

Pall Advanta™ AVL Liquid and Gas Filter Housings

L-Flow Sanitary Filter Housings



Pall **Advanta** AVL series filter housings are L-flow pattern (in the side, out the bottom) sanitary stainless steel housings. They accommodate one single open-ended Code 7 filter cartridge of 5, 10, 20, or 30 inches (127 mm, 254 mm, 508 mm or 762 mm) nominal length. The Pall **Advanta** AVL series housings are used for either gas or liquid applications, and are designed to meet the stringent requirements of the BioPharmaceutical industry. These housings are commonly used for venting applications because of their convenient flow pattern and low pressure-loss.

Features and Benefits

- Convenient L-flow pattern facilitates piping and solves many head-space limitations
- Low-point drain facilitates drainage of steam-condensate, product or CIP fluids
- Crevice-free internal surface finish of $\leq 0.4 \mu\text{m}$ ($\leq 15 \mu\text{in.}$) Ra is ideal for sanitary applications
- Purpose-design enables inline steaming and integrity testing (by water intrusion — WIT — and forward flow)
- CE marking shows design-review to European Pressure Equipment Directive 97/23/EC (housings with volumes $> 2.5 \text{ L}$)
- Every housing supplied with a quality certificate and manufactured to ATEX Directive 94/9/EC (Group II Category 2)
- Variety of connection-styles, vents and drains offers choice and convenience

Pall Advanta AVL Liquid and Gas Filter Housings

Technical Specifications

Materials

Housing	AISI 316L stainless steel
V-band Clamp	AISI 316L Nitronic* 60
O-ring Seal	FDA-listed silicone (other elastomers also available)
Surface Finishes	Internal: Polished to 0.4 µm (15 µin.) Ra (typical) External: Polished to 0.8µm (32 µin.) Ra (typical)
Interior and Exterior	Electropolished

* Nitronic is a registered trademark of Armco, Inc.

Nominal Dimensions of Selected Housings⁽¹⁾

Part Number	Overall Height	Clearance Required ⁽²⁾	Weight (Empty)	Volume
AVL105G23LABH4 AVL105G23LDDH4 AVL105G94ABH4 AVL105G94DDH4	364 mm (14.3 in.)	150 mm (5.9 in.)	2.5 kg (5.5 lbs)	1.5 L (0.4 US gal)
AVL11G23LABH4 AVL11G23LDDH4 AVL11G94ABH4 AVL11G94DDH4	500 mm (19.7 in.)	340 mm (13.4 in.)	3.0 kg (6.6 lbs)	2.3 L (0.6 US gal)
AVL12G23LABH4 AVL12G23LDDH4 AVL12G94ABH4 AVL12G94DDH4	751 mm (29.6 in.)	590 mm (23.2 in.)	3.9 kg (8.6 lbs)	3.8 L (1.0 US gal)
AVL13G23LABH4 AVL13G23LDDH4 AVL13G94ABH4 AVL13G94DDH4	1025 mm (40.3 in.)	840 mm (33.1 in.)	4.8 kg (10.6 lbs)	5.4 L (1.4 US gal)

⁽¹⁾ All dimensions are nominal. Sales drawings showing +/- tolerances are available on request. Please contact your Pall representative or local distributor for current sales drawings.

⁽²⁾ Suggested clearance is based on completely lifting the bowl over the top of an installed filter. Alternative methods of filter change-out allow operation with more limited "head-space". Contact Pall for assistance.

Operating Conditions

Maximum Operating Pressure	-1 to 10 barg (-14.5 ⁽³⁾ to 150 ⁽⁴⁾ psig)
Maximum Operating Temperature	150 °C (300 °F)

⁽³⁾ Full vacuum.

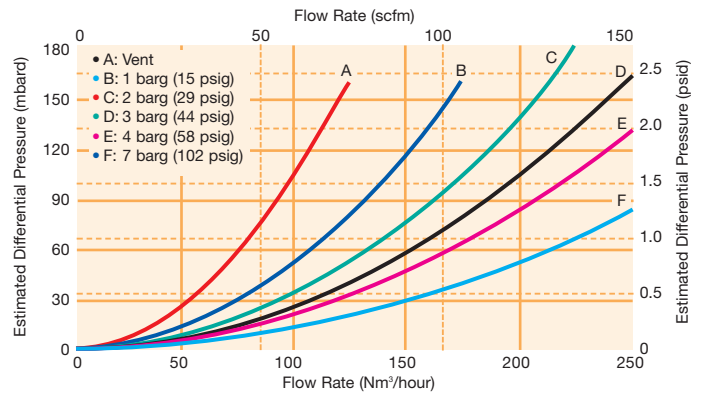
⁽⁴⁾ With compatible fluids, which do not soften, swell or adversely affect the materials.

Ordering Information

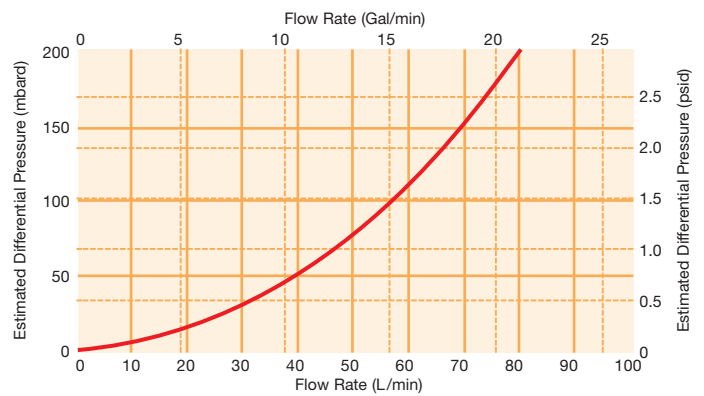
AVL	Design	1	G								
Code	Design	Code	Cartridge Type	Code	Inlet and Outlet	Code	Vent	Code	Drain	Code	Seal Material ⁽⁵⁾
-	To European Pressure Equipment Directive	05	AB05 code 2	23L	For 1½ in. sanitary flange to ISO2852	A	Quick-connect and disconnect male connector (compatible with Stäubli* coupling) with valve	A	Quick-connect and disconnect male connector (compatible with Stäubli* coupling) with valve	H4	FDA-listed Silicone
D	To European Pressure Equipment Directive with enhanced documentation including 3.1b stamped material and certification	1 2 3	AB1 code 7 AB2 code 7 AB3 code 7	94	33.7 mm (1.33 in) O.D. x 2.0 mm (0.079 in.) wall butt weld to ISO1127	B	Valve with 8 mm (0.31 in.) hose barb	B	Valve with 8 mm (0.31 in.) hose barb		
						D	For ½ in. sanitary flange connection	D	For ½ in. sanitary flange connection		
						N	None	N	None		

⁽⁵⁾ Other elastomer materials are available. Contact Pall for information. * Stäubli is a trademark of Stäubli AG.

Typical Air Flow Rates at 20 °C (68 °F)



Typical Liquid Flow Rates at 20 °C (68 °F)



Main Accessories and Spares

Part Number	Description
ACCS098CM	Diaphragm valve kit for ½ in. sanitary flange connection. Compatible with ½ in. fractional sanitary flange connection. Includes clamp and gasket.
ACCS0602EM	Valve seal kit (contains ten silicone O-rings and ten PTFE O-rings)
CC41608C00	Valve stem
LY00381	Valve knob cap
ACS0609DA	Closure clamp
ACS0428EX	EPR closure seal
ORH4P-238	Silicone housing closure gasket

Contact your Pall representative or local representative for other spares and accessories.