

Mounting and operating instructions

multidata S1

Microprocessor-controlled electronic heat meter

Before installation

Compare the meter's technical data (see nameplate) with the heating system's design data.

Nameplate description:

- Maximum permissible load given as a nominal flow rate Q_n in m^3/h .
- Maximum temperature of the heating water from 90° to maximum 120° C.
- Nominal operating pressure PN10 or PN16. (No specification on the nameplate = PN10) This may only be exceeded over short periods!
- Temperature range and maximum temperature difference.

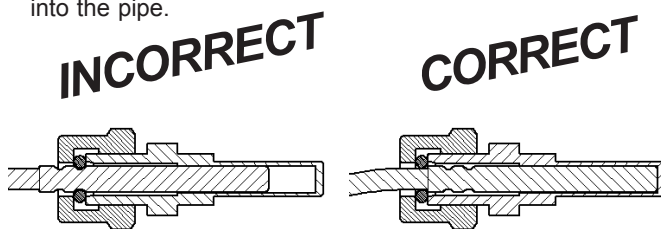
Fitting the heat meter

- Do not fit the meter into the backflow pipe until all installation work has been completed and the system has been rinsed.
- Pay attention to the direction of flow (see arrow on casing).
- Meters of type ETK/ETW (see nameplate) can be fitted in any position, but it has to be ensured that within one system the fitting position of all meters is the same.

Fitting the temperature sensor

Color coding on the temperature sensor:

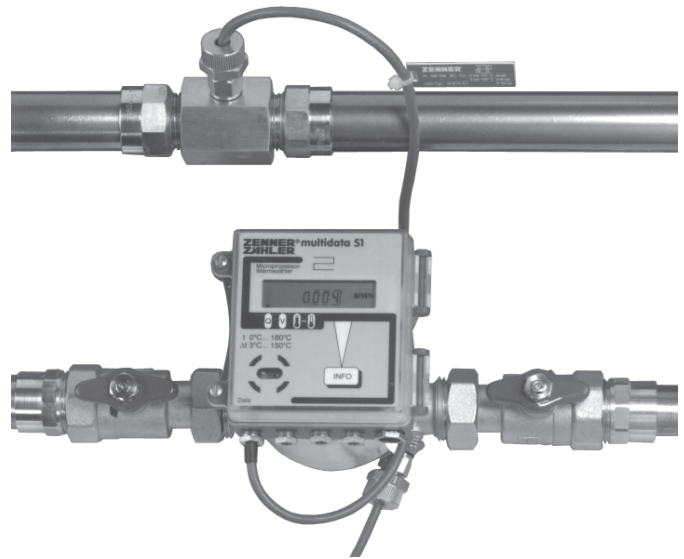
- the red nameplate is for forward flow
- the blue nameplate is for backflow
- If there is no color code on the sensor, then the sensor can be fitted in any position, but related pairs must have the same serial number.
- Immerse temperature sensors and sleeves sufficiently deep into the pipe.



*Please use only the parts originally supplied.
Do not install sleeves with additional extensions.
Do not shorten or lengthen sensor connection cables!
Do not coil sensor cables!*

Operational check

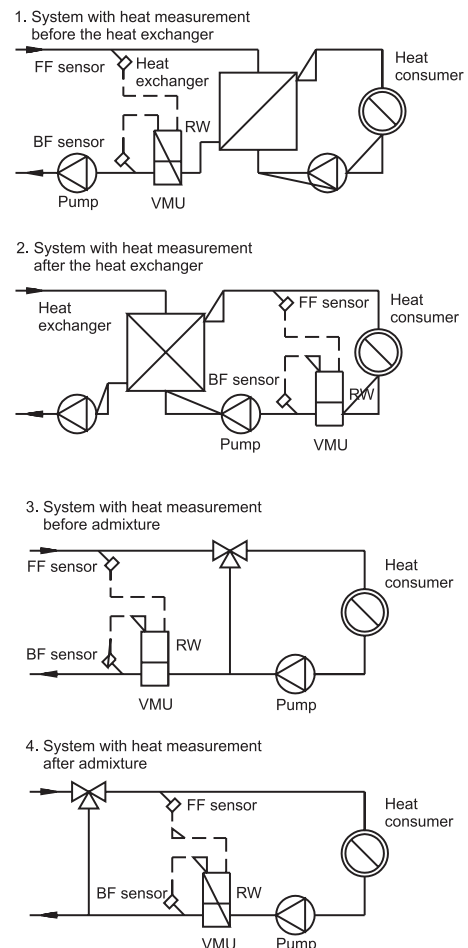
- The microprocessor-controlled heat computer provides all the information about your system.
- Malfunctions and installation errors are indicated by an error code on the display (see „Error code table“ on the other side).
- Check the m^3 display and that the temperatures are approximately in accordance with the plug-in thermometers (measuring cycle: 2 minutes).
- Make a note of the start positions on the meter.
- To safeguard consumer values carry out interim readings! (Consumption check)



These EBS fitting sets can be delivered:

- EBS- $\frac{3}{4}$ " : 2 ball valves $\frac{3}{4}$ "
1 hexagonal mount $\frac{3}{4}$ ", 40mm
1 temp. sensor sleeve M10x1, TH-A
- EBS-1" : 2 ball valves 1"
1 hexagonal mount
1 temp. sensor sleeve M10x1, TH-A

Circuit diagram / Fitting



User protection

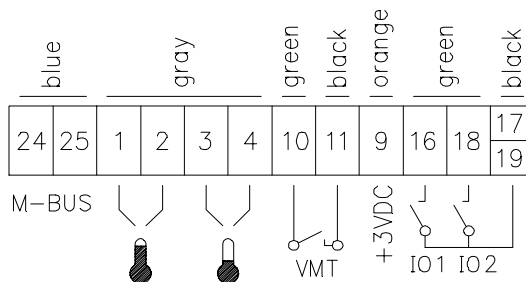
- Protect heat meters and temperature sensors against unauthorized removal or manipulation using the lead seal supplied.
- If the heat computer is mounted separately (wall mounting) from the heat meter, the heat computer must be additionally sealed.

Use only the sealing material supplied!

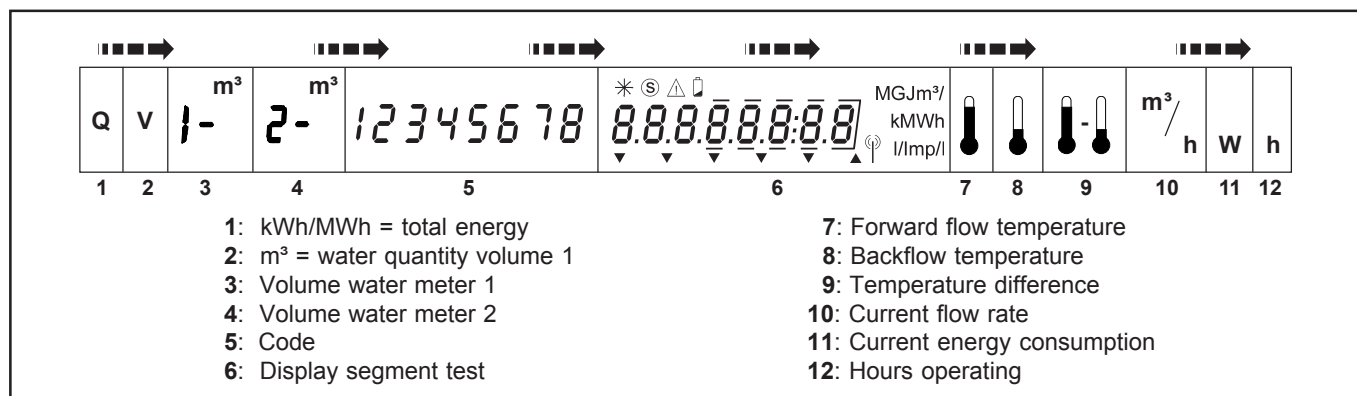
Certification

The year of certification and first calibration is shown on the cover of the heat computer. The calibration is valid for 5 years.

Connection key for the heat computer



Operating instructions for the heat computer



Basic setting: Display kWh (MWh) or error (Err.....)

Procedure: Pressing the "Info" key, switches the menu according to the diagram above. After a few moments the basic setting is again displayed.

Service-Program: Other menu levels can be reached by service technicians and reading companies. Ask our factory for information sheets about this.

Control: A turbine symbol * (asterisk) in the top left hand corner of the LCD-display appears with every pulse from the volumetric measuring unit and can be used as a functional check.

Error display: If there are error messages, these are set before the energy display until the error is corrected. Pressing the info key for several seconds will delete the error in the display.

Error code

Error		Remedy
Err 00100	volume 1 frequency too large	correct the system
Err 00062	wrong temperature sensor	check sensor and connections and replace if necessary
Err 00063		
Err 00064		
Err 00065		
Err 00071	sensors wrong way round	correct the system
Err 00034	short circuit in forward flow temperature sensor connection	check sensor and connections and replace if necessary
Err 00044	short circuit in backflow temperature sensor connection	
Err 00037	backflow sensor interruption	
Err 00047	forward flow sensor interruption	
Err 000xx	other errors in temperature measurement	
Err >1000	internal error	only at service company / factory

Attention: You have acquired a calibrated instrument! The legislative body has stipulated the following periods for the validity of the certification: 5 years for hot water meters and heat meters, 6 years for cold water meters.

Should these time limits not be observed, the meter will become invalid and may no longer be used for billing purposes!