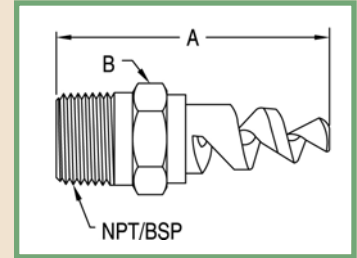


# N



Full Cone



## Fire Protection

### DESIGN FEATURES

- Simplicity of design
- Clog-resistant
- Three standard pipe sizes—1/2", 1" and 1-1/2"
- Male connection NPT and BSP
- Optional blow-off covers available

### SPRAY CHARACTERISTICS

- Two spray cones: an outer, wide angle cone and a narrower inner cone combine to give full cone effect

**Spray angles:** 90° and 120°

**Spray pattern:** Full Cone

**Flow rates:** 6.71 to 327 gpm

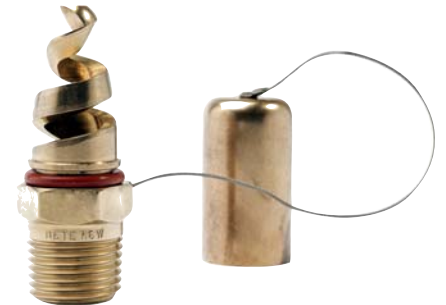
## N Flow Rates and Dimensions

Connection	Nozzle Number	K Factor	Pressure (psi)	Flow Rate (gpm)	Orifice (in)	Free Passage (in)	Dimensions (in)		Weight (oz)	
							A	B		
1/2"	N1/N1W	0.95	50	6.7	0.19	0.13	2.50	0.88	3.00	
			150	11.6						
	N2/N2W	1.68	50	11.9	0.27					
			150	20.6						
	N3/N3W	2.61	50	18.5	0.34					
			150	32.0						
N4/N4W	3.81	50	27.0	0.43	0.19	2.50	0.88	3.00		
		150	46.7							
N5/N5W	5.22	50	36.9	0.53						
		150	63.9							
N6/N6W	6.64	50	47.0	0.56						
		150	81.3							
1"	N6/N6W	6.64	50	47.0	0.60	0.19	3.63	1.38	8.50	
			150	81.3						
	N7/N7W	10.6	50	75.0	0.77					0.25
			150	130						
1 1/2"	N8/N8W	15.0	50	106	0.93	0.25	4.38	2.00	27.0	
			150	184						
	N9/N9W	20.4	50	144	1.09					
			150	250						
	N10/N10W	26.7	50	189	1.29					
			150	327						



All N1-N3W nozzles provided with integral strainer.  
Strainer material: 316SS  
24 mesh (0.027" opening)

All other nozzles require a main line strainer designed to entrap material 1/8" and larger in compliance with FM approval.



Nozzle with optional protective cover  
Use of blow-off covers requires a pressure of 25 PSI or higher

$$\text{Flow Rate (GPM)} = K (\text{PSI})^{0.50}$$

**Standard Materials:** Brass and 316 Stainless Steel.

Nickel aluminum bronze recommended for salt water applications.

Also available in titanium and other materials on request.

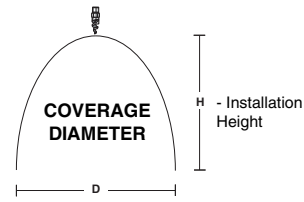
N series covers are available in Brass or 304 Stainless Steel.

SPECIAL PURPOSE

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

# N Spray Coverage

## Nozzle Installed Vertically Down



### 90° Nozzles

Connection Size	Installation Height - H (ft)		1	2	3	4	5	6	7	8
	Nozzle Number	Pressure (PSI)	Coverage Diameter - D (ft) @ Installation Height - H (ft)							
1/2	N1	50	2.0	3.0	4.0	4.5	5.0	5.5	6.0	6.0
		150	2.0	3.0	4.0	4.5	5.4	6.0	7.0	7.5
	N2	50	2.0	3.5	4.7	6.0	7.0	8.0	9.0	9.0
		150	2.0	3.0	4.0	5.0	6.0	7.0	7.5	8.0
	N3	50	2.0	4.0	5.5	7.0	8.0	9.0	10.0	11.0
		150	2.0	3.0	4.0	5.0	5.5	6.0	6.0	6.0
	N4	50	2.0	3.5	5.0	6.5	8.0	9.0	9.5	10.0
		150	2.0	3.0	4.0	5.0	6.0	7.0	8.0	8.0
	N5	50	2.0	4.0	6.0	7.6	9.0	10.4	11.5	12.0
		150	2.0	3.1	4.0	4.5	5.0	5.5	6.0	6.0
	N6	50	2.0	3.5	4.7	5.9	7.0	8.0	9.0	10.0
		150	2.0	3.0	4.0	5.0	6.0	7.0	7.5	8.0
1	N6	50	2.0	4.0	5.6	7.0	8.2	9.4	10.5	11.0
		150	2.0	3.5	4.5	5.5	6.5	7.5	8.0	8.0
	N7	50	2.0	3.7	5.0	6.4	7.7	9.0	10.0	11.0
		150	2.0	3.5	4.5	5.5	6.5	7.2	8.0	8.5
1 1/2	N8	50	2.0	4.0	6.0	8.0	9.6	11.0	12.0	12.5
		150	2.0	4.0	6.0	7.2	8.0	8.8	9.6	10.2
	N9	50	2.0	4.0	6.0	7.5	8.5	9.5	10.4	11.2
		150	2.0	3.8	5.0	6.0	7.0	8.0	9.0	10.0
	N10	50	2.0	4.0	6.0	7.5	8.5	9.2	10.0	10.5
		150	2.0	4.0	5.8	7.0	8.0	9.0	10.0	11.0

### 120° Nozzles

Connection Size	Installation Height - H (ft)		1	2	3	4	5	6	7	8
	Nozzle Number	Pressure (PSI)	Coverage Diameter - D (ft) @ Installation Height - H (ft)							
1/2	N1W	50	3.5	6.0	8.0	9.0	9.0	9.0	9.0	9.0
		150	3.5	6.0	8.5	10.0	10.0	10.0	10.0	10.0
	N2W	50	3.5	5.5	7.5	9.0	10.0	10.0	10.0	10.0
		150	3.5	6.0	8.0	9.0	9.5	9.5	9.5	9.5
	N3W	50	3.5	6.0	8.0	10.0	11.0	11.0	11.0	11.0
		150	3.5	6.5	9.0	9.5	9.5	9.5	9.5	9.5
	N4W	50	3.5	5.4	7.7	9.5	11.0	11.0	11.0	11.0
		150	3.5	6.5	9.0	9.5	9.5	9.5	9.5	9.5
	N5W	50	3.5	5.6	7.5	9.5	11.5	12.5	14.4	15.5
		150	2.0	4.0	6.0	7.5	8.0	8.0	8.0	8.0
	N6W	50	3.5	5.4	7.4	9.0	10.5	12.0	13.5	14.5
		150	2.0	4.0	5.5	6.5	7.5	8.0	8.0	8.0
1	N6W	50	3.5	7.0	10.0	12.6	15.0	16.0	16.6	17.0
		150	3.5	5.5	7.0	8.2	9.4	10.0	10.0	10.0
	N7W	50	3.5	5.6	7.5	9.5	11.5	13.0	15.0	16.0
		150	3.5	4.5	6.0	7.0	7.6	8.0	8.0	8.0
1 1/2	N8W	50	3.5	6.4	9.0	11.0	13.0	15.0	16.5	18.0
		150	3.5	5.5	7.2	9.0	10.0	10.9	11.5	11.5
	N9W	50	3.5	7.0	9.0	11.0	13.0	15.0	17.0	18.5
		150	3.5	6.0	8.0	10.5	12.5	14.0	15.2	16.0
	N10W	50	3.5	6.5	9.0	11.0	13.0	15.0	17.0	18.0
		150	3.5	7.0	9.5	11.2	13.0	14.5	16.0	17.0