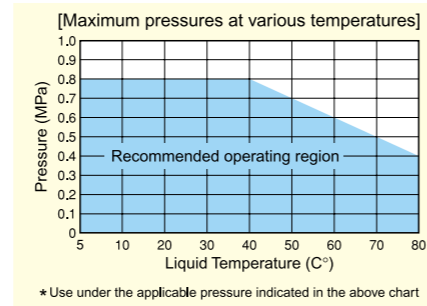
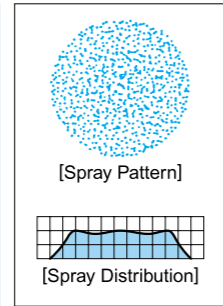


Quick-Detachable Standard Full Cone Spray Nozzles

Patented

INJJX



[Features]

- Full cone spray nozzle with a removable whirler.
- Quick installation and removal by just turning the nozzle 60° by hand.
- Easy maintenance with quick detachable nozzle.
- Nozzle bodies are color-coded by spray capacity for easy identification.

[Standard Pressure]

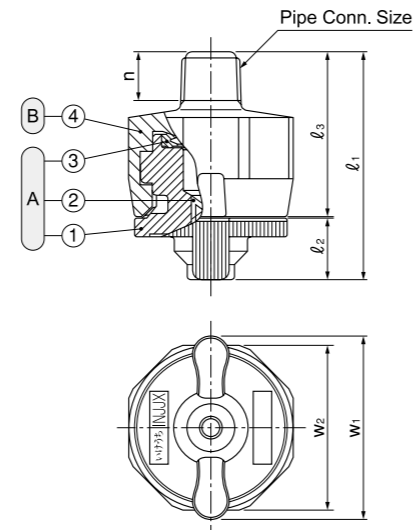
0.2MPa

[Applications]

Etching, stripping, chemical treatment
Cleaning

INJJX-series

INJJX-series	
Structure	• 2-piece structure comprised of nozzle and adaptor. • Easy installation and removal by just turning the nozzle 60°.
Material	• Nozzle : PP (polypropylene) • Adaptor : PPS (polyphenylene sulfide) • Packing : FEPM



① Nozzle ② Whirler ③ Packing-FEPM
④ Adaptor

Series	Pipe Conn. Size	Dimensions(mm)						Mass (g)
		l ₁	l ₂	l ₃	n	w ₁	w ₂	
INJJX	1/8M	37	10	26.5	8	30	27	12
	1/4M	40	10	29.5	11.5	30	27	13
	3/8M	40	10	29.5	12	30	27	14

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

• INJJX series nozzles are not compatible with ISJJX series.
(The INJJX series is the successor to the ISJJX series.)

Spray Capacity Code	Pipe Conn. Size			Spray Angle			Spray Capacity (ℓ/min)							Mean Drop. Dia. (μm)	Free Pass. Dia. (mm)	Color of nozzle body	
	1/8M	1/4M	3/8M	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				0.7 MPa
	010	○	○	○	60°	65°	55°	—	0.53	0.73	0.88	1.00	1.18				1.45
015	○	○	○	60°	65°	55°	—	0.79	1.09	1.32	1.50	1.77	2.18	2.50	—	1.0	Yellow
020	○	○	○	60°	65°	55°	—	1.06	1.46	1.75	2.00	2.36	2.91	3.34	—	1.5	Grey
025	○	○	○	60°	65°	55°	—	1.32	1.82	2.20	2.50	2.95	3.62	4.17	—	1.5	Yellow
030	○	○	○	60°	65°	55°	—	1.59	2.18	2.63	3.00	3.54	4.36	5.00	—	1.5	Blue
040	○	○	○	60°	65°	55°	—	2.12	2.91	3.51	4.00	4.72	5.81	6.67	—	2.0	Purple
050	○	○	○	65°	70°	60°	—	2.65	3.64	4.38	5.00	5.90	7.27	8.34	—	2.0	Green
060	○	○	○	70°	75°	65°	2.51	3.18	4.37	5.26	6.00	7.08	8.72	10.0	520	2.0	Pink

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

① Complete unit

<Example> ...1/8M(PT)INJJX040PP(FEPM)+PPS

1/8M (PT) INJJX 040 PP (FEPM) + PPS					
Pipe Conn. Size: 1/8M	Thread type: (PT)	Spray Capacity Code: 040	Nozzle Material: PP	Packing Material: (FEPM)	Adaptor Material: PPS
1/4M	(NPT)	50			
3/8M		50			

② Nozzle only

<Example> ... INJJX040PP(FEPM)

INJJX 040 PP (FEPM)		
Spray Capacity Code: 040	Nozzle Material: PP	Packing Material: (FEPM)
50		

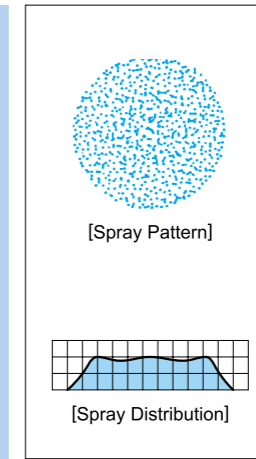
ALSO AVAILABLE!

Quick-Detachable Standard Flat Spray Nozzles
INVV series

See p.21 of this catalog.

Ceramic Orifice and Whirler Inserted Full Cone Spray Nozzles

JUP



[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 is available.

[Standard Pressure]

0.2MPa

[Applications]

Cleaning : Gases, incinerator fumes, machinery, eliminators, screen, tanks, gravel, stones, sand, etc.

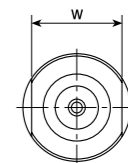
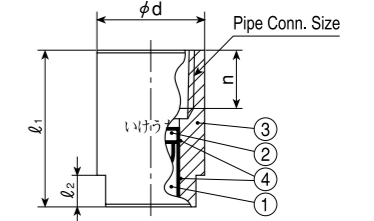
Cooling : Gases, machinery, tanks, steels, etc.

Spraying : Waste water treatment, aeration, foam breaking, dust suppression, etc.

JUP-series

JUP-series (with ceramic orifice inserted)	
Structure	• One-piece structure with ceramic whirler and orifice forming vortex chamber.
Material	• Sizes 1F or smaller : B (brass) or S303 (stainless steel 303) • Sizes 1 1/2 F or larger : S316 (stainless steel 316) • Optional material : S316L

Series	Pipe Conn. Size	Dimensions(mm)					Mass(g)	
		l ₁	l ₂	w	n	φd	B	S303 (S316)
JUP	3/8F	30	6	17	11	20	44	41
	1/2F	39	8	22	14	25	125	115
	3/4F	49	10	27	15	32	177	167
	1F	59	14	34	17	40	320	300
	1 1/2F	80	20	50	19	58	—	820



① Ceramic orifice ② Ceramic whirler
③ Body ④ Adhesive : Araldite®

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

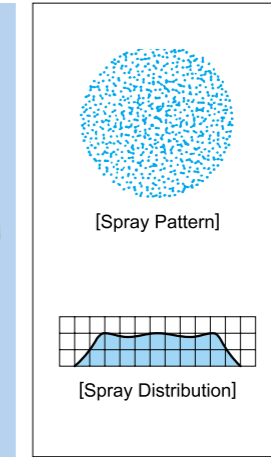
Spray Capacity Code	Pipe Conn. Size					Spray Angle			Spray Capacity (ℓ/min)							Mean Drop. Dia. (μm)	Free Pass. Dia. (mm)
	3/8F	1/2F	3/4F	1F	1 1/2F	0.05 MPa	0.2 MPa	0.5 MPa	0.03 MPa	0.05 MPa	0.1 MPa	0.15 MPa	0.2 MPa	0.3 MPa	0.5 MPa		
	03	○					50°	60°	52°	—	1.57	2.17	2.62	3.00	3.55		
04	○					50°	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

Spray Capacity Code	Pipe Conn. Size					Spray Angle			Spray Capacity (ℓ/min)							Mean Drop. Dia. (μm)	Free Pass. Dia. (mm)
	3/8F	1/2F	3/4F	1F	1 1/2F	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	1000	5.0

All Alumina Ceramic Full Cone Spray Nozzles

JUXP-AL92



- [Features]**
- X-shaped whirler provides large free passage diameter for minimal clogging.
 - Whirler and orifice are made of high-purity alumina and provide excellent wear-resistance.
 - Spray capacity ranges from medium to large.
- [Standard Pressure]**
0.2MPa
- [Applications]**
- Absorption tower of flue gas desulfurization equipment.
 - Spraying slurry, etc.

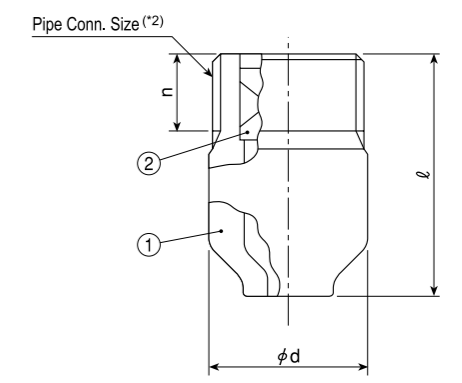
(JUXP-AL92 with S316 socket)

JUXP-AL92 series

JUXP-AL92 series (with ceramic orifice inserted)

- Structure** • Whole nozzle fired as one piece.
- Material** • 92% Alumina
- * If installed into a metal header, this nozzle should be used with a socket made of S316, shown on page 85 (otherwise, the thread may be damaged). Please refer to page 85.

Series	Pipe Conn. Size*1,2	Dimensions(mm)			Mass(g)
		φd	ℓ	n	
JUXP	1M	35	53	18	110
	1 1/2M	50	67	20	350
	2M	65	100	24	760
	2 1/2M (250~350)	80	136	29	1520
	2 1/2M (400~550)	80	94	29	1130
	3M	90	157	31	1690



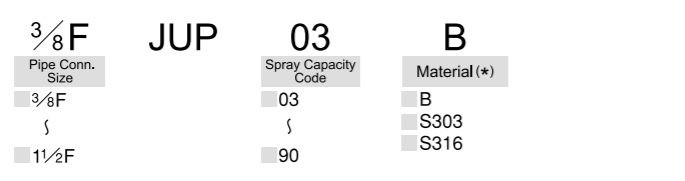
- ① Ceramic tip (Al₂O₃ 92%)
- ② Ceramic whirler (Al₂O₃ 92%)

*1) Figures in () after Pipe Conn. Size indicate the spray capacity codes.
 [Note] Appearance and dimensions may differ slightly depending on materials and nozzle codes.

*2) When used with our S316 socket, socket thread for pipe connection is female thread. Drawing for nozzle with socket is available on request. (The above drawing is nozzle only)

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

(Example) ... 3/8FJUP03B



* See "Material" information on page 64 for standard materials by each size.

Spray Capacity Code	Pipe Conn. Size						Spray Angle			Spray Capacity (ℓ/min)								Mean Drop. Dia. (μm)	Free Pass. Dia. (mm)	
	1M	1 1/2M	2M	2 1/2M (250~350)	2 1/2M (400~550)	3M	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	0.7 MPa			1 MPa
23	○						70°	75°	60°	9.63	12.2	16.7	20.2	23.0	27.1	33.4	38.4	44.4	630	4.7
26	○						75°	80°	65°	10.9	13.8	18.9	22.8	26.0	30.7	37.8	43.4	50.1		4.7
30	○						80°	85°	70°	12.6	15.9	21.8	26.3	30.0	35.4	43.6	50.0	57.9	∫	4.7
35	○						85°	90°	75°	14.7	18.5	25.5	30.7	35.0	41.3	50.9	58.4	67.5		4.7
40	○						90°	95°	80°	16.8	21.2	29.1	35.1	40.0	47.2	58.1	66.7	77.2		4.7
45	○						90°	95°	80°	18.8	23.8	32.7	39.5	45.0	53.1	65.4	75.0	86.8	950	4.7
50		○					70°	75°	60°	20.9	26.5	36.4	43.8	50.0	59.0	72.7	83.4	96.4	800	6.0
55		○					75°	80°	65°	23.0	29.1	40.0	48.2	55.0	64.9	79.9	91.7	105		6.0
60		○					80°	85°	70°	25.1	31.8	43.7	52.6	60.0	70.8	87.2	100	115	∫	6.0
70		○					85°	90°	75°	29.3	37.1	50.9	61.4	70.0	82.6	100	120	135		6.0
80		○					90°	95°	80°	33.5	42.4	58.2	70.1	80.0	94.4	115	135	155		6.6
90		○					90°	95°	80°	37.7	47.7	65.5	78.9	90.0	106	130	150	175	1150	6.6
100			○				80°	85°	70°	41.9	52.9	72.8	87.7	100	120	145	170	195	1000	8.7
120			○				80°	85°	70°	50.3	63.5	82.3	105	120	140	175	200	230		8.7
150			○				85°	90°	75°	62.8	79.4	110	130	150	180	220	250	290	∫	8.7
180			○				90°	95°	80°	75.4	95.3	130	160	180	210	260	300	350		10.3
200			○				90°	95°	80°	83.8	105	145	175	200	240	290	335	385	1350	10.7
250				○			85°	90°	75°	105	130	180	220	250	295	360	420	480	1200	12.7
300				○			90°	95°	80°	125	160	220	265	300	355	435	500	580	∫	12.7
350				○			90°	95°	80°	150	185	255	310	350	415	510	585	675	1450	12.7