

## Description

Level Sensor NR100 is designed to monitor liquids, granules, and powder. It is especially suitable for aggressive media and foodstuffs. Available as MIN or MAX monitor.

## Features

- MIN or MAX sensor
- transistor output
- max. medium temperature +130 °C
- LED status indication
- sanitary probe

## Ordering information

<b>Type No.</b>	
<b>NR100</b>	Sanitary Level Sensor
<b>Voltage rating</b>	
<b>DC 24 V</b>	
<b>Mounting method</b>	
<b>STD</b>	for use with compression nut (to be ordered separately)
<b>G1A</b>	thread to DIN 13, part 6, ISO 228/1
<b>1"NPT</b>	thread to ANSI B1.20.1
<b>Probe and fitting material</b>	
<b>B4</b>	PTFE Teflon®
<b>Function (factory preset)</b>	
<b>MIN</b>	minimum sensor
<b>MAX</b>	maximum sensor
<b>Cable (type LVCC, AWG16, 3x1.31 mm<sup>2</sup>)</b>	
standard without cable	
<b>NR100 - DC24V - G1A - B4 - MAX</b>	... ordering example

Mating connector supplied with the product.

## Accessories

0Z121Z000034	compression nut (for STD), consisting of
	- slotted nut
	- pressure spring
	- threaded bush

## Options

**AC voltage ratings and relay outputs:**  
only with power supply NG03 (see technical data NG03)



NR100-...

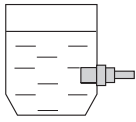
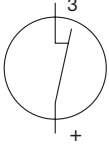

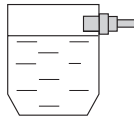
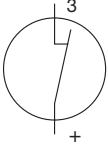

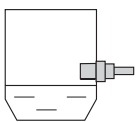
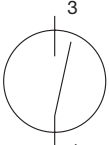

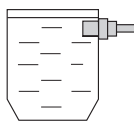
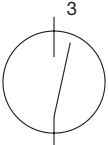



## Technical data

Input voltage	DC 24 V ±25% or with power supply NG03
Power consumption	typically 30 mA
Output max. load	PNP transistor, high side switching, max. 0.3 A (0.5 A short-time) short-circuit and overload protected with free-wheeling diode
Voltage drop	approx. 2 V
Ambient temperature	-20 °C...+85 °C
Medium temperature	-20 °C...+100 °C, for a short period (1 minute) up to 130 °C
Response delay	approx. 1 s
Switching point hysteresis (depending on medium viscosity)	horizontally mounted: 30 mm/32.5 mm max. (probe dia.)
Reverse polarity protection	fitted between plus and minus pole
Degree of protection to IEC 529/DIN 40050	IP65 housing (with mating connector)
Cable gland	PG 9 (for 6.5...8 mm cable dia.)
Pressure resistance	2 bar/29.4 PSI, with PTFE *)
Connection	screw terminals max. 1.5 mm <sup>2</sup> (AWG 16)
Material	probe PTFE *) fitting PTFE *) housing PTFE *) connector PBTP gv
Material spec.	PTFE = teflon® Polytetrafluorethylen PBTP gv = Polybutylene terephthalate with glass fibre
Mounting method	see dimension diagram
Mounting attitude	optional
Cable length	standard without cable 300 m max. Observe voltage drop!
Mass	approx. 180 g

\*) Polyamide PA 12 to special order (pressure resistance 25 bar/367.5 PSI)

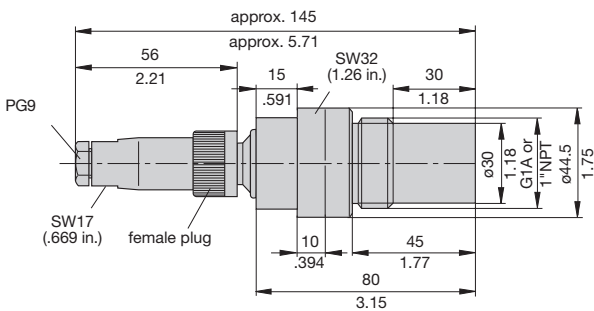
CE mark to demonstrate compliance with applicable directive.

Status indication factory preset for MIN or MAX

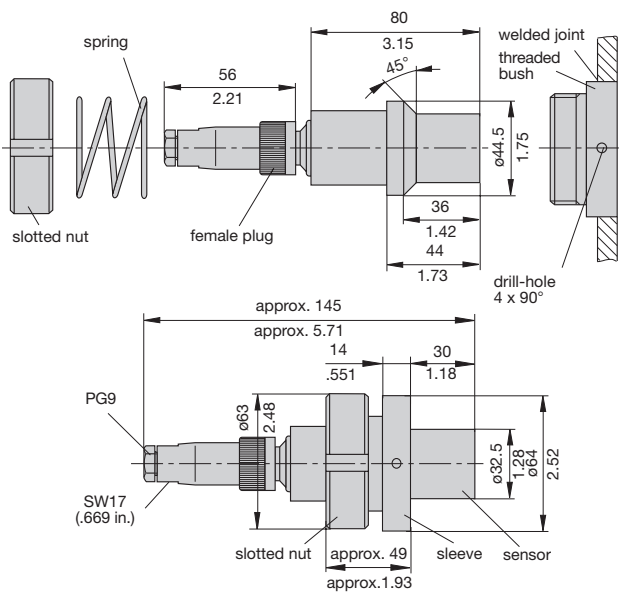
Minimum			Maximum		
medium level	transistor output	LED green	medium level	transistor output	LED green
					
					
short-circuit in the load circuit:					

Dimensions

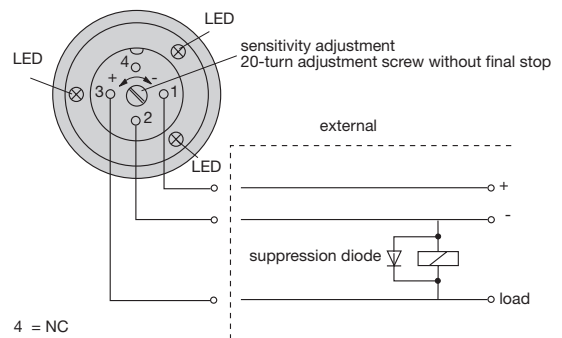
G1A or 1"NPT



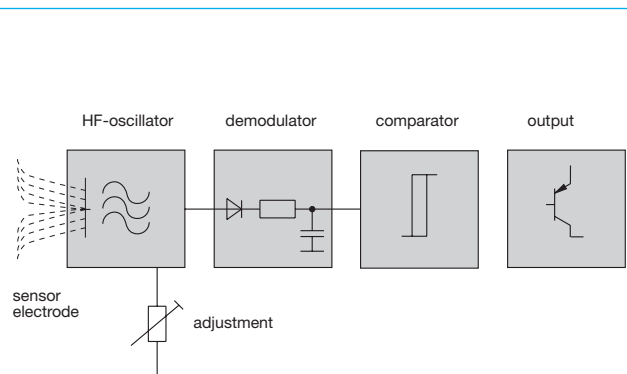
STD (with compression nut)  
OZ121Z000034



Connection diagram



Schematic diagram



This is a metric design and millimeter dimensions take precedence (mm / inch)

All dimensions without tolerances are for reference only. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved. Product markings may not be exactly as the ordering codes. Errors and omissions excepted.