

DU0/5 and DU0/25 Differential Pressure Sensors

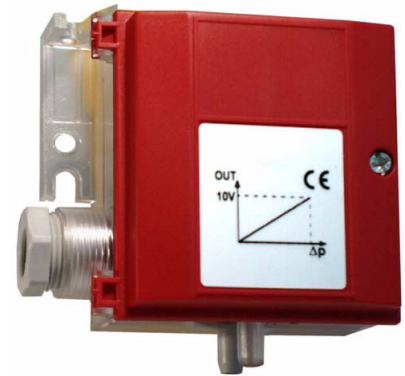
Application

Differential pressure sensors with power output DC 0 V to 10 V for measuring the pressure or differential pressure in ventilation and air conditioning systems.

The sensors convert the measured pressure/differential pressure into a proportional voltage signal between DC 0 V and 10 V.

The voltage signal can be used directly for closed-loop control and/or display.

- DU0/5 has three adjustable pressure ranges: 0 mbar to 1 mbar, 0 mbar to 3 mbar or 0 mbar to 5 mbar.
- DU0/25 has three adjustable pressure ranges: 0 mbar to 10 mbar, 0 mbar to 16 mbar or 0 mbar to 25 mbar.



Content	Page
Important Information Regarding Product Safety	2
Item	3
Technical Data	3
Dimensions	3
Connection	4
Installation	4
Commissioning	6

Änderungen vorbehalten - Contents subject to change - Sous réserve de modifications - Reservado el derecho a modificación - Wijzigingen voorbehouden - Con riserva di modifiche - Innehåll som skall ändras - Změny vyhrazeny - Zmiany zastrzeżone - Возможны изменения - A változtatások jogát fenntartjuk - 保留未经通知而改动的权力

Important Information Regarding Product Safety

Safety Instructions

This data sheet contains information on installing and commissioning the product "DU0/5, DU0/25". Each person who carries out work on this product must have read and understood this data sheet. If you have any questions that are not resolved by this data sheet, you can obtain further information from the supplier or manufacturer.

If the product is not used in accordance with this data sheet, the protection provided will be impaired.

Applicable regulations must be observed when installing and using the device. Within the EU, these include regulations regarding occupational safety and accident prevention as well as those from the VDE (Association for Electrical, Electronic & Information Technologies). If the device is used in other countries, it is the responsibility of the system installer or operator to comply with local regulations.

Mounting, installation and commissioning work on the devices may only be carried out by qualified technicians. Qualified technicians are persons who are familiar with the described product and who can assess given tasks and recognize possible dangers due to technical training, knowledge and experience as well as knowledge of the appropriate regulations.

Legend



WARNING

Indicates a hazard of medium risk which can result in death or severe bodily injury if it is not avoided.



CAUTION

Indicates a hazard of low risk which can result in minor or medium bodily injury if it is not avoided.



NOTICE

Indicates a hazard of medium risk which can result in material damage or malfunctions if it is not avoided.



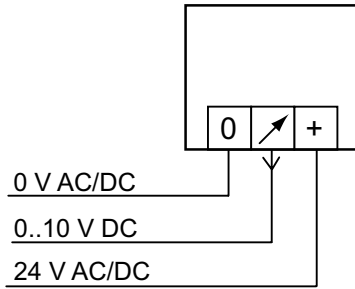
NOTE

Indicates additional information that can simplify the work with the product for you.

Notes on Disposal

For disposal, the product is considered waste from electrical and electronic equipment (electronic waste) and must not be disposed of as household waste. Special treatment for specific components may be legally binding or ecologically sensible. The local and currently applicable legislation must be observed.

Connection



Installation

The installation position is to be selected so that the permitted conditions for the differential pressure sensor are maintained (see Section Technical Data).

The system must be depressurized before installation and removal.

The differential pressure sensor should not be installed at a point where it may be affected by high pressure pulses.

The installation position is variable. The recommended installation position is vertical with the pressure connections at the bottom (factory calibration).



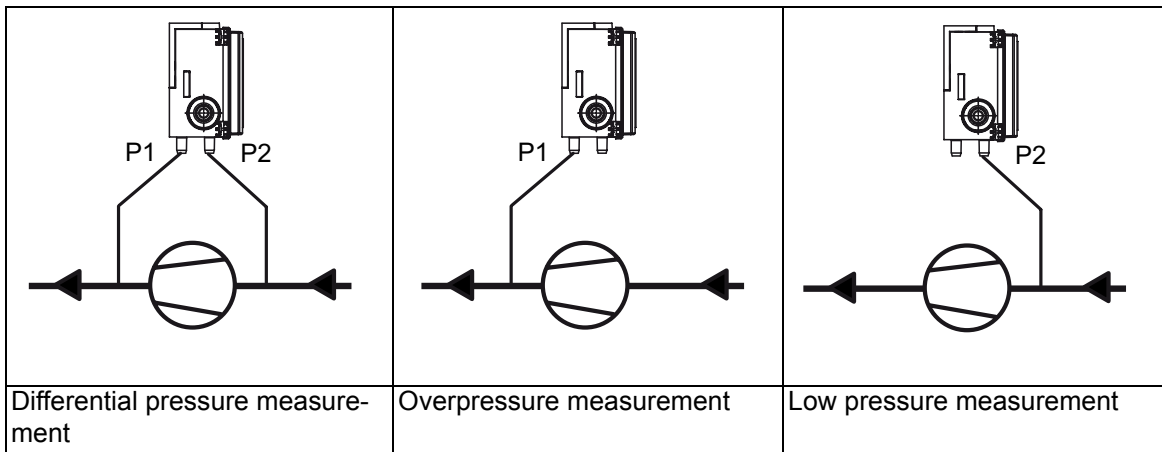
NOTICE

If the differential pressure sensor is not installed vertically, a zero point reset should be performed.

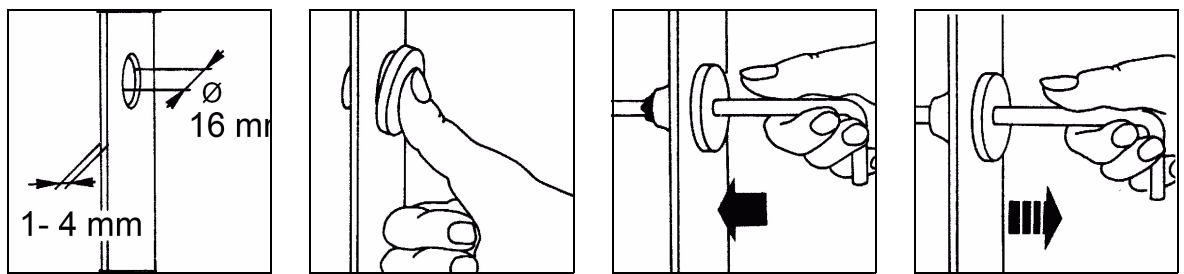
The sensor is installed on a mounting bracket on a vibration free surface, with the pressure connections at the bottom.

The connection hose for the higher pressure is connected at P1 for measuring the differential pressure. The connection for the lower pressure is connected at P2.

The hose connections at the ventilation duct and at the differential pressure sensor are to be connected depending on their function: for measuring differential pressure, overpressure or low pressure.



A connection set is provided for connecting the differential pressure sensor.

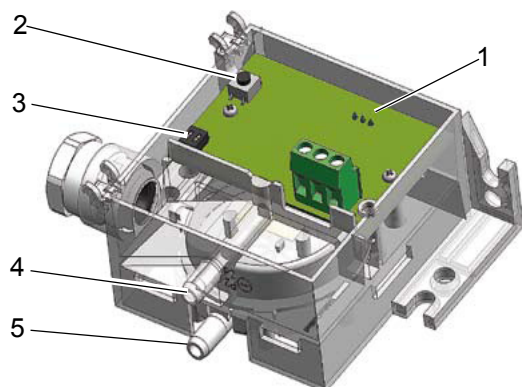


- ▶ Drill a hole for the ventilation duct \varnothing 16 mm.
- ▶ Insert a rubber grommet.
- ▶ Push the connection nozzle into the grommet.
- ▶ Cut the PVC hose to the required length, attach it to the connection nozzle and connect the differential pressure sensor.

**NOTE**

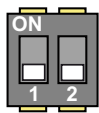
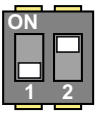
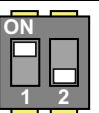
The pressure transmitter should be installed a minimum distance of 10 mm from magnetic materials. If this is not possible, an error of up to -1 Pa may occur when the pressure transmitter is mounted on sheet steel.

Commissioning



- (1) LED
- (2) Zero point reset button
- (3) DIP switch
- (4) Pressure connection at P2 (lower pressure/
bigger vacuum)
- (5) Pressure connection at P2 (higher pressure/
smaller vacuum)

Adjusting the measuring range

DIP switch (3) setting	Measuring range	
	DU0/5	DU0/25
 00	0 mbar to 5 mbar	0 mbar to 25 mbar
 01	0 mbar to 3 mbar	0 mbar to 16 mbar
 10	0 mbar to 1 mbar	0 mbar to 10 mbar

Zero point reset button (2)

A zero point offset may occur due to a strong thermal change in the sensor environment. This means that the displayed measured value is not zero when there is no pressure.

Pressure deviations are set to zero by pressing the zero point reset button (2).



NOTICE

After electrical commissioning, press and hold the button on the depressurized device until the LED (1) flashes. If the LED (1) remains lit, the reset has not worked due to pressure in the device.