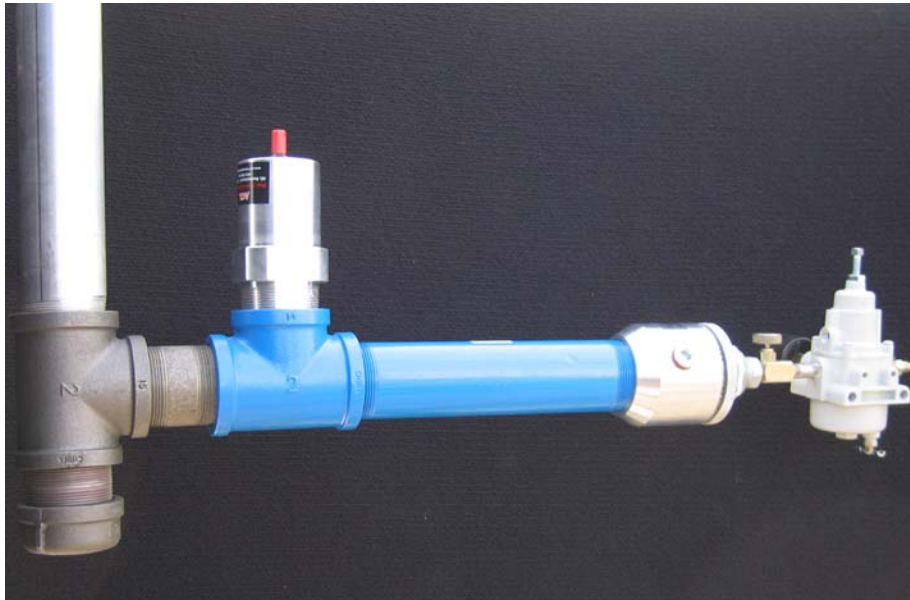


ACL

Manufacturing Inc.

ACL 4000 Flare Stack Ignitor

The ACL Model 4000 flare stack ignitor is a safe and cost effective means of lighting off all types of flare stacks. It does not require any source of power. The ignitor consists of a piezo ignitor, spark rod, a fuel/air mixer and flame arrester. To light the stack, simply open the fuel gas valve and allow shot tube to fill with air/fuel mixture then press the ignition button. The flame ignites at the bottom and travels up the stack through a 2" line. Ideal for flare systems with a continuous pilot or manually operated flare stacks.



Features

- Aluminum construction eliminates rusting and corrosion
- High pressure atmospheric injector
- Piezo ignition
- A removable high temperature spark plug
- Flame arrester protects operator from flashbacks

Principle of Operation

ACL 4000 incorporates the use of an ACL high pressure atmospheric injector (mixer head). The mixer head is designed to entrain all the air required for combustion, which is ignited by the piezo ignitor mounted in the aluminum housing via a spark rod. Gas flow is adjusted by a needle valve. The air required, is adjusted by the air shutter mounted on the end of the mixer head. The ACL 4000 has a flame arrestor mounted between the air shutter and mixer head. This prevents any flame from escaping the ignitor upon ignition. The arrestor is achieved by using 2 layers of stainless steel mesh and one perforated galvanized backing plate.

Ignition occurs when the external needle valve is opened and the shot tube is flooded with fuel/air mixture. Then the ignitor button is pushed. A flame is then carried up through the 2" shot tube to the top of the flare stack, which in turn lights the pilot gas at the tip of the stack. The needle valve is then closed. Note: Shot tube may require additional time to flood for tall stacks. Air shutter may also require adjustment for desired results.

Installation

The ACL 4000 is designed to mount at right angles to the bottom of a 2" ignitor shot tube mounted on the side of the flare stack at ground level. The shot tube requires a 2" NPT male thread to accept the ACL 4000. Once mounted, the ignitor requires fuel gas supplied via a Fisher 67 regulator or similar pressure reducing regulator to provide a maximum of 15 psi to the needle valve mounted on the ACL ignitor.

