

# Pressure gauge with helical tube DirectDrive version Models 116.18.036, 116.18.041

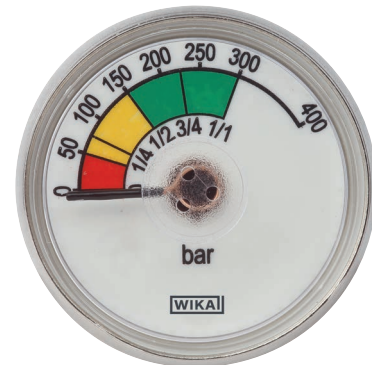
WIKA data sheet SP 01.24

## Applications

- For measuring static pressures in dry gaseous media that will not attack copper alloy parts
- Indication of cylinder charging pressure
- Welding engineering
- Medical engineering

## Special features

- Good vibration and shock resistance
- Compact and robust design
- Increased number of load cycles due to helical tube



Pressure gauge with helical tube, model 116.18.041

## Description

The model 116.18 is a DirectDrive pressure gauge, which does not require a movement for the transmission of the tube deflection to the pointer. This measuring principle leads to a good vibration and shock resistance. The helical tube enables an increased number of load cycles. In addition, the model 116.18 offers the security feature of having a pressure relief and IP 65 ingress protection.

This pressure gauge is particularly suited for the operating conditions of pressure controllers and pressure valves on fixed and portable gas cylinders.

WIKA offers its customers the joint development of tailored designs. This includes a full integration solution of the pressure measuring system into the customer's unit.

## Standard version

### Nominal size in mm

36, 41

### Accuracy

4.0 (including non-linearity, hysteresis, zero offset and end value deviation)

### Scale ranges

0 ... 40 bar,  
0 ... 200 bar,  
0 ... 315 bar or  
0 ... 400 bar

### Pressure limitation

Steady: 3/4 x full scale value  
Short time: Full scale value

### Permissible temperature

Ambient: -20 ... +60 °C  
Medium: -20 ... +60 °C  
Storage: -40 ... +70 °C

### Temperature effect

When the temperature of the measuring system deviates from the reference temperature (+20 °C):  
max.  $\pm 0.4 \%$  / 10 K of the span

### Process connection

Copper alloy,  
centre back mount (CBM)  
G 1/4 B

### Pressure element

Copper alloy, helical form

### Case

Stainless steel

### Dial

Plastic, white, black lettering, coloured segments to customer requirements, indication angle  $120^\circ \pm 15^\circ$

### Window

Polycarbonate

### Pointer

No separate pointer available; pointer is represented by tube end

### Ingress protection

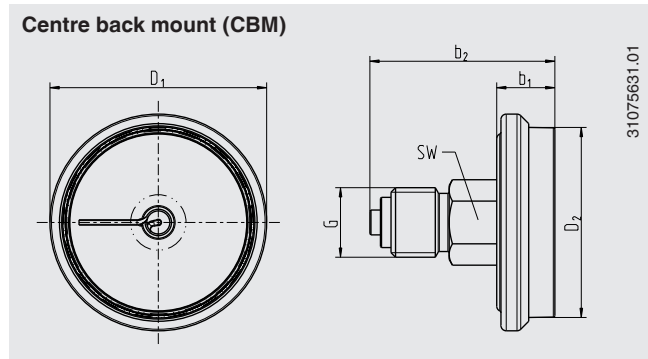
IP 65 per EN 60529 / IEC 60529

## Options

- Other process connection
- Restrictor
- Accuracy class 2.5
- Other indication angles
- Phosphorescent dial

## Dimensions in mm

### Standard version



NS	Dimensions in mm					Weight	
	D <sub>1</sub>	D <sub>2</sub>	b <sub>1</sub>	b <sub>2</sub>	G	SW	in kg
36	36	31	11	35	G 1/4 B	14	0.031
41	41	36	11	35	G 1/4 B	14	0.034

Process connection per EN 837-1 / 7.3

## Ordering information

Model / Nominal size / Scale range / Connection size / Options

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