

MSO High Flow Series Filter Housings

ASME Code High Flow Multi-Cartridge Filter Housings

- Accepts Twelve to Eighty-eight 20" (50.8 cm), 30" (76.2 cm) or 40" (102 cm) DOE Style Filter Cartridges
- Housings can be Modified to Accept SOE Style Cartridges
- Carbon Steel, 304, 304L, 316, and 316L Stainless Steel Materials of Construction
- 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
- ACCU-SEAL™ and UNI-SEAL™ Sealing Devices Permit Fast and Easy Cartridge Change Out

Housing Specifications

Maximum Operating Pressure:

Carbon Steel: 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 Stamp¹

Optional: ASME U Stamp

Connections:

Inlet/Outlet: 3" - 8" Flange

Drain: 1 1/2" NPT

Vent: 1" NPT

Gauge (2): 1/4" NPT (Upstream/Downstream)

Shell O-rings: Buna N (standard), Silicone Elastomer, Neoprene, Ethylene Propylene, Viton² A

Internal Components:

316 stainless steel top seat plate assemblies and tube guides are standard with internal parts option. Accu-Seal and Uni-Seal sealing mechanisms are optional.

Reverse Flow Option:

Housings can be modified for reverse flow applications. Consult factory for further information.

Davit Assembly:

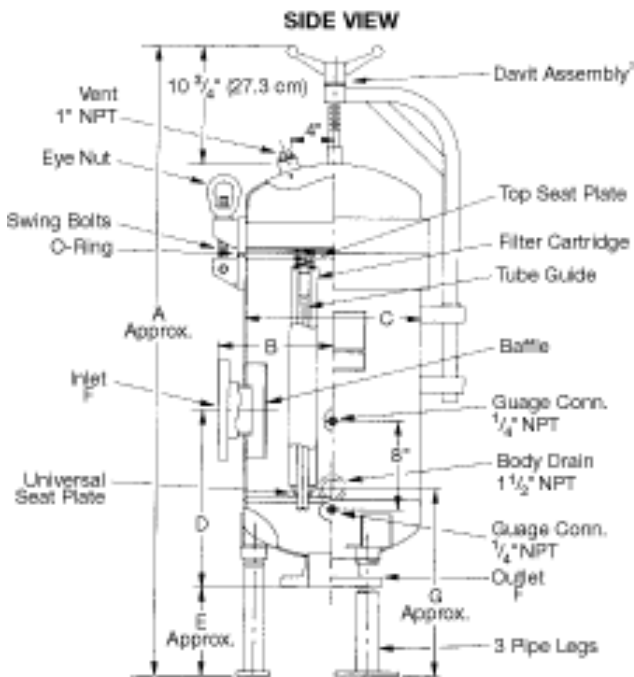
Standard on 12, 18, 22, 36, 55 and 88 column models.

¹ Certain MSO Series housings require ASME U stamp as standard.

² Registered trademark of DuPont Dow.



Dimensional Drawing



³ Pipe legs and davit arm are carbon steel on stainless steel housings. Stainless steel legs and davit arms are optional.

Dimensional Data⁴ (inches)

12 Columns	A ⁵	B	C	D	E	F	G ⁶	Flow Rate (gpm)
24MSO2	59 (149.9 cm)	8 ¼ (21 cm)	12 (30.5 cm)	16 (40.6 cm)	11 (27.9 cm)	3 (7.6 cm)	18 ¾ (46.2 cm)	120 (454 lpm)
36MSO3	69 (175.3 cm)	8 ¼ (21 cm)	12 (30.5 cm)	21 (53.3 cm)	11 (27.9 cm)	3 (7.6 cm)	18 ¾ (46.2 cm)	180 (681 lpm)
48MSO4	80 (203.2 cm)	8 ¼ (21 cm)	12 (30.5 cm)	21 (53.3 cm)	11 (27.9 cm)	3 (7.6 cm)	18 ¾ (46.2 cm)	240 (909 lpm)
18 Columns	A ⁵	B	C	D	E	F	G ⁶	Flow Rate (gpm)
36MSO2	61 (154.9 cm)	9 ¼ (23.5 cm)	14 (35.6 cm)	16 (40.6 cm)	11 (27.9 cm)	3 (7.6 cm)	19 ½ (49.5 cm)	180 (681 lpm)
54MSO3	71 (180.3 cm)	9 ¼ (23.5 cm)	14 (35.6 cm)	21 (53.3 cm)	11 (27.9 cm)	3 (7.6 cm)	19 ½ (49.5 cm)	270 (1022 lpm)
72MSO4	82 (208.3 cm)	9 ¼ (23.5 cm)	14 (35.6 cm)	21 (53.3 cm)	11 (27.9 cm)	3 (7.6 cm)	19 ½ (49.5 cm)	360 (1363 lpm)
22 Columns	A ⁵	B	C	D	E	F	G ⁶	Flow Rate (gpm)
44MSO2	62 (157.5 cm)	10 ⅝ (26.4 cm)	16 (40.6 cm)	16 (40.6 cm)	12 (30.5 cm)	4 (10.2 cm)	21 ⅜ (53.8 cm)	220 (833 lpm)
66MSO3	72 (182.9 cm)	10 ⅝ (26.4 cm)	16 (40.6 cm)	21 (53.3 cm)	12 (30.5 cm)	4 (10.2 cm)	21 ⅜ (53.8 cm)	330 (1249 lpm)
88MSO4	83 (210.8 cm)	10 ⅝ (26.4 cm)	16 (40.6 cm)	21 (53.3 cm)	12 (30.5 cm)	4 (10.2 cm)	21 ⅜ (53.8 cm)	440 (1666 lpm)
36 Columns	A ⁵	B	C	D	E	F	G ⁶	Flow Rate (gpm)
72MSO2	71 (180.3 cm)	12 ½ (31.8 cm)	20 (50.8 cm)	18 (45.7 cm)	16 (40.6 cm)	6 (15.2 cm)	27 ½ (68.9 cm)	360 (1363 lpm)
108MSO3	81 (205.7 cm)	12 ½ (31.8 cm)	20 (50.8 cm)	18 (45.7 cm)	16 (40.6 cm)	6 (15.2 cm)	27 ½ (68.9 cm)	540 (2044 lpm)
144MSO4	92 (233.7 cm)	12 ½ (31.8 cm)	20 (50.8 cm)	18 (45.7 cm)	16 (40.6 cm)	6 (15.2 cm)	27 ½ (68.9 cm)	720 (2726 lpm)
55 Columns	A ⁵	B	C	D	E	F	G ⁶	Flow Rate (gpm)
110MSO2	74 (188 cm)	14 ⅝ (37.1 cm)	24 (61 cm)	20 (50.8 cm)	16 (40.6 cm)	6 (15.2 cm)	28 ⅞ (71.4 cm)	550 (2082 lpm)
165MSO3	84 (213.4 cm)	14 ⅝ (37.1 cm)	24 (61 cm)	24 (61 cm)	16 (40.6 cm)	6 (15.2 cm)	28 ⅞ (71.4 cm)	825 (3123 lpm)
220MSO4	95 (241.3 cm)	14 ⅝ (37.1 cm)	24 (61 cm)	24 (61 cm)	16 (40.6 cm)	6 (15.2 cm)	28 ⅞ (71.4 cm)	1100 (4164 lpm)
88 Columns	A ⁵	B	C	D	E	F	G ⁶	Flow Rate (gpm)
176MSO2	81 (205.7 cm)	18 (45.7 cm)	30 (76.2 cm)	21 (53.3 cm)	19 (48.3 cm)	8 (20.3 cm)	33 (83.8 cm)	880 (3331 lpm)
264MSO3	91 (231.1 cm)	18 (45.7 cm)	30 (76.2 cm)	23 (58.4 cm)	19 (48.3 cm)	8 (20.3 cm)	33 (83.8 cm)	1320 (4997 lpm)
352MSO4	102 (259.1 cm)	18 (45.7 cm)	30 (76.2 cm)	23 (58.4 cm)	19 (48.3 cm)	8 (20.3 cm)	33 (83.8 cm)	1760 (6662 lpm)

⁴ Data presented in this section represents typical dimensions for MSO housings. For critical installation requirements, request certified drawing.

⁵ The "A" dimension for MSO stainless steel housings may vary up to -1" (2.5 cm) from the given dimension.

⁶ The "G" dimension for MSO stainless steel housings may vary up to -½" (1.3 cm) from the given dimension.

Part Numbers/Ordering Information

■ MSO ● - ▶ - ◆ FD - C150 ▶ - ☉ (e.g. 54MSO3-304-3FD-C150UM-IP)

Code	No. of 10" Equivalents
24	24
36	36
44	44
48	48
54	54
66	66
72	72
88	88
108	108
110	110
144	144
165	165
176	176
220	220
264	264
352	352

Code	No. of 10" Equivalents Per Column
1	1
2	2
3	3
4	4

Code	ASME Stamp Designation
U	U Stamp
UM	UM Stamp

Code	Materials of Construction
Blank	Carbon steel
304	304 Stainless Steel
304L	304L Stainless Steel
316	316 Stainless Steel
316L	316L Stainless Steel

Code	Inlet/Outlet Connection Sizes
2	2"
3	3"
4	4"
6	6"
8	8"

Code	Internal Parts ⁷
Blank	No Internal Parts
IP	Internal Parts

⁷ Standard vessels include internal parts of top seat plates and tube guides. Basic vessels without internal parts may be ordered as non-stock items.