

1040 cu. in. Nitrogen Pilot Cylinder

FEATURES

- **Contents Pressure Gauge**
- **For Use with Plain or Grooved Nut Discharge Heads**
- **Used as a Pilot Cylinder, Can Actuate Up to 15 Agent Cylinders or 8 Second-Stage Cylinders**
- **Used as a Second-Stage Cylinder, Can Actuate Up to 15 Agent Cylinders**
- **Used as a Siren Driver, Can Operate Up to 4 Nitrogen Operated Sirens**
- **Safety: Valve Protection Cap, Safety Burst Disc Assembly, Actuation Port Safety Cap**
- **RoHS Compliant**

DESCRIPTION

The Kidde Fire Systems 1040 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 or siren driver 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 Fire Systems control heads (excluding the stackable electric control head, P/N 82-486500-010) and either the plain nut discharge head (P/N WK-872450-000) or the grooved nut discharge head (P/N 81-872442-000). The valve also contains a schrader port allowing installation of pressure supervisory switch P/N 85-111540-001 or 85-111540-100 (ATEX).

The cylinder is supplied with two additional labels that can be applied to the main cylinder label to indicate its function in a system. The first optional 'add-on' label is applied when the cylinder is being used in a two-stage actuation system, the second optional label is applied when the cylinder is being used as a siren driver.

OPERATION

When used as a primary (single- or first-stage) pilot cylinder or as a siren driver, the 1040 cu. in. cylinder is operated by either a control head or by manifold pressure via a plain nut discharge head. It is common for the control head release action to be achieved remotely by a control panel, a cable pull handle or pilot cylinder. When used as second-stage pilot cylinder the 1040 cu. in. cylinder is operated by a pressure operated control head (P/N 82-878737-000).

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.



Each 1040 cu. in. cylinder assembly is installed using two straps installed at the specified heights. Rotate the cylinder to the correct orientation before completely tightening the bracket or connecting the control head or discharge nut (which should already be attached to the system piping); the cylinder contents gauge should be facing outwards. If the cylinder is being used as a siren driver or second-stage pilot cylinder, the appropriate 'add-on' label should be affixed to the dotted area on the main cylinder label (P/N 06-231866-501).

Use 3/4-inch discharge hoses (P/N 06-118207-001 [18.00-in. length] or P/N 06-118207-002 [14.75-in. length]) to connect the discharge head to discharge (siren effluent) piping/tubing. The piping to the discharge sirens should be either 1/4-in. schedule 40/80 stainless steel pipe or 5/16-in. x 0.032-in. wall tubing. Fittings should be rated for a maximum working pressure of no less than 3000 PSI (207 bar).

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

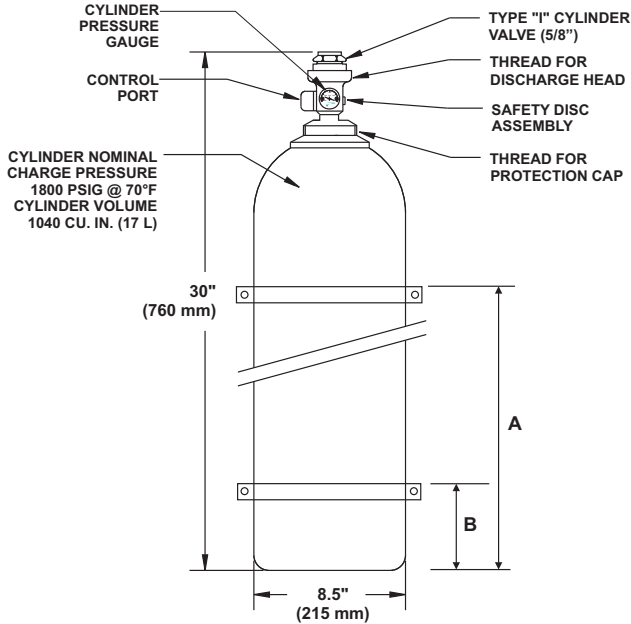


Figure 1. 1040 cu. in. Nitrogen Pilot Cylinder

ORDERING INFORMATION

Part Number	Description
85-101040-001	1040 cu. in. Nitrogen Cylinder
85-111540-001	Supervisory Pressure Switch (Form C 1540-psig falling) for Nitrogen Cylinders with Clean Agent Systems
85-111540-100	ATEX Supervisory Pressure Switch (Form C 1540-psig falling) for Nitrogen Cylinders with Clean Agent Systems
81-111350-001	Supervisory Pressure Switch (Form C 1350-psig falling) for Nitrogen Cylinders with Carbon Dioxide Systems
81-111350-100	ATEX Supervisory Pressure Switch (Form C 1350-psig falling) for Nitrogen Cylinders with Carbon Dioxide Systems

SPECIFICATIONS

Charge Pressure:	1800 PSIG @ 70°F (124 bar @ 21°C)
Cylinder Volume:	1040 cu. in. (17 L)
Charged Weight:	64.5 lb. (29.3 kg)
Charge Weight:	5.7 lb. (2.6 kg)
Cylinder Type:	Seamless, DOT3AA-2015
Cylinder Finish:	Black, Painted
Materials:	
Valve–	Forged Brass
Siphon Tube–	None Fitted
Cylinder–	Chrome, Moly Steel
Operating Temperature Range:	30°F to 130°F (0°C to 54°C)
Height (including protection cap):	40.2 in. (1020 mm)
Transport Information:	Class 2.2, I.D.#UN1066

Table 1: 1040 cu. in. Nitrogen Pilot Cylinder Mounting Dimensions

A		B		C	
in	mm	in	mm	in	mm
21 to 22	533 to 559	6 to 8	152 to 203	10.4	263

COMPATIBILITY

Series	DIOM P/N	Approvals
ECS-500™ Marine System	06-237589-001	UL, USCG
ECS™ 360 Marine with 3M™ Novec™ 1230 Fire Protection Fluid	06-236559-001	UL, USCG
ADS™ Marine with 3M™ Novec™ 1230 Fire Protection Fluid	06-237257-001	UL, USCG
ECS™ 360 Marine with HFC-227ea System	06-236225-001	UL, USCG
ADS™ Marine with HFC-227ea System	06-236595-001	UL, USCG
High Pressure CO2 Marine System	220610	UL, USCG

EXPORT INFORMATION (USA)

Jurisdiction: EAR

Classification: EAR99

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