PVC Schedule 40 IPS Plastic Pipe

(1120, 1220) C=150

psi Loss per 100 Feet of Pipe (psi/100 ft.)

Sizes 1/2" through 6" Flow 1 through 600 gpm

Size	1/2"		3/4"		1"		1 1/4"		1 1/2"		2"		2 1/2"		3"		4"		6"	
O.D.	0.840		1.050		1.315		1.660		1.900		2.375		2.875		3.500		4.500		6.625	
I.D.	0.622		0.824		1.049		1.380		1.610		2.067		2.469		3.068		4.026		6.065	
Wall Thk	0.109		0.113		0.133		0.140		0.145		0.154		0.203		0.216		0.237		0.280	
Flow gpm	Velocity fps	psi Loss	Velocity fps	psi Loss	Velocity fps	psi Loss	Velocity fps	psi Loss	Velocity fps	psi Loss	Velocity fps	psi Loss	Velocity fps	psi Loss	Velocity fps	psi Loss	Velocity fps	psi Loss	Velocity fps	psi Loss
1	1.06	0.43	0.60	0.11	0.37	0.03	0.21	0.01	0.16	0.00	0.10	0.00	0.07	0.00	0.04	0.00	0.03	0.00	0.01	0.00
2	2.11	1.55	1.20	0.39	0.74	0.12	0.43	0.03	0.32	0.02	0.19	0.00	0.13	0.00	0.09	0.00	0.05	0.00	0.02	0.00
3	3.17	3.28	1.80	0.83	1.11	0.26	0.64	0.07	0.48	0.03	0.29	0.01	0.20	0.00	0.13	0.00	0.08	0.00	0.03	0.00
4	4.22	5.58	2.41	1.42	1.48	0.44	0.86	0.12	0.64	0.06	0.38	0.02	0.26	0.01	0.17	0.00	0.10	0.00	0.04	0.00
5	5.28	8.43	3.01	2.15	1.86	0.66	1.07	0.17	0.80	0.09	0.48	0.02	0.33	0.01	0.22	0.00	0.13	0.00	0.06	0.00
6	6.34	11.81	3.61	3.01	2.23	0.93	1.29	0.24	0.96	0.12	0.57	0.03	0.40	0.01	0.26	0.01	0.15	0.00	0.07	0.00
7	7.39	15.71	4.21	4.00	2.60	1.24	1.50	0.33	1.12	0.16	0.67	0.05	0.46	0.02	0.30	0.01	0.18	0.00	0.08	0.00
8	8.45	20.12	4.81	5.12	2.97	1.58	1.72	0.42	1.28	0.20	0.76	0.06	0.53	0.02	0.35	0.01	0.20	0.00	0.09	0.00
9	9.50	25.01	5.41	6.37	3.34	1.97	1.93	0.52	1.44	0.25	0.86	0.07	0.59	0.03	0.39	0.01	0.23	0.00	0.10	0.00
10	10.56	30.40	6.02	7.74	3.71	2.39	2.15	0.63	1.60	0.31	0.96	0.09	0.66	0.04	0.43	0.01	0.25	0.00	0.11	0.00
11	11.61	36.26	6.62	9.23	4.08	2.85	2.36	0.75	1.76	0.37	1.05	0.11	0.73	0.04	0.48	0.02	0.28	0.00	0.12	0.00
12	12.67	42.59	7.22	10.84	4.45	3.35	2.57	0.88	1.91	0.43	1.15	0.12	0.79	0.05	0.52	0.02	0.30	0.00	0.13	0.00
14	14.78	56.64	8.42	14.42	5.20	4.45	3.00	1.17	2.23	0.57	1.34	0.16	0.92	0.07	0.61	0.02	0.35	0.01	0.16	0.00
16	16.89	72.52	9.63	18.46	5.94	5.70	3.43	1.50	2.55	0.73	1.53	0.21	1.06	0.09	0.69	0.03	0.40	0.01	0.18	0.00
18	19.01	90.17	10.83	22.95	6.68	7.09	3.86	1.87	2.87	0.91	1.72	0.26	1.19	0.11	0.78	0.04	0.45	0.01	0.20	0.00
20	21.12	109.58	12.03	27.89	7.42	8.62	4.29	2.27	3.19	1.10	1.91	0.32	1.32	0.13	0.87	0.05	0.50	0.01	0.22	0.00
22			13.24	33.27	8.17	10.28	4.72	2.71	3.51	1.32	2.10	0.38	1.45	0.15	0.95	0.06	0.55	0.01	0.24	0.00
24			14.44	39.08	8.91	12.07	5.15	3.18	3.83	1.55	2.29	0.45	1.58	0.18	1.04	0.07	0.60	0.02	0.27	0.00
26			15.64	45.32	9.65	14.00	5.58	3.69	4.15	1.79	2.49	0.52	1.71	0.21	1.13	0.08	0.66	0.02	0.29	0.00
28			16.85	51.98	10.39	16.06	6.01	4.23	4.47	2.06	2.68	0.59	1.85	0.24	1.22	0.09	0.71	0.02	0.31	0.00
30			18.05	59.05	11.14	18.24	6.44	4.80	4.79	2.34	2.87	0.67	1.98	0.27	1.30	0.10	0.76	0.03	0.33	0.00
35					12.99	24.26	7.51	6.39	5.58	3.11	3.35	0.89	2.31	0.36	1.52	0.13	0.88	0.03	0.39	0.00
40					14.85	31.06	8.58	8.18	6.38	3.98	3.82	1.15	2.64	0.46	1.74	0.17	1.01	0.04	0.44	0.01
45					16.71	38.62	9.65	10.17	7.18	4.95	4.30	1.42	2.97	0.58	1.95	0.21	1.13	0.06	0.50	0.01
50					18.56	46.94	10.73	12.36	7.98	6.02	4.78	1.73	3.30	0.70	2.17	0.25	1.26	0.07	0.56	0.01
55							11.80	14.74	8.78	7.18	5.26	2.06	3.63	0.84	2.39	0.30	1.39	0.08	0.61	0.01
60							12.87	17.32	9.57	8.43	5.74	2.43	3.96	0.98	2.60	0.36	1.51	0.09	0.67	0.01
65							13.94	20.08	10.37	9.78	6.21	2.81	4.29	1.14	2.82	0.41	1.64	0.11	0.72	0.01
70							15.02	23.03	11.17	11.21	6.69	3.23	4.62	1.31	3.04	0.47	1.76	0.13	0.78	0.02
75							16.09	26.17	11.97	12.74	7.17	3.66	4.95	1.48	3.25	0.54	1.89	0.14	0.83	0.02
80							17.16	29.49	12.77	14.36	7.65	4.13	5.28	1.67	3.47	0.60	2.02	0.16	0.89	0.02
85							18.23	32.99	13.56	16.06	8.13	4.62	5.60	1.87	3.69	0.68	2.14	0.18	0.94	0.02
90							19.31	36.67	14.36	17.85	8.61	5.14	5.93	2.08	3.91	0.75	2.27	0.20	1.00	0.03
95									15.16	19.73	9.08	5.68	6.26	2.30	4.12	0.83	2.39	0.22	1.06	0.03
100									15.96	21.69	9.56	6.24	6.59	2.53	4.34	0.91	2.52	0.24	1.11	0.03
110									17.55	25.88	10.52	7.44	7.25	3.01	4.77	1.09	2.77	0.29	1.22	0.04
120									19.15	30.40	11.47	8.74	7.91	3.54	5.21	1.28	3.02	0.34	1.33	0.05
130											12.43	10.14	8.57	4.11	5.64	1.48	3.28	0.40	1.44	0.05
140											13.39	11.63	9.23	4.71	6.08	1.70	3.53	0.45	1.55	0.06
150											14.34	13.21	9.89	5.35	6.51	1.93	3.78	0.52	1.67	0.07
160											15.30	14.89	10.55	6.03	6.94	2.18	4.03	0.58	1.78	0.08
170											16.25	16.65	11.21	6.74	7.38	2.44	4.28	0.65	1.89	0.09
180											17.21	18.51	11.87	7.50	7.81	2.71	4.54	0.72	2.00	0.10
190											18.17	20.46	12.53	8.29	8.25	2.99	4.79	0.80	2.11	0.11
200											19.12	22.50	13.19	9.11	8.68	3.29	5.04	0.88	2.22	0.12
225													14.84	11.33	9.76	4.09	5.67	1.09	2.50	0.15
250													16.48	13.77	10.85	4.98	6.30	1.33	2.78	0.18
275													18.13	16.42	11.93	5.94	6.93	1.58	3.05	0.22
300															13.02	6.97	7.56	1.86	3.33	0.25
325															14.10	8.09	8.19	2.16	3.61	0.29
350															15.19	9.27	8.82	2.47	3.89	0.34
375															16.27	10.54	9.45	2.81	4.16	0.38
400															17.36	11.87	10.08	3.16	4.44	0.43
425															18.44	13.28	10.71	3.54	4.72	0.48
450															19.53	14.76	11.34	3.93	5.00	0.54
475																	11.97	4.35	5.28	0.59
500																	12.60	4.78	5.55	0.65
550																	13.86	5.70	6.11	0.78
600																	15.12	6.70	6.66	0.91

Note: Dark shaded area of chart indicates velocities over 5' per second. Use with caution

Velocity of flow values are computed from the general equation $V = .408 \frac{Q}{d} 2$

Friction pressure loss values are computed from the equation: $\left[hf = 0.2083 \left(\frac{100}{c}\right) 1.852 \frac{Q1.852}{d4.866} \right]$ x.433 for psi loss per 100' of pipe