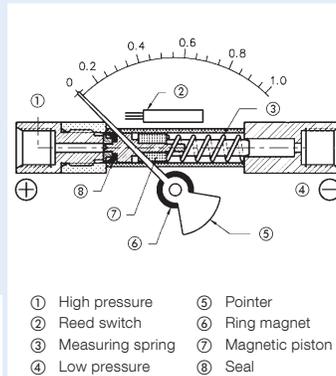


# Magnetic piston pressure gauge for differential pressure – high overload protection



- Extremely compact and robust stainless steel measuring system
- Max. static pressure PN 100, 250, 400
- Leak-proof due to mechanical separation of pressure chamber and display
- Various types of connections
- Easy retrofitting of electrical contacts without intervention in the measuring system



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**Application** For differential pressure measurements at very high static pressures. For gaseous and liquid, non-adhesive media that are not highly viscous. Particularly suitable for monitoring filters, pumps, pipe systems and cooling circuits.

**Description** The pressures act on two pressure chambers separated by a magnetic piston. If there are different pressures in the chambers, the magnetic piston is axially displaced against a compression spring. The magnetic piston transmits this displacement to the pointer by means of a ring magnet mounted to the pointer hub. The differential pressure is directly indicated. The complete mechanical separation of pressure chamber and display excludes the possibility of leaks.

## Technical specifications

**Type**  
MAG 80/100 Dif D312

**Nominal size**  
80–100 mm

**Accuracy**  
±3 % of full scale value  
(at increasing differential pressure)

**Ranges (EN 837-3/5)**  
0/0.25 bar to 0/10 bar

**Maximum static pressure**  
100 bar

**Overpressure safety**  
Up to the maximum static pressure at both sides

**Operating temperature range**  
Medium:  $T_{max} = 80\text{ °C}$   
Ambient:  $T_{min} = 0\text{ °C}$   
 $T_{max} = 80\text{ °C}$

**Degree of protection**  
IP 65 (EN 60529)

## Standard version

**Connection (wetted part)**  
Stainless steel 316, on left and right sides, opposite each other 2 x G $\frac{1}{4}$  female thread – spanner size SW 17 (EN 837-3/7.3)

**Connection cover**  
Plastic, glass-fibre reinforced, black

**Measuring element (wetted part)**  
Compression spring  
Stainless steel 301

**Magnetic piston (wetted part)**  
Stainless steel 316/strontium ferrite

**Seal (wetted part)**  
NBR (Perbunan)

**Dial**  
Aluminium, white  
Dial marking black/red (bar/psi)  
Scale angle 90°

**Pointer**  
Aluminium, black

**Housing**  
Stainless steel 304 with rubber sealing ring at the front

**Window**  
Instrument glass

**Mounting**  
Wall mounting via mounting plate (option) or pipe mounting by means of mounting plate and fixing clamp (option) for 2" pipe

## Options

- Mounting plate with fixing clamp
- 3-hole fixing, panel mounting bezel
- Max. static pressure PN 250/400
- Other connection threads
- Other connection designs
- Window acrylic glass
- Electrical contacts (Reed contacts)
- Filter in "plus" connection
- Glycerine filling
- Max. pointer
- Special scales

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See page 144 for prices.

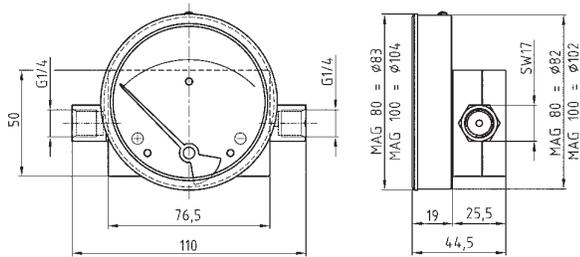
# Magnetic piston pressure gauge for differential pressure – high overload protection

Type D 3 NG 80/100

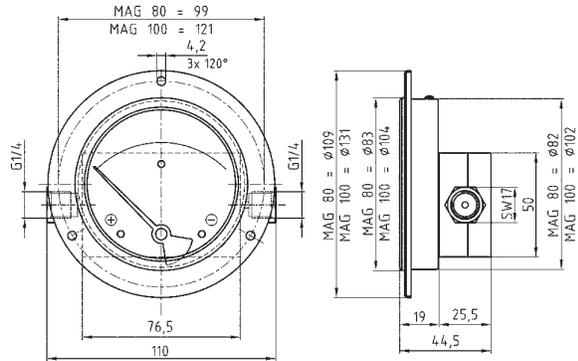
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## Types and dimensions (mm)

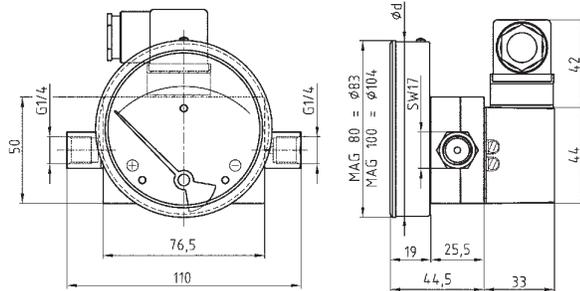
Connection on right and left sides



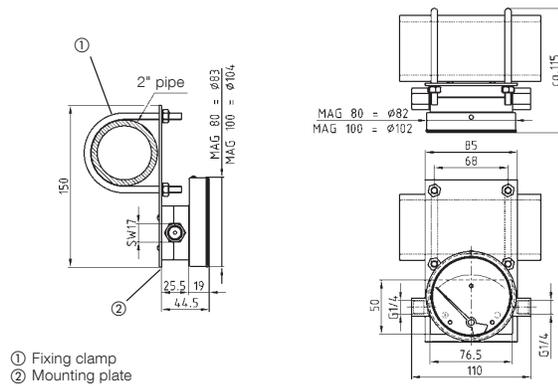
Connection on right and left sides 3-hole fixing, panel mounting bezel



Connection on right and left sides With electrical contact



Mounting plate and fixing clamp



Technical specifications electrical contact

Version: Reed contact, single, changeover contact (SPDT)

- Max. switching voltage: AC/DC 30 V
- Max. switch rating: AC 3 VA -- DC 3 W
- Max. current: AC/DC 300 mA
- Switching hysteresis: approx. 5 %
- Adjustment range: 20–80 % of full scale value
- Electrical connection: ISO 4400 connector (DIN 43650-A)

Wiring diagram

