vessel ratings only. Safe operating temperature and pressure will depend on filter cartridge and gasket/O-ring used. For inquiries on compatibility, contact the factory or your Pall distributor.

#### Construction:

Standard: ASME UM Stamp, 48MSOH, ASME

U Stamp, (76MSOH - 620MSOH)

Connections:

Inlet/Outlet: 3 - 12" Flange
Body Drain: 1½" NPT
Vent: 1" NPT
Gauge 1: 1/4" NPT

(Upstream/Downstream)



Shell O-rings:

Buna N (standard), Neoprene Viton<sup>2</sup> A, Silicone Elastomer, Ethylene Propylene

### Cartridges:

MSO Horizontal housings require the DOE-1X (extended center core) style end configuration. The M3H style end configuration is for use with engineered housings only.

## **Internal Option:**

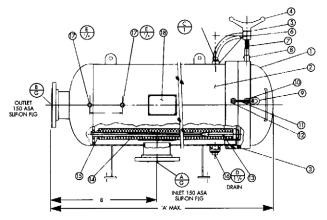
Uni-Seal sealing system is standard.

#### **Dimensional Data<sup>3</sup> (nominal)**

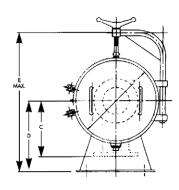
Model⁴	Liquid <sup>5, 6</sup>	Number	Dimensions (inches)						Inlet/	Weight
	Flow Rate (gpm)	of 30"or 40" Cartridges	Α	В	С	D	E	F	Outlet (inches)	(pounds)
48MSOH4-3FD-C150	to 240 (909 lpm)	12	58 (147 cm)	24 (61 cm)	10 (25.4 cm)	14 (35.6 cm)	33 (83.8 cm)	12 (30.5 cm)	3 (7.6 cm)	300 (136 kg)
76MSOH4-4FD-C150	to 380 (1439 lpm)	19	61 (155 cm)	27 (69 cm)	12 (30.5 cm)	16 (40.6 cm)	37 (94 cm)	16 (40.6 cm)	4 (10.2 cm)	370 (168 kg)
111MSOH3-4FD-C150	to 555 (2101 lpm)	37	54 (137 cm)	23 (58 cm)	14 (35.6 cm)	18 (45.7 cm)	42 (106.7 cm)	20 (50.8 cm)	4 (10.2 cm)	580 (263 kg)
148MSOH4-6FD-C150	to 740 (2801 lpm)	37	65 (165 cm)	30 (76 cm)	14 (35.6 cm)	18 (45.7 cm)	42 (106.7 cm)	20 (50.8 cm)	6 (15.2 cm)	615 (279 kg)
171MSOH3-6FD-C150	to 855 (3237 lpm)	57	57 (145 cm)	25 (64 cm)	16 (40.6 cm)	20 (50.8 cm)	45 (114.3 cm)	24 (61 cm)	6 (15.2 cm)	750 (340 kg)
228MSOH4-6FD-C150	to 1140 (4315 lpm)	57	67 (170 cm)	30 (76 cm)	16 (40.6 cm)	20 (50.8 cm)	45 (114.3 cm)	24 (61 cm)	6 (15.2 cm)	800 (363 kg)
267MSOH3-8FD-C150	to 1335 (5054 lpm)	89	61 (155 cm)	27 (69 cm)	19 (48.3 cm)	23 (58.4 cm)	51 (130 cm)	30 (76.2 cm)	8 (20.3 cm)	1180 (535 kg)
356MSOH4-8FD-C150	to 1780 (6738 lpm)	89	71 (180 cm)	32 (81 cm)	19 (48.3 cm)	23 (58.4 cm)	51 (130 cm)	30 (76.2 cm)	8 (20.3 cm)	1250 (567 kg)

- <sup>1</sup> Steel housings are equipped with stainless steel internal parts.
- <sup>2</sup> Registered trademark of DuPont Dow.
- <sup>3</sup> Data presented in this section represents typical dimensions for MSO housings. For critical installation requirements, request certified drawing.
- <sup>4</sup> The model numbers listed here denote welded carbon steel construction. For 304 or 316 stainless steel, insert the respective number (304 or 316) after the model number (i.e., 76MSOH4-304-4FD-C150).
- 5 Actual flow rate is a function of filter media type, particle type, size distribution and concentration, and fluid viscosity.
- <sup>6</sup> Flow rates listed are for depth cartridges. Consult factory for more specific information.

#### SIDE VIEW



#### **FRONT VIEW**



Item No	Description
1	Filter Cover
2	Filter Tank
3	O-ring
4	Davit Handwheel
5	Davit Bushing
6	Davit Arm <sup>7</sup>
7	Davit Screw

Item No	Description
8	Davit Pin
9	Eyenut
10	Washer
11	Eyebolt
12	Eyebolt Pin
13	Uni-seal
14	Filter Cartridge

Item No	Description
15	Separator Seat Plates
16	Drain Plug (NPT)
17	Gauge Plug (NPT)
18	Vent Plug (NPT)
19	Nameplate

<sup>7 -</sup> Davit arms are carbon steel on stainless steel housings. Stainless steel davit arms are optional.

# **Part Numbers/Ordering Information**

■ MSOH • - • ▼ D - C 150 ▶

(e.g., 48MSOH4-4FD-C150U)

Code	No. of 10" Equivalents		
48	48		
76	76		
111	111		
148	148		
171	171		
228	228		
267	267		
356	356		
620	620		

Code	No. of 10" Equivalents Per Column
3	3
4	4
Code	Inlet/Outlet Connection Sizes
3	3"
4	4"
6	6"
8	8"
12	12"

Code	Connection Styles
F	Flange

Code	ASME Stamp Designation			
UM	UM Stamp			
U	U Stamp			



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