

[Features]

- Our highest impact solid stream. Interior design featuring minimal pressure drop generates much larger flow of solid stream jet as compared with other solid stream nozzles having the same orifice diameters.

[Standard Pressure]

3MPa

[Applications]

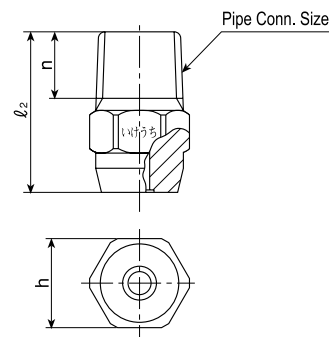
Cleaning : High pressure jet cleaning, wire and felt parts of paper making machines, vehicles, returnable containers, machinery, parts, etc.

Trimming : Paper making, asbestos plate, etc.

CCP-series

CCP-series	
Structure	• Made of metal, one-piece structure.
Material	• S303 (stainless steel 303) * Use below 3.5MPa. • Optional material : S316 or others

Series	Pipe Conn. Size	Dimensions(mm)					Mass(g)	
		l_1	l_2	h	n	ϕd	S303	
CCP	1/4M	—	26	14	10.5	—	20	



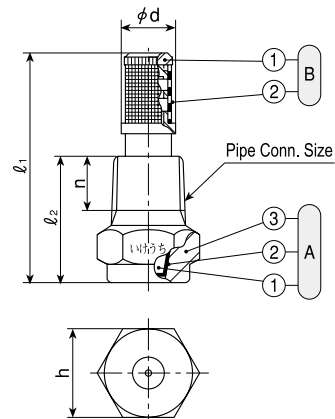
[Note] Appearance and dimensions may differ slightly depending on materials and nozzle codes.

CP-series

CP-series (with ceramic orifice inserted)	
Structure	• One-piece structure with ceramic orifice inserted.
Material	• Spray orifice : ceramic • Metal parts : B (brass) or S303 (stainless steel 303) • Optional material : S316 or others

Series	Pipe Conn. Size	Dimensions(mm)					Mass(g)	
		l_1	l_2	h	n	ϕd	B	S303
CP	1/8M	30	16.5	12	7	7.5	7.8	7.1
	1/4M	—	26	14	10.5	—	21	19.5
	3/8M	—	30	19	11	—	40	38

* For CP with strainer, add 2-5g to the above mass.



Ⓐ Nozzle (①Ceramic orifice ②Adhesive : Araldite® ③Body)
Ⓑ Strainer (①Strainer holder ②Strainer screen)

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

Spray Capacity Code	CCP (Metal)	CP (Ceramic orifice inserted)			Spray Capacity (ℓ/min)											Orifice Diameter (mm)	Strainer Mesh Size	
	1/4M	1/8M	1/4M	3/8M	1 MPa	2 MPa	2.5 MPa	3 MPa	3.5 MPa	4 MPa	4.5 MPa	5 MPa	6.5 MPa	8 MPa	10 MPa			15 MPa
25		●			1.43	2.02	2.25	2.47	2.67	2.85	3.03	3.19	3.64	4.03	4.51	5.52	0.8	50
31		●			1.78	2.52	2.82	3.09	3.34	3.57	3.78	3.99	4.55	5.05	5.64	6.91	0.9	50
37		○			2.14	3.03	3.39	3.71	4.01	4.28	4.54	4.79	5.46	6.06	6.77	8.30	1.0	—
43		○			2.50	3.54	3.96	4.33	4.68	5.00	5.30	5.59	6.37	7.06	7.91	9.67	1.1	—
49		○			2.86	4.04	4.52	4.94	5.34	5.71	6.06	6.38	7.28	8.07	9.04	11.1	1.2	—
56		○			3.22	4.54	5.08	5.56	6.01	6.42	6.81	7.18	8.19	9.08	10.2	12.4	1.2	—
62		○			3.57	5.05	5.65	6.18	6.68	7.14	7.57	7.98	9.10	10.1	11.3	13.8	1.3	—
68		○			3.93	5.55	6.21	6.80	7.35	7.85	8.33	8.79	10.0	11.1	12.4	15.2	1.4	—
74		○			4.29	6.06	6.78	7.42	8.01	8.56	9.09	9.58	10.9	12.1	13.6	16.6	1.4	—
80		○			4.65	6.56	7.35	8.04	8.68	9.28	9.85	10.4	11.8	13.1	14.7	18.0	1.5	—
87		○			5.00	7.07	7.91	8.66	9.35	10.0	10.6	11.2	12.8	14.1	15.8	19.4	1.6	—
93		○			5.36	7.58	8.48	9.28	10.0	10.7	11.4	12.0	13.7	15.2	17.0	20.8	1.6	—
99		○			5.72	8.08	9.04	9.89	10.7	11.4	12.1	12.8	14.6	16.2	18.1	22.1	1.7	—
111		○			6.43	9.09	10.2	11.1	12.0	12.9	13.6	14.4	16.4	18.2	20.3	24.9	1.8	—
124		○			7.15	10.1	11.3	12.4	13.4	14.3	15.1	16.0	18.2	20.2	22.6	27.7	1.9	—
136	○	○			7.85	11.1	12.4	13.6	14.7	15.7	16.7	17.6	20.0	22.2	24.8	30.4	2.0	—
148		○			8.57	12.1	13.6	14.8	16.0	17.1	18.2	19.2	21.8	24.2	27.1	33.2	2.0	—
161		○			9.28	13.1	14.7	16.1	17.4	18.6	19.7	20.8	23.7	26.2	29.3	35.9	2.1	—
173		○			9.99	14.1	15.8	17.3	18.7	20.0	21.2	22.4	25.5	28.3	31.6	38.7	2.2	—
186		○			10.7	15.2	16.9	18.6	20.0	21.4	22.7	24.0	27.3	30.3	33.9	41.5	2.3	—
198		○			11.4	16.2	18.1	19.8	21.4	22.8	24.2	25.5	29.1	32.3	36.1	44.2	2.4	—
210		○			12.1	17.2	19.2	21.0	22.7	24.3	25.7	27.1	30.9	34.3	38.4	47.0	2.4	—
223	○		○		12.9	18.2	20.3	22.3	24.0	25.7	27.3	28.7	32.8	36.3	40.6	49.8	2.5	—
247			○		14.3	20.2	22.6	24.7	26.7	28.6	30.3	31.9	36.4	40.4	45.2	55.3	2.6	—
272			○		15.7	22.2	24.8	27.2	29.4	31.4	33.3	35.1	40.0	44.4	49.7	60.8	2.7	—
297			○		17.1	24.2	27.1	29.7	32.1	34.3	36.3	38.3	43.7	48.5	54.2	66.4	2.9	—
322	○		○		18.6	26.3	29.4	32.2	34.7	37.1	39.4	41.5	47.3	52.5	58.7	71.9	3.0	—
346			○		20.0	28.3	31.6	34.6	37.4	40.0	42.4	44.7	51.0	56.5	63.2	77.4	3.1	—
371			○		21.4	30.3	33.9	37.1	40.1	42.8	45.4	47.9	54.6	60.6	67.7	82.9	3.2	—
396			○		22.8	32.3	36.1	39.6	42.7	45.7	48.5	51.1	58.2	64.6	72.2	88.5	3.3	—
420			○		24.3	34.3	38.4	42.0	45.4	48.5	51.5	54.3	61.9	68.7	76.8	94.0	3.4	—
445	○		○		25.7	36.3	40.6	44.5	48.1	51.4	54.5	57.5	65.5	72.7	81.3	99.5	3.5	—
470			○		27.1	38.4	42.9	47.0	50.7	54.3	57.5	60.7	69.2	76.7	85.8	105	3.6	—
495			○		28.6	40.4	45.1	49.5	53.4	57.1	60.6	63.8	72.8	80.8	90.3	111	3.7	—
519			○		30.0	42.4	47.4	51.9	56.1	60.0	63.6	67.0	76.4	84.8	94.8	116	3.8	—
544			○		31.4	44.4	49.7	54.4	58.8	62.8	66.6	70.2	80.1	88.8	99.3	122	3.9	—
569	○			○	32.8	46.4	51.9	56.9	61.4	65.7	69.7	73.4	83.7	92.9	104	127	4.0	—
594				○	34.3	48.5	54.2	59.4	64.1	68.5	72.7	76.6	87.4	96.9	108	133	4.1	—
717	○			○	41.4	58.6	65.5	71.7	77.5	82.8	87.8	92.6	106	117	131	160	4.5	—
767				○	44.3	62.6	70.0	76.7	82.8	88.5	93.9	99.0	113	125	140	171	4.6	—
890	○			○	51.4	72.7	81.3	89.0	96.2	103	109	115	131	145	163	199	5.0	—
1040	○			○	60.0	84.8	94.8	104	112	120	127	134	153	170	190	232	5.4	—

●.....With strainer ○.....Without strainer

Solid Stream

Related Products

■ CP with small orifice diameter

Orifice Diameter Code	Pipe Conn. Size	Spray Capacity (ℓ/min)												Orifice Diameter (mm)	Strainer Mesh Size
	1/8M	1 MPa	2 MPa	2.5 MPa	3 MPa	3.5 MPa	4 MPa	4.5 MPa	5 MPa	6.5 MPa	8 MPa	10 MPa	15 MPa		
φ 0.1	●	0.020	0.028	0.031	0.034	0.037	0.039	0.042	0.044	0.05	0.056	0.062	0.076	0.1	200
φ 0.15	●	0.044	0.063	0.070	0.077	0.083	0.089	0.094	0.099	0.113	0.126	0.141	0.172	0.15	200
φ 0.2	●	0.08	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.20	0.22	0.25	0.31	0.2	200
φ 0.25	●	0.12	0.18	0.20	0.22	0.23	0.25	0.26	0.28	0.32	0.35	0.39	0.48	0.25	200
φ 0.3	●	0.18	0.25	0.28	0.31	0.33	0.36	0.38	0.40	0.46	0.51	0.56	0.69	0.3	150
φ 0.4	●	0.32	0.45	0.50	0.55	0.59	0.63	0.67	0.71	0.81	0.90	1.00	1.23	0.4	150
φ 0.5	●	0.50	0.70	0.79	0.86	0.93	0.99	1.05	1.11	1.27	1.40	1.57	1.92	0.5	100
φ 0.6	●	0.72	1.01	1.13	1.24	1.34	1.43	1.52	1.60	1.83	2.02	2.26	2.77	0.6	100
φ 0.7	●	0.97	1.37	1.53	1.68	1.81	1.94	2.06	2.17	2.47	2.74	3.07	3.76	0.7	50
φ 0.8	●	1.27	1.80	2.01	2.20	2.38	2.54	2.69	2.84	3.24	3.59	4.02	4.92	0.8	50

●.....With strainer

* The above nozzles are manufactured for designated orifice diameters, therefore spray capacity is not guaranteed.

Solid Stream

How to order

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

① Standard CP and CCP

〈Example〉...1/8MCP25S303W

1/8M	CP	25	S303	W
Pipe Conn. Size	Series	Spray Capacity Code	Material	Strainer
1/8M	CCP	25	B*(*CP only)	W (with Strainer)
1/4M	CP	∫	S303	— (without Strainer)
3/8M		1040		

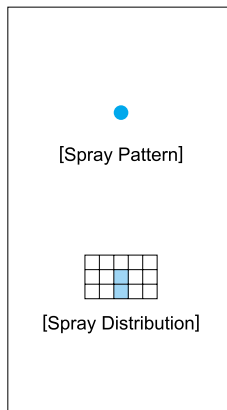
② CP with small orifice diameter

〈Example〉...1/8MCPφ0.1S303W

1/8MCP	φ0.1	S303	W
Orifice Diameter Code	Material	Strainer	
φ 0.1	B	W (with Strainer)	
∫	S303	— (without Strainer)	
φ 0.8			

Convex Round Inlet Solid Stream Jet

CCRP / CRP(AL99)



[Features]

- Convex round inlet protrudes inside the pipe to prevent particles from flowing into the nozzle, reducing clogging.
- CRP(AL99) series features high-purity alumina orifice providing stable performance with longer life.
- Short water path design enables easy and thorough brush-cleaning.

[Standard Pressure]

2MPa

[Applications]

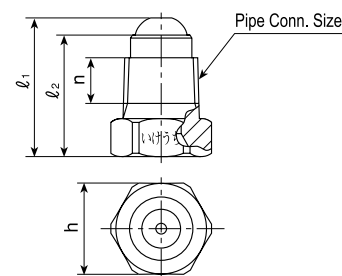
Cleaning : Wire and felt parts of paper making machines, machinery, parts, vehicles, returnable containers, bottles, etc.

Solid Stream

CCRP-series

CCRP-series (All metal)						
Structure	• Made of metal, one-piece structure.					
Material	• S303 (stainless steel 303)					
Series	Pipe Conn. Size	Dimensions(mm)				Mass (g)
		l_1	l_2	h	n	
CCRP	1/8M	18.5	16	12	6	8.5
	1/4M	22.5	17.2	14	7.5	17

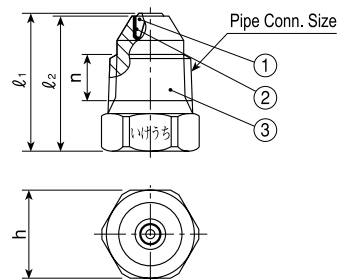
[Note] Appearance and dimensions may differ slightly depending on materials and nozzle codes.



CRP(AL99)-series

CRP(AL99)-series (with high-purity alumina orifice inserted)						
Structure	• One-piece structure with high-purity alumina orifice inserted. • Convex round inlet protrudes into the pipe.					
Material	• Spray orifice : 99.5% alumina • Metal parts : S303 (stainless steel 303)					
Series	Pipe Conn. Size	Dimensions(mm)				Mass (g)
		l_1	l_2	h	n	
CRP-(AL99)	1/8M	18	17.5	12	6	7.0
	1/4M	22	21.5	14	7.5	15.0

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



①99.5% Alumina orifice ②Adhesive : Araldite® ③Body

Orifice Diameter Code	CCRP (Metal)		CRP(AL99) (Ceramic orifice inserted)		Spray Capacity (ℓ/min)					
	1/8M	1/4M	1/8M	1/4M	0.3 MPa	0.5 MPa	0.7 MPa	1 MPa	2 MPa	3 MPa
φ 0.5	○	○	○	○	0.20	0.26	0.31	0.37	0.52	0.63
φ 0.6	○	○	○	○	0.29	0.37	0.44	0.53	0.74	0.91
φ 0.7	○	○	○	○	0.39	0.51	0.60	0.72	1.01	1.24
φ 0.8	○	○	○	○	0.51	0.66	0.78	0.94	1.32	1.62
φ 0.9	○	○	○	○	0.65	0.84	0.99	1.18	1.67	2.05
φ 1.0	○	○	○	○	0.80	1.03	1.22	1.46	2.07	2.53
φ 1.1	○	○	○	○	0.97	1.25	1.48	1.77	2.50	3.06
φ 1.2	○	○	○	○	1.15	1.49	1.76	2.10	2.98	3.64
φ 1.3	○	○	○	○	1.35	1.75	2.07	2.47	3.49	4.28
φ 1.4	○	○	○	○	1.57	2.02	2.40	2.86	4.05	4.96
φ 1.5	○	○	○	○	1.80	2.32	2.75	3.29	4.65	5.69
φ 1.7	○	○	○	○	2.31	2.99	3.53	4.22	5.97	7.31
φ 2.0	○	○	○	○	3.20	4.13	4.89	5.84	8.26	10.1

* The above nozzles are manufactured for designated orifice diameters, therefore spray capacity is not guaranteed.

How to order

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

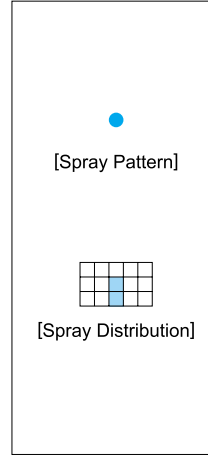
<Example>... 1/8MCRPφ0.6S303 (AL99)

1/8M	CRP	φ0.6	S303(AL99)
Pipe Conn. Size	Series	Orifice Diameter Code	Material
1/8M	CRP	φ 0.5	S303 (AL99) ...CRP
1/4M	CCRP	φ 2.0	S303 ...CCRP

Paper Trimming Nozzles

CMP-T / CTM / CM

Solid Stream



[Features]

- Extra fine and clear non-turbulent solid stream nozzles with high impact cutting force.

[Standard Pressure]

1MPa

[Applications]

- Trimming : Paper making, asbestos plate, etc.
- Cutting : Timber, food
- Others : Cleaning of precision machine parts, injection of chemicals, deburring, foaming of beer (jet foamer), etc.

CMP-T series

	CMP-T series (with high-purity alumina orifice inserted)					
Structure	<ul style="list-style-type: none"> • High-purity alumina ceramic orifice is inserted into a sleeve of strong engineering plastics. • Comprises two parts: nozzle and strainer. Worn-out nozzles can be replaced separately. 					
Material	<ul style="list-style-type: none"> • Spray orifice : 99.5% alumina • Sleeve : PA (polyamide) • Metal parts : S303 (stainless steel 303) • O-ring : NBR 					

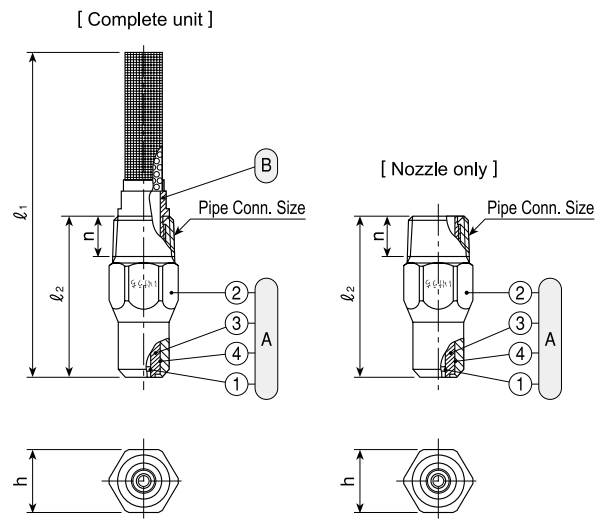
[Complete unit]

Series	Pipe Conn. Size	Dimensions(mm)				Mass (g)
		l_1	l_2	h	n	
CMP-T	$\frac{3}{8}$ M	89	44	17	11	47

[Nozzle only]

Series	Pipe Conn. Size	Dimensions(mm)			Mass (g)
		l_2	h	n	
CMP-T	$\frac{3}{8}$ M	44	17	11	40

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



Ⓐ Nozzle (① 99.5% Alumina orifice ② Body ③ Sleeve ④ O-ring-NBR)
Ⓑ Strainer

CTM-series

	CTM-series (with tungsten carbide orifice inserted)					
Structure	<ul style="list-style-type: none"> • Tungsten carbide orifice insert for longer life. • Comprises two parts : Nozzle, adaptor-strainer. Worn-out nozzles can be replaced separately. 					
Material	<ul style="list-style-type: none"> • Spray orifice : tungsten carbide • Metal parts : S303 (stainless steel 303) 					

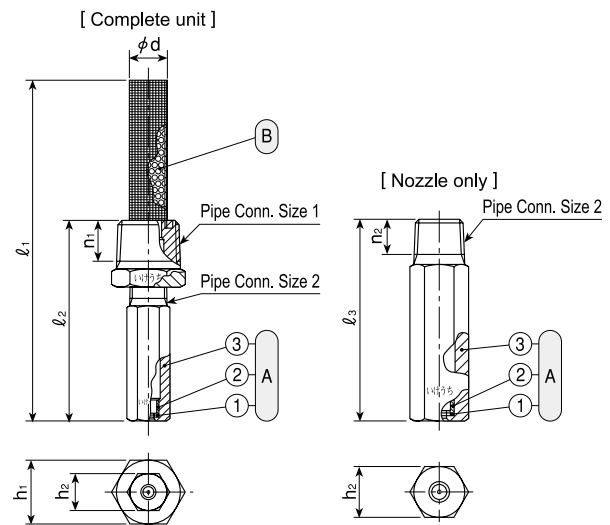
[Complete unit]

Series	Orifice Dia. Code	Pipe Conn. Size 1	Pipe Conn. Size 2	Dimensions(mm)						Mass (g)
				l_1	l_2	h_1	h_2	ϕd	n_1	
CTM	$\phi 0.2 \sim \phi 0.9$	$\frac{3}{8}$ M	$\frac{1}{8}$ M	92	54	17	10	10	11	39
	$\phi 1.0 \sim \phi 1.5$	$\frac{3}{8}$ M	$\frac{1}{4}$ M	90	52	17	14	10	11	47

[Nozzle only]

Series	Orifice Dia. Code	Pipe Conn. Size 2	Dimensions(mm)			Mass (g)
			l_3	h_2	n_2	
CTMP	$\phi 0.2 \sim \phi 0.9$	$\frac{1}{8}$ M	40	10	7	16.5
	$\phi 1.0 \sim \phi 1.5$	$\frac{1}{4}$ M	40	14	10.5	30

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



Ⓐ Nozzle (① Tungsten carbide orifice ② Sleeve ③ Body)
Ⓑ Strainer (Adaptor-strainer)

* Adaptor and strainer are not detachable.

CM-series

	CM-series (with ceramic or sapphire orifice inserted)
Structure	<ul style="list-style-type: none"> Ceramic orifice or sapphire orifice insert for longer life. Comprises two parts : nozzle, adaptor-strainer. Worn-out nozzles can be replaced separately.
Material	<ul style="list-style-type: none"> Spray orifice : ceramic or sapphire Metal parts : B (brass) or S303 (stainless steel 303)

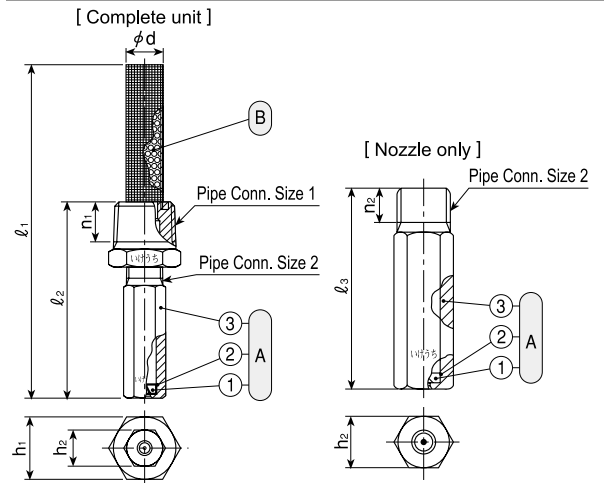
[Complete unit]

Series	Orifice Dia. Code	Pipe Conn. Size 1	Pipe Conn. Size 2	Dimensions(mm)							Mass(g)	
				l_1	l_2	h_1	h_2	ϕd	n_1	B	S303	
CM	$\phi 0.1 \sim \phi 0.9$	$\frac{3}{8}M$	$\frac{1}{8}M$	92	54	17	10	10	11	42	39	
	$\phi 1.0 \sim \phi 1.5$	$\frac{3}{8}M$	$\frac{1}{4}M$	90	52	17	14	10	11	51	47	

[Nozzle only]

Series	Orifice Dia. Code	Pipe Conn. Size 2	Dimensions(mm)			Mass(g)	
			l_3	h_2	n_2	B	S303
CMP	$\phi 0.1 \sim \phi 0.9$	$\frac{1}{8}M$	40	10	7	18	16.5
	$\phi 1.0 \sim \phi 1.5$	$\frac{1}{4}M$	40	14	10.5	33	30

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



Ⓐ Nozzle (① Ceramic or Sapphire orifice ② Adhesive : Araldite® ③ Body)
 Ⓑ Strainer (Adaptor-strainer)

* Adaptor and strainer are not detachable.

Orifice Diameter Code	CMP-T				CTM				CM				Spray Capacity (ℓ/min)						Strainer Mesh Size
	$\frac{3}{8}M$ High alumina orifice	$\frac{3}{8}M$ Tungsten carbide orifice	$\frac{3}{8}M$ Ceramic orifice	$\frac{3}{8}M$ Sapphire orifice	0.5 MPa	1 MPa	2 MPa	3 MPa	4 MPa	5 MPa	0.5 MPa	1 MPa	2 MPa	3 MPa	4 MPa	5 MPa			
$\phi 0.1$			●	●	0.011	0.016	0.022	0.027	0.031	0.035							200		
$\phi 0.15$			●	●	0.03	0.04	0.05	0.06	0.07	0.08							200		
$\phi 0.2$		●	●	●	0.05	0.06	0.09	0.11	0.12	0.14							200		
$\phi 0.25$		●	●	●	0.07	0.10	0.14	0.17	0.19	0.21							200		
$\phi 0.3$	●	●	●	●	0.10	0.14	0.19	0.23	0.27	0.30							150		
$\phi 0.4$	●	●	●	●	0.17	0.24	0.34	0.41	0.47	0.52							150		
$\phi 0.5$	●	●	●	●	0.25	0.35	0.49	0.60	0.68	0.76							80		
$\phi 0.6$	●	●	●	●	0.36	0.51	0.71	0.86	0.99	1.10							80		
$\phi 0.7$	●	●	●	●	0.49	0.69	0.96	1.17	1.34	1.49							50		
$\phi 0.8$	●	●	●	●	0.65	0.90	1.26	1.53	1.75	1.95							50		
$\phi 0.9$	●	●	●	●	0.78	1.09	1.52	1.84	2.11	2.35							50		
$\phi 1.0$	●	●	●	●	0.97	1.34	1.88	2.28	2.61	2.91							50		
$\phi 1.1$		●	●	●	1.17	1.63	2.27	2.75	3.16	3.51							50		
$\phi 1.2$		●	●	●	1.39	1.94	2.70	3.28	3.76	4.18							50		
$\phi 1.3$		●	●	●	1.63	2.27	3.17	3.85	4.41	4.91							50		
$\phi 1.4$		●	●	●	1.89	2.64	3.68	4.46	5.12	5.69							50		
$\phi 1.5$		●	●	●	2.17	3.03	4.22	5.12	5.88	6.54							50		

* The above nozzles are manufactured for designated orifice diameters, therefore spray capacity is not guaranteed.

■ CMP-T series (with high-purity alumina orifice inserted)

How to order		Please inquire or order for a specific nozzle using this coding system.					
① Complete unit	_____			② Nozzle only	_____		
$\frac{3}{8}M$ CMP	$\phi 0.3$	T	S303W	$\frac{3}{8}M$ CMP	$\phi 0.3$	T	S303
Orifice Diameter Code				Orifice Diameter Code			
$\phi 0.3$				$\phi 0.3$			
$\phi 1.0$				$\phi 1.0$			

■ CTM-series (with tungsten carbide orifice inserted)

How to order		Please inquire or order for a specific nozzle using this coding system.					
① Complete unit	_____			② Nozzle only	_____		
$\frac{3}{8}M$ CTM	$\phi 0.2$	S303W (PM-Strainer $\phi 10$)		$\frac{1}{8}M$ CTMP	$\phi 0.2$	S303	
Orifice Diameter Code				Size	Orifice Diameter Code		
$\phi 0.2$				$\frac{1}{8}M$	$\phi 0.2$		
$\phi 1.5$				$\frac{1}{4}M$	$\phi 1.5$		

■ CM-series (with ceramic or sapphire orifice inserted)

How to order		Please inquire or order for a specific nozzle using this coding system.					
① Complete unit	_____			② Nozzle only	_____		
(Example) ... $\frac{3}{8}M$ CMP $\phi 0.1$ BW (PM-Strainer $\phi 10$)	_____			(Example) ... $\frac{1}{8}M$ CMP $\phi 0.1$ B	_____		
$\frac{3}{8}M$ CM	$\phi 0.1$	B	W	$\frac{1}{8}M$ CMP	$\phi 0.1$	B	
Orifice Diameter Code		Material	Orifice material	Size	Orifice Diameter Code	Material	Orifice material
$\phi 0.1$		B	Ceramic	$\frac{1}{8}M$	$\phi 0.1$	B	Sapphire
$\phi 1.5$		S303	Sapphire	$\frac{1}{4}M$	$\phi 1.5$	S303	Sapphire
		Sa-B				Sa-B	
		Sa-S303				Sa-S303	

Solid Stream

For Effective Use of Solid Stream Jet Nozzles

Tightening Torque

For high-pressure cleaning, the highly wear-resistant CERJET® nozzle with inserted ceramic orifices is most suitable. However, if it is screwed too tight, the nozzle body, especially small ones such as 1/8" size, may be damaged, which results in cracking the ceramic orifice. Please apply the recommended torque. Tightening torque should not exceed the following.

For brass body.....1/8M ; 800N-cm, 1/4M ; 1500N-cm

For stainless steel body.....1/8M ; 800N-cm, 1/4M ; 1500N-cm

Nozzle Reaction Force

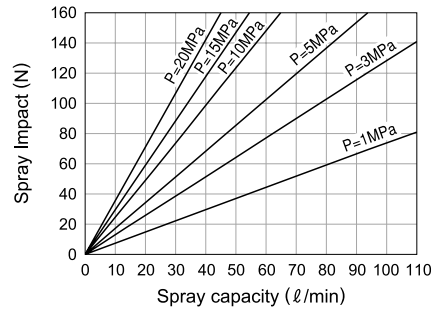
When spraying water under high pressure, the approximate reaction force is calculated by the following formula.

$$F = 0.73 \cdot Q \cdot \sqrt{P}$$

- F ; Reaction force (N)
- Q ; Spray capacity (ℓ/min)
- P ; Pressure (MPa)

Spray Impact

Spray impact means the force of spray droplets hitting the target surface. The stronger spray impact the nozzle has, the better cleaning effect it achieves.



Variation in spray impact of solid stream jet nozzles (Distance : 200mm)

Spray Capacity

■ Spray capacity vs. Liquid density

The spray capacities shown in this catalog are based on tap water at room temperature.

Theoretically, the spray capacity is inversely proportional to the square root of liquid density.

To determine the spray capacity of liquid having density (ρ) other than 1 g/cm³, multiply the spray capacity by a conversion factor of $\frac{1}{\sqrt{\rho}}$.

■ Spray capacity vs. Pressure

In hydraulic spray nozzles, the spray capacity (Q) increases as the pressure (P) increases. Theoretically, the spray capacity is proportional to the square root of the pressure. To determine the spray capacity at a pressure (Px) not shown in the catalog tables, calculate the capacity (Qx) by using the following equation.

$$Q_x = Q \sqrt{\frac{P_x}{P}}$$