

# Prolnert<sup>®</sup> Agent Storage Cylinders for IG-55

## GASEOUS SUPPRESSION SYSTEM

### Product Overview

Fike Prolnert Cylinders are offered in an 80 Litre size and filled to a pressure of 200 or 300 bar. The cylinders may be utilised in single or multiple cylinder applications as needed and linked together through a common discharge manifold. The cylinder can be mounted in the upright or horizontal mounting position. Upon installation, the cylinders shall be secured using either cylinder straps or 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. A pressure gauge and actuator are included in the cylinder assembly, but are shipped separately.

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

Each Prolnert Valve Assembly includes a combined pressure gauge and switch device providing visual pressure indication and continuous cylinder pressure monitoring at the fire control panel.

The Agent Storage Cylinder is a steel pressure vessel designed to hold the IG-55 agent under pressure until it is discharged.



# DATA SHEET

FORM NO 04-03

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### APPROVALS

LPCB Certification Number 654a

ActivFire<sup>®</sup> Listed AFP1768

### CYLINDER DATA / SPECIFICATIONS

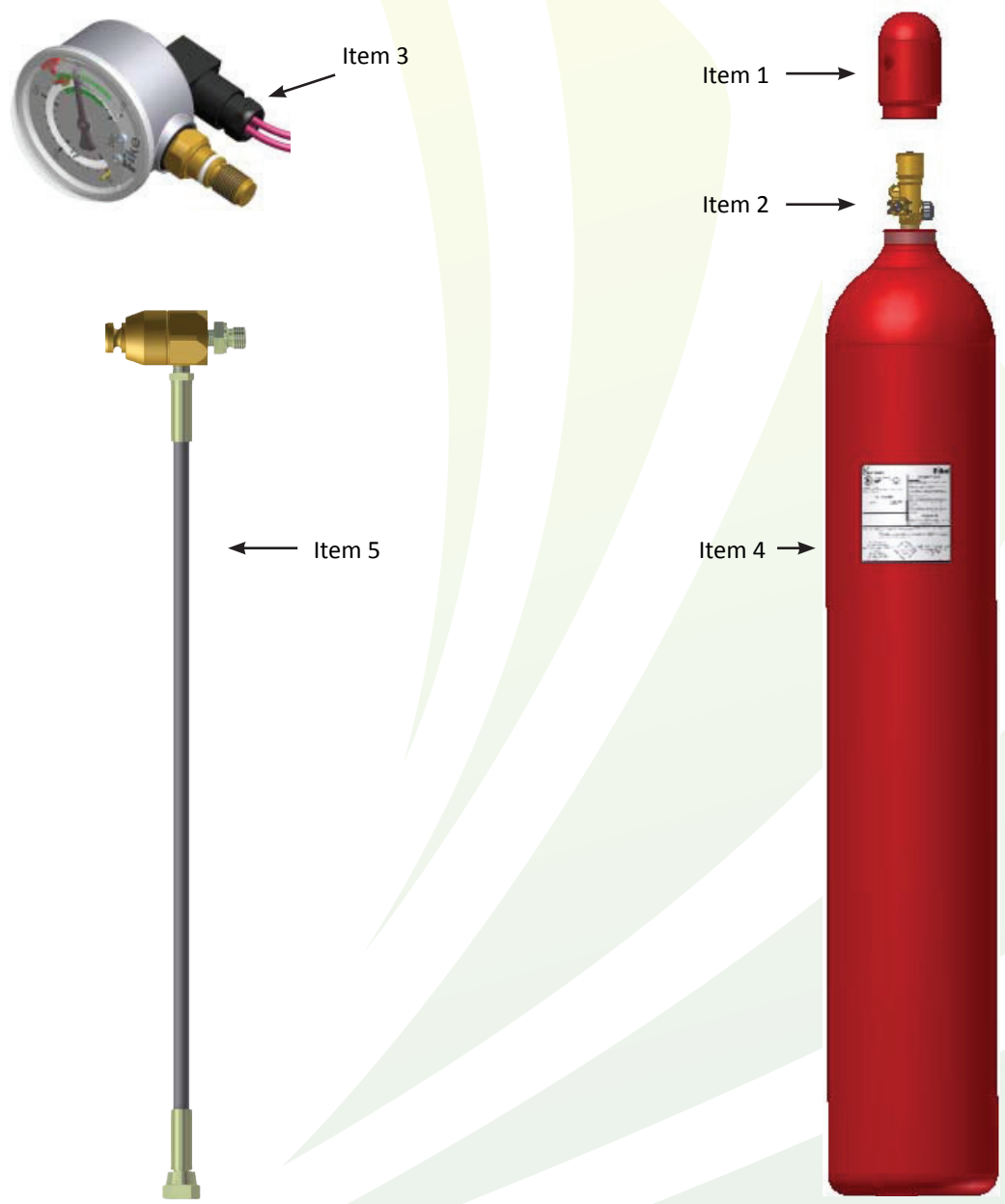
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|---|---|
| <b>Cylinder Size:</b>   | 80 Liter (water capacity)   |
| <b>Cylinder Dimensions:</b>   | Height: 1910 mm (75 in)<br>Width: 267 mm (10.5 in)  |
| <b>Mounting Position:</b>   | Upright   |
| <b>Cylinder Part Number:</b>  | IG71-080-200-55<br>IG71-080-300-55  |
| <b>Cylinder Pressurization Level:</b>                                   | -200 bar at 15°C<br>300 bar at 15°C   |
| <b>Temperature Limitation:<br/>(ISO 14520, EN 15004 &amp; EN 12094)</b> | -20°C (minimum)<br>50°C (maximum)   |
| <b>Agent Capacity:</b>  | 16.2 m3 (22.8 kg) @ 200 bar<br>22.7 m3 (32.1 kg) @ 300 bar  |
| <b>Cylinder Rating:</b>   | EN 1964-2   |
| <b>Cylinder Actuation Methods:</b>                                      | Electric/Pneumatic – Input from Actuator Package/Control Panel<br>Manual/Pneumatic – Input from Push Knob |
| <b>Cylinder Colour:</b>   | Signal Red  |
| <b>Tare Weight:</b>   | 136 kg (300 lbs.) approximate   |
| <b>Gross Weight:</b>  | 159 kg (350 lbs.) approximate   |

## ITEMS SUPPLIED WITH CYLINDER

| Item No. | Description                                      |
|----------|--|
| 1.       | Shipping Cap                                     |
| 2.       | ProInert Valve Assembly                          |
| 3.       | Pressure Gauge & Switch (shipped separately)     |
| 4.       | Nameplate (see note 1)                           |
| 5.       | Pneumatic Actuator Assembly (shipped separately) |

**NOTES:**

- 1) 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.



## Installation

The system installation must comply with the requirements of this manual; ISO 14520 or EN 15004 or NFPA 2001 and all applicable local codes, regulations, and standards; and the authority having jurisdiction (AHJ).

**WARNING:** “DO NOT” start system installation until the final design of the total system has been verified using Fike’s Engineered Flow Calculation.

**WARNING:** The Actuator should always be the last component installed on a Fike Clean Agent Fire Suppression system.

**SAFETY:** The system involves handling high pressure equipment. All installers must be fully trained by Fike and conversant with this manual.

Attention is drawn to the European Pressure Equipment Directive 97/23/EC. All pipe-work must be made using certified materials.

Do not locate any system components where they would be subject to physical damage, exposure to corrosive chemicals, or harsh weather conditions or fire.

## Agent Storage Cylinders

Make certain that each cylinder has been installed in the correct location. Each cylinder has a nameplate with an identifying part number. Check the cylinder part number against those listed on the system plans to verify their locations.

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 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 Solenoid Actuator should always be the last component installed on any Fike Prolnert system.

### Procedure:

1. Confirm the cylinder location and mount the cylinder back rack and manifold support.
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° to the wall.
3. Secure the cylinders and mount the manifold.
4. Fit the discharge hose assemblies to the manifold.
5. Install and test the discharge pipe-work.
6. Remove the valve protection caps and valve outlet caps (retain for future use.)
7. Remove and retain the Pressure Gauge blanking plug.
8. Fully screw in the gauge and then unscrew it by a maximum of 1 turn to the correct orientation.
9. Remove and retain the plug from the valve actuation port.
10. Connect the Solenoid Actuator and pilot hoses to each cylinder valve actuator. Do NOT fit actuators to the cylinder valves until the system is fully commissioned.