

**FRICTION LOSS CHARACTERISTICS  
PVC SCHEDULE 40 IPS PLASTIC PIPE  
PRESSURE LOSS PER 100 FT OF PIPE (PSI/100FT)**

<b>C=</b>	<b>150</b>									
<b>SIZE</b>	<b>1/2"</b>	<b>3/4"</b>	<b>1"</b>	<b>1-1/4"</b>	<b>1-1/2"</b>	<b>2"</b>	<b>2-1/2"</b>	<b>3"</b>	<b>4"</b>	<b>5"</b>
<b>OD</b>	0.84	1.05	1.315	1.66	1.9	2.375	2.875	3.5	4.5	5.563
<b>ID</b>	0.622	0.824	1.049	1.38	1.61	2.067	2.469	3.068	4.026	5.047
<b>WALL THK</b>	0.109	0.113	0.133	0.14	0.145	0.154	0.203	0.216	0.237	0.258

FLOW GPM	1/2"		3/4"		1"		1-1/4"		1-1/2"		2"		2-1/2"		3"		4"		5"		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	
1	1.055	0.43	0.601	0.11	0.371	0.03	0.214	0.01	0.157	0.00											1
2	2.109	1.55	1.202	0.39	0.742	0.12	0.428	0.03	0.315	0.02	0.191	0.00									2
3	3.164	3.28	1.803	0.84	1.112	0.26	0.643	0.07	0.472	0.03	0.286	0.01									3
4	4.218	5.59	2.404	1.42	1.483	0.44	0.857	0.12	0.630	0.05	0.382	0.02	0.201	0.00							4
5	5.273	8.45	3.005	2.15	1.854	0.66	1.071	0.17	0.787	0.08	0.477	0.02	0.268	0.01							5
6	6.327	11.85	3.605	3.02	2.225	0.93	1.285	0.25	0.944	0.12	0.573	0.03	0.335	0.01	0.217	0.00					6
7	7.382	15.76	4.206	4.01	2.595	1.24	1.500	0.33	1.102	0.15	0.668	0.05	0.469	0.02	0.303	0.01					7
8	8.437	20.18	4.807	5.14	2.966	1.59	1.714	0.42	1.259	0.20	0.764	0.06	0.535	0.02	0.347	0.01					8
9	9.491	25.10	5.408	6.39	3.337	1.97	1.928	0.52	1.417	0.25	0.859	0.07	0.602	0.03	0.390	0.01					9
10	10.546	30.51	6.009	7.77	3.708	2.40	2.142	0.63	1.574	0.30	0.955	0.09	0.669	0.04	0.433	0.01					10
11	11.600	36.40	6.610	9.26	4.079	2.86	2.357	0.75	1.731	0.36	1.050	0.11	0.736	0.04	0.477	0.02					11
12	12.655	42.77	7.211	10.88	4.449	3.36	2.571	0.89	1.889	0.42	1.146	0.12	0.803	0.05	0.520	0.02	0.302	0.00			12
14	14.764	56.90	8.413	14.48	5.191	4.47	2.999	1.18	2.204	0.56	1.337	0.16	0.937	0.07	0.607	0.02	0.352	0.01			14
16	16.873	72.86	9.614	18.54	5.932	5.73	3.428	1.51	2.518	0.71	1.528	0.21	1.071	0.09	0.694	0.03	0.403	0.01			16
18	18.982	90.62	10.816	23.06	6.674	7.12	3.856	1.88	2.833	0.89	1.719	0.26	1.205	0.11	0.780	0.04	0.453	0.01			18
20	21.092	110.15	12.018	28.03	7.415	8.66	4.285	2.28	3.148	1.08	1.910	0.32	1.339	0.13	0.867	0.05	0.503	0.01			20
22			13.220	33.44	8.157	10.33	4.713	2.72	3.463	1.28	2.101	0.38	1.472	0.16	0.954	0.06	0.554	0.01	0.352	0.00	22
24			14.422	39.29	8.899	12.14	5.142	3.20	3.778	1.51	2.292	0.45	1.606	0.19	1.040	0.07	0.604	0.02	0.384	0.01	24
26			15.624	45.57	9.640	14.08	5.570	3.71	4.092	1.75	2.483	0.52	1.740	0.22	1.127	0.08	0.654	0.02	0.416	0.01	26
28			16.825	52.27	10.382	16.15	5.999	4.25	4.407	2.01	2.674	0.60	1.874	0.25	1.214	0.09	0.705	0.02	0.448	0.01	28
30			18.027	59.40	11.123	18.35	6.427	4.83	4.722	2.28	2.865	0.68	2.008	0.28	1.300	0.10	0.755	0.03	0.481	0.01	30
35					12.977	24.41	7.498	6.43	5.509	3.04	3.342	0.90	2.343	0.38	1.517	0.13	0.881	0.04	0.561	0.01	35
40					14.831	31.26	8.570	8.23	6.296	3.89	3.820	1.15	2.677	0.49	1.734	0.17	1.007	0.04	0.641	0.01	40
45					16.685	38.88	9.641	10.24	7.083	4.83	4.297	1.43	3.012	0.60	1.951	0.21	1.133	0.06	0.721	0.02	45
50					18.539	47.26	10.712	12.44	7.870	5.88	4.775	1.74	3.346	0.73	2.167	0.25	1.259	0.07	0.801	0.02	50
55					11.783	14.84	8.657	7.01	5.252	2.08	3.681	0.88	2.384	0.30	1.384	0.08	0.881	0.03	0.881	0.03	55
60					12.854	17.44	9.444	8.24	5.730	2.44	4.016	1.03	2.601	0.36	1.510	0.10	0.961	0.03	0.961	0.03	60
65					13.926	20.23	10.231	9.55	6.207	2.83	4.350	1.19	2.817	0.41	1.636	0.11	1.041	0.04	1.041	0.04	65
70					14.997	23.20	11.018	10.96	6.685	3.25	4.685	1.37	3.034	0.48	1.762	0.13	1.121	0.04	1.121	0.04	70
75					16.068	26.36	11.805	12.45	7.162	3.69	5.020	1.55	3.251	0.54	1.888	0.14	1.201	0.05	1.201	0.05	75
80					17.139	29.71	12.592	14.03	7.640	4.16	5.354	1.75	3.468	0.61	2.014	0.16	1.281	0.05	1.281	0.05	80
85					18.210	33.24	13.379	15.70	8.117	4.65	5.689	1.96	3.684	0.68	2.140	0.18	1.361	0.06	1.361	0.06	85
90					19.282	36.95	14.166	17.45	8.595	5.17	6.024	2.18	3.901	0.76	2.265	0.20	1.442	0.07	1.442	0.07	90
95							14.953	19.29	9.072	5.72	6.358	2.41	4.118	0.84	2.391	0.22	1.522	0.07	1.522	0.07	95
100							15.740	21.21	9.549	6.29	6.693	2.65	4.335	0.92	2.517	0.25	1.602	0.08	1.602	0.08	100
110							17.314	25.31	10.504	7.50	7.362	3.16	4.768	1.10	2.769	0.29	1.762	0.10	1.762	0.10	110
120							18.888	29.74	11.459	8.82	8.032	3.71	5.202	1.29	3.021	0.34	1.922	0.11	1.922	0.11	120
130									12.414	10.22	8.701	4.31	5.635	1.50	3.272	0.40	2.082	0.13	2.082	0.13	130
140									13.369	11.73	9.370	4.94	6.068	1.72	3.524	0.46	2.242	0.15	2.242	0.15	140
150									14.324	13.33	10.039	5.61	6.502	1.95	3.776	0.52	2.403	0.17	2.403	0.17	150
160									15.279	15.02	10.709	6.33	6.935	2.20	4.027	0.59	2.563	0.20	2.563	0.20	160
170									16.234	16.80	11.378	7.08	7.369	2.46	4.279	0.66	2.723	0.22	2.723	0.22	170
180									17.189	18.68	12.047	7.87	7.802	2.73	4.531	0.73	2.883	0.24	2.883	0.24	180
190									18.144	20.65	12.717	8.70	8.236	3.02	4.783	0.81	3.043	0.27	3.043	0.27	190
200									19.099	22.70	13.386	9.56	8.669	3.32	5.034	0.89	3.203	0.29	3.203	0.29	200
225									15.059	11.89	9.753	4.13	5.664	1.10	3.604	0.37	3.604	0.37	3.604	0.37	225
250									16.732	14.46	10.837	5.02	6.293	1.34	4.004	0.45	4.004	0.45	4.004	0.45	250
275									18.406	17.25	11.920	5.99	6.922	1.60	4.405	0.53	4.405	0.53	4.405	0.53	275
300											13.004	7.04	7.552	1.88	4.805	0.62	4.805	0.62	4.805	0.62	300
325											14.087	8.17	8.181	2.18	5.206	0.72	5.206	0.72	5.206	0.72	325
350											15.171	9.37	8.810	2.50	5.606	0.83	5.606	0.83	5.606	0.83	350
375											16.255	10.64	9.439	2.84	6.007	0.94	6.007	0.94	6.007	0.94	375
400											17.338	12.00	10.069	3.20	6.407	1.06	6.407	1.06	6.407	1.06	400
425											18.422	13.42	10.698	3.58	6.807	1.19	6.807	1.19	6.807	1.19	425
450											19.506	14.92	11.327	3.98	7.208	1.32	7.208	1.32	7.208	1.32	450
475											11.957	4.40	7.608	1.46	7.608	1.46	7.608	1.46	7.608	1.46	475
500											12.586	4.83	8.009	1.61	8.009	1.61	8.009	1.61	8.009	1.61	500
550											13.844	5.77	8.810	1.92	8.810	1.92	8.810	1.92	8.810	1.92	550
600											15.103	6.77	9.610	2.26	9.610	2.26	9.610	2.26	9.610	2.26	600



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