

## Sinterflo® M

### Pleated Metal Mesh Filter Cartridges



Pleated metal mesh filter cartridges demonstrate good permeability, high tensile strength and are available from single wrap designs through to complex multi-layered structures in pleated constructions to optimise the area available. These meshes can be manufactured in diffusion bonded versions to increase performance security of pore shape and size and have the broadest range of pore sizes of any filter media type.

Sinterflo® M precision woven meshes are manufactured in various types of weaves. Plain square weave is available for simple sieving duties through various weave patterns (Reverse Plain Dutch, Broad Mesh Twill and Single Plain Weave). Dutch Twill Weave is provided for the most comprehensive selection of surface filtration duties. Sinterflo® M is available in 316/316L stainless steel as standard with other alloys such as 304L stainless steel, Inconel® and Monel® on request.

#### Ordering Information

**Sinterflo** [Table 1](#) - [Table 2](#) [Table 3](#) - [Table 4](#) - [Table 5](#) - [Table 6](#) [Table 7](#) [Table 8](#)

**Table 1** Media Type

M Sinterflo® M (mesh)

**Table 2** End Fitting

226	226 fitting
222	222 fitting
DOE	Double open ended fitting
NP1	1" NPT
NP5	1.5" NPT
NP2	2" NPT
BS1	1" BSP taper
BS4	1.25" BSP taper
BS5	1.5" BSP taper
BS2	2" BSP taper

**Table 3** Cartridge Type

P Pleated

Note: Other non-standard lengths, ratings and end pin options are available on request.

**Table 4** Micron Rating

0003	3µm
0005	5µm
0010	10µm
0015	15µm
0025	25µm
0030	30µm
0035	35µm
0040	40µm
0050	50µm
0070	70µm
0100	100µm
0150	150µm
0250	250µm

**Table 5** Cartridge Length

05	5" (125mm)
10	10" (250mm)
20	20" (498mm)
30	30" (745mm)
40	40" (1012mm)

#### Typical Applications

- Catalyst recovery and retention
- Gasification and chemical production
- Vent filters
- Agrochemical
- Steam filtration (culinary and process)
- Pharmaceutical powder recovery

#### Features and Benefits

- Precise aperture in size and shape
- Good permeability
- Fully welded construction with no adhesives or fillers
- Available in the broadest range of pore sizes of any filter media type

**Table 6** Seal Material

E	EPDM
N	Nitrile
S	Silicone
P	PTFE (DOE only)
V	Viton®
F	FEP encap. Viton® (222/226 only)
T	FEP encap. Silicone (222/226 only)
Y	FEP encap. EPDM (222/226 only)
C	Chemraz
X	No seal supplied

**Table 7** Guard/Support Option

G	Guard
N	None

**Table 8** Fin Option

F	Fin (226/222 only)
N	No fin

## Specifications

### Materials of Manufacture

316/316L stainless steel standard. 304L stainless steel, Inconel®, Hastelloy® and Monel® available on request or by process selection.

### Cartridge Dimensions\*

Diameter:	66mm (2.6") standard
Length:	05: 125mm (5")
	10: 250mm (10")
	20: 498mm (20")
	30: 745mm (30")
	40: 1012mm (40")

\* Other diameters and lengths available on request.

### Effective Filtration Area

0.13m<sup>2</sup> (1.40ft<sup>2</sup>) per 250mm (10") cartridge

### Gaskets and O-Rings\*

EPDM as standard. Chemraz®, nitrile, PTFE, silicone, Viton®, FEP coated EPDM, FEP coated silicone, FEP coated Viton® available on request or by process selection.

\* FDA approved and USP Class VI.

### Typical Maximum Differential Pressure (all lengths)

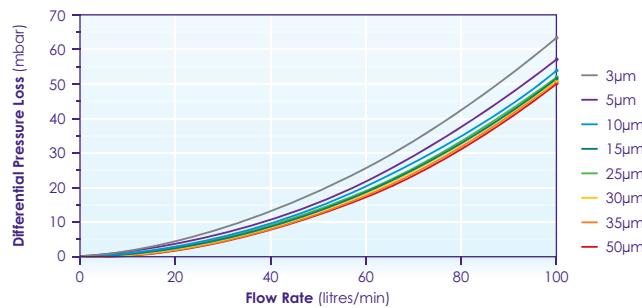
Normal flow direction (out to in): Up to 25bar (363psi)

Reverse flow direction (with guard): 3bar (44psi)

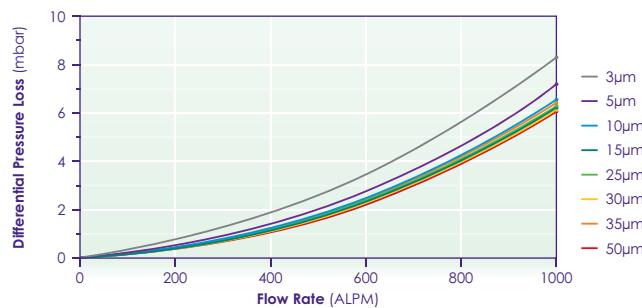
### Operating Temperature

Maximum continuous:	From -195°C (-319°F) to 340°C (644°F) seal limiting
	From -269°C (-452°F) to 1000°C (1832°F) alloy limiting

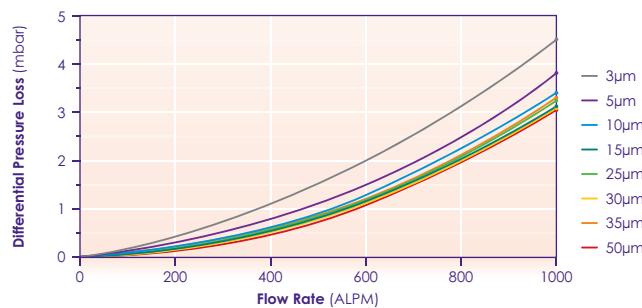
### Typical Flow Rates in Water\*



### Typical Flow Rates in Air\*



### Typical Flow Rates in Steam\*



\* Using a 10" element. Water and air at ambient temperature and 1 bar (A). Steam is dry saturated steam at 1bar (A).

### Sinterflo® M Stainless Steel Media Grades

Micron Rating (micron code)	Liquid Rating* (µm) (98.00% efficiency)	Gas Rating (µm) (99.9% Efficiency)
3 (0003)	3	10
5 (0005)	5	18
10 (0010)	10	25
15 (0015)	15	35
25 (0025)	25	36
30 (0030)	30	40
35 (0035)	35	50
40 (0040)	40	60
50 (0050)	50	70
70 (0070)	70	110
100 (0100)	100	140
150 (0150)	150	200
250 (0250)	250	260
		350

\* Hard spherical particle maximum passed.