

# Kidde Fire Systems

## ADS™ System Component Description



Effective: April 2023  
K-85-106 Rev AC

### Nitrogen Orifice Fitting

#### FEATURES

- Custom Engineered
- Factory Drilled
- Multiple Orifice Sizes Available to Fit Specific Applications
- RoHS Compliant
- For Approvals, see the “Compatibility” table on page 2.



#### DESCRIPTION

The Kidde Fire Systems ADS™ 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 Fire Systems flow 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 an authorized Kidde Fire Systems Distributor to service the system.

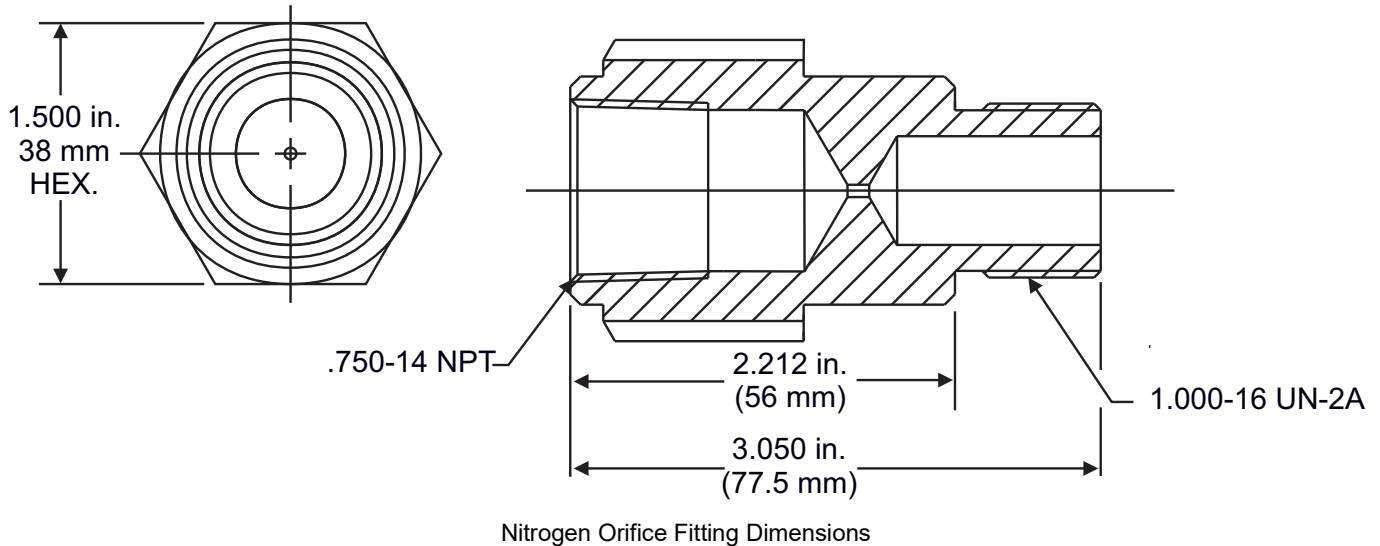
#### SPECIFICATIONS

##### MATERIALS:

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

Table 1. Nitrogen Orifice Fitting Part Numbers

Part Number	Diameter	Area
85-194129-009	0.107	0.0089
85-194129-111	0.111	0.0097
85-194129-116	0.116	0.0106
85-194129-120	0.12	0.0113
85-194129-129	0.129	0.013
85-194129-136	0.136	0.0145
85-194129-144	0.144	0.0163
85-194129-156	0.156	0.0192
85-194129-170	0.17	0.0226
85-194129-182	0.182	0.026
85-194129-199	0.199	0.0311
85-194129-213	0.213	0.0356
85-194129-234	0.234	0.0432
85-194129-261	0.261	0.0535
85-194129-281	0.281	0.0621
85-194129-316	0.316	0.0784
85-194129-348	0.348	0.0951
85-194129-391	0.391	0.1198
85-194129-438	0.438	0.1503
85-194129-484	0.484	0.184



## ORDERING INFORMATION

Nomenclature	Part Number	Nomenclature	Part Number
Orifice Fitting, 0.107" Diameter	85-194129-009	Orifice Fitting, 0.199" Diameter	85-194129-199
Orifice Fitting, 0.111" Diameter	85-194129-111	Orifice Fitting, 0.213" Diameter	85-194129-213
Orifice Fitting, 0.116" Diameter	85-194129-116	Orifice Fitting, 0.234" Diameter	85-194129-234
Orifice Fitting, 0.120" Diameter	85-194129-120	Orifice Fitting, 0.261" Diameter	85-194129-261
Orifice Fitting, 0.129" Diameter	85-194129-129	Orifice Fitting, 0.281" Diameter	85-194129-281
Orifice Fitting, 0.136" Diameter	85-194129-136	Orifice Fitting, 0.316" Diameter	85-194129-316
Orifice Fitting, 0.144" Diameter	85-194129-144	Orifice Fitting, 0.348" Diameter	85-194129-348
Orifice Fitting, 0.156" Diameter	85-194129-156	Orifice Fitting, 0.391" Diameter	85-194129-391
Orifice Fitting, 0.170" Diameter	85-194129-170	Orifice Fitting, 0.438" Diameter	85-194129-438
Orifice Fitting, 0.182" Diameter	85-194129-182	Orifice Fitting, 0.484" Diameter	85-194129-484

## COMPATIBILITY

Series	DIOM P/N	Approvals
Kidde Fire Systems ADS™ for use with Fluoroketone Fire Suppression Agents	06-237256-001	UL, ULC, FM
Kidde Fire Systems ADS™ Marine for use with Fluoroketone Fire Suppression Agents	06-237257-001	UL, ULC, USCG
Kidde Fire Systems ADS™ with HFC-227ea Agent	06-236068-001	UL, ULC, FM
Kidde Fire Systems ADS™ Marine with HFC-227ea Agent	06-236595-001	UL, ULC, USCG

### EXPORT INFORMATION (USA)

Jurisdiction: EAR  
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