# "NNI SPRAY" NOZZLES



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MODELS: High Velocity/Full Cone/Directional Narrow Angle - Type NA - 60° Pattern Medium Angle - Type MA - 90° Pattern Wide Angle - Type WA -120° Pattern Long Throw - Type LT - 40° Pattern

**TO SPECIFY:** Furnish and install "NNI" brand SPRAY NOZZLES.

### **DESIGN FEATURES:**

"SPRAY NOZZLES" are the most efficient method of applying water on such fires involving flammable liquids or solids those are violent and stubborn to extinguish. These nozzle provides a high velocity Directional spray, designed to impart sufficient velocity to the water spray to prevent dissipation of discharge before it reaches the surface to be protected. Interior spiral deflectors and a center jet break the water into a directional full cone spray.

"NNI SPRAY NOZZLES" are manufactured in a ISO 9001 certified plant and are designed for use with deluge-type systems operated by separate detection, such as rate-of-rise, vapor, smoke, electronic or photo-electric detection units. They do not employ a fusible link element. Possible objectives of an "SPRAY NOZZLES" system as per NFPA #15 are:

- 1. Extinguishment of fire
- 2. Control of burning
- 3. Exposure protection
- 4. Prevention of fire.

These Nozzles produce a coherent, uniform pattern which can be aimed at the specific area to be protected. They have relatively large water way which makes clogging from foreign material unlikely. It is therefore not necessary to remove and clean each nozzle after operation. A self-cleaning strainer is normally installed in the water supply line to prevent any foreign material from entering the system.

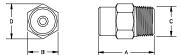
The design is such that a stream of water entering the nozzle is split into two segments. The first segment is directed by turbine vanes at the second segment, which flows straight through the nozzle in such a way that a controlled turbulence is produced at the orifice and breaks up the stream. The arrangement and number of these internal vanes produces the great variety of available patterns, and also atomizes the water spray so that uniform discharge throughout the pattern can be achieved.

These are generally made in Brass but are available in Stainless Steel also



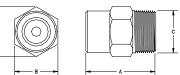
# "NNI-SPRAY" NOZZLES - SUBMITTAL SHEET

#### NARROW ANGLE NOZZLE



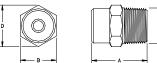
	PHYSICAL CHARACTERISTICS					
Nozzle	Dimensions					
No.	Α	В	С	D		
NA0.9	1-7/8	1-1/16	3/4	1-7/32		
NA1.2	1-7/8	1-1/16	3/4	1-7/32		
NA1.4	1-7/8	1-1/16	3/4	1-7/32		
NA1.8	1-7/8	1-1/16	3/4	1-7/32		
NA2.2	1-7/8	1-1/16	3/4	1-7/32		
NA2.6	1-7/8	1-1/16	3/4	1-7/32		

#### WIDE ANGLE NOZZLE



PHYSICAL CHARACTERISTICS					
Nozzle	Dimensions				
No.	Α	В	С	D	
WA1.8	2-3/16	1-5/16	1	1-17/32	
WA2.6	2-3/16	1-5/16	1	1-17/32	
WA3.3	2-5/8	1-11/16	1-1/4	1-15/16	
WA5.3	2-5/8	1-11/16	1-1/4	1-15/16	

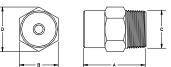
#### MEDIUM ANGLE NOZZLE



PHYSICAL CHARACTERISTICS						
NOZZLE	NOZZLE DIMENSIONS					
NUMBER	Α	В	С	D		
MA1.5	2-1/16	1-5/16	1	1-17/32		
MA2.3	2-1/16	1-5/16	1	1-17/32		
MA2.7	2-1/16	1-5/16	1	1-17/32		
MA3.4	2-1/16	1-5/16	1	1-17/32		
MA4.0	2-1/16	1-5/16	1	1-17/32		
MA4.8	2-1/2	1-11/16	1-1/4	1-15/16		
MA5.1	2-1/2	1-11/16	1-1/4	1-15/16		
MA7.0	2-1/2	1-11/16	1-1/4	1-15/16		

## **DESIGN DATA & ORDERING INFORMATION**

#### LONG THROW ANGLE NOZZLE



PHYSICAL CHARACTERISTICS				
Nozzle	Dimensions			
No.	Α	В	С	D
LT2.8	2-1/16	1-5/16	1	1-17/32
LT4.1	2-1/16	1-5/16	1	1-17/32
LT5.7	2-1/2	1-11/16	1-1/4	1-15/16

Nozzle No.	Ref: Automatic Sprinkler	Pipe Connection Male NPT	Nozzle Discharge Angle	K Factor	Discharge at 30Psi in gpm	Nozzle Type	Submittal check one	
	Spray Nozzle Narrow Angle 60°							
NA0.9	5NA	3/4"	60°	0.9	4.9	Narrow Angle		
NA1.2	7NA	3/4"	60°	1.2	6.6	Narrow Angle		
NA1.4	8NA	3/4"	60°	1.4	7.7	Narrow Angle		
NA1.8	10NA	3/4"	60°	1.8	9.9	Narrow Angle		
NA2.2	12NA	3/4"	60°	2.2	12.0	Narrow Angle		
NA2.6	14NA	3/4"	60°	2.6	14.2	Narrow Angle		
			Spray Nozzle M	edium Angle	90°			
MA1.5	8MA	1"	90°	1.5	8.2	Medium Angle		
MA2.3	13MA	1"	90°	2.3	12.6	Medium Angle		
MA2.7	15MA	1"	90°	2.7	14.8	Medium Angle		
MA3.4	19MA	1"	90°	3.4	18.6	Mediym Angle		
MA4.0	22MA	1"	90°	4.0	21.9	Medium Angle		
MA4.8	26MA	1-1/4"	90°	4.8	26.3	Medium Angle		
MA5.1	28MA	1-1/4"	90°	5.1	27.9	Medium Angle		
MA7.0	38MA	1-1/4"	90°	7.0	38.3	Medium Angle		
			Spray Nozzle V	Vide Angle 12	20°			
WA1.8	10WA	1"	120°	1.8	9.9	Wide Angle		
WA2.6	14WA	1"	120°	2.6	14.2	Wide Angle		
WA3.3	18WA	1-1/4"	120°	3.3	18.1	Wide Angle		
WA5.3	29WA	1-1/4"	120°	5.3	29.0	Wide Angle		
	Spray Nozzle Long Throw 40°							
LT2.8	15LT	1"	40°	2.8	15.3	Long Throw		
LT4.1	22LT	1"	40°	4.1	22.5	Long Throw		
LT5.7	31LT	1-1/4"	40°	5.7	31.2	Long Throw		