

Air Hose Friction

- PSI = pressure in pounds/square inch
- CFM = air flow in cubic feet/minute

Hose Size (inches)	CFM thru 50' Hose	Gauge Pressure - Pounds/sq inch			
		50	70	90	110
		PSI Loss Over 50' Hose Length			
1/2"	20	1.8	1.0	.8	.6
	30	5.0	3.4	2.4	2.0
	40	10.1	7.0	5.4	4.3
	50	18.1	12.4	9.5	7.6
	60	+	20.0	14.8	12.0
	70	+	28.4	22.0	17.6
	80	+	+	30.5	24.6
	90	+	+	41.0	33.3
	10	+	+	+	44.5
	110	+	+	+	+
3/4"	20	.04	.2	.2	.1
	30	.08	.5	.4	.3
	40	1.5	.9	.7	.5
	50	2.4	1.5	1.1	.9
	60	3.5	2.3	1.6	1.3
	70	4.4	3.2	2.3	1.8
	80	6.5	4.2	3.1	2.4
	90	8.5	5.5	4.0	3.1
	100	11.4	7.0	5.0	3.9
	110	14.2	8.8	6.2	4.9
	120	+	11.0	7.5	5.9
	130	+	+	9.0	7.1
1"	20	.1	0	0	0
	30	.2	.1	.1	.1
	40	.3	.2	.2	.2
	50	.5	.4	.3	.2
	60	.8	.5	.4	.3
	70	1.1	.7	.6	.4
	80	1.5	1.0	.7	.6
	90	2.0	1.3	.9	.7
	100	2.6	1.6	1.2	.9
	110	3.5	2.0	1.4	1.1
	120	4.8	2.5	1.7	1.3
	130	7.0	3.1	2.0	1.5

+ Pressure loss is too great and therefore the combination of hose size, CFM, and gauge pressure is not recommended. Gauge pressures are the indicated air pressure, in pounds/square inch, at the source (i.e. the air compressor receiver tank).