

Filter Bag Pressure Drop

The graphs give the clean pressure drop through a number 2 size bag for water, 1 CPS @ 68°F

To determine the pressure drop caused by the filter bag, follow these steps:

Step 1 Select the type of bag, micron rating and flow rate, determine the pressure drop for water, 1 cps @ 68°F, for a size #2 bag.

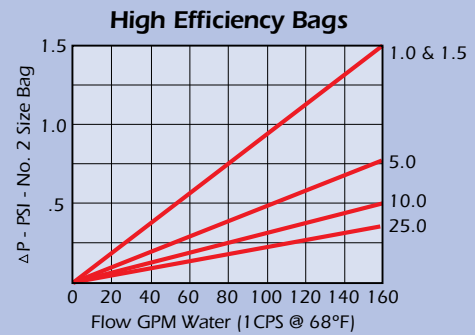
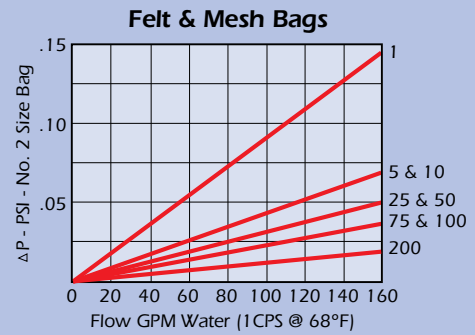
Step 2 Correct for bag size from the Bag Size Correction table at the right if the bag size is different than a #2 size.

Step 3 If the viscosity of the liquid is greater than 1 cps (water@ 68°F), multiply the result from step 2 by the proper correction factor from the Viscosity Correction table at the right.

The value obtained in Step 3 is the clean pressure drop caused by the filter bag.

SUMMARY

For new applications, the clean pressure drop of the system, housing and bag should be 2.0 PSI or less. The lower the value is, the more contaminant a bag will hold. For applications with low dirt loading, this value can go to 3.0 PSI or more. Consult the factory for recommendations when the clean pressure drop of the system exceeds 3.0 PSI.



Bag Size Correction		
Bag Size	Dia. x Length	Multiply By
1	7.2 x 16	2.25
2	7.2 x 32	1.0
3	4.3 x 8	9.0
4	4.3 x 14	4.5
8	5.7 x 21	2.25
9	5.7 x 37	1.50

Viscosity Correction	
Viscosity CPS	Correction Factor
50	4.5
100	8.3
200	16.6
400	27.7
800	50.0
1000	56.2
1500	77.2
2000	113.6
4000	161.0
6000	250.0
8000	325.0
10,000	430.0