

## NK06 || Level Sensing Probe Unit: Conductivity Type - GL structural tested

### General Description

The Model NK06 series are standardised conductivity type level sensing probe units for detection and control liquid level. An NK 06 level sensor probe is typically used with a Model ER67 (GT76) Electronic Control Unit. This combination is suitable for a wide range of level control applications, such as:

- Monitoring minimum or maximum filling levels in vessels
- Protection of pumps against dry running
- Differentiating oil and water levels within enclosed oil/water separators

The NK06 series are GL approved (Certificate No. 93 825-86 HH)

### Principles of Operation

These sensors use the conductivity of liquids to detect liquid level. When the liquid is in contact with at least two of the electrodes (or one electrode and the walls of a metallic vessel) a conductive path is created for a very small electric current to flow. The Electronic Unit supplies the excitation voltage for this circuit, and detects the presence or absence of a minimum electric current threshold in the circuit path.

Conductivity type level sensors are compatible with liquids with conductivity 5  $\mu\text{S}/\text{cm}$  or greater.

When the liquid falls below the low detection level, the interval relay in the Electronic Unit is set, and the output relay is energised, which causes the vessel to start getting filled. When the liquid reaches the high detection level, the interval relay is cancelled, and the output relay is de-energised, causing the filling to stop.

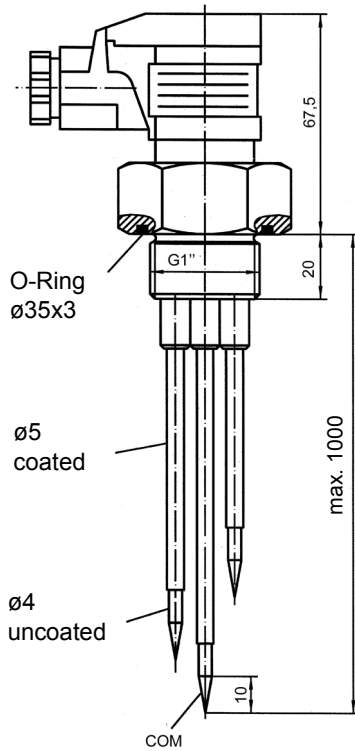


### Specifications

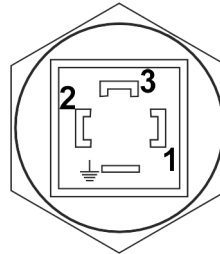
Number of electrodes	1...3
Operating pressure	10 bar (max.)
Enclosure classification	IP 65
Electrical connection	DIN EN 175301-803 standard plug-in connector; GL-approved
Media temperature	60°C (max.)
Ambient temperature	-20 to +50°C
<b>Materials:</b>	
Electrode head	Brass
Electrodes	Stainless steel (1.4305)
Liquid Conductivity	5 $\mu\text{S}/\text{cm}$ (min.)
Threaded stem	G 1" M
<b>Approval:</b>	
German Lloyd Certificate	No. 93 825-86 HH



**Dimensions** (all units in mm unless stated otherwise)



**Electrical Connections**



Connector pin assignment:

Pin 3 of the connector is always assigned to the longest electrode, Pin 2 to the next shorter electrode, and Pin 1 to the shortest electrode.

**Ordering Code**

<b>Niveau-Sonde</b>	<b>NK06</b>	<input type="text" value="0"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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**Number of Electrodes**

- 1 electrode..... > 1
- 2 electrodes..... > 2
- 3 electrodes..... > 3

**Electrode Sheathing**

- without..... > 0
- with PVC..... > 1
- with ECTFE..... > E
- with Kynar..... > K

**Materials**

Electrode head: brass, Electrodes: stainless steel (1.4305) .> 0

**Length of Electrodes (measured from sealing surface)\***

- 1st electrode in mm \*.....> ( )
- 2nd electrode in mm \*.....> ( )
- 3rd electrode in mm \*.....> ( )

\* Please fill in the desired length of every electrode in mm (max 1000mm, other lengths on request).