AUTOMATIC SPRAY NOZZLES

COATING • DISPENSING • GLAZING
LAMINATING • ROBOTIC APPLICATIONS
MARKING • FLAVORING • HUMIDIFYING
LUBRICATING • MOISTURIZING
AUTOMATIC NOZZLES
INTRODUCTION

INTRODUCTION
If your application requires precise control of intermittent spraying, you’ll find dozens of product options in this section. Both electrically-actuated and air-actuated nozzles are available. Models which atomize flow using liquid pressure only or using compressed air are both offered. More information about the spray performance of the hydraulic spray tips and air atomizing set-ups used in these nozzles is found in Section D. To optimize the performance of automatic spray nozzles, consider adding an AutoJet® Spray Controller.

THE BENEFITS OF SPRAY CONTROL
Controlling automatic nozzles with one of our AutoJet spray controllers maximizes nozzle performance and enables automation of spray system operation. Automated spray control can help improve accuracy, reduce waste and overspray, boost production time and allow workers to be deployed to other tasks.

More specifically, with AutoJet Spray Control you can:
• Adjust flow rate for line speed variations
• Fine-tune timing to accurately spray moving targets and prevent dripping on nozzle actuation or shut-off
• Precisely control liquid pressure, atomizing air pressure and fan air pressure to optimize spray performance
• Notify operators or shut down on specified faults
• Integrate control of your spray application with existing plant control

FOR MORE INFORMATION ON AUTOJET SPRAY CONTROLLERS SEE PAGES B4 & B5
PRECISION SPRAY CONTROL

Overview

ELECTRICALLY-ACTUATED SPRAY NOZZLES: HYDRAULIC

Quick Reference Guide
PulsaJet® Series

PulsaJet® Series

Quick Reference Guide
AA250AUH Nozzles and AA26AUH Nozzles

ELECTRICALLY-ACTUATED SPRAY NOZZLES: AIR ATOMIZING

Quick Reference Guide
PulsaJet Series
AA28JJAU Nozzles
AA29JAUCO Nozzles

AIR-ACTUATED SPRAY NOZZLES: HYDRAULIC

Quick Reference Guide
JAUH and JJAUH Series
D55500-JAUH Series
AA22AUH Series
AA24AUH Series

AIR-ACTUATED SPRAY NOZZLES: AIR ATOMIZING

Quick Reference Guide
JAU Series
JJAU Series
D55500-JAU Series
VAU/VMAU Variable Spray Series
10530 Series
72100 Nozzles

OPTIMIZE PERFORMANCE WITH:

AutoJet® Spray Controllers provide control ranging from simple on/off to sophisticated closed-loop to optimize the performance of automatic nozzles. See page B4

A variety of spray manifolds are available to save installation time and ensure proper nozzle positioning. See page F1

Premium UniJet® tips are available for select automatic nozzles and provide even coverage and better spray distribution. See page D5
EXPERIENCE BETTER PRECISION & INCREASED AUTOMATION

AUTOJET® SPRAY CONTROLLERS
All of our automatic spray nozzles are compatible with our spray controllers. For operations like coating, lubricating, moisturizing and adding costly ingredients, spray control can dramatically improve product or process quality and help save tens of thousands of dollars annually.

If your operation requires any of the following, the spray control should be considered.
• Consistent, uniform coverage of the target
• Precise spray placement on the target
• Intermittent spraying
• The use of costly coatings or chemicals
• The ability to adjust spray performance based on line speed
• Monitoring and supervision to ensure proper spray performance

Our AutoJet Spray Controllers range from basic to advanced.
• AutoJet Model 1550+ Modular Spray System with basic on/off spray control for up to eight automatic nozzles
• AutoJet Model 2008+ Spray Control Panel provides timing and sensor control for up to 16 nozzles
• AutoJet Model 2250+ Spray Control Panel with sophisticated real-time monitoring and closed-loop control for up to 16 nozzles

Many systems include a spray manifold to ensure proper delivery of the fluid to the nozzle, maintain optimal nozzle positioning and organize tubing to simplify maintenance. We have a wide variety of styles available.

Consult with your local sales engineer to determine which manifold is compatible with the nozzles in your spray system.

FOR A FULL LIST OF SPRAY MANIFOLDS SEE PAGE F4
PRECISION SPRAY CONTROL (PSC)

PulsaJet® automatic spray nozzles paired with an AutoJet® spray controller provide Precision Spray Control (PSC) to ensure coatings are applied uniformly and with minimal waste.

The benefits of PSC are many:

- Automatically maintains consistent coating weight even when line speed changes
- Reduces product scrap caused by over- or under-application of the sprayed solution
- Reduces the use of costly coatings by applying the proper coating volume directly on the target
- Eliminates maintenance time to clean overspray from equipment and/or floor due to over-application
- Improves worker safety by minimizing misting
- Eliminates the need for compressed air in some operations

HOW PRECISION SPRAY CONTROL WORKS

Electrically-actuated spray nozzles are turned on and off very quickly to control flow rate. This cycling is so fast that the flow often appears to be constant.

With traditional nozzles, flow rate adjustments require a change in pressure. Changing pressure also changes the nozzle’s spray angle/coverage and drop size. With PSC, pressure remains constant enabling flow rate changes without changes in spray performance.

TYPICAL APPLICATIONS:

- Adhesives/glue
- Anti-foaming agents
- Ascorbic acid
- De-ionized water
- Detergents
- Dyes and inks
- Emulsions
- Enzymes
- Fire retardants
- Fragrances/aromas
- Gels
- Lotions
- Lubricants/release agents/silicone
- Oils
- Wax

LEARN MORE & SEE HOW PSC WORKS:

spray.com/psc
OVERVIEW: ELECTRICALLY-ACTUATED HYDRAULIC NOZZLES

- Hydraulic atomizing nozzles use only liquid pressure as the force for atomization.
- Electrically-actuated nozzles provide the fastest cycling of any automatic nozzles – up to 25,000 cycles per minute.
- When using a PulsaJet® series nozzle and an AutoJet® spray controller, Precision Spray Control (PSC) can provide:
  - Consistent application rates at varying line speeds
  - Low flow rates comparable to air atomizing nozzles eliminating the use of compressed air in some operations
- Options for the PulsaJet 10000 series nozzles include food-grade materials of construction, sanitary connections, liquid recirculation and temperature control for spraying viscous liquids.
- Dozens of UniJet® spray tips are available for PulsaJet nozzles in a wide variety of flow rates. Auto-alignment of spray tips is offered on some models.
- Other electrically-actuated hydraulic nozzles include versions with a removable fluid module for easy maintenance and compact versions with stainless steel and Ryton® construction for maximum chemical resistance.

PLACING YOUR ORDER

Call 1.800.95.SPRAY for application assistance or to place an order.
## Quick Reference Guide – Electrically-Actuated Hydraulic Pulsajet® Series

<table>
<thead>
<tr>
<th>Pulsajet Series</th>
<th>Connection Size (in.)</th>
<th>Max Liquid Pressure</th>
<th>Power</th>
<th>Max Flow</th>
<th>Max Temp (liquid)</th>
<th>Max Speed</th>
<th>Spray Tips</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA10000AUH-03</td>
<td>1/8 NPT or BSPT</td>
<td>100 psi (7 bar)*</td>
<td>24 VDC, (0.36 Amp)</td>
<td>0.47 gpm (1.8 lpm)</td>
<td>200°F (93°C)</td>
<td>10,000 rpm (15,000 rpm with AutoJet® 2008+ spray controller)</td>
<td>TPU (page D6)</td>
</tr>
<tr>
<td>AA10000AUH-03-Z1</td>
<td>1/8 (F) NPT or BSPT</td>
<td>100 psi (7 bar)</td>
<td>24 VDC, (0.36 Amp)</td>
<td>0.47 gpm (1.8 lpm)</td>
<td>104°F (40°C)</td>
<td>10,000 rpm</td>
<td>TPU (page D6)</td>
</tr>
<tr>
<td>AA10000AUH-10</td>
<td>1/8 (F) NPT or BSPT</td>
<td>100 psi (7 bar)</td>
<td>24 VDC, (1.05 Amp)</td>
<td>1.6 gpm (6.1 lpm)</td>
<td>150°F (66°C)</td>
<td>5,000 rpm</td>
<td>TPU (page D6)</td>
</tr>
<tr>
<td>AA10000AUH-104210</td>
<td>1/8 (F) NPT or BSPT</td>
<td>100 psi (7 bar)</td>
<td>24 VDC, (0.36 Amp)</td>
<td>0.47 gpm (1.8 lpm)</td>
<td>200°F (93°C)</td>
<td>10,000 rpm (15,000 rpm with AutoJet 2008+ controller)</td>
<td>PWMD w/ auto spray pattern alignment (page D12)</td>
</tr>
<tr>
<td>AA10000AUH-104214</td>
<td>1/8 (F) NPT or BSPT</td>
<td>100 psi (7 bar)</td>
<td>24 VDC, (0.36 Amp)</td>
<td>0.47 gpm (1.8 lpm)</td>
<td>200°F (93°C)</td>
<td>10,000 rpm (15,000 rpm with AutoJet 2008+ controller)</td>
<td>PWMD w/ auto spray pattern alignment (page D12)</td>
</tr>
<tr>
<td>AA10000AUH-104215</td>
<td>1/8 (F) NPT or BSPT</td>
<td>100 psi (7 bar)</td>
<td>24 VDC, (0.36 Amp)</td>
<td>0.47 gpm (1.8 lpm)</td>
<td>200°F (93°C)</td>
<td>10,000 rpm (15,000 rpm with AutoJet 2008+ controller)</td>
<td>PWMD w/ auto spray pattern alignment (page D12)</td>
</tr>
<tr>
<td>AA10000AUH-72440-1/4</td>
<td>1/4 (F) NPT or BSPT</td>
<td>100 psi (7 bar)*</td>
<td>48 VDC, (0.36 Amp)</td>
<td>0.47 gpm (1.8 lpm)</td>
<td>150°F (66°C)</td>
<td>10,000 rpm (15,000 rpm with AutoJet 2008+ controller)</td>
<td>TPU (page D6)</td>
</tr>
<tr>
<td>AA10000AUH-0050</td>
<td>5/32 (4mm) tube fittings</td>
<td>200 psi (14 bar)</td>
<td>48 VDC, (1.0 Amp)</td>
<td>0.08 gpm (0.30 lpm)</td>
<td>150°F (66°C)</td>
<td>25,000 rpm</td>
<td>PWMM w/ auto spray alignment pattern (page D12)</td>
</tr>
</tbody>
</table>

*Higher pressure possible with AutoJet 2008+ spray controller

### Electrically-Actuated Hydraulic Pulsajet® Nozzle Options

#### AA10000AUH-03
- Typical flow range: 0.0017 - 0.47 gpm (0.006 - 1.8 lpm)
- Construction: Stainless steel, Viton® or EPDM seals, PPS and PEEK

#### AA10000AUH-03-Z1
- For use in Zone 1 hazardous areas
- Typical flow range: 0.0017 - 0.47 gpm (0.006 - 1.8 lpm)
- Construction: Stainless steel, FFKM seals, PPS and PEEK
**ELECTRICALLY-ACTUATED HYDRAULIC PULSAJet® NOZZLE OPTIONS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Features</th>
<th>Flow Range</th>
<th>Construction Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA10000AUH-10</td>
<td>• Typical flow range: 0.02 - 1.6 gpm (0.075 - 6.1 lpm)</td>
<td>• Highest capacity PulsaJet nozzle</td>
<td>Stainless steel, Viton® or EPDM seals, PPS and PEEK</td>
</tr>
<tr>
<td>AA10000AUH-104210</td>
<td>• Rear liquid inlet</td>
<td>Typical flow range: 0.0017 - 0.47 gpm (0.006 - 1.8 lpm)</td>
<td>Stainless steel, Viton or EPDM seals, PPS and PEEK</td>
</tr>
<tr>
<td>AA10000AUH-104214</td>
<td>• Side liquid inlet for low profile mounting</td>
<td>Typical flow range: 0.0017 - 0.47 gpm (0.006 - 1.8 lpm)</td>
<td>Stainless steel, Viton or EPDM seals, PPS and PEEK</td>
</tr>
<tr>
<td>AA10000AUH-104215</td>
<td>• Front port for liquid recirculation</td>
<td>Typical flow range: 0.0017 - 0.47 gpm (0.006 - 1.8 lpm)</td>
<td>Stainless steel, Viton or EPDM seals, PPS and PEEK</td>
</tr>
<tr>
<td>AA10000AUH-7240-1/4</td>
<td>• Jacketed design keeps nozzle and sprayed liquid at a consistent temperature</td>
<td>Typical flow range: 0.0017 - 0.47 gpm (0.006 - 1.8 lpm)</td>
<td>Electropolished or chromium nitride coated magnetic stainless steel, stainless steel, Viton or EPDM seals, PPS and PEEK</td>
</tr>
<tr>
<td>AA10000AUH-0050</td>
<td>• Miniature design for applications with limited space</td>
<td>Typical flow range: 0.0009 - 0.08 gpm (0.003 - 0.30 lpm)</td>
<td>Stainless steel, Viton or EPDM seals, PPS and PEEK</td>
</tr>
</tbody>
</table>

Available only as a part of the PulsaJet® Mini Low Flow Spray System (with AutoJet® spray controller).
OTHER ELECTRICALLY-ACTUATED HYDRAULIC NOZZLE OPTIONS

**AA250AUH**
- Flow rates up to 0.47 gpm (1.8 lpm)
- Accurate spray placement in high-speed or low-capacity operations
- Compact, lightweight design
- CE-certified
- Built-in mounting bracket accepts #8-32 UNC or M4 threaded screws
- Construction: Ryton® and stainless steel with Viton® seals for maximum corrosion resistance

**AA26AUH**
- Flow rates up to 1.1 gpm (4.2 lpm)
- High-speed, high-pressure operation
- Fluid module with all fluid handling parts can be replaced without disturbing the mounting or electrical connections
- 24200 version provides 2-1/2" (63.5 mm) extension for coating interiors of products like cans
- Corrosion-resistant – wetted parts are stainless steel or tungsten carbide

---

**PLACING YOUR ORDER**

Call 1.800.95.SPRAY for application assistance or to place an order.

---

**FOR DETAILED SPRAY TIP PERFORMANCE DATA**

See Section D
OVERVIEW: ELECTRICALLY-ACTUATED AIR ATOMIZING NOZZLES

- Electrically-actuated nozzles provide the fastest cycling of any automatic nozzles – up to 10,000 cycles per minute.

- Compressed air is used as the force for atomization, producing the smallest drop sizes and lowest possible flow rates.

- Hundreds of air atomizing set-ups are available for a wide variety of spray patterns and flow rates.

- Precision Spray Control using an AutoJet® Spray Controller ensures consistent flow rates at varying line speeds.

- Many options are available for convenient mounting, clean-out needles, food grade materials of construction and more.

QUICK REFERENCE GUIDE

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Connection Size (in.)</th>
<th>Max Liquid Pressure</th>
<th>Power</th>
<th>Max Air Pressure</th>
<th>Max Flow</th>
<th>Max Temp (liquid)</th>
<th>Max Speed</th>
<th>Spray Set-Ups</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA10000JAU</td>
<td>1/8 NPT or BSPT (air and liquid)</td>
<td>100 psi (7 bar)</td>
<td>24 VDC, (0.36 Amp)</td>
<td>100 psi (7 bar)</td>
<td>0.16 gpm (0.61 lpm)</td>
<td>200°F (93°C)</td>
<td>10,000 cpm</td>
<td>JJ set-ups (page D33)</td>
</tr>
<tr>
<td>AA10000JAU-10</td>
<td>1/8 NPT or BSPT (air and liquid)</td>
<td>100 psi (7 bar)</td>
<td>24 VDC, (1.05 Amp)</td>
<td>100 psi (7 bar)</td>
<td>0.75 gpm (2.84 lpm)</td>
<td>200°F (93°C)</td>
<td>5000 cpm</td>
<td>Threadless 1/4J set-ups (page D22)</td>
</tr>
<tr>
<td>AA28JJAU-49815</td>
<td>1/8 NPT (air and liquid)</td>
<td>125 psi (8.6 bar)</td>
<td>24 VDC, (0.50 Amp)</td>
<td>100 psi (7 bar)</td>
<td>0.42 gpm (1.62 lpm)</td>
<td>150°F (66°C)</td>
<td>2000 cpm</td>
<td>JJ set-ups (page D33)</td>
</tr>
<tr>
<td>AA29JAUC0</td>
<td>1/8 NPT or BSPT (air and liquid)</td>
<td>60 psi (4.0 bar)</td>
<td>24 VDC, (0.75 Amp)</td>
<td>100 psi (7 bar)</td>
<td>0.75 gpm (2.84 lpm)</td>
<td>150°F (66°C)</td>
<td>1000 cpm</td>
<td>Threadless 1/4J set-ups (page D22)</td>
</tr>
</tbody>
</table>
## Electrically-Actuated Air Atomizing Pulsajet® Nozzle Options

### AA10000JJAU
- Rear liquid inlet; side air inlet
- Flow rates up to 0.16 gpm (0.61 lpm)
- Stainless steel, PPS and PEEK construction with Viton® or EPDM seals
- All wear parts accessible from the front of the nozzle without disturbing mounting and air/liquid/electrical connections
- For use with standard 1/8JJ air caps and 1/8JJ fluid caps (maximum size 2850)

### AA10000JAU-10
- Rear liquid inlet; side air inlet
- Flow rates up to 0.75 gpm (2.84 lpm)
- Stainless steel, PPS and PEEK construction with Viton or EPDM seals
- All wear parts accessible from the front of the nozzle without disturbing mounting and air/liquid/electrical connections
- For use with standard 1/4JJ air caps and threadless 1/4J fluid caps (maximum size 80100)

### Other Electrically-Actuated Air Atomizing Nozzle Options

### AA28JJAU-49815
- Flow rates up to 0.42 gpm (1.62 lpm)
- Compact design features rear air and liquid inlets to minimize nozzle profile
- Fluid modules available for in-line, 45° or 75° spray direction
- Stainless steel, carbide, nylon construction with Viton or EPDM seals
- Fluid re-circulation possible
- For use with standard 1/8JJ air caps and 1/8JJ fluid caps (maximum size 2850)

### AA29JAU CO
- Flow rates up to 0.75 gpm (2.84 lpm)
- Rear air and liquid inlets to minimize nozzle profile
- Additional side liquid inlet available for liquid recirculation
- Stainless steel, PTFE and PPS construction with Viton seals
- Clean-out needle standard for all fluid cap sizes
- For use with standard 1/4J air caps and threadless 1/4J fluid caps (maximum size 80100)

---

### Placing Your Order

Call 1.800.95.SPRAY for application assistance or to place an order.

---

FOR DETAILED SPRAY TIP PERFORMANCE DATA SEE SECTION D
OVERVIEW: AIR-ACTUATED HYDRAULIC NOZZLES

- A compressed air inlet on the nozzle body is used to control air cylinder operation for accurate intermittent spraying up to 180 cycles per minute
- Lightweight nozzles use only liquid pressure as the force for atomization
- A variety of nozzle bodies are available for convenient mounting and positioning
- Models are available with extensions and with a recirculating option to optimize performance
- UniJet® spray tips provide a wide variety of spray patterns and flow rates at liquid pressures up to 4000 psi (275 bar)

QUICK REFERENCE GUIDE

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Inlet Connection Size (in.)</th>
<th>Max Liquid Pressure</th>
<th>Min Air Cylinder Pressure</th>
<th>Max Flow</th>
<th>Max Temp (liquid)</th>
<th>Max Speed</th>
<th>Spray Tips</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4JAUH</td>
<td>1/8 NPT or BSPT (air and liquid)</td>
<td>125 psi (8.6 bar)</td>
<td>30 psi (2.1 bar)</td>
<td>0.8 gpm (3 lpm)</td>
<td>400°F (204°C)</td>
<td>180 cpm</td>
<td>TPU (page D6)</td>
</tr>
<tr>
<td>1/8JJAUH</td>
<td>1/8 NPT or BSPT (air and liquid)</td>
<td>125 psi (8.6 bar)</td>
<td>30 psi (2.1 bar)</td>
<td>0.3 gpm (1.1 lpm)</td>
<td>400°F (204°C)</td>
<td>180 cpm</td>
<td>TPU (page D6)</td>
</tr>
<tr>
<td>D55500-JAUH0</td>
<td>1/8 NPT or BSPT (air and liquid)</td>
<td>43 psi (3 bar)</td>
<td>72 psi (5 bar)</td>
<td>0.42 gpm (1.6 lpm)</td>
<td>158°F (70°C)</td>
<td>600 cpm</td>
<td>TPU or PWMD (page D6 &amp; D12)</td>
</tr>
<tr>
<td>D55500-JAUH1</td>
<td>1/8 NPT or BSPT (air and liquid)</td>
<td>145 psi (10 bar)</td>
<td>72 psi (5 bar)</td>
<td>1.5 gpm (5.5 lpm)</td>
<td>158°F (70°C)</td>
<td>300 cpm</td>
<td>TPU or PWMD (page D6 &amp; D12)</td>
</tr>
<tr>
<td>AA22AUH</td>
<td>1/8 NPT or BSPT (air) 1/4 NPS or BSPP (liquid)</td>
<td>600 psi (40 bar)</td>
<td>45 psi (3.1 bar)</td>
<td>5 gpm (18.9 lpm)</td>
<td>400°F (204°C)</td>
<td>180 cpm</td>
<td>TPU (page D6)</td>
</tr>
<tr>
<td>AA22AUH-7676</td>
<td>1/8 NPT or BSPT (air) 1/4 NPS or BSPP (liquid)</td>
<td>250 psi (17 bar)</td>
<td>45 psi (3.1 bar)</td>
<td>2 gpm (7.6 lpm)</td>
<td>400°F (204°C)</td>
<td>180 cpm</td>
<td>TPU (page D6)</td>
</tr>
<tr>
<td>AA22AUH-SS-11024</td>
<td>1/8 NPT or BSPT (air) 1/4 NPS or BSPP (liquid)</td>
<td>600 psi (40 bar)</td>
<td>45 psi (3.1 bar)</td>
<td>5 gpm (18.9 lpm)</td>
<td>400°F (204°C)</td>
<td>180 cpm</td>
<td>TPU (page D6)</td>
</tr>
<tr>
<td>AA22AUH-SS-14799</td>
<td>1/8 NPT or BSPT (air) 1/4 NPS or BSPP (liquid)</td>
<td>800 psi (55 bar)</td>
<td>75 psi (5.2 bar)</td>
<td>2 gpm (7.6 lpm)</td>
<td>400°F (204°C)</td>
<td>180 cpm</td>
<td>TPU (page D6)</td>
</tr>
<tr>
<td>AA24AUA</td>
<td>1/8 NPT or BPST (air) 1/4 NPS or BSPP (liquid)</td>
<td>4000 psi (275 bar)</td>
<td>75 psi (5.2 bar)</td>
<td>0.6 gpm (2.3 lpm)</td>
<td>400°F (204°C)</td>
<td>180 cpm</td>
<td>TP-TC (page D13)</td>
</tr>
<tr>
<td>AA24AUA-20190</td>
<td>1/8 NPT or BPST (air) 1/4 NPS or BSPP (liquid)</td>
<td>3000 psi (206 bar)</td>
<td>42 psi (2.9 bar)</td>
<td>0.6 gpm (2.3 lpm)</td>
<td>400°F (204°C)</td>
<td>180 cpm</td>
<td>TP-TC (page D13)</td>
</tr>
<tr>
<td>AA24AUA-8395</td>
<td>1/8 NPT or BPST (air) 1/4 NPS or BSPP (liquid)</td>
<td>4000 psi (275 bar)</td>
<td>75 psi (5.2 bar)</td>
<td>0.6 gpm (2.3 lpm)</td>
<td>400°F (204°C)</td>
<td>180 cpm</td>
<td>TP-TC (page D13)</td>
</tr>
<tr>
<td>AA24AUA-8980</td>
<td>1/8 NPT or BPST (air) 1/4 NPS or BSPP (liquid)</td>
<td>4000 psi (275 bar)</td>
<td>75 psi (5.2 bar)</td>
<td>0.6 gpm (2.3 lpm)</td>
<td>400°F (204°C)</td>
<td>180 cpm</td>
<td>TP-TC (page D13)</td>
</tr>
</tbody>
</table>
AIR-ACTUATED HYDRAULIC NOZZLE OPTIONS

1/4JAUH
- Compact design – 4.5” (114 mm) total length, 1.25 lbs. (0.57 kg) weight (approx.)
- Flow rates up to 0.8 gpm (3.0 lpm)
- Stainless steel or nickel-plated brass construction

1/8JAUH
- Extra compact design – 2.75” (70 mm) total length, 6.5 oz. (184 g) weight (approx.)
- Flow rates up to 0.3 gpm (1.1 lpm)
- Construction: Stainless steel or nickel-plated brass

D55500-JAUHO
- Block design 30% smaller than standard 1/4JAUH
- Flow rates up to 0.42 gpm (1.6 lpm)
- Stainless steel construction with Viton® or EPDM seals
- Available with automatic spray tip alignment (15° or 30° offset angle)
- Available with plate mount and wall mount options

D55500-JAUH1
- Block design 30% smaller than standard 1/4JAUH
- Flow rates up to 1.5 gpm (5.5 lpm)
- Stainless steel construction with Viton or EPDM seals
- Available with automatic spray tip alignment (15° or 30° offset angle)
- Available with plate mount and wall mount options

AA22AUH
- Flow rates up to 5 gpm (18.9 lpm)
- Nickel-plated brass or stainless steel construction with PTFE packing material
- Mounting hole with locking screw for easy rod mounting

MORE OPTIONS
AA22AUH-7676 – Same as AA22AUH with flow rates up to 2 gpm (7.6 lpm) and available with extensions up to 36” (914 mm)

PLACING YOUR ORDER
Call 1.800.95.SPRAY for application assistance or to place an order.

FOR DETAILED SPRAY TIP PERFORMANCE DATA SEE SECTION D
AIR-ACTUATED HYDRAULIC NOZZLE OPTIONS

**AA22AUH-SS-11024**
- Flow rates up to 5 gpm (18.9 lpm)
- Nickel-plated brass or stainless steel construction with PTFE packing material
- Mounting hole with locking screw for easy rod mounting
- Dual liquid inlets allow continuous liquid recirculation

**AA22AUH-SS-14799**
- Flow rates up to 2 gpm (7.6 lpm)
- Nickel-plated brass or stainless steel construction with PTFE packing material
- Mounting hole with locking screw for easy rod mounting
- Adjusting screw limits stroke length of shut-off needle for greater control of response time

**AA24AUA**
- Flow rates up to 0.6 gpm (2.3 lpm)
- Nickel-plated brass or stainless steel construction with PTFE packing material
- Mounting hole with locking screw for easy rod mounting
- Rear knob locks the shut-off needle in place to prevent accidental discharge while changing spray tips
- Liquid inlet available in the standard “down” position or one of seven other positions in 45° increments

**AA24AUA-20190**
- Flow rates up to 0.6 gpm (2.3 lpm)
- Nickel-plated brass or stainless steel construction with PTFE packing material
- Mounting hole with locking screw for easy rod mounting
- Rear knob locks the shut-off needle in place to prevent accidental discharge while changing spray tips
- Aluminum body reduces total weight to just 1.25 lbs. (0.57 kg)

**AA24AUA-8395**
- Flow rates up to 0.6 gpm (2.3 lpm)
- Nickel-plated brass or stainless steel construction with PTFE packing material
- Mounting hole with locking screw for easy rod mounting
- Rear knob locks the shut-off needle in place to prevent accidental discharge while changing spray tips
- Dual liquid inlets allow continuous liquid recirculation

**AA24AUA-8980**
- Flow rates up to 0.6 gpm (2.3 lpm)
- Nickel-plated brass or stainless steel construction with PTFE packing material
- Mounting hole with locking screw for easy rod mounting
- Rear knob locks the shut-off needle in place to prevent accidental discharge while changing spray tips
- Available with extensions up to 36” (914 mm) long

**PLACING YOUR ORDER**

Call 1.800.95.SPRAY for application assistance or to place an order.

FOR DETAILED SPRAY TIP PERFORMANCE DATA SEE SECTION D
**OVERVIEW: AIR-ACTUATED AIR ATOMIZING NOZZLES**

- Compressed air is used to control air cylinder operation for accurate intermittent spraying (up to 180 cycles per minute) and also for liquid atomization
- Wide variety of nozzle bodies is available for convenient mounting and positioning
- Models available with clean-out needles, shut-off needles, swivels and strainers to optimize performance
- Liquid lines can be pressure-fed, siphon-fed or gravity-fed
- Spray set-ups, consisting of an air cap and a fluid cap can mix the fluids either internally or externally to produce a fine spray pattern
- Dozens of Drip Free™ air atomizing spray set-ups available for a wide range of flow capacity and spray patterns

![JAU Nozzle Diagram](image)

**QUICK REFERENCE GUIDE**

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Inlet Connection Size (in.)</th>
<th>Max Liquid Pressure</th>
<th>Min Air Cylinder Pressure</th>
<th>Max Flow</th>
<th>Max Temp Liquid</th>
<th>Max Speed</th>
<th>Spray Set-Ups</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4JAU</td>
<td>1/4 NPT or BSPT (air and liquid)</td>
<td>125 psi (8.6 bar)</td>
<td>30 psi (2.1 bar)</td>
<td>1.2 gpm (4.5 lpm)</td>
<td>400°F (204°C)</td>
<td>180 cpm</td>
<td>1/4J set-ups (page D22)</td>
</tr>
<tr>
<td>1/8JJAU</td>
<td>1/8 NPT or BSPT (air and liquid)</td>
<td>125 psi (8.6 bar)</td>
<td>30 psi (2.1 bar)</td>
<td>0.55 gpm (2.1 lpm)</td>
<td>400°F (204°C)</td>
<td>180 cpm</td>
<td>1/8JJ set-ups (page D33)</td>
</tr>
<tr>
<td>D55500-JAU</td>
<td>1/8 NPT or BSPT (air and liquid)</td>
<td>43 psi (3 bar)</td>
<td>72 psi (5 bar)</td>
<td>0.42 gpm (1.6 lpm)</td>
<td>158°F (70°C)</td>
<td>600 cpm</td>
<td>1/4J or DSU set-ups (page D22 &amp; D32)</td>
</tr>
<tr>
<td>D55500-JAUCO</td>
<td>1/8 NPT or BSPT (air and liquid)</td>
<td>58 psi (4 bar)</td>
<td>72 psi (5 bar)</td>
<td>0.42 gpm (1.6 lpm)</td>
<td>158°F (70°C)</td>
<td>300 cpm</td>
<td>1/4J or DSU set-ups (page D22 &amp; D32)</td>
</tr>
<tr>
<td>1/8VAU</td>
<td>1/8 NPT or BSPT (atom. air, fan air and liquid)</td>
<td>90 psi (6.2 bar)</td>
<td>35 psi (2.4 bar)</td>
<td>0.83 gpm (3.15 lpm)</td>
<td>200°F (93°C)</td>
<td>180 cpm</td>
<td>SUV set-ups (page D58)</td>
</tr>
<tr>
<td>1/4VMAU</td>
<td>1/4 NPT or BSPT, or sanitary flange (atom. air, fan air and liquid)</td>
<td>90 psi (6.2 bar)</td>
<td>35 psi (2.4 bar)</td>
<td>1.22 gpm (4.62 lpm)</td>
<td>200°F (93°C)</td>
<td>180 cpm</td>
<td>SUV set-ups (page D55)</td>
</tr>
<tr>
<td>10535-1/4J</td>
<td>1/4 NPT or BSPT (air and liquid)</td>
<td>125 psi (8.6 bar)</td>
<td>30 psi (2.1 bar)</td>
<td>1.2 gpm (4.5 lpm)</td>
<td>400°F (204°C) liquid 150°F (66°C) air</td>
<td>180 cpm</td>
<td>1/4J set-ups (page D22)</td>
</tr>
<tr>
<td>10536-1/2J</td>
<td>1/2 NPT or BSPT (air and liquid)</td>
<td>125 psi (8.6 bar)</td>
<td>30 psi (2.1 bar)</td>
<td>5.1 gpm (19.3 lpm)</td>
<td>400°F (204°C) liquid 150°F (66°C) air</td>
<td>180 cpm</td>
<td>1/2J set-ups (page D41)</td>
</tr>
<tr>
<td>72100</td>
<td>Hose barbs for 1/8&quot; tubing</td>
<td>100 psi (7 bar)</td>
<td>50 psi (3.5 bar)</td>
<td>0.22 gpm (0.83 lpm)</td>
<td>400°F (204°C)</td>
<td>180 cpm</td>
<td>1/8JJ set-ups up to PF35100 (page D33)</td>
</tr>
</tbody>
</table>
1/4JAU SERIES NOZZLES

- Flow rates up to 1.2 gpm (4.5 lpm)
- Drip Free™ set-ups provide complete shut-off
- Nickel-plated brass or stainless steel construction

1/4JAU NOZZLE OPTIONS

<table>
<thead>
<tr>
<th>1/4JAUCO</th>
<th>7310-1/4JAU</th>
<th>6218-1/4JAU</th>
<th>6083-1/4JAU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean-out needle operates with every spray cycle to reduce clogging</td>
<td>Knurled head screw control permits manual nozzle shut-off without disturbing operation of other nozzles on a manifold</td>
<td>Single air inlet for cylinder and atomizing air</td>
<td>Single air inlet for cylinder and atomizing air. Includes manual shut-off assembly to temporarily block liquid flow</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1/4JAUPM</th>
<th>19330-1/4JAUPM</th>
<th>619-1/4JAU</th>
<th>13242-1/4JAU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate-mounted nozzle with all inlet connections at the rear of the mounting plate</td>
<td>Plate-mounted nozzle with all inlet connections at the rear of the mounting plate. Locking regulating screw allows precise adjustment of atomizing air</td>
<td>Metering knob provides precise adjustment of liquid flow in 5% increments from zero to 100%</td>
<td>Single air inlet for cylinder and atomizing air. Used specifically for large fluid caps (PF80 and PF100)</td>
</tr>
</tbody>
</table>

MORE OPTIONS

<table>
<thead>
<tr>
<th>10880-1/4JAU</th>
<th>1/4JAUPMCO</th>
<th>17366-1/4JAU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used specifically for spray set-ups containing the largest fluid caps (80150DF or 100150DF)</td>
<td>Combines clean-out needle for reduced clogging with convenience of plate-mounting</td>
<td>Single air inlet for cylinder and atomizing air with regulating screw for atomizing air</td>
</tr>
</tbody>
</table>
1/8JJAU SERIES NOZZLES

- Compact design ideal where space is limited
- Flow rates up to 0.55 gpm (2.1 lpm)
- Drip Free™ set-ups provide complete shut-off
- Nickel-plated brass or stainless steel construction

1/8JJAU NOZZLE OPTIONS

14700-1/8JJAU – Knurled head screw control permits manual nozzle shut-off without disturbing operation of other nozzles on a manifold

14675-1/8JJAU – Single air inlet for cylinder and atomizing air

16860-1/8JJAU – Sprays at a 45° angle from nozzle inlet axis


17690-1/8JJAU – Available with extensions up to 18” (457 mm)

49660-1/8JJAU – Available with extensions and either 45° or 90° spray direction from nozzle body

MORE OPTIONS

1/8JJAUUMCO – Metering knob provides precise adjustment of liquid flow in 5% increments from zero to 100%

16883-1/8JJAU – Single air inlet for cylinder and atomizing air. Sprays at a 45° angle from nozzle inlet axis

PLACING YOUR ORDER

Call 1.800.95.SPRAY for application assistance or to place an order.

FOR DETAILED SPRAY SET-UP PERFORMANCE DATA
SEE SECTION D
## AIR-ACTUATED AIR ATOMIZING NOZZLE OPTIONS

<table>
<thead>
<tr>
<th><strong>D55500-JAU</strong></th>
<th><strong>D55500-JAU CO</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Block design 30% smaller than standard 1/4JAU</td>
<td>- Block design 30% smaller than standard 1/4JAU</td>
</tr>
<tr>
<td>- Flow rates up to 0.42 gpm (1.6 lpm)</td>
<td>- Flow rates up to 0.42 gpm (1.6 lpm)</td>
</tr>
<tr>
<td>- Available with plate mount and wall mount options</td>
<td>- Available with plate mount and wall mount options</td>
</tr>
<tr>
<td>- Drip Free™ spray set-ups provide complete shut-off</td>
<td>- Drip Free spray set-ups provide complete shut-off</td>
</tr>
<tr>
<td>- Stainless steel construction</td>
<td>- Stainless steel construction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>VAU/VMAU Variable Spray</strong></th>
<th><strong>10535-1/4J</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Flow rates up to 1.22 gpm (4.62 lpm)</td>
<td>- Flow rates up to 1.2 gpm (4.5 lpm)</td>
</tr>
<tr>
<td>- Stainless steel construction</td>
<td>- Self-contained air cylinder provides controlled intermittent spraying</td>
</tr>
<tr>
<td>- Independent control of liquid, fan air and atomizing air provides maximum control of spray coverage</td>
<td>- Drip Free spray set-ups provide complete shut-off</td>
</tr>
<tr>
<td>- Dual liquid inlets allow recirculating of sprayed fluid</td>
<td>- Nickel-plated brass or stainless steel construction</td>
</tr>
<tr>
<td>- VMAU offers modular construction for reduced maintenance time</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>10536-1/2J</strong></th>
<th><strong>72100</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Flow rates up to 5.1 gpm (19.3 lpm)</td>
<td>- Smallest automatic air atomizing nozzle available</td>
</tr>
<tr>
<td>- Self-contained air cylinder provides controlled intermittent spraying</td>
<td>- Flow rates up to 0.22 gpm (0.83 lpm)</td>
</tr>
<tr>
<td>- Drip Free spray set-ups provide complete shut-off</td>
<td>- Less than 1.5” (38 mm) in length; 1.2 oz. (34 g) net weight</td>
</tr>
<tr>
<td>- Nickel-plated brass or stainless steel construction</td>
<td>- Optional clean-out needle reduces clogging</td>
</tr>
<tr>
<td></td>
<td>- Nickel-plated brass or stainless steel construction</td>
</tr>
</tbody>
</table>

---

### PLACING YOUR ORDER

Call 1.800.95.SPRAY for application assistance or to place an order.

**FOR DETAILED SPRAY SET-UP PERFORMANCE DATA**

SEE SECTION D