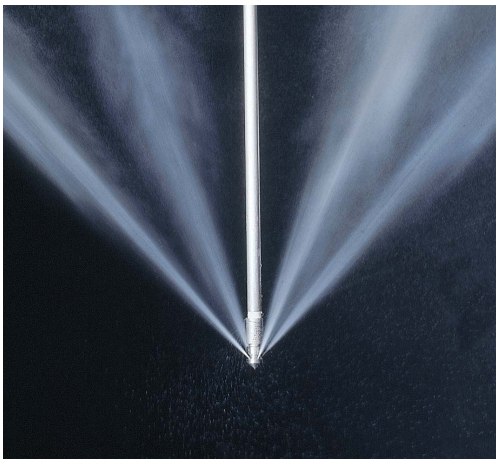
Pipe Cleaning Nozzles RSP



[Features]

- Cleaning inside pipes and tubes, moving itself by means of spraying solid stream jets in different directions as driving force.
- High impact jets effectively remove scale and dirt inside pipes.

[Standard Pressure]

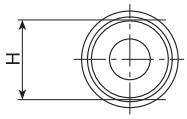
Not specified (RSP series is a made-to-order nozzle)

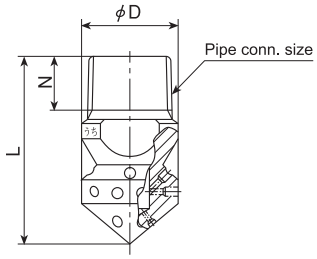
[Applications]

Cleaning inside pipes (drains, distribution pipes),
Removing scale and dirt inside tubes of heat exchangers and cooling machines

RSP series

	RSP series
Structure	● Made of metal, one-piece structure.
Material	● S303 ● Optional material: S420J2



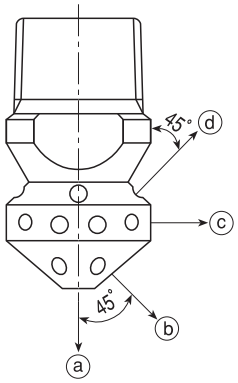


Pipe conn. size	Dimensions (mm)				Mass (g)
	L	H	ϕD	N	
1/8M	26	10.5	12	7	14
1/4M	34	14	17	9	30
3/8M	38	16	19	11	48
1/2M	42	22	25	14	88

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

How to order

RSP series nozzles are made-to-order products. Please select pipe connection size, orifice diameter, and the number of orifices in each direction according to **HOW TO SELECT RSP** in the next page.



〈Example〉···1/8MRSP(0.6) $\frac{(0.6)^3}{(0.6)^3}$ $(0.6)^3$S303

1/8M RSP (ⓐ) $\frac{(\ ⓑ\ )\square}{(\ ⓒ\ )\square}$ (ⓓ)□ S303

Pipe Conn. Size
- 1/8M
- 1/4M
- 3/8M
- 1/2M

( ) : Orifice diameter for directions ⓐ through ⓓ.
□ : Number of orifices for directions ⓑ through ⓓ.

[Note] To indicate no orifices in a direction, use "0" as orifice diameter.

HOW TO SELECT RSP

① Pipe Connection Size

Refer to the table, select the pipe connection size suitable for the spray capacity you require.

Pipe conn. size	Max. spray capacity by pipe connection size (ℓ/min)							
	3 MPa	5 MPa	7 MPa	10 MPa	15 MPa	20 MPa	25 MPa	30 MPa
1/8M	24	31	37	44	54	62	70	76
1/4M	96	124	147	176	216	249	278	305
3/8M	96	124	147	176	216	249	278	305
1/2M	105	135	160	191	234	270	302	331

② Orifice diameter and the number of orifices

Refer to the table, select the orifice diameter and the number of orifices.

Orifice dia. (ϕmm)	Spray capacity per one orifice (ℓ/min)							
	3 MPa	5 MPa	7 MPa	10 MPa	15 MPa	20 MPa	25 MPa	30 MPa
0.6	0.7	0.9	1.1	1.3	1.6	1.9	2.1	2.3
0.7	1.0	1.3	1.5	1.8	2.2	2.5	2.8	3.1
0.8	1.3	1.7	2.0	2.3	2.9	3.3	3.7	4.1
0.9	1.6	2.1	2.5	3.0	3.6	4.2	4.7	5.1
1.0	2.0	2.6	3.1	3.7	4.5	5.2	5.8	6.4
1.2	2.9	3.7	4.4	5.3	6.5	7.5	8.3	9.1
1.5	4.5	5.8	6.9	8.2	10.1	11.7	13.0	14.3
2.0	8.0	10.4	12.3	14.7	18.0	20.7	23.2	25.4

③ Spray direction and the number of orifices in each direction

Refer to the table, specify the number of orifices in each direction ⓑ, ⓒ and ⓓ.

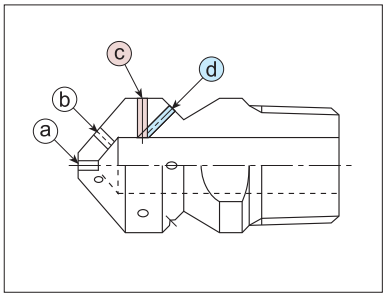
Pipe conn. size	Max. number of orifices in the direction of ⓑ, [ⓒ+ⓓ] (see Remarks)						
	ϕ0.6	ϕ0.7	ϕ0.8	ϕ1.0	ϕ1.2	ϕ1.5	ϕ2.0
1/8M	6	6	6	6	4	—	—
1/4M	10	10	10	10	8	8	—
3/8M	10	10	10	10	8	8	6
1/2M	12	10	10	10	8	8	6

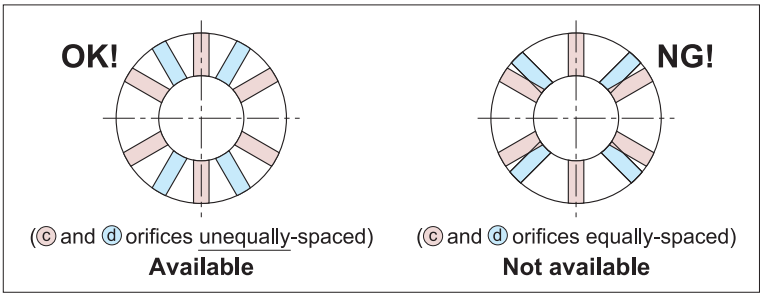
Remarks

- The number of orifices in direction ⓑ must not exceed the value in the above table.
- The total number of orifices in directions ⓒ and ⓓ, [ⓒ+ⓓ] must not exceed the value in the above table.
- Odd numbers, except three (3), are not recommended. Seven (7) is not acceptable.
- The numbers of orifices for ⓒ and ⓓ should be the same or one should be a multiple number of the other. For the other combinations, please inquire with us.

Note

In case the numbers for ⓒ and ⓓ have to be 6 and 4, it can be made but only with orifices for ⓒ and ⓓ unequally-spaced as shown in the sketch below.





(ⓒ and ⓓ orifices unequally-spaced)
Available

(ⓒ and ⓓ orifices equally-spaced)
Not available