

Compact leakage sensor MAXIMAT LW CX



SAFETY INSTRUCTIONS

- Installation, initial start-up and maintenance may only be performed by trained personnel!
- The device may only be connected to supply power compliant to 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 MAXIMAT LW CX leak detection system consists of leak sensors designed to detect leaks in tanks containing substances that are hazardous to water.

When the sensor comes into contact with an electrically conductive medium, the integrated electronics react and the continuous output signal is interrupted. This can be output by the system control unit as an audible or visual alarm signal and, if necessary, used to trigger an emergency shutdown of the filling process.

APPLICATION

The leakage probe is suitable for conductive media with a resistance of $<5\text{k}\Omega$ or a coupling capacitance to earth of $>50\text{pF}$. The media must not form insulating or conductive deposits.

TECHNICAL DATA

Operating principle	Capacitive high frequency, fail-safe
Operating/ambient temperature	$-20\dots+60^\circ\text{C}$
Operating pressure	Atmospheric, 0.8...1.1bar
Connection head	PBT glass fiber reinforced
Protection class	IP65 according to EN 60 529
Supply voltage	15...27V DC
Connection power	$<1\text{W}$
Cable length measuring circuit	Max. 300m, min. wire cross-section 0.5mm^2
Connection cable	6m PVC cable, $5 \times 0.34\text{mm}^2$, shielded – other lengths available on request
Outputs	Potential-free reed relay contact for low voltage (contact opens on alarm) Max. 50V AC/DC, max. 0.5A, max. 10VA, e.g. for operating coupling relays or PLCs, MAXIMAT TC4 signalling unit or CST supply isolator Two-wire alarm evaluation with transducer MAXIMAT SHR CS / MAXIMAT TC1

Important: Simultaneous operation of both outputs is not intended!

Terminals	For version K, D: screw connection, cable cross-section max. 2.5mm^2 .
Additional function	Connection of an external test button (potential-free contact) which can be used to check the entire MAXIMAT LW CX electronics, wiring and signaling/control equipment.
Input	For external test button (connection to terminal T and terminal C) Test button contact closed: Test alarm is triggered.

Note: The function check by the external test button is no substitute for the regular function checks required by the country!

CE mark: The device fulfills the legal requirements of applicable EU-guidelines.

BAMO INTERNATIONAL

22, Rue de la Voie des Bans · Z.I. de la gare · 95100 ARGENTEUIL

Tel +33 (0)1 30 25 83 20 Web www.bamo.eu

Fax +33 (0)1 34 10 16 05 E-mail export@bamo.fr

Compact leakage sensor
MAXIMAT LW CX

10-09-2026

M-556.07-EN-AL

LEV

556-07 /1

MATERIALS

During operation the leak probe comes into contact with the stored medium, its vapors or condensate in the event of tank leaks. The materials used in the device must therefore be selected so that they are sufficiently resistant to the medium to be monitored.

Component	Material
Sensor and sensor tube	PVC, PE
Connection head / housing	PBT
Mounting parts	PVC (Polyvinyl chloride) or PE (Polyethylene)
Cable glands (connection heads & adjustment glands)	PA (Polyamide)*
Sealing of cable glands (connection head & adjustment glands)	NBR*
Cable gland (probe)	PE / PVDF
Seal for the cable gland (probe)	TPR
Connection cable	PVC

* Other materials available on request

COUNTRY-SPECIFIC CERTIFICATIONS

- GERMANY - General technical approval in accordance with the Water Resources Law (WHG)
- SWITZERLAND - Type examination certificate for water protection suitability according to the Conference of Heads of Environmental Protection Offices (KvU)
- BELGIUM - Model certificate of approval according to Flemish environmental authorisation regulations (VLAREM II)

SIGNALING

LED (green) on the connection board (only for version with connection head):

Operation	LED ON
Alarm / Fault	LED OFF

MOUNTING

The probe of the leak detection system is installed suspended in the catch basin of the storage tank to be monitored.

It can either rest against the outer wall of the catch basin or stand on the floor of the catch basin.

The connected cable must be fixed in such a way that the probe is always in a vertical position.

In the case of free-hanging installation, it must be ensured that the connecting cable is only pulled through the adjusting screw connection to the extent that the lower edge of the sensor section has a maximum floor clearance of 40mm.

This ensures that a leak alarm is reliably triggered at a fill level of 50mm.

For the version without a connection head, MAXIMAT LW CX ... 0, suitable fixing materials must be used in the appropriate manner. The leak detectors must be secured to prevent them from shifting, swinging or floating away.

The fastening must be resistant to the media.

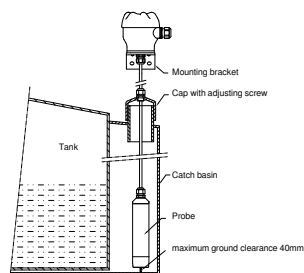
EXAMPLE OF INSTALLATION

Leakage probe for storage tanks

Leak detectors are installed in catch basins.

If the probe is resting on the floor, contact is made when the liquid level reaches approximately 6mm.

In catch basins of storage tanks, the sensor must be fitted in such a way that a leakage alarm is triggered when the liquid level reaches 50mm at the latest.



MAINTENANCE

When used as intended, the device is maintenance-free.

Please note: In case of leakage, the probe should be removed from the medium as soon as possible.

It must be effectively cleaned (rinsed) and may only be reintroduced into the dry collection device after a complete function test.

BAMO INTERNATIONAL

22, Rue de la Voie des Bans · Z.I. de la gare · 95100 ARGENTEUIL

Tel +33 (0)1 30 25 83 20 Web www.bamo.eu

Fax +33 (0)1 34 10 16 05 E-mail export@bamo.fr

Compact leakage sensor
MAXIMAT LW CX

10-09-2026

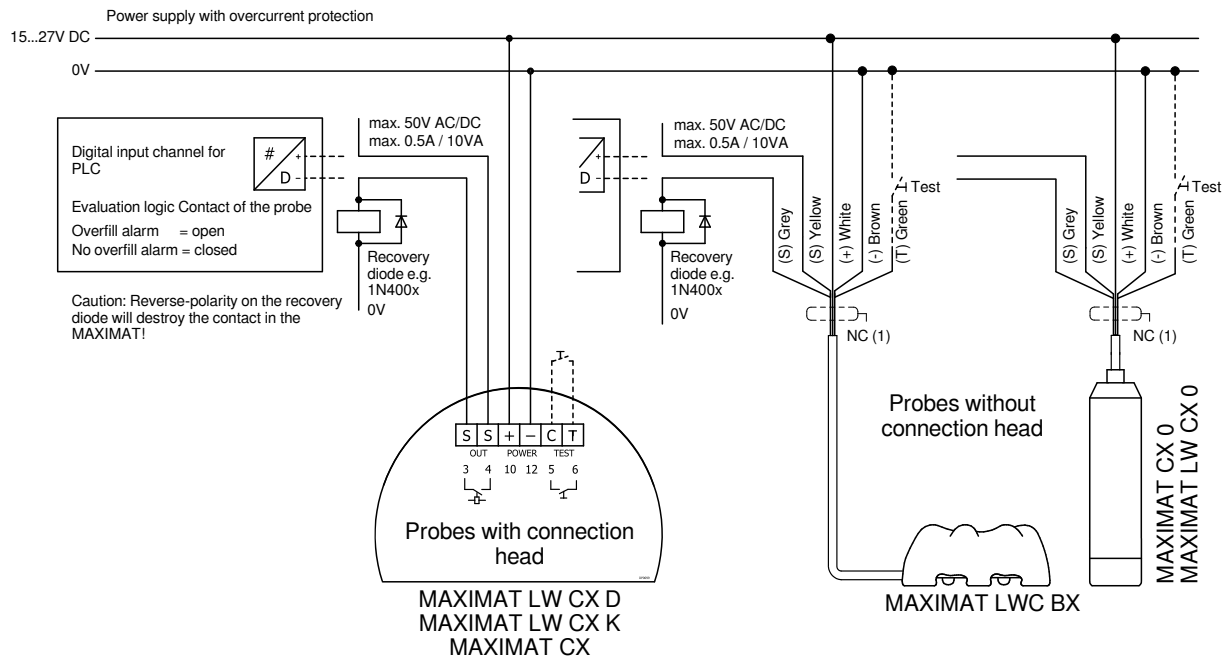
M-556.07-EN-AL

LEV

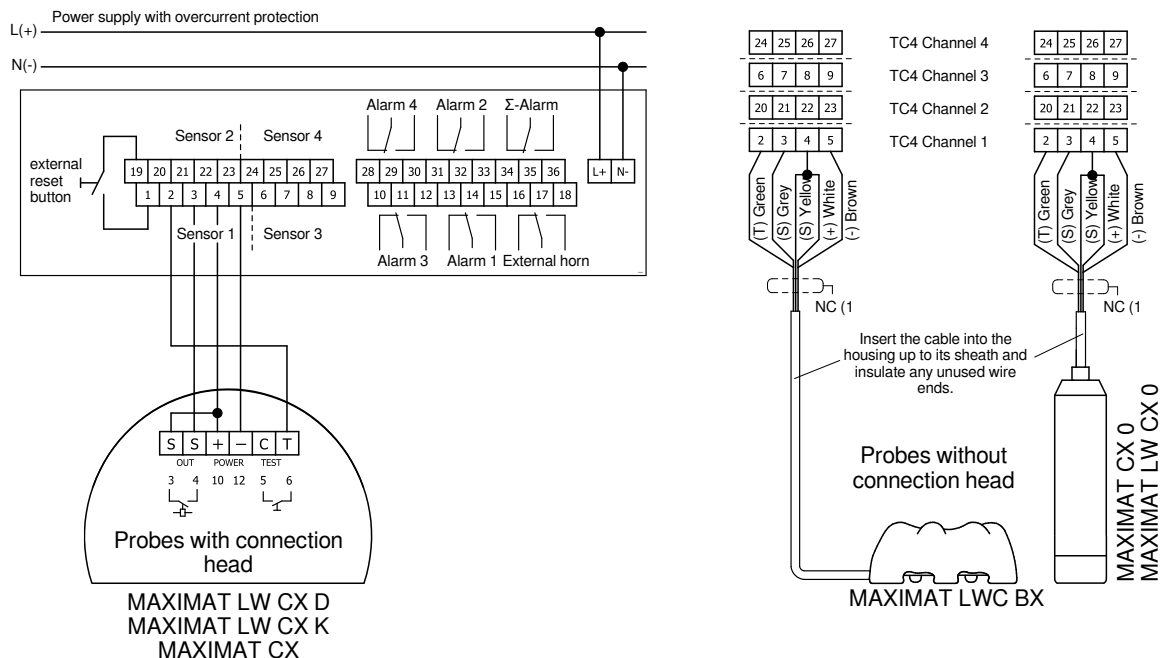
556-07 /2

ELECTRICAL CONNECTION

Coupling relay or PLC



Signalling device MAXIMAT TC4



(1) The cable shield must only be connected to a low-interference operational earth if increased levels of EMC interference are to be expected.

BAMO INTERNATIONAL

22, Rue de la Voie des Bans · Z.I. de la gare · 95100 ARGENTEUIL

Tel +33 (0)1 30 25 83 20 Web www.bamo.eu

Fax +33 (0)1 34 10 16 05 E-mail export@bamo.fr

Compact leakage sensor
MAXIMAT LW CX

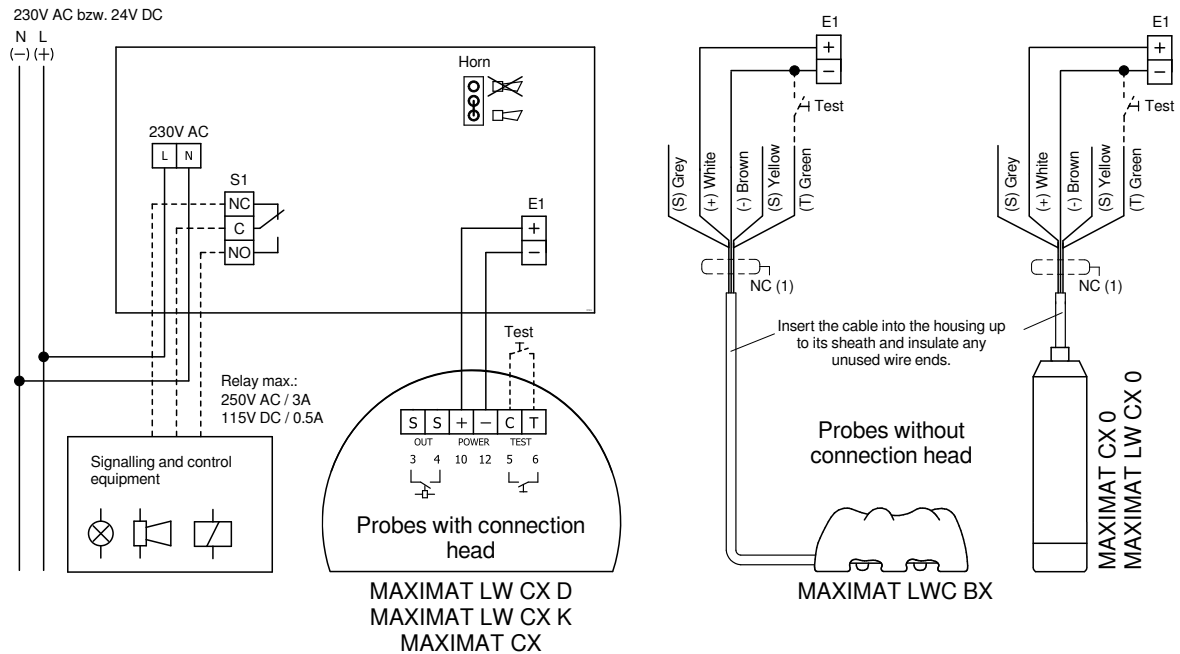
10-09-2026

M-556.07-EN-AL

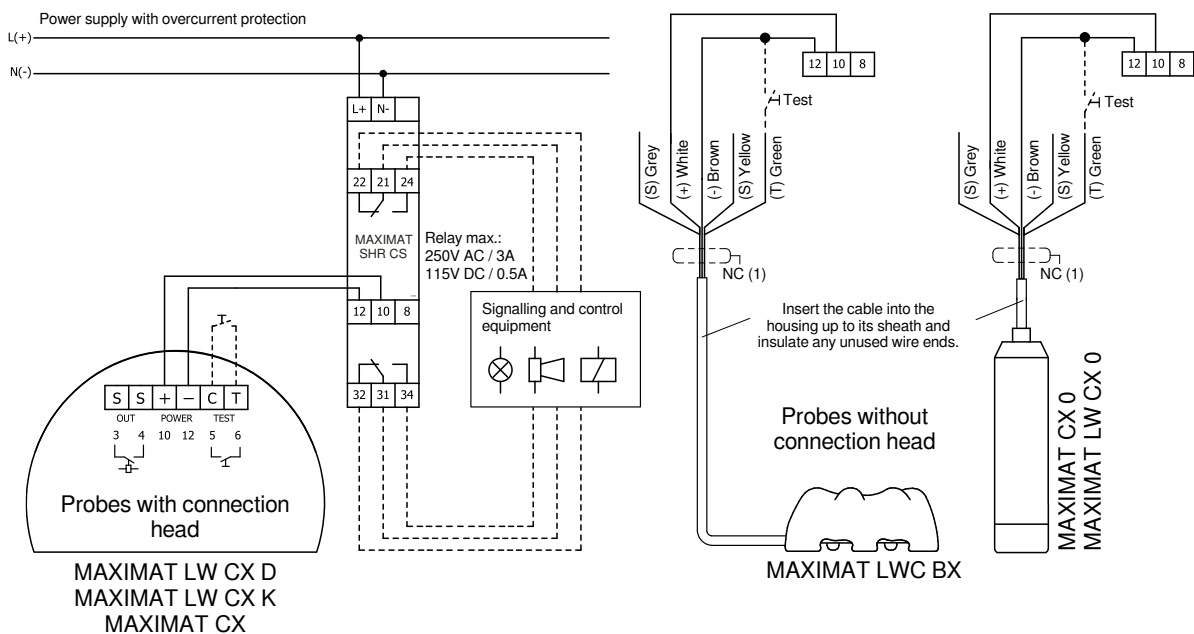
LEV

556-07/3

Signalling device MAXIMAT TC1



Transducer SHR CS



(1) The cable shield must only be connected to a low-interference operational earth if increased levels of EMC interference are to be expected.