

**FRICTION LOSS CHARACTERISTICS
PVC SCHEDULE 80 IPS PLASTIC PIPE
PRESSURE LOSS PER 100 FT OF PIPE (PSI/100FT)**

C= 150

SIZE	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
OD	0.54	0.675	0.84	1.05	1.315	1.66	1.9	2.375	2.875	3.5
ID	0.302	0.423	0.546	0.742	0.957	1.278	1.5	1.939	2.323	2.9
WALL THK	0.119	0.126	0.147	0.154	0.179	0.191	0.2	0.218	0.276	0.3

FLOW GPM	1/4"		3/8"		1/2"		3/4"		1"		1-1/4"		1-1/2"		2"		2-1/2"		3"		FLOW GPM	
	VELOCIT Y ft/sec	PSI LOSS	VELOCIT Y ft/sec	PSI LOSS	VELOCIT Y ft/sec	PSI LOSS	VELOCIT Y ft/sec	PSI LOSS	VELOCIT Y ft/sec	PSI LOSS	VELOCIT Y ft/sec	PSI LOSS	VELOCIT Y ft/sec	PSI LOSS	VELOCIT Y ft/sec	PSI LOSS	VELOCIT Y ft/sec	PSI LOSS	VELOCIT Y ft/sec	PSI LOSS		
0.1	0.447	0.20	0.228	0.04	0.137	0.01	0.074	0.00													0.1	
0.2	0.895	0.73	0.456	0.14	0.274	0.04	0.148	0.01	0.089	0.00											0.2	
0.3	1.342	1.55	0.684	0.30	0.411	0.09	0.222	0.02	0.134	0.01											0.3	
0.4	1.789	2.64	0.912	0.51	0.547	0.15	0.296	0.03	0.178	0.01											0.4	
0.5	2.237	4.00	1.140	0.78	0.684	0.22	0.371	0.05	0.223	0.01	0.125	0.00									0.5	
0.6	2.684	5.60	1.368	1.09	0.821	0.31	0.445	0.07	0.267	0.02	0.150	0.01									0.6	
0.7	3.131	7.46	1.596	1.45	0.958	0.42	0.519	0.09	0.312	0.03	0.175	0.01									0.7	
0.8	3.579	9.55	1.824	1.85	1.095	0.54	0.593	0.12	0.356	0.03	0.200	0.01									0.8	
0.9	4.026	11.87	2.052	2.30	1.232	0.67	0.667	0.15	0.401	0.04	0.225	0.01	0.163	0.00							0.9	
1	4.473	14.43	2.280	2.80	1.369	0.81	0.741	0.18	0.445	0.05	0.250	0.01	0.181	0.01							1	
1.25	5.592	21.82	2.850	4.23	1.711	1.22	0.926	0.27	0.557	0.08	0.312	0.02	0.227	0.01							1.25	
1.5	6.710	30.58	3.420	5.93	2.053	1.71	1.112	0.39	0.668	0.11	0.375	0.03	0.272	0.01							1.5	
1.75	7.829	40.69	3.990	7.90	2.395	2.28	1.297	0.51	0.780	0.15	0.437	0.04	0.317	0.02	0.190	0.00					1.75	
2	8.947	52.10	4.560	10.11	2.737	2.92	1.482	0.66	0.891	0.19	0.500	0.05	0.363	0.02	0.217	0.01					2	
2.25	10.065	64.80	5.131	12.58	3.079	3.63	1.667	0.82	1.002	0.24	0.562	0.06	0.408	0.03	0.244	0.01					2.25	
2.5	11.184	78.76	5.701	15.29	3.421	4.41	1.853	0.99	1.114	0.29	0.625	0.07	0.453	0.03	0.271	0.01					2.5	
2.75	12.302	93.97	6.271	18.24	3.764	5.27	2.038	1.18	1.225	0.34	0.687	0.08	0.499	0.04	0.298	0.01	0.208	0.00			2.75	
3	13.420	110.40	6.841	21.42	4.106	6.19	2.223	1.39	1.336	0.40	0.749	0.10	0.544	0.05	0.326	0.01	0.227	0.01			3	
3.5	15.657	146.88	7.981	28.50	4.790	8.23	2.594	1.85	1.559	0.54	0.874	0.13	0.635	0.06	0.380	0.02	0.265	0.01			3.5	
4	17.894	188.09	9.121	36.50	5.474	10.54	2.964	2.37	1.782	0.69	0.999	0.17	0.725	0.08	0.434	0.02	0.302	0.01			4	
4.5			10.261	45.40	6.159	13.11	3.335	2.95	2.005	0.85	1.124	0.21	0.816	0.10	0.488	0.03	0.340	0.01			4.5	
5			11.401	55.18	6.843	15.94	3.705	3.58	2.227	1.04	1.249	0.25	0.907	0.12	0.543	0.03	0.378	0.01	0.243	0.00	5	
6			13.681	77.34	8.212	22.34	4.446	5.02	2.673	1.46	1.499	0.36	1.088	0.16	0.651	0.05	0.454	0.02	0.291	0.01	6	
7			15.962	102.90	9.580	29.72	5.187	6.68	3.118	1.94	1.749	0.47	1.269	0.22	0.760	0.06	0.529	0.03	0.340	0.01	7	
8			18.242	131.77	10.949	38.05	5.928	8.55	3.564	2.48	1.998	0.61	1.451	0.28	0.868	0.08	0.605	0.03	0.388	0.01	8	
9			12.317	47.33	6.670	10.64	4.009	3.08	2.248	0.75	1.632	0.35	0.977	0.10	0.680	0.04	0.437	0.01			9	
10			13.686	57.53	7.411	12.93	4.455	3.75	2.498	0.92	1.813	0.42	1.085	0.12	0.756	0.05	0.485	0.02			10	
11			15.055	68.63	8.152	15.43	4.900	4.47	2.748	1.09	1.995	0.50	1.194	0.14	0.832	0.06	0.534	0.02			11	
12			16.423	80.63	8.893	18.13	5.346	5.26	2.998	1.29	2.176	0.59	1.302	0.17	0.907	0.07	0.582	0.02			12	
14			19.160	107.28	10.375	24.12	6.237	6.99	3.497	1.71	2.539	0.78	1.519	0.23	1.058	0.09	0.679	0.03			14	
16			11.857	30.88	7.128	8.95	3.997	2.19	2.901	1.01	1.736	0.29	1.210	0.12	0.776	0.04					16	
18			13.339	38.41	8.019	11.14	4.496	2.73	3.264	1.25	1.953	0.36	1.361	0.15	0.873	0.05					18	
20			14.821	46.69	8.910	13.53	4.996	3.31	3.627	1.52	2.170	0.44	1.512	0.18	0.970	0.06					20	
22			16.303	55.70	9.801	16.15	5.496	3.95	3.989	1.81	2.387	0.52	1.663	0.22	1.067	0.07					22	
24			17.785	65.44	10.692	18.97	5.995	4.64	4.352	2.13	2.604	0.61	1.815	0.25	1.164	0.09					24	
26			19.268	75.89	11.583	22.00	6.495	5.39	4.715	2.47	2.821	0.71	1.966	0.29	1.261	0.10					26	
28			12.474	25.24	6.994	6.18	5.077	2.83	3.039	0.81	2.117	0.34	1.358	0.11							28	
30			13.365	28.68	7.494	7.02	5.440	3.22	3.256	0.92	2.268	0.38	1.455	0.13							30	
35			15.592	38.16	8.743	9.34	6.347	4.28	3.798	1.23	2.646	0.51	1.698	0.17							35	
40			17.820	48.86	9.992	11.96	7.253	5.49	4.341	1.57	3.024	0.65	1.941	0.22							40	
45			11.241	14.87	8.160	6.82	4.883	1.96	3.402	0.81	2.183	0.28									45	
50			12.490	18.08	9.067	8.29	5.426	2.38	3.780	0.99	2.426	0.34									50	
55			13.739	21.57	9.973	9.89	5.969	2.84	4.158	1.18	2.668	0.40									55	
60			14.988	25.34	10.880	11.62	6.511	3.33	4.536	1.38	2.911	0.47									60	
65			16.237	29.39	11.787	13.48	7.054	3.87	4.914	1.60	3.153	0.55									65	
70			17.486	33.71	12.693	15.46	7.596	4.43	5.292	1.84	3.396	0.63									70	
75			18.735	38.31	13.600	17.57	8.139	5.04	5.671	2.09	3.639	0.71									75	
80			19.984	43.17	14.507	19.80	8.681	5.68	6.049	2.36	3.881	0.80									80	
85			15.413	22.16	9.224	6.35	6.427	2.64	6.427	2.64	4.124	0.90									85	
90			16.320	24.63	9.767	7.06	6.805	2.93	6.805	2.93	4.366	1.00									90	
95			17.227	27.22	10.309	7.81	7.183	3.24	7.183	3.24	4.609	1.10									95	
100			18.133	29.94	10.852	8.58	7.561	3.56	7.561	3.56	4.851	1.21									100	
110			19.947	35.72	11.937	10.24	8.317	4.25	8.317	4.25	5.337	1.44									110	
120			13.022	12.03	9.073	4.99	5.822	1.70														120
130			14.107	13.95	9.829	5.79	6.307	1.97														130
140			15.193	16.01	10.585	6.64	6.792	2.26														140
150			16.278	18.19	11.341	7.55	7.277	2.57														150
160			17.363	20.50	12.097	8.51	7.762	2.89														160
170			18.448	22.93	12.853	9.52	8.247	3.23														170



NOTE: SHADED AREAS INDICATE VELOCITIES OVER 5 FT/SEC. USE WITH CAUTION