# Operating Instructions MAXIMAT LW SUP Z... Leakage Sensor



## **Safety Precautions**

- Installation, initial start-up and maintenance may only be performed by trained personnel! All applicable European and national regulations regarding installation of electrical equipment must be adhered to.
- The device must be disconnected from all sources of power during installation and maintenance work!
- The device may only be operated under the conditions specified in the operating instructions!
- Connect the device to the MAXIMAT SHR C measuring transducer only (see operating instructions SU0133 to this end)!

## **Functions Description**

In combination with the MAXIMAT SHR C measuring transducer, the MAXIMAT LW SUP leakage sensor is intended for use with permanently installed containers for the storage of non-flammable, water endangering liquids. It is equipped with a self-monitoring measuring circuit in combination with the MAXIMAT SHR C measuring transducer using 2-wire connection.

## **Technical Data**

Terminal housing: Protection per EN 60 529: Installation:

Sensor tube material: Probe material: Connector cable, sensor to terminal housing: Operating temperature: Operating pressure: Min. switching point: Repetition accuracy: Hysteresis: Measuring circuit: Ready to operate: Overfill alarm: Broken cable: Short-circuit: Supply power:

#### PBT, fibre-glass reinforced IP 65 63 mm dia. PVC cap or angle bracket, each with Pg9 fitting PF Glass carbon TPK cable, 2 each 0.5 mm<sup>2</sup>, shielded, 6 m long Atmospheric, -20 to +60° C Atmospheric 5 mm approx. 2 mm approx. 2 mm > 18 to < 40 mA > 10 to < 18 mA < 7 mA > 40 to < 110 mA 12 V DC (2-wire connection via

measurement cable)

#### **Applications:**

The MAXIMAT LW SUP leakage sensor is suitable for liquids with a reactive impedance of less than 5 k $\Omega$ /cm, or a mutual capacitance to earth of greater than 50 pF. Stored liquids may not tend to precipitate insulating or conductive sediments.

#### **CE Mark**

In accordance with low-voltage directive (73/23/EWG), EMC directive (89/336/EWG) and

- EN 50 082-2:1995
- EN 55 011 (class A):1998

#### **DIBT Approval**

Approval no. **Z-65.40-201** for overfill inhibitors and leakage sensors in accordance with WHG §19 **Note:** 

The accompanying "General Building Supervisory Approval no. **Z-65.40-201**" is an integral part of the operating instructions and all stipulations contained therein must be adhered to!



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# **Electrical Connection:**



#### Connection to MAXIMAT SHR CS measuring transducer

#### Important!



**Always** connect cable shield and operational earthing! Observe the wiring diagram.

## Note regarding operational earthing:

Any grounded metal part in close proximity to the fill-level monitor can be used as a connection point for operational earthing, for example **grounded** metal building supports, metal stairways, railings, cable ducts etc., or even better, the equipotential bonding strip of the foundation earth.

It is not advisable to use the PE terminal at the mains power supply, because it is often charged with interference voltage.

## Mechanical Installation of the Leakage Sensor

- Installation to storage tank catch basins
- The probe may make contact with the outside wall, or may stand on the floor.
- Secure the cable such that the probe always stands or hangs vertically.
- Maximum allowable distance from the floor is 45 mm for hanging installation.

# **Periodic Testing**

The leakage probe must be tested for correct functioning at reasonable intervals, no less than once a year. It is the sole responsibility of the user to select the utilised test type, as well as a testing interval within the prescribed timeframe.

The accompanying "General Building Supervisory Approval no. **Z-65.40-201**" is an integral part of the operating instructions and all stipulations contained therein must be adhered to!



Connection to MAXIMAT SHR C19 measuring transducer