

# Spray Nozzles

# Adjustable Hoses - Overview

**Spray Shape: Full-Circular Shape**

**NZRCs**

**Inner Piece**

**Spray Angle**

Material: SUS304

Part Number	d (Hole Dia.)	T	S	L	L1	L2	L3	H	H1	B	B1	B2	B3	Weight (g)	Unit Price	Volume Discount Rate
NZRCs 1	1.6	R1/8	05	23.5	3	1	8	6.5	5	12	13.8	12	13.8	14.0		
	2.0															
	2.4															
	2.6															
	3.2															
NZRCs 2	1.6	R1/4	08	32	5.5	2	10	8	6.5	14	16	17	19.5	29.0		
	2.0															
	2.4															
	2.6															
	3.2															

**NZRCs Specifications**

Size	Hole Dia. (mm)	Water Pressure (MPa)	Water Qty. (L/min)	Spray Angle (°)
1/8	1.6	0.05	0.10	0.20
	2.0	0.30	0.50	0.05
	2.4	1.08	1.51	2.09
	2.6	2.55	3.26	1.29
1/4	2.0	0.05	0.10	0.20
	2.4	0.30	0.50	0.05
	2.6	1.63	2.19	3.02
	3.0	3.66	4.70	2.26
1/4	3.2	0.05	0.10	0.20
	3.6	0.30	0.50	0.05
	4.0	4.48	5.47	7.05
	4.8	11.23	14.23	18.23

**Spray Shape: Rod Shape**

**NZRS**

**Inner Piece**

**Spray Angle**

Material: SUS304

Part Number	d (Hole Dia.)	T	L	L1	L2	B1	B2	Weight (g)	Unit Price	Volume Discount Rate
NZRS 1	0.5									
	0.7									
	1.0	R1/8	18	10	8	12	13.8	12		
	1.2									
	1.6									
	2.0									
NZRS 2	1.6									
	2.0									
	2.5	R1/4	20	10	10	14	16	17		
	3.0									
	3.6									
	4.0									

**Features:** The impact changes as water flow jets rod-like due to water pressure.  
**Applications:** Pinpoint Washing, Air Blow, etc.  
**Note:** Hole with small diameter may clog.

**NZRS Specifications**

Size	Hole Dia. (mm)	Water Pressure (MPa)	Water Qty. (L/min)	Spray Angle (°)
1/8	0.5	0.2	0.3	0.5
	0.7	0.2	0.3	0.5
	1.0	0.2	0.3	0.5
	1.2	0.2	0.3	0.5
	1.6	0.2	0.3	0.5
	2.0	0.2	0.3	0.5
	2.5	0.2	0.3	0.5
	3.0	0.2	0.3	0.5
	3.6	0.2	0.3	0.5
	4.0	0.2	0.3	0.5
	4.8	0.2	0.3	0.5
	5.6	0.2	0.3	0.5
1/4	1.6	0.2	0.3	0.5
	2.0	0.2	0.3	0.5
	2.5	0.2	0.3	0.5
	3.0	0.2	0.3	0.5
	3.6	0.2	0.3	0.5
	4.0	0.2	0.3	0.5
	4.8	0.2	0.3	0.5
	5.6	0.2	0.3	0.5
	6.3	0.2	0.3	0.5
	7.9	0.2	0.3	0.5
	9.30	0.2	0.3	0.5
	11.23	0.2	0.3	0.5

**Spray Angle Adjustable**

Rod Shape: Angle 0° Full-circular Shape: Angle 30° Full-circular Shape: Angle 60°

**Spray Photo**

Material: SUS304

Part Number	d (Hole Dia.)	T	Weight (g)	Unit Price	Volume Discount Rate
NZRAJ 1	1.5	R1/8	50		
	2.0				

**Features:** Nozzle with spray angle adjustable within range of 0 ~ 60°. This product allows for angle adjustment on site, and thus, facilitates action taken to respond to workpiece change. It is possible to adjust the spray angle without using tools.

**Ordering Example**

Part Number	d
NZRCs1	1.6
NZRS2	1.6
NZRAJ1	1.5

**NZRAJ**

Adjustable Angle 0 ~ 60° (See the spray photo.)

Material: SUS304

Hole Dia. (mm)	Water Pressure (MPa)	Water Qty. (L/min)	Angle (°)
1.5	0.05	0.1	0.2
	0.3	0.6	0.3
	0.6	1.2	0.6
	1.0	2.3	1.2
	1.5	3.5	1.8
	2.0	5.0	2.5
	3.0	10.0	4.0
	4.0	15.0	6.0
	5.0	20.0	8.0
	6.0	25.0	10.0
	7.0	30.0	12.0
	8.0	35.0	14.0
2.0	0.05	0.1	0.2
	0.3	0.6	0.3
	0.6	1.2	0.6
	1.0	2.3	1.2
	1.5	3.5	1.8
	2.0	5.0	2.5
	3.0	10.0	4.0
	4.0	15.0	6.0
	5.0	20.0	8.0
	6.0	25.0	10.0
	7.0	30.0	12.0
	8.0	35.0	14.0

**Example**

Low Pressure Screwed Fittings  
 SUTPE (P.1273)  
 Steel Pipe  
 SUTP (P.1265)

**Features:** Flexible hose can be bent at any angle and easily fits workpieces. Lightweight, nonconductive, chemical resistant, shock resistant, and heat resistant resin material (Polyacetal).  
**Applications:** Application of coolant/lubricant liquid or lubricant application for metal processing machines. For air blow when positioning is cumbersome.

**Combinations**

Three Types of Fittings  
 Three Types of Hoses  
 Five Types of Nozzles

Material: Acetaldehyde Polyester  
 Heat Resistance Temp.: 80 deg.

For selection of products, see P.1479.

Chemical	A / NA	Pressure Resistance (MPa)
Solvent	○	
Lubricant	○	
Water	○	
Acid	×	
Alkali	×	

No.	Fluid	Air
2	0.2	0.5
3		
4		

**Min. Bending Radius**

No.2 35mm  
 No.3 45mm  
 No.4 45mm

**Dimension Details**

**Nozzle**

**Shape A (A1, A2, A3)**

**Shape A**

Hose Nominal	A1				A2				A3									
	C	C1	D	d1	d2	d3	C	C1	D	d1	d2	d3	C	C1	D	d1	d2	d3
2	30.0	16.0	16.0	1.6	4.9	7.0	30.0	19.0	16.0	3.2	6.3	9.6	35.0	25.5	16.0	6.3	9.6	11.0
3	33.0	19.0	21.0	6.3	9.5	13.0	39.0	28.0	21.0	9.5	13.0	15.0	33.0	22.0	21.0	12.7	15.0	16.0
4	37.5	24.5	24.5	6.6	10.5	12.5	37.5	24.5	24.5	9.5	12.5	15.5	37.5	24.5	24.5	12.5	17.0	19.0

**Shape B (B1, B2, B3)**

**Shape B**

Hose Nominal	B1				B2				B3						
	C	C1	D	d1	d2	C	C1	D	d1	d2	C	C1	D	d1	d2
2	24.5	12.0	16.0	1.8	4.1	25.5	12.0	16.0	3.2	5.6	26.3	12.0	16.0	6.3	9.0
4	36.0	20.0	24.5	6.8	9.5	37.0	18.0	24.5	9.5	12.4	39.0	19.5	24.5	12.4	15.4

**Shape C (C1, C2)**

**Shape C**

Hose Nominal	C1		C2	
	d1	F1	d1	F1
2	1.0	41.0	1.5	41.0

**Shape D (D1)**

**Shape D**

Hose Nominal	D1					
	C	D	d1	d2	d3	d4
2	26.4	16	3.2	1.7	25.4	26.8
3	39	21	5	3	32	34
4	50.5	25	6	4.5	44.5	48

**Shape M (M1, M2)**

**Shape M**

Hose Nominal	M1				M2					
	A	L	(H)	T	Rc (PT)	A	L	(H)	T	Rc (PT)
2	18.5	21	14	14	Rc1/8	22.5	25	17	10	Rc1/4

Shape of M2 is changed.

**Hose Only**

**Hose (For All Types)**

Hose Nominal	Hose I.D.	D	B	L1
2	6.3	16	14.5	20.7
3	9.5	21	17	25
4	12.7	24.5	20.3	30

**Connector Only**

**Male Threaded**

**Shape AJ (Male Threaded)**

Hose Nominal	R (PT)	A	L	H	T
2	1(R1/8)	23	26.3	14	7
3	3(R3/8)	27.3	32	19	8
4	3(R3/8)	28	38.3	18.8	7.5
	4(R1/2)	20.8			

**Male Valve**

**Shape VA (Male Valve)**

Hose Nominal	R (PT)	A	L	H	W
2	R1/4	41	44	30	27
3	R3/8	45	49	34	25
4	R1/2	48.5	58	43	34

**Female Valve**

**Shape VAF (Female Valve)**

Hose Nominal	Rc (PT)	A	L	H	W
2	Rc1/4	42	45	30	27
4	Rc1/2	58.2	64	63	34