

**Operating instructions  
for  
Plastic Level Switch  
for Liquids**

**Model: NKP**



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## **2. Note**

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Please read these operating instructions before unpacking and putting the unit into operation. Follow the instructions precisely as described herein.

The instruction manuals on our website [www.kobold.com](http://www.kobold.com) are always for currently manufactured version of our products. Due to technical changes, the instruction manuals available online may not always correspond to the product version you have purchased. If you need an instruction manual that corresponds to the purchased product version, you can request it from us free of charge by email ([info.de@kobold.com](mailto:info.de@kobold.com)) in PDF format, specifying the relevant invoice number and serial number. If you wish, the operating instructions can also be sent to you by post in paper form against an applicable postage fee.

Operating instructions, data sheet, approvals and further information via the QR code on the device or via [www.kobold.com](http://www.kobold.com)

The devices are only to be used, maintained and serviced by persons familiar with these operating instructions and in accordance with local regulations applying to Health & Safety and prevention of accidents.

By usage in machines, the measuring unit should be used only when the machines fulfil the EC-machine guidelines.

## **3. Instrument Inspection**

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Instruments are inspected before shipping and sent out in perfect condition. Should the damage to a device be visible, we recommend a thorough inspection of the delivery packing. In case of damage, please inform your parcel service/forwarding agent immediately, since they are responsible for damages during transit.

### **Scope of supply:**

- Plastic Level Switch      model: NKP

## 4. Regulation Use

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Model NKP devices are for use when monitoring liquid levels. The device should only be used with liquids that are compatible with the unit's materials of construction.

Level control is often accomplished with at least two level switches - one acting to sense the minimum level and the other for maximum level detection.

## 5. Operating Principle

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The Plastic Level Switch NKP is designed for economical control of liquids in vessels. Many industrial applications can be realized with two different plastic versions each with three different mountings. The switch is remarkable for its maintenance-free design, small dimensions and reed contacts with high switch capacity. The switch is mounted on the side of the vessel. A hinged plastic float with a magnet floats up and down through the liquid level. The encapsulated reed contact is operated by the magnet. The switching function (N/O contact/N/C contact) is determined by the installation position. The switching function is reserved by simply rotating the switch through 180 °.

## 6. Mechanical Connection

The level switch should be mounted so that the float can move freely over its entire path without hitting the walls, floor or roof of the container. Avoid fitting the switch where agitators or inlet valves could expose it to excessive turbulence.

Make sure that the medium does not contain solids or ferrite particles, as they could collect on the float magnet and interfere with the switching operation. If the liquid does contain sediment or suspended matter, you must be sure they do not come into contact with the float system.



### 4 Nm of torque should be applied to the mounting nut for the NKP-6

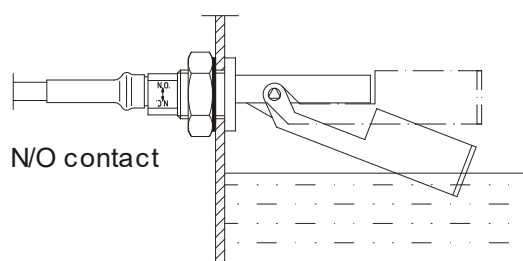
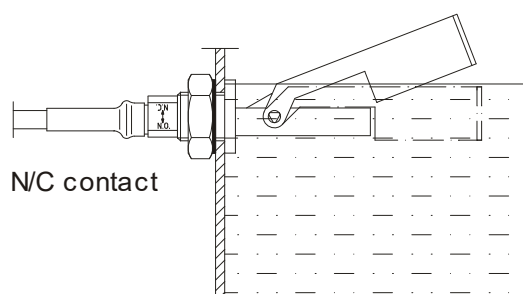
Mount the switch so that it is easily accessible for installation and maintenance.

- Make sure that the allowed max. process pressures and service temperature for the device are not exceeded.
- Mount the unit on a horizontal axis.
- Check that the joints are tight, immediately after installation.

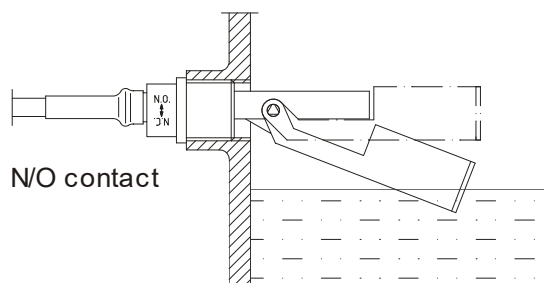
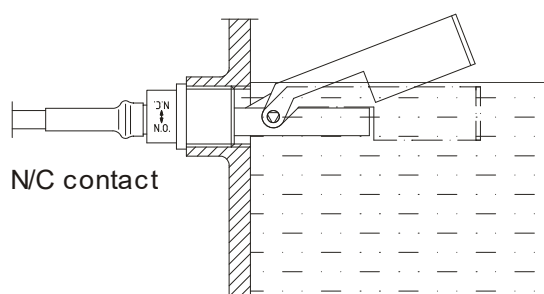
### Mounting position

The mounting position of the level switch determines the contact operation.

NKP-6 (M16)



NKP-1 / NKP-2 (G1/2, 1/2 NPT)



## 7. Electrical Connection

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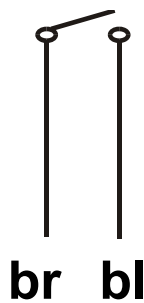
**Attention! Be sure that the supply voltage of your system is the same as that specified on the device nameplate.**

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- Before proceeding, be sure that the electrical supply lines are de-energised.
- Attach the connection cable to your system, as indicated in the diagram below.
- The level switch is totally insulated; a protective grounding conductor is not required.

Conductor colour code

**N/O contact**



The device is ready for operation once you have connected your own process devices.

## **8. Technical Information**

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Operating instructions, data sheet, approvals and further information via the QR code on the device or via [www.kobold.com](http://www.kobold.com)

## **9. Order Codes**

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Operating instructions, data sheet, approvals and further information via the QR code on the device or via [www.kobold.com](http://www.kobold.com)

## **10. Dimensions**

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Operating instructions, data sheet, approvals and further information via the QR code on the device or via [www.kobold.com](http://www.kobold.com)

## 11. Disposal

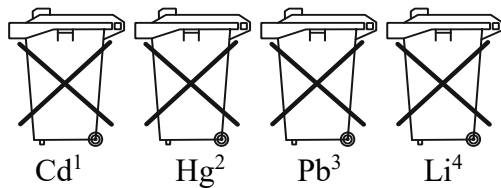
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### Note!

- Avoid environmental damage caused by media-contaminated parts
- Dispose of the device and packaging in an environmentally friendly manner
- Comply with applicable national and international disposal regulations and environmental regulations.

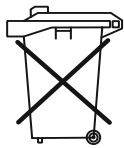
### Batteries

Batteries containing pollutants are marked with a sign consisting of a crossed-out garbage can and the chemical symbol (Cd, Hg, Li or Pb) of the heavy metal that is decisive for the classification as containing pollutants:



1. „Cd" stands for cadmium
2. „Hg" stands for mercury
3. „Pb" stands for lead
4. „Li" stands for lithium

### Electrical and electronic equipment





## 12. EU Declaration of Conformance

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We, KOBOLD Messring GmbH, Nordring 22-24, 65719 Hofheim, Germany, declare under our sole responsibility that the product:

**Plastic Level Switch          model: NKP**

to which this declaration relates is in conformity with the following EU directives stated below:

<b>2014/35EU</b>	Low voltage guideline
<b>2011/65/EU</b>	<b>RoHS</b> (category 9)
<b>2015/863/EU</b>	Delegated Directive (RoHS III)

Also, the following standards are fulfilled:

**EN 61010-1:2010**

Safety requirements for electrical measuring, control and laboratory instruments

**EN 60529:2014**

Protection type through housing (IP code)

**EN IEC 63000:2018**

Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances.

Hofheim, 26 Sept 2023



H. Volz  
General Manager



J. Burke  
Compliance Manager

## 13. UK Declaration of Conformity

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We, KOBOLD Messring GmbH, Nordring 22-24, 65719 Hofheim, Germany, declare under our sole responsibility that the product:

**Plastic Level Switch            model: NKP**

to which this declaration relates is in conformity with the following UK directives stated below:

<b>S.I. 2016/1101</b>	<b>Electrical Equipment (Safety) Regulations 2016</b>
<b>S.I. 2012/3032</b>	The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

Also, the following standards are fulfilled:

**BS EN 61010-1:2010+A1:2019**  
Safety requirements for electrical equipment for measurement, control, and laboratory use. General requirements

**BS EN 60529:1992+A2:2013**  
Degrees of protection provided by enclosures (IP Code)

**BS EN IEC 63000:2018**  
Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances.

Hofheim, 26 Sept 2023



H. Volz  
General Manager

J. Burke  
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