

Nozzle Joints / Two-Fluid Nozzles

Nozzle Joint

RoHS10

Type		Material	Max. Operating Pressure
Male, Female Ends	Female, Female Ends		
NJMS	NJFS	SUS303	1.0MPa
NJMP	-	PP Resin	

Male, Female Ends
NJMS

Ball, Cap, Adaptor, H, 50°, T1, T2, L

Female, Female Ends
NJFS

Ball, Cap, Adaptor, H, 50°, T1, T2, L

NJMP

T1, T2, L

Features

Swivel joints suitable for blows to anywhere. By loosening a cap and then, tightening the joint by moving the ball, the joint can be fixed at an arbitrary position. Angle adjustable range is 50°.

Example

For NJMP, products can be used in connected stacks.

Part Number		R/Rc (PT)		(L)	d	Wrench Flats H	Weight (g)	Unit Price		Volume Discount Rate
Type	No.	T1	T2					1 ~ 4 pc(s).	5 ~ 10	
Male, Female Ends NJMS	1-1	1/8	1/8	32	5.5	22	80			
	1-2	1/8	1/4	36	8	22	90			
	2-2	1/4	1/4	41	8	29	170			
	2-3	1/4	3/8	43	11	29	190			
	3-3	3/8	3/8	49	11	35	290			

Part Number		R/Rc (PT)		L	Unit Price	Volume Discount Rate		
Type	No.	T1	T2			1 ~ 4 pc(s).	5 ~ 9	10 ~ 19
Male, Female Ends NJMP	1-1	1/8	1/8	34.5				
	1-2	1/8	1/4					
	2-2	1/4	1/4					

For orders larger than indicated quantity, please check with WOS.

Part Number		Rc (PT)		(L)	Wrench Flats H	Weight (g)	Unit Price		Volume Discount Rate
Type	No.	T1	T2				1 ~ 4 pc(s).	5 ~ 10	
Female, Female Ends NJFS	1-1	1/8	1/8	24	22	65			
	1-2	1/8	1/4	24	22	65			
	2-2	1/4	1/4	30	29	140			
	2-3	1/4	3/8	30	29	140			
	3-3	3/8	3/8	35	35	240			

Ordering Example

Part Number
NJMS1-2

Ordering Example

Two-Fluid Nozzle

RoHS10

WANR

Wrench Flats 12, 19, 25.5, 6.5, 12, 13, 36, Rc1/8, Mixed Fluid, Air

Material: SUS303

Air Pressure (MPa)	Water Qty. (mL/min) / Air Qty. (L/min (ANR)) at Water Pressure below (MPa)								Spray Width (mm) at Water Pressure (MPa) below (Spray Distance 500mm)		
	0.2		0.3		0.4		0.5		0.2	0.3	0.4
	Water Qty.	Air Qty.	Water Qty.	Air Qty.	Water Qty.	Air Qty.	Water Qty.	Air Qty.			
0.1	182	28	228	27	258	26	284	25	800	900	900
0.2	146	47	200	45	248	43	280	41	800	800	900
0.3	102	65	168	63	222	61	259	59	700	800	900
0.4	58	83	127	82	189	80	232	78	600	800	900
0.5	-	-	92	97	158	96	207	95	-	800	900

[-] indicates that the amount of water spray is too little or only air is sprayed. [L] Spray Width (mm) is the length shown in the drawing below.

Spray Photo

Spray Width W (mm)

Component Details

Principle of Operation

Part Number		Fluid Min. Passage Dia. (mm)	Weight (g)	Unit Price		Volume Discount Rate
Type	No.			1 ~ 4 pc(s).	5 ~ 10	
WANR	0.5	0.5	35			

Features

Able to spray fine mists by mixing fluid and air at the same time. (Produces finer particles than the Spray Nozzles on P.1476 ~ 1477.)
- Compact, lightweight and useable in small space.
- Fluid or air flow rate becomes adjustable by adjusting pressure.
- Particle diameter gets finer as air percentage (air-water volume ratio) gets higher.

Applications

Humidification, cooling, spray of chemical solution, etc.

Ordering Example

Part Number
WANR0.5

Spray Nozzles

Spray Shape: Fan-shaped

NZRFs

• Spray Angle

Spray Shape: Fan-shaped

NZRVFS (Wide Angle Type)
NZRVFU (Narrow Angle Type)

• Spray Angle

Spray Shape: Annular Shape

NZRT

• Spray Angle

Spray Shape: Annular Shape

NZRK

• Spray Angle

Material: SUS304

Part Number		d (Hole Dia.)	T	L	L1	L2	H	H2	B1	B2	Weight (g)	Unit Price	Volume Discount Rate
Type	No.											1 ~ 4 pc(s).	5 ~ 20
NZRFS	1	1.0											
		1.2	R1/8	25.0	8.0	8.0	6.0	3.0	12.0	13.8	14.0		
		1.6											
		2.0											
		2.5											
2		2.0											
		2.5	R1/4	32.0	14.0	10.0	6.0	2.0	14.0	16.0	27.0		
		3.2											
		4.0											
		4.0											

NZRFS Specifications																
Size	Hole Dia. (mm)	1.0			1.2			1.6			2.0			2.5		
1/8"	Water Pressure (MPa)	0.05	0.1	0.2	0.05	0.1	0.2	0.05	0.1	0.2	0.05	0.1	0.2	0.05	0.1	0.2
	Water Qty. (L/min)	0.36	0.60	0.86	0.64	0.89	1.26	1.17	1.66	2.31	1.84	2.59	3.58	2.87	4.07	5.60
1/4"	Water Pressure (MPa)	0.05	0.1	0.2	0.05	0.1	0.2	0.05	0.1	0.2	0.05	0.1	0.2	0.05	0.1	0.2
	Water Qty. (L/min)	0.36	0.60	0.86	0.64	0.89	1.26	1.17	1.66	2.31	1.84	2.59	3.58	2.87	4.07	5.60
Size	Hole Dia. (mm)	2.0			2.5			3.2			4.0			4.5		
1/4"	Water Pressure (MPa)	0.05	0.1	0.2	0.05	0.1	0.2	0.05	0.1	0.2	0.05	0.1	0.2	0.05	0.1	0.2
	Water Qty. (L/min)	1.77	2.50	3.49	2.81	3.95	5.40	4.60	6.30	8.85	7.25	10.1	14.2	11.0	15.1	20.3
	Spray Angle (°)	110	120	130	115	125	135	110	120	130	115	125	135	110	120	130

⚠️ Listed values are for reference, not guaranteed. If the current fluid is air, the product does not spray with the values described on the above table.

Part Number		d (Hole Dia.)	T	L	L1	L2	H	B1	B2	Weight (g)	Unit Price	Volume Discount Rate
Type	No.										1 ~ 4 pc(s).	5 ~ 20
NZRVFS	1	2.0										
		2.5	R1/8	20	6	8	6	12	13.8	13		
		3.2										
		3.6										
		4.0										
NZRVFS NZRVFU	2	5.0	R1/4	20	6	10	6	14	16	20		
		6.4										
		7.0										
		7.0										
		7.0										

NZRVFS Specifications														
	Size	Hole Dia. (mm)	2.0			2.5			3.2			3.6		
1/8	Water Pressure (MPa)		0.1	0.3	0.5	0.1	0.3	0.5	0.1	0.3	0.5	0.1	0.3	0.5
	Water Qty. (L/min)		1.12	1.92	2.49	1.38	2.37	3.08	1.18	3.07	3.97	2.41	4.15	5.34
1/4	Water Pressure (MPa)		50	65	70	55	55	60	45	60	65	45	60	65
	Spray Angle (°)		50	60	70	60	70	75	65	70	75	60	65	70
1/4	Water Pressure (MPa)		4.0	5.0	6.4	5.0	6.4	7.0	6.4	7.0	7.0	7.0	7.0	7.0
	Water Qty. (L/min)		3.37	5.79	7.43	4.89	8.44	10.88	7.57	13.07	16.9	8.82	15.3	19.78
1/4	Spray Angle (°)		50	60	70	60	70	75	65	70	75	60	65	70

NZRVFU Specifications													
Size	Hole Dia. (mm)	4.0			5.0			6.4			7.0		
1/4	Water Pressure (MPa)	0.1	0.3	0.5	0.1	0.3	0.5	0.1	0.3	0.5	0.1	0.3	0.5
	Water Qty. (L/min)	3.30	5.60	7.40	4.60	7.80	10.10	6.80	11.50	15.10	8.70	15.40	20.00
	Spray Angle (°)	30	40	45	30	40	45	30	40	45	30	40	40

Part Number		d (Hole Dia.)	T	Weight (g)	Unit Price	Volume Discount Rate
Type	No.				1 ~ 4 pc(s).	5 ~ 20
NZRT	2	0.5				
		0.7	R1/4	33.0		
		1.0				

Features:

Since particle is very fine as a fluid nozzle, the higher the water pressure is, the higher the efficiency of air saturation becomes.

Applications:

Humidification, Small Amount of Fluid Application

NZRT Specifications

Size Hole Dia. (mm)	0.5	0.7	1.0									
Water Pressure (MPa)	0.2	0.3	0.4	0.5	0.2	0.3	0.4	0.5	0.2	0.3	0.4	0.5
Water Qty. (L/min)	0.11	0.13	0.15	0.17	0.14	0.17	0.19	0.21	0.20	0.24	0.27	0.30
Spray Angle (°)	60	60	65	70	65	65	70	75	65	70	75	80

Listed values are for reference, not guaranteed.
Does not spray normally at less than 0.2MPa. If the current fluid is air, the product does not spray with the values described on the above table.

Part Number		d (Hole Dia.)	T	Weight (g)	Unit Price	Volume Discount Rate
Type	No.				1 ~ 4 pc(s).	5 ~ 20
NZRK	2	1.0				
		1.6				
		2.0	R1/4	44.0		
		2.4				
		3.2				

Features:

Inside is hollow. The higher the water pressure is, the finer the particle diameter becomes.

Applications:

Air Washer, Dust Removal, Defrosting, etc.

NZRK Specifications

Size Hole Dia. (mm)	1.0	1.6	2.0									
Water Pressure (MPa)	0.1	0.2	0.3	0.4	0.1	0.2	0.3	0.4	0.1	0.2	0.3	0.4
Water Qty. (L/min)	0.38	0.50	0.60	0.68	0.51	0.69	0.82	0.93	0.92	1.22	1.48	1.67
Spray Angle (°)	70	75	80	80	70	80	80	80	70	80	80	80
Size Hole Dia. (mm)	2.4	3.2										
Water Pressure (MPa)	0.1	0.2	0.3	0.4	0.1	0.2	0.3	0.4				
Water Qty. (L/min)	1.47	2.00	2.40	2.74	3.19	4.37	5.27	6.02				
Spray Angle (°)	70	75	80	80	75	80	80	80				

Listed values are for reference, not guaranteed. If the current fluid is air, the product does not spray with the values described on the above table.

Ordering Example

Part Number - d
NZRFS1 - 1.0