

# 3M Model ZWB Sanitary Filter Housing



ZWB sanitary design cartridge housings provide the ultimate for critical clarification and sterile filtration applications. Manufactured to the strictest of standards and from high quality 316L stainless steel, the ZWB mirror polished filter housing is designed to meet the exacting quality standards of the pharmaceutical, food and beverage, fine chemical, and microelectronics industries.

The ZWB series are multi-cartridge housings designed to accommodate three (3), five (5), eight (8) or twelve (12) sanitary style filter cartridges up to 40 inches long. Other configurations are available upon request.

The ZWB design uses swing bolt closures to secure the housing dome to the base for operation up to 150 psi (10.3 bar). The Model ZWB housing can be steamed-in-place (SIP) and cleaned in place (CIP).

ZWB standard housing models include a positioning plate, positioning plate retainer rods, upstream vent and drain connections, silicone o-ring gaskets, and sanitary gauge port. An optional 1/2" sanitary:8mm barb vent/drain diaphragm valve is available.

## 3M PURIFICATION INC. FILTER SYSTEMS

3M Purification Inc. is a multi-national organization with manufacturing facilities providing worldwide product availability and consistent quality through field specialists who understand the unique requirements of the pharmaceutical, food and beverage, fine chemical, and microelectronics industries.

## 3M PURIFICATION INC. FILTER MEDIA

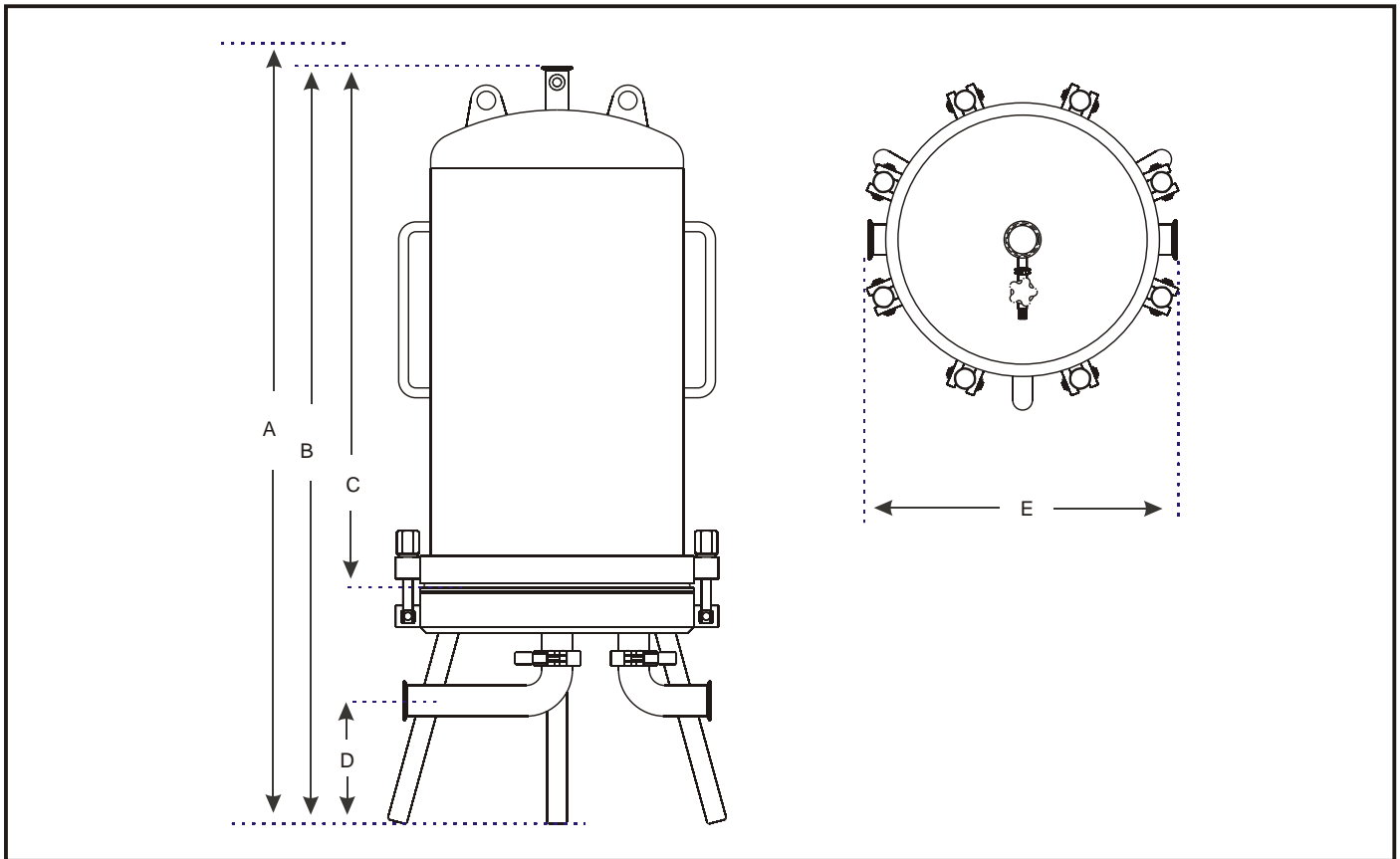
3M Purification Inc.'s family of microfiltration products offer a variety of filter media and retention ratings designed to meet the needs of the pharmaceutical, food and beverage, fine chemicals, and microelectronics industries. 3M Purification Inc.'s Nylon 6,6, PES, PTFE, and all-polypropylene pleated cartridges, as well as a variety of prefilters, can be used in the ZWB housings. For more information about media choices, consult your local 3M Purification Inc. representative.

FEATURES	BENEFITS
<ul style="list-style-type: none"> <li>■ Mirror surface finish sanitary 316L stainless steel construction</li> </ul>	<ul style="list-style-type: none"> <li>■ Reduces bacterial/particle adhesion, and easy to clean</li> <li>■ Maximum corrosion resistance</li> </ul>
<ul style="list-style-type: none"> <li>■ User friendly vertical design with sanitary connections</li> </ul>	<ul style="list-style-type: none"> <li>■ Requires minimum floor space and quickly dismantles for easy cleaning</li> </ul>
<ul style="list-style-type: none"> <li>■ Accepts 3M Purification Inc. sanitary style double o-ring bayonet locking elements</li> </ul>	<ul style="list-style-type: none"> <li>■ Cartridge locks into place assuring secure installation</li> </ul>
<ul style="list-style-type: none"> <li>■ Swing bolt closures</li> </ul>	<ul style="list-style-type: none"> <li>■ Higher pressure rating</li> <li>■ User friendly, minimum downtime</li> </ul>
<ul style="list-style-type: none"> <li>■ Housings accommodate from three (3) to twelve (12) 10", 20", 30" or 40" cartridges</li> </ul>	<ul style="list-style-type: none"> <li>■ Suitable for small through large batch sizes and flow rates</li> </ul>
<ul style="list-style-type: none"> <li>■ Optional sanitary vent valve available</li> </ul>	<ul style="list-style-type: none"> <li>■ Provides easy venting</li> </ul>
<ul style="list-style-type: none"> <li>■ Clean-in-place/sterilize-in-place design</li> </ul>	<ul style="list-style-type: none"> <li>■ Permits easy cleaning</li> </ul>
<ul style="list-style-type: none"> <li>■ Systems can be integrity tested in situ</li> </ul>	<ul style="list-style-type: none"> <li>■ Establishes proper cartridge installation and system integrity</li> </ul>

ZWB CARTRIDGE REQUIREMENTS			
Housing Model	Cartridge Length		Number of Cartridges (equivalent single length)
	inches	mm	
3ZWB1	10	254	3
3ZWB2	20	508	6
3ZWB3	30	762	9
3ZWB4	40	1016	12
5ZWB1	10	254	5
5ZWB2	20	508	10
5ZWB3	30	762	15
5ZWB4	40	1016	20
8ZWB1	10	254	8
8ZWB2	20	508	16
8ZWB3	30	762	24
8ZWB4	40	1016	32
12ZWB1	10	254	12
12ZWB2	20	508	24
12ZWB3	30	762	36
12ZWB4	40	1016	48

MODEL ZWB SPECIFICATIONS	
Maximum Operating Pressure & Temperature	150 psi @ 212°F (10.3 bar @ 100°C)
Materials of Construction:	
Base, Dome, Internals	316L stainless steel
Positioning Plate and Rods	316L stainless steel
O-ring/Gaskets	Silicone
Closure	Swing Bolts
Inlet / Outlet Connection Sizes:	
3ZWB	1 1/2" sanitary
5ZWB	2" sanitary
8ZWB	2" sanitary
12ZWB	2" sanitary
Pressure gauge connection	1 1/2" sanitary
Bleed valve connection	1/2" sanitary
Finish:	
External finish	Electropolished to 10Ra
Internal finish	Electropolished to 10Ra
Options (see Ordering Guide on back)	





**STANDARD MODEL WEIGHTS AND DIMENSIONS**

Housing Model	Dome Weight		Dimensions									
			A		B		C		D		E	
	lbs	kg	Clearance Needed		Height of Housing		Height of Dome		Height of Flange		Width	
		inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	
3ZWB1	27	12	48	1219	31 7/8	807	16 3/4	425	7 7/8	198	13 9/16	345
3ZWB2	34	15	68	1727	41 3/4	1060	26 1/2	673				
3ZWB3	41	19	88	2235	51 1/2	1308	36 1/2	927				
3ZWB4	49	22	108	2743	61	1549	45 7/8	1163				
5ZWB1	33	15	49	1244	32 1/2	825	17 1/8	435	7 1/16	179	16	406
5ZWB2	42	19	69	1752	42 1/4	1073	27	686				
5ZWB3	51	23	89	2260	52 1/8	1324	36 3/4	933				
5ZWB4	60	27	109	2768	61 1/2	1562	46 1/4	1174				
8ZWB1	42	19	50	1270	32 13/16	833	17 1/2	444	7 1/16	179	16 1/2	419
8ZWB2	53	24	70	1778	42 11 16	1084	27 3/8	693				
8ZWB3	63	29	90	2286	52 1/2	1333	37 3/16	944				
8ZWB4	73	33	110	2794	61 15/16	1572	46 5/8	1183				
*12ZWB1	75	34	46	1168	33 5/8	853	11 13/16	299	7 7/8	198	19 5/8	498
*12ZWB2	92	42	66	1676	43 1/2	1105	21 11/16	551				
*12ZWB3	109	50	86	2184	53 3/8	1356	31 1/2	800				
*12ZWB4	125	57	105	2667	62 3/4	1595	41	1041				

Dimensions are for rough plumbing estimates only; for other details, please contact 3M Purification Inc.

\*Models include lifting lugs on the dome.

## ZWB HOUSING ORDERING GUIDE

ZWB MODEL	DESCRIPTION	PART NUMBER
3ZWB1	3 around 10" sanitary filter housing	7061201
3ZWB2	3 around 20" sanitary filter housing	7061202
3ZWB3	3 around 30" sanitary filter housing	7061203
3ZWB4	3 around 40" sanitary filter housing	7061204
5ZWB1	5 around 10" sanitary filter housing	7061401
5ZWB2	5 around 20" sanitary filter housing	7061402
5ZWB3	5 around 30" sanitary filter housing	7061403
5ZWB4	5 around 40" sanitary filter housing	7061404
8ZWB1	8 around 10" sanitary filter housing	7061601
8ZWB2	8 around 20" sanitary filter housing	7061602
8ZWB3	8 around 30" sanitary filter housing	7061603
8ZWB4	8 around 40" sanitary filter housing	7061604
12ZWB1	12 around 10" sanitary filter housing	7062601
12ZWB2	12 around 20" sanitary filter housing	7062602
12ZWB3	12 around 30" sanitary filter housing	7062603
12ZWB4	12 around 40" sanitary filter housing	7062604
N/A	1/2" sanitary: 8mm barb vent/drain diaphragm valve	6431131

### Model ZWB Housing Integrated Systems

Model ZWB filter housings are available as complete sanitary systems including piping, valves, pressure gauges, optional feed loops, C.I.P. capabilities and skid mounted mobile systems for single source system solutions. For more information, please contact your local 3M Purification Inc. distributor.

**OPTIONS:** Housings are supplied with standard silicone gaskets. ZWB Housings are available as complete sanitary systems including piping, valves, pressure gauges, optional feed loops, C.I.P. capabilities and skid-mounted mobile systems for single source system solutions. For more information, please contact your local 3M Purification Inc. distributor.

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