

Kidde Fire Systems

Advanced Delivery System Component Description



Effective: March 2020
K-85-107 Rev AC

Fan Nozzles 180° and 360°

FEATURES

- “Fan” Pattern Allows for a Faster Rate of Vaporization
- Unique Nozzle Interior Design Allows for Superior Flow Control
- Stainless Steel
- Custom Drilled to Fit Specific Applications
- For Approvals, see the “Compatibility” table.
- RoHS Compliant
- Patented Kidde Fire Systems Technology

DESCRIPTION



360° Nozzle

180° Nozzle

The Kidde Fire Systems Advanced Delivery Fire Suppression (ADS) System 180° and 360° Fan Nozzles are built with a flat discharge pattern, or a “fan” pattern, which allows for a faster rate of vaporization. The large area of coverage that is created by the nozzle’s “fan” action, allows the agent to discharge closer to the nozzle and vaporize quickly to create the proper mixture between the agent and the nitrogen.

The nozzles are designed with unique interior profile to provide a smooth transitional direction change for the agent upon discharge. This type of design allows the agent to keep much of its momentum as it leaves the nozzle—momentum is necessary to provide agent distribution at greater distance. The nozzles are custom drilled for each application, allowing the nozzles to be effective in large or small spaces.

Another design feature that these nozzles offer is a downward discharge angle from the nozzle which controls the interaction of the vaporizing discharged liquid with ceiling surfaces, which is to be avoided.

When mounted, the nozzles offer a recess option with a minimum placement of 1/2 inch from the ceiling. The nozzles have a sleek, discrete profile, for an aesthetically pleasing look.

MAINTENANCE

- Ensure that there are no obstructions to hinder distribution of the agent.
- Visually inspect nozzles for physical damage or clogging. Replace or clean if required. If nozzles are replaced, new nozzles used must be the same part number in the same location.

SPECIFICATIONS

MATERIALS

Body: Stainless Steel

Approx. Weight 360° Nozzle:

1/2-in. and 3/4-in.: 1.46 lb. (0.66 kg)
1-in. through 2-in.: 5.96 lb. (2.70 kg)

Approx. Weight 180° Nozzle:

1/2-in. and 3/4-in.: 1.30 lb. (0.59 kg)
1-in. through 2-in.: 5.10 lb. (2.31 kg)

Note: Please refer to the corresponding DIOM for associated nozzle part numbers and orifice areas.

ORDERING INFORMATION

Refer to the corresponding Kidde Fire Systems Advanced Delivery DIOM for part number information.

Note: Brass ADS system nozzles are no longer offered by Kidde Fire Systems.

COMPATIBILITY

System	DIOM P/N	Applicable Agencies
ADS™ with 3M™ Novec™ 1230 Fire Protection Fluid	06-237256-001	UL, FM
ADS™ Marine with 3M™ Novec™ 1230 Fire Protection Fluid	06-237257-001	UL, USCG
ADS™ Marine with HFC-227ea System	06-236595-001	UL, USCG
ADS™ with HFC-227ea System	06-236068-001	UL, FM

Note: In addition to the above listing, nozzles with an 85-prefix are listed for use with Fenwal Protection Systems Phoenix™ Nitro systems by FM Approvals and UL Listings.

ADS WITH HFC-227EA AGENT SPECIFICATIONS

- Max. Single Row Ceiling Height: 16 feet. (Nozzles may be tiered to accommodate higher enclosures)
- Minimum Approved Height: 1 foot
- Max. Distance from Ceiling: 12 inches
- Max. Distance from wall for 180° Nozzle: 2 inches

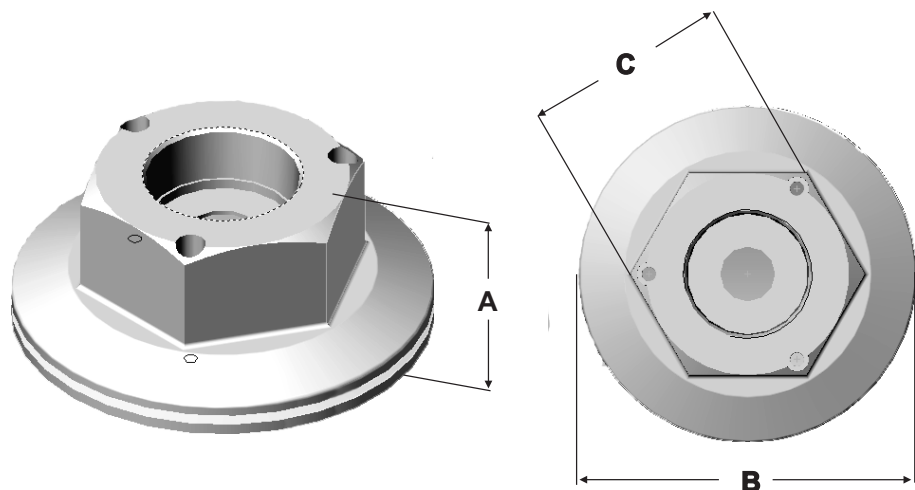
For more information, see DIOM P/N: 06-236068-001.

ADS WITH 3M NOVEC 1230 FIRE PROTECTION FLUID SPECIFICATIONS

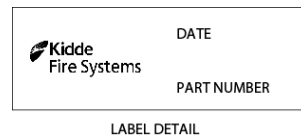
- Max. Single Row Ceiling Height: 18.5 feet. (Nozzles may be tiered to accommodate higher enclosures)
- Minimum Approved Height: 1 foot
- Max. Distance from Ceiling:
 - 360° Nozzle: 15 inches
 - 180° Nozzle: 12 inches
- Max. Distance from wall for 180° Nozzle:
 - For heights of one foot: 15 inches
 - For heights greater than one foot: 10 inches

For more information, see DIOM P/N: 06-237256-001.

DIMENSIONS



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Discharge Nozzle Dimensions

Table 1. Dimensions, 180° and 360° Discharge Nozzles

Nom. Size	180° Nozzle			360° Nozzle		
	A	B	C	A	B	C
1/2	1.47	3.00	1.50	1.44	3.00	1.50
3/4	1.52	3.00	1.50	1.47	3.00	1.50
1	1.98	5.00	3.00	1.92	5.00	3.00
1 1/4	2.06	5.00	3.00	1.96	5.00	3.00
1 1/2	2.13	5.00	3.00	2.00	5.00	3.00
2	2.29	5.00	3.00	2.08	5.00	3.00

Note: Dimensions are in inches and do not differ based on NPT or BSP threading.

EXPORT INFORMATION (USA)

Jurisdiction: EAR

Classification: EAR99

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