

# Figure 1

## Suggested Host Sizes and Maximum Length

Nozzle Size		Hose Selection	
Diameter	Number	Minimum I.D.	Maximum Lengths
<b>3/16 in</b> <b>5 mm</b>	<b>3</b>	¾ in – 19 mm 1 in – 25 mm	75 Feet – 22 Meters 100 Feet – 40 Meters
<b>¼ in</b> <b>6.5 mm</b>	<b>4</b>	1 in – 25 mm 1 ¼ in – 32 mm	75 Feet – 22 Meters 150 Feet – 50 Meters
<b>5/16 in</b> <b>8 mm</b>	<b>5</b>	1 in – 25 mm 1 ¼ in – 25 mm	60 Feet – 18 Meters 100 Feet – 40 Meters
<b>3/8 in</b> <b>9.5 mm</b>	<b>6</b>	1 ¼ in – 32 mm 1 ½ in – 38 mm 2 in – 51 mm	50 Feet – 15 Meters 100 Feet – 30 Meters 150 Feet – 50 Meters
<b>7/16 in</b> <b>11 mm</b>	<b>7</b>	1 ¼ in – 32 mm 1 ½ in – 38 mm 2 in – 51 mm 2 ½ in – 63 mm	18 Feet – 5 Meters 50 Feet – 15 Meters 150 Feet – 50 Meters 300 Feet – 100 Meters
<b>½ in</b> <b>2.8 mm</b>	<b>8</b>	1 ½ in – 38 mm 2 in – 51 mm 2 ½ in – 63 mm	25 Feet – 8 Meters 100 Feet – 30 Meters 170 Feet – 50 Meters

This chart is for reference only, as friction factors vary in different hoses.

The above chart is designed to allow a pressure drop of 10 P.S.I. maximum, from entry to the nozzle.

To achieve this low pressure drop, the hose must be assembled with no internal restrictions, as noted in Figure 3.

**Figure 2**

**Nozzle Size and Compressor Size**

Nozzle Size		Air (C.F.M.)							
Diameter	#	Compressor Horsepower (H.P.)							
		Nozzle Pressure in P.S.I.							
<b>3/16 in</b> <b>5 mm</b>	<b>3</b>	CFM HP	30 7	33 8	38 9	41 10	45 10	55 12	70 15
<b>1/4 in</b> <b>6.5 mm</b>	<b>4</b>	CFM HP	54 12	61 14	68 16	74 17	81 19	98 23	115 27
<b>5/16 in</b> <b>8 mm</b>	<b>5</b>	CFM HP	89 20	101 24	113 26	126 29	137 31	168 37	200 45
<b>3/8 in</b> <b>9.5 mm</b>	<b>6</b>	CFM HP	125 30	145 32	160 35	175 40	200 45	275 57	315 65
<b>7/16 in</b> <b>11 mm</b>	<b>7</b>	CFM HP	170 40	200 45	215 50	240 55	255 60	315 70	405 90
<b>1/2 in</b> <b>12.8 mm</b>	<b>8</b>	CFM HP	225 50	250 55	275 63	300 70	340 75	730 95	540 120
<b>5/8 in</b> <b>16 mm</b>	<b>10</b>	CFM HP	350 80	400 90	450 100	500 110	550 120	700 150	880 195
<b>3/4 in</b> <b>19 mm</b>	<b>12</b>	CFM HP	500 115	650 145	700 160	800 175	800 175	1100 215	1255 275

This chart is to used for reference only. Actual may vary widely between manufacturers.