

## CHARACTERISTICS OF STEEL PIPE-SIZE, SCHEDULE & FLOW RATES

STANDARD PIPE - SCHEDULE 40											EXTRA STRONG PIPE - XS - SCHEDULE 80											
PIPE SIZE	OD (IN)	WALL (IN)	ID (IN)	INT A REA (SQ IN.)	WT/FT (POUNDS)	GPM @ 2 FPS	GPM @ 5 FPS	GPM @ 10 FPS	GPM @ 15 FPS	GPM @ 20 FPS	GPM @ 25 FPS	WALL (IN)	ID (IN)	INT AREA (SQ IN.)	WT/FT (POUNDS)	GPM @ 2 FPS	GPM @ 5 FPS	GPM @ 10 FPS	GPM @ 15 FPS	GPM @ 20 FPS	GPM @ 25 FPS	PIPE SIZE
36533	0.405	0.068	0.269	0.057	0.244	0.4	0.9	1.8	2.7	3.5	404	0.095	0.215	0.036	0.314	0.2	0.6	1.1	1.7	2.3	2.8	36533
36529	0.54	0.088	0.364	0.104	0.424	0.6	1.6	3.2	4.9	6.5	8.1	0.119	0.302	0.072	0.534	0.4	1.1	2.2	3.3	4.5	5.6	36529
36593	0.675	0.094	0.493	0.191	0.567	1.2	3	6	8.9	11.9	14.9	0.126	0.423	0.141	0.738	0.9	2.2	4.4	6.6	8.8	11	36593
36527	0.84	0.409	0.622	0.304	0.85	1.9	4.7	9.5	14.2	18.9	23.7	0.147	0.546	0.234	1.087	1.5	3.6	7.3	10.9	14.6	18.2	36527
36589	1.05	0.113	0.825	0.533	1.13	3.3	8.3	16.6	25.9	33.2	41.6	0.154	0.742	0.432	1.472	2.7	6.7	13.5	20.2	27	33.7	36589
1	1.315	0.133	1.09	0.864	1.677	5.4	13.5	26.9	40.4	53.9	67.4	0.179	0.957	0.719	2.469	4.5	11.2	22.4	33.6	44.8	56.4	1
1.25	1.66	0.14	4.38	1.496	2.27	9.3	23.3	46.6	69.9	93.2	116.6	0.191	1.278	1.283	2.993	8	20	40	60	80	100	1 1/4
1.5	1.9	0.145	1.31	2.036	2.715	12.7	31.7	63.5	95.2	126.9	158.7	0.2	1.5	1.767	3.627	11	27.5	55.1	82.6	110.5	137.7	1.5
2	2.375	0.154	2.067	3.356	3.649	20.9	52.3	104.6	156.9	209.2	261.5	0.218	1.939	2.953	5.017	18.4	46	92	138.1	184.1	230.1	2
2.5	2.875	0.203	2.469	4.788	5.787	29.8	74.6	149.2	223.9	298.5	373.1	0.276	2.323	4.238	7.653	26.4	66.1	132.1	198.2	264.2	330.3	2.5
3	3.5	0.216	3.068	7.393	7.568	46.1	115.2	230.4	345.7	460.9	576.1	0.3	2.9	6.605	10.242	41.2	102.9	205.9	308.8	411.8	514.7	3
3.5	4	0.226	3.548	9.887	9.1	61.6	154.1	308.2	462.3	616.4	770.5	0.318	3.364	8.888	12.492	55.4	138.5	277.1	415.6	544.1	692.6	3.5
4	4.5	0.237	4.026	12.73	10.779	79.4	198.4	396.8	595.2	793.7	922.1	0.337	3.826	11.497	14.968	71.7	179.2	358.4	537.6	716.8	896	4
5	5.563	0.258	5.047	20.006	14.602	124.7	311.8	623.6	935.4	1247.2	1559.1	0.375	4.813	18.194	20.756	113.4	283.6	537.1	850.7	1134.3	1417.8	5
6	6.625	0.28	6.065	28.89	18.954	180.1	450.3	900.6	1350.9	1801.1	2251.4	0.432	5.761	26.067	28.543	162.5	406.3	812.6	1218.8	1625.1	2031.4	6
8	8.625	0.322	7.981	50.027	28.524	311.9	779.7	1559.4	2339.2	3118.9	3898.6	0.5	7.625	45.664	43.342	284.7	711.7	1423.4	2135.1	2846.9	3558.6	8
10	10.75	0.365	10.02	78.854	40.441	491.6	1229	2458.1	3687.1	491634	6145.1	0.594	9.562	72.81	64.362	447.7	1119.2	2238.5	3357.7	4477	5596.2	10 (3)
12(1)	12.75	0.406	11.938	111.932	53.469	697.8	1744.6	6489.1	5223.7	6978.3	8722.9	0.688	11.374	101.605	88.537	633.4	1583.6	3167.2	4750.9	6334.5	7918.1	12(3)
12(2)	12.75	0.375	12	113.097	49.51	705.1	1762.7	3525.5	5288.2	7051.1	8813.7											

SCHEDULE 160 PIPE											DOUBLE EXTRA STRONG PIPE - XXS											
PIPE SIZE	OD (IN)	WALL (IN)	ID (IN)	INT A REA (SQ IN.)	WT/FT (POUNDS)	GPM @ 2 FPS	GPM @ 5 FPS	GPM @ 10 FPS	GPM @ 15 FPS	GPM @ 20 FPS	GPM @ 25 FPS	WALL (IN)	ID (IN)	INT A REA (SQ IN.)	WT/FT (POUNDS)	GPM @ 2 FPS	GPM @ 5 FPS	GPM @ 10 FPS	GPM @ 15 FPS	GPM @ 20 FPS	GPM @ 25 FPS	PIPE (6) SIZE
36527	0.84	0.187	0.466	0.171	1.303	1.1	2.7	5.3	8	10.6	13.3	0.294	0.252	0.05	1.713	0.3	0.8	1.6	2.3	3.1	3.9	36527
36589	1.05	0.218	0.614	0.296	1.935	1.8	4.6	9.2	13.8	18.5	32.1	0.308	0.434	0.148	5.438	0.9	2.3	4.6	3.9	9.2	11.5	36589
1	1.315	0.25	0.815	0.522	2.841	3.3	8.1	16.3	24.4	32.5	40.7	0.358	0.599	0.282	3.655	4.8	4.4	8.8	13.2	17.6	22	1
1 1/4	1.66	0.25	1.16	1.057	3.761	6.6	16.5	32.9	49.4	65.9	82.4	0.382	0.896	0.631	5.208	3.9	9.8	19.7	29.5	39.3	49.1	1 1/4
1 1/2	1.9	0.281	1.338	1.406	4.854	8.8	21.9	43.8	65.7	87.7	109.6	0.4	1.1	0.95	6.401	5.9	12.8	29.6	44.4	59.2	74.1	1 1/2
2	2.375	0.344	1.687	2.235	7.454	13.9	34.8	69.7	104.5	139.4	174.2	0.436	1.503	1.774	9.079	11.1	27.7	55.3	83	110.6	138.3	2
2 1/2	2.875	0.375	2.125	3.547	10.002	22.1	55.3	110.6	165.8	221.1	276.4	0.552	1.771	2.463	13.681	15.4	38.4	76.8	115.2	153.6	192	2.5
3	3.5	0.438	2.624	5.408	14.309	33.7	84.3	168.6	252.9	337.1	421.4	0.6	2.3	4.155	18.564	25.9	64.8	129.5	194.3	259	323.8	3
4	4.5	0.531	3.438	9.283	22.485	57.9	144.7	289.4	434.1	578.8	723.4	0.674	3.152	7.803	27.512	48.6	121.6	243.2	364.9	486.5	608.1	4
5	5.563	0.625	4.313	14.61	32.927	91.1	227.7	455.4	683.1	910.8	1138.6	0.75	1.063	12.965	38.512	80.8	202.1	404.2	606.2	808.3	1010.4	5
6	6.625	0.719	5.187	21.131	45.304	131.7	329.4	658.7	988.4	1317.4	1646.8	0.864	4.897	18.864	53.104	117.4	293.6	587.1	880.7	1742.2	1467.8	6
8(4)	8.625	0.906	6.813	36.456	74.612	227.3	568.2	1136.4	1704.6	2272.8	2841	0.875	6.875	37.122	72.348	231.4	578.6	1157.2	1735.8	2314.4	2893	8(4)
10	10.75	1.125	8.5	56.745	115.524	353.8	884.4	1768.9	2653.3	3637.7	4422.1	1	8.75	60.132	104.021	374.9	937.2	1874.4	2811.7	3748.9	4686.1	10(7)
12	12.75	1.312	10.126	80.531	160.104	502.1	1255.2	2510.3	3765.5	5020.7	6275.8	1	10.75	90.763	125.359	565.9	1414.6	2829.3	4243.9	5685.5	7073.1	12(7)

(1) Sizes shown for "Schedule 40"  
 (2) Sizes shown for "Standard Weight"

(3) Data shown is for "schedule 80" 10 & 12 in. pipe. "XS", Extra Strong Pipe has thinner wall. Extra Strong" and Schedule 80 are the same sizes and wall thicknesses for 1/8 through 8 in.  
 (4) Note that 8" XXS has a thinner wall than 8" - 160

(5) This chart may be applicable to some stainless schedules. Consult size vs. pressure drop charts.  
 (6) 3-1/2-XXS may be available.  
 (7) Note that these two sizes have thinner wall than SCH 160.