

Indicator for panel mounting Model 910.70

WIKA data sheet SP 20.02

Applications

- General plant construction
- Machine building
- Test benches
- Level measurement
- Process industry

Special features

- Dial indicator, readable from a distance, for 4 ... 20 mA analogue current signal
- Suitable for all sensors with current output, irrespective of the measurand
- Optical signal if the sensor signal fails
- 4 ... 20 mA output signal (option)

Description

The model 910.70 has been developed specifically for the display of sensors with a 4 ... 20 mA output signal in industrial environments.

The design of the indicator with dial and case matches that of a mechanical pressure gauge. The standardised input signal of the indicator enables the connection of a variety of sensors, irrespective of their measurand (e.g. pressure, temperature or flow).

For demanding applications, e.g. with high medium temperatures and critical media, the model 910.70 can be used in combination with a diaphragm seal system, consisting of a pressure sensor and diaphragm seal.



Indicator for panel mounting, model 910.70

After the connection to the voltage supply, the independent initialisation of the indicator is carried out.

The green LED indicates the readiness for operation. If the LED flashes red, the output signal is either above or below the scale range. In the event of a loss of current, the LED goes out and the pointer drops below the scale.

The model 910.70 offers an optional 4 ... 20 mA output signal for the transmission of process values to a control room. This analogue output does not need any initialisation and gives the corresponding value as a 4 ... 20 mA signal.

Specifications

Model 910.70

Indicator

Principle	A digitally controlled stepper motor drives the pointer shaft
Dial	White, black lettering
Scale range	270°
Measuring time	Max. 30 % of full scale / s

Sensor input

Input signal	4 ... 20 mA, 2-wire
Electrical connection	Circular connector M12 x 1, 4-pin; nickel-plated brass
Accuracy	0.75 % of measuring span

Voltage supply

Power supply U_S	DC 14 ... 30 V, max. 0.2 A
Electrical connection	Circular Connector M12 x 1, 4-pin

Output signal

Output signal	4 ... 20 mA, 2-wire, passive, galvanically isolated
Permissible max. load R_A	$R_A \leq (U_B - 12 \text{ V})/0.02 \text{ A}$ with R_A in Ω and U_B in V, max. 600 Ω
Power supply U_B	DC $12 \text{ V} < U_B < 30 \text{ V}$

Cable

Power cord	Length: $\leq 5 \text{ m}$ [16.4 ft], only use of original cable is permitted
Sensor cable	Length: $\leq 3 \text{ m}$ [9.8 ft], only use of original cable is permitted

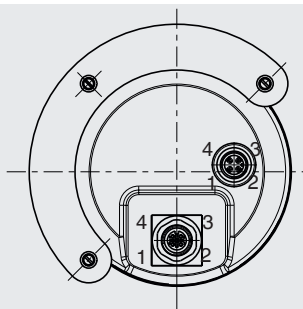
Permissible ambient conditions

Operating temperature	0 ... 60 °C [32 ... 140 °F]
Storage temperature	-25 ... +70 °C [-13 ... +158 °F]
Permissible air humidity	10 ... 95 % r. h. (non-condensing)

Case

Material	Stainless steel
Ingress protection per IEC/EN 60529	IP65/IP67
Weight	Approx. 365 g [12.9 oz]
Mounting	With mounting bracket

Wiring



Sensor input

Female connector: Connection for sensor cable (4-pin)

Analogue output (optional)

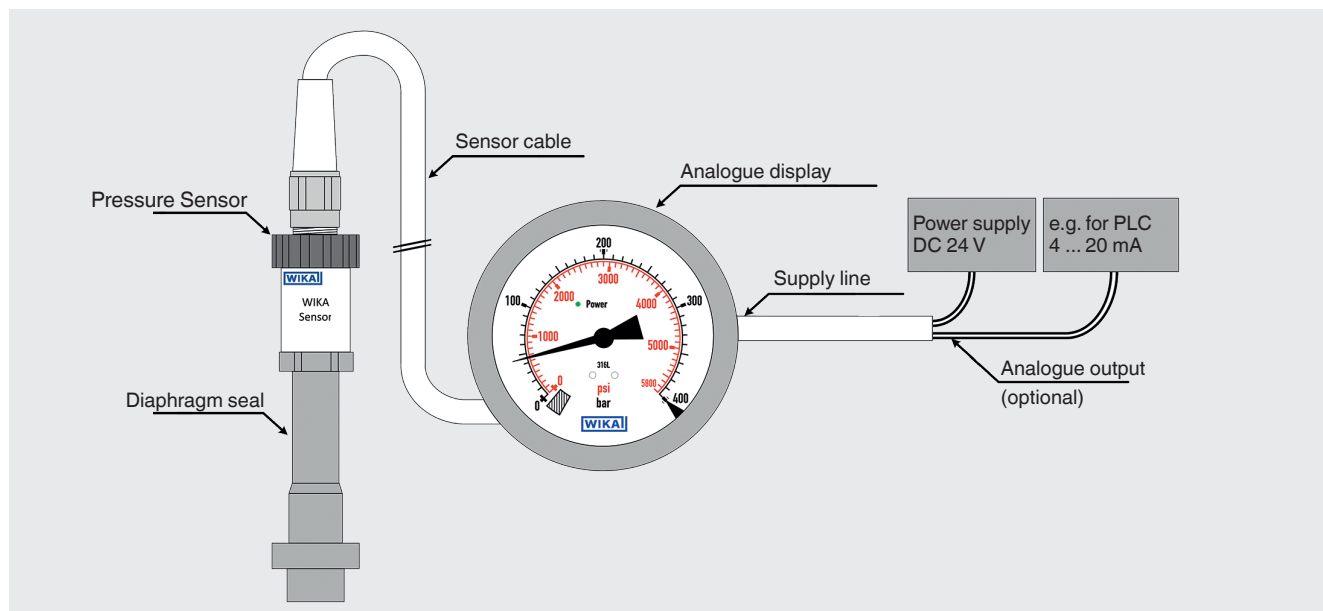
Connector: Connection for power cord (4-pin)

Cable assignment

Pin	Function	Wire colour
1	Analogue output (+)	BN
2	Power supply (DC 14 ... 24 V)	WH
3	Analogue output (-)	BL
4	Power supply (GND / 0 V)	BC

Installation example

Diaphragm seal system with pressure transmitter and analogue display



Approvals

Logo	Description	Country
CE	EU declaration of conformity <ul style="list-style-type: none"> ■ EMC directive ■ RoHS directive 	European Union

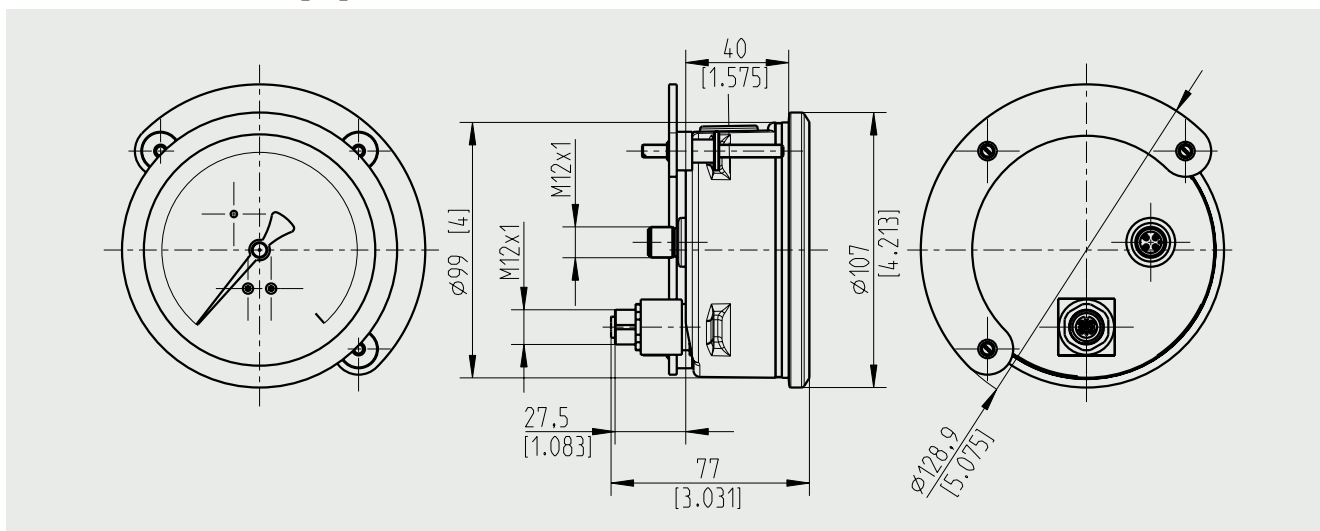
Approvals and certificates, see website

Dial markings and LED status

Dial status	Description	Operating status
	<p>Power LED lights up green. Pointer is within the scale.</p> <p>Analogue output is in the range of 4 ... 20 mA</p>	<p>Normal operation</p>
	<p>Power LED flashes green. Pointer is below the scale.</p> <p>Analogue output in the range of 4 ... 20 mA</p>	<p>After switching on the analogue display, an initialisation process is performed. Wait 5 seconds.</p>
	<p>Power LED flashes red. Pointer is above the full scale value.</p> <p>Analogue output: > 20 mA</p>	<p>The sensor signal is between 20.5 ... 21 mA ¹⁾. Error signal is suppressed for a few seconds.</p> <p>Check sensor.</p>
	<p>Power LED flashes red. Pointer is below the scale.</p> <p>Analogue output: < 4 mA</p>	<p>Sensor signal is < 3.6 mA ¹⁾ Error signal is suppressed for a few seconds.</p> <p>Check sensor cable and sensor.</p>
	<p>Power LED does not light up. Pointer is below the scale.</p> <p>Analogue output: > 21 mA</p>	<p>Check power supply</p>

1) In accordance with recommendation NE43 of NAMUR (international user association of automation technology in process industries)

Dimensions in mm [in]



Ordering information

Model / Scale range / Output signal / Accessories

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