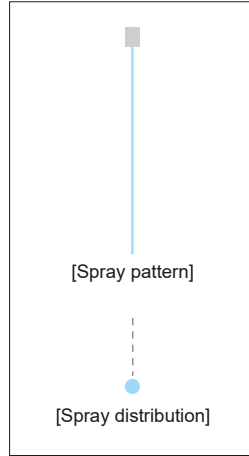


Standard Solid Stream Jet

Some Models are Made-to-Order

CCP/CP/CP-STB



- Highest impact solid stream nozzle. 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]

3.0 MPa

[APPLICATIONS]

- High pressure cleaning:
- Wire and felt parts of paper making machines, vehicles, returnable containers, machinery, parts
- Trimming: Paper making

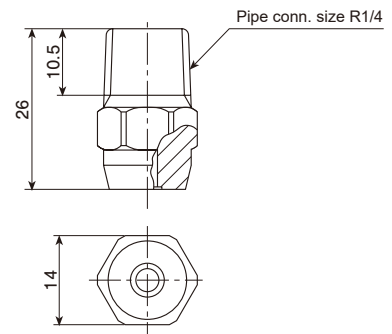
CCP SERIES (all metal)

Structure	• Metal one-piece structure.
Material	• S303 [Note] Use CCP series nozzles for pressures below 3.5 MPa. SPECIAL ORDER MATERIAL: S316
Weight	• 20g

[Note] Appearance and dimensions may differ slightly depending on material and nozzle code.

DRAWING

Unit: mm



CP SERIES (with ceramic orifice)

(Made-to-order models: $\phi 0.05$ to $\phi 0.8$ (see next page))

Structure	• One-piece structure with a ceramic orifice insert. High-purity ceramic is used for the orifice of R1/8 and R1/4 models with spray capacity codes 25–210 and the small orifice diameter CP series with code 0.05–0.8. • Small spray capacity models come with or without a strainer.
Material	• Nozzle orifice: ceramic • Metal parts: S303 SPECIAL ORDER MATERIAL: S316

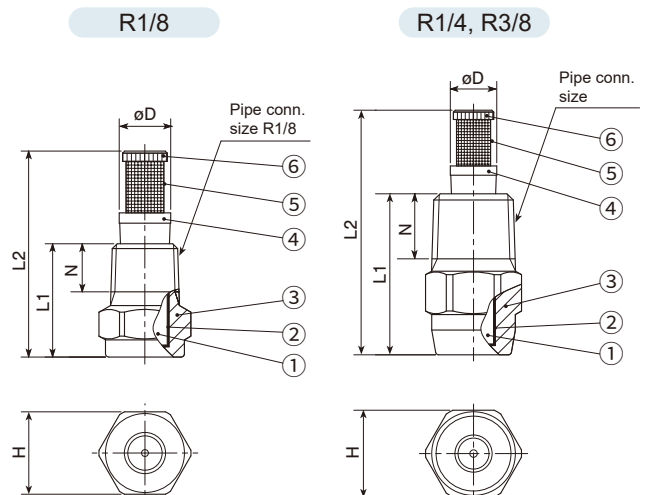
Pipe conn. size	Dimensions (mm)					Weight (g)*1
	L1	L2	H	ϕD	N	
R1/8	16.5	30	12	7.5	7	8
R1/4	26	39.5	14	7.5	10.5	19.5
R3/8	30	—	19	—	11	38

*1) With strainer, add 2g for R1/8 and 5g for R1/4 to the above weight.

[Note] Appearance and dimensions may differ slightly depending on material and nozzle code.

DRAWING

Strainer is optional on some models and can be ordered without it. See table for details.



- ① Ceramic orifice ② Adhesive: Araldite® ③ Nozzle body
④ Strainer holder ⑤ Strainer screen ⑥ Strainer cap

No strainer available for size R3/8.

Spray capacity code	Pipe connection size				Spray capacity (L/min)													Free pass. dia. (mm)	Strainer mesh size
	CCP		CP		0.1 MPa	0.3 MPa	0.5 MPa	0.7 MPa	1 MPa	2 MPa	3 MPa	4 MPa	5 MPa	6.5 MPa	8 MPa	10 MPa	15 MPa		
	R1/4	R1/8	R1/4	R3/8															
25		●	●		0.45	0.78	1.01	1.19	1.43	2.02	2.47	2.85	3.19	3.64	4.03	4.51	5.52	0.8	50
31		●	●		0.56	0.98	1.26	1.49	1.78	2.52	3.09	3.57	3.99	4.55	5.05	5.64	6.91	0.9	50
37		○	○		0.68	1.17	1.51	1.79	2.14	3.03	3.71	4.28	4.79	5.46	6.06	6.77	8.30	1.0	—
43		○	○		0.79	1.37	1.77	2.09	2.50	3.54	4.33	5.00	5.59	6.37	7.06	7.91	9.67	1.1	—
49		○	○		0.90	1.56	2.02	2.39	2.86	4.04	4.94	5.71	6.38	7.28	8.07	9.04	11.1	1.2	—
56		○	○		1.02	1.76	2.27	2.69	3.22	4.54	5.56	6.42	7.18	8.19	9.08	10.2	12.4	1.2	—
62		○	○		1.13	1.95	2.52	2.99	3.57	5.05	6.18	7.14	7.98	9.10	10.1	11.3	13.8	1.3	—
68		○	○		1.24	2.15	2.78	3.28	3.93	5.55	6.80	7.85	8.79	10.0	11.1	12.4	15.2	1.4	—
74		○	○		1.35	2.35	3.03	3.58	4.29	6.06	7.42	8.56	9.58	10.9	12.1	13.6	16.6	1.4	—
80		○	○		1.47	2.54	3.28	3.88	4.65	6.56	8.04	9.28	10.4	11.8	13.1	14.7	18.0	1.5	—
87		○	○		1.58	2.74	3.54	4.18	5.00	7.07	8.66	10.0	11.2	12.8	14.1	15.8	19.4	1.6	—
93		○	○		1.69	2.93	3.79	4.48	5.36	7.58	9.28	10.7	12.0	13.7	15.2	17.0	20.8	1.6	—
99		○	○		1.81	3.13	4.04	4.78	5.72	8.08	9.89	11.4	12.8	14.6	16.2	18.1	22.1	1.7	—
111		○	○		2.03	3.51	4.53	5.36	6.43	9.09	11.1	12.9	14.4	16.4	18.2	20.3	24.9	1.8	—
124	○	○	○	○	2.26	3.92	5.06	5.99	7.15	10.1	12.4	14.3	16.0	18.2	20.2	22.6	27.7	1.9	—
136	○	○	○	○	2.48	4.30	5.55	6.57	7.85	11.1	13.6	15.7	17.6	20.0	22.2	24.8	30.4	2.0	—
148	○	○	○	○	2.70	4.68	6.04	7.15	8.57	12.1	14.8	17.1	19.2	21.8	24.2	27.1	33.2	2.0	—
161	○	○	○	○	2.94	5.09	6.57	7.78	9.28	13.1	16.1	18.6	20.8	23.7	26.2	29.3	35.9	2.1	—
173	○	○	○	○	3.16	5.47	7.06	8.36	9.99	14.1	17.3	20.0	22.4	25.5	28.3	31.6	38.7	2.2	—
186	○	○	○	○	3.40	5.88	7.59	8.98	10.1	15.2	18.6	21.4	24.0	27.3	30.3	33.9	41.5	2.3	—
198	○	○	○	○	3.61	6.26	8.08	9.56	11.4	16.2	19.8	22.8	25.5	29.1	32.3	36.1	44.2	2.4	—
210	○	○	○	○	3.83	6.64	8.57	10.1	12.1	17.2	21.0	24.3	27.1	30.9	34.3	38.4	47.0	2.4	—
223	○	○	○	○	4.07	7.05	9.10	10.8	12.9	18.2	22.3	25.7	28.7	32.8	36.3	40.6	49.8	2.5	—
247	○	○	○	○	4.51	7.81	10.1	11.9	14.3	20.2	24.7	28.6	31.9	36.4	40.4	45.2	55.3	2.6	—
272	○	○	○	○	4.97	8.60	11.1	13.1	15.7	22.2	27.2	31.4	35.1	40.0	44.4	49.7	60.8	2.7	—
297	○	○	○	○	5.42	9.39	12.1	14.3	17.1	24.2	29.7	34.3	38.3	43.7	48.5	54.2	66.4	2.9	—
322	○	○	○	○	5.88	10.2	13.1	15.6	18.6	26.3	32.2	37.1	41.5	47.3	52.5	58.7	71.9	3.0	—
346	○	○	○	○	6.32	10.9	14.1	16.7	20.0	28.3	34.6	40.0	44.7	51.0	56.5	63.2	77.4	3.1	—
371	○	○	○	○	6.77	11.7	15.1	17.9	21.4	30.3	37.1	42.8	47.9	54.6	60.6	67.7	82.9	3.2	—
396	○	○	○	○	7.23	12.5	16.2	19.1	22.8	32.3	39.6	45.7	51.1	58.2	64.6	72.2	88.5	3.3	—
420	○	○	○	○	7.67	13.3	17.1	20.3	24.3	34.3	42.0	48.5	54.3	61.9	68.7	76.8	94.0	3.4	—
445	○	○	○	○	8.12	14.1	18.2	21.5	25.7	36.3	44.5	51.4	57.5	65.5	72.7	81.3	99.5	3.5	—
470	○	○	○	○	8.58	14.9	19.2	22.7	27.1	38.4	47.0	54.3	60.7	69.2	76.7	85.8	105	3.6	—
495	○	○	○	○	9.04	15.7	20.2	23.9	28.6	40.4	49.5	57.1	63.8	72.8	80.8	90.3	111	3.7	—
519	○	○	○	○	9.48	16.4	21.2	25.1	30.0	42.4	51.9	60.0	67.0	76.4	84.8	94.8	116	3.8	—
544	○	○	○	○	9.93	17.2	22.2	26.3	31.4	44.4	54.4	62.8	70.2	80.1	88.8	99.3	122	3.9	—
569	○	○	○	○	10.4	18.0	23.2	27.5	32.8	46.4	56.9	65.7	73.4	83.7	92.9	104	127	4.0	—
594	○	○	○	○	10.8	18.8	24.2	28.7	34.3	48.5	59.4	68.5	76.6	87.4	96.9	108	133	4.1	—
717	○	○	○	○	13.1	22.7	29.3	34.6	41.4	58.6	71.7	82.8	92.6	106	117	131	160	4.5	—
767	○	○	○	○	14.0	24.3	31.3	37.0	44.3	62.6	76.7	88.5	99.0	113	125	140	171	4.6	—
890	○	○	○	○	16.2	28.1	36.3	43.0	51.4	72.7	89.0	103	115	131	145	163	199	5.0	—
1040	○	○	○	○	19.0	32.9	42.5	50.2	60.0	84.8	104	120	134	153	170	190	232	5.4	—

●: Available with or without strainer ○: Only available without strainer

CP Series with Small Orifice Diameter Made-to-Order

Small orifice diameter CP Series

Orifice diameter code	Pipe connection size		Spray capacity (L/min)												Strainer mesh size
	R1/8	R1/4	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	
∅0.05 ²	●	●	0.005	0.007	0.007	0.008	0.009	0.009	0.010	0.010	0.012	0.013	0.015	0.018	400
∅0.1	●	●	0.020	0.028	0.031	0.034	0.037	0.039	0.042	0.044	0.050	0.056	0.062	0.076	200
∅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	200
∅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	200
∅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	200
∅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	150
∅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	150
∅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	100
∅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	100
∅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	50
∅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	50

●: Available with or without strainer

[Note] The above nozzles are manufactured for specific orifice diameters, therefore the spray capacity is not guaranteed.

*2) Cautions for Use (∅0.05 Orifice):

Leaving tap water or solutions prone to precipitation in the spray nozzle after spraying can increase the risk of clogging. Use only deionized water or chemical solutions that do not precipitate.

CP-STB SERIES (with ceramic orifice) Made-to-order

Stabilized Spray After Pipe Bends—New CP-STB Series with Built-in Straighteners.

- Provides a longer and more stable solid stream, even after bends where turbulence is prone to occur.
- The excellent flow-stabilizing function maintains a long-distance solid stream even in sideways installations.
- Ideal for applications requiring a high-impact, turbulence-free solid stream spray.

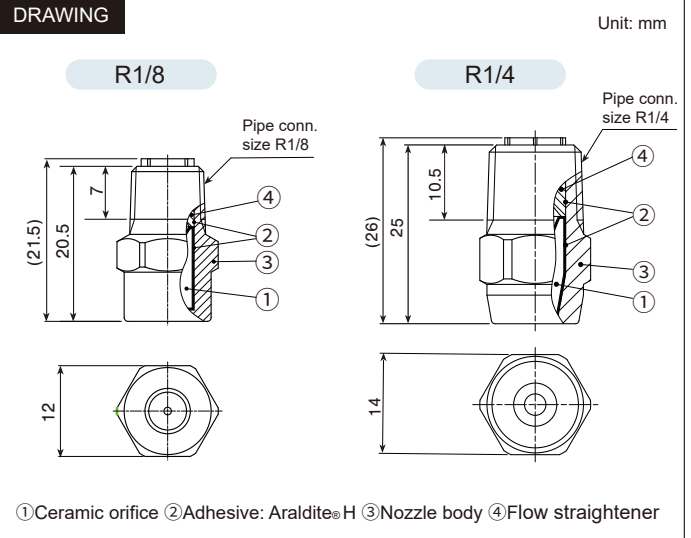
Structure	<ul style="list-style-type: none"> • One-piece structure with a ceramic orifice insert. High-purity ceramic is used for the orifice of models with spray capacity codes 25–210. • The built-in flow straightener improves solid stream stability, delivering stronger impact than the standard CP Series.
Material	<ul style="list-style-type: none"> • Nozzle orifice: ceramic • Metal parts: S303 <p>SPECIAL ORDER MATERIAL: S316</p>
Weight	<ul style="list-style-type: none"> • R1/8: 11 g • R1/4: 20 g

[Note] Appearance and dimensions may differ slightly depending on material and nozzle code.

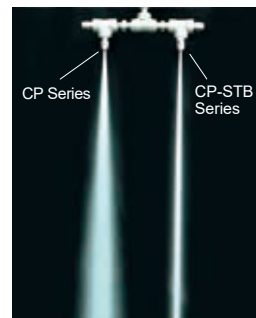
CP-STB Series Lineup

The CP-STB Series covers spray capacity codes 25–544, based on the CP Series chart (see previous page) for R1/8 and R1/4 thread sizes.

For spray capacity codes 80 to 544, the CP-STB Series has a free passage diameter of 1.5 mm, unlike the CP Series.
 Note: Strainers are not available for CP-STB models.



Spray Comparison on Bent Pipe



When installed immediately after a bend, turbulence inside the pipe may affect the spray performance of the standard CP Series. The CP-STB Series is effective in such cases.

The standard CP Series delivers sufficient performance in the absence of turbulence.

HOW TO ORDER

To inquire about or order a specific nozzle please refer to this coding system.

CCP CP

Example: 1/8M CP 25 AL99-S303 W

1/8M	CP	25	AL99-S303	W
Pipe conn. size ³	Series	Spray capacity code	Material ⁴	Strainer
1/8M	CCP	25	S303	W (with strainer)
1/4M	CP	∫	AL99-S303	(Blank indicates "without strainer")
3/8M		1040		

Small orifice diameter CP

Example: 1/8M CP ø0.1 AL99-S303 W

1/8M	CP	ø0.1	AL99-S303	W
Pipe conn. size ³	Orifice diameter code	Material	Strainer	
1/8M	ø0.05		W (with strainer)	
1/4M	∫		(Blank indicates "without strainer")	
	ø0.8			

CP-STB

Example: 1/8M CP 25 STB AL99-S303

1/8M	CP	25	STB	AL99-S303
Pipe conn. size ³	Spray capacity code	Material ⁴		
1/8M	25	S303		
1/4M	∫	AL99-S303		
	544			

The small orifice diameter CP and CP-STB series are made-to-order.

³) "M" indicates male thread ("R" of the ISO standard), e.g. 1/8M = R1/8.
⁴) Material code "AL99-S303" is for the CP/CP-STB series with spray capacity code 25–210.