

Safgard™

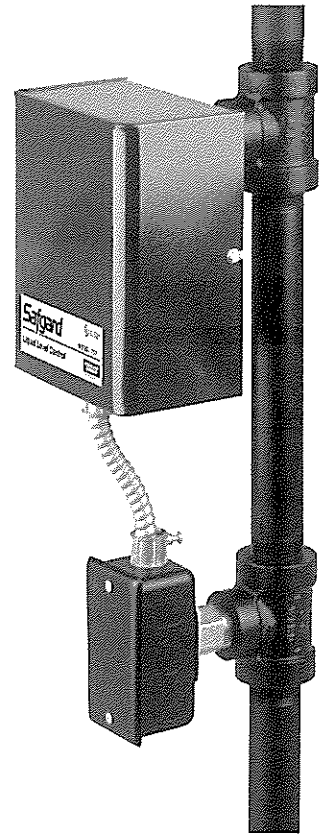
Model 727 – Tank Filler
Model 787 – Tank Drainer

**Multi-Purpose
Liquid Level Controls**
120 VAC Operating Voltage

- ▶ Works with any conductive, non-flammable liquid.
- ▶ Ideal for receiver tanks and process applications.
- ▶ No moving parts to wear, stick or hang-up.
- ▶ Heavy-duty electro-mechanical design for long life.

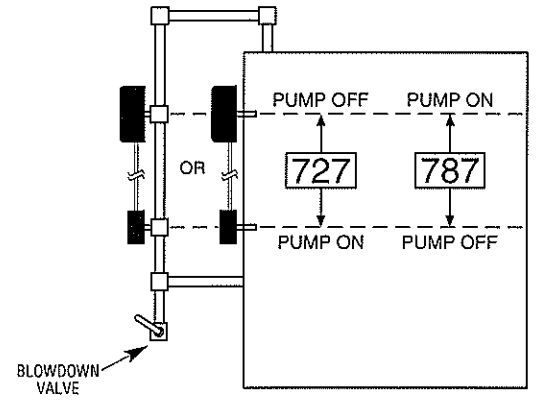


WARNING: To prevent electrical shock or equipment damage, power must be off during installation or servicing of the control. To prevent serious burns, the boiler should be thoroughly cooled before installing or servicing control. Only qualified personnel may install or service the control in accordance with local codes and ordinances. Read instructions completely before proceeding.



1. Where To Install

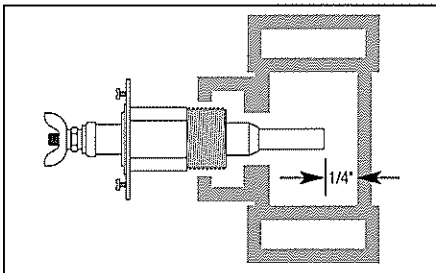
TYPICAL TANK INSTALLATION



The 727 or 787 can be installed in any conductive, non-flammable liquid. The 3/4" NPT probes can be installed in any metal tank or in an iron, copper, stainless steel or other metal equalizing line. The 727 and 787 cannot be used in plastic tanks or in plastic piping. When installed in an equalizing line, a proper blowdown valve should be installed for regular maintenance.

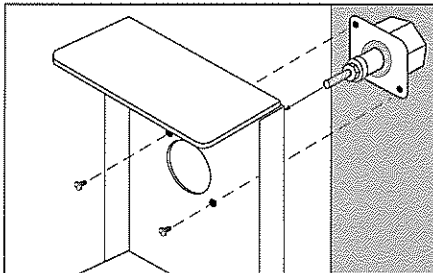
IMPORTANT: To assure proper drainage, pipe diameter should be no less than 1" on installations in vertical piping.

2. Probe Installation

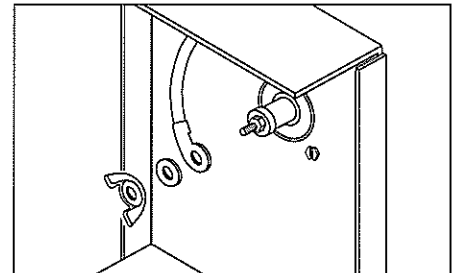


Check to insure 1/4" clearance from either probe to any surface inside the tank or tee. Apply pipe sealing compound to the threads. **Note:** Use of Teflon tape is not recommended. **Remote probe can be installed any distance from the top probe.** See wiring section for proper grounding.

3. Control Mounting

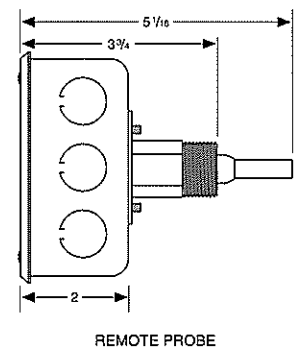
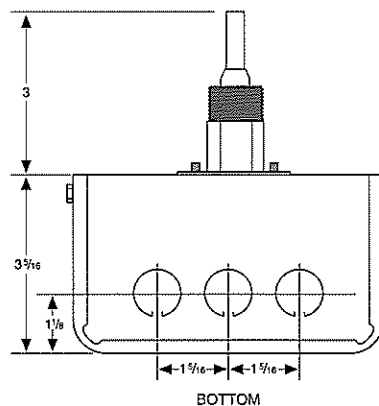
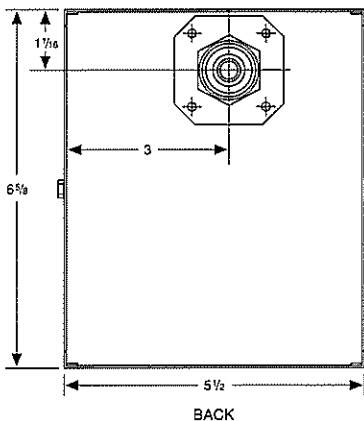


Remove control cover and center upper probe mounting holes of chassis over corresponding holes in probe flange. Secure control box probe with two probe mounting screws.



Connect the ring terminal wire lead to the probe terminal stud and secure with the lock washer and wing nut provided.

Dimensions



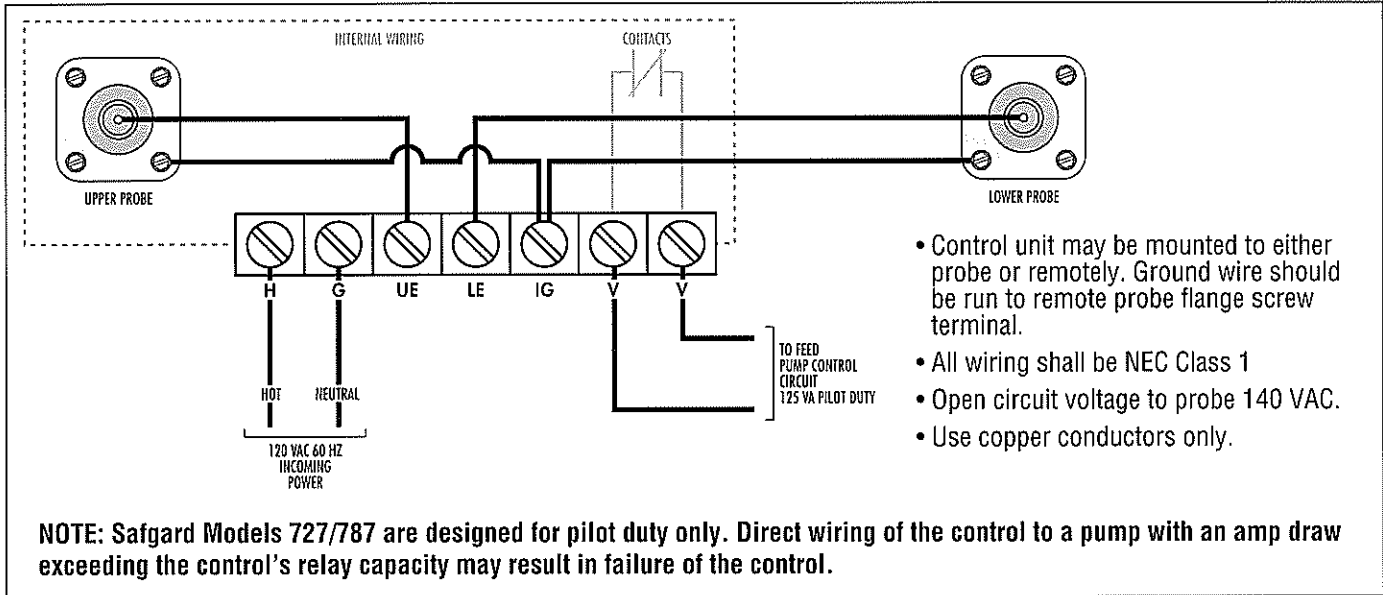
4. Wiring – Models 727 and 787 Liquid Level Controls

727 FILLS TANK

Controls pump or solenoid to FILL tank maintaining water level between probes. Closes contacts and activates pump circuit when liquid falls below bottom probe. Opens contacts and de-energizes pump circuit when liquid reaches top probe.

787 DRAINS TANK

Controls pump to DRAIN tank maintaining water level between probes. Closes contacts and activates pump circuit when liquid reaches top probe. Opens contacts and de-energizes pump circuit when liquid falls below bottom probe.



Maintenance

Remove and inspect the probe annually. Clean any sediment or scale from the probe using a scouring pad or steel wool.

Trouble Shooting

IF THE PUMP RUNS AND WILL NOT SHUT DOWN

1. Check for proper ground. Check for Teflon tape on probe nut. Check probe ground wire. The controls require both a probe lead wire connection **and** a ground wire connection (see wiring diagram).
2. Using a volt meter, check probe voltage between the upper probe and chassis ground. With water at the probe, meter should read between 0-10 volts. Higher readings may indicate nonconductive fluid or grounding problem.
3. Remove power and recheck wiring.

IF THE PUMP DOES NOT OPERATE

1. Using a volt meter, isolate the problem to determine if the control is breaking the circuit.
2. Check to insure that the water level is below the probe and that tee or tank is not collecting water which could be sensed by the probe.
3. Remove power and check for adequate clearance from the probe to any surface.
4. Remove power and recheck wiring.

Specifications

MAXIMUM PRESSURE:	250 PSI
INPUT VOLTAGE:	120 VAC, 60 HZ
SWITCH RATINGS:	.25 hp @ 120 VAC
RESISTIVE LOAD:	20 A
SWITCH CONTACTS:	SPDT

LIMITED MANUFACTURER'S WARRANTY

We warrant products manufactured by Hydrolevel Company to be free from defects in material and workmanship for a period of two years from the date of manufacture or one year from the date of installation, whichever occurs first. In the event of any claim under this warranty or otherwise with respect to our products which is made within such period, we will, at our option, repair or replace such products or refund the purchase price paid to us by you for such products. In no event shall Hydrolevel Company be liable for any other loss or damage, whether direct, indirect, incidental or consequential. This warranty is your **EXCLUSIVE** remedy and shall be **IN PLACE OF** any other warranty or guarantee, express or implied, including, without limitation, any warranty of MERCHANTABILITY or fitness for a particular purpose. This warranty may not be assigned or transferred and any unauthorized transfer or assignment thereof shall be void and of no force or effect.

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