

# DIFFERENTIAL PRESSURE GAUGE without or with 1 or 2 microswitches



**Nominal size 100**

**Accuracy 2,5**



## Description

The instruments of this type are suitable for measurement of pressure, differential pressure and partial vacuum in field of industrial and sanitary techniques.

These measuring instruments are suitable for liquid and gaseous media in so far as these are not aggressive or highly viscous and do not crystallise.

Differential pressure measuring instruments with electric microswitches are suitable for controlling and regulating process sequences by means of the given process pressure.

Differential pressure transmitters are used everywhere, where signal transmission is required, while a differential pressure must be displayed on site.

## Applications

Water and wastewater industry  
Pressure vessels, process heat technology  
Heating, air conditioning and ventilation technology  
Mechanical and plant engineering  
Fire extinguishing systems  
Marine boilers

## Features

- long life
- Static pressure and overloading up to 25 bar
- Compact version, easy fitting
- Fastening bracket for wall mounting

## Ranges

0 ... 250 mbar up to 0 ... 25 bar

## Different versions, for example.:

### Pressure connections

- Compression fitting for pipe
- G $\frac{1}{4}$  femal
- G $\frac{1}{4}$  male

### Electrical connections

- without
- Cable gland M20 x 1,5
- Connector housing
- Angle connector 7-pin

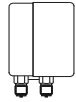
### Switches

- without
- 1 adjustable microswitch
- 2 adjustable microswitches

### more options

- Panel mounting flange
- 4-way valve manifold

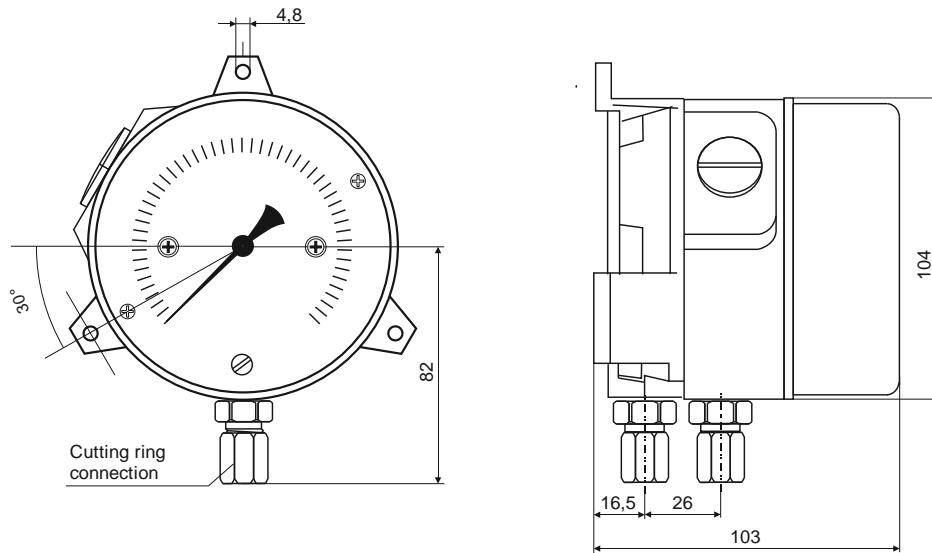
Technical data

Type	5591		Optionen
Symbol			bayonet ring design
Nominal size	<b>100</b>		
Accuracy class	± 2,5% of full scale		1,6% (without switch)
Differential pressure measuring ranges	0 ...250 mbar up to 0 ... 25 bar		
max. static pressure	depending on measuring range , see table below		
max. pressure load	One-sided overpressure protected up to nominal pressure on (+) and (-) side, part. vacuum protected		
Case	Aluminium, black laquared		Al with HART-COAT stainless steel 1.4301
Measuring system Measuring diaphragm	≤ 16 bar Diaphragm measuring system Diaphragm and gaskets of NBR oder Viton® 25 bar Diaphragm measuring system Diaphragm of Duratherm®		
Wetted parts	1.4310, 1.4305		
Cover	Macrolon		
Zero adjustment	located in the scale		
Pressure connection	cutting ring connection for pipe 6,8,10 mm, steel		G¼ female, G¼ male cutting ring connection of brass, CrNi-steel, others on request
Temperatures	ambient temperature -10...+70°C (but max. 55°C in case of SEV) medium temperature 70°C storage temperature -15...75°C		
Protection classs	IP55 acc. to DIN EN 60529		IP65 at bayonet design
Weight	pressure chamber of Al approx. 1,2 kg		at 1.4305 approx. 3,5 kg

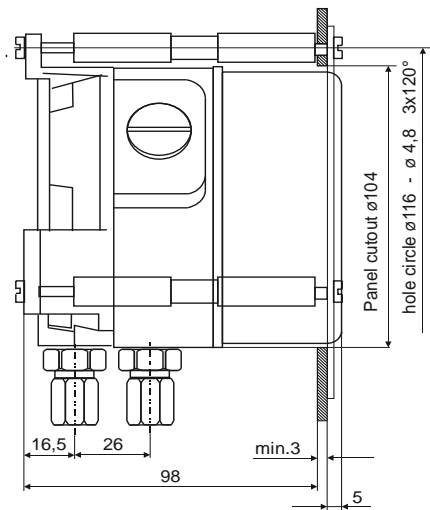
Measuring range	max. static operating pressure
0...250 mbar bis 0...400 mbar	6 bar
0...0,6 bar	10 bar
0...1 bar	16 bar
0...1,6 bis 0...25 bar	25 bar
-0,6...0 bar	10 bar
-1...0 bar	16 bar
-1...0,6 bar bis -1...5 bar	25 bar

Switching elements		
Contact output	1 or 2 microswitches, 1-channel change-over contacts	
Adjustm. Of switching pts.	external adjustment by standard value scales smallest adjustable value: approx. 5% FS	
Switching hysteresis	approx. 2,5 % FS	
Load data / contacts	AC	DC
U <sub>max</sub>	250 V	30 V
I <sub>max</sub>	5 A	0,4 A
P <sub>max</sub>	250 VA	10 W

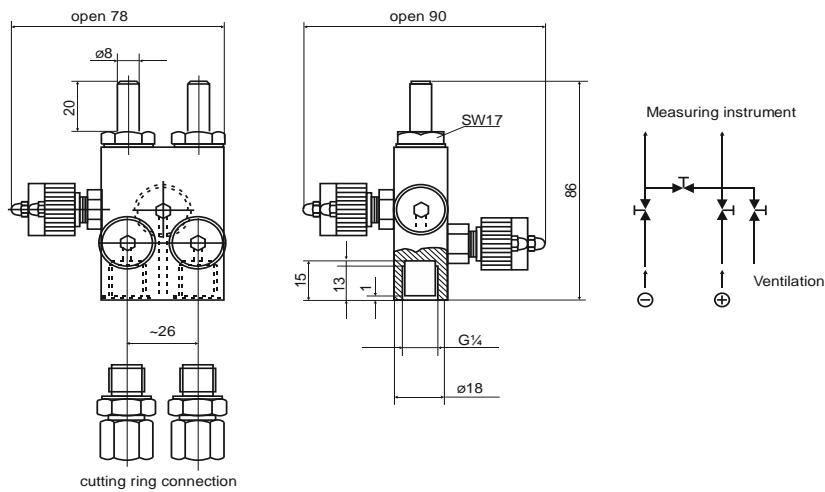
**Process connection - cutting ring connection, wall mounting**



**Panel mounting**

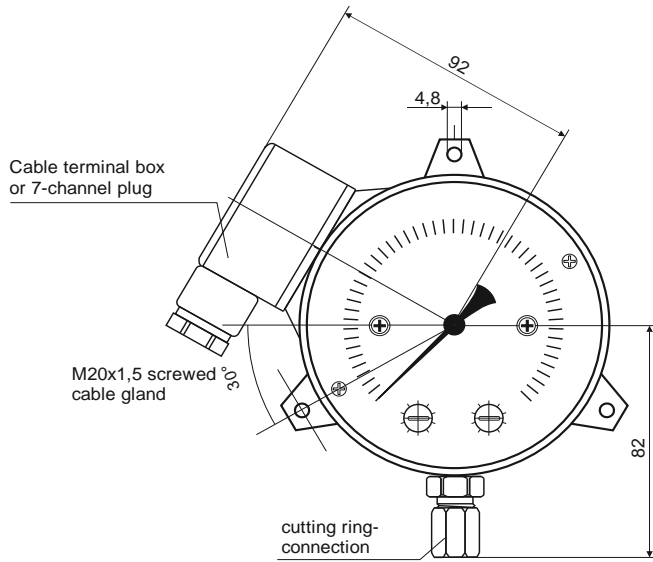


**Four-spindle shut off and equilizing valves**

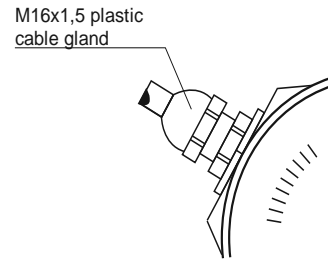


**Dimensional drawings**      Dimensions in mm

**Version - cable terminal box or 7-channel plug**



**Version - cable gland**



**assignment of connecting terminals**

cable gland

7-channel plug

