

# SCSQ

## Metal Alloy Line/Square Pattern

### 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 alloys nozzles see NCSQ Series (pp. 32, 33)

### SPRAY CHARACTERISTICS

**Spray pattern:** Square Full Cone with uniform distribution

**Spray angles:** 60°, 90°, and 120° across the corners

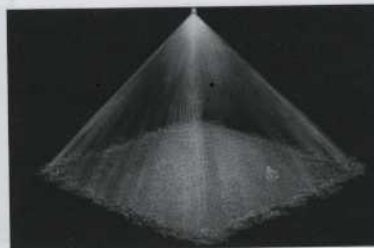
**Flow rates:** 6.25 to 8180 l/min



Female



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

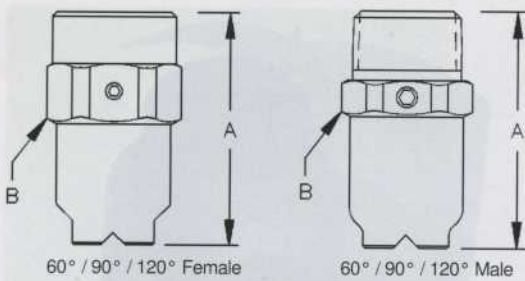
Male or Female Pipe Size	Nozzle Number	Available Spray Angles 60° 90° 120°	K Factor	LITERS PER MINUTE @ BAR								Approx. Orifice Dia. (mm)	Approx. Free Pass. Dia. (mm)	Dim. (mm)		Wt. (kg) Metal	
				0.2 bar	0.3 bar	0.7 bar	1 bar	2 bar	3 bar	5 bar	7 bar			A	B		
3/4	SCSQ 2.5	60° 90°	13.3	6.25	7.57	11.3	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	10.2	7.94				
	SCSQ 12	90° 120°	64.0	30.0	36.3	54.1	64.0	88.6	107	136	160	11.7	7.94				
1 1/4	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				
	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.

WHIRL

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 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	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	16.8	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)<sup>0.47</sup>

\* 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.