

# Kidde Engineered Fire Suppression System

Designed for use with 3M™ Novec™ 1230 Fire Protection Fluid



Effective: July 2013  
K-45-9043

## 600 lb. Cylinder Data Sheet

### FEATURES

- 3-inch Discharge Valve
- Optional Liquid Level Indicator
- Optional Low-Pressure Switch (P/N 06-118263-001)
- FM Approved
- UL Listed
- TC Approved

P/Ns: 45-100600-100 AND 45-100601-100

### DESCRIPTION

Kidde Engineered Fire Suppression System 600 lb. cylinders store 3M™ Novec™ 1230 Fire Protection Fluid super-pressurized with dry nitrogen to 360 PSIG at 70°F (2.48 Mpa at 21°C). The cylinders are painted red and are equipped with a 3-inch pressure differential valve, pressure gauge, optional liquid level indicator and optional low-pressure switch assembly. The safety burst disc is also located on the cylinder head.

### OPERATION

The agent storage container discharges when the actuation assembly operates, causing the pressure differential valve to open. All of the Kidde actuators may be used to actuate the 600 lb. cylinder. The only exception is the 48650001, which is not compatible with this cylinder valve.

### INSTALLATION

The container is installed in a vertical position with the valve assembly pointing up. Interconnection to discharge piping is 3-inch NPT. Interconnection can be via a 3-inch flex hose (P/N 06-118225-001) or via a suitably pressure rated groove style fitting.

The container is secured in place by a mounting bracket (P/N 294651), which must be fixed to a solid wall or strut assembly. After the container is securely mounted it is connected to discharge piping per the directions in the design manual.

An optional cylinder supervisory pressure switch (P/N 06-118262-001) can be installed on the cylinder valve in the field if required. This cylinder supervisory pressure switch has a 1/8-inch NPT connection, which is used on the 3-inch valve only. For cylinder valves manufactured prior to May 1, 2013, use supervisory pressure switch P/N 06-118263-001.

### ORDERING INFORMATION

The part number for ordering the Kidde Engineered System 600 lb. cylinder without liquid level indicator is 45-100600-001. The part number for ordering the Kidde Engineered System 600 lb. cylinder with liquid level indicator is 45-100601-001.



## MAINTENANCE

According to NFPA standards the following inspection and/or maintenance procedure must be scheduled as listed below and performed upon the occurrence of any event which might affect the reliability of the system.

### QUARTERLY INSPECTION

1. Check the pressure gauges of each agent storage container. If the pressure gauge indicates a loss in pressure of 10% or more, then it shall be recharged or replaced. Pressure varies with temperature, and this must be taken into account when checking the pressure gauge.
2. Check all components, including supporting hardware, and tighten, repair or replace as required.
3. Replace any component if at all in doubt of its ability to perform properly.

### SEMI-ANNUAL INSPECTION

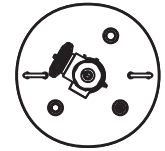
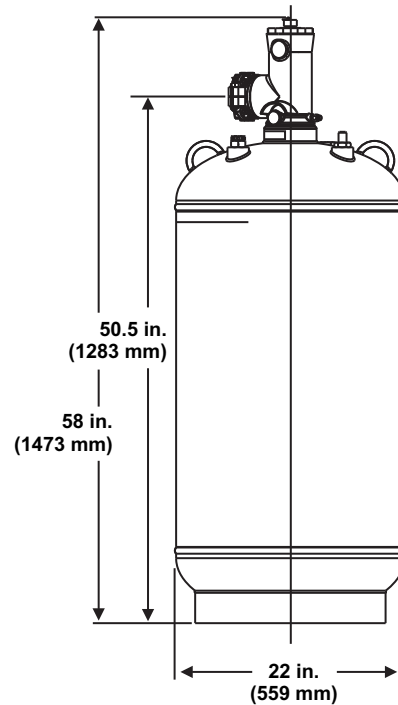
Qualified personnel are to determine the amount of agent in all containers. The optional liquid level indicator may be used to measure agent supply and compare it to the original net weight which is marked on the container label. If the measured net weight is less than 95% of the original charged weight the container should be recharged or replaced.

Inspect all piping, fittings and nozzles for looseness, dirt or other damage. All outlet piping must be clean and free of dirt, chips, fillings and other foreign material that may cause the system to become inoperative or ineffective at the time of discharge.

### SPECIFICATIONS

Fill Range	258-600 lb. (117-272 kg)
Height	58 in. (1478 mm)
Diameter	22 in. (559 mm)
Internal Volume	8.68 ft. <sup>3</sup> (0.246 m <sup>3</sup> )
Empty Weight	362 lb. (164 kg)
Temperature Range	0°F to 130°F (-18°C to 54°C)
Safety Relief Burst Range	800 to 975 PSIG (5.5 to 6.7 Mpa)
Construction Specification	DOT 4BW-500

## DIMENSIONS



VALVE ORIENTATION  
PLAN VIEW



SAFETY BURST  
DISC ASSEMBLY

## ACCESSORIES

Description	Part Number
3-inch stainless steel flexible hose	06-118225-001
3-inch swing check valve	06-118058-001
Cylinder bracket	WK-294651-000
Cylinder supervisory pressure switch	06-118262-001*

\*For cylinder valves manufactured prior to May 1, 2013 use supervisory pressure switch P/N: 06-118263-001.

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