

Eclipse BoostPak

Packaged Gas Booster Systems

Recommended Specification Leak Detection Option

Version 3

PART 1 - GENERAL

1.1. DESCRIPTION

1.1.1. SCOPE

This specification supplements the unit packaged gas booster system specification. The numbering indicates where each paragraph corresponds to and becomes a part of the main BoostPak specification.

1.1.2. GENERAL REQUIREMENTS

The Eclipse Leak Detection kit option is to be installed when the BoostPak is located in an enclosed space where the presence of combustible gases shall be monitored.

1.1.3. TYPE

The Eclipse Leak Detection kit shall contain the components parts to be field installed on-site. All components shall conform to the specifications of Part 2 of this document. The system shall include the gas leak sensor to monitor the presence of combustible gases, the annunciation control panel to alert personnel about the safety of the equipment room, and the safety shut-off valve to stop the gas supply.

1.3. ENVIRONMENTAL CONDITIONS

1.3.1. LOCATION

The leak detector specified in this section shall be located in an enclosed ventilated area that is normally non-hazardous but could become hazardous under abnormal events for a short period until the situation is corrected. The safety shut off valve specified in this section will be located in an enclosed ventilated area that is considered non-hazardous. The leak detection annunciation panel specified in this section will be located in an enclosed ventilated area that is considered non-hazardous.

PART 2 - PRODUCTS

2.1. TYPE

The leak detection system shall be standard catalog item series 630-LD as manufactured by Eclipse and indicated on the table below. The required maximum flow rate at ¼" w.c. pressure drop shall be within the range of the below selected kit.

{select one:}

Leak Detection Kit Number	Gas Capacity at ¼" w.c. pressure drop (cfh natural gas)	Pipe Connection Size (inches)
10016532-1	700	1 NPT
10016532-2	1,500	1½ NPT
10016532-3	1,750	2 NPT
10016532-4	3,500	3 flanged
10016532-5	27,000	4 flanged
10016532-6	50,000	6 flanged

2.2. EQUIPMENT

2.2.1. LEAK DETECTOR

The sensor shall be mounted within the equipment room and shall have two adjustable alarm settings. The first alarm shall be factory set to 25%LEL (lower explosive limit) and the second shall be set to 50%LEL. The second alarm shall cause the safety shut off valve to close. Outputs for both alarms shall be provided for customer use as needed to operate remote alarms, wired to shut down the BoostPak, or to turn on a ventilation fan.

2.2.2. SAFETY VALVE

The safety shut off valve shall be piped into the gas inlet inside the building and upstream of the BoostPak system.

2.2.3. ANNUNCIATION CONTROL PANEL

The annunciation control panel shall be a complete unit factory built to provide safe, proper automatic operation of the gas leak detection system. The control system shall be a standard cataloged item that has been particularly designed for the booster system. The annunciation control panel shall be mounted near the door of the equipment room containing the BoostPak system. Lights and switches on this panel shall allow an operator to control the safety shut off valve and observe if the room is safe to enter. Primary and control voltage shall be 115/1/60. The enclosure shall be rated for the environmental conditions and have UL and CSA listing.