

# Kidde Fire Suppression System Component Description

## 108 cu. inch Nitrogen Pilot Cylinder and Bracket

Effective: August 2016

K-85-5051

### FEATURES

- **Safety: Safety Burst Disc Assembly**
- **Actuation Port Safety Cap**
- **RoHS Compliant**
- **Pressure Gauge**
- **Quick Disconnect Bracket**
- **See Compatibility Table for Corresponding Manual P/N**

### DESCRIPTION

The Kidde Fire Suppression Systems 108 cu. in. capacity Nitrogen Pilot Cylinder is factory charged to 1800 PSIG (124 bar) with dry nitrogen and is designed for use as a pilot cylinder. The cylinder valve is a 5/8-inch bore design and is fitted with a contents pressure gauge. The valve is designed to accept the full range of Kidde Systems control heads (excluding the stackable electric control head, P/N 81-486500-010).

### OPERATION

Either electrical, pneumatic, pressure or mechanical inputs may operate the 108 cu in cylinder. The suite of Kidde Systems control heads can provide these inputs, again excluding control head part number 81-486500-010.

### INSTALLATION



**Nitrogen cylinders must not be moved unless the discharge and control heads have been removed and the protection caps are installed. Failure to do so could result in inadvertent discharge which could cause serious bodily injury, death or property damage.**

The 108 cuin cylinder is fitted to a wall bracket attached to an appropriate mounting location. Rotate the cylinder to the correct orientation before completely tightening the bracket. Upon securing the cylinder, attach the appropriate control head style. Ensure the cylinder pressure gauge remains sufficiently visible to facilitate periodic inspection requirements.

Remove the supplied pipe plug and attach a suitable 1/8-in. NPT fitting to the cylinder outlet port. Kidde Fire Systems provides 1/8-in. x 5/16-in. flare connections (see accessories table). Either tubing or 1/4-in. flexible actuation hoses may be attached to these connections. Refer to the applicable Kidde design manual for allowable tubing material, diameters and lengths. Fittings should be rated for a maximum working pressure of no less than 3000 PSI (207 bar). Refer to the Electrical Contact table for additional information.



### MAINTENANCE

The pressure of the nitrogen cylinder should be checked daily, and the cylinder should be visually inspected during periodic maintenance. The cylinder should be hydro-tested (or be subject to a full external visual inspection) every five years in accordance with DOT CFR 49 and CGA (Compressed Gas Association) Pamphlet C-6.

**DIMENSIONS**

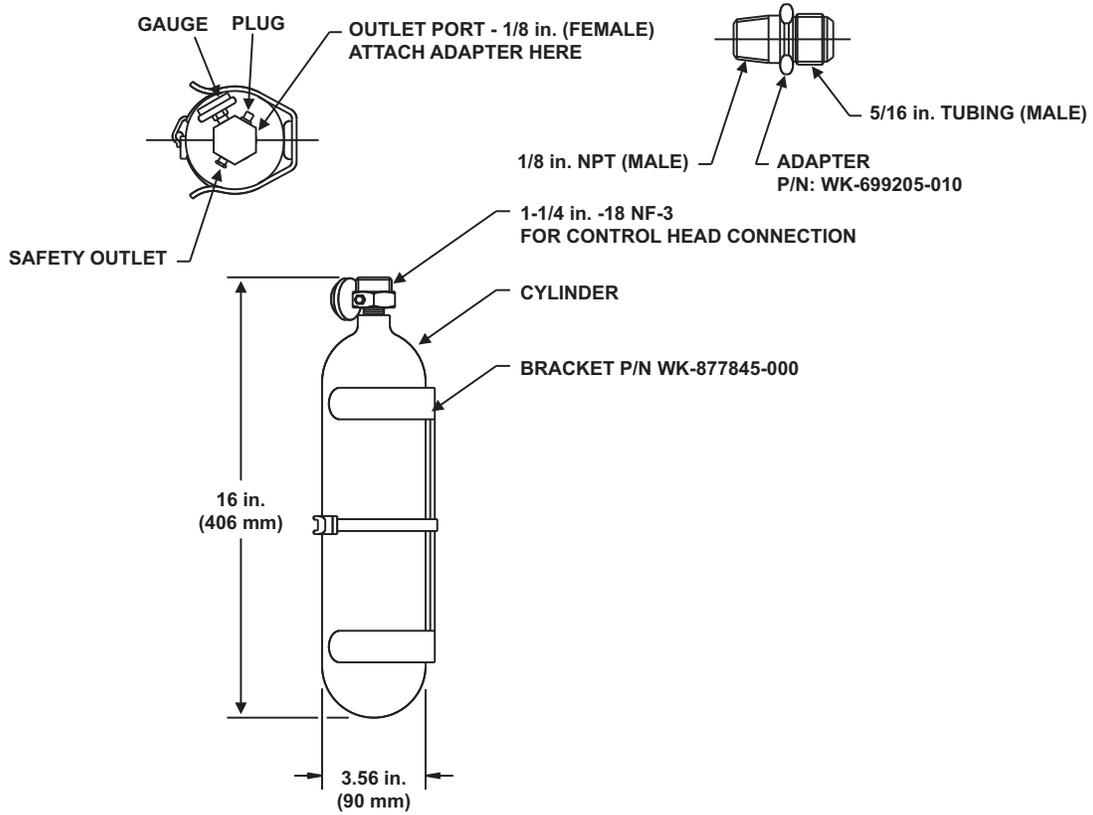


Figure 1. 108 cu. in. Nitrogen Pilot Cylinder

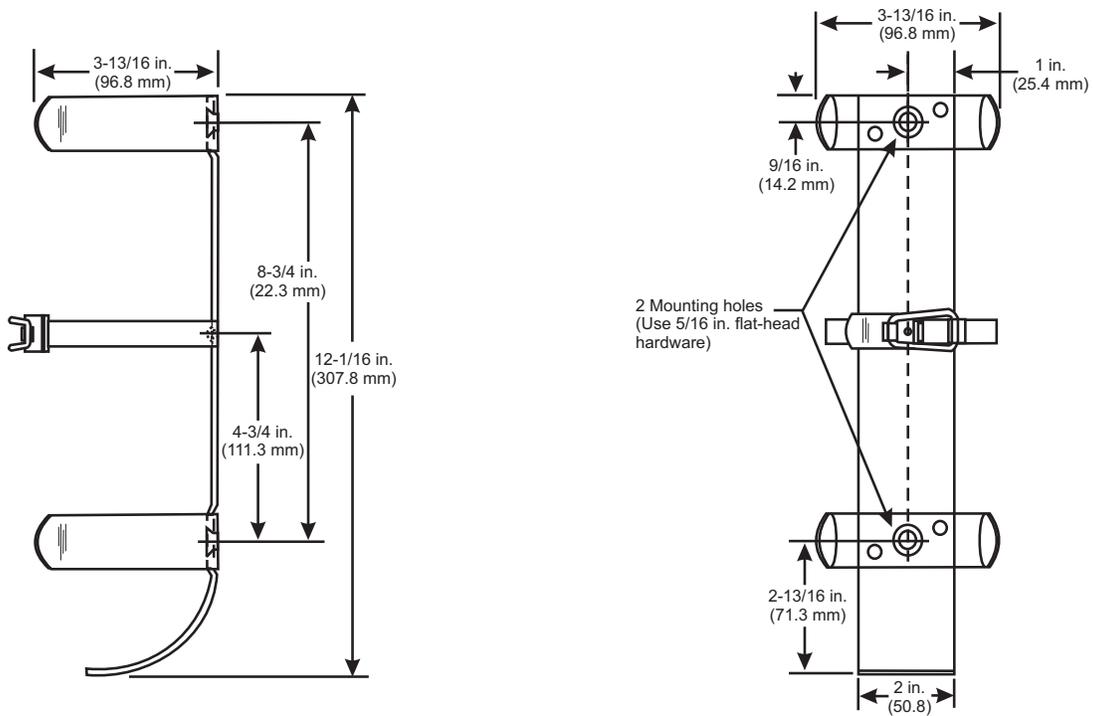


Figure 2. 108 cu. in. Nitrogen Pilot Cylinder Bracket

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## **SPECIFICATIONS**

**Charge Pressure:** 1800 PSIG @ 70°F  
(124 bar @ 21°C)

**Contents:** Nitrogen (BB-n-411 Grade A, Type I)

**Safety Relief:** Bust Disc 2650-3000 PSI (183-207 BAR) at 70F (20C)

**Cylinder Volume:** 108 cu. in. (1.77 L)

**Empty Weight:** 5.57 lb. (2.53 kg)

**Charged Weight:** 6.80 lb. (3.10 kg)

**Bracket Weight:** 1.50 lb. (0.68 kg)

**Cylinder Type:** Seamless, DOT3AA-1800

**Cylinder Finish:** Black, Painted

**Materials:**

- Valve–** Forged Brass
- Siphon Tube–** None Fitted
- Cylinder–** Chrome, Moly Steel
- Bracket–** Steel, Stainless Steel

**Operating Temperature Range:** -40°F to 130°F  
(-40°C to 54°C)

**Height (including protection cap):** 16 in. (406 mm)

**Transport Information:** Class 2.2, I.D.#UN1066

## **ORDERING INFORMATION**

<b>Part Number</b>	<b>Factory Charged</b>	<b>Comments</b>
WK-877940-000	Yes	Standard Pressure Gauge Only
WK-877940-001	No	Standard Pressure Gauge Only
WK-877940-200	Yes	Fitted with En-Gauge
06-129773-001	Yes	Fitted with NC Pressure Switch
06-129773-002	Yes	Fitted with NO Pressure Switch
06-129773-003	No	Fitted with NC Pressure Switch
06-129773-004	No	Fitted with NO Pressure Switch

## ACCESSORIES

Part Number	Description	Comments
WK-877845-000	Mounting Bracket, Nitrogen Pilot Cylinder	Steel Material
WK-699205-010	Male Connector, 5/6-in. Flare x 1/8-in. NPT	See Data Sheet K-90-5040
WK-699205-030	Male Elbow, 5/16-in. Flare x 1/8-in. NPT	See Data Sheet K-90-5040
WK-699205-050	Male Branch Tee, 5/16-in. Flare x 1/8-in. NPT	See Data Sheet K-90-5040
WK-264987-000	Actuation Hose, 22-in.	See Data Sheet K-90-5070
WK-264986-000	Actuation Hose, 30-in.	See Data Sheet K-90-5070
WK-264985-000	Check Valve, 1/4-in.	See Data Sheet K-90-5090
WK-933537-000	Adapter, Recharging	See Data Sheet K-90-9110

## ELECTRICAL CONTACT INFORMATION

Cylinder Assembly Part Number	Contact Status		Set Point PSIG	Dead Band PSIG	Comments
	Ambient	1800 PSI			
WK-877940-200	-	-	-	-	See Data Sheet K-90-116
06-129773-001	Closed	Open	1350 +/- 50	200 Max	48 Inch x 18 AWG Stranded Leads
06-129773-002	Open	Closed	1350 +/- 50	200 Max	48 Inch x 18 AWG Stranded Leads
06-129773-003	Closed	Open	1350 +/- 50	200 Max	48 Inch x 18 AWG Stranded Leads
06-129773-004	Open	Closed	1350 +/- 50	200 Max	48 Inch x 18 AWG Stranded Leads

## COMPATIBILITY

Series	For Use With	Land DIOM Manual P/N	Marine DIOM Manual P/N
Kidde ECS with HFC-227ea Agent	X	06-236115-001	06-236225-001
Kidde Advanced Delivery with FM-200® Agent	X	06-235068-001	06-236595-001
Kidde ECS with 3M™ Novec™ 1230 Fire Protection Fluid	X	06-236553-001	06-236559-001
Kidde Advanced Delivery with 3M™ Novec™ 1230 Fire Protection Fluid	X	06-237256-001	06-237257-001

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Classification: EAR99

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