SNP

THE SPRAY NOZZLE PEOPLE

SC

Metal Alloy Line

BETE® PERFORMANCE SPRAY ENGINEERING

FULL CONE

DESIGN FEATURES

- Complete line of full cone nozzles made in cast metal alloys
- Internal removable vane available
- Male and Female connections
- Flanged connections available
- For plastic nozzles, see NC or MaxiPass

SPRAY CHARACTERISTICS

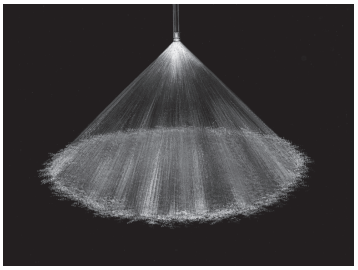
- Spray pattern: Full Cone with uniform distribution. For square spray patterns, please contact SNP
- Spray angles: 60°, 90°, and 120°
- Flow rates: 6.25 to 8180 L/min



The SC nozzle is a uniform distribution full cone nozzle. It produces a relatively coarse droplet size and has a very wide range of available flow rates. SC nozzles are used in several applications including:

Absorber sprays
Pack media fluid distribution
Parts cooling
Foam control
Intermitent washing
Gas scrubbing
And more.

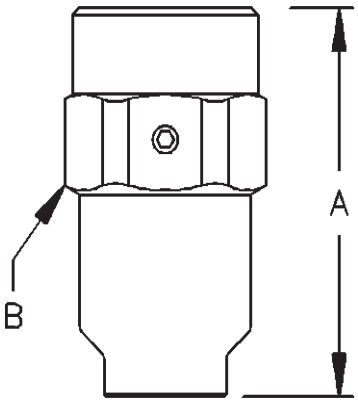
SC



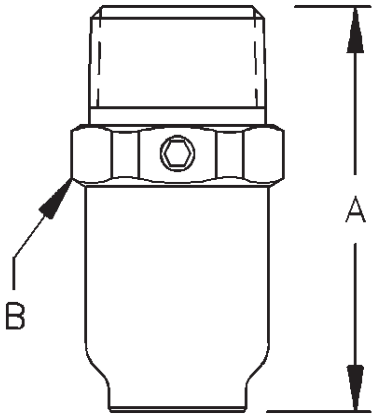
90° Medium Angle



120° Medium angle



60°, 90°,120° Female



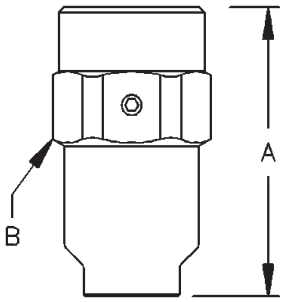
60°, 90°,120° Male

SC Flow Rates & Dimensions

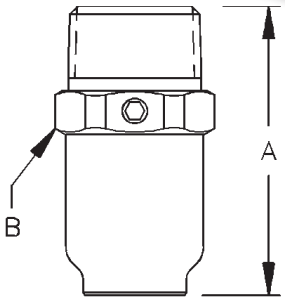
Full Cone, Narrow 60° (N), Medium 90° (M) and Wide 120° (W) Spray Angles, 3/4" to 6" Pipe Sizes BSP or NPT
Standard Materials: Brass, Carbon Steel and 316 Stainless Steel.

Male or Female Pipe Size	Nozzle No.	Available Spray Angles			K	Flow rate l/min @ Bar								Approx Orfice	Free Pass	Dims (mm)		Wt (g) Métal
		60°	90°	120°		0.2 bar	0.3 bar	0.7 bar	1 bar	2 bar	3 bar	5 bar	7 bar	Dia (mm)	Dia (mm)	A	B	
3/4"	SC 2.5	60°	90°		13.3	6.25	7.57	11.3	13.3	18.5	22.3	28.4	33.3	4.76				
	SC 3	60°	90°		16	7.5	9.08	13.5	16	22.1	26.8	34.1	39.9	5.16				
	SC 4	60°	90°	120°	21.3	10	12.1	18	21.3	29.5	35.7	45.4	53.2	7.14	4.83	50.8	31	0.23
	SC 6	60°	90°	120°	32	15	18.2	27	32	44.3	53.6	68.1	79.8	7.54				
	SC 7		90°	120°	37.3	17.5	21.2	31.6	37.3	51.7	62.5	79.5	93.1	8.89				
1"	SC 4.2	60°	90°		22.4	10.5	12.7	18.9	22.4	31	37.5	47.7	55.9	6.35	6.35			
	SC 7	60°	90°	120°	37.3	17.5	21.2	31.6	37.3	51.7	62.5	79.5	93.1	8.33	7.87			
	SC 8	60°	90°	120°	42.6	20	24.2	36.1	42.6	59.1	71.5	90.9	106	8.89	7.87			
	SC 9		90°	120°	48	22.5	27.2	40.6	48	66.4	80.4	102	120	10.2	7.87	73.2	38.1	0.36
	SC 10		90°	120°	53.3	25	30.3	45.1	53.3	73.8	89.3	114	133	10.7	7.87			
	SC 11		90°	120°	58.6	27.5	33.3	49.6	58.6	81.2	98.3	125	146	11.2	7.87			
	SC 12		90°	120°	64	30	36.3	54.1	64	88.6	107	136	160	11.7	7.87			
1 1/4"	SC 6	60°	90°		32	15	18.2	27	32	44.3	53.6	68.1	79.8	7.62	7.62			
	SC 10	60°	90°		53.3	25	30.3	45.1	53.3	73.8	89.3	114	133	9.92	9.65			
	SC 12	60°	90°	120°	64	30	36.3	54.1	64	88.6	107	136	160	10.7	9.65			
	SC 14	60°	90°	120°	74.6	35	42.4	63.1	74.6	103	125	159	186	11.7	9.65	88.9	47.6	0.59
	SC 16	60°	90°	120°	85.3	40	48.4	72.1	85.3	118	143	182	213	12.3	9.65			
	SC 17	60°	90°	120°	90.6	42.5	51.5	76.6	90.6	126	152	193	226	13.5	9.65			
	SC 20		90°	120°	107	50	60.5	90.1	107	148	179	227	266	15.9	9.65			

Flow Rate (l/min) = K (bar)$^{0.47}$



60°, 90°,120° Female



60°, 90°,120° Male

SC Flow Rates & Dimensions

Full Cone, Narrow 60° (N), Medium 90° (M) and Wide 120° (W) Spray Angles, 3/4" at 6" Pipe Sizes BSP or NPT
Standard Materials: Brass, Carbon Steel and 316 Stainless Steel.

Male or Female Pipe Size	Nozzle No.	Available Spray Angles			K	Flow rate l/min @ Bar								Approx Orfice	Free Pass	Dims (mm)		Wt (g) Metal
		60°	90°	120°		0.2 bar	0.3 bar	0.7 bar	1 bar	2 bar	3 bar	5 bar	7 bar	Dia (mm)	Dia (mm)	A	B	
1 1/2"	**SC 10**	60°	90°		53.3	25	30.3	45.1	53.3	73.8	89.3	114	133	9.92	9.65	98.6	55.6	0.82
	SC 16	60°	90°	120°	85.3	40	48.4	72.1	85.3	118	143	182	213	13.5	9.65			
	SC 20	60°	90°	120°	107	50	60.5	90.1	107	148	179	227	266	14.3	10.4			
	SC 24	60°	90°	120°	128	60	72.6	108	128	177	214	273	319	15.9	10.4			
	SC 29		90°	120°	155	72.5	87.8	131	155	214	259	329	386	17.5	10.4			
	SC 30		90°	120°	160	75	90.8	135	160	221	268	341	399	19.1	10.4			
2"	**SC 17**	60°	90°		90.6	42.5	51.5	76.6	90.6	126	152	193	226	12.3	12.2	130	69.9	1.5
	SC 30	60°	90°	120°	160	75	90.8	135	160	221	268	341	399	16.3	14.2			
	SC 35	60°	90°	120°	187	87.6	106	158	187	258	313	397	466	18.3	14.2			
	SC 40	60°	90°	120°	213	100	121	180	213	295	357	454	532	19.8	14.2			
	SC 47	60°	90°	120°	251	118	142	212	251	347	420	534	625	24.6	14.2			
	SC 50	60°	90°	120°	266	125	151	225	266	369	447	568	665	27.9	14.2			
	SC 60		90°	120°	320	150	182	270	320	443	536	681	798	29	19.1			
2 1/2"	**SC 25**	60°	90°		133	62.5	75.7	113	133	185	223	284	333	15.5	15.5	160	82.6	2.95
	SC 50	60°	90°		266	125	151	225	266	369	447	568	665	22.1	19.1			
	SC 60	60°	90°	120°	320	150	182	270	320	443	536	681	798	24.4	19.1			
	SC 70	60°	90°	120°	373	175	212	316	373	517	625	795	931	27.2	19.1			
	SC 80	60°	90°	120°	426	200	242	361	426	591	715	909	1060	29.2	19.1			
	SC 90		90°	120°	480	225	272	406	480	664	804	1020	1200	32.3	19.1			
3"	**SC 42**	60°	90°		224	105	127	189	224	310	375	477	559	19.1	19.1	182	95.3	4.26
	SC 58	60°	90°		309	145	176	261	309	428	518	659	772	22.9	22.9			
	SC 80	60°	90°	120°	426	200	242	361	426	591	715	909	1060	27.9	25.4			
	SC 90	60°	90°	120°	480	225	272	406	480	664	804	1020	1200	30.6	25.4			
	SC 95	60°	90°	120°	506	238	288	428	506	701	849	1080	1260	28.6	25.4			
	SC 100	60°	90°	120°	533	250	303	451	533	738	893	1140	1330	34.1	25.4			
	SC 117	60°	90°	120°	624	293	354	527	624	864	1050	1330	1560	36.1	25.4			
	SC 120	60°	90°	120°	640	300	363	541	640	886	1070	1360	1600	38.1	25.4			
	SC 135		90°	120°	720	338	409	608	720	997	1210	1530	1800	41.7	25.4			
4"	**SC 125**	60°	90°		666	313	378	563	666	923	1120	1420	1660	34.3	33.8	219	121	7.17
	SC 130	60°	90°		693	325	393	586	693	960	1160	1480	1730	35.1				
	SC 160	60°	90°		853	400	484	721	853	1180	1430	1820	2130	40.6				
	SC 180	60°	90°	120°	959	450	545	811	959	1330	1610	2040	2390	43.7				
	SC 188	60°	90°	120°	1000	470	569	847	1000	1390	1680	2140	2500	42.9				
	SC 200	60°	90°	120°	1070	500	605	901	1070	1480	1790	2270	2660	47.6				
	SC 210	60°	90°	120°	1120	525	636	947	1120	1550	1880	2390	2790	51.6				
	SC 250		90°	120°	1330	625	757	1130	1330	1850	2230	2840	3330	57				
6"	**SC 350**	60°	90°	120°	1860	876	1060	1580	1860	2580	3130	3980	4660	66	35.1	*	*	*
	SC 480		90°	120°	2560	1200	1450	2160	2560	3540	4290	5450	6390	71.1	42.9	*	*	*
	SC 615		90°	120°	3280	1540	1860	2770	3280	4540	5490	6980	8180	76.2	42.9	*	*	*

Ask our technical sales engineers about additional products and services to optimise your spraying process.

Spray Calibration Solutions

Easy-to-use, fast measurement solutions to ensure accurate nozzle installation and maintenance, reduce water wastage and identify nozzle wear.



Spray Pattern & Droplet Distribution



Nozzle Flow Calibrators



Nozzle Cleaning Kit

Complete Spray Bars

Tailored nozzle selections and spray bar designs that integrate seamlessly with your new or existing setup.

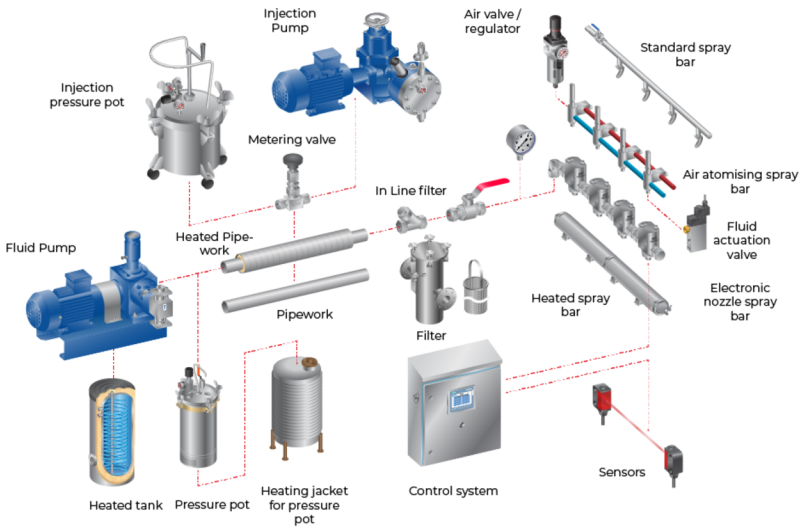
- **Expert nozzle selection and placement**
- **Efficient spray coverage**
- **Fast turnaround time**
- **Reduced design burden**
- **High-quality spray bars**



Complete Custom Spraying Systems

Complete spraying systems built around your goals and application.

- **Tailored upstream components supplied individually or as part of complete system**
- **Custom pipework, pumps, tanks, sensors, valves, heating, control panels and more**
- **Seamless integration with existing processes**
- **Built to budget and ROI targets**
- **End-to-end support: design, install, maintain**



THE GO-TO PEOPLE FOR SUCCESSFUL SPRAY ENGINEERING