

# Pressure gauge

## Function and application

The pressure gauge is suitable for the measuring of the pressure of fluids and gases in different measuring and controlling areas.

In the instrument the piezoresistive sensor transforms the pressure into electric signal. The measured pressure can be read off the 7-segment, LED, 3 ½ -digit display set on the face of the appliance.

The components that touch the measuring medium are made of stainless, acid- proof steel.

## Table of types

5 8 0 - 0 - 0 □ □ - 0 - xx

Messure range P (bar) (absolute)		Messure range P (bar) (relative)	
08	0 ... 0,4	08	0 ... 0,4
09	0 ... 0,6	09	0 ... 0,6
10	0 ... 1	10	0 ... 1
11	0 ... 1,6	11	0 ... 1,6
12	0 ... 2,5	12	0 ... 2,5
13	0 ... 4	13	0 ... 4
14	0 ... 6	14	0 ... 6
15	0 ... 10	15	0 ... 10
16	0 ... 16	16	0 ... 16
17	0 ... 25	17	0 ... 25
18	0 ... 40		
19	0 ... 60		
20	0 ... 100		
21	0 ... 160		
22	0 ... 250		

## General technical data:

Ranges of measure (Input signal)	from 0 ... 0,4 bar to 0 ... 250 bar according to the R5 series	
Overloading (compared to the upper limit of the input pressure)	to 0 ... 100 bar	25%
Voltage of the power supply	0 ... 160 and at 250 bar	15%
Linearity error (referred to the end value including hysteresis)	230 VAC (+10...-15%) 50 Hz	
Protection	0.25	
	IP 30	
Electric stability	500 V eff, 50 Hz	

Isolation resistance	min. 50 M $\Omega$
Size	150 X 150 X 60 mm
Relative humidity	max. 90%
Weight	approx. 0,8 kg
Range of temperature	+5 ... +55

### Reference conditions:

Surrounding temperature	20 $\pm$ 2 $^{\circ}$ C
Permissible change in temperature during measuring	$\pm$ 1 $^{\circ}$ C

### Additional errors:

For the change of the surrounding and medium temperature	
0 error	$\leq$ 0.3 % / 10 $^{\circ}$ C (referred to the end-value)
the temperature error of the sensitivity	$\leq$ 0.3 % / 10 $^{\circ}$ C (referred to the end-value)
Barometric pressure dependence	in case of above 25 bar relative pressure gauges: max $\pm$ 40 mbar. Its percentile value is the function of the current range of pressure.
External magnetic field (except the magnetic fields of the Earth)	Can not be measured