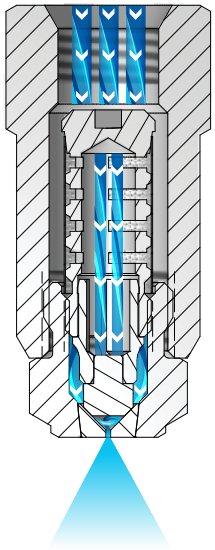
HYDRAULIC ATOMIZING NOZZLES

S STANDARD ANGLE SPRAY | W WIDE ANGLE SPRAY

OVERVIEW: HYDRAULIC ATOMIZING

- Finely atomized, hollow cone spray without compressed air
- Very small drops often achieving misting performance
- Ideal for use in dust control and humidification applications
- Wall-mount options for installation on room walls, vessel bulkheads or pipeline
- Orifice inserts, cores and strainers are easily removed for inspection or cleaning
- Most models can be supplied with an internal strainer
- Spray angles: Standard – 43° to 94°, Wide – 112° to 120°
- Uniform spray distribution from .82 to 130 gph (3.1 to 492 lph)
- Operating pressures from 20 to 1000 psi (1.5 to 69 bar)



Hydraulic Atomizing Nozzles

The liquid passes through slots in the core component. The slots make the liquid spin in a circle at a very high speed. The energy from the spinning action causes the liquid to break up into very small droplets and form a hollow cone pattern as it exits the orifice.

HYDRAULIC ATOMIZING OPTIONS

S W

LN
1/4" female conn.
Integral strainer

S W

LNN
1/4" male conn.
Integral strainer

S

LND
1/4" female conn. with 1/2" male wall-mounting threads
Wall-mount
Integral strainer

S

LNND
1/4" male conn. with 1/2" male wall-mounting threads
Wall-mount
Integral strainer

S W

N
1/4" female conn.

S W

NN
1/4" male conn.

S

M
1/4" male conn.
Two-piece design

RELATIVE DROP SIZE
IN MICRONS

10 to 100	100 to 500	500 to 1000	1000 to 5000

Drop size will vary based on flow rate and pressure.

ORDERING INFORMATION

HYDRAULIC ATOMIZING LN, LND, N AND M

Inlet Conn.	Nozzle Type	–	Material Code	Capacity Size

Example: **1/4** **LN** – **SS** **8**

BSPT connections require the addition of a "B" prior to the inlet connection.
To order M with strainer, use ML as Nozzle Type.

HYDRAULIC ATOMIZING LN AND N

Inlet Conn.	Nozzle Type	–	Material Code	Capacity Size

Example: **1/4** **LN** – **SS** **8W**

BSPT connections require the addition of a "B" prior to the inlet connection.

QUICK REFERENCE GUIDE

Model	Connection/Type	Connection Size (in.)	Materials	Page Number	
				Performance Data	Dimensions and Weights
LN	F	1/4	Brass, 303 stainless steel (SS), 316 stainless steel (316SS)	E6	E7
LNN	M	1/4			
LND	F, Wall-mount	1/4	Brass, 303 stainless steel (SS)		
LNND	M, Wall-mount	1/4			
N	F	1/4	Brass, 303 stainless steel (SS), 316 stainless steel (316SS), Polyvinyl chloride (PVC)		
NN	M	1/4	Brass, 303 stainless steel (SS), 316 stainless steel (316SS)		
M	M	1/4	Brass, 303 stainless steel (SS), 316 stainless steel (316SS), Polyvinyl chloride (PVC)		
LN-W	F	1/4	Brass, 303 stainless steel (SS), 316 stainless steel (316SS)	E7	
LNN-W	M	1/4			
N-W	F	1/4			
NN-W	M	1/4			

F = female thread; M = male thread. There is no material code for brass. Leave material code blank when ordering. Other materials available upon request.
For more dimensions and sizes, contact your sales engineer.

S PERFORMANCE DATA: STANDARD ANGLE SPRAY

Inlet Conn. (in.)	Nozzle Type							Capacity Size	Orifice Dia. Nom. (mm)	Core No.	Flow Rate Capacity (liters per hour)									Spray Angle (°)		
	LN	LNN	LND	LNND	N	NN	M				2 bar	3 bar	4 bar	7 bar	15 bar	20 bar	35 bar	45 bar	80 bar	3 bar	6 bar	20 bar
1/4	●	●						.30	.41	106	–	–	–	–	–	3.1	4.0	4.6	6.1	–	–	51
	●	●						.40	.41	108	–	–	–	–	–	4.1	5.4	6.1	8.2	–	–	58
	●							.50	.41	109	–	–	–	–	4.4	5.1	6.7	7.6	10.2	–	–	63
	●	●	●	●	●	●	●	.60	.41	206	–	–	–	3.6	5.3	6.1	8.1	9.2	12.2	–	35	65
	●	●	●	●	●	●	●	1	.51	210	–	3.9	4.6	6.0	8.8	10.2	13.5	15.3	20	45	62	72
	●	●	●	●	●	●	●	1.5	.51	216	4.8	5.9	6.8	9.0	13.2	15.3	20	23	31	65	70	72
	●	●	●	●	●	●	●	2	.71	216	6.4	7.9	9.1	12.1	17.7	20	27	31	41	70	75	77
	●	●	●	●	●	●	●	3	.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	153	204	82	84	86
	●	●	●	●	●	●	●	12	1.9	420	39	47	55	72	106	122	162	183	245	78	82	85
	●	●	●	●	●	●	●	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	351	398	530	73	74	77

Maximum operating pressure depends on material and application. Contact your sales engineer for details.

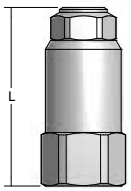
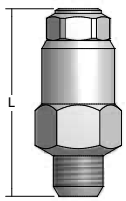
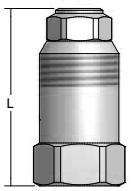
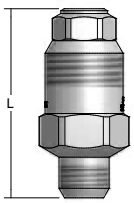
Highlighted column shows the rated pressure.

W PERFORMANCE DATA: WIDE ANGLE SPRAY

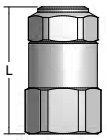
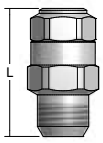
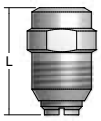
Inlet Conn. (in.)	Nozzle Type				Capacity Size	Orifice Dia. Nom. (mm)	Core No.	Flow Rate Capacity (liters per hour)				Spray Angle (°)	
	LN-W	LNN-W	N-W	NN-W				1.5 bar	2 bar	3 bar	6 bar	3 bar	6 bar
1/4	●	●	●	●	2W	.99	210	–	6.4	7.9	11.2	165	158
	●	●	●	●	3W	.99	216	8.4	9.7	11.8	16.8	157	152
	●	●	●	●	4W	1.5	220	11.2	12.9	15.8	22	156	155
	●	●	●	●	8W	1.5	225	22	26	32	45	152	153

Highlighted column shows the rated pressure.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Body Hex. (in.)	Cap Hex. (in.)	Net Weight (kg)
	**LN (F) LN-W (F)**	1/4	49.1	13/16	5/8	0.10
	**LNN (M) LNN-W (M)**	1/4	53.1	13/16	5/8	0.09
	**LND (F)**	1/4	47.6	7/8 dia.	5/8	0.09
	**LNND (M)**	1/4	51.6	7/8 dia.	5/8	0.09

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Body Hex. (in.)	Cap Hex. (in.)	Net Weight (kg)
	**N (F) N-W (F)**	1/4	33.3	11/16	5/8	0.05
	**NN (M) NN-W (M)**	1/4	35.7	11/16	5/8	0.05
	**M (M)**	1/4	21.4	9/16	–	0.02

Based on the largest/heaviest version of each type.