

## **User manual resistance thermometers type WTR 191**

### **safety instructions !!!**

#### **intended use of the product**

- The sensor has been designed exclusively for the intended use described here or in the data sheet 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 of the use, to come into contact with aggressive media. The safety instructions must be observed. There is danger to life if live parts are touched. Electrical installation and commissioning may only be carried out by qualified and skilled personnel.

#### **special hazards**

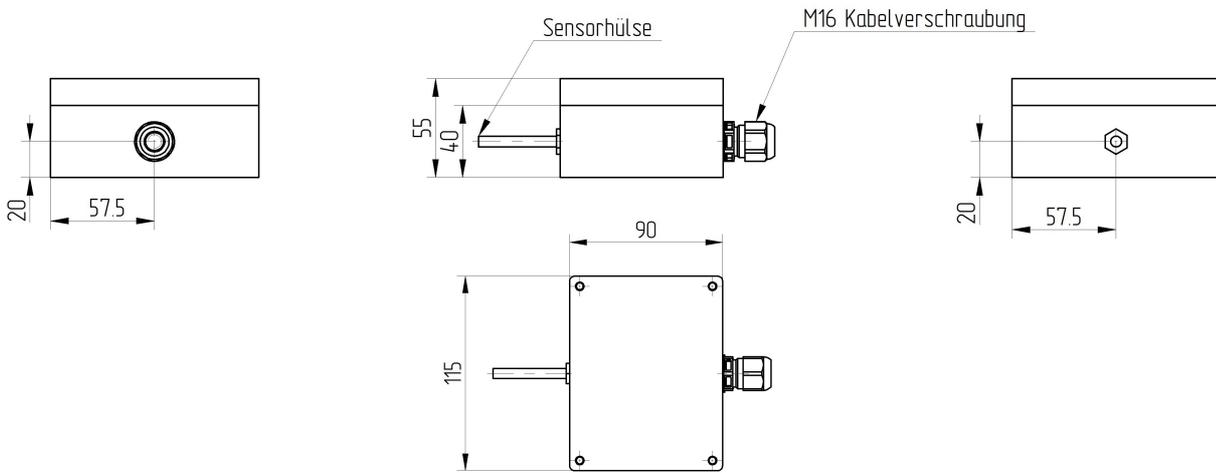
Residual media in dismantled devices can result in a risk to personnel, the environment and equipment. Sufficient precautionary measures must be taken here. Do not use the instruments in safety or emergency stop devices. Incorrect application or operation of the instrument can lead to injuries. Depending on the application, aggressive media with extreme temperatures and high pressure or vacuum may be present at the instrument in the event of a fault. We recommend installing and removing the device only at ambient temperature and in a pressureless mode.

#### **hazards when operating the device**

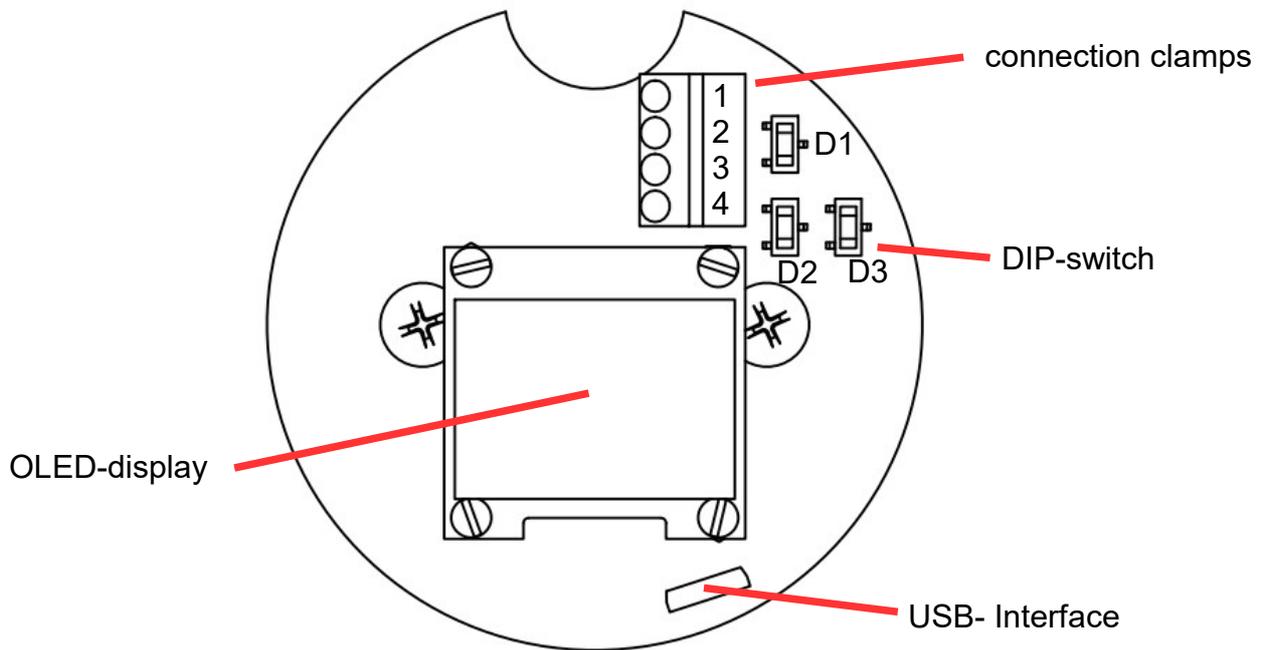
Our devices have a very high protection class when properly mounted and installed. When cleaning your system with high-pressure cleaners, steam cleaners etc., make sure that both the cover and the cable screw connection are not directly exposed to the pressure jet. If the temperature falls below the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

# temperature measurement

## dimensions WTR 191...



## construction circuit board

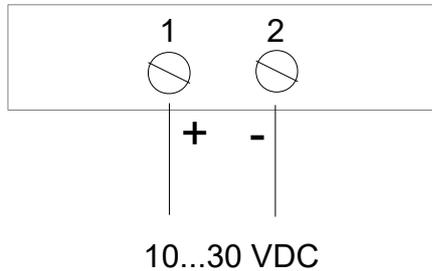


The electronics can be parameterized via the USB interface. The operating instructions and the software can be found on our homepage with the respective device.

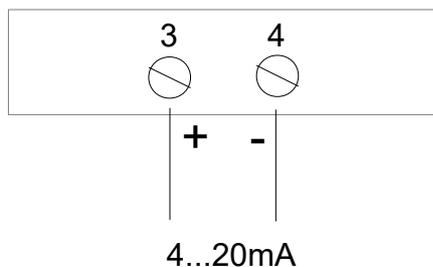
# temperature measurement

## connection WTR 191...

### power supply



### analog output



The analog output can be operated actively or passively. Attention: The changeover must only be carried out in a de-energized state. Destruction of the electronics may result.

**analog output aktiv:** This is the delivery status of the WTR 191... The DIP switches D1...D3 are switched up. The current signal is 4...20mA active and must not be supplied by a sensor supply. You go with it to the passive input of your SPS or similar.

**analog output passiv:** By switching the DIP switches D1...D3 downwards, the current output is switched passively. The current signal is 4...20mA passive and must be powered by a sensor supply. You use it to go to the active input of your SPS, transmitter power supply or similar.

**The data sheet and the complete user manual can be found on our homepage.**

## temperature measurement

### mounting instructions !!!

#### mechanical installation

- The WTR 191 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 guarantee you an optimal measuring point incl. the protection class.
- After mounting the sensor, check the tightness of the housing and after installing the connection cable, check the tightness of the screw connection (cable entry).

#### electrical mounting

- The electrical installation must be carried out in a de-energized status.
- Insert the connection cable into the cable entry (screw fitting). Be careful not to damage the seal of the cable screw fitting.
- Connect the connecting leads according to your switching task.
- You can parameterize the device via the USB interface.
- Close the housing and switch on the voltage.

### important informations !!!

#### return and repair

The promesstec sensors have a modular design. This allows us to repair and overhaul defective devices. To do this, send the device to promesstec. You will find a return form with the information to be provided 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 the recycling of high-quality materials such as stainless steel, etc.

#### further documentation

You can find these short manual, the data sheets and a complete user manual 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.

