

Ultramesh® P-SM

Pre- and final filter with with absolute retention rates for particle removal from aqueous solutions, water, liquids, and gases

Product Description

Ultramesh P-SM filters are constructed entirely of stainless steel, including the wire mesh media, end caps and inner support core. The retention rate extends from 5 µm up to 250 µm.

Features

Ultramesh P-SM filters are very economical: the stainless steel mesh can be regenerated many times in an ultrasonic bath or via back-flush, allowing for long filter life. The contact points of the mesh material are welded firmly together, which ensures constant pore diameter even under extreme operating conditions.

The heavy-duty construction of the Ultramesh filter makes it suitable for high-viscosity liquids. The filter withstands a differential pressure of up to 75 psid (flow from outside to inside). Ultramesh can be used in temperatures up to 390°F.

Applications

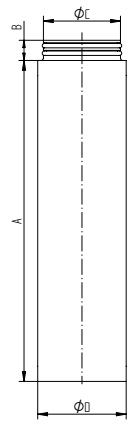
- Water filtration
- Solvents
- Food and beverage
- Cosmetics
- Salt- and Seawater
- Coolants
- Chemicals
- Pharmaceutical industry
- Syrup
- Paints
- Compressed air and other gases



Ultramesh® P-SM is a regenerable stainless steel mesh filter for liquids, air, and gases

Features	Benefits
Filter media, end caps, and inner support are stainless steel	Good durability against most liquids and gases
Heavy-duty construction	Can also be used for high-viscosity liquids
Welded contact points of the filter media	Constant pore diameter under all operating and process conditions
Multi-layered stainless steel mesh media	Absolute retention rate from 5 µm up to 250 µm
Available in 13 sizes	Optimum filter size for the individual application
Multiple regenerations with ultrasonic bath	Minimum filtration costs, especially at high contaminant load
All stainless steel construction	Temperature range from -60°F up to 390°F
Backflushable	In-line-installation, ease of operation

Dimensions					
Element size	A (inches)	B (inches)	ØC* (inches)	ØD* (inches)	Correction Factor**
03/10	3	0.5	1.2	1.65	0.12
04/10	4	0.5	1.2	1.65	0.17
04/20	4	0.55	1.5	2	0.19
05/20	5	0.55	1.5	2	0.25
05/25	5	0.55	1.5	2.44	0.32
07/25	7	0.55	1.5	2.44	0.47
05/30	5	0.6	2.5	3.4	0.46
07/30	7	0.6	2.5	3.4	0.68
10/30	10	0.6	2.5	3.4	1.00
15/30	15	0.6	2.5	3.4	1.55
20/30	20	0.6	2.5	3.4	2.10
30/30	30	0.6	2.5	3.4	3.28
30/50	30	0.6	2.5	5.5	5.89



*Plug-type connection with double o-ring
 **Correction factor filtration surface

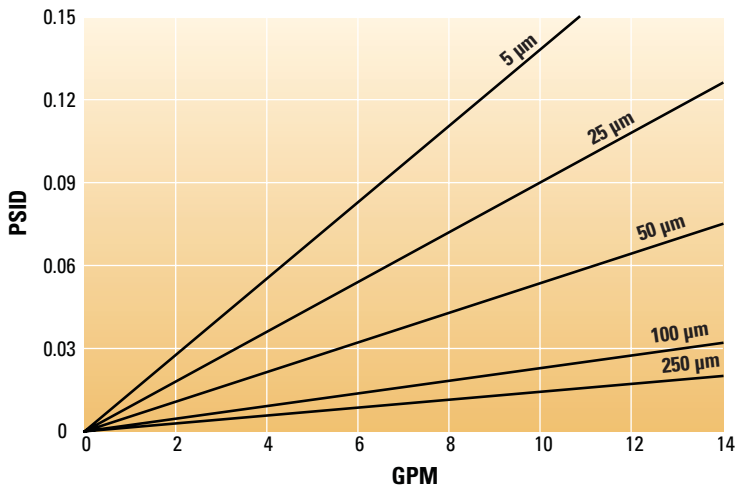
Filtration surface
 1/2 ft² for 10" element (10/30)
 For other sizes see correction factor

Regeneration
 Ultrasonic bath
 Back-flush ($\Delta p < 14.5$ psid)

Temperature range
 -60°F to 390°F*
 * > 300°F welded end caps, > 390°F on request

Absolute retention rate
 5 µm, 25 µm, 50 µm, 100 µm, 250 µm

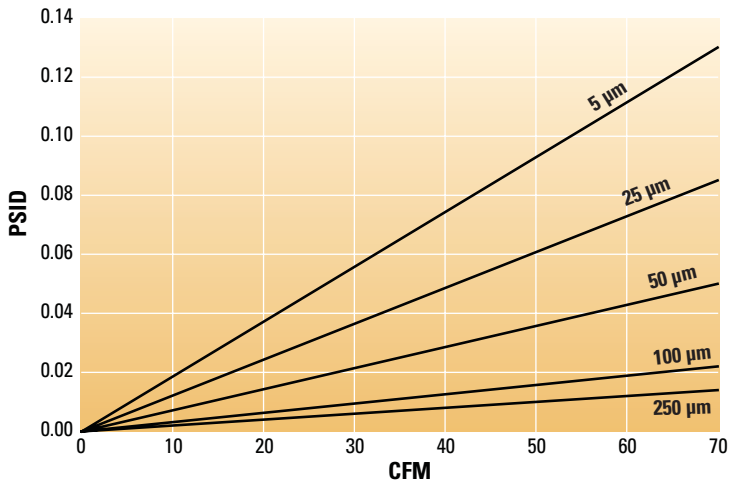
P-SM Pressure Drop per Ten Inch Equivalent (TIE) — Water



Materials	
Filter medium:	304 stainless mesh
Inner core:	304 stainless steel
End caps:	304 stainless steel
Bonding material:	Plastic steel*
O-Rings:	EPDM**

* > 300°F welded end caps
 ** Silicone, Perbunan, Viton®, Aflas or Kalrez on request
 Viton is a registered trademark of E.I. du Pont de Nemours and Company

P-SM Differential Pressure per Ten Inch Equivalent (TIE) — Air



Maximum differential pressure*	
Operating temperature	Differential pressure
70°F	73 psid

* In flow-through direction (outside to inside) only



Donaldson Company, Inc.
 Process Filtration
 P.O. Box 1299
 Minneapolis, MN
 55440-1299 U.S.A.
 Tel 800.543.3634 (USA)
 Tel 800.343.3639 (within Mexico)
 processfilters@mail.donaldson.com
 www.donaldson.com

Information in this document is subject to change without notice.
 © 2007 Donaldson Company, Inc.
 Printed in U.S.A. on recycled paper
 Bulletin No. PRO-217