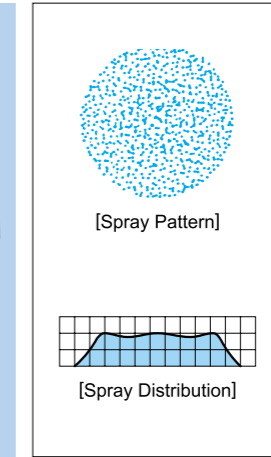


Ceramic Orifice and Whirler Inserted / Full Cone Spray Nozzles
JUP-series

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



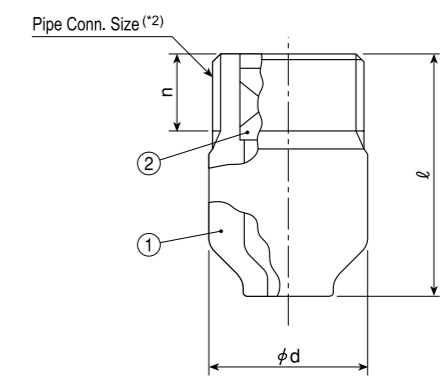
- [Features]**
- X-shaped whirler provides large free passage diameter for minimal clogging.
 - Whirler and orifice are made of high-purity alumina and provide excellent wear-resistance.
 - Spray capacity ranges from medium to large.
- [Standard Pressure]**
0.2MPa
- [Applications]**
- Absorption tower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

JUXP-AL92 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



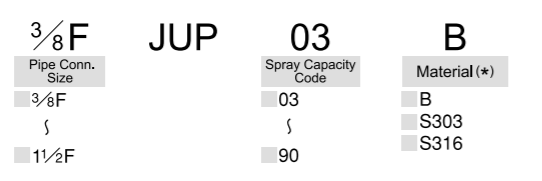
- ① Ceramic tip (Al₂O₃ 92%)
- ② Ceramic whirler (Al₂O₃ 92%)

*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.

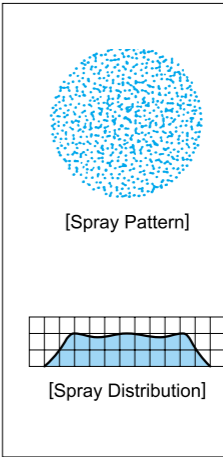
Spray Capacity Code	Pipe Conn. Size						Spray Angle			Spray Capacity (ℓ/min)								Mean Drop. Dia. (μm)	Free Pass. Dia. (mm)	
	1M	1 1/2M	2M	2 1/2M (250~350)	2 1/2M (400~550)	3M	0.05 MPa	0.2 MPa	0.5 MPa	0.03 MPa	0.05 MPa	0.1 MPa	0.15 MPa	0.2 MPa	0.3 MPa	0.5 MPa	0.7 MPa			1 MPa
23	○						70°	75°	60°	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

All Alumina Ceramic / Full Cone Spray Nozzles
JUXP-AL92 series

Spray Capacity Code	Pipe Conn. Size					Spray Angle			Spray Capacity (ℓ/min)									Mean Drop. Dia. (μm)	Free Pass. Dia. (mm)	
	1M	1½M	2M	2½M (250~350)	2½M (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
400					○		75°	80°	65°	170	210	290	350	400	470	580	670	770	1300	13.4
450					○		90°	90°	75°	190	240	330	395	450	530	655	750	870	5	13.4
500					○		95°	95°	80°	210	265	365	440	500	590	730	835	965	5	13.4
550					○		100°	100°	85°	230	290	400	480	550	650	800	920	1060	1550	13.4
600					○		75°	80°	65°	250	320	440	525	600	710	870	1000	1160	1500	17.0
700					○		85°	90°	75°	290	370	510	615	700	826	1020	1170	1359	1800	17.0

Small Capacity Full Cone Spray Nozzles

JJRP



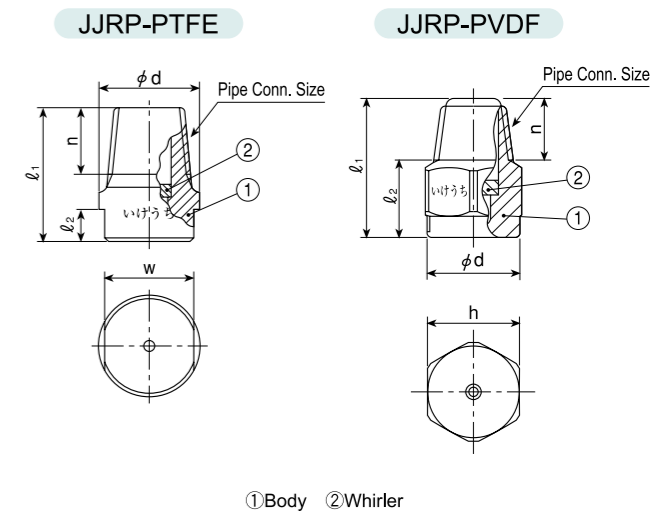
- [Features]**
- Small capacity full cone spray nozzles made of excellent wear-resistant PTFE (polytetrafluoroethylene) and injection molded PVDF (polyvinylidene fluoride).
 - Disc whirler is designed to provide uniform spray distribution at small spray capacity.
- [Standard Pressure]**
0.2MPa
- [Applications]**
Spraying : Etchants, acid liquids, etc.
Cleaning : For spraying pure water, etc.

Full Cone

Full Cone

JJRP-series

JJRP-series	
Structure	• One-piece structure with press-fit disc whirler. • JJRP-PVDF nozzle body is injection molded.
Material	• PTFE (polytetrafluoroethylene), PVDF (polyvinylidene fluoride)



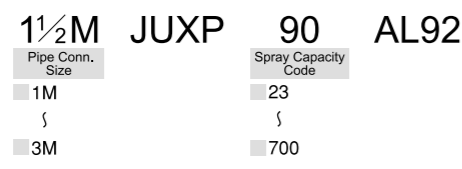
Series	Pipe Conn. Size	Dimensions(mm)					Mass (g)
		ℓ ₁	ℓ ₂	w	φd	h	
JJRP-PTFE	1/8M	16	4	10	12	—	7
	1/4M	21	5	14	16	—	10.5
JJRP-PVDF	1/8M	18	10	—	11.5	12	8
	1/4M	22	10.5	—	12	14	11.5

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

①Body ②Whirler

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

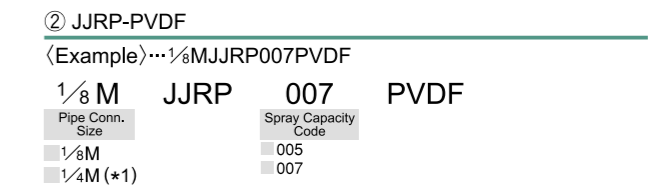
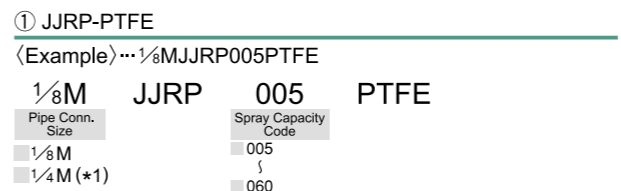
(Example) ...1½MJUXP90AL92



Spray Capacity Code	JJRP-PTFE		JJRP-PVDF		Spray Angle			Spray Capacity (ℓ/min)									Mean Drop. Dia. (μm)	Free Pass. Dia. (mm)
	1/8M	1/4M	1/8M	1/4M	0.15 MPa	0.2 MPa	0.5 MPa	0.05 MPa	0.1 MPa	0.15 MPa	0.2 MPa	0.3 MPa	0.5 MPa	0.7 MPa	1 MPa			
005	○	○	○	○	56°	60°	60°	—	0.36	0.44	0.50	0.59	0.74	0.85	0.99	260	0.4	
007	○	○	○	○	60°	65°	62°	—	0.51	0.61	0.70	0.83	1.03	1.19	1.39	5	0.6	
010	○	○	○	○	63°	65°	62°	—	0.73	0.88	1.00	1.19	1.48	1.70	1.98	5	0.8	
015	○	○	○	○	64°	70°	72°	0.79	1.09	1.31	1.50	1.78	2.22	2.56	2.98	5	1.0	
020	○	○	○	○	64°	70°	72°	1.06	1.45	1.75	2.00	2.38	2.95	3.41	3.97	5	1.2	
030	○	○	○	○	75°	80°	78°	1.58	2.18	2.63	3.00	3.56	4.43	5.11	5.95	410	1.3	
040		○			67°	70°	65°	2.11	2.91	3.50	4.00	4.75	5.91	6.82	7.93	380	1.4	
050		○			76°	80°	70°	2.64	3.63	4.38	5.00	5.94	7.38	8.52	9.92	5	1.6	
060		○			88°	90°	80°	3.17	4.36	5.26	6.00	7.13	8.86	10.2	11.9	520	1.6	

*Only the nozzles with white circle "○" in the above table are available.

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



*1) Pipe connection size code is indicated as "1/4 x 1/8M" when spray capacity is 005-030.