



SPECIALTY NOZZLES

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ACCUJET® ELECTROSTATIC SINGLE POINT SHUT-OFF SPRAY SYSTEM

PRODUCT OVERVIEW

The patented single-point shutoff nozzle delivers a single stream of fine droplets to a target with flow rates as low as .01 cc/min. With the needle controlled shutoff system, accurate starts and stops can be achieved. The nozzle can be easily disassembled for cleaning and maintenance. Nozzle is capable of reaching temperatures up to 250° F (121° C).

FEATURES AND BENEFITS

- Intermittent spray control
- Precise application rates
- Reduced fluid consumption

OPERATING PRINCIPLES

In electrostatic spraying, a negatively charged liquid coating is attracted to a neutral, grounded target. The physical attraction of the liquid to the target pulls the coating to an object's surface, providing a very high transfer efficiency.

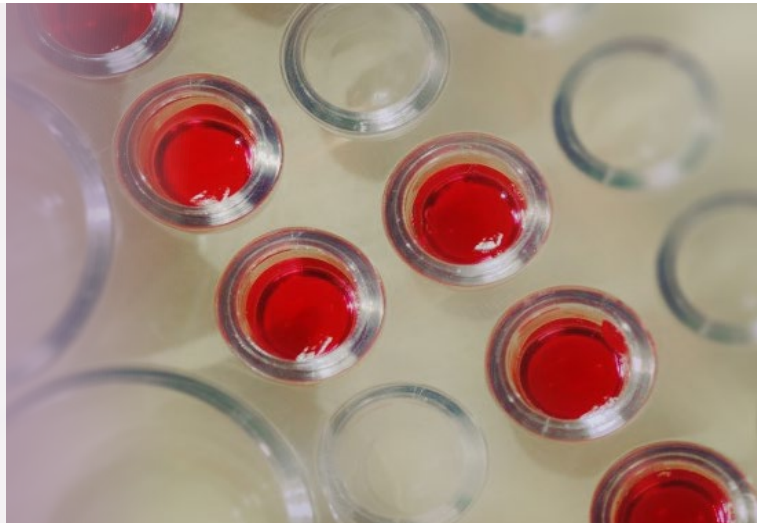


AccuJet Electrostatic
Spray Controller

AccuJet Electrostatic
Shut-off Spray Nozzle

SPRAY TIP: ELECTROSTATIC NOZZLES PROVIDE GREATER PRECISION FOR COATING MEDICAL DEVICES

The electrostatic nozzle is capable of producing very fine spray with high accuracy and minimal overspray. This makes it ideal for applying a very thin layer of coating material to a relatively small target area, such as the coating of assay trays, slides and other medical devices with anti-coagulants and other reagents for research or production purposes.



APPLICATIONS

- Medical Device Coating
- Stent Coating

ACCUJET® ULTRASONIC SPRAY SYSTEMS

PRODUCT OVERVIEW

The patented AccuJet® Ultrasonic Nozzle is designed to optimize spray coverage by atomizing fluids using ultrasonic vibration. The unpressurized, low-velocity spray gently settles on a target's surface unlike high liquid pressure or air pressure nozzles that create sprays which bounce off of the target. Sprays can be shaped to meet your process requirements.

FEATURES AND BENEFITS – ULTRASONIC ATOMIZING NOZZLE

- Patented nanotechnology produces superior accuracy in spray pattern formation
- Precise air-assisted round or flat spray pattern optimizes coverage and allows adjustment of drop velocity independently from atomization
- New cooling technology

ULTRASONIC SPRAY CONTROLLER

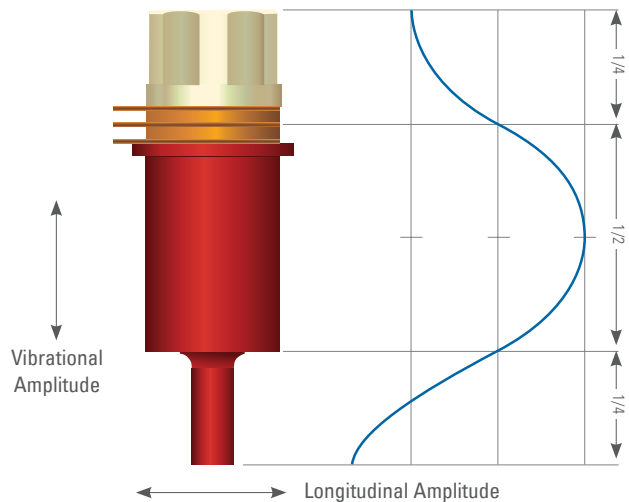
- Control up to three Ultrasonic nozzles with a single controller
- Adjustable voltage, remote control/monitoring via 15 pin I/O connector
- Dimensions: 10" width x 5" height x 8" depth (254 mm x 127 mm x 203.2 mm)

OPERATING PRINCIPLES

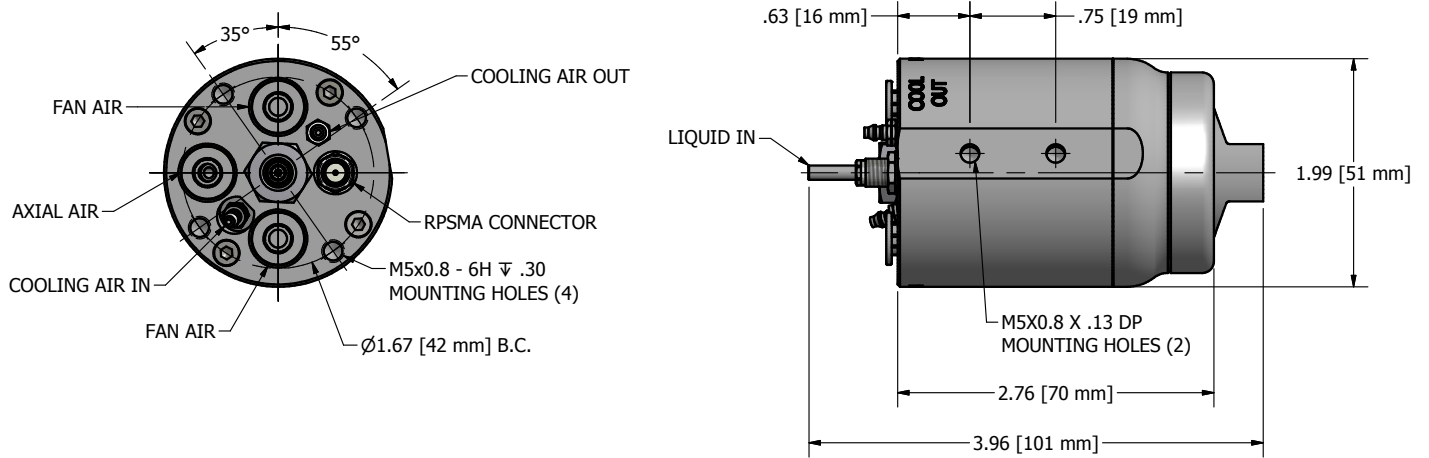
Ultrasonic nozzles use very high-frequency vibration instead of high pressure or compressed air to produce extremely small and uniform droplets. Capillary waves are produced on the surface of a liquid on a vibrating surface. During atomization, capillary waves are transformed into droplets by increasing 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



DIMENSIONS – ACCUJET ULTRASONIC SPRAY SYSTEMS



PERFORMANCE DATA

Air Cap	Water Flow (ml / min.)	Axial Air Pressure (PSI)	Fan Air (PSI)	Fan Air Flow (SCFM)	Drop Size (Microns)					RSF**
					Dv0.1	Dv0.5	Dv0.9	Dv0.99	Dv32	
ACUSN-501- 316SS (.031" / 0.8 mm Offset Orifice)	0.3	0.3	0	0	15	28	44	58	24	1.0
		0.3	1.0	1.30	14	26	40	52	23	1.0
		0.3	1.5	1.59	14	26	41	52	23	1.1
		0.5	1.5	1.59	14	25	40	52	22	1.0
	1	0.3	0	0	17	35	62	105	30	1.3
		0.3	1.0	1.30	16	32	55	102	28	1.2
		0.5	1.5	1.59	16	31	54	100	27	1.2
		1.0	1.5	1.59	15	30	52	89	26	1.2
	5	0.3	0	0	26	55	102	144	46	1.4
		0.3	1.0	1.30	23	46	85	126	40	1.3
		0.5	1.5	1.59	22	44	84	126	38	1.4
		1.0	1.5	1.59	20	41	78	117	35	1.4
	10	0.3	0	0	41	82	125	167	66	1.0
		0.3	1.0	1.30	27	54	104	156	46	1.4
		0.5	1.5	1.59	26	53	105	156	45	1.5
		1.0	1.5	1.59	23	54	110	153	43	1.6
	15	0.3	0	0	47	85	128	172	73	1.0
		0.3	1.0	1.30	30	63	118	169	52	1.4
		0.5	1.5	1.59	28	59	116	166	49	1.5
		1.0	1.5	1.59	27	59	116	165	48	1.5

**RSF - Relative Span Factor = (Dv0.9 - Dv0.1) / Dv0.5.

PERFORMANCE DATA

Air Cap	Water Flow (ml / min.)	Axial Air Pressure (PSI)	Axial Air Flow (SCFM)	Drop Size (Microns)					RSF**	
				Dv0.1	Dv0.5	Dv0.9	Dv0.99	Dv32		
ACUSN-401- 316SS (.031" / 0.8 mm Offset Orifice)	0.3	0	0	15	30	49	69	26	1.1	
		0.2	0.24	15	28	44	58	24	1.1	
	1	0	0	22	37	63	92	34	1.1	
		0.2	0.24	21	37	60	90	33	1.1	
		2	0.68	18	33	56	86	29	1.2	
		5	1.12	17	32	54	82	28	1.2	
	5	0	0	37	75	117	148	58	1.1	
		0.2	0.24	30	58	104	146	50	1.3	
		2	0.68	23	47	90	140	38	1.4	
		5	1.12	20	41	85	134	36	1.6	
	10	0	0	44	86	133	175	72	1	
		0.2	0.24	40	82	127	171	67	1.1	
		2	0.68	25	52	106	158	44	1.6	
		5	1.12	22	47	100	148	39	1.7	
	15	0	0	46	93	146	195	77	1.1	
		0.2	0.24	42	82	132	174	73	1.1	
		2	0.68	27	59	118	173	49	1.6	
		5	1.12	23	50	107	157	42	1.7	
	ACUSN-402- 316SS (.031" / 0.8 mm Offset Orifice)	0.3	0.2	.23	15	29	45	61	25	1.0
		1	0	0	34	50	95	132	40	1.2
0.2			0.23	31	49	92	124	39	1.2	
2			0.61	26	42	65	91	39	0.9	
5			1.00	26	41	64	86	39	0.9	
5		0	0	37	75	116	148	59	1.1	
		0.2	0.23	35	64	102	140	54	1.0	
		2	0.61	34	55	83	109	51	0.9	
		5	1.00	32	49	76	107	47	0.9	
10		0	0	44	87	134	174	72	1.0	
		0.2	0.23	38	74	120	165	62	1.1	
		2	0.61	35	55	93	145	52	1.1	
		5	1.00	33	50	86	140	47	1.1	
15		0	0	44	87	139	181	72	1.1	
		0.2	0.23	42	83	132	176	69	1.1	
		2	0.61	36	57	107	174	54	1.2	
	5	1.00	34	52	97	161	47	1.2		

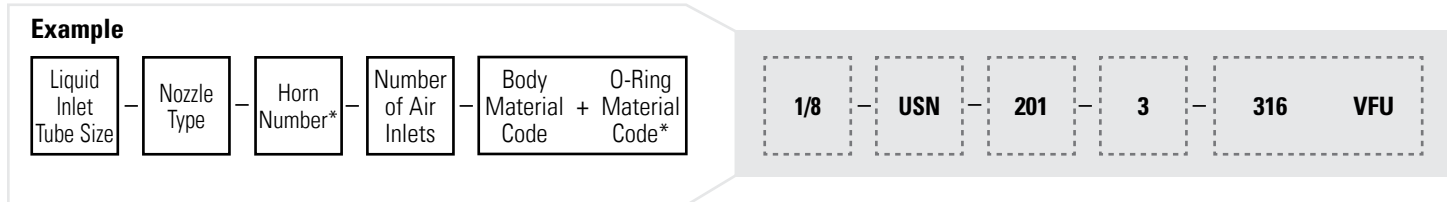
Cooling Air Pressure (PSI)	1	2	3	4	5	10	20	30
Flow (SCFM)	0.20	0.29	0.35	0.41	0.48	0.67	1.00	1.30

**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.

ULTRASONIC ATOMIZING NOZZLE



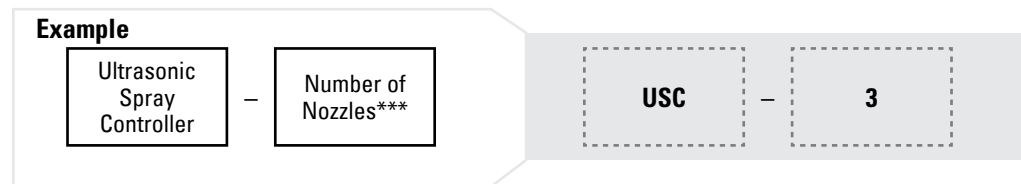
*For the Horn Number, use 201 for .031 orifice or 202 for .012 orifice. For the O-Ring Material Code, use EFU for white EPDM or VFU for blue Viton.

ULTRASONIC AIR CAP



**For the air cap number, use 401 for 30° full cone, 402 for 70° full cone or 501 for flat spray.

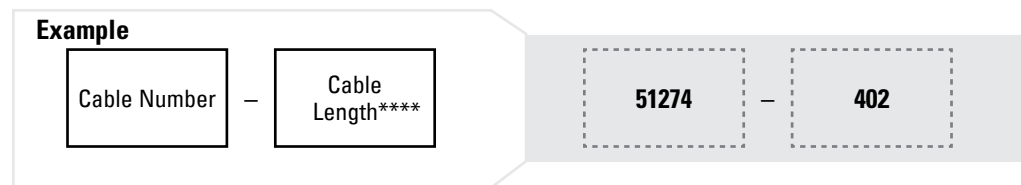
ULTRASONIC SPRAY CONTROLLER



***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. For a 17 ft. (5.2 m) cable, use number 404. For a 20 ft. (6.1 m) cable, use number 405.

Material Code
316 = 316SS Stainless Steel
VFU = FDA VITON (blue)
EFU = FDA EPDM (white)

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

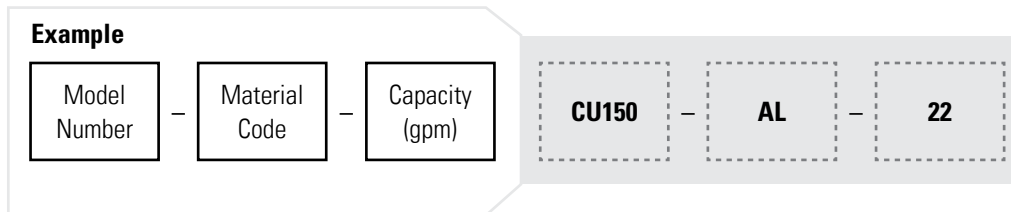
GunJet CU150

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



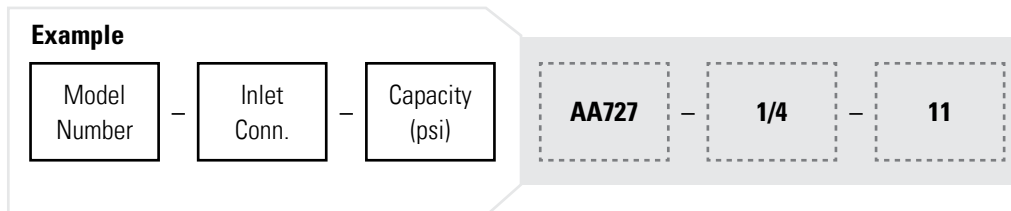
WindJet AA727

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