Fike® Corporation

HFC-227ea
ENGINEERED NOZZLES

CATALOG NUMBER C.1.22.01

Architect and Engineer Specification

Clean Agent Suppression Systems with Solenoid Actuated Valve

DESCRIPTION

The function of the Fike Engineered Discharge Nozzle, in a fire extinguishing system, is to distribute the Clean Agent in a uniform, predetermined pattern and concentration. The nozzles are designed to complete the discharge of Clean Agent in 10 seconds, or less, when installed within the design limitations of the Fike Design, Installation & Maintenance Manual, P/N 06-235 and the Fike Flow Calculation computer program.

Fike Engineered Discharge Nozzles are available in sizes of 10mm thru 50mm. Each nozzle is available in 180 and 360 degree discharge patterns.

The Discharge Nozzle size refers to the size of Schedule 40 or 80 steel pipe to which it can be connected. The nozzle discharge orifices are drilled perpendicular to the center line of the threads and discharge on a horizontal axis.

Nozzle orifices are available in a wide range of sizes to provide accurate Clean Agent flow results. All nozzles have been tested for their ability to discharge the Clean Agent under extreme conditions.

Nozzle orifice drilling must be done at the Fike factory, or other U.L. listed nozzle drill station, ***only after*** "As-Built" calculations of the installed piping system(s) have been performed, using the Fike Flow Calculation computer program.

As an option, deflector plates are available for use where sensitive ceiling tiles must be protected.

ARCHITECTS SPECIFICATIONS

The nozzle used to disperse Clean Agent shall be a Fike Series 80. The nozzle shall be available in 10mm thru 50mm sizes. Each size shall be available in both 180 and 360 degree dispersion patterns. The nozzle used shall have pipe threads that correspond to the nozzle size. All nozzles shall have an orifice size determined by an HFC-227ea flow calculation program. All nozzle orifice drilling shall be performed by the manufacturer or a UL listed nozzle drilling facility. Deflector plates shall be available as an option.

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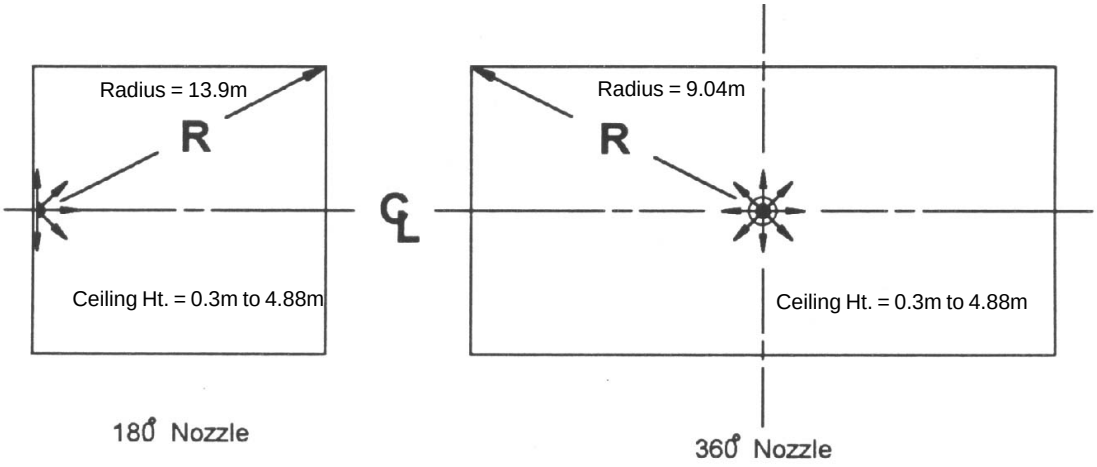

NOZZLE SIZE mm	180° NOZZLE PART NUMBER	360° NOZZLE PART NUMBER
10	80-060	80-052
15	80-061	80-053
20	80-062	80-054
25	80-063	80-055
32	80-064	80-056
40	80-065	80-057
50	80-066	80-058

NOTES:

a. The maximum allowable area coverage includes any area within the radius distance from the nozzle ("R" dimension) to the most extreme wall or corner.

b. Nozzles should be located on center line of hazard area.

c. When working with ceiling heights exceeding the values tabulated above, the hazard volume must be broken down into vertically stacked hazard volumes, with heights less than the maximums shown in the table.

   It is imperative that unusual applications of this nature be handled by experienced design engineers and, in most cases, operational tests should be performed before the system is put into service.

d. Dimensions and nozzle data shown are taken from the Design, Installation & Maintenance Manual - P/N 06-235.

e. 180 and 360 degree nozzles may be placed a maximum of 30.5cm down from the ceiling, and 180 degree nozzles may be placed a maximum of 30.5cm from the wall.

f. Nozzle threading is NPT.