



FRICTION LOSS CHARACTERISTICS

PVC Schedule 80 Plastic Pipe IPS Dimensions

PVC 1120, 1220 C=150

Loss per 100 feet of pipe in PSI



Size	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	4"	Size										
OD	0.814	1.050	1.315	1.660	1.900	2.375	2.875	3.500	4.500	OD										
ID	0.546	0.742	0.957	1.278	1.500	1.939	2.323	2.900	3.826	ID										
Wall	0.147	0.154	0.179	0.191	0.200	0.218	0.276	0.300	0.337	Wall										
Flow GPM																			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	1.36	0.81	0.74	0.18	0.44	0.05	0.24	0.01	0.18	0.01	0.10	0.00							1	
2	2.73	2.92	1.48	0.66	0.89	0.19	0.49	0.05	0.36	0.02	0.21	0.01	0.15	0.00					2	
3	4.10	6.19	2.22	1.39	1.33	0.40	0.74	0.10	0.54	0.05	0.32	0.01	0.22	0.01					3	
4	5.47	10.54	2.96	2.37	1.78	0.69	0.99	0.17	0.72	0.08	0.43	0.02	0.30	0.01					4	
5	6.84	15.93	3.70	3.58	2.22	1.04	1.24	0.25	0.90	0.12	0.54	0.03	0.37	0.01	0.24	0.00			5	
6	8.21	22.33	4.44	5.02	2.67	1.46	1.49	0.36	1.08	0.16	0.65	0.05	0.45	0.02	0.29	0.01			6	
7	9.58	29.71	5.18	6.68	3.11	1.94	1.74	0.47	1.26	0.22	0.75	0.06	0.52	0.03	0.33	0.01			7	
8	10.94	38.05	5.92	8.56	3.56	2.48	1.99	0.61	1.45	0.28	0.86	0.08	0.60	0.03	0.38	0.01			8	
9	12.31	47.33	6.66	10.64	4.00	3.09	2.24	0.76	1.63	0.35	0.97	0.10	0.68	0.04	0.43	0.01			9	
10	13.68	57.52	7.41	12.93	4.45	3.75	2.49	0.92	1.81	0.42	1.08	0.12	0.75	0.05	0.48	0.02	0.27	0.00	10	
11	15.05	68.63	8.15	15.43	4.90	4.47	2.74	1.10	1.99	0.50	1.19	0.14	0.83	0.06	0.53	0.02	0.30	0.01	11	
12	16.42	80.63	8.89	18.13	5.34	5.26	2.99	1.29	2.17	0.59	1.30	0.17	0.90	0.07	0.58	0.02	0.33	0.01	12	
14			10.37	24.12	6.23	6.99	3.49	1.71	2.53	0.79	1.51	0.23	1.05	0.09	0.67	0.03	0.39	0.01	14	
16			11.85	30.88	7.12	8.95	3.99	2.19	2.90	1.01	1.73	0.29	1.20	0.12	0.77	0.04	0.44	0.01	16	
18			13.33	38.41	8.01	11.14	4.49	2.73	3.26	1.26	1.95	0.36	1.36	0.15	0.87	0.05	0.50	0.01	18	
20			14.82	46.69	8.90	13.54	4.99	3.31	3.62	1.52	2.17	0.44	1.51	0.18	0.97	0.06	0.55	0.02	20	
22			16.30	55.70	9.80	16.15	5.49	3.95	3.98	1.81	2.38	0.52	1.66	0.22	1.06	0.07	0.61	0.02	22	
24			17.78	65.44	10.69	18.97	5.99	4.64	4.35	2.13	2.60	0.61	1.81	0.25	1.16	0.09	0.66	0.02	24	
26			19.26	75.90	11.58	22.01	6.49	5.39	4.71	2.47	2.82	0.71	1.96	0.29	1.26	0.10	0.72	0.03	26	
28					12.47	25.24	6.99	6.18	5.07	2.83	3.03	0.81	2.11	0.34	1.35	0.11	0.78	0.03	28	
30					13.36	28.69	7.49	7.02	5.43	3.22	3.25	0.92	2.26	0.38	1.45	0.13	0.83	0.03	30	
35					15.59	38.16	8.74	9.34	6.34	4.29	3.79	1.23	2.64	0.51	1.69	0.17	0.97	0.05	35	
40					17.81	48.87	9.99	11.96	7.25	5.49	4.34	1.57	3.02	0.65	1.94	0.22	1.11	0.06	40	
45							11.24	14.88	8.16	6.83	4.88	1.96	3.40	0.81	2.18	0.28	1.25	0.07	45	
50							12.49	18.09	9.06	8.30	5.42	2.38	3.78	0.99	2.42	0.34	1.39	0.09	50	
55							13.73	21.58	9.97	9.90	5.96	2.84	4.15	1.18	2.66	0.40	1.53	0.10	55	
60							14.98	25.35	10.87	11.63	6.51	3.33	4.53	1.38	2.91	0.47	1.67	0.12	60	
65							16.23	29.40	11.78	13.49	7.05	3.87	4.91	1.16	3.15	0.53	1.81	0.14	65	
70							17.48	33.72	12.69	15.47	7.59	4.44	5.29	1.84	3.39	0.63	1.95	0.16	70	
75							18.73	38.32	13.59	17.58	8.13	5.04	5.67	2.09	3.63	0.71	2.09	0.18	75	
80							19.98	43.19	14.50	19.81	8.68	5.68	6.04	2.36	3.68	0.80	2.22	0.21	80	
85									15.41	22.16	9.22	6.36	6.42	2.63	4.12	0.90	2.36	0.23	85	
90									16.32	24.64	9.76	7.07	6.80	2.93	4.36	1.00	2.50	0.26	90	
95									17.22	27.23	10.30	7.81	7.18	3.24	4.60	1.10	2.64	0.29	95	
100									18.13	29.95	10.85	8.59	7.56	3.57	4.85	1.21	2.78	0.31	100	
110								19.94	35.73	11.93	10.25	8.31	4.25	5.33	1.45	3.06	0.38		110	
120										13.02	12.04	9.07	5.00	5.82	1.70	3.34	0.44		120	
130										14.10	13.96	9.82	5.60	6.30	1.97	3.62	0.51		130	
140										15.19	16.02	10.58	6.65	6.79	2.27	3.90	0.59		140	
150										16.27	18.20	11.34	7.56	7.27	2.57	4.18	0.67		150	
160	Longhorn, Inc. 10835 Grissom Lane Dallas, TX 75229										17.36	20.51	12.09	8.51	7.76	2.89	4.45	0.75		160
170											18.44	22.95	12.85	9.53	8.24	3.24	4.73	0.84		170
180											19.53	25.51	13.60	10.59	8.73	3.60	5.01	0.93		180
190													14.36	11.71	9.21	3.98	5.29	1.03		190
200													15.12	12.87	9.70	4.37	5.57	1.14		200
225	972-406-0222 800-284-0205												17.01	16.01	10.91	5.44	6.27	1.41		225
250													18.90	19.46	12.12	6.61	6.96	1.72		250
275															13.34	7.89	7.66	2.05		275
300															14.55	9.27	8.36	2.41		300
325															15.76	10.75	9.05	2.79		325

Note: Velocities in shaded (Red) area exceed 5'/sec and should be used with caution