
Sprayvectors

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1 Sprayvectors

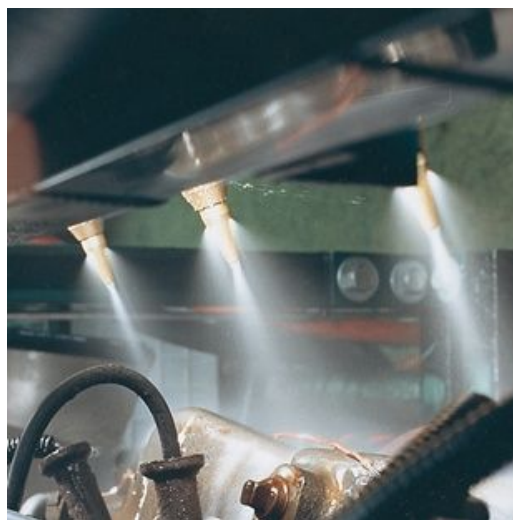
Sprayvector nozzles provide ultra-fine droplet-sized sprays

1.1 Overview

Sprayvector nozzles provide ultra-fine droplet-sized sprays for evaporative cooling, atomization, humidification and wetting. Superior to conventional hydraulic and piezoelectric nozzles, sprayvectors produce spray patterns that can be widely diffused or directed. The liquid stream is entrained by high velocity compressed air to create a range of micron-level spray droplets, resulting in greater surface coverage than conventional nozzles.

With this more efficient use of the liquid, Sprayvectors accelerate air-liquid interaction to give more effective cooling, humidifying, wetting and dust control.

Three types of Sprayvectors are available, all producing adjustable flow rates from 6 to 30 gallons per hour.



1.2 Features

- Produce controlled, ultra-fine droplet sizes
- Removable nozzle tips for easy cleaning and replacement
- Interchangeable nozzle tips give flexibility for fogging, atomizing and humidifying
- Can be used with a wide viscosity range of 1 - 1100 cPs
- Deliver a wide range of liquid flow rates (6 - 30 gallons per hour)
- Require no electrical connection at the nozzle
- Allow low pressure liquid supply (2 - 20 psig)
- Use only 12 scfm of compressed air
- Liquid entrainment using compressed air minimizes clogging

1.3 Benefits

- More efficient use of liquid as it is entrained by the compressed air
- Consistent, effective cooling of surfaces reduces heat distortion of parts
- Eliminates damage to wood and other water sensitive surfaces due to low humidity
- Provides even coverage when applying coatings, rust inhibitors, lubricants, preservatives, etc. to parts, wood, rubber, plastic, food, and more
- Reduces noise levels
- Speeds testing for humidity effects due to varying humidity levels
- High pressure liquid flows are not required
- Precision flow rates minimize usage of expensive coatings, preservatives, rust inhibitors, etc.
- Produce finer drops than will hydraulic nozzles
- Droplet size and production is not dependent on liquid pressure
- Air and liquid mix externally to minimize clogging

1.4 Applications

- Fogging: Directed spray having droplet sizes of 20 - 60 microns. Liquid viscosities up to 1100 cP.
- Atomizing: Directed spray having droplet sizes of 60 - 200 microns. Liquid viscosities up to 1100 cP
- Humidifying: Wide spray with droplet sizes of 20 - 200 microns. Liquid viscosities up to 100 cP.

1.5 Uses

- Evaporative Cooling
- Mist Cooling
- Moisturization
- Dust Suppression

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- Static Neutralization
 - Pressure Spray Cleaning
 - Humidification
 - Sanitizing or Deodorizing
 - Wetting
 - Lubrication
 - Atomizing
 - Spray Applications

2 Models

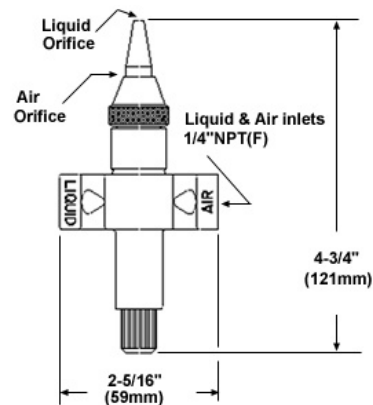
2.1 Sprayvectors (Fogging Humidifying Atomizing)

Three types of Sprayvectors are available, all producing adjustable flow rates from 6 to 30 gallons per hour.

Fogging: Directed spray having droplet sizes of 20 - 60 microns. Liquid viscosities up to 1100 cP. Atomizing: Directed spray having droplet sizes of 60 - 200 microns. Liquid viscosities up to 1100 cP. Humidifying: Wide spray with droplet sizes of 20 - 200 microns. Liquid viscosities up to 100 cP.

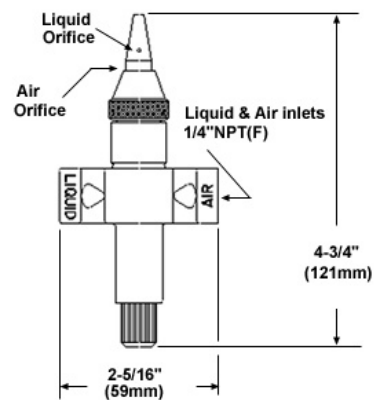
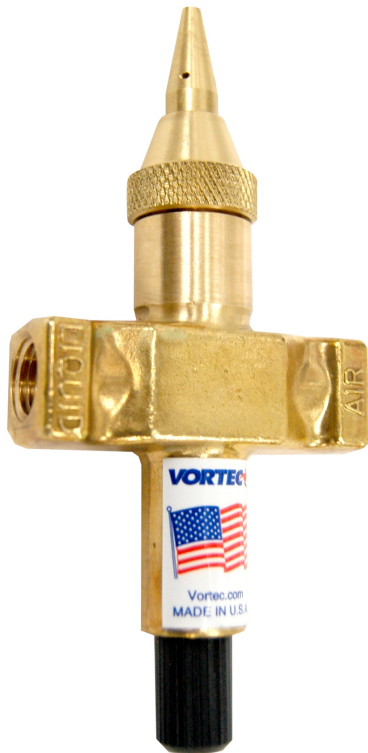
1713: Atomizing Sprayvector

Model	1713
Application	Atomizing
Droplet Size, micron	60-200
Max Liquid Viscosity, cPs	1100
Spray Pattern	Tight



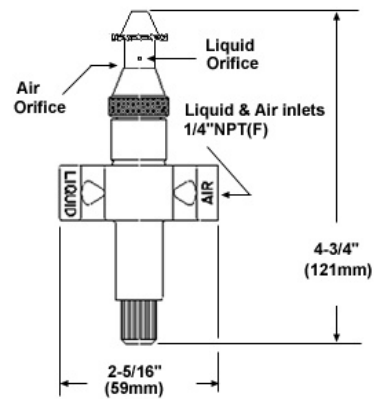
1703: Fogging Sprayvector

Model	1703
Application	Fogging
Droplet Size, micron	20-60
Max Liquid Viscosity, cPs	1100
Spray Pattern	Tight



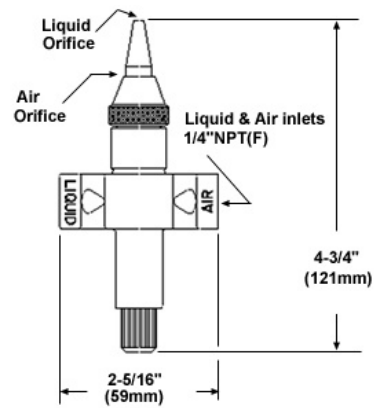
1707: Humidifying Sprayvector

Model	1707
Application	Humidifying
Droplet Size, micron	20-200
Max Liquid Viscosity, cPs	100
Spray Pattern	Wide



1700: Sprayvector Experimental Kit

Model	1700
Application	Atomizing/Fogging/Humidifying
Droplet Size, micron	20-200
Max Liquid Viscosity, cPs	1100
Spray Pattern	Tight/Wide



3 Technical data

Sprayvectors (Fogging Humidifying Atomizing)

Model	Application	Droplet Size, micron	Max Liquid Viscosity, cPs	Spray Pattern
1713	Atomizing	60-200	1100	Tight
1703	Fogging	20-60	1100	Tight
1707	Humidifying	20-200	100	Wide
1700	Atomizing/Fogging/Humidifying	20-200	1100	Tight/Wide