

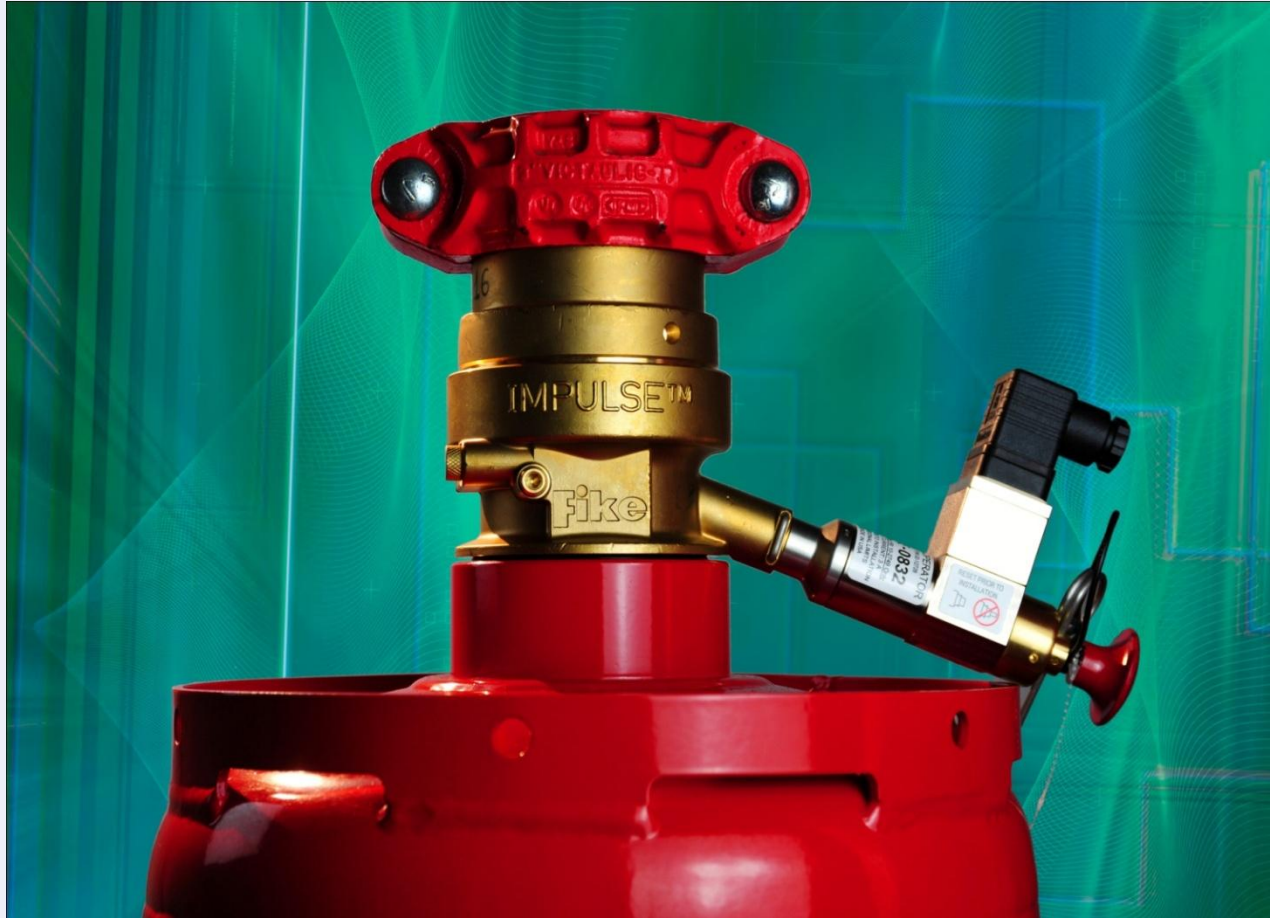
FIKE Impulse

Presented by:

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Sales Manager
British Isles
&
Southern
Europe



Fike Impulse



Introducing the New Fike Impulse Valve

- Innovative new valve design utilizes Fike's "Reverse-Acting" rupture disc technology
- Used with Fike's FM200 & ECARO-25 systems
- Replaces Fike's Solenoid Operated Valves



How is the Impulse valve different?



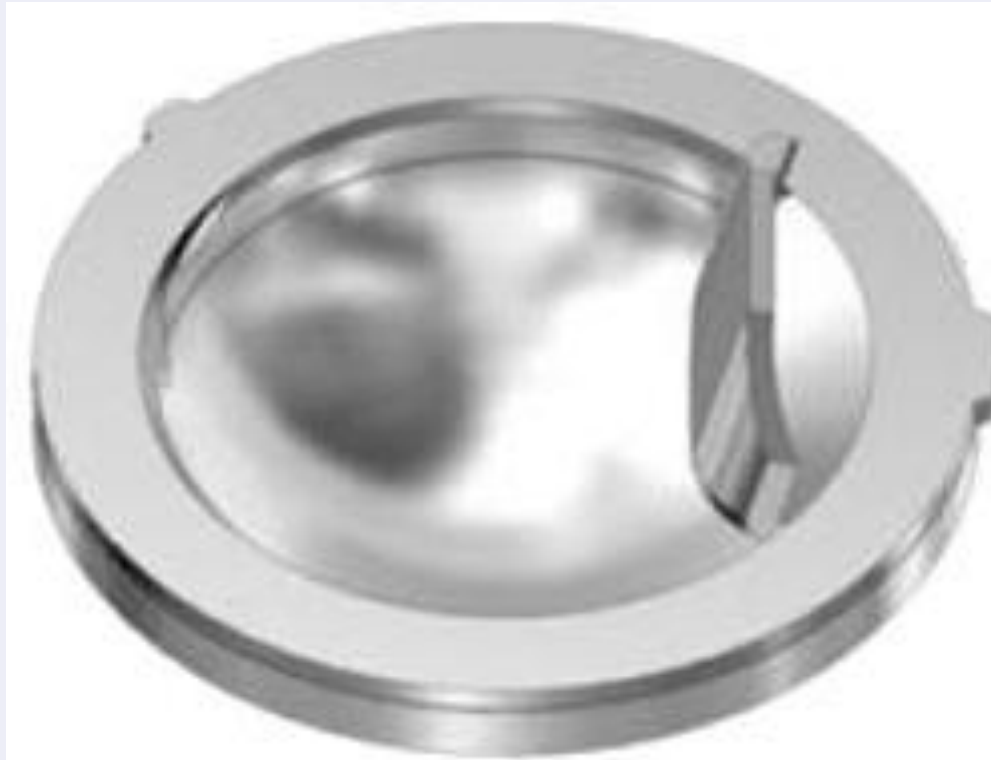
Fike[®]

The Impulse Valve
has a redesigned,
threaded valve body

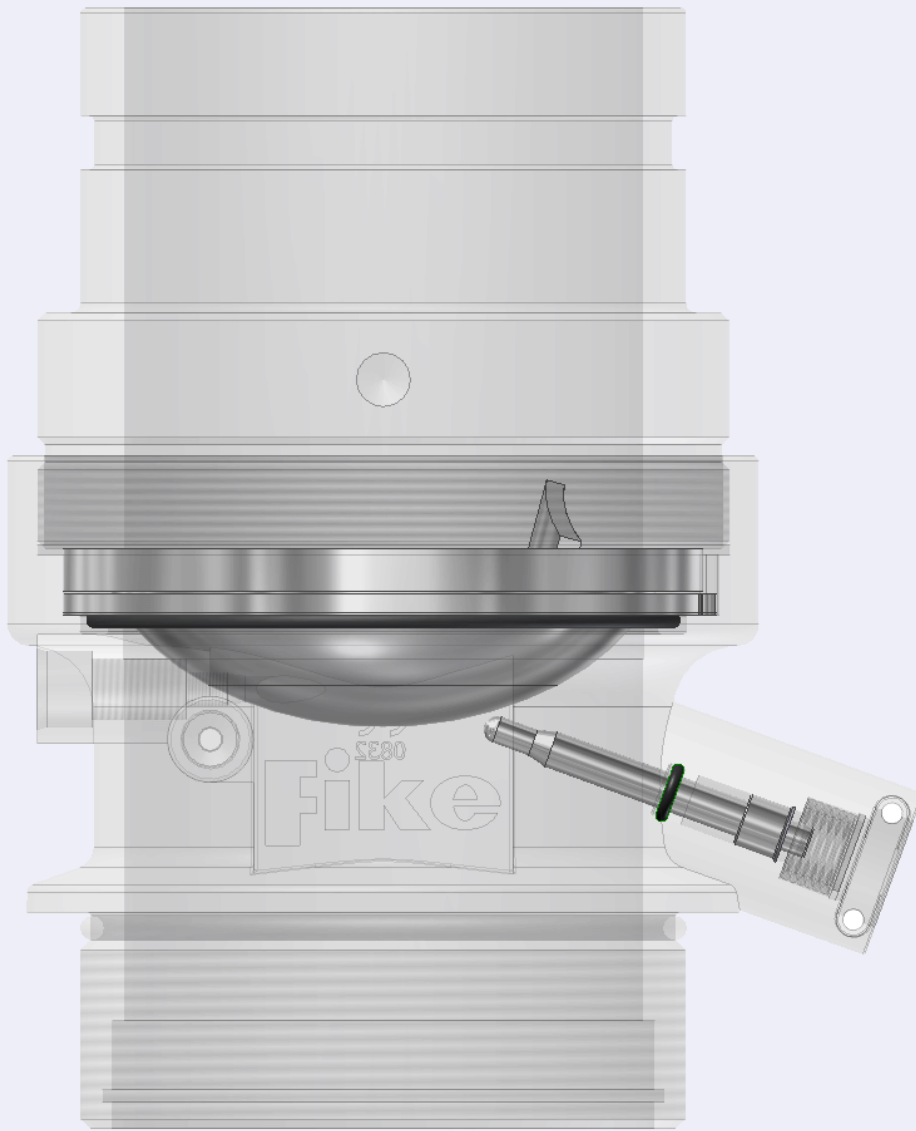
Available in 1" & 3"
"brass" valve bodies



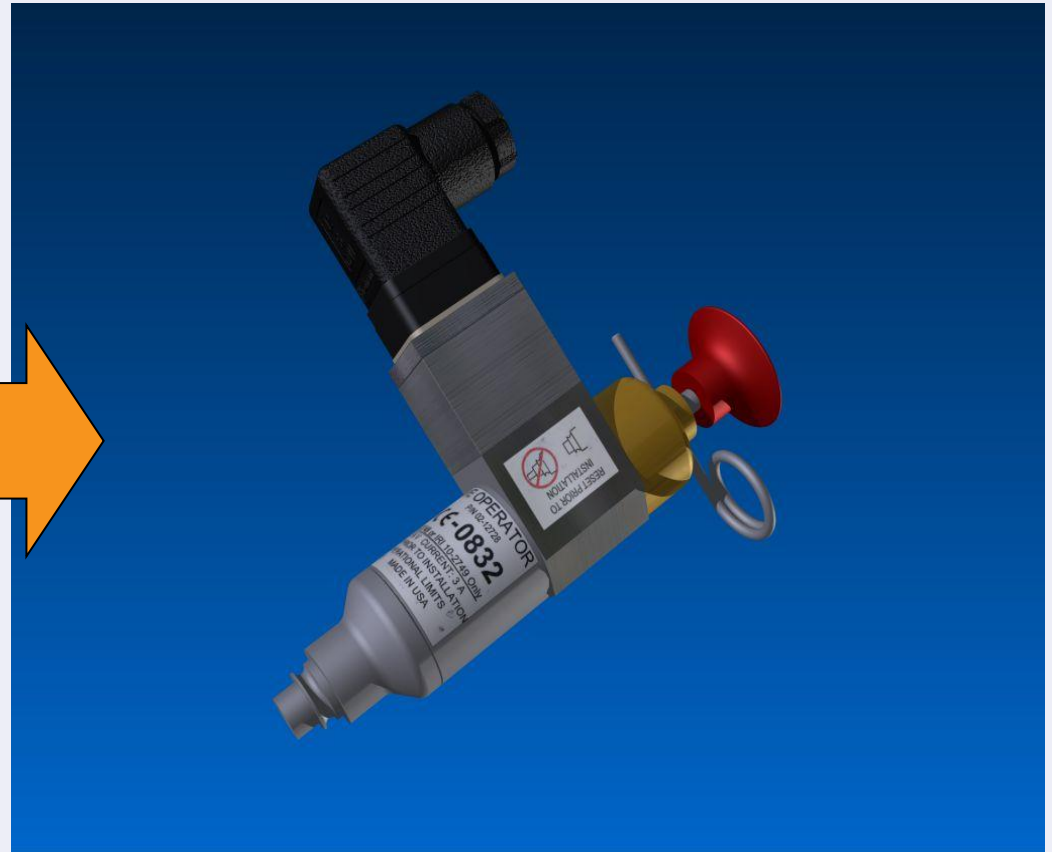
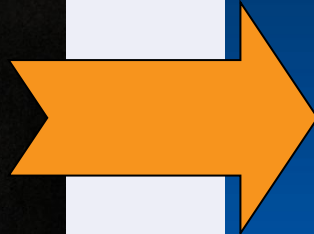
The Impulse Valve utilizes Fike's
“Reverse-Acting” rupture disc



Each valve body includes a strike pin assembly which is designed to impact the Reverse-Acting rupture disc, causing the “impulse” that opens the disc.



SAV has been replaced with a resettable actuation device (IVO)



Actuators



IVO

Impulse Valve Operator permits automatic (electric) activation, as well as manual activation

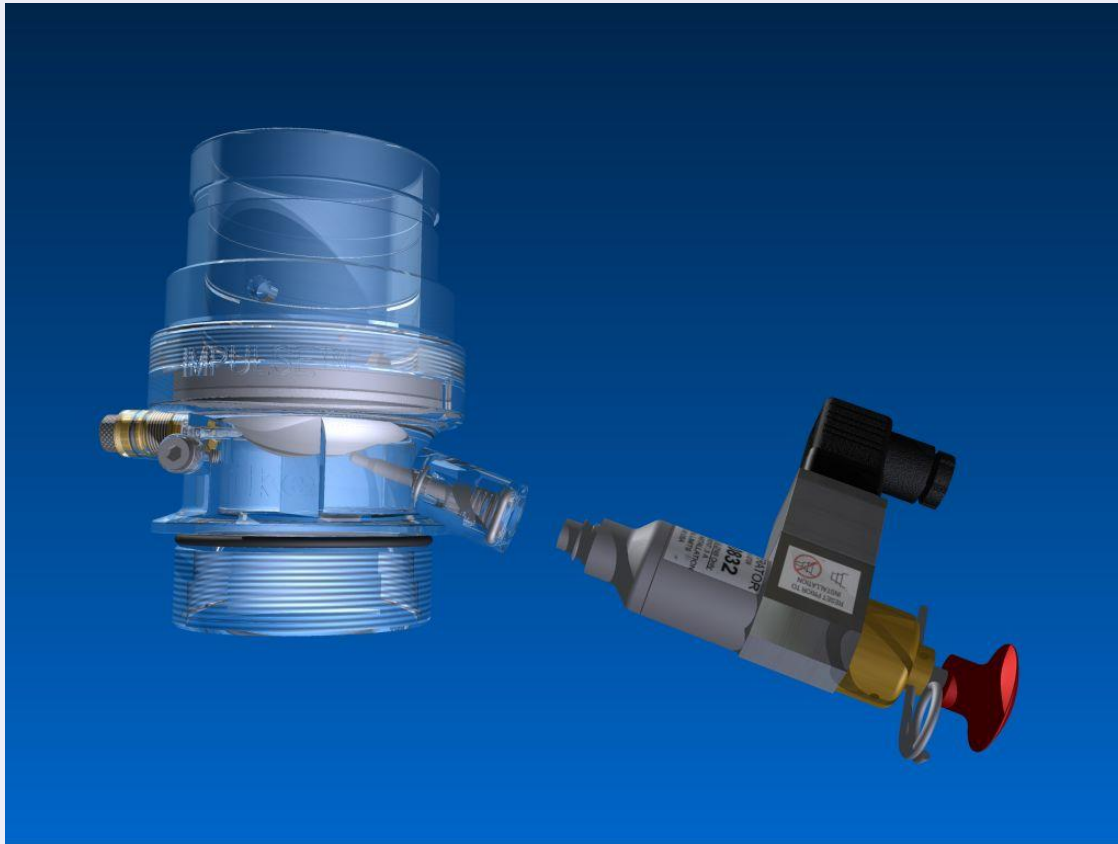


IVPO

Impulse Valve Pneumatic Operator provides a pneumatic means of activation of multiple valves

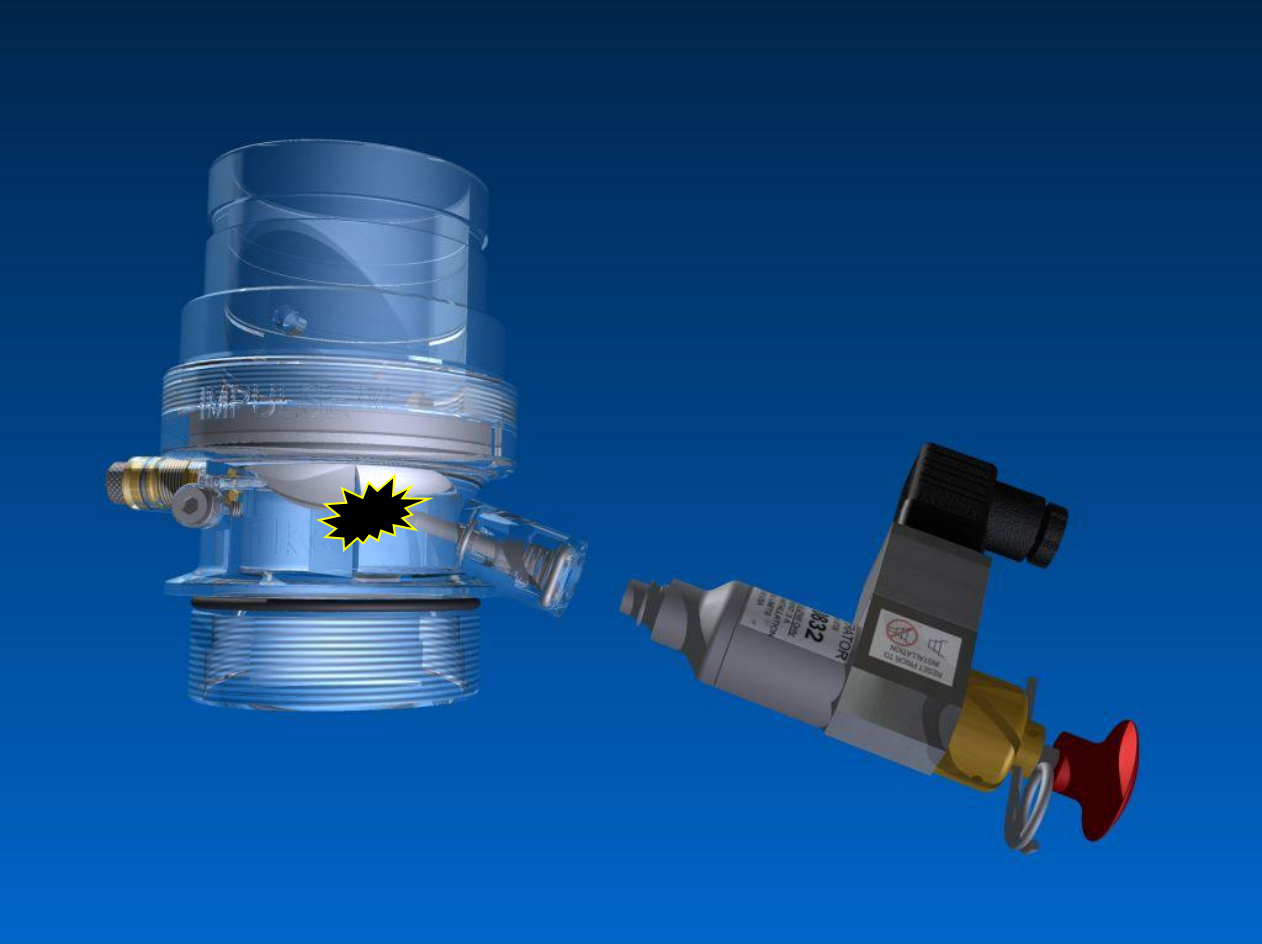
How does the IVO and IVPO work?



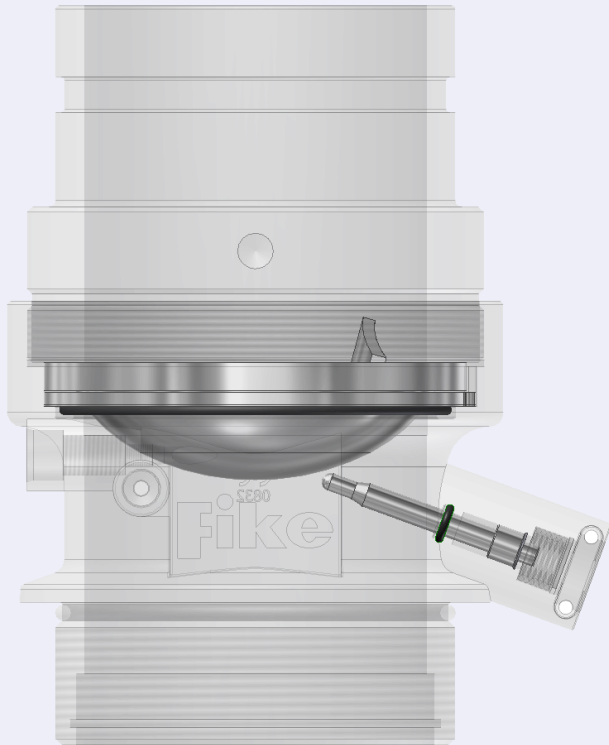


When inserted into the Impulse Valve the actuator firing pin is aligned with the strike pin inside the valve

Once activated, the IVO firing pin hits the striking pin...which in turn strikes the rupture disc



The “Impulse” created by the strike pin causes the “Reverse-Acting” disc to collapse and open, releasing the agent



System Design

- The new Impulse Valve can be used with both FM200 and ECARO-25
- The new Impulse Valve has NO effect on the agent concentration
- The equivalent length values for Impulse Valves are very similar to the SAV equivalent lengths
- Very little effect on the system flow calculations

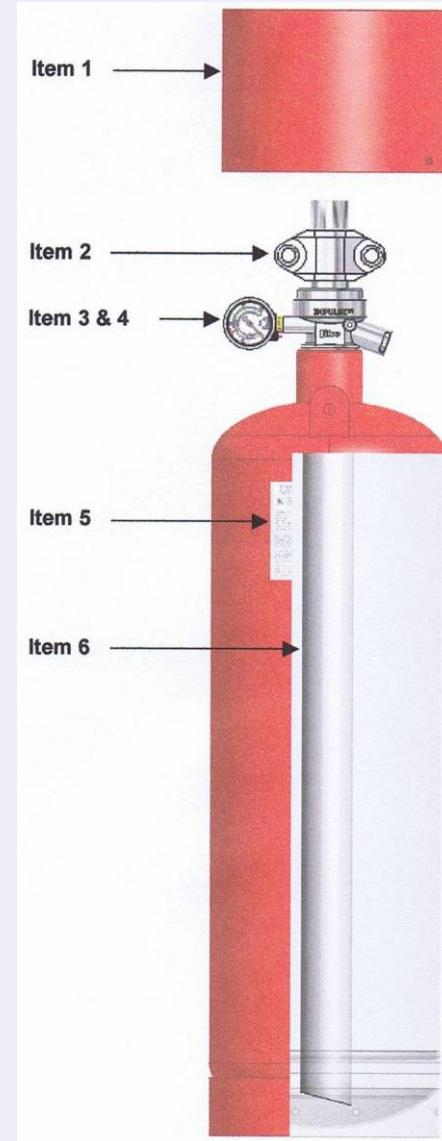


System Design

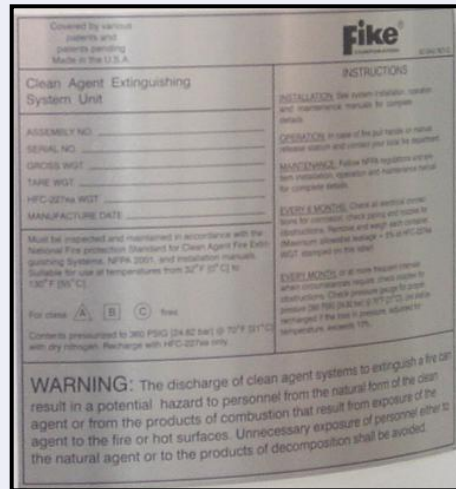
- FM200 and ECARO-25 software packages have been updated to include the Impulse Valve equivalent lengths as well as new container part numbers.
- Revised software packages will be available for free download on the Fike Technical Support Website.

Container Assemblies Include:

- 1) Shroud
- 2) Victaulic Coupling & Adaptor
- 3) 'Impulse' Valve
- 4) Switched Low Pressure Gauge
- 5) Information Label
- 6) Syphon (Dip) Tube



Information Label



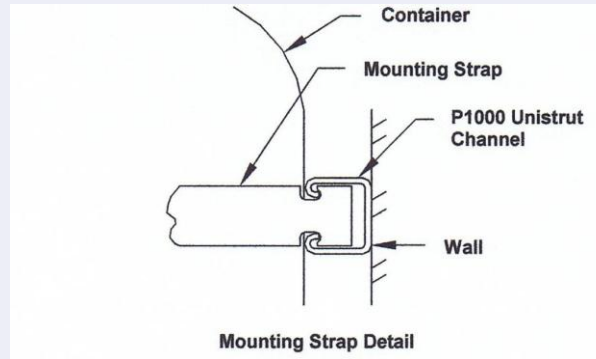
Markings:

- Assembly Number
- Serial Number
- Gross Weight
- Tare Weight
- Agent Weight
- Date of Fill

The valve assembly date and container date of manufacture are etched or stamped on the valve and the cylinder

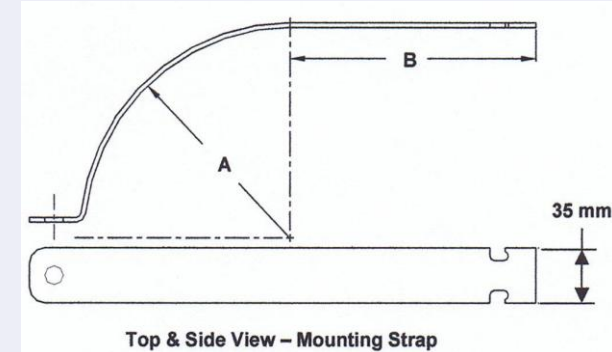
Container Accessories

(Mounting Brackets or Straps)



All cylinder sizes are supplied with only one set of straps

Mounting strap back-bar must be anchored to an appropriate load-bearing surface



Victaulic Coupling and Adaptor

	Baffle Plate Part Number	Victaulic Coupling Part Number	Victaulic Adaptor Part Number
25 mm Valve	70-1844	02-9964	70-1870
80 mm Valve	70-1754	02-1987	1-1350 (80-50mm)



Note:

A baffle plate is inserted into the Victaulic coupling as a safety measure during shipping. This plate **MUST** be removed prior to connection to the pipe network



The coupling and adaptor connect the container to the system piping
Coupling = 1000 psi working pressure and Buna "N" gasket

Switched Pressure Gauge



Part No: 02-12391

- IP65
- Contacts open at 18bar falling
- Hirschman connection
- Single pole contacts rated at 5-100mA
- Temperature Range -20°C to +50°C

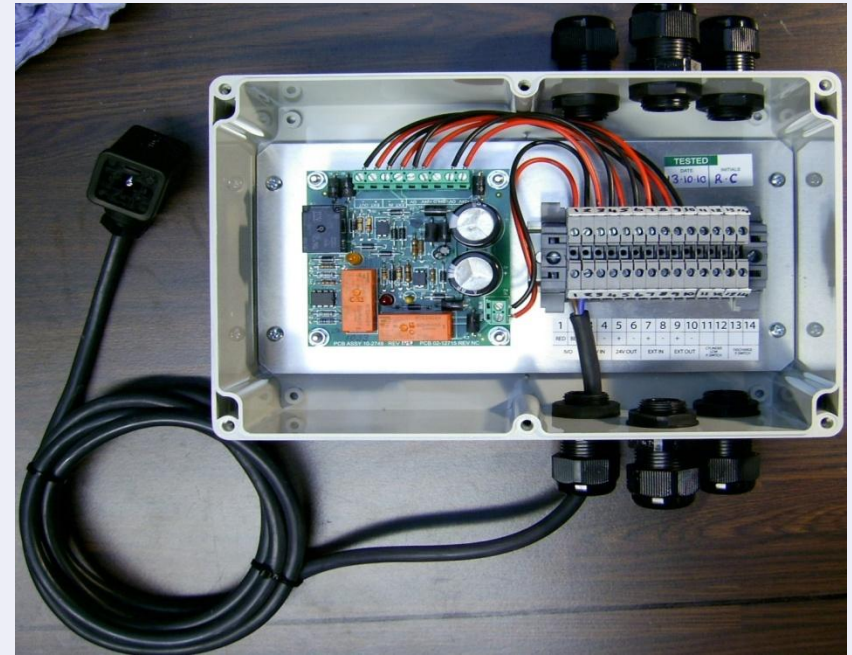
Optional Items for Containers

The following components are optional devices that do not come with the base HFC-227ea Container assemblies and must be ordered separately:

- Impulse Releasing Interface (IRI)
- Impulse Valve Operator (IVO)
- Impulse Valve Pneumatic Operator (IVPO)
- Discharge Pressure Switch



Impulse Releasing Interface (IRI)



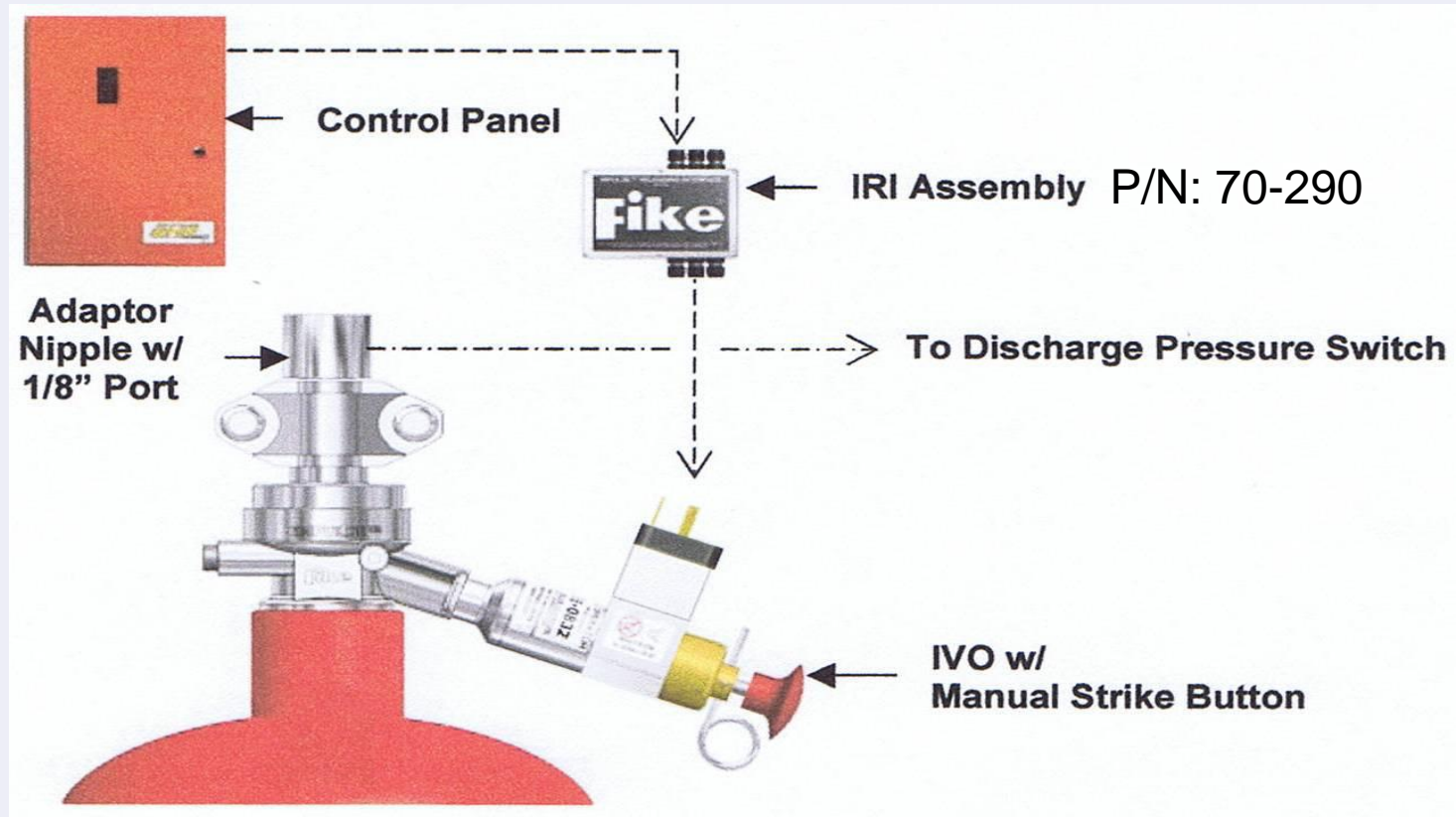
Allows connection of:

P/N: 70-290

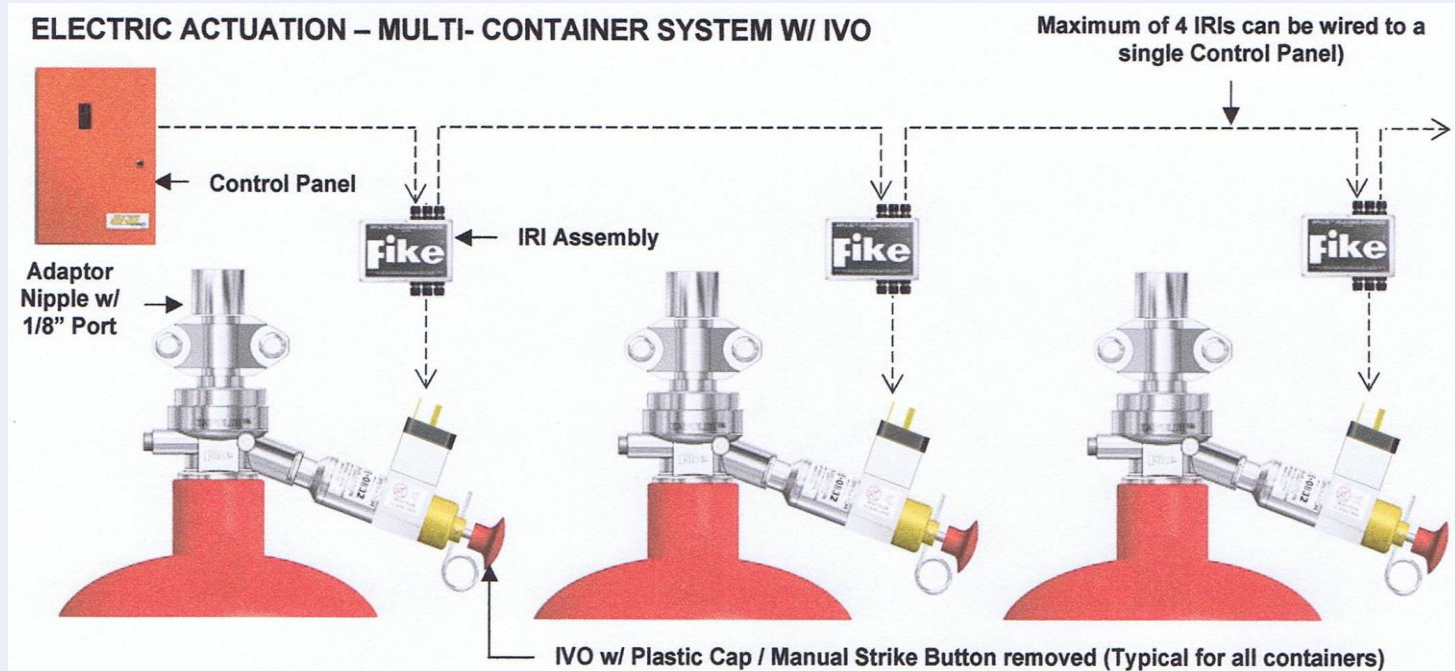
- Solenoid actuator
 - Low pressure switch
 - Discharge pressure switch
- through a single interface

Impulse Releasing Interface (IRI)

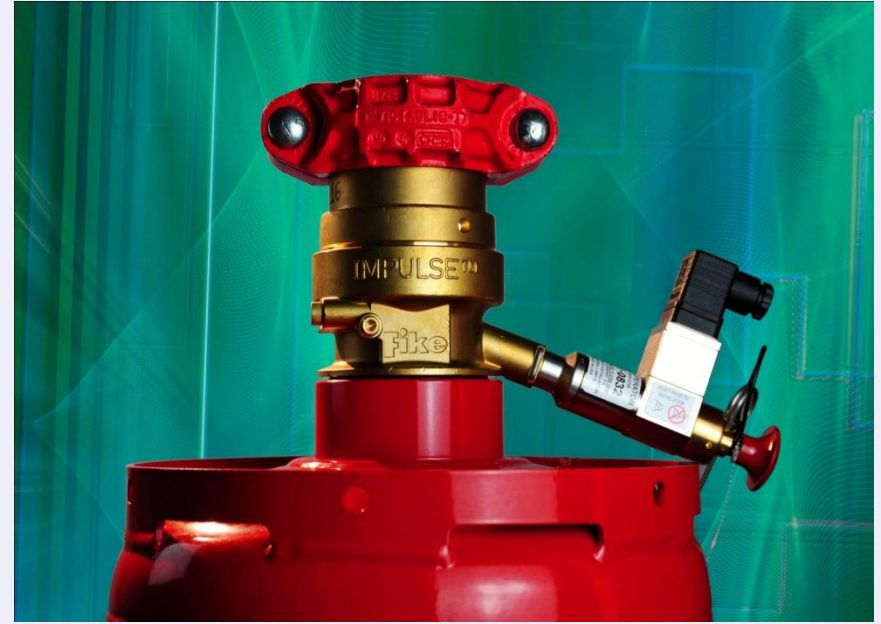
(Single Container Set-up)



Impulse Releasing Interface (IRI) (Multi-Container Set-up)



Impulse Valve Operator (IVO)



P/N: 02-12728

- IP65
- Temperature Range: -20°C to +50°C
- Latching
- Can be electronically or manually activated
- The IVO provides enough force to strike the actuation pin and open the rupture disc
- Will require reset tool (P/N 70-286) to reset solenoid

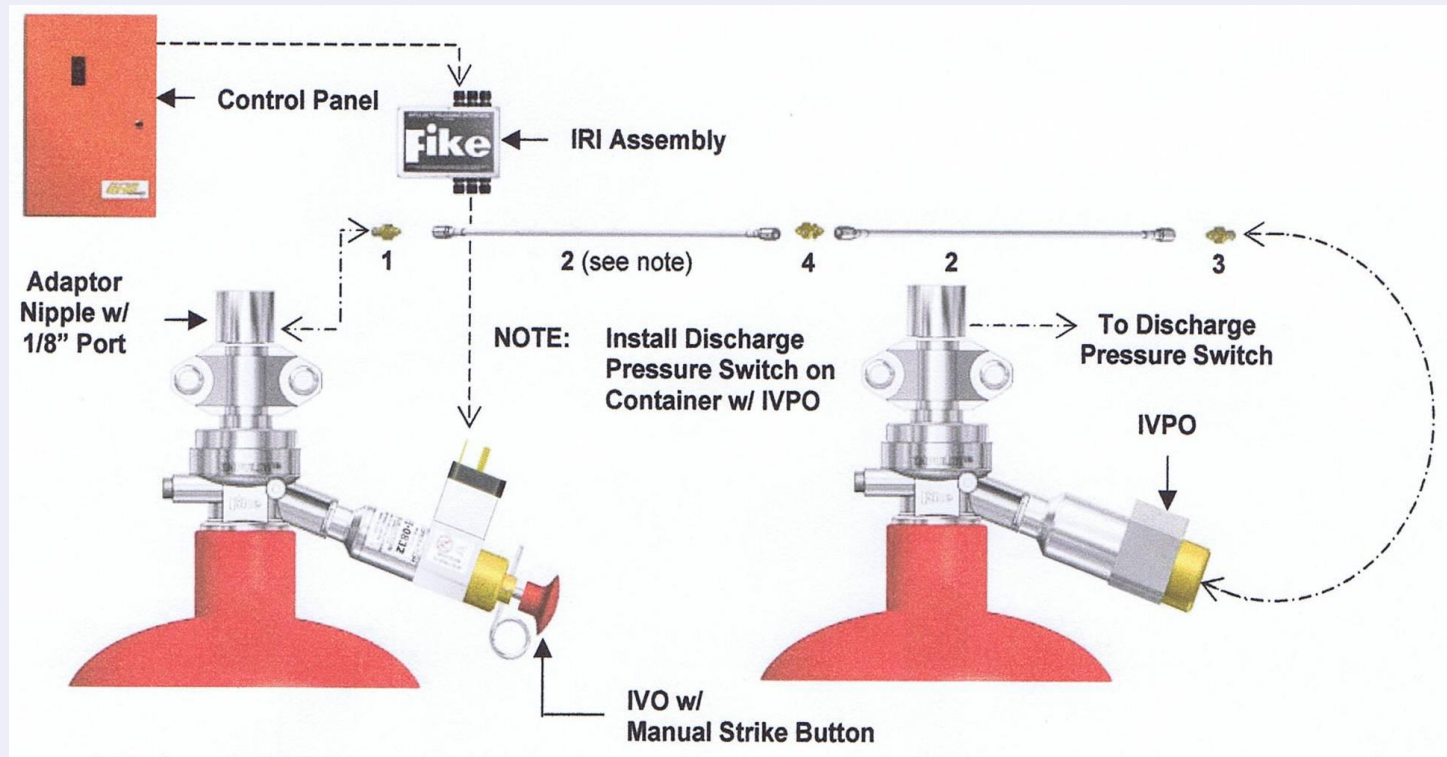
Impulse Valve Pneumatic Operator (IVPO)



P/N: 02-12729

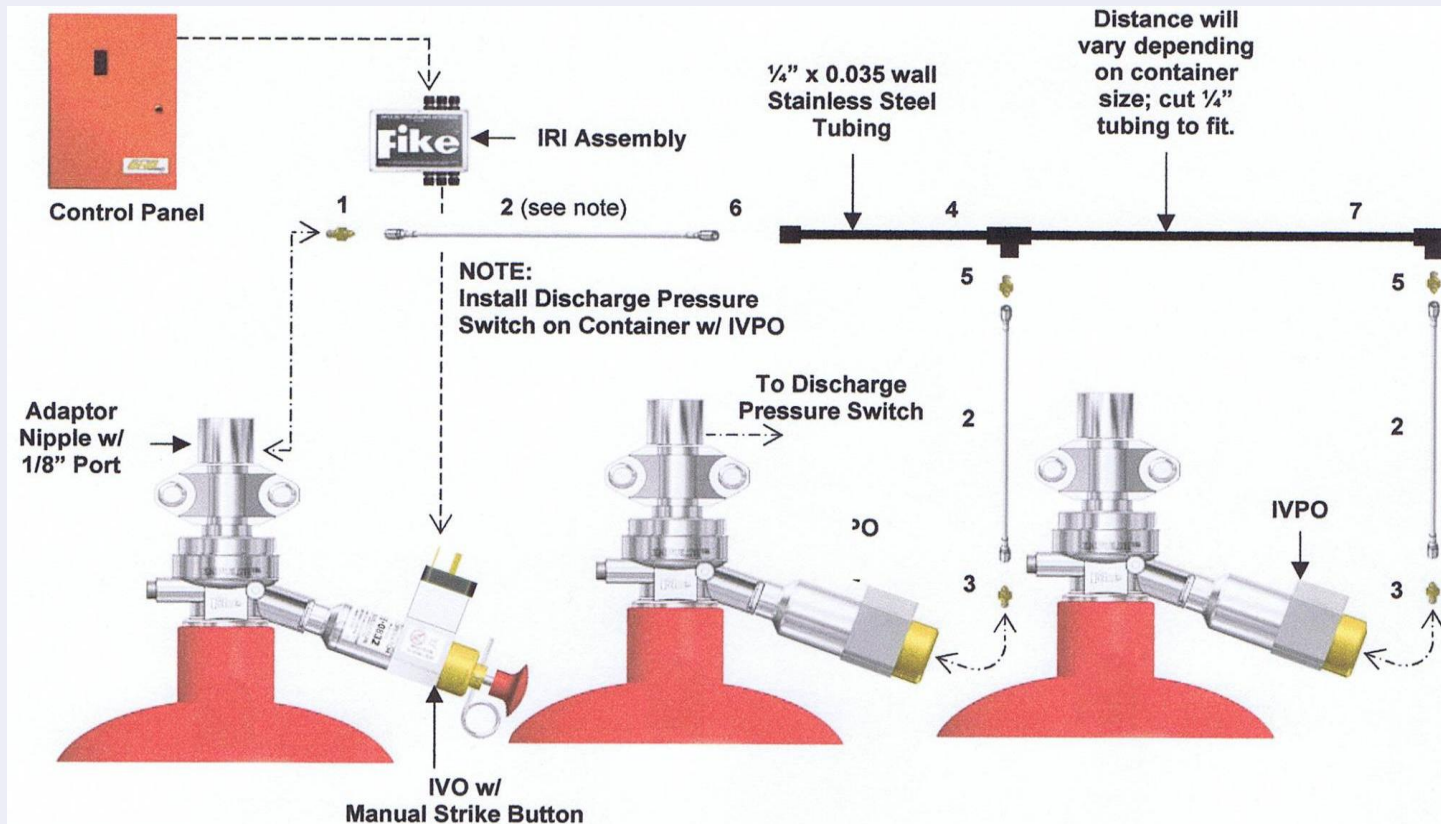
- 1/8" NPT Connection
- Temperature Range: -20°C to +50°C
- Latching
- Operating Pressure: 7 bar min 35 bar max
- The IVPO is pneumatically activated by the discharge pressure from the initial container discharge
- Will require reset tool (P/N 70-286) to reset pneumatic actuator

Impulse Valve Pneumatic Operator (IVPO) (Two Container System)



NOTE:
IRI and IVO are required to begin activation sequence.

Impulse Valve Pneumatic Operator (IVPO) (Multi-Container System)



NOTE:
IRI and IVO are required to begin activation sequence.

Discharge Pressure Switch



P/N: 02-9635

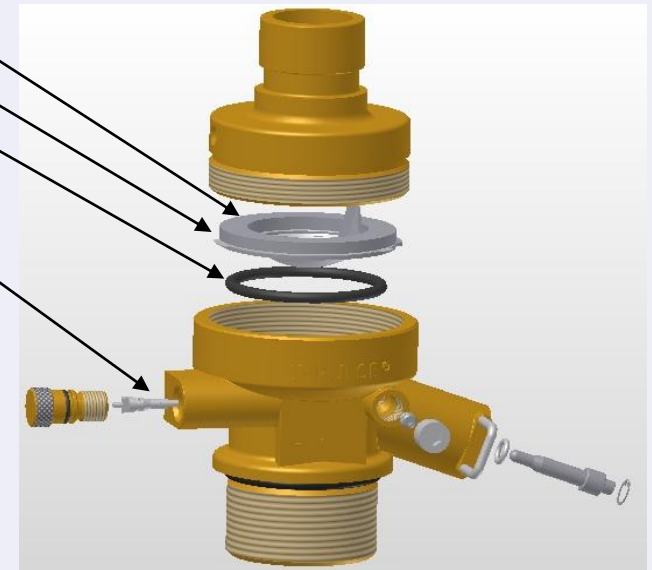
- IP65
- Pressure Setting 2 bar (increasing)
- Single pole, double throw, can be wired N/O or N/C
- Temperature Range 0°C to +54.4°C
- Used to confirm the discharge to the panel
- Latching design
- Supplied with connection hose
- Connects to the Victaulic adaptor

25mm Container Reload Kit

Item No.	Description	1" (25mm) Recharge Kit (p/n 85-047) includes the following:	3" (80mm) Recharge Kit (p/n 85-048) includes the following:
		Part Number	Part Number
1	Friction Ring	70-2060	70-2063
2	Disc Assembly	70-247	70-248
3	O-Ring	02-11987	02-11989
4	Valve Core-Fill Port	02-4161	02-4161

Fike HFC-227ea Containers can be recharged by following the procedures outlined in Fike's Container Recharge Manual

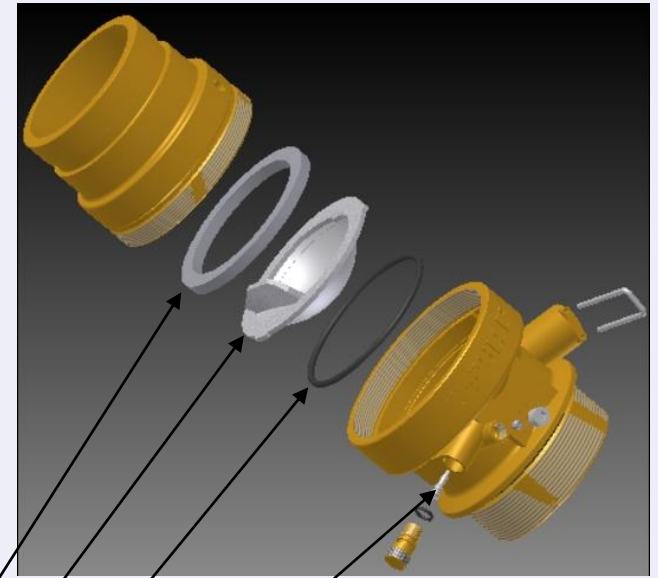
(Part Number: 06-290).



80mm Container Reload Kits

Fike HFC-227ea Containers can be recharged by following the procedures outlined in Fike's Container Recharge Manual

(Part Number: 06-290).



Item No.	Description	1" (25mm) Recharge Kit (p/n 85-047) includes the following:	3" (80mm) Recharge Kit (p/n 85-048) includes the following:
		Part Number	Part Number
1	Friction Ring	70-2060	70-2063
2	Disc Assembly	70-247	70-248
3	O-Ring	02-11987	02-11989
4	Valve Core-Fill Port	02-4161	02-4161

360 Engineered Discharge Nozzles



Engineered system discharge nozzles are available in seven sizes. Each has variable orifice hole diameters that are determined by the Fike HFC-227ea Flow Calculation Program.

Nozzle Size	Part Number	Drill Size	
		Minimum	Maximum
10mm	80-015-XXX	1.7mm	2.8mm
15mm	80-016-XXX	2.1mm	4.0mm
20mm	80-017-XXX	2.8mm	5.4mm
25mm	80-018-XXX	3.5mm	6.8mm
32mm	80-019-XXX	4.6mm	9.0mm
40mm	80-020-XXX	5.3mm	10.5mm
50mm	80-021-XXX	6.8mm	13.5mm

180 Engineered Discharge Nozzles

Engineered system discharge nozzles are available in seven sizes. Each has variable orifice hole diameters that are determined by the Fike HFC-227ea Flow Calculation Program.



Nozzle Size	Part Number	Drill Size	
		Minimum	Maximum
10mm	80-022-XXX	1.7mm	3.3mm
15mm	80-023-XXX	2.2mm	4.2mm
20mm	80-024-XXX	2.9mm	5.6mm
25mm	80-025-XXX	3.6mm	7.1mm
32mm	80-026-XXX	4.8mm	9.4mm
40mm	80-027-XXX	5.6mm	11.0mm
50mm	80-028-XXX	7.1mm	14.0mm



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VALVE TECHNOLOGY

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