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Operating Instructions

PDS02

*Differential pressure gauge for gasses with membrane
measuring system*

INSTRUCTION LEAFLET FOR PRESSURE GAUGES

WARNING:

Incorrect use of pressure gauges can cause damage and injuries. Under this Directive, the user must ensure that pressure gauges are installed and used in such a way that pressure-related hazards are eliminated to a maximum extent.

Before starting installation, follow the recommendations of standard EN 837-2:

Check that the pressure gauge, designed in compliance with standard EN 837-1/3, is suitable for the planned use in terms of:

- Operating pressure (OP)
- Operating temperature (OT)
- Safety level of the pressure gauge
- Connection interface
- Type of mounting
- Compatibility of materials in contact with the fluid to be measured
- Environmental conditions, vibrations, shocks, pulses, ambient atmosphere
- Check that the pressure gauge is compatible with the surrounding atmosphere

USE IN AN OXYGEN CIRCUIT

Check that the pressure gauge is designed for such an application. The dial must have the word OXYGEN printed in red and the international symbol "oil-free" (a crossed-out burette). The pressure gauge must not have been in contact with oil or grease that is incompatible with oxygen:

RISK OF EXPLOSION!

Mounting

A pressure gauge must be mounted in compliance with standard practice.

- We advise to mount with an isolation valve.
- The user must check that the connections are perfectly sealed by using suitable seals that are compatible with the fluid to be measured.
- Use a correctly sized spanner to tighten connections. NEVER TWIST THE CASE IN ORDER TO TIGHTEN CONNECTIONS.
- Comply with the instructions given on the device when putting it into service.
- For pressure gauges fitted with a rear blow-out disc for protection against overpressure, ensure that there is a gap of at least 10 mm between the rear panel of the casing and the panel immediately next to it.
- Likewise, for this type of rear blow-out disc and a casing filled with damping fluid, do not remove the disc from its location.
- Only re-use a pressure gauge if the medium is the same as for its first use.

USE

Warning: The operating conditions must be such that the device can be used safely.

THE PRESSURE GAUGE MUST NOT BE SUBJECTED TO:

- Mechanical shocks: if there is a risk install it at a distance with a hose connection.
- Vibrations: if there is a risk install it at a distance with a hose connection or use a liquid filled pressure gauge.
- Pressure pulses: if there is a risk mount a pulsation damper.

Warning: pressure pulses cause a considerable shortening of the operating life of pressure gauges.

- Pressures greater than operating pressures (OP). Otherwise use a pressure relief valve.
- Temperatures greater or less than operating temperatures (OT). If there is a risk use a siphon mount or mount with hose connection to respect the temperature at the pressure gauge.

NOTE:

Failure to observe the conditions above may reduce pressure gauge safety. In such cases contact us.

DISASSEMBLY

- During disassembly, check that the pressure gauge is no longer under pressure. As a precaution, disassemble it slowly.
- Check that the temperature of the pressure gauge body is not sufficient to cause burning.
- Check that residues of the product present in the tube and block of the pressure gauge are not dangerous for the operator and the environment.

MAINTENANCE

- The general safety of a facility often depends on the reliability of indications on the pressure gauges installed in the facility.
- Any pressure gauge that seems to be giving false readings must be removed immediately, then tested. If the tests prove it is unreliable, it must be replaced with a new device.
- Periodic verifications should be carried out to check the accuracy of pressure gauges.
- Any pressure gauge considered to have been subjected to abnormal conditions of use (e.g. fire, wrong fluid, blows, etc.) must not be used.

MAINTENANCE, VERIFICATION OR RECALIBRATION MUST BE CARRIED OUT BY PERSONNEL APPROVED BY THE CONSTRUCTOR AND USING SUITABLE EQUIPMENT.

IMPORTANT

The instructions in this leaflet must be strictly followed.

The manufacturer declines all responsibility for any direct or indirect damage to property or persons as well as for the consequence, for example, of lost production resulting from failure to observe the instructions in this leaflet.

PDS02

Economical pressure gauge with diaphragm sensing system for measuring relative and differential pressures

- For non-corrosive gases
- Available measuring ranges: from 0–60 Pa to 0–30 kPa
- Rugged, heavy-duty cast aluminum housing
- For panel mounting or surface mounting



Description:

Model PDS02 pressure gauges can be used to measure positive, negative or differential pressures. The devices are enclosed in a rugged aluminum housing and have two sets of two pressure inlets – one set on the side, and one set on the back – which can be used as needed to accommodate the particular installation. Both of the unneeded pressure connections can be sealed off with the end plugs included with the gauge. In addition to standard scales in Pa or kPa, additional scales (mm WC, PSI, double scales, \pm -scales with the zero point in the middle) are available upon request.

Typical Applications:

Because of their very low cost, model PDS02 pressure gauges are particularly suitable for inexpensive monitoring of the following conditions:

- Filter systems
- Air ducts
- Air blowers
- Pressure in spray-paint booths

and other, similar applications

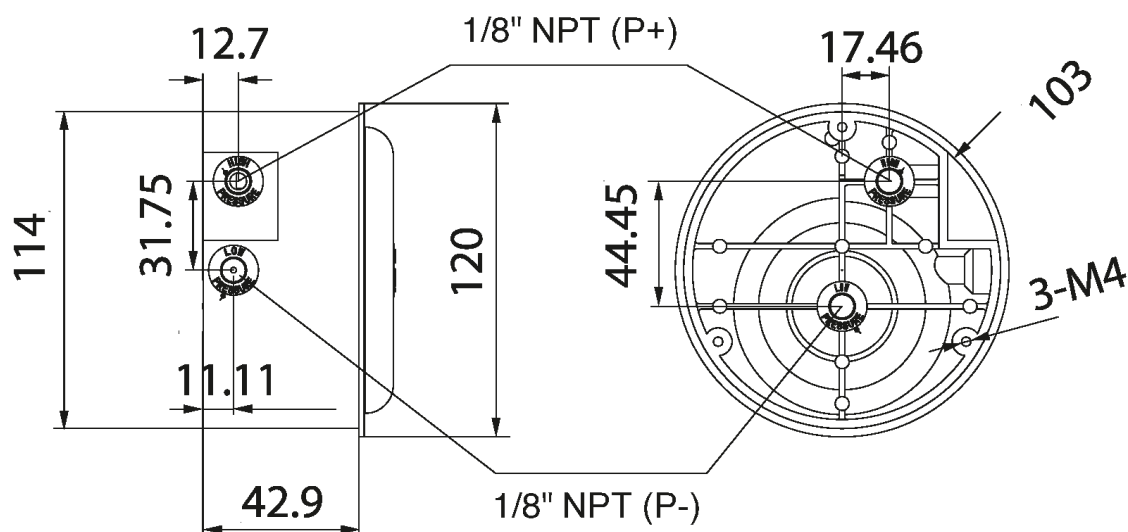
Models:

Nominal size:	Housing diameter of 114 mm
Materials:	Gauge housing made of cast aluminum, gauge face made of plexiglass
Process connection:	2 sets x 1/8" NPT connections (4 total possible connections), female thread, located on the side and back
Compatible media:	Air and other non-corrosive gases

Measuring ranges:

Measuring range	Ordering codes	Special scales (available upon request)
0... 60 Pa	D52	mm water column PSI inch water column ± - Scales with the zero point in the middle
0... 125 Pa	D53	
0... 250 Pa	D55	
0... 500 Pa	D56	
0... 750 Pa	D57	
0... 1 kPa	D58	
0... 1,5 kPa	D59	
0... 2 kPa	D60	
0... 3 kPa	D61	
0... 5 kPa	D62	
0... 10 kPa	D63	Special, customized scales
0... 15 kPa	D64	
0... 20 kPa	D65	
0... 30 kPa	D66	

Dimensions:



Model Coding:

Order Number: PDS02 10. A. 08N. D58. 0

Economical pressure gauge with diaphragm sensing system for measuring relative and differential pressures

Models:

10 = Housing diameter of 114 mm

Materials:

A = Aluminum housing, plexiglass face

Process connection

08N = 2 sets x 1/8" NPT connections (4 total possible connections), female thread, located on the side and back

Measuring ranges:

D52 to D65 = See table in section "Measuring Ranges"

S = Measuring range available by special order

Options and accessories (more than one may be selected):

0 = None

ASF = Position indicator, installed in the device face

NT = Low-temperature design (-29 to +60°C)

ER = Stainless steel bezel

9 = Please specify in writing.

Technical Specifications:

Housing:

Round housing made of cast aluminum; d = 114 mm with bezel for panel mounting and fittings for surface mounting

Glass face:

Plexiglass

Process connection:

2 sets x 1/8" NPT connections (4 total possible connections), female thread, located on the side and back

Measuring ranges:

See table in section "Measuring Ranges"

Overload protection:

-0,68 to +1 bar

Media temperature:

-7 to +60 °C

Accuracy:

2% of measured range end value

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