

Appendix



Pipe Size - Inches

Pressure Drop per 100 Feet of Pipe

Pipe Size - Inches

10% of Applied Pressure
5% of Applied Pressure

1/8, 1/4, 3/8, 1/2
3/4, 1, 1-1/4, 1-1/2, 2, 1-1/2, 3

Applied Pressure psig	Derived Units = Pressure Drop per 100 Feet of Pipe (CFH)										
	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
5	30	72	162	294	396	780	1,620	2,400	4,800	8,100	14,400
10	48	102	234	462	660	1,260	2,640	3,840	7,500	12,000	22,200
20	78	180	396	780	1,110	2,100	4,500	6,600	12,900	21,000	36,000
40	150	330	720	1,380	2,040	3,720	8,100	12,000	23,100	38,400	66,000
60	210	480	1,080	2,040	3,000	5,580	11,700	17,400	33,600	54,000	96,000
80	282	630	1,380	2,640	3,900	7,200	15,300	23,400	43,200	72,000	126,000
100	348	780	1,740	3,240	4,800	9,000	18,900	28,200	54,000	87,000	156,000
150	516	1,200	2,460	4,800	6,900	13,200	27,600	40,800	81,000	132,000	234,000
200	690	1,560	3,480	6,480	9,300	17,400	37,200	54,600	105,000	168,000	300,000
250	870	1,980	4,380	8,100	12,000	22,200	46,200	69,000	132,000	210,000	3,660,000

Acetylene and Oxygen Pressure vs. Temperature

Temp (°F)	Acetylene (PSI)	Oxygen (PSI)
0	85	1782
10	100	1840
20	125	1900
30	150	1960
40	170	2010
50	190	2080
60	225	2140
70	250	2216
80	285	2256
90	320	2317
100	355	2375

Acetylene withdrawal rate is 1/7th-1/10th of cylinder contents for intermittent use.
Acetylene withdrawal rate is 1/15th of cylinder contents for continuous use.