

PSS® Porous Metal Filter Cartridges

Pall PSS porous metal filter cartridges are made from fine stainless-steel powders sintered to form rugged high voids and fixed pore filters with high temperature, pressure, and solvent resistance. P Series cartridges begin as flat porous sheets which are shaped and welded into cylindrical elements. S Series cartridges are produced in cylindrical form with higher voids and narrower pore size distributions for greater flows at comparable ratings. Double open-ended (DOE) style cartridges are standard. They are recommended for steam service and well suited for liquid or gas applications, including solvents, chemical intermediates, heat transfer, and cryogenic fluids, polymers, pharmaceuticals, and high-temperature gases. Single open-ended (SOE) AB sanitary and threaded styles of these porous metal filter cartridges are also available.

Features

- All stainless steel construction
- Controlled and fixed pore size
- PH grade for clean steam
- Up to 2x life of competitive filters
- High pressure and corrosion resistant
- Withstands high reverse-flows
- High-temperature capabilities
- Repeatedly cleanable
- No soluble polymeric extractables
- No unloading or shedding
- Absolute rated for reliable performance
- ISO 9000 Certified Quality System
- Manufactured for use in conformance
- FDA-listed materials per 21 CFR

Materials of Construction

Component	Description
Medium	Type 316L stainless steel ¹
End Caps	Type 316 stainless steel ¹
Gasket	Buna-N (Standard) ²

Configuration³

Double open-ended (DOE), flat gasket seals



PSS Porous Metal Filter Cartridges

Diameter (Nominal Dimensions)

P Series	2.5 in (64 mm)
S Series	2.38 in (60.5 mm)

Operating Conditions

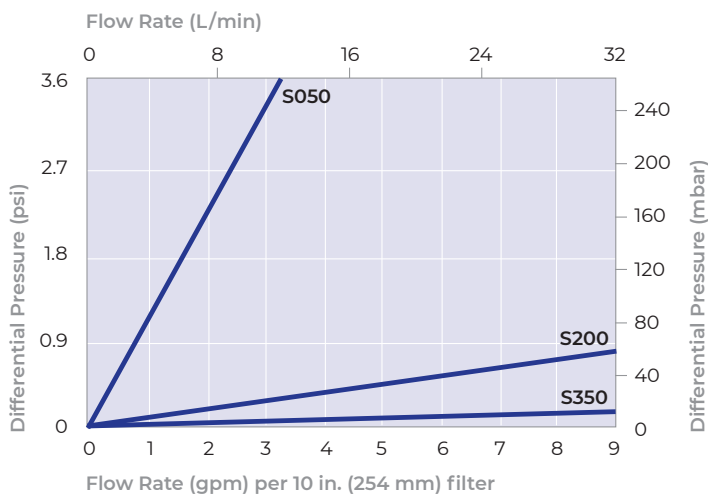
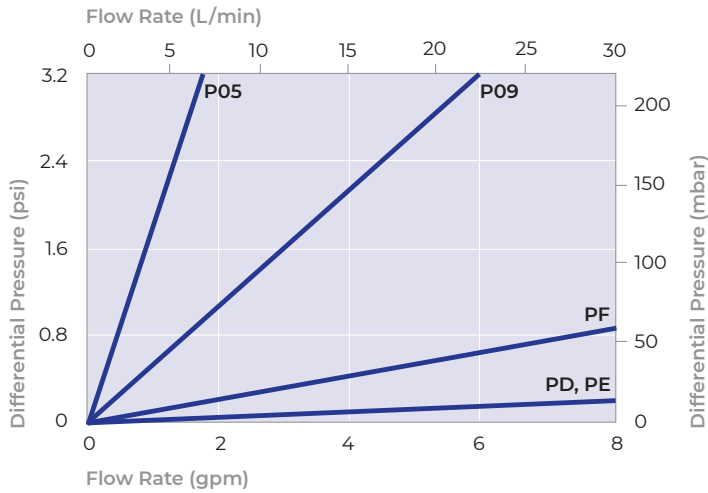
Maximum Differential Pressure ⁴	Forward and Reverse Flow Direction, 3.4 bard (50 psid) to 232 °C (450 °F)
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Recommended Maximum Flow Densities⁵

Grade	Aqueous L/min (gal/min)	Air Nm ³ /hr (acfm)
P Series		
PD	3.5 (0.9)	13 (80)
PE	2.5 (0.7)	9.5 (60)
PF	2.1 (0.6)	7.9 (50)
PH*	1.4 (0.4)	6.3 (40)
P09	1.1 (0.3)	4.7 (30)
P05	0.7 (0.2)	1.6 (10)
S Series		
S350	3.5 (0.9)	13 (80)
S200	2.5 (0.7)	7.9 (50)
S100*	1.8 (0.5)	6.3 (40)
S050	1.1 (0.3)	3.2 (20)

⁵ This product is available in single open-ended (SOE) AB sanitary and threaded styles in 10 in (254 mm) and in the DOE styles in 20 in (508 mm) and 30 in (762 mm).

Typical Liquid Flow Rates⁶



¹ Other grades and alloys available

² Other Polymers available.

³ Single open-ended AB sanitary and threaded styles available.

⁴ Minimum collapse differential pressure. Temperature limit with Buna-N gaskets: 121 °C (250 °F). Other gasket materials to 232 °C (450 °F). For temperatures to 316 °C (600 °F), or in other alloys to 677 °C (1250 °F), contact your local Pall distributor.

⁵ Ratings are absolute particulate in liquids and gases. Aqueous water, 1 cp and air flows per 10 in. (254 mm) cartridge.

⁶ Typical initial clean medium ΔP per 10 in. (254 mm) element, water at 20 °C (68 °F), 1 cp. For assistance in sizing and housing selection, contact your local Pall representative.

Ordering Information

This information is a guide to the part number structure and possible options. For availability of specific options and housing details, please contact Pall.

Part number nomenclature:

MBS100
 Table 1 Table 2 Table 3

Example: **MBS100 1 PF J** (See bold references in tables below.)

Table 1: Length

Code	Nominal Length	Filter Area
1	10 in. (254 mm)	0.05 m² (0.5 ft²)
2	20 in. (508 mm)	0.09 m ² (1.0 ft ²)
3	30 in. (762 mm)	0.14 m ² (1.5 ft ²)

Table 2: Liquid and Gas Rating

Code	Liquid Ratings ⁷	Gas Ratings ⁷
PD	55 μm	20 μm
PE	35 μm	11 μm
PF	20 μm	2.8 μm
PH*	13 μm	1.3 μm
P09	9 μm	0.8 μm
P05	5 μm	0.4 μm
S35	35 μm	11 μm
S200	20 μm	2.8 μm
S100*	10 μm	0.8 μm
S050	5 μm	0.4 μm

* This product is available in single open-ended (SOE) AB sanitary and threaded styles in 10 in (254 mm) and in the DOE styles in 20 in (508 mm) and 30 in (762 mm).

Table 3: Gasket Options

Code	Gasket Options
H13	Buna-N gaskets (Standard)
H	Viton ⁸
J	Ethylene Propylene
J7	Ethylene Propylene (Steam Service)

Other materials available on request.

⁷Liquids: > 99.98% by mod. OSU-F2 test. Gases: 100% for hard spherical particles.

⁸Viton is a registered trademark of DuPont Dow (non-FDA materials)



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The information provided in this literature was reviewed for accuracy at the time of publication. Product data may be subject to change without notice. For current information consult your local Pall distributor or contact Pall directly.

IF APPLICABLE Please contact Pall Corporation to verify that the product conforms to your national legislation and/or regional regulatory requirements for water and food contact use.

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