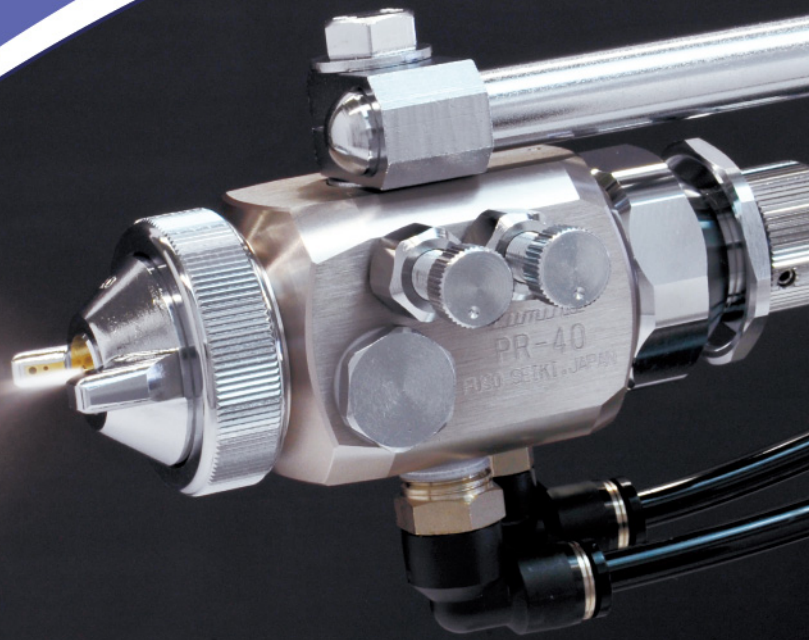


**LUMINA**  
**AUTOMATIC**  
**SPRAY GUN**  
**PR-40**  
**MS-8** SERIES



**WIDE-ANGLE SPRAY GUN SERIES**





# WIDE-ANGLE SPRAY GUN

Thanks to a large body, wide-angle spray guns have a large internal liquid passage and liquid opening. Since there is little resistance to liquid flow, they offer more stable spraying than the ST series, even when using a small volume of liquid or a high-viscosity liquid.



Due to its wide liquid passage and liquid-circulation passages, the PR-40 can be used with high-viscosity liquids and precipitating liquids. Its unique cap structure enables spraying over a wider angle than the ST series.

## Features

- Wide fan-shaped pattern: enables spraying of wide areas.
- Liquid-circulation system: supports liquids that are easily separated.
- Atomizing air adjuster: enables a gentle spray of large droplets to be achieved.
- Hard-anodized aluminum body: resistant against corrosives and abrasions.

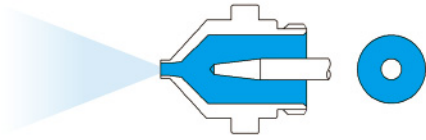


The MS-8 series handle high-viscosity liquid that even The PR-40 struggles with. A high level of clogging resistance is achieved, thanks to the widest liquid passages of any Lumina product, and the effect of the spiral air stream. The round spray pattern that opens widely also tends to reduce liquid adhesion to the cap.

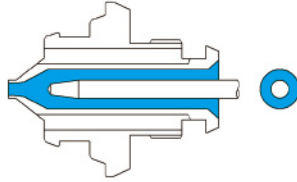
## Features

- Spiral liquid nozzle: generates a wide round pattern, even with viscous liquids.
- Tornado-like stream: reduces dirt and clogging of the cap and enables effective application on concave surfaces.
- Multiple-packing structure: prevents liquid from penetrating the piston chamber.
- Hard-anodized aluminum body: resistant against corrosives and abrasions.

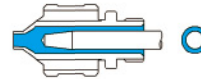
Liquid Passage of the MS series



Liquid Passage of PR-40



Liquid Passage of the ST series



The wider liquid passages allow a more stable spray.



For liquids that are easily separated



Liquid-circulation body

From round to wide-fan pattern



With pattern air adjuster

High resistance against corrosives and abrasions



Hard-anodized aluminum body

To wider areas



Wide-fan pattern

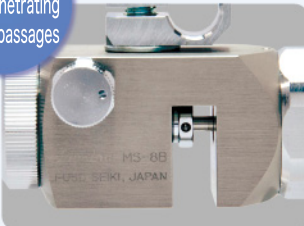
From paints to lubrications



With atomizing air adjuster



Prevents liquids from penetrating into air passages



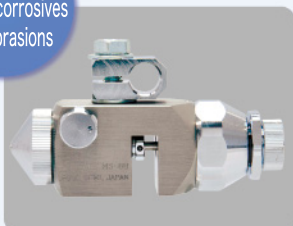
Multiple packing structure

Efficient liquid application on concave surfaces



Spiral nozzle

High resistance against corrosives and abrasions



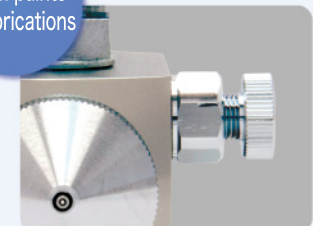
Hard-anodized aluminum body

Resistance against clogging



Tornado-like stream effect

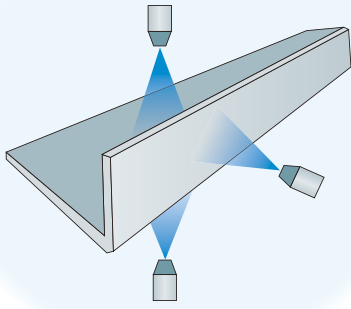
From paints to lubrications



With atomizing air adjuster

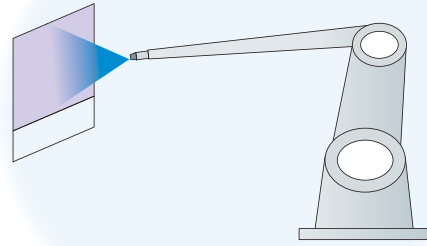
# APPLICATION EXAMPLES

## ADHESION



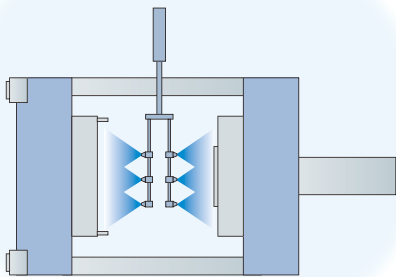
Adhesives

## COATING



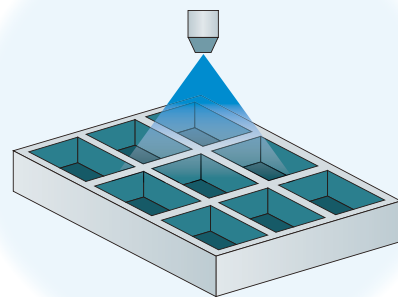
Paints

## MOLDING



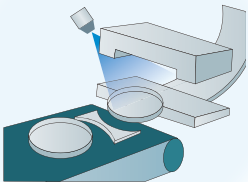
Release agents

## COOLING



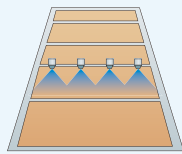
Water

## STAMPING PRESS



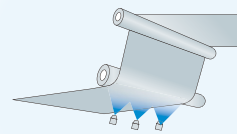
Press working lubricants

## RUST PREVENTION



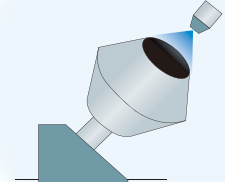
Rust-preventive oils

## SURFACE TREATMENT



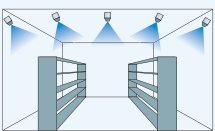
Waterproof or antistatic agents

## MIXING



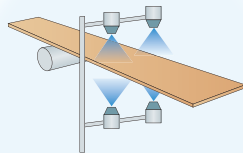
Additives

## FACTORY HUMIDIFICATION



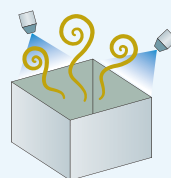
Water

## CHEMICAL SPRAYING



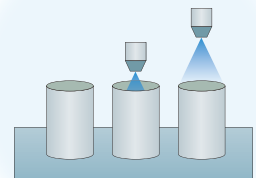
Water-repellent chemicals

## ODOR REMOVAL



Deodorizing agents

## DISINFECTION



Disinfection of food containers

### Other Uses

- Coating rust-preventive oil to automobiles.
- Coating to prevent degradation and improve sliding of rubber products.
- Coating solid lubricants onto pistons or camshafts.
- Spraying anti-spatter when welding.
- Application of adhesives onto automobile upholstery.
- Application of glues in furniture manufacturing.
- Spraying metalworking fluids in forging work.



# PR-40

Features genuine pattern adjuster and atomizing air adjuster. Useful for many different applications from coating to lubrication.



- Two separate air lines for atomizing and piston-actuated air. A wide adjustment range is possible, from large-droplet mist without overspray to very fine mist for producing beautiful finishes.
- A wide fan-shaped pattern. To switch to round pattern, close the pattern adjuster.
- With liquid circulation for liquids that include solids and liquids that are easily separated. If circulation is not needed, it can be used as a normal spray gun by closing the passage using the plug.

## Features

- Spray pattern: Wide fan pattern
  - 2 air inlets (atomizing air and piston-actuated air)
  - 1 liquid inlet (equipped with another plugged inlet for liquid circulation)
  - Recommended piston-actuated air pressure: 0.4–0.5 MPa\*
  - Body material: Hard-anodized aluminum
  - Mass: 505 g
- \*At piston-actuated air pressure below 0.4 MPa the piston is not actuated and no liquid comes out.

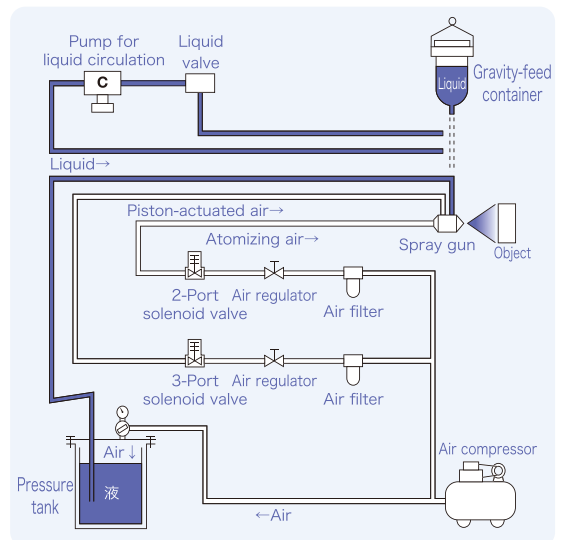
## PR-40 Spray Data

Spray Data						
Nozzle Size (mm)	Code	Flow Rate (mL/min)	Pattern Size (Fan) (mm)	Pattern Size (Round) (mm)	Particle Size (μm)	Air Consumption (L/min)
φ0.5	PR-40-0.5X	0- 70	400mm	φ 70	9	130
φ1.0	PR-40-1.0X	0-210	450mm	φ 90	10	150
φ1.3	PR-40-1.3X	0-335	460mm	φ110	11	160
φ1.5	PR-40-1.5X	0-450	530mm	φ110	12	180
φ2.0	PR-40-2.0X	0-540	540mm	φ120	12	210
φ3.0	PR-40-3.0X	0-580	700mm	φ140	12	210

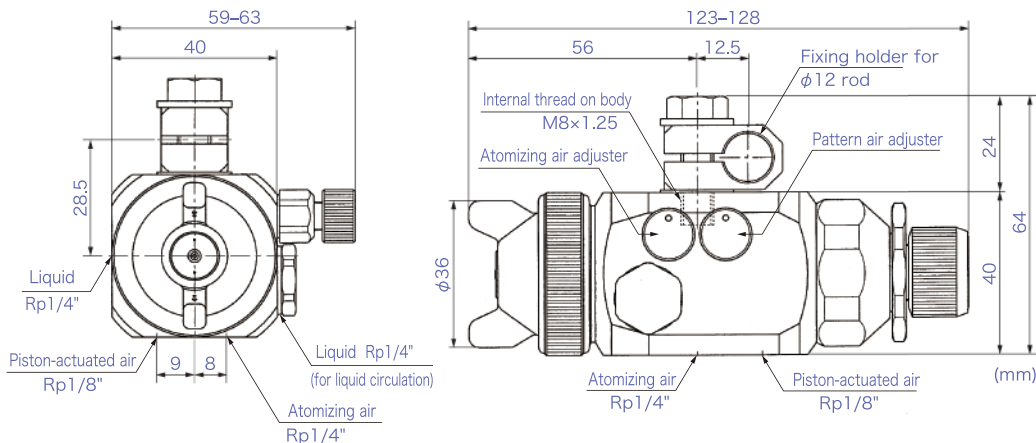
\*Data above collected at 0.3 MPa atomizing air pressure, 0.01 MPa liquid pressure, liquid adjuster full throttle, 300-mm distance (for particle size, 200-mm distance), using water. Particle size is based on Sauter Mean Diameter (SMD).

\*Air consumption varies according to conditions, e.g., temperature.

## Installation example



## PR-40 Dimensions



## Materials

- Body  
Hard-anodized Aluminum
- Liquid Nozzle  
303 Stainless Steel
- Needle  
303 Stainless Steel
- Other Parts  
Chrome-plated Brass

# MS-8 SERIES

Lumina's most clogging-resistant gun for high-viscosity liquids. A wide, spiral stream enables effective application on concave surfaces. The MS-8 series have two models: MS-8A (one air inlet) and MS-8B (two air inlet).



## MS-8A

- Offers more stable spraying than the ST series, even when using a high-viscosity liquid.
- A spiral stream reduces dirt and clogging of air caps.
- The included L-shaped swivel joint allows quick and easy removal of connected hoses.

### Features

- Spray pattern: Wide round pattern
- 1 air inlet (common inlet for atomizing and piston-actuated air)
- Recommended air pressure: 0.4–0.5 MPa\*.
- With an atomizing air adjuster
- Body material: Hard-anodized aluminum
- Mass: 530 g (Body with nipples: 420 g/Fittings: 110 g)

\*At air pressure below 0.4 MPa the piston is not actuated and no liquid comes out.

\*MS-8A includes two hose joints (code 18006, 18101).



## MS-8A Spray Data

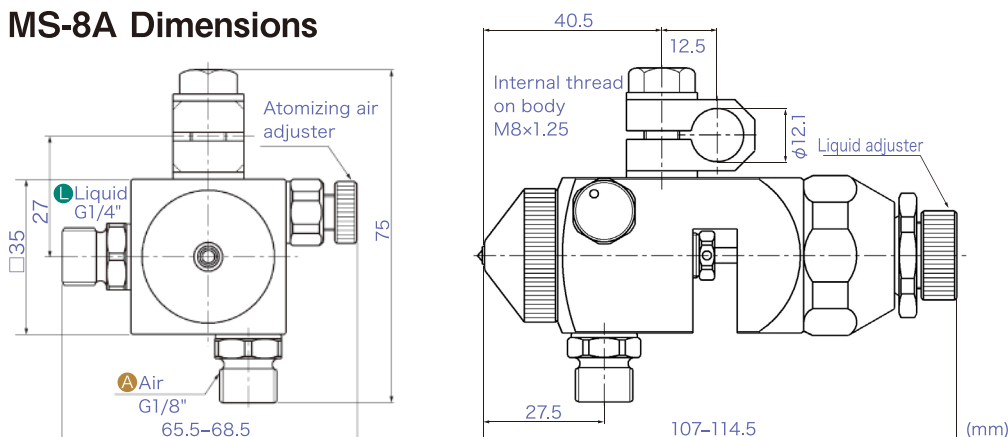
Spray Data					
Nozzle Size (mm)	Code	Flow Rate (mL/min)	Pattern Size (mm)	Particle Size (μm)	Air Consumption (L/min)
φ1.0	MS-8A-1.0	0-290	φ 130	15	170
φ1.5	MS-8A-1.5	0-580	φ 140	21	190
φ2.0	MS-8A-2.0	0-780	φ 150	25	210
φ3.0	MS-8A-3.0	0-930	φ 160	26	230

\*Data above collected at 0.4 MPa atomizing air pressure, 0.01 MPa liquid pressure, liquid adjuster full throttle, 300-mm distance (for particle size, 200-mm distance), using water. Particle size is based on Sauter Mean Diameter (SMD).

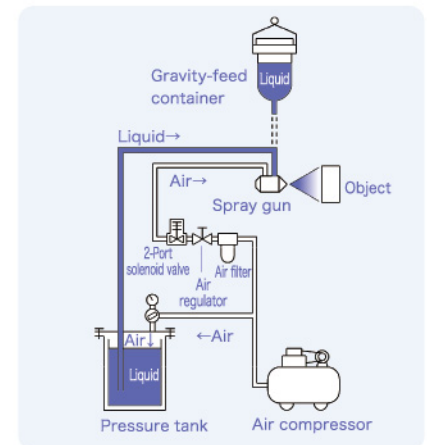
\*If the liquid concentration increases, the spray quantity and pattern width will decrease.

\*Air consumption varies according to conditions, e.g., temperature.

## MS-8A Dimensions



## Installation example



### Materials

- Body  
Hard-anodized Aluminum
- Liquid Nozzle  
303 Stainless Steel
- Needle  
303 Stainless Steel
- Other Parts  
Chrome-plated Brass

## Fittings for MS-8A/MS-8B



No.81 Tube Fitting

Code **18181**

R1/4"×φ6 mm  
Straight

Connecting point **A** **L**



No.83 Tube Fitting

Code **18183**

R1/4"×φ6 mm  
Elbow

Connecting point **A** **L**



Tube Fitting PC6-M6M

Code **PC6-M6M**

M6×φ6 mm  
Straight (mini)

Connecting point **CYL**



Tube Fitting PL6-M6M

Code **PL6-M6M**

M6×φ6 mm  
Elbow (mini)

Connecting point **CYL**



No.6 Hose Joint

Code **18006**

G1/4"×hose inner diameter  
φ6.5 mm–7 mm  
1/4" Hexagonal

Connecting point **A** **L**



No.10 Hose Joint

Code **18101**

G1/4" Male×G1/4" Female  
Elbow

Connecting point **A** **L**

\*Liquid solvent cannot be used with tube fittings.

## MS-8B

- Separate air lines for atomizing and piston-actuated air.
- A wide adjustment range is possible, from large-droplet mist without overspray to very fine mist for producing beautiful finishes.

### Features

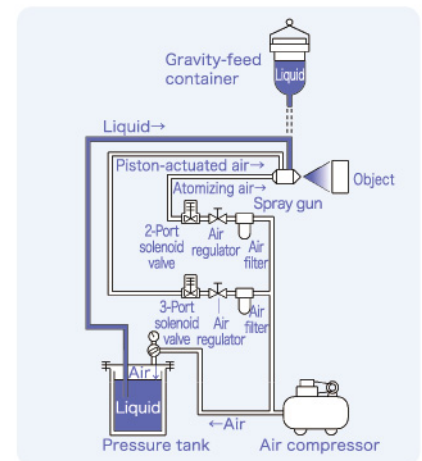
- Spray pattern: Wide round pattern
- 2 air inlets (atomizing air and piston-actuated air)
- Recommended piston-actuated air pressure: 0.4–0.5 MPa\*.
- With an atomizing air adjuster
- Body material: Hard-anodized aluminum
- Mass: 390 g (no nipples included.)

\*At air pressure below 0.4 MPa the piston is not actuated and no liquid comes out.

\*Fittings for MS-8B are sold separately.



## Installation example



## MS-8B Spray Data

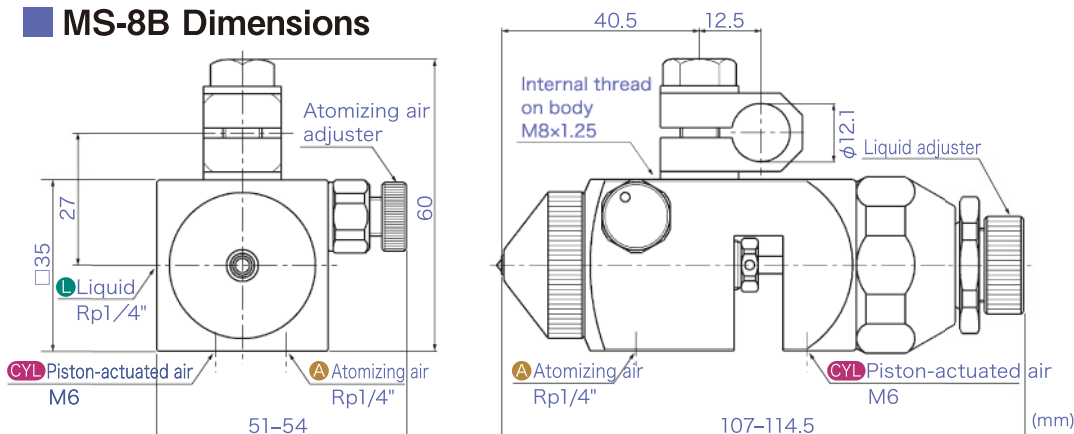
Spray Data					
Nozzle Size (mm)	Code	Flow Rate (mL/min)	Pattern Size (mm)	Particle Size (μm)	Air Consumption (L/min)
φ1.0	MS-8B-1.0X	0–250	φ 140	20	100
φ1.5	MS-8B-1.5X	0–490	φ 160	28	110
φ2.0	MS-8B-2.0X	0–710	φ 170	29	120
φ3.0	MS-8B-3.0X	0–900	φ 180	30	130

\*Data above collected at 0.2 MPa atomizing air pressure, 0.01 MPa liquid pressure, liquid adjuster full throttle, 300-mm distance (for particle size, 200-mm distance), using water. Particle size is based on Sauter Mean Diameter (SMD).

\*If the liquid concentration increases, the spray quantity and pattern width will decrease.

\*Air consumption varies according to conditions, e.g., temperature.

## MS-8B Dimensions



## Materials

- Body  
Hard-anodized Aluminum
- Liquid Nozzle  
303 Stainless Steel
- Needle  
303 Stainless Steel
- Other Parts  
Chrome-plated Brass

# PERIPHERAL EQUIPMENT

## Stainless Steel Pressure Tanks

Stable supply, safe design.

Ideal for supplying high-viscosity liquids.

- Equipped with air regulator, relief valve, liquid filter.
- Safety structure prevents cover from opening when pressure is applied, thanks to inner lid design.
- Light and compact. One-touch lever makes opening and closing the cover easy.
- Capacity: 4 L, 10 L, 18 L, 39 L



## Polyethylene Containers

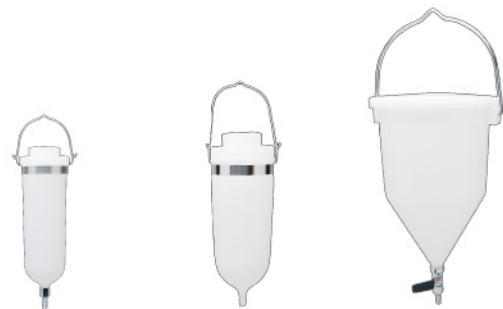
Simple, gravity-feed containers.

Due to its semi-transparent material, liquid level can be seen easily.

Including polyvinyl chloride hose ( $\phi 7$  mm  $\times$   $\phi 10$  mm) 2 m and strainer

\*E model container with tube fitting specifications also available.

\*Corrosive liquids cannot be used.



0.5 L Container **CT-G0.5M**

1 L Container **CT-G1.0**

4 L Container **CT-G4.0**

2 L Container **CT-G2.0**

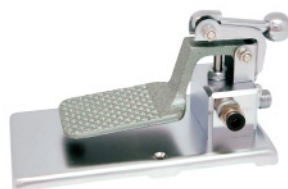
## Air Valve



Cam Air Valve U-4E (3-port valve)

**U-4E**

- While the upper roller is pushed, air comes out.
- (inlet) G1/4"  $\times$   $\phi 6$  mm (outlet)



Foot Air Valve C-60E (3-port valve)

**C-60E**

- Pushing the manual lever down to the pedal side makes air come out continuously.
- (inlet) G1/4"  $\times$   $\phi 6$  mm (outlet)

\*A 2-port C-50E model is also available.



Lumina Automatic Spray Gun

**ST series**

Lumina standard models



Lumina Automatic Spray Gun

**HM series**

Super mini size !



Lumina Automatic Spray Gun

**MK series**

Fine-finishing type



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Phone +81-3-3947-1334 <http://lumina.jp/>