

Product Description**D500Z22, D592Z22, D593Z22****D500Z22, D592Z22 and D593Z22 Differential Pressure Monitors****Application**

The differential pressure monitors with contact outputs are used for air flow or filter monitoring in ventilation and air conditioning systems.

The differential pressure monitors can be used for measuring differential pressure, overpressure and low pressure.



D500Z22



D592Z22, D593Z22

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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 "D500Z22, D592Z22, D593Z22". 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.



CAUTION

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.

Product Description**D500Z22, D592Z22, D593Z22****Item**

D500Z22	Differential pressure monitor, pressure range 20 Pa to 300 Pa
D592Z22	Differential pressure monitor, pressure range 100 Pa to 1000 Pa
D593Z22	Differential pressure monitor, pressure range 250 Pa to 3000 Pa

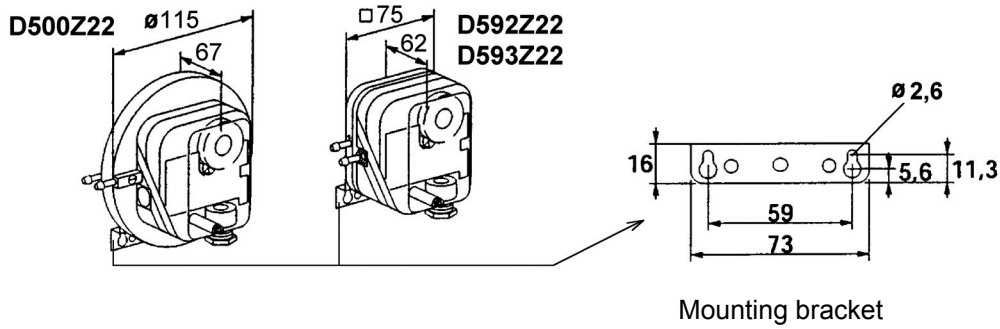
Technical Data

Output	Voltage-free changeover switch with gold-plated AgNi contacts	
Switching capacity	DDC operation:	Max. 0.1 (0.05) A; AC/DC 12 V to 24 V
	Conventional application:	Max. 5 (1) A, AC 250 V The gold film on the contacts will burn off in this mode of operation. Subsequent use with low voltages of 12 V to 24 V is therefore no longer possible. Specification (0.05) A and (1) A for $\cos\varphi$ 0.6
Pressure range	D500Z22	20 Pa to 300 Pa
	D592Z22	100 Pa to 1000 Pa
	D593Z22	250 Pa to 3000 Pa
Switching difference	D500Z22	7 Pa to 16 Pa
	D592Z22	25 Pa to 40 Pa
	D593Z22	60 Pa to 80 Pa
Max. pressure	D500Z22	Max. 15 kPa
	D592Z22	Max. 30 kPa
	D593Z22	Max. 30 kPa
Measured value	Differential pressure, overpressure, low pressure	
Measuring system	Membrane system with two separate pressure chambers	
Medium	Air, neutral gasses	
Pressure connections	Hose connections \varnothing 6 mm Higher pressure on +, lower pressure on -	
Electrical connection	3-wire, screw terminals for lines max. 1.5 mm ² Cable feed M16	
Installation position	Membrane vertical, cable feed underneath	
Ambient temperature	-15 °C to +80 °C	
Degree of protection	IP54	
Weight	0.32 kg	

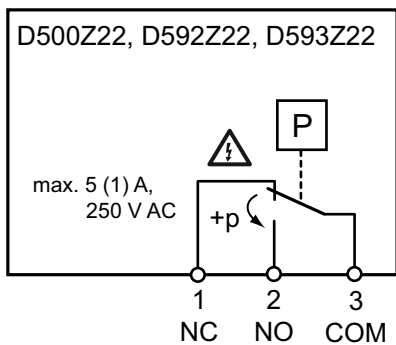
Accessories (included in delivery)

Z22	Hose set, PVC hose and nipple
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Dimensions



Connection



Mounting



WARNING

Danger of death by electrocution.
Mount or remove only when power is switched off.

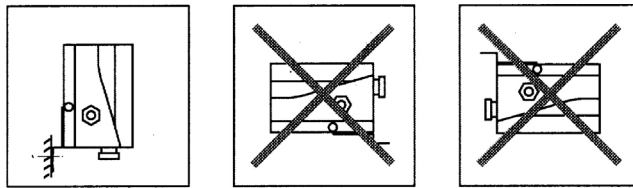
- The differential pressure monitor should be installed where the permitted surrounding conditions can be maintained. See the technical data section.
- The differential pressure monitor must be installed with the mounting bracket on a plant component that is vibration free. A drill stencil is included with two 3.5 x 13 screws.
- The membrane must be lying vertically in the position in which the monitor is installed.
- The hose connections at the ventilation duct and at the differential pressure monitor are to be connected depending on their function: for measuring differential pressure, overpressure or low pressure.
- The Z22 hose set is included to make the pressure measurement connection.
Z22 includes:
 - 2 m PVC hose, 4.75 x 1 mm
 - 2 connection nozzles for the ventilation duct
 - 2 extensions for the connection nozzles, for thicker duct walls
 - 2 90° connectors
 - 4 3.5 x 13 screws. The drill stencil for the connection nozzles is included.



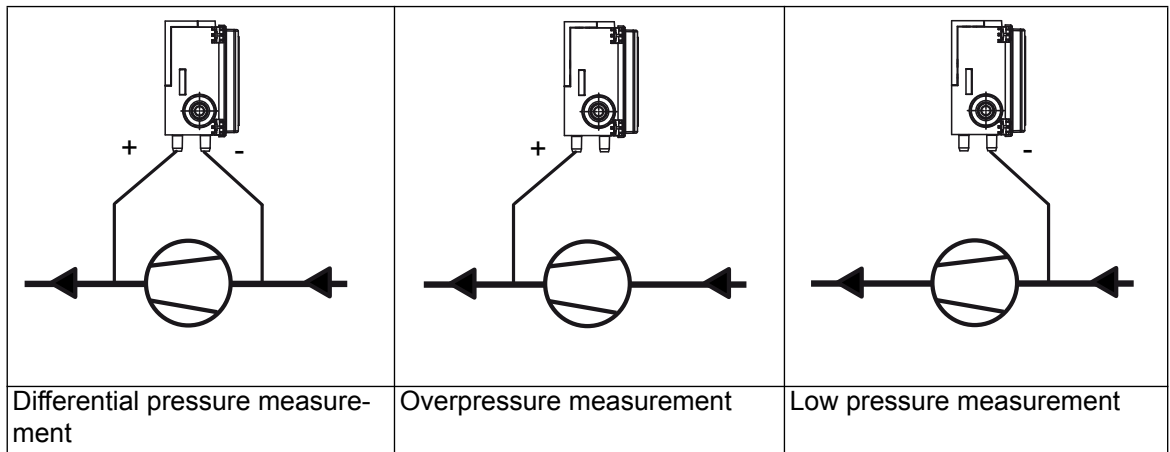
CAUTION

Protect the pressure connections from icing over in low temperatures.

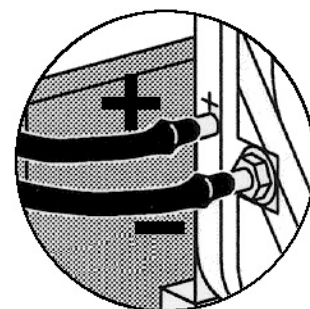
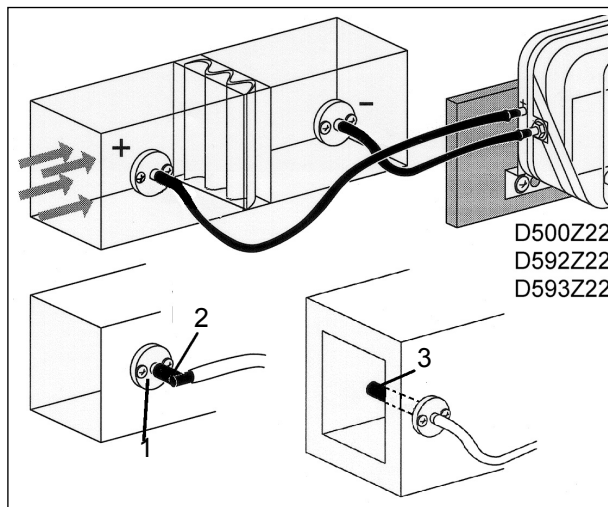
Installation position



Pressure connection principle



Example installation for differential pressure measurement



Hose connection on the device:
 - higher pressure on +
 - lower pressure on -

- (1) Connection nozzles
- (2) 90° connectors
- (3) Extension

