



GAS CARTRIDGE ACTUATOR

DESCRIPTION

The Gas Cartridge Actuator (GCA), Fike P/N 70-1651, provides the necessary pressure to fully open all Fike's Clean Agent containers utilizing a Fike fast acting rupture disc assembly. The GCA consists of a stainless steel body containing two sets of bridge wires and a charge of smokeless powder. Operation of the GCA occurs when an electric current is sent through the bridge wires causing the smokeless powder to ignite. This generates the necessary pressure to open the rupture disc and discharge the agent in the Clean Agent container.

The GCA is not an explosive device and cannot be used as a detonator. Operating time for the GCA is 10 milliseconds. Operating temperature range for the GCA is +32^o to +130^oF. (0^o to +54.4^oC) for HFC-227ea systems. For ECARO-25 systems, the maximum operating temperature is 120^oF (49^oC).

The GCA is designed to operate in all Fike Clean Agent system containers with 1" and 2 1/2" valves and also containers with 3" valves with single disc packs. This device is designed to operate by two methods of actuation:

1. Electrical input from a Fike Control Unit or Interface Firing Module (IFM) and through an Agent Release Module (ARM).
2. Input from an (optional) independent Fike Manual Actuator.

Installation

The GCA has two sets of threads; the 3/8-24 UNF-20 thread is used to install the GCA in either 1 or 2 1/2" (25 or 65mm) valved containers and the 7/16-20 UNF-24 thread is used to install the GCA in the 3" (80mm) valved containers, without modification to the valve assemblies.

It should be noted that for retrofit systems, the junction box for the ARM/GCA may need to be longer and/or larger than was required for the ARM/detonator device.

Shelf Life

The GCA is a sealed device utilizing a glass seal and epoxy plug on the wire end and a mylar seal on the discharge end. This extends the actuator's continuous service and shelf life to 10 years before it requires replacement.

Shipping Classification

The GCA will not detonate any explosive materials or products. It has a U.S. Department of Transportation classification of:

- Class: 1.4
- Compatibility Group: "S"
- Shipping Number: UN0323

This classification allows this device to be shipped on any type of carrier (excluding ocean containers) such as commercial airlines, as well as all forms of land carriers without special handling permits and/or licensing.



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APPROVALS

- UL Listed - Ex 4623
- FM Approved:
 - HFC-227EA: 0Y4A8.AF
 - ECARO-25TM: 3014476

GAS CARTRIDGE ACTUATOR DETAILS

