Rigimesh® Sintered Metal Mesh Filter Cartridges

High-flow Pleated Metal Cartridges for Liquid and Gas Service

Pall **Rigimesh** sintered metal mesh filter cartridges are constructed from fine-woven stainless steel wire mesh which is sintered at each wire contact point in a Pall-patented process to produce an extremely strong surface-sieving porous material with extremely narrow pore size distribution. Unlike unsintered meshes, **Rigimesh** media will not shift under stress. Sintering also enables the use of finer wires to produce more pores per unit area for higher flow rates and higher contaminant loading capacity. **Rigimesh** media is pleated to form double open-ended (DOE) MBS1000 style filter cartridges with applications in bulk active pharmaceutical chemical purification processes such as catalyst solids recovery and decolorizing carbon removal.

Single open-ended (SOE) AB sanitary and threaded styles are also available.

Features and Benefits

- All-stainless steel construction
- Sintered mesh screen media
- Pleated for high-capacity
- Consistent and fixed pore size
- Corrosion resistant
- High pressure 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

Rigimesh Sintered Metal Mesh Filter Cartridges

Technical Specifications

Materials of Construction

Medium	304 L stainless steel[1]
Core and End Caps	304 stainless steel[1]
Gaskets	Buna-N[2]

[1] Also available with type 316 L medium and type 316 hardware or with other alloys (special order).
[2] Other polymers available.

Configuration[3]

Double open-ended (DOE)
Flat gasket seals

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

Nominal Dimensions

Diameters	64 mm (2.5 in.)

Operating Conditions

Maximum Differential Pressure and Temperature[4]	
Forward Flow Direction	8.6 bard (125 psid) to 232 °C (450 °F)
Reverse Flow Direction	0.7 bard (10 psid) to 232 °C (450 °F)

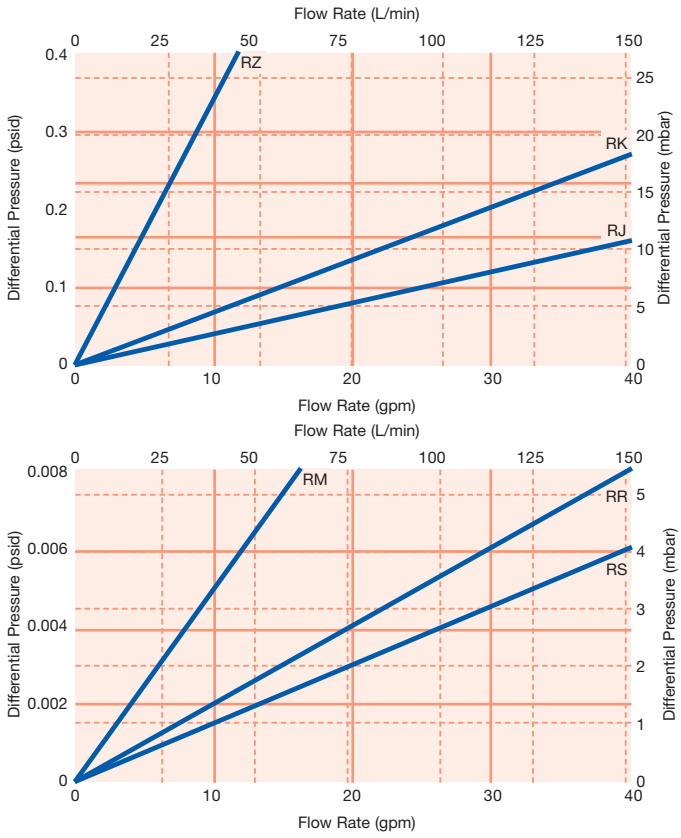
[4] Minimum collapse differential pressure. Temperature limit with Buna-N gaskets: 121 °C (250 °F). Other gasket materials to 232 °C (450 °F). For Reinforced for 50 psid (3.4 bard) Reverse-flow option, temperatures to 316 °C (600 °F), or in other alloys to 677 °C (1250 °F), contact your local Pall distributor.

Recommended Maximum Flow Densities[5]

Grade	Aqueous L/min (gal/min)	Air Nm³/hr (acfm)
RA	14 (3.7)	47 (300)
RT	11 (2.9)	38 (240)
RS	8.8 (2.3)	32 (200)
RR	7.0 (1.8)	24 (150)
RM	3.3 (0.8)	16 (100)
RJ	3.5 (0.9)	13 (80)
RK	2.8 (0.7)	11 (69)
RZ	1.8 (0.5)	6.3 (40)

[5] 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)	0.9 m² (1.0 ft²)
2	20 in. (508 mm)	0.19 m² (2.0 ft²)
3	30 in. (762 mm)	0.28 m² (3.0 ft²)
4	40 in. (1016 mm)	0.37 m² (4.0 ft²)

Code	Liquid Ratings[7]	Gas Ratings[7]
RA	450 µm	350 µm
RT	225 µm	175 µm
RS	105 µm	85 µm
RR	70 µm	55 µm
RM	45 µm	25 µm
RJ	25 µm	18 µm
RK	18 µm	13 µm
RZ[8]	15 µm	2 µm

[7] **Liquids:** > 99.98% by mod. OSU-F2 test.
Gases: 100% for hard spherical particles.
[8] **Supra**mesh® (Sintered powdered metal and mesh composite medium).

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).