

## Metering Stations PN 25 / PN 16

made of brass, cast iron or stainless steel  
DN 15...800



Metering stations are installed in the pipelines of hot water central heating systems as well as cooling systems and enable the hydronic balancing of the pipelines with each other. It can be used both in the supply and the return pipe. They are installed either upstream or downstream of a double regulating valve or a shutoff valve or a butterfly valve. In conjunction with Oventrop valves, they can be installed tightly coupled to a double regulating valve or shutoff valve to form a complete set.

Balancing of the pipeline is done by adjusting the double regulating valve during pressure loss measurement at the metering station. This means that the change in flow rate values is independent of the presetting values of the valve, so that the flow rate can be read directly when the presetting is changed. For example, when using the Oventrop OV-DMC 3 measuring system.

Metering stations are available in threaded or intermediate flange versions and are equipped with Classic measuring valves.

### Features

- + Ease of use
- + Flow determination by differential pressure measurement
- + Flow characteristic lines stored in the Oventrop OV-DMC 3 measuring system



# Product Details

## Metering Stations PN 25, DN 15...50

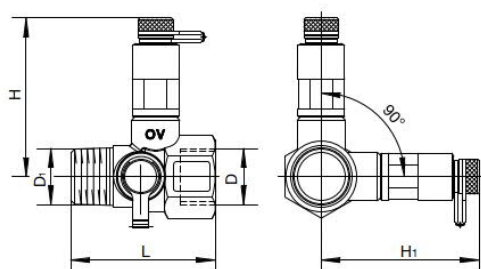
made of brass with internal thread/external thread according to EN 10226

### Technical Data

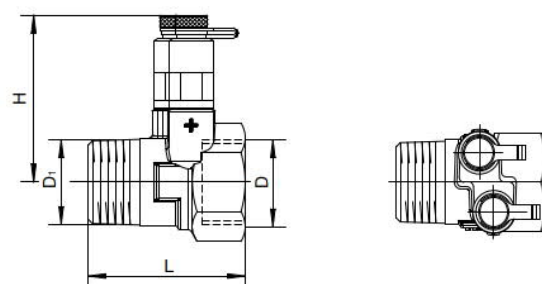
|                       |                                                                                                                    |
|-----------------------|--------------------------------------------------------------------------------------------------------------------|
| Nominal sizes         | DN 15...50                                                                                                         |
| Operating temperature | -20...150 °C                                                                                                       |
| Operating pressure    | 25 bar / PN 25                                                                                                     |
| Medium                | Heating or cooling water according to VDI 2035 or ÖNORM 5195<br>Water-glycol mixture with max. 50 % glycol content |
| Kvs values            | 0.55...48                                                                                                          |



### Dimensions and Item Numbers



DN 15...20

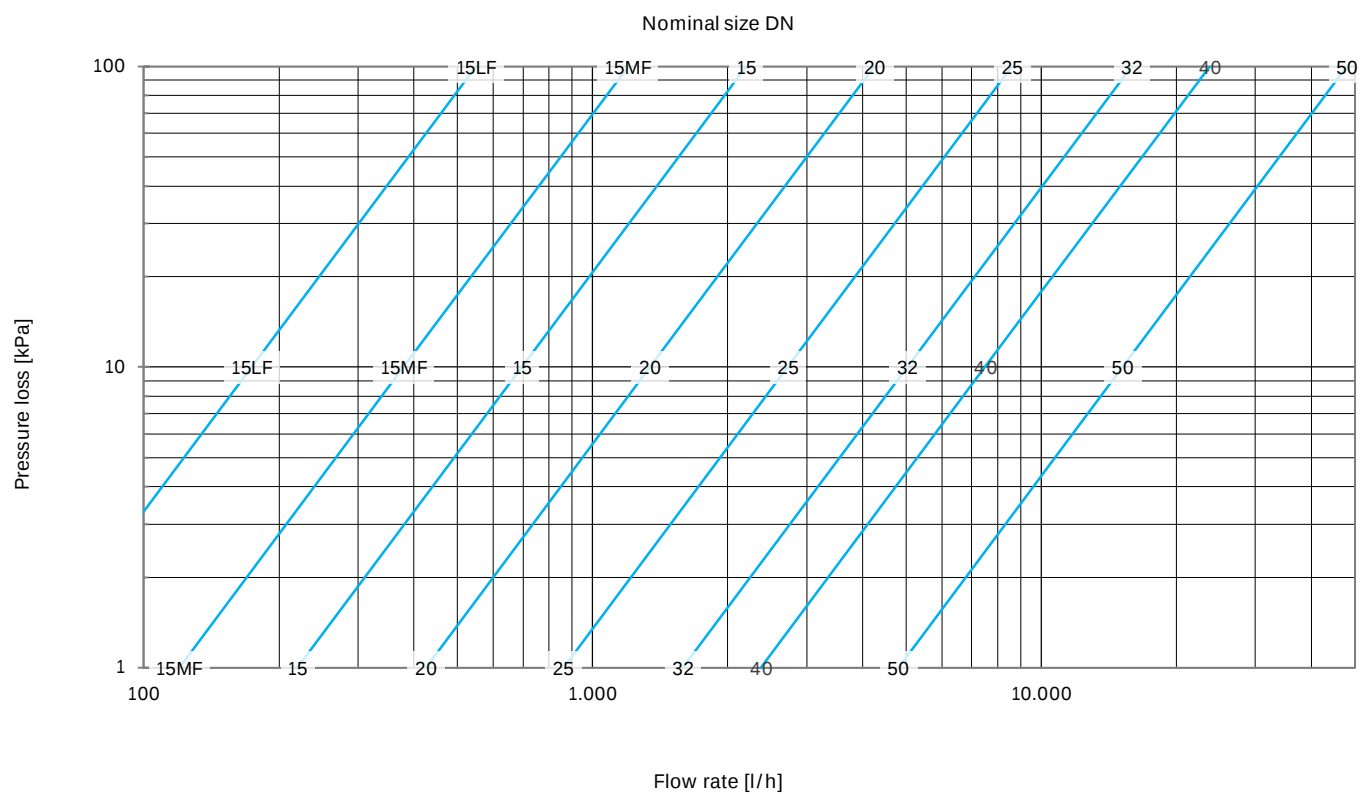


DN 25...50

| DN           | Kvs  | D      | D1    | L  | H    | H1 | Item No. |
|--------------|------|--------|-------|----|------|----|----------|
| <b>15 LF</b> | 0.55 | Rp ½   | R ½   | 54 | 60   | 60 | 1060644  |
| <b>15 MF</b> | 1.20 | Rp ½   | R ½   | 54 | 60   | 60 | 1060634  |
| <b>15</b>    | 2.20 | Rp ½   | R ½   | 54 | 60   | 60 | 1060604  |
| <b>20</b>    | 4.25 | Rp ¾   | R ¾   | 55 | 62   | 62 | 1060606  |
| <b>25</b>    | 8.60 | Rp 1   | R 1   | 62 | 66   | —  | 1060608  |
| <b>32</b>    | 15.9 | Rp 1 ¼ | R 1 ¼ | 69 | 70.5 | —  | 1060610  |
| <b>40</b>    | 23.7 | Rp 1 ½ | R 1 ½ | 69 | 76   | —  | 1060612  |
| <b>50</b>    | 48.0 | Rp 2   | R 2   | 80 | 81   | —  | 1060616  |

Metering stations PN 25, DN 15...50 made of brass with internal thread/external thread according to EN 10226

## Flow chart



## Kvs values

| Nominal size | DN 15 LF | DN 15 MF | DN 15 | DN 20 | DN 25 | DN 32 | DN 40 | DN 50 |
|--------------|----------|----------|-------|-------|-------|-------|-------|-------|
| Kvs value    | 0.55     | 1.20     | 2.20  | 4.25  | 8.60  | 15.9  | 23.7  | 48.0  |

# Metering stations PN 16, DN 65...800

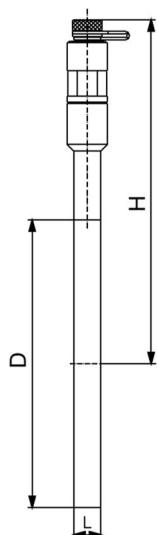
made of stainless steel for flanges according to EN 1092 PN 16

## Technical Data

|                       |                                                                                                                     |
|-----------------------|---------------------------------------------------------------------------------------------------------------------|
| Nominal sizes         | DN 65...800                                                                                                         |
| Operating temperature | -20...150 °C                                                                                                        |
| Operating pressure    | 16 bar / PN 16                                                                                                      |
| Medium                | Heating or cooling water according to VDI 2035 or ÖNORM 5195<br>Water-glycol mixtures with max. 50 % glycol content |
| Kvs values            | 102...14,000                                                                                                        |



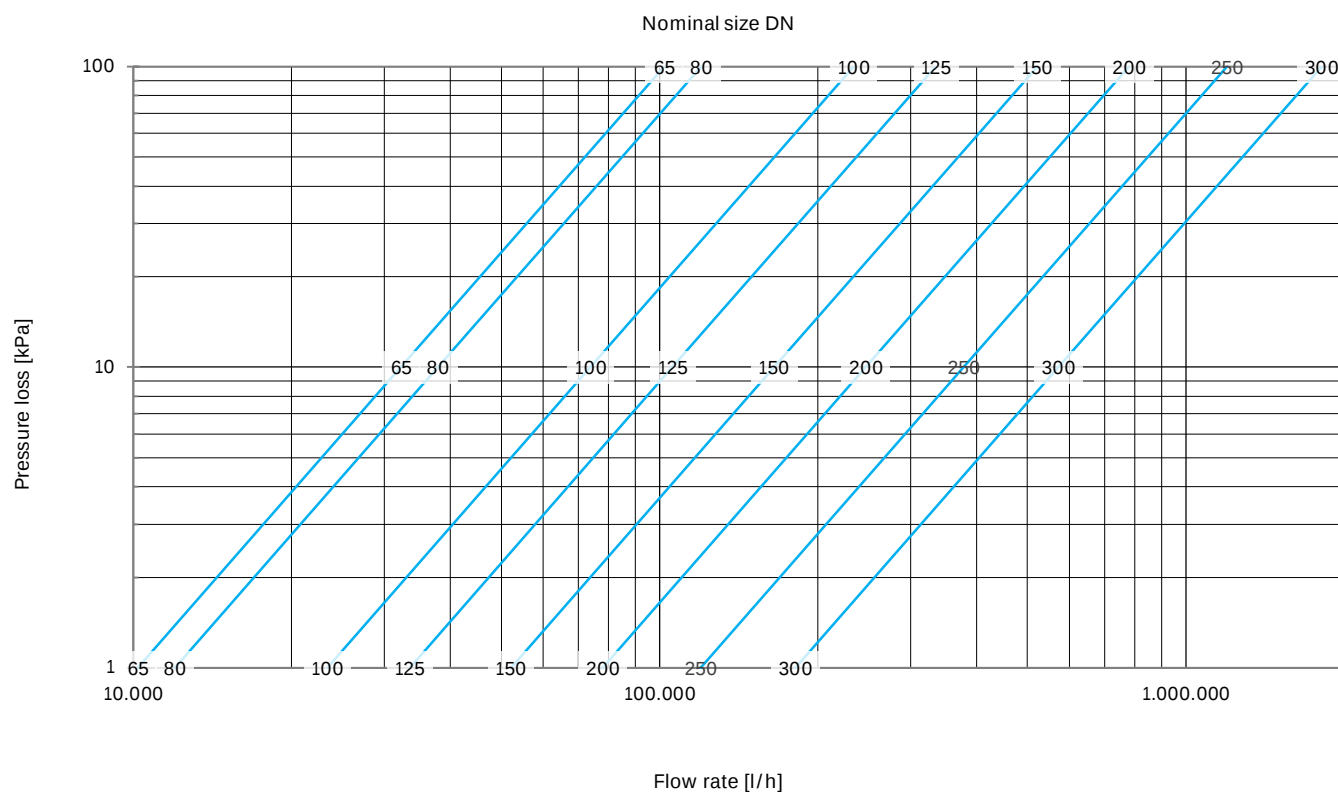
## Dimensions and Item Numbers



| DN         | Kvs    | L  | D   | H   | Item no. |
|------------|--------|----|-----|-----|----------|
| <b>65</b>  | 102    | 12 | 127 | 201 | 1060751  |
| <b>80</b>  | 120    | 12 | 142 | 208 | 1060752  |
| <b>100</b> | 234    | 12 | 162 | 218 | 1060753  |
| <b>125</b> | 335    | 12 | 192 | 233 | 1060754  |
| <b>150</b> | 522    | 12 | 218 | 246 | 1060755  |
| <b>200</b> | 780    | 12 | 273 | 274 | 1060756  |
| <b>250</b> | 1,197  | 12 | 329 | 302 | 1060757  |
| <b>300</b> | 1,810  | 12 | 384 | 330 | 1060758  |
| <b>350</b> | 2,050  | 12 | 444 | 409 | 1060759  |
| <b>400</b> | 2,650  | 12 | 495 | 435 | 1060760  |
| <b>450</b> | 3,400  | 12 | 555 | 465 | 1060761  |
| <b>500</b> | 4,200  | 12 | 617 | 496 | 1060762  |
| <b>600</b> | 6,250  | 12 | 734 | 554 | 1060763  |
| <b>700</b> | 10,690 | 12 | 804 | 590 | 1060764  |
| <b>800</b> | 14,000 | 12 | 911 | 643 | 1060765  |

Metering stations PN 16, DN 65...800 made of stainless steel for flanges according to EN 1092 PN 16

### Flow chart DN 65...300

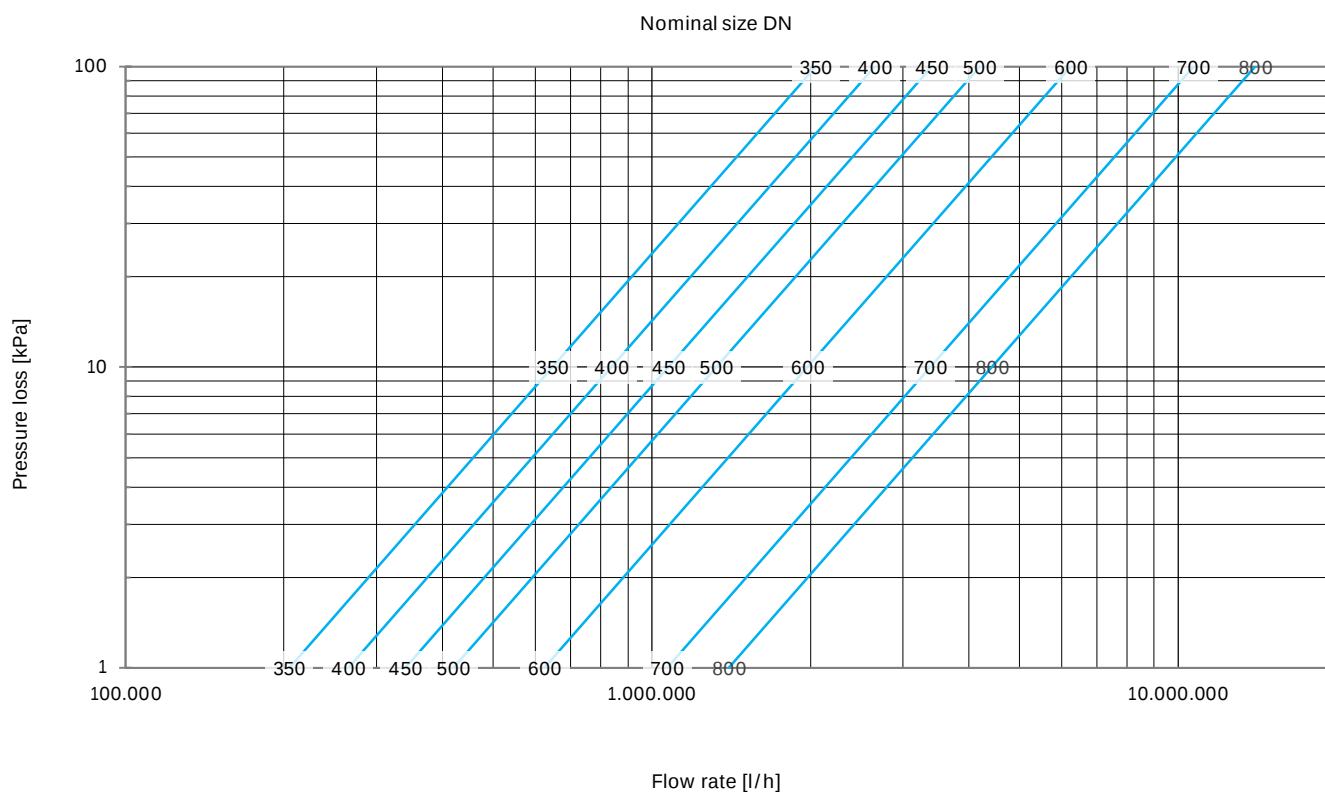


### Kvs values DN 65...300

| Nominal size | DN 65 | DN 80 | DN 100 | DN 125 | DN 150 | DN 200 | DN 250 | DN 300 |
|--------------|-------|-------|--------|--------|--------|--------|--------|--------|
| Kvs value    | 102   | 120   | 234    | 335    | 522    | 780    | 1,197  | 1,810  |

Metering stations PN 16, DN 65...800 made of stainless steel for flanges according to EN 1092 PN 16

### Flow chart DN 350...800



### Kvs values DN 350...800

| Nominal size | DN 350 | DN 400 | DN 450 | DN 500 | DN 600 | DN 700 | DN 800 |
|--------------|--------|--------|--------|--------|--------|--------|--------|
| Kvs value    | 2,050  | 2,650  | 3,400  | 4,200  | 6,250  | 10,690 | 14,000 |

# Metering stations PN 16, DN 65...300

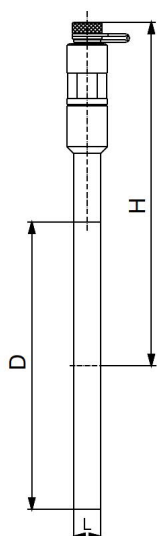
made of cast iron for flanges according to EN 1092 PN 16

## Technical Data

|                       |                                                                                                                      |
|-----------------------|----------------------------------------------------------------------------------------------------------------------|
| Nominal sizes         | DN 65...300                                                                                                          |
| Operating temperature | -10...120 °C                                                                                                         |
| Operating pressure    | 16 bar / PN 16                                                                                                       |
| Medium                | Heating and cooling water according to VDI 2035 or ÖNORM 5195<br>Water-glycol mixtures with max. 50 % glycol content |
| Kvs values            | 93...2,400                                                                                                           |



## Dimensions and Item Numbers



| DN         | Kvs   | L  | D   | H   | Item no. |
|------------|-------|----|-----|-----|----------|
| <b>65</b>  | 93    | 20 | 127 | 127 | 1060771  |
| <b>80</b>  | 126   | 20 | 142 | 134 | 1060772  |
| <b>100</b> | 244   | 20 | 162 | 144 | 1060773  |
| <b>125</b> | 415   | 20 | 192 | 159 | 1060774  |
| <b>150</b> | 540   | 20 | 218 | 172 | 1060775  |
| <b>200</b> | 1,020 | 20 | 273 | 200 | 1060776  |
| <b>250</b> | 1,450 | 20 | 329 | 228 | 1060777  |
| <b>300</b> | 2,400 | 20 | 384 | 255 | 1060778  |

## Measuring valves with extension

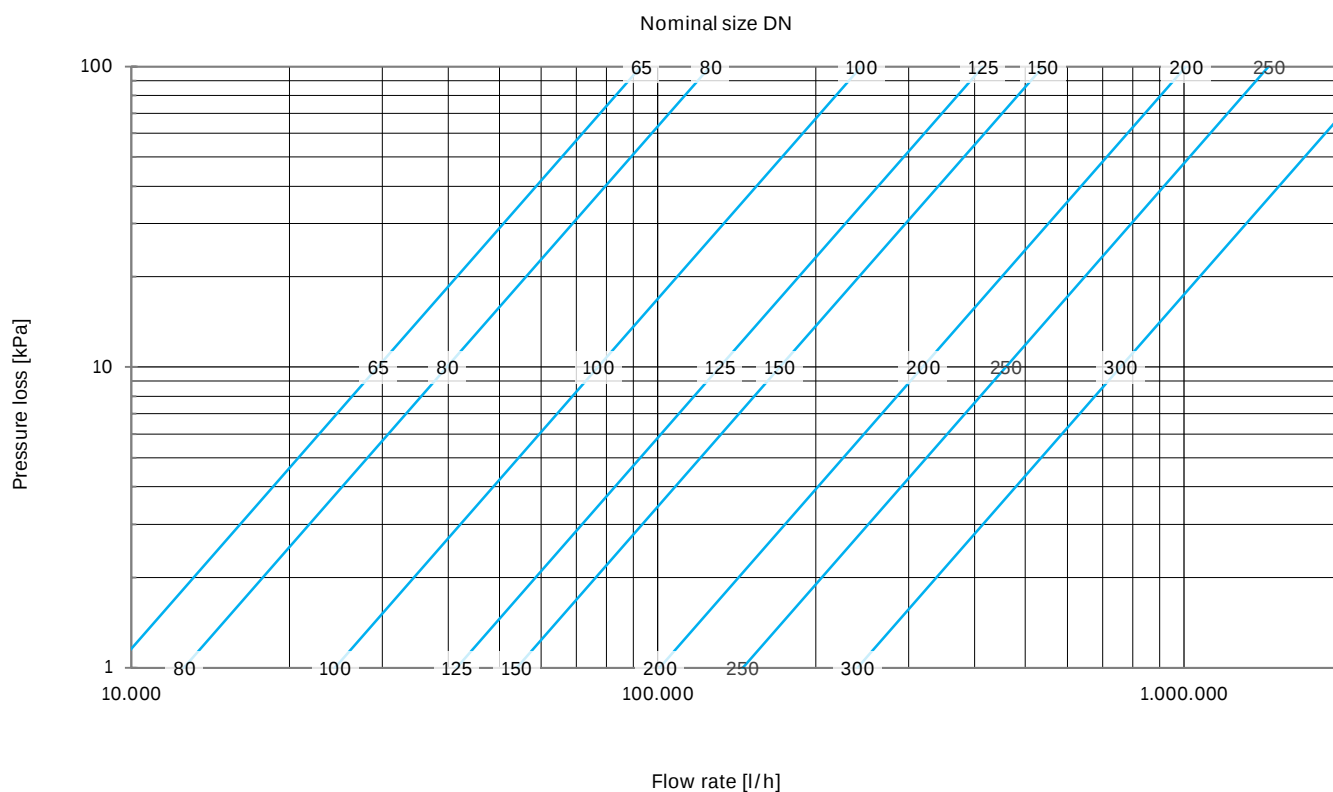


2 measuring valves G ¼ with extension for cast iron metering stations for intermediate flanges

| Length    | Suitable for             | Item no. |
|-----------|--------------------------|----------|
| L = 80 mm | Item no.<br>1060771...78 | 1688291  |

## Metering stations PN 16, DN 65...300 made of cast iron for flanges according to EN 1092 PN 16

### Flow chart



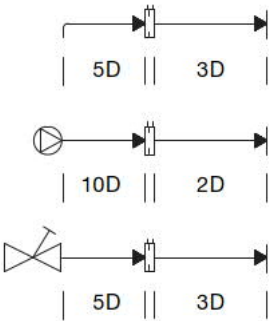
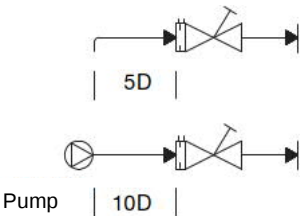
### Kvs values

| Nominal size | DN 65 | DN 80 | DN 100 | DN 125 | DN 150 | DN 200 | DN 250 | DN 300 |
|--------------|-------|-------|--------|--------|--------|--------|--------|--------|
| Kvs value    | 93    | 126   | 244    | 415    | 540    | 1,010  | 1,450  | 2,400  |

# Installation instructions

We recommend installing a straight pipe with a minimum length of 5 times the diameter at the inlet of the metering station without any other elements between the metering station and the downstream fitting. When installing, ensure that the metering stations are aligned centrally to the adjacent flange axes.

## Calming sections



D = Inner pipe diameter

Recommended calming sections for installation directly upstream of an Oventrop double regulating valve

Recommended calming sections for installation upstream of other components

# Accessories

| OV-DMC 3                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Suitable for                    | Item no. |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------|
|  | 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, Hycocon and metering stations.                                                                                                                                                                                               | All variants, all nominal sizes | 1069278  |
|                                                                                     | 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 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.                                                                                                                                                                                                                                                                                                                                                                                                      |                                 |          |

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