

# 3M™ ME Single Series

## Stainless steel housings for single bag filters

3M ME single series bag filter housings are available in a variety of formats to provide a range of options for single filter bag or 3M™ DF series filtration applications. MES, MEC and MET housings versions

The MES, MEC and MET housings provide an economic and flexible solution for non-coded PED Article 4§3 applications and are constructed from 316L stainless steel as standard. They also have a maximum operating pressure of 10 bar g and a maximum operating temperature of 90 °C.



### Pressure Equipment Directive 2014/68/EU.

ME single housings are built to PED 2014/68/EU Article 4§3 “Sound Engineering Practice” as standard. These single housings can be coded to PED Category I or Category II on request.

The actual pressure and temperature that these housings can be used at will depend on the type and nature of the fluid being processed (Group 1: Hazardous, Group 2: Other) as defined by the PED.

Please refer to the PED data for details of the permissible operating conditions for these housings.

### ATEX Directive 2014/34/EU.

ME single housings are approved for use in ATEX condition II 2 GD c IIC / IIIC.

The user of these housings must ensure that they are used in accordance with the requirements of these PED and ATEX directives at all times.

Please consult your local 3M representative for any other classification or further information.

The 3M™ ME Series filter housings are food contact compliant.

### Food Contact Directive (EC) 1935/2004.

The housing are constructed from 316 and 316L stainless steel (wetted parts in contact) and delivered with O-rings that are compliant to FDA (there are no other non-316 parts in contact).

In addition to the standard Coreline housing range described here, the 3M™ ME housing can be built upon request to a wide range of specifications and design and construction standards. These routinely include PED Category IV and for use with Hazardous (Group 1) liquids and Gas/Vapour. Design and constructions codes can include (but are not limited to) EN13445, AD Merkblatter, ASME Div VIII & U Stamp and CODAP. Materials can include in addition to 316 (but not limited to) 304 and Uranus B6 Super Duplex steels.

## Applications

Industrial processes: Parts washers, coolants, cooling water.	Electronics: Pre-RO.
Water treatment: Pre-RO, waste water.	Paint and coatings: Phosphate E-coat.
Refining: Amine, final products.	Food and beverage: Process water, edible oils.
Petrochemicals: Bulk solids removal.	Pharmaceutical: Bulk chemicals.
Chemicals: Product trans.	

# Economical and flexible filtration solution.

Table 1: Standard housing model specifications

Housing type	01 MEC	01 MES	01 MET
Inlet/outlet connections	2" BSPT (male)	2" BSPT (male)	PN16 DN50
Vent connections	1/4" BSP	1/4" BSP	1/4" BSP
Drain connections	1/2" BSP	N/A	N/A
Filterbag sizes	1 and 2 high	2 high	2 high
Housing material	316L stainless steel		
Standard gasket material	Nitrile as standard (others available as accessories)		
Design condition	10 bar g at 90 °C		

Table 2: Maximum Allowable Pressure (PS) bar g  
ME Single Element Vessels: PED 2014/68/EU  
Article 4§3 - "Sound Engineering Practice"

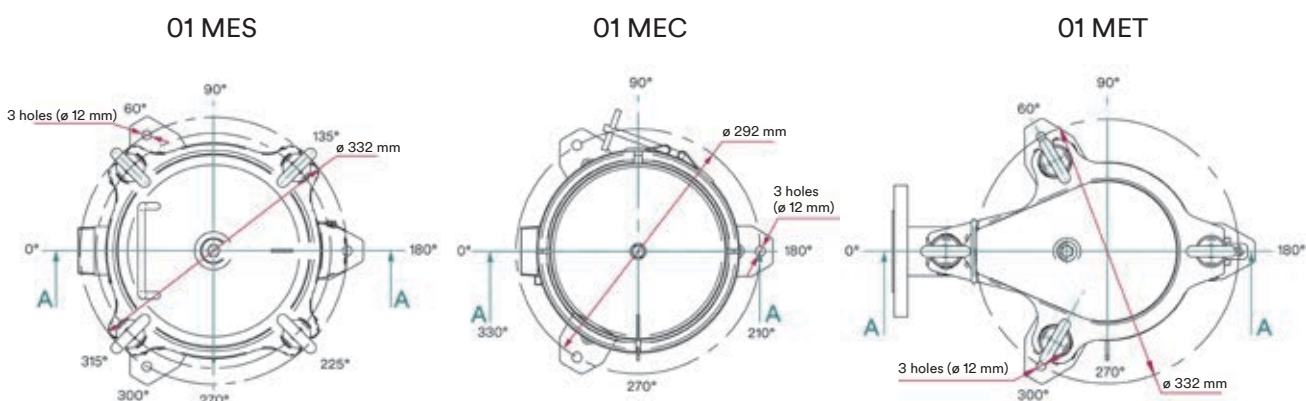
Housing model	01 MEC	01 MES	01 MET
Element height	H1	H2	H2
Housing volume (Litre)	22	33	30
Liquid Group 1 (Hazardous) PS max	6.0	6.0	6.0
Liquid Group 2 (Other) PS max	10	10	10

Table 3: Standard model dimensions in mm \*

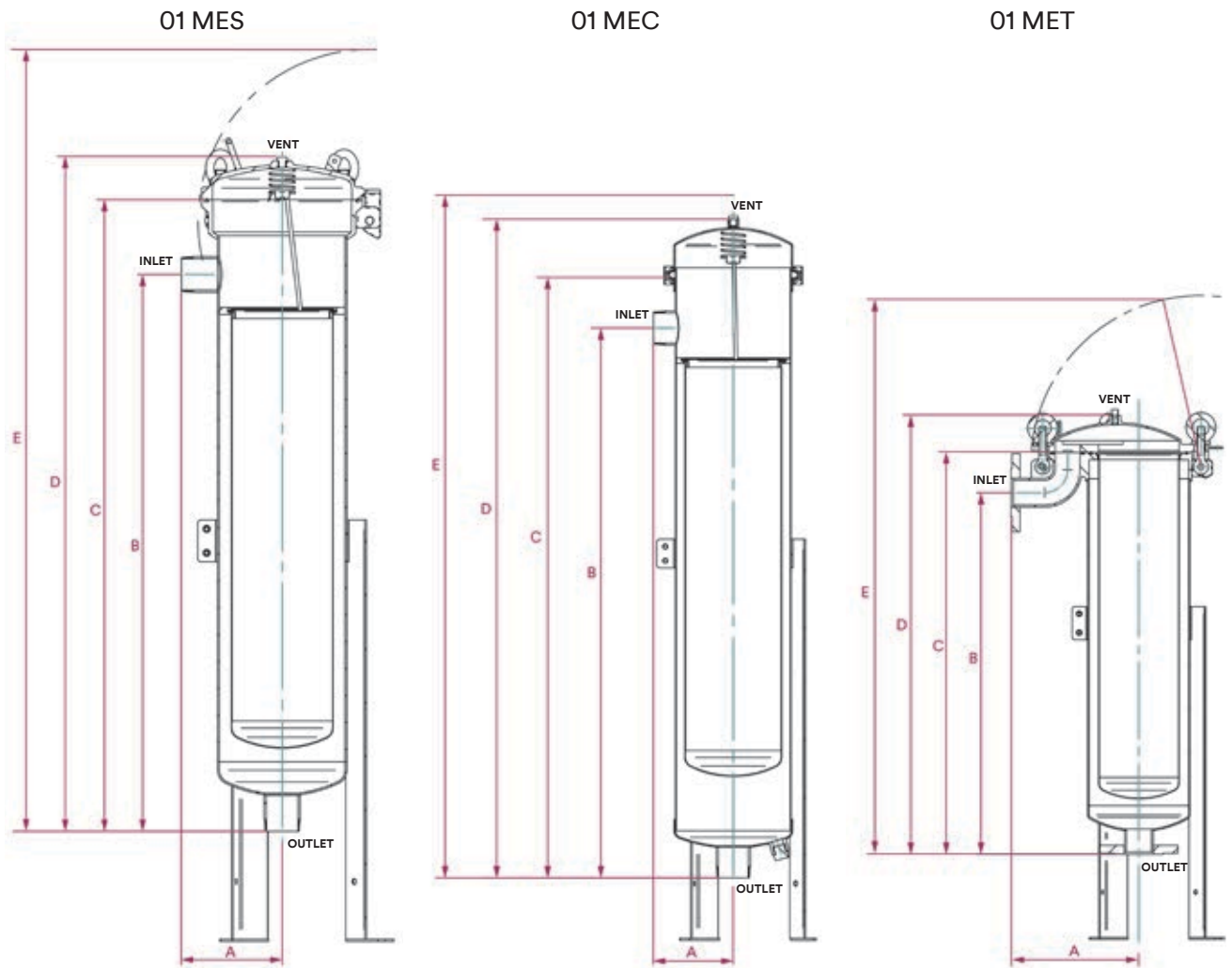
Housing type	01 MEC 1	01 MEC 2	01 MES 2	01 MET 2
A - Inlet to outlet - diameter (mm)	140	140	168	270
B - Inlet to outlet - height (mm)	584	965	930	765
C - Closure to outlet (mm)	673	1054	1055	850
D - Unit height (mm)	775	1156	1301	1175
E - Clearance (mm)	1060	1810	1740	1590
Floor to outlet (mm)	Up to 304	Up to 304	Up to 304	Up to 304
Weight (kg)	16	22	40	40

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

## ME housing lid drawings



## ME housing drawings



**Table 4: ME single housings part numbers**

3M Part number	Number of cartridges	Housing type	Cartridge height	Range	Materials (wetted)	Gaskets	Surface finish	Connec-tion type	Bottom outlet
7100184160	01	MEC	1	V	6	NB	FE	GM	D
7100184132	01	MEC	2	V	6	NB	FE	GM	D
7100184695	01	MES	2	V	6	NB	FE	GM	D
7100184243	01	MET	2	V	6	NB	FE	BP	D

**Table 5: ME single housings part numbers**

Item	Designation	Material	Quantity	3M Part Number
1	Filter Bag Basket H1	316L stainless steel	1	7100157875
2	Filter Bag Basket H2	316L stainless steel	1	7100039303
3	3M DF Element Basket H1	316L stainless steel	1	7100016358
4	3M DF Element Basket H2	316L stainless steel	1	7100018269

Table 6: Cover gasket

Standard ME housing type	MEC	Qty	MES	Qty	MET	Qty
NB Nitrile	7000075507	1	7000075770	1	7000075532	1
Nitrile O-Ring : Lid					7000075917	1

# 3M™ ME single series filter housings.

Number of elements	Housing type	Bag size	Range	Housing material	Gasket material	Surface finish	Connection type	Outlet	Option elbow bottom outlet
01	MEC	1 2	V = Vertical	6 = 316L	NB = Nitrile *	FE	GM = 2" Male (BSP)	D = Bottom outlet	N = None
01	MES	2	V = Vertical	6 = 316L	NB = Nitrile *	FE	GM = 2" Male (BSP)	D = Bottom outlet	N = None
01	MET	2	V = Vertical	6 = 316L	NB = Nitrile *	FE	BP = Flanged (ISO PN16)	D = Bottom outlet	N = None

Example part number: 01MEC1V6NBF0GMDN

\* Other gasket materials are available to order on request (see cover gasket spare parts). Please contact a local 3M SPSP representative for more information.

## Important Notice

The information described in this literature is accurate to the best of our knowledge. A variety of factors, however, can affect the performance of the Product(s) in a particular application, some of which are uniquely within your knowledge and control. INFORMATION IS SUPPLIED UPON THE CONDITION THAT THE PERSONS RECEIVING THE SAME WILL MAKE THEIR OWN DETERMINATION AS TO ITS SUITABILITY FOR THEIR USE. IN NO EVENT WILL 3M SPSP BE RESPONSIBLE FOR DAMAGES OF ANY NATURE WHATSOEVER RESULTING FROM THE USE OF OR RELIANCE UPON INFORMATION.

It is your responsibility to determine if additional testing or information is required and if this product is fit for a particular purpose and suitable in your specific application.

3M SPSP MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

## Limitation of Remedies and Liability

3M SPSP will not be liable for any loss or damage arising from the use of the Product(s), whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.



## Separation and Purification Sciences Division

3M United Kingdom PLC	3M Ireland Ltd
3M Centre, Cain Road	The Iveagh Building
Bracknell, RG12 8HT	The Park, Carrickmines
Berkshire	Dublin 18
+44(0) 845 6025 237	+353(01) 280 3555

3M is a trademark of 3M Company.

Data may be subject to change without further notice.

[www.3M.co.uk/housings](http://www.3M.co.uk/housings)

[www.3Mireland.ie/housings](http://www.3Mireland.ie/housings)

© 3M 2019. All rights reserved.