

QSH Plastic easy install flat fan nozzle

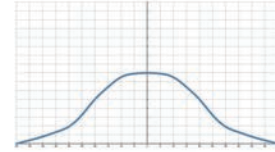
Flat Fan Nozzles



【 Top view of nozzle spray pattern 】



【 Flow distribution 】



- Recommended working pressure: 3.0 kgf/cm²
- Flowrate tolerance: ± 10% @ 3.0 ± 0.1 kgf/cm²
- Angle tolerance: ± 10° @ 3.0 ± 0.1 kgf/cm²
- Jet angle tolerance: 3°

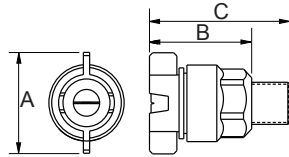
Features

- The spraying type is fan type, and the spray shape is single line and two sides are tapered (tapered edge), which presents a bell curve shape flow field distribution with weaker ends compared to the middle.
- Two piece nozzle design which includes nozzle and the body allows quick and accurate installation by hand. It is convenient for on-site management. Nozzle tip is secured into the body and fastened by three buckle points to avoid the nozzle tip loosening and ensure the performance quality.

- The internal gaskets have different options such as EPDM, Viton and Viton-F, which can be adapted to various chemical processes. With a special structural design, the nozzles and the base can be closely fitted to avoid water leakage.
- These general-purpose nozzles without guaranteed flow and angle tolerance are not recommended for environments with high accuracy requirements.

Applications

- Cleaning: Vehicles, containers, filters, dust, gravel, metals, metal parts, mechanical, steel plates, various containers, etc.
- Cooling: Gas, tank, machinery, metal, roof, etc.
- Dispersion: Humidifying, chemicals (etching solution, developer, insect repellent, etc.), Water Curtain (fire, dust, deodorisation, etc.)
- Printed circuit board: etching process, developing process, washing process.



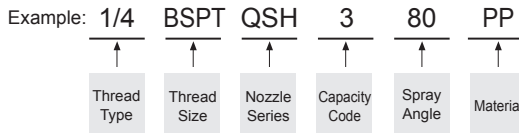
Appearance dimensions may vary depending on model, material. Please ask for details.

Material	Serie	Unit (mm)			Thread Type	Weight (g)
		A	B	C		
PP	1/4QSH	32	31	44	1/4M	7.9
	3/8QSH	32	31	44	3/8M	12.1

Material

- TIP: PP
- Oring: EPDM, VITON, VITON-F
- Base: PP, C-PVC

How to place an order for LORRIC nozzles?



※ Standard Pressure: Column in red.
 ※ This product for spray angle 0°, 15° 25°, 40°, 50°, 100° and 110° is able to be made to order.

Spray Angle	Capacity Code	Capacity at Pressure									Average particle size (um)	Min. Free Passage (mm)	Filter mesh
		0.5 kgf/cm ²	1 kgf/cm ²	1.5 kgf/cm ²	2 kgf/cm ²	3 kgf/cm ²	4 kgf/cm ²	5 kgf/cm ²	6 kgf/cm ²	8 kgf/cm ²			
0°	2	0.32	0.45	0.55	0.64	0.78	0.90	1.01	1.11	1.28	-	-	-
	2.5	0.40	0.56	0.69	0.80	0.98	1.13	1.26	1.38	1.60	-	-	-
	3	0.48	0.68	0.83	0.96	1.17	1.35	1.51	1.66	1.92	-	-	-
	4	0.64	0.90	1.11	1.28	1.56	1.81	2.02	2.21	2.55	-	-	-
	5	0.80	1.13	1.38	1.60	1.96	2.26	2.52	2.76	3.19	-	-	-
	6	0.96	1.35	1.66	1.92	2.35	2.71	3.03	3.32	3.83	-	-	-
	7	1.12	1.58	1.94	2.23	2.74	3.16	3.53	3.87	4.47	-	-	-
	7.5	1.20	1.69	2.07	2.39	2.93	3.39	3.79	4.15	4.79	-	-	-
	8	1.28	1.81	2.21	2.55	3.13	3.61	4.04	4.42	5.11	-	-	-
	9	1.44	2.03	2.49	2.87	3.52	4.06	4.54	4.98	5.75	-	-	-
	10	1.60	2.26	2.76	3.19	3.91	4.51	5.05	5.53	6.39	-	-	-
	12.5	2.00	2.82	3.46	3.99	4.89	5.64	6.31	6.91	7.98	-	-	-
	15	2.39	3.39	4.15	4.79	5.87	6.77	7.57	8.29	9.58	-	-	-
	20	3.19	4.51	5.53	6.39	7.82	9.03	10.10	11.06	12.77	-	-	-
	25	3.99	5.64	6.91	7.98	9.78	11.29	12.62	13.82	15.96	-	-	-
30	4.79	6.77	8.29	9.58	11.73	13.54	15.14	16.59	19.16	-	-	-	

※ For MPa / bar / psi units, please refer to LORRIC.com.

Spray Angle	Capacity Code	Capacity at Pressure									Average particle size (um)	Min. Free Passage (mm)	Filter mesh
		0.5 kgf/cm ²	1 kgf/cm ²	1.5 kgf/cm ²	2 kgf/cm ²	3 kgf/cm ²	4 kgf/cm ²	5 kgf/cm ²	6 kgf/cm ²	8 kgf/cm ²			
15°	2	0.32	0.45	0.55	0.64	0.78	0.90	1.01	1.11	1.28	-	-	-
	2.5	0.40	0.56	0.69	0.80	0.98	1.13	1.26	1.38	1.60	-	-	-
	3	0.48	0.68	0.83	0.96	1.17	1.35	1.51	1.66	1.92	-	-	-
	4	0.64	0.90	1.11	1.28	1.56	1.81	2.02	2.21	2.55	-	-	-
	5	0.80	1.13	1.38	1.60	1.96	2.26	2.52	2.76	3.19	-	-	-
	6	0.96	1.35	1.66	1.92	2.35	2.71	3.03	3.32	3.83	-	-	-
	7	1.12	1.58	1.94	2.23	2.74	3.16	3.53	3.87	4.47	-	-	-
	7.5	1.20	1.69	2.07	2.39	2.93	3.39	3.79	4.15	4.79	-	-	-
	8	1.28	1.81	2.21	2.55	3.13	3.61	4.04	4.42	5.11	-	-	-
	9	1.44	2.03	2.49	2.87	3.52	4.06	4.54	4.98	5.75	-	-	-
	10	1.60	2.26	2.76	3.19	3.91	4.51	5.05	5.53	6.39	-	-	-
	12.5	2.00	2.82	3.46	3.99	4.89	5.64	6.31	6.91	7.98	-	-	-
	15	2.39	3.39	4.15	4.79	5.87	6.77	7.57	8.29	9.58	-	-	-
	20	3.19	4.51	5.53	6.39	7.82	9.03	10.10	11.06	12.77	-	-	-
	25	3.99	5.64	6.91	7.98	9.78	11.29	12.62	13.82	15.96	-	-	-
30	4.79	6.77	8.29	9.58	11.73	13.54	15.14	16.59	19.16	-	-	-	
25°	2	0.32	0.45	0.55	0.64	0.78	0.90	1.01	1.11	1.28	-	-	-
	2.5	0.40	0.56	0.69	0.80	0.98	1.13	1.26	1.38	1.60	-	-	-
	3	0.48	0.68	0.83	0.96	1.17	1.35	1.51	1.66	1.92	-	-	-
	4	0.64	0.90	1.11	1.28	1.56	1.81	2.02	2.21	2.55	-	-	-
	5	0.80	1.13	1.38	1.60	1.96	2.26	2.52	2.76	3.19	-	-	-
	6	0.96	1.35	1.66	1.92	2.35	2.71	3.03	3.32	3.83	-	-	-
	7	1.12	1.58	1.94	2.23	2.74	3.16	3.53	3.87	4.47	-	-	-
	7.5	1.20	1.69	2.07	2.39	2.93	3.39	3.79	4.15	4.79	-	-	-
	8	1.28	1.81	2.21	2.55	3.13	3.61	4.04	4.42	5.11	-	-	-
	9	1.44	2.03	2.49	2.87	3.52	4.06	4.54	4.98	5.75	-	-	-
	10	1.60	2.26	2.76	3.19	3.91	4.51	5.05	5.53	6.39	-	-	-
	12.5	2.00	2.82	3.46	3.99	4.89	5.64	6.31	6.91	7.98	-	-	-
	15	2.39	3.39	4.15	4.79	5.87	6.77	7.57	8.29	9.58	-	-	-
	20	3.19	4.51	5.53	6.39	7.82	9.03	10.10	11.06	12.77	-	-	-
	25	3.99	5.64	6.91	7.98	9.78	11.29	12.62	13.82	15.96	-	-	-
30	4.79	6.77	8.29	9.58	11.73	13.54	15.14	16.59	19.16	-	-	-	
40°	2	0.32	0.45	0.55	0.64	0.78	0.90	1.01	1.11	1.28	-	-	-
	2.5	0.40	0.56	0.69	0.80	0.98	1.13	1.26	1.38	1.60	-	-	-
	3	0.48	0.68	0.83	0.96	1.17	1.35	1.51	1.66	1.92	-	-	-
	4	0.64	0.90	1.11	1.28	1.56	1.81	2.02	2.21	2.55	-	-	-
	5	0.80	1.13	1.38	1.60	1.96	2.26	2.52	2.76	3.19	-	-	-
	6	0.96	1.35	1.66	1.92	2.35	2.71	3.03	3.32	3.83	-	-	-
	7	1.12	1.58	1.94	2.23	2.74	3.16	3.53	3.87	4.47	-	-	-
	7.5	1.20	1.69	2.07	2.39	2.93	3.39	3.79	4.15	4.79	-	-	-
	8	1.28	1.81	2.21	2.55	3.13	3.61	4.04	4.42	5.11	-	-	-
	9	1.44	2.03	2.49	2.87	3.52	4.06	4.54	4.98	5.75	-	-	-
	10	1.60	2.26	2.76	3.19	3.91	4.51	5.05	5.53	6.39	-	-	-
	12.5	2.00	2.82	3.46	3.99	4.89	5.64	6.31	6.91	7.98	-	-	-
	15	2.39	3.39	4.15	4.79	5.87	6.77	7.57	8.29	9.58	-	-	-
	20	3.19	4.51	5.53	6.39	7.82	9.03	10.10	11.06	12.77	-	-	-
	25	3.99	5.64	6.91	7.98	9.78	11.29	12.62	13.82	15.96	-	-	-
30	4.79	6.77	8.29	9.58	11.73	13.54	15.14	16.59	19.16	-	-	-	

※ For MPa / bar / psi units, please refer to LORRIC.com.

Spray Angle	Capacity Code	Capacity at Pressure									Average particle size (um)	Min. Free Passage (mm)	Filter mesh
		0.5 kgf/cm ²	1 kgf/cm ²	1.5 kgf/cm ²	2 kgf/cm ²	3 kgf/cm ²	4 kgf/cm ²	5 kgf/cm ²	6 kgf/cm ²	8 kgf/cm ²			
50°	2	0.32	0.45	0.55	0.64	0.78	0.90	1.01	1.11	1.28	-	-	-
	2.5	0.40	0.56	0.69	0.80	0.98	1.13	1.26	1.38	1.60	-	-	-
	3	0.48	0.68	0.83	0.96	1.17	1.35	1.51	1.66	1.92	-	-	-
	4	0.64	0.90	1.11	1.28	1.56	1.81	2.02	2.21	2.55	-	-	-
	5	0.80	1.13	1.38	1.60	1.96	2.26	2.52	2.76	3.19	-	-	-
	6	0.96	1.35	1.66	1.92	2.35	2.71	3.03	3.32	3.83	-	-	-
	7	1.12	1.58	1.94	2.23	2.74	3.16	3.53	3.87	4.47	-	-	-
	7.5	1.20	1.69	2.07	2.39	2.93	3.39	3.79	4.15	4.79	-	-	-
	8	1.28	1.81	2.21	2.55	3.13	3.61	4.04	4.42	5.11	-	-	-
	9	1.44	2.03	2.49	2.87	3.52	4.06	4.54	4.98	5.75	-	-	-
	10	1.60	2.26	2.76	3.19	3.91	4.51	5.05	5.53	6.39	-	-	-
	12.5	2.00	2.82	3.46	3.99	4.89	5.64	6.31	6.91	7.98	-	-	-
	15	2.39	3.39	4.15	4.79	5.87	6.77	7.57	8.29	9.58	-	-	-
	20	3.19	4.51	5.53	6.39	7.82	9.03	10.10	11.06	12.77	-	-	-
	25	3.99	5.64	6.91	7.98	9.78	11.29	12.62	13.82	15.96	-	-	-
30	4.79	6.77	8.29	9.58	11.73	13.54	15.14	16.59	19.16	-	-	-	
65°	2	0.32	0.45	0.55	0.64	0.78	0.90	1.01	1.11	1.28	-	0.4	150
	2.5	0.40	0.56	0.69	0.80	0.98	1.13	1.26	1.38	1.60	-	0.6	100
	3	0.48	0.68	0.83	0.96	1.17	1.35	1.51	1.66	1.92	-	0.7	100
	4	0.64	0.90	1.11	1.28	1.56	1.81	2.02	2.21	2.55	-	0.8	50
	5	0.80	1.13	1.38	1.60	1.96	2.26	2.52	2.76	3.19	-	0.9	50
	6	0.96	1.35	1.66	1.92	2.35	2.71	3.03	3.32	3.83	230	0.9	50
	7	1.12	1.58	1.94	2.23	2.74	3.16	3.53	3.87	4.47	-	1.0	-
	7.5	1.20	1.69	2.07	2.39	2.93	3.39	3.79	4.15	4.79	-	1.0	-
	8	1.28	1.81	2.21	2.55	3.13	3.61	4.04	4.42	5.11	-	1.1	-
	9	1.44	2.03	2.49	2.87	3.52	4.06	4.54	4.98	5.75	-	1.1	-
	10	1.60	2.26	2.76	3.19	3.91	4.51	5.05	5.53	6.39	-	1.2	-
	12.5	2.00	2.82	3.46	3.99	4.89	5.64	6.31	6.91	7.98	-	1.3	-
	15	2.39	3.39	4.15	4.79	5.87	6.77	7.57	8.29	9.58	-	1.4	-
	20	3.19	4.51	5.53	6.39	7.82	9.03	10.10	11.06	12.77	370	1.6	-
	25	3.99	5.64	6.91	7.98	9.78	11.29	12.62	13.82	15.96	-	2.0	-
30	4.79	6.77	8.29	9.58	11.73	13.54	15.14	16.59	19.16	-	2.3	-	
80°	2	0.32	0.45	0.55	0.64	0.78	0.90	1.01	1.11	1.28	-	0.3	150
	2.5	0.40	0.56	0.69	0.80	0.98	1.13	1.26	1.38	1.60	-	0.4	150
	3	0.48	0.68	0.83	0.96	1.17	1.35	1.51	1.66	1.92	-	0.4	150
	4	0.64	0.90	1.11	1.28	1.56	1.81	2.02	2.21	2.55	-	0.6	100
	5	0.80	1.13	1.38	1.60	1.96	2.26	2.52	2.76	3.19	220	0.7	50
	6	0.96	1.35	1.66	1.92	2.35	2.71	3.03	3.32	3.83	-	0.7	50
	7	1.12	1.58	1.94	2.23	2.74	3.16	3.53	3.87	4.47	-	0.9	50
	7.5	1.20	1.69	2.07	2.39	2.93	3.39	3.79	4.15	4.79	-	0.9	50
	8	1.28	1.81	2.21	2.55	3.13	3.61	4.04	4.42	5.11	-	1.0	-
	9	1.44	2.03	2.49	2.87	3.52	4.06	4.54	4.98	5.75	-	1.0	-
	10	1.60	2.26	2.76	3.19	3.91	4.51	5.05	5.53	6.39	-	1.1	-
	12.5	2.00	2.82	3.46	3.99	4.89	5.64	6.31	6.91	7.98	-	1.3	-
	15	2.39	3.39	4.15	4.79	5.87	6.77	7.57	8.29	9.58	-	1.4	-
	20	3.19	4.51	5.53	6.39	7.82	9.03	10.10	11.06	12.77	340	1.6	-
	25	3.99	5.64	6.91	7.98	9.78	11.29	12.62	13.82	15.96	-	1.9	-
30	4.79	6.77	8.29	9.58	11.73	13.54	15.14	16.59	19.16	-	2.1	-	

※ For MPa / bar / psi units, please refer to LORRIC.com.

Spray Angle	Capacity Code	Capacity at Pressure									Average particle size (um)	Min. Free Passage (mm)	Filter mesh
		0.5 kgf/cm ²	1 kgf/cm ²	1.5 kgf/cm ²	2 kgf/cm ²	3 kgf/cm ²	4 kgf/cm ²	5 kgf/cm ²	6 kgf/cm ²	8 kgf/cm ²			
90°	2	0.32	0.45	0.55	0.64	0.78	0.90	1.01	1.11	1.28	-	0.3	150
	2.5	0.40	0.56	0.69	0.80	0.98	1.13	1.26	1.38	1.60	-	0.4	150
	3	0.48	0.68	0.83	0.96	1.17	1.35	1.51	1.66	1.92	-	0.4	150
	4	0.64	0.90	1.11	1.28	1.56	1.81	2.02	2.21	2.55	-	0.5	100
	5	0.80	1.13	1.38	1.60	1.96	2.26	2.52	2.76	3.19	-	0.5	100
	6	0.96	1.35	1.66	1.92	2.35	2.71	3.03	3.32	3.83	210	0.5	100
	7	1.12	1.58	1.94	2.23	2.74	3.16	3.53	3.87	4.47	-	0.6	100
	7.5	1.20	1.69	2.07	2.39	2.93	3.39	3.79	4.15	4.79	-	0.8	50
	8	1.28	1.81	2.21	2.55	3.13	3.61	4.04	4.42	5.11	330	0.8	50
	9	1.44	2.03	2.49	2.87	3.52	4.06	4.54	4.98	5.75	-	0.8	50
	10	1.60	2.26	2.76	3.19	3.91	4.51	5.05	5.53	6.39	-	1.0	-
	12.5	2.00	2.82	3.46	3.99	4.89	5.64	6.31	6.91	7.98	-	1.1	-
	15	2.39	3.39	4.15	4.79	5.87	6.77	7.57	8.29	9.58	-	1.2	-
	20	3.19	4.51	5.53	6.39	7.82	9.03	10.10	11.06	12.77	-	1.4	-
	25	3.99	5.64	6.91	7.98	9.78	11.29	12.62	13.82	15.96	-	1.6	-
	30	4.79	6.77	8.29	9.58	11.73	13.54	15.14	16.59	19.16	-	1.8	-
100°	2	0.32	0.45	0.55	0.64	0.78	0.90	1.01	1.11	1.28	-	-	-
	2.5	0.40	0.56	0.69	0.80	0.98	1.13	1.26	1.38	1.60	-	-	-
	3	0.48	0.68	0.83	0.96	1.17	1.35	1.51	1.66	1.92	-	-	-
	4	0.64	0.90	1.11	1.28	1.56	1.81	2.02	2.21	2.55	-	-	-
	5	0.80	1.13	1.38	1.60	1.96	2.26	2.52	2.76	3.19	-	-	-
	6	0.96	1.35	1.66	1.92	2.35	2.71	3.03	3.32	3.83	-	-	-
	7	1.12	1.58	1.94	2.23	2.74	3.16	3.53	3.87	4.47	-	-	-
	7.5	1.20	1.69	2.07	2.39	2.93	3.39	3.79	4.15	4.79	-	-	-
	8	1.28	1.81	2.21	2.55	3.13	3.61	4.04	4.42	5.11	-	-	-
	9	1.44	2.03	2.49	2.87	3.52	4.06	4.54	4.98	5.75	-	-	-
	10	1.60	2.26	2.76	3.19	3.91	4.51	5.05	5.53	6.39	-	-	-
	12.5	2.00	2.82	3.46	3.99	4.89	5.64	6.31	6.91	7.98	-	-	-
	15	2.39	3.39	4.15	4.79	5.87	6.77	7.57	8.29	9.58	-	-	-
	20	3.19	4.51	5.53	6.39	7.82	9.03	10.10	11.06	12.77	-	-	-
	25	3.99	5.64	6.91	7.98	9.78	11.29	12.62	13.82	15.96	-	-	-
	30	4.79	6.77	8.29	9.58	11.73	13.54	15.14	16.59	19.16	-	-	-
110°	2	0.32	0.45	0.55	0.64	0.78	0.90	1.01	1.11	1.28	-	-	-
	2.5	0.40	0.56	0.69	0.80	0.98	1.13	1.26	1.38	1.60	-	-	-
	3	0.48	0.68	0.83	0.96	1.17	1.35	1.51	1.66	1.92	-	-	-
	4	0.64	0.90	1.11	1.28	1.56	1.81	2.02	2.21	2.55	-	-	-
	5	0.80	1.13	1.38	1.60	1.96	2.26	2.52	2.76	3.19	-	-	-
	6	0.96	1.35	1.66	1.92	2.35	2.71	3.03	3.32	3.83	-	-	-
	7	1.12	1.58	1.94	2.23	2.74	3.16	3.53	3.87	4.47	-	-	-
	7.5	1.20	1.69	2.07	2.39	2.93	3.39	3.79	4.15	4.79	-	-	-
	8	1.28	1.81	2.21	2.55	3.13	3.61	4.04	4.42	5.11	-	-	-
	9	1.44	2.03	2.49	2.87	3.52	4.06	4.54	4.98	5.75	-	-	-
	10	1.60	2.26	2.76	3.19	3.91	4.51	5.05	5.53	6.39	-	-	-
	12.5	2.00	2.82	3.46	3.99	4.89	5.64	6.31	6.91	7.98	-	-	-
	15	2.39	3.39	4.15	4.79	5.87	6.77	7.57	8.29	9.58	-	-	-
	20	3.19	4.51	5.53	6.39	7.82	9.03	10.10	11.06	12.77	-	-	-
	25	3.99	5.64	6.91	7.98	9.78	11.29	12.62	13.82	15.96	-	-	-
	30	4.79	6.77	8.29	9.58	11.73	13.54	15.14	16.59	19.16	-	-	-

※ For MPa / bar / psi units, please refer to LORRIC.com.