

Air Blow Nozzles

Pipe Nozzles / Copper Pipes for Air Blow / Nozzles with Attachment Plate

Tubes/Fittings/Suction Components/Nozzles

Air Blow Nozzles – Pipe Nozzles

RoHS 10

Type			Material	
Straight	Threaded	Tapped	Body	Pipe
PNZC	PNMC	PNRC	Copper Pipe (C1220T)	
PNZS	PNMS	PNRS	304 Stainless Steel	

Threaded

$$L = (H-1) \times P + S + Q + L_2 + L_3 + 2 \leq 300$$

Tapped

$$L = (H-1) \times P + S + Q + 25 \leq 300$$

ⓘ The body may be tarnished due to heat by brazing.
 ⓘ The above drawing is for four hole rows.

If threaded or tapped type is used, it is recommended to use a nozzle joint (P.3557) to blow at a desired angle.

Straight

Part Number	Type	D	H No. of hole	P 1 mm Increment	N (Hole Dia.) Selection	S / Q 1 mm Increment
PNZC	PNZS	6	1-20	5-30	1.0 1.5 2.0	15-50
		8				
		10				

ⓘ When H=1, specification of P (Pitch) is not necessary.

Threaded – Tapped

Part Number	Type	D	H No. of Hole Rows	P 1 mm Increment	N (Hole Dia.)	S, Q 1 mm Increment	R/Rc (PT)	B	L ₁	L ₂	L ₃	D ₁	d	(C)
Threaded	Tapped	6	1-20	5-30	1.0 1.5 2.0	15-50	1/8	12	6	9	14	10	4	13.8
PNMC	PNRC	8					1/4	16	8	12	14	6	18.4	
PNMS	PNRS	10					1/4	19	8	20	16	6.5	21.9	

ⓘ When H=1, specification of P (Pitch) is not necessary.

Air Blow Nozzles – Copper Pipes for Air Blow

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Type			Material	
Straight	Tapered	Tapped	Body	Pipe
DKNZ	DKNZP	DKNZF	C36000 Brass	C1220T
DKNZ	DKNZP	DKNZFN	Brass	Annealed Copper Pipe (C1220T-0)

ⓘ The body may be tarnished due to heat by brazing.
 ⓘ The Annealing Copper Pipe is slightly bent.

Straight

Part Number	Type	D	L Selection	R/Rc (PT)	B	L ₁	L ₂	L ₃	D ₁	d	(C)
DKNZ	DKNZN DKNZF DKNZFN	6	100 200 300 500	1/8	12	6	9	14	10	4	13.8
		8		1/4	16	8	12	14	6	18.4	
		10		1/4	19	8	20	16	6.5	21.9	

Tapered

Part Number	Type	D	L 1 mm Increment	Diameter of Tapered Hole N	R/Rc (PT)	B	L ₁	L ₂	L ₃	D ₁	d	(C)
DKNZP	DKNZN	6	50-500	1.0 1.5 2.0	1/8	12	6	9	14	10	4	13.8
		8			1/4	16	8	12	14	6	18.4	
		10			1/4	19	8	20	16	6.5	21.9	

Air Blow Nozzles – Nozzles with Attachment Plate

1-Hole Type
2-Hole Type

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Type	No. of Holes	Pipe	Body	Plate
PLNZS	1 Hole	C1220T	304 Stainless Steel	
PLNZC	2 Holes	C1220T	C36000 Brass	304 Stainless Steel

ⓘ The body may be tarnished due to heat by brazing.

Part Number	Type	D	L 1 mm Increment	t
PLNZS	PLNZC	3	100-300	0.5
		4	50-300	0.5
		6		1.0

Application Example

Insert tube with inner dia. ϕ 2.5 (ex. PUT4 on P.3474) into PLNZS directly.

Pipe Nozzles

Part Number Example: **PNZC8** - H(10) - P10 - N1.5 - S15 - Q15
PNMS10 - H(1) - P - N1.0 - S20 - Q20

Copper Pipes for Air Blow

Part Number Example: **DKNZF8** - L(300) - N1
DKNZP8 - L(200) - N1.0

Nozzles with Attachment Plate

Part Number Example: **PLNZC6** - L(150)

Two-Fluid Nozzles

Two-Fluid Nozzles

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WANR

Width across Flats 12

Material: 303 Stainless Steel

Part Number	Type	No.	Fluid Min. Passage Dia. (mm)	Mass (g)
WANR		0.5	0.5	35

Part Number Example

Part Number: **WANR0.5**

Component Details

- Features**
- Able to spray fine mists by mixing fluid and air at the same time. (Produces finer particles than the Spray Nozzles (P.3566-3567))
 - Compact and lightweight and useable in small space.
 - Fluid flow rate and air are 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.

Principle of Operation

Fluid and air are mixed in the nozzle.

Air Pressure (MPa)	Water Qty. (mL/min) / Air Qty. (L/min (ANR)) of Hydraulic Pressure below (L/min MPa)								Spray Width (mm) at Water Pressure (MPa) below (Spray Distance 500 mm)		
	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.
 ⓘ Spray Width (mm) is the length shown in the drawing below.

Spray Photo

Spray Width W (mm)

Application Example

Tubes/Fittings/Suction Components/Nozzles