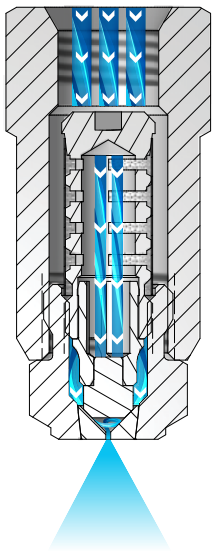
HYDRAULIC ATOMIZING NOZZLES

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

LN
1/4" female conn.
Integral strainer

LNN
1/4" male conn.
Integral strainer

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

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

N
1/4" female conn.

NN
1/4" male conn.

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. (in.)	Core No.	Flow Rate Capacity (gallons per hour)									Spray Angle (°)		
	LN	LNN	LND	LNND	N	NN	M				30 psi	40 psi	60 psi	100 psi	200 psi	300 psi	500 psi	700 psi	1000 psi	40 psi	80 psi	300 psi
1/4	●	●						.30	.016	106	–	–	–	–	–	.82	1.1	1.3	1.5	–	–	51
	●	●						.40	.016	108	–	–	–	–	–	1.1	1.4	1.7	2.0	–	–	58
	●							.50	.016	109	–	–	–	–	1.1	1.4	1.8	2.1	2.5	–	–	63
	●	●	●	●	●	●	●	.60	.016	206	–	–	–	.95	1.3	1.6	2.1	2.5	3.0	–	35	65
	●	●	●	●	●	●	●	1	.020	210	–	1.0	1.2	1.6	2.2	2.7	3.5	4.2	5.0	45	62	72
	●	●	●	●	●	●	●	1.5	.020	216	1.3	1.5	1.8	2.4	3.4	4.1	5.3	6.3	7.5	65	70	72
	●	●	●	●	●	●	●	2	.028	216	1.7	2.0	2.4	3.2	4.5	5.5	7.1	8.4	10.0	70	75	77
	●	●	●	●	●	●	●	3	.028	220	2.6	3.0	3.7	4.7	6.7	8.2	10.6	12.5	15.0	65	70	73
	●	●	●	●	●	●	●	4	.042	220	3.5	4.0	4.9	6.3	8.9	11.0	14.1	16.7	20	72	81	84
	●	●	●	●	●	●	●	6	.042	225	5.2	6.0	7.3	9.5	13.4	16.4	21	25	30	73	79	81
	●	●	●	●	●	●	●	8	.060	225	6.9	8.0	9.8	12.6	17.9	22	28	33	40	85	89	91
	●	●	●	●	●	●	●	10	.064	420	8.7	10.0	12.2	15.8	22	27	35	42	50	82	84	86
	●	●	●	●	●	●	●	12	.076	420	10.4	12.0	14.7	19.0	27	33	42	50	60	78	82	85
	●	●	●	●	●	●	●	14	.076	421	12.1	14.0	17.1	22	31	38	49	59	70	85	88	90
					●	●		16	.086	421	13.9	16.0	19.6	25	36	44	57	67	80	83	86	88
	●	●	●	●	●	●	●	18	.076	422	15.6	18.0	22	28	40	49	64	75	90	81	84	86
	●						●	20	.081	422	17.3	20	24	32	45	55	71	84	100	75	78	80
	●	●	●	●	●	●	●	22	.076	625	19.1	22	27	35	49	60	78	92	110	70	72	75
	●	●	●	●	●	●	●	26	.086	625	23	26	32	41	58	71	92	109	130	73	74	77

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

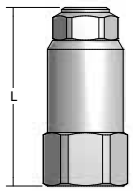
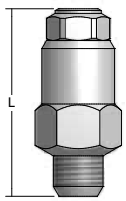
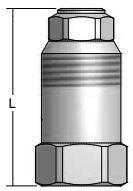
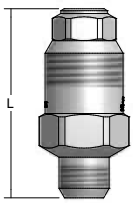
Highlighted column shows the rated pressure.

W PERFORMANCE DATA: WIDE ANGLE SPRAY

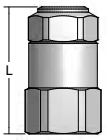
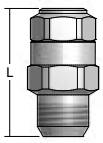
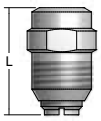
Inlet Conn. (in.)	Nozzle Type				Capacity Size	Orifice Dia. Nom. (in.)	Core No.	Flow Rate Capacity (gallons per hour)				Spray Angle (°)	
	LN-W	LNN-W	N-W	NN-W				20 psi	30 psi	40 psi	80 psi	40 psi	80 psi
1/4	●	●	●	●	2W	.039	210	–	1.7	2.0	2.8	165	158
	●	●	●	●	3W	.039	216	2.1	2.6	3.0	4.2	157	152
	●	●	●	●	4W	.060	220	2.8	3.5	4.0	5.7	156	155
	●	●	●	●	8W	.060	225	5.7	6.9	8.0	11.3	152	153

Highlighted column shows the rated pressure.

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Body Hex. (in.)	Cap Hex. (in.)	Net Weight (oz.)
	**LN (F) LN-W (F)**	1/4	1.935	13/16	5/8	3.6
	**LNN (M) LNN-W (M)**	1/4	2.092	13/16	5/8	3.3
	**LND (F)**	1/4	1.875	7/8 dia.	5/8	3.2
	**LNND (M)**	1/4	2.031	7/8 dia.	5/8	3.2

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (in.)	Body Hex. (in.)	Cap Hex. (in.)	Net Weight (oz.)
	**N (F) N-W (F)**	1/4	1.313	11/16	5/8	1.9
	**NN (M) NN-W (M)**	1/4	1.404	11/16	5/8	1.8
	**M (M)**	1/4	0.844	9/16	–	0.7

Based on the largest/heaviest version of each type.