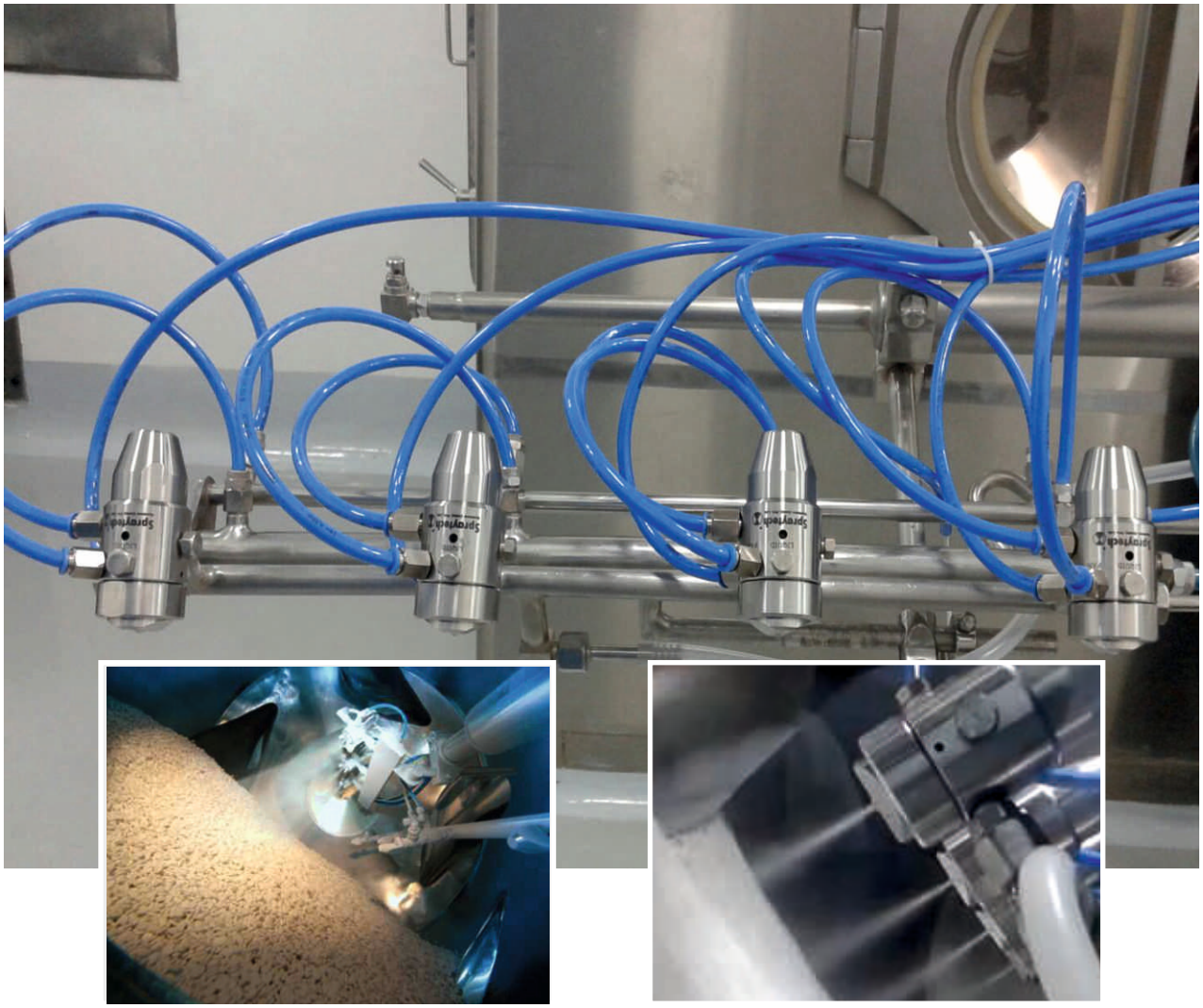
Spraytech®
Systems (India) Pvt. Ltd.
The Flow Technologists

Air Atomizing Spray Nozzles



APPLICATION

- Tablet Coating
- Pallet Coating
- Atomization of viscous liquids
- Agglomeration
- Granulation
- Humidification of air

Air Atomizing
Design, Features & Introduction

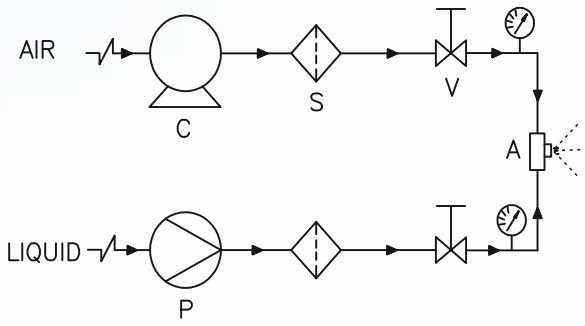
Air atomizing spray nozzles produces fine mist spray with the help of compressed air, liquid breaks into small droplets as air provides sharing effects on liquid droplets. Various spray pattern are available, there are categorized into Flat and Round spray patterns. The droplet size can be adjusted by flow adjustment of compressed air. Air atomizing nozzles are divided into two types Internal and External mix air atomizing nozzles. Those are available in various metals.

An air atomizing spray nozzles can work on three principles as below :

1) Pressure Principle
2) SIPHON Principle
3) Gravity Head Principle

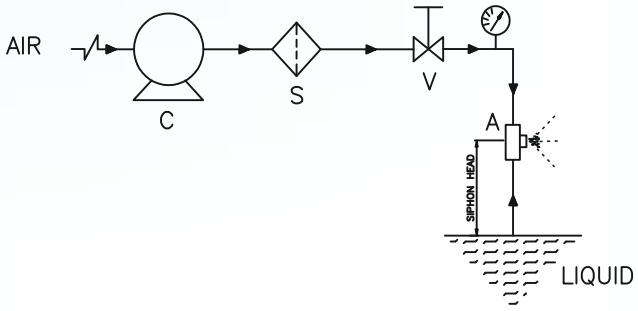
1) Pressure Principle

Liquid is supplied in pressurised form with the help of pump or pressurised container, separate compressed air is needed



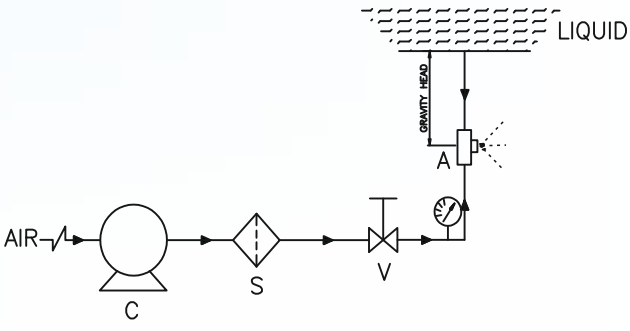
2) Siphon Principle

Siphon principle is utilised to lift liquid from certain height from spray nozzle, suitable where pump or pressurised container of liquid is not available.



3) Gravity head Principle

Gravitational head of liquid is utilised to feed liquid to the spray nozzle, suitable where pump or pressurized container of liquid is not available.

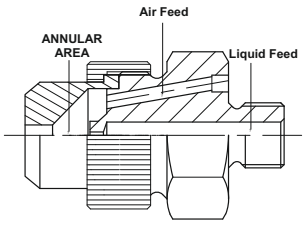


Choice of spray Nozzles
Each spray set-ups consists of an air cap and liquid cap which provide a specific spray pattern capacity and coverage performance

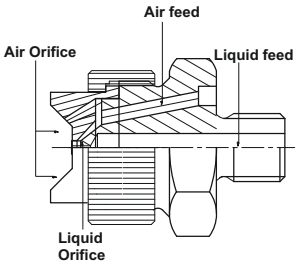
Inside Body Mixing
Liquid and air streams meet within nozzle and are mixed together and expelled through the same orifice. This internal mixing means the streams are not independent; a change in air flow will affect the liquid flow. This makes precise metering of the liquid more difficult than with an External Mix Set-up. Internal Mix set-up are able to produce the finest atomization of any of the XA set-ups, but they are generally not suitable for use with liquids which have a viscosity that is above 200 centipoise.

Out Side Body Mixing
The air and liquid streams exit the nozzle independently and are combined and mixed outside of the nozzles. Because there is no connection between the air and liquid lines within the nozzles, the air and liquid flow rates can be controlled independently, allowing precise metering of the liquid. The atomization can be controlled by adjusting the air flow rate more air produces finer atomization. In most cases these set-up do not atomize as finely as Internal Mix Set-ups.

External Mix Set-up may be used with liquid having a viscosity above 200 centipoise and for abrasive suspensions. Spraytech provides Engineering guidance for spraying high viscosity liquids.



Internal Mix Set-Ups
Air & Liquid mix inside the nozzle



External Mix Set-Ups
Air & Liquid exit independently and combine outside the nozzle

Applications

1. Tablet Coating
2. Thin Film Coating
3. Humidification
4. Paper Moisturising
5. Dust Suppression

Optional Features

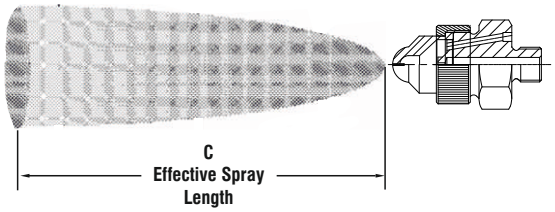
1. Manual Shut-off / Cleaning Needle
2. Automatic self Cleaning Needle
3. Auto shut-off Arrangement

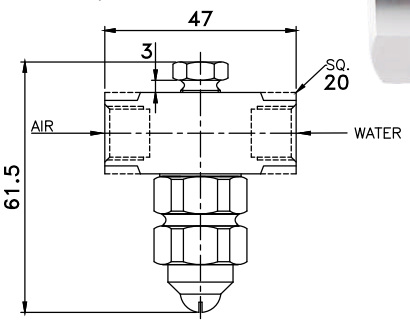
Material Code

M1 = SS303/SS304
M2 = SS316/M2L=SS316L
M3 = Brass (Nickel Plating on Request)
M4 = SS410/ M4-3=SS310

DESIGN / SPRAY CHARACTERISTICS

- Internal mix
- Very fine atomization
- Flat fan, wide angle spray patterns (range 45° and 120°)





Flow Rates and Dimensions

Pressure-fed, Internal Mix, Flat Spray Pattern, 1/8" and 1/4" Pipe Sizes, BSP or NPT

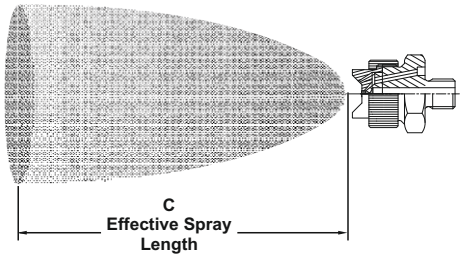
Pipe Size	Model No.	0.7 Bar Liquid			1.5 Bar Liquid			2.0 Bar Liquid			3.0 Bar Liquid			4.0 Bar Liquid			Spray Dimensions	
		Air (bar)	l/h	$\frac{Nm^3}{h}$	Air (bar)	l/h	$\frac{Nm^3}{h}$	Air (bar)	l/h	$\frac{Nm^3}{h}$	Air (bar)	l/h	$\frac{Nm^3}{h}$	Air (bar)	l/h	$\frac{Nm^3}{h}$	"C" Effective Spray Length (mm)	Max. Spray Length (m)
1/8 or 1/4	CAIA 050	0.7 0.9 1.0 1.1 1.3 1.4 1.5	5.5 4.7 4.1 3.5 3.0 2.5 2.0	1.44 1.62 1.86 2.04 2.22 2.40 2.64	1.3 1.5 1.8 2.1 2.4 2.7 2.8	9.1 7.7 6.5 5.4 4.3 3.3 2.8	1.86 2.16 2.52 2.82 3.12 3.42 3.60	2.0 2.2 2.5 2.8 3.1 3.2 3.4	8.6 7.5 6.2 5.2 4.2 3.7 3.2	2.52 2.82 3.12 3.42 3.78 3.90 4.08	2.7 3.0 3.2 3.5 4.2 4.6 4.9	11.2 10.1 9.1 8.1 5.4 4.2 3.1	3.12 3.36 3.72 3.96 4.74 5.10 5.46	3.9 4.6 5.3 6.0 6.3 6.7 7.0	12.0 9.7 7.5 5.3 4.3 3.3 2.4	4.14 4.86 5.58 6.24 6.60 6.96 7.32	460 660 760 860 940	2.6 3.0 3.2 3.4 4.0
1/8 or 1/4	CAIA 100	1.3 1.4 1.5 1.7 1.8 2.0	3.9 3.0 2.3 1.8 1.3 1.0	1.80 1.98 2.10 2.28 2.46 2.64	2.1 2.4 2.5 2.7 2.8 3.0 3.1	7.4 5.3 4.4 3.7 3.1 2.6 2.1	2.40 2.70 2.82 3.00 3.12 3.30 3.42	3.0 3.1 3.2 3.4 3.5 3.9	6.1 5.3 4.5 3.8 3.2 1.8	3.12 3.24 3.42 3.54 3.72 4.08	3.9 4.2 4.6 4.9	9.4 7.2 5.3 3.8	3.60 4.02 4.38 4.80	5.3 5.6 6.0 6.3	10.2 8.3 6.6 5.1	4.68 5.04 5.34 5.88	460 690 740 940 970	1.8 2.0 2.0 2.1 2.3
1/8 or 1/4	CAIA 150	0.9 1.0 1.1 1.3 1.4	8.2 6.8 5.5 4.1 2.9	1.20 1.38 1.62 1.80 2.04	1.4 1.7 2.0 2.1 2.2 2.4 2.5	14.4 11.9 9.5 8.3 7.1 6.1 5.1	1.62 1.92 2.22 2.40 2.58 2.76 2.94	2.1 2.4 2.7 3.0 3.2 3.4 3.5	13.5 11.4 9.2 7.1 5.0 4.0 3.3	2.16 2.52 2.82 3.18 3.54 3.78 3.96	2.7 3.0 3.2 3.5 4.2 4.6 4.9	19.1 17.1 15.1 13.1 8.1 5.9 4.0	2.52 2.76 3.12 3.42 4.32 4.74 5.16	4.6 4.9 5.3 5.6 6.0 6.3 6.7	16.1 13.8 11.5 9.3 7.3 5.6 4.3	4.14 4.56 4.98 5.40 5.82 6.24 6.72	710 810 890 970 970	2.1 2.4 2.6 2.7 3.2
1/8 or 1/4	CAIA 200	1.0 1.1 1.3 1.4 1.7 2.0 2.2	9.0 7.8 6.6 5.2 3.1 2.0 1.1	1.50 1.80 1.92 2.16 2.64 3.00 3.36	2.0 2.1 2.2 2.5 2.8 3.1 3.4	10.4 9.3 8.2 6.1 4.3 3.0 2.0	2.46 2.70 2.88 3.30 3.72 4.14 4.50	2.4 2.5 2.7 3.0 3.2 3.5 3.8	11.6 10.4 9.4 7.3 5.5 4.1 2.9	2.88 3.06 3.24 3.66 4.08 4.50 4.86	3.1 3.2 3.4 3.8 4.2 4.9 6.0	15.6 14.6 13.7 10.8 8.5 5.2 2.3	33.6 3.54 3.72 4.26 4.92 5.88 7.20	4.2 4.6 4.9 5.3 5.6 6.3 7.0	17.1 15.0 12.8 11.0 9.4 7.2 6.1	4.38 4.80 5.22 5.64 6.18 7.14 8.04	170 200 220 280 330	3.0 3.7 4.0 4.2 4.8
1/8 or 1/4	CAIA 250	1.1 1.3 1.4 1.5 1.7	11.2 8.5 6.5 5.0 3.8	3.24 3.60 3.90 4.26 4.62	2.1 2.2 2.4 2.5	18.0 15.8 13.6 11.6	4.47 5.04 5.34 5.70	2.7 2.8 3.0 3.1 3.2	19.6 17.3 15.2 13.2 11.4	5.58 5.88 6.18 6.54 6.84	3.5 3.7 3.8 3.9 4.1 4.2	27.0 25.0 23.0 21.0 18.9 17.0	6.72 6.96 7.26 7.56 7.92 8.22	4.6 4.9 5.3 5.6 6.0 6.3	33.0 28.0 24.0 19.7 15.7 12.4	8.22 8.94 9.66 10.4 11.2 12.0	200 330 400 460 480	3.0 3.2 3.4 3.5 4.0
1/8 or 1/4	CAIA 300	0.9 1.0 1.1 1.3 1.4 1.5	27.0 20.0 15.9 12.5 10.2 7.6	1.98 2.28 2.70 2.88 3.36 3.72	1.8 2.1 2.2 2.4 2.5 2.7	38.0 28.0 24.0 21.0 17.8 15.1	3.30 3.96 4.26 4.56 4.92 5.22	2.4 2.7 3.0 3.2 3.4 3.5 3.7	39.0 30.0 24.0 17.8 15.1 12.9 10.6	4.02 4.62 5.22 5.88 6.18 6.54 6.84	3.2 3.5 3.8 3.9 4.2 4.6 4.9	58.0 47.0 38.0 34.0 27.0 20.0 14.8	4.56 5.22 5.82 6.18 6.78 7.56 8.40	4.6 5.3 5.6 6.0 6.3 6.7 7.0	59.0 40.0 32.0 26.0 20.0 15.9 12.7	6.36 7.92 8.70 9.48 10.3 11.1 11.9	300 410 430 480 510	3.4 3.5 3.7 3.8 4.4
1/8 or 1/4	CAIA 350	1.0 1.1 1.3 1.4	17.0 11.0 7.6 3.2	1.38 1.62 1.98 2.40	2.0 2.1 2.2 2.4 2.5	24.0 18.9 14.4 10.6 7.2	2.64 3.00 3.36 3.78 4.26	2.4 2.5 2.7 2.8 3.0	28.0 23.0 18.9 15.1 11.7	3.06 3.54 3.96 4.44 4.74	3.4 3.5 3.7 3.8 3.8 4.2 4.6	38.0 33.0 28.0 23.0 19.7 13.1 7.2	4.32 4.80 5.34 5.82 6.30 7.20 8.28	3.9 4.2 4.6 4.9 5.3 5.6 6.3	65.0 53.0 40.0 30.0 21.0 13.8 3.2	4.50 5.34 6.48 7.62 8.94 10.4 13.5	150 170 220 280 350	2.4 3.0 3.4 3.6 4.0
1/8 or 1/4	CAIA 400	1.0 1.1	29.0 18.9	5.40 6.48	1.8 2.0	56.0 40.0	7.02 7.98	2.1 2.2 2.4 2.5 2.7	100 79.0 62.0 48.0 36.0	7.14 7.98 8.82 9.72 10.6	3.0 3.1 3.2 3.4 3.5 3.7 3.8	126 110 95.0 78.0 62.0 48.0 37.0	8.40 9.06 9.78 11.0 11.6 12.6 13.5	4.1 4.2 4.6 4.9 5.3 5.6	140 125 89.0 58.0 34.0 16.7	10.9 11.6 13.5 15.9 18.3 20.4	250 430 460 530 580	3.4 3.8 4.3 4.6 5.2

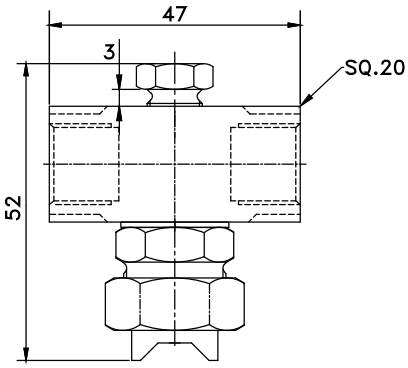
Standard Materials: Nickel-plated Brass, 303 Stainless Steel and 316 Stainless Steel.

CAEA Series Flat External Air Atomizing Spray Nozzles

DESIGN / SPRAY CHARACTERISTICS

- External mix: allows spraying of viscous materials
- Variable atomization
- Moderate spray angle (range 60°- 90°)
- Precise metering of the liquid flow rate





Flow Rates and Dimensions

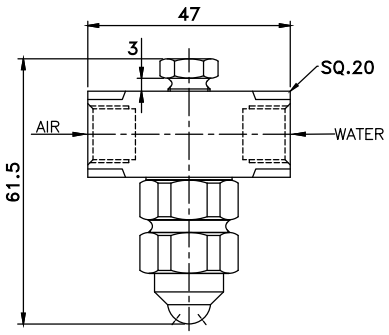
Siphon-fed, External Mix, Flat Spray Pattern, 1/8" and 1/4" Pipe Sizes, BSP or NPT

Orifice size & water flow		Water Pressure [kg/cm2]									
		Pressure 0.2 Bar	Pressure 0.4 Bar	Pressure 0.6 Bar	Pressure 0.8 Bar	Pressure 1 Bar	Pressure 1.2 Bar	Pressure 1.4 Bar	Pressure 1.6 Bar	Pressure 1.8 Bar	Pressure 2 Bar
0.5	ML/MIN	80	100	130	150	170	190	200	210	210	210
	LPH	4.8	6	7.8	9	10.2	11.4	12	12.6	12.6	12.6
0.6	ML/MIN	160	200	240	260	300	320	340	360	380	400
	LPH	9.6	12	14.4	15.6	18	19.2	20.4	21.6	22.8	24
0.7	ML/MIN	170	220	250	300	320	340	360	400	420	440
	LPH	10.2	13.2	15	18	19.2	20.4	21.6	24	25.2	26.4
0.8	ML/MIN	260	300	360	400	440	480	510	540	580	610
	LPH	15.6	18	21.6	24	26.4	28.8	30.6	32.4	34.8	36.6
0.9	ML/MIN	280	320	380	420	470	500	540	580	600	640
	LPH	16.8	19.2	22.8	25.2	28.2	30	32.4	34.8	36	38.4
1	ML/MIN	340	420	500	560	620	680	720	740	760	780
	LPH	20.4	25.2	30	33.6	37.2	40.8	43.2	44.4	45.6	46.8
1.1	ML/MIN										
	LPH										
1.2	ML/MIN	440	540	640	760	840	900	990	1040	1080	1100
	LPH	26.4	32.4	38.4	45.6	50.4	54	59.4	62.4	64.8	66
1.3	ML/MIN	740	760	880	1000	1100	1200	1300	1380	1200	1260
	LPH	44.4	45.6	52.8	60	66	72	78	82.8	72	75.6
1.4	ML/MIN	760	880	940	1100	1200	1300	1400	1500	1560	1600
	LPH	45.6	52.89	56.4	66	72	78	84	90	93.6	96
1.5	ML/MIN	800	1000	1200	1300	1440	1580	1660	1800	1900	1980
	LPH	48	60	72	78	86.4	94.8	99.6	108	114	118.8

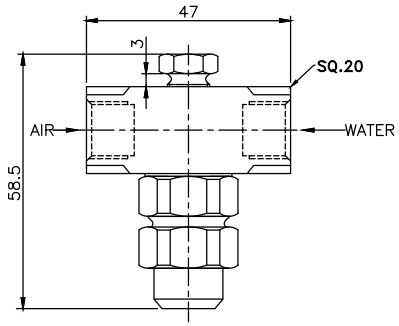
Standard Materials: Nickel-plated Brass, 303 Stainless Steel and 316 Stainless Steel.

Pipe Size	Model No.	0.7 Bar Liquid			1.5 Bar Liquid			2.0 Bar Liquid			3.0 Bar Liquid			4.0 Bar Liquid			Spray Dimensions	
		Air (bar)	l/h	$\frac{Nm^3}{h}$	Air (bar)	l/h	$\frac{Nm^3}{h}$	Air (bar)	l/h	$\frac{Nm^3}{h}$	Air (bar)	l/h	$\frac{Nm^3}{h}$	Air (bar)	l/h	$\frac{Nm^3}{h}$	"C" Effective Spray Length(mm)	Max. Spray Length (m)
1/8 or 1/4	**CAEA 350**	0.6 0.7 1.1 1.4	13	5.46 6.12 7.80 9.36	0.7 1.1 1.8 2.1	16	6.12 7.80 11.0 12.6	1.4 2.1 2.5 2.8	25	9.36 12.6 14.1 15.6	2.1 2.8 3.5 4.2	37	12.6 15.6 18.6 21.6	3.2 4.2 5.3 5.6	52	17.1 21.6 25.8 27.3	480 560 580 660 640 690	3.8 4.3 4.0 4.6 5.2 4.6
1/8 or 1/4	**CAEA 400**	0.7 1.0 1.4 1.8 2.1 2.8 3.5	13	5.10 6.12 6.96 8.34 9.36 11.7 13.6	1.0 1.4 1.8 2.1 2.8 3.5 4.2	16	6.12 6.96 8.34 9.36 11.7 13.6 16.0	1.4 1.8 2.1 2.5 2.8 3.5 4.2	25	6.96 8.34 9.36 10.7 11.7 13.6 16.0	2.5 2.8 3.5 4.2 4.9 5.6 6.3	37	10.7 11.7 13.6 16.0 18.7 21.6 24.7	3.2 3.5 3.9 4.2 4.9 5.6 6.3	52	12.7 13.9 15.3 16.5 18.8 21.6 24.7	250 250 280 280 360 370 320	1.7 2.7 3.0 3.5 3.7 4.3 4.9
1/8 or 1/4	**CAEA 450**	0.6 1.1 1.4 1.8	18	5.46 7.80 9.36 11.0	0.7 1.4 1.8 2.1	22	6.12 9.36 11.0 12.6	1.1 1.8 2.5 2.8	33	7.80 11.0 14.1 15.6	2.5 3.2 3.9 4.2	48	14.1 17.1 19.8 21.6	3.5 4.6 6.0 6.7	68	18.6 22.6 28.5 31.5	510 640 640 610 580 610 600	3.5 3.0 3.8 4.3 4.9 5.2 4.0
1/8 or 1/4	**CAEA 500**	0.7 1.0 1.4 1.8 2.1 2.8 3.5	18	5.10 6.12 6.96 8.34 9.36 11.7 13.6	1.4 1.8 2.1 2.5 2.8 3.5 4.2	22	6.96 8.34 9.36 10.7 11.7 13.6 16.0	1.8 2.1 2.5 2.8 3.5 4.2 4.9	33	8.34 9.36 10.7 11.7 13.6 16.0 18.7	2.8 3.2 3.5 4.2 4.9 5.6 6.3	48	11.7 12.7 13.6 16.0 18.7 21.6 24.7	3.5 4.2 4.9 5.3 5.6 6.3 6.6	68	13.9 16.5 18.8 20.4 21.6 24.7 25.7	270 270 330 360 370 370 360	2.1 3.0 3.4 3.8 4.0 4.9 5.8
1/8 or 1/4	**CAEA 550**	0.7 1.1 1.4 1.8	36	6.12 7.80 9.36 11.0	1.1 1.4 2.1 2.5	45	7.80 9.36 12.6 14.1	1.8 2.1 2.8 3.2	68	11.0 12.6 15.6 17.1	3.2 3.5 4.9 5.9	100	17.1 18.6 24.3 27.3	5.3 6.0 6.7 7.0	141	25.8 28.5 31.5 33.0	760 810 790 760 660 840 790	3.0 4.0 4.3 4.9 5.8 4.3 5.8
1/8 or 1/4	**CAEA 600**	1.0 1.4 1.8 2.1 2.5 2.8 3.5	36	6.12 6.96 8.34 9.36 10.7 11.7 13.6	1.8 2.1 2.5 2.8 3.2 3.5 4.2	45	8.34 9.36 10.7 11.7 12.7 13.6 16.0	2.5 2.8 3.2 3.5 4.2 4.9 5.6	68	10.7 11.7 12.7 13.6 16.0 18.7 21.6	3.2 3.5 3.9 4.2 4.9 5.6 6.3	100	12.7 13.6 14.8 16.0 18.7 21.6 24.7	3.9 4.2 4.6 4.9 5.6 6.3 7.0	141	15.3 16.5 17.8 18.8 21.6 24.7 27.2	250 290 360 390 380 390 380	2.7 3.0 3.5 3.7 4.0 4.3 5.9
1/8 or 1/4	**CAEA 650**	1.8 2.1 2.5 2.8 3.2 3.5 4.2	36	14.1 15.6 18.0 19.8 21.3 22.8 26.7	1.8 2.1 2.5 2.8 3.2 3.5 4.2	45	14.1 15.6 18.0 19.8 21.3 22.8 26.7	2.5 2.8 3.2 3.5 3.9 4.2 4.9	68	18.0 19.8 21.3 22.8 24.6 26.7 31.2	3.9 4.2 4.6 4.9 5.3 5.6 6.3	100	24.6 26.7 28.8 31.2 33.9 36.0 41.1				290 300 300 320 340 330 340	3.0 3.4 4.0 4.3 4.6 4.7 5.5
1/8 or 1/4	**CAEA 700**	2.1 2.5 2.8 3.2 3.5 4.2 4.9	64	15.6 18.0 19.8 21.3 22.8 26.7 31.2	2.8 3.2 3.5 3.9 4.2 4.9 5.6	78	19.8 21.3 22.8 24.8 26.7 31.2 36.0	3.9 4.2 4.6 4.9 5.3 5.6 6.3	119	24.6 26.7 28.8 31.2 33.9 36.0 41.1	4.9 5.3 5.6 6.0 6.3	175	31.2 33.9 36.0 38.4 41.1				340 360 360 360 380 380	3.5 4.3 4.9 5.5 5.5 5.8 6.1
1/8 or 1/4	**CAEA 750**	2.8 3.2 3.5 3.9 4.2 4.6 4.9	102	19.8 21.3 22.8 24.6 26.7 28.8 31.2	3.5 3.8 4.2 4.6 4.9 5.3 5.6	125	22.8 24.6 26.7 28.8 31.2 33.9 69.0	4.6 4.9 5.3 5.6 6.0 6.3	192	28.8 31.2 33.9 36.0 38.4 41.1	5.6 6.0 6.3	280	34.0 38.4 41.1				360 370 370 380 410 410 410	4.6 4.9 5.2 5.5 5.5 5.8 6.1

Standard Materials: Nickel-plated Brass, 303 Stainless Steel and 316 Stainless Steel.



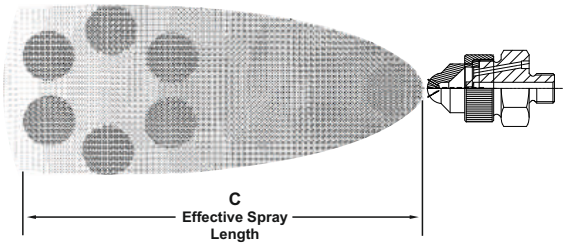
Full Cone spray pattern (range 45° to 120°)



Full Cone spray pattern (range 15° to 30°)

DESIGN / SPRAY CHARACTERISTICS

- Internal Mix
- Very fine atomization
- Full Cone spray pattern (range 15° to 120°)
- Moderate forward spray projection



Flow Rates and Dimensions

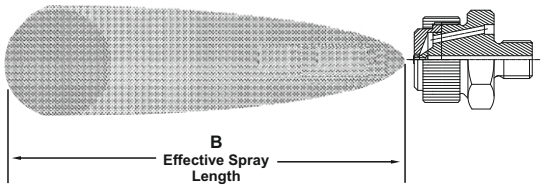
Pressure-fed, Internal Mix, Wide Angle Round Spray Pattern, 1/8" and 1/4" Pipe Sizes, BSP or NPT

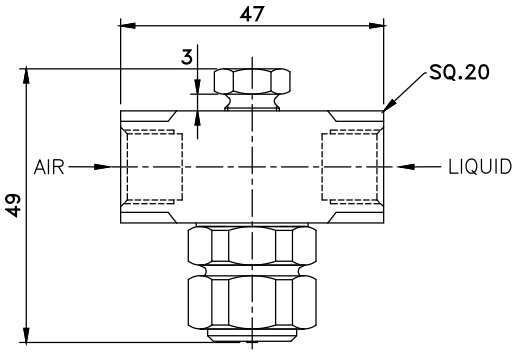
Pipe Size	Model No.	0.7 Bar Liquid			1.5 Bar Liquid			2.0 Bar Liquid			3.0 Bar Liquid			4.0 Bar Liquid			Spray Dimensions	
		Air (bar)	l/h	$\frac{Nm^3}{h}$	Air (bar)	l/h	$\frac{Nm^3}{h}$	Air (bar)	l/h	$\frac{Nm^3}{h}$	Air (bar)	l/h	$\frac{Nm^3}{h}$	Air (bar)	l/h	$\frac{Nm^3}{h}$	"C" Effective Spray Length(mm)	Max. Spray Length (m)
1/8 or 1/4	**DAIA 050**	0.6 0.7 0.9 1.0	5.3 4.3 3.0 1.7	0.60 0.72 0.84 1.02	1.1 1.3 1.4 1.5 1.7 1.8	8.1 7.0 6.4 5.5 4.5 3.5	0.79 0.88 0.94 1.01 1.16 1.30	1.5 1.8 2.1 2.4	8.1 6.6 4.9 3.2	0.92 1.09 1.32 1.68	2.4 2.7 3.0 3.2 3.4 3.5	8.9 8.1 6.4 4.9 4.2 3.4	1.24 1.40 1.66 1.92 2.13 2.33	3.1 3.4 3.9 4.2 4.6 4.9	10.5 9.7 7.8 6.1 4.4 2.8	1.44 1.68 2.16 2.52 2.82 3.24	230 240 250 260 300	1.5 1.8 2.1 2.7 4.0
1/8 or 1/4	**DAIA 100**	0.9 1.0	7.0 2.1	3.00 3.72	1.7 1.8	13.2 9.8	4.08 4.74	2.0 2.1 2.2	18.5 15.1 11.7	4.08 4.56 5.10	2.8 3.0 3.1 3.2 3.4 3.5 3.7	25.0 22.0 18.5 15.1 12.1 9.1 6.1	5.04 5.52 6.06 6.54 7.14 7.80 8.52	3.7 3.8 3.9 4.1 4.2 4.6 4.9	31.0 28.0 26.0 23.0 20.0 13.6 6.8	5.76 6.30 6.78 7.32 7.80 9.18 11.0	310 330 330 340 370	1.8 2.4 3.2 4.1 5.9
1/8 or 1/4	**DAIA 150**	1.1 1.3 1.4 1.5 1.7 1.8 2.0	12.3 9.9 7.9 6.1 4.9 3.9 3.1	2.40 2.70 3.00 3.24 3.48 3.72 4.02	2.2 2.5 2.8 3.0 3.1 3.2 3.4	16.3 12.1 8.9 7.6 6.4 5.5 4.7	3.72 4.26 4.74 4.98 5.22 5.46 5.70	2.7 3.0 3.2 3.4 3.5 3.9 4.2	21.0 16.3 12.3 10.7 9.3 6.4 4.7	4.14 4.68 5.16 5.46 5.64 6.30 6.90	4.2 4.6 4.9 5.3 5.6 6.0 6.3	19.3 14.6 10.8 8.1 6.2 4.9 4.0	6.00 6.78 7.44 8.10 8.76 9.42 10.00	5.6 6.0 6.3 6.7 7.0	22.0 17.6 14.0 11.4 9.1	7.80 8.52 9.12 9.78 10.4	230 240 240 250 280	2.7 4.6 5.5 7.3 9.4
1/8 or 1/4	**DAIA 200**	0.7 0.9 1.0	24.0 13.6 7.6	1.92 2.64 3.42	1.4 1.5 1.7 1.8	43.0 35.0 28.0 21.0	2.22 2.94 3.66 4.26	2.1 2.2 2.4 2.5	33.0 26.0 18.9 11.7	3.96 4.68 5.34 6.00	2.8 3.0 3.1 3.2 3.4 3.5 3.7	52.0 46.0 39.0 33.0 26.0 19.5 13.2	3.90 4.56 5.22 5.94 6.60 7.32 7.98	3.7 3.8 4.0 4.2 4.6 4.9	63.0 58.0 52.0 41.0 27.0 15.9	4.08 4.74 6.06 6.66 8.28 9.96	360 370 370 380 390	2.1 3.2 4.1 5.0 6.8
1/8 or 1/4	**DAIA 250**	1.3 1.5 1.8 2.0 2.1 2.3 2.4	36.0 29.0 23.0 19.7 16.7 14.0 11.4	5.10 6.12 7.02 7.50 7.98 8.52 8.94	2.1 2.4 2.7 3.0 3.2 3.5 4.2	57.0 51.0 45.0 39.0 33.0 28.0 13.6	6.96 7.80 8.58 9.42 10.2 11.1 13.2	3.1 3.2 3.4 3.5 3.9 4.6 4.9	53.0 50.0 47.0 45.0 38.0 25.5 18.5	9.36 9.78 10.2 10.6 11.6 13.8 14.7	4.2 4.9 5.6 6.0 6.3 6.7 7.0	64.0 51.0 40.0 34.0 28.0 22.0 17.8	11.8 13.8 15.9 17.1 18.0 19.2 20.1	5.6 6.0 6.3 6.7 7.0	74.0 68.0 62.0 56.0 51.0	14.7 15.6 16.8 17.7 18.9	330 340 370 380 400	5.5 6.4 8.2 9.1 10.4
1/8 or 1/4	**DAIA 300**	1.7 1.8 2.0 2.1 2.3	27.0 20.0 15.9 12.5 10.2 7.6	9.36 10.0 10.7 11.6 12.3	3.0 3.1 3.2 3.4 3.5 3.7	39.0 33.0 27.0 23.0 18.5 14.8	13.8 14.4 15.3 15.9 16.8 17.4	3.4 3.5 3.7 3.9 4.1 4.2 4.4	50.0 43.0 41.0 27.0 23.0 18.9 15.9	15.0 15.6 16.5 18.0 18.6 19.2 20.1	4.6 4.9 5.3 5.6 6.0 6.3	62.0 47.0 36.0 26.0 18.9 13.6	19.2 20.7 22.5 24.3 26.1 27.6	6.0 6.3 6.7 7.0	93.0 77.0 62.0 52.0	23.7 25.5 27.6 29.7	460 470 510 530 580	5.5 6.4 7.3 7.9 9.8

Standard Materials: Nickel-plated Brass, 303 Stainless Steel and 316 Stainless Steel.

DESIGN / SPRAY CHARACTERISTICS

- Lowest flow available
- Very fine atomization
- Narrow spray angle (12°- 25°)
- Full cone pattern
- Short to moderate forward spray projection





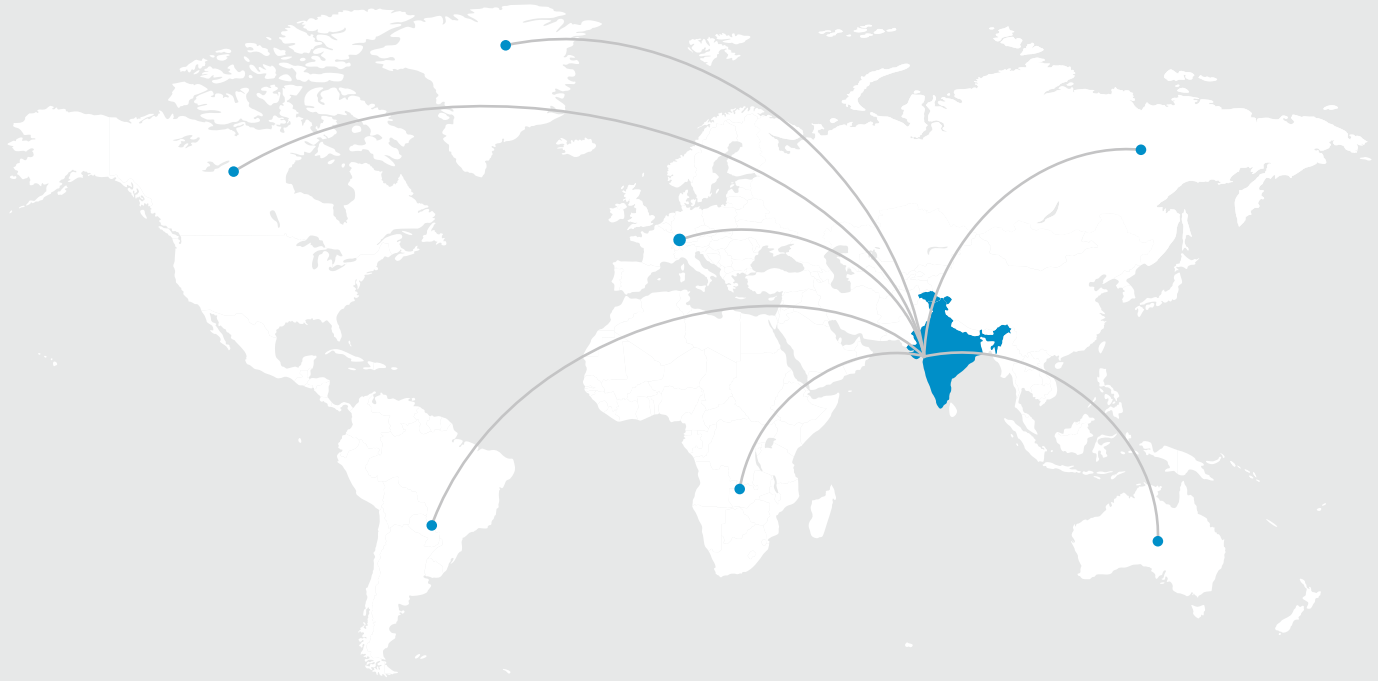
Flow Rates and Dimensions

Siphon-fed, External Mix, Round Spray Pattern, 1/8" and 1/4" Pipe Sizes, BSP or NPT

Pipe Size	Spray Set-up Number	ATOMIZING AIR		Liquid Capacity in l/h (Liters Per Hour)								Spray Dimensions at 200 mm. Siphon Height	
				Gravity Head			Siphon Height						
		Air (bar)	$\frac{Nm^3}{h}$	450 mm	300 mm	150 mm	100 mm	200 mm	300 mm	600 mm	900 mm	"B" Effective Spray Length(mm)	Max. Spray Length (m)
1/8 or 1/4	**DASA 050**	0.7 1.5 3.0 4.0	0.66 1.02 1.68 2.16	1.5 1.8 2.1 2.2	1.3 1.7 1.9 2.0	1.1 1.5 1.7 1.8	0.9 1.3 1.5 1.6	0.7 1.2 1.4 1.5	0.5 1.1 1.3 1.4	0.6 1.1 1.2	0.8 0.9	280 280 300 360	1.8 1.9 2.3 2.6
1/8 or 1/4	**DASA 150**	0.7 1.5 3.0 4.0	0.78 1.20 1.92 2.46	24 2.8 3.4 3.7	2.1 2.6 3.1 3.4	1.7 2.4 2.9 3.3	1.5 2.1 2.8 3.1	1.2 1.9 2.6 2.9	0.8 1.6 2.4 2.7	0.9 1.7 2.1	1.1 1.5	300 330 380 430	2.1 2.3 2.6 3.0
1/8 or 1/4	**DASA 200**	0.7 1.5 3.0 4.0	1.38 2.16 3.48 4.44	2.5 2.9 3.4 3.7	2.3 2.8 3.3 3.6	2.0 2.5 3.2 3.5	1.6 2.2 2.9 3.4	1.4 2.0 2.8 3.3	1.1 1.7 2.5 3.0	0.9 1.9 2.5	1.2 2.0	300 330 380 430	2.4 2.7 3.4 4.0
1/8 or 1/4	**DASA 250**	0.7 1.5 3.0 4.0	1.14 1.86 3.00 3.90	4.5 5.3 6.0 5.7	4.0 4.9 5.6 5.4	3.4 4.4 5.0 5.0	21 3.5 4.4 4.2	1.8 2.9 4.0 3.9	1.4 2.7 3.4 3.5	1.8 2.4 2.8	1.2 1.9	380 410 460 510	3.0 3.4 4.0 4.6
1/8 or 1/4	**DASA 400**	1.5 3.0 4.0 5.6	3.48 5.28 6.66 8.82	22 25 26 26	19.9 23 24 24	16.3 19.5 21 22	12.3 16.7 18.4 19.7	10.5 14.2 15.7 17	8.3 11.5 12.9 14.6	2.8 6.4 7.9 9.8	2.8 4.5 6.1	460 510 530 580	3.7 4.3 4.9 5.5
1/8 or 1/4	**DASA 450**	2.0 3.0 4.0 5.6	8.64 11.4 14.4 18.9	44	43 42	40 39	27 30 31 31	22 26 28 28	16.8 21 23 24	11.0 16.7	8.3	510 530 580 630	6.7 7.0 7.6 8.2

Standard Materials: Nickel-plated Brass, 303 Stainless Steel and 316 Stainless Steel.

Spraytech®
Systems (India) Pvt. Ltd.
The Flow Technologists



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