

MAXITOP

Compact Overfill Sensor



INSTRUCTIONS MANUAL

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COMPACT OVERFILL SENSOR
MAXITOP

MSA

556-01

CAUTION

Trained personnel may only perform installation, initial start-up and maintenance.

All applicable European and national regulations regarding installation of electrical equipment must be adhered to.

- The device may only be connected to supply power complying with the specifications included in the technical data and on the serial plate.

- 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.

DESCRIPTION

The compact overflow probe MAXITOP is used as an overflowing monitoring device for permanently installed containers used for the storage of non-flammable, water endangering liquids.

The MAXIMAT has 5 different possible transmissions:

- Low voltage contact output (max. 50 V AC/DC, max. 0.5 A, max. 10 VA)
- Relay output to use with a CST device (data sheet 555-09)
- Relay output to use with a SHR relay (data sheet 555-06)
- Direct connection to a PLC
- Direct connection to an alarming unit TC4 (data sheet 555-07)

Applications: Note that stored liquids may not tend to precipitate insulating or conductive sediments.

CE mark: In accordance with low-voltage directive (2006/95/CE), EMC directive (89/336/EWG).

TECHNICAL FEATURES

Main power supply:	15 ... 26 V DC (when a fuse 250 mA is installed)
Power consumption:	approx. 3 W
Ambient temperature:	-20 to +60°C
Operating pressure:	atmospheric (0.8 to 1.1 bar)
Probe:	PEHD
Process connection:	2" G, PVC, sliding – adjustable immersion depth
Terminal housing:	PBT, fibre glass reinforced, IP 65 acc. EN 60 529
Terminals:	Screw connectors, IP 20; max. wire cross-section 2.5 mm ²
Input:	for an external push in switch to run a test sequence; T & C connectors
Status display:	1 LED (green) inside the terminal housing; lighting = perfect conditions; Off = or alarm status or Error status

WIRING OPTIONS

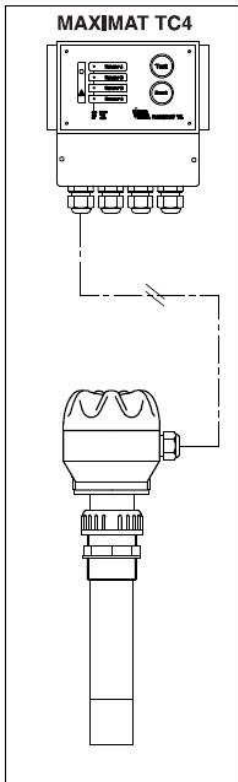


2 wires cable symbol

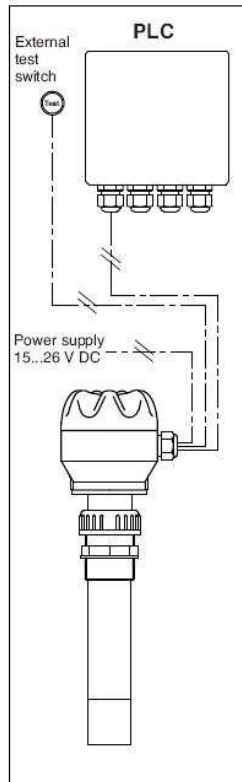


3 wires cable symbol

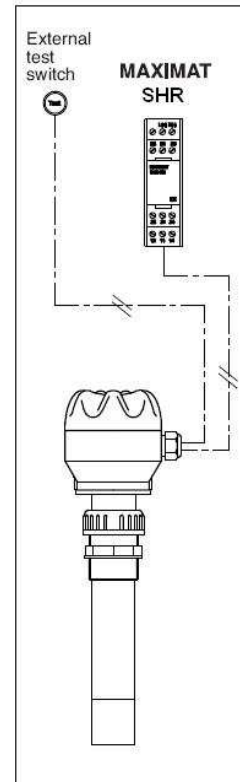
Using a TC4 signalling device



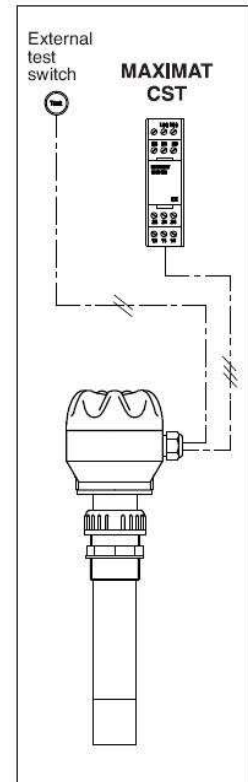
Using a PLC



Using a relay SHR

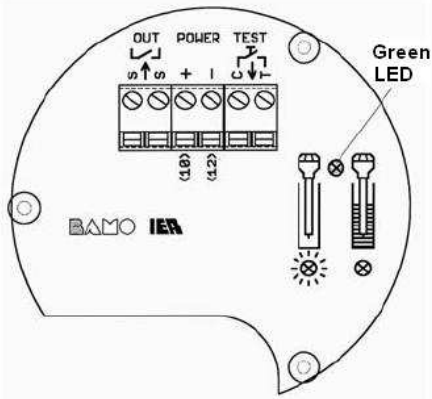


Using a relay CST



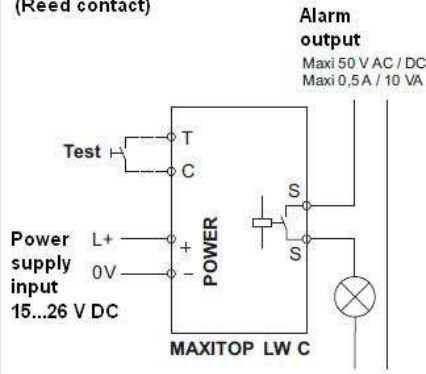
NOTE: The external test push button is useful for a diagnostic of the system. It is not necessary for the detection mode.

**Power supply input
15 ... 26 V DC**

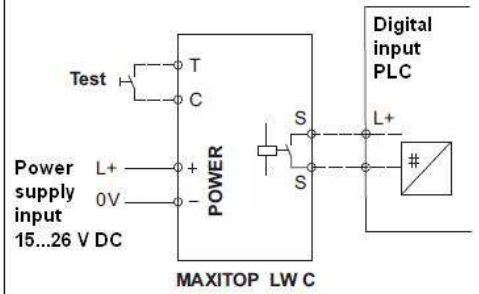


Built-in contact

(Reed contact)

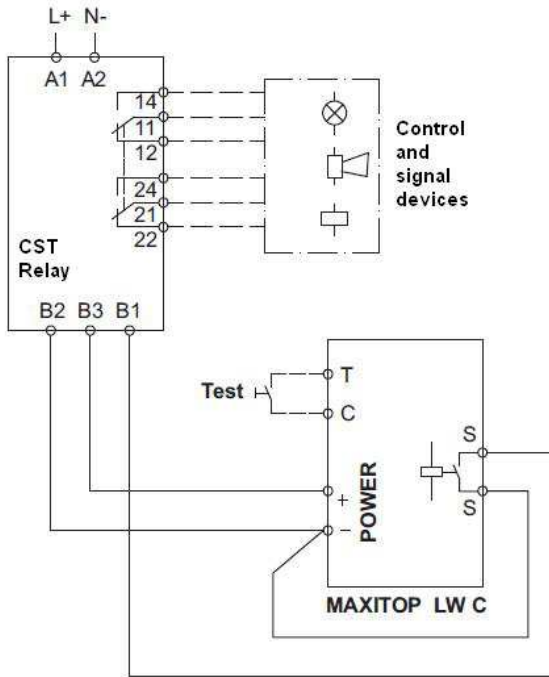


PLC



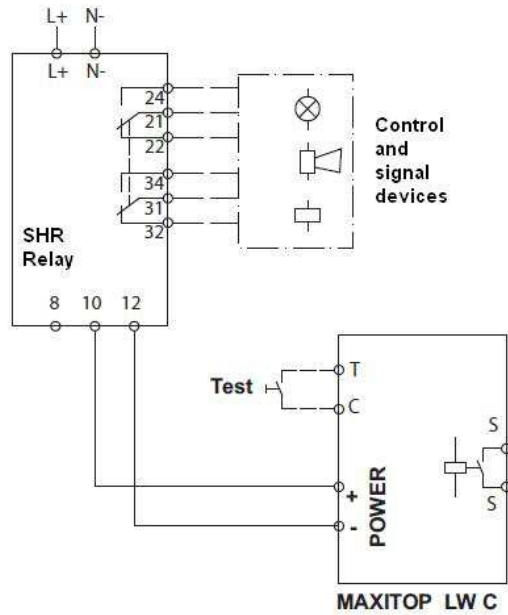
CST Relay

Main power 230 V / 50 Hz



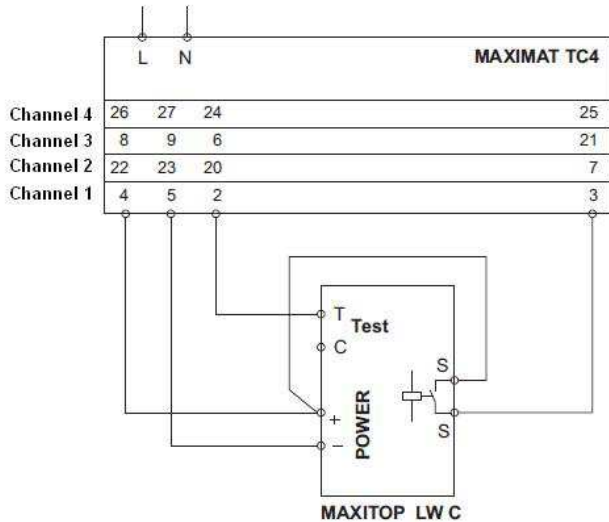
SHR Relay

Main power 230 V / 50 Hz



TC4 Programming, outputs, etc. please report to TC4 manual

Main power 230 V / 50 Hz

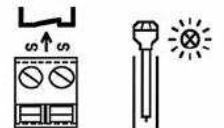


LED AND CONTACT STATUS

Power off
LED off
Opened contact



Normal survey status
Closed contact
LED lighting



Alarm, leakage detection
Opened contact
Led off



TEST INSTRUCTIONS FOR OVERFILLING AND LEAKAGE DETECTION PROBES

Measuring Method

The measuring sensor works in accordance with the capacitive proximity switch principle. In this application the non-conductive medium –air- changes to a conductive medium –stored chemical- when an overflowing or a leakage occurs.

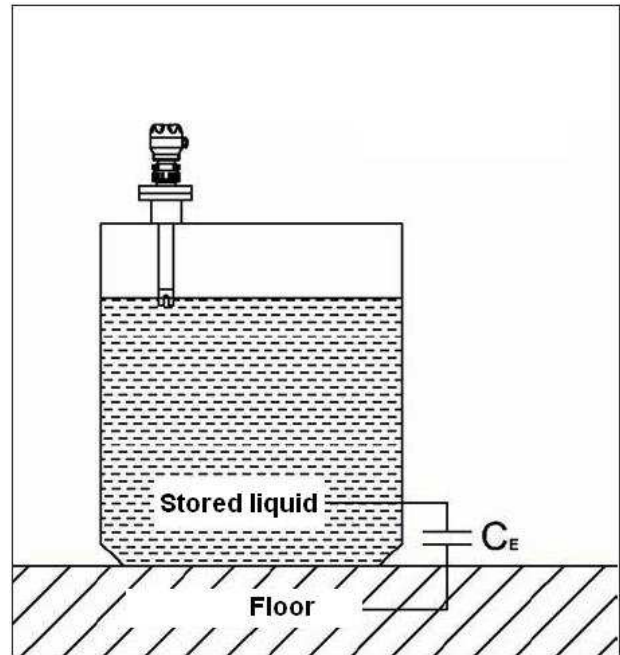
Applications

The measuring sensors are suitable to liquids for which reactive impedance is less than 5 kOhm / cm, or with a coupling capacitance to earth is greater than 50 pF. Stored liquids may not tend to precipitate insulating or conductive sediments.

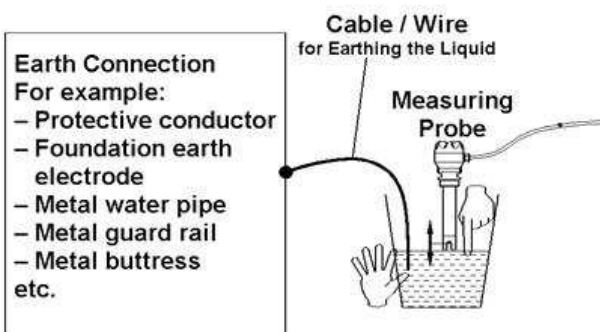
Periodic Testing

The frequency for testing the complete system should be at least once a year, or more often, and in any case according to the rules of the Country where is the installation. Observe the instructions from the “General Building Supervisory Approval” (concerns the probes that require a specific approval).

Proceed to a test before the installation and initial start-up.



Test method



The bucket may not touch the floor

- Fill a bucket (plastic or metal) with original liquid or water (at least 5 litres).
- Earth the liquid in the bucket with a cable/wire.
or
Grasp the bucket with your hand from the outside.
or
Immerse a finger into the liquid.
- At the same time, immerse and remove the measuring probe several times.
- Examine the switching status of the measuring circuit (refer to the respective operating instructions to this end).