

# Solventum™ ZMS, ZVS, ZMT and ZVT Series

## Sanitary design filter housing

### Single around single open end

Solventum ZMS, ZVS, ZMT and ZVT series filter housings are designed for critical clarification and sterile filtration applications. These housings are configured as Single Open End (SOE) Single Around in 316L stainless steel. Manufactured to strict quality standards and from high quality materials, the Solventum ZMS, ZVS, ZMT and ZVT series filter housings meet the exacting requirements of the pharmaceutical, food & beverage and microelectronics industries. Solventum ZMS, ZVS, ZMT and ZVT series filter housings are designed for liquid or gas service and can easily be cleaned-in-place (CIP), steamed-in-place (SIP) or hot water sanitized.

The four product families are designed to accommodate a variety of Single-Open-End (SOE) filter cartridges in different configurations. The T-style has the inlet and outlet at the bottom of the housing, while the in-line has the inlet at the top. The in-line can be used for vent filtration.

Series	Configuration	Filter cartridge	Inlet/Outlet	Vent/Drain	Gauge port	Cartridge height
1ZMS	T-style	SOE 226	1"	1/2"	1.5"	10", 20", 30"
1ZVS	In-line	SOE 226	1.5"	1/2"	None	
1ZMT	T-style	SOE 222	1"	1/2"	1.5"	
1ZVT	In-line	SOE 222	1.5"	1/2"	None	

The end treatments on "SOE 226" filter cartridges consist of a plug-in outlet with locking tabs and 226 double O-Rings and a spear (Code 7 / Code "B"). The end treatments on "SOE 222" filter cartridges consist of a plug-in outlet with 222 double O-Rings and flat cap (Code 3 / Code "F").

ZMS, ZVS, ZMT and ZVT Series Filter Housings are offered in a high quality polished surface finish for ease of cleaning. Wetted surfaces are electropolished to a 32 micro inch RA (0.8 µm) surface finish to help limit bacterial and particulate adhesion.

The 226 bayonet cartridge positive locking retention mechanism reduces the chance of cartridge disengagement during back pressure surges. A 300 Series stainless steel clamp secures the housing base and dome permitting rapid filter change-outs. Each filter housing is hydrostatically tested to confirm pressure-rating performance. Housings are supplied with gaskets which comply with USP Class VI for pharmaceutical applications and food contact regulations FDA 21 CFR 177.2600 and (EC)1935/2004. Contact your Solventum Representative for more details.

## Features & benefits

### 316L Stainless steel construction

- Provides corrosion resistance for long term application service

### Polished surface finish 32 micro inch RA (0.8 µm)

- Helps minimize bacterial/particulate adhesion

### Housings accommodate One 10 inch, 20 inch, 30 inch filter cartridges

- Suitable for small to intermediate product batches and tank vent applications

### Solventum™ ZMS and ZVS Series Filter Housings accept style 226 (Code 7)

- Cartridge locks into place providing secure installation even under back pressure conditions

### Solventum™ ZMT and ZVT Series Filter Housings accept style 222 (Code 3)

### Sanitary design vent and drain

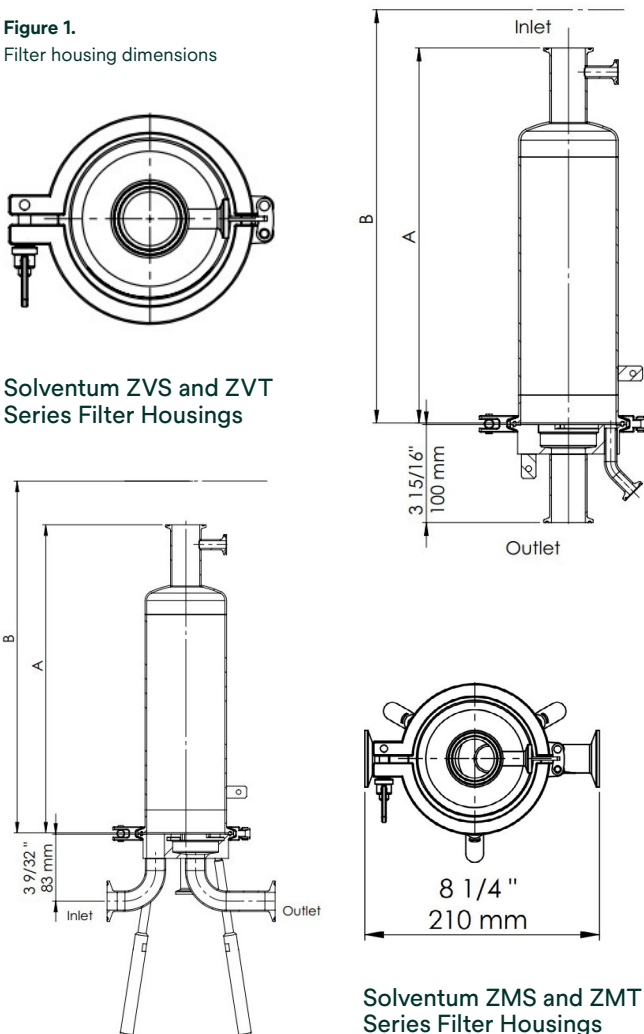
- Easy to clean, helps limit cross contamination, no threaded parts in contact with process fluids

### Clean-in-Place (CIP)/Steam-in-Place (SIP) design

- Permits easy cleaning, sterilization or sanitization in place (in-situ)



Figure 1.  
Filter housing dimensions



Solventum ZVS and ZVT  
Series Filter Housings

Solventum ZMS and ZMT  
Series Filter Housings

## Operating parameters and specifications

### Connections

Inlet/Outlet — ZMS/ZMT	1 in. sanitary fitting
Inlet/Outlet — ZVS/ZVT	1-1/2 in. sanitary fitting
Vent & Drain	1/2 in. sanitary fitting
Gauge Port (ZMS & ZMT only)	1-1/2 in. sanitary fitting

### Filter cartridge style

**Solventum™ 1ZVS/1ZMS Series Filter Housing:** Double 226 O-ring with bayonet locking tabs and spear top (Code 7)

**Solventum™ 1ZMT/1ZVT Series Filter Housing:** Double 222 O-ring with flat cap top (Code 3)

Shipping weight	A
1 High	18lbs. (8 kg)
2 High	20lbs. (9 kg)
3 High	25lbs. (11 kg)

### Maximum allowable working pressure

150 psig (10.3 Bar)

### Maximum temperature

212°F (100°C)

### Sterilization/Sanitization

In-situ steam sterilization	30 minutes @ 250°F (121°C)
Hot water sanitization	30 minutes @ 176°F (80°C)

Dimensions	A	B
1ZVS1/1ZMS1	15.1" (384mm)	28.5" (725mm)
1ZVS2/1ZMS2	24.7" (627mm)	46.4" (1180mm)
1ZVS3/1ZMS3	34.6" (879mm)	66.1" (1680mm)
1ZVT1/1ZMT1	13.5" (345mm)	23.9" (610mm)
1ZVT2/1ZMT2	23.3" (590mm)	43.3" (1100mm)
1ZVT3/1ZMT3	33.2" (845mm)	63.1" (1600mm)

# Solventum™ ZMS, ZVS, ZMT, ZVT Series Filter Housings ordering guide

Filter Model	Description	Part Number
1ZMS1	10 inch Sanitary T-Style SOE 226 Filter Housing	51210901
1ZMS2	20 inch Sanitary T-Style SOE 226 Filter Housing	51210902
1ZMS3	30 inch Sanitary T-Style SOE 226 Filter Housing	51210903
1ZVS1	10 inch Sanitary In-line SOE 226 Filter Housing	51211101
1ZVS2	20 inch Sanitary In-line SOE 226 Filter Housing	51211102
1ZVS3	30 inch Sanitary In-line SOE 226 Filter Housing	51211103
1ZMT1	10 inch Sanitary T-Style SOE 222 Filter Housing	51211001
1ZMT2	20 inch Sanitary T-Style SOE 222 Filter Housing	51211002
1ZMT3	30 inch Sanitary T-Style SOE 222 Filter Housing	51211003
1ZVT1	10 inch Sanitary In-line SOE 222 Filter Housing	51211201
1ZVT2	20 inch Sanitary In-line SOE 222 Filter Housing	51211202
1ZVT3	30 inch Sanitary In-line SOE 222 Filter Housing	51211203

Please consult with your Solventum Representative to determine the appropriate part number for your application.

**Intended Use:** Solventum™ ZMS, ZVS, ZMT and ZVT Series Filter Housings are intended for use in various filtration applications such as industrial, food and beverage and pharmaceutical in accordance with the applicable filter product instructions and specifications. Since there are many factors that can affect a product's use, the customer and user remain responsible for determining whether the Solventum product is suitable and appropriate for the user's specific application, including user conducting an appropriate risk assessment and evaluating the Solventum product in user's application for safety, regulatory compliance, performance and any other requirements.

**Restrictions on Use:** Solventum advises against the use of these Solventum products in any application other than the stated intended use(s) since other applications have not been evaluated by Solventum and may result in an unsafe or unintended condition. Refer to the applicable filter product instructions and specifications for product specific restrictions on use.

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