

## short manual resistance thermometer WTR 190

### safety instructions !!!

#### intended use of the product

- The sensor has been designed exclusively for the intended use described here or in the datasheet and may only be used in this way.
- The technical specifications contained in these operating instructions must be observed.
- Improper handling or operation of the device outside of its technical specifications requires the device to be taken out of service immediately and an inspection by promesstec.
- When the device is transported from a cold into a warm environment, the formation of condensation may result in the device malfunctioning.
- Before putting it back into operation, wait for the device temperature and the room temperature to equalise.

*The manufacturer shall not be liable for claims of any type based on operation contrary to the intended use!!*

#### staff qualification

Improper handling can result in considerable personal injury and damage to equipment. The activities described in these operating instructions may only be carried out by skilled staff who have the appropriate qualifications. For installation and starting of the sensor, the relevant regulations and directives of the country and the norms must be observed. Especially during installation of the sensor, it is possible, depending on the use, to come into contact with aggressive media. The safety instructions must be observed. There will be danger to life if live parts are touched. Electrical installation and commissioning may only be carried out by qualified and skilled personnel.

#### special hazards

Residual media in dismantled devices can endanger persons, the environment and equipment. Sufficient precautionary measures must be taken here. The devices must not be used in safety or emergency stop equipment. Incorrect application or operation of the device can lead to injuries. Depending on the application, aggressive media with extreme temperatures and high pressure or vacuum may be present at the device in the event of a fault. We recommend installing and removing the device only at ambient temperature and in a depressurized state.

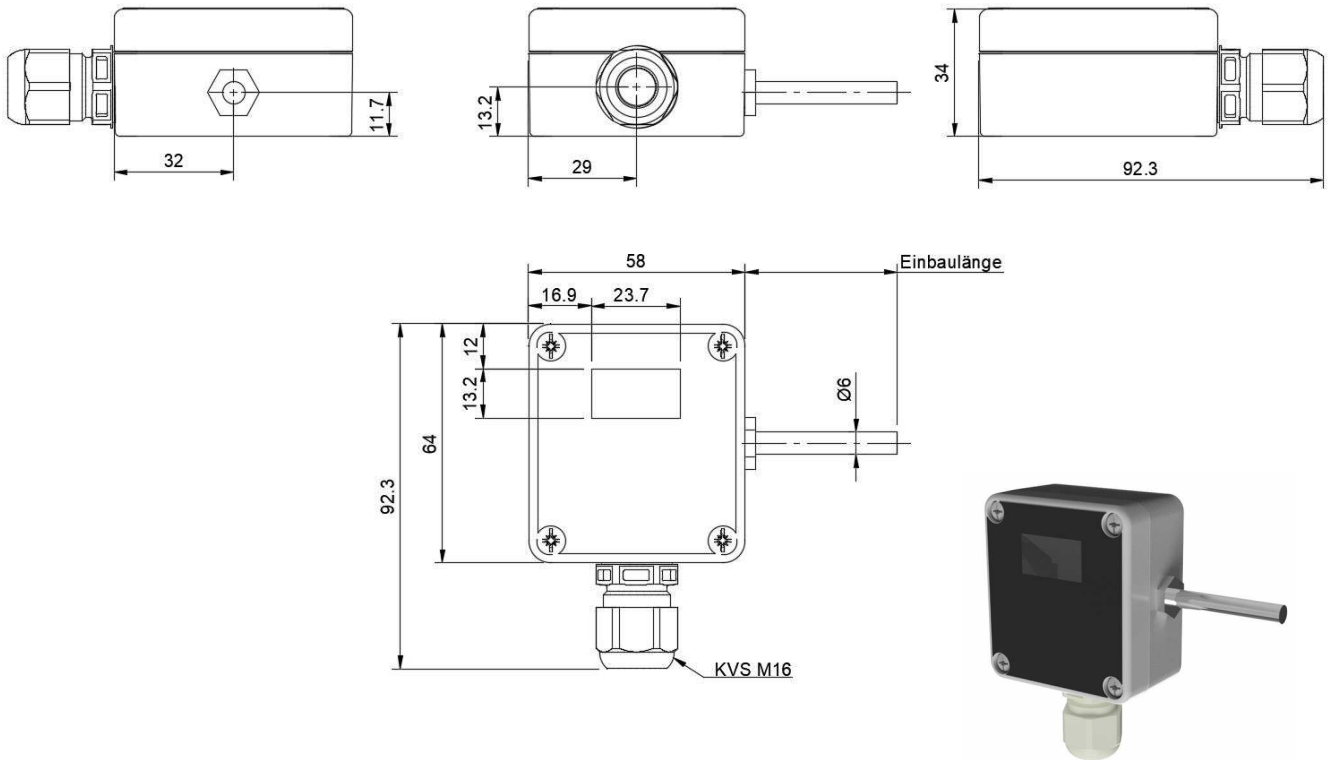
#### hazards when operating the device

Our units have a very high protection class when properly assembled and installed. When cleaning your unit with high-pressure cleaners, steam cleaners, etc., make sure that both the cover and the cable gland are not directly exposed to the pressure jet. If the temperature falls below the dew point, condensation may form in the terminal compartment of the unit. For such extreme applications, contact our sales and technical support before commissioning.

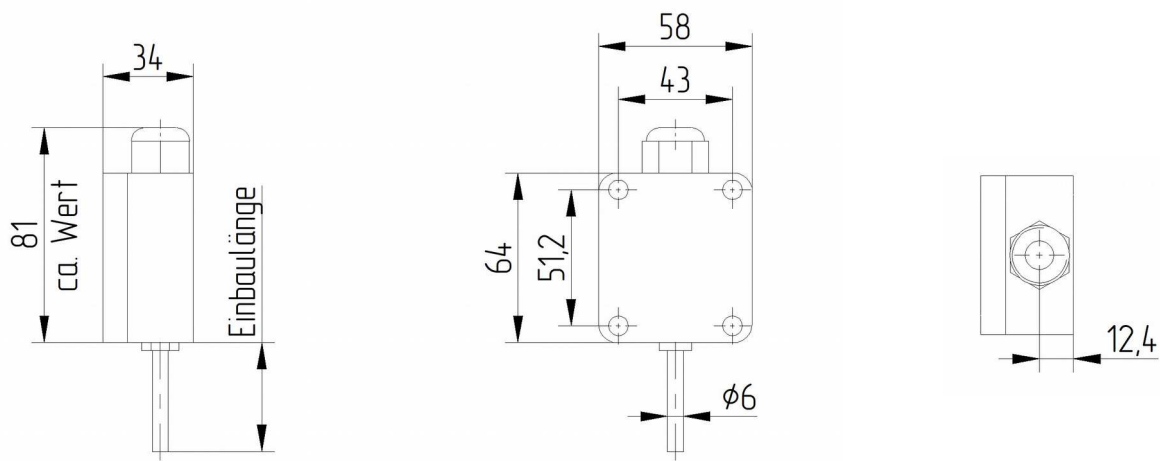
# temperature measurement

## dimensions WTR 190

### WTR190 mit DMU50



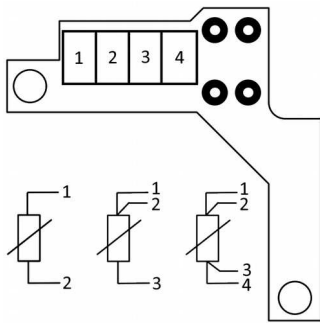
### WTR 190 passive/ WTR 190 with KMU 100/ WTR 190 with KMUS 100



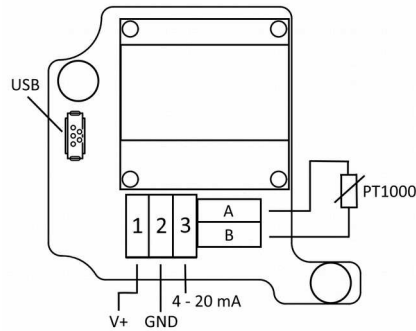
# temperature measurement

## connection WTR 190

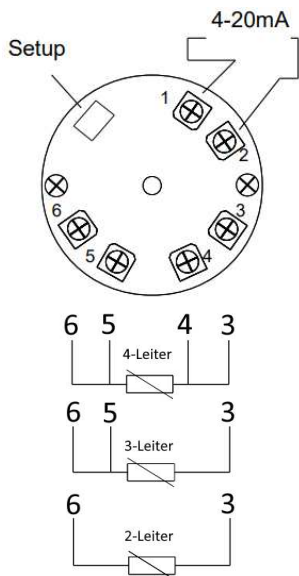
**WTR 190 passive**



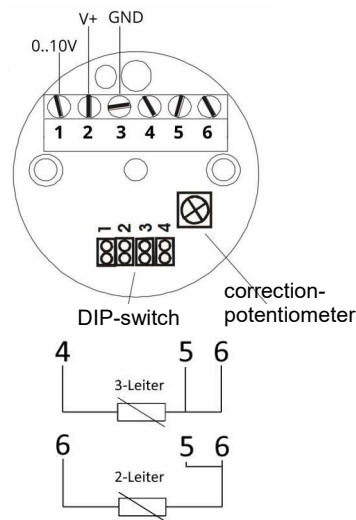
**WTR 190 with DMU 50**



**WTR 190 with KMU 100**



**WTR 190 with KMUS 100**



## configuration notes

If the WTR 190 is used with a DMU 50, the configuration is done via the Windows software "pmtKonfigTool" (installation file can be downloaded from the website [www.promesstec.de](http://www.promesstec.de)). The connection is made with a commercially available USB type C cable.

If the WTR 190 is used with a KMU 100, the settings can be read out and changed with the parameterization software kit PXU01. In addition to the software, the software kit also includes a programming adapter.

If the WTR 190 is used with a KMUS 100, the measuring range can be set via four DIP-switches. Furthermore, a correction-potentiometer can be used to fine-tune the output voltage. A sealing protects the potentiometer against accidental adjustment.

No.	measuring range	Dip-swi. 1 2 3 4
MB1:	- 20°C .. +150°C	1-1-1-1
MB2:	0°C .. + 50°C	0-1-1-1
MB3:	0°C .. +100°C	1-0-1-1
MB4:	0°C .. +200°C	0-0-1-1
MB5:	0°C .. +300°C	1-1-0-1
MB6:	0°C .. +400°C	0-1-0-1
MB7:	0°C .. +500°C	1-0-0-1
MB8:	0°C .. +600°C	0-0-0-1
MB9:	- 50°C .. + 50°C	1-1-1-0
MB10:	-100°C .. +100°C	0-1-1-0
MB11:	- 30°C .. + 70°C	1-0-1-0
MB12:	- 40°C .. + 60°C	0-0-1-0

## temperature measurement

### mounting instructions !!!

#### mechanical installation

- The WTR 190 is designed as a wall-mounted sensor. Use the holes provided in the housing for mounting. Use suitable screws that do not destroy the housing. Only by this we can assure you an optimal measuring point incl. the protection class.
- After mounting the sensor, check the tightness of the housing and after the installation of the connection cable the tightness of the screw connection (cable entry)

#### electrical assembly

- The electrical installation must be carried out in a de-energized state.
- Insert the connection cable into the cable entry (gland). Make sure not to damage the seal of the cable gland.
- Connect the connecting cables according to your task.
- If a transmitter is used, it can be configured via the respective interfaces.
- Close the housing and switch on the voltage.

### important informations !!!

#### return and repair

The promesstec sensors are modular in design. This allows us to carry out repairs and overhauls of defective devices. To do this, send the device to promesstec. A return form with the information to be provided can be found on our homepage under "Technical Information".

#### disposal of the devices

Dispose of devices, components and packaging in an environmentally friendly manner in accordance with the waste treatment and disposal regulations typical for the country. Pay attention to waste separation and recycling of high-grade materials such as stainless steel, etc.

#### further documentation

You can find these short manual and the datasheets as a file on our homepage under the respective devices. The documentation is available in German as well as in English. Other languages on request.

