

Mini Bypass Level Indicator



measuring monitoring analysing

NZJ



KOBOLD companies worldwide:

ARGENTINA, AUSTRALIA, AUSTRIA, BELGIUM, BULGARIA, CANADA, CHILE, CHINA, COLOMBIA, CZECHIA, EGYPT, FRANCE, GERMANY, GREAT BRITAIN, HUNGARY, INDIA, INDONESIA, ITALY, MALAYSIA, MEXICO, NETHERLANDS, PERU, POLAND, REPUBLIC OF KOREA, ROMANIA, SINGAPORE, SPAIN, SWITZERLAND, TAIWAN, THAILAND, TUNISIA, TURKEY, USA, VIETNAM

KOBOLD Messring GmbH Nordring 22-24 D-65719 Hofheim/Ts.

← Head Office:

+49(0)6192 299-0 +49(0)6192 23398 info.de@kobold.com www.kobold.com





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 as requested ATEX version, 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

Gasket: NBR, FPM, EPDM, PTFE
Process connection: G¼, ¼" NPT (male) union nut

Scale resolution: 2 mm on stick foil

Max. pressure: 16 bar

Medium and ambient

temperature: -25...+100°C

(-25 ... +70 °C with switch)

Density: any (no float used)

Max. viscosity: 50 mm²/s

Limit contacts

Type: capacitive sensor (without ATEX)

Operating voltage U_B : 10...36 V_{DC} Short-circuit protection: pulsing Voltage drop at U_D : $\leq 2.5 \text{ V}$ Operating current I_I : 0...100 mA

No-load supply

current I_0 : $\leq 12 \text{ mA}$ Switching indication: LED, yellow

Potentiometer: sensitivity adjustment
Ambient temperature: -25...+70 °C (-13...158° F)

Connection type: cable PUR, 2 m
Core cross-section: 0,34 mm²
Protection: IP65

Type: capacitive sensor (with ATEX)

Ambient temperature: -25...+70 °C
Operating voltage: 10...30 V_{DC}
DC rated current: ≤ 200 mA
No-load current I₀: ≤ 15 mA
Residual current: ≤ 0.1 mA

Output function: 3-wire, N/O contact, PNP

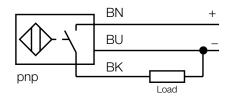
Voltage drop at I_e : $\leq 1.8 \text{ V}$

Connection type: cable PUR, 2 m

Protection: IP67

ATEX version: (Ex) II 3G Ex nA IIC T4 Gc (Ex) II 3D Ex tc IIIC T91°C Dc

Wiring diagram





Materials

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

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

Model/Version	Measuring scale	Seals	Connection	Switch	Options
NZJ-A = aluminium NZJ-K = st. steel 1.4301 NZJ-S = st. steel 1.4404	 0 = without 1* = plastic foil on measuring tube (2 mm division) 2* = plastic foil on measuring tube (% division) 	1 = FPM 3 = EPDM 4 = NBR 5 = PTFE	G2 = G ¼ male N2 = ¼" NPT	0 = without switch 1 = 1 x N/O 2 = 2 x N/O A = 1 x N/O ATEX B = 2 x N/O ATEX	0 = withoutY = customer specification

^{*} 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.

Dimensions [mm]

