oventrop

Innovation + Quality

Valves, controls + systems

“OV-DMC 3” Measuring system

Product range





1

The measuring system “OV-DMC 3” with WLAN interface serves the comfortable hydronic balancing of heating and cooling systems.

The measuring system “OV-DMC 3” has especially been designed for a simple and quick regulation of heating and cooling systems.
Communication takes place via commercial smartphones, tablets, notebooks and PCs. The Oventrop app for IOS and Android as well as a software package for Windows operating systems are available for operation. This allows for a comfortable regulation of heating and cooling systems as well as a simple generation of records.
Calculation of the presetting values for Oventrop double regulating and commissioning valves is possible after having entered the valve data and the required nominal flow rate. Permanent differential pressure and flow measurement is possible, too. This way, the system conditions can be recorded over a longer period. The simultaneous measurement of the flow and return temperature with the help of PT 1000 temperature sensors allows for a direct performance calculation.



2

Advantages:
- operation via commercial smartphones, tablets, notebooks and PCs
- integrated WLAN / LAN
- autonomous storage of the measured values without operating device but with the “OV-DMC 3” sensor only
- internal data memory (4 GB) for data logging
- networking of several devices
- 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

1 Measurement at a double regulating and commissioning valve

2 The values measured by several “OV-DMC 3” sensors can be queried successively via the WLAN connection.



1



2



3

Any standard Oventrop regulating valve can be measured with the enclosed measuring accessories.

Technical data:

- Max. operating temperature: 120°C
- Min. operating temperature: -20°C
- Max. operating pressure: 20bar (2000kPa)
- Max. differential pressure: 2.5bar (250kPa)
- 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 230 V AC 50/60Hz
- Dimensions W x H x D: 107x165x40 mm
- Weight: 650g
- Protective system: IP64
- Interface: WLAN / LAN

Minimum requirements on the display devices:

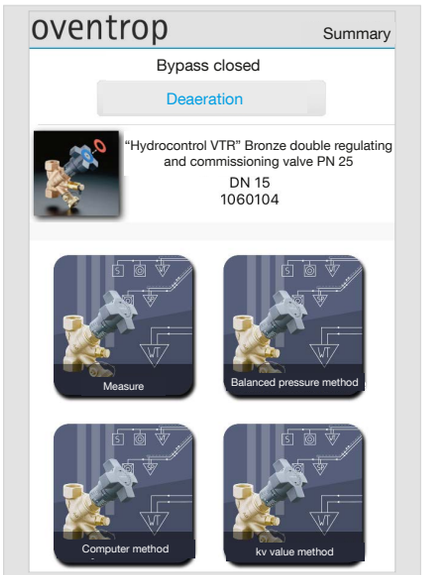
- Apple iPhone 4 with at least iOS 7.1
- Apple iPad 2 with at least iOS 7.1
- Android devices with at least API version 11 which corresponds to Android 3.0 (Honeycomb) and higher
- Windows devices with at least Win 7 and WLAN

Models:	Item no.:
without display device	**1069278**
with display device	**1069279**

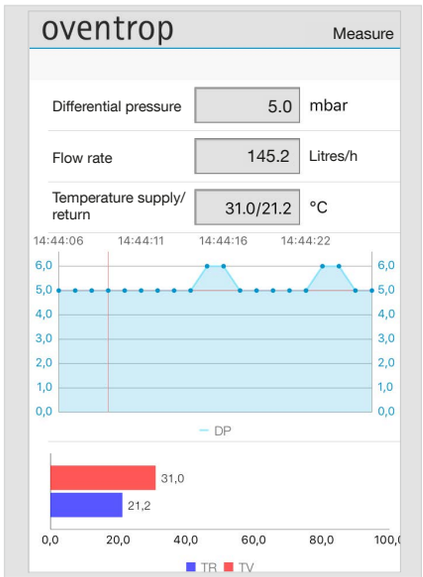
1 Interfaces

2 The measuring system is supplied in a sturdy case

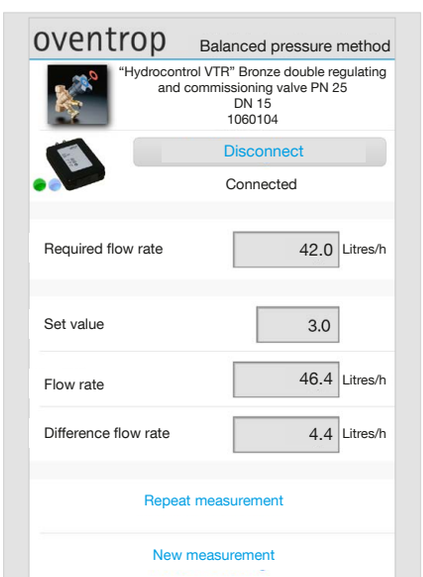
3 Extent of supply of the measuring system “OV-DMC 3” with accessories



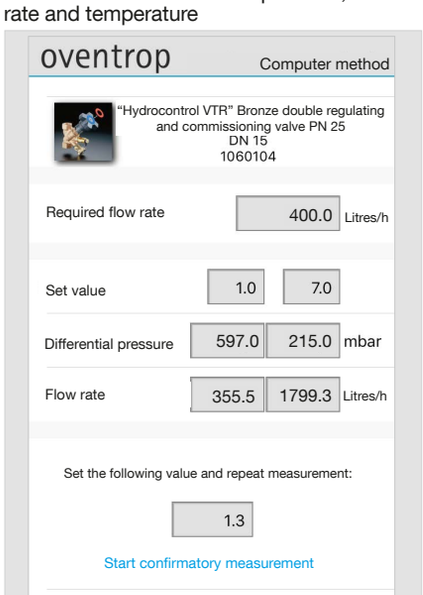
Summary measuring methods



Measurement of differential pressure, flow rate and temperature



Balanced pressure method



Computer method



k_V value method

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 an 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.

Subject to technical modifications without notice.

Presented by:

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