

Capacitive Level Switch



measuring monitoring analysing

LNZ



Weld-in sleeve LZE

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Description

The LNZ capacitive level switch is used for detecting levels of fill. The electric field penetrates several millimetres into the medium. The change in capacity caused by contact with the medium is measured and evaluated.

By using this principle of measurement it is also possible to detect non-conductive media. Installation in tanks is very straightforward regardless of position.

In combination with the KOBOLD LZE or LZE-R weld-in sleeves, the probe provides a measuring point that has no dead space and meets hygiene standards and (EHEDG approval certificate). Installation is virtually front-flush. This level switch is therefore very well suited for CIP/SIP cleaning. Adapter sleeves are also available for different process connections so that the device can also be used in existing systems.

Because the electronics are already integrated no other evaluating instrument is necessary. The output signal (24 V_{DC}) can therefore be transmitted direct to an SPS for further processing.

Applications

- Level monitoring, also in non-conductive media
- Not with deposits
- Safe level monitoring, even with foam

Technical Details

Measuring principle: capacitive Process temperature: 0...100°C

150°C max. 30 min for

CIP process

Ambient temperature: 0...70 °C
Working pressure: max. 10 bar

Material

• Head, thread supports: stainless steel 1.4404

Coupler section: PEEK, stainless steel 1.4404
 Process connection:: G ½, hygienic weld-in sleeve LZE, LZE-R (page 191-198)

Connection: threaded cable connection

M16x1.5 terminal: 3-pole, (optional plug M12x1)

Function: full /empty report (determined via

the polarity of the supply voltage)

Output: open collector, PNP, max. 200 mA

Switch delay (fixed): approx. 0.2 s Power supply: $24 V_{DC} \pm 20 \%$,

<10 mA without load

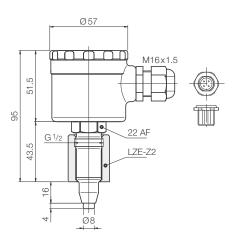
Protection: IP 67

Weight: approx. 0.5 kg

Dielectric constant of

the medium: $\epsilon_r > 20$

Dimensions



Order Details (Example: LNZ-12 G4 3PK)

Model	Material	Process connection	Electrical connection
LNZ-	12 = stainless steel	G4 = G ½	3PK = M16x1.5 threaded cable connection 3PS = M12x1 plug

EHEDG certification of the connection system in combination with weld-in sleeve LZE (see Page 191-198)