

150 C	Friction Loss PVC Sch 80 Pipe										
IPS Size											
1/2"				3/4"				1"			
O.D.= 0.84 Wall= 0.14 I.D.= 0.560				O.D.= 1.05 Wall= 0.154 I.D.= 0.742				O.D.= 1.315 Wall= 0.179 I.D.= 0.957			
GPM	Velocity (ft/s)	Velocity Head (ft)	Friction Loss (ft/100')	GPM	Velocity (ft/s)	Velocity Head (ft)	Friction Loss (ft/100')	GPM	Velocity (ft/s)	Velocity Head (ft)	Friction Loss (ft/100')
0.5	0.65	0.01	0.5	1.5	1.11	0.02	0.9	2	0.89	0.01	0.4
1	1.30	0.03	1.7	2.0	1.48	0.03	1.5	3	1.34	0.03	0.9
1.5	1.95	0.06	3.5	2.5	1.86	0.05	2.3	4	1.78	0.05	1.6
2	2.61	0.11	6.0	3.0	2.23	0.08	3.2	5	2.23	0.08	2.4
2.5	3.26	0.17	9.0	3.5	2.60	0.11	4.3	6	2.68	0.11	3.4
3	3.91	0.24	12.6	4.0	2.97	0.14	5.5	8	3.57	0.20	5.7
3.5	4.56	0.32	16.8	4.5	3.34	0.17	6.8	10	4.46	0.31	8.7
4	5.21	0.42	21.5	5.0	3.71	0.21	8.3	12	5.35	0.45	12.1
4.5	5.86	0.54	26.8	6.0	4.45	0.31	11.6	14	6.25	0.61	16.2
5	6.51	0.66	32.5	7.0	5.20	0.42	15.4	16	7.14	0.79	20.7
5.5	7.17	0.80	38.8	8.0	5.94	0.55	19.8	18	8.03	1.00	25.7
6	7.82	0.95	45.6	9.0	6.68	0.69	24.6	20	8.92	1.24	31.3
6.5	8.47	1.12	52.9	10.0	7.42	0.86	29.9	22	9.82	1.50	37.3
7	9.12	1.30	60.7	11.0	8.16	1.04	35.6	24	10.71	1.79	43.8
7.5	9.77	1.49	69.0	12.0	8.91	1.24	41.9	26	11.60	2.10	50.8
8	10.42	1.69	77.7	13.0	9.65	1.45	48.6	28	12.49	2.43	58.3
8.5	11.07	1.91	86.9	14.0	10.39	1.68	55.7	30	13.38	2.79	66.3
9	11.73	2.14	96.6	16.0	11.87	2.20	71.3	35	15.62	3.80	88.1
9.5	12.38	2.39	106.8	18.0	13.36	2.78	88.7	40	17.85	4.96	112.9
10	13.03	2.64	117.5	20.0	14.84	3.43	107.8	45	20.08	6.28	140.4

150 C	Friction Loss PVC Sch 80 Pipe										
IPS Size											
1-1/4"				1-1/2"				2"			
O.D.= 1.660 Wall= 0.191 I.D.= 1.278				O.D.= 1.900 Wall= 0.200 I.D.= 1.500				O.D.= 2.375 Wall= 0.218 I.D.= 1.939			
GPM	Velocity (ft/s)	Velocity Head (ft)	Friction Loss (ft/100')	GPM	Velocity (ft/s)	Velocity Head (ft)	Friction Loss (ft/100')	GPM	Velocity (ft/s)	Velocity Head (ft)	Friction Loss (ft/100')
4.0	1.00	0.02	0.4	6	1.09	0.02	0.4	10	1.09	0.02	0.3
5.0	1.25	0.02	0.6	8	1.45	0.03	0.6	12	1.30	0.03	0.4
6.0	1.50	0.04	0.8	10	1.82	0.05	1.0	14	1.52	0.04	0.5
7.0	1.75	0.05	1.1	12	2.18	0.07	1.4	16	1.74	0.05	0.7
8.0	2.00	0.06	1.4	14	2.54	0.10	1.8	18	1.96	0.06	0.8
10.0	2.50	0.10	2.1	16	2.91	0.13	2.3	20	2.17	0.07	1.0
12.0	3.00	0.14	3.0	18	3.27	0.17	2.9	22	2.39	0.09	1.2
14.0	3.50	0.19	4.0	20	3.63	0.21	3.5	24	2.61	0.11	1.4
16.0	4.00	0.25	5.1	22	4.00	0.25	4.2	26	2.83	0.12	1.6
18.0	4.50	0.32	6.3	24	4.36	0.30	4.9	28	3.04	0.14	1.9
20.0	5.00	0.39	7.7	26	4.72	0.35	5.7	30	3.26	0.17	2.1
25.0	6.25	0.61	11.6	28	5.08	0.40	6.5	35	3.80	0.23	2.8
30.0	7.51	0.88	16.2	30	5.45	0.46	7.4	40	4.35	0.29	3.6
35.0	8.76	1.19	21.6	32	5.81	0.53	8.4	45	4.89	0.37	4.5
40.0	10.01	1.56	27.6	34	6.17	0.59	9.4	50	5.43	0.46	5.5
50.0	12.5	2.44	41.8	36	6.54	0.67	10.4	55	5.98	0.56	6.6
60.0	15.0	3.51	58.6	38	6.90	0.74	11.5	60	6.52	0.66	7.7
70.0	17.5	4.78	77.9	40	7.26	0.82	12.7	65	7.06	0.78	8.9
80.0	20.0	6.24	99.8	42	7.63	0.91	13.9	70	7.61	0.90	10.2
90.0	22.5	7.90	124.1	44	7.99	0.99	15.1	75	8.15	1.03	11.6
				46	8.35	1.09	16.4	80	8.69	1.18	13.1
				48	8.72	1.18	17.8	85	9.24	1.33	14.7
				50	9.08	1.28	19.2	90	9.78	1.49	16.3
				55	9.99	1.55	22.9	95	10.32	1.66	18.0
				60	10.90	1.85	26.9	100	10.87	1.84	19.8
				65	11.8	2.17	31.2	110	12.0	2.23	23.7
				70	12.7	2.52	35.7	120	13.0	2.65	27.8
				75	13.6	2.89	40.6	130	14.1	3.11	32.3
				80	14.5	3.29	45.8	140	15.2	3.61	37.0
				85	15.4	3.71	51.2	150	16.3	4.14	42.0
				90	16.3	4.16	56.9				

150 C	Friction Loss PVC Sch 80 Pipe										
IPS Size											
2-1/2"				3"				4"			
O.D.= 2.875 Wall= 0.276 I.D.= 2.323				O.D.= 3.500 Wall= 0.300 I.D.= 2.900				O.D.= 4.5 Wall= 0.237 I.D.= 4.026			
GPM	Velocity (ft/s)	Velocity Head (ft)	Friction Loss (ft/100')	GPM	Velocity (ft/s)	Velocity Head (ft)	Friction Loss (ft/100')	GPM	Velocity (ft/s)	Velocity Head (ft)	Friction Loss (ft/100')
20	1.51	0.04	0.4	30	1.46	0.03	0.30	60	1.51	0.04	0.2
25	1.89	0.06	0.6	35	1.70	0.05	0.40	80	2.02	0.06	0.4
30	2.27	0.08	0.9	40	1.94	0.06	0.51	100	2.52	0.10	0.6
35	2.65	0.11	1.2	45	2.19	0.07	0.64	120	3.03	0.14	0.8
40	3.03	0.14	1.5	50	2.43	0.09	0.78	140	3.53	0.19	1.1
45	3.41	0.18	1.9	60	2.92	0.13	1.09	160	4.03	0.25	1.4
50	3.79	0.22	2.3	70	3.40	0.18	1.45	180	4.54	0.32	1.7
55	4.16	0.27	2.7	80	3.89	0.24	1.85	200	5.04	0.40	2.0
60	4.54	0.32	3.2	90	4.37	0.30	2.30	220	5.55	0.48	2.4
65	4.92	0.38	3.7	100	4.86	0.37	2.80	240	6.05	0.57	2.9
70	5.30	0.44	4.3	120	5.83	0.53	3.92	260	6.55	0.67	3.3
75	5.68	0.50	4.8	140	6.80	0.72	5.22	280	7.06	0.78	3.8
80	6.06	0.57	5.4	160	7.77	0.94	6.7	300	7.56	0.89	4.3
85	6.44	0.65	6.1	180	8.75	1.19	8.3	320	8.07	1.01	4.9
90	6.81	0.72	6.8	200	9.72	1.47	10.1	340	8.57	1.14	5.5
95	7.2	0.81	7.5	220	10.69	1.78	12.1	360	9.08	1.28	6.1
100	7.6	0.89	8.2	240	11.66	2.12	14.2	380	9.58	1.43	6.7
110	8.3	1.08	9.8	260	12.63	2.49	16.4	400	10.1	1.58	7.4
120	9.1	1.29	11.5	280	13.60	2.88	18.8	420	10.6	1.75	8.1
130	9.8	1.51	13.4	300	14.58	3.31	21.4	460	11.6	2.09	9.6
140	10.6	1.75	15.4	320	15.55	3.77	24.1	500	12.6	2.47	11.2
160	12.1	2.29	19.7	340	16.52	4.25	27.0	550	13.9	2.99	13.3
180	13.6	2.89	24.5	360	17.49	4.77	30.0	600	15.1	3.56	15.7
200	15.1	3.57	29.7	380	18.46	5.31	33.2	650	16.4	4.18	18.2
220	16.7	4.32	35.5	400	19.43	5.88	36.5	700	17.6	4.85	20.8
240	18.2	5.14	41.7	420	20.4	6.49	39.9	750	18.9	5.57	23.7

150 C	Friction Loss PVC Sch 80 Pipe										
IPS Size											
5"				6"				8"			
O.D.= 5.563 Wall= 0.375 I.D.= 4.813				O.D.= 6.625 Wall= 0.432 I.D.= 5.761				O.D.= 8.625 Wall= 0.500 I.D.= 7.625			
GPM	Velocity (ft/s)	Velocity Head (ft)	Friction Loss (ft/100')	GPM	Velocity (ft/s)	Velocity Head (ft)	Friction Loss (ft/100')	GPM	Velocity (ft/s)	Velocity Head (ft)	Friction Loss (ft/100')
100	1.76	0.05	0.2	200	2.46	0.09	0.36	400	2.81	0.12	0.3
120	2.12	0.07	0.3	250	3.08	0.15	0.54	450	3.16	0.16	0.4
160	2.82	0.12	0.6	300	3.69	0.21	0.76	500	3.51	0.19	0.5
200	3.53	0.19	0.9	350	4.31	0.29	1.01	550	3.87	0.23	0.6
250	4.41	0.30	1.3	400	4.92	0.38	1.29	600	4.22	0.28	0.7
300	5.29	0.44	1.8	450	5.54	0.48	1.61	650	4.57	0.33	0.8
350	6.17	0.59	2.4	500	6.16	0.59	1.95	700	4.92	0.38	0.9
400	7.06	0.78	3.1	550	6.77	0.71	2.33	750	5.27	0.43	1.1
450	7.94	0.98	3.9	600	7.39	0.85	2.74	800	5.62	0.49	1.2
500	8.82	1.21	4.7	650	8.00	1.00	3.18	900	6.33	0.62	1.5
550	9.70	1.47	5.6	700	8.62	1.16	3.64	1000	7.03	0.77	1.8
600	10.58	1.74	6.6	750	9.23	1.33	4.14	1100	7.73	0.93	2.2
650	11.47	2.05	7.6	800	9.85	1.51	4.7	1200	8.43	1.11	2.5
700	12.35	2.37	8.7	850	10.46	1.71	5.2	1300	9.14	1.30	2.9
750	13.23	2.73	9.9	900	11.1	1.91	5.8	1400	9.84	1.51	3.4
800	14.1	3.10	11.2	950	11.7	2.13	6.4	1500	10.54	1.73	3.8
850	15.0	3.50	12.5	1000	12.3	2.36	7.1	1600	11.24	1.97	4.3
900	15.9	3.93	13.9	1100	13.5	2.86	8.4	1800	12.7	2.49	5.4
950	16.8	4.37	15.4	1200	14.8	3.40	9.9	2000	14.1	3.08	6.5
1000	17.6	4.85	16.9	1300	16.0	3.99	11.5	2200	15.5	3.72	7.8
1100	19.4	5.86	20.2	1400	17.2	4.63	13.2	2400	16.9	4.43	9.1
1200	21.2	6.98	23.7	1600	19.7	6.04	16.8	2600	18.3	5.20	10.6
1300	22.9	8.19	27.5	1800	22.2	7.65	21.0	2800	19.7	6.03	12.1
1400	24.7	9.50	31.6	2000	24.6	9.44	25.5	3000	21.1	6.92	13.8
1500	26.5	10.90	35.9	2200	27.1	11.43	30.4	3500	24.6	9.42	18.4
1600	28.2	12.41	40.4	2400	29.5	13.60	35.7	4000	28.1	12.31	23.5