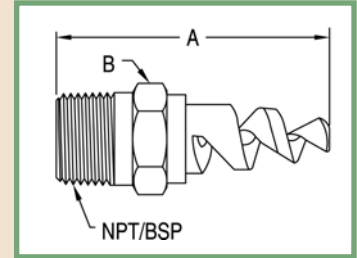


N



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

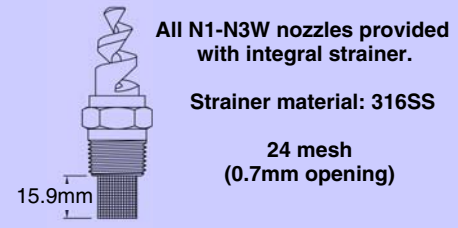
Spray angles: 90° and 120°

Spray pattern: Full Cone

Flow rates: 25.3 to 1236 l/min

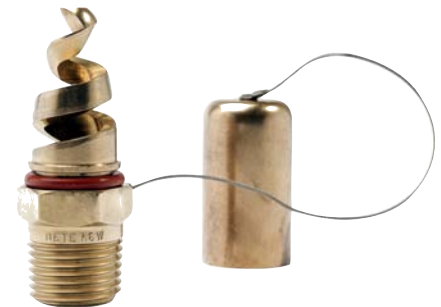
N Flow Rates and Dimensions

Connection	Nozzle Number	K Factor	Pressure (bar)	Flow Rate (l/min)	Orifice (mm)	Free Passage (mm)	Dimensions (mm)		Weight (g)	
							A	B		
1/2"	N1/N1W	13.7	3.4	25.3	4.93	3.18	63.5	22.4	85.0	
			10.3	44.0						
	N2/N2W	24.2	3.4	44.6	6.73					
			10.3	77.7						
	N3/N3W	37.6	3.4	69.3	8.71					
			10.3	121						
N4/N4W	54.9	3.4	101	10.9	4.76	63.5	22.4	85.0		
		10.3	176							
N5/N5W	75.2	3.4	139	13.5						
		10.3	241							
N6/N6W	95.7	3.4	176	14.3						
		10.3	307							
1"	N6/N6W	95.7	3.4	176	15.2	4.76	92.2	35.1	241	
			10.3	307						
	N7/N7W	153	3.4	282	19.6					6.35
			10.3	491						
1 1/2"	N8/N8W	216	3.4	398	23.6	6.35	111	50.8	765	
			10.3	693						
	N9/N9W	294	3.4	542	27.7					7.94
			10.3	944						
	N10/N10W	385	3.4	710	32.8					
			10.3	1236						



All N1-N3W nozzles provided with integral strainer.
Strainer material: 316SS
24 mesh (0.7mm 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 1.7 bar or higher

$$\text{Flow Rate (L/min)} = K (\text{BAR})^{0.50}$$

Standard Materials: Brass and 316 Stainless Steel.

Nickel aluminum bronze recommended for salt water applications.

Also available in titanium and other materials on request.

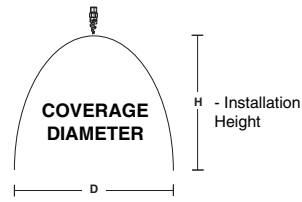
N series covers are available in Brass or 304 Stainless Steel.

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 (m)		0.5	1	1.5	2	2.5
	Nozzle Number	Pressure (bar)	Coverage Diameter - D (m) @ Installation Height - H (m)				
1/2	N1	3.5	0.80	1.25	1.50	1.75	1.85
		10.3	0.80	1.25	1.60	2.00	2.30
	N2	3.5	0.90	1.55	2.10	2.60	2.75
		10.3	0.80	1.30	1.80	2.20	2.45
	N3	3.5	1.00	1.80	2.40	2.90	3.40
		10.3	0.80	1.30	1.65	1.85	1.85
	N4	3.5	0.90	1.65	2.40	2.85	3.10
		10.3	0.80	1.30	1.80	2.30	2.45
	N5	3.5	1.00	1.95	2.70	3.35	3.70
		10.3	0.80	1.25	1.50	1.75	1.85
	N6	3.5	0.90	1.55	2.10	2.60	3.10
		10.3	0.80	1.30	1.80	2.20	2.45
1	N6	3.5	1.00	1.85	2.45	3.05	3.40
		10.3	0.90	1.45	1.95	2.35	2.45
	N7	3.5	0.95	1.65	2.30	2.90	3.40
		10.3	0.90	1.45	1.95	2.35	2.60
1 1/2	N8	3.5	1.00	2.00	2.90	3.50	3.85
		10.3	1.00	1.95	2.40	2.80	3.15
	N9	3.5	1.00	1.95	2.55	3.05	3.45
		10.3	0.95	1.60	2.10	2.60	3.10
	N10	3.5	1.00	1.95	2.55	2.95	3.25
		10.3	1.00	1.85	2.40	2.90	3.40

120° Nozzles

Connection Size	Installation Height - H (m)		0.5	1	1.5	2	2.5
	Nozzle Number	Pressure (bar)	Coverage Diameter - D (m) @ Installation Height - H (m)				
1/2	N1W	3.5	1.55	2.50	2.75	2.75	2.75
		10.3	1.55	2.70	3.05	3.05	3.05
	N2W	3.5	1.45	2.40	3.00	3.05	3.05
		10.3	1.55	2.50	2.90	2.90	2.90
	N3W	3.5	1.55	2.60	3.35	3.35	3.35
		10.3	1.65	2.80	2.90	2.90	2.90
	N4W	3.5	1.45	2.50	3.30	3.35	3.35
		10.3	1.65	2.80	2.90	2.90	2.90
	N5W	3.5	1.50	2.45	3.45	4.15	4.80
		10.3	1.00	1.95	2.45	2.45	2.45
	N6W	3.5	1.45	2.40	3.15	3.90	4.50
		10.3	1.00	1.75	2.25	2.45	2.45
1	N6W	3.5	1.75	3.25	4.50	5.00	5.20
		10.3	1.45	2.25	2.85	3.05	3.05
	N7W	3.5	1.50	2.45	3.45	4.30	4.95
		10.3	1.25	1.90	2.30	2.45	2.45
1 1/2	N8W	3.5	1.65	2.90	3.90	4.85	5.60
		10.3	1.45	2.35	3.00	3.45	3.50
	N9W	3.5	1.75	2.90	3.90	4.90	5.75
		10.3	1.55	2.65	3.75	4.45	4.95
	N10W	3.5	1.65	2.90	3.90	4.90	5.55
		10.3	1.75	3.05	3.90	4.70	5.25