



AUTOMATIC SPRAY NOZZLES

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

AUTOMATIC NOZZLES INTRODUCTION



PRECISE CONTROL & EFFICIENT SPRAY APPLICATION

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

Automated spray control can help increase production, improve accuracy, reduce waste and overspray 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

AutoJet[®]
TECHNOLOGIES
From *Spraying Systems Co.*

FOR MORE INFORMATION ON AUTOJET SPRAY
CONTROLLERS SEE PAGES C4 & C5



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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 C4



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

PRECISION SPRAY CONTROL O V E R V I E W

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 1750+ Modular Spray System with basic on/off spray control for up to 10 automatic nozzles
- AutoJet Model 2150+ Spray Control Panel provides timing and sensor control for up to 16 nozzles
- AutoJet Model 2850+ Spray Control Panel with sophisticated real-time monitoring and closed-loop control for up to 32 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:

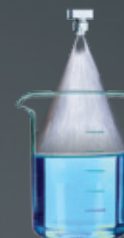
- Automatically maintains consistent coating weight even when line speed changes
- Reduces product scrap caused by over- or under-application of the sprayed solution
- Reduces the use of costly coatings by applying the proper coating volume directly on the target
- Eliminates maintenance time to clean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

HOW PRECISION SPRAY CONTROL WORKS

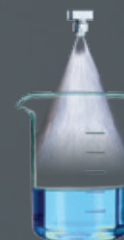
Electrically-actuated spray nozzles are turned on and off very quickly to control flow rate. This cycling is so fast that the flow often appears to be constant.

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.

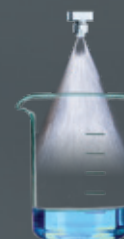
NOZZLES SPRAYING 90% OF THE TIME



NOZZLES SPRAYING 50% OF THE TIME



NOZZLES SPRAYING 25% OF THE TIME



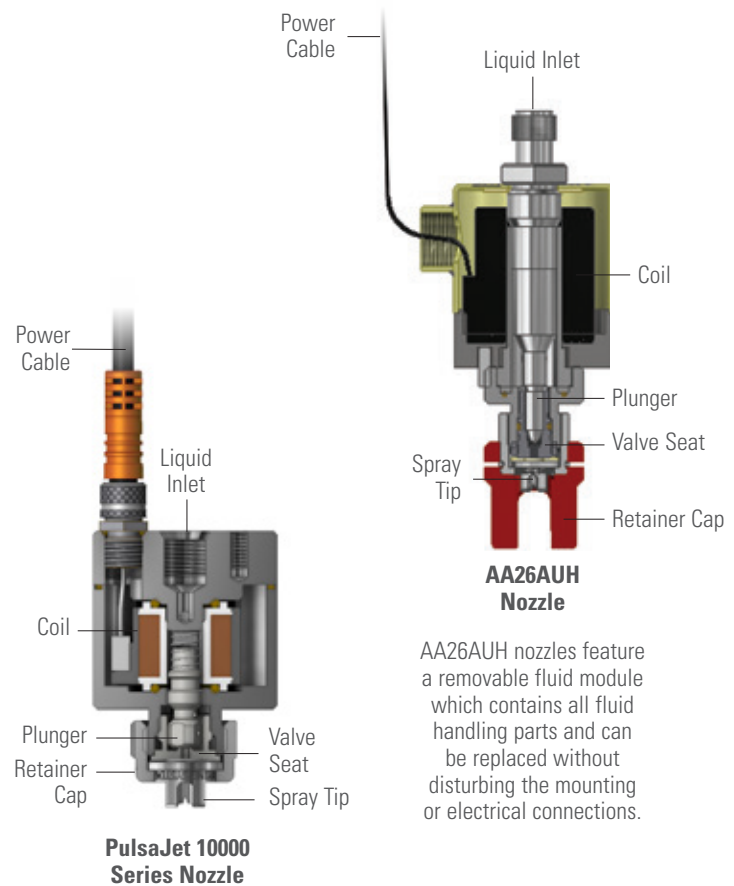
TYPICAL APPLICATIONS:

- 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 applications
- 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. Spray tip alignment 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 1.630.665.5000 for application assistance or to place an order.

FOR DETAILED SPRAY TIP PERFORMANCE DATA
SEE SECTION D

QUICK REFERENCE GUIDE – ELECTRICALLY-ACTUATED HYDRAULIC PULSAJET® SERIES

PulsaJet Series	Connection Size (in.)	Max Liquid Pressure	Power	Max Flow	Max Temp (liquid)	Max Speed	Spray Tips
AA10000AUH-03	1/8 NPT or BSPT	100 psi (7 bar)* 250 psi (17 bar) (250 w/ advanced AutoJet® spray controller)	24 VDC, (0.36 Amp)	0.47 gpm (1.8 lpm)	200°F (93°C)	10,000 cpm (15,000 cpm with advanced AutoJet controller)	TPU (page D6)
AA10000AUH-03-Z1	1/8 (F) NPT or BSPT	100 psi (7 bar)	24 VDC, (0.36 Amp)	0.47 gpm (1.8 lpm)	104°F (40°C)	10,000 cpm	TPU (page D6)
AA10000AUH-10	1/4 (F) NPT or BSPT	100 psi (7 bar)	24 VDC, (1.05 Amp)	1.6 gpm (6.1 lpm)	150°F (66°C)	5,000 cpm	TPU (page D6)
AA10000AUH-104210	1/8 (F) NPT or BSPT	100 psi (7 bar) 250 psi (17 bar) (250 w/ advanced AutoJet spray controller)	24 VDC, (0.36 Amp)	0.47 gpm (1.8 lpm)	200CF (93°C)	10,000 cpm (15,000 cpm with advanced AutoJet controller)	PWMD w/ auto spray pattern alignment (page D12)
AA10000-10-PWMD	1/4 (F) NPT or BSPT	100 psi (7 bar)	24 VDC, (1.05 Amp)	1.6 gpm (6.1 lpm)	150°F (66°C)	5,000 cpm	PWMD w/ auto spray pattern alignment (page D12)
AA10000AUH-104215	1/8 (F) NPT or BSPT	100 psi (7 bar)	24 VDC, (0.36 Amp)	0.47 gpm (1.8 lpm)	200°F (93°C)	10,000 cpm (15,000 cpm with advanced AutoJet controller)	PWMD w/ auto spray pattern alignment (page D12)
AA10000AUH-72440-1/4	1/4 (F) NPT or BSPT	100 psi (7 bar)* 250 psi (17 bar) (250 w/ advanced AutoJet spray controller)	48 VDC, (0.36 Amp)	0.47 gpm (1.8 lpm)	150°F (66°C)	10,000 cpm (15,000 cpm with advanced AutoJet controller)	TPU (page D6)
AA10000AUH-0050	5/32 (4mm) tube fittings	200 psi (14 bar)	48 VDC, (1.0 Amp)	0.08 gpm (0.30 lpm)	150°F (66°C)	25,000 cpm	PWMM w/ auto spray alignment pattern (page D13)

*Higher pressure possible with AutoJet® advanced spray controllers

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 zirconia ceramic

**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

AA10000AUH-10

- Typical flow range: 0.02 - 1.6 gpm (0.075 - 6.1 lpm)
- Construction: Stainless steel, Viton® or EPDM seals, PPS and PEEK

**AA10000AUH-104210**

- Uses UniJet® PWMD self-aligning spray tips which reduce installation/replacement time
- Typical flow range: 0.0017 - 0.47 gpm (0.006 - 1.8 lpm)
- Construction: Stainless steel, Viton or EPDM seals, PPS and zirconia ceramic

**AA10000-10-PWMD**

- Uses UniJet PWMD self-aligning spray tips which reduce installation/replacement time
- Typical flow range: 0.0017 - 1.6 gpm (0.006 - 6.1 lpm)
- Construction: Stainless steel, Viton or EPDM seals, PPS and zirconia ceramic

**AA10000AUH-104215**

- Front port for liquid recirculation
- Typical flow range: 0.0017 - 0.47 gpm (0.006 - 1.8 lpm)
- Construction: Stainless steel, Viton or EPDM seals, PPS and zirconia ceramic

**AA10000AUH-72440-1/4**

- Jacketed design keeps nozzle and sprayed liquid at a consistent temperature
- Typical flow range: 0.0017 - 0.47 gpm (0.006 - 1.8 lpm)
- Construction: Electropolished or chromium nitride coated magnetic stainless steel, stainless steel, Viton or EPDM seals, PPS and zirconia ceramic

**AA10000AUH-0050**

- Miniature design for applications with limited space
- Typical flow range: 0.0009 - 0.08 gpm (0.003 - 0.30 lpm)
- Construction: Stainless steel, Viton or EPDM seals, PPS and PEEK
- Available only as a part of the PulsaJet® Mini Low Flow Spray System (with AutoJet® spray controller)



QUICK REFERENCE GUIDE – OTHER ELECTRICALLY-ACTUATED HYDRAULIC NOZZLES

Other Electrically-Actuated Hydraulic Nozzles	Connection Size (in.)	Max Liquid Pressure	Power	Max Flow	Max Temp (liquid)	Max Speed	Spray Tips
AA250AUH	1/8 (F) NPT or BSPT	100 psi (7 bar)	24 VDC, (.375 Amp)	0.47 gpm (1.8 lpm)	150°F (66°C)	5000 cpm	TPU (page D6)
AA26AUH, AA26AUH-24200-2-1/2	1/4 (M) NPT or BSPT	2000 psi (138 bar)	24 VDC, (1.65 Amp)	1.1 gpm (4.2 lpm)	200°F (93°C)	1500 cpm	TPU (page D6)

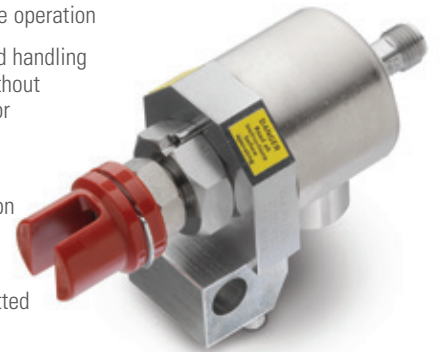
OTHER ELECTRICALLY-ACTUATED HYDRAULIC NOZZLE OPTIONS

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

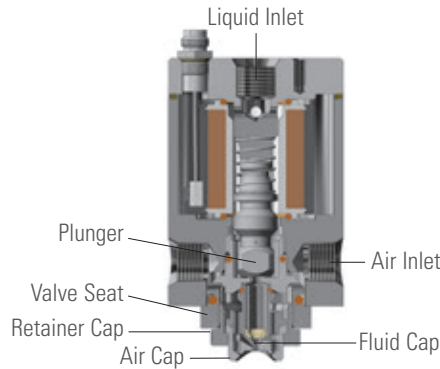
**PLACING YOUR ORDER**

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FOR DETAILED SPRAY TIP PERFORMANCE DATA
SEE SECTION D

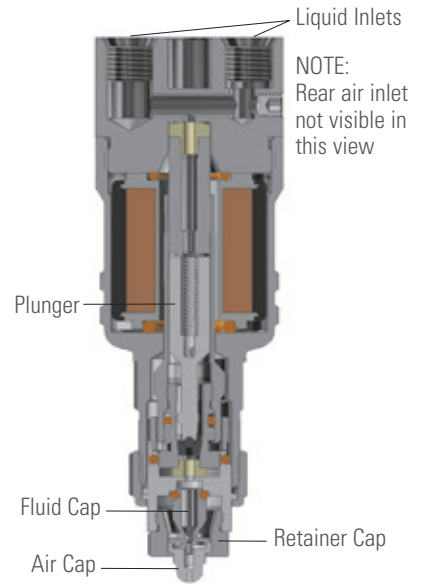
OVERVIEW: ELECTRICALLY-ACTUATED AIR ATOMIZING NOZZLES

- 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



AA10000JAU Nozzle

The compact design and simple mounting options for PulsaJet® nozzles enable them to be easily integrated into most production areas. Wear parts for all PulsaJet nozzles are easily accessible to minimize routine maintenance time.



AA28JJAU Nozzle

AA28JJAU nozzles feature a removable fluid module which contains all fluid handling parts and can be replaced without disturbing the mounting or electrical connections.

QUICK REFERENCE GUIDE

Product Number	Connection Size (in.)	Max Liquid Pressure	Power	Max Air Pressure	Max Flow	Max Temp (liquid)	Max Speed	Spray Set-Ups
AA10000JJAU	1/8 NPT or BSPT (air and liquid)	100 psi (7 bar) 250 psi (17 bar) (w/ advanced AutoJet spray controller)	24 VDC, (0.36 Amp)	100 psi (7 bar)	0.16 gpm (0.61 lpm)	200°F (93°C)	10,000 cpm	JJ set-ups (page D35)
AA10000JAU-10	1/4 NPT or BSPT (air and liquid)	100 psi (7 bar)	24 VDC (1.05 Amp)	100 psi (7 bar)	0.75 gpm (2.84 lpm)	200°F (93°C)	5000 cpm	Threadless 1/4J set-ups (page D24)
AA28JJAU-49815	1/8 NPT (air and liquid)	125 psi (8.6 bar)	24 VDC (0.50 Amp)	100 psi (7 bar)	0.42 gpm (1.62 lpm)	150°F (66°C)	2000 cpm	JJ set-ups (page D35)
AA29JAUCO	1/4 NPT or BSPT (air and liquid)	60 psi (4.0 bar)	24 VDC (0.75 Amp)	100 psi (7 bar)	0.75 gpm (2.84 lpm)	150°F (66°C)	1000 cpm	Threadless 1/4J set-ups (page D24)



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 zirconia ceramic 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 1/4J 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 and 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)

**AA29JAUCO**

- 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)

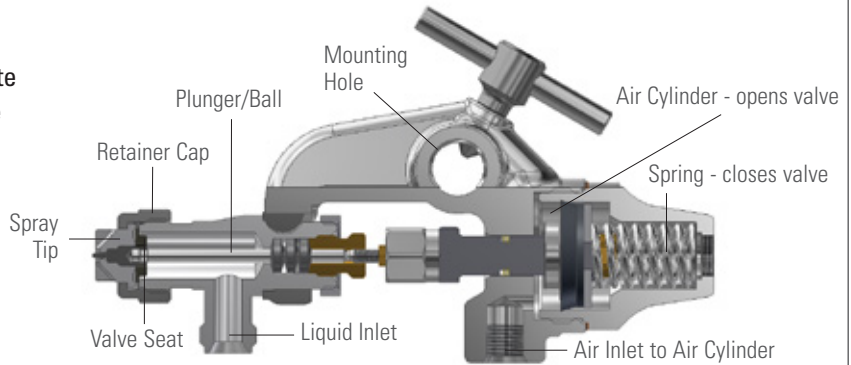
**PLACING YOUR ORDER**

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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)



AA22AUH Nozzle

AA22AUH nozzles provide controlled intermittent liquid spray using only hydraulic pressure as the force for atomization. An internal air cylinder automatically interrupts the liquid flow at any desired frequency up to 180 cycles per minute.

QUICK REFERENCE GUIDE

Product Number	Inlet Connection Size (in.)	Max Liquid Pressure	Min Air Cylinder Pressure	Max Flow	Max Temp (liquid)	Max Speed	Spray Tips
JUAUH	1/4 NPT or BSPT (air and liquid)	125 psi (8.6 bar)	30 psi (2.1 bar)	0.8 gpm (3 lpm)	160°F (71°C)	180 cpm	TPU (page D6)
1/8JUAUH	1/8 NPT or BSPT (air and liquid)	125 psi (8.6 bar)	30 psi (2.1 bar)	0.3 gpm (1.1 lpm)	160°F (71°C)	180 cpm	TPU (page D6)
D55500-JAUH0	1/8 NPT or BSPT (air and liquid)	43 psi (3 bar)	72 psi (5 bar)	0.42 gpm (1.6 lpm)	158°F (70°C)	600 cpm	TPU or PWMD (page D6 & D13)
D55500-JAUH1	1/8 NPT or BSPT (air and liquid)	145 psi (10 bar)	72 psi (5 bar)	1.5 gpm (5.5 lpm)	158°F (70°C)	300 cpm	TPU or PWMD (page D6 & D13)
AA22AUH	1/8 NPT or BSPT (air) 1/4 NPS or BSPP (liquid)	600 psi (40 bar)	45 psi (3.1 bar)	5 gpm (18.9 lpm)	160°F (71°C)	180 cpm	TPU (page D6)
AA22AUH-7676	1/8 NPT or BSPT (air) 1/4 NPS or BSPP (liquid)	250 psi (17 bar)	45 psi (3.1 bar)	2 gpm (7.6 lpm)	160°F (71°C)	180 cpm	TPU (page D6)
AA22AUH-SS-11024	1/8 NPT or BSPT (air) 1/4 NPS or BSPP (liquid)	600 psi (40 bar)	45 psi (3.1 bar)	5 gpm (18.9 lpm)	160°F (71°C)	180 cpm	TPU (page D6)
AA24AUA	1/8 NPT or BPST (air) 1/4 NPS or BSPP (liquid)	4000 psi (275 bar)	75 psi (5.2 bar)	0.6 gpm (2.3 lpm)	160°F (71°C)	180 cpm	TP-TC (page D14)
AA24AUA-20190	1/8 NPT or BPST (air) 1/4 NPS or BSPP (liquid)	3000 psi (206 bar)	42 psi (2.9 bar)	0.6 gpm (2.3 lpm)	160°F (71°C)	180 cpm	TP-TC (page D14)
AA24AUA-8395	1/8 NPT or BPST (air) 1/4 NPS or BSPP (liquid)	4000 psi (275 bar)	75 psi (5.2 bar)	0.6 gpm (2.3 lpm)	160°F (71°C)	180 cpm	TP-TC (page D14)
AA24AUA-8980	1/8 NPT or BPST (air) 1/4 NPS or BSPP (liquid)	4000 psi (275 bar)	75 psi (5.2 bar)	0.6 gpm (2.3 lpm)	160°F (71°C)	180 cpm	TP-TC (page D14)



AIR-ACTUATED HYDRAULIC NOZZLE OPTIONS

JAUAH

- 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



1/8JJAUH

- 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 1.630.665.5000 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
- Specially designed for glue and other viscous spray applications

**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

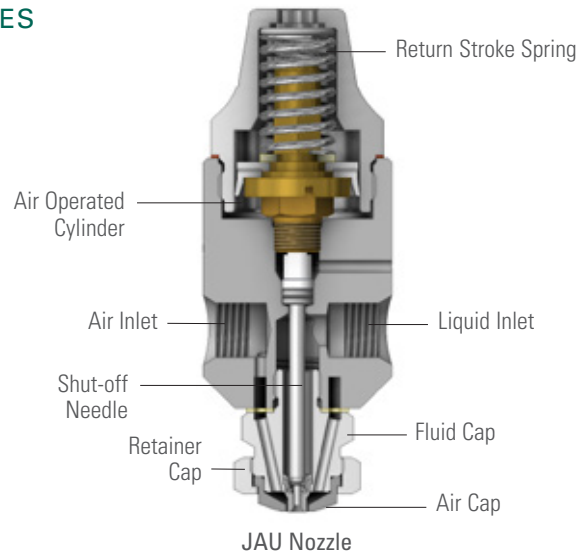
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FOR DETAILED SPRAY TIP PERFORMANCE DATA
SEE SECTION D

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 air atomizing nozzles mix compressed air and liquid to form a finely atomized spray. An air-actuated internal cylinder with a return stroke spring cycles the nozzle up to 180 times per minute.

QUICK REFERENCE GUIDE

Product Number	Inlet Connection Size (in.)	Max Liquid Pressure	Min Air Cylinder Pressure	Max Flow	Max Temp (liquid)	Max Speed	Spray Set-Ups
JAU	1/4 NPT or BSPT (air and liquid)	125 psi (8.6 bar)	30 psi (2.1 bar)	1.2 gpm (4.5 lpm)	160°F (71°C)	180 cpm	1/4J set-ups (page D24)
1/8JAU	1/8 NPT or BSPT (air and liquid)	125 psi (8.6 bar)	30 psi (2.1 bar)	0.55 gpm (2.1 lpm)	160°F (71°C)	180 cpm	1/8JJ set-ups (page D35)
VX-70	1/4 NPT or BSPT (air, fan air and liquid)	100 psi (7 bar)	45 psi (3 bar)	1.3 gpm (4.9 lpm)	180° F (82° C)	250 cpm	VX set-ups (pages D66)
VX-72	1/4 NPT or BSPT (air, fan air and liquid)	100 psi (7 bar)	45 psi (3 bar)	1.3 gpm (4.9 lpm)	180° F (82° C)	250 cpm	VX set-ups (pages D66)
VX-80	1/4 NPT or BSPT (air, fan air and liquid)	100 psi (7 bar)	45 psi (3 bar)	1.3 gpm (4.9 lpm)	180° F (82° C)	250 cpm	VX set-ups (pages D66)
VX-82	1/4 NPT or BSPT (air, fan air and liquid)	100 psi (7 bar)	45 psi (3 bar)	1.3 gpm (4.9 lpm)	180° F (82° C)	250 cpm	VX set-ups (pages D66)
1/8VAU	1/8 NPT or BSPT (atom. air, fan air and liquid)	90 psi (6.2 bar)	35 psi (2.4 bar)	0.83 gpm (3.15 lpm)	200°F (93°C)	180 cpm	SUV set-ups (page D62)
1/4VMAU	1/4 NPT or BSPT, or sanitary flange (atom. air, fan air and liquid)	90 psi (6.2 bar)	35 psi (2.4 bar)	1.22 gpm (4.62 lpm)	200°F (93°C)	180 cpm	SUVM set-ups (page D59)
10535-1/4J	1/4 NPT or BSPT (air and liquid)	125 psi (8.6 bar)	30 psi (2.1 bar)	1.2 gpm (4.5 lpm)	400°F (204°C) liquid 150°F (66°C) air	180 cpm	1/4J set-ups (page D24)
10536-1/2J	1/2 NPT or BSPT (air and liquid)	125 psi (8.6 bar)	30 psi (2.1 bar)	5.1 gpm (19.3 lpm)	400°F (204°C) liquid 150°F (66°C) air	180 cpm	1/2J set-ups (page D43)
D55500-JAU	1/8 NPT or BSPT (air and liquid)	43 psi (3 bar)	72 psi (5 bar)	0.42 gpm (1.6 lpm)	158°F (70°C)	600 cpm	1/4J or DSU set-ups (page D24 & D34)
D55500-JAUCO	1/8 NPT or BSPT (air and liquid)	58 psi (4 bar)	72 psi (5 bar)	0.42 gpm (1.6 lpm)	158°F (70°C)	300 cpm	1/4J or DSU set-ups (page D24 & D34)

JAUA 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



JAUA
Nozzle

JAUA NOZZLE OPTIONS



JAUACO – Clean-out needle operates with every spray cycle to reduce clogging



JAUAN – Knurled head screw control permits manual nozzle shut-off without disturbing operation of other nozzles on a manifold



JAUAD – Single air inlet for cylinder and atomizing air



JAUADN – Single air inlet for cylinder and atomizing air. Includes manual shut-off assembly to temporarily block liquid flow



JAUAPM – Plate-mounted nozzle with all inlet connections at the rear of the mounting plate



JAUAMCO – Metering knob provides precise adjustment of liquid flow in 5% increments from zero to 100%

MORE OPTIONS

JAUAPMCO – Combines clean-out needle for reduced clogging with convenience of plate-mounting

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**

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



38499-1/8JJAU – Uses 1/4J spray set-ups.



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

1/8JJAUMCO – 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 1.630.665.5000 for application assistance or to place an order.

FOR DETAILED SPRAY SET-UP PERFORMANCE DATA
SEE SECTION D



AIR-ACTUATED AIR ATOMIZING NOZZLE OPTIONS

VX Variable Spray Series

- Flow rates from 0.013 gpm (.05 lpm) to 1.3 gpm (4.9 lpm)
- Independent control of liquid, atomizing air and fan air
- Pre-set air cap indexing increments ensure repeatability
- Optional metering knobs to simplify manual adjustments to air and liquid volumes
- Integrated anti-bearding technology to resist buildup on the air cap
- Quick release mounting block for fast and easy nozzle change out
- Liquid recirculation reduces clogging
- VX-70 and VX-72 feature stainless steel and anodized aluminum construction
- VX-80 and VX-82 feature 316 stainless steel sanitary nozzle bodies and components in compliance with FDA and EU regulations

**VAU/VMAU Variable Spray Series**

- Flow rates up to 1.22 gpm (4.62 lpm)
- Independent control of liquid, fan air and atomizing air provides maximum control of spray coverage
- Dual liquid inlets allow recirculating of sprayed fluid
- VMAU offers modular construction for reduced maintenance time
- Stainless steel construction

**10535-1/4J**

- Flow rates up to 1.2 gpm (4.5 lpm)
- Self-contained air cylinder provides controlled intermittent spraying
- Drip Free spray set-ups provide complete shut-off
- Nickel-plated brass or stainless steel construction

**10536-1/2J**

- Flow rates up to 5.1 gpm (19.3 lpm)
- Self-contained air cylinder provides controlled intermittent spraying
- Drip Free spray set-ups provide complete shut-off
- Nickel-plated brass or stainless steel construction

**72100-1/8JJAU**

- Smallest automatic air atomizing nozzle available
- Flow rates up to 0.22 gpm (0.83 lpm)
- Less than 1.5" (38 mm) in length; 1.2 oz. (34 g) net weight
- Optional clean-out needle reduces clogging
- Nickel-plated brass or stainless steel construction

**D55500-JAU/JAUCO**

- Block design 30% smaller than standard 1/4JAU
- Flow rates up to 0.42 gpm (1.6 lpm)
- Available with plate mount and wall mount options
- Drip Free™ spray set-ups provide complete shut-off
- Stainless steel construction
- D55500-JAUCO includes clean-out needle to reduce clogging

