Technical Information TI 267F/00/en

Operating Instructions 017180-1000

Capacitance Limit Detection Electronic Insert EC 61 Z

Transmitter for capacitance probes





















Application

The electronic insert EC 61 Z is a transmitter for capacitance limit detection in conjunction with the limit switch Nivotester FTC 325 3-WIRE or FTC 420, 421, 422.

Features and Benefits

- Applicable over a wide temperature range
- Also applicable if conductive deposit on probe.

Measuring System

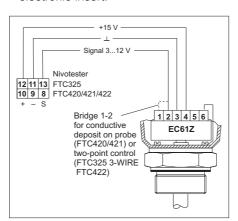
A typical measuring system comprises:

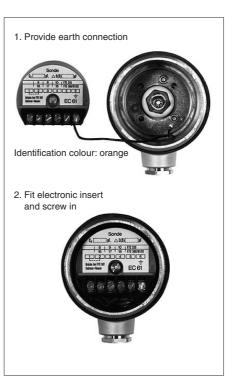
- the Nivotester FTC 325 3-WIRE or FTC 420, 421, 422
- the EC 61 Z electronic insert
- a probe, suitable for the medium to be measured.



Electrical Connection

- Connect the EC 61 and Nivotester by a 3-wire installation cable, line resistance max. 25 Ω/core.
- If the cable is laid through strong electromagnetic fields, then shielded cable, preferably with twisted cores, must be used. Ground the shielding at one end only.
- Ground the probe to terminal 6 of the electronic insert.





left: Connection to Nivotester FTC...

right: Connection to probe head

Technical Data

Housing	plastic, potted electronics
Protection type to DIN 40050	electronics IP 55, terminals IP 00
Identification	orange
Weight	180 g
Permissible ambient temperature	−20 °C+100 °C
Measuring frequency	approx. 500 kHz
Power supply	15 V ± 0.9 V from Nivotester FTC
Output signal voltage	3 V12 V, equivalent to 10350 pF
Electromagnetic compatibility	interference emission to EN 61326, electrical equipment class B interference immunity to EN 61326

Supplementary Documentation

- Nivotester FTC 325 3-WIRE Technical Information TI 380F/00/en
- □ Nivotester FTC 420/421/422 Technical Information TI 127F/00/en
- □ Nivotester FTC 420/421 Operating Instructions BA 021F/00/a2
- ☐ Nivotester FTC 420 Quick Installation Guide BA 043F/00/a3
- □ Nivotester FTC 422 Operating Instructions BA 029F/00/a2

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