

BLUE STANDARD VALVES FLOW VELOCITY & FRICTION LOSS – SCHEDULE 80 PIPE

	VELOCITY Ft. / Second	FRICTION LOSS Ft. Water / 100 Ft.	FRICTION LOSS PSI / 100 Ft.	VELOCITY Ft. / Second	FRICTION LOSS Ft. Water / 100 Ft.	FRICTION LOSS PSI / 100 Ft.	VELOCITY Ft. / Second	FRICTION LOSS Ft. Water / 100 Ft.	FRICTION LOSS PSI / 100 Ft.	VELOCITY Ft. / Second	FRICTION LOSS Ft. Water / 100 Ft.	FRICTION LOSS PSI / 100 Ft.	VELOCITY Ft. / Second	FRICTION LOSS Ft. Water / 100 Ft.	FRICTION LOSS PSI / 100 Ft.	VELOCITY Ft. / Second	FRICTION LOSS Ft. Water / 100 Ft.	FRICTION LOSS PSI / 100 Ft.	VELOCITY Ft. / Second	FRICTION LOSS Ft. Water / 100 Ft.	FRICTION LOSS PSI / 100 Ft.	VELOCITY Ft. / Second	FRICTION LOSS Ft. Water / 100 Ft.	FRICTION LOSS PSI / 100 Ft.		
	1/2 in.			3/4 in.				1 in.			1 1/4 in.			1 1/2 in.				2 in.			2 1/2 in.			3 in.		
1	1.48	4.02	1.74	0.74	0.86	0.37																				
2	2.95	8.03	3.48	1.57	1.72	0.74	0.94	0.88	0.38	0.52	0.21	0.09	0.38	0.10	0.041											
5	7.39	45.23	19.59	3.92	9.67	4.19	2.34	2.75	1.19	1.30	0.66	0.29	0.94	0.30	0.126	0.56	0.10	0.040	0.39	0.05	0.022	0.25	0.02	0.009		
7	10.34	83.07	35.97	5.49	17.76	7.69	3.28	5.04	2.19	1.82	1.21	0.53	1.32	0.55	0.24	0.78	0.15	0.065	0.54	0.07	0.032	0.35	0.028	0.012		
10				7.84	33.84	14.65	4.68	9.61	4.16	2.60	2.30	1.00	1.88	1.04	0.45	1.12	0.29	0.13	0.78	0.12	0.052	0.50	0.04	0.017		
15	4 in.			11.76	71.70	31.05	7.01	20.36	8.82	3.90	4.87	2.11	2.81	2.20	0.95	1.68	0.62	0.27	1.17	0.26	0.11	0.75	0.09	0.039		
20	0.57	0.04	0.017				9.35	34.68	15.02	5.20	8.30	3.59	3.75	3.75	1.62	2.23	1.06	0.46	1.56	0.44	0.19	1.00	0.15	0.065		
25	0.72	0.06	0.026	5 in.			11.69	52.43	22.70	6.50	12.55	5.43	4.69	5.67	2.46	2.79	1.60	0.69	1.95	0.67	0.29	1.25	0.22	0.095		
30	0.86	0.08	0.035	0.54	0.03	0.013	14.03	73.48	31.82	7.80	17.59	7.62	5.63	7.95	3.44	3.35	2.25	0.97	2.34	0.94	0.41	1.49	0.31	0.13		
35	1.00	0.11	0.048	0.63	0.04	0.017				9.10	23.40	10.13	6.57	10.58	4.58	3.91	2.99	1.29	2.73	1.25	0.54	1.74	0.42	0.18		
40	1.15	0.14	0.061	0.72	0.04	0.017				10.40	29.97	12.98	7.50	13.55	5.87	4.47	3.83	1.66	3.12	1.60	0.69	1.99	0.54	0.23		
45	1.29	0.17	0.074	0.81	0.06	0.026	6 in.			11.70	37.27	16.14	8.44	16.85	7.30	5.03	4.76	2.07	3.51	1.99	0.86	2.24	0.67	0.29		
50	1.43	0.21	0.091	0.90	0.07	0.030	0.63	0.03	0.013	13.00	45.30	19.61	9.38	20.48	8.87	5.58	5.79	2.51	3.90	2.42	1.05	2.49	0.81	0.35		
60	1.72	0.30	0.13	1.08	0.10	0.043	0.75	0.04	0.017				11.26	28.70	12.43	6.70	8.12	3.52	4.68	3.39	1.47	2.99	1.14	0.49		
70	2.01	0.39	0.17	1.26	0.13	0.056	0.88	0.05	0.022							7.82	10.80	4.68	5.46	4.51	1.95	3.49	1.51	0.65		
75	2.15	0.45	0.19	1.35	0.14	0.061	0.94	0.06	0.026							8.38	12.27	5.31	5.85	5.12	2.22	3.74	1.72	0.74		
80	2.29	0.50	0.22	1.44	0.16	0.069	1.00	0.07	0.030							8.93	13.83	5.99	6.24	5.77	2.50	3.99	1.94	0.84		
90	2.58	0.63	0.27	1.62	0.20	0.087	1.13	0.08	0.035							10.05	17.20	7.45	7.02	7.18	3.11	4.48	2.41	1.04		
100	2.87	0.76	0.33	1.80	0.24	0.10	1.25	0.10	0.043	8 in.						11.17	20.90	9.05	7.80	8.72	3.78	4.98	2.93	1.27		
125	3.59	1.16	0.50	2.25	0.37	0.16	1.57	0.16	0.068	0.90	0.045	0.019							9.75	13.21	5.72	6.23	4.43	1.92		
150	4.30	1.61	0.70	2.70	0.52	0.23	1.88	0.22	0.095	1.07	0.05	0.022							11.70	18.48	8.00	7.47	6.20	2.68		
175	5.02	2.15	0.93	3.15	0.69	0.30	2.20	0.29	0.12	1.25	0.075	0.033	10 in.									8.72	8.26	3.58		
200	5.73	2.75	1.19	3.60	0.88	0.38	2.51	0.37	0.16	1.43	0.09	0.039	0.90	0.036	0.015							9.97	10.57	4.58		
250	7.16	4.16	1.81	4.50	1.34	0.58	3.14	0.56	0.24	1.79	0.14	0.061	1.14	0.045	0.02							12.46	16.00	6.93		
300	8.60	5.83	2.52	5.40	1.87	0.81	3.76	0.78	0.34	2.14	0.20	0.087	1.36	0.07	0.03	12 in.										
350	10.03	7.76	3.36	6.30	2.49	1.08	4.39	1.04	0.45	2.50	0.27	0.12	1.59	0.085	0.037	1.12	0.037	0.016								
400	11.47	9.93	4.30	7.19	3.19	1.38	5.02	1.33	0.58	2.86	0.34	0.15	1.81	0.11	0.048	1.28	0.05	0.022								
450				8.09	3.97	1.72	5.64	1.65	0.71	3.21	0.42	0.18	2.04	0.14	0.061	1.44	0.06	0.026								
500				8.99	4.82	2.09	6.27	2.00	0.87	3.57	0.51	0.22	2.27	0.17	0.074	1.60	0.07	0.030								
750							5.36	1.08	0.47	3.40	0.36	0.16	2.40	0.36	0.16	2.40	0.15	0.065								
1000										7.14	1.84	0.80	4.54	0.61	0.26	3.20	0.26	0.11								
1250													5.67	0.92	0.40	4.01	0.40	0.17								
1500													6.80	1.29	0.56	4.81	0.55	0.24								
2000																6.41	0.94	0.41								
2500																										

NOTE: Blue Standard recommends velocities be maintained at or below 5 feet per second; breakpoint highlighted in yellow.