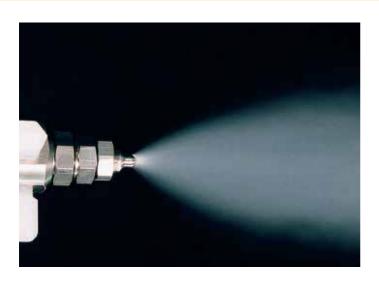
# Small Capacity Fine Fog Nozzles

### **BIM/CBIM series Fine Fog Nozzles**







- ■BIM/CBIM series produces fine atomization with a mean droplet diameter of 10-100µm measured by Laser Doppler Method.
- Unique design greatly minimizes clogging.
  Designed using fewer parts than typical nozzles for easier maintenance and lower price.
- Available in 3 spray patterns, BIMV/CBIMV flat spray, BIMK/CBIMK hollow cone spray and BIMJ/CBIMJ full cone spray.
  - Versatile pneumatic spray nozzles you can select a suitable type depending on the intended use.
- ■Available with integrated spray header combining air and liquid conduits, ring-shaped header, and other compact headers to fit your site.

#### **Contents**

Small Capacity Fine Fog Nozzles	
BIMV series / Flat Spray  -Liquid pressure type-	p.13
BIMV-S series / Flat Spray -Liquid siphon type-	p.15
BIMK series / Hollow Cone Spray -Liquid pressure type-	p.17
BIMK-S series / Hollow Cone Spray –Liquid siphon type–	p.19
BIMJ series / Full Cone Spray  -Liquid pressure type-	p.21
Types and structures of adaptors for BIM series nozzles	p.23
Dimensions and pipe connection size	p.25
How to use BIM controlling adaptors	p.26
BIM-PP series Flat Spray & Full Cone Spray -Liquid pressure type-	p.27
Integrated Spray Header with BIM Fine Fog Nozzles	p.28
CBIM Compact Nozzles  -Liquid pressure type-	p.30
CBIM Compact Nozzles  -Liquid siphon type-	p.33
Common applications	p.34
List of spray tip interchangeablity	p.35

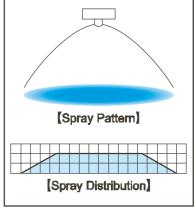
## Small Capacity Fine Fog Nozzles / Flat Spray - Liquid Siphon Type -

### **BIMV-S**

#### **Features**

- Flat spray pneumatic nozzle producing fine atomization with a mean droplet diameter of 30μm or less (\*1).
- ■Liquid siphon feed type (liquid pressure device is not required).
- ■Spray angle is 80°.
- Even spray distribution across the entire spray area.
  - \*1) Measured by Laser Doppler Method





BIM with T-type adaptor

#### **Applications**

- ■Spraying: Mold release agent, lubricant, deodorant, oil, surface treatment agent, rust preventive, honey, insecticide, aqueous urea, etc.
- ■Cooling: Dies, gas, glass, steel plates, steel pieces, moldings, automobile bodies, plastic products, etc.
- ■Moisture control: Paper, gas, ceramics, concrete, etc.
- ■Cleaning: Printed circuit boards, glass tubes, etc.

#### Structure & Materials

- ■Comprising 4 parts: Spray tip, core, cap and adaptor. (Details of adaptors are shown on pages 23 and 24.)
- ■Meterials: S303 (Optional material; S316L)

#### Dimensions & Pipe Conn. Sizes

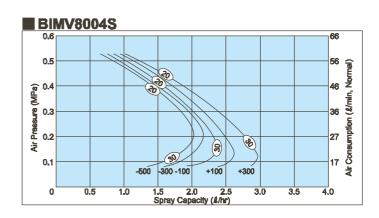
■Dimensions and pipe connection sizes are shown on page 25.

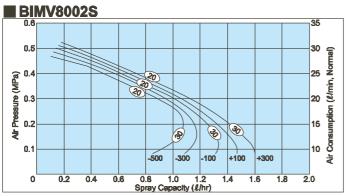
#### Accessories

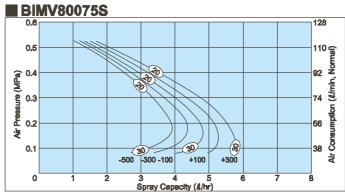
■Fixing support for easy installation is shown on page 26.

#### Flow-rate Diagram

- ■How to read the chart
- 1) The spray capacity shown is for one nozzle.
- ②Figures at foot of each curve indicate gravity head (+) and siphon height (-) in mm.
- ③Figures in ovals indicate Sauter mean droplet diameters (μm) measured by the Laser Doppler Method.



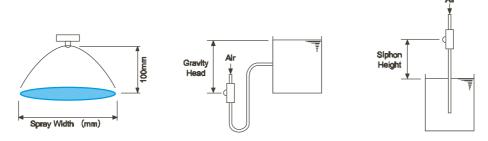




Spray Angle Code *2	Air Consumption Code	1	Air Consumption (&/min, Normal)	Spray Capacity (t/hr)				Spray Width*3 (mm)	Mean Droplet Dlameter (µm)				
				Gravity Head (mm) Siphon Height (mm)			Laser Doppler		r Spray				
				+300	+100	-100	-300	-500		Method	Orifice	Liquid	Air
80°	02	0.2 0.3 0.4	15 20 25	1.4 1.1 0.7	1.3 1.0 0.7	1.2 1.0 0.6	1.2 0.9 0.6	1.1 0.9 0.5	160 165 170	20 30	0.3	0.9	0.7
	04	0.2 0.3 0.4	27 36 46	2.8 2.4 1.9	2.5 2.1 1.7	2.3 2.0 1.6	2.2 1.9 1.5	2.0 1.8 1.4	165 170 175	20 30	0.5	0.9	0.9
	075	0.2 0.3 0.4	56 74 92	5.5 4.7 3.5	5.1 4.3 3.2	4.7 4.0 2.9	4.3 3.7 2.7	3.9 3.3 2.5	170 180 190	20 30	0.7	1.2	1.4

Note: \*2) Measured at compressed air pressure of 0.3MPa and liquid siphon height of 100mm.

<sup>\*3)</sup> Measured at 100mm from nozzle and liquid siphon height of 100mm.



#### How to order

To determine specifications, please specify a spray angle code and air consumption code referring to the above chart, then select a connecting adaptor from the 8 types (type N, T, ND, etc.). Please inquire or order for a specific nozzle using this coding system.

## <Example> BIMV8002S S303+NS303 80 02 S S303 + N

Details of adaptors are shown on pages 23 and 24.