

# Filter Bag Viscosity – Flow Rate Conversion Chart

## To Use Chart

- 1 Select micron rated bag at the bottom of the chart.
- 2 Follow the corresponding vertical line up until it intersects the selected viscosity in centipose.
- 3 Cross at right angle to the left hand ordinate, which will indicate the flow rate at 1 PSI pressure drop.

## Notes:

- A For greater than 1 PSI ΔP simply multiply the resultant GPM times PSI desired to obtain flow - or - divide desired flow by the resultant flow to obtain ΔP.
- B For #2 size filter bag and for extended life filter bag multiply results by a factor of 1.88.
- C For #3 size filter bag divide results by a factor of 3.48.
- D For #4 size filter bag divide results by a factor of 1.99.
- E For bags with covers, reduce results by 25%.

## Conversion Formula\*

$$\frac{(\text{viscosity}) (\text{factor}) (\text{sp.gr.})}{5.62} = \text{absolute viscosity (centipoises)}$$

\*The conversion formula is approximately valid when the numerator is greater than 250. For other values consult appropriate Chemical Handbook.

## Viscosity Units at 70 Degrees F Factor

Demmier #1 .....	14.6
Demmier #10 .....	146.0
Engler .....	34.5
Ford Cup # .....	17.4
MacMichael .....	1.92
Parlin Cup #2 .....	187.0
Redwood Admiralty .....	10.87
Redwood Standard .....	1.095
Saybolt Furool .....	10.0
Saybolt Seconds Universal .....	1.0
Stormer .....	approx. 13

To convert gallons per minute (gpm) to litres per minute, multiply by 3.785.

## Code for Filter Media:

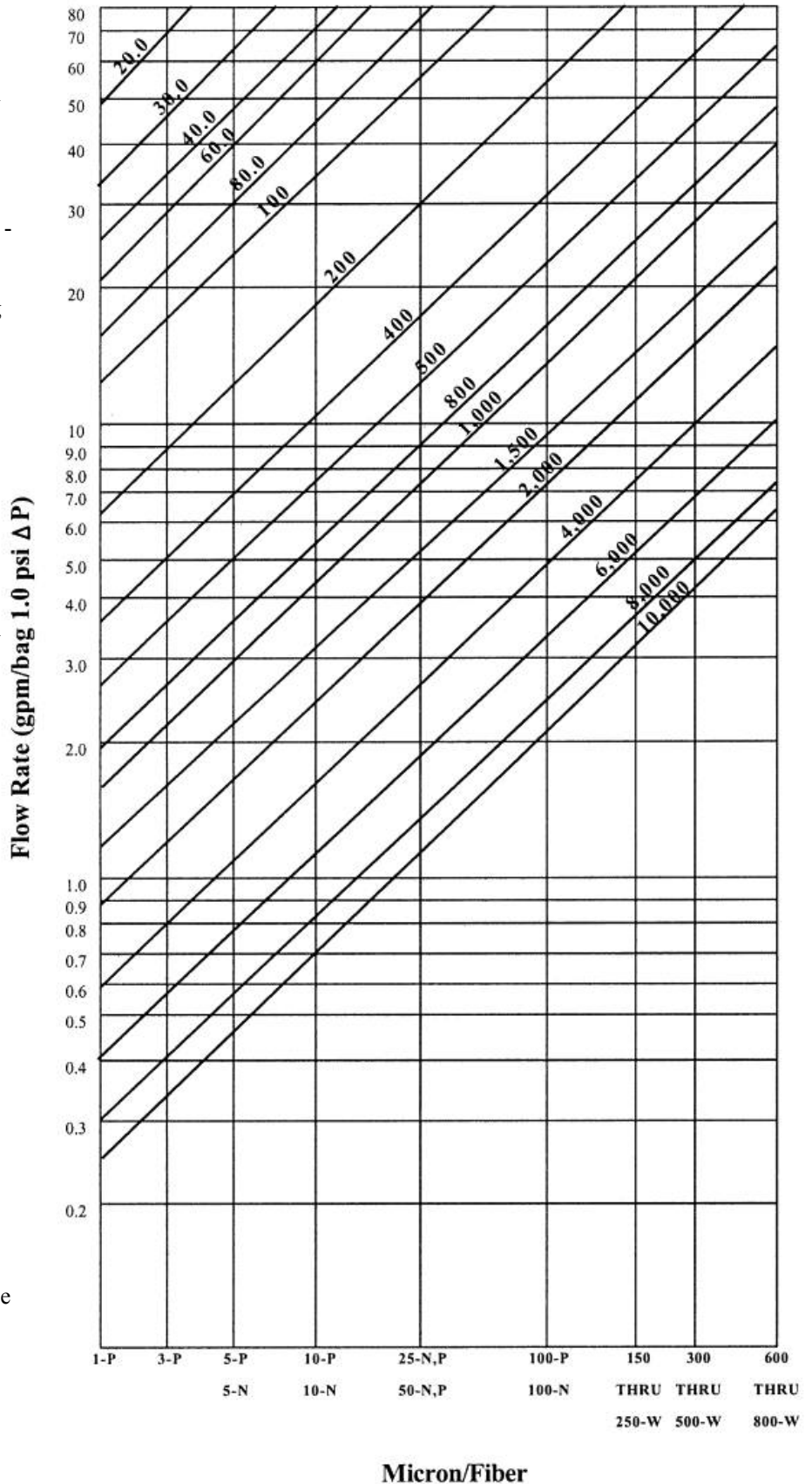
- P = Polypropylene/Polyester Felts
- N = Nylon Felts
- W = Woven Mesh

- Note: (1) No. 1 size filter bag not to exceed 80 gpm.  
 (2) Where centipose lines run off at 80 gpm, the differential pressure is less than 1 psi.

## Filter Bag Surface Area:

Size 1	2.33 sq ft
Size 2	4.37 sq ft
Size 3	0.67 sq ft
Size 4	1.17 sq ft

(Flow Rate for No. 1 Size Filter Bag at a Given Viscosity at a 1.0ΔP)



Micron/Fiber