



2.4 Differential pressure measurement and verification of water quantities

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OV-DMC 3 Measuring device



System for flow measurement at valves and for regulation of heating and cooling systems. For use with all Oventrop products equipped with Classic or Eco measuring valves or HydroPort auxiliary valves: HydroControl, HydroCom, Cocon, Hycoccon and measuring orifices. With interfaces for communication with commercially available smartphones and tablets using the Oventrop app for convenient measuring and logging. The data determined with the OVplan and OVselect calculation programmes can be accessed.

After entering the valve data and the desired flow rate, a calculation of the presetting for Oventrop double regulating and commissioning valves is possible. The permanent recording of differential pressure and flow rate is also possible. The optional connection of two temperature sensors, for example for supply and return, enables direct performance calculation. The OV-DMC 3 is supplied in a sturdy case with all necessary adapters for connection to Oventrop valves. Smartphone or tablet are not included in the scope of delivery.

Operating temperature -20 up to 120 °C



OV-DMC 3 Measuring system

Item No.

1069278



OV-Connect Differential pressure sensor



Differential pressure transducer for permanent differential pressure monitoring at Oventrop products with Classic measuring technique in heating and cooling systems operated with water or water-glycol mixtures. The differential pressure is taken via the measuring needles and the copper pipes at the measuring valves of the product to be measured. In operation, the differential pressure transducer pro-

vides an output signal (0 to 10 V) proportional to the measured differential pressure. This signal can be used by a higher-level electronic control and monitoring unit of a building management system (BMS) or by individual devices (e.g. pressure indicators). For central heating and cooling systems as well as potable water installations (circulation pipes) up to PN 25. Installation in the supply or the return pipe.



OV-Connect Differential pressure transducer



Item No.

1069180

OV Measuring system - Accessories



Measuring hose

Suitable for OV-DMC 3, OV-DMC 2 and OV-DMPC.

Description	Item No.
2 measuring hoses, length 0.5 m, red and blue	1069178
2 measuring hoses, length 2 m, red and blue	1069179



Measuring valve

Suitable for OV-DMC 3, OV-DMC 2 and OV-DMPC.



Thermometer

Classic measuring technique - Accessories



Ball valve

Description

Fill and drain ball valve with G 1/4 external thread

Item No.

1060191



Measuring valve

Description

2 measuring valves with G 1/4 external thread

Item No.

1060281



Measuring valve with extension

Description

2 measuring valves G 1/4 with extension L = 100 mm, system draining not required for mounting

Item No.

1060282



Measuring valve extension

Description

Measuring valve extension L = 80 mm, system draining is required for mounting

Item No.

1060295



Measuring adapter with Classic measuring technique and G 3/4 internal thread, for the connection to drain and fill tools and fill and drain cocks

Description

Measuring adapter with Classic measuring technique and G 3/4 internal thread, for the connection to drain and fill tools and fill and drain cocks

Item No.

1060298

Measuring adapter with Classic measuring technique and G 3/4 internal thread, for the connection to drain and fill tools and fill and drain cocks



Description

2 measuring adapters for differential pressure measurement at Hydromat DTR / DFC

Item No.

1060299

Measuring valve



Description

Measuring valve with Classic measuring technique and fill and drain ball valve. With external thread G 1/4.

Item No.

1060381

Measuring needle



Description

2 measuring needles with plug-in connection

Item No.

1069199

Measuring valve extension



Description

Measuring valve extension L = 80 mm, with T-piece connection. For differential pressure measurement and simultaneous connection of the impulse tube of the differential pressure regulator

Item No.

1688290

Measuring valve extension



Description

2 measuring valve extensions L = 80 mm, for measuring orifices item no. 1060771-78

Item No.

1688291



Measuring valve extension



Description

Measuring valve extension L = 40 mm, system draining is required for mounting

Item No.

1688295



Eco measuring technique - Accessories



Draining

Description

Drain and fill tool for Hycocon double regulating and commissioning valves

Item No.

1061791



Measuring needle

Description

2 measuring needles for Hycocon double regulating and commissioning valves, for the connection of the OV-DMC 3, OV-DMC 2 and OV-DMPC measuring devices

Item No.

1061799



Plug-in coupling technology - Accessories



Measuring adapter with Classic measuring technique and G 3/4 internal thread, for the connection to drain and fill tools and fill and drain cocks

Description

Measuring adapter with HydroPort plug-in coupling and G 3/4 internal thread, for the connection to drain and fill tools and fill and drain cocks

Item No.

1060297



Measuring valve

Suitable for HydroControl VTR, MTR and ATR. Not suitable for the new HydroControl V, M, D and A.

Description

Measuring valve with HydroPort plug-in coupling and fill and drain ball valve. With external thread G 1/4.

Item No.

1060391





2.4 Differential pressure measurement and verification of water quantities

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Measuring orifices



Measuring orifices PN 16 / PN 25 with threads or for installation between flanges. Supplied with Classic measuring valves. For flow determination in central heating and cooling systems. The flow rate is determined by measuring the differential pressure across the measuring orifice. Modification of the flow values

can be read directly independently of the pre-set values of the upstream or downstream valve by means of the OV-DMC 3 measuring system.

The measuring orifices for installation between flanges can be combined with all valves with flanges according to EN 1092.

Measuring connection	Yes	Installation location	Supply or return
Medium	Water Water-glycol mixture		



Measuring orifice with internal thread / external thread PN 25



Body material	DZR brass	Operating temperature	-20 up to 150 °C
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Connection size	Nominal size	kvs	Item No.
R 1/2 x Rp 1/2	DN 15 LF	0.55	1060644
R 1/2 x Rp 1/2	DN 15 MF	1.20	1060634
R 1/2 x Rp 1/2	DN 15 HF	2.20	1060604
R 3/4 x Rp 3/4	DN 20	4.25	1060606
R 1 x Rp 1	DN 25	8.60	1060608
R 1 1/4 x Rp 1 1/4	DN 32	15.90	1060610
R 1 1/2 x Rp 1 1/2	DN 40	23.70	1060612
R 2 x Rp 2	DN 50	48.00	1060616

Measuring orifice for flanges according to EN 1092 PN 16



Body material	Stainless steel	Operating temperature	-10 up to 150 °C
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Nominal size	kvs	Item No.
DN 65	102.00	1060751
DN 80	120.00	1060752
DN 100	234.00	1060753
DN 125	335.00	1060754
DN 150	522.00	1060755
DN 200	780.00	1060756
DN 250	1,197.00	1060757
DN 300	1,810.00	1060758
DN 350	2,050.00	1060759
DN 400	2,650.00	1060760
DN 450	3,400.00	1060761
DN 500	4,200.00	1060762
DN 600	6,250.00	1060763
DN 700	10,690.00	1060764
DN 800	14,000.00	1060765

Measuring orifice for flanges according to EN 1092 PN 16



Body material Cast iron Operating temperature -10 up to 120 °C

Nominal size	kvs	Item No.
DN 65	93.00	1060771
DN 80	126.00	1060772
DN 100	244.00	1060773
DN 125	415.00	1060774
DN 150	540.00	1060775
DN 200	1,010.00	1060776
DN 250	1,450.00	1060777
DN 300	2,400.00	1060778

