



Food and Beverage

# SUPRApak S Series Filter Housings

SUPRApak™ Filtration  
for small batch depth filtration



SUPRApak S series filter housings are designed for use with SUPRApak S filter modules, to handle small batch, high value food and beverage filtration applications.

### Description

SUPRApak S series filtration units provide a closed system approach to high capacity depth filtration, maximizing product protection and minimizing product losses.

SUPRApak S units hold one SUPRApak module (Figure 1), representing about 0.5 m<sup>2</sup> (5.4 ft<sup>2</sup>) of filtration area in a very compact and low hold-up volume design.

The units also provide a logical choice for carrying out small-scale pilot trials, to demonstrate the operation and benefits of this revolutionary alternative to classical flat sheet filtration.

### Features and Benefits

Features	Benefits
Closed filtration system	<ul style="list-style-type: none"> <li>Increased process safety and product quality; no drip losses; minimum operator exposure to process fluids</li> </ul>
Compact design accommodates high sheet area	<ul style="list-style-type: none"> <li>High throughput filtration for small batch production</li> </ul>
Drainable, low hold-up volume assembly	<ul style="list-style-type: none"> <li>Higher product yield; minimized cleaning costs</li> </ul>
High quality surface finish, sanitary and crevice-free design	<ul style="list-style-type: none"> <li>Enhanced cleanability</li> </ul>
Clamp coupling housing closure	<ul style="list-style-type: none"> <li>Ease of handling during filter change-out and cleaning</li> </ul>
Simple, quick installation and servicing	<ul style="list-style-type: none"> <li>Reduced labor and maintenance costs; reduced process downtime</li> </ul>
ATEX (94/9/EC) Group II Category 2 certification available	<ul style="list-style-type: none"> <li>Suitable for use in potentially explosive environments</li> </ul>

### Specifications

Minimum / Maximum Operating Pressure <sup>1,2</sup>	-1 to 6 bar (-14.5 to 87 psig)	
Minimum / Maximum Operating Temperature <sup>1</sup>	-10 to 130 °C (14 to 266 °F)	
Materials of Construction	Wetted parts 1.4404 (AISI 316L stainless steel)	
Sealing Materials <sup>3</sup>	EPDM elastomer	
Internal Surface Finish	≤ 0.8 micron Ra (≤ 32 Ra microinches), electropolished	
Internal Welds	Dressed and blended to provide uniform ripple and crevice-free surface to ≤ 0.8 micron Ra (≤ 32 Ra microinches)	
Connections	Inlet/Outlet	DN 25 (DIN 11851) 1 inch sanitary clamp coupling (ISO 2852)
	Vent	DN 6 (6 mm / 0.24 inch) OD hose nipple
	Drain (optional)	DN 6 (6 mm / 0.24 inch) OD hose nipple
Filter Module Compatibility <sup>4</sup>	SUPRApak S series modules	

<sup>1</sup> Maximum operating pressure and temperature ratings are vessel ratings only. Safe operation will also depend on filter module use. For compatibility details, please contact Pall.

<sup>2</sup> Design satisfies EC Pressure Equipment Directive (PED) 97/23/EC (Fluid Group 1, Category I). Pressure rating is for liquid or gas.

<sup>3</sup> Seal materials meet requirements for food contact use as detailed in FDA 21 CFR Section 177.2600, and EC Regulation 1935/2004. Please contact Pall for additional options.

<sup>4</sup> Refer to Pall Food and Beverage SUPRApak module literature for additional guidelines on use.



Figure 1: The SUPRApak S filtration assembly consists of one module and the housing.



# SUPRApak S Series Filter Housings

## Technical Information

SUPRApak S housings are provided in 'WA' or 'SA' design. The 'SA' design includes a standard accessory package.

**Nominal Dimensions in mm (inches)** — for specific dimensions, please contact Pall<sup>5</sup>

A	B	C	D	E	F	G	H <sup>6</sup>	I	J	K	L
592 (23.3)	476 (18.7)	174 (6.9)	395.5 (15.6)	760 (29.9)	207 (8.1)	174.4 (6.9)	318 (12.5)	130 (5.1)	140 (5.5)	476 (18.7)	591.6 (23.3)

<sup>5</sup> Pall Corporation reserves the right to make dimensional modifications at any time, maintaining the same fit, form and function. Please request a general arrangement drawing if exact dimensions are required.

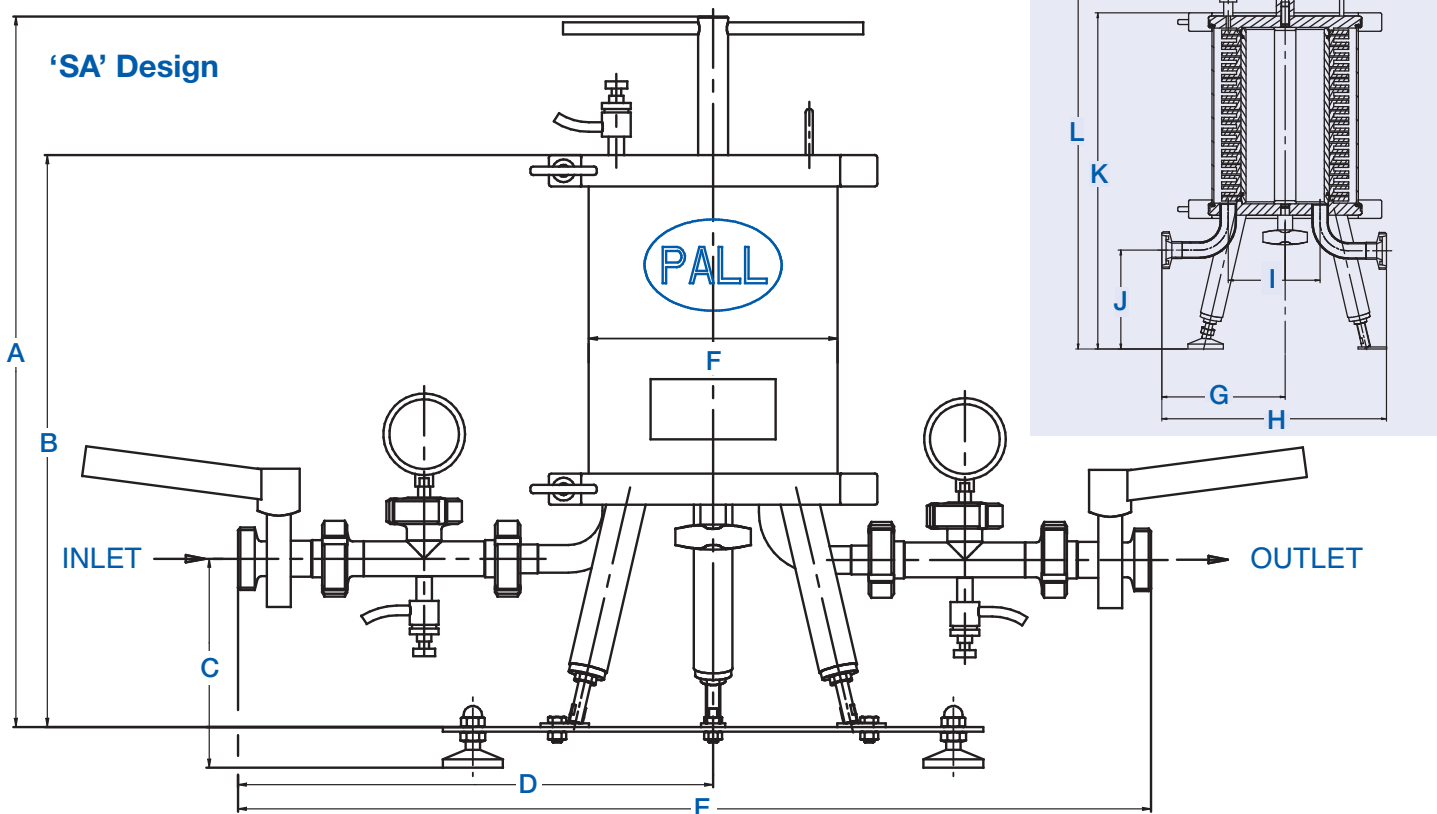
<sup>6</sup> Indicated dimension is for both DIN 11851 and clamp coupling connections.

### Volume and Weight

Volume	Housing without accessories	8 L (2.1 gal)
Weight	Housing without accessories	18 kg (40 lbs)
	Housing with standard accessories	23.5 kg (52 lbs)
	Base plate	8 kg (18 lbs)

### Standard Documentation

- Declaration of Conformity for CE Marking
- Certificate of Conformity to PED
- Certificate of surface finish
- Installation / Operating Manual (IOM)
- ATEX Certificate



This is a guide to the part numbering structure and possible options only.  
For availability of specific options, please contact Pall.

### 'WA' Design

Part Number: SPS WA   0  
Table 1 Table 2

Example Part Number: SPS WA 23 0 0

Note: See bold reference codes in the tables

Table 1

Code	Inlet/Outlet Connection Type
NW25	DN 25 DIN 11851
<b>23</b>	1 inch clamp coupling (ISO 2852)

Table 2

Code	Base Plate
<b>0</b>	Without base plate
B	With base plate



Figure 2: SUPRApak housing SPSWANW2500

### 'SA' Design<sup>7</sup>

Part Number: SPS SA NW25    
Table 1 Table 2

Example Part Number: SPS SA NW25 B D

Note: See bold reference codes in the tables

Table 1

Code	Base Plate
0	Without base plate
<b>B</b>	With base plate

Table 2

Code	Base Plate
0	Without drain valves
<b>D</b>	With drain valves

<sup>7</sup> The standard accessory package is only available with DN 25 DIN 11851 connections and includes diaphragm pressure gauges (2) and butterfly valves (2) for the feed and filtrate sides of the housing.



Figure 3: SUPRApak housing SPSSANW250D

If locally applicable pressure vessel directives require a safety device, the user must install one between the housing and the inlet butterfly valve.

### Spare Parts and Accessories

Part No.	Description	Details
ACS1002EM	Housing O-Ring Kit	EPDM
ACS1003EM	Housing O-Ring Kit	Fluorocarbon
ACS1000AM	DN 25 Seal Ring (1 pc)	DN25 DIN 11851 EPDM
ACS1001AM	DN 25 Seal Ring (1 pc)	DN25 DIN 11851 Fluorocarbon
SAN1TS23J	1 inch sanitary gasket (10 pcs)	EPDM
SAN1TS23H	1 inch sanitary gasket (10 pcs)	Fluorocarbon
ACS0700FA	DN 25 pressure gauge	DN25 DIN 11851 diaphragm pressure gauge
25590-0226-01	SUPRApak Hot fluid core (Z1) <sup>8</sup>	Stainless steel core
066001-025-02	Hook Spanner (DN 25-65)	Tool

<sup>8</sup> Required for continuous hot fluid filtration (> 40 °C / > 104 °F). See Figure 4.



Figure 4: Stainless steel core for hot fluid filtration



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