



## Conductive Level Switches for Conductive Liquids



measuring  
•  
monitoring  
•  
analysing

NEK



- Pressure: max. 20 bar
- Temperature: max. 85 °C
- Connection:  
R 3/4 or 3/4" NPT
- Material:  
PPS/stainless steel  
Polypropylene/stainless steel



KOBOLD companies worldwide:

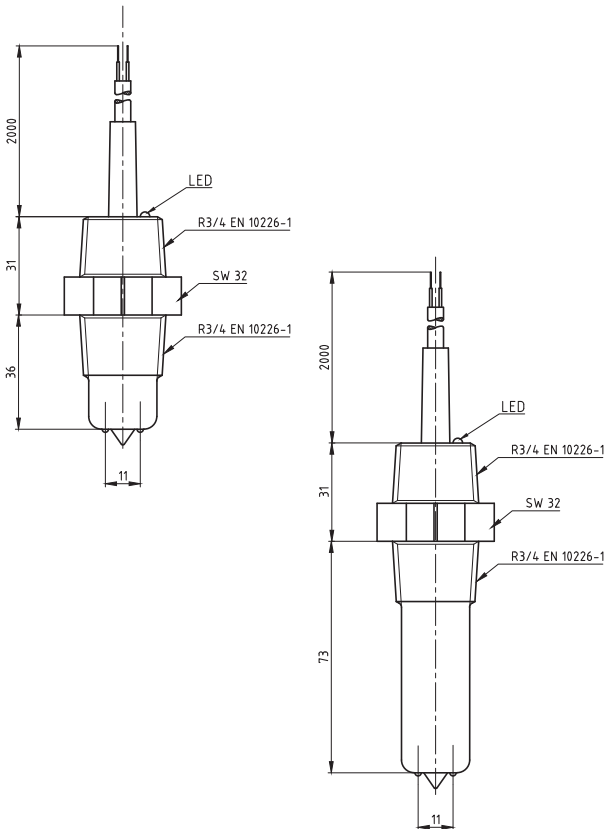
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**Description**

The KOBOLD level switch of model NEK is a complete functional unit which is specially designed for monitoring conductive liquids under extreme conditions. Due to the design without any moving or protruding parts, the switches are very suitable for monitoring critical media with, for example, solid content, negligible density or high viscosity. The double-thread allows a variety of installations. The length of the shaft can be extended by attaching an additional protective tube. The instruments operate on the conductive principle of measurement. The conductive medium touches both electrodes causing a negligible alternating current to flow; the output state changes.

**Dimensions**



**Technical Details**

- Housing: PPS or Polypropylene
- Electrodes: stainless steel 1.4571
- Connections: R 3/4 or 3/4" NPT male thread
- Operating temperature: -25 ... +85 °C (PPS)  
-25 ... +60 °C (Polypropylene)
- Max. pressure: 20 bar (PPS)  
6 bar (Polypropylene)
- Installation position: horizontal or vertical
- Contact components: open collector (NPN or PNP)  
wet signal  
Option: relay (floating changeover contact)
- Electrical connection: 2 m encapsulated cable  
3-core screened (open collector)  
5-core unshielded (relay)
- Supply: 18-29 V<sub>DC</sub>, < 20 mA
- Switch-in delay: dry/wet: 0.5 s  
wet/dry: 0.5 s
- Sensitivity: approx. 50 kΩ
- Min. conductance: approx. 100 μS/cm
- Switch capacity: **Open Collector:**  
max. 32 V / max. 100 mA  
short-circuit-proof  
**Relay:**  
max. 1 A / 30 V  
short-circuit-proof
- Protection: IP 68

**Applications**

- Chemical tanks
- Fresh-water tanks
- Mixing vessels
- Run-dry protection for pumps

**Order Details** (Example: NEK-1136 R20 C)

| Immersion length | Contact                    | Model       |               | Mechanical connection                    | Electrical connection |
|------------------|----------------------------|-------------|---------------|------------------------------------------|-----------------------|
|                  |                            | PPS         | Polypropylene |                                          |                       |
| 36 mm            | Open collector (NPN)       | NEK-1136... | NEK-1236...   | ...R20... = R 3/4<br>...N20... = 3/4 NPT | ...C = 2 m PVC cable  |
|                  | Open collector (PNP)       | NEK-2136... | NEK-2236...   |                                          |                       |
|                  | Relay (changeover contact) | NEK-3136... | NEK-3236...   |                                          |                       |
| 73 mm            | Open collector (NPN)       | NEK-1173... | NEK-1273...   |                                          |                       |
|                  | Open collector (PNP)       | NEK-2173... | NEK-2273...   |                                          |                       |
|                  | Relay (changeover contact) | NEK-3173... | NEK-3273...   |                                          |                       |