Spraying Systems (India) Pvt. Ltd.

A Wholly owned subsidiary of Spraying Systems Co. USA
CIN: U29120KA1999PTC036505

Quotation - Air Atomizing Nozzles For Mist Cooling Enquiry No:EN230103375Bhiwadi Division

Quote Number: 230015553
Cust.RFQ Reference: Email Dtd 14/2/2023
Customer Number: P353301
Issue Date: 16/02/2023
Valid Through: 17/05/2023

JINDAL ALUMINIUM LIMITED

SP-2/333 INDUSTRIAL AREA
BHIWADI
Rajasthan
301019

Mr. Ajay Yadav
09871115539

Attn:
Mr Harikesh Sharma
harikesh.sharma@jindalaluminium.com
961-119-5368

INCOTERMS: EXW Bangalore
Terms: 100% against proforma invoice prior to dispatch

Thank you for your interest in our products. We are pleased to provide this quotation.

#	PartNumber	Description	Qty	MFG Lead Time*	Unit Price (INR)	Total(INR)
1	1/2JN-SS	AIR ATM.NZ,SS,W/O SU	50	6 Weeks	0.00	0.00
2	SU62-SS	SPRAY SETUP,ST.STL.	50	6 Weeks	0.00	0.00
3	ASSEMBLY ITEM 1+2	ASSEMBLY ITEM 1+2	50	8 Weeks	10,500.00	525,000.00

Final Price

*Delivery days is an estimate and does not include shipping.

Product Sub-total	**525,000.00**
Total(INR)	**525,000.00**

CHECK LIST
DISCOUNT : above Price are final
PRICE BASIS : FOR BHIWADI Ex-Work
P & F : INCL...../ EXTRA Extra
GST/IGST : 18% Gst Extra
DELIVERY : 5 to 6 Week
PAYMENT : 50% against PI Before Dispatch 50% after Delivery
GC/NC/TC : 18 Month Warranty.
VALIDITY
CHECKED BY : Rupesh

Experts in Spray Technology

Plot No.301 & 304, 2nd Cross, 5th Main, 4th Phase, Peenya Industrial Area, Bangalore-560 058.
Tel: +91-80-3083-3200/3201, 2837547 Fax: +91-80-3085-3377 Email: info@spray-india.com Website: www.spray.com

TECHNICAL DESCRIPTION
Model: 1/2JN-SS +SU82-SS (Having Manual Shut Off needle to Stop Liquid Flow)
Spray Pattern: Round Spray
Mixing Pattern: Internal Mix
Spray Set Up: SU82-SS (Air Cap: 4691312 & Fluid Cap: 251376)
Water Flow Rate : 740 LPH @ 3 Bar
Air Pressure: 3 Bar
Air Consumption: 710 LPM
Material: SS303
Inlet Connection: 1/2" NPT(F) Air & Liquid Both

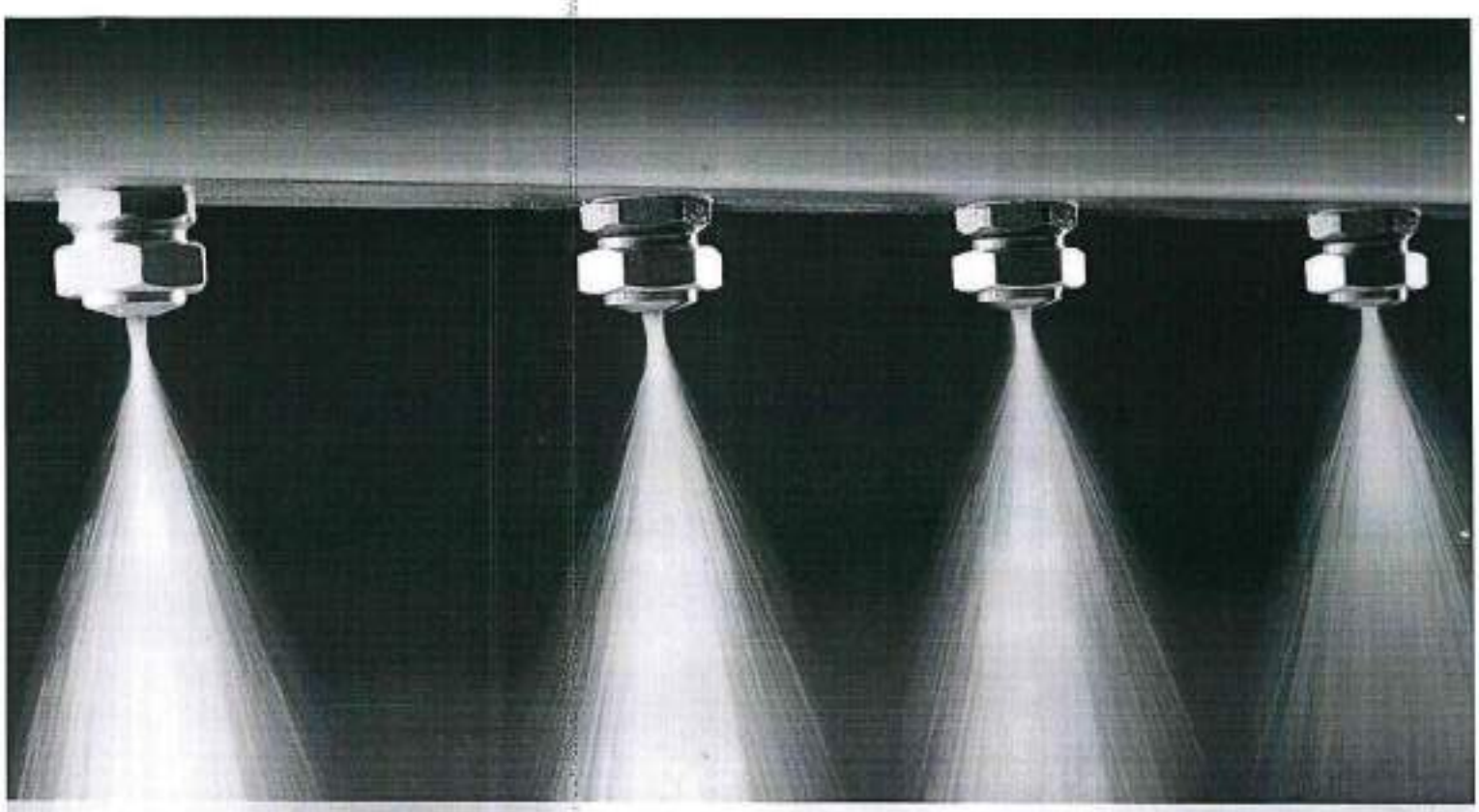
Note: We Will Only Provide Conformance Of certificate (C.O.C) Of Product, Any Other will charges Extra

TERMS & CONDITIONS :
Quote Format no : S&M/F/01/00
PRICE BASIS : Ex-works ,Bangalore
P & F : 3% Extra of Basic Order Value
Freight :Extra
GST : 18% extra as applicable at the time of dispatch
HSN CODE: 8424.8990
INSURANCE : To your account
DELIVERY : 8 weeks from the date of receipt of techno-commercially clear order
OTHERS : Please let us know regarding any statutory/regulatory requirements to be followed.
PAYMENT : 100% against proforma Invoice before despatch

Please reference the quotation number in the upper right corner when you place your order. If you have questions or need assistance, I am happy to help. We value your business.
Should you have any questions or need additional information, please contact me.

Thank you,

Yadav Ajay Kumar
Hindi
9871115539
011-32976000
ajayyadav@sprayindia.com

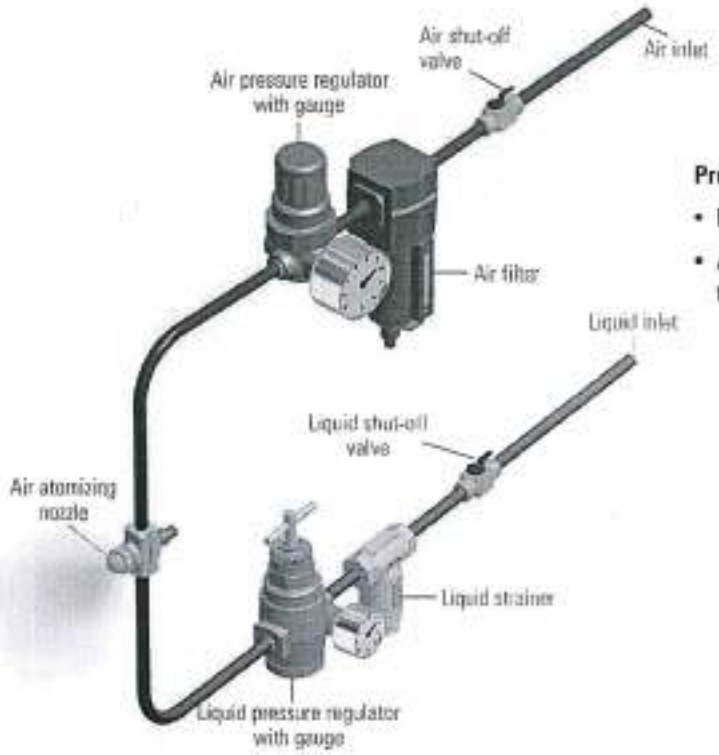


AIR ATOMIZING SPRAY NOZZLES

CHEMICAL INJECTION • PASSIVATING
COATING • STERILIZING • FOGGING
HUMIDIFYING • MISTING • COATING
MOISTURIZING • GAS COOLING
LUBRICATING

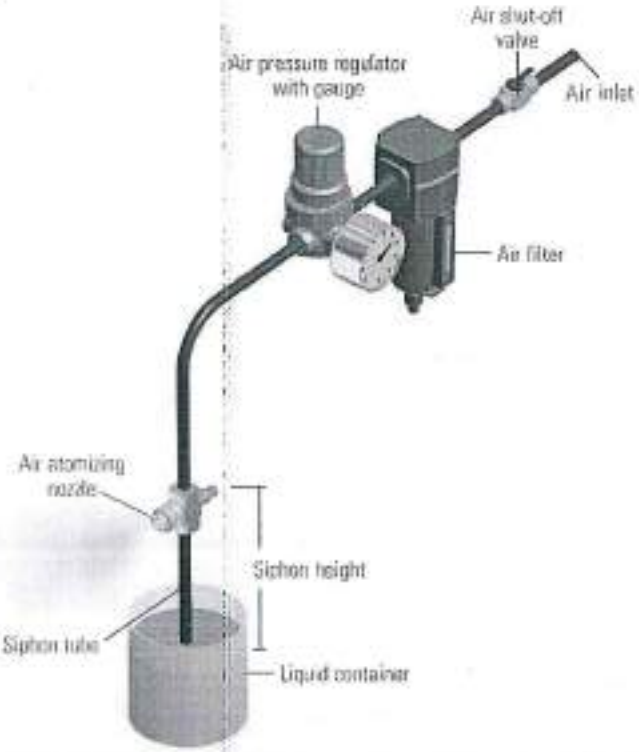
OVERVIEW: AIR ATOMIZING NOZZLE SET-UPS

Liquid can be supplied to the nozzle under pressure or it can be supplied through a liquid siphon or gravity-feed.



Pressure Spray Set-Ups

- Liquid is supplied to the nozzle under pressure
- Air and liquid can be externally or internally mixed to produce a completely atomized spray



Siphon/Gravity-Fed Spray Set-Ups

- Liquid is supplied via liquid siphon or is gravity-fed
- These set-ups are designed to draw liquid through the feed line into the air flow where it is atomized

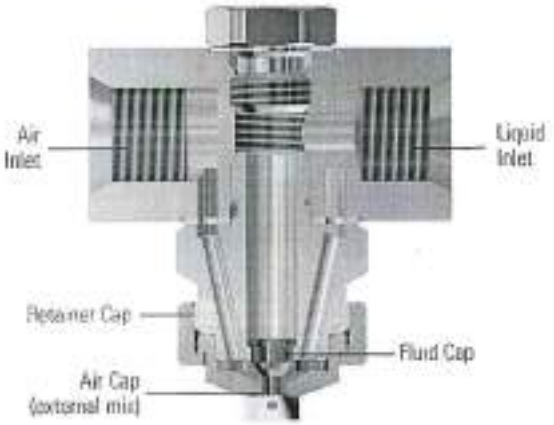
PLACING YOUR ORDER

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

FOR DETAILED SPRAY SET-UP PERFORMANCE DATA
SEE SECTION D

OVERVIEW: J AND JJ SERIES NOZZLES

- Liquid and compressed air enter the nozzle body and are mixed by the spray set-up to produce a finely atomized spray pattern
- Spray set-ups, consisting of an air cap and a fluid cap, can mix the fluids either internally or externally
- Hundreds of spray set-ups are available to produce cone and flat spray patterns
- A wide variety of nozzle bodies are available for convenient mounting and positioning
- JJ compact nozzle bodies are available for applications where space is limited
- Models available with clean-out needles, shut-off needles, swivels and strainers to optimize performance



1/4J Nozzle

Air and liquid enter the air atomizing nozzle body and are combined by the spray set-up to generate finely atomized droplets.

QUICK REFERENCE GUIDE

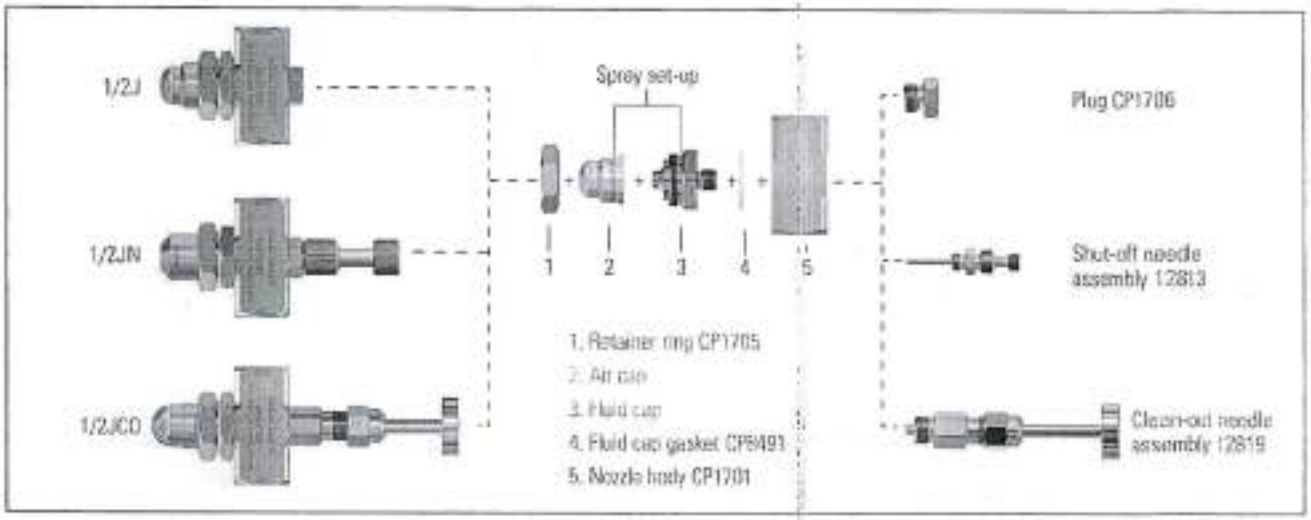
Product Number	Inlet Connection Size (in.)	Max Flow	Max Temp (liquid)	Spray Set-Ups
1/8J and 1/4J Series	1/8 , 1/4 (F) NPT or BSPT	72 gph (273 lph)	400°F (204°C)	1/8J and 1/4J set-ups (pages D30)
1/8JJ Series	1/8 (F) NPT or BSPT	33.2 gph (126 lph)	400°F (204°C)	1/8JJ set-ups (pages D33)
1/2J Series	1/2 (F) NPT or BSPT	306 gph (1158 lph)	400°F (204°C)	1/2J set-ups (pages D40)
1J Series	1 (F) NPT or BSPT	29 gpm (110 lpm)	400°F (204°C)	1J set-ups (pages D44)

1/2J SERIES NOZZLES

- J Series nozzles consist of a nozzle body and a spray set-up
- A wide variety of spray set-ups are available with flow rates up to 306 gph (1158 lph) in various spray patterns
- Basic 1/2J bodies have liquid and air inlets on opposing sides of the nozzle bodies. Nozzle bodies include a removable plug so needle assemblies can be added in the future
- Nickel-plated brass or stainless steel construction

1/2J Nozzle

1/2J NOZZLE OPTIONS



1/2JN – Manual shut-off needle to stop liquid flow

1/2JCO – Manual clean-out needle to clear obstructions from the fluid orifice

1/2JBC – Air and liquid inlets at the back of the nozzle body, in line with the spray direction

1/2JBCJ – Steam jacket around the nozzle body for spraying liquids too viscous to spray at room temperatures

1/2-2J – 1/2" air and liquid inlet connections on opposing sides of the nozzle body with two opposing spray set-ups

OVERVIEW: AIR ATOMIZING SPRAY NOZZLE SET-UPS

- Each spray set-up – consisting of an air cap and a fluid cap – provides a specific spray pattern, flow rate and spray coverage
- Within each nozzle series, spray set-ups are interchangeable, for versatile performance
- Air and liquid can be externally or internally mixed to produce a completely atomized spray
- Drip Free™ spray set-ups are used for all nozzle assemblies containing shut-off or clean-out needles to ensure positive liquid shut-off

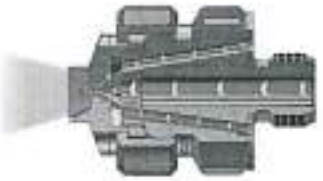
Air Cap | Fluid Cap

Spray Set-Ups

Each spray set-up consists of an air cap and a fluid cap.

Internal Mix Set-Ups

Liquid and air are mixed internally to produce an atomized spray. Liquid and gas streams are not independent – a change in air flow will affect the liquid flow.



External Mix Set-Ups

Liquid and air streams are mixed outside of the nozzle. Air and liquid flow can be controlled independently. Effective for higher viscosity liquids and abrasive suspensions.

QUICK REFERENCE GUIDE

Spray Set-Up	Liquid Supply	Internal / External Mix	Spray Patterns	Max Flow	Page Number
1/8J and 1/4J Series	Pressure Feed Siphon/Gravity Feed	Both	• Flat Spray • Deflected Flat Spray • Round Spray • Wide Angle Round Spray • 360° Circular Spray	72 gph (272.5 lph)	D22
1/8JJ Series	Pressure Feed Siphon/Gravity Feed	Both	• Flat Spray • Round Spray • Wide Angle Round Spray • 360° Circular Spray	33.2 gph (126 lph)	D33
1/2J Series	Pressure Feed Siphon/Gravity Feed	Both	• Flat Spray • Round Spray • Wide Angle Round Spray	306 gph (1158 lph)	D41
1J Series	Pressure Feed Siphon/Gravity Feed	Both	• Flat Spray • Round Spray • Wide Angle Round Spray	29 gpm (110 lpm)	D45
QuickMist® Series	Pressure Feed Siphon/Gravity Feed	Internal Mix Only	• Flat Spray • Round Spray • Wide Angle Round Spray	26 gpm (98 lpm)	D50
SUV and SUVM Series	Pressure Feed Only	External Mix Only	• Variable	49.8 gph (188.5 lph)	D55

PERFORMANCE DATA:
SIPHON/GRAVITY SPRAY SET-UPS I INTERNAL MIX I FLAT SPRAY

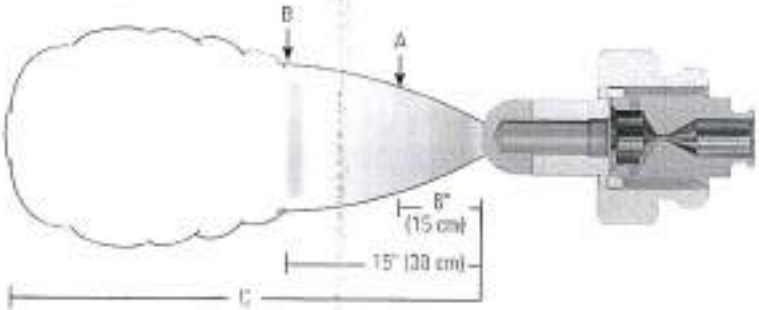
For a flat spray pattern, "A" and "B" are the pattern widths at distances from the nozzle.

The total distance of spray projection from the nozzle to the maximum dispersal point is represented by "C".

Liquid is supplied to this spray set-up by either a liquid siphon or a gravity-feed.

Liquid is drawn through the feed line into the air flow where it is atomized.

When ordering only a spray set-up, 12582 retainer ring and 7717-2/007 O-ring must be ordered separately. These components are included in a complete air atomizing nozzle assembly. **Please contact your sales engineer for more information.**



Spray Set-up No.	Spray Set-up Consists of Fluid and Air Cap Combination	Atomizing Air		Liquid Capacity (gallons per hour)*								Spray Dimensions at 8" Siphon Height		
				Gravity Head (in.)			Siphon Height (in.)							
		Air Press.	Air Capacity scfm	18	12	6	4	8	12	24	36	A (in.)	B (ft.)	C (ft.)
SUJF1	Fluid Cap J2850 + Air Cap J7342D	10.0	.99	.35	.33	.30	.27	.25	.22	.17	.13	8 - 9	15	6 - 7
		20	1.42	.31	.30	.29	.28	.25	.23	.19	.16			
		30	1.83	.18	.16	.15	.11	.09	–	–	–			
SUJF2C	Fluid Cap J35100 + Air Cap J120402	20	1.86	1.01	.95	.90	.77	.72	.67	.62	.56	9 - 11	15 - 19	9 - 10
		30	2.42	.89	.84	.81	.75	.71	.67	.63	.57			
		40	2.96	.76	.73	.69	.65	.61	.58	.53	.48			
		60	4.05	.44	.41	.37	.33	.30	.27	–	–			
SUJF3B	Fluid Cap J40100 + Air Cap J122435	20	2.26	1.35	1.28	1.20	1.01	.86	.92	.78	.62	7-1/2 - 8-1/2	10 - 1/2 - 12	10 - 11
		30	2.88	1.26	1.21	1.14	.92	.87	.82	.74	.59			
		40	3.52	.98	.92	.87	.80	.69	.52	.44	–			
		50	4.13	.56	.52	.44	–	–	–	–	–			
SUJF4B	Fluid Cap J40100 + Air Cap J122440	20	2.10	2.01	1.90	1.71	1.47	1.40	1.32	1.17	.92	8-1/2 - 8	10-1/2 - 13	11
		30	2.70	2.00	1.94	1.81	1.58	1.52	1.45	1.34	1.11			
		40	3.28	1.82	1.74	1.63	1.42	1.34	1.22	1.03	–			
		50	3.87	1.10	.97	.85	.69	–	–	–	–			

*At the stated pressure in psi.

Drip Free™ spray set-ups ensure positive shut-off and are provided for air atomizing assemblies containing a shut-off needle. For more information, call 1.800.95.SPRAY.

PERFORMANCE DATA:
PRESSURE SPRAY SET-UPS | INTERNAL MIX | FLAT SPRAY

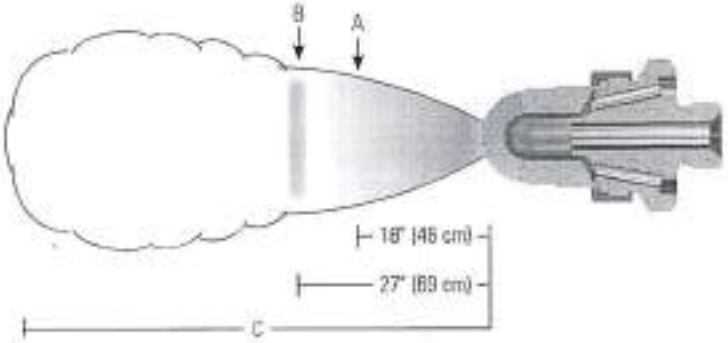
For a flat spray pattern, "A" and "B" are the pattern widths at distances from the nozzle.

The total distance of spray projection from the nozzle to the maximum dispersal point is represented by "C".

Liquid is supplied to this spray set-up under pressure.

Liquid and compressed air or gas are mixed internally to produce a completely atomized spray.

When ordering only a spray set-up, 1705 retainer ring and 6491 gasket must be ordered separately. These components are included in a complete air atomizing nozzle assembly. **Please contact your sales engineer for more information.**



Spray Set-up No.	Spray Set-up Consists of Fluid and Air Cap Combination	Liquid Capacity (gallons per hour)* and Air Capacity (standard cubic feet per minute)*															Spray Dimensions		
		Liquid Pressure															A (in.)	B (in.)	C (ft.)
		5 psi			15 psi			25 psi			35 psi			55 psi					
		Air Press.	gph	scfm	Air Press.	gph	scfm	Air Press.	gph	scfm	Air Press.	gph	scfm	Air Press.	gph	scfm			
SU75	Fluid Cap 250375 + Air Cap 4533102	–	–	–	28	39	22.4	44	44.1	31.5	58	53	40	–	–	–	17 - 19	35 - 38	18 - 19
		–	–	–	30	31.8	24	46	37.2	33.5	60	45.6	42	–	–	–			
		–	–	–	32	24.6	25.9	48	31.2	35.1	63	38	44	–	–	–			
		–	–	–	34	19.8	27.5	50	27	36.9	65	31	47	–	–	–			
SU85	Fluid Cap 251370 + Air Cap 4699102	10.0	35.4	11.1	18.0	103	15.4	26	155	17.7	36	180	23	54	222	29.1	20 - 36	47 - 69	13 - 21
		12.0	26.4	13.4	20	81.6	17.6	28	135	20	38	162	25.4	56	198	31.2			
		–	–	–	22	63.6	19.8	30	115	22.5	40	147	27.8	58	186	34			
		–	–	–	24	48.3	22.6	32	100	25.1	42	131	30.2	60	180	35.3			
		–	–	–	–	–	–	34	84	27.5	44	116	32.6	62	166	38.9			
		–	–	–	–	–	–	36	69.5	30	46	101	35.1	64	154	41.6			
		–	–	–	–	–	–	38	56.4	32.6	48	81.5	37.8	66	142	44.1			
		–	–	–	–	–	–	40	45.7	35.3	50	75.6	40.2	68	130	46.6			
		–	–	–	–	–	–	–	–	–	52	62.4	42.7	70	119	48.3			
		–	–	–	–	–	–	–	–	–	–	–	–	72	108	51.6			
		–	–	–	–	–	–	–	–	–	–	–	–	74	97.4	54.2			
		–	–	–	–	–	–	–	–	–	–	–	–	76	87.5	57.1			

*At the stated pressure in psi.

PERFORMANCE DATA:
PRESSURE SPRAY SET-UPS | INTERNAL MIX | WIDE ANGLE ROUND

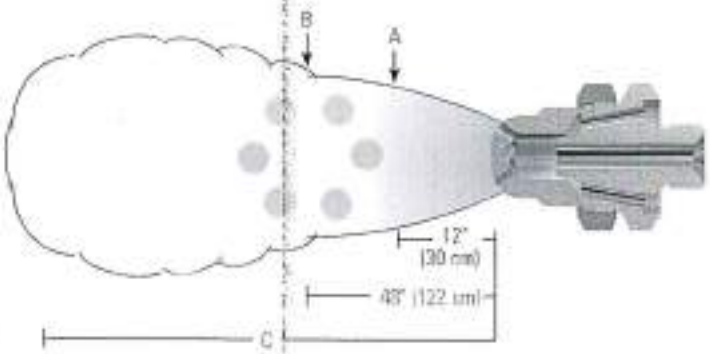
For a wide angle round spray, dimensions "A" and "B" are the pattern widths at distances from the nozzle.

The total distance of spray projection from the nozzle to the maximum dispersal point is represented by "C".

Liquid is supplied to this spray set-up under pressure.

Liquid and compressed air or gas are mixed internally to produce a completely atomized spray.

When ordering only a spray set-up, 1705 retainer ring and 8491 gasket must be ordered separately. These components are included in a complete air atomizing nozzle assembly. **Please contact your sales engineer for more information.**



Spray Set-up No.	Spray Set-up Consists of Fluid and Air Cap Combination	Liquid Capacity (gallons per hour)* and Air Capacity (standard cubic feet per minute)*															Spray Dimensions		
		Liquid Pressure															A (in.)	B (in.)	C (ft.)
		5 psi			15 psi			25 psi			35 psi			55 psi					
		Air Press.	gph	scfm	Air Press.	gph	scfm	Air Press.	gph	scfm	Air Press.	gph	scfm	Air Press.	gph	scfm			
SU07	Fluid Cap 250375 + Air Cap 422-6-73-70°	–	–	–	–	–	–	28	33	8.4	40	28.8	11.3	58	66	12.2	13-1/2 - 14	26-1/2 - 27	22 - 28
		–	–	–	–	–	–	30	19.8	10.8	42	15.6	13.9	60	42	15.0			
		–	–	–	–	–	–	–	–	–	–	–	–	62	25.2	18.2			
SU08	Fluid Cap 250375 + Air Cap 422-6-94-70°	8.0	27	6.5	18.0	42	7.0	32	47	11.0	46	42.6	18.1	70	81	29.5	13 - 14	25-1/2 - 27	20 - 27
		10.0	15.0	8.2	20	29.4	8.8	34	36	12.8	48	32.4	20.2	75	33	34.5			
		12.0	8.4	9.8	22	20.2	10.5	36	25.2	14.7	50	25.8	22.2	80	22.2	39.6			
		–	–	–	24	14.4	12.2	38	18.6	16.6	52	19.8	24	–	–	–			
		–	–	–	–	–	–	40	13.8	18.6	54	15.6	25.8	–	–	–			
SU09	Fluid Cap 250375 + Air Cap 469-6-125-70°	10.0	34.2	11.4	26	46.2	20.2	40	62.6	27.5	54	75.6	32.6	75	127	39	13 - 14	26 - 28	23 - 30
		12.0	21.6	13.0	28	37.2	22	42	52.8	29.6	56	57	34.3	80	108	42.4			
		14.0	12.0	14.7	30	28.4	23.7	44	43.8	31.6	58	46.8	35.8	85	98	45.6			
		–	–	–	32	21.6	25.3	46	33.6	33.6	60	39	37.3	–	–	–			
		–	–	–	34	16.2	27	48	25.2	35.6	62	33	38.8	–	–	–			
SU89	Fluid Cap 251376 + Air Cap 469-6-130-70°	10.0	35.4	11.1	18.0	103	15.4	26	155	17.7	36	180	23	54	222	29.1	11 - 13	29 - 36	11 - 25
		12.0	26.4	13.4	20	81.6	17.6	28	135	20	38	162	25.4	56	198	31.2			
		–	–	–	22	63.6	19.8	30	115	22.5	40	147	27.8	58	186	34			
		–	–	–	24	49.3	22.6	32	100	25.1	42	131	30.2	60	180	36.3			
		–	–	–	–	–	–	34	84	27.5	44	116	32.5	62	166	38.9			
		–	–	–	–	–	–	36	69.5	30	46	101	35.1	64	154	41.6			
		–	–	–	–	–	–	38	58.4	32.0	48	81.5	37.0	66	142	44.1			
		–	–	–	–	–	–	40	45.7	35.3	50	75.6	40.2	68	130	46.6			
		–	–	–	–	–	–	–	–	–	52	62.4	42.7	70	119	49.3			
		–	–	–	–	–	–	–	–	–	–	–	–	72	108	51.8			
		–	–	–	–	–	–	–	–	–	–	–	–	74	97.4	54.2			
		–	–	–	–	–	–	–	–	–	–	–	–	76	87.5	57.1			

*At the sized pressure in psi.

PERFORMANCE DATA:
PRESSURE SPRAY SET-UPS I INTERNAL MIX I ROUND SPRAY

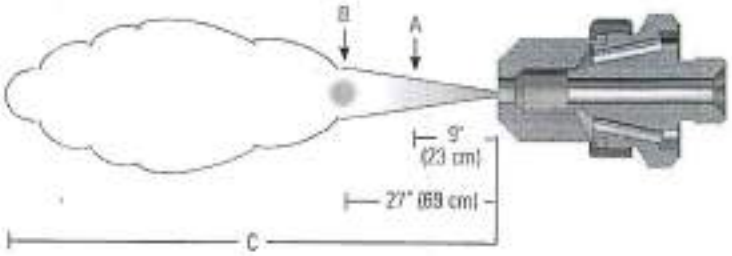
For a round spray, dimensions "A" and "B" are the pattern widths at distances from the nozzle.

The total distance of spray projection from the nozzle to the maximum dispersal point is represented by "C".

Liquid is supplied to this spray set-up under pressure.

Liquid and compressed air or gas are mixed internally to produce a completely atomized spray.

When ordering only a spray set-up, 1706 retainer ring and 8491 gasket must be ordered separately. These components are included in a complete air atomizing nozzle assembly. **Please contact your sales engineer for more information.**



Spray Set-up No.	Spray Set-up Consists of Fluid and Air Cap Combination	Liquid Capacity (gallons per hour)* and Air Capacity (standard cubic feet per minute)*															Spray Dimensions		
		Liquid Pressure															A (in.)	B (in.)	C (ft.)
		5 psi			15 psi			25 psi			35 psi			55 psi					
		Air Press.	gph	scfm	Air Press.	gph	scfm	Air Press.	gph	scfm	Air Press.	gph	scfm	Air Press.	gph	scfm			
SU12	Fluid Cap 250375 + Air Cap 4221250	18.0	9.0	12.4	28	31.7	14.9	38	58	17.3	48	80	19.3	–	–	–	3-1/2	10	22 - 30
		20	6.7	13.7	32	22.5	17.0	44	37.7	20.8	54	55.2	23.6	–	–	–			
		22	5.4	14.7	36	15.9	19.3	50	24.7	24.8	60	40	27.5	–	–	–			
		24	4.1	15.7	38	13.2	20.4	54	19.5	27.5	66	30	32.1	–	–	–			
		–	–	–	40	11.1	21.5	58	16.0	30.2	72	23.3	37	–	–	–			
		–	–	–	42	9.2	22.6	60	14.5	31.8	76	18.3	42.2	–	–	–			
SU82	Fluid Cap 251376 + Air Cap 4891312	10.0	35.4	11.1	18.0	103	15.4	26	155	17.7	36	180	23	54	222	29.1	4 - 5	9 - 13	21 - 47
		12.0	26.4	13.4	20	81.6	17.6	28	135	20	38	162	25.4	56	198	31.2			
		–	–	–	22	63.6	19.8	30	115	22.5	40	147	27.8	58	186	34			
		–	–	–	24	48.3	22.6	32	100	25.1	42	131	30.2	60	180	36.3			
		–	–	–	–	–	–	34	84	27.5	44	116	32.6	62	166	38.9			
		–	–	–	–	–	–	36	69.5	30	46	101	35.1	64	154	41.6			
		–	–	–	–	–	–	38	55.4	32.6	48	81.5	37.6	66	142	44.1			
		–	–	–	–	–	–	40	45.7	35.3	50	75.6	40.2	68	130	46.6			
		–	–	–	–	–	–	–	–	–	52	62.4	42.7	70	119	49.3			
		–	–	–	–	–	–	–	–	–	–	–	–	72	108	51.6			
		–	–	–	–	–	–	–	–	–	–	–	–	74	97.4	54.2			
		–	–	–	–	–	–	–	–	–	–	–	–	76	87.5	57.1			

*At the stated pressure in psi.