

**Pressure Switch**  
**P/N 87-300040-001**

IM10-KIDDE2-01




## Installation and Maintenance Instructions

*Please read all instructional literature carefully and thoroughly before starting. Refer to the final page for the listing of Recommended Practices, Liabilities and Warranties.*

### GENERAL

The Kidde-Fenwal pressure switch utilizes a diaphragm sensor to detect a pressure change. The response, at a predetermined set point, actuates a SPDT snap-acting switch, converting a pressure signal into an electrical signal.

 **PROOF PRESSURE\*** LIMITS STATED ON NAMEPLATE MUST NEVER BE EXCEEDED, EVEN BY SURGES IN THE SYSTEM. OCCASIONAL OPERATION OF UNIT UP TO PROOF PRESSURE IS ACCEPTABLE (E.G., START-UP, TESTING). CONTINUOUS OPERATION SHOULD NOT EXCEED THE DESIGNATED OVER RANGE PRESSURE.\*\*

\* Proof Pressure - the maximum pressure to which a pressure sensor may be occasionally subjected, which causes no permanent damage (e.g., start-up, testing).

\*\* Over Range Pressure - the maximum pressure to which a pressure sensor may be continuously subjected without causing damage and maintaining set point repeatability.




THESE PRODUCTS DO NOT HAVE ANY FIELD REPLACEABLE PARTS.


## Part I - Installation

### Tools Needed

1-1/16" open-end wrench  
7/16" open-end wrench for valve fitting

### MOUNTING

 ALWAYS LOCATE UNITS WHERE SHOCK, VIBRATION AND AMBIENT TEMPERATURE FLUCTUATIONS ARE MINIMAL. DO NOT MOUNT IN AMBIENT TEMPERATURE AREAS EXCEEDING 180°F. IF SEVERE PRESSURE SURGES ARE EXPECTED, CONSIDER THE USE OF A PRESSURE SNUBBER.

 MOUNT USING PRESSURE CONNECTION: ALWAYS USE A WRENCH ON PRESSURE CONNECTION WRENCH FLATS. UNIT MAY BE MOUNTED IN ANY POSITION. HOWEVER, IF INSTALLATION LOCATION RESULTS IN FREQUENT EXPOSURE TO LIQUID IT IS RECOMMENDED THAT THE UNIT BE MOUNTED VERTICALLY WITH THE PRESSURE CONNECTION DOWN.

### WIRING



DISCONNECT ALL SUPPLY CIRCUITS BEFORE WIRING UNIT. ELECTRICAL RATINGS STATED IN LITERATURE AND NAMEPLATES MUST NOT BE EXCEEDED— OVERLOAD ON A SWITCH CAN CAUSE FAILURE ON THE FIRST CYCLE.



WIRE IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODES.

Color coding:

#### **Wire Color**

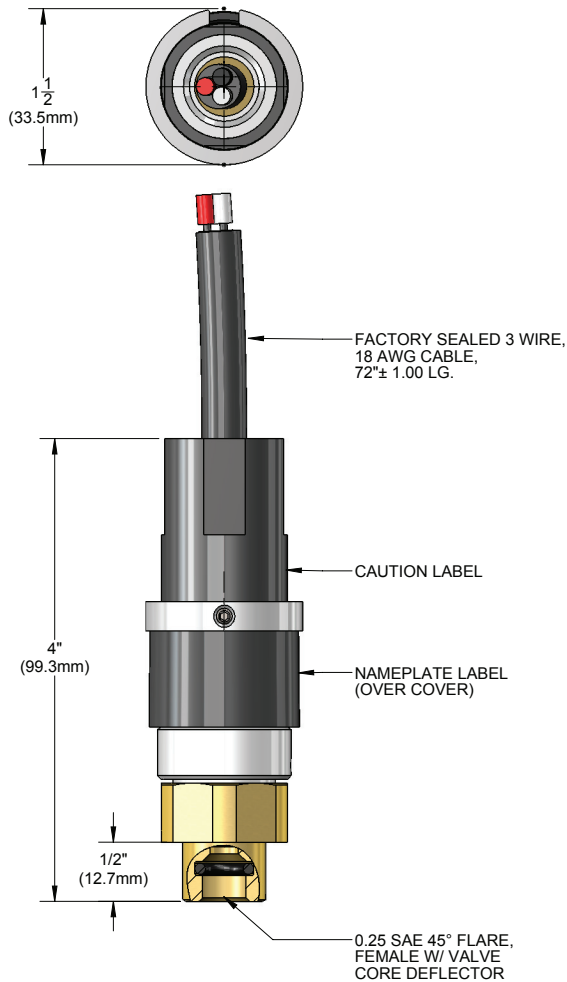
Red  
Black  
White

#### **Terminals**

N.O. (N.C. Under Pressure)  
N.C. (N.O. Under Pressure)  
COM

For further details on installation, refer to Design Installation, Operations and Maintenance manuals.

# Dimensions



## RECOMMENDED PRACTICES AND WARNINGS

Kidde-Fenwal recommends careful consideration of the following factors when specifying and installing Kidde-Fenwal pressure units. Before installing a unit, the Installation and Maintenance instructions provided with unit must be read and understood.

- To avoid damaging unit, proof pressure limits stated in literature and on nameplates must never be exceeded, even by surges in the system. Operation of the unit up to maximum pressure is acceptable on a limited basis (e.g., start-up, testing) but continuous operation must be restricted to the designated adjustable range. Excessive cycling at maximum pressure limits could reduce sensor life.
- Install unit where shock, vibration and ambient temperature fluctuations will not damage unit or affect operation. When applicable, orient unit so that moisture does not enter the enclosure via the electrical connection. When appropriate, this entry point should be sealed to prevent moisture entry.
- Unit must not be altered or modified after shipment.
- Monitor operation to observe warning signs of possible damage to unit, such as drift in set point. Check unit immediately.
- Preventative maintenance and periodic testing is necessary for critical applications where damage could endanger property or personnel.
- Electrical ratings stated in literature and on nameplate must not be exceeded. Overload on a switch can cause damage, even on the first cycle. Wire unit according to local and national electrical codes, using wire size recommended in installation sheet.
- Do not mount unit in ambient temp. exceeding published limits.



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