



Safety Precautions

- Installation, initial start-up and maintenance may only be performed by trained personnel!
- The device may only be connected to power which complies 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 these operating instructions!

Functions Description

The MAXIMAT CX compact overfill sensor is used as a fill-level limit switch for permanently installed containers for the storage of non-flammable, water endangering liquids.

Applications

The fill-level sensor is suitable for liquids with an impedance of less than 5k Ω , or a mutual capacitance to earth of greater than 50pF. Stored liquids may not tend to precipitate insulating or conductive sediments.

Technical Data

Functional principal:	Capacitive high-frequency, fail-safe
Ambient temperature:	-20 to +60°C
Operating pressure:	Atmospheric, 0.8 to 1.1bar
Terminal housing:	PBT, IP65 protection per EN 60 529
Process connection:	See order information
Supply power:	15 to 27V DC
Power consumption:	<1W

Technical Data (continued):

Outputs:

- **Floating reed relay contact** (contact opens in case of alarm)
for extra-low voltage, max. 50V AC / DC, max. 0.5A, max. 10VA
e.g. for operating coupling relays or PLC, TC4 signalling device or CST supply power isolator
Observe protective measures for reed relay contacts (see instruction leaflet SU3104)
- **2-wire alarm evaluation** with MAXIMAT SHR C measuring transducer
Note: Simultaneous use of both outputs is not possible.

Terminals: Screw terminal for wire cross-sections of up to 2.5mm²
Input: For external test button (connection to terminals T and C)
 Test button contact closed = test alarm is triggered

Note: The function test executed with the test button does not replace the operating test specified in ZG-ÜS, section 6.2, which must be conducted for all probes on a regular basis at least once a year.

Indication:

LED (green) on the connector PCB (variant KL only):

- Run: LED illuminated
- Alarm / error: LED off

Measuring circuit cable length:

Max. 300m, min. wire cross-section: 0.5mm²

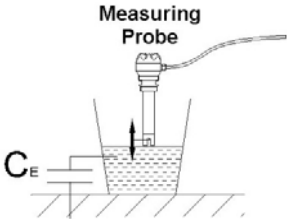
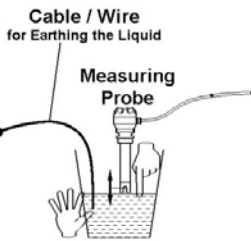
CE Mark

In accordance with low-voltage directive RL 2006/95/EC and EMC directive 2004/108/EC

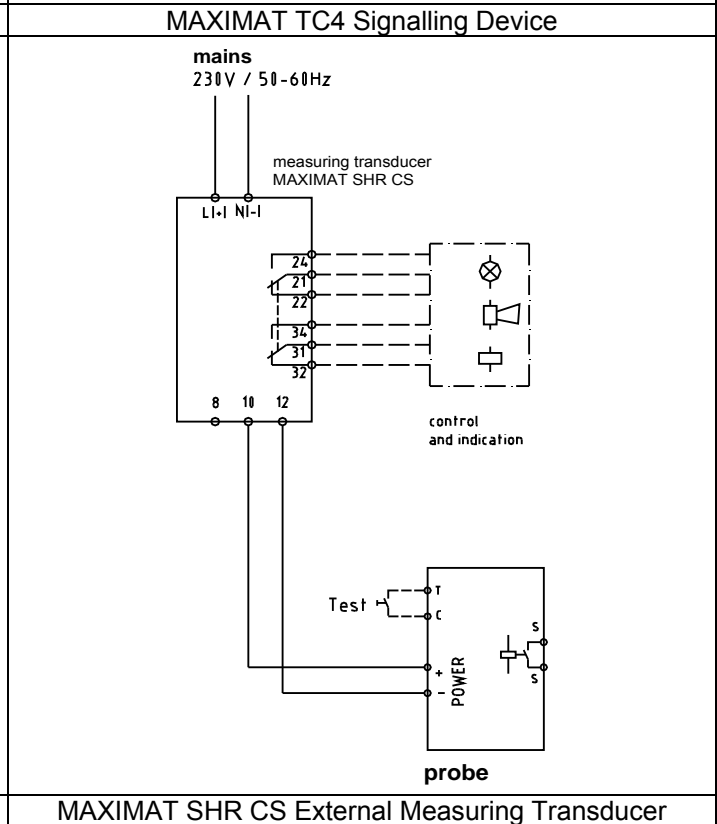
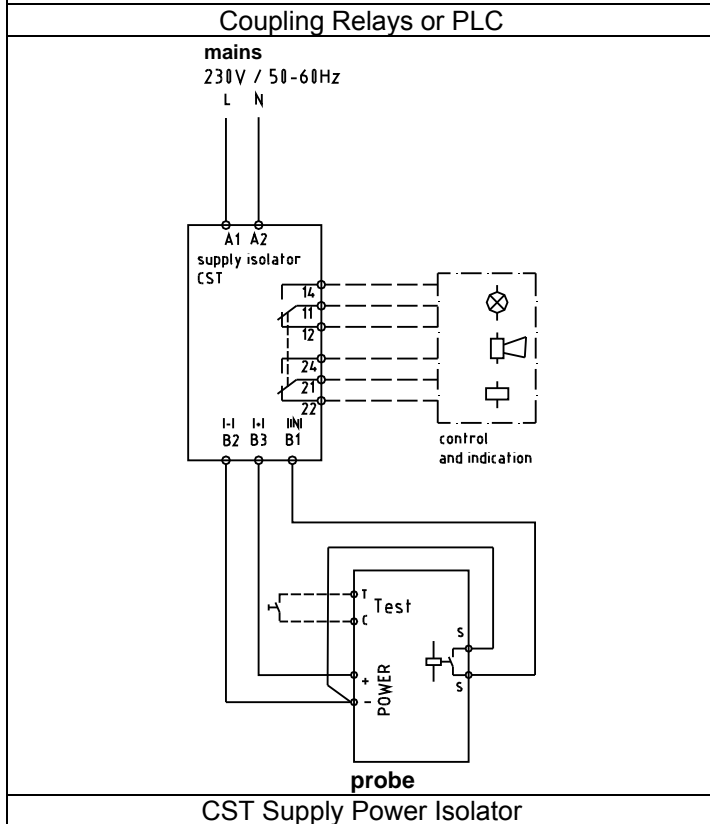
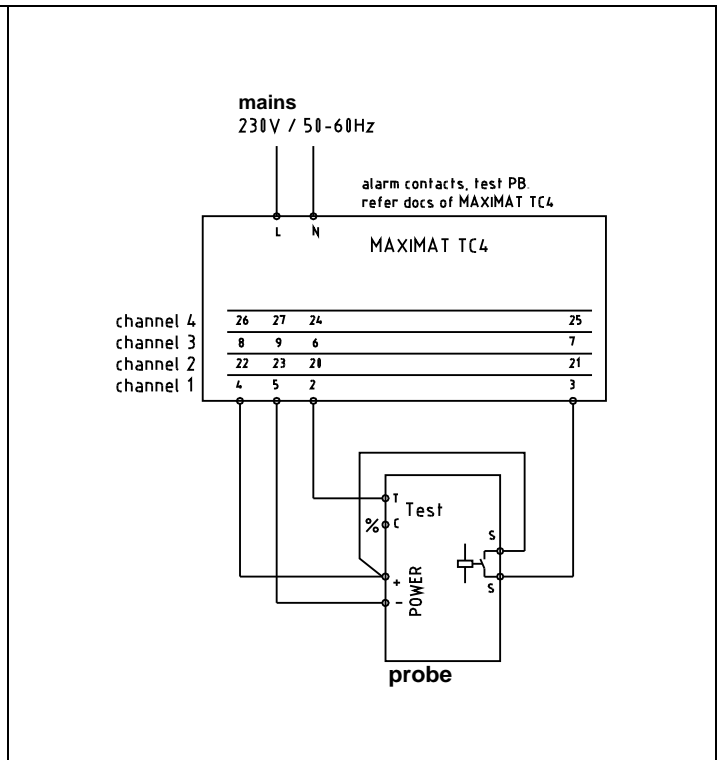
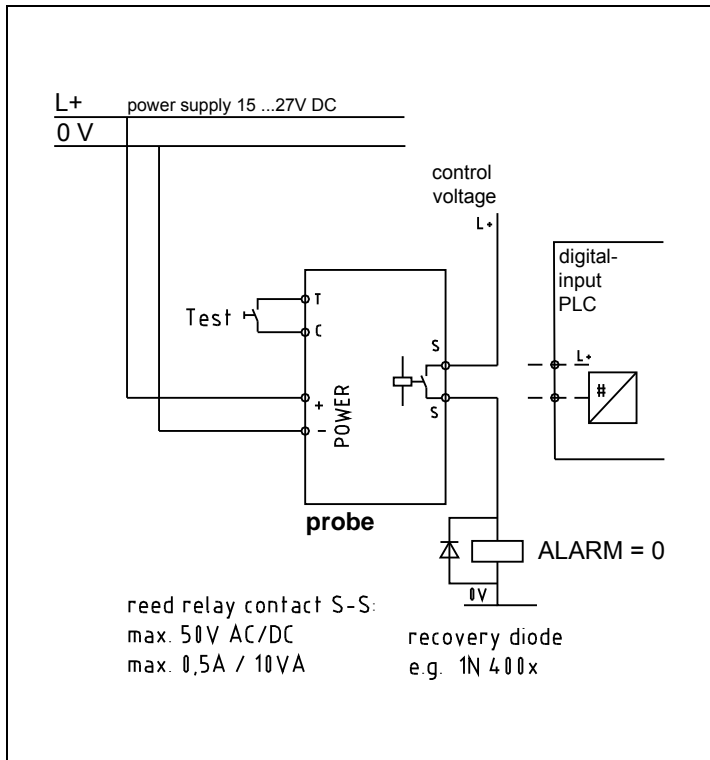
Approvals

DIBt (Germany)-Approval no. **Z-65.13.494** for overfill inhibitors in accordance with WHG §19
 SVTI ASIT (Switzerland)-Approval no. **KVU-No. 302.019.14** for overfill inhibitors in accordance with GSchG
 Vlare II (Corcon bvba Belgium), Prototypekeur certificaat nr.: **CP0914/3072-HCC001**
 GOST- Clearance Certificate (Russia) **42 1300 / 9026 10 290 0**

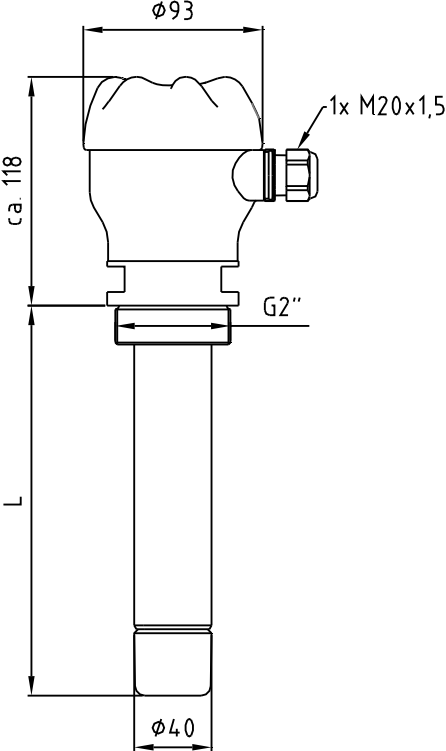
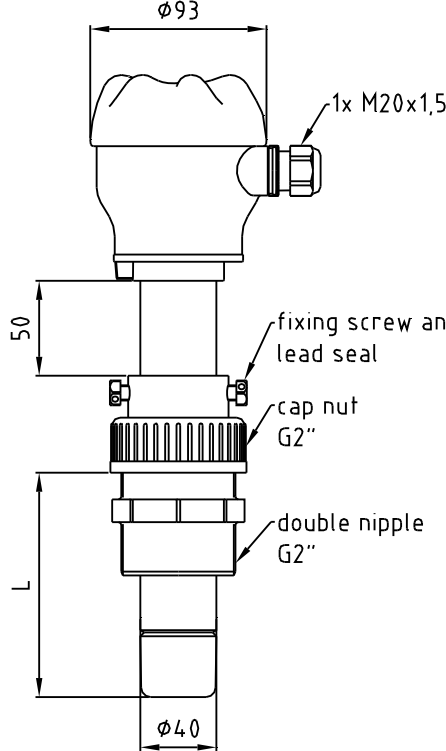
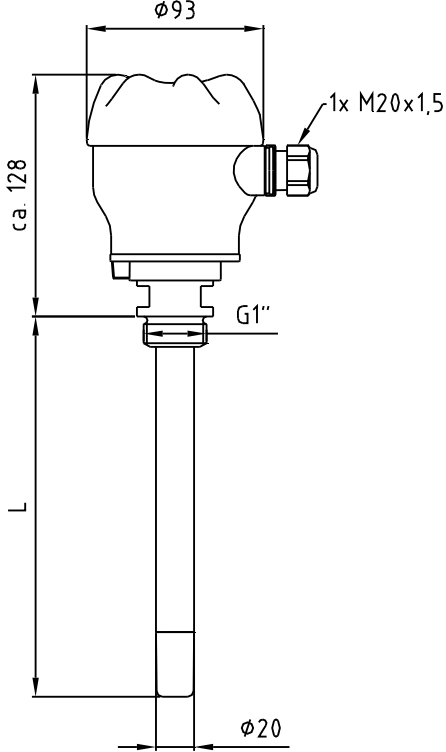
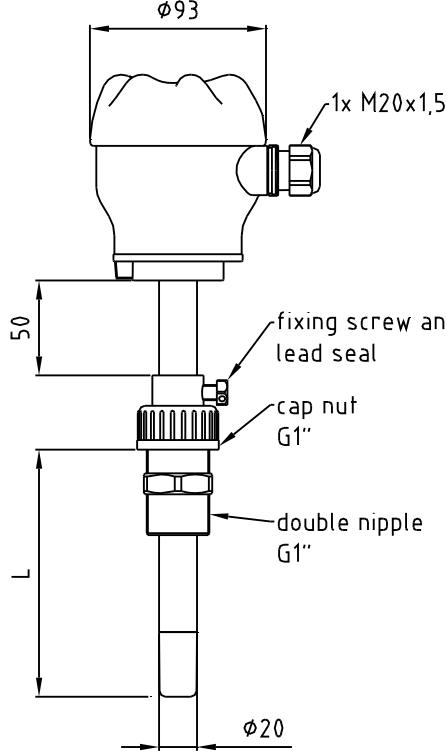
Function Test: Before Installation and Initial Start-Up, and During Inspection

Method 1	Method 2
 <p>Bucket is on the floor.</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p>Earth Connection For example:</p> <ul style="list-style-type: none"> - Protective conductor - Foundation earth electrode - Metal water pipe - Metal guard rail - Metal buttress etc. </div>  <p>Bucket is not on the floor.</p>
<ul style="list-style-type: none"> ○ Fill a bucket (plastic or metal) with original liquid or water (at least 5 litres) and set it onto the floor. ○ Immerse and remove the measuring probe several times. ○ Examine the switching status of the measuring circuit 	<ul style="list-style-type: none"> ○ 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).

Electrical Connection



Dimensions:

Trigger Point, Non-Adjustable	Trigger Point, Adjustable
 <p>Technical drawing of MAXIMAT CX40 K ... N sensor, non-adjustable. Dimensions: $\phi 93$, ca. 118, 1x M20x1,5, G2", L, $\phi 40$.</p>	 <p>Technical drawing of MAXIMAT CX40 K ... V sensor, adjustable. Dimensions: $\phi 93$, 50, 1x M20x1,5, fixing screw and lead seal, cap nut G2", double nipple G2", L, $\phi 40$.</p>
MAXIMAT CX40 K ... N	MAXIMAT CX40 K ... V
 <p>Technical drawing of MAXIMAT CX20 K ... N sensor, non-adjustable. Dimensions: $\phi 93$, ca. 128, 1x M20x1,5, G1", L, $\phi 20$.</p>	 <p>Technical drawing of MAXIMAT CX20 K ... V sensor, adjustable. Dimensions: $\phi 93$, 50, 1x M20x1,5, fixing screw and lead seal, cap nut G1", double nipple G1", L, $\phi 20$.</p>
MAXIMAT CX20 K ... N	MAXIMAT CX20 K ... V