

SPN

High Impact/Narrow Fan Spray

DESIGN FEATURES

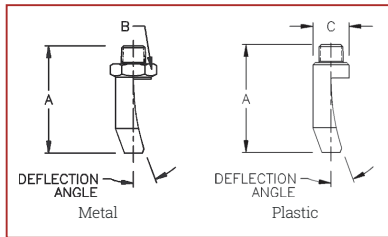
- One-piece, durable construction
- Straight-through orifice minimizes clogging
- Machined from bar stock to exacting standards
- Male connection

SPRAY CHARACTERISTICS

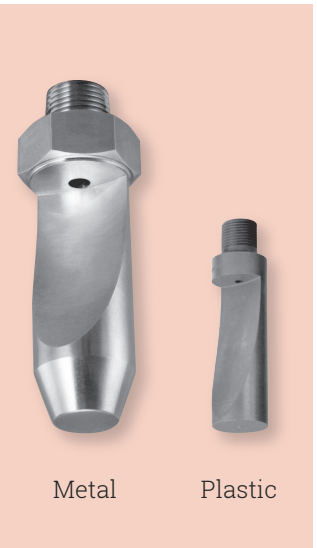
- Yields highest impact, narrow flat spray with least atomization
- Spoon-shaped deflector surface efficiently forms a hard-driving spray

Spray angles: 15°, 25°, 35°, 40°, 50°

Flow rates: 0.76 to 177 l/min



Pipe Size	Metal Dimensions (mm)			Wt (g)
	A	B	C	
1/8"	21.8	12.7	14.2	14.1
1/4"	50.8	22.4	19.1	70.9
3/8"	76.2	28.4	25.4	227
1/2"	114	35.1	31.8	539
3/4"	124	44.5	42.9	850



FAN

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

SPN Flow Rates & Spray Angles

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

Connections: Male NPT or BSP

Pipe Size	Nozzle Number	K Factor	Spray Angles				Flow Rate (l/min) @ Differential Pressure (bar)								Approx Orifice Dia (mm)	Deflection Angle @				
							0.7	1	2	3	4	5	10	15		15°	25°	35°	40°	50°
							bar	bar	bar	bar	bar	bar	bar	bar						
1/8"	SPN 04	0.91		35°			0.76	0.91	1.29	1.58	1.82	2.04	2.88	3.53	1.24			15°		
1/4"	SPN 10	2.28	15°	35°		50°	1.91	2.28	3.22	3.95	4.56	5.10	7.21	8.83	1.98	5°		35°		55°
	SPN 20	4.56	15°	35°		50°	3.81	4.56	6.45	7.89	9.12	10.2	14.4	17.7	2.77	5°		35°		45°
	SPN 25	5.70				50°	4.77	5.70	8.06	9.87	11.4	12.7	18.0	22.1	3.05					50°
	SPN 40	9.12	25°			50°	7.63	9.12	12.9	15.8	18.2	20.4	28.8	35.3	3.86		20°			45°
3/8"	SPN 20	4.56		35°			3.81	4.56	6.45	7.89	9.12	10.2	14.4	17.7	2.77			30°		
	SPN 25	5.70		35°			4.77	5.70	8.06	9.87	11.4	12.7	18.0	22.1	3.05			28°		45°
	SPN 30	6.84	15°	35°			5.72	6.84	9.67	11.8	13.7	15.3	21.6	26.5	3.18	5°		28°		
	SPN 40	9.12	15°	35°	40°	50°	7.63	9.12	12.9	15.8	18.2	20.4	28.8	35.3	3.86	5°		35°	35°	50°
	SPN 50	11.4		35°	40°		9.53	11.4	16.1	19.7	22.8	25.5	36.0	44.1	4.34			23°	33°	
	SPN 60	13.7	15°	35°	40°	50°	11.4	13.7	19.3	23.7	27.3	30.6	43.2	53.0	4.75	5°		20°	33°	35°
	SPN 70	16.0			40°		13.3	16.0	22.6	27.6	31.9	35.7	50.4	61.8	5.05				29°	
	SPN 80	18.2	15°	35°	40°	50°	15.3	18.2	25.8	31.6	36.5	40.8	57.7	70.6	5.31	5°		25°	26°	35°
	SPN 90	20.5			40°		17.2	20.5	29.0	35.5	41.0	45.9	64.9	79.4	5.54				28°	
	SPN 100	22.8	15°	35°	40°	50°	19.1	22.8	32.2	39.5	45.6	51.0	72.1	88.3	5.94	5°		25°	28°	40°
	SPN 120	27.3	15°	35°		50°	22.9	27.3	38.7	47.4	54.7	61.1	86.5	106	6.73	5°		25°		40°
1/2"	SPN 125	28.5				50°	23.8	28.5	40.3	49.3	57.0	63.7	90.1	110	6.91					38°
	SPN 160	36.5				50°	30.5	36.5	51.6	63.2	72.9	81.5	115	141	7.92			25°		37°
	SPN 200	45.6				50°	38.1	45.6	64.5	78.9	91.2	102	144	177	8.33					32°
	SPN 60	13.7	15°	35°			11.4	13.7	19.3	23.7	27.3	30.6	43.2	53.0	4.75	5°		27°		
	SPN 80	18.2	15°	35°		50°	15.3	18.2	25.8	31.6	36.5	40.8	57.7	70.6	5.31	5°		25°		
	SPN 100	22.8	15°	35°			19.1	22.8	32.2	39.5	45.6	51.0	72.1	88.3	5.94	5°		19°		
3/4"	SPN 140	31.9	15°	35°		50°	26.7	31.9	45.1	55.3	63.8	71.3	101	124	7.52	25°		25°		40°
	SPN 160	36.5	15°	35°		50°	30.5	36.5	51.6	63.2	72.9	81.5	115	141	7.92	5°		25°		40°
	SPN 200	45.6		35°			38.1	45.6	64.5	78.9	91.2	102	144	177	8.33	5°		23°		

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

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

www.BETE.com

CALL 413-772-0846
Call for the name of your nearest BETE representative.