

PVC Class 200 IPS Plastic Pipe

(1120, 1220) SDR 21 C=150

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

Sizes 3/4" through 6" Flow 1 through 600 gpm

Size	3/4"		1"		1 1/4"		1 1/2"		2"		2 1/2"		3"		4"		6"	
O.D.	1.050		1.315		1.660		1.900		2.375		2.875		3.500		4.500		6.625	
I.D.	0.930		1.189		1.502		1.720		2.149		2.601		3.166		4.072		5.993	
Wall Thk	0.060		0.063		0.079		0.090		0.113		0.137		0.167		0.214		0.316	
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
1	0.47	0.06	0.29	0.02	0.18	0.01	0.14	0.00	0.09	0.00	0.06	0.00	0.04	0.00	0.02	0.00	0.01	0.00
2	0.94	0.22	0.58	0.07	0.36	0.02	0.28	0.01	0.18	0.00	0.12	0.00	0.08	0.00	0.05	0.00	0.02	0.00
3	1.42	0.46	0.87	0.14	0.54	0.04	0.41	0.02	0.27	0.01	0.18	0.00	0.12	0.00	0.07	0.00	0.03	0.00
4	1.89	0.79	1.16	0.24	0.72	0.08	0.55	0.04	0.35	0.01	0.24	0.01	0.16	0.00	0.10	0.00	0.05	0.00
5	2.36	1.19	1.44	0.36	0.91	0.12	0.69	0.06	0.44	0.02	0.30	0.01	0.20	0.00	0.12	0.00	0.06	0.00
6	2.83	1.67	1.73	0.50	1.09	0.16	0.83	0.08	0.53	0.03	0.36	0.01	0.24	0.00	0.15	0.00	0.07	0.00
7	3.31	2.22	2.02	0.67	1.27	0.22	0.97	0.11	0.62	0.04	0.42	0.01	0.29	0.01	0.17	0.00	0.08	0.00
8	3.78	2.84	2.31	0.86	1.45	0.28	1.10	0.14	0.71	0.05	0.48	0.02	0.33	0.01	0.20	0.00	0.09	0.00
9	4.25	3.53	2.60	1.07	1.63	0.34	1.24	0.18	0.80	0.06	0.54	0.02	0.37	0.01	0.22	0.00	0.10	0.00
10	4.72	4.29	2.89	1.30	1.81	0.42	1.38	0.22	0.88	0.07	0.60	0.03	0.41	0.01	0.25	0.00	0.11	0.00
11	5.20	5.12	3.18	1.55	1.99	0.50	1.52	0.26	0.97	0.09	0.66	0.03	0.45	0.01	0.27	0.00	0.13	0.00
12	5.67	6.02	3.47	1.82	2.17	0.58	1.66	0.30	1.06	0.10	0.72	0.04	0.49	0.02	0.30	0.00	0.14	0.00
14	6.61	8.00	4.05	2.42	2.54	0.78	1.93	0.40	1.24	0.14	0.85	0.05	0.57	0.02	0.34	0.01	0.16	0.00
16	7.56	10.24	4.62	3.10	2.90	0.99	2.21	0.51	1.42	0.17	0.97	0.07	0.65	0.03	0.39	0.01	0.18	0.00
18	8.50	12.74	5.20	3.85	3.26	1.24	2.49	0.64	1.59	0.22	1.09	0.09	0.73	0.03	0.44	0.01	0.20	0.00
20	9.45	15.48	5.78	4.68	3.62	1.50	2.76	0.78	1.77	0.26	1.21	0.10	0.82	0.04	0.49	0.01	0.23	0.00
22	10.39	18.46	6.36	5.59	3.98	1.79	3.04	0.93	1.95	0.31	1.33	0.12	0.90	0.05	0.54	0.01	0.25	0.00
24	11.34	21.69	6.93	6.56	4.35	2.11	3.31	1.09	2.12	0.37	1.45	0.15	0.98	0.06	0.59	0.02	0.27	0.00
26	12.28	25.15	7.51	7.61	4.71	2.44	3.59	1.26	2.30	0.43	1.57	0.17	1.06	0.06	0.64	0.02	0.30	0.00
28	13.22	28.85	8.09	8.73	5.07	2.80	3.87	1.45	2.48	0.49	1.69	0.19	1.14	0.07	0.69	0.02	0.32	0.00
30	14.17	32.77	8.67	9.92	5.43	3.18	4.14	1.65	2.65	0.56	1.81	0.22	1.22	0.08	0.74	0.02	0.34	0.00
35	16.53	43.59	10.11	13.19	6.34	4.23	4.83	2.19	3.10	0.74	2.11	0.29	1.43	0.11	0.86	0.03	0.40	0.01
40	18.89	55.80	11.56	16.89	7.24	5.42	5.52	2.80	3.54	0.95	2.42	0.37	1.63	0.14	0.99	0.04	0.45	0.01
45			13.00	21.00	8.15	6.74	6.21	3.48	3.98	1.18	2.72	0.47	1.83	0.18	1.11	0.05	0.51	0.01
50			14.45	25.51	9.05	8.18	6.90	4.23	4.42	1.43	3.02	0.57	2.04	0.22	1.23	0.06	0.57	0.01
55			15.89	30.43	9.96	9.76	7.59	5.05	4.86	1.71	3.32	0.67	2.24	0.26	1.35	0.08	0.63	0.01
60			17.34	35.75	10.86	11.47	8.28	5.93	5.31	2.01	3.62	0.79	2.45	0.30	1.48	0.09	0.68	0.01
65			18.78	41.46	11.77	13.30	8.98	6.88	5.75	2.33	3.92	0.92	2.65	0.35	1.60	0.10	0.74	0.02
70					12.68	15.25	9.67	7.89	6.19	2.67	4.23	1.05	2.85	0.41	1.72	0.12	0.80	0.02
75					13.58	17.33	10.36	8.96	6.63	3.03	4.53	1.20	3.06	0.46	1.85	0.14	0.85	0.02
80					14.49	19.53	11.05	10.10	7.08	3.42	4.83	1.35	3.26	0.52	1.97	0.15	0.91	0.02
85					15.39	21.84	11.74	11.30	7.52	3.82	5.13	1.51	3.46	0.58	2.09	0.17	0.97	0.03
90					16.30	24.28	12.43	12.56	7.96	4.25	5.43	1.68	3.67	0.65	2.22	0.19	1.02	0.03
95					17.20	26.83	13.12	13.88	8.40	4.70	5.74	1.86	3.87	0.71	2.34	0.21	1.08	0.03
100					18.11	29.51	13.81	15.26	8.85	5.16	6.04	2.04	4.08	0.78	2.46	0.23	1.14	0.04
110					19.92	35.20	15.19	18.20	9.73	6.16	6.64	2.43	4.48	0.94	2.71	0.27	1.25	0.04
120							16.57	21.38	10.61	7.24	7.25	2.86	4.89	1.10	2.96	0.32	1.36	0.05
130							17.95	24.79	11.50	8.39	7.85	3.31	5.30	1.27	3.20	0.37	1.48	0.06
140							19.33	28.44	12.38	9.62	8.45	3.80	5.71	1.46	3.45	0.43	1.59	0.07
150									13.27	10.93	9.06	4.32	6.11	1.66	3.70	0.49	1.71	0.07
160									14.15	12.32	9.66	4.87	6.52	1.87	3.94	0.55	1.82	0.08
170									15.04	13.78	10.27	5.44	6.93	2.09	4.19	0.61	1.93	0.09
180									15.92	15.32	10.87	6.05	7.34	2.33	4.43	0.68	2.05	0.10
190									16.81	16.93	11.47	6.69	7.74	2.57	4.68	0.76	2.16	0.12
200									17.69	18.62	12.08	7.35	8.15	2.83	4.93	0.83	2.27	0.13
225									19.90	23.15	13.59	9.14	9.17	3.51	5.54	1.03	2.56	0.16
250											15.10	11.11	10.19	4.27	6.16	1.26	2.84	0.19
275											16.61	13.26	11.21	5.09	6.77	1.50	3.13	0.23
300											18.11	15.57	12.23	5.98	7.39	1.76	3.41	0.27
325											19.62	18.06	13.25	6.94	8.01	2.04	3.70	0.31
350													14.26	7.96	8.62	2.34	3.98	0.36
375													15.28	9.04	9.24	2.66	4.27	0.41
400													16.30	10.19	9.85	2.99	4.55	0.46
425													17.32	11.40	10.47	3.35	4.83	0.51
450													18.34	12.67	11.09	3.72	5.12	0.57
475													19.36	14.00	11.70	4.11	5.40	0.63
500															12.32	4.52	5.69	0.69
550															13.55	5.40	6.26	0.82
600															14.78	6.34	6.82	0.97

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  $V = .408 \sqrt{\frac{Q}{d}}$

Friction pressure loss values are computed from the equation:  $[hf = 0.2083 \left(\frac{100}{L}\right) 1.852 \frac{Q^{1.852}}{d^{4.866}}] \times 4.33$  for psi loss per 100' of pipe