Liquid Atomizing Spray Nozzles

HollowStream™ Cone Nozzles – 1/4 NPT

Model: HL1001SS
Material: Type 303 Stainless Steel

Model: HL1002SS
Material: Type 303 Stainless Steel

Model: HL1003SS
Material: Type 303 Stainless Steel

Model: HL1005SS
Material: Type 303 Stainless Steel

Model: HL1008SS
Material: Type 303 Stainless Steel

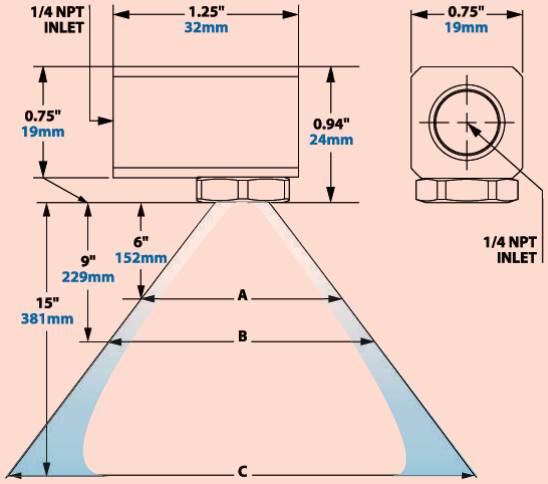
Model: HL1011SS
Material: Type 303 Stainless Steel

Model HL1001SS, HL1002SS, HL1003SS, HL1005SS, HL1008SS and HL1011SS

EXAIR's 1/4 NPT HollowStream Cone Nozzles produce a ring of liquid upon your target and are among the most common type of spray nozzles. Hollow cone spray nozzles generally use less liquid than full cone spray nozzles. These nozzles will be used when cooling, cleaning, washing, rinsing and dust suppression can be achieved with less liquid than a full cone nozzle. Their tangential flow design is vaneless which creates wide open internal features to resist clogging. They produce a uniform distribution in a hollow cone round pattern and medium to large droplets. The right-angle design is compact and operates at up to 250 PSI liquid pressure. HollowStream nozzles also work well with liquids containing particulate.

Dimensions and Spray Pattern

DOWNLOAD drawings at EXAIR.com



Compared to EXAIR's Air Atomizing Spray Nozzles the HollowStream will have higher liquid flow rates.

For maximum liquid conservation and spray control visit page 70.

See page 99 for
How the FullStream and HollowStream Cone Nozzles Work.

HollowStream Cone Nozzles

Inlet Connection	Model	Capacity	Max Free Passage		Flow Rate GPM/LPM 3 psi	5 psi	7 psi	10 psi	20 psi	40 psi	60 psi
1/4 NPT	HL1001SS	1	0.052"	GPM	0.06	0.07	0.09	0.10	0.13	0.18	0.21
				LPM	0.23	0.26	0.34	0.38	0.49	0.68	0.79
	HL1002SS	2	0.086"	GPM	0.14	0.17	0.19	0.20	0.27	0.38	0.46
				LPM	0.53	0.64	0.72	0.76	1.02	1.44	1.74
	HL1003SS	3	0.109"	GPM	0.20	0.24	0.28	0.32	0.45	0.63	0.77
				LPM	0.76	0.91	1.06	1.21	1.70	2.38	2.91
	HL1005SS	5	0.120"	GPM	0.27	0.35	0.39	0.49	0.65	0.91	1.12
				LPM	1.02	1.32	1.47	1.85	2.46	3.44	4.23
	HL1008SS	8	0.166"	GPM	0.46	0.59	0.73	0.80	1.16	1.60	2.04
				LPM	1.74	2.23	2.76	3.02	4.38	6.05	7.71
	HL1011SS	11	0.180"	GPM	0.65	0.81	0.93	1.10	1.47	2.03	2.50
				LPM	2.46	3.06	3.52	4.16	5.56	7.67	9.45

Spray Angle

Inlet Pressure PSI	BAR	Width A in	A cm	B in	B cm	C in	C cm
7	0.5	4.8	12.3	6.1	15.5	7.8	19.8
20	1.4	7.3	18.5	9.2	23.3	11.7	29.7
60	4.1	12.1	30.8	15.3	38.8	19.5	49.5
7	0.5	6.1	15.5	8.6	21.7	11.2	28.4
20	1.4	9.2	23.3	12.8	32.6	16.8	42.6
60	4.1	15.3	38.8	21.4	54.4	28.0	71.1
7	0.5	6.8	17.2	10.4	26.5	13.3	33.9
20	1.4	10.2	25.9	15.6	39.7	20.0	50.8
60	4.1	17.0	43.1	26.1	66.2	33.3	84.6
7	0.5	8.4	21.3	9.7	24.7	14.3	36.3
20	1.4	12.6	32.0	14.6	37.0	21.5	54.5
60	4.1	21.0	53.4	24.3	61.7	35.8	90.8
7	0.5	7.1	18.0	7.8	19.8	10.1	25.6
20	1.4	10.6	26.9	11.7	29.7	15.1	38.4
60	4.1	17.7	44.9	19.5	49.5	25.2	63.9
7	0.5	9.5	24.2	12.0	30.5	14.8	37.6
20	1.4	14.3	36.4	18.0	45.7	22.2	56.5
60	4.1	23.9	60.6	30.0	76.2	37.0	94.1

NEW HollowStream™ Cone Nozzles – 3/8 NPT

Model: HL3005SS
Material: Type 303 Stainless Steel

Model: HL3008SS
Material: Type 303 Stainless Steel

Model: HL3010SS
Material: Type 303 Stainless Steel

Model: HL3015SS
Material: Type 303 Stainless Steel

Model: HL3020SS
Material: Type 303 Stainless Steel

Model: HL3025SS
Material: Type 303 Stainless Steel

Model: HL3030SS
Material: Type 303 Stainless Steel

Model HL3005SS, HL3008SS, HL3010SS, HL3015SS, HL3020SS, HL3025SS and HL3030SS

EXAIR's 3/8 NPT HollowStream Cone Nozzles produce a ring of liquid upon your target and are among the most common type of spray nozzles. Hollow cone spray nozzles generally use less liquid than full cone spray nozzles. These nozzles will be used for cooling, cleaning, washing, rinsing and dust suppression with less liquid than a full cone nozzle. Their tangential flow design is vaneless which creates wide open internal features to resist clogging. They produce a uniform distribution in a hollow cone round pattern and medium to large droplets. The right-angle design is compact and operates at up to 250 PSI liquid pressure. HollowStream nozzles work well with liquids containing particulate.

Dimensions and Spray Pattern

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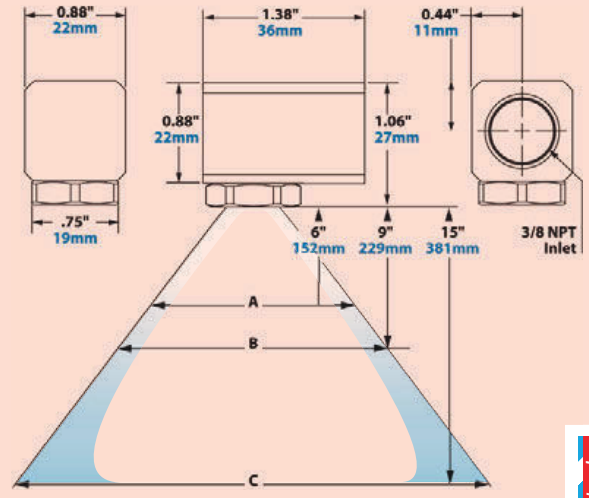

Compared to EXAIR's Air Atomizing Spray Nozzles the HollowStream will have higher liquid flow rates.

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See page 99 for How the FullStream and HollowStream Cone Nozzles Work.

HollowStream Cone Nozzles

Inlet Connection	Model	Capacity	Max Free Passage		Flow Rate GPM/LPM 3 psi	5 psi	7 psi	10 psi	20 psi	30 psi	40 psi	60 psi
3/8 NPT	HL3005SS	5	0.111"	GPM	0.29	0.34	0.39	0.45	0.62	0.75	0.86	1.04
				LPM	1.11	1.30	1.48	1.71	2.35	2.83	3.25	3.95
	HL3008SS	8	0.159"	GPM	0.50	0.60	0.71	0.82	1.12	1.33	1.50	1.80
				LPM	1.88	2.28	2.68	3.09	4.25	5.04	5.68	6.80
	HL3010SS	10	0.172"	GPM	0.64	0.75	0.89	1.01	1.36	1.62	1.83	2.47
				LPM	2.42	2.84	3.36	3.81	5.16	6.13	6.93	9.35
	HL3015SS	15	0.166"	GPM	0.94	1.10	1.29	1.48	1.98	2.60	2.80	3.60
				LPM	3.54	4.16	4.88	5.60	7.48	9.84	10.60	13.63
	HL3020SS	20	0.203"	GPM	1.28	1.50	1.81	2.00	2.75	3.39	3.92	4.53
				LPM	4.86	5.69	6.86	7.57	10.41	12.84	14.83	17.13
	HL3025SS	25	0.219"	GPM	1.45	1.78	2.02	2.45	3.34	4.00	4.52	5.40
				LPM	5.49	6.75	7.63	9.27	12.65	15.14	17.10	20.44
	HL3030SS	30	0.281"	GPM	1.80	2.30	2.68	3.10	4.23	5.13	6.03	7.28
				LPM	6.81	8.71	10.13	11.73	15.99	19.40	22.81	27.54

Spray Angle

Inlet Pressure PSI/BAR		Width A in	A cm	B in	B cm	C in	C cm
7	0.5	10.1	25.6	15.1	38.4	25.2	63.9
20	1.4	11.0	27.9	16.5	41.9	27.5	69.8
60	4.1	11.8	30.0	17.7	44.9	29.5	74.9
7	0.5	7.5	19.0	11.2	28.6	18.7	47.6
20	1.4	8.4	21.3	12.6	32.0	21.0	53.4
60	4.1	10.1	25.6	15.1	38.4	25.2	63.9
7	0.5	8.4	21.3	12.6	32.0	21.0	53.4
20	1.4	9.5	24.2	14.3	36.4	23.9	60.6
60	4.1	10.4	26.5	15.6	39.7	26.1	66.2
7	0.5	11.4	28.9	17.1	43.4	28.5	72.3
20	1.4	13.1	33.3	19.6	49.9	32.7	83.2
60	4.1	13.8	35.1	20.7	52.6	34.5	87.7
7	0.5	11.4	28.9	17.1	43.4	28.5	72.3
20	1.4	12.0	30.5	18.0	45.7	30.0	76.2
60	4.1	13.1	33.3	19.6	49.9	32.7	83.2
7	0.5	10.1	25.6	15.1	38.4	25.2	63.9
20	1.4	11.0	27.9	16.5	41.9	27.5	69.8
60	4.1	12.0	30.5	18.0	45.7	30.0	76.2
7	0.5	8.2	20.9	12.4	31.4	20.6	52.4
20	1.4	8.7	22.1	13.1	33.2	21.8	55.4
60	4.1	10.1	25.6	15.1	38.4	25.2	63.9