



SPECIALTY NOZZLES

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ULTRASONIC ATOMIZING NOZZLE AND CONTROLLER

PRODUCT OVERVIEW

Ultrasonic atomizing nozzles use sonic vibrations to produce an extremely fine spray ideal for high-precision coatings, thin film coatings and micron coatings.

FEATURES AND BENEFITS – ULTRASONIC ATOMIZING NOZZLE

- Patent-pending nanotechnology produces superior accuracy in spray pattern formation
- Precise air-assisted round spray pattern optimizes coverage and allows adjustment of drop velocity independently from atomization
- Reduced overspray and product waste

FEATURES AND BENEFITS – ULTRASONIC SPRAY CONTROLLER

- Self-adjusting controller maintains consistent spray
- Control up to three Ultrasonic nozzles with a single controller
- Adjustable voltage, remote control/monitoring via 15 pin I/O connector
- Dimensions: 10" width x 5" height x 8" depth (254 mm x 127 mm x 203.2 mm)

OPERATING PRINCIPLES

Ultrasonic nozzles use very high-frequency vibration instead of high pressure or compressed air to produce extremely small and uniform droplets.

Capillary waves are produced on the surface of a liquid on a vibrating surface. During atomization, capillary waves are transformed into droplets by increasing the amplitude until the peak of the wave forms droplets. The wavelength and, subsequently the droplet size, are determined by vibration frequency. High vibration frequency generates fine droplets and low vibration frequency generates coarse droplets.

APPLICATIONS

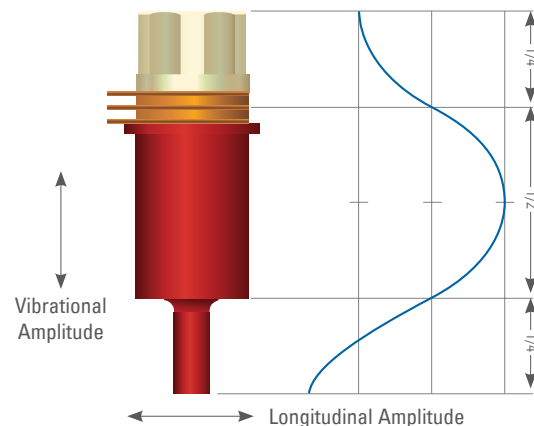
- High-Precision Coating
- Spray Drying
- Humidification



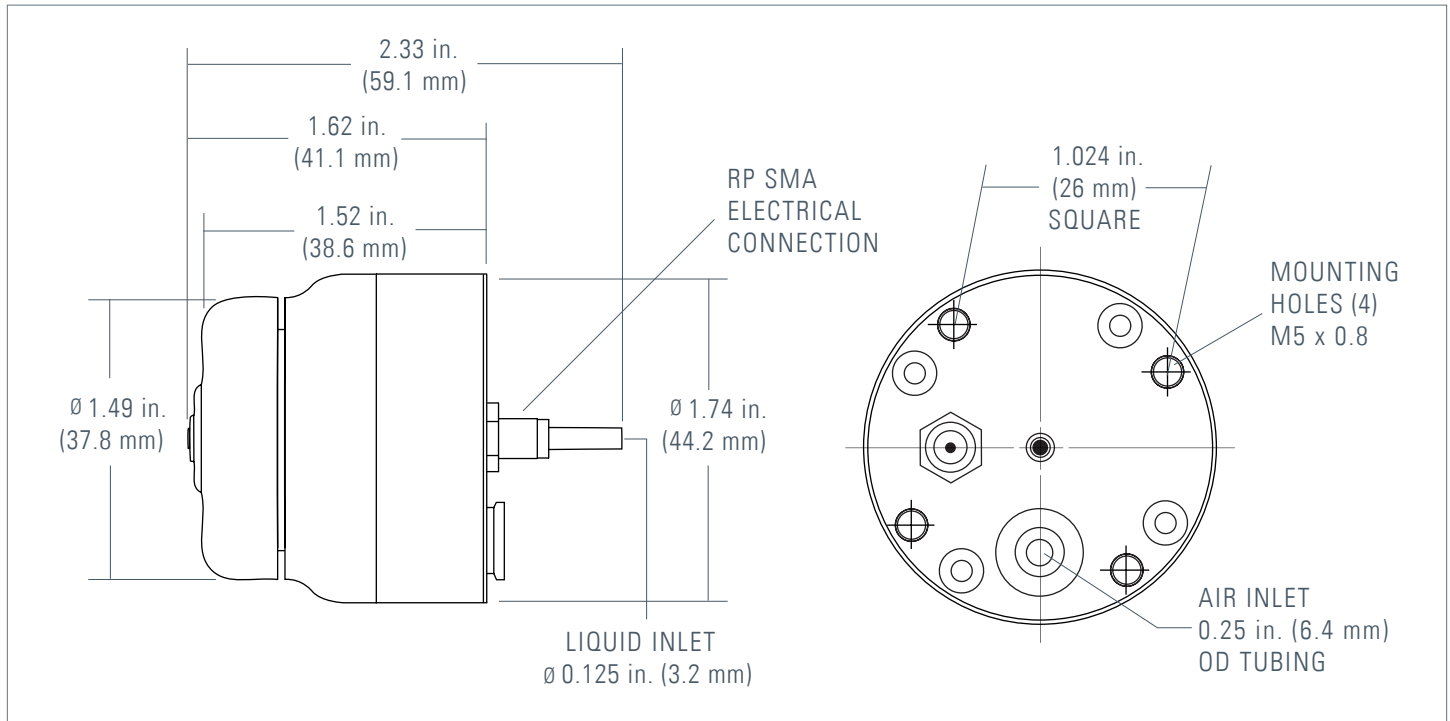
Ultrasonic
Spray Controller

ADDITIONAL RESOURCES

For more information
on Ultrasonic
Atomizing Nozzles,
[click here](#) ▶



DIMENSIONS – ULTRASONIC ATOMIZING NOZZLE



PERFORMANCE DATA

Air Cap	Water Flow (cc / min.)	Air Pressure (PSI)	Air Flow (SCFM)	Drop Size (Microns)				RSF**	Drop Velocity* V avg. (m / sec.)	Coverage at 2 in. / 50.8 mm Spray Height (in.)
				Dv0.1	Dv0.5	Dv0.9	D32			
ACUSN-150 (.032" / 0.8 mm Offset Orifice)	1.5	0.0	0.0	22	38	65	36	1.1	0.8	0.5
		0.5	0.32	20	30	48	30	0.9	7.1	0.8
		1.0	0.45	20	29	47	30	0.9	9.8	1.0
		3.0	0.79	20	28	46	29	0.9	11.8	1.0
	4.0	0.0	0.0	24	47	78	42	1.1	1.4	0.6
		0.5	0.32	23	40	66	37	1.1	8.1	0.9
		1.0	0.45	22	36	59	34	1.0	11.3	1.1
		3.0	0.79	21	35	60	34	1.1	14.8	1.1
	10.0	0.0	0.0	26	48	80	43	1.1	2.0	0.7
		0.5	0.32	26	48	78	43	1.1	7.3	0.9
		1.0	0.45	25	47	77	43	1.1	11.0	1.1
		3.0	0.79	25	46	77	42	1.1	16.6	1.1
ACUSN-156 (.094" / 2.4 mm Offset Orifice)	1.5	0.0	0.0	22	38	65	36	1.1	0.8	0.5
		0.5	0.32	20	31	52	31	1.0	3.3	2.3
		1.0	0.45	18	28	48	28	1.1	4.0	2.7
		3.0	0.79	17	27	44	27	1.0	6.0	3.0
	4.0	0.0	0.0	24	47	78	42	1.1	1.4	0.6
		0.5	0.32	20	34	58	33	1.1	3.8	2.4
		1.0	0.45	20	34	58	32	1.1	4.7	2.8
		3.0	0.79	19	32	54	31	1.1	7.1	3.1
	10.0	0.0	0.0	26	48	80	43	1.1	2.0	0.7
		0.5	0.32	24	48	80	43	1.1	4.9	2.4
		1.0	0.45	24	48	80	43	1.2	5.8	2.8
		3.0	0.79	22	41	71	37	1.2	9.5	3.1

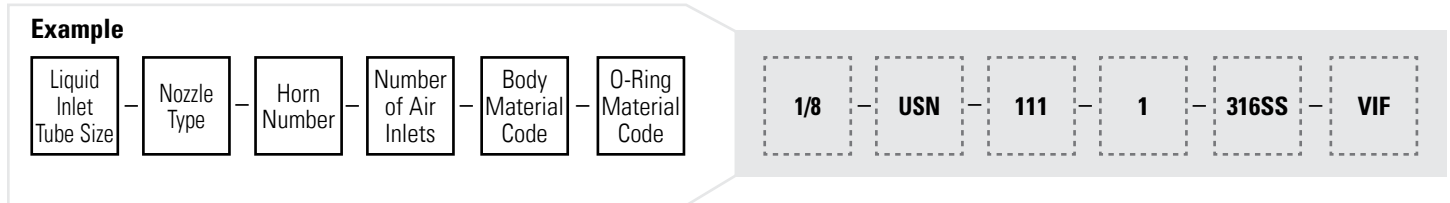
*Drop velocity measured at 0.5 inches from exit orifice. **RSF - Relative Span Factor = (Dv0.9 - Dv0.1) / Dv0.5.

ORDERING INFORMATION – ULTRASONIC SPRAY SYSTEMS

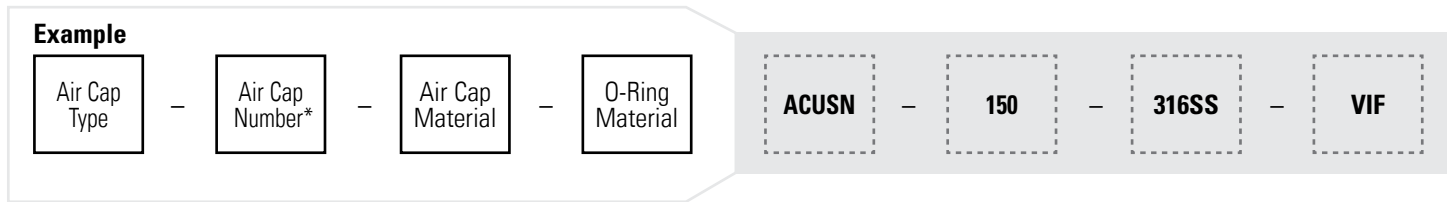
Ultrasonic Spray Nozzles are part of a complete Ultrasonic Spray system, including nozzle(s), air cap, controller, and cables. Reference the information below to help you complete your order.

For more information, contact your local sales representative.

ULTRASONIC ATOMIZING NOZZLE

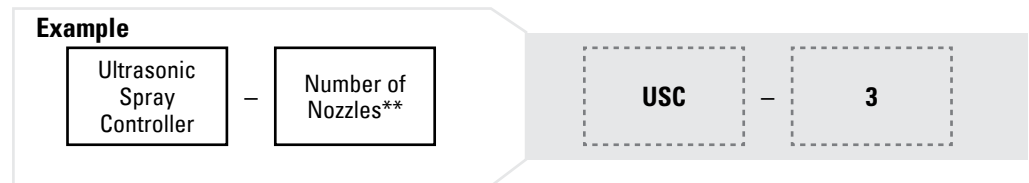


ULTRASONIC AIR CAP



*For the air cap number, use 150 for 30° full cone or 156 for 70° full cone spray.

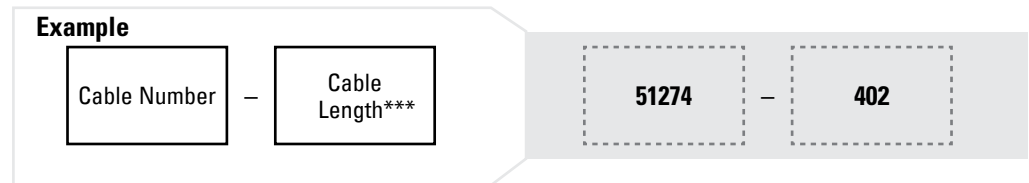
ULTRASONIC SPRAY CONTROLLER



**Ultrasonic Spray Controller is available in 1 and 3-nozzle versions only.

SMA CABLE

Note: Ultrasonic Spray Controller requires an SMA cable for operation. To order, specify cable number (51274) and length.



***For a 5 ft. (1.5 m) cable, use number 402. For a 10 ft. (3.0 m) cable, use number 403.

Material Code
316SS = 316SS Stainless Steel
VIF = FDA VITON
EPF = FDA EPDM

GUNJET® SPRAY GUNS

PRODUCT OVERVIEW

GunJet spray guns are the ideal choice for clean-up, rinsing and blow-off applications in many industries. Options range from a gentle spray to a high-impact solid stream.

FEATURES AND BENEFITS

- Interchangeable spray caps
- Adjustable spray patterns – solid stream to 50° hollow cone
- Corrosion resistant
- Available in aluminum



GunJet 60-21580

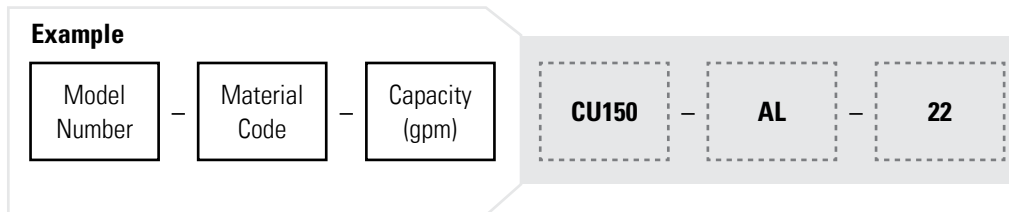
GunJet CU150

SPECIFICATIONS

Model	Pressure (psi)	Capacity (gpm)	Temp. °F (°C)	Inlet Conn.	Length	Width	Height	Weight
CU150	150	10-22	200 (93)	1/2" NPT or BSPT	6.5 in.	2.25 in.	6.5 in.	36 oz.
60-21580	250	16	300 (150)	3/8" NPT or BSPT	9.0625 in.	1.44 in.	6.5 in.	19.25 oz.

ORDERING INFORMATION

To order, specify model number, material code (AL for aluminum, blank for rubber) and capacity size.



APPLICATIONS

- Cleaning of Tablet Coating Pans
- Drying/Blow-Off
- Low-Pressure Cleaning
- Spot Application of Chemicals

WINDJET® AIR NOZZLES

PRODUCT OVERVIEW

WindJet air nozzles can help you improve performance, reduce noise and save on air costs in drying, cooling and coating applications.

FEATURES AND BENEFITS

- Generates a quiet, efficient, controlled flat fan distribution of compressed air
- Air stream is discharged through 16 precision orifices that ensure uniform distribution and spray pattern integrity
- Recessed orifices protect against external damage and provide an air escape should the nozzle accidentally be placed against a flat surface
- Convenient mounting hole ensures correct position on the header or manifold for fixed applications
- Available in stainless steel, ABS (acrylonitrile butadiene styrene) and PPS (polyphenylene sulfide) versions



WindJet AA707



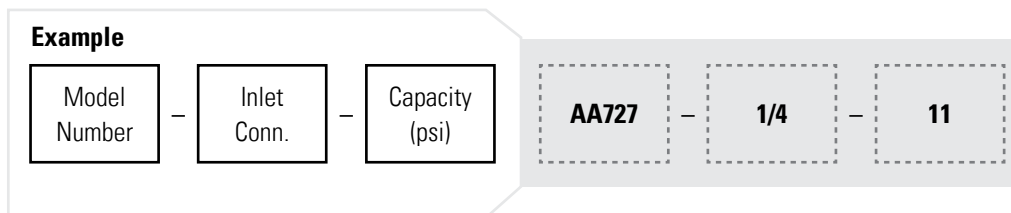
WindJet AA727

SPECIFICATIONS

Nozzle Type	Capacity Sizes	Inlet Conn.	Length	Width	Weight
AA727 (M)	11, 15, 23	1/4" (M)	3-9/16" (91 mm)	2" (51 mm)	4.1 oz. (0.12 kg)
AA727-F (F)	11, 15, 23	1/4" (F)	3-9/16" (91 mm)	2" (51 mm)	0.7 oz. (0.02 kg)
AA707 (M)	11, 15, 23	1/4" (M)	1-7/8" (91 mm)	1" (51 mm)	1.6 oz. (0.04 kg)

ORDERING INFORMATION

To order, specify model number, inlet connection and capacity size.



APPLICATIONS

- Dust and Particle Blow-Off
- Leveling Coatings
- General Drying
- Cooling