

### LED attachable indicator with switching outputs for pressure transmitters with M12 x 1 or bayonet connectors Model A-AS-1

WIKA data sheet AC 80.09

#### Applications

- Machine tools
- Test benches
- Pneumatics
- Packing machines
- General industrial applications

#### Special features

- 4-digit indication range - 999 ... 6000
- Scaleable on site and without the need for external tools
- Ingress protection IP 65
- Accuracy  $\leq 0.5\%$  of span  $\pm 1$  digit
- Switch points freely adjustable



Fig. Attachable indicator A-AS-1

#### Description

The model A-AS-1 attachable indicator is the ideal solution for displaying the measured pressure locally, and simultaneously transmitting the signal.

Due to its open programmability and easy installation, the attachable indicator can also be easily retrofitted to transmitters which are already in service. The attachable indicator can be scaled directly where it is operated, without the need for additional tools. With an input signal of 4 ... 20 mA the power comes directly from the current loop, meaning no additional power supply is needed.

Via the control keys, the unit (psi, bar, kPa, MPa and  $\text{kg/cm}^2$ ), the decimal point, the display range, the zero point and the switch points can all be set.

The seven-millimetre high, red LED display offers good readability. With this, the display can be adjusted to the actual mounting position, and is available in two versions - with the connection to the transmitter underneath or from behind.

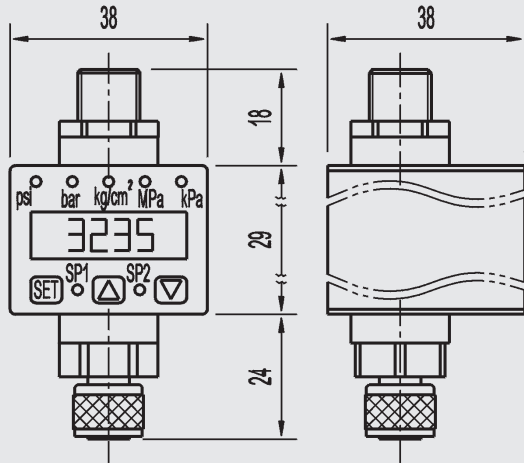
Specifications	Model A-AS-1
Indication	
■ Principle	7-segment LED, red, 4-digit, character size 7 mm
■ Range	-999 ... 6000
■ Accuracy	≤ 0.5 % of span ± 1 digit
Housing material	ABS
Scaling adjustment	Menu-driven programming via external control keys Adjustable measuring range Freely-selectable decimal point Programmable pressure units: bar, psi, kg/cm <sup>2</sup> , MPa, kPa Zero point, freely adjustable in the range ± 10 % of span
Input signal	4 ... 20 mA, 2-wire (power supply from current loop, 6 V voltage drop) 0 ... 10 V, 3-wire 0 ... 5 V, 3-wire
Output signal	Analogue current signal is connected through directly (4 ... 20 mA, 0 ... 10 V or 0 ... 5 V, voltage: Offset ≤ 100 mV)
Max. permissible input	± 40 mA (short-term) ± DC 40 V (short-term)
Power supply U <sub>B</sub>	DC 16 ... 30 V for 4 ... 20 mA DC 15 ... 30 V for 0 ... 10 V DC 10 ... 30 V for 0 ... 5 V
Influence of supply voltage	< 0.1 % of span / 10 V
Switching output	Individually adjustable via external control keys
■ Number	2 x NPN open-collector (with bayonet connector: 1 x NPN open-collector) Galvanically-isolated switching outputs for 4 ... 20 mA
■ Function	Normally open, normally closed
■ Adjustment	Freely-adjustable in the range 1 ... 99 % of span
■ Temperature error	< 0.1 % of span / 10 K
■ Accuracy	≤ 0.5 % of span ± 1 digit
■ Max. switching current	300 mA
■ Display of switch status	LED
■ Response time	< 15 ms
■ Hysteresis	0.5 % (fixed)
Permissible temperature ranges	
■ Ambient	-30 ... +85 °C
■ Storage	-30 ... +85 °C
■ Compensated	-20 ... +80 °C
Temperature error	< 0.1 % of span / 10 K
CE-mark	EMC directive 2004/108/EC, EN 61326 emission (group 1, class B) and interference immunity (industrial application)
Ingress protection	IP 65 to IEC 60529
Shock resistance	100 g to IEC 60068-2-27 (mechanical shock)
Vibration resistance	5 g at 10 ... 2,000 Hz to IEC 60068-2-6 (vibration at resonance)
Electrical safety	
■ Short-circuit resistance	Sig+ to U <sub>B</sub> - (short-term)
■ Reverse polarity protection	U <sub>B</sub> + to U <sub>B</sub> - (short-term)
Weight	50 g

**Dimensions in mm**

**Front-view version**

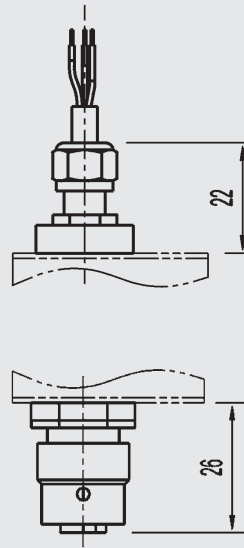
**Output**

Circular connector M 12 x 1, 5-pin



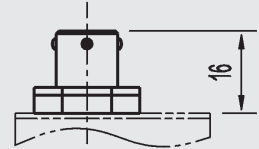
**Output**

Cable outlet with 3 m length



**Output**

Bayonet connector, 4-pin



**Input**

Connection socket for M12 x 1, 4-pin circular connector

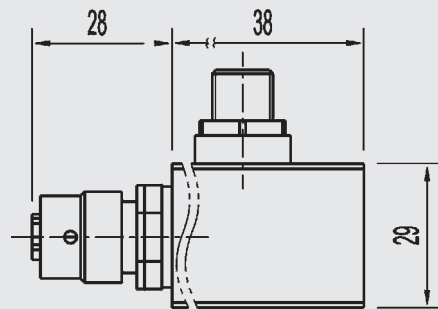
**Input**

Connection socket for bayonet connector, 4-pin

**Top-view version**

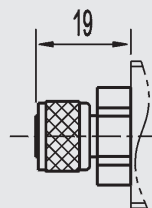
**Input**

Connection socket for bayonet connector, 4-pin



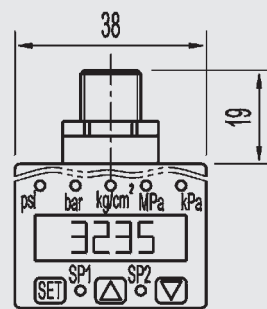
**Input**

Connection socket for M12 x 1, 4-pin circular connector



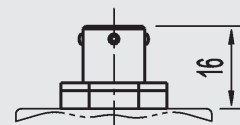
**Output**

Circular connector M12 x 1, 5-pin



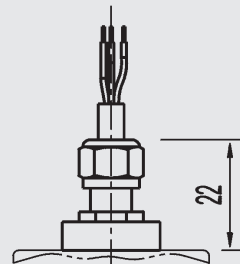
**Output**

Bayonet connector, 4-pin

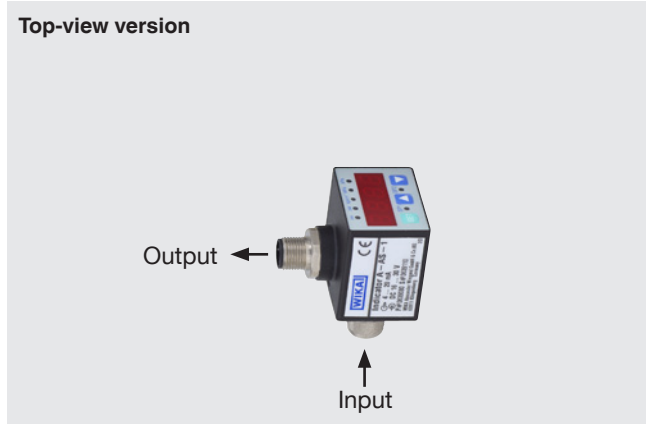
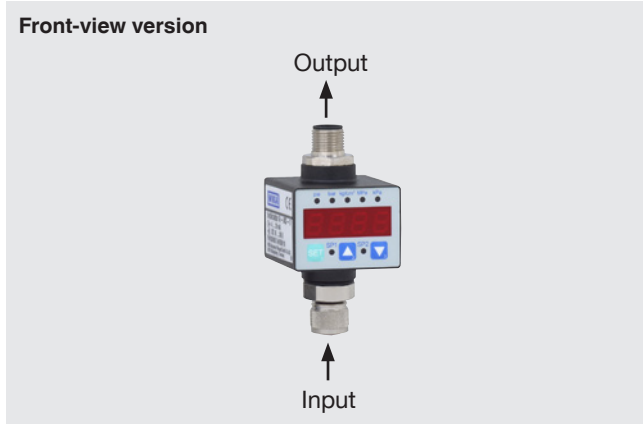


**Output**

Cable outlet with 3 m length



## Electrical connections



Input	2-wire Current version	3-wire Voltage version
<b>Connection socket for M12 x 1, 4-pin circular connector</b>		
	1 Power supply $U_{B+}$ , Sig+ 2 -- 3 Power supply 0V, Sig- 4 --	Power supply $U_{B+}$ -- Power supply 0V, Sig- Signal Sig+
<b>Connection socket for bayonet connector, 4-pin</b>		
	A Power supply $U_{B+}$ , Sig+ B -- C -- D Power supply 0V, Sig-	Power supply $U_{B+}$ Signal Sig+ -- Power supply 0V, Sig-
Output	2-wire Current version	3-wire Voltage version
<b>Circular connector M12 x 1, 5-pin</b>		
	1 Power supply $U_{B+}$ , Sig+ 2 Switching output, out1 3 Power supply 0V, Sig- 4 Switching output ground (potential-free) 5 Switching output, out2	Power supply $U_{B+}$ Switching output, out1 Power supply 0V, switching output ground, Sig- Signal Sig+ Switching output, out2
<b>Cable outlet</b>		
	red Power supply $U_{B+}$ , Sig+ black Power supply 0V, Sig- yellow Switching output ground (potential-free) brown Switching output, out1 orange Switching output, out2	Power supply $U_{B+}$ Power supply 0V, switching output ground, Sig- Signal Sig+ Switching output, out1 Switching output, out2
<b>Bayonet connector, 4-pin</b>		
	A Power supply $U_{B+}$ , Sig+ B Switching output ground (potential-free) C Switching output, out1 D Power supply 0V, Sig-	Power supply $U_{B+}$ Signal Sig+ Switching output, out1 Power supply 0V, switching output ground, Sig-

### Ordering information

Model / Version / Output signal / Electrical connection

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