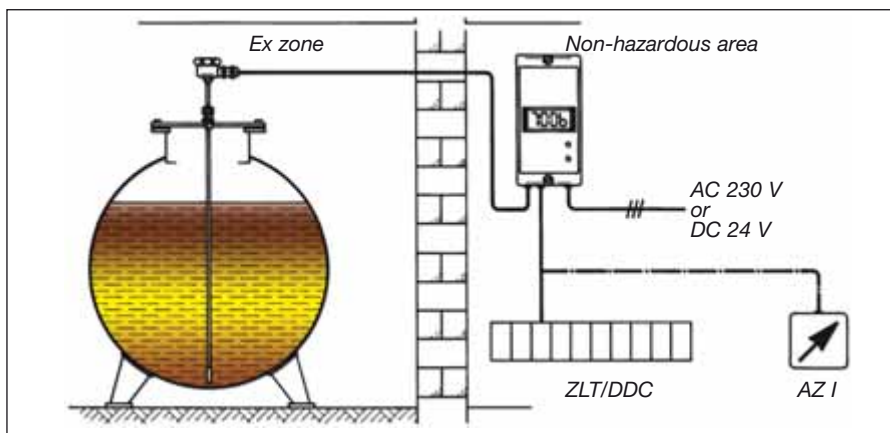


Capacitance level indicator with Ex approval CapFox® S 74x



01



Application

For continuous level measurement in tanks and vessels in Ex zones 0, 1 and 2.

Suitable for liquids, powders, electrically conducting or non-conducting media. Also suitable for pressurised or vacuum tanks.

Description

The capacitance level indicator consists of a series CapFox® S 74x evaluation unit with digital display, a probe and an Ex pre-amplifier which is factory fitted in the probe head.

CapFox® S 74x has an intrinsically safe probe circuit. In order to guarantee the intrinsic safety of the circuit, the S 74x evaluation unit may only be used in conjunction with a type Ex 3640 021HF pre-amplifier and a rigid series 88 capacitance probe. The evaluation unit must be installed outside of the Ex zone.

The choice of probe (partly or fully insulated, rigid) depends on the properties of the material to be measured and the shape of the tank. Fully insulated probes must be used for conducting media. The probes are equipped with a capacitance voltage transducer (HF probe insert) in the probe head and are mounted vertically.

Technical specifications

Measuring range

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

Accuracy of measurement

±1.5 % FSD

Operating temperature range

Ambient: -10 °C/+50 °C

Process pressure

Depending on selected probe

Display

3½ digit LCD display
Resolution 0.1 % (±1 digit)

Displayed units

0–100 % liquid level

Supply voltage

AC 230 V

Power consumption

5 VA

Outputs

0–10 V/0–1 mA/4–20 mA

Visual indication

Yellow LED power „on“

Intrinsically safe circuit

$U_M = 250 \text{ V}$, $U_0 = 13.0 \text{ V}$, $I_0 = 76 \text{ mA}$
 $P_0 = 0.25 \text{ W}$, $C_0 = 1.0 \mu\text{F}$, $L_0 = 6.1 \text{ mH}$

Housing

Wall mounting housing with plug-in base, impact resistant plastic (ABS)
W x H x D: 76 x 150 x 115 mm

Protection

IP 30 (EN 60529)

Ex approval

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HF pre-amplifier Ex

HF pre-amplifier insert Ex type 3640 021 exclusively for the CapFox® S 74x to ensure the intrinsic safety of the circuit. The pre-amplifier is factory fitted in the probe head.

Ordering information

Complete measuring system (items to be ordered separately):

- Evaluation unit S 74x
- HF probe insert type 3640 021
- Rigid series 88 probe
- Concentric screen tube

Refer to pages 30, 31 for probes. Select according to the operating conditions. Special customer-specific probes are available in addition to the standard probes.

Options

- Supply voltage DC 24 V

DG: E	Part no.	Price €
S 74x AC 230 V	51745	
S 74x DC 24 V	51746	
HF-preamplifier Ex	51791	