

Kidde Fire Systems

ADS™ Component Description



Effective: April 2023
K-85-103 Rev AB

Actuation Arrangement Kit for Single Driver

P/N: 06-129882-001

FEATURES

- Reduces the Number of Control Heads
- Allows Cylinders to Actuate Simultaneously
- Safe and Easy to Install
- Pressure Relief Device Included for Safe Disassembly
- UL Listed, File Number 4674
- FM Approved
- RoHS Compliant

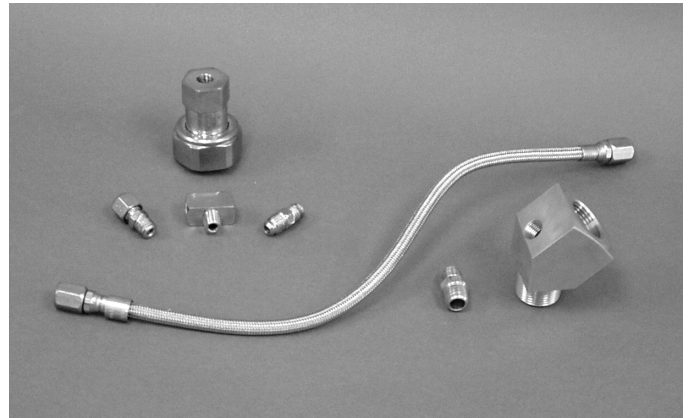
DESCRIPTION

Each Kidde Fire Systems ADS™ Fire Suppression Systems (ADS systems) must be equipped with the actuation assembly in order for the nitrogen driver to pneumatically actuate the agent cylinder. The nitrogen driver is set up to act as the primary cylinder. Actuation of the nitrogen driver is initiated by use of a control head; it initiates the nitrogen system discharge by opening the pilot check on the cylinder valves. This allows the nitrogen to pressurize the discharge head piston, which opens the main check in the valve and discharges the contents of nitrogen through the transfer hose. From the transfer hose, the nitrogen splits in two directions. The first path the nitrogen takes is through the orifice fitting where the nitrogen pressure is regulated into the agent cylinder. At the same time, the nitrogen travels through the actuation assembly to the pressure operated control head. The pressure operated control head actuates the agent cylinder valve by releasing the pressure off the top of the piston, thereby allowing the agent to be driven out by the nitrogen.

The single driver actuation assembly kit (P/N 06-129882-001) consists of seven parts (see Table 1). The nitrogen fitting threads into the orifice fitting. The 1/8-in. flare allows for the connection of the actuation hose, which is then fitted into the 1/8-in. branch tee for operation of the pressure operated control head. A Schrader valve and cap is then added to the 1/8-in. tee as a safety for venting off residual pressure after discharge and before decommissioning of the system.

INSTALLATION

Once the nitrogen driver cylinder and the agent storage cylinder are safely secured and attached to system piping, the actuation assembly can be connected using the following procedure. Inspect and assemble the kit components separately, prior to attaching to the agent storage cylinder.



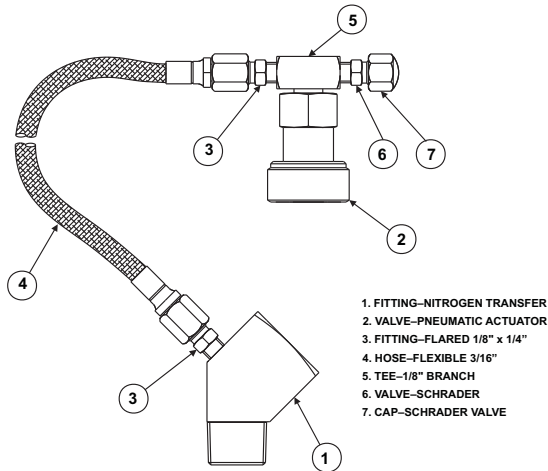
The agent storage cylinder must be permanently connected into the system piping. Never attach the control head to the cylinder valve until the cylinders are secured in brackets or racking and the hose is attached to the agent cylinder. Under no circumstances should the control head remain attached to the cylinder valve after removal from service or during shipment, handling, storage or filling. In the event of inadvertent discharge, failure to follow these instructions could result in death, serious bodily injury and/or property damage.

ASSEMBLY:

Assembly of Kit Components

1. Apply thread tape to male thread of nitrogen transfer fitting.
2. Apply thread tape to the NPT male thread of the first 1/8-in. x 1/4-in. flared fitting, thread NPT male into the nitrogen transfer fitting and tighten.
3. Take the two assembled components and thread into orifice fitting already attached to the nitrogen diffuser assembly, then tighten.
4. Apply thread tape to the male end of 1/8-in. branch tee and thread into the pressure operated control head (P/N 82-878737-000). Tighten the branch tee.
5. Apply thread tape to the NPT male thread of the second 1/8-in. x 1/4-in. flared fitting and thread into one side of the 1/8-in. branch tee. Tighten the flared fitting.
6. Apply thread tape to the male end of the Schrader valve. Securely threading the male end into the open end of the 1/8-in. branch tee. Apply Schrader cap to Schrader fitting.

7. Connect 1/4-in. actuation hose to flare fitting that was applied to the 1/8-in. branch tee.
8. Connect the other end of the 1/4-in. actuation hose into the flare fitting that was connected in the busing in Step 3.
9. Remove the protection cap from the cylinder valve.
10. Using a suitable wrench, assemble control head to cylinder valve and tighten swivel nut securely.

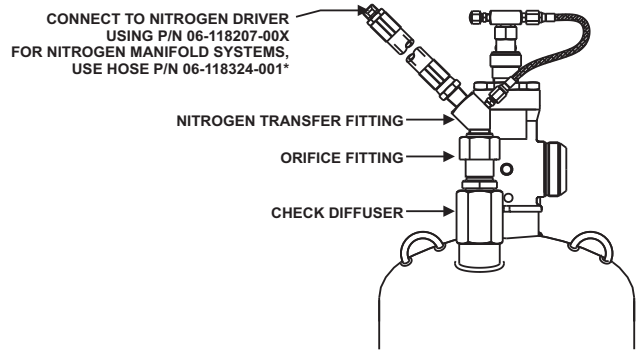


Actuation Kit Assembly

MAINTENANCE:

Monthly

Inspect components for cracks, corrosion, grime, etc. Ensure that the assembled fittings are tightly secured at each of their respective connections and to the agent cylinder. If any defects are found during the monthly inspection, immediately contact a Kidde Fire Systems Authorized Distributor to service the systems. Please refer to the Agent specific Design, Installation, Operation and Maintenance (DIOM) Manual for more details.



Cylinder and Valve Assembly with Assembled Actuation Components

COMPATIBILITY

Series	Cylinder Size	DIOM	Marine DIOM
Kidde Fire Systems ADS™ with HFC-227ea Agent	225, 395, and 450 lb. only	06-236068-001	06-236595-001
Kidde Fire Systems ADS™ for use with Fluoroketone Fire Suppression Agents	20, 350, 450, 600*, and 900* lb.	06-237256-001	06-237257-001

* Ensure there are no issues when running the flow calculation software with one driver and this agent cylinder size.

ORDER INFORMATION

Table 1: Actuation Arrangement Kit for Single Driver P/N: 06-129882-001

Item No.	Qty.	P/N	Description	Material
1	1	06-236124-001	Nitrogen Transfer Fitting	Brass
2	1	82-878737-000	Pressure Operated Control Head	Brass
3	2	06-118191-001	1/8" X 1/4" Flared Fittings	Brass
4	1	06-118193-001	1/4" Flexible Actuation Hose	Stainless Steel Braiding, Brass Fittings
5	1	06-118192-001	1/8" Branch Tee	Brass
6	1	WK-263303-000	1/8" Schrader Valve	Brass
7	1	WK-263304-000	1/8" Schrader Valve Cap	Brass

EXPORT INFORMATION (USA)

Jurisdiction: EAR
Classification: EAR99

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