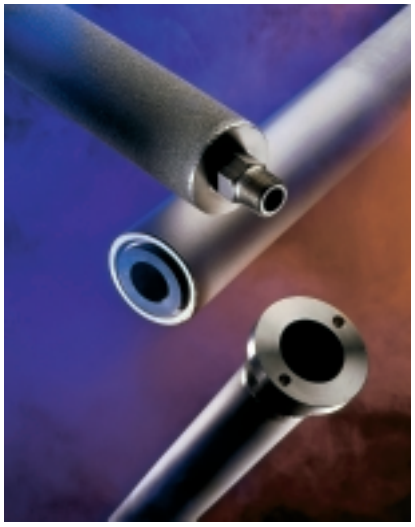
PSS® Porous Metal Filter Cartridges

Sintered Metal Powder Filters for Liquid and Gas Service



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 are also available.

Features and Benefits

- 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 with cGMP
- FDA-listed materials per 21 CFR

PSS Porous Metal Filter Cartridges

Technical Specifications

Materials of Construction

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

[1] Other grades and alloys available
[2] Other Polymers available.

Configuration[3]

Double open-ended (DOE), flat gasket seals

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

Nominal Dimensions

Diameters	**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)

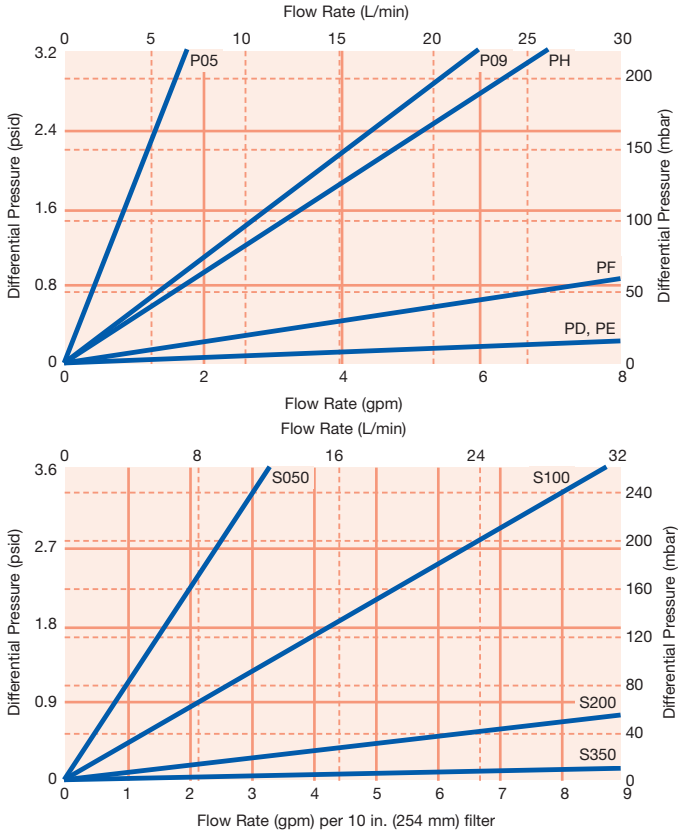
[4] Minimum collapse differential pressure. Temperature limit with Buna-N gaskets: 121 °C (250 °F). Other gasket materials to 232 °C (450 °F). For temperatures to 316 °C (600 °F), or in other alloys to 677 °C (1250 °F), contact your local Pall distributor.

Recommended Maximum Flow Densities[5]

Grade	Aqueous L/min (gal/min)	Air Nm³/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] Ratings are absolute particulate in liquids and gases. Aqueous water, 1 cp and air flows per 10 in. (254 mm) cartridge.

Typical Liquid Flow Rates[6]



[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

MBS100 ☐

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

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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

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

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

Other materials available on request.
* Viton is a registered trademark of DuPont Dow (non-FDA materials).