

Kidde ECS Advanced Delivery Fire Suppression System Component Description



Effective: June 2014

K-90-106

Nitrogen Orifice Fitting, P/N: 90-194129-XXX

FEATURES

- Custom Engineered
- Factory Drilled
- Multiple Orifice Sizes Available to Fit Specific Applications
- UL Listed
- FM Approved
- RoHS Compliant

DESCRIPTION

The Kidde ECS ADS Fire Suppression System with FM-200[®] Agent nitrogen orifice fitting is a custom-engineered and factory drilled orifice that regulates the flow of the nitrogen into the agent cylinder. The orifice fitting ensures that the proper design pressure is regulated so that the appropriate amount of FM-200[®] Agent is discharged into each hazard. The size of the regulating orifice is chosen by the Kidde ECS ADS System computer calculation software. The software determines the size based on the input parameters of the specific system, along with the engineered discharge nozzles (see Table 1).



INSTALLATION

Prior to installation, visually inspect fitting to ensure that the orifice hole is not clogged or obstructed in any way. In addition, it is recommended to check the part number located on the fitting and ensure that it corresponds to the part number that is referenced in the calculations.

MAINTENANCE

MONTHLY:

Inspect the fitting for cracks, corrosion, grime, etc. Ensure that the orifice fitting is tightly secured to the diffuser and connected to the agent cylinder. If any defects are found during the monthly inspection, immediately contact a Kidde Distributor to service the system.

SPECIFICATIONS

MATERIALS

Body: Brass
 Approx. Weight: 1 lb. (0.45 kg)

ORDERING INFORMATION

90-194129-XXX

The drill code is provided by the Flow Calculation Software. See Table 1.

Table 1. Nitrogen Orifice Fitting Part Numbers

Part Number	Diameter	Area
90-194129-107	0.107	0.0089
90-194129-111	0.111	0.0097
90-194129-116	0.116	0.0106
90-194129-120	0.12	0.0113
90-194129-129	0.129	0.013
90-194129-136	0.136	0.0145
90-194129-144	0.144	0.0163
90-194129-156	0.156	0.0192
90-194129-170	0.17	0.0226
90-194129-182	0.182	0.026
90-194129-199	0.199	0.0311
90-194129-213	0.213	0.0356
90-194129-234	0.234	0.0432
90-194129-261	0.261	0.0535
90-194129-281	0.281	0.0621
90-194129-316	0.316	0.0784
90-194129-348	0.348	0.0951
90-194129-391	0.391	0.1198
90-194129-438	0.438	0.1503
90-194129-484	0.484	0.1843

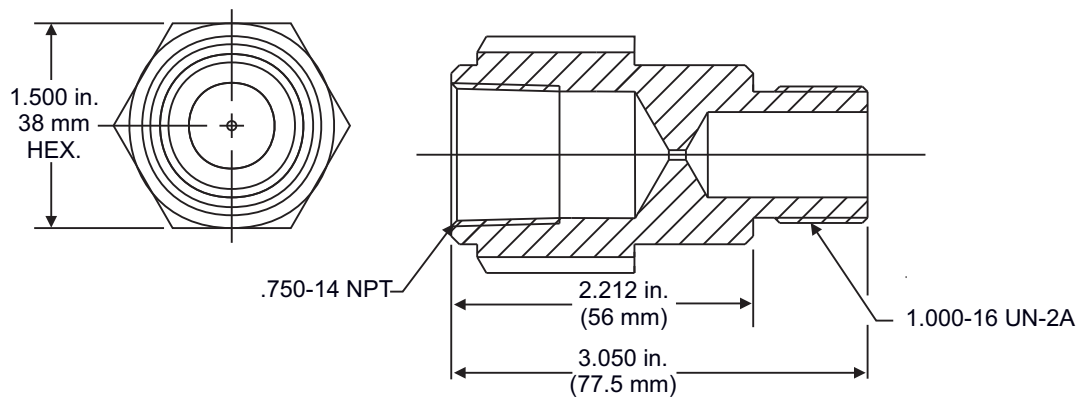


Figure 1. Nitrogen Orifice Fitting

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