

3M Purification

LifeASSURE™ ZW Model

Sanitary Filter Housings



3M PURIFICATION FILTER SYSTEMS

3M Purification 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 FILTER MEDIA

3M Purification'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's Nylon 66, PES, PTFE, and all polypropylene pleated cartridges, as well as a variety of prefilters, can be used in the ZW housings. For more information about media choices consult your local 3M Purification representative.

LifeAssure ZW 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 ZW mirror polished filter housing is designed to meet the exacting quality standards of the pharmaceutical, food and beverage, fine chemical, and microelectronics industries.

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

The ZW design uses swing bolt closures to secure the housing dome to the base for operation up to 10 bar (145 psi). The LifeAssure ZW housing can be steamed in place (SIP) and cleaned in place (CIP).

ZW standard housing models include a positioning plate, positioning plate retainer rods, upstream vent and drain connections, silicone o-ring gaskets and sanitary gauge port.

Features & Benefits

Mirror surface finish sanitary 316L stainless steel construction

- Reduces bacterial/particle adhesion and easy to clean
- Maximum corrosion resistance

User friendly vertical design with sanitary connections

- Requires minimum floor space and quickly dismantles for easy cleaning

Accepts 3M Purification sanitary style double o-ring bayonet locking elements

- Cartridge locks into place assuring secure installation

Swing bolt closures

- Higher pressure rating
- User friendly, minimum downtime
- Conforms to AS1210 pressure vessel standard

Housings accommodate from three (3) to twelve (12) 10", 20", 30" or 40" cartridges

- Suitable for small through large batch sizes and flow rates

Optional sanitary vent valve available

- Provides easy venting

Clean in place/sterilize in place design

- Permits easy cleaning

Systems can be integrity tested *in situ*

- Establishes proper cartridge installation and system integrity



ZW CARTRIDGE REQUIREMENTS

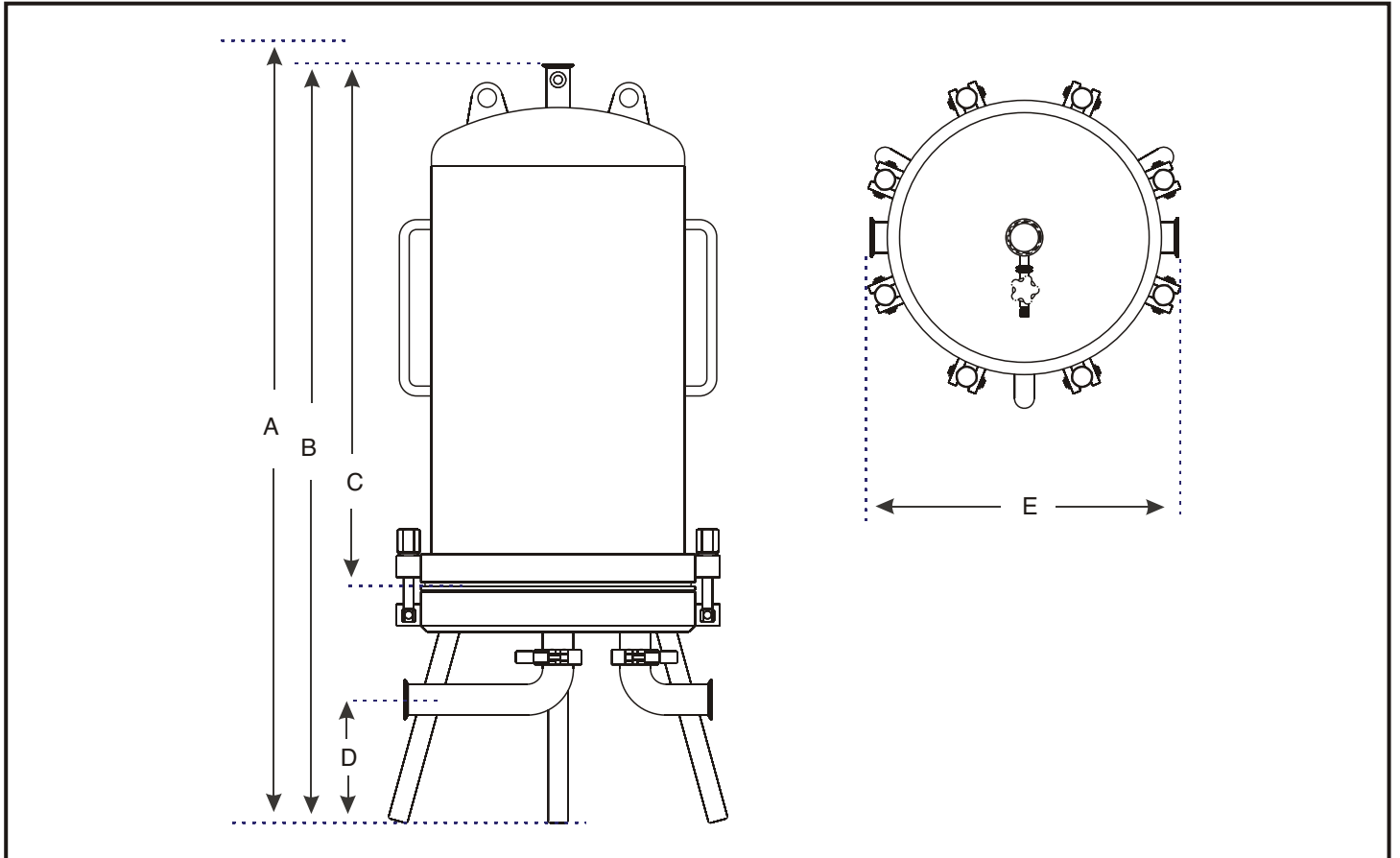
Housing Model	Cartridge Length		No. of cartridges (equivalent single length)
	Inches	mm	
3ZW2	20	508	6
3ZW3	30	762	9
3ZW4	40	1016	12
5ZW3	30	762	15
5ZW4	40	1016	20
12ZW4	40	1016	48

HOUSING SPECIFICATIONS

Maximum Operating Pressure & Temperature	10 bar @ 100°C (145 psig @ 212° F)
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 Connections:	
3ZW	1 ½" sanitary
5ZW	2" sanitary
12ZW	2" sanitary
Pressure gauge connection	1 ½" sanitary
Bleed valve connection	½" sanitary
Finish:	
External finish	Polished to 0.4µm
Internal finish	Polished to 0.4µm

Options (see Ordering Guide on back)





STANDARD MODEL WEIGHTS AND DIMENSIONS

Model Housing	Dome Weight	Dimensions				
		A Clearance Required	B Height of Housing	C Height of Dome	D Connection Height	E Width
	kg	mm	mm	mm	mm	mm
3ZW2	16	1650	1070	680	200	345
3ZW3	19	2253	1320	925		
3ZW4	22	2725	1560	1200		
5ZW3	23	2260	1325	935	180	400
5ZW4	27	2750	1565	1185		
*12ZW4	57	3040	1820	1220	370	543

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

*Models include lifting lugs on the dome.

ZW Standard Housing Ordering Guide		
MODEL	DESCRIPTION	PART NUMBER
3ZW2	3 around 20" sanitary filter housing	AK200040421
3ZW3	3 around 30" sanitary filter housing	AK200040439
3ZW4	3 around 40" sanitary filter housing	AK200040447
5ZW3	5 around 30" sanitary filter housing	AK200040538
5ZW4	5 around 40" sanitary filter housing	AK200040546
12ZW4	12 around 40" sanitary filter housing	AK200115660

Housings are supplied with standard silicone gaskets.

For more information, please contact your local 3M Purification distributor.

Model ZW Housing Integrated System

Model ZW 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 distributor.

Applications Support - SASS

3M Purification's Scientific Applications Support Services (SASS) is staffed by scientists and engineers, with state-of-the-art laboratory facilities. SASS staff, familiar with pharmaceutical, food and beverage, fine chemicals, and micro-electronics filtration and separations, work closely with customer applications to recommend the most effective and economical 3M Purification filtration system.

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 PURIFICATION 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.

Limitation of Liability

3M Purification Pty Limited will not be liable, to the extent permitted by law, for any loss or damage from the use of the Product(s), whether direct, indirect, special, or consequential, regardless of the legal theory asserted, included warranty, contract, negligence or strict liability.



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