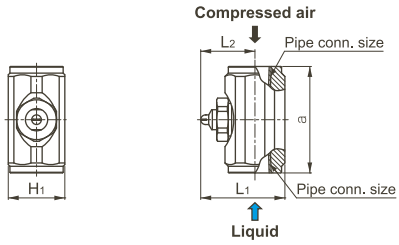
The following eight types of adaptors are available for BIM Small Capacity Fine Fog Nozzles: BIMV, BIMV-S, BIMK, BIMK-S, BIMJ, which are introduced on pages 13 to 22.

Types of Adaptors

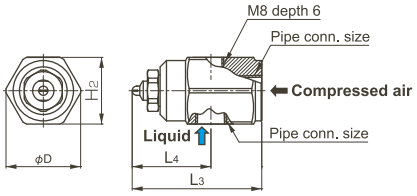
Type N

Liquid and air enter into adaptor from both sides.



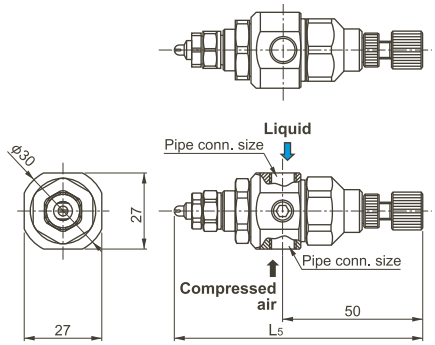
Type T

Air inlet is on the center line and liquid inlet is on a 90° angle line to the center line.
Suitable for use in a small space.



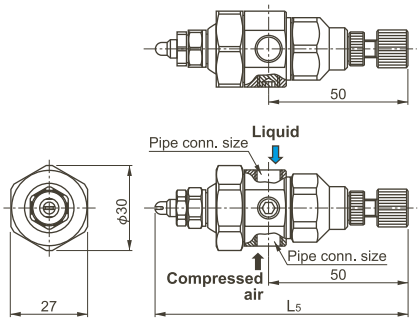
Type NDB

Spray capacity is adjustable with needle valve.



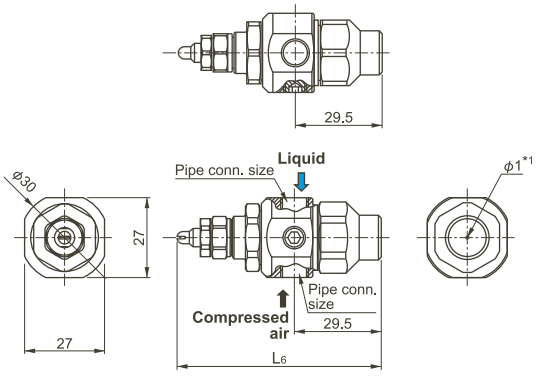
Type UNDB

Besides the features of the NDB-type adaptor, spray direction can be adjusted within +/- 15° by means of a ball joint.
It is ideal for fine-tuning of spray direction after pipe assemblies have been completed.



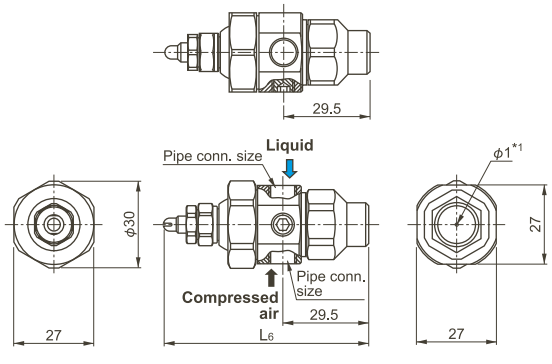
Type SNB

Spray ON/OFF can be regulated by turning compressed air ON/OFF, which actuates an internal piston, to open or close the nozzle.
Compressed air pressure over 0.2 MPa starts the spray.



Type USNB

Besides the features of the SNB-type adaptor, spray direction can be adjusted within +/- 15° by means of a ball joint.
It is ideal for fine-tuning of spray direction after pipe assemblies have been completed.

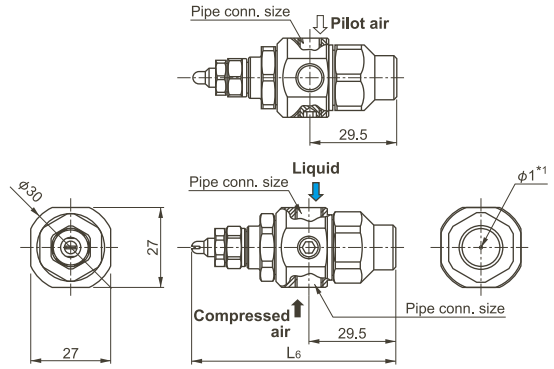


*1) Hole ϕ1 is for air relief.

Types of Adaptors

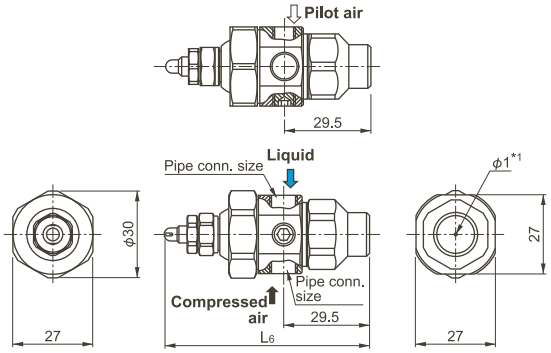
Type SPB

Spray ON/OFF can be regulated by switching the pilot air ON/OFF. The pilot air actuates an internal piston to regulate the spray.
(Pilot air pressure more than 0.2 MPa required)
This type of adaptor is suitable for applications to avoid scattering droplets of fog.



Type USPB

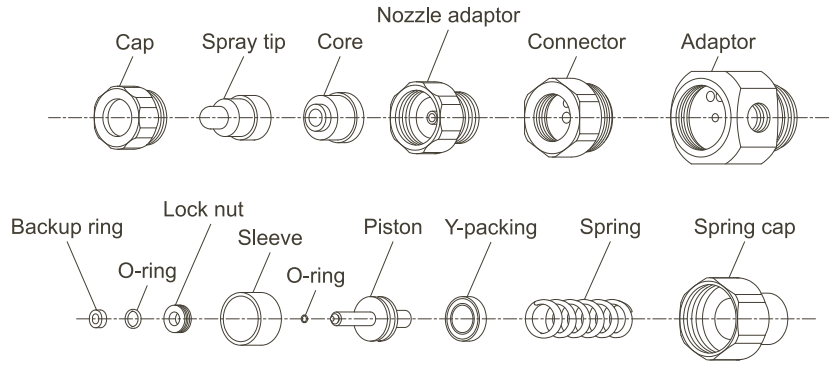
Besides the features of the SPB-type adaptor, spray direction can be adjusted within +/- 15° by means of a ball joint.
It is ideal for fine-tuning of spray direction after pipe assemblies have been completed.



*1) Hole ϕ1 is for air relief.

Structure of SPB adaptor

This exploded view shows a structure of SPB adaptor as an example.
Structure and components varies according to adaptor types.



CAUTIONS for NDB, UNDB, SPB, USPB, SNB, and USNB adaptors

Thin-walled nozzle adaptor tends to deform easily if installed directly by itself.

First assemble Core, Spray tip, Cap and Nozzle adaptor by hand with light pressure, then attach them to Connector (or UT Ball).
Use a well-fitting hexagon socket wrench instead of a regular spanner (wrench), as a spanner may deform the unit.

Pipe connection sizes and mass

Adaptor type	Air consumption code	Pipe connection sizes			Mass (g)
		Compressed air	Liquid	Pilot air	
N	02, 04, 075	Rc1/8	Rc1/8		55
	15, 22	Rc1/4	Rc1/4		130
T	02, 04, 075	Rc1/8	Rc1/8		80
	15, 22	Rc1/4	Rc1/4		210
NDB UNDB	02, 04, 075	Rc1/8	Rc1/8		172
	15, 22				193
SPB USPB	02, 04, 075	Rc1/8	Rc1/8	Rc1/8	146
	15, 22				167
SNB USNB	02, 04, 075	Rc1/8	Rc1/8		151
	15, 22				172

Dimensions

Air consumption code	Dimensions (mm)									
	L1	L2	L3	L4	L5	L6	a	H1	H2	ϕD
02	25.3	16.3	40.8	24.8	87.3	66.8	32	17	21	23.5
04*2	26.8	17.8	42.3	26.3	88.8	68.3	32	17	21	23.5
BIMJ 2004	27.0	18.0	42.5	26.5	89.0	68.5	32	17	21	23.5
075	28.1	19.1	43.6	27.6	90.1	69.6	32	17	21	23.5
15	39.1	26.6	60.1	38.1	97.6	77.1	43	23	29	32.5
22	41.3	28.8	62.3	40.3	99.8	79.3	43	23	29	32.5

*2) Excludes BIMJ2004.

How to Use BIM Controlling Adaptors

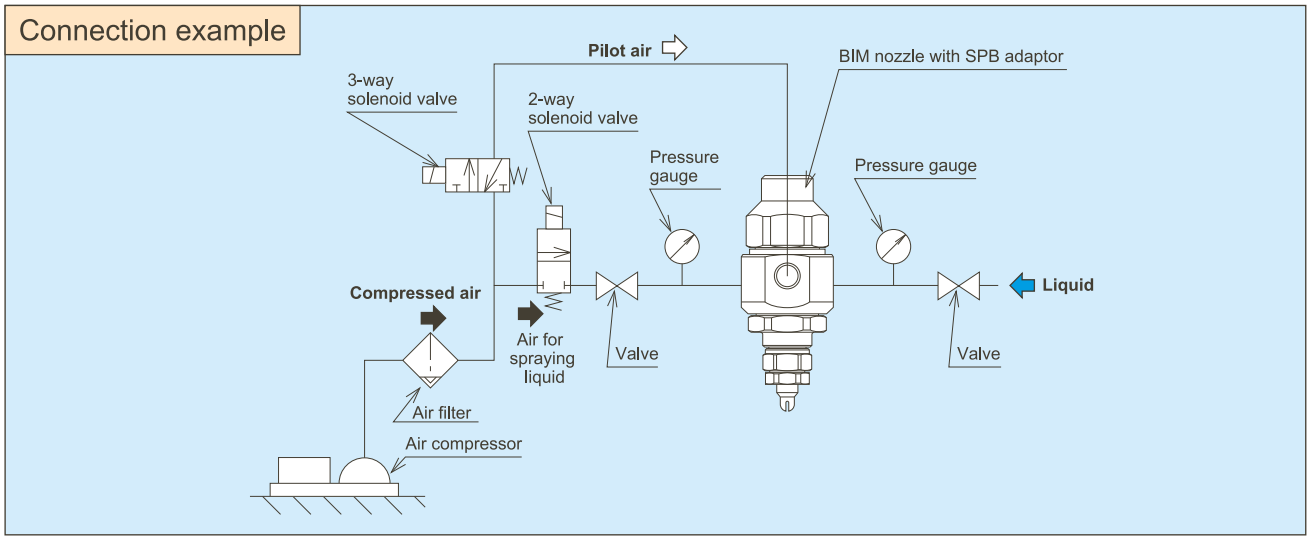
■ SPB adaptor

Spray ON/OFF can be regulated by switching the pilot air ON/OFF.
The pilot air actuates an internal piston to regulate the spray. (Pilot air pressure must be 0.2 MPa or higher.)
As even low pressure atomizing air can be used, production of a range of fine to coarse fog is possible.
Best-suited for when there is concern about scattering droplets.

Function chart

Compressed air			ON			
Pilot air	OFF	ON	OFF	ON	OFF	
Liquid	Stop	Spray	Stop	Spray	Stop	

Connection example



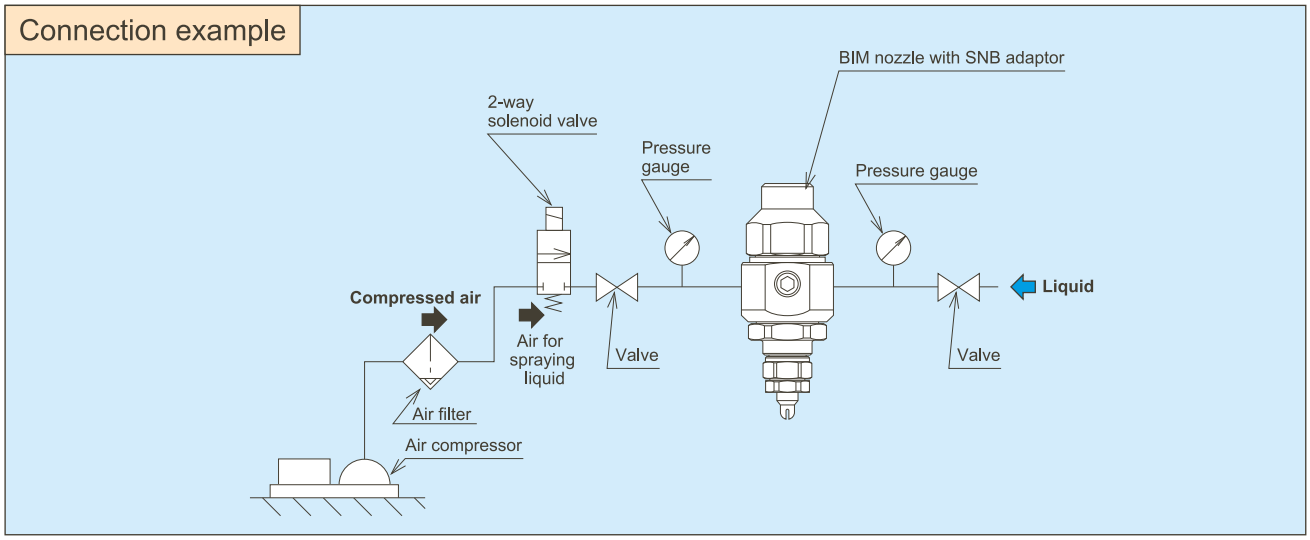
■ SNB adaptor

Spray ON/OFF can be regulated by turning compressed air ON/OFF.
Compressed air pressure must be 0.2 MPa or higher in order to start the spray.

Function chart

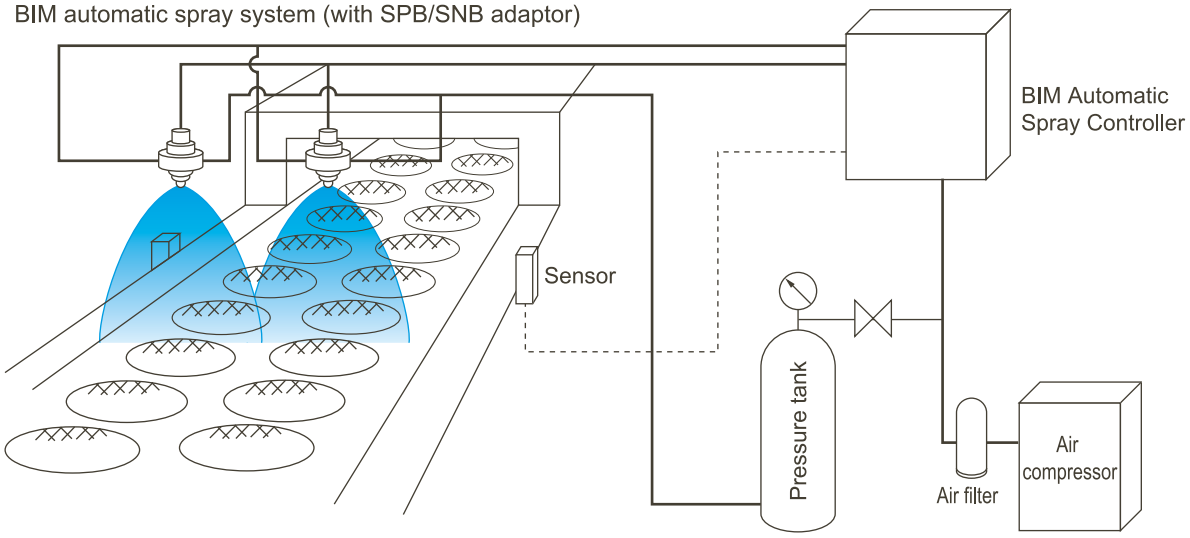
Compressed air	OFF	ON	OFF	ON	OFF	
Liquid	Stop	Spray	Stop	Spray	Stop	

Connection example



Installtion Example of BIM Automatic Spray System

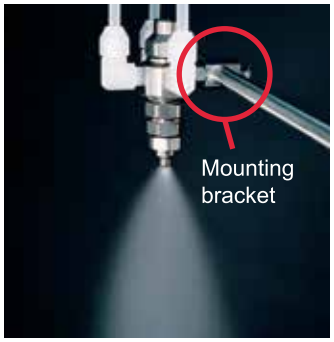
■ Example of applications controlled by
BIM automatic spray system (with SPB/SNB adaptor)



Optional/ Related Products

■ Mounting Bracket (product code: MBW)

Mounting bracket enables easy fixing of a nozzle on a pole (metal rod) with desired spray direction.
Available in two size for pipe diameters of 8 mm and 10 mm.
Available for the adaptor types T, NDB, UNDB, SPB, USPB, SNB, and USNB (not available for N-type adaptor).



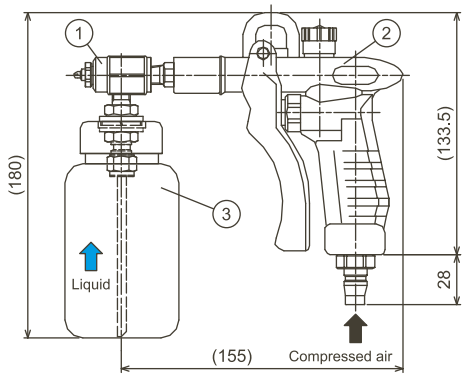
■ Spray Gun Unit with BIM nozzles: BIM-GUN

Liquid siphon type with 250 mℓ bottle.*
Air capacity adjustability (as standard equipment).
Suitable for chemical spraying, etc.

*500mℓ bottle is available as an option.

Pressure gauge kit including pressure reducing valve and two couplers.

Note: When using BIM**04S types, this item is necessary.



Max. operating pressure: 0.5 MPa
Structure: ①BIM nozzle ②Air duster gun ③Plastic bottle
Materials: S303, S304, PP, PE, etc.
Liquid contacting parts: PE (bottle) and Stainless steel 303 (nozzle)
Some kinds of chemical may not be suitable for use.

How to order

Please inquire or order for a specific BIM-GUN using these product codes.

(Flat spray) BIMV series
BIMV8004SS303+TS303 siphon spray unit (w/ 250 ml bottle)
BIMV80075SS303+TS303 siphon spray unit (w/ 250 ml bottle)

(Hollow cone spray) BIMK series
BIMK6004SS303+TS303 siphon spray unit (w/ 250 ml bottle)
BIMK60075SS303+TS303 siphon spray unit (w/ 250 ml bottle)

Approx. spray capacity (for your reference)
●BIMV8004S/BIMK6004S: 30 mℓ/min ●BIMV80075S/BIMK60075S: 60 mℓ/min