

3M™ ME & DF Series Housings

3M™ ME Series ASME Code Housings for 3M™ DF Series Elements and Bag Filters



3M Purification Inc. offers the 3M™ ME series bag housings, for use with 3M™ DF series filter elements or conventional bag filters, in 3, 4, 6, 8, and 12 filter element configurations. Constructed with carbon steel, 304, or 316L Stainless Steel, the housings are designed for use with #2 size filter bags or elements. The housings have been engineered for maximum flow throughput for a given vessel footprint to minimize the required floor space. All ME series bag housings include stainless steel baskets, for either 3M DF series element or bag filter support. The housings are rated for operation up to 150 psi @ 300 °F and are manufactured in accordance with ASME code and “U” stamped.

Applications

Industrial Processes	Parts, Washers, Coolants, Cooling Water
Water Treatment	Pre-RO, Wastewater
Refining	Amine, Final Products
Food & Beverage	Process Water, Edible Oils
Paint & Coatings	Phosphate E-Coat
Chemicals & Petrochemicals	
Electronics	Pre-RO
Pharmaceutical	Bulk Chemicals

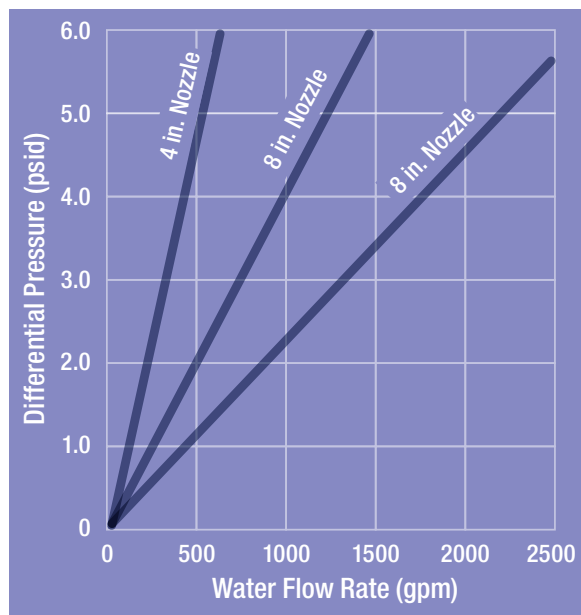
The compact design of the 3M™ ME series bag housings and in-line bottom inlet and outlet connections offer tremendous flexibility for installation and operation. The swing bolt closure design and davit arm operation allow for easy filter element change-out.

3M ME series bag housings come standard with a swing bolt cover closure and davit arm for ease of cover opening. An optional quick open/close (QOC) cover closure version is also available. Through the use of a band clamp and hinged cover, the QOC design allows for rapid vessel opening and closing with minimum labor requirements. This can be of significant benefit for operations requiring frequent filter change-outs. For more information on the QOC design, please refer to 3M Purification Literature LITHSHQC1.

Available Options – Consult Factory

- Quick Open/Close Cover Design
- Different Inlet/Outlet Connection Sizes
- Different Exterior/Interior Coatings/Finishes
- Tangential Bottom Outlet Design
- Corrosion Allowances (carbon steel)
- 21 CFR compliant materials of construction

Housing Pressure by Nozzle Size*



* Pressure drop for standard housings without filters installed.



Features & Benefits

Compact vessel design

- Reduced footprint requirement

Drains at lowest point in housing

- No residual build-up or fluid loss

Integral cover assembly

- No additional parts required to seal filter elements

In-line piping configuration

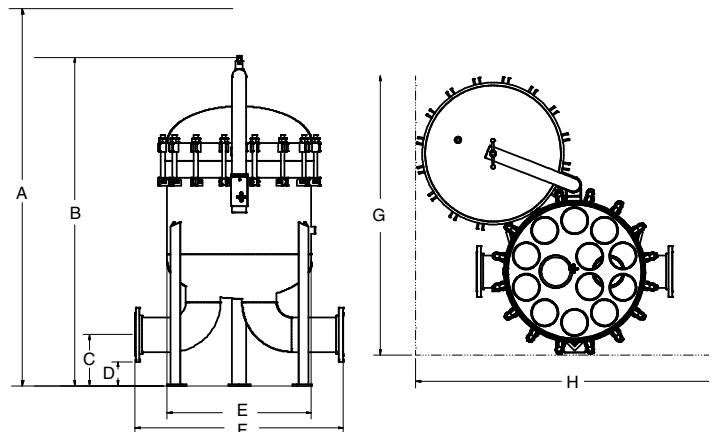
- Capital expenditure and installation cost savings

Isolated dirty fluid chamber

- Helps prevent clean-side contamination during filter change-out
- Minimizes build-up of dirty fluid

Designed for use with 3M™ DF series or conventional bag filter elements

- Flexibility for using optimum filter element for application



3M™ ME Series Bag Housing Specifications

Model	Number of Filter Elements	Material	Connection Size (inches)	Drain Size Inches (NPT)	Vent/Gauge Size Inches (NPT)	Maximum Flow (gpm/lpm)*	Maximum Operating Pressure (psf/bar)	Operating Temperature Range (°F/°C)	Approximate Housing Weight (lbs/kgs)	
									Swing Bolt Closure	Quick Open/Close
3ME	3	Carbon Steel, 304 or 316L Stainless Steel	4	1	1/2	450/1703	150/10.3	-20 to 300/ -28 to 148	470/213	NA
4ME	4		4	1		450/1703			585/265	NA
6ME	6		6	1		1000/3785			720/327	850/386
8ME	8		6	2		1000/3785			960/435	1050/476
12ME	12		8	2		1750/6624			1270/576	1450/658

* Values represent maximum aqueous flow rates for ME series bag housings (without filter elements in stalled) yielding housing pressure drop of 3 psid. When determining vessel flow rates, the type of filter element to be used needs to be taken into account. The total filtration system pressure drop is the sum of the housing and filter element pressure drops. For some models, larger inlet/outlet connection sizes are available providing lower vessel pressure drops at higher flow rates.

3M™ ME Series Bag Housing Dimensions (inches/cm)*

	Model				
	3 ME	4 ME	6 ME	8 ME	12 ME
	Nominal Dimensions (inches/cm)				
A – Clearance (Swingbolt)	76/193	76/193	82/208	83/211	88/223
Clearance (Quick Open)	N/A	N/A	88/223	96/244	110/279
B – Overall Unit Height	63/160	65/165	70/178	75/191	81/206
C – Floor to flange centerline	11/28	11/28	12/30	12/30	13/33
D – Floor to flange clearance	6/15	6/15	6/15	6/15	6/15
E – Unit diameter	18/46	20/51	24/61	30/76	36/91
F – Flange to flange	33/84	34/86	40/102	42/107	52/132
G – Space to cover reduction	40/102	42/107	48/122	58/147	74/188
H – Space for cover reduction	52/132	54/137	64/163	77/196	84/213

* Dimensions are for overall space requirements only. For all other uses, request a certified drawing

3M™ ME Series Bag Housing Ordering Guide (Example Part Number = XME2XFXXX)

X	ME	2	X	F	X	X	Q
Number of Elements	Product Designation	Element Size	Housing Material	Connection Type	Gasket Material/O-ring	Basket Type	Closure Type
3	ME	2 = #2	A – Carbon Steel	F – ANSI Flange	GA – Nitrile* GB – EPR GC – Fluorocarbon	B = Bag Basket D = DF Basket	Q – Quick Open/Close** (Leave blank for swing bolt)
4			B – 304 Stainless Steel				
6			C – 316L Stainless Steel				
8							
12							

* Limits maximum operation temperature to 250 °F (121°C).

**Quick Open/Close available for models 6ME, 8ME, and 12ME 316L SS only. Standard gasket/O-ring is nitrile, consult factory for other available gasket materials.

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3M Purification Inc.

400 Research Parkway
Meriden, CT 06450
U.S.A.

Phone (800) 243-6894

(203) 237-5541

Fax (203) 630-4530

www.3Mpurification.com

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