



## Mechanical water meter

**WFK30..**  
**WFW30..**

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- **Mechanical meter for measuring the consumption of cold and hot water**
  - **Displays cumulated consumption**
  - **can be retrofitted with electronic modules**

### Use

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To acquire the water consumption in:

- Domestic water systems in residential or non-residential buildings
- Water supply systems of any type
- Multi-family houses, office and administrative buildings

Typical users are:

- Private building owners and property associations
- Building maintenance companies and housing estate agents

### Functions

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- Acquisition of water consumption
- Cumulation of consumption values
- Display of consumption values

## Type summary

### Meters without a remote reading output

<i>Max. water temperature [°C]</i>	<i>Mounting length [mm]</i>	<i>Q<sub>3</sub> [m<sup>3</sup>/h]</i>	<i>corresponds to Q<sub>n</sub> [m<sup>3</sup>/h]</i>	<i>Connection sizes (ISO 228)</i>	<i>Type reference</i>
30	80	2,5	1.5	G ¾	WFK30.D080
30	110	2,5	1.5	G ¾	WFK30.D110
30	130	4,2	2.5	G 1	WFK30.E130
90	80	2,5	1.5	G ¾	WFW30.D080
90	110	2,5	1.5	G ¾	WFW30.D110
90	130	4,0	2.5	G 1	WFW30.E130

## Accessories

### Meter replacement pieces

<i>Mounting length / thread</i>	<i>Type reference</i>
80 mm / G ¾	<b>WFZ.R80</b>
110 mm / G ¾	<b>WFZ.R110</b>
130 mm / G 1"	<b>WFZ.R130</b>

### Other accessories

<i>Description</i>	<i>Type reference</i>
Two fittings for water meter ¾"	<b>WFZ.R2</b>
Two fittings for water meter 1"	<b>WFZ.R2-1</b>
Extension 80 mm to 110 mm (G3/4 B to G1 B)	<b>WZM-V110</b>

## Ordering

When ordering, please indicate type references according to the "Type summary". The water meter is supplied with two flat seals and a metal seal with a sealing wire. The fittings and the meter replacement piece are not included in the standard delivery. They must be ordered as separate items.

## Technical design

### Direct reading

The flow rate is measured by means of a hydraulic impeller. The flow rate value is transferred to a mechanical totalizer via a magnetic clutch. The meter has

- a totalizer (maximum value 99.999,999 m<sup>3</sup>), which gives the current consumption
- a totalizer (1 revolution = 1 liter), which shows the current consumption in liters
- a flow check

## Mechanical design

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### Basic design and totalizer

The water meter is comprised of a flow measuring section, which houses the impeller and the totalizer. It is designed as a compact unit; the flow measuring section and the totalizer form one unit.

The body of the flow measuring section is made of brass. It houses the measuring chamber with the single-jet impeller. The inlet has a sieve to retain larger dirt particles.

The flow measuring section carries the totalizer, which is a dry running meter. It is protected by a transparent plastic cover. The water meter indicates the actual consumption with an 8-digit totalizer. It has an indicator for the current water consumption and a rotating wheel for the indication of flow.

### Direct connection

The water meter for direct connection has a flow measuring section with two externally threaded connections. Fittings are used to mount it directly into the piping (refer to "Accessories").

The totalizer can be swivelled through 360°.

## Accessories

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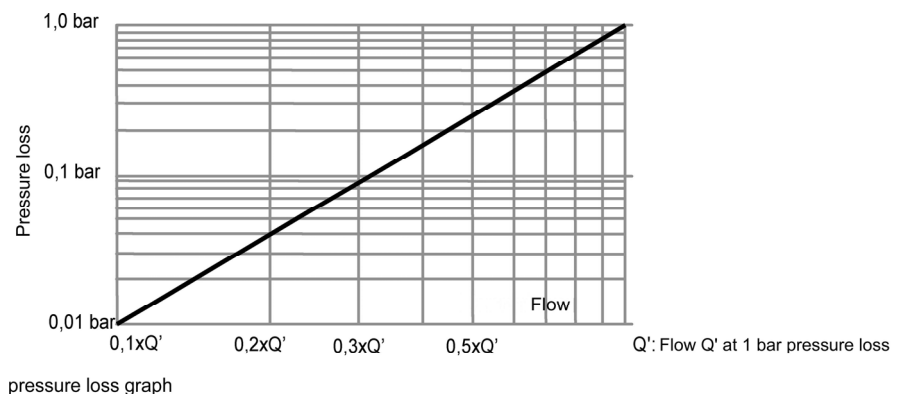
### Meter replacement piece Fittings

Meter replacement piece for previous mounting, which can be used for flushing the piping before mounting the water meter, etc.

The fittings are made of brass. They consist of insert, spigot nut and flat seals and are used for mounting the meter replacement piece or the water meter.

## Pressure Drop Curve

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## Mounting notes

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- The local regulations for the use of water meters (mounting, sealing, etc.) must be complied with
- The water meter should preferably be mounted between two shutoff valves. To facilitate reading and service work, it should be easily accessible
- If the water meter is only used at the time of commissioning, it is possible to fit the meter replacement piece first.
- Prior to mounting the water meter, the piping must be thoroughly flushed. For this purpose, fit the meter replacement piece
- The flow measuring section can be mounted horizontally or vertically. For higher metrological classes, it must be mounted horizontally.
- The direction of flow (indicated by an arrow on the body) must be observed
- Before the flow enters the measuring section, there should be a straight inlet path of at least 35 mm
- The totalizer should be placed in a position where it is easy to read (horizontal).

After mounting, the respective test pressure must be applied to the plant.

## Operating notes

For operation, recalibration and replacement of the water meter, the local regulations must be observed.

## Technical Data

**CE** conformity to

EC-type examination certificate DE-08-MI001-PTB018

EC Drinking Water Directive (98/83/EG)

Metrology class

Horizontal R80

Vertical R40

Flow rates

**1.5** **2.5**

Permanent flowrate  $Q_3$  [m<sup>3</sup>/h] 2,5 4,0

corresponds to nominal flow  $Q_n$  [m<sup>3</sup>/h] 1.5 2.5

Nominal width [mm] 15 20

Start-up approx. [l/h] < 8 < 15

Max. perm. operating pressure [bar] 16

Range of use of volume meter [°C]

Typ WFK30 30 30

Typ WFW30 90 90

Flow rate  $Q'$  at a pressure drop of 1 bar [l/h] 3200 5050

Connection sizes and dimensions\*

Pipe connection G (inlet and outlet) G  $\frac{3}{4}$  G  $\frac{3}{4}$  G 1

Mounting length L [mm] 80 110 130

Mounting height H [mm] 69 69 69

Weight [kg] 0.40 0.43 0.63

\* see diagram below

## Dimensions

