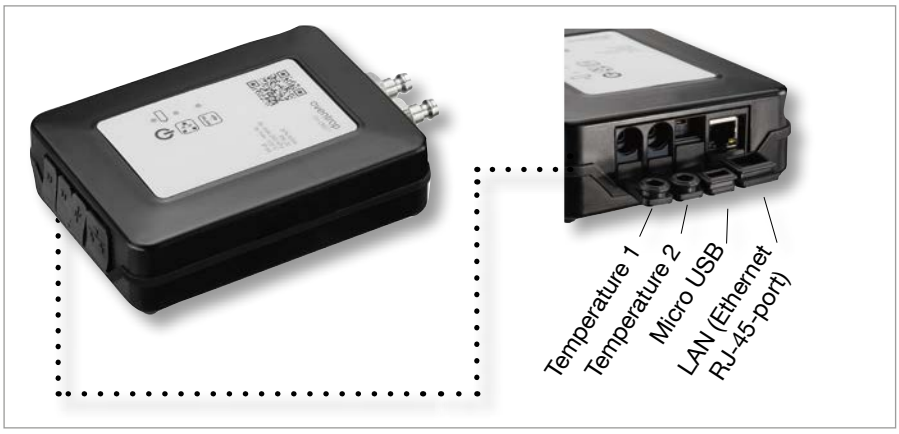
oventrop

Hydronics

“OV-DMC 3” Measuring system

Measurement at a double regulating and commissioning valve



Measurement at a double regulating and commissioning valve

The “OV-DMC 3” measuring system can be used in combination with Oventrop products with “classic” or “eco” measuring technique (e.g. “Hycocon”, “Hydrocontrol” and “Cocon” as well as Oventrop metering stations).

The WLAN interfaces of the measuring system for communication with standard smartphones, tablets and personal computers enable an easy regulation of heating and cooling systems as well as a simple generation of measurement records.
Calculation of the presetting for an Oventrop double regulating and commissioning valve is possible after having entered the valve data and the required nominal flow rate. The permanent measurement of differential pressure and flow is possible, too. The measurement of two temperatures (e.g. supply and return) with the help of temperature sensors allows for a direct calculation of the heating capacity.

Advantages
- Operation via commercial smartphones, tablets and PCs
- integrated WLAN
- optional permanent measurement
- motor-operated bypass function for automatic deaeration of the device
- quickly rechargeable LiFe battery for a long operating time
- high differential pressure measuring range up to 2.5 bar

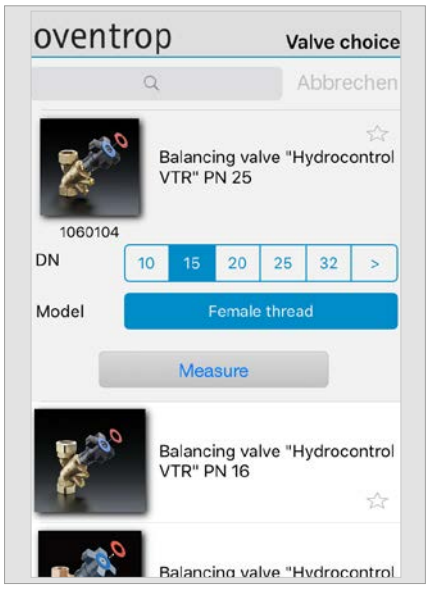
Technical data:
- Max. operating temperature: +120 °C
- Min. operating temperature: -20 °C
- Max. operating pressure: 20 bar (2000 kPa)
- Max. differential pressure: 2.5 bar (250 kPa)
- Temperature measuring range: -20 °C up to +120 °C
- Temperature sensor type: PT 1000
- Power supply: via LiFe rechargeable battery or enclosed USB power pack 230V AC 50/60 Hz
- Dimensions W x H x D: 107x165x40 mm
- Weight: 650 g
- Protection class: IP 64
- Interface: WLAN

Minimum requirements on the display devices:
- Apple iPhone 4 with at least iOS 7.1
- Apple iPad 2 with at least iOS 7.1
- Android API devices with at least version 11 which corresponds to Android 3.0 (Honeycomb) and higher
- Windows with at least Win 7 and WLAN

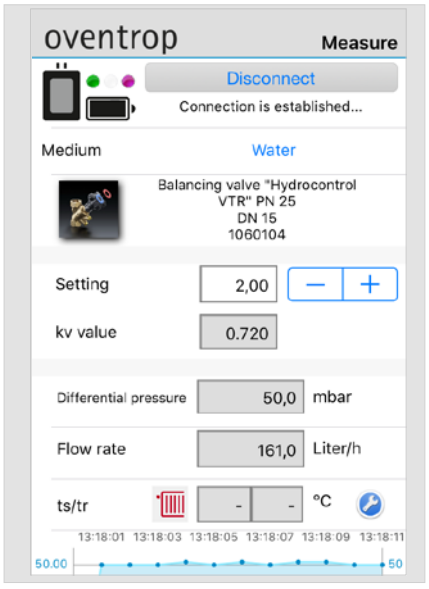
Picture credits: Title: © European Parliament, Strasbourg

Measuring system in a sturdy case

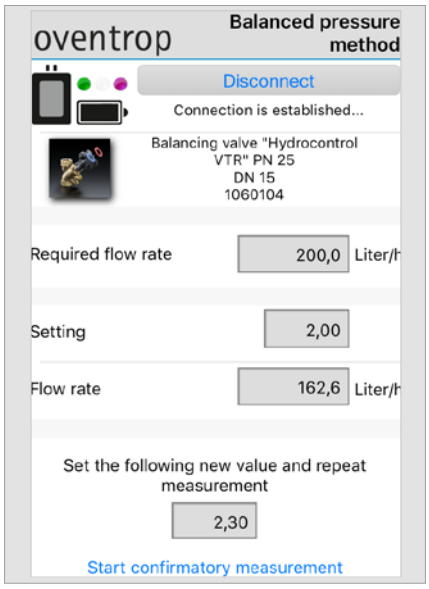
Extent of supply of the “OV-DMC 3 with accessories



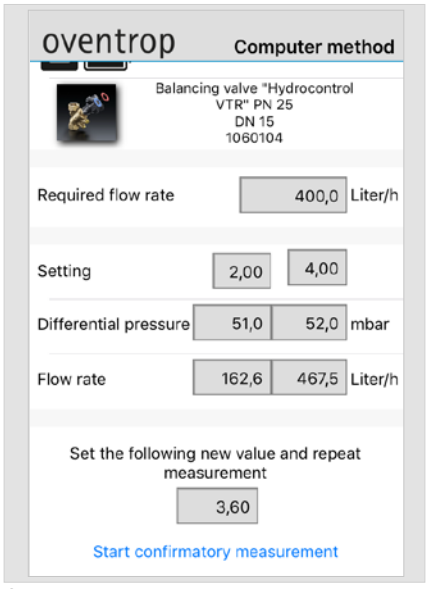
Valve selection



Measurement of differential pressure, flow rate and temperature



Balanced pressure method



Computer method

“OV-DMC 3” Measuring system For measurement, transmission and determination of pressure, flow rate and temperature	
Model	Item no.
without display device	**1069278**

Measuring methods

The “OV-DMC 3” software with its different measuring methods serves the regulation of valves. Measured values (differential pressure/flow rate) are displayed and graphically represented. The flow and return temperature can be measured by connecting temperature sensors. The presetting values of the valve which are determined from the measured values, are displayed and recorded.

Balanced pressure method

The required flow rate is entered first and then the presetting value of the regulating valve. The new presetting obtained from measurement, is set at the valve and is checked by repeating the measurement. If necessary, a new measurement has to be carried out.

Computer method

As with the balanced pressure method, the required flow rate is set first. Now the regulating valve is set to any presetting value and a measurement is started.

Once the measurement has been completed, a second presetting value is set and the measurement is repeated. The presetting value for the required flow rate is determined by the software from the measured values. This value is set at the regulating valve and a confirmatory measurement is carried out. If the measured flow is in accordance with the specifications, the value can be entered into the regulation record.

kv value method

After having entered the kv value of the regulating valve, the flow rate is determined from the differential pressure measured in the current valve position.

Room climate

Hydronics

Stations
Storage cylinders
Pipes

Potable water

Oil
Solar

Smart Home
Smart Building

Subject to technical modifications without notice.
Private persons may purchase our products from their specialised installer.

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