



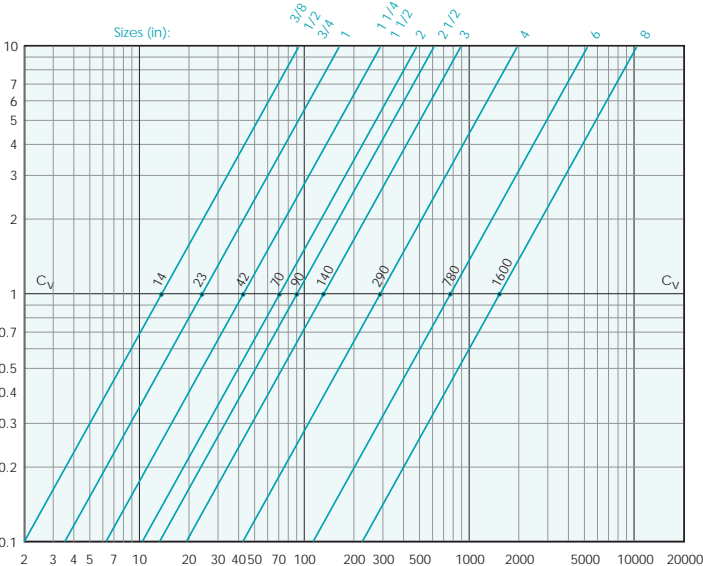
# TECHNICAL AND PERFORMANCE DATA

## PRESSURE DROP CHARTS ♦ WYE & BASKET STRAINERS

Purple Engineering

### Basket Strainers - Threaded Ends & Flanged Ends

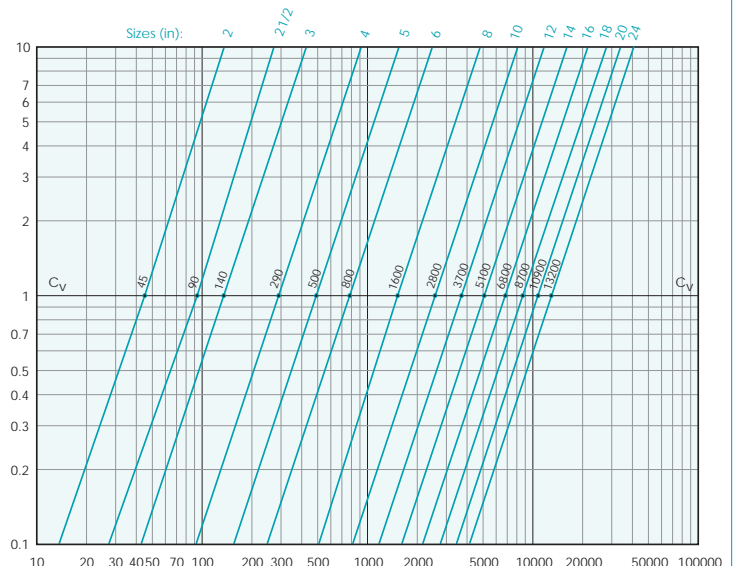
Models: ACE-BI-TE - BS25 - BS25F - BS35 - BS35F



Legend: Pressure Drop - PSI (y - axis) versus Flow Rate - GPM (x - axis)

### Basket Strainers - Flanged Ends

Models: ACE-BS\_BC - BS55 - BS65 - BS85 - BS86 - BS95



Legend: Pressure Drop - PSI (y - axis) versus Flow Rate - GPM (x - axis)

### Cv CORRECTION FACTOR TABLE

Centistokes	(SSU)	Perf. (Unlined)	20 MESH	40 MESH	60 MESH	80 MESH	100 MESH	120 MESH	150 MESH	200 MESH	300 MESH	25 Micron	10 Micron	5 Micron
2	30 (Water)	1.00	1.05	1.2	1.4	1.6	1.7	1.8	2.0	2.2	2.35	3.0	3.5	4.0
10	60	1.1	1.15	1.4	1.5	1.7	1.8	2.2	2.3	2.4	2.55	---	---	---
20	100	1.2	1.25	1.5	1.6	1.9	2.1	2.35	2.45	2.6	2.75	---	---	---
32	150	1.3	1.35	1.6	1.7	2	2.2	2.45	2.85	3	3.15	---	4.0	---
43	200	1.4	1.45	1.7	1.8	2.1	2.3	2.55	3.0	3.2	3.35	4.0	---	---
54	250	1.45	1.5	1.75	1.85	2.2	2.35	2.65	3.1	3.3	3.4	---	---	---
76	350	1.5	1.6	1.8	1.9	2.3	2.45	2.75	3.2	3.4	3.5	---	---	---
100	500	1.6	1.7	1.9	2.1	2.4	2.6	2.8	3.35	3.6	3.75	---	---	---
162	750	1.65	1.9	2.1	2.3	2.5	2.7	2.9	3.5	3.7	3.9	---	---	---
216	1000	1.7	2.0	2.2	2.4	2.6	2.8	3.0	3.6	3.8	4.0	---	---	---
325	1500	1.8	2.1	2.3	2.6	2.75	3	3.2	3.8	4.1	4.3	---	---	---
433	2000	1.9	2.2	2.4	2.7	2.9	3.2	3.4	4.05	4.6	5.5	---	---	---
650	3000	2.0	2.3	2.6	2.9	3.5	3.5	3.8	4.6	5.0	5.2	---	---	---
866	4000	2.1	2.45	2.8	3.15	3.6	3.9	4.2	4.9	---	---	---	---	---
1083	5000	2.2	2.6	3	3.4	3.8	4.2	4.6	---	---	---	---	---	---
1624	7500	2.35	2.8	3.4	3.8	4.3	4.75	---	---	---	---	---	---	---
2200	10000	2.5	3.0	3.5	4.0	4.5	5.0	---	---	---	---	---	---	---
3000	13500	3.0	3.5	---	---	---	---	---	---	---	---	---	---	---
5000	22500	4.0	4.5	5.0	5.5	6.0	6.5	7.5	8.0	8.5	9.0	9.5	10.0	10.5
6000	27300	4.2	---	---	---	---	---	---	---	---	---	---	---	---
15000	67000	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
18900	86000	8.0	8.5	---	---	---	---	---	---	---	---	---	---	---
20000	89300	8.5	9.0	---	---	---	---	---	---	---	---	---	---	---

Multiply the Correction Factor by the pressure drop obtained from the charts in order to calculate Δ P for other liquids (besides water) and mesh lined screens and baskets.

### Pressure Drop Equation for Liquids:

$$\Delta P = G \times (Q / Cv)^2 \times Cr$$

Δ P = Pressure drop (psi)  
Cv = Flow coefficient factor

G = Specific gravity of liquid  
Q = Flow rate (GPM)  
Cr = Correction factor for mesh and viscosity

- These curves are theoretical; actual results may vary depending on installation conditions and other variables. Use these values for reference only.
- The above pressure drop charts are based upon 1/8" perforated screens and baskets handling clean water at 60 °F during ideal inlet and outlet conditions. Therefore, they should only be used for estimation purposes.
- For fluids other than water, multiply the pressure drop (Δ P) obtained from the charts by the specific gravity of the fluid in question.
- For mesh lined screens, multiply the pressure drop (Δ P) obtained from the charts by the corresponding correction factor shown in the Cv correction table.