

Single Cylinder Nozzle and Piping Parameters

A single cylinder supports up to 5 nozzles, 20 flow points¹. Max supply line up to 42 feet to the first overlapping nozzle.

Table 7 - Agent Distribution Piping Limitations for Single Cylinder System

Pipe Section	Max Pipe Length (ft)
Max Supply Line to First Overlapping Nozzle	42
Overlapping Nozzle Appliance Branch	10
Dedicated Nozzle Appliance Branch	10

Notes:

- One (1) tee allowed per appliance drop.
- No more than two nozzles can be utilized for a single appliance drop.
- Additional elbows are permitted on branch lines, provided linear pipe length is reduced by corresponding equivalent length (1.3 ft per 90° elbow, 0.6 ft per 45° elbow).
For example: a 3/8" steel elbow has an equivalent length of 1.3 ft. An appliance branch may use 4 elbows, provided the total linear pipe is reduced by 1.3 ft (e.g., from 5 ft to 3.7 ft). Additional pipe cannot be added in lieu of fittings, as pipe volume limits could be exceeded.
- Maximum 6 ft vertical rise of supply line above cylinder outlet.
- Minimum 7 ft. of supply line to first overlapping nozzle.
- If hoods are piped to the same TANK, the sum of piping between hoods plus distance to first overlapping nozzle should NOT exceed 42 feet.

Dual Cylinder Nozzle and Piping Parameters

A dual cylinder system supports up to 40 flow points and 10 nozzles. Dual cylinder can be piped in series or parallel. Max supply line up to 42 feet to the first overlapping nozzle.

Table 8 - Agent Distribution Piping Limitations for Dual Cylinder System

Pipe Section	Max Pipe Length (ft)
Max Supply Line to First Overlapping Nozzle	42
Overlapping Nozzle Appliance Branch	10
Dedicated Nozzle Appliance Branch	10

Notes:

- One (1) tee allowed per appliance drop.
- No more than two nozzles can be utilized for a single appliance drop.
- Additional elbows are permitted on branch lines, provided linear pipe length is reduced by corresponding equivalent length (1.3 ft per 90° elbow, 0.6 ft per 45° elbow).
For example: a 3/8" steel elbow has an equivalent length of 1.3 ft. An appliance branch may use 4 elbows, provided the total linear pipe is reduced by 1.3 ft (e.g., from 5 ft to 3.7 ft). Additional pipe cannot be added in lieu of fittings, as pipe volume limits could be exceeded.
- Maximum 6 ft vertical rise of supply line above cylinder outlet.
- Minimum 7 ft. of supply line to first overlapping nozzle.
- If hoods are piped to the same TANK, the sum of piping between hoods plus distance to first overlapping nozzle should NOT exceed 42 feet.