

# Capacitive Level Monitor for Bulk



measuring

monitoring

analysing

## **NSC**



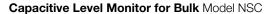


- Length of probe: 3000 mm (rod), 15 m (cable)
- $p_{max}$ : -0.1...+0.5 bar;  $t_{max}$ : -20...+80°C
- Process connection:
   G 1 male, Adapter G 1½ male,
   G 1½ male, welding-sleeve,
   circular flange
- Contact max. 250 V<sub>AC</sub>, 1 A
- Suitable for ATEX applications



Order from: C A Briggs Company

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#### **Description**

The KOBOLD level monitor devices model NSC are used for the monitoring of minimum and maximum levels in silos and depots. They are working on the capacitive principle and can be supplied in two different designs. They are suitable for various installation conditions.

The level monitoring device NSC-R is supplied with a rigid stainless steel probe with a PTFE coating. This model is mostly used for monitoring the maximum level. For small silos and low bulk densities the short version can also be installed on the side for controlling of the minimum level.

The level monitor device NSC-C consists of a stainless steel probe body, which is connected to the connection box by means of a steel cable coated with polypropylene. The cable can be shortened by the customer, making an adaptation to changing application conditions very easy. This type is usually used to control the maximum level, but also for the minimum in case of low bulk densities.

There is a nonsensitive section close to the mounting thread to avoid false alarms in case of deposits. For adaptation to the kind of media and its density or the shape of the silo, the sensitivity can be adjusted via a DIP-switch or a potentiometer.

#### **Advantages**

- No mechanically moving parts, very little wear
- Easy installation
- Pluggable evaluation module
- Various special lengths
- Adjustable sensitivity
- Setting as minimum or maximum security

#### **Application areas**

- Animal feed
- Sands and gravel
- Cement
- Flour
- Mineral products
- Food

#### **Technical Details**

Measuring principle: capacitive

Immersion length: 265 ... 3000 mm (NSC-R) (shorter versions on request)

maximum 15 m (NSC-C)

Medium temperature: max. -20...+80°C

Ambient temperature: -20...+60°C

Max. pressure: -0.1...+0.5 bar

Media DC-value:  $\mathbf{\epsilon}_{r} = \text{min. } 1.5$ 

Materials

Housing: Polycarbonate,

Aluminium with ATEX

Connection: stainless steel 1.4305

Sonde: NSC-R: stainless steel with

PTFE-coating 1.4305

NSC-C: stainless steel probe, steel cable with PP-coating isolation piece: polypropylene

Process connection: G1 male thread

Adapter: thread G11/4 and G11/2

circular flange Ø 110 mm, 200 mm weld-in sleeve outside-Ø 40 mm

Mounting position: vertical (NSC-C)

vertical/inclined (NSC-R)

Supply voltage: 18...36 V<sub>DC</sub>, 24 V<sub>AC</sub>, 110 V<sub>AC</sub>,

230 V<sub>AC</sub>, 50/60 Hz

Power input: 1 VA

Electr. connection: via 1 (2) cable gland M20x1,5

Contact: relay output

adjustable sensitivity

Electrical switching

values: max. 250 V<sub>AC</sub>, 1 A

Protection: IP65

ATEX marking: (Ex) II 2/1 ExtD (iaD)iaD A21/20 IP65

T85°C Ta: -20°C/+60°C

#### Capacitive Level Monitor for Bulk Model NSC



#### Order Details (Example: NSC-R 20 G6 00 0)

Model	Version*	Probe material	Mechanical connection	ATEX	Supply
NSC	R = rigide probe C = probe with steel cable	20 = stainless steel 1.4305	<b>G6</b> = G 1 male	<b>00</b> = ohne <b>0E</b> = ATEX	$0 = 230 \text{ V}_{AC}$ $4 = 110 \text{ V}_{AC}$ $2 = 24 \text{ V}_{AC}$ $3 = 1836 \text{ V}_{DC}$

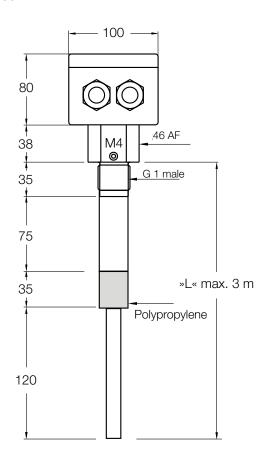
<sup>\*</sup> Please specify length for specific application »L« in writing.

#### **Dimensions**

NSC-R

# 

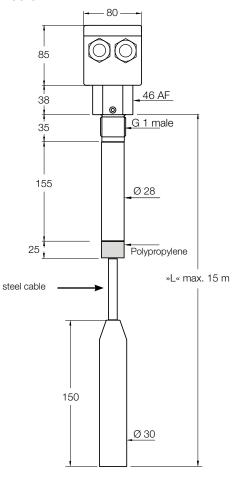
#### **NSC-R ATEX**



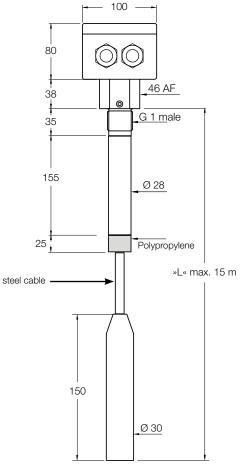


#### **Dimensions**



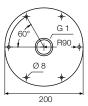


### NSC-C ATEX



#### **Spare parts and Accessories**

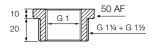
Flange type: F2



Flange type: F1



Thread adapter G1¼ and G1½



Welding sleeve



Spare parts/Accessories Model NMZ for Level Monitor NSC

Model	Design	Adapter type	Specials
NMZ	<b>A</b> = installation adapter	G7 = stainless steel thread adapter for G11/4 thread G8 = stainless steel thread adapter for G11/2 thread F1 = st. steel circular flange for thread, Ø 110 mm F2 = st. steel circular flange for thread, Ø 200 mm S6 = st. steel welding sleeve, external Ø 40 m	0 = without Y = version according to description