

# Kidde ECS Advanced Delivery Fire Suppression System Component Description



Effective: October 2014

K-85-106

## Nitrogen Orifice Fitting

### FEATURES

- Custom Engineered
- Factory Drilled
- Multiple Orifice Sizes Available to Fit Specific Applications
- UL Listed, File Number 4674
- FM Approved
- RoHS Compliant



### DESCRIPTION

The Kidde ECS Advanced Delivery Fire Suppression System 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 agent is discharged into each hazard. The size of the regulating orifice is chosen by the Kidde ECS Advanced Delivery System hydraulic 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 for orifice part numbers).

### 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)

### COMPATIBILITY

Series	For Use With
Kidde ECS Advanced Delivery with FM-200 <sup>®</sup> Agent	X
Kidde ECS Advanced Delivery with 3M <sup>™</sup> Novec <sup>™</sup> 1230 Fire Protection Fluid	X

Table 1. Nitrogen Orifice Fitting Part Numbers

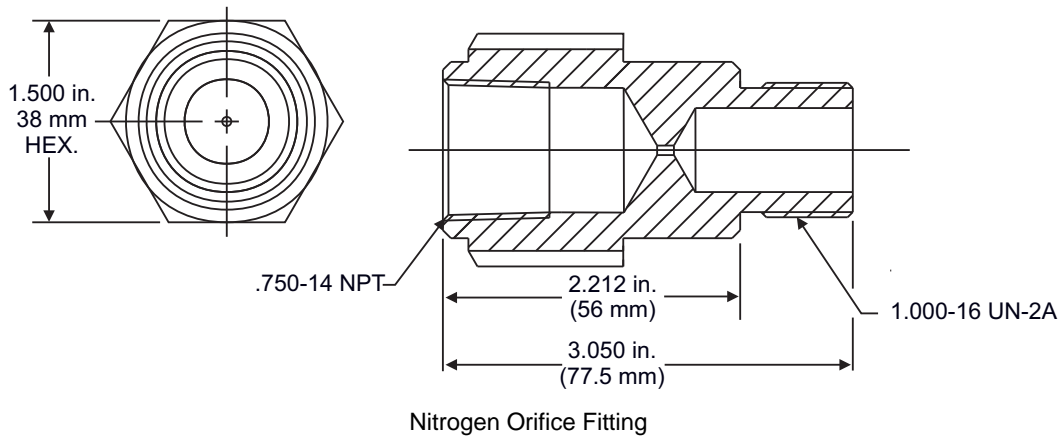
Part Number	Diameter	Area
XX-194129-107	0.107	0.0089
XX-194129-111	0.111	0.0097
XX-194129-116	0.116	0.0106
XX-194129-120	0.12	0.0113
XX-194129-129	0.129	0.013
XX-194129-136	0.136	0.0145
XX-194129-144	0.144	0.0163
XX-194129-156	0.156	0.0192
XX-194129-170	0.17	0.0226
XX-194129-182	0.182	0.026
XX-194129-199	0.199	0.0311
XX-194129-213	0.213	0.0356
XX-194129-234	0.234	0.0432
XX-194129-261	0.261	0.0535
XX-194129-281	0.281	0.0621
XX-194129-316	0.316	0.0784
XX-194129-348	0.348	0.0951
XX-194129-391	0.391	0.1198
XX-194129-438	0.438	0.1503
XX-194129-484	0.484	0.184

### ORDERING INFORMATION

85-194129-XXX

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

90: FM-200  
85: Novec 1230



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