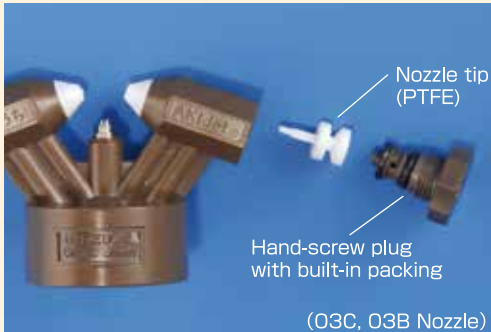


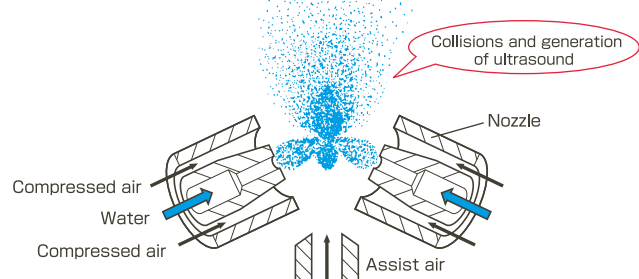
Features

- Quality Fog reaches over four meters horizontally, providing effective humidification.*¹
- Up to four nozzles can be mounted per body.
- Compact water tank keeps free from bacteria.
- Automatic humidity control is available with a timer or humidity controller.

*¹Spray length depends on the surrounding air temperature and humidity conditions.



Atomization principle



High quality, silky Dry Fog Nozzle type O3C

Sauter mean droplet diameter: **7.5 μm**
measured by a laser analyzer

Spray volume: **2.4 ℓ/hr** at 0.3 MPa
(per nozzle) (air pressure)

O3C nozzle type with clog-resistant nozzle tip produces non-wetting Dry Fog (smoke-like ultrafine fog) of uniform quality.

Our Dry Fog, with its ability to humidify target spaces without wetting nearby machines or products, is ideal for use in electronics factories or where wetting is not allowed.

■ O3C Nozzle Performance (per nozzle)

Air pressure in MPa (psi)	Spray volume in ℓ/hr (GPH)	Air consumption in ℓ/min , Normal (SCFM)
0.2 (29)	1.3 (0.34)	22 (0.82)
0.3 (44)	2.4 (0.63)	29 (1.08)
0.4 (58)	3.1 (0.82)	36 (1.34)
0.5 (73)	3.6 (0.95)	43 (1.60)

Note: Use under the air pressure of between 0.2 and 0.5 MPa (29 and 73 psi).

■ Specifications (per body)

Model No.	Number of nozzles	at air pressure of 0.3 MPa (44 psi)	
		Spray volume in ℓ/hr (GPH)	Air consumption in ℓ/min , Normal (SCFM)
AE-1 (O3C)	1	2.4 (0.63)	29 (1.08)
AE-2 (O3C)	2	4.8 (1.27)	58 (2.16)
AE-3 (O3C)	3	7.2 (1.90)	87 (3.24)
AE-4 (O3C)	4	9.6 (2.54)	116 (4.32)

One O3C nozzle should be good for spaces of 100 m³ (3,500 ft³), though it depends on various conditions.

Large volume fog Nozzle type O4E

Sauter mean droplet diameter: **10 μm**
measured by a laser analyzer

Spray volume: **3.0 ℓ/hr** at 0.3 MPa
(per nozzle) (air pressure)

O4E nozzle type: Scratch-resistant nozzle tip, made of metal.

■ O4E Nozzle Performance (per nozzle)

Air pressure in MPa (psi)	Spray volume in ℓ/hr (GPH)	Air consumption in ℓ/min , Normal (SCFM)
0.2 (29)	1.9 (0.50)	27 (1.00)
0.3 (44)	3.0 (0.79)	36 (1.34)
0.4 (58)	3.8 (1.00)	45 (1.67)
0.5 (73)	4.5 (1.19)	54 (2.00)

Note: Use under the air pressure of between 0.2 and 0.5 MPa (29 and 73 psi).

■ Specifications (per body)

Model No.	Number of nozzles	at air pressure of 0.3 MPa (44 psi)	
		Spray volume in ℓ/hr (GPH)	Air consumption in ℓ/min , Normal (SCFM)
AE-1 (O4E)	1	3.0 (0.79)	36 (1.34)
AE-2 (O4E)	2	6.0 (1.58)	72 (2.67)
AE-3 (O4E)	3	9.0 (2.38)	108 (4.00)
AE-4 (O4E)	4	12.0 (3.17)	144 (5.34)

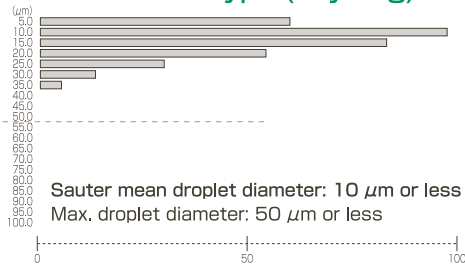
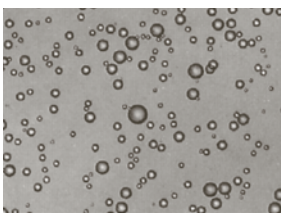
O3B type with PTFE nozzle tip and spray volume of 3.3 ℓ/hr per nozzle is also available. For details please contact us.

Spray Droplet Size by various humidifiers

Shown below are pictures of droplets collected by Immersion Sampling and droplet diameter distribution measured by the laser analyzer.

(The vertical axis is for droplet diameter, and the horizontal for the proportional number of droplets.)

AKIMist® "E" O3C/O4E nozzle type (Dry Fog)



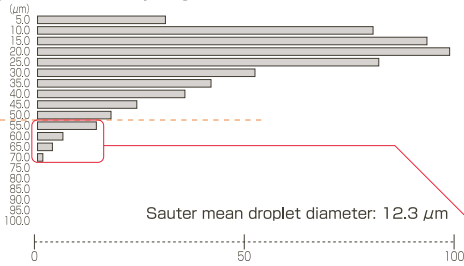
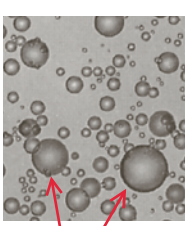
Why Dry Fog doesn't get things wet:

Uniform fog, **having no large particles**, humidifies target spaces effectively without getting anything wet.

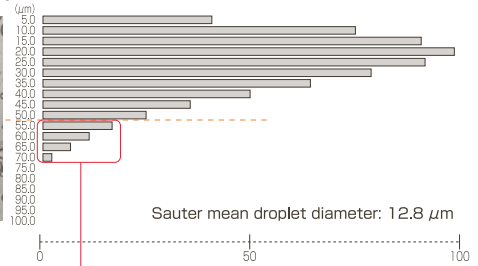
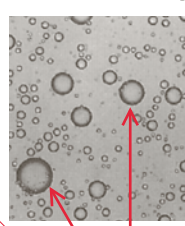
We define Dry Fog as a very fine fog with a uniform, mean droplet diameter (average fog droplet size) of 10 μm or less.

Other kinds of humidifiers

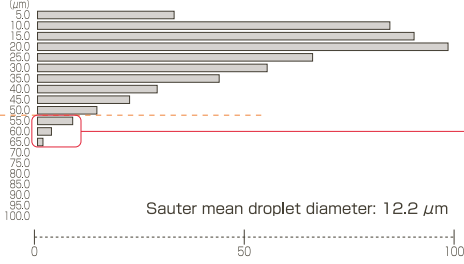
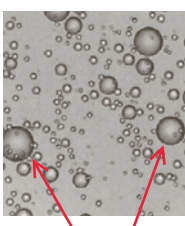
● Conventional pneumatic spray nozzle



● Ultrasonic type



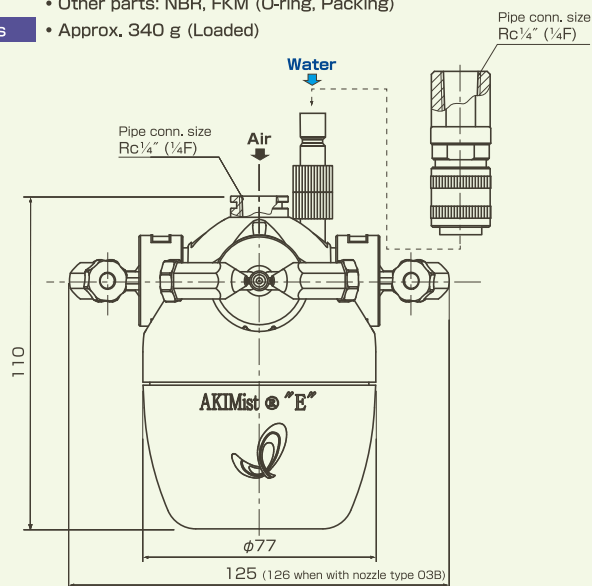
● Spinning disk type



Why other humidifiers wet things: Even though the mean droplet diameter is small, large droplets included in spray distributions will eventually cause wetting.

AKIMist® "E" Dimensions

- Materials**
- Body: PP, Stainless steel 303
 - Nozzle: Stainless steel 303, PPS, fluorocarbon resin
 - Other parts: NBR, FKM (O-ring, Packing)
- Mass**
- Approx. 340 g (Loaded)



Note:

- Before disassembling, close the water valve.
- As main parts are made of plastic, handle AKIMist® "E" with care. (For details, see Instruction Manual.)
- "F" in pipe connection size denotes female thread.
- Stop plugs are enclosed to reduce the number of nozzles when needed.

Applications

- Humidification: Textile factory, mushroom nursery, poultry incubation, fermentation room, cold storage for food
- Moisture control: Textile, paper, plywood, etc.
- Preventing dust adhesion: Plastic molding, bag-making, painting line, etc.
- Dust suppression: Painting line, foundry, ceramic fabrication, etc.
- Curing: Concrete, etc.
- ESD prevention / Static electricity control: Printing, textile, painting line, plastic film, plastic molding, assembly line of electronics, paper, etc.

