

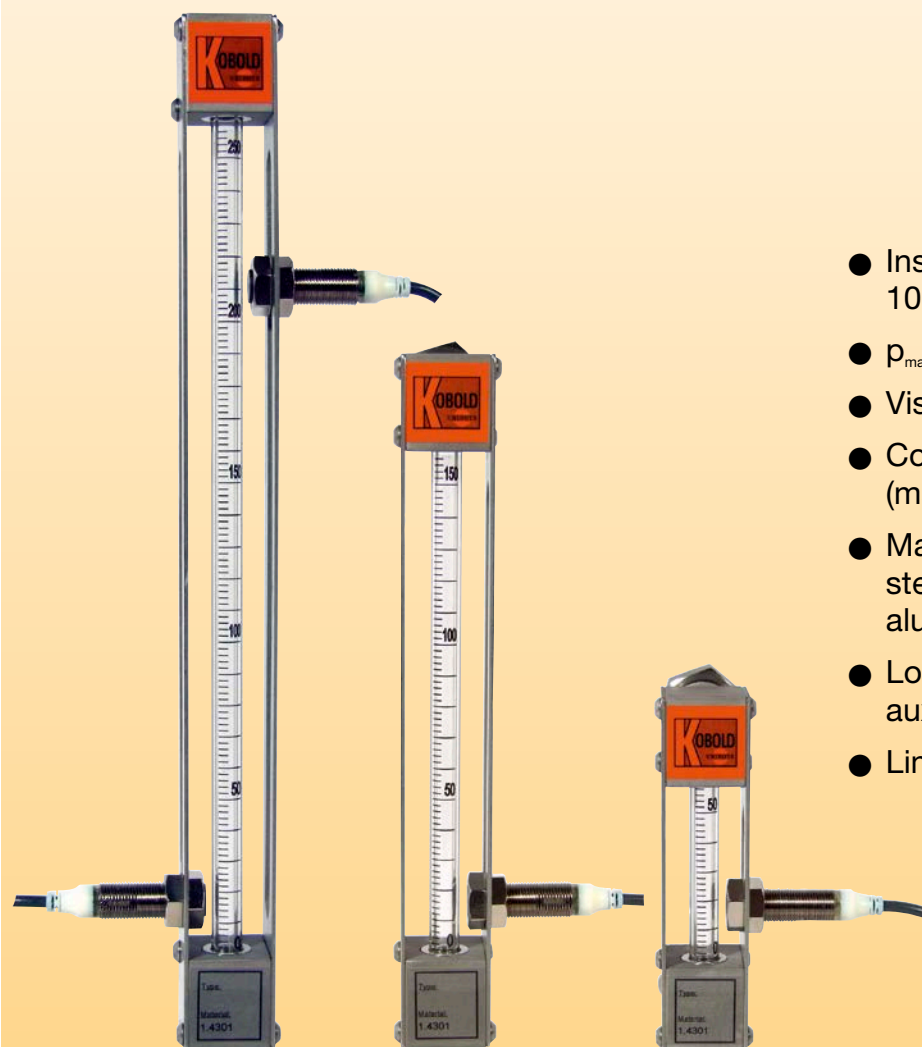


## Mini Bypass Level Indicator



measuring  
•  
monitoring  
•  
analysing

NZJ



- Installation length: 100 ... 540 mm
- $p_{\max}$ : 16 bar;  $t_{\max}$ : 100 °C
- Viscosity: max. 50 mm<sup>2</sup>/s
- Connection: G $\frac{1}{4}$ ,  $\frac{1}{4}$ " NPT (male) union nut
- Material: stainless steel (1.4301/1.4404) / aluminium
- Local indication without auxiliary power
- Limit contacts



N2

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### Description

The NZJ type glass tube level indicator is applicable for the indication of liquid level in small standing or lying round containers used in pharmaceutical and chemical industries.

The loads occurring at the installation are absorbed by the outer armature, thus the glass tube is protected against breaking. The outer armature also protects the glass tube against the mechanical impacts that may occur following the installation.

Installation length means the distance between the horizontal centre lines of the two threaded stubs, that is minimum 100 mm, and maximum 540 mm.

The bottom, and top sealing of the glass tube is by two O-rings each, the material of which is to be chosen to be chemically compatible with the liquid measured. Standard sealing material is NBR, whereas FPM, EPDM or PTFE are available on request.

The level indicator may be furnished with capacitive level sensors, which monitor the Min./Max. level or any level along the scale. The scale can be printed on a foil and to be attached to the glass tube.

### Areas of Application

- Pharmaceutical
- Chemical
- Water treatment
- Laboratories
- Small storage tanks for liquids on any field
- Gravity tanks
- Capacity tank

### Technical Details

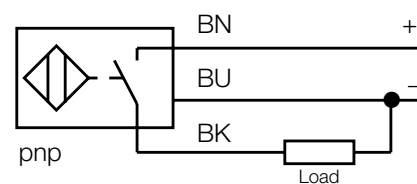
Installation position: vertical  
 Installation length: 100 ... 540 mm  
 Measuring length : 60... 500 mm  
 Material: stainless steel (1.4301/1.4404)/Alu  
 Gaskets: NBR, FPM, EPDM, PTFE

Process connection: G 1/4, 1/4" NPT (male) union nut  
 Scale resolution: 2 mm on stick foil  
 Max. pressure: 16 bar  
 Ambient temperature: -25 ... +70 °C  
 Medium temperature: 0 ... +100 °C  
 (0 ... +70 °C with switch)  
 Density: any (no float used)  
 Viscosity: max. 50 mm<sup>2</sup>/s

### Limit contacts

**Type:** capacitive sensor  
 Operating voltage: 10 ... 65 V<sub>DC</sub>  
 Short-circuit protection: yes  
 Voltage drop: ≤ 1.8 V  
 Operating current: ≤ 200 mA  
 No-load current: ≤ 15 mA  
 Output function: 3-wire, N/O-contact, PNP  
 Connection type: 2 m PVC cable  
 Core cross-section: 3 x 0.34 mm<sup>2</sup>  
 Fine adjustment: via potentiometer  
 Switching indication: LED, yellow  
 Protection: IP 67

### Wiring diagram





**Materials**

Code	Tube	Body	Connection	Seal	Side Flat
NZJ-A	borosilicate glass	aluminium	1.4404	NBR	1.4301
NZJ-K		stainless steel 1.4301		FPM	
NZJ-S		stainless steel 1.4404		FPM	

**Order Details** (Example: NZJ-K 1 1 G2 00 0)

Model/Version	Measuring scale	Seals	Connection	Switches <sup>2)</sup>	Options
<b>NZJ-A</b> = aluminium <b>NZJ-K</b> = st. steel 1.4301 <b>NZJ-S</b> = st. steel 1.4404	<b>0</b> = without <b>1<sup>1)</sup></b> = plastic foil on measuring tube (2 mm division) <b>2<sup>1)</sup></b> = plastic foil on measuring tube (% division)	<b>1</b> = FPM <b>3</b> = EPDM <b>4</b> = NBR <b>5</b> = PTFE	<b>G2</b> = G ¼ male <b>G3</b> = G ⅜ male <b>N2</b> = ¼" NPT male	<b>00</b> = without <b>1D<sup>3)</sup></b> = 1 x N/O, PNP <b>2D<sup>3)</sup></b> = 2 x N/O, PNP <b>nD<sup>3)</sup></b> = n x N/O, PNP <b>1S<sup>4)</sup></b> = 1 x N/O, PNP <b>2S<sup>4)</sup></b> = 2 x N/O, PNP <b>nS<sup>4)</sup></b> = n x N/O, PNP	<b>0</b> = without <b>V</b> = with vent hole on top <b>Y</b> = customer specification

<sup>1)</sup> Installation length »L« to be specified in writing (scale length = L-40 mm). 0% and 100% level are relative to the bottom and top connection.

<sup>2)</sup> Capacitive sensors

<sup>3)</sup> Ideal for water, water-based solutions and solvent-based liquids.

<sup>4)</sup> Ideal for oils, greases, lubricants, inks, acids, sauces, water-based alkalis and cleaning agents.

**Dimensions [mm]**

