

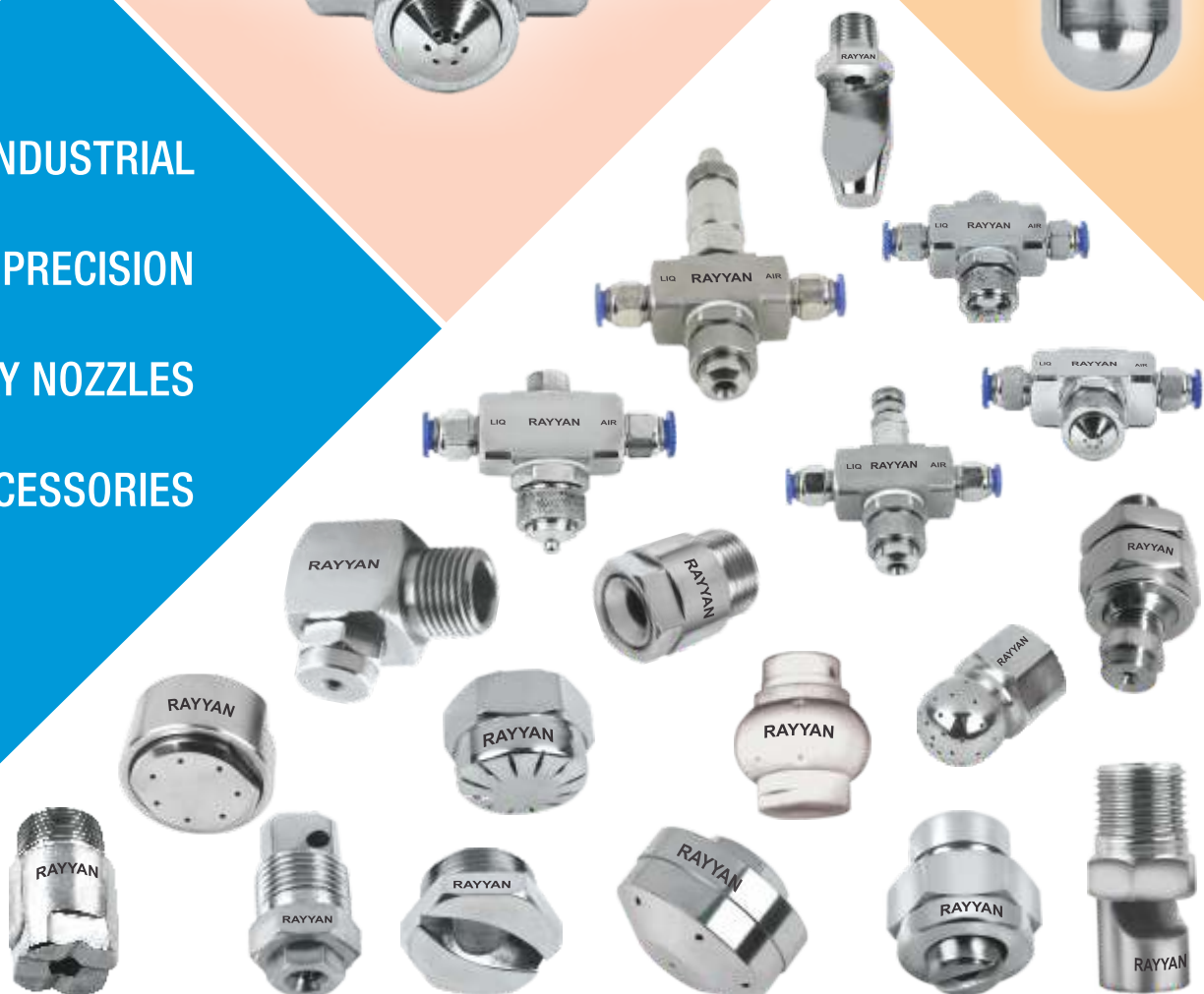


RAYYAN SPRAY SYSTEMS

www.spraynozzlesindia.com



**INDUSTRIAL
PRECISION
SPRAY NOZZLES
& ACCESSORIES**





COMPANY PROFILE

We are the manufactures and suppliers of the different type of precision industrial Spray Nozzles and Accessories with an experience of 7 years, Today 'RAYYAN SPRAY SYSTEMS' is a trusted name in the manufacturing different types of nozzles used in various fields our fields of specialization include manufacturing nozzles for surface treatment, chemical industry, Steel making industry, power engineering environmental technology, air conditioning, fire protection, paper industry, Food and beverages, Machine tools and agriculture. We also manufacture nozzles as per your Specification and sample. We attribute our success to our motivated and skilled work force. Who can accomplish job order of varying magnitudes and complexities. We are proud to have esteemed customers who have entrusted their faith in us over the years.

AIM OF ORGANIZATION

The aim of our organization is customer satisfaction which is achieved through Following objectives:

- Prompt response.
- Commitment to quality.
- Technological solutions.
- In time delivery.
- After sales service.
- To meet the widely ranging delivery demands.

ABOUT QUALITY SYSTEM

The quality control measured are taken right from raw material stage to final product and that is readily reviewed through necessary documents. Internal inspection report is made for every lot and the same is given to the customer along with material TC report. All our measuring instruments are calibrated periodically.



SPRAY PERFORMANCE CONSIDERATIONS:

Basic spray nozzle characteristics : Spray nozzles are precision components which are designed for industrial products to very specific performance under specific conditions. This will help you to determine the perfect nozzle type. For your application general spray characteristics of nozzle are given with different types of spray pattern.

FULL CONE NOZZLE



Full cone utilizes an internal vane to provide a uniform round conical. Full spray pattern with medium to large sized drops.

FLAT JET NOZZLE



A Flat jet spray nozzle produce a flat liquid layer. They are non-clogging and one piece construction can operate through pressure fluctuation.

CONTINUOUS CASTING FULL CONE NOZZLE (JATO TYPE)



Supply of liquid takes place axially and form fine Uniform full cone spray pattern.

HOLLOW CONE NOZZLE



Hollow cone spray where most of the liquid is uniformly distributed at the outer edge of a conical pattern like ring type pattern.

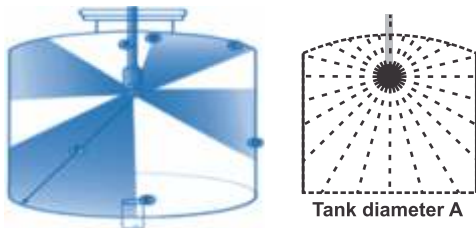


SOLID STREAM



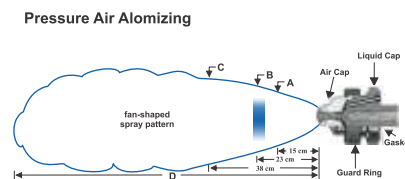
Solid stream nozzles produce compact, solid stream jet of defined lengths. Solid stream nozzles provide the greatest impact per square inch of any other type of nozzle. They are 0° deg nozzle provides the greatest impacts.

TANK CLEANING NOZZLE



This type of nozzle are used to clean the inside Diameter of tank and barrels, and they are clean upto 360° deg. Angle depends on inside diameter of tanks.

AIR ATOMIZING NOZZLE



Atomization produced by a combination of air and liquid pressures. Air atomising spray nozzles mixes liquid and air to give fine mist like humidification. It is available in cone and flat spray patterns.

CAPACITY OF NOZZLE

Capacity of nozzle varies with spraying pressure. It also depends on the specific gravity of the liquid. Thus for lower specific gravity, the flow rate is larger and for higher specific gravity, the flow rate is smaller at the same pressure.

SPRAY ANGLE

Spray angle varies with the distance from where it is going to spray. Spray angle also depend on viscosity of liquid.

VISCOSITY

Viscosity is the property of a liquid which resists change in the shape during flow liquid viscosity is a primary factor affecting spray pattern formation and to lesser degree capacity. High viscosity liquids require a higher minimum pressure to the formation of a spray pattern and provide narrower spray angles as compared to those of water.



DROP SIZE SPRAY

Drop size refers to the size of individual spray drops that comprise a nozzle's spray pattern each spray provides a range of drop size. Drop size distribution is depend on the spray pattern type and varies from one type to another. The smallest drop size is achieved by air atomizing nozzle which the largest drops are produced by full cone hydraulic spray nozzle. The drop size is also affect by liquid properties, nozzle capacity, spraying pressure and spray angle. Lower spraying pressures provide larger drop sizes. Higher spraying pressures yield smaller drop sizes. With each type of spray pattern the smallest capacity produced the smallest spray drops, and the largest capacities produced the largest spray drops.

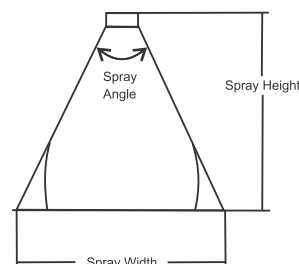
MATERIAL SELECTION

Following types of material are generally used:-

- 1) Brass 2) Stainless steel:- SS- 304, SS- 316, SS- 316L 3) Hardened SS
- 4) Plastic material:- PVC, Teflon, PP

SPRAY ANGLE AND COVERAGE

The table listed below gives the theoretical coverage of spray patterns as calculate from the included spray and the distance from the nozzle orifice.



Theoretical spray width in (cm) at various heights from nozzle orifice.

Spray Angle	5cm	10cm	15cm	20cm	25cm	30cm	40cm	50cm	60cm	70cm	80cm	100cm
5°	0.4	0.9	1.3	1.8	2.2	2.6	3.5	4.4	5.2	6.1	7.0	8.7
10°	0.9	1.8	2.6	3.5	4.4	5.3	7.0	8.8	10.5	12.3	14.0	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	73.3	91.6	110	128	147	183
90°	10.0	20.0	30.0	40.0	50.0	60.0	80.0	100	120	140	160	200
95°	10.9	21.8	32.7	43.7	54.6	65.5	87.3	109	131	153	175	218
100°	11.9	23.8	35.8	47.7	59.6	71.5	95.3	119	143	167	191	238
110°	14.3	28.6	42.9	57.1	71.4	85.7	114	143	171	200	229	286
120°	17.3	34.6	52.0	69.3	86.6	104	139	173	208	243	-	-



FLOW RATE CONVERSION CHART

Unit	l/s	l/min	m3/hr	Us-gal min	imp-gal min
1 l/s	1	60	3.6	15.85	13.2
1 l/min	0.01667	1	0.06	0.2642	0.22
1 m3/hr	0.28	16.67	1	4.1	3.66
1 Us-gal/min	0.0631	3.785	0.227	1	0.8327
1 imp-gal/min	0.076	4.546	0.273	1.201	1

PRESSURE CONVERSION CHART

Unit	Bar	Pascal (Pa)=N/m ²	Kg/cm ² =1at	Psi	lb/sq.ft.
1 bar	1	100000	1.02	14.5	2089
1 Pascal	1x10 ⁻⁵	1	1.02x10 ⁻⁵	14.5x10 ⁻⁵	0.0209
1 at=kg/cm ²	0.9807	98070	1	14.22	2048
1 Psi	0.06895	6895	0.07031	1	144
1 lb/sq.ft	0.479x10 ⁻³	47.9	0.4882x10 ⁻³	6.94x10 ⁻³	1

FULL CONE NOZZLES

A wide choice of full cone nozzles is shown on the following pages, which are sufficient for the majority of standard industrial process. In order to assist your choice of nozzle, the table below lists the full cone nozzles type, and some general indications about the nozzle style special features, spray pattern and specific application where it might be used.

Full cone nozzles are normally delivered in brass or in stainless steel SS -304, SS -316, while a wide choice of offer material like PVC, PP, Teflon can be supplied on request.

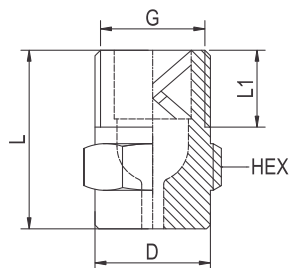


FULL CONE NOZZLES

Full cone nozzle spray in a conical spray pattern within the inside area of the cone. They are available in axial or in tangential. Axial full cone spray pattern with uniform distribution of liquid spray over the whole circular impact area. It consists of vane. In most of these nozzles the vane are removable.

Application :

- *Washing and cleaning process
- *Cooling and quenching
- *Dust suppression
- *Surface spraying



G	L1	L2	HEX	D
1/8"	19	6.5	12	11
1/4"	22	10	14	13
3/8"	25	10.5	17	16
1/2"	32	14	22	21
3/4"	42	15	27	32
1"	56	17	36	39



Spray Angle	Flow rate LPM at Pressure (p)= 0.5 - 10 bar	Connection	Materials
45°, 60°, 90°, 120°	1 - 750	1/8" to 2", BSP/BSPT/NPT -(M)	Brass, SS-304, SS-316, PVC, PP
Special material and connections on request.			

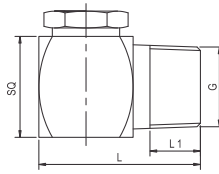


TANGENTIAL FULL CONE NOZZLES

Tangential full cone nozzles sprays at 90° angle. They are Vaneless. It consists of removable cap.

Application :

- * Water coating / cooling of tanks
- * Chemical process engineering
- * Dust Suppression
- * Fire Fighting



G	L	L1	SQ
1/4"	35	10	20
3/8"	35	10.5	22
1/2"	45	14	25
3/4"	57	16	32



Spray Angle	Flow rate lpm at pressure P = 2-10 bar	Connection	Materials
60°, 90°, 120°	2 to 161	1/4" to 3/4 " BSP/BSPT/NPT-(M)	Brass, SS-304, SS-316, PP, PVC, Teflon
Special material and connections on request.			



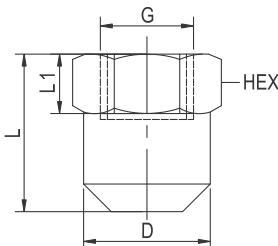
CONTINUOUS CASTING COOLING FULL CONE NOZZLES

Supply of liquid takes place aerielly and form fine. Uniform full cone spray pattern.

Application :

- * Spray Drying.
- * Brine Spraying.
- * Metal Treating.
- * Cooling & Cleaning of air and gas.
- * Continaus Casting Cooling.

G	L	L1	HEX	D
3/8"	26.5	10	22	21.3



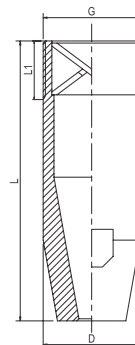
Spray Angle	Flow rate lpm at pressure P = 2.8 bar	Connection	Materials
45°, 65°	2 to 16	3/8" BSP (F)	Brass, SS-304, SS-316
Special material and connections on request.			



NARROW FULL CONE SPRAY NOZZLES

These nozzles produce a solid cone spray with round pattern. This nozzles are available in 15° or 30° spray angle.

G	L	L1	HEX	D
1/4"	42	10	12	14
3/8"	45	10.5	16	18
1/2"	70	14	19	22
3/4"	72	15	25	28
1"	92	17	30	34
1.1/4"	110	19	38	43
1.1/2"	117	22	45	50
2"	150	24	60	68



Spray Angle	Flow rate LPM, Pressure (p) =0.5 - 10 bar	Connection	Materials
15°, 30°	1 to 750	1/4" to 2" BSP/BSPT/NPT-(M)	Brass, SS-304, SS-316, PVC
Special material and connections on request.			



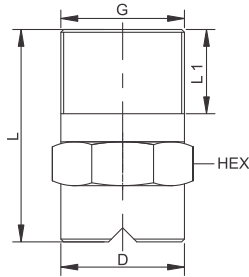


FULL CONE SPRAY NOZZLES WITH SQUARE PATTERN

This type of nozzle gives square cone with uniform distribution throughout.

Application :

- *Cooling and quenching
- *Product washing
- *Air and gas washers
- *Scrubbers
- *Liquor washer
- *Dust control
- *Fire protection



G	L	L1	HEX	D
3/8"	25	10.5	17	16.2
1/2"	32.5	13.2	22	21.2
3/4"	42	15	27	32
1"	56	17	36	40



Spray Angle	Flow rate LPM at pressure (p) = 0.5 - 10 bar	Connection	Materials
60°, 90°, 120°	2 to 94	3/8" to 1" BSP/BSPT/NPT-(M)	Brass . SS-304, SS-316, PVC
Special material and connections on request.			

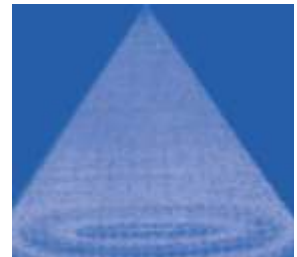
SPIRAL FULL CONE NOZZLES

The spiral full cone nozzles combine small sizes with wide flow rate and opening- they are non-clogging due to absence of internal parts.

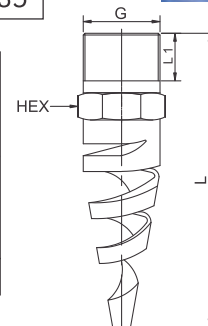
Application :

- *Fire fighting system
- *Gas washing
- *Cooling towers

G	L	L1	HEX
1/4"	46	10	14
3/8"	50	10.5	17
1/2"	65	14	22
3/4"	70	15	27
1"	92	17	35



Spray Angle	Flow rate lpm at pressure P = 2 to 10 bar	Connection	Materials
60°, 90°, 150° 120°, 180°	10 to 2700	1/4" to 2" BSP/BSPT/NPT-(M)	Brass, SS-304, SS-316, PP, PVC, Teflon
Special material and connections on request.			



FULL CONE ADJUSTABLE BALL -TYPE NOZZLES

This type of nozzles are used for adjusting of variable spray direction.

Application :

- *Cleaning
- *Cooling
- *Washing
- *Dust suppression

Spray Angle	Flow rate lpm at pressure P = 2-10 bar	Connection	Materials
45°, 60° to 120°	2 to 22	1/4", 3/8" BSP/BSPT/NPT-(M)	Brass, SS-304, SS-316, PVC
Special material and connections on request.			



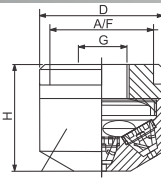


MULTIPLE FULL CONE SPRAY NOZZLES

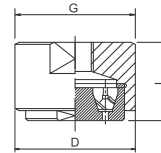
Multiple full cone spray nozzles consist of seven individual hollow cone orifices which generate small droplets from a large capacity flow. The overlapping hollow cone orifices produce a full cone spray pattern of 130° & 75° angle of very fine droplets.

Application :

- *Gas cooling
- *Desuperheaters
- *Fire protection
- *Chlorine precipitation absorption
- *Chemical process



G	L	D	A/F
1/2" to 3/4"	44	63	32



G	L	D	A/F
1/2" to 3/4"	44	75	65



Spray Angle	Flow rate lpm at pressure P = 2 to 10 bar	Connection	Materials
130°, 75°	Up to - 140	1/2" to 3/4" BSP (F)	SS-304, SS-316, SS-310
Special material and connections on request.			



FLAT JET SPRAY NOZZLES

A wide choice of flat jet nozzles are shown on the following pages flat jet spray nozzles are having strong fluid impact. The energy of the jet is concentrated over a small surface area. Because of the flat jet shape and its relatively high impact values these nozzles are commonly used to wash objects moving on conveyors in a transverse direction to the pipe the nozzles are assembled to a flat jet spraying system involve large of relatively large number of nozzles on to one or more manifolds.

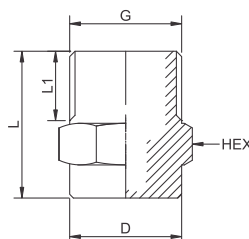


FLAT JET NOZZLES

Flat jet spray nozzles with uniform distribution of droplets.

Application :

- *Material cleaning and processing
- *Degreasing and rinsing
- *Surface treatment
- *Spray coating
- *Filter cleaning
- *Lubricating
- *Roll cooling
- *Sand and cool washing



G	L	L1	HEX	D
1/8"	19	6.5	12	11
1/4"	22	10	14	13
3/8"	25	10.5	17	16
1/2"	27	14	22	21



Spray Angle	Flow rate lpm at pressure P = 2 to 10 bar	Connection	Materials
30°, 45°, 60°, 90°, 120°	2 to 170	1/8" to 1/2" BSP/BSPT/NPT-(M)	Brass, SS-304, SS-316
Special material and connections on request.			

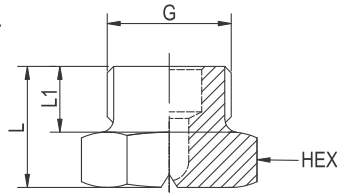


FLAT JET TYPE DESCALER NOZZLE

Flat jet type Descaler nozzles highly uniform flat spray with knife-life cutting edge – a accurate jet alignment maximum impinging force with minimum loss of energy speedy nozzles change with the dovetail design.

Application :

- *Descaling
- *High pressure cleaning Etc.



Spray Angle	Flow rate lpm at pressure P = 2 to 10 bar	Connection	Materials
30°, 45°, 60°, 90°, 120°	2 to 950	1/4" to 2" BSP/NPT-(M)	Brass, SS-304, SS-316
Special material and connections on request.			

G	L	L1	HEX
1/4"	13	8	17
3/4"	15	9	32
1"	20	12	36
1.1/4"	22	14	50
2"	32	20	70



FLAT JET WITH DOVETAIL TYPE

This nozzle uniform flat spray with knife- like cutting edge and maximum impinging force with minimum loss of energy.

Application :

- *Descaling
- *High pressure cleaning

Spray Angle	Flow rate LPM at pressure (p) = 0.5 - 10 bar	Connection	Materials
30°, 45°, 60°, 90°, 120°	1 to 150	Mounted with dovetail fixing	Brass, SS-304, SS-316
Special material and connections on request.			



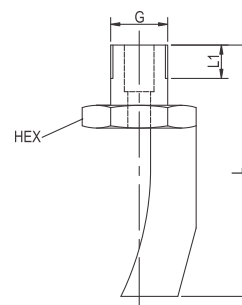
FLAT JET NOZZLES WITH HIGH IMPACT

Flat jet nozzles with high impact a powerful flat jet narrowly defined spray pattern provides clog resistance it is of deflector type spray pattern.

Application :

- *Cleaning washing
- *Decreasing and Phosphating
- *Processing techniques

Spray Angle	Flow rate LPM at pressure (p) = 0.5 - 10 bar	Connection	Materials
30° to 60°	1 to 150	1/4" to 1/2" BSP/BSPT/NPT-(M)	Brass, SS-304, SS-316, PVC
Special material and connections on request.			



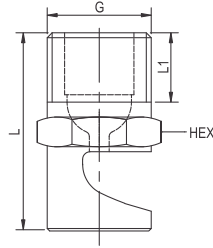


FLAT JET NOZZLES WITH FLOOD JET NOZZLES

These type of nozzles produce the wide angle flat spray pattern the deflection provide by this nozzle is of medium impact. It is clog resistant.

Application :

- *Dust Suppression
- *Waste Water treatment Plants
- *Light Washing
- *Spray Cooling
- *Degreasing and Phosphating



G	L	L	HEX
1/8"	23	6.5	12
1/4"	30	10	14
3/8"	36	10.5	17
1/2"	45	14	22
3/4"	56	15	27
1"	94	16.8	36



Spray Angle	Angle of Deflection 75°, 40°	Flow rate LMP at Pressure (p)=0.5 to 10 bar	Connection	Materials
90°, 140°	75°, 40°	1 to 560	1/8" to 1" BSP/NPT-(M)	Brass, SS-304, SS-316, PP, PVC
Special material and connections on request.				

FLAT JET ADJUSTABLE BALL-TYPE NOZZLES

BALL TYPE FLAT JET NOZZLES

This type of nozzles are used for adjusting of variable spray direction.

Application :

- *Cleaning
- *Cooling
- *Lubrication



Spray Angle	Flow rate LPM at pressure (p) = 2 - 10 bar	Connection	Materials
30°, 45°, 60°, 90° and 120°	2 to 22	1/4", 3/8" BSP/BSPT/NPT-(M)	Brass, SS-304, SS-316,
Special material and connections on request.			



HOLLOW CONE NOZZLES

Hollow cone nozzles produces a conical spray pattern like a circular ring of where droplets are distributed on to the surface of the conical shape they are used in many different application like gas scrubbing, dust suppression cooling of large surface. Different types of hollow cone nozzle are shown below.



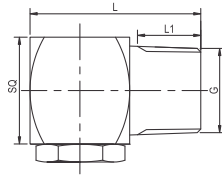


TANGENTIAL HOLLOW CONE NOZZLES

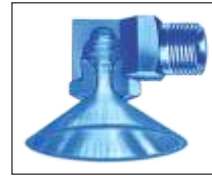
This type of nozzles are without swirl insert with uniform hollow cone spray.

Application :

- *Humidification of air
- *Dust control
- *Foam control
- *Cooling



G	L	L1	SQ
1/4"	35	10	20
3/8"	35	10	20
1/2"	45	13	25
3/4"	57	15	32



Spray Angle	Flow rate lpm at pressure P = 2 to 10 bar	Connection	Materials
60°, 90°, 120°	1 to 175	1/8" to 3/4" BSP/NPT-(M)	SS-304, SS-316, PVC
Special material and connections on request.			



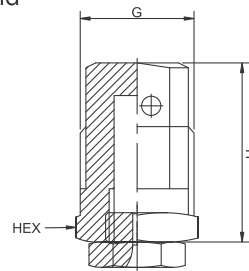
HOLLOW CONE NOZZLE- INLINE

In line entry (small capacity) supply of liquid takes place axially and form fine uniform hollow cone spray nozzle.

Application :

- *Cooling and cleaning of air and gas
- *Spray drying
- *Desuperheating
- *Metal treating
- *Brine spraying

G	H	HEX
1/4"	25	14
3/8"	27	17
1/2"	32.5	22
3/4"	38	27



Spray Angle	Flow rate LPM at pressure (p) = 0.5 - 10 bar	Connection	Materials
60°, 75°, 90°	1 - 180	1/4", to 1 1/2", BSP/ BSPT/NPT-(M)	Brass, SS-304, SS-316
Special material and connections on request.			

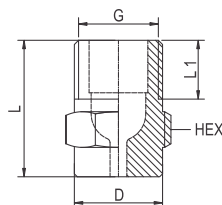


AXIAL HOLLOW CONE NOZZLE

Hollow cone spray where most of the liquid is uniformly distributed of the outer edge of a conical pattern they available in axial or tangential type. Non clogging type.

Application :

- *Air and gas washing
- *Gas washing
- *Dust control
- *Air humidification
- *Brine spraying
- *Fire protection
- *Flue gas desulphurization



G	L	HEX	D
1/4"	22	17	16.5
3/8"	29	22	21.5
1/2"	36	27	26.7



Spray Angle	Flow rate LPM at pressure (p) = 0.5 - 10 bar	Connection	Materials
60°, 75°, 90°	1 to 40	1/4" to 1/2" BSP/BSPT/NPT-(M)	Brass, SS-304, SS-316
Special material and connections on request.			





SOLID JET NOZZLES

Solid jet nozzles produce compact Solid stream jets of defined length. In solid jet nozzles flow condition are not affected by turbulence.

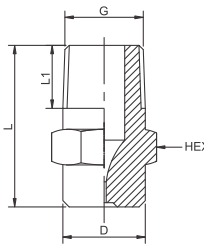
A concentrated stream jet with high impact force is achieved. A solid jet nozzles are of 0° angle as the square inch impact increases, the spray angle decreases.

Application :

*Cleaning processes

*Jet cutting

*Separating



G	L	L1	HEX	D
1/8"	18	6.5	12	11
1/4"	22	10	14	13
3/8"	25	10.5	17	16
1/2"	32	14	22	21
3/4"	42	15	27	32
1"	56	17	36	39



Spray Angle	Flow rate lpm at pressure P = 2 to 10 bar	Connection	Materials
0°	1 to 300	1/8" to 1" BSP / BSPT/ NPT-(M)	Brass, SS-304, SS-316
Special material and connections on request.			

AIR ATOMIZING NOZZLES (FLATJET / FULL CONE)

Atomization produced by a combination of air and liquid pressures. Air atomizing spray nozzles mix liquid and air to give fine mist like humidification. It is available in cone and flat spray patterns.

This type of nozzles utilize a collision of air and liquid to provide an atomized spray. Various types of nozzle designs are available to comply with customers' special applications.

Application :

*Atomization of viscous liquids

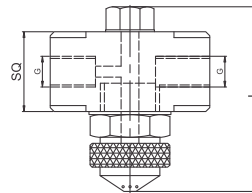
*Cooling

*Humidification of air

*Humidification of goods

*Lubrication

G	L	SQ
1/4"	56	22



Spray Angle	Flow rate lpm at pressure P = 0.7 - 4 bar	Connection	Materials
15°, 20°, 25°, 30°, 45°, 60°, 90°, 120°	0.05 to 3	1/8" to 1/4" BSP (F)	SS-316, SS-304
Special material and connections on request.			



External Air atomizing nozzle



Full cone Air atomizing nozzle



Air atomizing nozzle with flow control



Tangential entry Air atomizing nozzle



Flat jet Air atomizing nozzle



Air atomizing shut off needle & flow control



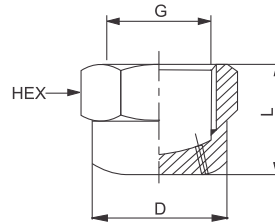
FOG JET NOZZLES

Fog jet type of nozzles throws a fogging spray of small-sizes drops. They produce full cone type pattern with large flow rates with the aid of several flat jets spraying into one another.

Application :

- * Dust Control
- * Chemical Processing
- * Fire protection

G	D	L	HEX
3/4"	31.5	25.4	32
1"	37	29.4	38
1.1/4"	47	31	48



Spray Angle	Flow rate lpm at pressure P = 2 - 10 bar	Connection	Materials
70°, 90°	16 to 255	3/4" to 1.1/4" BSP / BSPT (F)	Brass, SS-304, SS-316, PVC
Special material and connections on request.			

TANK CLEANING / WASHING NOZZLES

This type of nozzle are used to clean the inside Diameter of tank and barrels, and they are clean upto 360° deg. Angle depends on inside diameter of tanks.



SELF ROTATING TANK CLEANING NOZZLES

Tank cleaning nozzle are more efficient way to clean tanks and barrales in your plant

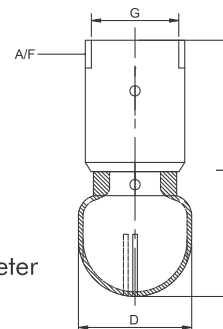
Application :

- *Beverage industry
- *Bioengineering
- *Chemical industry
- *Food industry
- *Cosmetic industry
- *Pharmaceutical industry

Self rotating tank cleaning :-

This type of nozzles are used for cleaning of small tanks up to 1.5 m in diameter

G	L	D	A/F
3/8"	57	24.5	19
1/2"	65	28.5	24
3/4"	85	39	30



Spray Angle	Flow rate LPM at pressure (p)=] 2 bar	Connection	Materials
270°up 270° down 360°	30 -100	3/8", 1/2", 3/4" BSP, BSPT(F)	SS-304, SS-316
Special material and connections on request.			



TANK WASHER NOZZLES

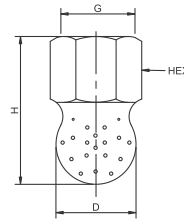
STATIC SPRAY BALLS

This type of nozzle is a very compact static spray ball and it produces sharp solid jets which are excellent for rinsing small drums.

Application :

- *For small kegs
- *Drums
- *Barrels
- *Totes

G	L	D	HEX
1/2"	45	26	27
3/4"	65	40	28



Spray Angle	Flow rate lpm at pressure P = 2 bar	Connection	Materials
240° 360°	18 to 108	1/2" 3/4" BSP (F)	SS- 304, SS- 316,
Special material and connections on request.			

TANK CLEANING NOZZLES

This type of nozzle are used to clean the inside Diameter of tank and barrels, and they are clean upto 360° deg. Angle depends on inside diameter of tanks.

Application :

- *Beverage industry
- *Bioengineering
- *Chemical industry
- *Food industry
- *Cosmetic industry
- *Pharmaceutical industry

Spray Angle	Flow rate lpm at pressure P = 2 bar	Connection	Materials
270° UP / down 360°	60 - 225	3/4" & 1" BSP (F)	Teflon
Special material and connections on request.			



ACCESSORIES



Coupling



Nipple



Socekets



Retaning Lock Nuts



Dovetail Nipple



Boll Joint

ACCESSORIES

We can also provide following type of accessories.

1. Connector Bodies - Tip Holder
2. Welding Nipples, Threaded Nipples (Dove-tail)
3. Fittings - sockets, Nuts, Nipple.
4. Ball Joints with threaded connections.



RAYYAN SPRAY SYSTEMS

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