

Ultra High Purity Attachable indicator with LED Model WUR-1

WIKA Data Sheet PE 87.20

Applications

- Semiconductor and flat panel industry
- Microelectronic Technology
- Gas distribution systems
(Gas sticks, gas panels, bulk-gas supply)

Special features

- Top View or Front View
- Up to 2 Switch points freely programmable
- Ingress protection IP65
- 5 different units manually adjustable

Description

Dynamic

An unique solution for a local display of the process pressure offers the attachable indicator model WUR-1. With this especially for the UHP-Market designed indicator a signal and freely adjustable switch points can be transmitted simultaneously.

Due to its universal programmability and simple mounting the attachable indicator can also be easily installed on pressure transmitters which are already in use. Its scale can be fully adjusted directly on site without master instrument.

Unit (psi, bar, kPa, MPa and kg/cm²), decimal point, display range, zero point and switch points can be adjusted via the control keys.



Fig. left WUR-1, Top View
Fig. right WUR-1, Front View

Comfortable

Power is directly supplied by the 4 ... 20 mA-loop, i.e. no extra power supply is required.

Practical

The seven millimetre high, red LED display is easy to read. In order to be able to adapt the indicator to the application, it is available in two different versions; Front View (connection to the transmitter at the bottom) or Top View (connection to the transmitter at the back).

Specifications

Model WUR-1

Display		
■ Design		7-Segment-red LED, height 7 mm, 4-digit
■ Range		-999 ... 6000
■ Accuracy	% of span	≤ 0.5 ± 1 digit
Materials case		ABS
Scaling adjustment		Menu-driven programming via external control keys
		Adjustable measuring range
		Adjustable decimal point
		Programmable pressure units: bar, psi, kg/cm ² , MPa, kPa
		Zero point freely adjustable within a range of ±10 % of the span
Signal input	mA	4 ... 20, 2-wire (supplied by the current loop, 6 V voltage load)
	V	0.1 ... 5.1, 3-wire / 0.1 ... 10.1, 3-wire
Signal output		Analogue signal is directly looped through
		(4 ... 20 mA or 0.1 ... 10.1 V or 0.1 ... 5.1 V)
Max. permissible input	mA / VDC	± 40 (short-time)
Power supply UB	VDC	16 ... 30 at 4 ... 20 mA; 15 ... 30 at 0.1 ... 10.1 V
		10 ... 30 at 0.1 ... 5.1 V
Influence of power supply	%	< 0.1 / 10 V
Switch points		Individually adjustable via external control keys
■ Number		{bayonet connector: 1 x NPN Open-Collector}
		galvanically isolated switch points at 4 ... 20 mA
■ Function		Normally open / Normally closed
■ Adjustment		Freely adjustable within a range of 1 ... 99 % of the span
■ Temperature error	% of span	< 0.1 / 10 K
■ Accuracy	% of span	≤ 0.5 ± 1 digit
■ Max. switching current	mA	300 (None-inductive)
■ Display of switch status		LED
■ Response time (10 ... 90 %)	ms	< 15
■ Hysteresis	%	0.5 (fixed)
Permissible temperature range		
■ Ambient		-30 ... +85 °C / -22 ... +185 °F
■ Storage		-30 ... +85 °C / -22 ... +185 °F
■ Compensated		-20 ... +80 °C / -4 ... +176 °F
Temperature error	% of span	< 0.1 / 10 K
CE-conformity		Interference emission and Interference compatibility see EN 61 326
		For cable lengths of > 30 m (current) resp. > 3 m (voltage) shielded cables must be used
Shock resistance	g	100 according to IEC 60068-2-27 (mechanical shock)
Vibration resistance	g	5 at 10 ... 2000 Hz according to IEC 60068-2-6 (vibration under resonance)
Wiring protection		
■ Short-circuit proofness		Sig+ towards UB-
■ Reverse polarity protection		UB+ towards UB-
Weight	g	50

{ } Items in curved brackets are optional extras for additional price.

Dimensions in mm

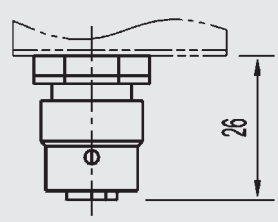
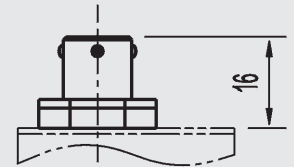
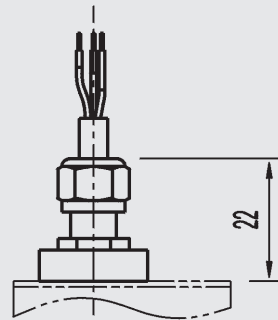
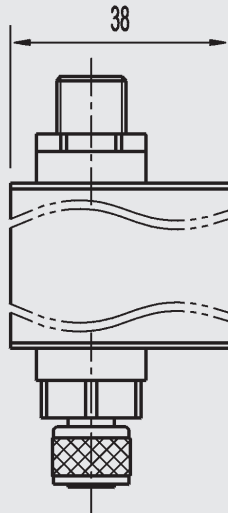
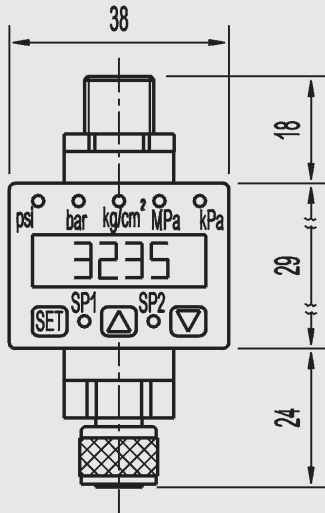
Front View: connection to the transmitter at the bottom

Circular connector
M 12x1, 5-pin

Circular connector (female)
M 12x1, 4-pin

Output
Flying leads
with 3 m length

Output
Bayonet connector,
4-pin



Input
Circular connector
(female)
M 12x1, 4-pin

Input
Bayonet connector (female)
M 12x1, 4-pin

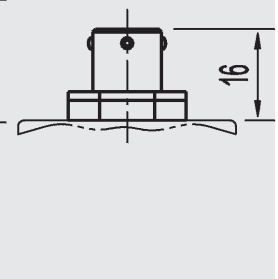
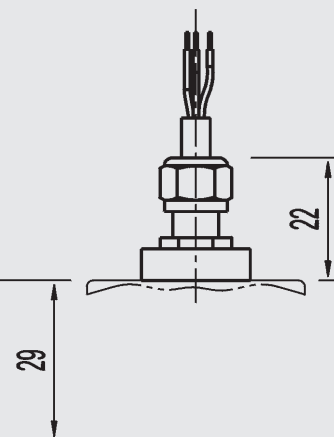
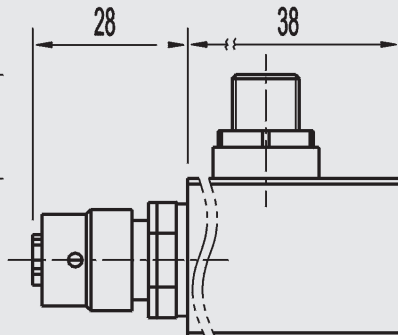
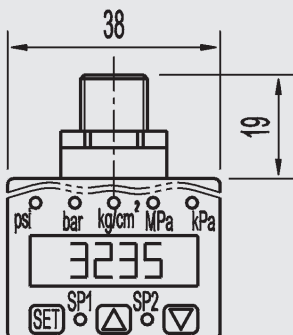
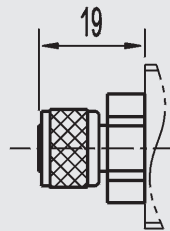
Top View: connection of the transmitter at the back

Output
Circular connector
M 12x1, 5-pin

Input
Circular connector (female)
M 12x1, 4-pin

Output
Flying leads
with 3 m length

Output
Bayonet connector,
4-pin




Input
Bayonet connector (female),
4-pin

Wiring details

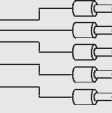
Ingress Protection IP 65 according to IEC 60 529

Output	Plug-Pin	2-wire Execution current	3-wire Execution voltage
--------	----------	--------------------------	--------------------------

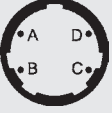
Circular connector M 12x1, 5-pin

	1	Power supply UB+, Sig+	Power supply UB+
	2	Switch out1	Switch out1
	3	Power supply 0V, Sig-	Power supply 0V, Switch ground, Sig-
	4	Switch ground (potential-free)	Signal Sig+
	5	Switch out2	Switch out2

Flying leads

	red	Power supply UB+, Sig+	Power supply UB+
	black	Power supply 0V, Sig-	Power supply 0V, Switch ground, Sig-
	yellow	Switch ground (potential-free)	Signal Sig+
	brown	Switch out1	Switch out1
	orange	Switch out2	Switch out2

Bayonet connector, 4-pin

	A	Power supply UB+, Sig+	Power supply UB+
	B	Switch ground (potential-free)	Signal Sig+
	C	Switch out1	Switch out1
	D	Power supply 0V, Sig-	Power supply 0V, Switch ground, Sig-



Output



Input

Fig. WUR-1 Front View

Fig. WUR-1 Top View

Input	Plug-Pin	2-wire Execution current	3-wire Execution voltage
-------	----------	--------------------------	--------------------------

Circular connector (female) M 12x1, 4-pin

	1	Power supply UB+, Sig+	Power supply UB+
	2	--	--
	3	Power supply 0V, Sig-	Power supply 0V
	4	--	Signal Sig+

Bayonet connector (female), 4-pin

	A	Power supply UB+, Sig+	Power supply UB+
	B	--	Signal Sig+
	C	--	--
	D	Power supply 0V, Sig-	Power supply 0V, Sig-

Modifications may take place and materials specified may be replaced by others without prior notice. Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing.

