

Pneumatic Atomizing Nozzle



► Features

- Wide control range of water flow rate.
- Flexible intermittent spray is available by using automatic cylinder with in nozzle.
- No special tool required to overhaul.

► Applications

- Humidification, spraying of deodorant, painting, cooling
- Washing, sterilization, spraying of chemicals, etc.

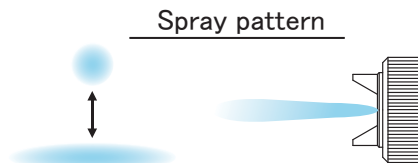
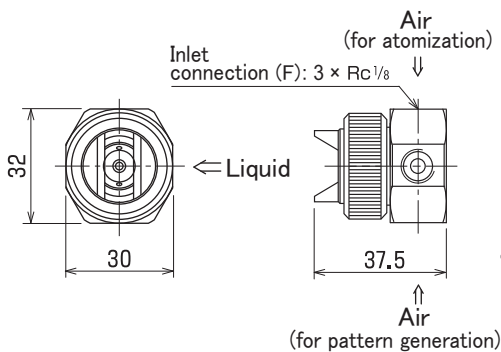
► Materials

- 303 Stainless steel
- Brass

Shapes and dimensions

● PV-D...SP type

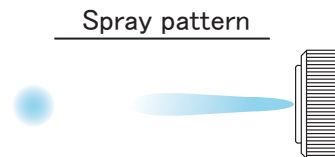
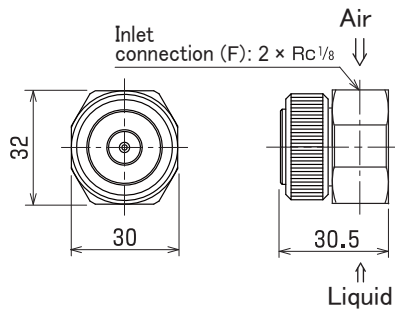
Full-cone pattern to Flat pattern, 2 air and 1 liquid sources type



- Spray pattern can be arranged from full-cone pattern (20°) to flat pattern (80°) by injection of pattern generation air.

● PNV-D...SP type

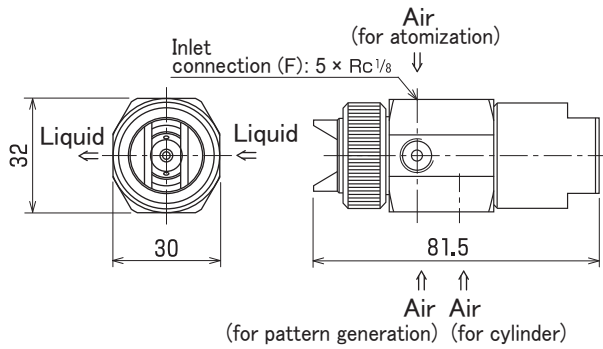
Full-cone pattern, 1 air and 1 liquid sources type



- Spray angle is full cone pattern of 20°.

● PV-D type, With automatic cylinder

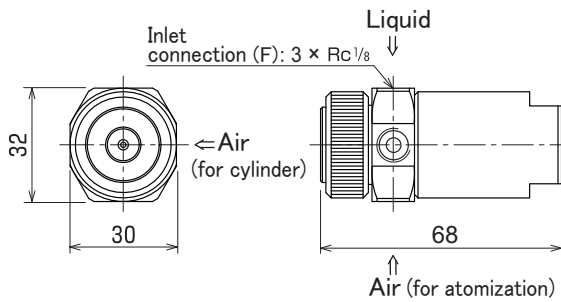
Full-cone pattern to flat pattern, 3 air and 2 liquid sources type



- Flexible intermittent spray is available by using automatic cylinder.
- Applicable for high viscosity/easily dissociative liquid.
- Spray pattern can be arranged from full-cone pattern (20°) to flat pattern (80°) by injection of pattern generation air.
- Option: Unique 'clean needle' eliminate clogging problem.

● PNV-D type, With automatic cylinder

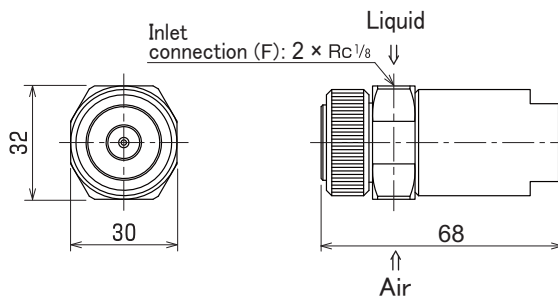
Full-cone pattern, 2 air and 1 liquid sources type



- Flexible intermittent spray is available by using automatic cylinder.
- Spray angle is full cone pattern of 20°.
- Option: Unique 'clean needle' eliminate clogging problem.

● PNV-D···A type, With automatic cylinder

Full-cone pattern, 1 air and 1 liquid sources type



- Flexible intermittent spray is available by using automatic cylinder.
- Spray angle is full cone pattern of 20°.
- Option: Unique 'clean needle' eliminate clogging problem.

* NPT thread is also available.

● Model and Model Number representing

PV - D $\frac{0.4}{\text{Model number}}$

● Standard type model number list

Model	Model number	Min. orifice diameter for liquid [mm]	Water flow rate [mL/min] at following water pressure [MPa]				Air flow rate [L/min(nor)] at following air pressure [MPa] Spray air / Pattern air			
			0.01	0.02	0.03	0.04	0.2	0.3	0.4	0.5
PV	0.4	0.4	30	42	52	61	28 / 54	38 / 72	48 / 90	57 / 108
	0.5	0.5	47	67	82	95	38 / 54	53 / 72	68 / 90	83 / 108
	1.0	1.0	190	267	327	378	43 / 54	59 / 72	75 / 90	90 / 108
	1.5	1.5	425	600	736	850	56 / 54	76 / 72	95 / 90	113 / 108
	2.0	2.0	755	1070	1310	1510	66 / 54	87 / 72	107 / 90	127 / 108

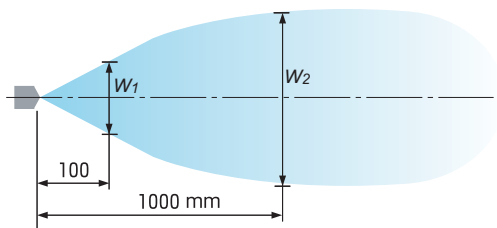
* When a wide angle flat pattern is desired, please set the pattern air pressure higher than the spray air pressure.

Model	Model number	Min. orifice diameter for liquid [mm]	Water flow rate [mL/min] at following water pressure [MPa]				Air flow rate [L/min(nor)] at following air pressure [MPa]			
			0.01	0.02	0.03	0.04	0.2	0.3	0.4	0.5
PNV	0.4	0.4	30	42	52	61	28	38	48	57
	0.5	0.5	47	67	82	95	38	53	68	83
	1.0	1.0	190	267	327	378	43	59	75	90
	1.5	1.5	425	600	736	850	56	76	95	113
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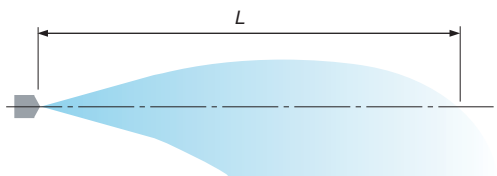
■ Performance data

Spray patterns

Nozzle model number PV - D2.0
[Widthwise, view from the top]



[Thicknesswise, view from the side]



Air pressure for spray [MPa]	Air pressure for pattern generation [MPa]	Water flow rate [mL/min]	Spray pattern value [mm]		
			W_1	W_2	L
0.2	0	40	50	300	4500
	0.2		110	500	5000
	0.5		180	550	5000
0.5	0	40	50	300	5000
	0.5		100	350	5000

Particle size characteristic

Nozzle model number PV - D2.0

