

# PROINERT®<sup>2</sup> DISCHARGE NOZZLES

## DESCRIPTION

The Discharge Nozzle is the device that controls the flow and distribution of the agent into the protected area. Fike offers 360° and 180° ProInert nozzles in six sizes.

Fike ProInert Discharge Nozzles are machined from brass to prevent corrosion. The nozzles are designed to comply with ISO 14520 EN 15004, EN 12094-7 and NFPA 2001 requirements for agent discharge.

Engineered Discharge Nozzles are available in six sizes. Each nozzle has an internal orifice plate to control agent flow. The orifice plate hole diameters are determined by the Fike Engineered ProInert Flow Calculation Program.

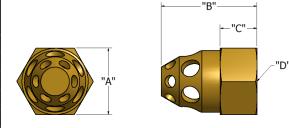


Fike Discharge Nozzle

## **SPECIFICATIONS**

Description	P/N for 360° Nozzle	P/N for 180° Nozzle	
1/2" (15 mm) Nozzle	IG71-072-XXX	IG71-209-XXX	
3/4" (20 mm) Nozzle	IG71-073-XXX	IG71-210-XXX	
1" (25 mm) Nozzle	IG71-074-XXX	IG71-211-XXX	
1 1/4" (32 mm) Nozzle	IG71-215-XXX	IG71-216-XXX	
1 1/2" (40 mm) Nozzle	IG71-075-XXX	IG71-212-XXX	
2" (50 mm) Nozzle	IG71-214-XXX	IG71-213-XXX	

Nozzle Size in. (mm)	А	В	С	D
	in. (mm)	in. (mm)	in. (mm)	(NPT)
1/2" (15mm)	1.00 (25)	1.77 (45)	0.63 (16)	1/2
3/4" (20mm)	1.25 (32)	2.28 (58)	0.79 (20)	3/4
1" (25mm)	1.75 (44)	2.44 (62)	0.87 (22)	1
1 1/4" (40mm)	2.00 (51)	2.82 (71.6)	1.13 (28.7)	1 1/4
1 1/2 (40mm)	2.25 (57)	3.07 (78)	1.02 (26)	1 1/2
2" (50mm)	2.75 (70)	3.70 (94.0)	1.45 (36.8)	2



Note:: Each nozzle will be permanently marked with the part number, nozzle orifice and other information per NFPA 2001.

## **APPROVALS**

- UL Listed
- FM Approved
- ULC Listed

Form No. C.1.64.01

## Nozzle Orifice Plates

Each Engineered Discharge Nozzle comes with a brass Orifice Plate. The Orifice Plate controls the flow of the agent through the nozzle. The hole diameter of the orifice plate is determined by the Fike Engineered ProInert Flow Calculation Program.

## Nozzle Ordering Format for Engineered Discharge Nozzles

When placing an order for a ProInert Discharge Nozzle, you MUST specify the orifice plate hole diameter code in addition to the basic part number for the nozzle needed. I G 7 1 - X X X - X X X

$$A - A - B$$

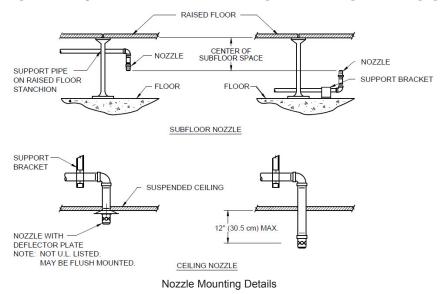
A = Basic Nozzle part number (e.g., IG71-**012**-XXX, etc.)

B = Orifice Plate Hole Diameter Code (obtained from Engineered Flow Calculation Program)

# INSTALLATION

Always verify the nozzle identification number (stamped on the closed end of the nozzle) matches the nozzle part number listed on the system installation plans. All nozzle locations should be within 1'- 0" (0.3m) of their intended locations on the system plans. Discharge Nozzles must be mounted in the vertical position and can face either up or down.

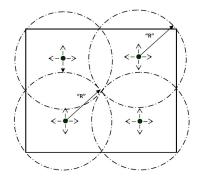
**Caution**: The piping should be blown clear to remove chips, mill scale, or metal shavings before the nozzles are installed. **Note**: Clip all ceiling tiles in the protected enclosure to avoid ceiling tiles from being lifted during agent discharge.



#### 360° Nozzles

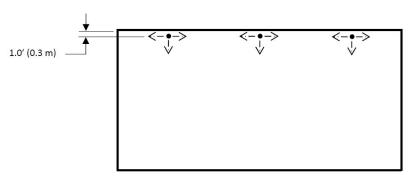
Nozzles should be located in a symmetrical, or near symmetrical, pattern within the protected area. Nozzle patterns need to overlap, to adequately cover the area without any "blind spots" due to nozzle locations. Apply to all Nozzle types.

3600 Nozzles are designed to be located on, or near, the centerline of the protected area, discharging toward the perimeter of the area being covered. The system designer should lay out the nozzles on a floor plan and verify that the entire area being protected is adequately covered without any "blind spots" due to nozzle locations.



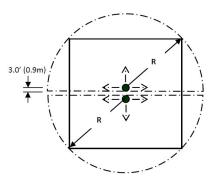
## 180° Nozzles

180° Nozzles should be located in a symmetrical, or near symmetrical, pattern within the protected area. 1800 Nozzles should be located along the perimeter of the area – discharging along the perimeter and toward the opposite side. These nozzles can be located a maximum of 1'-0'' (0.3 m) out from the wall.



#### 180° Nozzles - Back to Back Application

1800 Nozzles can also be installed in "Back-to-Back" applications. The distance between nozzles can be a maximum of 3.0' (0.9 m), this allows 35.0' (10.7 m) radius "R" to be used.





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