

# SPN

## High Impact/Narrow Fan Spray

### DESIGN FEATURES

- One-piece/heavy construction
- Straight-through orifice minimizes clogging
- Machined from bar stock to exacting standards
- Male connection

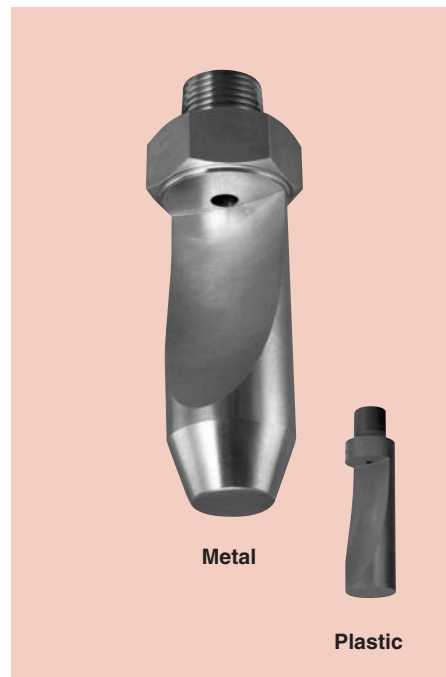
### SPRAY CHARACTERISTICS

- Yields highest impact, narrow, flat spray with least atomization
- Spoon-shaped deflector surface efficiently forms a hard driving spray

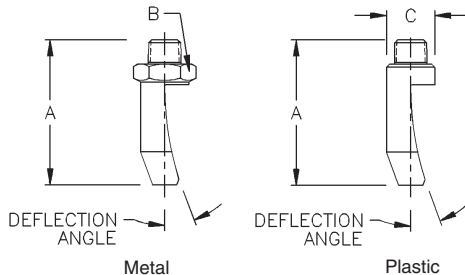
**Spray pattern:** Fan

**Spray angles:** 15°, 25°, 35°, 40°, 50°

**Flow rates:** 0.76 to 177 L/min



Fan 50°



Dimensions are approximate. Check with BETE for critical dimension applications.

### SPN Flow Rates and Dimensions

Fan, 15°, 25°, 35°, 40° and 50° Spray Angles, 1/4" to 3/4" Pipe Sizes, BSP or NPT

Male Pipe Size	Nozzle Number	Available Spray Angles	K Factor	LITERS PER MINUTE @ BAR								Approx. Orifice Dia. (mm)	Deflection Angle @ Spray Angle	Dimensions (mm) Metals Only		
				0.7 bar	1 bar	2 bar	3 bar	4 bar	5 bar	10 bar	15 bar			15°	25°	35°
1/8	SPN 04	35°	0.91	0.76	0.91	1.29	1.58	1.82	2.04	2.88	3.53	1.24	15°	17.8	12.7	14.2
1/4	SPN 10	15° 35° 50°	2.28	1.91	2.28	3.22	3.95	4.56	5.10	7.21	8.83	1.98	5° 35° 55°	50.8	22.4	19.1
	SPN 20	15° 35° 50°	4.56	3.81	4.56	6.45	7.89	9.12	10.2	14.4	17.7	2.77	5° 35° 45°			
	SPN 25	50°	5.70	4.77	5.70	8.06	9.87	11.4	12.7	18.0	22.1	3.05	50°			
	SPN 40	25° 50°	9.12	7.63	9.12	12.9	15.8	18.2	20.4	28.8	35.3	3.96	20° 45°			
3/8	SPN 20	35°	4.56	3.81	4.56	6.45	7.89	9.12	10.2	14.4	17.7	2.77	30°	76.2	28.7	25.4
	SPN 25	35°	5.70	4.77	5.70	8.06	9.87	11.4	12.7	18.0	22.1	3.05	28° 45°			
	SPN 30	15° 35°	6.84	5.72	6.84	9.67	11.8	13.7	15.3	21.6	26.5	3.18	5° 28°			
	SPN 40	15° 35° 40° 50°	9.12	7.63	9.12	12.9	15.8	18.2	20.4	28.8	35.3	3.96	5° 35° 35° 50°			
	SPN 50	35° 40°	11.4	9.53	11.4	16.1	19.7	22.8	25.5	36.0	44.1	4.34	23° 33°			
	SPN 60	15° 35° 40° 50°	13.7	11.4	13.7	19.3	23.7	27.3	30.6	43.2	53.0	4.75	5° 20° 33° 35°			
	SPN 70	40°	16.0	13.3	16.0	22.6	27.6	31.9	35.7	50.4	61.8	5.16	29°			
	SPN 80	15° 35° 40° 50°	18.2	15.3	18.2	25.8	31.6	36.5	40.8	57.7	70.6	5.31	5° 25° 26° 35°			
	SPN 90	40°	20.5	17.2	20.5	29.0	35.5	41.0	45.9	64.9	79.4	5.54	28°			
	SPN 100	15° 35° 40° 50°	22.8	19.1	22.8	32.2	39.5	45.6	51.0	72.1	88.3	5.94	5° 25° 28° 40°			
	SPN 120	15° 35° 50°	27.3	22.9	27.3	38.7	47.4	54.7	61.1	86.5	106	7.14	5° 25° 40°			
	SPN 125	40°	28.5	23.8	28.5	40.3	49.3	57.0	63.7	90.1	110	6.76	38°			
	SPN 160	50°	36.5	30.5	36.5	51.6	63.2	72.9	81.5	115	141	7.54	25° 37°			
	SPN 200	50°	45.6	38.1	45.6	64.5	78.9	91.2	102	144	177	8.33	32°			
1/2	SPN 60	15° 35°	13.7	11.4	13.7	19.3	23.7	27.3	30.6	43.2	53.0	4.75	5° 27°	114	35.1	31.8
	SPN 80	15° 35° 50°	18.2	15.3	18.2	25.8	31.6	36.5	40.8	57.7	70.6	5.31	5° 25°			
	SPN 100	15° 35°	22.8	19.1	22.8	32.2	39.5	45.6	51.0	72.1	88.3	5.94	5° 19°			
	SPN 140	15° 35° 50°	31.9	26.7	31.9	45.1	55.3	63.8	71.3	101	124	7.52	5° 25° 40°			
	SPN 160	15° 35° 50°	36.5	30.5	36.5	51.6	63.2	72.9	81.5	115	141	7.92	5° 25° 40°			
3/4	SPN 160	35°	36.5	30.5	36.5	51.6	63.2	72.9	81.5	115	141	7.92	23°	124	44.5	42.9
	SPN 200	15° 35°	45.6	38.1	45.6	64.5	78.9	91.2	102	144	177	8.33	5° 22°			

$$\text{Flow Rate (L/min)} = K \sqrt{\text{bar}}$$

Standard Materials: Brass, 303 Stainless Steel, 316 Stainless Steel, PVC and PTFE.

Spray angle performance varies with pressure. Contact BETE for specific data on critical applications.

FAN

TO ORDER: specify pipe size, connection type, nozzle number, spray angle, and material.