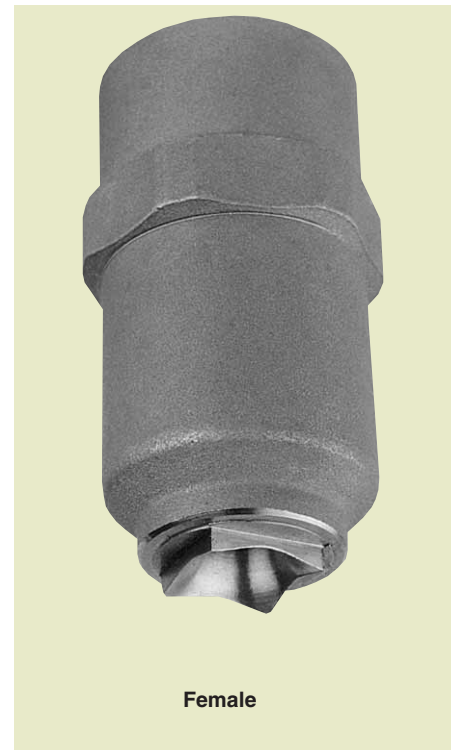


SCSQ

Metal Alloy Line/Square Pattern



Female

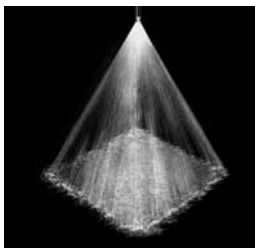
WHIRL

DESIGN FEATURES

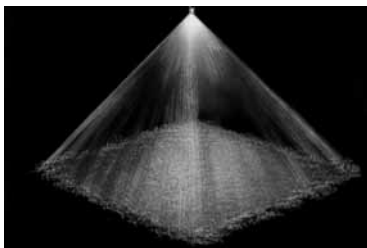
- Complete line of squared full cone nozzles made in cast metal alloys
- Internal removable vane
- Male and female connections
- Flanged connections available
- For plastic and bar stock metal alloy nozzles see NCSQ Series (pp. 36, 37)

SPRAY CHARACTERISTICS

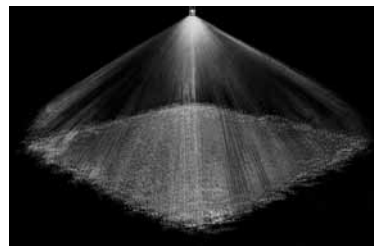
- Spray pattern:** Square Full Cone with uniform distribution
- Spray angles:** 60°, 90°, and 120° across the corners
- Flow rates:** 6.25 to 8180 l/min



Full Cone 60° (N)



Full Cone 90° (M)



Full Cone 120° (W)

SCSQ Flow Rates & Dimensions

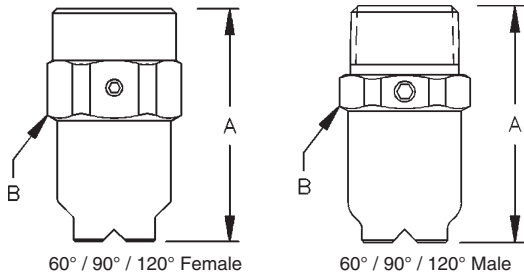
Squared Full Cone, Narrow 60° (N), Medium 90° (M) and Wide 120° (W) Spray Angles 3/4" to 6" Pipe Sizes, BSP or NPT

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	
3/4	SCSQ 2.5	60° 90°	13.3	6.25	7.57	11.3	13.3	18.5	22.3	28.4	33.3	4.76				
	SCSQ 3	60° 90° 120°	16.0	7.50	9.08	13.5	16.0	22.1	26.8	34.1	39.9	5.16				
	SCSQ 4	60° 90° 120°	21.3	10.0	12.1	18.0	21.3	29.5	35.7	45.4	53.2	7.14	4.76	50.8	31.0	0.23
	SCSQ 6	90° 120°	32.0	15.0	18.2	27.0	32.0	44.3	53.6	68.1	79.8	7.54				
	SCSQ 7	90° 120°	37.3	17.5	21.2	31.6	37.3	51.7	62.5	79.5	93.1	8.89				
1	SCSQ 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			
	SCSQ 7	60° 90° 120°	37.3	17.5	21.2	31.6	37.3	51.7	62.5	79.5	93.1	8.33	7.94			
	SCSQ 8	60° 90° 120°	42.6	20.0	24.2	36.1	42.6	59.1	71.5	90.9	106	8.89	7.94			
	SCSQ 9	60° 90° 120°	48.0	22.5	27.2	40.6	48.0	66.4	80.4	102	120	10.2	7.94	73.2	38.1	0.36
	SCSQ 10	60° 90° 120°	53.3	25.0	30.3	45.1	53.3	73.8	89.3	114	133	10.7	7.94			
	SCSQ 11	60° 90° 120°	58.6	27.5	33.3	49.6	58.6	81.2	98.3	125	146	11.2	7.94			
1 1/4	SCSQ 12	90° 120°	64.0	30.0	36.3	54.1	64.0	88.6	107	136	160	11.7	7.94			
	SCSQ 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			
	SCSQ 10	60° 90° 120°	53.3	25.0	30.3	45.1	53.3	73.8	89.3	114	133	9.92	9.53			
	SCSQ 12	60° 90° 120°	64.0	30.0	36.3	54.1	64.0	88.6	107	136	160	10.7	9.53			
	SCSQ 14	60° 90° 120°	74.6	35.0	42.4	63.1	74.6	103	125	159	186	11.7	9.53	88.9	47.6	0.59
	SCSQ 16	60° 90° 120°	85.3	40.0	48.4	72.1	85.3	118	143	182	213	12.3	9.53			
1 1/4	SCSQ 17	60° 90° 120°	90.6	42.5	51.5	76.6	90.6	126	152	193	226	13.5	9.53			
	SCSQ 20	90° 120°	107	50.0	60.5	90.1	107	148	179	227	266	15.9	9.53			

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

Standard Materials: Brass, Cast Iron, Carbon Steel and 316 Stainless Steel. See chart on page 21 for complete list.

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



For more information on the orientation of the “square” pattern please see the NCSQ on page 33.

SCSQ Flow Rates & Dimensions

Squared 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. Free Pass.		Dim. (mm)		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)	A		B
1 1/2	SCSQ 10	60°	90°		53.3	25.0	30.3	45.1	53.3	73.8	89.3	114	133	9.92	9.53	98.6	55.6	0.82
	SCSQ 16	60°	90°	120°	85.3	40.0	48.4	72.1	85.3	118	143	182	213	13.5	9.53			
	SCSQ 20	60°	90°	120°	107	50.0	60.5	90.1	107	148	179	227	266	14.3	10.3			
	SCSQ 24	60°	90°	120°	128	60.0	72.6	108	128	177	214	273	319	15.9	10.3			
	SCSQ 29	60°	90°	120°	155	72.5	87.8	131	155	214	259	329	386	17.5	10.3			
	SCSQ 30		90°	120°	160	75.0	90.8	135	160	221	268	341	399	19.1	10.3			
2	SCSQ 17	60°	90°		90.6	42.5	51.5	76.6	90.6	126	152	193	226	12.3	12.3	130	69.9	1.50
	SCSQ 30	60°	90°	120°	160	75.0	90.8	135	160	221	268	341	399	16.3	14.3			
	SCSQ 35	60°	90°	120°	187	87.6	106	158	187	258	313	397	466	18.3	14.3			
	SCSQ 40	60°	90°	120°	213	100	121	180	213	295	357	454	532	19.8	14.3			
	SCSQ 47	60°	90°	120°	251	118	142	212	251	347	420	534	625	24.6	14.3			
	SCSQ 50	60°	90°	120°	266	125	151	225	266	369	447	568	665	27.9	14.3			
	SCSQ 60		90°	120°	320	150	182	270	320	443	536	681	798	29.0	19.1			
2 1/2	SCSQ 25	60°	90°		133	62.5	75.7	113	133	185	223	284	333	15.5	15.5	160	82.6	2.95
	SCSQ 50	60°	90°		266	125	151	225	266	369	447	568	665	22.1	19.1			
	SCSQ 60	60°	90°	120°	320	150	182	270	320	443	536	681	798	24.4	19.1			
	SCSQ 70	60°	90°	120°	373	175	212	316	373	517	625	795	931	27.2	19.1			
	SCSQ 80	60°	90°	120°	426	200	242	361	426	591	715	909	1060	29.2	19.1			
	SCSQ 90		90°	120°	480	225	272	406	480	664	804	1020	1200	32.3	19.1			
3	SCSQ 42	60°	90°		224	105	127	189	224	310	375	477	559	19.1	19.1	182	95.3	4.26
	SCSQ 58	60°	90°		309	145	176	261	309	428	518	659	772	22.9	22.9			
	SCSQ 80	60°	90°	120°	426	200	242	361	426	591	715	909	1060	27.9	25.4			
	SCSQ 90	60°	90°	120°	480	225	272	406	480	664	804	1020	1200	30.6	25.4			
	SCSQ 95	60°	90°	120°	506	238	288	428	506	701	849	1080	1260	28.6	25.4			
	SCSQ 100	60°	90°	120°	533	250	303	451	533	738	893	1140	1330	34.1	25.4			
	SCSQ 117	60°	90°	120°	624	293	354	527	624	864	1050	1330	1560	36.1	25.4			
	SCSQ 120	60°	90°	120°	640	300	363	541	640	886	1070	1360	1600	38.1	25.4			
	SCSQ 135		90°	120°	720	338	409	608	720	997	1210	1530	1800	41.7	25.4			
4	SCSQ 125	60°	90°		666	313	378	563	666	923	1120	1420	1660	34.3		219	121	7.17
	SCSQ 130	60°	90°		693	325	393	586	693	960	1160	1480	1730	35.1				
	SCSQ 160	60°	90°		853	400	484	721	853	1180	1430	1820	2130	40.6				
	SCSQ 180	60°	90°	120°	959	450	545	811	959	1330	1610	2040	2390	43.7	33.7			
	SCSQ 188	60°	90°	120°	1000	470	569	847	1000	1390	1680	2140	2500	42.9				
	SCSQ 200	60°	90°	120°	1070	500	605	901	1070	1480	1790	2270	2660	47.6				
	SCSQ 210	60°	90°	120°	1120	525	636	947	1120	1550	1880	2390	2790	51.6				
	SCSQ 250		90°	120°	1330	625	757	1130	1330	1850	2230	2840	3330	63.5				
6	SCSQ 350	60°	90°	120°	1860	876	1060	1580	1860	2580	3130	3980	4660	66.0	35.1	*	*	*
	SCSQ 480		90°	120°	2560	1200	1450	2160	2560	3540	4290	5450	6390	71.1	42.9	*	*	*
	SCSQ 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, Cast Iron, Carbon Steel and 316 Stainless Steel. See chart on page 21 for complete list.



WHIRL

CALL 1-413-772-2166
Call for the name of your nearest BETE representative.