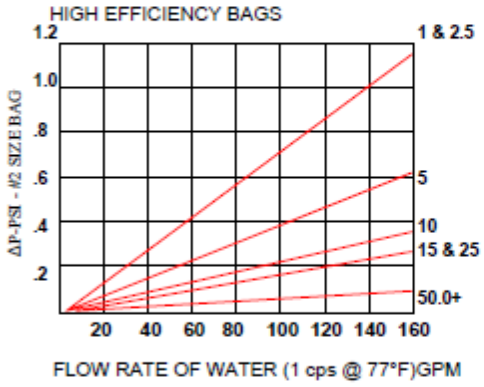
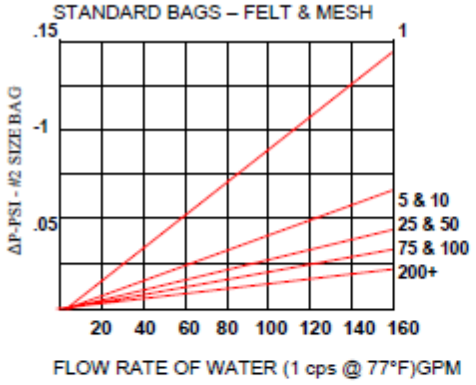
# *Filter Bag Pressure Drop - ΔPB*




**Step 1** The graphs show the ΔPB produced by a #2 size bag for water, 1 cps @ 77°F. The pressure drop is determined from the type of bag, the micron rating and flow rate.

**Step 2** Correct for bag size from the table below if the size is different than #2 size.

| Bag Size | Dia. X Length | Multiply By |
|---|---|---|
| 2 | 7.06 x 32 | 1.00 |
| 9 | 5.5 x 32 | 1.50 |
| 1 | 7.06 x 16 | 2.25 |
| 8 | 5.5 x 21 | 2.25 |
| 7 | 5.5. x 15 | 3.00 |
| 4 | 4.15 x 14 | 4.50 |
| 3 | 4.15 x 8 | 9.00 |

**Step 3** If the viscosity of the liquid is greater than 1 cps (water @ 77°F). Multiply the result from step 2 by the proper correction factor from the chart below.

| 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 |
| 10000 | 430.0 |

The value obtained in step 3, ΔPB is the clean pressure drop caused by the filter bag.

**SUMMARY**

System Pressure Drop = **ΔPS = ΔPH + ΔPB**

For new applications the **ΔPS** should be 2.0 psi or less. For high contaminant loading applications, this value should be as low as possible. The lower this value is, the more contaminant a bag will hold. For applications with nominal contaminants, this value can go to 3.0 psi or more. Consult factory for specific recommendations when the clean **ΔPS** exceeds 2.0 psi.