

# **Boiler Control Unit**

The Omnitrol Liquid Level Control Model 250 is a chamber mounted unit designed for a variety of uses in boiler water level control applications. It utilizes a unique patented constantly engaged magnetic field concept which assures a positive switch in both the rise and fall of liquid levels without the introduction of springs or other mechanical devices. Unlike other Omnitrol units, the Model 250 utilizes a stainless steel internal float assembly rather than a displacer, housed within a cast iron chamber. It is supplied as standard with a SPDT switch housed within any of three electrical enclosures.

As with all Omnitrol liquid level controls, the Model 250 offers patented "snap action" operation based on the unique and proven principle of a constantly engaged magnetic field. A typical unit would have a ceramic magnet assembly magnet assembly which influences the position of the outer actuator/magnet.

As the float position changes with liquid level the inner magnet moves up or down within the magnetic field created by its association with the outer magnet. When a predetermined level change is achieved, the inner magnet either pulls down, or forces the actuator/magnet up causing a switch opening or closure, depending on increasing or decreasing liquid level.

All internal switch components are separated from the process liquid by a non-magnetic corrosion resistant stainless steel isolation tube.

Common Applications include low-water fuel cutoff, high water alarm and pump or auxiliary switch control.



# **Features**

- Positive Switch Action
- Constantly engaged magnetic field
- Flexibility of switch arrangements
- Easy Installation, virtually maintenance free
- UL and CSA Approved





## **Specifications:**

#### **Materials of Construction:**

Chamber- Cast Iron, ASTM A-278 Grade 4

#### **Switch Housing Options:**

Weather Resistant Aluminum housing cover fitted to an aluminum die cast housing base

Explosion Proof/Vapor Proof Class 1, Groups B, C and D: Class 2, Groups E, F and G. Heavy duty corrosion resistant aluminum housing cover threaded into an aluminum housing base.

Explosion Proof/Rain Tight Class 1, Groups C and D; Class II, Groups F and G. Heavy duty corrosion resistant aluminum housing cover threaded into an aluminum housing base. This housing includes an explosion proof breather drain.

### **Internal Components:**

Stainless steel pivot bearings
Shafts - stainless steel
Ceramic Magnets
Isolation Tube - stainless steel
Internal Float Assembly - stainless steel
All other internal actuator parts - corrosion resistant stainless steel or anodized aluminum

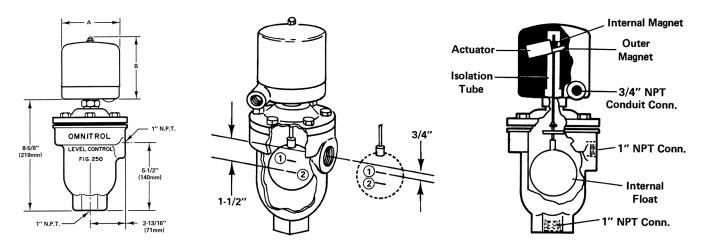
#### Ratinas:

Maximum Safe Working Pressure and Temperature: Up to 250 PSI at 400° F (204° C). Units for higher temperature ratings are available upon request.

### **Mounting Connections:**

3/4" NPT tangential conduit connection. Two 1" NPT female threaded connection, one side mount, one bottom

## **Dimensions:**



All designs subject to change. Certified dimensions and specifications available upon request

## **Ordering Information**

#### Specify:

- 1. Model 250 Boiler Control Unit
- 2. Provide a complete description of the unit the Boiler Control Unit will be mounted on.

