General “Rule of Thumb” Compressor Tubing Recommendations

	100'		200'		300'		400'		500'		600'		800'		1000'		1200'	
	Tubing	PSI	Tubing	PSI	Tubing	PSI	Tubing	PSI	Tubing	PSI	Tubing	PSI	Tubing	PSI	Tubing	PSI	Tubing	PSI
Rocking Piston Compressors - 25 to 40 PSI max																		
1 cfm	3/8"	1.1	3/8"	2.2	3/8"	3.3	3/8"	4.4	3/8"	5.5	3/8"	6.6	3/8"	8.8	1/2"	4.0	1/2"	4.8
2 cfm	3/8"	2.1	3/8"	4.2	3/8"	6.3	3/8"	8.4	3/8"	10.5	1/2"	4.8	1/2"	6.4	1/2"	8.0	1/2"	9.6
3 cfm	3/8"	3.4	3/8"	6.8	3/8"	10.2	1/2"	5.0	1/2"	6.3	1/2"	7.5	1/2"	10.0	5/8"	3.1	5/8"	3.7
4 cfm	3/8"	4.2	3/8"	8.4	1/2"	5.4	1/2"	7.2	1/2"	9.0	5/8"	3.0	5/8"	4.0	5/8"	5.0	5/8"	6.0
Rotary Vane Compressors - 10 PSI max																		
1 cfm	3/8"	1.1	3/8"	2.2	3/8"	3.3	1/2"	1.6	1/2"	2.0	1/2"	2.4	5/8"	.72	5/8"	.9	5/8"	1.1
2 cfm	3/8"	2.1	1/2"	1.6	1/2"	2.4	1/2"	3.2	5/8"	.75	5/8"	.9	5/8"	1.2	5/8"	1.5	5/8"	1.8
3 cfm	1/2"	1.25	1/2"	2.5	5/8"	.9	5/8"	1.2	5/8"	1.5	5/8"	1.8	5/8"	2.4	3/4"	1.0	3/4"	1.2
4 cfm	1/2"	1.8	5/8"	1.0	5/8"	1.5	5/8"	2.0	3/4"	1.0	3/4"	1.2	3/4"	1.6	3/4"	2.0	3/4"	2.4

Important - Do not exceed maximum compressor PSI rating! ***To get total system PSI:***

1. Divide the depth in feet of the deepest air diffuser by 2.31 = depth PSI
2. Add depth PSI to longest tubing run PSI = TOTAL PSI

Example:

16' deep pond with 600 maximum tubing run with 2 cfm air flow

16' ÷ 2.31 = 6.9 PSI

400' using 3/8" tubing = 8.4 PSI

Total PSI = 15.3 - Okay if using rocking piston, too high if using rotary vane (larger tubing size would be needed)