

Description

Level Sensor NR 150 is suitable for liquids with low relative dielectric constant ϵ_r (e.g. oil). With MIN/MAX selector switch.

Features

- status indication by 2 LEDs
- suitable for general industrial applications
- recommended for oil or media with similar electrical conductivity
- min/max selector switch
- transistor output
- max. medium temperature +130 °C

Ordering information

Type No.	NR 150	Level Sensor
Voltage rating	DC 9-36 V	short-circuit proof PNP transistor output
Mounting method	G3/4A	thread to DIN 13, part 6, ISO 228/1
	3/4"NPT	thread to ANSI B1.20.1
Probe material	C	Tefzel® (ETFE)
Fitting material	1	stainless steel 1.4305/AISI 303
	2	stainless steel 1.4571/AISI 316 Ti (standard)
Connection (optional)	B	connector M 12 to DIN EN 60947-5-2
	Cable	(type LVCC, AWG24, 3x0.2 mm ²) standard without cable

NR 150 - DC9-36V - G3/4A - C 1 - ordering example

Ordering information for cable

Type No.	KA type 1	LVCC, AWG 24, 3x0.2mm ²
Available cable lengths	...	2 m, 3 m, 5 m, 10 m, 15 m, 20 m, 25 m, 30 m, 40 m, 50 m ... 200 m (in 10 m steps)

KA type 1 | 2 m | ordering example

Accessories

0Z031Z000097 metal coupling if the sensor is to be used as an immersion sensor

Options

AC voltage ratings and relay outputs:
only with power supply NG 03 (see page 149)

Cable: standard without cable; max. 200 m cable with connector available to special order (300 m upon request).





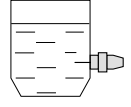
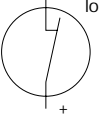


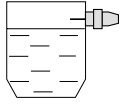
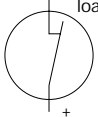


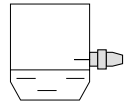
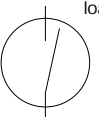


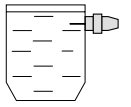
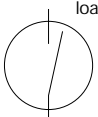






Technical data

Input voltage	DC 9...36 V or with power supply NG 03
Power consumption	typically 15 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 -4 °F...+185 °F
Medium temperature	-20 °C...+130 °C (to +150 °C short-time) -4 °F...+266 °F (to +302 °F short-time)
Response delay	approx. 0.1 s
Degree of protection to IEC 529/DIN 40050	IP 65 housing (with mating connector)
Cable gland	PG 7
Pressure resistance	25 bar/367.5 PSI
Connection	screw terminals max. 1.5 mm ²
Reverse polarity protection	in-built
Material	probe fitting: ETFE DIN 1.4305/AISI 303, or DIN 1.4571/AISI 316 Ti (standard) seal (O ring): Viton® housing cover: PA6-3-T
Material spec.	ETFE = Tefzel® Ethylene Tetrafluoromethylene) Copolymerisate PA6-3-T = Trogamide, transparent
Mounting method	screw in
Mounting attitude	optional
Cable length	standard without cable 300 m max. Observe voltage drop!
Switching point hysteresis (depending on medium viscosity)	horizontally mounted: 5 mm max. (probe dia.)
Mass	approx. 220 g

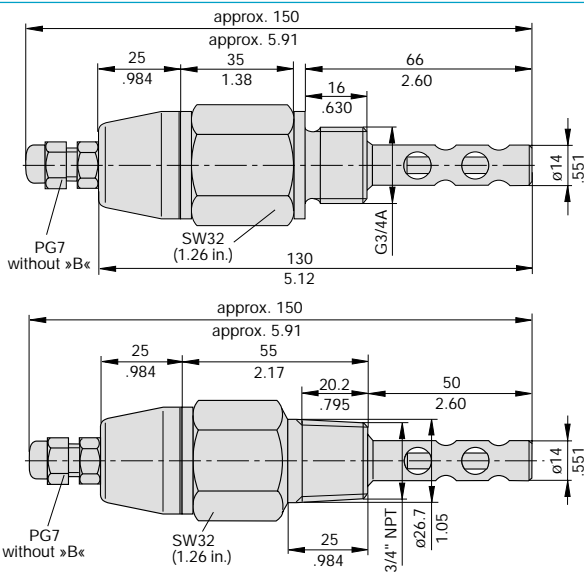
CE mark to demonstrate compliance with applicable directive.

Status indication: MIN or MAX

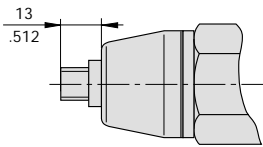
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Minimum selector switch pos. 1 			Maximum selector switch pos. 2 				
medium level	transistor output	green LED	red LED	medium level	transistor output	green LED	red LED
							
							
short-circuit in the load circuit:							

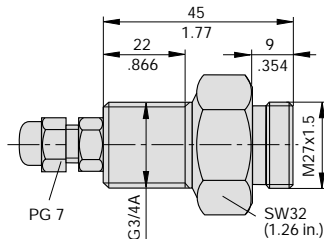
Dimensions



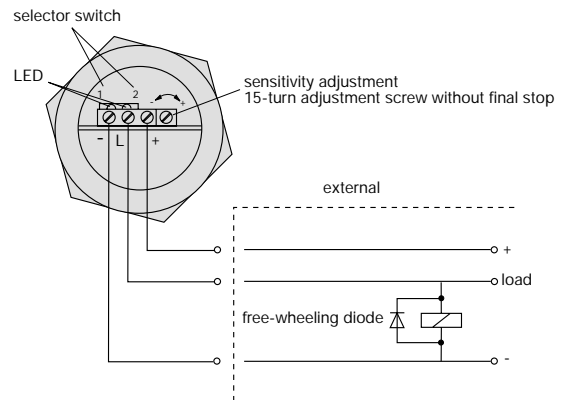
Connector »B«



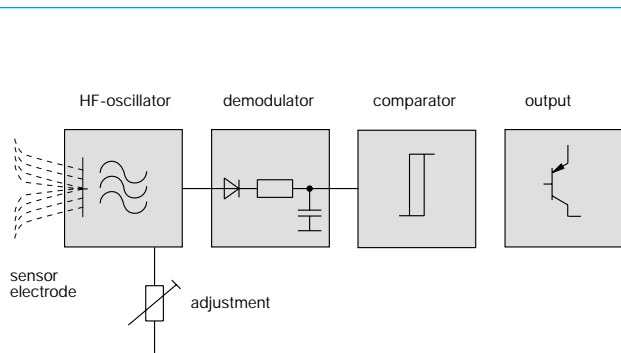
Metal coupling (for pipe extension) 0Z031Z000097 (to be ordered separately)



Connection diagram



Schematic diagram



This is a metric design and millimeter dimensions take precedence ($\frac{mm}{inch}$)

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.