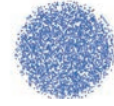


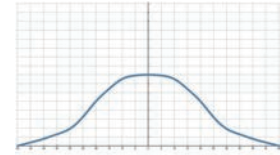
## QFF Plastic clog-resistant easy install full cone nozzle



【 Top view of nozzle spray pattern 】



【 Flow distribution 】



- Recommended working pressure: 2.0 kgf/cm<sup>2</sup>
- Flowrate tolerance: ± 5% @ 2.0 ± 0.1 kgf/cm<sup>2</sup>
- Angle tolerance: ± 5° @ 2.0 ± 0.1 kgf/cm<sup>2</sup>

### Features

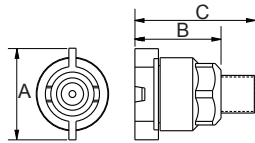
- Full cone spray.
- Unibody design allows for secure and easy installation, and X-shaped core provides minimal clogging. It is often used in etching and developing processes for semiconductors and printed circuit boards that require high spray uniformity.
- Two piece nozzle design which includes nozzle 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.

- Internal gaskets are available in various options such as EPDM, Viton, and Viton-F, which can be adapted to various types of chemical processes. The special structural design allows the nozzles to closely contact the base to prevent water leakage.

### Applications

- Cleaning: Gas, exhaust gas, dust, cleaning device, tank cleaning, etc.
- Cooling: Gas, tank, machinery, metal, roof, etc.
- Dispersion: Humidifying, chemicals, dust suppression.



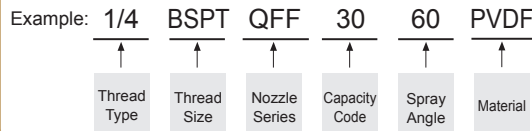
Appearance dimensions may vary depending on model, material. Please ask for details.

Material	Serie	Unit (mm)			Thread Type	Weight (g) PVDF
		A	B	C		
Plastic	1/8QFF	32	28	39	1/8M	17.5
	1/4QFF	32	28	43	1/4M	17.9
	3/8QFF	32	28	43	3/8M	19.6

### Material

- TIP: PVDF
- Core: PP
- Oring: EPDM, VITON
- Body: PVDF, PP, U-PVC (QFSA, QFWG)

#### How to place an order for LORRIC nozzles?



※ Standard Pressure: Column in red.  
 ※ This product for spray angle 90° and 120° is able to be made to order.

Spray Angle	Capacity Code	Capacity at Pressure									Average particle size (um)	Min. Free Passage (mm)	Filter mesh	
		0.7 kgf/cm <sup>2</sup>	1 kgf/cm <sup>2</sup>	1.5 kgf/cm <sup>2</sup>	2 kgf/cm <sup>2</sup>	4 kgf/cm <sup>2</sup>	6 kgf/cm <sup>2</sup>	8 kgf/cm <sup>2</sup>	10 kgf/cm <sup>2</sup>	15 kgf/cm <sup>2</sup>				
50°	10	0.59	0.71	0.87	1.00	1.41	1.73	2.00	2.24	2.74	230	0.7	100	
	15	0.89	1.06	1.30	1.50	2.12	2.60	3.00	3.35	4.11				
	20	1.18	1.41	1.73	2.00	2.83	3.46	4.00	4.47	5.48				
	25	1.48	1.77	2.17	2.50	3.54	4.33	5.00	5.59	6.85				
	}	30	1.77	2.12	2.60	3.00	4.24	5.20	6.00	6.71	8.22	}	1.4	-
		35	2.07	2.47	3.03	3.50	4.95	6.06	7.00	7.83	9.59			
		40	2.37	2.83	3.46	4.00	5.66	6.93	8.00	8.94	10.95			
	90°	45	2.66	3.18	3.90	4.50	6.36	7.79	9.00	10.06	12.32	400	1.7	-
50		2.96	3.54	4.33	5.00	7.07	8.66	10.00	11.18	13.69				
55		3.25	3.89	4.76	5.50	7.78	9.53	11.00	12.30	15.06				

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

Spray Angle	Capacity Code	Capacity at Pressure									Average particle size (µm)	Min. Free Passage (mm)	Filter mesh
		0.7 kgf/cm <sup>2</sup>	1 kgf/cm <sup>2</sup>	1.5 kgf/cm <sup>2</sup>	2 kgf/cm <sup>2</sup>	4 kgf/cm <sup>2</sup>	6 kgf/cm <sup>2</sup>	8 kgf/cm <sup>2</sup>	10 kgf/cm <sup>2</sup>	15 kgf/cm <sup>2</sup>			
90°	10	0.59	0.71	0.87	1.00	1.41	1.73	2.00	2.24	2.74	-	-	-
	15	0.89	1.06	1.30	1.50	2.12	2.60	3.00	3.35	4.11	-	-	-
	20	1.18	1.41	1.73	2.00	2.83	3.46	4.00	4.47	5.48	-	-	-
	25	1.48	1.77	2.17	2.50	3.54	4.33	5.00	5.59	6.85	-	-	-
	30	1.77	2.12	2.60	3.00	4.24	5.20	6.00	6.71	8.22	-	-	-
	35	2.07	2.47	3.03	3.50	4.95	6.06	7.00	7.83	9.59	-	-	-
	40	2.37	2.83	3.46	4.00	5.66	6.93	8.00	8.94	10.95	-	-	-
	45	2.66	3.18	3.90	4.50	6.36	7.79	9.00	10.06	12.32	-	-	-
	50	2.96	3.54	4.33	5.00	7.07	8.66	10.00	11.18	13.69	-	-	-
	55	3.25	3.89	4.76	5.50	7.78	9.53	11.00	12.30	15.06	-	-	-
120°	10	0.59	0.71	0.87	1.00	1.41	1.73	2.00	2.24	2.74	-	-	-
	15	0.89	1.06	1.30	1.50	2.12	2.60	3.00	3.35	4.11	-	-	-
	20	1.18	1.41	1.73	2.00	2.83	3.46	4.00	4.47	5.48	-	-	-
	25	1.48	1.77	2.17	2.50	3.54	4.33	5.00	5.59	6.85	-	-	-
	30	1.77	2.12	2.60	3.00	4.24	5.20	6.00	6.71	8.22	-	-	-
	35	2.07	2.47	3.03	3.50	4.95	6.06	7.00	7.83	9.59	-	-	-
	40	2.37	2.83	3.46	4.00	5.66	6.93	8.00	8.94	10.95	-	-	-
	45	2.66	3.18	3.90	4.50	6.36	7.79	9.00	10.06	12.32	-	-	-
	50	2.96	3.54	4.33	5.00	7.07	8.66	10.00	11.18	13.69	-	-	-
	55	3.25	3.89	4.76	5.50	7.78	9.53	11.00	12.30	15.06	-	-	-

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