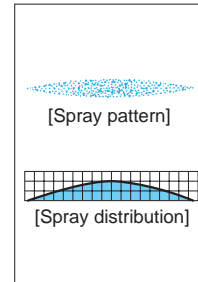


# One-piece Structure Standard Flat Spray Nozzles

VVP/VP

Flat Spray



- Flat spray pattern with a mountain-shaped spray distribution and gradually tapered edges.
- Tapered edges overlap to provide uniform spray distribution in multi-nozzle arrangements.

**[STANDARD PRESSURE]**  
0.3 MPa

**[APPLICATIONS]**

- Cleaning: Automotives, containers, films, felts, filters, screens, bottles, crushed stone, earth and sand, metal parts, machines, steel plates and pieces
- Spraying: Etchants, oils, lubricants, liquids, solutions, insecticides, herbicides
- Cooling: Gas, heat exchangers, tanks, steel, roofs
- Water screen: Fire protection, heat protection, dust suppression, deodorization

## VVP SERIES

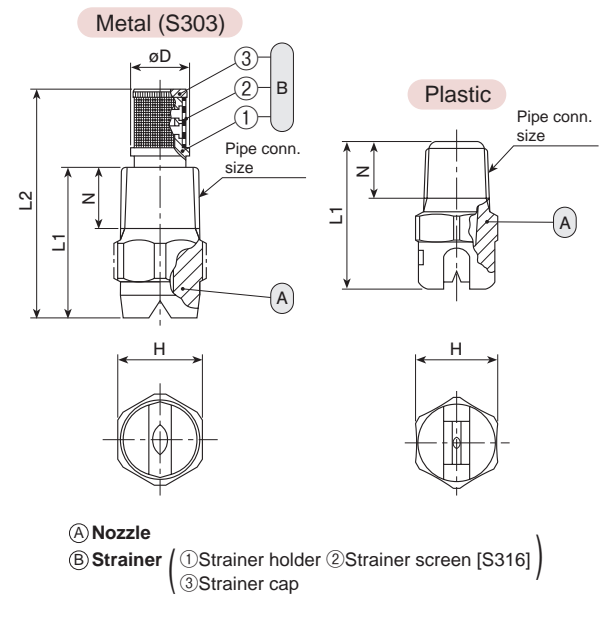
Structure	<ul style="list-style-type: none"> <li>• One-piece structure, made of metal or plastic.</li> <li>• Small spray capacity VVP nozzles made of metal come with or without a strainer.</li> </ul>
Material	<ul style="list-style-type: none"> <li>• S303, PP, or PVDF</li> </ul> <p>SPECIAL ORDER MATERIAL: S316, PVC, or others</p>

Material	Pipe conn. size	Dimensions (mm)					Weight (g)		
		L1	L2	H	øD	N	S303	PP	PVDF
Metal <sup>1,2</sup>	R1/8	18.5	31	12	7.5	6.5	10	-	-
	R1/4	25	40	14	10	10.5	21	-	-
	R3/8	30	-	19	-	10.5	37	-	-
	R1/2	38	-	23	-	14	65	-	-
	R3/4	45	-	29	-	15	110	-	-
Plastic	R1	55	-	35	-	18	170	-	-
	R1/8	22	-	12	-	8.5	-	1.1	2.1
	R1/4	27	-	14	-	11.5	-	2.2	4.3

\*1) VVP nozzles with a spray capacity code of 20 or smaller differ in dimension (L1, L2) and shape. Contact us for details.  
\*2) With a strainer, add 2-5 g to the above weight.

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

## DRAWING



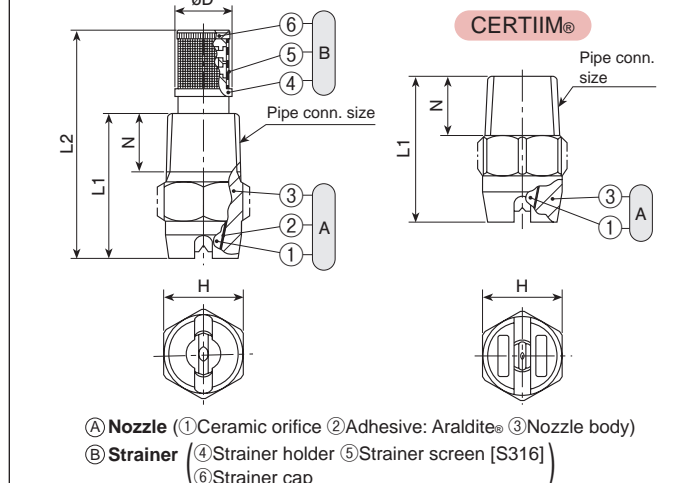
## VP SERIES (with ceramic orifice)

Structure	<ul style="list-style-type: none"> <li>• One-piece structure with a ceramic orifice insert.</li> <li>• Small spray capacity VP nozzles made of metal come with or without a strainer.</li> <li>• CERTIIM® is a one-piece plastic nozzle molded around a ceramic orifice.</li> </ul>
Material	<ul style="list-style-type: none"> <li>• Nozzle orifice: ceramic</li> <li>• Metal parts: S303 or B (brass)</li> <li>• CERTIIM®'s plastic body: PVDF</li> </ul> <p>SPECIAL ORDER MATERIAL: S316 or others</p>

Body material	Pipe conn. size	Dimensions (mm)					Weight (g)		
		L1	L2	H	øD	N	S303	B	CERTIIM®
Metal <sup>2</sup>	R1/8	16.5	30	12	7.5	6.5	8	9	-
	R1/4	26	40	14	10	10.5	20	22	-
PVDF (CERTIIM®)	R1/8	22	-	12	-	8.5	-	-	2.1
	R1/4	26	-	14	-	10.5	-	-	6

\*2) With a strainer, add 2-5 g to the above weight.

## DRAWING



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

# One-piece Structure Standard Flat Spray Nozzles

## VVP/VP SERIES

Flat Spray

### VVP Series, VP Series

Spray angle code	Spray capacity code	Pipe connection size													Spray angle (°)			Spray capacity (L/min)						Mean drop dia. (µm)	Free pass. dia. (mm)	Strainer mesh size				
		VVP						VP							0.15 MPa	0.3 MPa	0.7 MPa	0.05 MPa	0.1 MPa	0.15 MPa	0.2 MPa	0.3 MPa	0.5 MPa				0.7 MPa	1 MPa	2 MPa	
		All metal						All plastic		Metal																				CER-TIIM <sub>6</sub>
		R1/8	R1/4	R3/8	R1/2	R3/4	R1	R1/8	R1/4	R1/8	R1/4	R1/8	R1/4																	
115	03								○	○	●	●	○	○	101	115	124	-	0.17	0.21	0.24	0.30	0.39	0.46	0.55	0.77	140	0.2	200	
	04								○	○	●	●	○	○	102	115	124	-	0.23	0.28	0.33	0.40	0.52	0.61	0.73	1.03	160	0.2	200	
	05										●	●	○	○	102	115	124	-	0.29	0.35	0.41	0.50	0.65	0.76	0.91	1.29	160	0.3	150	
	07										●	●	○	○	103	115	124	-	0.40	0.49	0.57	0.70	0.90	1.07	1.28	1.81	160	0.3	150	
	10										●	●	○	○	103	115	124	0.41	0.58	0.71	0.82	1.00	1.29	1.53	1.83	2.58	170	0.4	150	
	15	●	●								●	●	○	○	104	115	123	0.61	0.87	1.06	1.23	1.50	1.94	2.29	2.74	3.87	170	0.5	100	
	20	●	●								●	●	○	○	104	115	123	0.82	1.15	1.41	1.63	2.00	2.58	3.06	3.65	5.16	270	0.6	100	
	30	●	●								●	●	○	○	105	115	122	1.23	1.73	2.12	2.45	3.00	3.88	4.58	5.48	7.75	270	0.8	50	
	40	○	○						○	○					106	115	122	1.63	2.31	2.83	3.27	4.00	5.16	6.11	7.30	10.3	270	0.8	50	
	60	○	○												107	115	121	2.45	3.46	4.24	4.90	6.00	7.75	9.17	11.0	15.5	270	1.0	-	
	80	○	○												107	115	121	3.27	4.62	5.66	6.53	8.00	10.3	12.2	14.6	20.6	270	1.2	-	
	100	○	○												107	115	120	4.08	5.77	7.07	8.17	10.0	12.9	15.3	18.3	25.8	270	1.7	-	
	200														109	115	120	8.16	11.5	14.1	16.3	20.0	25.8	30.6	36.5	51.6	510	2.4	-	
	230														109	115	119	9.39	13.3	16.3	18.8	23.0	29.7	35.1	42.0	59.4	510	2.7	-	
	260			○	○										109	115	119	10.6	15.0	18.4	21.2	26.0	33.6	39.7	47.5	67.1	510	2.8	-	
	300			○	○										109	115	119	12.2	17.3	21.2	24.5	30.0	38.7	45.8	54.8	77.5	510	3.0	-	
	400				○	○									110	115	118	16.3	23.1	28.3	32.7	40.0	51.6	61.1	73.0	103	580	3.5	-	
	500					○	○								110	115	118	20.4	28.9	35.4	40.8	50.0	64.6	76.4	91.3	129	580	3.9	-	
600						○	○							111	115	118	24.5	34.6	42.4	49.0	60.0	77.5	91.7	110	155	610	4.3	-		
800							○	○						111	115	117	32.7	46.2	56.5	65.3	80.0	103	122	146	206	700	5.0	-		
1000								○						111	115	117	40.8	57.7	70.7	81.7	100	129	153	183	258	700	5.6	-		
1500									○					111	115	117	61.2	86.6	106	122	150	194	229	274	387	900	7.2	-		
90	02									●	●	○	○	76	90	100	-	0.12	0.14	0.16	0.20	0.26	0.31	0.37	0.52	145	0.2	200		
	03									●	●	○	○	76	90	100	-	0.17	0.21	0.24	0.30	0.39	0.46	0.55	0.77	150	0.2	200		
	04										●	●	○	○	77	90	100	-	0.23	0.28	0.33	0.40	0.52	0.61	0.73	1.03	170	0.3	150	
	05										●	●	○	○	77	90	100	-	0.29	0.35	0.41	0.50	0.65	0.76	0.91	1.29	170	0.3	150	
	07										●	●	○	○	78	90	100	-	0.40	0.49	0.57	0.70	0.90	1.07	1.28	1.81	170	0.4	150	
	10										●	●	○	○	78	90	99	0.41	0.58	0.71	0.82	1.00	1.29	1.53	1.83	2.58	170	0.5	100	
	15	●	●								●	●	○	○	79	90	99	0.61	0.87	1.06	1.23	1.50	1.94	2.29	2.74	3.87	280	0.6	100	
	20	●	●								●	●	○	○	79	90	98	0.82	1.15	1.41	1.63	2.00	2.58	3.06	3.65	5.16	280	0.7	50	
	30	○	○								○	○	○	○	80	90	97	1.23	1.73	2.12	2.45	3.00	3.88	4.58	5.48	7.75	280	0.9	50	
	40	○	○								○	○	○	○	81	90	97	1.63	2.31	2.83	3.27	4.00	5.16	6.11	7.30	10.3	280	1.1	-	
	50	○	○								○	○	○	○	81	90	97	2.04	2.89	3.54	4.08	5.00	6.46	7.64	9.13	12.9	280	1.2	-	
	60	○	○								○	○	○	○	82	90	96	2.45	3.46	4.24	4.90	6.00	7.75	9.17	11.0	15.5	280	1.3	-	
	80	○	○								○	○	○	○	82	90	96	3.27	4.62	5.66	6.53	8.00	10.3	12.2	14.6	20.6	280	1.5	-	
	100	○	○								○	○	○	○	82	90	96	4.08	5.77	7.07	8.17	10.0	12.9	15.3	18.3	25.8	280	1.7	-	
	120														83	90	95	4.90	6.93	8.49	9.80	12.0	15.5	18.3	21.9	31.0	540	2.0	-	
	140														83	90	95	5.72	8.08	9.90	11.4	14.0	18.1	21.4	25.6	36.1	540	2.2	-	
	170														83	90	95	6.94	9.82	12.0	13.9	17.0	22.0	26.0	31.1	43.9	540	2.4	-	
	200														84	90	95	8.16	11.5	14.1	16.3	20.0	25.8	30.6	36.5	51.6	540	2.6	-	
230			○	○										84	90	94	9.39	13.3	16.3	18.8	23.0	29.7	35.1	42.0	59.4	540	2.8	-		
260			○	○										84	90	94	10.6	15.0	18.4	21.2	26.0	33.6	39.7	47.5	67.1	540	3.1	-		
300				○	○									84	90	94	12.2	17.3	21.2	24.5	30.0	38.7	45.8	54.8	77.5	540	3.4	-		
400					○	○								85	90	94	16.3	23.1	28.3	32.7	40.0	51.6	61.1	73.0	103	580	3.8	-		
500						○	○							85	90	93	20.4	28.9	35.4	40.8	50.0	64.6	76.4	91.3	129	580	4.2	-		
600							○	○						86	90	93	24.5	34.6	42.4	49.0	60.0	77.5	91.7	110	155	700	4.7	-		
800								○	○					86	90	93	32.7	46.2	56.5	65.3	80.0	103	122	146	206	700	5.4	-		
900									○	○				86	90	92	36.7	52.0	63.6	73.5	90.0	116	137	164	232	750	5.7	-		
1000										○	○			86	90	92	40.8	57.7	70.7	81.7	100	129	153	183	258	750	6.0	-		
1200											○	○		86	90	92	49.0	69.3	84.9	98.0	120	155	183	219	310	850	6.6	-		
1500												○	○	86	90	92	61.2	86.6	106	122	150	194	229	274	387	950	7.2	-		
80	02									●	●	○	○	67	80	90	-	0.12	0.14	0.16	0.20	0.26	0.31	0.37	0.52	150	0.2	200		
	03									●	●	○	○	67	80	90	-	0.17	0.21	0.24	0.30	0.39	0.46	0.55	0.77	150	0.3	150		
	04										●	●	○	○	67	80	90	-	0.23	0.28	0.33	0.40	0.52	0.61	0.73	1.03	180	0.3	150	
	05	●	●								●	●	○	○	67	80	90	-	0.29	0.35	0.41	0.50	0.65	0.76	0.91	1.29	180	0.3	150	
	07	●	●								●	●	○	○	68	80	89	-	0.40	0.49	0.57	0.70	0.90	1.07	1.28	1.81	180	0.4	150	
	10	●	●								●	●	○	○	68	80	89	0.41	0.58	0.71	0.82	1.00	1.29	1.53	1.83	2.58	180	0.5	100	
	15	○	○								○	○	○	○	69	80	88	0.61	0.87	1.06	1.23	1.50	1.94	2.29	2.74	3.87	290	0.7	50	
	20	○	○																											

One-piece Structure Standard Flat Spray Nozzles  
VVP/VP SERIES

Spray angle code	Spray capacity code	Pipe connection size																Spray angle (°)			Spray capacity (L/min)										Mean drop. dia. (µm)	Free pass. dia. (mm)	Strainer mesh size
		VVP								VP								0.15 MPa	0.3 MPa	0.7 MPa	0.05 MPa	0.1 MPa	0.15 MPa	0.2 MPa	0.3 MPa	0.5 MPa	0.7 MPa	1 MPa	2 MPa				
		All metal				All plastic				Metal		CER-TIIM®																					
		R1/8	R1/4	R3/8	R1/2	R3/4	R1	R1/8	R1/4	R1/8	R1/4	R1/8	R1/4	R1/8	R1/4	R1/8	R1/4																
65	02											●	●	○	○				52	65	75	—	0.12	0.14	0.16	0.20	0.26	0.31	0.37	0.52	155	0.2	200
	03											●	●	○	○				52	65	75	—	0.17	0.21	0.24	0.30	0.39	0.46	0.55	0.77	160	0.3	150
	04											●	●	○	○				52	65	75	—	0.23	0.28	0.33	0.40	0.52	0.61	0.73	1.03	?	0.3	150
	05											●	●	○	○				52	65	74	—	0.29	0.35	0.41	0.50	0.65	0.76	0.91	1.29	190	0.4	150
	07											●	●	○	○				53	65	74	—	0.40	0.49	0.57	0.70	0.90	1.07	1.28	1.81	?	0.5	100
	10											●	●	○	○				54	65	73	0.41	0.58	0.71	0.82	1.00	1.29	1.53	1.83	2.58	?	0.6	100
	15	●	●									●	●	○	○				54	65	73	0.61	0.87	1.06	1.23	1.50	1.94	2.29	2.74	3.87	?	0.8	50
	20	●	●									●	●	○	○				55	65	72	0.82	1.15	1.41	1.63	2.00	2.58	3.06	3.65	5.16	310	0.9	50
	30	○	○									○	○	○	○				56	65	72	1.23	1.73	2.12	2.45	3.00	3.88	4.58	5.48	7.75	?	1.1	—
	40	○	○									○	○	○	○				56	65	71	1.63	2.31	2.83	3.27	4.00	5.16	6.11	7.30	10.3	?	1.3	—
	50	○	○									○	○	○	○				57	65	71	2.04	2.89	3.54	4.08	5.00	6.46	7.64	9.13	12.9	?	1.5	—
	60	○	○									○	○	○	○				57	65	71	2.45	3.46	4.24	4.90	6.00	7.75	9.17	11.0	15.5	?	1.6	—
	80	○	○									○	○	○	○				58	65	71	3.27	4.62	5.66	6.53	8.00	10.3	12.2	14.6	20.6	?	1.9	—
	100	○	○									○	○	○	○				58	65	70	4.08	5.77	7.07	8.17	10.0	12.9	15.3	18.3	25.8	?	2.1	—
	120	○	○									○	○	○	○				58	65	70	4.90	6.93	8.49	9.80	12.0	15.5	18.3	21.9	31.0	?	2.3	—
	140	○	○									○	○	○	○				59	65	69	5.72	8.08	9.90	11.4	14.0	18.1	21.4	25.6	36.1	?	2.5	—
	170	○	○									○	○	○	○				59	65	69	6.94	9.82	12.0	13.9	17.0	22.0	26.0	31.1	43.9	?	2.8	—
	200	○	○									○	○	○	○				59	65	69	8.16	11.5	14.1	16.3	20.0	25.8	30.6	36.5	51.6	580	3.0	—
300	○	○									○	○	○	○				60	65	69	12.2	17.3	21.2	24.5	30.0	38.7	45.8	54.8	77.5	650	3.9	—	
400	○	○									○	○	○	○				60	65	68	16.3	23.1	28.3	32.7	40.0	51.6	61.1	73.0	103	?	4.7	—	
500	○	○									○	○	○	○				61	65	67	20.4	28.9	35.4	40.8	50.0	64.6	76.4	91.3	129	?	5.3	—	
600	○	○									○	○	○	○				61	65	67	24.5	34.6	42.4	49.0	60.0	77.5	91.7	110	155	?	5.7	—	
800	○	○									○	○	○	○				62	65	67	32.7	46.2	56.5	65.3	80.0	103	122	146	206	?	6.5	—	
1000	○	○									○	○	○	○				62	65	66	40.8	57.7	70.7	81.7	100	129	153	183	258	?	7.3	—	
1500	○	○									○	○	○	○				62	65	66	61.2	86.6	106	122	150	194	229	274	387	1,000	9.0	—	
50	03											●	●	○	○				37	50	60	—	0.17	0.21	0.24	0.30	0.39	0.46	0.55	0.77	180	0.3	150
	04											●	●	○	○				37	50	60	—	0.23	0.28	0.33	0.40	0.52	0.61	0.73	1.03	?	0.4	150
	05	●	●									●	●	○	○				38	50	59	—	0.29	0.35	0.41	0.50	0.65	0.76	0.91	1.29	210	0.4	150
	07	●	●									●	●	○	○				38	50	58	—	0.40	0.49	0.57	0.70	0.90	1.07	1.28	1.81	?	0.5	100
	10	●	●									●	●	○	○				40	50	58	0.41	0.58	0.71	0.82	1.00	1.29	1.53	1.83	2.58	?	0.6	100
	15	○	○									●	●	○	○				40	50	57	0.61	0.87	1.06	1.23	1.50	1.94	2.29	2.74	3.87	?	0.8	50
	20	○	○									●	●	○	○				41	50	57	0.82	1.15	1.41	1.63	2.00	2.58	3.06	3.65	5.16	?	1.0	—
	30	○	○									○	○	○	○				42	50	56	1.23	1.73	2.12	2.45	3.00	3.88	4.58	5.48	7.75	340	1.2	—
	40	○	○									○	○	○	○				42	50	56	1.63	2.31	2.83	3.27	4.00	5.16	6.11	7.30	10.3	?	1.4	—
	50	○	○									○	○	○	○				43	50	55	2.04	2.89	3.54	4.08	5.00	6.46	7.64	9.13	12.9	?	1.6	—
	60	○	○									○	○	○	○				43	50	55	2.45	3.46	4.24	4.90	6.00	7.75	9.17	11.0	15.5	?	1.7	—
	80	○	○									○	○	○	○				43	50	55	3.27	4.62	5.66	6.53	8.00	10.3	12.2	14.6	20.6	?	2.0	—
	120	○	○									○	○	○	○				44	50	54	4.90	6.93	8.49	9.80	12.0	15.5	18.3	21.9	31.0	550	2.5	—
	200	○	○									○	○	○	○				45	50	53	8.16	11.5	14.1	16.3	20.0	25.8	30.6	36.5	51.6	640	3.3	—
	300	○	○									○	○	○	○				45	50	53	12.2	17.3	21.2	24.5	30.0	38.7	45.8	54.8	77.5	?	4.2	—
	400	○	○									○	○	○	○				46	50	52	16.3	23.1	28.3	32.7	40.0	51.6	61.1	73.0	103	?	4.9	—
	500	○	○									○	○	○	○				46	50	52	20.4	28.9	35.4	40.8	50.0	64.6	76.4	91.3	129	?	5.6	—
	600	○	○									○	○	○	○				47	50	52	24.5	34.6	42.4	49.0	60.0	77.5	91.7	110	155	750	6.1	—
800	○	○									○	○	○	○				47	50	51	32.7	46.2	56.5	65.3	80.0	103	122	146	206	?	7.1	—	
1000	○	○									○	○	○	○				47	50	51	40.8	57.7	70.7	81.7	100	129	153	183	258	1,000	7.9	—	
1500	○	○									○	○	○	○				48	50	51	61.2	86.6	106	122	150	194	229	274	387	1,100	9.7	—	
40	05	●	●																30	40	48	—	0.29	0.35	0.41	0.50	0.65	0.76	0.91	1.29	230	0.4	150
	07	●	●																30	40	48	—	0.40	0.49	0.57	0.70	0.90	1.07	1.28	1.81	?	0.5	100
	10	●	●																31	40	47	0.41	0.58	0.71	0.82	1.00	1.29	1.53	1.83	2.58	?	0.7	50
	20	○	○																32	40	46	0.82	1.15	1.41	1.63	2.00	2.58	3.06	3.65	5.16	380	1.0	—
	30	○	○																33	40	46	1.23	1.73	2.12	2.45	3.00	3.88	4.58	5.48	7.75	?	1.3	—
	40	○	○																33	40	45	1.63	2.31	2.83	3.27	4.00	5.16	6.11	7.30	10.3	?	1.5	—
	80	○	○																34	40	44	3.27	4.62	5.66	6.53	8.00	10.3	12.2	14.6	20.6	?	2.1	—
	120	○	○																35	40	44	4.90	6.93	8.49	9.80	12.0	15.5	18.3	21.9	31.0	?	2.8	—
	200	○	○																														

# One-piece Structure Standard Flat Spray Nozzles VVP/VP SERIES

Flat Spray

## VVP SERIES (S316L-IN)

Precision-manufactured stainless steel VVP nozzle with low flow rate.

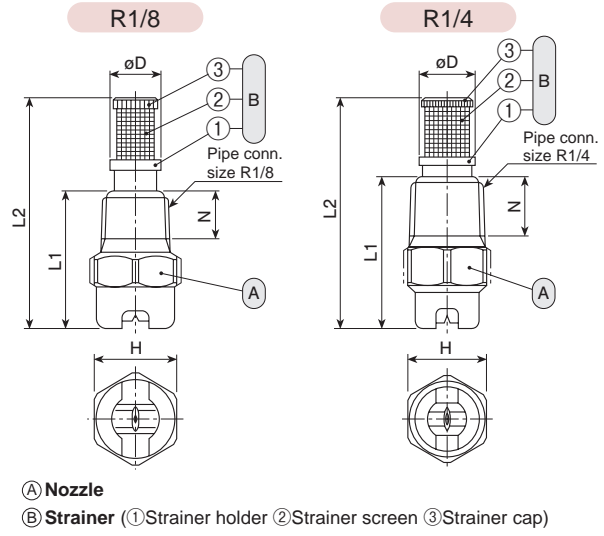
Structure	<ul style="list-style-type: none"> <li>Made of metal.</li> <li>Available with or without a strainer.</li> </ul>
Material	<ul style="list-style-type: none"> <li>S316L equivalent</li> <li>Strainer: S303 or S316</li> </ul>

Pipe conn. size	Dimensions (mm)					Weight <sup>2</sup> (g)
	L1	L2	H	øD	N	
R1/8	20	33.5	12	7.5	7	9.6
R1/4	27	41	14	10	10.5	16

\*2) With a strainer, add 2-5 g to the above weight.

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

## DRAWING



## VVP (S316L-IN) Series, precision stainless steel nozzle with low flow rate

Spray angle code	Spray capacity code	Pipe connection size		Spray angle (°)			Spray capacity (L/min)									Mean drop. dia. (µm)	Free pass. dia. (mm)	Strainer mesh size
		R1/8	R1/4	0.15 MPa	0.3 MPa	0.7 MPa	0.05 MPa	0.1 MPa	0.15 MPa	0.2 MPa	0.3 MPa	0.5 MPa	0.7 MPa	1 MPa	2 MPa			
115	03	●	●	101	115	124	-	-	0.21	0.24	0.30	0.39	0.46	0.55	0.77	140	0.2	200
	04	●	●	102	115	124	-	-	0.28	0.33	0.40	0.52	0.61	0.73	1.03	0.2	200	
	05	●	●	102	115	124	-	0.29	0.35	0.41	0.50	0.65	0.76	0.91	1.29	0.3	150	
	07	●	●	103	115	124	-	0.40	0.49	0.57	0.70	0.90	1.07	1.28	1.81	0.3	150	
	10	●	●	103	115	124	0.41	0.58	0.71	0.82	1.00	1.29	1.53	1.83	2.58	270	0.4	150
90	03	●	●	76	90	100	-	-	0.21	0.24	0.30	0.39	0.46	0.55	0.77	150	0.2	200
	04	●	●	77	90	100	-	-	0.28	0.33	0.40	0.52	0.61	0.73	1.03	0.3	150	
	05	●	●	77	90	100	-	0.29	0.35	0.41	0.50	0.65	0.76	0.91	1.29	0.3	150	
	07	●	●	78	90	100	-	0.40	0.49	0.57	0.70	0.90	1.07	1.28	1.81	0.4	150	
	10	●	●	78	90	99	0.41	0.58	0.71	0.82	1.00	1.29	1.53	1.83	2.58	280	0.5	100
80	07	●	●	68	80	89	-	0.40	0.49	0.57	0.70	0.90	1.07	1.28	1.81	180	0.4	150
	10	●	●	68	80	89	0.41	0.58	0.71	0.82	1.00	1.29	1.53	1.83	2.58	290	0.5	100
65	03	●	●	52	65	75	-	-	0.21	0.24	0.30	0.39	0.46	0.55	0.77	160	0.3	150
	04	●	●	52	65	75	-	-	0.28	0.33	0.40	0.52	0.61	0.73	1.03	0.3	150	
	05	●	●	52	65	74	-	0.29	0.35	0.41	0.50	0.65	0.76	0.91	1.29	0.4	150	
	07	●	●	53	65	74	-	0.40	0.49	0.57	0.70	0.90	1.07	1.28	1.81	0.5	100	
	10	●	●	54	65	73	0.41	0.58	0.71	0.82	1.00	1.29	1.53	1.83	2.58	310	0.6	100
50	03	●	●	37	50	63	-	-	0.21	0.24	0.30	0.39	0.46	0.55	0.77	180	0.3	150

●: Available with or without strainer

## HOW TO ORDER

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

### VVP

Example: 1/4M VVP 11515 S303W

### VP

<b>1/4M</b> Pipe conn. size <sup>3</sup> 1/8M 1/4M	<b>VVP</b> Series VVP VP	<b>115</b> Spray angle code 115 15	<b>15</b> Spray capacity code 02 1500	<b>S303</b> Material <sup>4</sup> S303 B TPVDF PVDF PP-IN	<b>W</b> Strainer W (with strainer) (Blank indicates "without strainer")
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\*3) "M" indicates male thread ("R" of the ISO standard), e.g. 1/4M = R1/4.

\*4) TPVDF and B are only for the VP series. PVDF and PP-IN are only for the VVP series.

### VVP (S316L-IN)

Example: 1/4M VVP 6507 S316L-IN + WS303

<b>1/4M</b> Pipe conn. size <sup>3</sup> 1/8M 1/4M	<b>VVP</b>	<b>65</b> Spray angle code 115 50	<b>07</b> Spray capacity code 03 04 05 07 10	<b>S316L-IN</b> Nozzle material	<b>W</b> Strainer W (with strainer) (Blank indicates "without strainer")	<b>S303</b> Strainer material S303 S316
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