

# Micro Bypass Level Indicator

with Switch Option



measuring  
•  
monitoring  
•  
analyzing

NZJ



- Installation Length: 4" ...22"
- $p_{\max}$ : 230 PSI
- $t_{\max}$ : 210 °F
- Viscosity: Max. 50 mm<sup>2</sup>/s
- Connection: 1/4" NPT, G1/4 (Male) Union Nut
- Material: Stainless Steel (304/316) / Aluminum
- Local Indication without Auxiliary Power
- Limit Contacts



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**Description**

The KOBOLD NZJ glass tube bypass level indicator indicates liquid level in small containers and tanks. It is engineered with durability in mind, as the glass tube is protected from damage by the stainless steel outer armature. The glass tube is sealed by two O-rings each, on both the top and bottom. Sealing materials are NBR, FKM, EPDM, or PTFE for compatibility with various media. The NZJ is available without a scale, or with an incremental inch, mm, or percentage scale attached to the glass measuring tube. It can also be fitted with one or two level switches. ATEX versions are also available. Installation length refers to the distance between the horizontal center lines of the two threaded stubs, with a minimum of 4 inches and a maximum of 22 inches.



**Areas of Application**

- Pharmaceutical
- Chemical
- Water Treatment
- Laboratories
- Small Storage Tanks for Liquids
- Gravity Tanks
- Capacity Tank



**Technical Details**

<b>Installation Position:</b>	Vertical
<b>Installation Length:</b>	4" ... 22"
<b>Scale Length (Visible Length):</b>	2.4" ... 20.4"
<b>Material:</b>	Stainless Steel (304/316)/ Aluminum
<b>Gasket:</b>	NBR, FKM, EPDM, or PTFE
<b>Connection:</b>	1/4" NPT, G1/4 (Male) Union Nut
<b>Scale Material:</b>	Plastic Foil
<b>Max. Pressure:</b>	230 PSIG (ATEX version 145 PSIG)
<b>Ambient Temperature:</b>	-13...158 °F
<b>Media Temperature:</b>	32...212 °F (without switch) 32...158 °F (with switch)
<b>Density:</b>	Any (No Float Used)
<b>Max. Viscosity:</b>	50 mm <sup>2</sup> /s

**Models without ATEX**

<b>Type:</b>	Capacitive Sensor
<b>Operating Voltage U<sub>B</sub>:</b>	10 ... 65 V <sub>DC</sub>
<b>Short Circuit Protection:</b>	Yes
<b>Voltage Drop at U<sub>D</sub>:</b>	≤ 1.8 V
<b>Operating Current I<sub>L</sub>:</b>	≤ 200 mA
<b>No-Load Supply Current I<sub>0</sub>:</b>	≤ 15 mA
<b>Output Function:</b>	3-wire, N/O Contact, PNP
<b>Connection Type:</b>	2 m PVC Cable
<b>Core Cross Section:</b>	3 x 0.34 mm <sup>2</sup>
<b>Fine Adjustment:</b>	Via Potentiometer
<b>Switching Indication:</b>	LED, Yellow
<b>Protection:</b>	IP65

**Models with ATEX**

<b>Type:</b>	Capacitive Sensor
<b>Operating Voltage:</b>	Nom 8.2 V <sub>DC</sub>
<b>Non-actuated Consumption:</b>	≤ 1.2 mA
<b>Actuated Consumption:</b>	≥ 2.1 mA
<b>Output Function:</b>	2-wire, NAMUR
<b>Connection Type:</b>	2 m PVC Cable
<b>Core Cross Section:</b>	2 x 0.34 mm <sup>2</sup>
<b>Fine Adjustment:</b>	Via Potentiometer
<b>Switching Indication:</b>	LED, Yellow
<b>Protection:</b>	IP67
<b>ATEX Version:</b>	 II 2G Ex ia IIC T6 Gb  II 1D Ex ia IIIC T115°C Da



Materials

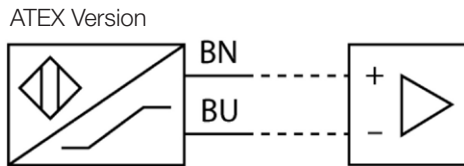
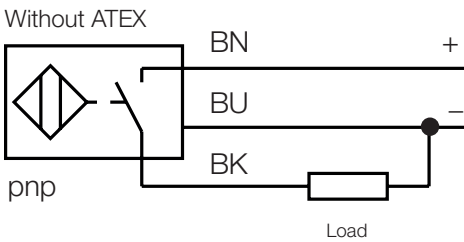
Model	Tube	Body	Connection	Seals	Side Plates
NZJ-A	Borosilicate Glass	Aluminum	316 Stainless Steel	FKM	304 Stainless Steel
NZJ-K		304 Stainless Steel		EPDM	
NZJ-S		316 Stainless Steel		NBR PTFE	

Order Details (Example: NZJ-K 1 1 N2 00)

Model/Version	Measuring Scale	Seals	Connection	Switch
NZJ-A.. = Aluminum NZJ-K.. = 304 Stainless Steel NZJ-S.. = 316 Stainless Steel	..0.. = without ..1*.. = Plastic Foil on Measuring Tube (2 mm Division) ..2*.. = Plastic Foil on Measuring Tube (% Division) ..3*.. = Plastic Foil on Measuring Tube (1/8" Division)	..1.. = FKM ..3.. = EPDM ..4.. = NBR ..5.. = PTFE	..N2.. = 1/4" NPT ..G2.. = G 1/4 Male	..00 = without switch ..10 = 1x N/O ..20 = 2x N/O ..A0 = 1x ATEX ..B0 = 2x ATEX

\* Installation length «L» to be specified in writing (scale length = L - 1.6").  
 0% and 100% level are relative to the bottom and top connection.

Wiring Diagrams



Dimensions

