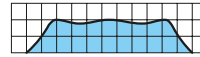


# Ceramic Orifice and Whirler Inserted Full Cone Spray Nozzles

JUP



[Spray pattern]



[Spray distribution]

### [Features]

- Full cone spray pattern with a round impact area and uniform distribution.
- Ceramic disc whirler and ceramic orifice forming vortex chamber provide excellent wear resistance.
- Medium spray capacity range.

### [Standard pressure]

0.2 MPa

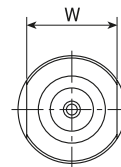
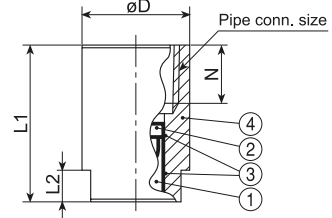
### [Applications]

Cleaning: Gas, incinerator fumes, machinery, eliminators, screen, tanks, crushed stones, earth and sand  
 Cooling: Gas, machinery, tanks, steels  
 Spraying: Waste water treatment, aeration, foam breaking, dust suppression

Full Cone

## JUP series

JUP series (with ceramic orifice inserted)	
Structure	<ul style="list-style-type: none"> <li>• One-piece structure with a ceramic whirler and orifice forming vortex chamber.</li> </ul>
Material	<ul style="list-style-type: none"> <li>• Nozzle orifice &amp; whirler: ceramic</li> <li>• Nozzle body:                      Sizes Rc1" or smaller: S303                      Sizes Rc1*1/2" or larger: S316</li> <li>• Optional material: S316L</li> </ul>



Pipe conn. size	Dimensions (mm)					Mass (g) S303 S316
	L1	L2	W	øD	N	
Rc3/8	30	6	17	20	11	41
Rc1/2	39	8	22	25	14	115
Rc3/4	49	10	27	32	15	167
Rc1	59	14	34	40	17	300
Rc1*1/2	80	20	50	58	19	860

[Note] Appearance and dimensions may differ slightly depending on materials and nozzle codes.

- ①Ceramic orifice ②Ceramic whirler  
 ③Adhesive: Araldite® ④Nozzle body

Spray capacity code	Pipe connection size					Spray angle (°)			Spray capacity (ℓ/min)						Mean drop. dia. (μm)	Free pass. dia. (mm)	
	Rc3/8	Rc1/2	Rc3/4	Rc1	Rc1*1/2	0.05 MPa	0.2 MPa	0.5 MPa	0.03 MPa	0.05 MPa	0.1 MPa	0.15 MPa	0.2 MPa	0.3 MPa			0.5 MPa
03	○					50	60	52	—	1.57	2.17	2.62	3.00	3.55	4.37	380	1.2
04	○					50	60	52	—	2.09	2.89	3.50	4.00	4.73	5.83	§	1.4
05	○					55	65	55	—	2.61	3.61	4.37	5.00	5.91	7.29	490	1.5
06		○				50	60	52	2.46	3.13	4.33	5.24	6.00	7.09	8.75	470	2.0
07		○				55	63	55	2.87	3.65	5.05	6.12	7.00	8.27	10.2	§	2.0
08		○				55	65	55	3.28	4.18	5.78	6.99	8.00	9.46	11.7	§	2.0
10		○				60	70	58	4.10	5.22	7.22	8.74	10.0	11.8	14.6	§	2.2
12		○				63	70	60	4.92	6.26	8.66	10.5	12.0	14.2	17.5	600	2.3
14			○			63	70	60	5.74	7.31	10.1	12.2	14.0	16.5	20.4	580	2.8
16			○			63	70	60	6.56	8.35	11.6	14.0	16.0	18.9	23.3	§	2.8
18			○			70	77	65	7.38	9.40	13.0	15.7	18.0	21.3	26.2	§	3.0
20			○			75	80	68	8.20	10.4	14.4	17.5	20.0	23.6	29.2	§	3.0
23			○			75	80	68	9.43	12.0	16.6	20.1	23.0	27.2	33.5	§	3.2
26			○			78	83	70	10.7	13.6	18.8	22.7	26.0	30.7	37.9	§	3.2
30			○			78	83	72	12.3	15.7	21.7	26.2	30.0	35.5	43.7	730	3.4

# Ceramic Orifice and Whirler Inserted Full Cone Spray Nozzles

## JUP series

Full Cone

Spray capacity code	Pipe connection size					Spray angle (°)			Spray capacity (ℓ/min)						Mean drop. dia. (μm)	Free pass. dia. (mm)	
	Rc3/8	Rc1/2	Rc3/4	Rc1	Rc1*1/2	0.05 MPa	0.2 MPa	0.5 MPa	0.03 MPa	0.05 MPa	0.1 MPa	0.15 MPa	0.2 MPa	0.3 MPa			0.5 MPa
35				○		80	83	70	14.4	18.3	25.3	30.6	35.0	41.4	51.0	700	4.0
40				○		80	83	70	16.4	20.9	28.9	35.0	40.0	47.3	58.3		4.0
45				○		83	85	70	18.5	23.5	32.5	39.3	45.0	53.2	65.6	∫	4.0
50				○		83	85	72	20.5	26.1	36.1	43.7	50.0	59.1	72.9		4.0
55				○		83	85	72	22.6	28.7	39.7	48.1	55.0	65.0	80.2	900	4.0
60					○	75	80	70	24.6	31.3	43.3	52.4	60.0	70.9	87.5	800	5.0
70					○	78	83	70	28.7	36.5	50.5	61.2	70.0	82.7	102	∫	5.0
80					○	80	83	72	32.8	41.8	57.8	69.9	80.0	94.6	117		5.0
90					○	82	85	72	36.9	47.0	65.0	78.7	90.0	106	131	1,000	5.0

### How to order

Please inquire or order for a specific nozzle using this coding system.

〈Example〉 3/8F JUP 03 S303

**3/8F JUP 03 S303**

Pipe conn. size <sup>*1</sup>	Spray capacity code	Material <sup>*2</sup>
■ 3/8F ∫	■ 03 ∫	■ S303 ■ S316
■ 1*1/2F	■ 90	

\*1) "M" indicates male thread ("R" of the ISO standard) and "F" indicates female thread ("Rc" of the ISO standard), e.g. 3/8F = Rc3/8".

\*2) See "Material" information on page 70 for standard materials by each size.