



# **Magnatrol** VALVE CORP.



Manufacturers of Solenoid Valves

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## **Magnatrol Solenoid Valves**

**Subject:** AC Hum, Heat Rise and General Coil Information

**AC HUM:** The AC Hum or (buss) is generated by the solenoid valve powered by an alternating current. All AC type valves will have some degree of AC hum. This noise is common and will not result in danger to the user.

**HEAT RISE:** Solenoid may not feel hot when operated intermittently. Under continuous operation or rapid cycling, it is normal for the coil housing to feel hot to the touch. A solenoid typically has a temperature rise (internally) of between 65° C (approx. 150° F) to 105° C. (approx. 212° F). If there is a problem within the valve (such as a jammed piston), the coil would burn out and heat would no longer be generated.

**Note:** "Standard solenoids will have a temperature rise of 80° C (approx. 180° F) over ambient"

### **GENERAL COIL INFORMATION FOR MAGNATROL SOLENOID VALVES**

#### **CONSTRUCTION:**

Coils can be continuously energized without overheating or failure. Coils supplied with 18" long, 18 gage wire leads standard\*\*, encapsulated for temperature of intended service, providing a coil with excellent resistance to shock, moisture, oil and chemicals.

\*\*Longer continuous leads available

**General Service:** Class "B" coils supplied for gas and liquids up to 212° F and where ambient temperatures do not exceed 40° C (104° F). The Class "H" coil should be specified for higher ambient temperatures.

**High Temperature Service:** Class "H" coils supplied for gases and liquids from 212° - 400° F and where ambient temperatures do not exceed 100° C (212° F).

#### **INSTALLATION:**

The coil is a two wire device which may be controlled by either a single or double pole switch. The switch should always be installed in the hot leg of 120 volt circuits. Where both legs are hot, such as 240 or 480 volt circuits, a double pole switch is preferable, however, if a single pole switch is used, then the wiring should have top quality insulation since even minute leakage currents may give rise to sticking problems. On motor hookup with step control starter, full voltage should be supplied to coil immediately.

**Note:** Coil can be readily changed while valve is still under pressure.