

# Pressure transmitter for general applications

## Model S-10, standard version

## Model S-11, flush diaphragm

WIKA Data Sheet PE 81.01



### Applications

- Mechanical engineering
- Hydraulics / Pneumatics
- General industrial applications
- Food & Beverageel

### Special Features

- Pressure ranges from 0 ... 0.1 bar to 0 ... 1000 bar
- Various industrial standard signal outputs
- Wiring with connector or flying leads
- Stock program for short delivery times
- Vacuum tight

### Description

This series of pressure transmitters has been carefully designed to cover the majority of industrial applications with instruments readily available from stock.

Compact design and robust construction make these instruments suitable for all applications in machine construction, process control, laboratory or quality and materials testing equipment.

There is an extraordinary range of instrument variants resulting from the fact that various mechanical and electrical connections can be combined with each other to almost any extent.

#### Structure

All wetted parts are made of stainless steel and are hermetically welded. Therefore there is no need for additional sealing material, which could possibly react with the pressure medium. The compact case is also made of stainless steel and provides IP 65 ingress protection (special versions up to IP 68).



Fig. left Pressure transmitter S-10  
Fig. center Pressure transmitter S-11  
Fig. right Pressure transmitter S-11 with cooling element

The transmitters can be supplied with a non-stabilized direct voltage of 10 (14) ... 30 V and provide standard industrial output signals.

The model S-11 with flush diaphragm is particularly suitable for the measurement of viscous fluids or media containing particulates that may clog the pressure connection of standard industrial transmitters. Thus, a trouble-free pressure measurement is ensured. Pressure transmitters with flush diaphragm are available in pressure ranges from 0 ... 0.1 bar to 0 ... 600 bar. For applications with higher temperature requirements an integrated cooling element enables medium temperatures of up to 150 °C (302 °F).

For the pressure ranges from 0 ... 0.25 bar up to 0 ... 1000 bar the pressure transmitters can be delivered for oxygen applications (technical safety check of the BAM, Bundesanstalt für Materialforschung und -prüfung available).



# Specifications

# Model S-10 / S-11

Wiring protection	VDC	
■ Overvoltage protection		36
■ Short-circuit proofness		Sig+ towards UB-
■ Reverse polarity protection		UB+ towards UB-
Weight	kg	Approx. 0.2
		Approx. 0.3 with option accuracy 0.25% of span due to longer case

\*) In an oxygen version model S-11 is not available. In an oxygen version model S-10 is only available in gauge pressure ranges  $\geq 0.25$  bar with media temperatures between  $-20 \dots +60$  °C /  $-4 \dots +140$  °F and using stainless steel or Elgiloy® wetted parts.

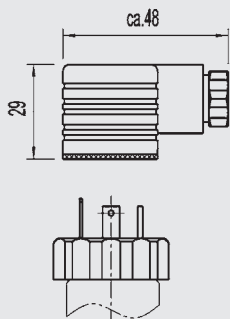
{ } Items in curved brackets are optional extras for additional price

## Dimensions in mm

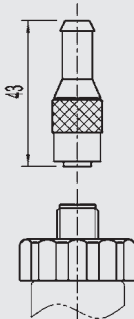
Ingress Protection IP per IEC 60529. The ingress protection classes specified only apply while the pressure transmitter is connected with female connectors that provide the corresponding ingress protection.

### Electrical connections

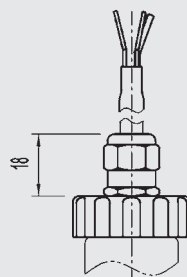
DIN 175301-803 A  
L-connector  
for conductor cross section up to max.  $1.5 \text{ mm}^2$ , conductor outer diameter 6-8 mm  
IP 65  
Order code: A4



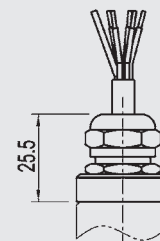
M 12x1  
Circular connector  
4-pin  
IP 67  
Order code: M4  
\*)



Flying leads  
for conductor cross section  $0.5 \text{ mm}^2$ , AWG 20 with end splices, conductor outer diameter 6.8 mm,  
IP 67  
Order code: DL



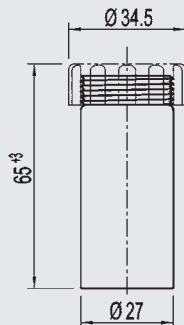
Flying leads  
zero/span not adjustable, for conductor cross section up to max.  $0.5 \text{ mm}^2$ , AWG 20 with end splices, conductor outer diameter 6.8 mm,  
IP 68  
Order code: EM



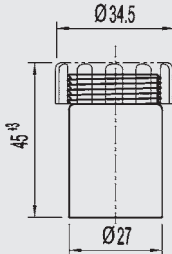
Others on request

### Case

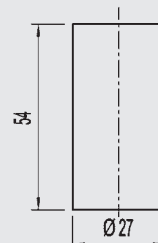
Case at 0.25 % accuracy



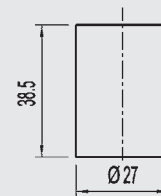
Case at 0.5 % accuracy



Case at 0.25 % accuracy

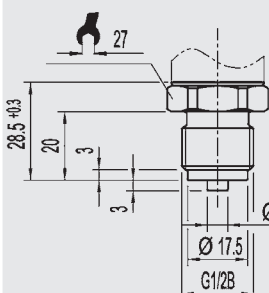


Case at 0.5 % accuracy

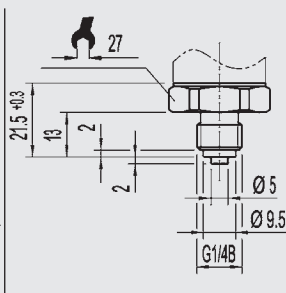


### Pressure connections S-10

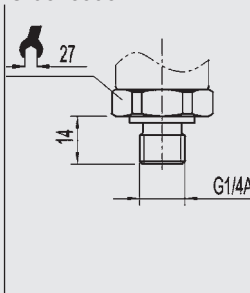
G 1/2  
EN 837  
Order code: GD



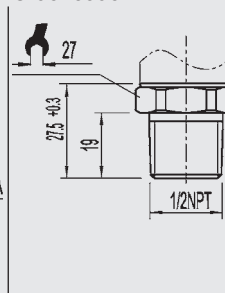
G 1/4  
EN 837  
Order code: GB



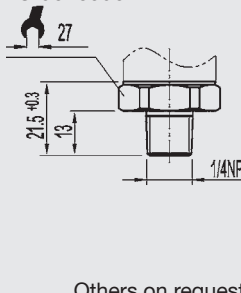
G 1/4  
DIN 3852-E  
(over pressure safety max. 600 bar)  
Order code: HD



1/2 NPT  
per „Nominal size for US standard tapered pipe thread NPT“  
Order code: ND



1/4 NPT  
per „Nominal size for US standard tapered pipe thread NPT“  
Order code: NB



Others on request

For installation and safety instructions see the operating instructions for this product.

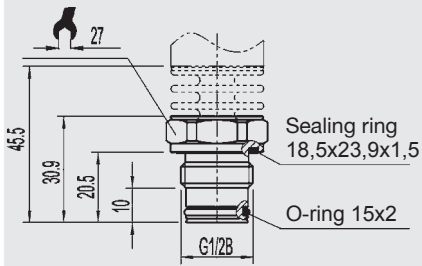
For tapped holes and welding sockets please see Technical Information IN 00.14 for download at [www.wika.de](http://www.wika.de) -Service

\*) Connectors are not included in delivery.

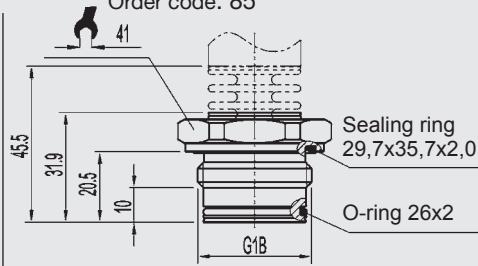
## Dimensions in mm

### Pressure connections S-11, flush diaphragm

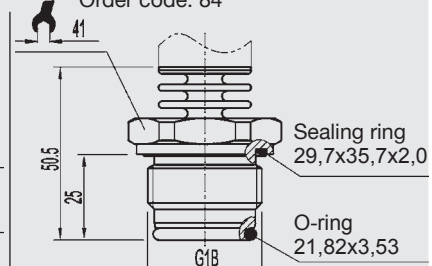
G 1/2 B  
with or without cooling element  
0 ... 2.5 up to 0 ... 600 bar  
Order code: 86



G 1 B  
with or without cooling element  
0 ... 0.1 up to 0 ... 1.6 bar  
Order code: 85



G 1 B  
acc. EHEDG \*\*)  
with cooling element, up to 150 °C  
up to 25 bar  
Order code: 84



Others on request

For installation and safety instructions see the operating instructions for this product.

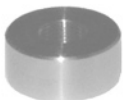
For tapped holes and welding sockets please see Technical Information IN 00.14 for download at [www.wika.de](http://www.wika.de) -Service

\*\*) European Hygienic Equipment Design Group

## Wiring details

	2-wire	3-wire
DIN 175301-803 A L-Connector		
M 12x1, 4-pin Circular connector		
Flying leads with 1.5 m of cable		
<b>Legend:</b> power supply load (e.g. display)		

## Order-No.



	S-11
11 92 299	G 1/2 Weld-on adaptor
11 92 264	G 1 Weld-on adaptor

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



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