

# Reliable®

## Model A Spray Nozzle

### Features

1. Non-Automatic Fixed Pattern
2. Solid Cone Discharge
3. All Brass and Bronze Construction
4. No Moving Parts, No Orifice Less Than 1/4" (6mm)
5. Three (3) Orifice Sizes and Three (3) Discharge Angles

### Approvals

1. Listed by Underwriters Laboratories Inc. and Certified by UL for Canada (cULus)
2. Approved by Factory Mutual Corp. (FM).
3. N.Y. City BS&A No. 587-75-SA.
4. LPC (UK)
5. Scientific Services Laboratory (SSL, Australia)



### Applications

The Reliable Model A Spray Nozzle discharges water in small droplet sizes at low velocities. The resulting low penetration spray is effective for extinguishing fires in the lighter oils including kerosene or for the control of the fire intensity of explosive hazards, thus allowing for their disposal by continuous burning.

The nozzles may also be used for cooling volatile liquid or chemical receivers exposed to a fire area to control both the temperature and pressure in the receivers.

Normally the spray nozzle forms a part of deluge type sprinkler system specifically engineered as to nozzle type and piping to provide the required degree of protection. Such systems are activated manually or by means of a separate actuation system sensing either the rate of temperature rise or the generation of products of combustion.

### Installation

1/2" NPT External Thread  
2 5/8" Total Height

### Identification

Model Number is Cast on Body  
Discharge Angle is Stamped on Deflector

### Finishes

Bronze  
Chrome  
Lead Plated  
Electroless Nickel PTFE (Teflon®)\* UL listed only

### Ordering Information

#### Specify:

Model Number  
Finish

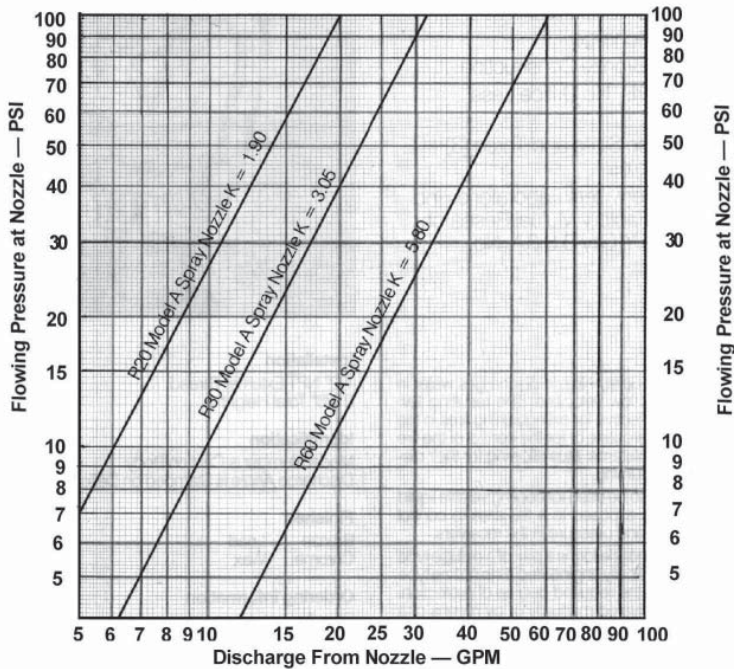
\*DuPont Registered Trademark

**Note:** Pressure values are minimum values to develop spray pattern. No minimum densities are implied by this data.

**Hydraulic Data**

Model	Discharge Angle	K Factor	Nozzle Diameter (in.)	For nozzles in horizontal position	
				Effective Range, ft (psi)	Dia of Range, ft (psi)
R20-80	80	1.90	0.257	10 (7)	12 (7)
				15 (54)	13 (54)
				14 (100)	14 (100)
R30-80	80	3.05	0.328	10.5 (4)	12 (4)
				18 (52)	19 (52)
				19 (100)	15 (100)
R60-80	80	5.80	0.453	10 (4)	10 (4)
				21 (52)	15 (52)
				23 (100)	14 (100)
R20-110	110	1.90	0.257	9 (7)	13 (7)
				14 (54)	17 (54)
				11 (100)	13 (100)
R30-110	110	3.05	0.328	8 (4)	12 (4)
				13 (52)	20 (52)
				11 (100)	14 (100)
R60-110	110	5.80	0.453	10 (4)	13 (4)
				16 (52)	22 (52)
				14 (100)	16 (100)
R20-140	140	1.90	0.257	6 (7)	15 (7)
				10 (54)	15 (54)
				10 (100)	10 (100)
R30-140	140	3.05	0.328	5.5 (4)	15 (4)
				11 (52)	22 (52)
				10 (100)	14 (100)
R60-140	140	5.80	0.453	7 (4)	18 (4)
				15 (52)	26 (15)
				17 (100)	15 (100)

Discharge Angle is the included conical angle of water spray coverage. Range is not noticeably affected by changes in pressure. The horizontal position generates nominal range values. Indoor range information is based on Factory Mutual Approval Standard. NFPA 15-1977 requires main pipe line strainer for waterways less than 3/8". Models R20 & R30 per Factory Mutual Approval Standards requires the use of an individual, integral or main-line strainer.



The equipment presented in this bulletin is to be installed in accordance with the latest published Standards of the National Fire Protection Association, Factory Mutual Research Corporation, or other similar organizations and also with the provisions of governmental codes or ordinances whenever applicable.

Products manufactured and distributed by Reliable have been protecting life and property for over 90 years, and are installed and serviced by the most highly qualified and reputable sprinkler contractors located throughout the United States, Canada and foreign countries.

Manufactured by



**Reliable Automatic Sprinkler Co., Inc.**

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