

VALVE ACTUATOR ASSEMBLY

The Valve Actuator Assembly consists of a Gas Cartridge Actuator (GCA), a pressure-generating device used to activate select Fike Explosion Protection components. The GCA consists of a stainless steel body containing two sets of bridge wires and a small charge of smokeless powder. It has a Mylar seal on the discharge end and an epoxy plug on the wire end to create a sealed unit. The GCA has a protective metal cap threaded onto its discharge end for shipping and storage purposes. The cap is removed only when placing the GCA into service.



VAA with Shipping Tube

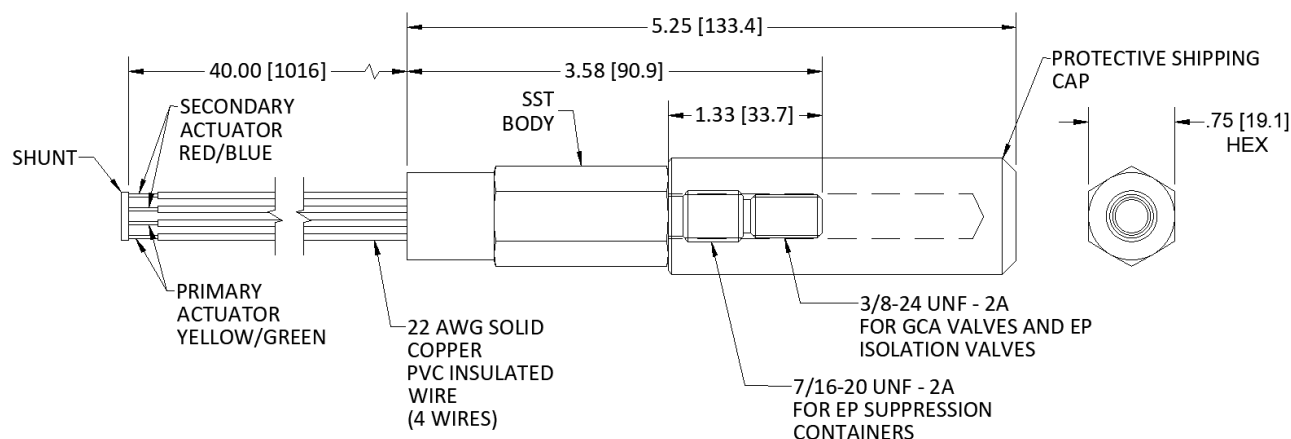
Operation of the GCA occurs when an electric current is sent through its bridge wire, causing an exothermic chemical reaction within the smokeless powder. The high pressure developed by this reaction is directed out of the discharge end of the GCA to facilitate activation of the following Fike components.

1. High Rate Discharge (HRD) Explosion Suppression Containers
2. Standard Rate Discharge (SRD) Explosion Suppression Containers
3. Closure of Fike's fast-acting isolation valves (EIV, FAV, SiFAV)

ORDERING

PART	DESCRIPTION
02-4134	Valve Actuator Assembly (Americas)


DIMENSIONS



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SPECIFICATIONS

Operating Temperature	-40°C to +60°C (-40°F to +140°F)
Storage Temperature	43.3°C (110°F) maximum
Storage Environment	Keep Cool and Dry
Auto-Ignition Temperature	>107°C (>225°F)
Life Expectancy	Ten years maximum ^{1, 2}
Body Material	17-4PH Stainless Steel
Wire Leads	4 x 22 AWG, Solid Copper, PVC Insulated, 1016mm (40 in) long Primary: Yellow/Green, Secondary: Red/Blue Shorting device for shipping and storage
Connection Threads	Two Sets: 3/8-24 UNF-20 and 7/16-20 UNF-24
Shipping Cap	Electroless Nickel Plated Cold Rolled Steel
Handling	The device is static sensitive. Handling precautions are required.
U.S. Bureau of Alcohol, Tobacco and Firearms	The ATF classifies the Valve Actuator Assembly (GCA) as a special device under 27 CFR, 55.32. As such, the device is exempt from the licensing and storage requirements contained in the Federal explosives regulations.
Approvals	 CE Classification P1
U.N./U.S. DOT Classification	Class 1.4, Group S ³
U.N. Proper Shipping Name and Number	Cartridges, Power Devices, UN0323 ³
U.N./U.S. DOT Reference Number	EX-1996090043 (EX-9609043) ³
Tariff Code	3602.00.0060
U.S. Code of Federal Regulations (49 CFR)	Section 173.56, Title 49

¹ The date and month the GCA was manufactured is indicated on the sticker applied to the unit.

² If the GCA is exposed to temperatures above +60°C (+140°F), the ten-year service life is reduced to 5 years. The GCA must be replaced if exposed to temperatures above 74°C (+165°F).

³ This classification is only valid when shipping caps are installed over the output ends and the devices are packaged as follows: Inner packaging: Tubes, fiberboard, a heavy wall with plastic plugs in both ends, each containing one device. Outer packaging: Specification 4G fiberboard box, each containing not more than 25 inner packaging with corrugated dividers and pads above and below all devices. The device in this packaging has been tested and passed the U.N. Series 6(d) test requirement in the 5th Revision of the UN Manual of Tests and Criteria.