



## Differential Pressure Sensors

### QBE61.2-dp0,5

- Operating voltage AC24 V
- Signal output DC 0...10 V
- Measuring ranges between 0 and 0.5 bar differential pressure

#### Use

Sensing of differential pressure in heating, ventilating and air conditioning plants.

The QBE61.2-dp0,5 can be used as a

- control sensor
- measuring sensor

with control systems and in connection with building automation systems.

The unit takes hot water and chilled water (without or with additives, such as hydratin or up to 50 % glycol in water).

#### Ordering

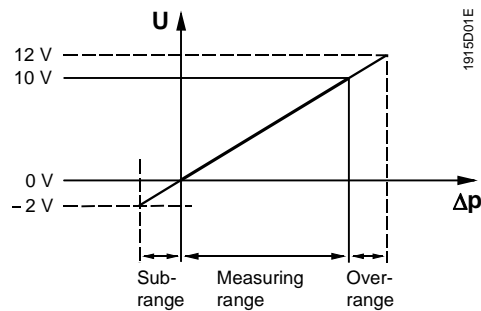
When ordering, please give the full type reference.

#### Gerätekombination

The QBE61.2-dp05 pressure sensor can be combined with all devices or systems capable of processing the DC 0 ...10 V output from the pressure sensor.

## Function

The QBE61.2-dp0,5 is an active detector delivering an output signal of DC 0...10 V. The output signal is proportional to the measuring range which has a subrange and an overrange.



## Design features

The plastic housing with cover, mounting bracket and the two threaded connection G $\frac{1}{2}$ A form one unit. The connecting terminals are located under the removable cover. The cable enters through a Pg 11 cable entry gland.

The measuring system consists of a metal diaphragm with permanent magnet and a Hall sensor. No physical contact is made when acquiring the measured value.

## Accessories

Description	Ordering No.
<b>Water trap pipe</b> for medium temperatures exceeding 80 °C or below 0 °C and up to 16 bar	<b>4 286 1652 0</b>

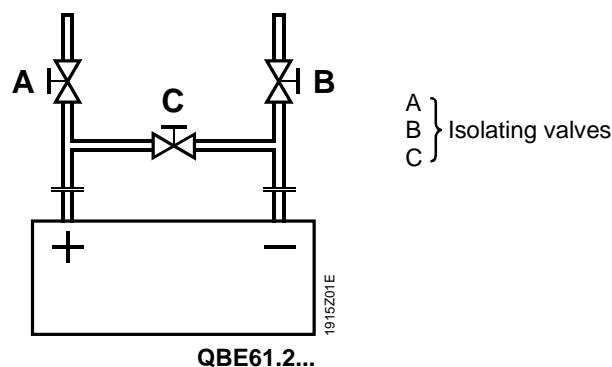
## Engineering notes

The QBE61.2-dp0,5 differential pressure detector and all units electrically interconnected must be wired to the same G0. Also refer to the Data Sheets of the units to which the sensor is connected.

With processed water, it should be made certain that the pH-value 10 is not exceeded.

The differential pressure at the sensor must never exceed the permissible overload capacity (see "Technical data").

High static pressure can destroy the detector if it acts on one side of the measuring system only. This can be avoided with the following lay-out.



## Mounting and installation notes

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Medium temperatures above 80 °C or below 0 °C make it necessary to install a water trap pipe between the pipe work and the sensor.

*Mounting orientation:* optional, with the exception of the cable entry gland facing upward.

The QBE61.2-dp0,5 is supplied complete with mounting instructions and a drilling template.

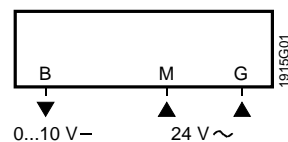
## Technical data

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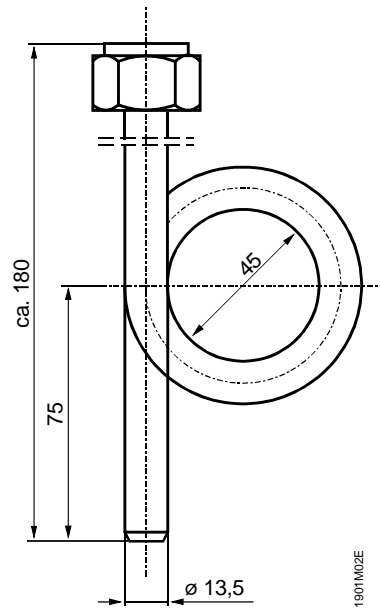
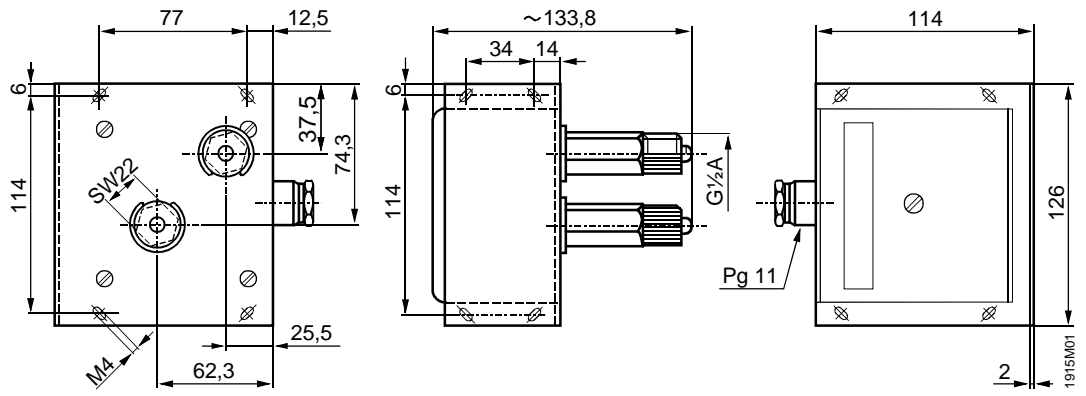
Operating voltage	AC 24 V $\pm$ 20 %
Frequency	45...65 Hz
Power consumption	2 VA
Measuring range	0...0.5 bar
Subrange	-0.1... bar
Overrange	...0.6 bar
Overload capacity	-0.25...+3 bar
Measuring accuracy at 20 °C including hysteresis	max. $\pm$ 2 % MR
Hysteresis	max. 0.5 % MR
Output signal	
Measuring range (MR)	DC 0...10 V, max. $\pm$ 1mA
Subrange and overrange	DC -2...+12 V (-20...+20 % MR)
Permissible cable lengths	
Copper cable 0,6 mm dia.	60 m
Copper cable 1 mm <sup>2</sup>	220 m
Copper cable 1,5 mm <sup>2</sup>	300 m
Permissible ambient temperature	
Operation	-15...+50 °C
Transport and storage	-25...+65 °C
Permissible ambient humidity	class D to DIN 40 040
Nominal pressure	PN 40
Protection standard of housing	IP 42 to DIN 40 050
Weight	1.2 kg

## Anschlussklemmen

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## Dimensions



Water trap pipe

Dimensions in mm