



## MONITOR PRESSURE DROP

### PRESSURE DROP (PV) DUE TO CHANGE IN VELOCITY OF WATER FLOWING THROUGH CONDUIT WITH REDUCED AREA

Inlet Dia (in) =>	2.0	2.5	3.0	4.0	4.0	4.5	6.0	6.0	2 x 2.5	3 x 2.5
Outlet Dia (in) =>	1.5	1.5	2.5	2.5	3.5	2.5	2.5	3.5	2.5	3.5
100	1.5	1.9	0.1	0.2	0.0	0.3	0.3	0.1	0.2	0.0
200	6.1	7.8	0.6	1.0	0.1	1.0	1.1	0.3	0.9	0.2
300	13.7	17.5	1.3	2.2	0.3	2.4	2.5	0.6	2.0	0.4
400	24.4	31.1	2.4	3.9	0.5	4.2	4.5	1.1	3.5	0.7
500	38.1	48.6	3.7	6.1	0.8	6.5	7.0	1.7	5.4	1.1
600			5.4	8.8	1.1	9.4	10.1	2.4	7.8	1.6
700			7.3	12.0	1.5	12.8	13.7	3.3	10.6	2.1
800			9.6	15.7	2.0	16.8	18.0	4.3	13.9	2.8
900			12.1	19.9	2.5	21.2	22.7	5.4	17.6	3.5
1000			15.0	24.5	3.1	26.2	28.1	6.7	21.7	4.3
1100			18.1	29.7	3.8	31.7	33.9	8.1	26.3	5.2
1200			21.6	35.3	4.5	37.7	40.4	9.6	31.3	6.2
1300			25.3	41.4	5.3	44.2	47.4	11.3	36.7	7.3
1400			29.4	48.0	6.1	51.3	55.0	13.1	42.6	8.5
1500			33.7	55.2	7.0	58.9	63.1	15.0	48.9	9.7
1600					8.0		71.8	17.0		
1700					9.0		81.1	19.2		
1800					10.1		90.9	21.6		
1900					11.2		101.3	24.0		
2000					12.5		112.2	26.6		

### Bernoulli's Equation = > Total Static Pressure Drop (TSPD) = Pressure Drop due to change in water velocity (Pv) + Friction Loss (F.L.)

When the Total Static Pressure Drop of a system is known (line pressure at inlet less line pressure at outlet), the associated Friction Loss of the system can be calculated by subtracting the appropriate value in the table above from the measured Total Static Pressure Drop.

NOTE: For all systems which have an outlet area smaller than the inlet area, the reported Friction Loss will always be less than the measured total static pressure drop due to the effect of the change in velocity related pressure drop.

$$F.L. = TSPD - Pv$$