

# Quick-Detachable Standard Flat Spray Nozzles

Patented

INVV



### [Features]

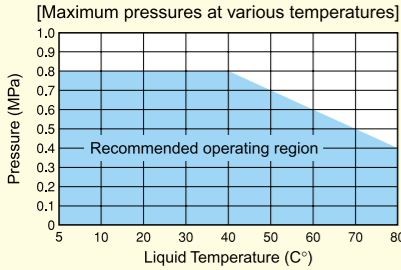
- Flat spray pattern with a mountain-shaped spray distribution having gradually tapered edges.
- Made in highly chemical and heat resistant PP (nozzle tip) and PPS (adaptor).
- Quick installation and removal by just turning the nozzle 60° by hand.
- Quick detachable nozzle requiring no tools. Nozzle tip has a tab for easy handling.
- Crack-resistant thick-walled body.
- Nozzle bodies are color-coded by spray capacity for easy identification.

### [Standard Pressure]

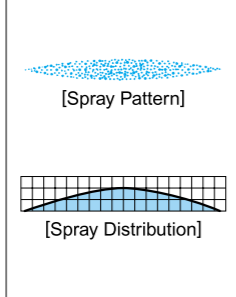
0.3MPa

### [Applications]

- Cleaning
- Etching, stripping, chemical treatment
- For periodic maintenance or for the applications where precise spray alignment is required



\* Use under the applicable pressure indicated in the above chart

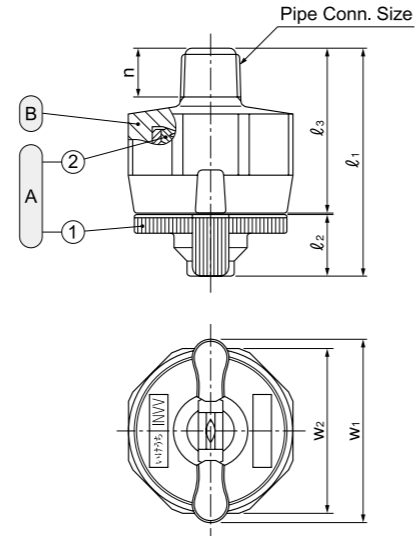


## Quick-Detachable Standard Flat Spray Nozzles INVV-series

Spray Angle Code	Spray Capacity Code	Pipe Conn. Size			Spray Angle			Spray Capacity (ℓ/min)							Mean Drop. Dia. (μm)	Free Pass. Dia. (mm)	Color of nozzle body
		1/8M	1/4M	3/8M	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			
65°	05	○	○	○	52°	65°	74°	—	0.29	0.35	0.41	0.50	0.65	0.76	190	0.4	Green
	07	○	○	○	53°	65°	74°	—	0.40	0.49	0.57	0.70	0.90	1.07			
	10	○	○	○	54°	65°	73°	0.41	0.58	0.71	0.82	1.00	1.29	1.53			
	15	○	○	○	54°	65°	73°	0.61	0.87	1.06	1.23	1.50	1.94	2.29			
	20	○	○	○	55°	65°	72°	0.82	1.15	1.41	1.63	2.00	2.58	3.06			
	30	○	○	○	56°	65°	72°	1.23	1.73	2.12	2.45	3.00	3.88	4.58			
	40	○	○	○	56°	65°	71°	1.63	2.31	2.83	3.27	4.00	5.16	6.11			
50	○	○	○	57°	65°	71°	2.04	2.89	3.54	4.08	5.00	6.46	7.64	350	1.5	Pink	
50°	05	○	○	○	38°	50°	59°	—	0.29	0.35	0.41	0.50	0.65	0.76	210	0.4	Green
	07	○	○	○	38°	50°	58°	—	0.40	0.49	0.57	0.70	0.90	1.07			
	10	○	○	○	40°	50°	58°	0.41	0.58	0.71	0.82	1.00	1.29	1.53			
	15	○	○	○	40°	50°	57°	0.61	0.87	1.06	1.23	1.50	1.94	2.29			
	20	○	○	○	41°	50°	57°	0.82	1.15	1.41	1.63	2.00	2.58	3.06			
	30	○	○	○	42°	50°	56°	1.23	1.73	2.12	2.45	3.00	3.88	4.58			
	40	○	○	○	42°	50°	56°	1.63	2.31	2.83	3.27	4.00	5.16	6.11			
50	○	○	○	43°	50°	55°	2.04	2.89	3.54	4.08	5.00	6.46	7.64	400	1.6	Pink	

### INVV-series

INVV-series	
Structure	• 2-piece structure comprised of nozzle and adaptor. • Easy installation and removal by just turning a nozzle 60°.
Material	• Nozzle : PP (polypropylene) • Adaptor : PPS (polyphenylene sulfide) • Packing : FEPM



① Nozzle (1) Body (2) Packing-FEPM  
② Adaptor

Series	Pipe Conn. Size	Dimensions(mm)						Mass (g)
		l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	n	w <sub>1</sub>	w <sub>2</sub>	
INVV	1/8M	37	10	26.5	8	30	27	12
	1/4M	40	10	29.5	11.5	30	27	12
	3/8M	40	10	29.5	12	30	27	14

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

- INVV series nozzles are not compatible with ISVV series. (The INVV series is the successor to the ISVV series.)

Spray Angle Code	Spray Capacity Code	Pipe Conn. Size			Spray Angle			Spray Capacity (ℓ/min)							Mean Drop. Dia. (μm)	Free Pass. Dia. (mm)	Color of nozzle body
		1/8M	1/4M	3/8M	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			
115°	05	○	○	○	102°	115°	124°	—	0.29	0.35	0.41	0.50	0.65	0.76	160	0.3	Green
	07	○	○	○	103°	115°	124°	—	0.40	0.49	0.57	0.70	0.90	1.07			
	10	○	○	○	103°	115°	124°	0.41	0.58	0.71	0.82	1.00	1.29	1.53			
	15	○	○	○	104°	115°	123°	0.61	0.87	1.06	1.23	1.50	1.94	2.29			
	20	○	○	○	104°	115°	123°	0.82	1.15	1.41	1.63	2.00	2.58	3.06			
	30	○	○	○	105°	115°	122°	1.23	1.73	2.12	2.45	3.00	3.88	4.58			
	40	○	○	○	106°	115°	122°	1.63	2.31	2.83	3.27	4.00	5.16	6.11			
50	○	○	○	106°	115°	122°	2.04	2.89	3.54	4.08	5.00	6.46	7.64	300	0.9	Pink	
90°	05	○	○	○	77°	90°	100°	—	0.29	0.35	0.41	0.50	0.65	0.76	170	0.3	Green
	07	○	○	○	78°	90°	100°	—	0.40	0.49	0.57	0.70	0.90	1.07			
	10	○	○	○	78°	90°	99°	0.41	0.58	0.71	0.82	1.00	1.29	1.53			
	15	○	○	○	79°	90°	99°	0.61	0.87	1.06	1.23	1.50	1.94	2.29			
	20	○	○	○	79°	90°	98°	0.82	1.15	1.41	1.63	2.00	2.58	3.06			
	30	○	○	○	80°	90°	97°	1.23	1.73	2.12	2.45	3.00	3.88	4.58			
	40	○	○	○	81°	90°	97°	1.63	2.31	2.83	3.27	4.00	5.16	6.11			
50	○	○	○	81°	90°	97°	2.04	2.89	3.54	4.08	5.00	6.46	7.64	300	1.2	Pink	

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

#### ① Complete unit

〈Example〉 ...1/8M(PT)INVV9030PP(FEPM)+PPS

1/8M (PT) INVV	90	30	PP (FEPM) + PPS
Pipe Conn. Size	Thread type	Spray Angle Code	Spray Capacity Code
1/8M	(PT)	115°	05
1/4M	(NPT)	50°	50
3/8M			

#### ② Nozzle only

〈Example〉 ... INVV9030PP(FEPM)

INVV	90	30	PP (FEPM)
Spray Angle Code	Spray Capacity Code	Nozzle Material	Packing Material
115°	05		
50°	50		

ALSO AVAILABLE!

Quick-Detachable Full Cone Spray Nozzles **INJX series**

See p.63 of this catalog.