



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 1 ¼ male,
G 1 ½ male, welding-sleeve,
circular flange
- Contact max. 250 V_{AC}, 1 A
- Suitable for ATEX applications



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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: $\epsilon_r = \text{min. } 1.5$

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: G 1 male thread

Adapter: thread G 1 ¼ and G 1 ½
 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_{DC}, 24 V_{AC}, 110 V_{AC},
 230 V_{AC}, 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_{AC}, 1 A

Protection: IP65

ATEX marking:  II 2/1 ExtD (iaD)iaD A21/20 IP65
 T85 °C Ta: -20 °C / +60 °C

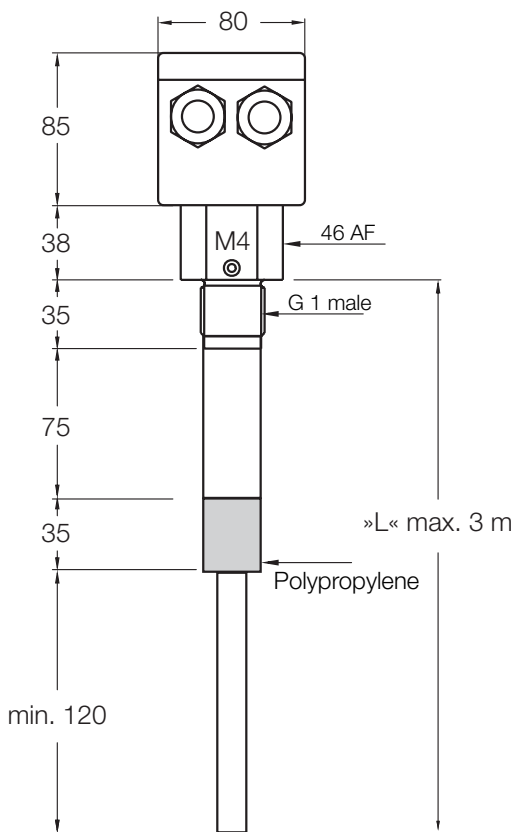
Order Details (Example: NSC-R 20 G6 00 0)

Model	Version*	Probe material	Mechanical connection	ATEX	Supply
NSC	R = rigide probe C = probe with steel cable	20 = stainless steel 1.4305	G6 = G 1 male	00 = ohne 0E = ATEX	0 = 230 V _{AC} 4 = 110 V _{AC} 2 = 24 V _{AC} 3 = 18...36 V _{DC}

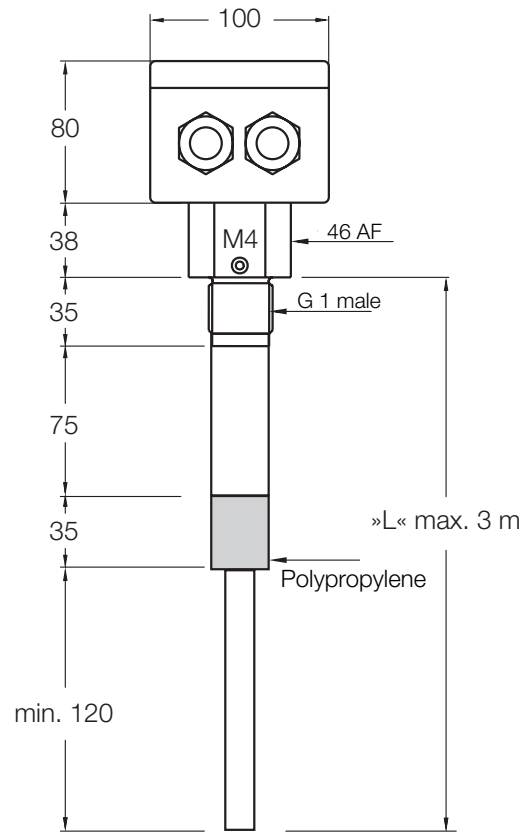
* Please specify length for specific application »L« in writing.

Dimensions [mm]

NSC-R

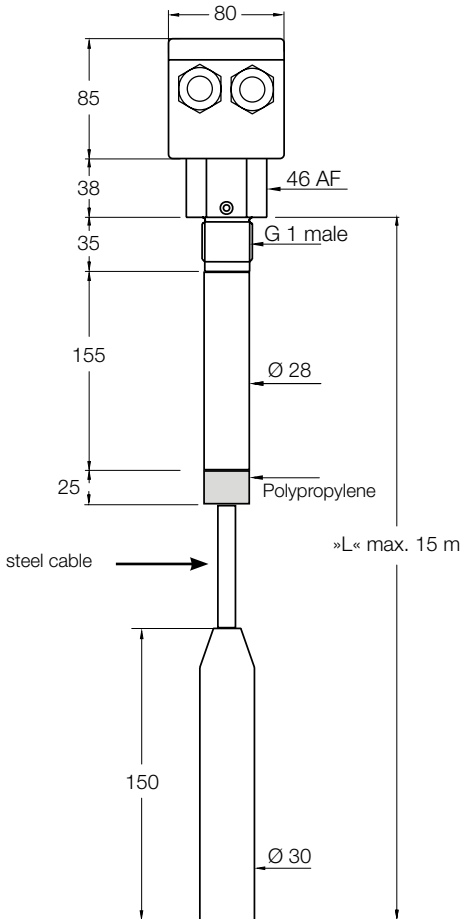


NSC-R ATEX

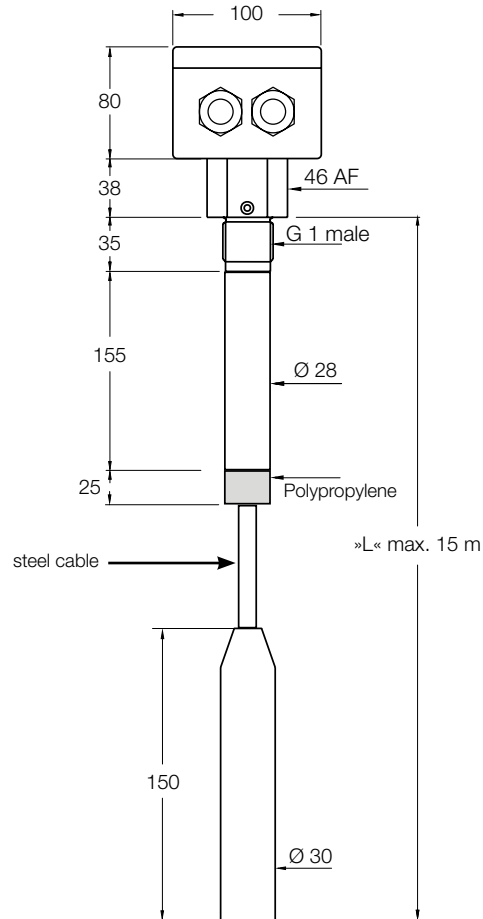


Dimensions [mm]

NSC-C

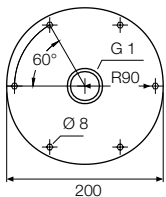


NSC-C ATEX

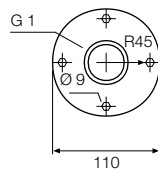


Spare parts and Accessories

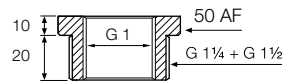
Flange type: F2



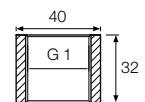
Flange type: F1



Thread adapter
G1 ¼ and G1 ½



Welding sleeve



Spare parts/Accessories Model NMZ for Level Monitor NSC

Model	Design	Adapter type	Specials
NMZ	A = installation adapter	<p>G7 = stainless steel thread adapter for G1¼ thread</p> <p>G8 = stainless steel thread adapter for G1½ thread</p> <p>F1 = st. steel circular flange for thread, Ø 110 mm</p> <p>F2 = st. steel circular flange for thread, Ø 200 mm</p> <p>S6 = st. steel welding sleeve, external Ø 40 m</p>	<p>0 = without</p> <p>Y = version according to description</p>