

Differential pressure sensor Water

Active sensor (0...10 V) for differential pressure measurement in HVAC systems. The sensor is suitable for water and water-glycol mixtures. The housing is made of stainless steel and is IP65 / NEMA 4 rated. Optional stainless steel or brass pipe connection adaptors also available.

Technical data sheet







Type Overview

| Туре | Measuring range pressure [bar] | Output signal active pressure | Overpressure | Overpressure note | Burst pressure |
|-----------|--------------------------------------|-------------------------------------|--------------|----------------------|----------------|
| 22WDP-111 | 01 | 010 V | 6 bar | Single-sided | 21 bar |
| 22WDP-112 | 02.5 | 010 V | 6 bar | Single-sided | 21 bar |
| 22WDP-114 | 04 | 010 V | 16 bar | Single-sided | 21 bar |
| 22WDP-115 | 06 | 010 V | 16 bar | Single-sided | 21 bar |

Technical data

| Electrical data | Nominal voltage | AC/DC 24 V | | |
|-----------------|------------------------------|---|--|--|
| | Nominal voltage range | AC 21.626.4 V / DC 13.526.4 V | | |
| | Power consumption AC | 0.9 VA | | |
| | Power consumption DC | 0.37 W | | |
| | Electrical connection | Connector plug for wire 0.51.5 mm ² | | |
| | Cable entry | Angle plug according to DIN 43650, construction A | | |
| Functional data | Application | Water Water-glycol mixture | | |
| | Voltage output | 1 x 010 V, min. resistance 2 kΩ | | |
| | Mechanical connection | pressure connector: G 1/4" | | |
| | Mounting | Installation position unrestricted | | |
| | Response time | 740 ms | | |
| Measuring data | Measured values | Differential pressure | | |
| | Accuracy pressure | ±1% of measuring range @ -575°C [23167°F] | | |
| | Long-term stability | ±2.5% / 10 yr. | | |
| Materials | Housing seal | EPDM | | |
| | Housing | Bottom: Stainless steel 1.4305 Top Cover: Die cast aluminium | | |
| | Fluid wetted parts | Stainless steel 1.4301, Ceramic | | |
| Safety data | Protection class IEC/EN | III, Protective Extra-Low Voltage (PELV) | | |
| | Power source UL | Class 2 Supply | | |
| | Degree of protection IEC/EN | IP65 | | |
| | Degree of protection NEMA/UL | NEMA 4 | | |
| | EU Conformity | CE Marking | | |
| | Certification IEC/EN | IEC/EN 60730-1 | | |
| | Quality Standard | ISO 9001 | | |
| | Ambient humidity | Max. 95% RH, non-condensing | | |



Technical data sheet

Safety data Ambier

Ambient temperature Fluid temperature -10...50°C [15...122°F] -10...80°C [15...175°F] At a fluid temperature of < 2°C [< 36°F], frost protection must be guaranteed

Safety notes



This device has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application. Unauthorised modifications are prohibited. The product must not be used in relation with any equipment that in case of a failure may threaten humans, animals or assets.

Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

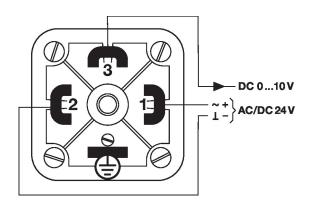
Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.

The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

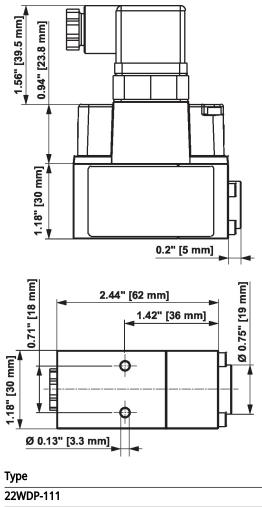
Accessories

| Optional accessories | Description | Туре |
|------------------------|---|---------------|
| | Pipe connector, Brass, Pipe 6 mm to G 1/4" (external thread), Set of 2 pcs. | A-22WP-A04 |
| | Pipe connector, Stainless steel, Pipe 6 mm to G 1/4" (external thread), Set of 2 pcs. | A-22WP-A06 |
| | Pipe connector, Brass, Pipe 8 mm to G 1/4" (external thread), Set of 2 pcs. | A-22WP-A08 |
| | Pipe connector, Stainless steel, Pipe 8 mm to G 1/4" (external thread), Set of 2 pcs. | A-22WP-A10 |
| | Mounting bracket for 22WDP, Metal | A-22WP-A11 |
| Electrical accessories | Description | Туре |
| | Connecting cable 1.5 m for 22WP / 22WDP | EXT-MR-249184 |
| | Connecting cable 5 m for 22WP / 22WDP | EXT-MR-249185 |

Wiring diagram







| Weight |
|---------|
| 0.55 kg |
| 0.55 kg |
| 0.55 kg |
| 0.55 kg |
| |

Further documentation

• Installation instructions