MAXIMAT C20... Compact Overfill Sensor with connection for test push button

MAXIMAT C20 N

MAXIMAT C20 V (adjustable)

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 may only be connected to supply power which complies with the specifications included in the technical data!
- 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!

Functions Description

The MAXIMAT C20 is used for overfill detection in tanks

It is equipped with three different output circuits:
- Binary output for controlling a coupling relay
- 0 to 20 mA current output for controlling an analogue input channel, e.g. a programmed logic controller (PLC)
- Self-monitoring measuring circuit in combination with the MAXIMAT SHR C measuring transducer with 2-wire connection

Applications:

The MAXIMAT C20... compact overfill sensor is suitable for conductive liquids

Technical Data

Ambient temperature:
-20 to +60° C
Operating pressure:
atmospheric, 0.8 to 1.1 bar
Terminal housing:
PBT, fiber glass reinforced, IP 65 acc. EN 60 529
Process connection:
see type key
Supply power:
15 ... 26 V DC
Power consumption:
approx. 3 W
Outputs:
- Binary-Output: +DO / -DO max. 30 mA
  Input voltage: 24 VDC,
  Output-Voltage: approx. 18 VDC
  (coupling relay KRC recommended)
- Current output: +AO / - AO,   0 ... 20 mA
- Output for MAXIMAT SHR C..

(Observe: use only one output channel at the same time)
Terminals:
screw connectors, IP 20
max. wire cross-section 2.5 mm²
Optional:
Connection external test button:
Terminal **T** and terminal **0V**
if contact closed = overfill alarm
Effect:
Operation test of the complete MAXIMAT C electronic, the plant cabling and the control/alarm indication unit.

CE mark

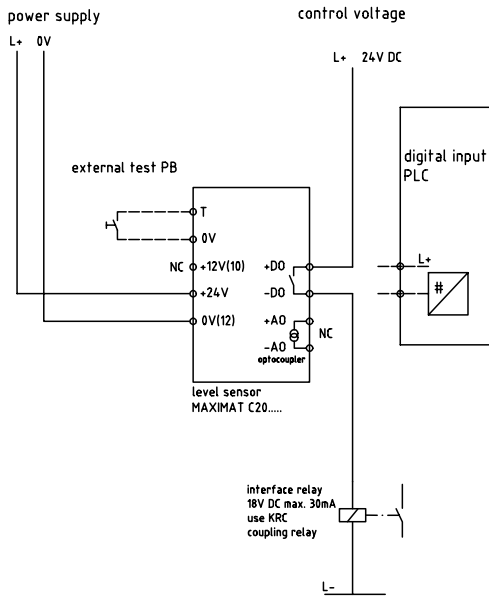In accordance with low-voltage directive (2006/95/EG) and EMC directives (89/336/EWG)

DIBT Approval

Approval no. **Z-65.13-294** for overfill sensors and leakage sensors in accordance with WHG §19

Note:
The accompanying "General Building Supervisory Approval no. Z-65.13-294" is an integral part of the operating instructions and all stipulations contained therein must be adhered to!

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power supply
L+   0V

control voltage
L+   24V DC

digital input
PLC
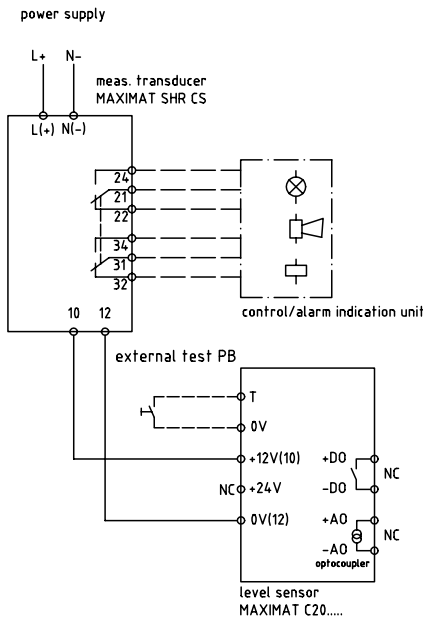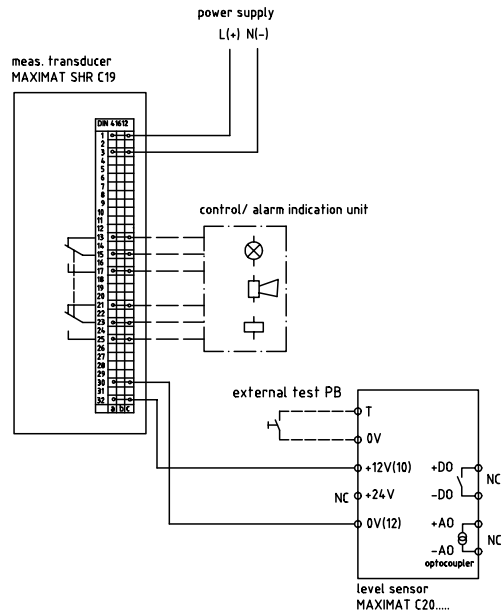
external test PB

T
0V
NC   +12V(10)   +DO
+24V   –DO
0V(12)   +AO
–AO
optocoupler
NC

level sensor
MAXIMAT C20.....

L+

#

L–

interface relay
18V DC max. 30mA
use KRC
coupling relay

power supply
L+   0V

external test PB

T
0V
NC   +12V(10)   +DO
+24V   –DO
0V(12)   +AO
–AO
optocoupler
NC

NC

analog. input
(e.g. of a PLC)

+
–
#

config. input channel
= 0 ...20mA

level sensor
MAXIMAT C20.....

control logic
o.k. = I >4 mA ... <20mA
Fill alarm =   I < 4mA
fault =   I <4mA oder >20mA

MAXIMAT C20..., Binary Output to Coupling Relay / PLC
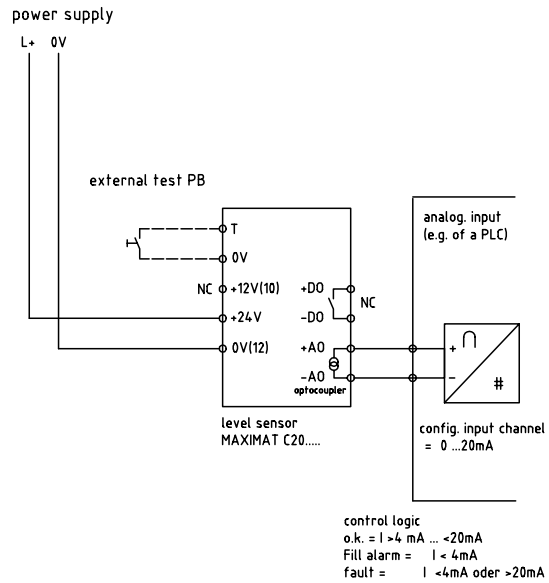
MAXIMAT C20..., Current Output to PLC Analogue Input

power supply
L+   N–

meas. transducer
MAXIMAT SHR CS

L(+)   N(–)

24
21
22
34
31
32

10   12

control/alarm indication unit

external test PB

T
0V
+12V(10)   +DO
NC   +24V   –DO   NC
0V(12)   +AO
–AO   NC
optocoupler

level sensor
MAXIMAT C20.....

power supply
L(+)   N(–)

meas. transducer
MAXIMAT SHR C19

DIN 46?2

control/ alarm indication unit

external test PB

T
0V
+12V(10)   +DO
NC   +24V   –DO   NC
0V(12)   +AO
–AO   NC
optocoupler

level sensor
MAXIMAT C20.....

MAXIMAT C20... to MAXIMAT SHR CS Measuring Transducer

MAXIMAT C20... to MAXIMAT SHR C19 Measuring Transducer

Alarm
Indication

Terminals

Signal

Cable

Terminals

Sensor electronic

MAXIMAT TC4

external
test pb

Alarm
Indication
Unit

or
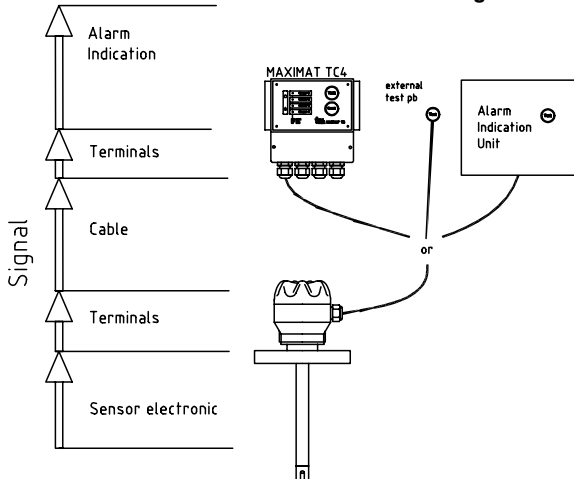
Test of the complete signaling

*) Observe: The function test with the external push button does not replace the annual operation test, which is specified in the DIBt-ZG-ÜS Chapter 6.2.