

## **TA-2 Tank Gauge Overfill Alarm**

The "Always On" Alarm System

### Overfill Protection For Above-Ground Storage Tanks

Tokheim tank alarms are designed to meet state and federal regulations requiring an audible overfill alarm system on above-ground storage tanks.

# The TA-2 Alarm Is "Always On"

The Tokheim Tank Alarm "always on" feature provides for consistent monitoring of tank levels. The alarm simply cannot be turned off, which helps to eliminate human error.

#### Activate An Alarm At Any Level In Your Tank

The Tokheim TA-2 Tank Alarm is designed to indicate when a liquid level reaches a predetermined height. The alarm can be installed to sound when the tank is full, empty, or anywhere between. The alarm will work alone or in conjunction with other Tokheim products to monitor tank levels.

#### Several Mounting and Monitoring Options

The easy-to-install alarm features a weatherproof housing and a two-level audible horn.

- The alarm box may be mounted near the tank or up to 500 ft. away.
- Alarm boxes mounted away from the tank may be monitored from an office or other building on the site.
- Several alarm boxes are often gang mounted at the fill rack.









Top Left: TA-2 installed with a Tokheim No. 20 Tank Gauge.

Top Right: Sensor tube.

Above: TA-2 alarm box may be mounted up to 500 feet from the sensor.

Left: Optional Remote Audible Signal.

#### **Equipment and Options**

- TA-2 Tank Gauge Alarm the "Always On" system.
- TA-2OF Overfill Alarm does not require a gauge; works through a 2-inch opening.
- RA-1 Optional Remote Audible Signal.
- MA-1 Master Alarm monitors up to 10 alarms.
   Interfaces with flashing strobe and sirens.
- Tokheim alarms and sensors can be custom configured for special applications. Contact the engineering department for more information.
- Indicate the length of cable needed for your mounting application.

#### **Maintenance**

Requires two 9-volt batteries. Typical battery life of approximately 2 years, otherwise maintenance free.

Optional AC power adapters are available.

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- Flame Arresters (2, 3, 4, 6, 8, & 10 inch sizes)
- Combination Units of Flame Arrester & Pressure-Vacuum Vent (2, 4, 6, 8, & 10 inch sizes)
- Sampling Pumps
- · Overfill Alarms



## **TA-2 Tank Gauge**

Instructions

## Installation Instructions for Gauge Being Used as Overfill Alarm

#### **Materials**

- Two spiral hose clamps
- Two conduit hangers
- Four nylon ties
- · Alarm box and sensor
- One 18" section of aluminum tubing
- · Counterweight with attached magnet

#### Step 1

If installing on an existing gauge, remove the counterweight. If the tank is full, simply remove the lowest 18" section of pipe to gain access to the counterweight. If the tank is only partially full, the counterweight must be accessed through the #20C (top) housing. Do so by removing the #20I cover and pulley.

#### Step 2

Discard the preexisting counterweight. Replace it with the provided counterweight and magnet assembly. Attach the new weight to the measuring tape.

#### Step 3

Replace the lowest 18" of the existing pipe with the 18" section of aluminum tubing included with the alarm.

#### Step 4

Mount the alarm box to the pipe at a height of approximately 60" using the included spiral hose clamps.

#### Step 5

Place the float at the liquid level you wish to trigger the overflow alarm. Use a wedge to hold the float at the desired level if necessary. When the tank is full, the counterweight should be within the 18" of aluminum pipe. If the counterweight is above this section of pipe, the tank gauge was installed improperly. To remedy this error, purchase a new tape and replace the tape according to the instructions, making sure the counterweight falls within the bottom 18" of pipe when the tank is full.

#### Step 6

Attach the alarm sensor loosely to the top of the 18" aluminum pipe using the conduit hangers. Slide the sensor down the pipe until the counterweight triggers the alarm. Tighten the sensor onto the pipe at the level of the counterweight. Remove the wedge from the top of the tank to allow the float to work properly.

## **Installation Instructions**

#### **DIP SWITCH SETTINGS**

#### Timer Disable: \$1, \$2

S1 and S2 are in the DOWN/OFF position to enable the alarm timer. To disable the timer, S1 and S2 should be moved to UP/ON.

#### **Alarm Duration Time Setting: S2, S4, S5**

The following configurations can be used to set the approximate duration of the alarm:

S3	S4	S5	Approximate Time	The factory
OFF OFF OFF OFF ON ON	OFF OFF ON ON OFF OFF ON	OFF ON OFF ON OFF ON OFF	1-2 minutes 4-5 minutes 5-7 minutes 8-9 minutes 9-11 minutes 12-14 minutes 13-15 minutes 14-18 minutes	default setting places S3 and S5 in the OFF position and S4 in the ON position, for an alarm duration of approximately 5-7 minutes.

CAUTION: Switches S7 and S8 control the battery power to the alarm. It is important not to have both switches in the UP/ON position simultaneously. When changing configurations, place both switches in the OFF position before moving either switch to the ON position.

### **Series Battery Enable: S7**

Normally in the ON position so battery B2 is set in series with the main battery, B1.

## **Parallel Battery Enable: \$8**

Normally in the OFF position so S7 can be enabled. The Series Battery Enable configuration provides the loudest output, and is usually preferred. If a quieter alarm is acceptable, placing S7 in the down position and subsequently moving S8 to the UP position will result in longer battery life. This configuration will place battery B2 in parallel mode, powering only the alarm tone generator, and will preserve battery B1 for the primary sensor operation.

CAUTION: Jumper JU-1, located near the DIP Switch, should remain un-jumpered unless the factory indicates otherwise to prevent damage to the unit.

#### **Sensor Cable:**

Connect the white lead to S1.
Connect the black lead to Common.