

## IMPULSE VALVE OPERATOR (IVO) KIT

### DESCRIPTION

The Impulse Valve Operator (IVO) provides means to electrically or manually activate the Fike Impulse Valve clean agent container by providing the force required to extend a piston that will open the rupture disc, allowing the agent to be released from the container.

The IVO can be activated electrically via a signal from Fike control panel or manually by depressing red strike button.

Fike Clean Agent Containers with Impulse Valve must use an Impulse Releasing Module (IRM) to supervise the agent release circuit wiring (for open and ground fault conditions) from the container to the control panel.



### SPECIFICATIONS

Normal Supply Voltage: 24VDC  
 Current Consumption: 0 Amps (for Battery Calculation)  
 Electrical Connection: DIN connector w/ Cable & ½" NPT for conduit connection  
 IVO Material: Stainless Steel (Body) / Brass (End Cap)  
 Temperature Range: 32 to 130°F (0 to 54.4°C)  
 Environment: Indoor Use Only

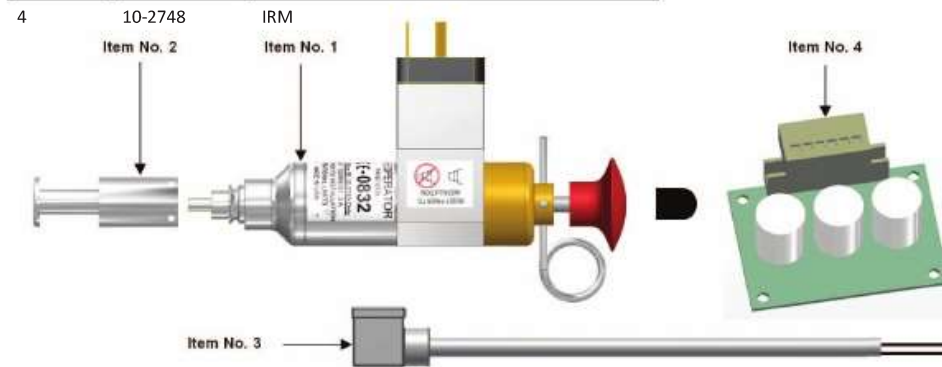
### APPROVALS:

- UL Listed
- ULC Listed
- FM Approved



### ORDERING INFORMATION

Item No.	Fike P/N	Description
-	70-279	IVO Kit (includes all items listed below)
1	02-12728	IVO
2	70-286	Reset Tool
3	02-12755	Wire Lead (3' long) with connector



Form No. IV.1.09.01-1

## INSTALLATION

After the electrical / control system has been checked out and no trouble / ground faults are present; proceed with the Actuation System installation.

*Note: This should be the last items completed before the system is placed into operation.*

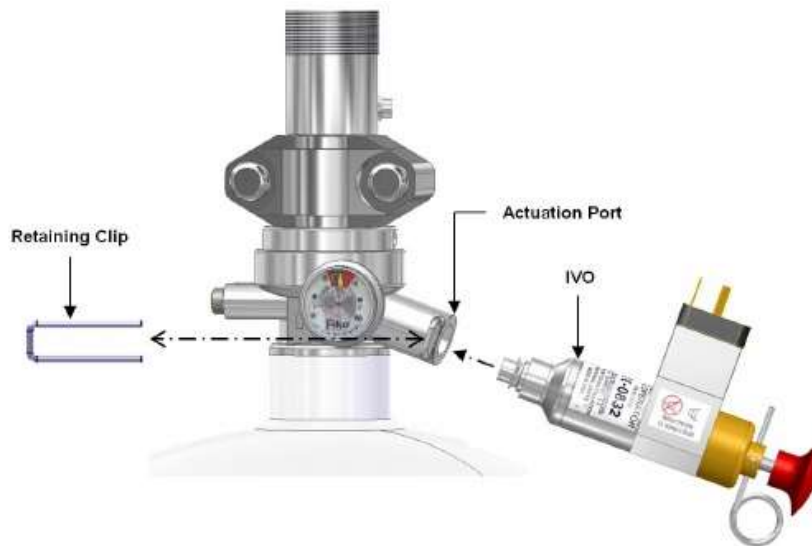
*Important Note: Check to ensure IVO is armed (Firing Pin retracted) and Safety Pin is in place before installing to the Impulse Valve on the container.*



Install the wire lead w/ connector (Item no. 3) to the IVO (Item no. 1) connector and secure with set screw.

Install IVO; remove Retaining Clip and Plastic Plug from Impulse Valve Actuation Port.

Insert IVO into Impulse Valve Actuation Port and re-insert Retaining Clip.



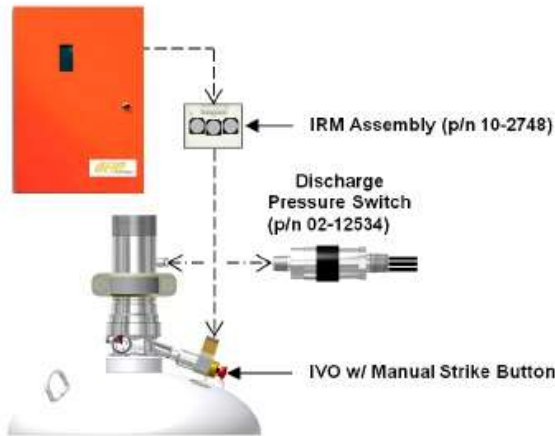
The container is "NOW ARMED".

### ELECTRIC ACTUATION – SINGLE CONTAINER SYSTEM W/ IVO

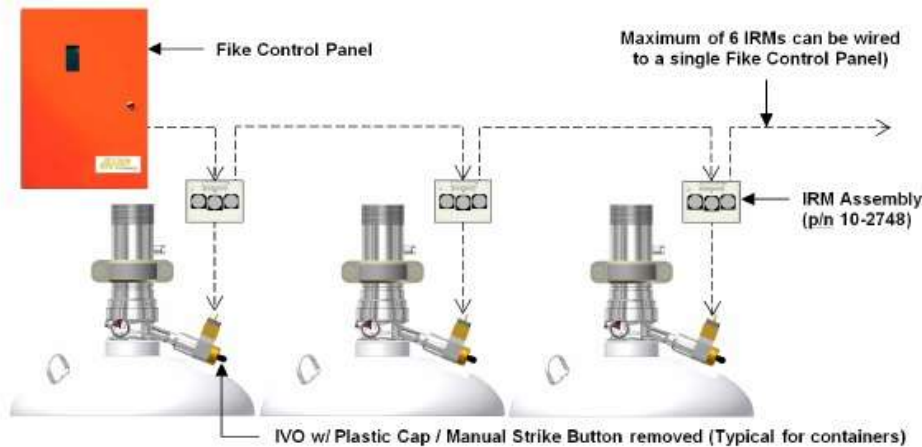
For wiring installation details between Fike Control Panel, IRM and the IVO, reference the Impulse Release Module Product Manual (P/N 06-552).

At this point the IVO can be installed to the Clean Agent Container Impulse Valve. The Discharge Pressure Switch (P/N 02-12534) is required and is wired to the manual release contact in SHP PRO® or to a monitor module in Cheetah® Xi or Xi 50.

*Warning: Do not attempt to install the IVO with the firing pin in the extended position.*



### ELECTRIC ACTUATION – MULTI- CONTAINER SYSTEM W/ IVO



*Important Note: When utilizing electric actuation (IRM) with multiple containers with IVO, the manual strike button on each IVO must be removed and plastic cap installed. The Discharge Pressure Switch is NOT used. This is to prevent a single container from being discharged in a multiple container system.*

*For wiring installation details between Fike Control Panel, IRM and the IVO, reference the Impulse Release Module (IRM) Product Manual (P/N 06-552).*

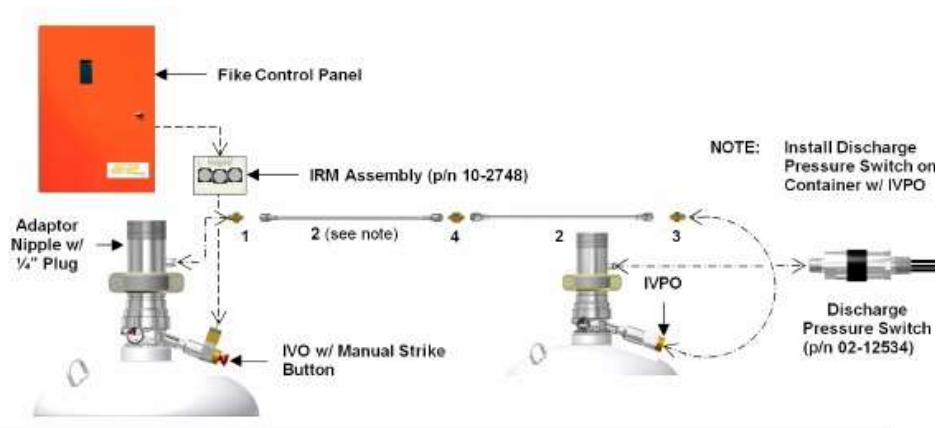
*At this point the IVO can be installed to the Clean Agent Container Impulse Valve.*

*Reference detailed installation instructions on page 2 of this data sheet*

### ELECTRIC & PNEUMATIC ACTUATION – TWO CONTAINER SYSTEM W/ IVO & IVPO

Item No.	Fike P/N	Description
1	02-4530	¼" NPT x ¼" JIC Adaptor (must be ordered separately)
2	02-4977	¼" JIC x 3.0' lg. Actuation Hose (supplied w/ IVPO kit) (see note)
3	02-4543	1/8" NPT x ¼" JIC Adaptor (supplied w/ IVPO kit)
4	02-12926	¼" JIC Male Adaptor (must be ordered separately)

*Note: This actuation method requires 2 – ¼" JIC x 3.0' lg. Actuation Hoses, 1 hose supplied w/ IVPO kit, the 2nd Actuation Hose must be ordered separately.*



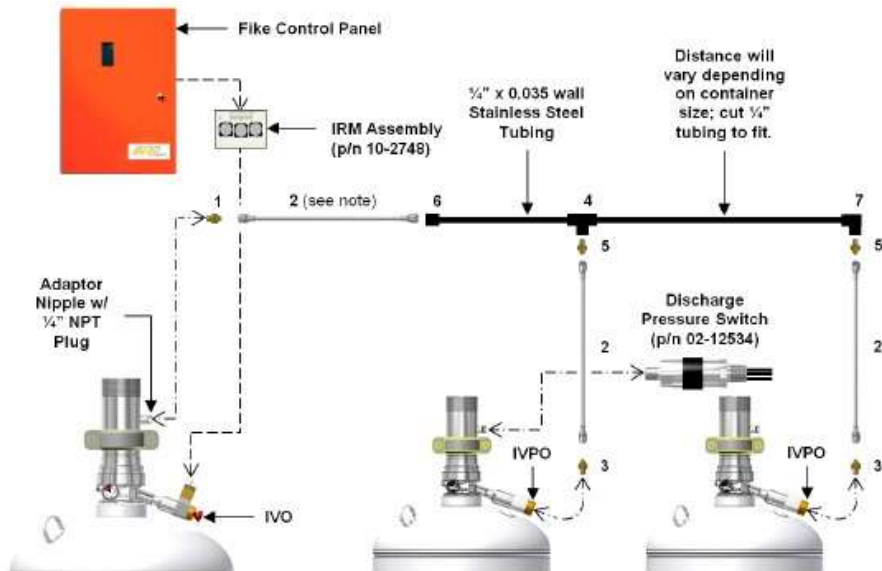
First remove the 1/4" NPT Plug from Adaptor Nipple, then install Actuation System as shown above. Secure Actuation tubing to a solid surface. Anchoring into plaster, sheetrock wall or any other facing material is NOT acceptable. For additional information regarding the installation and resetting of the IVPO, refer to the IVPO Data Sheet IV.1.10.01

The Discharge Pressure Switch (P/N 02-12534) is required and is wired to the manual release contact in SHP PRO or to a monitor module in Cheetah Xi or Xi 50.

#### ELECTRIC & PNEUMATIC ACTUATION – MULTI CONTAINER SYSTEM W/ IVO & IVPO

Item No.	Fike P/N	Description
1	02-4530	1/4" NPT x 1/4" JIC Adaptor (must be ordered separately)
2	02-4977	1/4" JIC x 3.0' lg. Actuation Hose (supplied w/ IVPO kit) (see note)
3	02-4543	1/8" NPT x 1/4" JIC Adaptor (supplied w/ IVPO kit)
4	C02-1359	1/4" Tube Tee (must be ordered separately)
5	C02-1356	1/4" Male JIC x 1/4" Male Tube Adaptor (must be ordered separately)
6	02-12695	1/4" Tube x 1/4" JIC Adaptor (must be ordered separately)
7	02-12696	1/4" Tube Elbow-90° (must be ordered separately)
8	02-12697	1/4" Tube Coupler (not shown) (must be ordered separately)

Note: The Actuation Hose required to connect the 1st container w/ IVO to the Actuation Tubing must be ordered separately.



The illustration above shows the items required to make the proper connection between the Container equipped w/ an IVO and the Container(s) equipped w/ an IVPO. The maximum length of pneumatic actuation line (including Hoses) can not exceed 50 ft. (15.2 m) and up to 6 containers equipped w/ an IVPO.

First remove the 1/4" NPT Plug from Adaptor Nipple, then install Actuation System as shown above. Secure Actuation tubing to a solid surface. Anchoring into plaster, sheetrock wall or any other facing material is NOT acceptable.

The Discharge Pressure Switch (p/n 02-12534) is required and is wired to the manual release contact in SHP PRO or to a monitor module in Cheetah Xi or Xi 50.

For additional information regarding the installation and resetting of the IVPO, refer to the IVPO Data Sheet IV.1.10.01

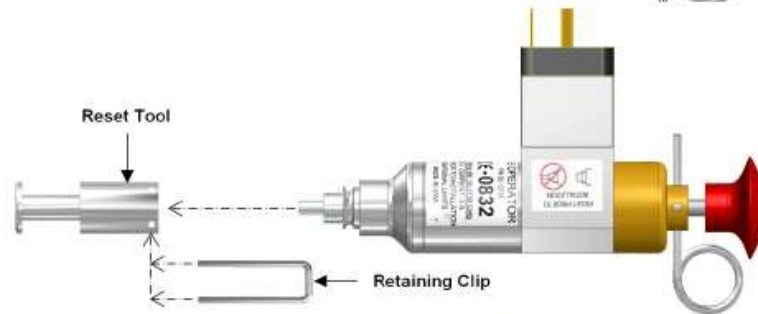
## RESET INSTRUCTIONS

Remove IVO from Impulse Valve by removing Retaining Clip.

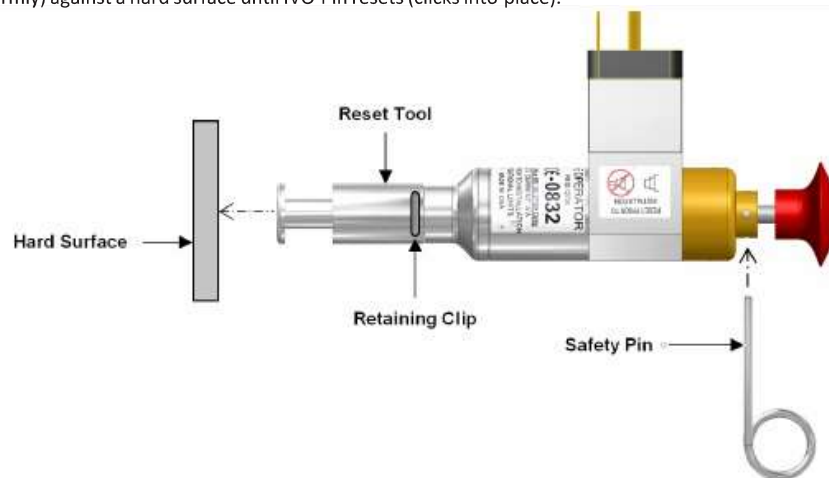
Remove Safety Pin and pull the Manual Strike Button knob until it resets (clicks into place).



Insert IVO into Reset Tool and secure with Retaining Clip.



Push Reset Tool button (firmly) against a hard surface until IVO Pin resets (clicks into place).



Insert and secure the Safety Pin, remove Retaining Clip, IVO is reset and ready to be installed on Impulse Valve.

*Important Note: Check IVO to ensure device is armed before inserting on Impulse Valve.*

