Compact leakage detector MAXIMATLW



SAFETY INSTRUCTIONS

- Installation, commissioning and maintenance may only be performed by qualified personnel!
- Only connect the device to the voltage specified in the technical data or on the type plate!
- Disconnect the device from the power supply during installation / maintenance work!
- Only operate the device under the conditions defined in the operating instructions!

DESCRIPTION

The compact leakage detectors of the MAXIMAT LW CX type are leakage probes which are used to report leaks in containers with water-polluting media.

When the sensors come into contact with an electrically conductive medium, the integrated electronics react and the permanently output signal is interrupted. By interrupting the signal, an audible and visual alarm can be triggered.

APPLICATION AREA

The leakage probes are only suitable for conductive media whose specific reactance is $<5k\Omega$ or whose coupling capacitance to ground is

The media must not form insulating or conductive deposits.

TECHNICAL DATA

Capacitive high frequency, fail-safe Operating principle Operating/ambient temperature -20...+60°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 <1W Connection power Cable length measuring circuit Max. 300m, min. wire cross-section 0.5mm2 Materials Mounting bracket / pipe cap = PVC Sensor part = PVC (LW CX 25) / PE (LW CX 40) PVC cable 5x 0.34mm², shielded

Connection cable (only for version without connection head) Outputs

Floating reed relay contact for extra-low voltage (contact opens on alarm)

Max. 50V AC/DC, max. 0.5A, max. 10VA, e.g. for operation of coupling relay or

PLC, signal device TC4 or supply isolator CST

Two-wire alarm evaluation with transmitter MAXIMAT SHR C

Important: Simultaneous operation of both outputs is not intended!



22, Rue de la Voie des Bans · Z.I. de la gare · 95100 ARGENTEUIL +33 (0)1 30 25 83 20 Web www.bamo.eu

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

Compact leakage detector MAXIMAT LW CX

LEV

556-07/1

30-05-2023 M-556.07-EN-AC

TECHNICAL DATA (continuation)

Terminals Additional function	For version K, D: screw connection, cable cross-section max. 2.5mm². Connection of an external test button (potential-free contact) with which the entire MAXIMAT LW CX electronics, wiring and signaling/control equipment can be checked.
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 the applicable EU directives.

SIGNALING

LED (green) on the connection board (only for version with connection head): Operation: LED on Alarm / Fault: I FD off

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.

MOUNTING

The sensor part of the leakage probe is installed suspended in the catch basin of the storage tank to be monitored.

The sensor part of the leakage probe is installed suspended in the catch basin of the storage tank to be monitored.

The connected cable must be fixed in such a way that the sensor part 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 leakage alarm is reliably triggered at a maximum filling height of 50mm.

For the version without connection head MAXIMAT LW CX...0 must be proceeded in a corresponding manner by other, suitable mounting material.

The leakage probes must be secured against displacement, oscillation and floating.

The fastening must be resistant to the media.

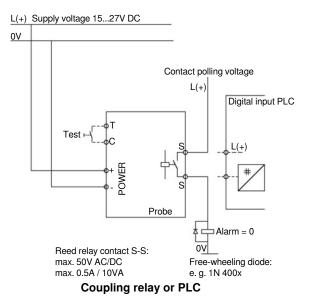
MATERIALS

The leak probe comes into contact with the storage medium, its vapors or condensate in the event of tank leaks.

Therefore, the materials of the leakage probe must 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 gland	PA (polyamide)
Cable gland seal	Perbunan / EPDM
Connecting/connection cable	PVC

ELECTRICAL CONNECTION (version with connection head)



Power supply 230V / 50...60Hz

Alarm contacts, test button, etc., see doc. MAXIMAT TC4

L(+)N(-)

Maximat TC4

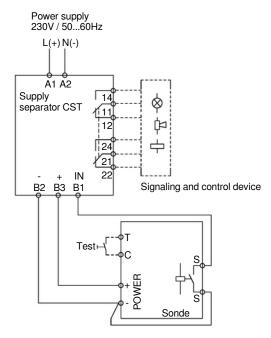
26 27 24 25
8 9 6 7
22 23 20 21
4 5 2

Port 1

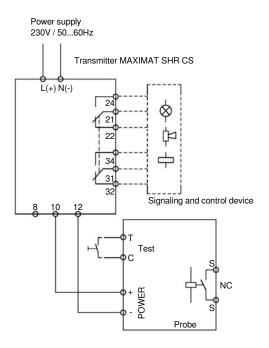
Port 1

Probe

Signaling device Maximat TC4



Supply Separator CST



External transmitter MAXIMAT SHR CS

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

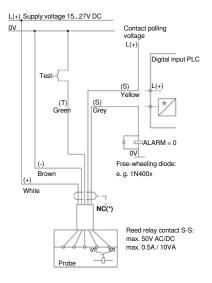
Compact leakage detector MAXIMAT LW CX

30-05-2023 M-556.07-EN-AC

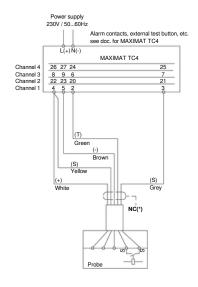
LEV

556-07/3

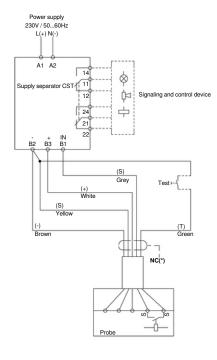
ELECTRICAL CONNECTION (version with cable connection)



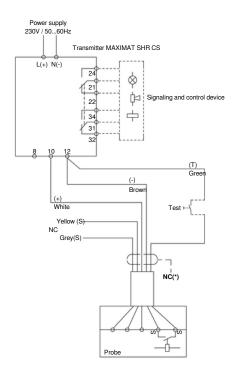
Coupling relay or PLC



Signaling device Maximat TC4



Supply Separator CST



External transmitter MAXIMAT SHR CS

(*) The cable shield must only be connected to a low-interference operating ground if increased EMC interference signals are to be expected.



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

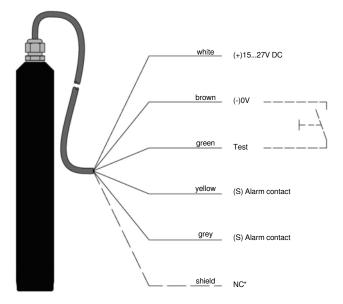
Compact leakage detector MAXIMAT LW CX

30-05-2023 M-556.07-EN-AC

LEV

556-07/4

WIRE ASSIGNMENT OF THE CONNECTION CABLE (for versions without connection head):



(*) The cable shield must only be connected to a low-interference operating ground if increased EMC interference signals are to be expected.

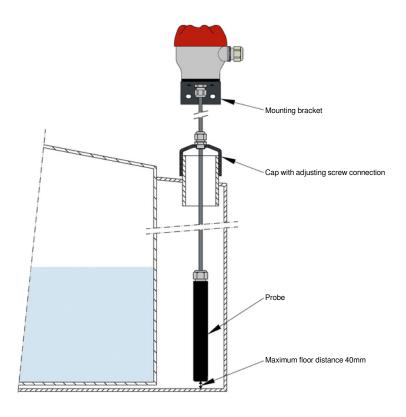
EXAMPLE OF INSTALLATION

Leakage probe for storage tanks

The leakage probes are installed in the collection trays.

If the probe stands on the ground, contact is made at approx. 6mm level.

In collecting trays for storage tanks, the probe must be installed in such a way that a leakage alarm is triggered at a filling level of 50mm at the latest.





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 detector MAXIMAT LW CX

30-05-2023 M-556.07-EN-AC

LEV

556-07/5