



## 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

<b>Meters without a remote reading output</b>	<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	4,0	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

#### 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 swiveled through 360°.

## Accessories

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### Meter replacement

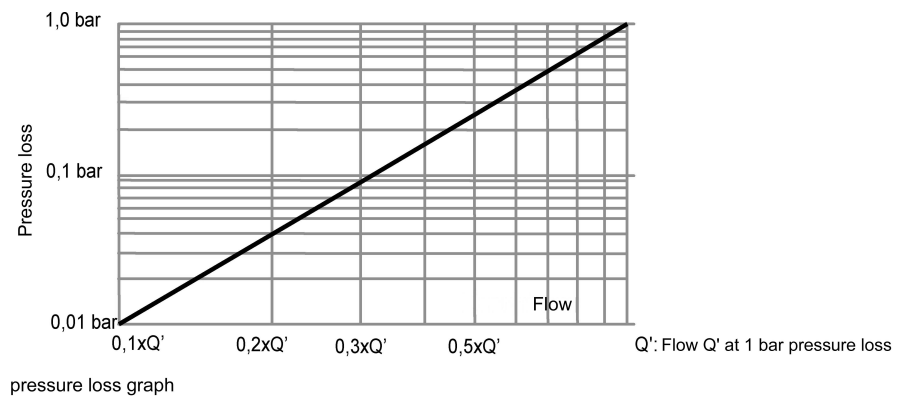
Meter replacement piece for previous mounting, which can be used for flushing the piping before mounting the water meter, etc.

### Piece Fittings

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

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

## Disposal notes

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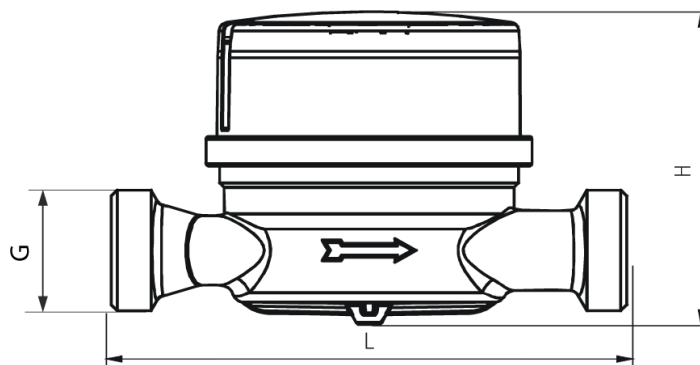
- Dispose of the devices through channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.

## Technical Data

Metrology class	Horizontal	R80		
	Vertical	R40		
Operational data		<i>WFxx.D080</i>	<i>WFxx.D110</i>	<i>WFxx.D130</i>
	Flow rates			
	Permanent flow rate $Q_3$ [m³/h]	2,5	2,5	4,0
	corresponds to nominal flow $Q_n$ [m³/h]	1.5	1,5	2.5
	Nominal width [mm]	15	15	20
	Start-up approx. [l/h]	< 8	< 8	< 15
	Max. permitted operating pressure [bar]	16	16	16
	Range of use of volume meter [°C]			
	Type WFK30	30	30	30
	Type WFW30	90	90	90
	Flow rate $Q'$ at a pressure drop of 1 bar [l/h]	3200	3200	5050
	Flow rate $Q'$ at a pressure drop of 1 bar [l/h]			
	Connection sizes and dimensions (see diagram below)			
Pipe connection G (inlet and outlet)	G ¾	G ¾	G 1	
Mounting length L [mm]	80	110	130	
Mounting height H [mm]	69	69	69	
Weight [kg]	0.40	0.43	0.63	
Standards, directives and approvals	Product standard	EN 14154 Water meters		
	EU conformity (CE)	CE1T5326xx *)		
	EC-type examination certificate	DE-08-MI001-PTB018		
	EC Drinking Water Directive	98/83/EC		
Environmental compatibility	Product environmental declaration (contains data on RoHS compliance, materials composition, packaging, environmental benefit, disposal)	CE1E5326 *)		

\*) The documents can be downloaded from <http://siemens.com/bt/download>.

## Dimensions



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