

# NCS

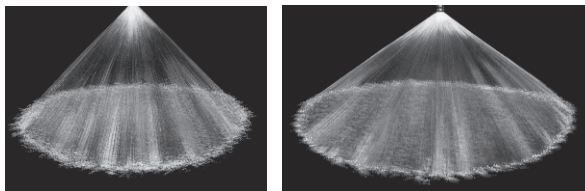
## Stubbies/Minimize Head Space

### DESIGN FEATURES

- Takes no more room than pipe plug, yet performs like full-size nozzle
- Small projection
- Can be used with standard pipe couplings to form female nozzle, with elbows to form right angle nozzle, or with tees or crosses for multiple installations
- Male connection
- Metal and plastic materials

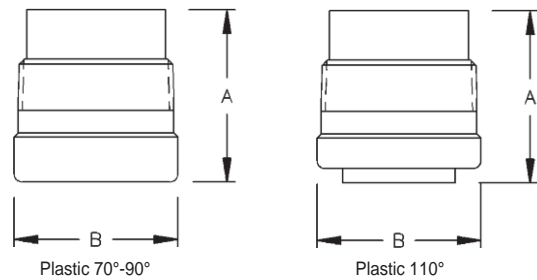
### SPRAY CHARACTERISTICS

- Spray pattern:** Full Cone  
**Spray angles:** 70°, 90°, and 110° standard  
**Flow rates:** 2.0 to 419 gpm (Special flow rates available)



Full Cone 90° (M)

Full Cone 110° (W)



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

### NCS Flow Rates and Dimensions

Full Cone, Narrow 70° (N), Medium 90° (M) and Wide 110° (W) Spray Angles, 1" to 4" Pipe Sizes

Male Pipe Size	Nozzle Number	K Factor	GALLONS PER MINUTE @ PSI									Approx. Orifice Dia. (in.)	Approx. Free Pass. Dia. (in.)	Dim. (in.)		Wt. (oz.) PVC
			3 PSI	5 PSI	7 PSI	10 PSI	20 PSI	40 PSI	60 PSI	80 PSI	100 PSI			A	B	
1	NCS1003	1.20	2.01	2.56	3.00	3.55	4.91	6.81	8.23	9.43	10.5	0.22	0.15	1.88	1.38	1.50
	NCS1005	2.00	3.36	4.27	5.00	5.91	8.19	11.3	13.7	15.7	17.4	0.28	0.22			
	NCS1007	2.81	4.70	5.98	7.00	8.28	11.5	15.9	19.2	22.0	24.4	0.33	0.21			
1 1/2	NCS1510	4.01	6.72	8.54	10.0	11.8	16.4	22.7	27.4	31.4	34.9	0.41	0.28	2.38	2.00	3.00
	NCS1513	5.21	8.73	11.1	13.0	15.4	21.3	29.5	35.7	40.9	45.4	0.45	0.38			
	NCS1516	6.41	10.7	13.7	16.0	18.9	26.2	36.3	43.9	50.3	55.8	0.50	0.36			
2	NCS2020	8.01	13.4	17.1	20.0	23.7	32.8	45.4	54.9	62.8	69.8	0.56	0.41	2.63	2.50	6.00
	NCS2025	10.0	16.8	21.3	25.0	29.6	40.9	56.7	68.6	78.6	87.2	0.64	0.45			
	NCS2030	12.0	20.1	25.6	30.0	35.5	49.1	68.1	82.3	94.3	105	0.69	0.52			
	NCS2035	14.0	23.5	29.9	35.0	41.4	57.3	79.4	96.1	110	122	0.75	0.55			
2 1/2	NCS2540	16.0	26.9	34.1	40.0	47.3	65.5	90.7	110	126	140	0.8	0.63	3.00	3.00	9.00
	NCS2545	18.0	30.2	38.4	45.0	53.2	73.7	102	124	141	157	0.84	0.63			
	NCS2550	20.0	33.6	42.7	50.0	59.1	81.9	113	137	157	174	0.89	0.63			
3	NCS3060	24.0	40.3	51.2	60.0	71.0	98.3	136	165	189	209	0.94	0.63	3.31	3.50	14.0
	NCS3070	28.0	47.0	59.8	70.0	82.8	115	159	192	220	244	1.05	0.58			
	NCS3085	34.0	57.1	72.6	85.0	101	139	193	233	267	297	1.16	0.66			
4	NCS40100	40.1	67.2	85.4	100	118	164	227	274	314	349	1.25	0.95	4.00	4.50	20.0
	NCS40120	48.1	80.6	102	120	142	197	272	329	377	419	1.38	1.00			

$$\text{Flow Rate (GPM)} = K (\text{PSI})^{0.47}$$

Standard Materials: Brass, 316 Stainless Steel, Polypropylene, PVC and PTFE.

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