



# **PROINERT®<sup>2</sup> AGENT STORAGE CYLINDERS FOR IG-55**

## DESCRIPTION

Fike ProInert Cylinders are offered in an 80 Liter size filled to a pressure of 200 or 300 bar. The cylinders may be utilized in single or multiple cylinder applications as needed and linked together through a common discharge manifold. Upon installation, the cylinders shall be secured using a suitable racking arrangement. Cylinders are shipped from the factory with a protective shipping cap. These caps should be stored in a suitable area for future use. Shipping caps must be in place while transporting or handling cylinders. The Agent Storage Cylinder is a steel pressure vessel designed to hold the IG-55 agent under pressure until it is discharged.

Refer to Fike ProInert Recharge/Refill Manual, P/N 06-312, for cylinder refill instructions and procedures.

#### **SPECIFICATIONS**

Cyilnder Size: Cylinder Dimensions (approximate):

Mounting Position: Cylinder Part Number

Cylinder – Pressurization Level:

Cylinder Storage Temperature Limitation:

Agent Capacity:

Cylinder Rating:

Cylinder Actuation Methods:

Cylinder Color: Tare Weight: Gross Weight:

### **APPROVALS**

- UL Listed
- FM Approved
- ULC Listed
- Conforms to TPED

80 Liter (water capacity) Height: 75 in (1910 mm) Width: 10.5 in (267 mm) Upright IG71-103-200-55 IG71-103-300-55 2900 psi at 60°F (200 bar at 15°C) 4351 psi at 60°F (300 bar at 15°C) -4°F to +120°F (-20°C to +48°C) for cylinder and all related items 572.3 ft<sup>3</sup> (16.2 m<sup>3</sup>) @ 200 bar 801.6 ft<sup>3</sup> (22.7 m<sup>3</sup>) @ 300 bar DOT 3AA3000 (US Department of Transportation) TC-3AAM (Transport Canada) EN ISO 9809-2 Electric – UVO (Input from Control Panel) Manual – Push button on UVO Pneumatic - Relay Actuator or Pneumatic Actuator Signal Red 244 lbs. (110.7 kg) approximate 200 bar: 294.5 lbs. (133.5 kg) approximate 300 bar: 315 lbs (142.8 kg) approximate



Data Sheet

Form No. C.1.55.01

## **DISCHARGE VALVE ASSEMBLY**

Each cylinder is fitted with a ProInert Discharge Valve Assembly. The Fike ProInert Valve Assembly is a pressure-regulating outlet valve designed to provide an outlet pressure of 645 psi (44.5 bar) and a free flow area of 12mm in diameter. Each valve is equipped with a safety relief disc that will rupture if the cylinder pressure exceeds the rating of the rupture disc. The rupture disc is set to relieve at below the test pressure of the cylinder.

Each valve is equipped with a combined pressure gauge and switch, providing visual pressure monitoring, as well as continuous cylinder pressure monitoring at the control panel.

**NOTE:** The Fike system does NOT require a pressure reducing orifice plate.



Cylinder with Discharge Outlet Valve

**WARNING**: Shipping Cap must be in place when moving, weighing or transporting a filled or empty cylinder. Failure to do so may result in injury and/or property damage.

The valve assembly is available in a 200 bar model (P/N IG71-001-2) and a 300 bar model (P/N IG71-001-1). The valve has a forged brass body. All threads comply with ANSI B2.1, ISO 7-1 & ISO 228-1. The valve meets the requirements of Fike's UL & FM approved.

ltem Number	Part Number	Description
	IG71-103-XXX-XXX	ProInert Cylinder Assembly
1	02-10631	Cylinder, 80 L with Agent
2	02-11723	Cylinder ID Label for 200 bar
	02-13724	Cylinder ID Label for 300 bar
3	IG71-001-2	ProInert Valve Assembly for 200 bar
	IG71-001-1	ProInert Valve Assembly for 300 bar
4	02-4829	Safety/Shipping Cap

## **ITEMS SUPPLIED WITH CYLINDER**

### NOTES:

 Fike nameplate provides the information that is specific to each cylinder: Assembly number of the cylinder, Weight information: tare, gross and agent and installation, operation and safety information.

All cylinders filled either by the factory or by an Approved Initial Fill Station are provided with a nameplate bearing the approval agency markings.

2) All cylinders do not have siphon tubes and can be mounted the upright or horizontal position.

### **ORDERING FORMAT FOR CYLINDER ASSEMBLY**

When placing an order for a cylinder assembly, you MUST specify the following in addition to the basic part number.

IG71 - 103 - XXX - XX Pressure Agent

Examples:

For a 80L Cylinder at 200 bar and IG-55 Agent P/N is IG71-200-55 For a 80L Cylinder at 300 bar and IG-55 Agent P/N is IG71-300-55



## **ORDERING INFORMATION**

The completer kit provides the means of operation for the cylinder and is required on each cylinder. There are 2 methods of operation available - Electric / Manual and Pneumatic for both 200 and 300 bar cylinders.

There are 6 options available: 3 for 200 bar systems and 3 for 300 bar systems.

<b>Option 1 - Completer Kit for Primary Cylinder with Electric - Manual Operation</b> Completer Kit - IG-55 and 200 bar PRIMARY ELECTRIC (P/N IG71-112-200-55-PE) Completer Kit - IG-55 and 300 bar PRIMARY ELECTRIC (P/N IG71-112-300-55-PE) Note: The following items are furnished with Completer Kit		
Description		
Pressure Gauge with Switch Assembly for 200 bar		
Pressure Gauge with Switch Assembly for 300 bar		
Discharge Hose Assembly		
Universal Valve Operator (UVO)		
Reset Tool		
Din Connector		
Actuation Hose		
- IG-55 and 200 bar PRIMARY ELECTRIC (P/N IG71-112-200-55-PP) - IG-55 and 300 bar PRIMARY ELECTRIC (P/N IG71-112-300-55-PP) owing items are furnished with Completer Kit		
Pressure Gauge with Switch Assembly for 200 bar		
Pressure Gauge with Switch Assembly for 300 bar		
Relay Actuator Assembly with Actuation Hose		
Discharge Hose Assembly		
<b>Option 3 - Completer Kit for Secondary Cylinder(s) with Pneumatic Operation</b> Completer Kit - IG-55 and 200 bar PRIMARY ELECTRIC (P/N IG71-112-200-55-SP) Completer Kit - IG-55 and 300 bar PRIMARY ELECTRIC (P/N IG71-112-300-55-SP) <b>Note:</b> The following items are furnished with Completer Kit		
Pressure gauge Assembly for 200 bar		
Pressure gauge Assembly for 300 bar		
Pneumatic Actuator Assembly with Actuation Hose		
Discharge Hose Assembly		

#### INSTALLATION

The following sections provide pictorial clarification and procedures for the correct installation and mounting positions of Fike ProInert cylinders and associated hardware.

Cylinders should be located in clean, dry and relatively vibration-free areas. Avoid aisles and other high traffic areas where physical damage or tampering is more likely. Cylinders should never be mounted where the cylinder could potentially be splashed with, or submerged in any liquid. Cylinder storage location must be within a temperature of  $-4^{\circ}F$  to  $+120^{\circ}F$  (-20°C to  $+48.9^{\circ}C$ ) for system components to function properly.

Cylinder brackets must be mounted securely to solid load-bearing surfaces that will support the cylinder load. Some installations may require additional mounting support not supplied by Fike.

Cylinders should be located to allow easy accessibility to the actuation package for manual release of the system. Manual release is achieved by removing the locking pin and pressing the red manual activation strike knob adjacent to the electric solenoid. This will pneumatically initiate the discharge sequence.

**WARNING:** The ProInert valve Pneumatic Actuator should always be the last component installed on any Fike ProInert system.

### PROCEDURE

- Step 1: Confirm the cylinder location and mount the cylinder rack and manifold support.
- Step 2: Position the cylinders in the racking. Do NOT remove the valve protection cap until the cylinders are fully mounted. The orientation of the valve outlet is indicated by a label on the cylinder neck. Generally discharge outlets will be to the right and at an angle of 30 degree to the wall.
- Step 3: Secure the cylinders and mount the manifold.
- Step 4: Fit the discharge hose assemblies to the manifold.
- Step 5: Install and test the discharge pipe network.
- Step 6: Remove the valve protection caps and valve outlet caps (retain for future use.)
- Step 7: Remove and retain the Pressure Gauge blanking plug.
- Step 8: Fully screw in the gauge and then unscrew it by a maximum of 1 turn to the correct orientation.
- Step 9: Remove and retain the plug from the valve actuation port.
- Step 10: For installation details for connecting the UVO, Relay Actuator, Pneumatic Actuator and pilot hoses to each cylinder valve refer to manual 06-625.Do NOT fit to the valves until the system is fully commissioned.



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