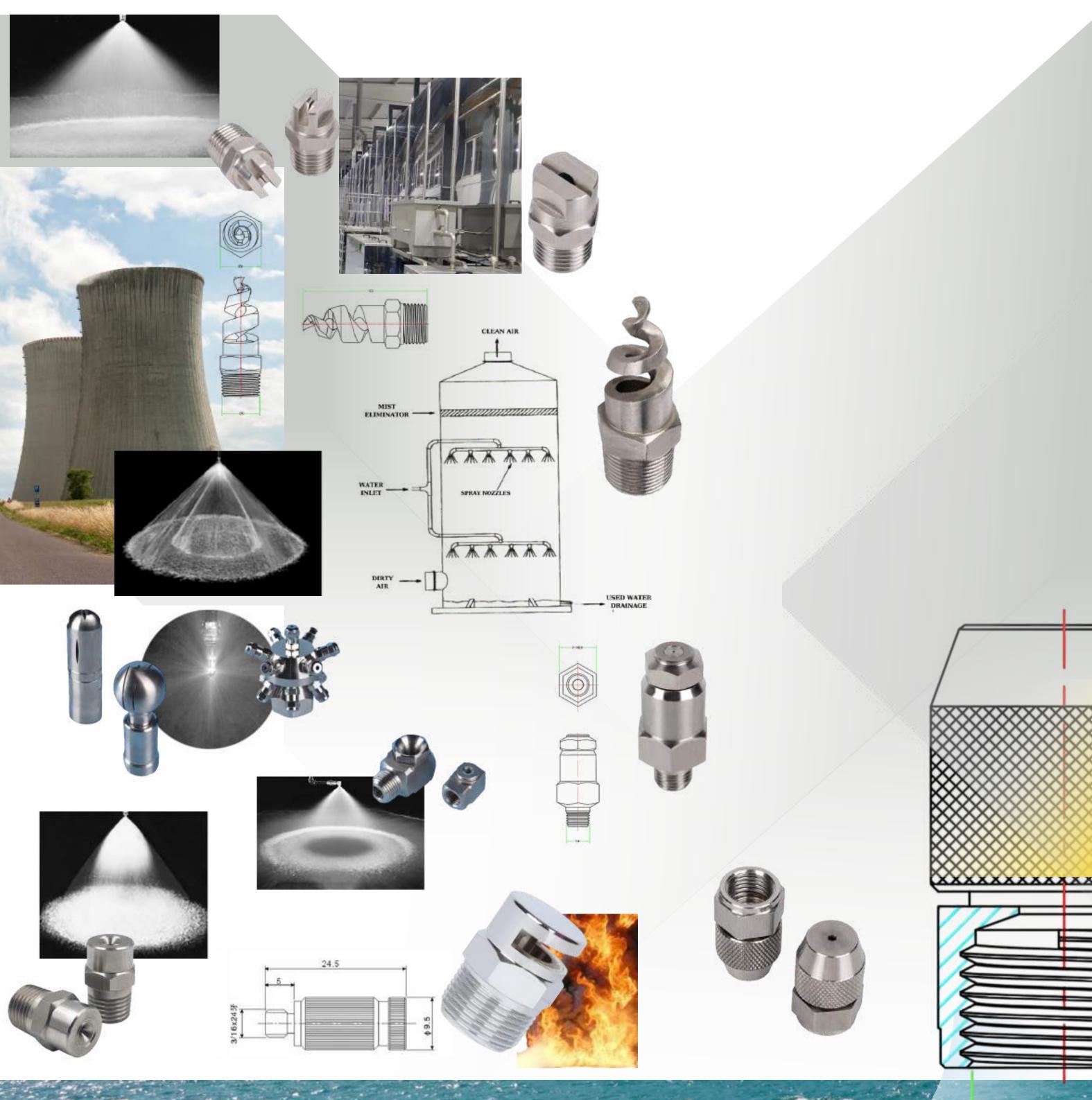
# ALFANOZZLE





# Our Vision

To meet customer demands and expectations at the highest level by constantly improving our product and service quality, to offer quality product diversity in line with the needs of the sector, to have a good place for ourselves in national and international markets where competition is at a high level and quality and reliability are indispensable.

# Our Mission

To its domestic and foreign customers in the field; is to offer innovative, reliable, efficient, practical, suitable products for the purpose of businesses with high quality, customer-specific fast solutions at the best price and to make customer satisfaction permanent

# **Main Products**

Industrial Nozzles
Spray Equipment
Fittings





# ALFANOZZLE

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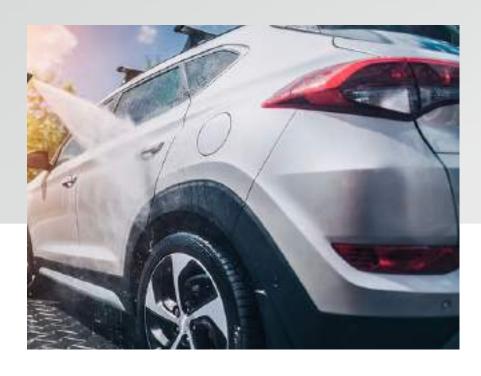
**Greenhouse Cooling & Irrigation** 



**Surface Cleaning of The Metal Parts** 



**Washing Dust Removal** 



**Automobile Spray Cleaning** 



High Pressure Phosphorus Removal in Steel Works







#### ·Spraying, Coating

Sponge cake with donkey slurry spray. Dust-proof spraying agent for image tube. Icing key coloring.

Adhesive spray cloth for building materials. Metal phosphide parts

Airless spray or spray paint. Tablet coating. Spray rust inhibitor coating coils in a paper mill Spray products with fuel for identification

Spray wax, resin and wet agent on the medicine. Grease before baking

food is sprayed with additives and flavorings

Spray protectant on furniture. Apply release agent to the mold

Box for tile and color tile. Apply oil to the metal surface

Food and beverage can inner wall feed coating. The removal of oxygen from the chimney. Printing roller coated with silicone

Coat with egg sauce. Dispersion of metal release agent.

Ceramic tile glaze coating. Solution cloth on brick

#### ·Remove

Paper making/edging

The label of the bottle has slipped away. Separate selection in quality control

Dust removal of glass plate. Paper machine trimming

Separate sheet metal before stamping

Air conditioning filter replacement standard

#### Dust prevention

Handling of grain storage yard

Prevent dust adhesion after coating. Cement/mixing plant

Prevent dust when the casting is transported. Garbage sweeper ground ash

Remove dust from the cupola

Coal ash control at side coal. Cement plant

Dust from chimneys and incinerators

#### **Dust Control**

Dust control in coal ash and sand transportation Humidify the roof of the coal truck

Remove dust from smoke towers

Control of iron oxide layer in steel rolling. Suppress dust when dumping coal

Dust control in cement kilns

Dust suppression during wood chip transport

Slag pit ash layer control

Garbage sweeper ground ash

Dust control in the transport and handling of refuse Remove dust from the cupola

#### ·Oiling

Iron plate lubrication and rust prevention. Lubricant spraying of glass bottles. Lubricant spraying for press engineering

Lubricating oil coating of cables. Gear lubrication. Spray release agent

Lubricate conveyor belts or transmission chains Copper cable lubrication

Die lubrication for large forging presses. Hydraulic oil injection

Lubricate blades and springs. Shaft and bearing lubrication

#### Agriculture and Animal Husbandry

Agricultural irrigation Sprayed pesticide. Drought-resistant irrigation. Vegetation protection mushroom planting

Spray the roots of crops large areas of crop spraying

#### ·Salt Damage Test

Salt damage test salt spray test face. Reaction test

#### ·Surface Treatment

Antirust oil spraying of metal pipes

The glazing of luxury bricks

Make dyeing marks for corrugating molding. Mold release agent spraying

Glass plate protective spray cloth

Wax coating in glass bottle

#### ·Gas Regulation

Wash paint booth air

Gas washing in pipes and cleaning towers

Sulfur dioxide (S02) removal

Nitrogen oxide (NOx) control

Smoke is eliminated from the center

Reactor wash system

Air cleaning system in air conditioning system. Control of iron oxide dust in steel rolling. Centrifugal wet dust collector

Remove dust from chimneys and furnaces

Spray ammonia to eliminate nitrogen oxide. Space humidification to eliminate static electricity. Spray lime slurry to remove sulfur dioxide ·Fire Prevention

Electrical equipment area Pressure vessel coal storage area Horizontal multi-layer dryer Rocket missile test stand

Buildings and public buildings in the mine

Conveyor channel

Outside fire fighting in nuclear power plant

Fire fighting equipment for oil tank and gas tank. Fuel supply station for tank car

Fire spray on the rocket pad

Storage tank

Pipes in steel mills and refineries

Used on ships and submarines

Offshore oil field

Substation, agricultural machinery station. Carbon proof of storage tank











LPG tank and tank car





The nozzles are widely used in various fields of industrial applications. The products have covered surface treatment, electronics, textile, steel, pharmaceutical and other industries. ·Cooling

Remove burning gas from the plant. Continuous casting in steelmaking Stretch works for covered wires. Forming of plastic pipe. Cooling tower Conveyor belt cooling. Post-heat hardening

> Die cooling. PVC pipe extrusion cooling Secondary cooling of continuous casting in steel

Roll cooling in steel. Tank cooling. Roof cooling

Condenser coil cooling. Kiln tail gas cooling Aluminum products are pressed and cooled. Strip binding machine cooling

Cooling of tools, materials, etc

Cooling and humidification before electrostatic precipitation and dust removal

Cooling of belt grinder

Cooling of beverages

Cooling of wire extension works. Plastic forming product cooling Direct and indirect cooling of products. Cooling granulation

> Spray cooling of equipment ·Spice Additive Industry

·Cleaning

Clean semiconductor chips

Desulphurization of exhaust gases, removal of dioxin High pressure cleaning of cement mixer. Automatic cleaning of beer kegs Cars, motorcycles, household appliances, etc.. Cleaning of electronic circuit board

Circuit board chemical cleaning

Beer bottle cleaning

Glass cleaning in the mirror industry

Clean the sand and gravel from the screen

Cleaning of iron sand on conveyor belt

Cleaning of blankets and netting in paper mills

Cleaning the inner wall of tank and container

Disinfection and sanitation equipment in food processing plants

Strainer and filter

Fruit and vegetable washing

Food processing plant bottle cap cleaning. Cleaning industrial equipment Clean the items on the hanging chain. Pretreatment of metal surfaces

Bottle cleaning

Building exterior cleaning by drone

High pressure water dephosphorization of rolled steel surface

Tank inside cleaning

Solar panel cleaning

Plastic container washing

Cleaning of various bottles and oil tanks. Machining workshop floor cleaning ·Spatial And Local Humidification

Humidity adjustment in the printing plant

Prevent static electricity from plastic parts. Mushroom cultivation

Cuttings and flowers freezer. Paper humidification system. Spray drying

·Sterilization And Disinfection

Disinfection of bottle caps

Food conveyor belt disinfectant spray cloth.

Coliform countermeasures in rice containers.

**Building cleaning** 

Blending of products

The steam directly heats the water and the gas is stirred

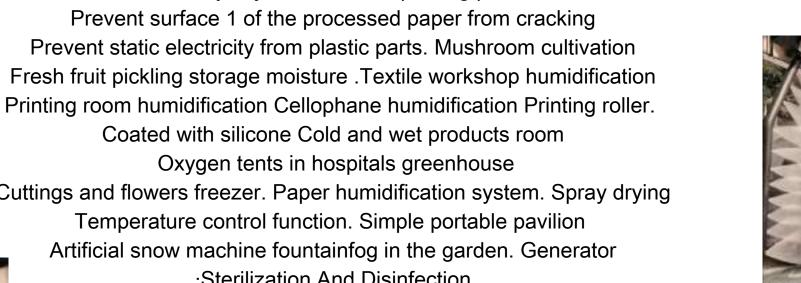












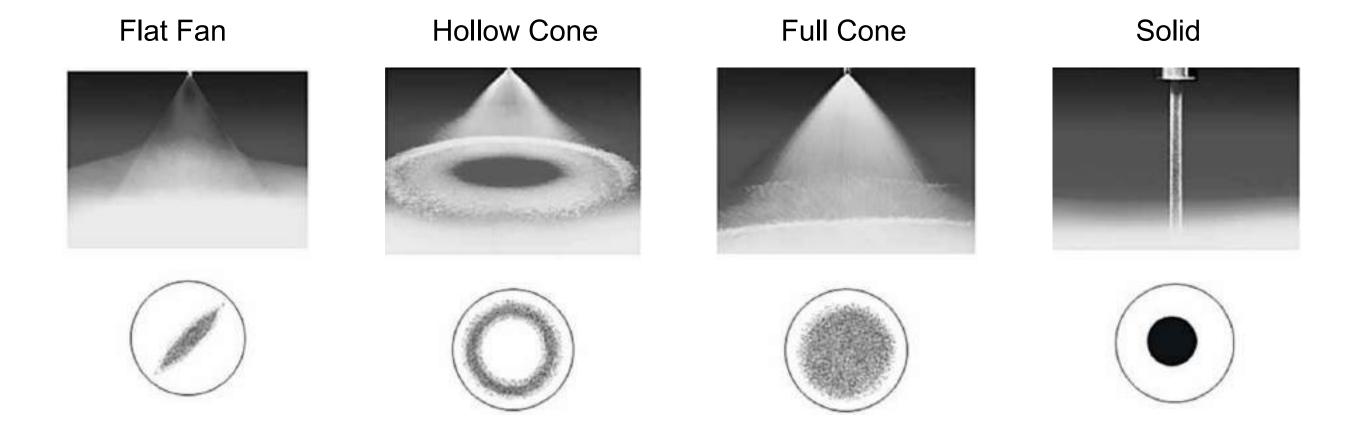


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The spray patterns of the nozzle is generally divided into four types:



#### **Tolerance Range Of Nozzle Flow and Nozzle Angle**

- The division's nozzle flow tolerance General 5.5%.
- The division's nozzle Angle tolerance is generally Earth 5°.
- The tolerance of the liquid column flow Angle is generally within 3°

#### **Material Selection Of Nozzle**

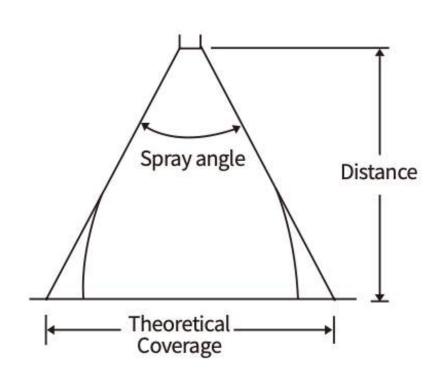
• Plastic : PP, PVC, ABS, PVDF, PTFE

• Metal : BRASS, 303 SS, 304 SS, 316 SS, 316 L SS, TN

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Spray				Theore	etical Cov	erage at	Different	Distance	s (cm)			
Angle	5	10	15	20	25	30	40	50	60	70	80	100
5°	0.4	0.9	1.3	1.8	2.2	2.6	3.5	4.4	5.2	6.1	7	8.7
10°	0.9	1.8	2.6	3.5	4.4	5.3	7	8.8	10.5	12.3	14	17.5
15°	1.3	2.6	4.0	5.3	6.6	7.9	10.5	13.2	15.8	18.4	21.1	26.3
20°	1.8	3.5	5.3	7.1	8.8	10.6	14.1	17.6	21.2	24.7	28.2	35.3
25°	2.2	4.4	6.7	8.9	11.1	13.3	17.7	22.2	26.6	31.0	35.5	44.3
30°	2.7	5.4	8.0	10.7	13.4	16.1	21.4	26.8	32.2	37.5	42.9	53.6
35°	3.2	6.3	9.5	12.6	15.8	18.9	25.2	31.5	37.8	44.1	50.5	63.1
40°	3.6	7.3	10.9	14.6	18.2	21.8	29.1	36.4	43.7	51.0	58.2	72.8
45°	4.1	8.3	12.4	16.6	20.7	24.9	33.1	41.4	49.7	58.0	66.3	82.8
50°	4.7	9.3	14.0	18.7	23.3	28.0	37.3	46.6	56.0	65.3	74.6	93.3
55°	5.2	10.4	15.6	20.8	26.0	31.2	41.7	52.1	62.5	72.9	83.3	104
60°	5.8	11.6	17.3	23.1	28.9	34.6	46.2	57.7	69.3	80.8	92.4	115
65°	6.4	12.7	19.1	25.5	31.9	38.2	51.0	63.7	76.5	89.2	102	127
70°	7.0	14.0	21.0	28.0	35.0	42.0	56.0	70.0	84.0	98.0	112	140
75°	7.7	15.4	23.0	30.7	38.4	46.0	61.4	76.7	92.1	107	123	153
80°	8.4	16.8	25.2	33.6	42.0	50.4	67.1	83.9	101	118	134	168
85°	9.2	18.3	27.5	36.7	45.8	55.0	73.6	91.6	120	128	147	183
90°	10.0	20.0	30.0	40.0	50.0	60.0	80.0	100	131	140	160	200
95°	10.9	21.8	32.7	43.7	54.6	65.5	87.3	109	143	153	175	218
100°	11.9	23.8	35.8	47.7	59.6	71.5	95.3	119	171	167	191	238
110°	14.3	28.6	42.9	57.1	71.4	85.7	114	143	208	200	229	286
120°	17.3	34.6	52.0	69.1	86.6	104	139	173	257	243	_	-
130°	21.5	42.9	64.3	69.3	107	129	172	215	-	-	_	-
140°	27.5	55.0	82.4	85.8	137	165	220	275	-	-	-	-
150°	37.3	74.6	112.0	110	187	224	299	-	-	-	_	-
160°	56.7	113	170	149	284	-	-	-	-	-	-	-
170°	114	229	-	227	-	-	-	-	-	-	_	-



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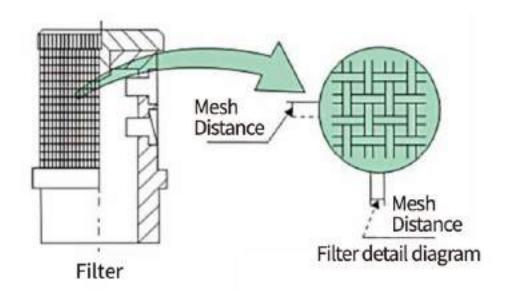


The nozzle generally selects different filters according to the use of the situation, the choice of large particle size is larger than the coarse filter particle size small color selection of fine filters, filters are determined according to the number of mesh specifications.

Please see the chart below:

The filter in the nozzle is composed of the main body, the cap and the filter screen.

Mesh Number	Mesh Distance (mm)	Particle Path (mm)
# 200	0.07	under 0.2
# 150	0.10	0.3-0.4
# 100	0.15	0.5-0.7
# 50	0.30	0.8-0.9

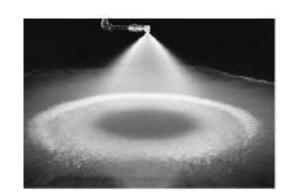




#### A (INTERNAL THREAD) / AA (EXTERNAL THREAD) STANDARD ANGLE HOLLOW CONE NOZZLES







·Spray Angle : 51°-144°

·Spray Pattern : Hollow cone- shaped spray pattern with a ring-shaped impact area.

·Drops : Small- to medium-size, uniform distribution over a wide range of flow rates and pressure.

·Material : BRASS/SS/PP/PVC/PTFE.

·Features : Large, unobstructed flow passages minimize clogging

Good atomization of liquids at lower pressures, quick heat transfer, effective airborne droplet impingement.

Applications : Water cooling . Chemical processing . Cooling towers. Dust control. Gas cooling & srcubbing. Metal treating. Degreasing

#### ·Standard Angle

Inlet Conn.	Capacity Size	Orifice (mm)				F	low Rate (L/n	Capacity nin)	,				S	pray Angl (°)	e
(in.)			0.2 bar	0.5 bar	1 bar	1.5 bar	2 bar	3 bar	4 bar	5 bar	6 bar	7 bar	0.5 bar	1.5 bar	6 bar
	0.5	1.2	-	0.16	0.23	0.28	0.32	0.39	0.46	0.51	0.56	0.60	-	58	69
	1	1.6	-	0.32	0.46	0.56	0.61	0.79	0.91	1.1	1.1	1.2	-	64	76
	2	2.0	157	0.64	0.91	1.1	1.3	1.6	1.8	2.0	2.2	2.4	52	61	69
1/8	3	2.4	-	0.97	1.4	1.7	1.9	2.4	2.7	3.1	3.3	3.6	52	64	77
	5	3.2	1.0	1.6	2.3	2.8	3.2	3.9	4.6	5.1	5.6	6.0	56	67	76
	8	4.0	1.6	2.6	3.6	4.5	5.2	6.3	7.3	8.2	8.9	9.6	56	65	70
	10	4.4	2.0	3.2	4.6	5.6	6.4	7.9	9.1	10.2	11.2	12.1	55	65	72
	1	1.6	-	:=:	0.46	0.56	0.64	0.79	0.91	1.0	1.1	1.2	=	53	67
	2	2.0	84	0.64	0.91	1.1	1.3	1.6	1.8	2.0	2.2	2.4	<u>-</u>	62	71
	3	2.4	-	0.97	1.4	1.7	1.9	2.4	2.7	3.1	3.3	3.6	51	65	78
1/4	5	3.6	1.0	1.6	2.3	2.8	3.2	3.9	4.6	5.1	5.6	6.0	63	73	79
	8	4.0	1.6	2.6	3.6	4.5	5.2	6.3	7.3	8.2	8.9	9.6	61	69	73
	10	4.4	2.0	3.2	4.6	5.6	6.4	7.9	9.1	10.2	11.2	12.1	63	70	74
	15	5.2	3.1	4.8	6.8	8.4	9.7	11.8	13.7	15.1	16.7	18.1	63	71	72
	5	3.2	1.0	1.6	2.3	2.8	3.2	3.9	4.6	5.1	5.6	6.0	64	73	79
	8	4.0	1.6	2.6	3.6	4.5	5.2	6.3	7.3	8.2	8.9	9.6	62	70	74
	10	4.4	2.0	3.2	4.6	5.6	6.4	7.9	9.1	10.2	11.2	12.1	64	72	75
3/8	15	5.6	3.1	4.6	6.8	8.4	9.7	11.8	13.7	15.3	16.7	18.1	64	72	74
	20	6.4	4.1	6.4	9.1	11.2	12.9	15.8	18.2	20	22	24	63	70	74
	25	7.5	5.1	8.1	11.4	14.0	16.1	19.7	23	25	28	30	63	70	74
	30	7.9	6.1	9.7	13.7	16.7	19.3	24	27	31	33	36	63	70	74
	25	6.4	5.1	8.1	11.4	14.0	16.1	19.7	23	25	28	30	63	66	71
	30	7.5	6.1	9.7	13.7	16.7	19.3	24	27	31	33	36	67	71	75
1/2	40	9.1	8.2	12.9	18.2	22	26	32	36	41	45	48	72	76	78
	50	11.1	10.2	16.1	23	28	32	39	46	51	56	60	74	79	82
	60	13.1	12.2	19.3	27	33	39	47	55	61	67	72	77	82	86



#### **WIDE ANGLE HOLLOW CONE**

#### · Wide Angle

Inlet Conn.	Capacity	Orifice				Flo	ow Rate (L/n	Capaci	ity					oray Ang (°)	le
(in.)	Size	(mm)	0.2bar	0.5bar	1bar	1.5bar	2bar	3bar	4bar	5bar	6bar	7bar	0.5bar	1.5bar	6bar
	0.5-0.5W	1.2	-	-	0.23	0.28	0.32	0.39	0.46	0.51	0.56	0.6	33=	117	98
	1-1W	1.6	-	-	0.46	0.56	0.64	0.79	0.91	1.0	1.1	1.2	165	125	110
	2-3W	2.8	-	0.81	1.1	1.4	1.6	2.0	2.3	2.5	2.8	2.9	114	114	97
	3-3W	2.8	-	1.97	1.4	1.7	1.9	2.4	2.7	3.1	3.3	3.7	114	114	97
1/8	3-5W	3.2	-	1.1	1.5	1.9	2.2	2.7	3.1	3.5	3.8	4.0	116	110	95
	2-10W	4.4	-	1.3	1.9	2.3	2.6	3.2	3.7	4.2	4.6	5.0	130	135	120
	5-5W	3.2		1.6	2.3	2.8	3.2	3.9	4.6	5.1	5.5	6.1	116	110	92
	5-10W	4.4	1.3	2.1	3.0	3.6	4.2	5.1	5.9	6.6	7.3	7.9	126	121	95
	8-10W	4.4	1.8	2.9	4.1	5.0	5.8	7.1	8.2	9.2	10.0	10.8	124	112	90
	1-1W	1.6	-	-	0.46	0.56	0.64	0.79	0.91	1.0	1.1	1.2	-	117	111
	1-5W	3.2			0.77	0.95	1.1	1.3	1.5	1.7	1.9	2.0	-	123	124
	1-10W	4.4	-	-	0.96	1.2	1.4	1.7	1.9	2.1	2.3	2.5	-	144	139
	1-15W	5.6	-	=	1.1	1.3	1.5	1.9	2.2	2.4	2.7	2.9	975	128	132
	2-5W	3.2	-	1.1	1.5	1.9	2.2	2.7	3.1	3.5	3.8	4.0	118	123	113
	2-10W	4.4	-	1.3	1.9	2.3	2.6	3.2	3.7	4.2	4.6	5.0	138	136	126
1/4	5-5W	3.2	-	1.6	2.3	2.8	3.2	3.9	4.6	5.1	5.6	6.1	114	113	104
1/4	5-10W	4.4	1.3	2.1	3.0	3.6	4.2	5.1	5.9	6.6	7.3	7.9	130	130	119
	5-15W	5.6	1.6	2.5	3.5	4.3	5.0	6.1	7.0	7.8	8.6	9.3	130	132	120
	8-10W	4.4	1.8	2.9	4.1	5.0	5.8	7.1	8.2	9.2	10.0	10.8	129	122	103
	10-10W	4.4	2.0	3.2	4.6	5.6	6.4	7.9	9.1	10.2	11.2	12.2	120	108	95
	8-15W	5.6	2.2	3.5	5.0	6.1	7.1	8.7	10.0	11.2	12.3	13.2	129	122	107
	10-15W	5.6	2.4	3.9	5.5	6.7	7.7	9.5	10.9	12.2	13.4	14.6	120	108	97
	15-15W	5.6	3.0	4.8	6.8	8.4	9.7	11.8	13.7	15.3	16.7	18.0	101	95	90
	5-10W	4.4	1.3	2.1	3.0	3.6	4.2	5.1	5.9	6.6	7.3	7.9	130	123	102
	5-15W	5.6	1.6	2.5	3.5	4.3	5.0	6.1	7.0	7.8	8.6	9.3	138	131	112
	8-10W	4.4	1.8	2.9	4.1	5.0	5.8	7.1	8.2	9.2	10.0	10.8	122	110	96
	10-10W	4.4	2.0	3.2	4.6	5.6	6.4	7.9	9.1	10.2	11.2	12.2	116	108	93
	8-15W	5.6	2.2	3.5	5.0	6.1	7.1	8.7	10.0	11.2	12.3	13.2	133	120	105
	10-15W	5.6	2.4	3.9	5.5	6.7	7.7	9.5	10.9	12.2	13.4	14.6	126	115	100
3/8	8-25W	7.5	2.6	4.2	5.9	7.3	8.4	10.3	11.9	13.3	14.5	15.6	122	118	109
3/6	10-20W	6.0	2.9	4.5	6.4	7.8	9.0	11.1	12.8	14.3	15.6	16.9	118	112	102
	15-15W	5.6	3.0	4.8	6.8	8.4	9.7	11.8	13.7	15.3	16.7	18.0	116	106	95
	15-20W	6.0	3.4	5.5	7.7	9.5	11.0	13.4	15.5	17.3	16.0	20.4	113	108	98
	20-20W	6.0	4.1	6.4	9.1	11.2	12.9	15.8	18.2	20	22	24.1	106	102	95
	15-30W	7.9	4.5	7.1	10.0	12.3	14.2	17.4	20	22	25	26.5	116	110	102
	25-25W	7.5	5.1	8.1	11.4	14.0	16.1	19.7	23	25	28	30.2	105	100	93
	25-30W	7.9	5.7	9.0	12.8	15.6	18.0	22	26	29	31	33.9	105	101	94
1/2	50-50W	11.1	10.2	16.1	23	28	32	39	46	51	56	60.9	110	102	93



#### **AD TYPE DIRECT INJECTION TYPE**





Removable Cap

·Spray Angle: 52°-124°.

·Spray Pattern: Hollow cone-shaped spray pattern with a ring-shaped impact area. ·Drops : Small- to medium-size, uniform distribution over a wide range of flow rates and

pressure.

·Material: BRASS/SS

·Features : Interchangeable spray caps within each inlet connection size group for maximum

Lower profile projection for installation in a tee or pipe header.

Applications : Water aerating. Degreasing. Dust control. Metal treating. Gas cooling &

srcubbing. Washing & cooling

#### ·Standard Angle

At the stated pressure in bar.

Inlet Conn.	Capacity Size	Orifice (mm)						ate Ca (L/min)	A CASCOSCO CONTRACTOR					Sp	ray Ang (°)	gle
(in.)	Size	(11111)	0.2bar	0.4bar	0.5bar	0.7bar	1bar	1.5bar	2bar	3bar	4bar	6bar	7bar	0.5bar	1.5bar	6bar
10. 10.	2	2.0	0.14	0.58	0.64	0.76	0.91	1.1	1.3	1.6	1.8	2.2	2.4	2	60	70
	3	2.4	0.61	0.86	0.97	1.1	1.4	1.7	1.9	2.4	2.7	3.4	3.6	52	64	77
1023000	5	3.2	1.0	1.4	1.6	1.9	2.3	2.8	3.2	3.9	4.6	5.6	6.0	56	67	76
3/8	8	4.0	1.6	2.3	2.6	3.1	3.6	4.5	5.2	6.3	7.3	8.9	9.6	56	65	70
	10	4.4	2.0	2.9	3.2	3.8	4.6	5.6	6.4	7.9	9.1	11.2	12.1	55	65	72
	20-10	4.4	-	4.0	4.5	5.3	6.4	7.8	9.0	11.1	12.8	15.6	16.9	61	65	67
	5	3.6	1.0	1.4	1.6	1.9	2.3	2.8	3.2	3.9	4.6	5.6	6.0	63	73	79
	8	4.0	1.6	2.3	2.6	3.1	3.6	4.5	5.2	6.3	7.3	8.9	9.6	61	69	73
1/2	10	4.4	2.0	2.9	3.2	3.8	4.6	5.6	6.4	7.9	9.1	11.2	12.1	63	70	74
1/2	15	5.2	3.1	4.3	4.8	5.7	6.8	8.4	9.7	11.8	13.7	16.8	18.1	60	67	70
	20	6.0	4.1	5.8	6.4	7.6	9.1	11.2	12.9	15.8	18.2	22	24	63	65	69
	25	7.1	5.1	7.2	8.1	9.5	11.4	14.0	16.1	19.7	23	28	30	59	63	68
	5	3.2	1.0	1.4	1.6	1.9	2.3	2.8	3.2	3.9	4.6	5.6	6.0	64	73	79
	8	4.0	1.6	2.3	2.6	3.1	3.6	4.5	5.2	6.3	7.3	8.9	9.6	62	70	74
	10	4.4	2.0	2.9	3.2	3.8	4.6	5.6	6.4	7.9	9.1	11.2	12.1	64	72	75
3/4	15	5.6	3.1	4.3	4.8	5.7	6.8	8.4	9.7	11.8	13.7	16.8	18.1	64	72	74
	20	6.4	4.1	5.8	6.4	7.6	9.1	11.2	12.9	15.8	18.2	22	24	63	70	74
	25	7.5	5.1	7.2	8.1	9.5	11.4	14.0	16.1	19.7	23	28	30	63	70	74
	50-50.3	9.5	10.2	14.4	16.1	19.1	23	28	32	39	46	56	60	70	72	73
	40	7.9	8.2	11.5	12.9	15.3	18.2	22	26	32	36	45	48	70	73	74
	50	9.5	10.2	14.4	16.1	19.1	23	28	32	39	46	56	60	72	75	77
	60	11.1	12.2	17.3	19.3	23	27	34	39	47	55	67	72	74	76	79
	70	12.7	14.3	20	23	27	32	39	45	55	64	78	84	76	79	83
1-1/2	80	14.3	16.3	23	26	31	36	45	52	63	73	89	96	78	82	84
or training	90	14.7	18.3	26	29	34	41	50	58	71	82	101	109	81	84	84
	100	15.9	20	29	32	38	46	56	64	79	91	112	121	83	86	86
	110	17.1	22	32	35	42	50	61	71	87	100	123	133	85	88	88
	120	18.3	24	35	39	46	55	67	77	95	109	134	145	87	90	90

#### Wide Angle

Inlet Conn.	Capacity	Orifice						ate Ca [L/min]						Sp	ray Ang (°)	gle
(in.)	Size	(mm)	0.2bar	0.4bar	0.5bar	0.7bar	1bar	1.5bar	2bar	3bar	4bar	6bar	7bar	0.5bar	1.5bar	6bar
	3-2W	2.0	-	-	0.73	0.84	1.0	1.2	1.4	1.7	2.0	2.5	2.7	112	109	90
1	3-3W	2.8	_	-	0.96	1.1	1.4	1.7	1.9	2.4	2.7	3.4	3.6	115	112	97
1	3-5W	3.2	-		1.1	1.3	1.6	1.9	2.2	2.7	3.1	3.8	4.2	117	113	103
	5-5W	3.2	-	-	1.6	1.9	2.3	2.8	3.2	3.9	4.5	5.6	6.1	115	112	102
3/8	5-10W	4.4	-	1.5	2.1	2.5	3.0	3.6	4.1	5.1	6.0	7.2	8.0	119	119	109
3735527	8-8W	3.9	-	1.8	2.6	3.1	3.6	4.4	5.2	6.3	7.4	9.0	9.5	116	110	98
[	8-10W	4.4	2	2.1	2.9	3.4	4.1	5.1	6.0	7.1	8.2	9.9	10.7	118	113	101
	10-10W	4.4	-	2.3	3.2	3.8	4.5	5.5	6.3	7.9	9.3	11.0	11.8	118	111	100
	5-3W	2.8	0.67	0.75	1.0	1.2	1.5	1.8	2.0	2.5	2.9	3.5	3.8	118	113	100
1	5-5W	3.2	1.0	1.1	1.6	1.9	2.3	2.8	3.2	3.9	4.5	5.6	6.1	121	116	102
1	8-8W	3.9	1.6	1.8	2.6	3.1	3.6	4.4	5.2	6.3	7.4	9.0	9.5	119	113	103
1/2	10-15W	5.6	2.5	2.8	3.9	4.6	5.6	6.7	7.8	9.5	11.1	13.4	14.5	120	112	102
	15-15W	5.6	3.0	3.4	5.0	5.7	6.7	8.3	9.7	11.9	14.1	16.7	18.3	117	111	104
	8-25W	7.5	2.6	2.9	4.2	5.0	6.0	7.5	8.6	10.3	11.9	14.6	15.6	124	120	111
	10-10W	4.4	2.0	2.2	3.2	3.8	4.5	5.5	6.3	7.9	9.3	11.0	11.8	118	111	100
	10-30W	7.9	3.7	4.1	6.2	7.2	8.6	10.3	11.9	14.6	16.8	21	23	124	117	108
	15-15W	5.6	3.0	3.4	5.0	5.7	6.7	8.3	9.7	11.9	13.8	16.7	18.3	117	112	102
	15-25W	7.5	4.1	4.6	6.2	7.3	8.9	10.7	12.6	15.4	17.9	22	23	119	114	106
	20-25W	7.5	4.8	5.4	8.1	9.5	11.5	13.8	16.0	19.7	23	28	30	118	112	105
3/4	20-30W	7.9	5.2	5.8	8.5	9.9	11.9	14.6	16.8	21	24	29	31	118	112	105
1	25-25W	7.5	5.2	5.8	8.1	9.5	11.5	13.8	16.0	19.7	23	28	30	117	110	103
	25-30W	7.9	5.6	6.3	8.9	10.7	12.7	15.8	18.2	22	26	31	34	117	110	103



#### **AAT TYPE DIRECT INJECTION WIDE ANGLE TYPE**



·Spray Angle : 120° /150° /180°

·Spray Pattern: Hollow cone- shaped spray pattern with a ring-shaped impact area.

·Drops : Small- to medium-size, uniform distribution over a wide range of flow rates and pressure.

·Material : BRASS/SS

·Features: Interchangeable spray caps within each inlet connection size group for maximum versatility.

Applications: Water aerating. Degreasing. Dust control. Metal treating. Gas cooling & srcubbing. Washing & cooling

**Order Info:** 

Nozzle Type Inlet Conn Material Code Capacity Size Spray Angle

Inlet Conn	Capacity			Flow R	ate Capacity(I	_/min)		
(in.)	Size	0.4bar	0.7bar	1.5bar	3bar	4bar	6bar	7bar
	0.37	1.1	1.4	2.1	3.0	3.4	4.2	4.5
1/8	0.5	1.4	1.9	2.8	4.0	4.6	5.6	6.0
	0.75	2.2	2.9	4.2	5.9	6.8	8.4	9.0
	1	2.9	3.8	5.6	7.9	9.1	11.2	12.1
1/4	1.5	4.3	5.7	8.3	11.8	13.7	16.8	18.1
1/4	2	5.8	7.7	11.2	15.8	18.2	22	24
	2.5	7.2	9.5	13.9	19.7	23	28	30
	3	8.8	11.6	17.0	24	27	34	36
	3.5	10.4	13.7	20	28	32	39	42
3/8	4	11.9	15.7	23	32	36	45	48
	4.5	12.9	17.1	25	36	41	50	54
	5	14.4	19.1	28	39	46	56	60

# **CANNON NOZZLE (ADJUSTABLE FOG CANNON NOZZLE)**











#### **Order Info:**



Orifice				Flov	v rate(L/	min)			
dia. mm	2bar	3bar	4bar	5bar	6bar	7bar	10bar	20bar	35bar
1	0.22	0.26	0.31	0.34	0.37	0.40	0.48	0.68	0.90
1.1	0.29	0.33	0.37	0.41	0.43	0.47	0.53	0.7	0.95
1.2	0.32	0.39	0.46	0.51	0.56	0.6	0.72	1.0	1.3
1.5	0.39	0.48	0.55	0.61	0.67	0.72	0.86	1.3	1.7







·Spray Angle : 15°-65°

·Spray Pattern: Hollow cone spray, spray area into a ring.

·Orifice: 1.0mm/1.1 mm/1.2mm/1.5mm .Thread Size: 1/4" male or female, bspt / npt .Covering dia.: Approx. 0.5-2 meters

·Material : SS

·Features: Injection Angle can be adjusted, through the fan injection distance of 30-100 meters.

Applications: Dust pollution control, disinfection, fire emergency, dust removal, dust suppression, humidifying, cooling



#### **OIL BURNER NOZZLE**



·Spray Angle : 50°-90°

·Spray Pattern: shaped spray pattern with round impact area.

·Orifice: 0.8mm/1.0mm/1.2mm/1.5mm/1.8mm

·Material: SS

·Features: Stainless steel nozzle core and flow guide groove are built in,

forming a centrifugal vortex in the flow guide groove.

Applications: ·Cooling ·Dust control ·Artificial fog ·Atomized fuel oil ·Cleaning &

disinfection ·Garden landscape construction

**Order Info:** 

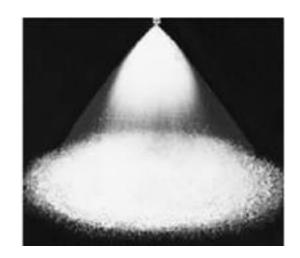
AAZ - 1/4 - SS - 3#

| Nozzle Type Inlet Conn Material Code Orifice

Inlet Conn	Orifice	Atomized Particle	Mesh Number		.,		Flow	Rate Cap (L/min)	pacity				Spray (	Angle °)
In	mm	um	mesh	1.5bar	2bar	3bar	5bar	7bar	10bar	15bar	20bar	25bar	3bar	10bar
	0.3	50	120	0=	-	0.05	0.06	0.07	0.08	0.10	0.12	0.14	30	45
	0.4	60	120	-	-	0.06	0.08	0.09	0.11	0.13	0.15	0.16	30	45
	0.5	70	100	-		0.08	0.10	0.12	0.14	0.17	0.20	0.22	45	60
	0.6	70	100	-	0.10	0.13	0.16	0.20	0.25	0.30	0.35	0.40	50	70
	0.7	80	100	0.14	0.16	0.20	0.26	0.30	0.35	0.43	0.49	0.55	50	70
	0.8	80	100	0.22	0.25	0.30	0.38	0.45	0.53	0.66	0.74	0.82	60	70
	0.9	90	50	0.29	0.33	0.40	0.50	0.60	0.71	0.86	0.99	1.10	60	70
1/4	1.0	110	50	0.36	0.41	0.50	0.64	0.75	0.89	1.08	1.23	1.37	60	80
1/4	1.1	120	50	0.43	0.49	0.60	0.77	0.90	1.06	1.29	1.48	1.65	60	80
	1.2	130	50	0.58	0.66	0.80	1.02	1.20	1.42	1.72	1.97	2.20	60	80
	1.3	140	50	0.72	0.82	1.00	1.28	1.50	1.77	2.15	2.47	2.74	60	80
	1.4	140	50	0.86	0.99	1.20	1.53	1.80	2.13	2.58	2.96	3.29	80	80
	1.5	150	50	1.01	1.15	1.40	1.79	2.10	2.48	3.01	3.46	3.84	80	80
	1.6	180	50	1.15	1.32	1.60	2.04	2.40	2.84	3.44	3.95	4.39	80	80
	1.7	210	50	1.29	1.48	1.80	2.20	2.69	3.19	3.87	4.44	4.94	80	80
	1.8	230	50	1.45	1.70	2.08	2.40	3.02	3.65	4.25	4.98	5.50	80	80



#### **BB SERIES STANDARD TYPE**





·Spray Angle : 42°-120°

·Spray Pattern: Solid cone- shaped spray pattern with round impact area. ·Drops: Small- to medium-size,uniform distribution over a wide range of flow

rates and pressure.

·Material : BRASS/SS/PP/PVC/PTFE

·Features : Unique vane design with large flow passages provides superior

control and uniform distribution.

Applications: Water aerating. Fire prevention. Dust control. Metal Treating. Gas cooling & scrubbing

#### ·Standard Angle

Inlet Conn.	Capacity	Orifice				Flow R	ate Ca <sub>l</sub>	pacity (	L/min)				Sp	ray Ang (°)	le
(in.)	Size	(mm)	0.5bar	1bar	1.5bar	2bar	3bar	4bar	5bar	6bar	7bar	10bar	0.5bar		6bar
	1	0.79	-:	0.44	0.54	0.62	0.74	0.85	0.94	1.0	1.1	1.3	0-0	58	53
	1.5	1.2	0.49	0.69	0.81	0.93	1.1	1.3	1.4	1.5	1.7	1.9	65	65	59
	2	1.2	0.65	0.92	1.1	1.2	1.5	1.7	1.9	2.0	2.2	2.6	43	50	46
1/8	3	1.5	0.98	1.4	1.6	1.9	2.2	2.5	2.8	3.1	3.3	3.9	52	65	59
1/0	3.5	1.6	1.1	1.6	1.9	2.2	2.6	3.0	3.3	3.6	3.9	4.5	43	50	46
	3.9	2.0	1.3	1.8	2.1	2.4	2.9	3.3	3.7	4.0	4.3	5.1	77	84	79
	5	2.0	1.6	2.3	2.7	3.1	3.7	4.2	4.7	5.1	5.5	6.5	52	65	59
	6.1	2.3	2.0	2.8	3.3	3.8	4.5	5.2	5.7	6.2	6.7	7.9	69	74	68
	6.5	2.4	2.1	3.0	3.5	4.0	4.8	5.5	6.1	6.7	7.1	8.4	45	50	46
1/4	10	3.2	3.3	4.7	5.4	6.2	7.4	8.5	9.4	10.2	11.0	13.0	58	67	61
	12.5	3.2	4.1	5.8	6.8	7.7	9.3	10.6	11.8	12.8	13.7	16.2	69	74	68
	9.5	2.6	3.1	4.7	5.1	5.9	7.1	8.1	8.9	9.7	10.4	12.3	45	50	46
3/8	15	3.6	4.9	6.9	8.1	9.3	11.2	12.7	14.1	15.4	16.5	19.4	64	67	61
3/6	20	4.0	6.5	9.2	10.8	12.4	14.9	17.0	18.8	20	22	26	76	80	73
	22	4.5	7.2	10.2	11.9	13.6	16.4	18.7	21	23	24	28	87	90	82
	16	3.5	5.2	7.4	8.7	9.9	11.9	13.6	15.1	16.4	17.6	21	48	50	46
	25	4.6	8.2	11.6	13.5	15.4	18.6	21	24	26	27	32	64	67	61
1/2	32	5.2	10.4	14.7	17.3	19.8	24	27	30	33	35	41	72	75	68
	40	6.2	13.1	18.5	22	25	30	34	38	41	44	52	88	91	83
	50	6.7	16.3	23.1	27	31	37	42	47	51	55	65	91	94	86
	2.5	4.9	9.6	12.7	15.9	18.2	22	25	28.5	30	32	38	48	50	46
3/4	4.0	6.4	15.4	20	26	29	35	40	45	48	52	61	67	70	63
	7.0	9.5	27	35	45	51	61	70	78	84	91	107	89	92	84
	4.2	6.0	16.2	21	27	31	37	42	48	51	54	64	48	50	46
	7.0	8.3	27	35	45	51	61	70	79	84	91	107	67	68	62
1	8.0	9.5	31	40	51	58	70	80	90	97	104	122	72	81	82
	10	11.9	38	51	65	73	88	100	113	121	130	153	78	90	94
	12	11.9	46	60	77	87	105	120	135	145	155	183	89	92	84



#### **BB SERIES WIDE ANGLE TYPE**





## ·Wide Angle

Inlet Conn.	Capacity	Orifice				Flow R	ate Ca <sub>l</sub>	pacity (	L/min)				Spr	ray Angle	e (°)
(in.)	Size	(mm)	0.5bar	1bar	1.5bar	2bar	3bar	4bar	5bar	6bar	7bar	10bar	0.5bar	1.5bar	6bar
	2.8W	1.6	_	1.2	1.5	1.7	2.0	2.3	2.5	2.7	2.9	3.5	116	120	102
1/8	4.3W	2.0	-	1.9	2.3	2.6	3.1	3.5	3.9	4.2	4.5	5.4	116	120	102
1/6	5.6W	2.4	1.8	2.5	3.1	3.4	4.0	4.6	5.1	5.5	5.9	7.1	116	120	102
	8W	2.4	2.6	3.6	4.4	4.8	5.8	6.6	7.2	7.8	8.4	10.1	116	120	103
	10W	2.8	3.3	4.5	5.5	6.0	7.2	8.2	9.1	9.8	10.6	12.7	116	120	103
1/4	12W	3.2	3.9	5.3	6.5	7.3	8.7	9.8	10.9	11.8	12.7	15.2	117	120	103
	14W	3.6	4.6	6.2	7.6	8.5	10.1	11.5	12.7	13.7	14.8	17.7	117	120	103
	17W	4.0	5.6	7.6	9.3	10.3	12.3	13.9	15.4	16.7	18.0	21.6	117	120	103
3/8	20W	4.4	6.6	8.9	10.9	12.1	14.5	16.5	18.1	19.6	21.2	25.3	117	120	104
3/0	24W	4.8	7.9	10.7	13.1	14.5	17.3	19.7	22	24	25.9	31.0	117	120	104
	27W	5.2	8.9	12.0	14.7	16.3	19.5	22	24	26	28.1	33.6	117	120	106
	30W	5.6	9.9	13.4	16.4	18.1	22	25	27	29	31.3	37.4	117	120	108
	35W	6.0	11.5	15.6	19.1	21	25	29	32	34	36.7	43.9	117	120	108
1/2	40W	6.4	13.1	17.8	21.8	24	29	33	36	39	42.1	50.3	117	120	108
	45W	6.4	14.8	20	24.5	27	33	37	41	44	47.5	56.8	117	120	110
	50W	6.7	16.4	22	26.9	30	36	41	45	49	52.9	63.3	117	120	112
3/4	6W	9.9	23	31	37	42	51	58	63	69	74	89	115	120	112
1	11W	13.1	42	57	69	78	93	106	115	126	136	162	117	120	117
1-1/4	16W	15.5	62	83	100	113	135	154	168	184	199	238	118	121	119
1-1/2	24W	18.3	92	125	150	170	203	230	251	275	297	355	119	124	119
2	47W	25	181	245	293	333	398	451	492	539	582	695	120	124	119



#### B SERIES - TYPE 15° / 30°



·Spray Angle: 15°/30°

·Spray Pattern : Flat spray pattern distributes the liquid

as a flat - or sheet-type spray. Drops: Small- to medium-size, uniform distribution

over a wide range of flow rates and pressure. ·Material : BRASS/SS

·Features: Except BH type, all models are designed with removable cap, which is convenient for maintenance and cleaning; the internal design of blades and large flow

channels ensures and controls the uniform distribution of spray.

Applications: Water aerating. Fire prevention. Metal Treating. Air and gas washers.

**BG-15** 

**BBG-15** 

**BH-15** 

**BG-30** 

**BBG-30** 

**BH-30** 



Removable Cap Type

(internal thread)





Removable Cap Type

(External Thread)









Integral Casting Type (Inside)

Removable Cap Type (Inside)

Removable Cap type (Outer)

Integral Casting Type (Inside)

·Type 15°

At the stated pressure in bar.

Inlet Conn.		Nozzle Type		Capacity Size	Orifice (mm)				Flov		Capa nin)	acity				Sp	ray An (°)	gle
(in.)	BG-15	BBG-15	BH-15	Size	(iiiii)	0.7bar	1.5bar	2bar	3bar	4bar	6bar	7bar	10bar	15bar	20bar	0.7bar	3bar	7bar
1/8	•	•	i	07	1.6	1.3	2.0	2.3	2.8	3.2	3.9	4.2	5.0	6.2	7.1	13	15	15
1/8	•	•		14	2.4	2.7	3.9	4.5	5.5	6.4	7.8	8.4	10.1	12.4	14.3	13	15	15
1/4	•	•		30	3.2	5.7	8.4	9.7	11.8	13.7	16.8	18.1	22	26	31	13	15	15
3/8	•	•		50	4.4	9.5	14.0	16.1	19.7	23	28	30	36	44	51	13	15	15
1/2	•	•		90	5.6	17.2	25	29	36	41	50	54	65	79	92	13	15	15
3/4			•	150	7.5	29	42	48	59	68	84	90	108	132	153	13	15	15
1			•	280	9.9	53	78	90	111	128	156	169	202	247	285	13	15	15

·Type 30°

At the stated pressure in bar.

Inlet Conn.		Nozzle Type		Capacity			er e	0	Flow	Rate (L/r	Capa nin)	acity				Sp	ray An (°)	gle
(in.)	BG-30	BBG-30	BBH-30	Size	(mm)	1bar	1.5bar	2bar	3bar	4bar	6bar	7bar	10bar	15bar	20bar	1bar	3bar	7bar
	•	•		1.4	0.79	0.32	0.39	0.45	0.55	0.64	0.78	0.84	1.0	1.2	1.4	17	30	31
4/0	•	•		2.5	0.79	0.57	0.70	0.81	0.99	1.1	1.4	1.5	1.8	2.2	2.5	17	30	32
1/8	•	•		04	1.2	0.91	1.1	1.3	1.6	1.8	2.2	2.4	2.9	3.5	4.1	26	30	32
	•	•		07	1.6	1.6	2.0	2.3	2.8	3.2	3.9	4.2	5.0	6.2	7.1	23	30	30
1/4	•	•		09	2.0	2.1	2.5	2.9	3.6	4.1	5.0	5.4	6.5	7.9	9.2	23	30	30
3/8	•	•		14	2.1	3.2	3.9	4.5	5.5	6.4	7.8	8.4	10.1	12.4	14.3	25	30	30
1/2	•	•		30	3.2	6.8	8.4	9.7	11.8	13.7	16.8	18.1	22	26	31	26	30	31
3/4			•	50	4.4	11.4	14.0	16.1	19.7	23	28	30	36	44	51	26	30	31
4			•	70	5.2	16.0	19.5	23	28	32	39	42	50	62	71	27	30	30
1			•	100	6.4	23	28	32	39	46	56	60	72	88	102	27	30	30



#### **SOLID CONE NOZZLE**



·Spray Pattern : The jet is a single water column with high impact force.

·Drops : Small- to Medium-size,uniform distribution over a wide range of flow rates and

pressure.

·Material :303 SS / 316 SS / BRASS

·Features: Concentrated water flow, high impact, suitable for small cavity cleaning.

Applications: ·High pressure cleaning ·Engineering vehicle cleaning ·Automobile chassis

cleaning

Capacity		Inlet Co	onn(in.)		Orifice				Fl	ow Rate	Capaci	ty(L/mi	n)			
Size	1/8	1/4	3/8	1/2	(mm)	0.3bar	1bar	2bar	3bar	4bar	5bar	6bar	7bar	10bar	20bar	35bar
003	•	•			1	0.37	0.68	0.97	1.2	1.4	1.5	1.7	1.8	2.2	3.1	4
004	•	•			1.2	0.5	0.91	1.3	1.6	1.8	2	2.2	2.4	2.9	4.1	5.4
005	•	•			1.3	0.62	1.1	1.6	2	2.3	2.5	2.8	3	3.6	5.1	6.7
006	•	•			1.5	0.75	1.4	1.9	2.4	2.7	3.1	3.3	3.6	4.3	6.1	8.1
800	•	•			1.7	1	1.8	2.6	3.2	3.6	4.1	4.5	4.8	5.8	8.2	10.8
010	•	•			1.9	1.2	2.3	3.2	3.9	4.6	5.1	5.6	6	7.2	10.2	13.5
015	•	•			2.3	1.9	3.4	4.8	5.9	6.8	7.6	8.4	9	10.8	15.3	20
020	•	•	•		2.7	2.5	4.6	6.5	7.9	9.1	10.2	11.2	12.1	14.4	20	27
030	•	•	•		3.6	3.7	6.8	9.7	11.8	13.7	15.3	16.7	18.1	22	31	40
040	•	•	•		4	5	9.1	12.9	15.8	18.2	20	22	24	29	41	54
050		•	•		4.4	6.2	11.4	16.1	19.7	23	25	28	30	36	51	68
060		•	•		4.8	7.5	13.7	19.3	24	27	31	33	36	43	61	81
070		•	•		5.2	8.7	16	23	28	32	36	39	42	50	71	94
080		•	•		5.2	10	18.2	26	32	36	41	45	48	58	82	108
100			•	•	6	12.5	23	32	39	46	51	56	60	72	102	135
120			•	•	6.4	15	27	39	47	55	61	67	72	86	122	162
150			•	•	7.5	18.7	34	48	59	68	76	84	90	108	153	205
200			•	•	8.3	25	46	64	79	91	102	112	121	144	205	270
250			•	•	9.5	31	57	81	99	114	127	140	151	180	255	340







·Spray Angle : 0°(Liquid column flow)-110°

·Spray Pattern: Flat spray pattern distributes the liquid as a flat - or sheet-type spray. ·Drops: Small- to medium-size,uniform distribution over a wide range of flow rates and pressure.

·Material : BRASS/SS/PP/PVC/PTFE

·Features :Large,unobstructed flow passages minimize clogging.

High impact solid stream provides highest impact per unit area. Specially tapered spray

pattern is ideal for use in manifold.

Applications: ··Fire prevention ·Dust control

·Spray cooling ·Metal treating

·Air purification ·Cooling and hardening ·Gas cooling & srcubbing

Jet Angle	Capacity			N	ozzl	е Ту	pe/li	nlet	Conn	ı.(in	.)			Orifice				Flo		te C	Children or an article of the Control	city				S	pray (°	Ang )	le
(3 bar)	Size	H-\	W	H-\	VVL		I BY COME	H-U	J			U		(mm)	0.3	1	. 2	3	4	5	6	7	10	20	35	1.5	3	6	1
		1/8	1/4	1/8	1/4	1/8	1/4	3/8	1/2 3	3/4	1	1-1/4	2		bar	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar	b
	2501	•	•	•	•									0.66			and the same of the same	and agree to the form the second of the party of	and the second state of the second	0.51	A CONTRACTOR OF THE PARTY OF TH	-	Section Contraction	Company of the Part of the Asset of	1.3			34°	
	2502	•	•		•									0.91		THE RESIDENCE OF THE PARTY OF T	THE RESERVE OF THE PERSON NAMED IN	0.79	-	- Contraction	1.1	1.2	1.4	2.0	2.7	15°	International Programme (in	33°	_
	2503	•												1.1		0.68	0.97	1.2	1.4	1.5	1.7	1.8	2.2	3.1	4.0	15°	25°	33°	4
	2504	•	•											1.3		0.91	1.3	1.6	1.8	2.0	2.2	2.4	2.9	4.1	5.4	16°	25°	32°	1
	2505	•												1.4		1.1	1.6	2.0	2.3	2.5	2.8	3.0	3.6	5.1	6.7	16°	25°	32°	
	2506	•	•		•									1.6		1.4	1.9	2.4	2.7	3.1	3.3	3.6	4.3	6.1	8.1	17°	25°	31°	
	2508	•	•											1.8		1.8	2.6	3.2	3.6	4.1	4.5		5.8	8.2	10.8	17°	25°	31°	
	2510						•							2.0		2.3	3.2	3.9	4.6	5.1	5.6	6.0	7.2	10.2	13.5	18°	25°	31°	
	2515							•						2.4		3.4	4.8	5.9	6.8	7.6	8.4	9.0	10.8	15.3	20	18°	25°	31°	
	2520							•						2.8	2.5	4.6	6.5		9.1			12.1			27	19°	25°	31°	T
25°	2530						•							3.6	3.7	6.8	9.7	11.8	13.7	15.3			22	31	40	20°	25°		
1-0-0-0-1/	2540													4.0	5.0	9.1		15.8			22	24	29	41	54	21°		29°	
	2550													4.4	6.2	Market Color Colored	and the second	19.7	- Contract of the Contract of	25	28	-	36	51	68	-	the second second second second second	29°	
	2560													4.8	7.5	-	-	24		31	33		43	61	81	22°	biring and a second	29°	
	2570					1								5.2	8.7	16.0	A STATE OF THE PARTY OF THE PAR	-	32	36	39	42	50	71	94	22°	-	29°	
	25100													6.4	12.5		32		46	51	56	60	72	102			Desiration was a second like	28°	
	25150	7												7.5	18.7	Separate services and	48		68	76	84	90	108	-			THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN	28°	_
	25200								•					8.7	25	46	64	79	91			121	decine and a	205	-	-	the state of the s	26°	-9~
	25500										•			13.1	62	114	161	197	230	- PARTY CONTRACTOR	STATE OF THE PARTY	A PROPERTY AND A PROP		THE PERSON NAMED IN COLUMN 2 I		A STATE OF THE PARTY OF THE PAR		26°	
	25750											•		15.9	94	171	240		-	-	Section of the last of	-	_		-	24°	-	26°	-
	251000													18.7		230	THE OWNER OF THE OWNER,	-	-	-	-		-	1020				26°	
	1501	•	•		•									0.66				The state of the s	* Committee of the Comm	0.51	The Department of the Part of	A STATE OF THE PARTY OF THE PAR	Service and the second	benefit in the second of	1.3		-	24°	
	1502													0.91										2.0		6°		22°	Ī
	1503	•			•									1.1				1.2					22	31	40			22°	
	1504	•												1.3				1.6				2.4	2.9	4.1	5.4		15°		
	1505	•												1.4			1.6						3.6	5.1	6.7		15°		
	1506													1.6		1.4	1.9									-		21°	
15°	1508	•	•											1.8		1.8		3.2			4.5	4.8	5.8	8.2				20°	
	1510													2.0		2.3		3.9			5.6	6.0	7.2	10.2	13.5	10°	15°		
	1515													2.4		3.4	4.8							15.3			15°		
	1520													2.8		4.6				10.2					27			19°	
	1530													3.6		6.8				15.3					40		15°		
	1540													4.0				15.8				24	29	41	54		15°		
	1550													4.4				79.7				30	36	51	68		15°		
	0003													1.0	0.37			1.2			1.7		2.2		4.0				
	0004													1.2				1.6				2.4	2.9	4.1	5.4				
	0005						•							1.3	0.62	1.1	1.6	2.0			2.8		3.6	5.1	6.7				
	0006													1.5	0.75	1.4	1.9	2.4	2.7	3.1	3.3	3.6	4.3	6.1	8.1				
	0008													1.7	1.0	1.8	2.6	3.2	3.6	4.1	4.5	4.8	5.8	8.2	10.8				
	0010													1.9	1.2	2.3		3.9	4.6	5.1	5.6	6.0	7.2	10.2					
	0015													2.3	1.9	3.4	4.8	5.9	6.8	7.6	8.4	9.0	10.8	15.3					
	0020						•	•				1		2.7	2.5	4.6	6.5	7.9	9.1	10.2	11.2	12.1	14.4		27				
	0030				1									3.6	3.7	6.8	9.7	11.8	13.7	15.3	16.7	18.1	22	31	40				
	0040													4.0	5.0		12.9	15.8	18.2	20	22	24	29	41	54		0	0	
	0050						•							4.4				19.7		25	28		36	51	68				
	0060				1		•							4.8	7.5	13.7	19.3	24	27	31	33	36	43	61	81	) >	Solid	COI	1
24	0070						•	•						5.2		16.0			32	36	39	42	50	71	94			2	J
0°	0080						•	•						5.2	10.0	18.2		32	36	41	45	48	58		108		100		
	00100	l ii						•						6.0	12.5	23	32	39	46	51	56	60	72	102	135		0	100	
	00120							•						6.4	15.0	27	39	47	55	61	67	72	86	122	162		L	No.	
	00150												, l	7.5	18.7		48	59	68	76	84			153					
	00200						1							8.3	25	46	64	79	91		112	121	144	205	270				
	00250							•					Î	9.5	31		81	99		127	140	151	180	255	340				
	00350								10	•				11.1	44	80	113	138	160	178	195	210	255	360	475				
	00700								1	•				15.5	THE RESERVE THE PERSON NAMED IN	Section and property of		and the second second second		the state of the state of the state of	The state of the s	Name and Address of the Owner, where the Owner, which is the Ow	Section of the last of the las	720					
	001000										•	1		19.1										1020					
	001100		i i								•			19.8										1120			1		
	001400	ļ												22.2										1430					
	001800											•		25.4										1840					
	002000												•	26.6										2040					
	003500					1							•	34.9	The state of the s	The state of the s	TO STORY OF THE PERSON		A BUNCHES AND THE RES	1790	and the second second	NOT THE OWNER WHEN THE	SALES OF THE PARTY OF	processing and processing		-	- 1		







External Thread Type CC

·Spray Angle : 0°(Liquid column flow)-110°

·Spray Pattern : Flat spray pattern distributes the liquid as a flat - or sheet-type spray. ·Drops : Small- to medium-size,uniform distribution over a wide range of flow rates and

pressure.

·Material : BRASS/SS/PP/PVC/PTFE

·Features :Large,unobstructed flow passages minimize clogging.

High impact solid stream provides highest impact per unit area. Specially tapered spray

pattern is ideal for use in manifold.

Applications: ··Fire prevention ·Dust control

·Spray cooling ·Metal treating

·Air purification ·Cooling and hardening ·Gas cooling & srcubbing

																								Attr	ie sta	atea p	oress	ure II	n ba
Jet Angle	Capacity			No	ozzl	e Ty	pe/I	nlet	Cor	nn.(iı	n.)			Orifice				Flov		te C /mii		city				S	pray ('	Ang ')	le
(3 bar)	Size	- 300	V	KAN SA	VVL		Issuevi	H-U	1000000	Part I		U		(mm)	0.3bar	1bar	2bar	3bar	4bar	5bar	6bar	7bar	10bar	20bar	35bar	1.5bar	3bar	6bar	14ba
		1/8	1/4	1/8	1/4	1/8	1/4	3/8	1/2	3/4	1	1-1/4	2																
	5001	•	•	•	•									0.66		STREET, SQUARE, SQUARE	THE RESERVE TO SHARE THE PARTY OF THE PARTY	Contract Con	THE RESERVE THE PARTY OF THE PA	-	0.56	-	0.72		1.3	37°	50°	59°	
	5002	•	•	•	•									0.91	0.27			0.79		-	1.1	1.2	1.4	2.0	2.7	39°	50°	57°	-
	5003	•	•	•	•	-				-			-	1.1		0.68	The second second	-	1.4	1.5	1.7	1.8	2.2	3.1	4.0	40°	50°	56°	-
	5004		•						-					1.3		0.91		1.6	1.8	2.0	2.2	2.4	2.9	4.1	5.4			56°	_
	5005	•	•		•									1.4	0.62	Section Contract Section 1	1.6	2.0	2.3	2.5	2.8		3.6	5.1	6.7	44°	THE RESERVE OF THE PERSON NAMED IN	56°	a annual extension
	5006	•	-			-								1.6 1.8	-	1.4	1.9	2.4 3.2	2.7	3.1	3.3	3.6	4.3	6.1	8.1	45°	50°	56°	60
	5008 5010	•	_	-	•									2.0	1.0	-	2.6 3.2	3.9	3.6 4.6	4.1 5.1	4.5 5.6	6.0	5.8	8.2	13.5		50°	55°	59
	5015													2.4	1.9	And in Addition of the Publishers	4.8	-	6.8	7.6	8.4	-	10.8	THE RESIDENCE OF THE PARTY OF T	Secure de la constitución de la	-	50°	55°	59
	5020													2.8	2.5	4.6	6.5	7.9	9.1				14.4	20	27	45°	50°	55°	59
	5030		1			•								3.6	3.7	6.8	9.7	Section in the contract of	Service and the service of the servi	15.3		No.	-	31	40	45°	50°	55°	59
	5040					•								4.0	5.0	-	and the same of the same	15.8	THE RESERVE OF THE PARTY OF THE	STATE OF THE PERSON	22	24	29	41	54	46°	50°	54°	59
===	5050													4.4	6.2	STATISTICS OF THE PARTY OF THE	16.1	Section Commence of Commence	23	25	28	30	36	51	68	46°	50°	54°	-
50°	5060													4.8		13.7	Printed Street, Street	-	27	31	33	36	43	61	81	46°	50°	54°	59
	5070					1		•						5.2	and the second second	16.0	THE RESERVE OF SHAPE OF SHAPE	28	32	36	39	42	50	71	94	46°	50°	54°	and the state of t
	50100							•						6.4	12.5	-	32	39	46	51	56	60	72	102	135		50°	52°	54
	50120							•						6.7	15.0	STREET, SALES STREET, SALES	39	47	55	61	67	72	86	NAME AND ADDRESS OF	162	STATE OF THE PERSON NAMED IN	THE RESERVE AND PARTY.	53°	a Bankrook risens
	50150							•						7.5	18.7	-	48	59	68	76	84	90	108	153	205		50°	52°	
	50200													8.7	25	46	64	79	91	102	112	121	144	205	270	46°	50°	52°	-
	50400									•				12.7	50	91	129	158	182	205	225	240	290	410	540	46°	50°	52°	55
	50500										•	•		13.1	62	114	161	197	230	255	280	300	360	510	680	49°	50°	51°	54
	50580										•			13.9	72								420						
	50750											•		15.9	94								540						
	501000													18.3									720					51°	-
	501500													22.6	The state of the s	SALAR STREET, SA	-			The second second second	Mark Control of the Control	-	1080	THE RESERVE OF THE PERSON NAMED IN	Section of the Party of the Par	-		51°	
	502000												•	26.2	250	460				STREET, STREET			1440			THE PROPERTY OF THE PARTY.		51°	Name and Address of the
	4001	•	•		•	_	-						_	0.66									0.72			SALES OF THE PARTY	40°	52°	-
	40015	•	•	•										0.79		0.46		Section in contrast and other laws		0.76		-		1.5	2.0	27°	40°	52°	-
	4002	•	•											0.91		The second second	STATE OF THE PERSON NAMED IN			1.0	MODERN CONTRACTOR		1.4	2.0	2.7	29°	40°	51°	-
	4003	•	•	•	•									1.1			0.97	The second second	1.4	1.5	1.7	1.8			4.0	30°	40°	50°	57
	4004	•	•	•										1.3		0.91	1.3	1.6	1.8	2.0	2.2	2.4	2.9	4.1	5.4	30°	40°	50°	
	4005	-	-	•										1.4		1.1	1.6	2.0	2.3	2.5	2.8	3.0	-	5.1	6.7	31°		THE RESERVE AND ADDRESS OF THE PARTY.	-
	4006 4008				0									1.8	1.0	1.4	1.9	3.2	3.6	3.1 4.1	3.3 4.5	3.6 4.8	4.3 5.8	6.1 8.2	8.1 10.8		40°	49°	referencement
	4010	•		•	•				-					2.0	1.2		3.2	3.9	4.6	The second second	5.6		7.2	Serve Andread Commission of the	Property and the second	32°	40°	45°	48
40°	4015							-						2.4	1.9	Environment and	4.8	5.9	6.8	7.6	8.4		10.8			32°	40°	45°	48
40	4020													2.8	2.5	Section Section Section 1	6.5	7.9					14.4		27	32°	40°	45°	
	4030						•							3.6	3.7	The second district of the second				15.3				31	40	33°	40°	45°	48
	4040													4.0	5.0	STATE OF THE PERSON NAMED IN	The state of the s	15.8		Comment of the Commen	22	24	29	41	54	34°	40°	45°	A CHARLESTON
	5050						•							4.4	-	Commence of the last of	The second secon	19.7		25	28	30	36	51	68	35°	40°	45°	48
	4060						•	•	•					4.8		13.7			27	-	33	36	43	61	81	35°	40°	45°	-
	4070						•		•					5.2	-	16.0		28	32	36	39	42	50	71	94	35°	40°	45°	48
	40100													6.4	12.5		32	39	46	51	56	60	72	102	135		40°	43°	-
	40150													7.5	18.7	-	48	59	68	76	84	90	108			35°		43°	-
	40200													8.7	25	46	64	79	91	102			144	movement of the latest of	THE RESERVE OF THE PERSON NAMED IN	-		42°	



• Standard Angle
At the stated pressure in bar.

	ar a z ar gre													. cric state	d pressu	ire iii bai.
Spray Angle	Capacity Size	Orifice (mm)						Rate Ca (L/min)						Sį	oray Ang (°)	le
			0.5bar	1bar	1.5bar	2bar	3bar	4bar	5bar	6bar	7bar	10bar	35bar	0.5bar	1.5bar	6bar
	650033	0.28	-	121	0.09	0.11	0.13	0.15	0.17	0.18	0.2	0.24	0.45	-	47	76
	650050	0.46	15-7	n=a	0.14	0.16	0.2	0.23	0.26	0.28	0.3	0.36	0.67	-	48	75
	650067	0.53	( <del>-</del> )	-	0.19	0.22	0.26	0.31	0.33	0.37	0.4	0.47	0.9	-	50	75
	6501	0.66	-	0.23	0.28	0.32	0.39	0.46	0.51	0.56	0.60	0.72	1.3	51	65	74
	65015	0.79	// <u>=</u> 1	0.34	0.42	0.48	0.59	0.68	0.76	0.84	0.90	1.1	2.0	51	65	74
	6502	0.91	0.32	0.46	0.56	0.64	0.79	0.91	1.0	1.1	1.2	1.4	2.7	52	65	73
	65025	1.0	0.40	0.57	0.70	0.81	0.99	1.1	1.3	1.4	1.5	1.8	3.4	52	65	73
	6503	1.1	0.48	0.68	0.83	0.97	1.2	1.4	1.5	1.7	1.8	2.2	4.0	53	65	72
	6504	1.3	0.65	0.91	1.1	1.3	1.6	1.8	2.0	2.2	2.4	2.9	5.4	53	65	72
	6505	1.4	0.80	1.1	1.3	1.6	2.0	2.3	2.5	2.8	3.0	3.6	6.7	53	65	72
65°	6506	1.6	0.97	1.4	1.7	1.9	2.4	2.7	3.1	3.3	3.6	4.3	8.1	54	65	72
	6508	1.8	1.3	1.8	2.2	2.6	3.2	3.6	4.1	4.5	4.8	5.8	10.8	55	65	71
	6510	2.0	1.5	2.3	2.8	3.2	3.9	4.6	5.1	5.6	6.0	7.2	13.5	56	65	71
	6515	2.4	2.5	3.4	4.2	4.8	5.9	6.6	7.6	8.4	9.0	10.8	20	56	65	70
	6520	2.8	3.2	4.6	5.6	6.5	7.9	9.1	10.2	11.2	12.1	14.4	27	57	65	70
	6530	3.6	4.8	6.8	8.3	9.7	11.8	13.7	15.3	16.7	18.1	22	40	58	65	69
	6540	4.0	6.5	9.1	11.1	12.9	15.8	18.2	20	22	24	29	54	59	65	68
	6550	4.4	8.0	11.4	14.0	16.1	19.7	23	25	28	30	36	68	60	65	68
	6560	4.8	9.7	13.7	16.8	19.3	24	27	31	33	36	43	81	60	65	68
	6570	5.2	11.2	16.0	19.6	23	28	32	36	39	42	50	94	60	65	68
	65100	6.4	16.1	23	28.2	32	39	46	51	56	60	72	135	58	65	69



## · Wide Angle

0 - 1 2 - 1	/iligic												At	the state	ed pressu	re in ba
Spray Angle	Capacity	Orifice (mm)						Rate Ca (L/min)						Sį	pray Ang (°)	le
Ü	Size	·····	0.5bar	1bar	1.5bar	2bar	3bar	4bar	5bar	6bar	7bar	10bar	35bar	0.5bar	1.5bar	6bar
	11001	0.66	0.15	0.23	0.28	0.32	0.39	0.46	0.51	0.56	0.60	0.72	1.3	94	110	121
	110015	0.79	0.25	0.34	0.42	0.48	0.59	0.68	0.76	0.84	0.90	1.1	2.0	97	110	121
	11002	0.91	0.32	0.46	0.56	0.64	0.79	0.91	1.0	1.1	1.2	1.4	2.7	98	110	120
	11003	1.1	0.48	0.68	0.83	0.97	1.2	1.4	1.5	1.7	1.8	2.2	4.0	99	110	120
	11004	1.3	0.65	0.91	1.1	1.3	1.6	1.8	2.0	2.2	2.4	2.9	5.4	100	110	119
110°	11005	1.4	0.80	1.1	1.3	1.6	2.0	2.3	2.5	2.8	3.0	3.6	6.7	100	110	118
	11006	1.6	0.97	1.4	1.7	1.9	2.4	2.7	3.1	3.3	3.6	4.3	8.1	101	110	117
	11008	1.8	1.3	1.8	2.2	2.6	3.2	3.6	4.1	4.5	4.8	5.8	10.8	102	110	117
	11010	2.0	1.5	2.3	2.8	3.2	3.9	4.6	5.1	5.6	6.0	7.2	13.5	103	110	117
	11015	2.4	2.5	3.4	4.2	4.8	5.9	6.8	7.6	8.4	9.0	10.8	20	104	110	117
	11020	2.8	3.2	4.6	5.6	6.5	7.9	9.1	10.2	11.2	12.1	14.4	27	105	110	117
	9501	0.66	0.15	0.23	0.28	0.32	0.39	0.46	0.51	0.56	0.60	0.72	1.3	81	95	105
	95015	0.79	0.25	0.34	0.42	0.48	0.59	0.68	0.76	0.84	0.90	1.1	2.0	82	95	105
	9502	0.91	0.32	0.46	0.56	0.64	0.79	0.91	1.0	1.1	1.2	1.4	2.7	82	95	105
	9503	1.1	0.48	0.68	0.83	0.97	1.2	1.1	1.5	1.7	1.8	2.2	4.0	83	95	104
	9504	1.3	0.65	0.91	1.1	1.3	1.6	1.8	2.0	2.2	2.4	2.9	5.4	84	95	103
	9505	1.4	0.80	1.1	1.3	1.6	2.0	2.3	2.5	2.8	3.0	3.6	6.7	84	95	102
	9506	1.6	0.97	1.4	1.7	1.9	2.4	2.7	3.1	3.3	3.6	4.3	8.1	86	95	101
	9508	1.8	1.3	1.8	2.2	2.6	3.2	3.6	4.1	4.5	4.8	5.8	10.8	87	95	100
95°	9510	2.0	1.5	2.3	2.8	3.2	3.9	4.6	5.1	4.6	6.0	7.2	13.5	89	95	100
	9515	2.4	2.5	3.4	4.2	4.8	5.9	6.8	7.6	8.4	9.0	10.8	20	90	95	100
	9520	2.8	3.2	4.6	5.6	6.5	7.9	9.1	10.2	11.2	12.1	14.4	27	90	95	100
	9530	3.6	4.8	6.8	8.3	9.7	11.8	13.7	15.3	16.7	18.1	22	40	91	95	101
	9540	4.0	6.5	9.1	11.1	12.9	15.8	18.2	20	22	24	29	54	92	95	100
	9550	4.4	8.0	11.4	14.0	16.1	19.7	23	25	28	30	36	68	93	95	99
	9560	4.8	9.7	13.7	16.8	19.3	24	27	31	33	36	43	81	93	95	99
	9570	5.2	11.2	16.0	19.6	23	28	32	36	39	42	50	94	93	95	99
	95100	6.4	16.1	23	28.2	32	39	46	51	56	60	72	135	93	95	99
	8001	0.66	-	0.23	0.28	0.32	0.39	0.46	0.51	0.56	0.60	0.72	1.3	68	80	89
	80015	0.79	-	0.34	0.42	0.48	0.59	0.68	0.76	0.84	0.90	1.1	2.0	68	80	89
	8002	0.91	0.32	0.46	0.56	0.64	0.79	0.91	1.0	1.1	1.2	1.4	2.7	69	80	88
	8003	1.1	0.48	0.68	0.83	0.97	1.2	1.1	1.5	1.7	1.8	2.2	4.0	70	80	87
	8004	1.3	0.65	0.91	1.1	1.3	1.6	1.8	2.0	2.2	2.4	2.9	5.4	71	80	86
	8005	1.4	0.80	1.1	1.3	1.6	2.0	2.3	2.5	2.8	3.0	3.6	6.7	71	80	86
	8006	1.6	0.97	1.4	1.7	1.9	2.4	2.7	3.1	3.3	3.6	4.3	8.1	72	80	85
	8008	1.8	1.3	1.8	2.2	2.6	3.2	3.6	4.1	4.5	4.8	5.8	10.8	72	80	84
80°	8010	2.0	1.5	2.3	2.8	3.2	3.9	4.6	5.1	4.6	6.0	7.2	13.5	73	80	84
	8015	2.4	2.5	3.4	4.2	4.8	5.9	6.8	7.6	8.4	9.0	10.8	20	74	80	83
	8020	2.8	3.2	4.6	5.6	6.5	7.9	9.1	10.2	11.2	12.1	14.4	27	74	80	83
	8030	3.6	4.8	6.8	8.3	9.7	11.8	13.7	15.3	16.7	18.1	22	40	74	80	83
	8040	4.0	6.5	9.1	11.1	12.9	15.8	18.2	20	22	24	29	54	74	80	83
	8050	4.4	8.0	11.4	14.0	16.1	19.7	23	25	28	30	36	68	74	80	83
	8060	4.8	9.7	13.7	16.8	19.3	24	27	31	33	36	43	81	75	80	83
	8070	5.2	11.2	16.0	19.6	23	28	32	36	39	42	50	94	75	80	83
	80100	6.4	16.1	23	28.2	32	39	46	51	56	60	72	135	75	80	83



#### HIGH PRESSURE TYPE / MEG SERIES











Integrated

Integrated with Filter

Integrated
Tungsten Core

Tungsten Steel Core

·Spray Angle: Injection radians of 5° to 65° at working pressures from 20 to 275 bar (kg).

·Spray Pattern: Fan spray, spray area in line.

·Drops: Small-to medium-size, uniform distribution over a wide range of flow rates and pressure.

-Material: SS

·Features: The liquid column flow pattern provides the maximum impact force per unit area;

The built-in guide blade stabilizes the turbulent flow to achieve uniform spray distribution.

		100,000	2000			N	ozz	le T			-	ray	Ang	le		102510		10.000			Capacity				Flo			apac	ity			
		TP	C-N	IGX				,	1/	4M	EG				1	/41	1EG	-WC	ξX		Size					(L	_/mii	n)				
40°	50°	65°	80°	95°	110°	130°	0°	5°	15°	25°	40	50°	°65°	0°	5°	15°	25°	40°	50°	65°	OILC	20bar	25bar	35bar	40bar	45bar	60bar	80bar	100bar	140bai	170bar	200ba
									•					•		•			•		010	1.0	1.1	1.3	1.4	1.5	1.8	2.0	2.3	2.7	3.0	3.2
									•												015	1.5	1.7	2.0	2.2	2.3	2.6	3.1	3.4	4.0	4.5	4.8
•	•	•	•	•		•	•	•	•	•	•		•	•				•	•	•	020	2.0	2.3	2.7	2.9	3.1	3.5	4.1	4.6	5.4	5.9	6.4
													•								025	2.5	2.8	3.4	3.6	3.8	4.4	5.1	5.7	6.7	7.4	8.1
		•	•	•	•		•	•	•	•	•	•		•					•	•	030	3.1	3.4	4.0	4.3	4.6	5.3	6.1	6.8	8.1	8.9	9.7
							•		•	•	•										035	3.6	4.0	4.7	5.0	5.4	6.2	7.1	8.0	9.4	10.4	11.3
•		•	•	•	•	•	•		•		•			•			•			•	040	4.1	4.6	5.4	5.8	6.1	7.1	8.2	9.1	10.8	11.9	12.9
•		•	•	•		•	•	•	•	•			•				•				045	4.6	5.1	6.1	6.5	6.9	7.9	9.2	10.3	12.1	13.4	14.5
•	•	•	•	•		•	•	•			•	•	•	•			•		•		050	5.1	5.7	6.7	7.2	7.6	8.8	10.2	11.4	13.5	14.9	16.1
•		•	•	•	•	•	•			•	•		•	•		•					055	5.6	6.3	7.4	7.9	8.4	9.7	11.2	12.5	14.8	16.3	17.7
•	•	•	•	•	•		•		•	•		•		•			•				060	6.1	6.8	8.1	8.6	9.2	10.6	12.2	13.7	16.2	17.8	19.3
•		•	•	•			•		•	•	•		•								065	6.6	7.4	8.8	9.4	9.9	11.5	13.3	14.8	17.2	19.3	21
•	•	•	•	•	•	•	•	•	•		•	•	•	•		•	•				070	7.1	8.0	9.4	10.1	10.7	12.4	14.3	16.0	18.9	21	23
•		•	•	•			•		•	•											075	7.6	8.5	10.1	10.8	11.5	13.2	15.3	17.1	20	22	24
•		•	•	•		•	•	•	•		•	•	•	•		•	•	•		•	080	8.2	9.1	10.8	11.5	12.2	14.1	16.3	18.2	22	24	26
•		•	•				•														085	8.7	9.7	11.5	12.3	13.0	15.0	17.3	19.4	23	25	27
•		•	•	•	•	•	•	•		•		•		•			•				090	9.2	10.3	12.1	13.0	13.8	15.9	18.3	21	24	27	29
							•														095	9.7	10.8	12.8	13.7	14.5	16.8	19.4	22	26	28	31
•		•	•	•	•	•	•		•	•		•	•	•			•				100	10.2	11.4	13.5	14.4	15.3	17.7	20	23	27	30	32
•			•				•														110	7.00		14.8				GC11A10	25	30	33	35
•		•	•																		115			15.5				5.466	26	31	34	37
•				•			•	•		•	•	•									120			16.2			-		27	32	36	272020
•						•			•	•											125			16.9					28	34	.00.000	1



#### **V SERIES - NARROW ANGLE TYPE**





Integrated

·Spray Angle : 15°-50°

·Spray Pattern : Fan spray, spray area in line.

·Drops : Small- to medium-size, uniform distribution over a wide range

of flow rates and pressure.

·Material : BRASS/SS/PP/PVC/PTFE

·Features: The unobstructed liquid column flow channel reduces the blockage as much as possible; Integrated flow surface design, high impact flat fan spray shape, clear edge, uniform distribution.

Applications: Degreasing. Fire prevention. Air purification. Cooling & quenching. Metal treating. Cleaning gravel. Cleaning & cooling.

Jet Angle	ı	nlet	Con	n(in.					Flov	v Rat	e Ca	pacit	y(L/r	nin)		Spra	y Ang	gle(°)		Si	ze	
at 3bar pressure		1/4	3/8	1/2		Capacity Size	Orifice (mm)	1bar	1.5bar	2bar	3bar	4bar	6bar	7bar	10bar	1bar	3bar	7bar	A length (mm)	B Deflection Angle (°)	C Bar size (mmsq.)	Net weight (kg)
		•				05	1.3	1.1	1.4	1.6	2.0	2.3	2.8	3.0	3.6	33	50	60	31	60	15.9	0.03
		•				10	1.9	2.3	2.8	3.2	3.9	4.6	5.6	6.0	7.2	34	50	60	31	60	15.9	0.03
		•	•			25	3.0	5.7	7.0	8.1	9.9	11.4		15.1	18.0	42	50	59	41.5	42	19.1	0.09
		•	•			40	3.8	9.1	11.2	12.9	15.8	18.2	22	24	29	39	50	60	47	45	19.1	0.09
50°			•			60	4.6	13.7	16.8	19.3	24	27	34	36	43	42	50	53	55	37	25.4	0.14
80.61			•			100	5.9	23	28	32	39	46	56	60	72	43	50	55	72	40	31.8	0.33
			•			125	6.6	28	35	40	49	57	70	75	90	38	50	59	72	38	31.8	0.31
			•			160	7.5	36	45	52	63	73	89	96	115	44	50	55	72	37	31.8	0.31
			•			200	8.4	46	56	64	79	91	112	121	144	46	50	53	72	32	31.8	0.31
			•			40	3.8	9.1	11.2	12.9	15.8	18.2	22	24	29	31	40	50	60.5	35	22.2	0.14
			•			50	4.2	11.4	14.0	16.1	19.7	23	28	30	36	31	40	49	63.5	33	25.4	0.20
			•			60	4.6	13.7	16.8	19.3	24	27	34	36	43	32	40	49	72	33	25.4	0.23
40°		Ì	•			70	5.0	16.0	19.5	23	28	32	39	42	50	32	40	49	75.5	29	25.4	0.26
			•			80	5.3	18.2	22	26	32	36	45	48	58	32	40	48	77	26	25.4	0.26
			•			90	5.6	21	25	29	36	41	50	54	65	34	40	44	77	28	25.4	0.23
			•			100	5.9	23	28	32	39	46	56	60	72	35	40	44	86.5	28	25.4	0.26
	•					04	1.2	0.91	1.1	1.3	1.6	1.8	2.2	2.4	2.9	20	35	41	23	40	11.1	0.01
		•				10	1.9	2.3	2.8	3.2	3.9	4.6	5.6	6.0	7.2	18	35	39	36.5	36	15.9	0.06
		•	•			20	2.7	4.6	5.6	6.4	7.9	9.1	11.2	12.1	14.4	24	35	40	42	30	19.1	0.06
			•			25	3.0	5.7	7.0	8.1	9.9	11.4	14.0	15.1	18.0	24	35	39	49	28	19.1	0.09
			•			30	3.3	6.8	8.4	9.7	11.8	13.7	16.8	18.1	22	26	35	41	52.5	28	19.1	0.09
35°			•			40	3.8	9.1	11.2	12.9	15.8	18.2	22	24	29	28	35	38	58	26	22.2	0.11
33			•			50	4.2	11.4	14.0	16.1	19.7	23	28	30	36	31	35	38	63.5	23	22.2	0.14
				•		60	4.6	13.7	16.8	19.3	24	27	34	36	43	29	35	39	73	27	25.4	0.23
				•		80	5.3	18.2	22	26	32	36	45	48	58	26	35	40	81	24	25.4	0.26
				•		100	5.9	23	28	32	39	46	56	60	72	26	35	40	89	19	25.4	0.26
					•	160	7.5	36	45	52	63	73	89	96	115	26	35	40	114	23	31.8	0.57
					•	200	8.4	46	56	64	79	91	112	121	144	25	35	40	122	22	31.8	0.57
25°		•				40	3.8	9.1	11.2	12.9	15.8	18.2	22	24	29	15	25	34	65	25	19.1	0.11
		•				10	1.9	-	2.8	3.2	3.9	4.6	5.6	6.0	7.2	-	15	23	47.5	22	15.9	0.06
		•	1			20	2.7	-	5.6	6.4	7.9	9.1	11.2	12.1	14.4		15	19	54	19	15.9	0.06
			•			30	3.3	6.8	8.4	9.7	11.8	13.7	16.8	18.1	22	6	15	24	72	25	19.1	0.11
gg.com.com			•			40	3.8	9.1	11.2	12.9	15.8	18.2	22	24	29	8	15	21	92	18	22.2	0.23
15°			•			50	4.2	11.4	14.0	16.1	19.7	23	28	30	36	9	15	20	90.5	15	22.2	0.17
				•		60	4.6	13.7	16.8	19.3	24	27	34	36	43	10	15	19	125	14	25.4	0.34
				•		80	5.3	18.2	22	26	32	36	45	48	58	11	15	18	130	14	25.4	0.34
				•		100	5.9	23	28	32	39	46	56	60	72	11	15	18	137	14	25.4	0.40
					•	200	8.4	46	56	64	79	91	112	121	144	12	15	18	191	14	31.8	0.91



#### **W SERIES - WIDE ANGLE TYPE**









·Spray Angle :  $73^{\circ}$ - $138^{\circ}$ 

·Spray Pattern: Flat spray pattern distributes the liquid as a flat or sheet type spray.
·Drops: Small-tomedium-size,uniform distribution over a wide range of flow rates and pressure.

·Material : BRASS/SS/PP/PVC/PTFE

·Features : Large, unobstructed flow passages minimize clogging. Solid one piece design with deflector plane. Very

high impact flat spray pattern, sharply defined edges and uniform spray distribution.

Applications: Fire prevention, degreasing, air and gas washers, quenching during heat treat process, metal treating, crushed stone gravel washing

	Î	nlet Co	onn(in.	)		Capacity Size	Orifice (mm)					ate Ca L/min	pacity )				Sp	oray Ang (°)	gle
1/8	1/4	3/8	1/2	3/4	1''			0.2bar	0.4bar	0.5bar	0.7bar	1bar	1.5bar	2bar	3bar	4bar	0.5bar	1.5bar	4bar
•						0.25	0.43	-	-	-	.=	0.11	0.14	0.16	0.20	0.23	-	83	117
•						0.50	0.58	-	-	-		0.23	0.28	0.32	0.39	0.46	-	89	122
•						0.72	0.74	-	- 2	) - <del>-</del> -	0.29	0.34	0.42	0.48	0.59	0.68	1.0	106	125
•						1	0.84	-	-	-	0.38	0.46	0.56	0.64	0.79	0.91		103	128
•						1.5	1.0	-		0.48	0.57	0.68	0.84	0.97	1.2	1.4	73	103	125
•	•					2	1.2	-	-	0.64	0.76	0.91	1.1	1.3	1.6	1.8	83	113	129
•	•					2.5	1.3	· ·	0.72	0.81	0.95	1.1	1.4	1.6	2.0	2.3	98	122	133
•	•					3	1.4	-	0.86	0.97	1.1	1.4	1.7	1.9	2.4	2.7	86	112	126
•						4	1.7	-	1.2	1.3	1.5	1.8	2.2	2.6	3.2	3.6	97	123	132
•	•					5	1.9	1.0	1.4	1.6	1.9	2.3	2.8	3.2	3.9	4.6	114	128	142
•	•					7.5	2.3	1.5	2.2	2.4	2.9	3.4	4.2	4.8	5.9	6.8	101	119	134
•	•					10	2.7	2.0	2.9	3.2	3.8	4.6	5.6	6.4	7.9	9.1	115	133	145
•	•					12	2.9	2.4	3.5	3.9	4.6	5.5	6.7	7.7	9.5	10.9	128	139	153
•	•					15	3.3	3.1	4.3	4.8	5.7	6.8	8.4	9.7	11.8	13.7	98	113	123
•	•					18	3.6	3.7	5.2	5.8	6.9	8.2	10.1	11.6	14.2	16.4	106	120	131
•	•					20	3.8	4.1	5.8	6.4	7.6	9.1	11.2	12.9	15.8	18.2	110	122	133
	•					22	3.9	4.5	6.3	7.1	8.4	10.0	12.3	14.2	17.4	20	113	125	136
	•					24	4.1	4.9	6.9	7.7	9.2	10.9	13.4	15.5	19.0	22	115	131	144
	•					27	4.4	5.5	7.8	8.7	10.3	12.3	15.1	17.4	21	25	119	135	148
		•				30	4.6	6.1	8.6	9.7	11.4	13.7	16.8	19.3	24	27	100	110	121
		•				35	5.0	7.1	10.1	11.3	13.3	16.0	19.5	23	28	32	105	118	128
		•	•			40	5.3	8.2	11.5	12.9	15.3	18.2	22	26	32	36	111	126	136
		•				45	5.6	9.2	13.0	14.5	17.2	21	25	29	36	41	115	130	140
			•			50	5.9	10.2	14.4	16.1	19.1	23	28	32	39	46	117	131	140
			•			60	6.5	12.2	17.3	19.3	23	27	34	39	47	55	120	134	142
			•			70	7.0	14.3	20	23	27	32	39	45	55	64	123	137	146
			•			80	7.5	16.3	23	26	31	36	45	52	63	73	127	138	149
				•		90	8.1	18.3	26	29	34	41	50	58	71	82	120	133	140
				•		100	8.5	20	29	32	38	46	56	64	79	91	123	136	145
				•		110	8.9	22	32	35	42	50	61	71	87	100	125	138	148
				•		120	9.3	24	35	39	46	55	57	77	95	109	129	143	150
				•		140	10.0	29	40	45	53	64	78	90	111	128	118	127	135
						160	10.7	33	46	52	61	73	89	103	126	146	121	130	137
				•		180	11.4	37	52	58	69	82	101	116	142	164	124	133	139
				•		210	12.3	43	61	58	80	96	117	135	166	191	128	139	145
					•	300	14.8	61	86	97	114	137	168	193	237	274	110	128	135
					•	450	18.0	92	130	145	172	205	251	290	355	410	118	132	138



#### **S SERIES**







·Spray Angle : 60°-180°

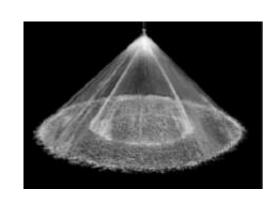
·Spray Pattern: Solid (hollow) conical spray, spray area into a circle (ring).

·Drops: Small-to medium size, uniform distribution over a wide range of flow rates and pressure.

·Material: BRASS/SS/PP/PVC/PTFE/SIS

·Features : The interior is designed for large flow channels to minimize liquid blockage. The spiral nozzle produces a solid (hollow) conical spray with relatively coarse droplets.

Applications: Water aerating. Fire prevention. Spray cooling. Dust cooling. Metal treating. Gas cooling & scrubbing.



Inlet		Spray	/Angle(0.	.7bar)		Capacity	Orifice		Flow Rat	te Capacit	y(L/min)	
Conn (in.)	60°	90°	120°	150°	180°	Size	(mm)	0.7bar	1.5bar	3bar	7bar	25bar
	•	•	•			07	2.4	2.6	3.9	5.5	8.4	16
1/4	•	•	•	•	•	13	3.2	4.9	7.3	10.3	15.7	30
	•	•	•	•	•	20	4.0	7.6	11.2	15.8	24	46
	•					07	2.4	2.6	3.9	5.5	8.4	16
	•					13	3.2	4.9	7.3	10.3	15.7	30
	•					20	4.0	7.6	11.2	15.8	24	46
3/8	•	•	•	•	•	30	4.8	11.4	16.7	24	36	68
	•	•	•	•	•	40	5.6	15.1	22	32	48	91
	•	•	•	•	•	53	6.4	20	30	42	64	121
	•	•	•	•	•	82	7.9	31	46	65	99	187
1/2	•	•	•	•	•	120	9.5	45	67	95	145	270
1/2	•	•	•	•	•	164	11.1	62	92	129	198	370
3/4	•	•	•	•	•	210	12.7	80	117	166	255	480
1	•	•	•	•	•	340	15.9	130	190	270	410	775
1	•	•	•	•	•	470	19.1	179	260	370	565	1070
	•	•	•	•	•	640	22.2	245	355	505	770	1460
1-1/2	•	•	•	•	•	820	25.4	310	455	645	990	1870
	•	•	•	•	•	960	28.6	365	535	755	1160	2190
2	•	•	•	•	•	1400	34.9	535	780	1105	1690	3190
2	•	•	•	•	•	1780	38.1	680	995	1405	2150	4060
2	•	•	•			2560	44.5	980	1430	2020	3090	5830
3	•	•	•			3360	50.8	1280	1880	2650	4050	7660
4	•	•	•			5250	63.5	2000	2930	4140	6330	11960

<sup>\*\*</sup> For higher pressure, brass and transition 316 stainless steel nozzles are used



#### **L SERIES**

L



Removable cap(M)

Ê

LL

Removable cap(F)

LD



Detachable Wallinstall(M)

LLD



Detachable Wall install(F)

LLM



Removable cap with fillter

·Spray Angle : 60°-180°

·Spray Pattern : Solid (hollow) conical spray, spray area into a circle (ring). ·Drops: Very small, forming a mist spray effect. Wide range of pressure and flow.

·Material: BRASS/SS

·Features : Most models are equipped with built-in filters.

Wall-mounted (LD/LLD) fine atomizer nozzles can be used on exterior walls, containers or pipes.

Without compressed air, only hydraulic pressure can be used to form a very fine conical atomizing spray.

Applications: Water aerating. Fire prevention. Spray cooling. Dust cooling. Metal treating. Gas cooling & scrubbing.



#### · Standard Angle

At the stated pressure in bar.

Inlet Conn (in.)		No	ozzle Ty	/pe		Capacity Size	Orifice (mm)	Core number			F	12	ate Ca L/min	776	у			Sp	oray An (°)	gle
(111.)	L	LL	LD	LLD	LLM				2bar	3bar	4bar	7bar	15bar	20bar	35bar	45bar	80bar	3bar	6bar	20bar
	•	•	•	•	•	1	0.51	210	-	3.9	4.6	6.0	8.8	10.2	13.5	15.3	20	45	62	72
	•	•	•	•	•	1.5	0.51	216	4.8	5.9	6.8	9.0	13.2	15.3	20	23	31	65	70	72
	•	•	•	•	•	2	0.71	216	6.4	7.9	9.1	12.1	17.7	20	27	31	41	70	75	77
	•	•	•	•	•	3	0.71	220	9.7	11.8	13.7	18.1	26	31	40	46	61	65	70	73
	•	•	•	•	•	4	1.1	220	12.9	15.8	18.2	24	35	41	54	61	82	72	81	84
	•	•	•	•	•	6	1.1	225	19.3	24	27	36	53	61	81	92	122	73	79	81
	•	•	•	•	•	8	1.5	225	26	32	36	48	71	82	108	122	163	85	89	91
	•	•	•	•	•	10	1.6	420	32	39	46	60	88	102	135	204	204	82	84	86
	•	•	•	•	•	12	1.9	420	39	47	55	72	106	122	162	183	245	78	82	85
1/4	•	•	•	•	•	14	1.9	421	45	55	64	84	124	143	189	214	285	85	88	90
						16	2.2	421	52	63	73	96	141	163	216	245	326	83	86	88
	•	•	•	•		18	1.9	422	58	71	82	109	159	183	243	275	367	81	84	86
	•				•	20	2.1	422	64	79	91	121	177	204	270	306	408	75	78	80
	•		•	•	•	22	1.9	625	71	87	100	133	194	224	297	336	449	70	72	75
	•	•	•	•	•	26	2.2	625	84	103	119	157	230	265	361	398	530	73	74	77

#### · Wide Angle

Inlet Conn	Nozz	le Type	Capacity	Orifice	Core	Flow	Rate Ca	pacity(L/	min)	Spray A	Angle(°)
(in.)	L	LL	Size	(mm)	number	1.5bar	2bar	3bar	6bar	3bar	6bar
	•	•	2W	0.99	210	5.6	6.4	7.9	11.2	5.	165
1/4	•	•	3W	0.99	216	8.4	9.7	11.8	16.8	-	157
1/4	•	•	4W	1.5	220	11.2	12.9	15.8	22	156	155
	•	•	8W	1.5	225	22	26	32	45	152	153



#### **P SERIES**



**PJ TYPE** 



Integrated Type

·Spray Angle: 90°

·Spray Pattern: Hollow conical spray, spray area into a ring.

·Drops: Fine insize and evenly distributed.

·Material: BRASS/SS

·Features: High energy efficiency, integrated construction, no vortex and parts construction;

Direct pressure nozzle, pressure impact needle target to produce atomization effect;

In some conditions, it can replace the air atomizing nozzle and reduce the cost.

cooling & scrubbing.

Applications: Water cooling. Spray cooling. Dust control. Product degreasing. Chemical treatment. Metal treating. Gas

• PJ Type

At the stated pressure in bar.

Inlet Conn	Capacity					Capacity nin)				Orifice	Coverage Area	Rated Spray
(in.)	Size	2bar	3bar	5bar	10bar	20bar	30bar	50bar	70bar	(mm)	Diameter (mm)	Altitude (mm)
	1#	-	¥	0.031	0.043	0.061	0.075	0.097	0.114	0.152	203	103
	2#	-	-	0.058	0.082	0.116	0.142	0.183	0.217	0.203	254	127
1/8	3#	-	0.067	0.087	0.123	0.173	0.212	0.274	0.324	0.2554	254	127
	4#	5	0.091	0.117	0.166	0.234	0.287	0.371	0.439	0.305	254	127
	5#	0.119	0.146	0.189	0.267	0.377	0.462	0.596	0.705	0.381	254	127



#### **FD SERIES**



#### **ANTI DRIP TYPE**

·Spray Angle : About 50°

·Spray Pattern : Hhollow conical spray, spray area into a ring. ·Drops: Very small (about50µm), forming a mist spray effect.

Wide range of applicable pressures.

·Material : BRASS/SS

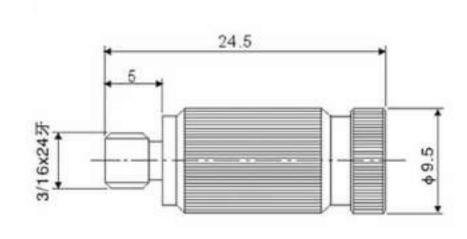
·Features : Fine, small size, relatively low cost;

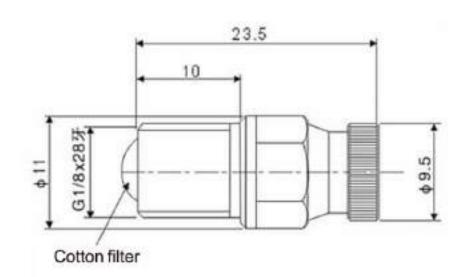
It can be used normally under the water pressure of 20kg-70kg.

Brass body with stainless steel nozzle core, flow guide, and anti-drip device.

Applications: Artificial fog. Air humidification. Wetting and rust removal. Chemical spraying. Chemical treatment. Tablet coating. Sterilization and disinfection.

FDN	ozzle				Flow Ra	te Capacity	(L/min)			
Туре	Aperture	3bar	4bar	7bar	10bar	15bar	18bar	35bar	50bar	70bar
FD1	0.1	0.003	0.0033	0.0044	0.0053	0.0065	0.0071	0.01	0.02	0.03
FD2	0.15	0.008	0.01	0.012	0.015	0.018	0.02	0.03	0.04	0.05
FD3	0.2	0.022	0.0258	0.034	0.04	0.05	0.06	0.07	0.08	0.09
FD4	0.3	0.032	0.038	0.05	0.06	0.07	0.08	0.09	0.1	0.11
FD5	0.4	0.07	0.09	0.12	0.15	0.18	0.2	0.22	0.25	0.28
FD6	0.5	0.08	0.1	0.13	0.16	0.19	0.21	0.23	0.26	0.3
FD7	0.6	0.09	0.12	0.14	0.17	0.2	0.23	0.27	0.32	0.38
Fd8	0.8	0.11	0.13	0.15	0.18	0.22	0.26	0.3	0.36	0.48





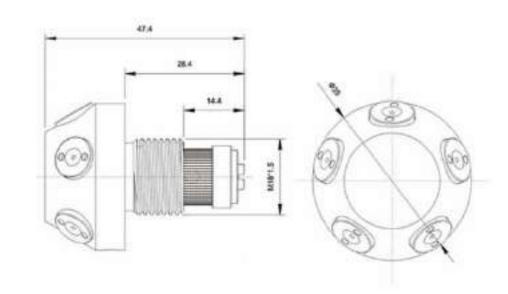


#### HIGH PRESSURE TYPE

#### **FIRE NOZZLE**







·Spray Angle : 60-120° ·Spray Pattern : Cone spray.

·Drops: Fine insize and evenly distributed.

·Material : BRASS/SS

·Features : Fixed, porous jet, covering a wide area;

Low water consumption, large surface area, can dissolve, adsorption part of the smoke and gas, clean the fire environment.

Applications: Dust control. Fire extinguishing. Smoke washing and cooling.

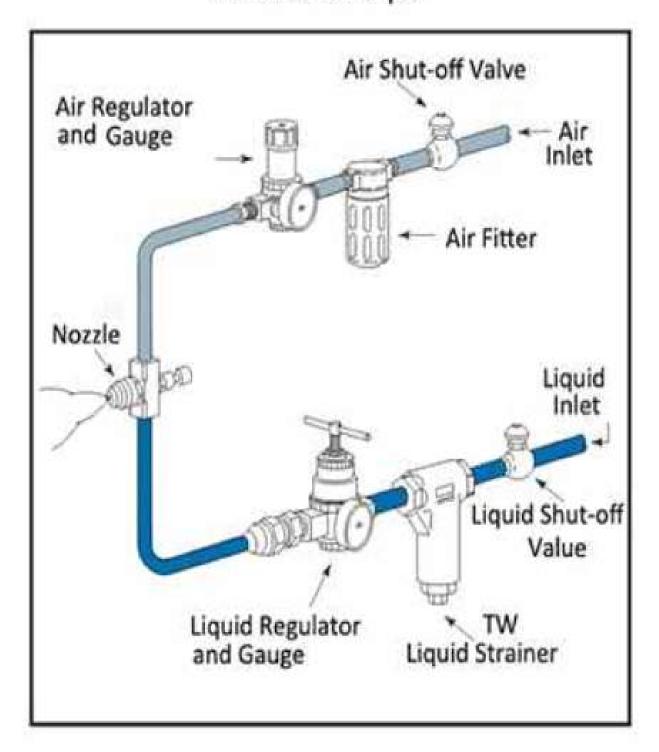
Nozzle Type	Flow Coefficient(K)	Working Pressure(Mpa)	Working Flow(L/min)
XSWT0.3/10	0.3	10.0-14.0	3.0-3.5
XSWT0.5/10	0.5	10.0-14.0	5.0-5.9
XSWT0.7/10	0.7	10.0-14.0	7.0-8.3
XSWT0.9/10	0.9	10.0-14.0	9.0-10.6
XSWT1.0/10	1.0	10.0-14.0	10.0-11.8
XSWT1.2/10	1.2	10.0-14.0	12.0-14.2
XSWT1.5/10	1.5	10.0-14.0	15.0-17.7
XSWT1.7/10	1.7	10.0-14.0	17.0-20.1
XSWT2.0/10	2.0	10.0-14.0	20.0-23.7
XSWT2.5/10	2.5	5.0-10.0	12.5-29.6
XSWT3.0/10	3.0	5.0-10.0	15.0-35.5
XSWT3.5/10	3.5	5.0-10.0	17.5-41.4
XSWT4.0/10	4.0	3.5-10.0	14.0-47.3
XSWT4.5/10	4.5	3.5-10.0	15.8-53.2
XSWT5.0/10	5.0	3.5-10.0	17.5-59.2
XSWT5.5/10	5.5	3.5-10.0	19.3-65.1



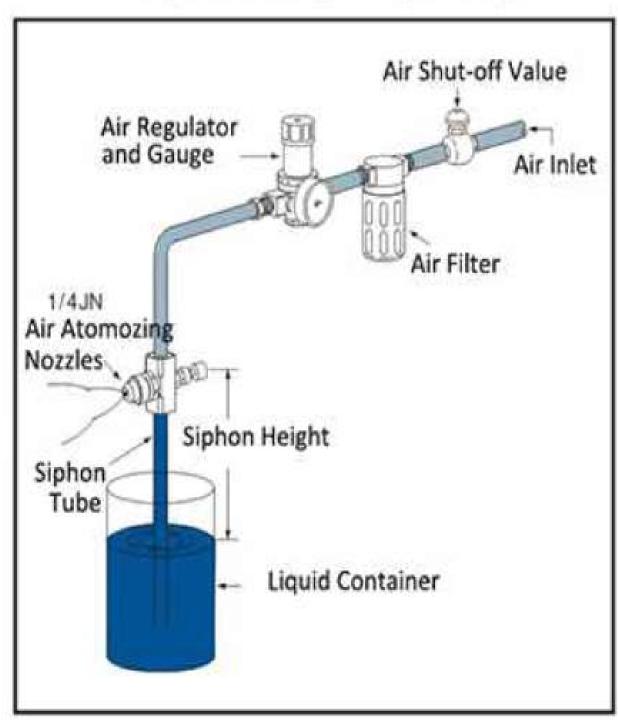
#### **BASIC INFORMATION**

#### **SET-UPS**

#### Pressure Set-ups



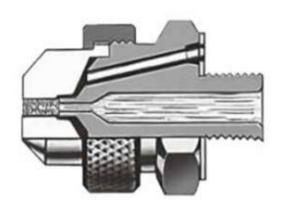
#### Siphon or Gravity-Fed Liquid Set-ups



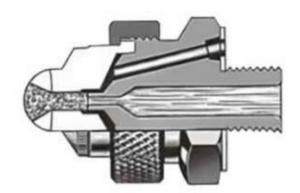
#### **INTERNAL MIX**

- Liquid and air mix internally
- Fluid flow and air flow are not independent and a change in airflow will affect the liquid flow
- Pressure units are mixed internally to provide the following spray patterns:

Round Spray (SUA Series)
Wide Angle Round Spray (SUB series)
Flat Spray (SUC Series)



Internal mix with pressure set-ups: round spray patterns

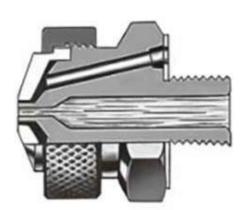


Internal mix with pressure set-ups: flat spray patterns

#### **EXTERNAL MIX**

- 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
- External mix can use pressure set-ups provide the following spray patterns:

Round Spray (SUA-Z) Flat Spray (SUC-Z)



Enternal mix with pressure set-ups: round spray patterns



Enternal mix with pressure set-ups: flat spray patterns



#### STANDARD AIR ATOMIZATION











#### **STANDARD TYPE**

 The Standard SU Series Nozzles Include An Air Cap Body Adjusting Needle (Adjustable Only) And Various Components.



1/8" & 1/4"NPT or BSPT



 $1/8"\,\&\,1/4" \text{NPT}$  or BSPT with Shut-off needle

#### **NORMAL TYPE**



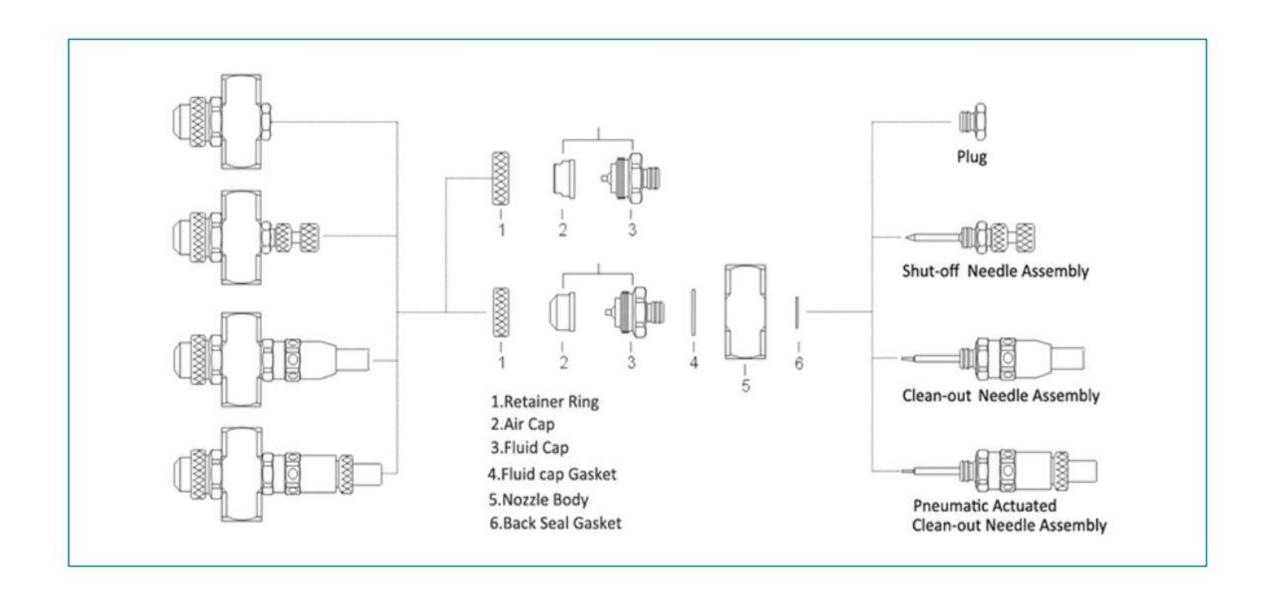
1/8" & 1/4" NPT or BSPT with clean needle





1/8" & 1/4"NPT or BSPT with clean and Shut-off needle

## **INSTALLATION**

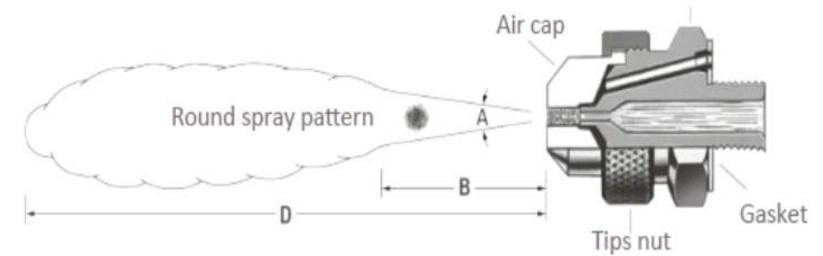


#### **SU SERIES**

#### **ROUND SPRAY - INTERNAL MIX**



Round spray air caps produce a narrow, full cone round spray pattern



For round spray pattern, angle "A" is maintained throughout distance "B". Beyond "B", the spray becomes turbulent and will project out to distance "D".

·Spray Angle: 15°-30°

·Spray Pattern: Hollow cone- shaped spray pattern with irregularly round impact area. ·Drops: Small- to much small-size,uniform distribution.

·Features : The nozzle body has air inlet and liquid inlet at opposite ends.

Wide selection, includes adjustable nozzle, fixed nozzle and self-cleaning nozzle.

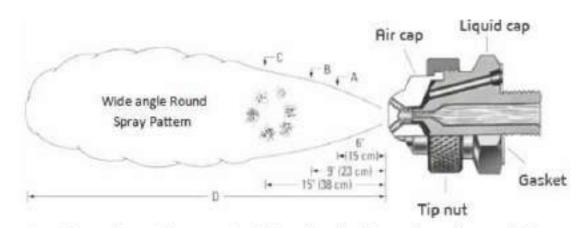
	Spray				Lic	quid Ca	pacity (	(liters p	er hour	)* and	Air Capa	acity (lit	ters per	minute	e)*					Spray		
Spray Set-up	Set-up Consists of	Orifice							Liqu	id Pres	sure								D	imension	ıs	
No.	Fluid and Air Cap	(mm)	- 10	0.7bai			1.5baı			2bar			3bar			4bar		Air	Liquid	Spray	В	D
	Combination		Air Press.	L/h	Air L/min	Air Press.	L/h	Air L/mi	Air Press.	L/h	Air L/min	Air Press.	L/h	Air L/min	Air Press	L/h	Air L/min	*	*	Angle A(°)	(cm)	(m)
	Eluid Con		0.7	2.5	15.6 19	1.1	5.0	11.9	1.4	6.4 5.5	13.9	2.7	5.7	23	3.5	7.8	28	0.9	0.7	13	30	2.7
	Fluid Cap 2050		1.0	1.4	22	1.7	4.1	18.7	2.0	4.5	19.8	3.0	5.2	27	3.9	6.4	33	1.7	1.5	13	33	3.0
SU11	+	0.5			_	1.8	3.4	20	2.2	3.4	24	3.1	4.7	29	4.2	5.5	38	2.5	2.0	13	36	3.4
0011	Air Cap	0.5	_	_	_	2.0	3.0	23	2.4	3.0	26	3.2	4.3	31	4.5	4.5	43	3.1	3.0	14	39	3.8
	67147		_	3-1	-	2.1	2.6	25	2.5	2.5	28	3.4	3.9	33	4.6	4.1	45	4.5	4.0	15	44	4.4
	15-17-16-16-16-16-16-16-16-16-16-16-16-16-16-		-	( <del></del> )	-	2.2	2.0	27	2.7	2.3	31	3.7	3.0	38	4.8	3.7	47					
			0.7	2.5	18.7	1.4	5.7	27	1.7	6.7	29	2.2	9.2	34	2.8	11.9	39					
	Fluid Cap		0.9	2.0	22	1.5	5.2	29	1.8	6.4	31	2.5	8.2	39	3.1	11.0	43	0.9	0.7	12	43	3.7
	2050		1.0	1.6	26	1.7	4.8	32	2.0	5.9	34	2.8	7.2	44	3.4	10.1	47	1.5	1.5	13	46	4.0
SU12A	+	0.5			_	1.8	4.3	35	2.1	5.2	37	3.0	6.7	47	3.7	9.2	52	2.4	2.0	13	48	4.3
	Air Cap					2.0	3.9	37	2.2	4.8	40	3.1	6.3	49	3.9	8.4	58	3.0	3.0	13	51	4.6
	73160			_	_	2.1	3.4	40	2.4	4.3	43	3.2	5.9	52	4.2	7.6	62	3.9	4.0	15	56	5.2
			-	4.0		1.7	- 0.4	21	2.7	3.6	48	3.4	5.5	55	4.5	6.8	68					
	Fluid Cap		0.9	4.8	21	1.7	8.4 7.5	31 35	2.0	9.8	33	2.7	16.5 15.4	37 38	3.4	20 18.4	43 47	1.5	0.7	12	48	4.0
	2850		1.4	3.4	33	2.0	7.0	37	2.4	8.2	42	3.1	13.6	43	3.9	16.8	50	2.5	1.5	13	51	4.3
SU12	+	0.7	1.5	3.1	35	2.2	5.7	44	2.7	6.8	48	3.4	11.8	49	4.2	15.2	55	3.0	2.0	13	53	4.6
0012	Air Cap	0.7	1.7	3.0	39	2.5	4.8	49	3.0	5.9	55	3.7	10.4	55	4.5	13.8	60	3.4	3.0	14	56	4.9
	67149		1.8	2.9	41	2.8	4.1	54	3.2	5.0	59	3.9	9.1	61	4.8	12.4	65	4.2	4.0	15	60	5.3
			2.0	2.8	44	3.1	3.6	59	3.5	4.1	65	4.2	7.9	65	4.9	11.8	68					
			1.1	13	76	2.2	17.8	116	2.8	20	136	3.4	32	149	4.6	37	193					
	Fluid Cap		1.4	8.9	91	2.5	13.1	130	3.1	16.3	149	3.9	25	170	5.3	29	220	1.7	0.7	18	66	4.9
	40100		1.5	7.2	98	2.8	9.5	143	3.4	11.9	163	4.6	15.9	205	5.6	25	235	2.8	1.5	20	76	6.1
SU22B	+	1.0	1.7	5.8	105	3.1	7.0	157	3.9	7.0	187	5.3	9.1	240	6.0	21	250	3.9	2.0	20	81	6.7
	Air Cap		1.8	4.7	112	3.4	4.9	171	4.2	4.7	205	5.6	6.8	255	6.3	17.4	270	5.3	3.0	21	91	7.9
	1401110		2.0	3.6 2.7	119 127	3.5	4.2	178	4.6	3.0	220	6.0	5.0 3.6	275 290	6.7 7.0	14	290 305	6.0	4.0	21	97	9.1
			0.9	31	57	1.4	61	69	2.1	53	96	2.7	80	103	3.8	88	135		7			
	Fluid Cap		1.0	25	66	1.5	54	76	2.4	41	112	3.0	69	117	4.2	73	156	1.0	0.7	17	61	4.9
	60100		1.1	18.5	75	1.7	48	85	2.7	31	127	3.2	59	130	4.6	61	176	1.8	1.5	18	69	5.8
SU22	+	1 5	1.3	12.9	85	1.8	41	93	2.8	26	136	3.5	49	146	4.9	48	196	2.8	2.0	20	76	6.7
	Air Cap	1.5	_	1-1	_	2.0	35	102	3.0	22	144	3.7	44	154	5.3	39	215	3.5	3.0	20	79	7.0
	1401110		<del></del> 8	, i <del></del> ,	-	2.1	30	110	-	15-15	-	3.8	37	161	5.6	31	240	4.9	4.0	21	91	8.5
					-	2.2	25	119	1-4	- S	8-3	3.9	35	170	6.0	23	260					
	V 1/4		1.0	44	86	1.4	125	79	2.0	123	108	2.2	199	88	3.0	250	99					
	Fluid Cap		1.1	32	102	1.5	106	91	2.1	108	119	2.5	174	110	3.2	225	120	1.0	0.7	19	89	6.1
61146	100150			_		1.7	87	105	2.2	95	130	2.8	146	133	3.5	205	141	1.7	1.5	20	99	7.0
SU42	Air Can	2.5	_	_	_	1.8	70	118	2.4	79	143	3.1	121	154	3.8	182	163	2.4	2.0	21	104	7.6
	Air Cap		_	_		2.0	55	130	2.5	64	155	3.2	108	166	4.1	159	184	3.1	3.0	21	107	7.9
	1891125		_	_	_	_	_	_	2.7	52	166	3.4	95	176	4.6	121	225	3.8	4.0	22	117	9.1
			_		-	-	-	-	2.8	42	178	3.5	84	187	4.9	93	255		1/			

#### **SU SERIES**



Wide angle round spray air caps produce wide angle round spray

#### **WIDE ANGLE ROUND SPRAY - INTERNAL MIX**



For wide angle round spray, angle "A" is maintained throughout distance "B".

·Spray Angle: 70°

·Spray Pattern :Full/hollow cone- shaped spray pattern with irregularly ring-shaped/round impact area.

·Drops : Small- to much small-size,uniform distribution .

·Features: The nozzle body has air inlet and liquid inlet at opposite ends. Wide selection, includes adjustable nozzle, fixed nozzle and self-cleaning nozzle.

#### · Wide Angle Round Spray

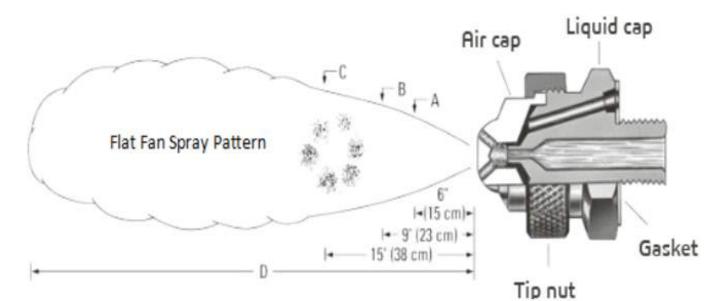
	Spray		1	Liqui	d Cap	acity	(liter	s per l	nour)	* and	Air Ca	apaci	ty (lite	ers pe	rmir	ute)*							
Spray	Set-up Consists of	Orifice							Liqui	d Pre	ssure										ray nsions	i.	
Set-up No.	Fluid and Air Cap	(mm)	(	.7ba	r	1	L.5ba	r		2bar			3bar			4bar							
	Combination		Air Press	L/h	Air L/min	Air Press	L/h	Air L/min	Air Press	L/h	Air L/min	Air Press	L/h	Air L/min	Air Press	L/h	Air L/min	Air*	Liquid*	A(cm)	B(cm)	C(cm)	D(m)
-3	EL . 1.0		0.6	5.3	10.2	1.1	8.1	13.3	1.5	8.1	16.4	2.4	8.9	22	3.1	10.5	24	0.70	0.70	14	18	23	1.5
	Fluid Cap 2050		0.7	4.3	12.2	1.3	7	15	1.8	6.6	21	2.7	8.1	26	3.4	9.7	28	1.4	1.5	15	19	24	1.8
SU16	+	0.5	0.85	3	14.2	1.4	6.4	17	2.1	4.9	25	3	6.4	30	3.9	7.8	36	1.8	2.0	16	20	25	2.1
3010	AirCap	0.5	1	1.7	17	1.5	5.5	19	2.4	3.2	29	3.2	4.9	34	4.2	6.1	42	3.0	3.0	16	20	26	2.7
	67-6-20- 70°		1872	157	10	1.7	4.5	22	97.U	10	n (	3.4	4.2	37	4.6	4.4	47	3.9	4.0	19	23	30	40
	10		(4)	•		1.8	3.5	24	(-)	15		3.5	3.4	40	4.9	2.8	54	3.9	4.0	19	23	30	40
			0.85	7	50	1.7	13.2	68	2	18.5	68	2.8	25	84	3.7	31	96						
	Fluid Cap		1	2.1	62	1.8	9.8	79	2.1	15.1	76	3	22	92	3.8	28	105	0.85	0.70	18	24	31	1.8
	40100			140	-	-	-		2.2	11.7	85	3.1	18.5	101	3.9	26	113	1.7	1.5	19	25	33	2.4
SU26B	+ Air Cap	1.0		*			7.	-	**	-	-	3.2	15.1	109	4.1	23	122	2.1	2.0	19	25	33	3.2
	140-6-37-	1.0	1000	150		-	7	-	-	-		3.4	12.1	119	4.2	20	130	3.2	3.0	20	26	34	4.1
	70°		1/5:	153	-5	-	7.	-	27/		7.	3.5	9.1	130	4.6	13.6	153	4.1	4.0	21	28	37	5.9
				•		-	-					3.7	6.1	142	4.9	6.8	183						
			0.7	24	32	1.4	43	37	2.1	33	66	2.8	52	65	3.7	63	68						
	Fluid Cap		0.85	13.6	44	1.5	35	49	2.2	26	78	3	46	76	3.8	58	79	0.85	0.70	19	25	36	2.1
	60100		1	7.6	57	1.7	28	61	2.4	18.9	89	3.1	39	87	3.9	52	101	1.5	1.5	20	27	37	3.2
<b>SU26</b>	+ Air Cap		-	380		1.8	21	71	2.5	11.7	100	3.2	33	99	4.2	41	111	2.4	2.0	20	27	37	4.1
	140-6-37-	1.5	1000	170		-	70	-	-		-	3.4	26	110	4.6	27	138	3.2	3.0	20	28	38	5.0
	70°		0	9		-	- 8		(4)	-		3.5	19.5	122	4.9	15.9	166	3.9	4.0	20	28	39	6.8
			7725	121	0		27	628	20	0	2	3.7	13.2	133	्	0	120						
			1.3	36	85	2.1	57	116	3.1	53	156	4.2	64	197	5.6	74	245						
	Fluid Cap		1.5	29	102	2.4	51	130	3.2	50	163	4.9	51	230	6	66	260	2.0	0.70	20	25	33	5.5
	60100		1.8	23	117	2.7	45	143	3.4	47	170	5.6	40	265	6.3	62	280	3.0	1.5	20	27	34	6.4
SU29	+ AirCan		2	19.7	125	3	39	157	3.5	45	177	6	34	285	6.7	56	295	3.9	2.0	22	28	37	8.2
	Air Cap 140-6-52-	1.5	2.1	16.7	133	3.2	33	170	3.9	38	194	6.3	28	300	7	51	315	6.0	3.0	23	29	38	9.1
	70°		2.3	14	142	3.5	28	185	4.6	25	230	6.7	22	320		-	-	6.3	4.0	24	32	41	10.4
			2.4	11.4	149	4.2	13.6	220	4.9	18.5	245	7	17.8	335			121						

	Spray			Liqui	d Cap	acity	(liter	s per	hour	* and	Air C	apaci	ty (lit	ers p	er mii	nute)	1						
Spray	Set-up	Orifice							Liqui	id Pre	ssure								Spi	ay Dir	nensi	ons	
Set-up No.	Fluid and Air Cap	(mm)	(	0.7ba	r	1	1.5ba	r		2bar			3bar			4bar							
	Combination		Air Press	L/h	Air L/min	Air Press	L/h	Air L/min	Air Press	L/h	Air L/min	Air Press	L/h	Air L/min	Air Press	L/h	Air L/min	Air*	Liquid	A(cm)	B(cm)	C(cm)	D(m)
			1.1	12.3	40	2.2	16.3	62	2.7	21	69	4.2	19.3	100	5.6	22	130						-
	Fluid Cap		1.3	9.9	45	2.5	12.1	71	3	16.3	78	4.6	14.6	113	6	17.6	142	1.5	0.70	15	19	23	2.7
	40100		1.4	7.9	50	2.8	8.9	79	3.2	12.3	86	4.9	10.8	124	6.3	14	152	3.0	1.5	16	20	24	4.6
SU30	+ Air Cap	1.0	1.5	6.1	54	3	7.6	83	3.4	10.7	91	5.3	8.1	135	6.7	11.4	163	3.4	2.0	16	20	24	5.5
	120-6-35-		1.7	4.9	58	3.1	6.4	87	3.5	9.3	94	5.6	6.2	146	7	9.1	174	5.3	3.0	18	22	25	7.3
	70°		1.8	3.9	62	3.2	5.5	91	3.9	6.4	105	6	4.9	157		17		6.3	4.0	19	24	30	9.4
			2	3.1	67	3.4	4.7	95	4.2	4.7	115	6.3	4	167		9	*						
			1.7	25	156	3	39	230	3.4	50	250	4.6	62	320	6	93	395						
	Fluid Cap		1.8	19.7	167	3.1	33	240	3.5	43	260	4.9	47	345	6.3	77	425	2.0	0.70	24	33	46	5.5
	100150		2	15.1	178	3.2	27	255	3.7	41	275	5.3	36	375	6.7	62	460	3.2	1.5	25	34	47	6.4
SU46	Air Cap	2.5	2.1	11.4	193	3.4	23	265	3.9	27	300	5.6	26	405	7	52	495	3.9	2.0	28	37	51	7.3
3040	189-6-62-	2.3	2.3	7.6	205	3.5	18.5	280	4.1	23	310	6	18.9	435		24	~	5.3	3.0	29	38	53	7.9
	70°		7		-	3.7	14.8	290	4.2	18.9	320	6.3	13.6	460	-	-	7	6.3	4.0	33	42	58	9.8
			51		3.5	25	*	*	4.4	15.9	335	7	-	(*)		2.0	-						

#### **SU SERIES**

Flat spray air caps produce flat fan spray patterns

#### **FLAT SPRAY - INTERNAL MIX**



For flat spray pattern, angle "A" is maintained throughout distance "B".

·Spray Angle : 28°-51°

·Spray Pattern :Flat fan spray pattern with irregularly ellipse impact area.

·Drops : Small- to much small-size,uniform distribution .

·Features : The nozzle body has air inlet and liquid inlet at opposite ends.

Wide selection, includes adjustable nozzle, fixed nozzle and self-cleaning nozzle.

#### · Flat Fan Spray(Pressure)

	Spray			Liquid	d Cap	acity	(liters	perl	hour)	* and	Air Ca	apaci	ty (lit	ers pe	er min	ute)			Cor	ny Dir	monei	one	
Spray	Set-up Consists of	Orifice							Liqui	d Pre	ssure								Spi	ay Dii	nensi	ons	
Set-up No.	Fluid and Air Cap	(mm)		0.7	THE RESERVE OF	207	1.5			2	***		3			4		Air*	Liquid	, A	В	C	D
	Combination		Air Press	L/h	Air L/min	Air Press	L/h	Air L/min	Air Press	L/h	Air L/min	Air Press	L/h	Air L/min	Air Press	L/h	Air L/min	F.1115	*	(cm)	(cm)	(cm)	(m)
	Fluid Cap		0.7	5.5	24	1.3	9.1	31 36	2.2	8.6 7.5	42	2.7	11.2	52 56	3.9	12	69	1.1	0.7	25	36	46	2.6
	2050		1	4.1	31	1.8	6.5	42	2.5	6.2	52	3.2	9.1	62	4.6 5.3	9.7	81 93	2.1	1.5	36	48	66	3.0
SU13A	+	0.5	1.1	3.5	34	2.1	5.4	47	2.8	5.2	57	3.5	8.1	66	6	5.3	104	2.8	2.0	38	53	76	3.2
	Air Cap	11072000	1.3	3	37	2.4	4.3	52	3.1	4.2	63	4.2	5.4	79	6.3	4.3	110	3.5	3.0	47	61	86	3.4
	73328		1.4	2.5	40	2.7	3,3	57	3.2	3.7	65	4.6	4.2	85	6.7	3.3	116	6.0	4.0	56	74	94	4.0
	10020		0.85	8.2	19.8	2.8	2.8	60 27	3.4	3.2 13.5	68 36	4.9 2.7	3.1	91	7	2.4	122	0.00		27(0)			1000
	Fluid Cap		1	6.8	23	1.7	11.9	32	2.4	11.4	42	3	17.1	46	4,6	16.1	69 76	1.1	0.7	36	46	71	2.1
	2850		1.1	5.5	27	2	9.5	37	2.7	9.2	47	3.2	15.1	52	5.3	11.5	83	2.1	1.5	43	61	81	2.4
SU13	+	0.7	1.3	4.1	30	2.1	8.3	40	3	7.1	53	3.5	13.1		5.6	9.3	90	3.0	2.0	51	66	89	2.6
	Air Cap		1.4	2.9	34	2.2	7.1	43	3.2	5	59	4.2	8.1	57 72	6	7.3	97	3.5	3.0	58	76	97	2.7
	73328		-	~	-	2.4	6.1	46	3.4	4	62	4.6	5.9	79	6.3	5.6	104	5.6	4.0	58	76	97	3.2
	10020		-	-	- 20	2.5	5.1	49	3.5	3.3	66	4.9	4	86	6.7	4.3	112		1/21/200		(3500)		100000
	Fluid Cap		111	7.8	25 30	2.1	9.3	41	2.4	11.6	48 51	3.1	15.6	56 59	4.2	17.1	73	1.4	0.7	10	13	17	3.0
	2850		1.3	6.6	32	2.2	8.2	48	2.7	9.4	54	3.4	13.7	62	4.9	12.8	80	2.5	1.5	13	15	20	3.7
SUN13	+	0.7	1.4	5.2	36	2.5	6.1	55	3	7.3	61	3.8	10.8	71	5.3	11	94	3.2	2.0	13	17	22	4.0
	Air Cap		1.7	3.1	44	2.8	4.3	62	3.2	5.5	68	4.2	8.5	82	5.6	9.4	103	3.8	3.0	15	22	28	4.2
	73335		2	2	50	3.1	3	69	3.5	4.1	75	4.9	5.2	98	6.3	7.2	119	5.3	4.0	20	25	33	4.8
	13333		2.2	1.1	56	3.4	2	75	3.8	2.9	81	6	2.3	120	7	6.1	134						
	Fluid Cap		1.3	3.9	30	2.1	7.4	40	3	6.1	52	3.9	9.4	60	5.3	10.2	78	1.5	0.7	25	33	46	1.8
	2850		1.4	2.3	33 35	2.4	5.3	45	3.1	5.3	54 57	4.2	7.2 5.3	73	5.6	8.3	84	2.7	1.5	36	51	69	2.0
SU14	2030	0.7	1.7	1.8	38	2.7	3.7	50	3.4	3.8	59	4.9	3.8	80	6.3	6.6 5.1	89 98	3.2	2.0	58	74	91	2.0
3014	AirCan		1.8	1.3	41	2.8	3.1	52	3.5	3.2	62	7.3	3.0	- 00	0.3	3.4	30	4.2	3.0	61	74	94	2.1
	Air Cap		2	0.95	44	3	2.6	55	3.9	1.8	68	-	-	-	-	100	- 2	5.6	4.0	64	76	97	2.3
	73320		-		+	3.1	2.1	57			1.0			T.	-	141		3.0	4.0	04	10	31	Aug
	Fluid Cap		1	17	23	2	24	44	2.4	28	51	3.4	38	72	3.9	65	75	1.1	0.7	10	13	15	2.4
	60100		1.1	11	27	2.1	18.9	50	2.5	23	59	3.5	33	80	4.2	53	89	2.1	1.5	10	13	17	3.0
SUN23	00100	1.5	1.3	7.6	33 40	2.2	14.4	56 63	2.7	18.9 15.1	66 74	3.7	28	89 97	4.6	40 30	108	2.8	2.0	13	17	22	3.4
301423	Air Con		1.4	3.4	40	2.5	7.2	71	3	11.7	79	3.9	19.7	105	5,3	21	149	3.7	3.0	15	20	28	3.6
	Air Cap		-	-	-	-	-		-	-	-	4.2	13.1	120	5.6	13.8	173	4.9	4.0	20	25	35	4.0
	125340		-	-		-	-	-		-	-	4.6	7.2	138	6.3	3.2	225	4.9	4.0	20	25	35	4.0
	Fluid Cap		1.1	11.2	54	2.1	18	79	2.7	19.6	93	3.5	27	112	4.6	33	137	1.4	0.7	15	18	20	3.0
	40100		1.3	8.5	60	2.2	15.8	84	2.8	17.3	98	3.7	25	116	4.9	28	149	2.4	1.5	23	28	33	3.2
SU23B	+	1.0	1.4	6.5	65 71	2.4	13.6	89 95	3.1	15.2 13.2	103	3.8	23	121 126	5,3	24	161	3.0	2.0	25	33	46	3.4
	Air Cap		1.7	3.8	77	2,3	11.0	33	3.2	11.4	114	4.1	18.9	132	5,6	19.7	174	3.7	3.0	30	38	46	3.5
	125328		-	3.0		-			-	AACT.	-	4.2	17	137	6.3	12.4	200	5.3	4.0	33	41	48	4.0
	EL 14 C		0.85	27	33	1.8	38	55	2.4	39	67	3.2	58	76	4.6	59	106	12/12/1					
	Fluid Cap		1	20	38	2.1	28	66	2.7	30	77	3.5	47	87	5.3	40	132	1.1	0.7	18	23	30	3.4
	60100	0.20-220	1.1	15.9	45	2.2	24	71	3	24	87	3.8	38	97	5.6	32	145	2.4	1.5	23	30	41	3.5
SU23	+	1.5	1.3	12.5	48	2.4	21	76	3.2	17.8	98	3.9	34	103	6	26	158	3.2	2.0	25	33	43	3.7
	Air Cap		1.4	10.2 7.6	56 62	2.5	17.8 15.1	82 87	3.4	15.1 12.9	103	4.2	27	113 126	6.3	20	172	3.9	3.0	30	38	48	3.8
	125328		1.3	7.0	- 62	2.1	13.1	81	3.7	10.6	114	4.9	14.8	140	6.7	15.9	185 198	6.0	4.0	33	41	51	4.4
	m		1	29	90	1.8	56	117	2.1	100	119	3	126	140	4.1	140	181						
	Fluid Cap		1.1	18.9	108	2	40	133	2.2	79	133	3.1	110	151	4.2	125	193	1.0	0.7	18	20	25	3.4
20.00	100150	12020	-	-	-	-/-	-	-	2.4	62	147	3.2	95	163	4.6	89	225	1.8	1.5	25	30	43	3.8
SU43	+	2.5		-		7.0	-	4	2.5	48	162	3.4	78	184	4.9	58	265	2.4	2.0	25	30	46	4.3
	Air Cap				-			-	2.7	36	177	3.5	62	193	5,3	34	305	3.4	3.0	33	41	53	4.6
	189351		-		-	-		-	-	-		3.7	48	210 225	5.6	16.7	340	4.9	4.0	36	43	58	5.2

#### SU SERIES WIDE ANGLE ROUND SPRAY - INTERNAL MIX



360°circular spray air caps produce hollow Cone,360°circular spray pattern

·Spray Angle : 360°

·Spray Pattern :Hollow cone- shaped spray pattern with irregularly ring-shaped impact area.

·Drops: Small- to much small-size, uniform distribution.

·Features : The nozzle body has air inlet and liquid inlet at opposite ends. Wide selection,includes

adjustable nozzle, fixed nozzle and self-cleaning nozzle

	6			L	iquid Ca	apacity	(liters p	er hour	)* and /	Air Capa	city (lite	ers per	minute	)*		
Spray	Spray Set-up							Liqu	id Pres	sure						
Set-up	Consists of Fluid and		0.7bar			1.5bar			2bar			3bar			4bar	
No.	Air Cap Combination	Air Press	L/h	Air L/min	Air Press	L/h	Air L/min	Air Press	L/h	Air L/min	Air Press	L/h	Air L/min	Air Press	L/h	Air L/min
	Fluid Cap	1.4	15.1	69	2.8	19.5	142	3.5	21	185	4.2	48	210	6	45	340
	60150	1.5	10.6	77	3	16.1	153	3.7	17.6	196	4.6	37	240	6.3	37	375
SU340C	+ Air Cap	1.7	7.6	84	3.1	13.2	165	3.8	14.8	210	4.9	28	275	6.7	30	405
	189-6-62-	1.8	5.7	93	3.2	10.6	177	3.9	12.5	220	5.6	15.5	340	7	24	440
	160HC	2	4.2	103	3.4	8.3	188	4.2	8.1	245	6.3	7.8	425	-	) <del>-</del>	-

#### **WIDE ANGLE FLAT SPRAY - INTERNAL MIX**



Deflected flat fan spray air cap produce deflected Flat Fan Spray Pattern

·Spray Angle :75°

·Spray Pattern :Flat fan spray pattern with irregularly ellipse impact area. ·Drops : Small- to much small-size,uniform distribution .

·Features: The nozzle body has air inlet and liquid inlet at opposite ends. Wide selection, includes adjustable nozzle, fixed nozzle and self-cleaning nozzle

	Spray Set-up				Li	iquid Ca	apacity	(liters p	er hour	)* and /	Air Capa	city (lit	ers per	minute	)*		
Spray Set-up	Consists of Fluid and	Orifice (mm)		0.7bar	6		1.5bar		Liqu	iid Pres 2bar	sure		3bar			4bar	
No.	No. Air Cap Combination	()	Air Press	l/h	Air L/min	Air Press	l/h	Air L/min	Air Press	l/h	Air L/min	Air Press	l/h	Air L/min	Air Press	l/h	Air L/min
			0.4	11.0	45	1.1	14.5	79	1.5	15.7	96	2.1	20	114	2.7	26	133
	Fluid Cap 28150 SUC-W + Air Cap 189110-75°		0.6	9.5	54	1.3	13.2	86	1.7	14.3	104	2.2	19.2	121	3.2	22	160
SUC-W		0.7	0.7	7.6	65	1.4	11.8	95	1.8	12.9	112	2.7	15.8	146	3.8	17.7	186
			0.8	5.7	77	1.5	10.0	103	2.1	9.8	130	3.1	11.8	173	4.4	13.1	230
	AirCap		]	-	-	1.7	8.7	113	2.2	8.3	142	3.2	10.3	183	4.6	10.2	250

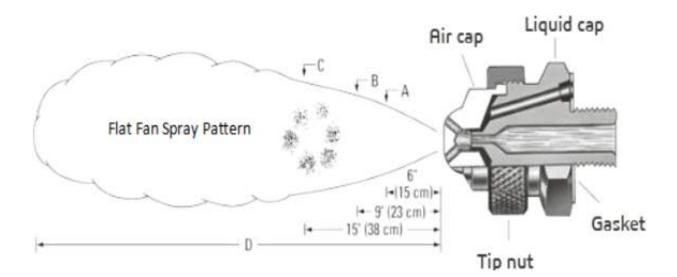


# **SU SERIES**

### **FLAT SPRAY - EXTERNAL MIX**



External mix caps produce a flat spray pattern



For flat spray, angle "A" is maintained throughout distance "B".

Beyond "B", the spray becomes turbulent and will project out to distance "D".

·Spray Angle: 45°-60°

·Spray Pattern :Flat fan spray pattern with irregularly ellipse impact area.

·Drops: Small- to much small-size, uniform distribution.

·Features: The nozzle body has air inlet and liquid inlet at opposite ends. Wide selection,includes adjustable nozzle,fixed nozzle and self-cleaning nozzle.

#### FLAT SPRAY - EXTERNAL MIX

	Liquid Capacity (liters per hour)* and Air Capacity (liters per minute)*  Spray Set-up													Sp									
Spray	Consists of	Orifice							Liqui	d Pre	ssure									Dimer	nsions		
Set-up No.	Fluid and Air Cap Combination	(mm)	(	).2ba	r	(	).3ba	r	(	).7ba	r	1	L.5ba	r		3bar		Air*	Liquid*	Α.	В	, C ,	,D,
			Air Press.	L/h	Air L/min	Air Press.	L/h	Air L/min	AII	Liquid	(cm)	(cm)	(cm)	(m)									
			0.20	2.8	25.2	3.5	3.5	26.3	0.70	5.3	31.2	1.4	7.8	45.3	2.8	11.0	73.6	500E00		200		555	12 000
	Fluid Cap		0.35	2.8	26.3	0.70	3.5	31.2	1.05	5.3	39.6	1.75	7.8	53.8	3.5	11.0	85	0.20 1.05	0.20	9.0 9.0	15.0 15.0	23 23	0.90
	1650		0.70	2.8	31.2	1.05	3.5	39.6	1.4	5.3	45.3	2.1	7.8	59.5	4.2	11.0	102	1.4	0.20	10.0	15.0	23	1.2
SUE15B	+ Air Cap	0.4	1.05	2.8	39.6	1.4	3.5	45.3	1.75	5.3	53.8	2.8	7.8	73.6	4.9	11.0	119	1.4	1.4	11.5	18.0	25	1.5
	67228-		1.4	2.8	45.3	1.75	3.5	53.8	2.1	5.3	59.4	3.5	7.8	85	5.3	11.0	127.5	1.75	0.70	11.5	15.0	24	1.5
	45°		1.75	2.8	53.8	2.1	3.5	59.4	2.8	5.3	73.6	4.2	7.8	102	5.6	11.0	139	2.8 4.9	1.4 2.8	13.0 15.0	18.0 18.0	28 24	1.8 2.4
			2.1	2.8	59.4	2.8	3.5	73.6	3.5	5.3	85	5.6	7.8	139	6.3	11.0	159	1.5	2.0	15.0	10.0	<b>5</b>	۷.,
	Fluid Cap		0.35	2.8	22	0.35	3.5	22	0.40	5.3	25	0.60	7.8	28	0.7	11.0	34	0.40	0.30 0.70	20	28	33 40	1.2 1.8
CUETOD	1650	0.4	0.40	2.8	25	0.40	3.5	25	0.60	5.3	28	0.70	7.8	34	1.1	11.0	45	0.60	1.5 1.5	28	35	46	1.8
SUE18B	Air Cap	0.4	0.50	2.8	27.5	0.60	3.5	28	0.70	5.3	34	1.1	7.8	45	1.8	11.0	62	1.1 1.4	1.5	20 23 28 28 25 25 28 30	28 30 35 33 30 35 38	46 43 41	1.8 2.4 2.7
	62240-60°		0.60	2.8	28	0.70	3.5	34	0.85	5.3	40	1.4	7.8	54	2.5	11.0	79	1.1 1.4	2.0 3.0	28 30	35 38	48 51	2.6 2.7
			0.35	4.5	26.3	0.70	5.5	31.2	1.05	8.3	39.6	1.75	12.2	53.8	3.15	16.6	82						
	Fluid Cap		0.70	4.5	31.2	1.05	5.5	39.6	1.4	8.3	45.3	2.1	12.2	59.4	3.5	16.6	85	0.35	0.20	7.5	14.0	22	1.0
	2050		1.05	4.5	39.6	1.4	5.5	45.3	1.75	8.3	53.8	2.8	12.2	73.6	4.2	16.6	102	1.4 1.75	0.20	9.0 10.0	15.0 16.5	22 23	1.7 1.8
SUE15A	+ Air Can	0.5	1.4	4.5	45.3	1.75	5.5	53.8	2.1	8.3	59.4	3.5	12.2	85	4.9	16.6	119	1.75	1.4	13.0	19.0	29	2.1
	Air Cap 67228-		1.75	4.5	53.8	2.1	5.5	59.4	2.8	8.3	73.6	4.2	12.2	102	5.25	16.6	127	2.1	0.70	13.0	18.0	25	1.8
	45°		2.1	4.5	59.4	2.8	5.5	73.6	3.5	8.3	85	4.9	12.2	119	6.3	16.6	159	3.5	1.4	13.0	22	30	2.4
			2.8	4.5	73.6	3.5	5.5	85	4.2	8.3	102	6.3	12.2	159	6.7	16.6	164	5.3	2.8	15.0	19.0	25	3.0
	Fluid Cap		0.35	4.5	22	0.35	5.5	22	0.60	8.3	28	0.70	12.2	34	1.1	16.6	45	0.70 1.1	0.30 0.70	28	33	40	1.5
	2050		0.60	4.5	28	0.70	5.5	34	0.70	8.3	34	1.4	12.2	54	1.4	16.6	500	0.70	1.5	28 30 38 35 33 38 41	33 38 46 43 40 46	40 48 56 51 58 66	1.5 2.1 1.8 2.4 3.0 2.7 2.9
SUE18A	+ Air Cap	0.5	0.70	4.5	34	1.1	5.5	45	1.4	8.3	54	2.1	12.2	71	2.1	16.6		1.4 2.5	1.5 1.5	35 33	43 40	56 51	3.0
	62240-60°		1.1	4.5	45	1.4	5.5	54	2.1	8.3	71	2.5	12.2	79	2.5	16.6	79	1.8 1.8	1.5 1.5 1.5 2.0 3.0	38 41	46 48	58 66	2.7
			0.70	8.5	31.2	1.05	10.4	39.6	1.4	15.9	45.3	2.5	23	68	3.5	33	85		Contract Contract		C-000000000000000000000000000000000000		
	Fluid Cap		1.05	8.5	39.6	1.4	10.4	45.3	1.75	15.9	53.8	2.8	23	73.6	4.2	33	102	0.70	0.20	13.0	16.5	25	1.2
	2850		1.4	8.5	45.3	1.75	10.4	53.8	2.1	15.9	59.4	3.5	23	85	4.9	33	119	1.75 2.1	0.20	13.0 13.0	16.5 18.0	25 24	1.8
SUE15	+ Air.Com	0.7	1.75	8.5	53.8	2.1	10.4	59.4	2.8	15.9	73.6	4.2	23	102	5.3	33	127	2.5	1.4	14.0	20	32	1.8
	Air Cap 67228-		2.1	8.5	59.4	2.8	10.4	73.6	3.5	15.9	85.0	4.9	23	119	5.6	33	139	2.8	0.70	14.0	19.0	30	2.3
	45°		2.8	8.5	73.6	3.5	10.4	85	4.2	15.9	102	5.6	23	139	6.3	33	159	4.2	1.4	14.0	20	36	3.0
			3.5	8.5	85	4.2	10.4	102	4.9	15.9	119	6.3	23	159	7.0	33	176	5.3	2.8	16.5	20	30	4.0
	Fluid Cap		0.40	8.5	25	0.40	10.4	25	0.40	15.9	25	0.70	23	34	1.4	33	54	0.60	0.30	35 35	48	61	1.8
	2850		0.50	8.5	27.5	0.60	10.4	28	0.60	15.9	28	0.85	23	40	1.8	33	62	0.60 0.70	0.70 1.5	35	48 48	63 63	1.5 1.8
SUE18	+ Air Can	0.7	0.60	8.5	28	0.65	10.4	31	0.70	15.9	34	1.1	23	45	2.1	33	71	1.1	1.5 1.5 1.5	41 43	51 53	63 66 66	1.8 2.1 2.4
	62240-60°	Air Cap C	0.70	8.5	34	0.70	10.4	34	0.85	15.9	40	1.4	23	54	2.5	33	79	1.8 2.1	2.0 3.0	38 41 43 41 41	48 51 53 51 51	69 69	2.7 2.9



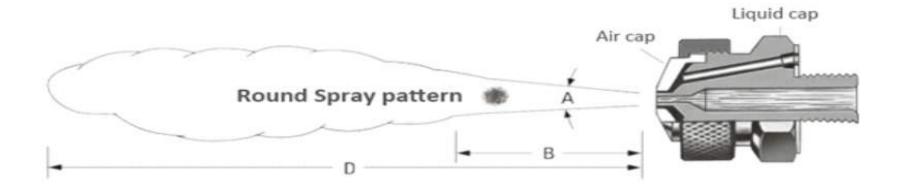
### **SU SERIES**

### **ROUND SPRAY - EXTERNAL MIX**

### **SIPHON SPRAY SET-UPS**



Round spray air caps produce round spray



For round spray pattern, angle ""A"" is maintained throughout distance ""B"".

Beyond ""B"", the spray becomes turbulent and will project out to distance ""D"".

- ·Spray Angle: 18°-22°
- ·Spray Pattern: Hollow cone- shaped spray pattern with irregularly ellipse impact area.
- ·Drops: Small- to much small-size, uniform distribution.
- ·Features :The nozzle body has air inlet and liquid inlet at opposite ends.

Wide selection, includes adjustable nozzle, fixed nozzle and self-cleaning nozzle.

### · Round Spray

At the stated pressure in bar.

Spray	Set-up Fluid and		Atomi	zingAir		Li	quid Ca	pacity	(liters p	er hou	r)*			Spray Din 20cm Sip		
	The second secon	Orifice (mm)	Air	Air	Gravi	ty Head	d (cm)		Sipho	n Heigh	nt (cm)			Spray	В	D
No.	Air Cap Combination		Press.	Capacity L/min	45	30	15	10	20	30	60	90	Air*	Angle A(°)	(cm)	(m)
	Fluid Cap		0.7	11.3	1.5	1.3	1.1	0.87	0.68	0.53	-	_	0.7	18	28	1.8
SU1A	1650	0.4	1.5	17.0	1.8	1.7	1.5	1.3	1.2	1.1	0.62	-	1.5	18	28	1.9
3017	+	0.4	3.0	28	2.1	1.9	1.7	1.5	1.4	1.3	1.1	0.76	3.0	18	30	2.3
	Air Cap 64		4.0	36	2.2	2.0	1.8	1.6	1.5	1.4	1.2	0.87	4.0	18	36	2.6
	Fluid Cap		0.7	13.3	2.4	2.1	1.7	1.5	1.2	0.79	1 <del></del>	_	0.7	18	30	2.1
SU1	2050	0.5	1.5	20	2.8	2.6	2.4	2.1	1.9	1.6	0.91	_	1.5	18	33	2.3
301	+	0.5	3.0	32	3.4	3.1	2.9	2.8	2.6	2.4	1.7	1.1	3.0	18	38	2.6
	Air Cap 64		4.0	41	3.7	3.4	3.3	3.1	2.9	2.7	2.1	1.5	4.0	19	43	3.0
	Fluid Cap		0.7	23	2.5	2.3	2.0	1.6	1.4	1.1	-	_	0.7	18	30	2.4
SU2A	2050	0.5	1.5	36	2.9	2.8	2.5	2.2	2.0	1.7	0.89	_	1.5	18	33	2.7
302A	+	0.5	3.0	58	3.4	3.3	3.2	2.9	2.8	2.5	1.9	1.2	3.0	20	38	3.4
	Air Cap 70		4.0	74	3.7	3.6	3.5	3.4	3.3	3.0	2.5	2.0	4.0	21	43	4.0
	Fluid Cap		0.7	19.3	4.5	4.0	3.4	2.1	1.8	1.4	-		0.7	21	38	3.0
SU2	2850	0.7	1.5	31	5.3	4.9	4.4	3.5	2.9	2.7	1.8	_	1.5	21	41	3.4
302	+	0.7	3.0	50	6.0	5.6	5.0	4.4	4.0	3.4	2.4	1.2	3.0	22	46	4.0
	Air Cap 70		4.0	65	5.7	5.4	5.0	4.2	3.9	3.5	2.8	1.9	4.0	17	51	4.6
	Fluid Cap		1.5	58	22	19.9	16.3	12.3	10.5	8.3	2.8	2-	1.5	18	46	3.7
SU4	60100		3.0	88	25	23	19.5	16.7	14.2	11.5	6.4	2.8	3.0	18	51	4.3
304	+	1.5	4.0	111	26	24	21	18.4	15.7	12.9	7.9	4.5	4.0	19	53	4.9
	Air Cap 120		5.6	147	26	24	22	19.7	17.0	14.6	9.8	6.1	5.6	20	58	5.5
	Fluid Cap		2.0	144	12 <del></del>	70 <del>-00</del>	-	27	22	16.8	11 <del></del>	_	2.0	20	51	6.7
SU5	100150		3.0	190		-	-	30	26	21	-	_	3.0	20	53	7.0
303	+	2.5	4.0	240	_	43	40	31	28	23	11.0	_	4.0	21	58	7.6
	Air Cap 180		5.6	315	44	42	39	31	28	24	16.7	8.3	5.6	22	63	8.2



# SU SERIES FLAT FAN SPRAY - EXTERNAL MIX SIPHON SPRAY SET-UPS



External mix caps produce a flat spray pattern

i tat i t	an Spray(Si	piioi		Liquio	d Can	acity	/litors	norl	hourl	* and	AirC	anaci	tv/lit	ore ne	ar mir	uto)	k				tated p nensi		
Spray	Spray Set-up			Liquid	и Сар	acity	(iiters	-	1000	HSASS	ssure	-	ty (iit	erspe	21 11111	iutej			Spi	ay Dii	Hensi	OHS	
Set-up	Fluid and	Orifice		0.2bai	_	10	0.3ba			0.7ba			L.5ba	_		3bar			500	Α	В	С	0
No.	Air Cap Combination	(mm)	Air	L/h	Air	Air	1.76	Air L/min	Air	L/h	Air	Air	L/h	Air	Air	1.76	Air L/min	Air*	Liquid*		(cm)		(n
			Press.	8		Press.	. 01		0.2 (2)		L/min	0.00			Press.								
			1.0	13.4 13.4	85 102	1.0	16.4 16.4	102 116	1.4	25 25	116	2.5	37 37	178 195	3.2	52 52	212	0.70	0.20	13.0	19.0	25	1
	Fluid Cap		1.4	13.4	116	1.8	16.4	139	2.1	25	156	3.5	37	227	3.9	52	255	1.8	0.20	13.0	19.0	25	2
SUE25B	35100	0.8	1.8	13.4	139	2.1	16.4	156	2.5	25	178	4.2	37	266	4.2	52	275	2.1	0.35	15.0 15.0	19.0 22	28 28	3
001200	Air Cap	0.0	2.1	13.4	156	2.8	16.4	195	2.8	25	195	4.9	37	312	4.9	52	314	2.5	1.4	16.5	23	36	3
	134255-45°		2.8	13.4	195	3.5	16.4	227	3.5	25	227	5.6	37	360	5.6	52	360	4.2	1.4	16.5	23	37	4
			3.5	13.4	227	4.2	16.4	266	4.2	25	266	6.3	37	411	6.3	52	411	4.9	2.8	16.5	22	32	4
	Fluid Cap		0.60	13.4	91	0.7	16.4	102	1.4	25	156	2.1	37	210	3.2	52	285	1.4 2.1	0.30 0.70	33	38 40	48	1
	35100	0.8	0.70	13.4	102	1.1	16.4	130	2.1	25	210	2.8	37	260	4.2	52	360	2.1	0.70	33 33 35 38 38	40 46	48 56 58 66 64	4
UE28B	+	0.0	1.1	13.4	130	1.8	16.4	184	2.5	25	235	3.5	37	310	5.3	52	430	2.1 3.2 4.2	1.5 1.5 1.5	38	46 48 48 51 51	66	4
	Air Cap 122281-60°		1.4	13.4	156	2.1	16.4	210	2.8	25	260	4.2	37	360	5.6	52	455	3.9	2.0 3.0	41 38	51	69 71	1
	122201 00		0.70	17.6	85	1.4	22	116	1.8	33	139	2.8	48	195	3.5	68	232	4.2	3.0	30	31	11	-
			1.0	17.6	102	1.8	22	139	2.1	33	156	3.2	48	212	4.2	68	275	0.70	0.35	15.0	19.0	27	1
	Fluid Cap	1.0	1.4	17.6	116	2.1	22	156	2.5	33	178	3.5	48	227	4.9	68	314	1.8 2.5	0.70	15.0 15.0	19.0	27 33	
SUE25A	40100	1.0	1.8	17.6	139	2.5	22	178	2.8	33	195	4.2	48	266	5.3	68	340	2.8	1.4 1.4	15.0	22 22	36	
	Air Cap		2.1	17.6	156	2.8	22	195	3.5	33	227	4.9	48	312	5.6	68	360	2.8	1.4	16.5	25	37	
	134255-45°		2.8	17.6	195	3.5	22	227	4.2	33	266	5.6	48	360	6.3	68	411	4.2	2.1	16.5	25	37	100
			3.5	17.6	227	4.2	22	266	4.9	33	312	6.3	48	411	6.6	68	428	5.3	2.8	18.0	23	36	
	Fluid Cap		0.60	17.6	91	0.70	22	102	1.1	33	130	2.5	48	235	3.5	68	310	1.1	0.20 0.70	33	38	51 64	
SUE28A	40100	1.0	1.1	17.6	130	1.4	22	156	1.8	33	184	3.2	48	285	4.6	68	380	1.8 2.5	0.70	33 35 38 33 30 33 33	38 48 46 43 43 43	64	
	+ Air Con		1.4	17.6	156	1.8	22	184	2.5	33	235	3.9	48	330	6.0	68	475	2.5 3.2 4.2	1.5 1.5 1.5	33 30	43 43	64 61 58 61 61	1
	Air Cap 122281-60° Fluid Cap		1.8	17.6	184	2.1	22	210	2.8	33	260	4.2	48	360	6.7	68	525	4.2	2.0 3.0	33	43	61	1
	Fluid Cap		0.70	36	102	1.1	45	130	1.8	68	184	3.2	100	285	5.3	141	430	2.1	0.30 0.70	-	and the second	76	1
	60100 + Air Cap	0.00000.0	1.1	36	130	1.4	45	156	2.1	68	210	3.5	100	310	6.0	141	475	3.2 4.6	1.5	46	58 58	79	1
SUE28		1.5	1.4	36	156	2.1	45	210	2.8	68	260	4.9	100	405	6.7	141	525	5.6	1.5	43 38	53 51	76 66	1
	122281-60°		1.8	36	184	2.5	45	235	3.2	68	285	5.9	100	455	7.0	141	550	3.9 6.3	1.5 1.5 1.5 2.0 3.0	40 46 48 43 38 48 41	56 58 58 51 64 56	81 79 76 66 84 79	4
			1.0	36	102	1.8	45	139	2.5	68	178	3.2	100	212	3.9	141	255	1.0	0.20	15.0	20	25	2
	Fluid Cap		1.4	36	116	2.1	45	156	2.8	68	195	3.5	100	227	4.2	141	275	1.0	0.20	15.0 15.0	20 22	25 29	
	60100		1.8	36	139	2.5	45	178	3.2	68	212	3.9	100	246	4.6	141	297	2.8	0.35	18.0	24	36	1
SUE25	+	1.5	2.1	36	156	2.8	45	195	3.5	68	227	4.2	100	266	4.9	141	314	3.2	1.4	20	28	39	3
	Air Cap 134255-45°		2.5	36	178	3.2	45	212	4.2	68	266	4.9	100	312	5.6	141	360	3.5	0.70	19.0	27 28	38 39	4
	134233-43		2.8	36	195	3.5	45	227	4.9	68	312	5.6	100	360	6.3	141	411	4.2 5.6	1.4 2.8	20 18.0	24	38	
		-	3.5	36	227	4.2	45	266	5.6	68	360	6.3	100	411	7.0	141	453-	-	2000000				
			1.8	36	235	1.8	45	235	2.5	68	300	3.9	100	410	870	-	-	1.8	0.20	15.0	20	29	:
	Fluid Cap		2.1	36 36	300	2.1	45 45	300	3.2	68 68	330 355	4.2	100	445		-	-	2.8	0.20	15.0	20	30	1
SUE45B	60150	1.5	2.8	36	330	2.8	45	330	3.5	68	380	4.9	100	529		_ <u>5</u> _	-	2.8 3.5	0.30	15.0 17.0	20 22	30 32	4
JOE IJD	Air Cap		3.2	36	355	3.2	45	355	3.9	68	410	5.3	100	565	-	2	-	3.9	1.5	17.0	22	34	4
	200278-45°		3.5	36	380	3.5	45	380	4.2	68	445	5.6	100	600	-	-	-	4.2	1.0	17.0	23	33	4
			4.2	36	445	4.2	45	445	4.9	68	520	6.3	100	685	-	-	-	4.9	1.5	17.0	23	34	į
			2.1	64	260	2.8	78	330	3.9	119	410	4.9	175	520	( <del>-</del> )	-		2.1	0.20	17.0	24	34	
	Fluid Cap		2.5	64	300	3.2	78	355	4.2	119	445	5.3	175	565	-	-	-	2.1 3.2	0.20	18.0	24	36	3
	80150	202	2.8	64	330	3.5	78	380	4.6	119	480	5.6	175	600	:5:	5	-	3.9	0.30	18.0	25	36	1
SUE45A	+ A:C-	2.0	3.2	64	355	3.9	78	410	4.9	119	520	6.0	175	640	-	-	-	4.9	0.70	18.0	25	36	
	Air Cap 200278-45°		3.5	64	380	4.2	78	445	5.3	119	565	6.3	175	685	-	-	-	4.9 5.3	1.5	20 18.0	25 25	38 38	1
	200210-40		4.2	64	445	4.9	78	520	5.6	119	600	-	-	-	-	-	-	5.6	1.5	20	25	38	6
			4.9	102	520	5.6	78	600	6.3	119	685	-	200	- 600	-	-	-						
			3.2	102	330 355	3.5	125	380	4.6	192	480	5.6	280	600	( <del>-</del>		8	2.8	0.20	19.0	25	36	4
	Fluid Cap		3.5	102	380	4.2	125 125	410	5.3	192 192	520 565	6.0	280	640	-	-	-	3.9	0.20	20	25	37	4
SUE45	100150	2.5	3.9	102	410	4.6	125	480	5.6	192	600	-	-	- 003	-	-	-	4.6 5.3	0.30	20 22	25 27	37 38	1
JULTU	Air Cap	100000	4.2	102	445	4.9	125	520	6.0	192	640			20	-	-	-	5.6	1.0	22	27	41	
	200278-45°		4.6	102	480	5.3	125	565	6.3	192	685			-	-		-	5.6	1.5	22	27	41	5
			4.9	102	520	5.6	125	600		-	-			-	-	_	-	6.0	1.5	22	27	41	



# **SU SERIES**

# FLAT FAN SPRAY - INTERNAL MIX SIPHON SPRAY SET-UPS





Flat spray air caps produce flat fan spray patterns

# · Flat Fan Spray(Siphon)

At	the state	ed pressur	e in bar.
	y Dimer	nsions n Height	
atzuci	ii Sipiioi	rrieigne	

Spray Set-up Consists of		Orifice		mizing Air					Capacity er hour) '						y Dimen: n Siphon		
Set-up	Fluid and Air Cap	(mm)	Air	Air	Grav	ity Head	(cm)		Sipho	on Heigh	t (cm)		Air*	A	В	С	D
No.	Combination		Press.	Capacity L/min	45	30	15	10	20	30	60	90	AIF	(cm)	(cm)	(cm)	(m)
	Fluid Cap 2850		0.7	28	1.3	1.2	1.1	1.0	0.95	0.83	0.64	0.49	0.7	20	26	38	2.1
SUF1	+	0.7	1.5	43	1.2	1.1	1.0	0.9	0.86	0.78	0.66	0.54	1.5	21	29	38	2.1
	Air Cap73420		2.0	50	0.82	0.76	0.68	0.57	0.50	1993		(9)	2.0	23	30	38	1.8
			1.5	56	3.7	3.5	3.3	2.9	2.8	2.5	2.3	2.1	1.5	23	32	38	2.7
CLIESC	Fluid Cap 35100	0.8	2.0	65	3.4	3.3	3.1	2.8	2.7	2.6	2.4	2.2	2.0	24	34	42	2.7
SUF2C	Air Cap 120432		0.8	3.0	87	2.8	2.7	2.5	2.4	2.2	2.1	1.9	1.7	3.0	27	37	46
			4.0	110	1.9	1.8	1.6	1.5	1.3	1.2	2	127	4.0	28	39	48	2.7
			1.5	68	5.1	4.8	4.5	3.8	3.7	3.5	3.0	2.4	1.5	19	23	27	3.4
SUF3B	Fluid Cap 40100	5275.555.57	2.0	78	4.9	4.7	4.4	3.6	3.4	3.2	2.9	2.3	2.0	20	25	28	3.4
SUFSE	Air Cap 122435	1.0	3.0	103	3.4	3.2	3.0	2.2	2.0	1.7	75	29420	3.0	22	27	30	3.0
	**************************************		3.5	117	2.2	2.0	1.7	87.5	.5	2.72		253	3.0	22	21	30	3.0
			1.5	63	7.6	7.2	6.6	5.7	5.4	5.1	4.6	3.7	1.5	17	22	27	3.4
CLIEAD	Fluid Cap 40100	1.0	2.0	73	7.6	7.3	6.8	5.9	5.7	5.5	5.0	4.2	2.0	18	23	29	3.4
SUF4D	SUF4B + Air Cap 122440	1.0	3.0	96	6.4	6.1	5.7	5.0	4.5	4.1	3.3	-	3.0	20	27	33	3.4
			3.5	110	4.2	3.7	3.2	2.6	-	-	-	140	3.0	20	21	33	3.4



# **DRY FOG NOZZLE**







·Spray Angle : 15°-80° ·Spray Pattern : Cone spray.

·Drops : 10-50µm

·Features: Compared with similar products, it can save energy and reduce consumption significantly, and can produce small particle size dry fog particles under low pressure and low gas volume conditions, which is not easy to plug.

### Application:

- ·Dry mist suppresses dust
- ·Disinfection and sterilization
- ·Dust falls from coal yard
- ·Environmental humidification
- ·Cooling
- ·Dust removal and ash suppression in the discharge yard

Categories	SK508 nozzle 80°	SV882 nozzle 60°	SV980 nozzle 30°
Air pressure	5.0 bar	5.0 bar	3.0bar
Liquid pressure	1.0 bar	1.0 bar	0.5 bar
Air Capacity	112 L/min	240 L/min	307 L/min
Liquid Capacity	22 L/Hr	45L/Hr	41L/Hr
Average atomizing granularity	18.02µm(0.5 meters height)	23.79µm(1.5 meters height)	35.82µm(2 meters height)



# ST SERIES - AUTOMATIC SPRAY GUN

**ST - 5** 



·Spray Pattern : Cone- shaped spray pattern or flat fan spray pattern.(Based on air pressure)

·Drops: Much small-size, uniform distribution.

·Material : SS

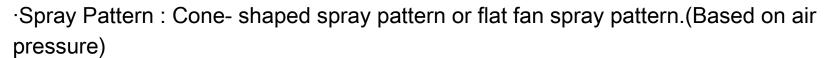
·Features: Spray gun piston work with air and using the fog to seperate the liquid. Being suitable for the circumstance of superior fog and spray switch in lower frequency.

Application:

·Coating

·Workshop wetting

**ST-6** 



·Drops: Much small-size, uniform distribution.

·Material : SS

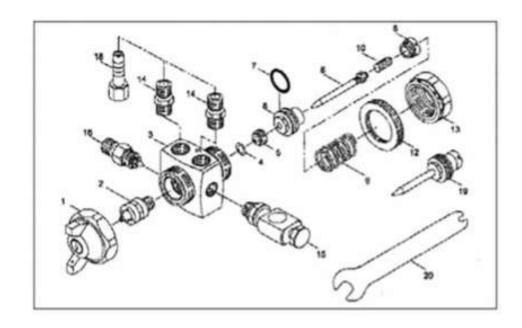
·Features: Spray gun piston work with air and using the fog to seperate the liquid. Being suitable for the circumstance of superior fog and spray switch in lower frequency.

Application:

·Recirculation system

·Coating

·Workshop wetting





Orifica domm	Water Flow rate	Flat Spray	ring Width	Air Flavoresta	Air proceure machine
Orifice Φmm	ML/min	200mm	300mm	Air Flow rate	Air pressure machine
0.5	0~60	180	200	60	0.4~0.75
1.0	0~250	200	250	80	0.4~0.76
1.3	0~360	250	350	100	0.75~1.5
2.0	0~600	300	400	140	0.75~1.5

### ST-6

Orifice down	Water Flow rate	Flat Spray	ing Width	Round Spra	aying Width	Drop Size	Air Eleveres	Air pressure
Orifice Φmm	ML/min	200mm	300mm	200mm	300mm	Drop Size	Air Flow rate	machine
0.5	0~60	180	180	ф40	ф50	40	60	0.4~0.75
1.0	0~250	200	200	ф60	ф70	80	80	0.4~0.75
1.3	0~360	250	250	ф70	ф80	100	100	0.75~1.5
2.0	0~600	300	300	ф80	ф90	130	140	0.75~1.5



# **DRY MIST HUMIDIFIER**

# **DRY MIST HUMIDIFIER - WMD**

# **DRY MIST HUMIDIFIER - WJB**





- ·Spraying distance of 4 meters or more;
- ·Can prevent drying and static electricity generation;
- ·More energy efficient than other humidification methods.
- ·Pa66 Industrial nylon material. Acid-proof, alkali-proof, explosion-proof;
- ·Good sealing, no water leakage;
- ·The metal part is 316 stainless steel material;
- ·Particle size test report can be issued;
- ·All assembled finished products, 100% inspection and shipment.

Application: ·Workshop anti-static cooling and humidification. Cooling and dust removal

·Farm disinfection. Garden irrigation

# · Siphon Type

Model Number	Air cap Orifice	Liquid Orifice	Air Press.	Air consumption	Liquid Capacity	GraininessSMD (1meter)
	0.4	0.4	2KG	6m³/H	0.1L/min	10μm
GWJSQ-WJB-316L-0.4K	0.4	0.4	3KG	8m³/H	0.11L/min	8µm
	0.4	0.4	4KG	10m <sup>3</sup> /H	0.12L/min	7μm
	0.5	0.7	2KG	6m³/H	0.19L/min	8µm
GWJSQ-WJB-316L-0.7K	0.5	0.7	3KG	7m³/H	0.2L/min	8µm
	0.5	0.7	4KG	8m³/H	0.21L/min	9µm
	0.5	0.8	2KG	6m <sup>3</sup> /H	0.21L/min	7μm
GWJSQ-WJB-316L-0.8K	0.5	0.8	3KG	6.8m <sup>3</sup> /H	0.22L/min	8µm
	0.5	0.8	4KG	7.5m <sup>3</sup> /H	0.23L/min	9μm

# · Pressure Type

Model Number	Air cap Orifice	Liquid Orifice	Air Press.	Water press.	Air consumption	Liquid Capacity	GraininessSMD (1meter)
	0.4	0.4	3KG	1.2KG	7.5m <sup>3</sup> /H	0.2L/min	8µm
GWJSQ-WMD-316L-0.4K	0.4	0.4	SNG	1.5KG	7.5m <sup>3</sup> /H	0.4L/min	12μm
G11726-111111-210F-0'4V	0.4	0.4	4KG	1.2KG	9m³/H	0.2L/min	9µm
	0.4	0.4	460	1.5KG	9m³/H	0.4L/min	14μm
	0.5	0.7	3KG	1.2KG	9m³/H	0.1L/min	8µm
GWJSQ-WMD-316L-0.7K	0.5	0.7	SNG	1.5KG	9m³/H	0.38L/min	9μm
GW35Q-WMD-310E-0.1K	0.5	0.7	4KG	1.2KG	10.8m <sup>3</sup> /H	0.18L/min	7μm
	0.5	0.7	460	1.5KG	10.8m <sup>3</sup> /H	0.38L/min	7μm
	0.5	0.8	3KG	1.2KG	10m³/H	0.18L/min	10μm
GWJSQ-WMD-316L-0.8K	0.5	0.6	SNG	1.5KG	10m <sup>3</sup> /H	0.39L/min	10μm
01/12/0-10IN-210F-0'0V	0.5	0.8	4KG	1.2KG	11.5m <sup>3</sup> /H	0.18L/min	8µm
	0.5			1.5KG	11.5m <sup>3</sup> /H	0.39L/min	9µm



### T SERIES - THREE PIECE SET

### TB - STANDARD ANGLE - STANDARD THREE PIECE FULL CONE STANDARD TYPE







### **TB2- WIDE ANGLE - STANDARD TWO PIECE**







andard.	Aligic												At the sta	ted pressu	ire in ba	
Inlet Conn (in.)	Capacity Size	Orifice (mm)				Flo		e Capac nin)	city				Spray Angle (°)			
			0.4bar	0.5bar	0.7bar	1.5bar	2bar	3bar	4bar	6bar	7bar	10bar	0.5bar	1.5bar	6bar	
	0.3	0.51	-		-5.	0.16	0.19	0.22	0.25	0.31	0.33	0.39	-	50	61	
	0.4	0.56	-			0.22	0.25	0.3	0.34	0.41	0.44	0.52	-	56	63	
	0.5	0.61	3 (	ંચ	*	0.27	0.31	0.37	0.42	0.51	0.55	0.65	5-8	56	63	
	0.6	0.69	-	-		0.32	0.37	0.45	0.51	0.61	0.66	0.78	*	54	62	
	0.7	0.76	12	) \$5°	-	0.38	0.43	0.52	0.59	0.72	0.77	0.91	120	54	63	
1/4	1	0.94		123	-	0.54	0.62	0.74	0.85	1	1.1	1.3	2	58	53	
1/4	2	1.19			0.76	1.1	1.2	1.5	1.7	2	2.2	2.6		50	46	
	3	1.57	-		1.1	1.6	1.9	2.2	2.5	3.1	3.3	3.9	-	65	59	
	3.5	1.7	-		1.3	1.9	2.2	2.6	3	3.6	3.8	4.5	370	50	46	
	5	2.08			1.9	2.7	3.1	3.7	4.2	5.1	5.5	6.5	-	65	59	
	6.5	2.38	1.9	2.1	2.5	3.5	4	4.8	5.5	6.7	7.1	8.4	45	50	46	
	10	3.18	2.9	3.3	3.8	5.4	6.2	7.4	8.5	10.2	11	13	58	67	61	

Spray Angle : 45°-120°

Spray Pattern: Solid cone-shaped spray pattern with round impact area. Drops: Small-to medium-size, uniform distribution over a wide range of flow

rates and pressure.

Material: BRASS/SS

Features: Fast way to install spray tip. Large,unobstructed flow passages

minimize clogging.

Removable caps and vanes for easy inspection and cleaning on most models.

· Wide Angle		At the stated pressure in bar
AND THE RESERVE OF THE PERSON	Flour Boto Connected	_

Inlet Conn (in.)		zzle rpe	Capacity Size	Orifice (mm)				Flow	Rate Ca <sub>l</sub> (L/min)					Sį	oray Ang (°)	le
(III.)	ТВ	TB2			0.4bar	0.5bar	0.7bar	1bar	1.5bar	2bar	3bar	4bar	6bar	0.4bar	0.7bar	6bar
	•		2.8W	1.6	0.83	0.91	1.1	1.3	1.5	1.7	2.1	2.4	2.9	12	120	102
1/0 1/4	•	•	4.3W	2	1.3	1.4	1.6	1.9	2.3	2.7	3.2	3.7	4.4		120	102
1/8,1/4			5.6W	2.4	1.7	1.8	2.1	2.5	3	3.5	4.2	4.8	5.7	- 12	120	102
	•	•	8W	2.4	2.4	2.6	3	3.6	4.3	4.9	6	6.8	8.2	12	120	103
	•	•	10W	2.8	2.9	3.3	3.8	4.5	5.4	6.2	7.4	8.5	10.2	112	120	103
1/4	•		12W	3.2	3.5	3.9	4.6	5.4	6.5	7.4	8.9	10.2	12.3	114	120	103
	•		14W	3.6	4.1	4.6	5.3	6.3	7.6	8.6	10.4	11.9	14.3	114	120	103
			17W	4	5	5.6	6.5	7.6	9.2	10.5	12.7	14.4	17.4	114	120	103
2/0			20W	4.4	5.9	6.5	7.6	9	10.8	12.4	14.9	17	20	114	120	104
3/8		•	24W	4.8	7.1	7.8	9.1	10.8	13	14.8	17.9	20	25	114	120	104
Ī			27W	5.2	8	8.8	10.3	12.1	14.6	16.7	20	23	28	114	120	106
1/2		•	30W	5.6	8.8	9.8	11.4	13.5	16.2	18.5	22	25	31	114	120	108
1/2		•	35W	6	10.3	11.4	13.3	15.7	18.9	22	26	30	36	114	120	108

#### Application:

·Degreasing ·Fire prevention
·Air cleaning ·Cooling in heat treat
process ·Quenching during heat treat
process ·Metal treating ·Gas cooling &
scrubbing

	-1	lozzle Bo	dy-			Spr	ay Tip	,
1/4	-	TB	_	SS	+	SS	-	14W
Inlet Conn	В	ody Typ	e	Material Code		Material Code	C	apacity Size



### **T SERIES - TPC**

# **TUNGSTEN CORE FLAT FAN NOZZLE**



High Pressure Internal Thread





Screen Filter



Sprinkler Head (see chart)



High Pressure Nozzle Retainer





- ·TPC tungsten core sector nozzle is suitable for high pressure and has exceptional wear resistance.
- ·TPC nozzle is embedded with a large tungsten steel core spray core to make it have the strongest wear resistance.
- ·The inlay is installed in the groove of the stainless steel mouth body to avoid bad damage.
- •The nozzle is a high impact plane injection type, and the injection angle is from 5° to 110°.
- ·The spray effect of the nozzle is uniform distribution of small droplets.
- •The edge of the jet surface is gradually reduced to ensure uniform coverage during overlapping injection.
- ·The grinding surface of the TPC tungsten core fan-shaped nozzle is parallel to the jet surface so that it can be quickly adjusted into a straight jet through vision.

Nozzle	Orifice		w Rate (L/r	Capa nin)	city	Spray Shape Wide
Туре	(mm)	50bar	100bar	150bar	200bar	(Distance 30cm) (cm)
1100025	0.33	0.40	0.57	0.70	0.81	42
1100033	0.38	0.53	0.75	0.92	1.1	43
1100039	0.41	0.63	0.89	1.1	1.3	46
1100050	0.46	0.81	1.1	1.4	1.6	48
1100067	0.53	1.1	1.5	1.9	2.2	53
1100080	0.58	1.3	1.8	2.2	2.6	56
11001	0.66	1.6	2.3	2.8	3.2	58
110015	0.79	2.4	3.4	4.2	4.8	63
11002	0.91	3.2	4.6	5.6	6.4	66
11003	1.1	4.8	6.8	8.4	9.7	68
11004	1.3	6.4	9.1	11.2	12.9	71
11005	1.4	8.1	11.4	14.0	16.1	71
11006	1.6	9.7	13.7	16.7	19.3	71
11007	1.7	11.3	16.0	19.5	23	71
11008	1.8	12.9	18.2	22	26	71
11009	1.9	14.5	21	25	29	71
11010	2.0	16.1	23	28	32	71
11012	2.3	19.3	27	33	39	71
950017	0.28	0.27	0.39	0.47	0.55	33
950025	0.33	0.40	0.57	0.70	0.81	36
950033	0.38	0.53	0.75	0.92	1.1	38
950039	0.41	0.63	0.89	1.1	1.3	40
950050	0.46	0.81	1.1	1.4	1.6	43
950067	0.53	1.1	1.5	1.9	2.2	48
950080	0.58	1.3	1.8	2.2	2.6	48
9501	0.66	1.6	2.3	2.8	3.2	53
95015	0.79	2.4	3.4	4.2	4.8	53
9502	0.91	3.2	4.6	5.6	6.4	56
9503	1.1	4.8	6.8	8.4	9.7	56
9504	1.3	6.4	9.1	11.2	12.9	58
9505	1.4	8.1	11.4	14.0	16.1	58
9506	1.6	9.7	13.7	16.7	19.3	58

Nozzle	Orifice	Flov	w Rate (L/r	Capa nin)	city	Spray Shape Wide
Type	(mm)	50bar	100bar	150bar	200bar	(Distance 30cm) (cm)
9507	1.7	11.3	16.0	19.5	23	58
9508	1.8	12.9	18.2	22	26	58
9509	1.9	14.5	21	25	29	58
9510	2.0	16.1	23	28	32	58
9511	2.2	17.7	25	31	35	58
9512	2.3	19.3	27	33	39	58
9515	2.5	24	34	42	48	58
800011	0.23	0.18	0.25	0.31	0.35	27
800017	0.28	0.27	0.39	0.47	0.55	29
800025	0.33	0.40	0.57	0.70	0.81	31
800033	0.38	0.53	0.75	0.92	1.1	33
800039	0.41	0.63	0.89	1.1	1.3	36
800050	0.46	0.81	1.1	1.4	1.6	38
800067	0.53	1.1	1.5	1.9	2.2	43
800080	0.58	1.3	1.8	2.2	2.6	43
8001	0.66	1.6	2.3	2.8	3.2	48
80015	0.79	2.4	3.4	4.2	4.8	48
8002	0.91	3.2	4.6	5.6	6.4	48
8003	1.1	4.8	6.8	8.4	9.7	48
8004	1.3	6.4	9.1	11.2	12.9	48
8005	1.4	8.1	11.4	14.0	16.1	48
8006	1.6	9.7	13.7	16.7	19.3	48
8007	1.7	11.3	16.0	19.5	23	48
8008	1.8	12.9	18.2	22	26	48
8009	1.9	14.5	21	25	29	48
8010	2.0	16.1	23	28	32	48
8011	2.1	17.7	25	31	35	48
8012	2.2	19.3	27	33	39	48
8013	2.3	21	30	36	42	48
8014	2.4	23	32	39	45	48
8015	2.5	24	34	42	48	48
730023	0.30	0.37	0.52	0.64	0.74	29
730039	0.41	0.63	0.89	1.1	1.3	33

Filter Mesh	Selection Guide
Equivalent Orifice Size	Recommended Mesh Size
No more than 46mm	200
47mm to 79mm	100
800mm and larger	50

1/4	-	BTT	+	TPC	-	SS	-	11001 I	- WGX
Inlet Conn.	Ti	nree-piece embination	В	ody Type	M	laterial Co	de	Flow rate	Tungsten steel core



### T SERIES - THREE PIECE SET

# TC - FLAT FAN NOZZLE









·SprayAngle: 0° (Liquid column flow) - 110°

·Spray Pattern : Flat spray pattern distributes the liquid as a flat - or sheet-type spray.

·Drops : Small- to medium-size, uniform distribution over a wide range of flow rates and pressure.

·Material: BRASS、SS

·Features : Fast way to install spray tip and adjust angle. Large,unobstructed flow passages minimize clogging. Removable caps and vanes for easy inspection and cleaning on most models.

Applications: ·Fire prevention ·Spray cooling ·Cooling in heat treat process ·Dust control ·Metal treating ·Air cleaning ·Quenching during heat treat process ·Gas cooling & scrubbing

At the stated pressure in bar.

		FI	at FanN	ozzle Typ	oe .			Orifice	ice Capacity at 1.0-10.0kg pressure (liters per minute)*								
15°	25°	40°	50°	65°	80°	95°	110°	(mm)	1bar	2bar	3bar	4bar	5bar	6bar	7bar	10bar	
1501	2501	4001	5001	6501	8001	9501	11001	0.66	858	0.32	0.39	0.46	0.51	0.56	0.6	0.72	
	121	40015	-	65015	80015	95015	110015	0.79	-	0.48	0.59	0.68	0.76	0.84	0.9	1.1	
1502	2502	4002	5002	6502	8002	9502	11002	0.91	0.46	0.64	0.79	0.91	1	1.1	1.2	1.4	
1503	2503	4003	5003	6503	8003	9503	11003	1.1	0.68	0.97	1.2	1.1	1.5	1.7	1.8	2.2	
1504	2504	4004	5004	6504	8004	9504	11004	1.3	0.91	1.3	1.6	1.8	2	2.2	2.4	2.9	
1505	2505	4005	5005	6505	8005	9505	11005	1.4	1.1	1.6	2	2.3	2.5	2.8	3	3.6	
1506	2506	4006	5006	6506	8006	9506	11006	1.6	1.4	1.9	2.4	2.7	3.1	3.3	3.6	4.3	
1508	2508	4008	5008	6508	8008	9508	11008	1.8	1.8	2.6	3.2	3.6	4.1	4.5	4.8	5.8	
1510	2510	4010	5010	6510	8010	9510	11010	2	2.3	3.2	3.9	4.6	5.1	5.6	6	7.2	
1515	2515	4015	5015	6515	8015	9515	11015	2.4	2.4	4.8	5.9	6.8	7.6	8.4	9	10.8	
1520	2520	4020	5020	6520	8020	9520	11020	2.8	2.8	6.5	7.9	9.1	10.2	11.2	12.1	14.4	
1530	2530	4030	5030	6530	8030	9530	11030	3.6	3.6	9.7	11.8	13.7	15.3	16.7	18.1	22	
1540	2540	4040	5040	6540	8040	9540	55 <del></del>	4	4	12.9	15.8	18.2	20	22	24	29	
1550	2550	4050	5050	6550	8050	9550	72	4.4	4.4	16.1	19.7	23	25	28	30	36	
1560	2560	4060	5060	6560	8060	9560	344	4.8	4.8	19.3	24	27	31	33	36	43	
1570	2570	4070	5070	6570	8070	9570	1.5	5.2	5.2	23	28	32	36	39	42	50	



### T SERIES - THREE PIECE SET

# **TBL - FLAT FAN BLOWING**

### **TBL**





Blowing Flat Fan Nozzle



·Spray Pattern : Flat spray pattern distributes the liquid as a flat - or sheet-type spray. ·Drops : Small,uniform distribution over a wide range of flow rates and pressure.

·Material : BRASS、SS

·Spray Angle: 90°

·Features : Split type, can quickly install the nozzle, adjust the Angle.

Liquid air dual use, suitable for a variety of occasions.

An open flow channel minimizes clogging as much as possible.

The nozzle body can be used repeatedly, only need to replace the nozzle, easy maintenance and cleaning.

Applications: ·Spray cooling ·Air cleaning ·Quenching during heat treat process ·Gas cooling & scrubbing ·Cooling in heat treat process ·Dust control ·Metal treating

nlet Co	onn. (in.)	Spray	Capacity	Slot width	Capacity	for Air at 0.2	2-7kg pressu	ure (liters per	r minute)*	Capacity fo	or Steam at 0	).2-7kg pres	sure (liters p	er minute
1/4	3/8	Angle	Size	(mm)	1bar	2bar	3bar	5bar	7bar	1	2	3	5	7
		90°	150	0.2	77.6	116	154	230	307	3.56	5.27	6.97	10.3	13.7
		90°	200	0.3	102	152	202	302	402	4.67	6.92	9.14	13.6	17.9
		90°	250	0.4	126	188	250	374	498	5.78	8.57	11.3	16.8	22.2
		90°	300	0.5	150	224	298	446	594	6.9	10.2	13.5	20	26.5
		90°	350	0.6	175	261	346	518	690	8	11.9	15.7	23.2	30.7
Ŏ		90°	400	0.7	199	297	394	590	768	9.12	13.5	17.9	26.5	35
		90°	450	0.8	223	333	443	662	882	10.2	15.2	20.2	29.7	39.3
		90°	500	0.9	247	369	491	734	977	11.3	16.8	22.2	32.9	43.5
		90°	550	0.6	278	414	551	823	1096	12.7	18.8	24.9	36.9	48.8
		90°	600	0.7	305	455	605	905	1205	14	20.7	27.4	40.6	53.7
		90°	650	0.8	328	489	650	972	1295	15	22.3	29.4	43.6	57.7
		90°	700	0.8	353	526	700	1047	1394	16.2	24	31.7	46.9	62.1
		90°	750	0.9	380	566	753	1126	1500	17.4	25.8	34.1	50.5	66.8
	Ŏ	90°	900	1.1	454	677	901	1347	1794	20.8	30.8	40.7	60.4	79.9
		90°	1130	1.4	566	844	1122	1678	2235	25.9	38.4	50.8	75.2	99.5



# M SERIES - ADJUSTABLE BALL TYPE

### 155M - CLIP TYPE

### 155M



155MG



1552M Detachable

**155MGL** 



Detachable

155MH



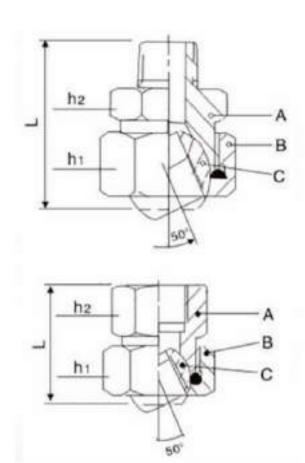
One Shape

- ·Spray Angle: 0°-144°(based on nozzle type)
- .Total adjustment rotation angle: 50°
- ·Spray Pattern :Solid cone- shaped spray pattern or hollow cone- shaped spray pattern or flat fan spray pattern or square spray pattern. (Based on nozzle type)
- ·Drops: Small- to medium-size, uniform distribution over a wide range of flow rates and pressure.
- ·Material : BRASS、SS .Maximum Pressure : 21 bar.
- ·Features: Fast way to install spray tip and adjust angle.

Adjustable swivel ball provides a quick change direction. Removable caps and vanes for easy inspection and cleaning on most models. It has large internal passages to minimize clogging.

Applications: ·Water aerating ·Dust control ·Fire prevention ·Metal treating ·Spray cooling ·Gas cooling & scrubbing

T1	Nozzle	Bottom	Ou	ıtside size (m	ım)	Gross Weight(gr.)		
Thread	Type	Connect – size (inch)	L	h <sub>1</sub>	h₂	BRASS	SUSS	
	155M	1/8	32	22	21	60	56	
	155M	1/4	36	22	21	65	60	
Connect	155M	1/4	39	29	24	110	110	
Size	155M	3/8	40	29	24	115	105	
(Male)	155M	3/8	47	35	30	205	190	
	155M	1/2	54	41	41	350	325	
	155M	3/4	61	50	46	525	490	
	155M	1/8	28	22	21	69	63	
	155M	1/4	28	22	21	63	58	
Connect	155M	1/4	33	29	24	120	110	
Size	155M	3/8	33	29	24	110	100	
(Female)	155M	3/8	44	35	30	235	220	
	155M	1/2	48	41	41	405	375	
	155M	3/4	55	50	46	600	560	

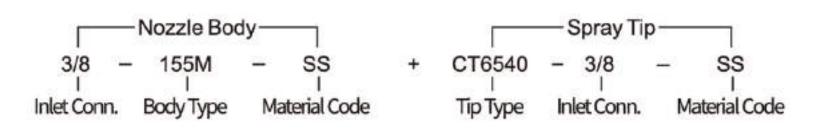


A Bottom B Cap C Ball

- . Connector Size (inch) 1/8 x Outlet size (inch) 1/8
- . Connector Size (inch) 1/4 x Outlet size (inch) 1/8 or 1/4
- . Connector Size (inch)  $3/8 \times 0$ utlet size (inch) 1/4 or 3/8
- . Connector Size (inch) 1/2 x Outlet size (inch) 1/4 or 3/8 or 1/2
- . Connector Size (inch) 3/4 x Outlet size (inch) 3/4

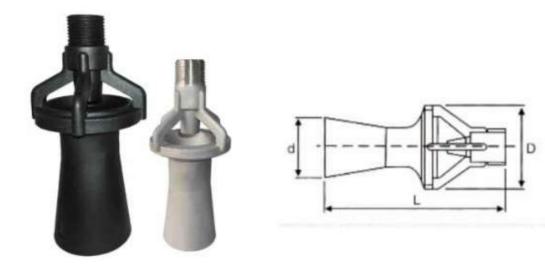








# **TYPE H - EDUCTOR**



·Material: SS、PP

·Features: Circulation turbulent movement, improve the effection of

solution mixing.

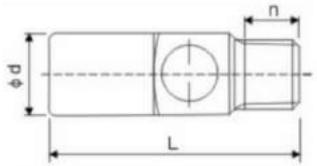
Realize solution without air mixing, reduce solution oxidation decomposition. Plastic can withstand high temperatures up to 120 degrees ;Stainless steel resistant to high temperature.

According to the gravity principle of Berboulli jet, the working jet and the attracted liquid are mixed and diffused in a ratio of 1:4.

Typo	Inlet	onn. L (mm)		d (mm)	Flow Rate Capacity L / Min						
Туре	(Inch)		D (mm)	d (mm)	1	1.5	2	3	4		
H40	1/4	70	30	23	15	18	21	26	30		
H60	3/8	115	50	38	34	42	48	59	68		
H90	1/2	115	50	38	34	42	48	59	68		
H130	3/4	165	65	50	64	78	90	110	127		

# **TYPE E**





·Material: SS、PP

·Features: Cyclic turbulent motion improves the mixing effect of solution.

The working jet and the attracted liquid are mixed and diffused in a ratio of 1:4. To realize the solution without air mixing, reduce the solution oxidation decomposition.

It is suitable for liquid stirring in the tank to improve the effect of liquid plating and etching.

Applications: ·Etched in liquid ·Electroplating solution stirring. Liquid cleaning. ·Stir the liquid in the tank

# **SIZE & WEIGHT**

Carias	Thread	Overa	II dimension	(mm)	Foreign body	Weigh	
Series	Specification	L	Фф	n	path (mm)	(kg)	
E	1/8"	30	11	7	1.5	0.001	
C	1/4"	48	16	10.5	2.8	0.003	



# **F SERIES**

F - PP - 47 - MALE







F-PP-110



F-PP



F973 - SS



Standard Stainless Steel Air Shower Nozzle

F-ALMA



FCH - SS



One-piece duck bill Air Shower Nozzle

F010 - SS



Double row Air Shower Nozzle

F703 - SS



Solid Air Shower Nozzle

·Material : ALMA, BRASS, SS, PP , ABS ·Features : High impact sector air flow;

Plastic material can withstand pressure of 7 Bar, temperature resistance up to 77 degrees;

Aluminum alloy material can withstand pressure of 7 Bar, temperature resistance up to 77 degrees; The connection is 1/4 BSPT external thread. (If you need other interfaces, use adapters, etc.)

Nozzle design ensures low noise, low consumption and high airflow impact.

Applications: ·Parts cooling ·Moving of materials ·Parts drying ·Paper injection ·Parts cleaning



DUCK BILL NOZZLE: .Thread size: 1/4, 3/8", 1/2", 3/4

.Material: PP
\*Pressure: Max. 7 Bar

.Operating Temperature: Max.80°C

Applications: Drying, cooling, blow off, moving the materials, sweeping, air streaming

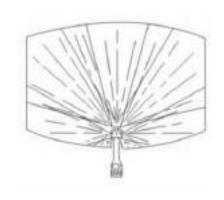


# **FIXED TYPE**

### **FIXED TYPE FOR TANK DIAMETER 3 - 4 METERS**

### F1602





1" NPT or BSPT (M)

·Maximum Operating Temperature : 93°C-177°C

.WorkingPressure : 1-10 Bar .Flow Rate : 23-67 L/min .Thread Size : 1" ·Spray Impact Area : 360° ·Material : SS、BRASS

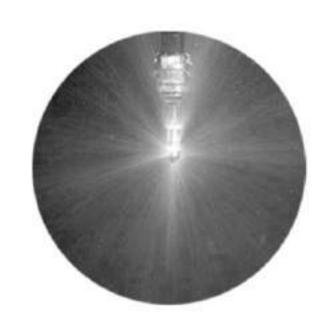
.15 pieces and 21 pieces of full cone nozzle tips are for your choices

·Features : Fixed and used for tank diameter 3-4 meters.

Nozzles tip fixed, clean the small tank is better,

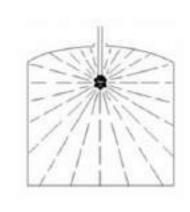
different jet to spray, spray cover area and shape is different. Durable and corrosion resistant design.

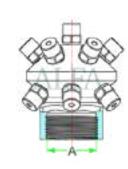
Applications: ·Tank Cleaning ·Bucket Cleaning ·Container Cleaning ·Drum Barrel Cleaning ·Pipeline Cleaning

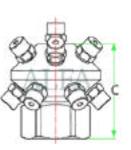


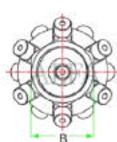
### F6713











A (BSPT/NPT) : 1-1/2 B (HEX) : 12 C (mm) : 86.5

·Spray Impact Area:180° ( upward or down ward ) or  $360^\circ$ 

 $\cdot \textbf{Capacity/Pressure Range}: \textbf{280-415 L/min}; \textbf{1.5-3 bar}$ 

.Spray Pattern : Cone spray

·Material : SS

·Features : Fixed and used for tank diameter 3m-4m

.Thread Size : 1-1/2" Female - BSPT/ NPT

.Component : 13 nozzle connecting parts (fan or cone tip can be selected according to actual needs, 1-13 plug and spray

head devices can be provided

Nozzles tip fixed, clean the small tank is better , different jet to spray, spray cover area and shape is different.

Durable and corrosion resistant design.

Applications: ·Tank Cleaning ·Bucket Cleaning ·Container Cleaning ·Drum Barrel Cleaning ·Pipeline Cleaning



# **ROTARY TYPE**

### **ROTARY TYPE FOR TANK DIAMETER 0.8 - 3 METERS**

#### R2405



·Maximum Operating Temperature : 95°C

.Spray Pattern : Flat fan

·Spray Impact Area: 360° Rotating Head

.Thread Size: 3/8" - 2" Female Thread. BSPT/ NPT. Clamp type is with 38 mm and 51 mm

.Working Pressure : 1-5 bar

·Capacity/Pressure Range : 20-165 L/min

·Material:SS

·Features : Rotating tank washing, used for the interior of small tank and barrel with diameter up to 3.0 m

Applications: ··Bucket cleaning ·Pipeline cleaning ·Chemical container cleaning ·Food processing tank cleaning

Drug processing tank cleaning

#### **ROTARY TYPE FOR TANK DIAMETER 2.4 METERS**

# R2401



·Maximum Operating Temperature : 93°C-177°C

·Spray Impact Area: 180° or 360° ·Capacity/Pressure Range : 14-79 L/min

·Material:SS

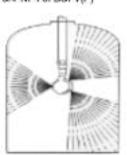
·Features : Rotating tank washing, used for the interior of small tank and barrel with diameter up to 2.4 m. Precise installation and positioning of jet holes, which can cover all surfaces in tank during injection. It can be installed in both vertical and horizontal positions.

Applications: ·Bucket cleaning ·Pipeline cleaning ·Chemical container cleaning ·Food processing tank cleaning ·Drug processing tank cleaning

#### R2403



3/4"NPT or BSPT(F)



·Maximum Operating Temperature : 93°C-177°C

·Spray Impact Area: 180° or 360° ·Capacity/Pressure Range : 23-205 L/min

·Material:SS

·Features : Rotating tank washing, used for the interior of small tank and barrel with diameter up to 2.4 m.

Precise installation and positioning of jet holes, which can cover all surfaces in tank during injection. It can be installed in both vertical and horizontal positions.

Applications: ·Bucket cleaning ·Pipeline cleaning ·Chemical container cleaning ·Food processing tank cleaning Drug processing tank cleaning

### R2401

Nozzlo Typo		Flow Rate Capacity (L/min)												
Nozzle Type	1.5bar	3bar	4bar	5bar	6bar	8bar	10bar	12bar						
R2401-2-HSS-5	14	19.7	23	25	28	32	36	39						
R2401-2-HSS-8	22	32	36	41	45	52	58	63						
R2401-3-HSS-5.7	15.9	22	26	29	32	37	41	45						
R2401-3-HSS-7	19.5	28	32	36	39	45	50	55						
R2401-3-HSS-10	28	39	46	51	56	64	72	79						

### **R2403**

Nozzle Type			Flow Rate Ca	pacity (L/min)		
NOZZIE Type	1bar	1.5bar	2bar	2.5bar	3bar	4bar
R2403-HSS-10	23	28	32	36	39	46
R2403-HSS-18	41	50	58	65	71	82
R2403-HSS-21	48	59	68	76	83	96
R2403-HSS-45	103	126	145	162	178	205



# **ROTARY TYPE**

### **ROTARY TYPE FOR TANK DIAMETERS UP TO 5 - 20 METERS**

# **R20**



·360° no dead Angle cleaning design, through horizontal and vertical rotation to achieve 360° coverage; ·Using medium driven design, cleaning liquid driven vortex rotation to achieve horizontal and vertical rotation; In the cleaning process, it can clean itself and lubricate itself through the cleaning liquid.

### **R5501**

·Maximum Operating Temperature: 93°C

·SprayImpactArea: 180(° upwardordownward),270°or360° ·Capacity/Pressure Range: 34-384 L/min; 0.7-3.5 bar ·Material: PTFE



Hygienic Pipe Nozzle

·Features: Rotating and used for the interior of small tank and container with diameter up to 5.5 meters. It works well. No thread, tapered design facilitates self-draining and prevents the formation of nozzle effusion. The material contains fluoropolymer

resin, suitable for corrosive chemical cleaning agent.

Applications: ·Chemical container cleaning ·Drug processing tank cleaning ·Food processing tank cleaning

# **ROTARY TYPE FOR TANK DIAMETER 3 - 7.6 METERS**

# **R7601**



·Maximum Operating Temperature: 93°C

·SprayImpactArea: 180° (upward or downward), 270°or360° ·Capacity/Pressure Range : 15-1490L/min;0.7-3.5bar

·Material: SS、BRASS、PVDF, PTFE

·Features : Rotating and used for the interior of small tank and container with

diameter up to 7.6 meters .The material is fluoropolymer resin with with corrosion resistance and long service life.

Meet low pressure requirements for cleaning and rinsing.

1/2-3"NPT or BSPT

Applications: Chemical container cleaning Container cleaning Mixing tank cleaning

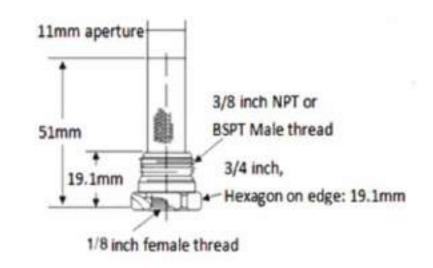
Interface	Capacity		Flow Rate	Correspon	ding To Diffe	rent Pressur	res (liters per	minute)*		Maximun
Size	Code	0.5bar	0.7bar	1bar	1.5bar	2bar	2.5bar	3bar	3.5bar	Spray Distance
1/2''	8	13	15	18	22	26	29	32	34	3m
	18	29	34	41	50	58	65	71	77	
	23	37	44	53	64	74	83	91	99	
3/4''	32	52	61	73	90	104	116	127	137	4.5m
	33	53	63	76	93	106	119	131	141	
	46	74	88	105	129	149	166	182	197	
	50	81	96	114	140	162	181	198	214	
1''	53	86	102	121	149	172	192	210	227	5.5m
1	70	113	135	160	196	227	253	278	300	3.3111
	90	146	172	206	252	291	326	357	385	
	100	162	192	229	280	324	362	196	428	
	125	202	239	286	350	405	452	496	535	
2''	150	243	287	343	421	486	543	595	642	6m
	175	283	335	401	491	567	633	693	749	
	200	323	383	457	560	647	723	792	856	
	250	404	478	572	700	809	904	991	1070	
3''	300	485	574	686	841	971	1085	1189	1284	7.5m
	350	566	670	801	981	1133	1266	1387	1498	

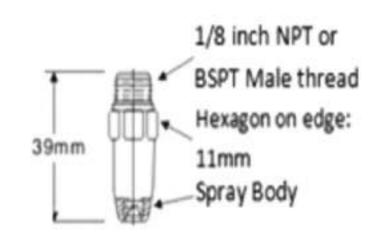


# HIGH PRESSURE NEEDLE NOZZLE

# P1070







·Material: SS、BRASS

·Features: Used for cutting edge of paper, precise and clean.

It can withstand up to 140 bar of pressure, and the nozzle is made of a variety of materials, 316SS、ruby core, tungsten alloy, ceramic and so on.

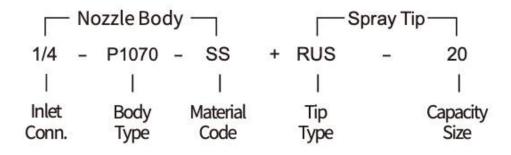
Applications: ·High pressure swing cleaning of the net

- ·Press section blanket high pressure swing cleaning
- ·Blind roll cleaning
- ·Groove cleaning



Nozzle	No.	Orifice				Flo	w Rate Ca	pacity (L/r	min)			
Type	NO.	(mm)	7bar	10bar	20bar	30bar	40bar	50bar	60bar	70bar	100bar	138bar
P1070	15	0.38	0.17	0.21	0.29	0.36	0.41	0.46	0.5	0.54	0.65	0.76
P1070	20	0.51	0.31	0.36	0.52	0.63	0.73	0.82	0.89	0.96	1.2	1.4
P1070	25	0.64	0.48	0.57	0.81	0.99	1.1	1.3	1.4	1.5	1.8	2.1
P1070	30	0.76	0.69	0.82	1.2	1.4	1.6	1.8	2	2.2	2.6	3.1
P1070	35	0.89	0.93	1.1	1.6	1.9	2.2	2.5	2.7	3	3.5	4.2
P1070	40	1.0	1.2	1.5	2.1	2.5	2.9	3.3	3.6	3.9	4.6	5.4
P1070	45	1.1	1.5	1.9	2.6	3.2	3.7	4.1	4.5	4.9	5.8	6.9
P1070	50	1.3	1.9	2.3	3.2	4	4.6	5.1	5.6	6	7.2	8.5
P1070	60	1.5	2.8	3.3	4.6	5.7	6.6	7.3	8	8.7	10.4	12.2

### **ORDER INFO:**



### REPLACEABLE PARTS:







54



# HIGH PRESSURE NEEDLE NOZZLE

PN2070 - SS



SS Normal Type

**PN2070 - RUS** 



Standard Ruby Inset

PN2070 - SIS



Standard Ceramic Inset

PN2071 - SS



Standard Longer SS Type

**PN2071 - RUS** 



Longer with Ruby Inset

PN2071 - SIS



Longer with Ceramic Inset





<sup>·</sup>Features: High impact cleaning. It can be used with swing spray bar, and can be interchangeable with other needle nozzles, and the nozzle is made of a variety of materials, SS、ruby core, tungsten alloy, ceramic and so on.

Applications: ·Net washing ·Machine washing ·Blind hole roll cleaning ·Blanket cleaning .Cage cleaning .Grooved roll cleaning .Fabric cleaning

		Nozzl	e Type							F	low Rate		ty		
	PN2070			PN2071		Capacity	Orifice				(L/n	nin)			
	Material			Material		Size (mm)		26.54	26 56		4-1	20h ==	10h 3r	E0h ar	COh
316SS	SIS	RUS	31688	SIS	RUS			3bar	5bar	7bar	15bar	30bar	40bar	50bar	60bar
•	•	•	•	•	•	1P	0.8	0.54	0.7	0.83	1.22	1.73	2	2.23	2.45
•						2P	0.84	0.62	0.81	0.95	1.4	2	2.4	2.7	2.9
•	•	•	•	•	•	3P	0.9	0.6	0.89	1.05	1.55	2.19	2.53	2.83	2.1
•	•	•	•	•	•	4P	1	0.85	1.1	1.3	1.91	2.7	3.21	3.49	3.83
						5P	1.02	0.89	1.1	1.4	2	2.8	3.2	3.6	3.9
•	•	•	•	•	•	6P	1.2	1.23	1.59	1.88	2.75	3.9	4.5	5.03	5.51
						7P	1.4	1.6	2.1	2.4	3.6	5	5.8	6.5	7
•	•	•	•	•	•	8P	1.5	1.92	2.48	2.94	4.3	6.09	7.03	7.86	8.61
						9P	1.78	2.7	3.5	4.2	6.1	8.8	10	11	13
•	•	•	•	•	•	10P	1.8	2.77	3.58	4.23	6.2	8.77	10.1	11.3	12.4
•	•	•	•	•	•	11P	2	3.42	4.42	5.23	7.66	10.8	2.5	13.9	15.3
•						12P	2.39	4.5	5.9	7	10	15	18	20	22
•						13P	3.18	7.3	9.6	11	17	25	30	33	37











# SLICE HIGH PRESSURE NEEDLE NOZZLE

#### PN3070 - SS

#### **PN3070 - RUS/SIS**

#### **PNH3071 - RUS**

Ruby core and gasket

#### **PN3071 - RUS**



Stainless steel body





Ceramic or ruby core







Ruby core

- ·Spray angle: 0°(stream)
- ·Material: SS
- ·Features: Wafer high pressure needle nozzle.

Apply to blind hole roll cleaning blanket cleaning . Net cleaning .Grooved roll cleaning .Cage cleaning

# PN3070 - SS SS ONE - PIECE

Nozzle Type	Orifice			Rate Ca (L/min)			Spray Angle
WOZZIC Type	(mm)	1.5bar	3bar	7bar	20bar	55bar	at 4 bar
PN3070-SS-00004	0.3	0.11	0.16	0.24	0.41	0.68	
PN3070-SS-00007	0.4	0.2	0.28	0.42	0.71	1.2	
PN3070-SS-00009	0.5	0.25	0.36	0.54	0.92	1.5	
PN3070-SS-0001	0.6	0.36	0.51	0.78	1.3	2.2	
PN3070-SS-0002	1	0.64	0.91	1.4	2.3	3.9	00
PN3070-SS-0003	1.2	0.92	1.3	2	3.4	5.6	0°
PN3070-SS-0004	1.5	1.2	1.7	2.6	4.4	7.3	
PN3070-SS-0008	1.9	2.2	3.1	4.8	8.1	13.4	
PN3070-SS-0012	2.4	3.5	4.9	7.5	12.6	21	
PN3070-SS-0020	3.2	5.5	7.8	11.9	20	33	

Nozzle Type	Orifice			Rate Ca (L/min)			Spray Angle
Nozzie Type	(mm)	1.5bar	3bar	7bar	20bar	55bar	at 4 bar
PN3070-SIS-00005	0.5	0.14	0.20	0.31	0.52	0.86	
PN3070-SIS-00008	0.64	0.22	0.31	0.45	0.81	1.34	
PN3070-SIS-00010	0.76	0.32	0.45	0.69	1.16	1.93	
PN3070-SIS-00015	0.9	0.43	0.61	0.94	1.58	2.62	00
PN3070-SIS-00020	1.0	0.56	0.80	1.22	2.06	3.42	0°
PN3070-SIS-00025	1.1	0.72	1.01	1.54	2.61	4.33	
PN3070-SIS-00030	1.3	0.88	1.25	1.91	3.22	5.34	
PN3070-SSCER-00045	1.5	1.27	1.80	2.75	4.64	7.7	

### PN3070 - RUS RUBY CORE TYPE

### PNH3071 - RUS RUBY CORE TYPE

Nozzle Type	Inch
PN3070-RUS-00003	0.015"(0.38mm)
PN3070-RUS-00005	0.020"(0.51mm)
PN3070-RUS-00008	0.025"(0.64mm)
PN3070-RUS-00011	0.030"(0.76mm)
PN3070-RUS-00015	0.035"(0.89mm)
PN3070-RUS-00020	0.040"(1.02mm)
PN3070-RUS-00025	0.045"(1.14mm)

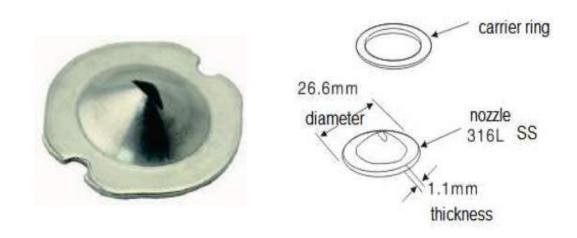
Nozzle Type	Inch
PNH3071-RUS-00003	0.015"(0.38mm)
PNH3071-RUS-00005	0.020"(0.51mm)
PNH3071-RUS-00008	0.025"(0.64mm)
PNH3071-RUS-00011	0.030"(0.76mm)
PNH3071-RUS-00015	0.035"(0.89mm)
PNH3071-RUS-00020	0.040"(1.02mm)
PNH3071-RUS-00025	0.055"(1.14mm)





# SLICE HIGH PRESSURE NEEDLE NOZZLE

### PC1080



·Spray angle: 0° (stream) - 75°

·Material: SS

·Features: It is suitable for use when space is limited and the height of spray rod and net is small.

Apply to low-pressure fan cleaning and scraper type stream and lubrication.

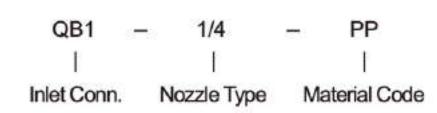
	Nozzl	е Туре		Orifice								
0°	30°	60°	75°	(mm)	1.5bar	3bar	7bar	20bar	55bar			
0002	-	6002	7502	1.0	0.64	0.91	1.4	2.3	3.9			
0003	-	6003	7503	1.2	0.92	1.3	2.0	3.4	5.6			
0004	-	6004	7504	1.5	1.2	1.7	2.6	4.4	7.3			
0006	2	6006	7506	1.8	1.7	2.4	3.7	6.2	10.3			
0008	-	6008	7508	2.0	2.2	3.1	4.8	8.1	13.4			
0010	-	6010	7510	2.2	2.8	4.0	6.2	10.4	17.2			
(41)	3012	6012	7512	2.5	3.5	4.9	7.5	12.6	21			
-	3016	6016	7516	2.8	4.5	6.3	9.7	16.4	27			
(2)	3020	6020	7520	3.0	5.5	7.8	11.9	20	33			
-	3025	6025	7525	3.5	7.2	10.1	15.5	26	43			
(=0)	3031	6031	7531	4.0	8.8	12.4	18.9	32	53			
121	3040	6040	7541	4.5	11.3	15.9	24	41	68			
-	3049	6049	7549	5.0	13.7	19.4	30	50	83			
6 <b>7</b> 77	3078	6078	7578	6.0	22	31	48	81	133			
120	3099	6099	7599	7.0	28	39	60	101	167			
\ <del>#</del> ()	30124	60124	75124	8.0	35	49	75	126	210			



# **QUICK - RELEASE FULL CONE NOZZLE**



### **ORDER INFO:**



Nozzle				Flo	w Rate Ca	pacity(L/r	nin)				Sp	ray Angle (	(°)*
Type	0.5bar	0.7bar	1.5bar	2bar	3bar	4bar	5bar	6bar	7bar	10bar	0.5bar	1.5bar	6bar
QB1	0.25	0.38	0.54	0.62	0.74	0.85	0.94	1	1.1	1.3	4	58	53
QB2	0.65	0.76	1	1.2	1.5	1.7	1.9	2	2.2	2.6	43	50	46
QB3	0.98	1.1	1.6	1.9	2.2	2.5	2.8	3.1	3.3	3.9	52	65	59
QB3.5	1.1	1.3	1.9	2.2	2.6	3	3.3	3.6	3.9	4.5	43	50	46
QB5	1.6	1.9	2.7	3.1	3.7	4.2	4.7	5.1	5.5	6.5	52	65	59
QB6.5	2.1	2.5	3.5	4	4.8	5.5	6.1	6.7	7.1	8.4	45	50	46
QB10	3.3	3.8	5.4	6.2	7.4	8.5	9.4	10.2	11	13	58	67	61

### **QUICK - RELEASE FLAT FAN NOZZLE**







		Nozzle Typ y angle at			Flow Rate Capacity (L/min)										
55°	65°	80°	95°	110°	0.3bar	1bar	2bar	3bar	4bar	5bar	6bar	7bar	14bar		
QC5001	QC6501	QC8001	QC9501	QC11001	0.12	0.23	0.32	0.39	0.46	0.51	0.56	0.6	0.85		
QC5002	QC6502	QC8002	QC9502	QC11002	0.25	0.45	0.64	0.79	0.91	1	1.1	1.2	1.7		
QC5003	QC6503	QC8003	QC9503	QC11003	0.37	0.69	0.97	1.2	1.4	1.5	1.7	1.8	2.6		
QC5004	QC6504	QC8004	QC9504	QC11004	0.5	0.92	1.3	1.6	1.8	2	2.2	2.4	3.4		
QC5005	QC6505	QC8005	QC9505	QC11005	0.62	1.1	1.6	2	2.3	2.5	2.8	3	4.3		
QC5006	QC6506	QC8006	QC9506	QC11006	0.75	1.3	1.9	2.4	2.7	3.1	3.3	3.6	5.1		
QC5008	QC6508	QC8008	QC9508	QC11008	1	1.8	2.6	3.2	3.6	4.1	4.5	4.8	6.8		
QC5010	QC6510	QC8010	QC9510	QC11010	1.2	2.3	3.2	3.9	4.6	5.1	5.6	6	8.5		
QC5015	QC6515	QC8015	QC9515	QC11015	1.9	3.4	4.8	5.9	6.8	7.6	8.4	9	12.8		
QC5020	QC6520	QC8020	QC9520	QC11020	2.5	4.6	6.5	7.9	9.1	10.2	11.2	12.1	17.1		
QC5030	QC6530	QC8030	QC9530	QC11030	3.7	6.8	9.7	11.8	13.7	15.3	16.7	18.1	26		



# QUICK-RELEASE FLAT FAN NOZZLE



·Spray angle : 25°-110°

·Spray Pattern : Flat spray pattern distributes the liquid as a flat - or sheet-type spray.

·Material : F4/PP/PVC/PVDF/SS(nozzle tip);PVC/PP/PCDF(nozzle body)

·Features : Standard quick connected spray nozzle Assemblies:nozzle body,spray

tip,seal,cap.

Model 2818 offers Φ16mm welded base, access size 1/2"", 3/8"" BSPT/NPT; Lower cost and more choices of materials. Fast and easy installation.

Outlet Conn.	Outlet Conn. Flat Fan Nozzle Type			Capacity at 1.0-10.0kg pressure								
1/4	65°	80°	95°	110°	1bar	2bar	3bar	4bar	5bar	6bar	7bar	10bai
•	6502	8002	9502	11002	0.46	0.64	0.79	0.91	1	1.1	1.2	1.4
•	6504	8004	9504	11004	0.91	1.3	1.6	1.8	2	2.2	2.4	2.9
•	6506	8006	9506	11006	1.4	1.9	2.4	2.7	3.1	3.3	3.6	4.3
•	6508	8008	9508	11008	1.8	2.6	3.2	3.6	4.1	4.5	4.8	5.8
•	6510	8010	9510	11010	2.3	3.2	3.9	4.6	5.1	5.6	6	7.2
•	6515	8015	9515	11015	3.4	4.8	5.9	6.8	7.6	8.4	9	10.8
•	6520	8020	9520	11020	4.6	6.5	7.9	9.1	10.2	11.2	12.1	14.4
•	6530	8030	9530	11030	6.8	9.7	11.8	13.7	15.3	16.7	18.0	22.0

### SPLIT HOLE QUICK RELEASE NOZZLE



KC-01 (11/4inch Pinch)



KC-02 (1/2inch Pinch)



KC-03 (3/4inch Pinch)



KC-04 (3/4inch Pinch)



**JK Series** (3/4inch Pinch)





Metal Clip connector

Body	To Cla	10000			utside Conn.		Material		Maximum Pressure	Capacity at Maximum	Dimensions				Net Weight	
Туре	PipeSize (in.)	Outside Dia. Tubing(mm)		NPT &	BSPT	3.	Α	В	С	(bar)	Pressure (L/min)	A (mm)	B DrillHole Dia. ( mm )	C Bodylnlet Dia. (mm)	D (mm)	(kg)
	1/2	20-22	1/8	1/4		2	•	•	•			48				
7521	3/4	25-27	1/8	1/4	-	=	•	•	•	17	11	54	7.1	4.8	17.5	0.06
	1	32-35	1/8	1/4	-	+:	•	•	•			57				
	1-1/4	39-43	-	1/4	3/8	1/2		•	•			70		11.1		
8370	1-1/2	44-51	.5	1/4	3/8	1/2	•	•		9	45	81	17.5	or	20	0.17
	2	54-60	-	1/4	3/8	1/2	•					88		14.3		

·Material : SS/BRASS.PP(nozzle tip);SS/PP(nozzle body) ·Features: The tube sizes:3/8", 1/2", 3/4",1",1/2", 3/4"

Fast and easy installation.



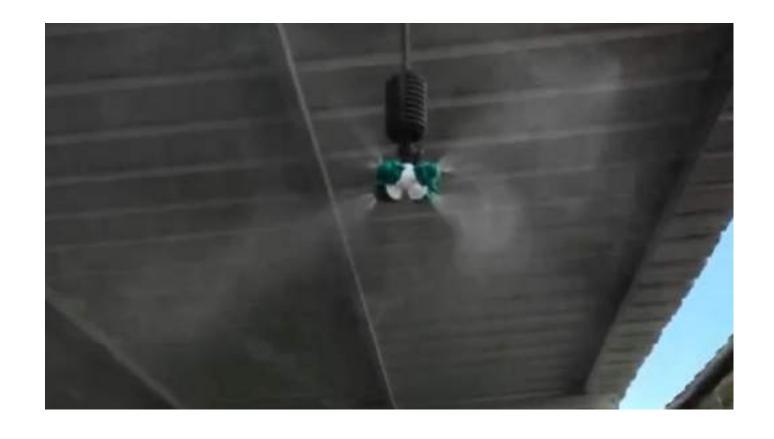




MATERIAL	PP
THREAD SIZE	1/8" , 1/4"
FLOW RATE	1.6 - 3.4 L/H (REFERENCE: 3 L/H AT 2 BAR)
WATER PRESSURE	3 - 14 BAR
SPRAY ANGLE	80 - 90 DEGREE
ATOMIZED PARTICLE SIZE	20 - 40 MICRON
FEATURES	ANTIDRIP. INSIDE FILTER . HOLLOW CONE
COVERAGE AREA	3 - 4 M²
COOLING CAPACITY	5 - 10 °C
APPLICATIONS	DISINFECTION. LOW-PRESSURE FOGGING. HUMIDIFYING. GREENHOUSE IRRIGATION. PESTICIDE SPRAYING. COOLING.



### 4-WAY FOGGER IRRIGATION NOZZLE

















	ITEM NO	DIAMETER (mm)	DISCHARGE (L/h)	WORKING PRESSURE (Bar)	SPRAYING RADIUS (m)
	MJ40B	0.6	32	2-3	1
	MJ40C	0.5	27	2-3	1
	MJ40D	0.4	22	2-3	1

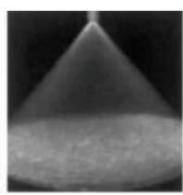
#### **FEATURES:**

- HIGH WATER DISTRIBUTION UNIFORMITY AND COVERAGE
- RECOMMENDED WORKING PRESSURE 2 3 BAR
- CHEMICAL RESISTANT RAW MATERIALS
- PP NOZZLES AND ANTIDROP + PVC TUBE
- EASY INSTALLATION
- FILTRATION REQUIREMENTS: 130 MICRONS (120 MESH)
- INCREASES GREENHOUSE HUMIDITY
- REDUCES GREENHOUSE TEMPERATURE
- PROVIDES PERFECT CONDITIONS FOR PLANT PROPAGATION
- IT CAN BE USED ALSO FOR PESTICIDE APPLICATION
- FOR COOLING, HUMIDIFYING, SPRAYING, IT IS ENOUGH 3 M. LATERALS AND ROUGHLY 1.5 M BETWEEN HEADS
- MINIMUM HEIGHT ABOVE CROP: 1 M.
- MAX. IMPACT AREA ON LATERAL: 1.2 1.3 M
- MAX. DISTANCE OF LATERAL FROM BENCH EDGE: 0.2 0.3 M
- DROPLET SIZE AVERAGE ROUGHLY: 60 65 MICRON



### **BB FULL CONE NOZZLE**





	,	4						,	At the stat	ed pressu	re in ba		
Inlet Conn.	Capacity Code		Flow Rate Capacity(L/min)								Spray Angel (°)		
		0.7bar	1.5bar	2bar	3bar	4bar	6bar	7bar	0.7bar	1.5bar	6bar		
	1.3	0.5	0.7	0.8	0.97	1.1	1.3	1.4	52	65	59		
1 /0	3	1.1	1.6	1.9	2.2	2.5	3.1	3.3	52	65	59		
1/8	4	1.5	2.2	2.5	3.0	3.4	4.1	4.4	52	65	59		
	6	2.3	3.2	3.7	4.5	5.1	6.1	6.6	67	75	82		
1/4	6	2.3	3.2	3.7	4.5	5.1	6.8	6.6	67	75	82		
1/4	8	3.0	4.3	4.9	6.0	6.8	8.2	8.8	58	70	64		
	6	2.3	3.2	3.7	4.5	5.1	6.1	6.6	67	75	82		
3/8	8	3	4.3	4.9	6.0	6.8	8.2	8.8	58	70	64		
	10	3.8	5.4	6.2	7.4	8.5	10.2	11.0	58	70	64		

### **CC FLAT FAN NOZZLE**





Inlet	Spray Angel (°)				Flow Rate Capacity(L/min)									
Conn.	65	80	95	120	0.3bar	1bar	2bar	3bar	4bar	5bar	6bar	7bar	10bar	
	6502	8002	9502	12002	0.25	0.46	0.64	0.79	0.91	1.0	1.1	1.2	1.4	
	6503	8003	9503	12003	0.37	0.68	0.97	1.2	1.4	1.5	1.7	1.8	2.2	
30000000	6504	8004	9504	12004	0.5	0.91	1.3	1.6	1.8	2.0	2.2	2.4	2.9	
1/8	6505	8005	9505	12005	0.62	1.1	1.6	2.0	2.3	2.5	2.8	3.0	3.6	
	6506	8006	9506	12006	0.75	1.4	1.9	2.4	2.7	3.1	3.3	3.6	4.3	
	6508	8008	9508	12008	1	1.8	2.6	3.2	3.6	4.1	4.5	4.8	5.8	
	6510	8010	9510	12010	1.2	2.3	3.2	3.9	4.6	5.1	5.6	6.0	7.2	
1/4	6515	8015	9515	12015	1.9	3.4	4.8	5.9	6.8	7.6	8.4	9.0	10.8	
	6520	8020	9520	12020	2.5	4.6	6.5	7.9	9.1	10.2	11.2	12.1	14.4	
3/8	6530	8030	9530	12030	3.7	6.8	9.7	11.8	13.7	15.3	16.7	18.1	22	



Material : PP/PVC/PTFE/PVDF

Features : Smooth finished surfaces assure leak-proof connections.

High hardness and wear resistance

Lower cost and more choices of materials.

Applications: ·PCB manufacturing ·Quenching during heat treat process ·Gas cooling & scrubbing ·Dust control ·Ash washing ·Etching ·Foam break-up,aeration,deaeration



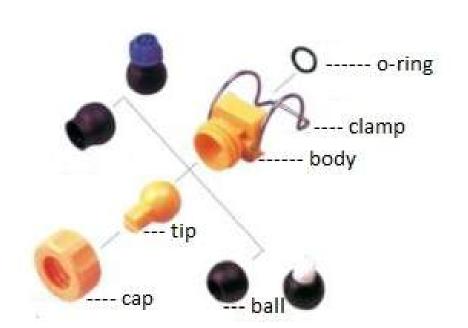
# **CLAMP TYPE**

### **26988 SERIES**



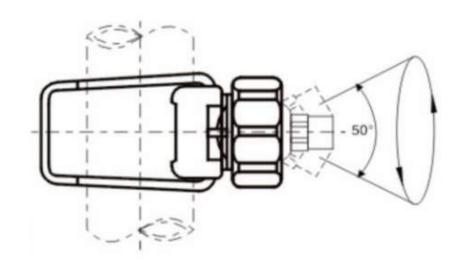
### **155 SERIES**





- ·Two connection types:the clip type(26988, 27988) and the thread type (155 series).
- ·Hollow cone- shaped spray pattern or solid cone- shaped spray pattern or flat spray pattern.
- ·Fast and easy installation.

Applications: ··Metal treating ·Degreasing ·Phosphating



# ·Clip-on nozzle

Туре	Clamp Size (inch)	Clamp Outlet Dia. (mm)	
	3/4	25-27	
	1	32-35	
26988	1-1/4	38-43	
	1-1/2	44-51	
	2	54-60	

Pi	pe Orific (mm)	е
	14	
	14	
	16	
	18	
	20	

# ·Thread Spray Size

Туре	Thread Size (inch)
	1/8
155	1/4
155	3/8
	1/2













# **CLAMP TYPE - M SERIES**

#### **26988M SERIES - PP**



·Spray Angle: 0°-144°(based on nozzle type)

·Spray Pattern :Solid cone- shaped spray pattern or hollow cone- shaped spray pattern or flat fan

spray pattern or square spray pattern .(Based on nozzle type)

·Drops : Small- to medium-size,uniform distribution over a wide range of flow rates and pressure.

·Material : BRASS/SS/PP/PVC/PTFE

·Features : Combines snap-on installation with quick-connect spray tips for fast and easy maintenance.

Available in single or double clamp designs.

Adjustable swivel ball provides a quick change direction.

Removable caps and vanes for easy inspection and cleaning on most models.

Applications: ·Water aerating ·Spray cooling ·Quenching during heat treat process ·Fire prevention ·Cooling in heat treat process ·Dust control ·Metal treating ·Gas cooling & scrubbing

Туре	Clamp Size (inch)	Clamp Outlet Dia(mm)	Pipe Orifice (mm)	Threaded Ball Type	Thread Size (inch)
	1	32-35	14	BL1	1/8
2500011	1-1/4	38-43	16	BL2	1/4
26988M	1-1/2	44-51	18	BL3	3/8
	2	54-60	20		

#### **ORDER INFO:**

26988 -	1-1/4	- D14	-	PP +	CT6520
1	1	1		1	1
Body Nozzle Type	Clamp Size	Pipe Opening	Size	Material Code	Nozzle type

### **HOLLOW CONE NOZZLE**

Nozzle			Spray Angle (°)							
Туре	0.3bar	0.7bar	1bar	1.5bar	2bar	3bar	4bar	0.5bar	1.5bar	4bar
AT15-30.1	6.2	8.8	10.4	12.6	14.5	17.6	20.2	46	49	51
AT25-30.1	7.5	10.7	12.7	15.4	17.6	21.4	24.6	45	47	50
AT55-50.1	13.5	19	22.7	27.8	32	39.2	45.2	38	46	48
AT55-50.3	13.5	19	22.7	27.6	31.8	38.7	44.4	75	75	76

### **FULL CONE NOZZLE**

Nozzle		Flow Rate Capacity (L/min)								Spray Angle (°)			
Type	0.35bar	0.7bar	1bar	1.5bar	2bar	3bar	4bar	0.5bar	1.5bar	4bar			
BT6	1.6	2.3	2.6	3.2	3.7	4.5	5.1	69	74	68			
BT12.5	3.4	4.8	5.4	6.8	7.7	9.3	10.6	69	74	68			
BT25	6.7	9.5	10.9	13.5	15.4	18.6	21	64	67	63			
BT50	13.5	19.1	21.9	27	31	37	42	91	94	88			

### **FLAT FAN NOZZLE**

	Spray Tip Type (spray angle at 3 bar)							Flow Rate Capacity (L/min)						
15°	25°	40°	50°	65°	80°	0.3bar	0.7bar	1bar	1.5bar	2bar	3bar	4bar		
-	-	-	-	CT6510	CT8010	1.2	1.9	2.3	2.8	3.2	3.9	4.6		
		CT4020	CT5020	CT6520	-	2.5	3.8	4.6	5.6	6.5	7.9	9.1		
121	CT2530	CT4030	CT5030	CT6530	2	3.7	5.7	6.8	8.4	9.7	11.8	13.7		
170	-	CT4040	CT5040	CT6540	CT8040	5.0	7.6	9.1	11.2	12.9	15.8	18.2		
CT1550		CT4050	CT5050	CT6550	-	6.2	9.5	11.4	14	16.1	19.7	23		
-	CT2560	CT4060	CT5060	CT6560	CT8060	7.5	11.4	13.7	16.7	19.3	24	27		
CT1570	CT2570	CT4070	CT5070	CT6570	CT8070	8.7	13.3	16.0	19.5	23	28	32		
CT15100	CT25100	CT40100	CT50100	CT65100	CT80100	12.5	19.1	23	28	32	39	46		



# **CLAMP TYPE - M SERIES**

# **HOLLOW CONE NOZZLE**

	Nozzlo Typo	Flow Rate Capacity (L/min)									Spray Angle (°)		
00	Nozzle Type	0.3bar	0.7bar	1bar	1.5bar	2bar	3bar	4bar	0.5bar	1.5bar	4bar		
	AT15-30.1	6.2	8.8	10.4	12.6	14.5	17.6	20.2	45	49	51		
	AT25-30.1	7.5	10.7	12.7	15.4	17.6	21.4	24.6	45	47	50		
	AT55-30.1	13.5	19.0	22.7	27.8	32.0	39.2	45.2	38	46	48		
	AT55-50.3	13.5	19.0	22.7	27.6	31.8	38.7	44.4	75	75	76		

### **FULL CONE NOZZLE**

Nozzle Type			Spray Angle (°)							
NOZZIC TYPE	0.3bar	0.7bar	1bar	1.5bar	2bar	3bar	4bar	0.5bar	1.5bar	4bar
BT6	1.6	2.3	2.6	3.2	3.7	4.5	5.1	69	74	68
BT12.5	3.4	4.8	5.4	6.8	7.7	9.3	10.6	69	74	68
BT25	6.7	9.5	10.9	13.5	15.4	18.6	21	64	67	63
BT50	13.5	19.1	21.9	27	31	37	42	91	94	88

### **FLAT FAN NOZZLE**

		Nozzle Type (spray angle at 3 bar)							Flow Rate Capacity (L/min)					
	15°	25°	40°	50°	65°	80°	0.3	0.7	1bar	1.5bar	2bar	3bar	4ba	
	-	0.0	-		CT6510	CT8010	1.2	1.9	2.3	2.8	3.2	3.9	4.6	
(40)	-	-	CT4020	CT5020	CT6520		2.5	3.8	4.6	5.6	6.5	7.9	9.1	
	14	CT2530	CT4030	CT5030	CT6530		3.7	5.7	6.8	8.4	9.7	11.8	13.	
		-	CT4040	CT5040	CT6540	CT8040	5.0	7.6	9.1	11.2	12.9	15.8	18.	
	CT1550	12	CT4050	CT5050	CT6550	-	6.2	9.5	11.4	14.0	16.1	19.7	23	
	-	CT2560	CT4060	CT5060	CT6560	CT8060	7.5	11.4	13.7	16.7	19.3	24	27	
	CT1570	CT1570	CT4070	CT5070	CT6570	CT8070	8.7	13.3	16.0	19.5	23	28	32	
	CT15100	CT15100	CT40100	CT50100	CT65100	CT80100	12.5	19.1	23	28	32	39	46	

# **QUICK-RELEASE BALL**

	Туре	Connected
6	BLQ	Quick-release Type

# **THREAD BALL**

Thread Ball Type	Thread Size inch
BL1	1/8
BL2	1/4
BL3	3/8

### QUICK-RELEASE FLAT FAN NOZZLE

	N	ozzle Type	(spray an	igle at 3 ba	ar)			Flov	v Rate	Capac	ity (L/	min)		
	50°	65°	80°	95°	110°	0.3bar	1bar	2bar	3bar	4bar	5bar	6bar	7bar	14bai
	QC5001	Qc6501	Qc8001	Qc9501	Qc11001	0.12	0.23	0.32	0.39	0.46	0.51	0.56	0.6	0.85
AD.	QC5002	QC6502	QC8002	QC9502	QC11002	0.25	0.45	0.64	0.79	0.91	1.0	1.1	1.2	1.7
	QC5003	QC6503	QC8003	QC9503	QC11003	0.37	0.69	0.97	1.2	1.4	1.5	1.7	1.8	2.6
	QC5004	QC6504	QC8004	QC9504	QC11004	0.50	0.92	1.3	1.6	1.8	2.0	2.2	2.4	3.4
	QC5005	QC6505	QC8005	QC9505	QC11005	0.62	1.1	1.6	2.0	2.3	2.5	2.8	3.0	4.3
	QC5006	QC6506	QC8006	QC9506	QC11006	0.75	1.3	1.9	2.4	2.7	3.1	3.3	3.6	5.1
	QC5008	QC6508	QC8008	QC9508	QC11008	1.0	1.8	2.6	3.2	3.6	4.1	4.5	4.8	6.8
	QC5010	QC6510	QC8010	QC9510	QC11010	1.2	2.3	3.2	3.9	4.6	5.1	5.6	6.0	8.5
	QC5015	QC6515	QC8015	QC9515	QC11015	1.9	3.4	4.8	5.9	6.8	7.6	8.4	9.0	12.8
	QC5020	QC6520	QC8020	QC9520	QC11020	2.5	4.6	6.5	7.9	9.1	10.2	11.2	12.1	17.1
	QC5030	QC6530	QC8030	QC9530	QC11030	3.7	6.8	9.7	11.8	13.7	15.3	16.7	18.1	26

### QUICK-RELEASE FULL CONE NOZZLE

	Nozzle		Flow Rate Capacity (L/min)									Spray Angle (°)		
	Туре	0.5bar	0.7bar	1.5bar	2bar	3bar	4bar	5bar	6bar	7bar	10bar	0.5bar	1.5bar	6bar
	Qb1	0.25	0.38	0.54	0.62	0.74	0.85	0.94	1.0	1.1	1.3		58	53
200	QB2	0.65	0.76	1.0	1.2	1.5	1.7	1.9	2.0	2.2	2.6	43	50	46
	QB3	0.98	1.1	1.6	1.9	2.2	2.5	2.8	3.1	3.3	3.9	52	65	59
100	QB3.5	1.1	1.3	1.9	2.2	2.6	3.0	3.3	3.6	3.9	4.5	43	50	46
	QB5	1.6	1.9	2.7	3.1	3.7	4.2	4.7	5.1	5.5	6.5	52	65	59
	QB6.5	2.1	2.5	3.5	4.0	4.8	5.5	6.1	6.7	7.1	8.4	45	50	46
	QB10	3.3	3.8	5.4	6.2	7.4	8.5	9.4	10.2	11.0	13.0	58	67	61



Quick couplings provide immediate, perfectly sealed junction between the two tubes. They have some types from A to F and made of different raw materials such as PP, aluminum, SS. Regarding pretreatment processes, couplings made of PP material are widely preferred with SS handles,pins,rings or with PP handles. Camlock couplings have two kinds of adapter: male and female. During the process of installation, no tools are required and hand pressure is enough. Hence, camlock couplings are not only save time but also the tools ad human power. However, camlocks are not suitable for any kinds of hose. It is forbidden to be used in compressed air, gas or high pressure applicatons.

The camlock couplings, in general, have 8 types including 4 types male parts and 4 types female parts

### Types:

A TYPE adapter : material PP, size 1/2" to 4"

B TYPE coupler : material PP, handles PP/SS, safety pin SS, size 1/2"

to 4"

C TYPE coupler : material PP, handles PP/SS, safety pin SS, size 1/2"

to 4"

D TYPE coupler : material PP, handles PP/SS, safety pin SS, size 1/2"

to 4"

E TYPE adapter : material PP, size 1/2" to 4" F TYPE adapter : material PP, size 1/2" to 4"

DC TYPE (dust cap) coupler : material PP, handles PP/SS, safety pin SS, size 1/2" to 4"

DP TYPE (dust plug) adapter: material PP, size 1/2" to 4"

General usage area. : Polypropylene quick couplings are typically used in low pressure suction or discharge hoses of firefighting pumps, IBC containers and other applications where need quick connect or disconnect operations. PP camlocks have an excellent chemical resistance to most aggressive chemicals and corrosive solvents.

Advantages :

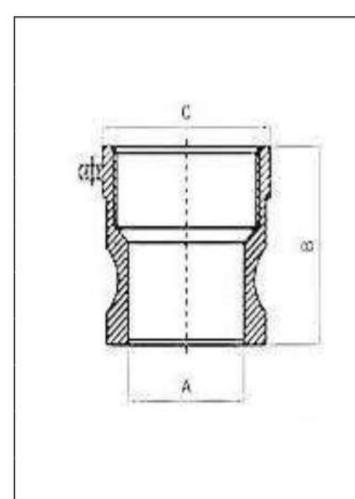
- \* Excellent chemical resistance
- \* Economical option for quick hose coupling
- \* No tools needed
- \* Connect or disconnect in an easy way

\*\* Temperature range : -15 Fo to + 200 Fo (water)

\*\*\* Working pressure : depends on size and temperature



### A Type PP Adapter Technical Data:

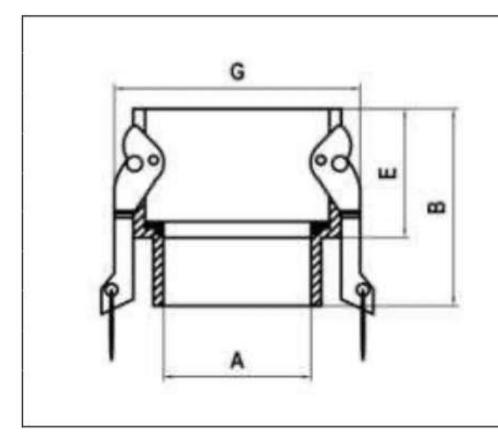


SIZE	A (mm)	B (mm)	C (mm)
1/2"	21,5	48	34
3/4"	21,5	48	34
1"	24	56	42
1-1/4"	28,5	64	48
1-1/2"	36	66	59
2"	44	70	71
2-1/2"	59	79	84
3"	72	82	101
4"	93	92	131

Polypropylene A type adapter is compatible with most chemicals. It is typically used in combination with Type D, B,C and DC type in suction / discharge applications. Due to its excellent chemical resistance to the strongest chemicals and solvents, it is quite suitable for agricultural acids, fertilizers and acids.

Thread : Standard NPT / BSP

### **B Type Coupler Technical Data:**



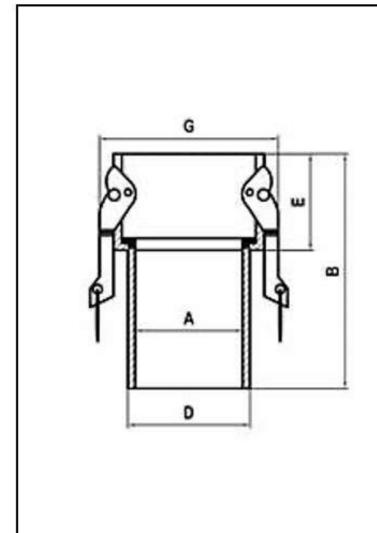
SIZE	A (mm)	B (mm)	E (mm)	G (mm)
1/2"	15	54	34	50
3/4"	18	54	34	50
1"	24	60	41	60
1-1/4"	33	70	46	77
1-1/2"	37	72	50	82
2"	49	82	56	94
2-1/2"	63	85	56	107
3"	76	89	59	127
4"	98	95	60	160

B Type polypropylene coupling has two stainless steel / PP handles. Handles, pins and safety clips are made stainless steel. Finger rings are made of brass or stainless steel. Type B PP coupling is typically used in conjunction with Type F, A and E adapters to connect low pressure suction hoses to pumps in frequent plugging, connecting or disconnecting applications such as IBC (international bulk containers), painting industries

Thread : Standard NPT / BSP



### C Type PP Coupler Technical Data:

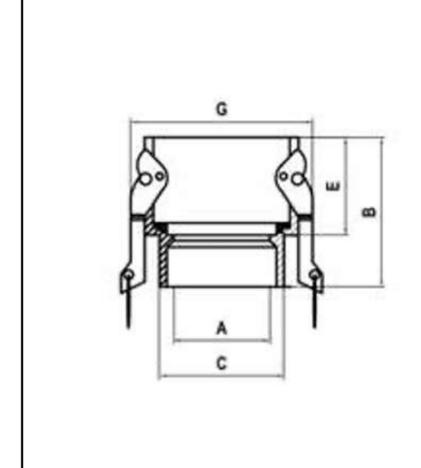


SIZE	A (mm)	B (mm)	D (mm)	E (mm)	G (mm)
1/2"	8	79	14	34	50
3/4"	14	87	21	34	50
1"	19	99	27	41	60
1-1/4"	25	103	34	46	76
1-1/2"	31	110	39	49	85
2"	41	124	53	56	94
2-1/2"	55	141	65	56	109
3"	65	147	78	60	133
4"	85	170	102	60	160

C Type polypropylene coupler has two stainless steel / PP handles. Handles, pins and safety clips are made stainless steel. Finger rings are made of brass or stainless steel. Typically used with E, A, F and DP adapters. It has resistant to many aggressive acids, agricultural fertilizers solvents and treated waters just like stainless steel.

Thread type : Standard NPT / BSP

# D Type PP Coupler Technical Data:



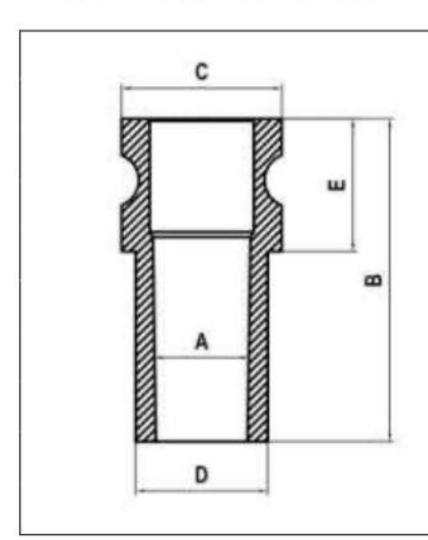
SIZE	A (mm)	B (mm)	C (mm)	E (mm)	G (mm)
1/2"	19	54	34	34	52
3/4"	21	54	34	34	52
1"	24	60	41	41	62
1-1/4"	33	70	59	46	78
1-1/2"	39	72	59	49	88
2"	49	83	71	55	98
2-1/2"	62	85	84	56	111
3"	77	90	102	60	132
4"	98	92	131	60	165

Type D polypropylene coupler is used with Type A, E, F and DP adapters of the same size. D type PP coupler has two stainless steel (aisi 304 / 316) / PP handles. Handles, pins and safety clips are made of stainless steel. Finger rings are made of brass or stainless steel. Standard gaskets Buna-N, EPDM, PTFE, Nitrile or silicon gaskets can be supplied upon request. It is suitable for many chemicals and solvents.

Thread type : Standard NPT / BSP



### E Type PP Adapter Technical Data:

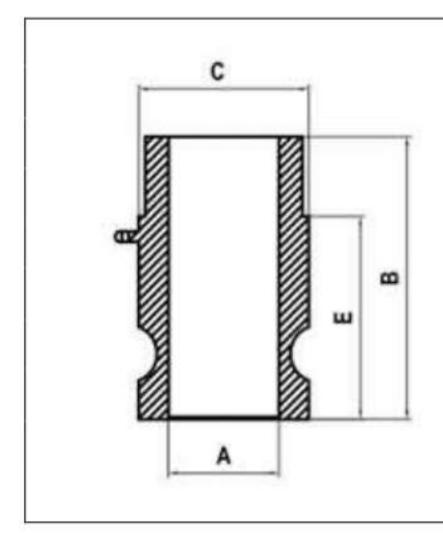


SIZE	A (mm)	B (mm)	D (mm)	E (mm)	C (mm)
1/2"	8	77	14	33	32
3/4"	14	84	21	33	32
1"	19	97	27	38	37
1-1/4"	25	100	34	44	46
1-1/2"	31	108	40	47	54
2"	41	125	53	54	63
2-1/2"	55	141	64	56	70
3"	65	148	79	58	91
4"	85	175	103	65	119

Used with C, B, D and DC type couplings. It is often used in firefighting pumps, IBC containers, oil or painting industries. It is used in low pressure suction, discharge pipe or hose systems. Care must be taken when attching the adapter to the coupling to avoid crushing or breaking.

Thread type : Standard NPT / BSP

# F Type PP Adapter Technical Data:



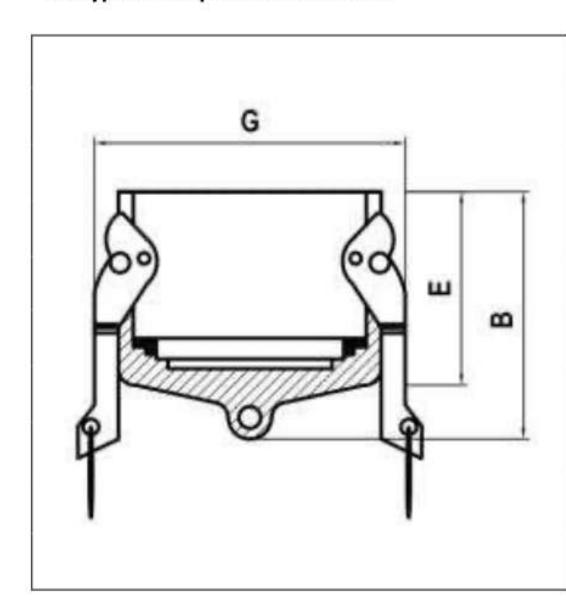
SIZE	A (mm)	B (mm)	C (mm)	E (mm)
1/2"	21	58	34	39
3/4"	22	58	34	39
1"	24	66	41	46
1-1/4"	29	81	48	57
1-1/2"	37	78	58	54
2"	45	90	70	62
2-1/2"	59	92	80	63
3"	74	98	100	67
4"	93	108	110	74

Used with C, B, D and DC couplers

Thread type : Standard NPT / BSP



#### DC Type PP Coupler Technical Data:

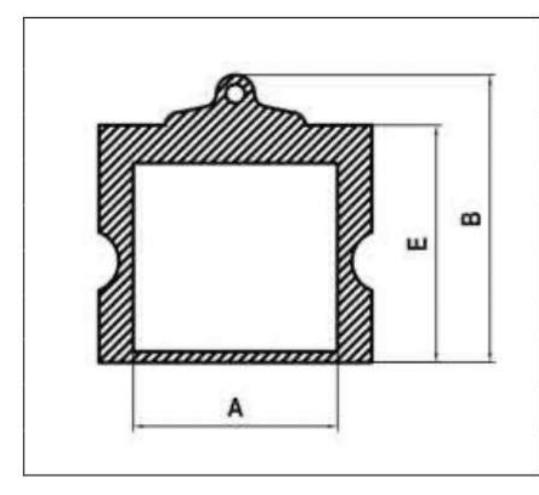


SIZE	B (mm)	E (mm)	G (mm)
1/2"	43	33	43
3/4"	46	36	50
1"	57	43	60
1-1/4"	63	48	75
1-1/2"	65	51	82
2"	73	57	98
2-1/2"	76	58	108
3"	74	60	127
4"	76	60	162

Type DC polypropylene female end coupler is used with Type A, E and F adapters of the same size. DC type coupling should not be used under pressure.

Thread type : Standard NPT / BSP

# **DP Type PP Adapter Technical Data:**



SIZE	A (mm)	E (mm)	B (mm)
1/2"	14	28	39
3/4"	21	30	41
1"	23	34	49
1-1/4"	29	43	58
1-1/2"	35	46	60
2"	44	49	65
2-1/2"	59	51	67
3"	73	52	69
4"	93	57	73

DP type polypropylene male end adapter plugs into Type B, C and D adapters of the same size. It is frequently used in the chemical industry, agriculture, paint and ink factories. It is preferred not only because of its good performance against chemicals, coolants and treated water, but also because of its cheap price and simple use.

Thread type : Standard NPT / BSP

Care must be taken attaching or releasing couplings and adapters made of all PP materials. DP type adapter should not be used under pressure.





Polypropylene adapter Type A



Polypropylene coupler Type B



Polypropylene coupler Type C



Polypropylene coupler Type D





Polypropylene adapter Type E



Polypropylene adapter Type F



Polypropylene coupler Type DC



Polypropylene adapter Type DP