

Marine Suppression Systems

Architect and Engineer Specification

N80-053 THRU N80-066

FM - 3002238

USCG - 162.161/2/0



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 06-210 and the Fike Flow Calculation computer program.

Fike Engineered Discharge Nozzles are available in sizes of 3/8" (10mm) thru 2" (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.

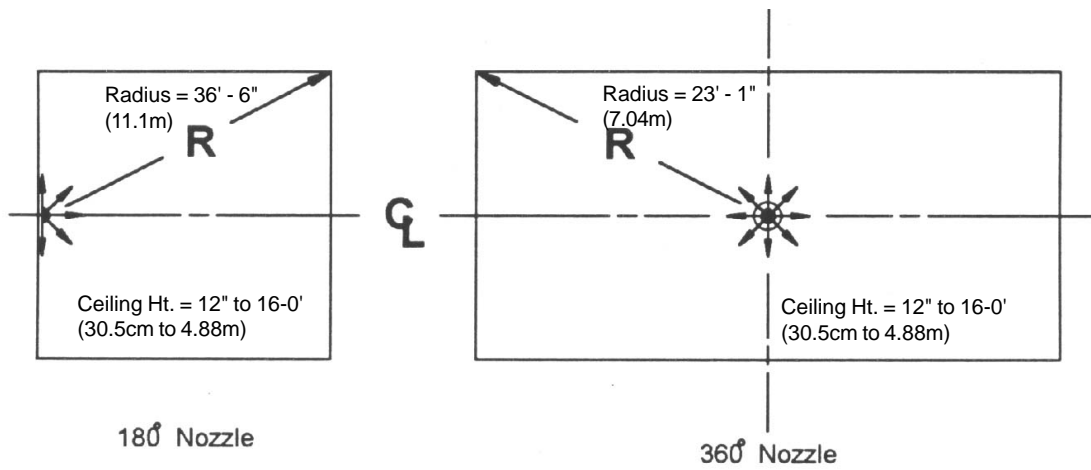
Nozzle orifices are available in a wide range of sizes to provide accurate Clean Agent flow results. All nozzles have been tested for their ability to discharge the Clean Agent under extreme conditions.

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

The Fike Discharge Nozzle used shall be Factory Mutual (FM) approved.

ARCHITECTS SPECIFICATIONS

The nozzle used to disperse Clean Agent shall be a Fike Series 80. The nozzle shall be available in 3/8" (10mm) thru 2" (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 FM approved flow calculation program. All nozzle orifice drilling shall be performed by the manufacturer or an FM approved nozzle drilling facility.



NOZZLE SIZE (NPT)	NOZZLE SIZE (mm)	180° NOZZLE PART NUMBER	360° NOZZLE PART NUMBER
3/8"	(10)	N80-060	N80-052
1/2"	(15)	N80-061	N80-053
3/4"	(20)	N80-062	N80-054
1"	(25)	N80-063	N80-055
1 1/4"	(32)	N80-064	N80-056
1 1/2"	(40)	N80-065	N80-057
2"	(50)	N80-066	N80-058

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 FM approved Design, Installation & Maintenance Manual - P/N 06-210.
- e. 180 and 360 degree nozzles may be placed a maximum of 1 foot (305mm) down from the ceiling, and 180 degree nozzles may be placed a maximum of 1 foot (305mm) from the wall.