DELTA CONTROL

Differential Pressure Gauges

Model PID-1200.01 With Magnetic Piston

Applications

- Filter plants
- Pump monitoring
- Cooling circuits
- Pipeline systems

Special Features

- Differential pressure measuring ranges
- Model PID 1200: From 0...400 mbar to 0...10 bar
  Sturdy and compact system case made of stainless steel
- High working pressures (static pressures), optionally 100,250 or 400 bar
- Overpressure safe either side to maximum working pressure
- System and/or case of indication may be changed locally
- Reed contacts may also be adjusted and retrofitted locally

Description

Model PID 1200 is particulary intended for the monitioing of differential pressures even in the case of high working pressures in gas and air preparation and supply systems.

This piston-type differential pressure gauge offers special advantages due to its compact modular design. For instance an on-the-spot replacement of measuring system and case of indication is possible in retrospect and the Reed contacts can also be retrofitted and adjusted locally. A front surface mounting flange may be retrofitted on model

Although these models have a high overload capacity either side up to the maximum working pressure, the weight of the standard versions, i.e. approx. 220 g in the case of model PID1200 and approx. 500 g
Therefore, these gauge provide an econo -
mical and flexible solution to your measuring task.

This compact design with a measuring system of stainless steel enables an optimal price/performance ratio.

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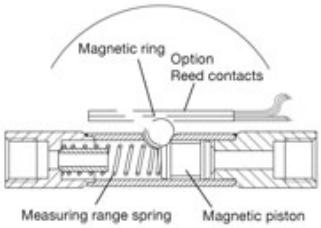
Model PID-1200

Illustration of operating principle



Installation

Pressure entries identified ⊕ and ⊖,
⊕ high pressure, ⊖ low pressure
Mounting by means of

- rigid tailpipes,
- panel mounting (optional extra) or
- device for surface mounting (optional extra)

Design and operating principle

The difference in pressure causes axial movement (measuring travel) of the piston supported by a measuring range spring.

A magnetic ring mounted on the instrument pointer follows the magnet's movement in the piston so that each piston position is appropriated to a defined pointer position.

This design ensures complete mechanical separation of the measuring system and the case and eliminates external leakage.

The stream of volume from the ⊕ measuring chamber to the ⊖ measuring chamber is minimised by the constructive design and will not intefere with the process .

For applications where liquids or dirty and heavily contaminated media are to be measured the version with a separation diaphragm Model 700.02, is suitable (no volume flow from ⊕ and ⊖ media chamber).

Specifications	Model PID-1200
Nominal size	80 mm
Accuracy	± 3 % full scale ascending
Scale ranges	0 … 400 mbar to 0 … 10 bar
Max. working pressure (static pressure)	Optionally 100, 250 or 400 bar
Overpressure safety	Either side to maximum working pressure (exception for Model 700.02, scale ranges 0 ... 160 mbar und 0 ... 250 mbar: Overpressure safety up to 50 bar)
Operating temperature	
Ambient	0 ... +60 °C
Medium	+100 °C maximum
Ingress protection	IP 54 (EN 60 529 / IEC 529)
Pressure chamber with connections (exposed to pressure medium)	Stainless steel 1.4571, 2 x G ¼ female, entry on the right and left, in-line (EN 837-1 / 7.3)
Pressure element (exposed to pressure medium)	Compression spring, stainless steel 1.4310
Magnetic piston (exposed to pressure medium)	Piston: stainless steel 1.4571, magnet: hard ferrite
Separation diaphragm (exposed to pressure medium)	-
Dial	White aluminium with dual scale: outer scale black (bar), inner red (psi)
Pointer	Black aluminium
Case of indication	Black aluminium, die-casting
Window	Acryl plastic, snap-fit window

Optional extras

- Other threaded pressure connection female or male
- Bottom or back pressure entry, ⊕ connection left
- Fine strainer integrated in ⊕ connection
- Resettable max. drag pointer

Following accessories may be retrofitted locally:

- Reed contacts, single or double change over contact, adjustable from the outside
- Panel mounting flange)
- Device for surface mounting