

Capacitance level indicator

CapFox® EFT 7

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- For non-conductive media such as fuel oil and diesel fuel
- Band electrode can be shortened on site as required
- Rod probe for tank heights exceeding 200 mm



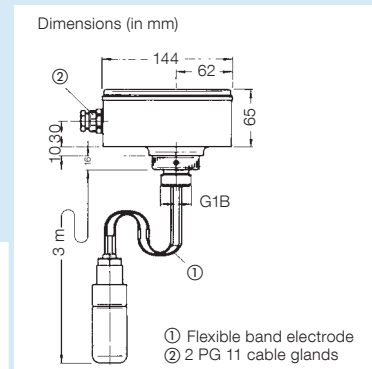
Page 33



Page 32



Page 592



Application Capacitance level indicator for continuous measurement of levels in tanks and containers with liquid levels of 200 mm to 3,000 mm. Suitable for non-conductive media, especially fuel oil and diesel fuel.

Description The compact CapFox® EFT 7 capacitance level indicator, the control unit and the probe form a unit. The device is available with either a flexible band electrode or a rigid probe. The flexible band electrode can be used for liquid levels from a minimum of 1,150 mm to a maximum of 3,000 mm. The rigid probe version with shielding tube is used for applications involving small containers with heights or diameters of 200 mm to 1,500 mm. Please specify the length of the rigid probe when ordering. Zero and full scale can be adjusted via an internal potentiometer. The output signals are proportional to the liquid level.

Technical specifications

Measuring range

0/200 mm to 0/3,000 mm,
depending on selected probe

Measuring accuracy

±2 % FS

Operating temperature range

Ambient: -20/+50 °C

Process pressure

Atmospheric

Process connection

Aluminium
Flexible band electrode G1B
Rod probe G1½B

Flexible band electrode

3,000 mm long flexible electrode band cable
(can be shortened to 1,150 mm)
with plastic probe weight

Rigid rod probe

Electrode stainless steel 316 Ti
Concentric shielding tube, steel
Required probe length must be
specified with order
Minimum length 200 mm
Maximum length 1,500 mm

Supply voltage

AC 230 V, DC 24 V, AC 24 V

Power input

AC 3 VA/DC 2 W

Output signals (load)

4–20 mA (max. 500 Ohm)
0–10 V (min. 10 kOhm)

Capacitance range

0–200 pF

Housing

Impact-resistant plastic (ABS)
W x H x D: 104 x 65 x 144 mm

Degree of protection

IP 65 (EN 60529)

Electrical connections

2 x cable gland PG 11

- Options**
- Flexible band electrode 6,000 mm
 - Other lengths

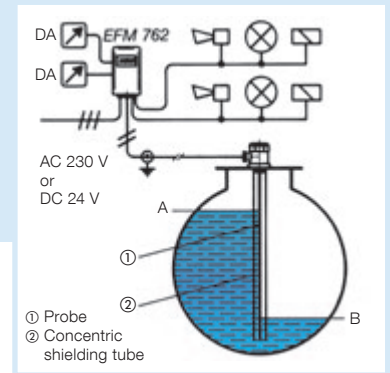
DG: E	Part no.	Price €
CapFox® EFT 7 with flexible band electrode 3 m	52107	
CapFox® EFT 7 with rod probe, please specify length!	52108	

Capacitance level indicator

CapFox® EFM 741/752/762



- Suitable for liquid, powdery, electrically conductive or non-conductive media.
- Various probes available for optimum adaptation to the application.
- Can be used as ready-to-connect filling or emptying controller



Application For continuous level measurement in containers, silos, tanks or filling systems. Suitable for liquid, powdery, electrically conductive or non-conductive media. Also suitable for pressurised or vacuum tanks.

Description The capacitance level indicator consists of a control unit with digital display (transducer), a probe and a pre-amplifier which is factory-mounted in the probe head. CapFox® EFM 752 features a limit switch with freely adjustable limit value for minimum/maximum signals with variable hysteresis which can be used for control functions via a voltage-free relay contact. CapFox® EFM 762 allows you to control filling or emptying processes. The choice of probe (partially or fully insulated, rigid or flexible) depends on the properties of the medium to be measured and the shape of the tank. Fully insulated probes must be used for conductive media. The probes are equipped with a capacitance voltage transducer (HF probe insert) in the probe head and are mounted vertically. Customised special probes are available.

Technical specifications

Measuring range

0/200 mm to 0/12,000 mm, depending on selected probe

Measuring accuracy

±2 % FS

Operating temperature range

Ambient: -10/+50 °C

Process pressure

Depending on selected probe

Display

3½ digit LCD
Resolution 0.1 % (±1 digit)

Displayed values

0–100 % liquid level

Supply voltage

AC 230 V, DC 24 V

Power input

5 VA

Outputs

0–10 V/4–20 mA

Relay outputs (relay contacts)

EFM 741 without
EFM 752 1 x voltage-free changeover contact
EFM 762 2 x voltage-free changeover contact

Switch rating

AC 250 V, 3 A
DC 24 V 0.5 A

Visual indication (752/762)

Green LED: Normal operation
Red LED: Alarm condition switch point indication

Fail-safe mode (752/762)

Integrated selector for min. or max. fail-safe mode (low/high)

Housing

Wall mounting housing with plug-in base made of impact-resistant plastic (ABS)
W x H x D: 76 x 150 x 115 mm
Degree of protection: IP 30 (EN 60529)

Scope of order

Items to be ordered separately

- Probe
- Control unit EFM
- HF probe insert part no. 51790
- Concentric shielding tube (not required with flexible band electrode since the earth electrode is already integrated)



Probes and pre-amplifiers see page 23–24.

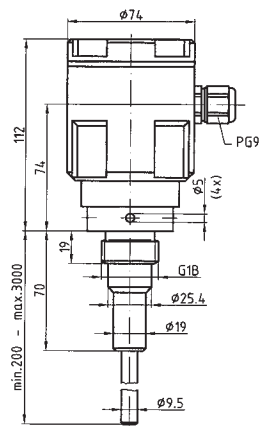
DG: E	Part no.	Price €
EFM 741	51741	
EFM 752	51752	
EFM 762	51762	

Probes for CapFox® EFM 741/752/762

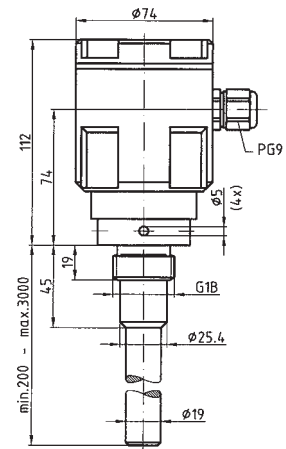
Types and dimensions (mm)

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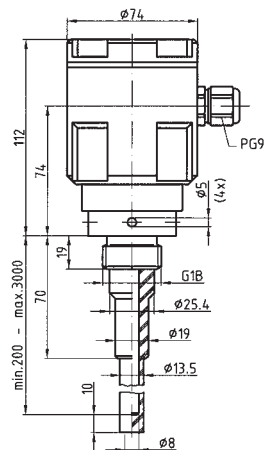
Rod probe CNS 01 partially PTFE-insulated



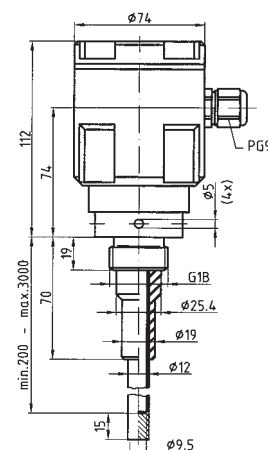
Rod probe CNS 02 heavy-duty version partially PTFE-insulated



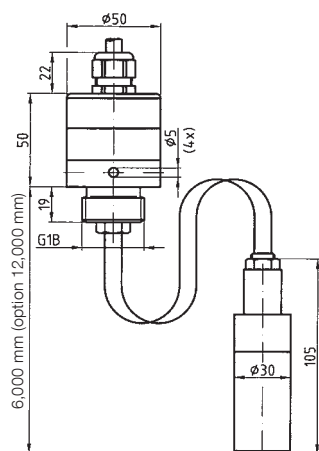
Rod probe CNS 03 fully PP-insulated



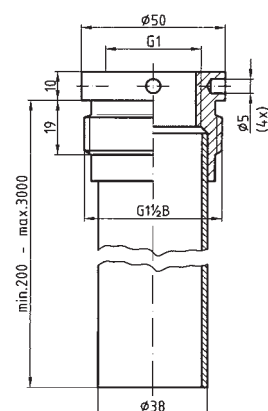
Rod probe CNS 04 fully PTFE-insulated



Band electrode CNS 05 F



Concentric shielding tube



Many other probe versions are available.
Please enquire. See page 24 for prices.