



SC

Metal Alloy Line

DESIGN FEATURES

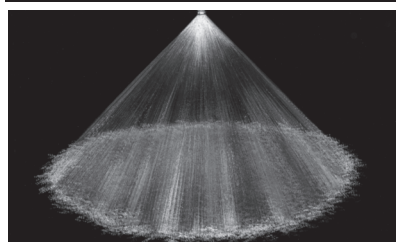
- Complete line of full cone nozzles made in cast metal alloys
- Internal removable vane available
- Male and female connections
- Flanged connections available
- For plastic nozzles, see NC (pp. 40, 41), or MaxiPass (pp.32, 33)

SPRAY CHARACTERISTICS

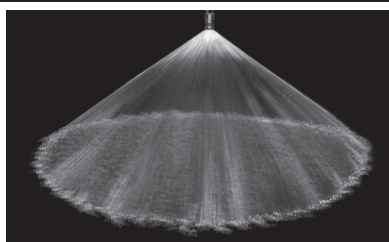
- **Spray pattern:** Full Cone with uniform distribution. For square spray patterns, please contact BETE.
- **Spray angles:** 60°, 90°, and 120°
- **Flow rates:** 6.25 to 8180 l/min



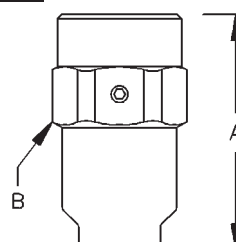
Male



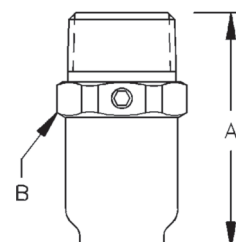
Full Cone 90° (M)



Full Cone 120° (W)



60° / 90° / 120° Female



60° / 90° / 120° Male

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

SC Flow Rates & Dimensions

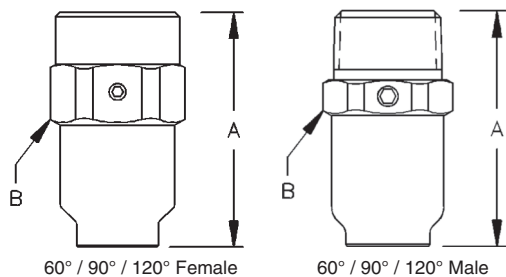
Full Cone, Narrow 60° (N), Medium 90° (M) and Wide 120° (W) Spray Angles, 3/4" to 6" Pipe Sizes, BSP or NPT

Male or Female Pipe Size	Nozzle Number	Available Spray Angles		K Factor	LITERS PER MINUTE @ BAR							Approx.		Dim. (mm) A B	Wt. (kg) Metal	
		60°	90° 120°		0.2 bar	0.3 bar	0.7 bar	1 bar	2 bar	3 bar	5 bar	7 bar	Approx. Orifice Dia. (mm)			Free Pass. Dia. (mm)
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		50.8 31.0	0.23
	SC 3	60°	90° 120°	16.0	7.50	9.08	13.5	16.0	22.1	26.8	34.1	39.9	5.16			
	SC 4	60°	90° 120°	21.3	10.0	12.1	18.0	21.3	29.5	35.7	45.4	53.2	7.14	4.83		
	SC 6		90° 120°	32.0	15.0	18.2	27.0	32.0	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	31.0	37.5	47.7	55.9	6.35	6.35	73.2 38.1	0.36
	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	20.0	24.2	36.1	42.6	59.1	71.5	90.9	106	8.89	7.87		
	SC 9	60°	90° 120°	48.0	22.5	27.2	40.6	48.0	66.4	80.4	102	120	10.2	7.87		
	SC 10	60°	90° 120°	53.3	25.0	30.3	45.1	53.3	73.8	89.3	114	133	10.7	7.87		
	SC 11	60°	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°	64.0	30.0	36.3	54.1	64.0	88.6	107	136	160	11.7	7.87		
1 1/4	SC 6	60°	90°	32.0	15.0	18.2	27.0	32.0	44.3	53.6	68.1	79.8	7.62	7.62	88.9 47.6	0.59
	SC 10	60°	90°	53.3	25.0	30.3	45.1	53.3	73.8	89.3	114	133	9.92	9.65		
	SC 12	60°	90° 120°	64.0	30.0	36.3	54.1	64.0	88.6	107	136	160	10.7	9.65		
	SC 14	60°	90° 120°	74.6	35.0	42.4	63.1	74.6	103	125	159	186	11.7	9.65		
	SC 16	60°	90° 120°	85.3	40.0	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	50.0	60.5	90.1	107	148	179	227	266	15.9	9.65		

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

Standard Materials: Brass, Carbon Steel, and 316 Stainless Steel

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



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

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

Male or Female Pipe Size	Nozzle Number	Available Spray Angles 60° 90° 120°	K Factor	LITERS PER MINUTE @ BAR								Approx. Orifice Dia. (mm)	Approx. Free Pass. Dia. (mm)	Dim. (mm)		Wt. (kg) Metal
				0.2 bar	0.3 bar	0.7 bar	1 bar	2 bar	3 bar	5 bar	7 bar			A	B	
1 1/2	SC 10	60° 90°	53.3	25.0	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	40.0	48.4	72.1	85.3	118	143	182	213	13.5	9.65			
	SC 20	60° 90° 120°	107	50.0	60.5	90.1	107	148	179	227	266	14.3	10.4			
	SC 24	60° 90° 120°	128	60.0	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	75.0	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	1.50
	SC 30	60° 90° 120°	160	75.0	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	29.0	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		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	33.8			
	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	57.0				
6	SC 350	60° 90° 120°	1860	876	1060	1580	1860	2580	3130	3980	4660	66.0	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	*	*	*

Flow Rate (l/min) = $K (bar)^{0.47}$ * Dimensions vary with spray angle ordered, please call for dimensions and weights

Standard Materials: Brass, Carbon Steel, and 316 Stainless Steel

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