

Kidde ECS Advanced Delivery Fire Suppression System Component Description

Actuation Arrangement Kit for Single Driver

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

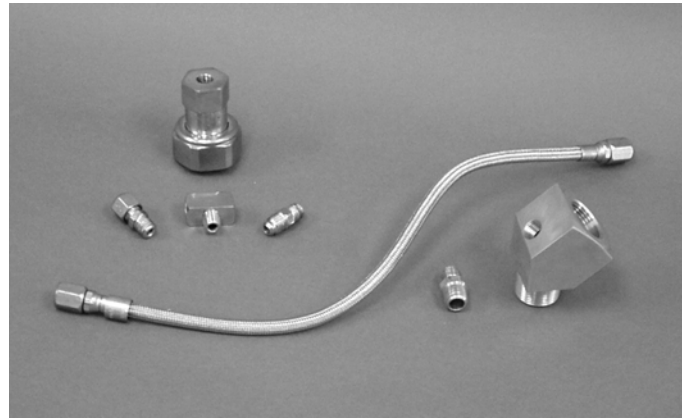
DESCRIPTION

Each Kidde ECS Advanced Delivery Fire Suppression System 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 master 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.



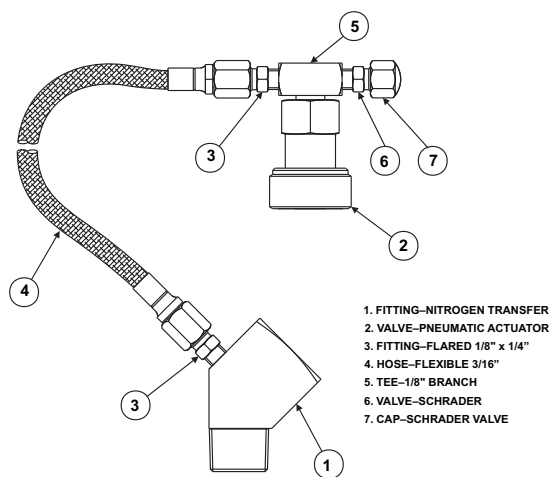
The agent storage cylinder must be permanently connected into the system piping. Never attach the control head to the cylinder valve until the cylinders are secured in brackets or racking and the hose is attached to the agent cylinder. Under no circumstances should the control head remain attached to 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.

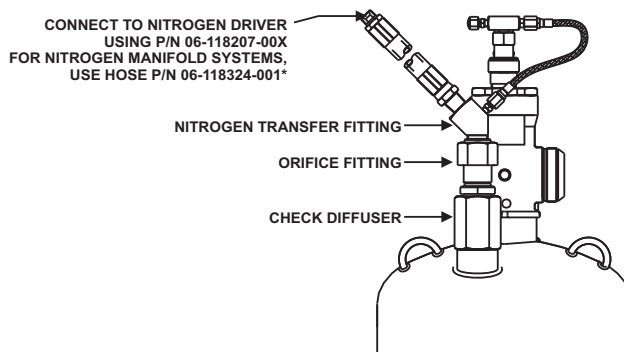


Actuation Kit Assembly

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 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 | For Use With | Cylinder Size | DIOM |
|--|--------------|--|---------------|
| Kidde ECS Advanced Delivery with FM-200® Agent | X | 225 lb. and 395 lb. only | 06-236068-001 |
| Kidde ECS Advanced Delivery with 3M™ Novec™ 1230 Fire Protection Fluid | X | 200 lb., 350 lb., 600 lb.*, and 900 lb.* | 06-237256-001 |

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

ORDER INFORMATION 06-129882-001 CONTAINS:

| 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 |

FM-200 is a registered trademark of E.I. du Pont de Nemours and Company. 3M and Novec are trademarks of 3M Company. Kidde is a registered trademark of Kidde-Fenwal Inc. All other trademarks are the property of their respective owners.

This literature is provided for informational purposes only. Kidde-Fenwal, Inc. assumes no responsibility for the product's suitability for a particular application. The product must be properly applied to work correctly. If you need more information on this product, or if you have a particular problem or question, contact Kidde-Fenwal, Inc.

