SIEMENS

2[879]

Add-on radio module WFZ16
WFZ166

Add-on modules for external water meters prepared for wireless transmission

The add-on radio module records and processes the counting pulses of mechanical water meters prepared for wireless transmission and transmits the data to a readout system. The add-on radio module is equipped with an optical interface for parameter setting.

Application

Add-on radio modules of the type WFZ16.. are part of the AMR system,
add-on radio modules of the type WFZ166.. are part of the walk-by system.
Both variants are used where mechanical water meters prepared for wireless
transmission are available, the data of which are to be recorded within one of these
systems.
These can be meters for hot or cold water..

Functions

- Recording the counting pulses of the mechanical water meter prepared for wireless transmission the add-on module is fixed to
- Monitoring pulse recording
- Processing the pulses and storing consumption data and due date values
- Readout via radio and transmission of the consumption values to a readout unit without direct access to the device
- The radio module does not have its own display
- The transmission period is always given as CET (winter time) the whole year round

Stored data

- Current consumption value
- Due date value
- Due date
- 13 monthly values
- Error code
- Error date

Parameter setting possibilities when using the service software

WFZ16..
WFZ166..
- Due date
- Meter count
- Medium (cold or hot water)
- Device numberr

WFZ166..
- Time delay (offset) in days to the readout day
- Weekdays without telegram transmission
- Transmission period within one day (e.g. from 8 am to 6 pm CET)
- Changing parameter setting for use in AMR system (not reversible)

The measuring devices transmit status information several times a day the whole year round independently of the readout time set..

Type summary

Special add-on radio modules for mechanical meters prepared for wireless transmission are supplied for different water meter models from different manufacturers.

Manufacturer	Water meter series	System	Type
SIEMENS GmbH	WFx30, WMx10	AMR walk-by	WFZ16.MO* WFZ166.MO*
QUNDIS GmbH	WFx30, WMx10	AMR walk-by	WFZ16.MO* WFZ166.MO*
E. WEHRLE GmbH	ETK-EAX, ETW-EAX, MTK-OZX, MTW-OZX	AMR walk-by	WFZ16.MO* WFZ166.MO*
Elster Messtechnik GmbH	EV-A, MO-A, MOZ-A	AMR walk-by	WFZ16.EL WFZ166.EL
Deltamess DWWF GmbH	Delta-AP-Funk-V, Delta-TKS-Funk-V, AMS Funk V	AMR walk-by	WFZ16.DM WFZ166.DM
	AP Funk V, M140 MO-A Funk V	AMR walk-by	WFZ16.EL WFZ166.EL
	Koax 2" Funk V	AMR walk-by	WFZ16.MO* WFZ166.MO*
Wasser-Geräte GmbH	WG ETW.. (MFS), WG UP-Zähler.. (MFS)	AMR walk-by	WFZ16.WG WFZ166.WG
	Unimeter UP-Zähler..	AMR walk-by	WFZ16.MO* WFZ166.MO*
Allmess GmbH	System measuring capsule MK +m, system watermeter V +m	AMR walk-by	WFZ16.AL WFZ166.AL

* The Modularis counter is used by several water meter manufacturers, which means that the modules WFZ16.MO and WFZ166.MO can also be used for these.

Order

The complete order number must be given for the order.
When devices are delivered ex factory, the following parameters are pre-set as default:
- Due date 31.12.
- Meter count 00000 m³
- Medium cold water

As to walk-by, the WFZ166 is set to:
- Annual readout
- Time delay to readout day 0 days
- Daily transmission time from 8 am to 6 pm
- No telegram transmission on Sundays

Device combination

One add-on radio module is required per mechanical water meter prepared for wireless transmission. The add-on radio module has to be selected in line with the respective manufacturer's water meter series, as otherwise there is no guarantee that the add-on module will fit on the meter, nor that the metering function will work correctly.

Technical data
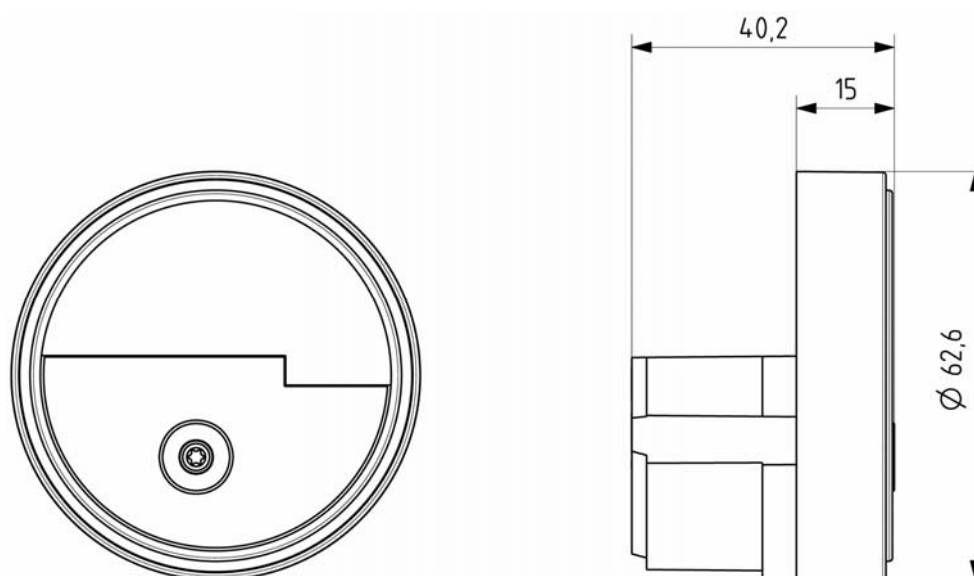**WFZ16.MO / WFZ166.MO**

General device data

Rated voltage	DC 3 V
Service life	12 years + 12 months reserve
Data transmission according to	EN 13757/4
Frequency band	868.0 MHz to 868.6 MHz
Transmission power	Typically 5 dBm
Transmission frequency	< 1 %
Pulse value	1 litres
Permissible ambient temperature	
during transport	-20 °C to max. +70 °C
during storage	+5 °C to +55 °C
during operation	+5 °C to +65 °C

Standards and norms

CE conformity	Directive 1995/5/EC (R&TTE Directive) Legislation concerning radio systems and telecommunications equipment (FTEG)
Protection rating	IP 65
Electromagnetic compatibility	
Interference resistance	EN 61000-6-2
Emitted interference	EN 61000-6-3
Security of IT equipment	EN 60950-1

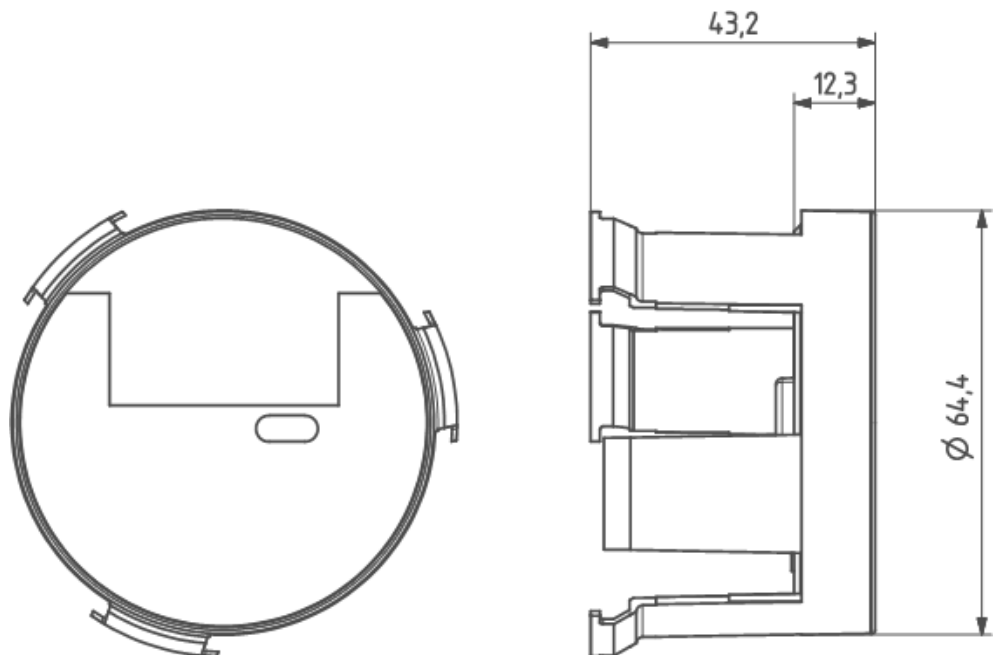**Dimensional drawing**
WFZ16.MO / WFZ166.MO

Technical data
WFZ16.EL / WFZ166.EL

General device data

Rated voltage	DC 3 V
Service life	12 years + 12 months reserve
Data transmission according to	EN 13757/4
Frequency band	868.0 MHz to 868.6 MHz
Transmission power	Typically 5 dBm
Channel assignment	< 1 %
Pulse value	0.5 litres
Permissible ambient temperature	
during transport	-10 °C to max. +60 °C
during storage and in operation	0 °C to max. +55 °C

Standards and norms

CE conformity	Directive 1995/5/EC (R&TTE Directive) Legislation concerning radio systems and telecommunications equipment (FTEG)
Protection rating	IP 54
Electromagnetic compatibility	
Interference resistance	EN 61000-6-2
Emitted interference	EN 61000-6-3
Security of IT equipment	EN 60950-1

Dimensional drawing
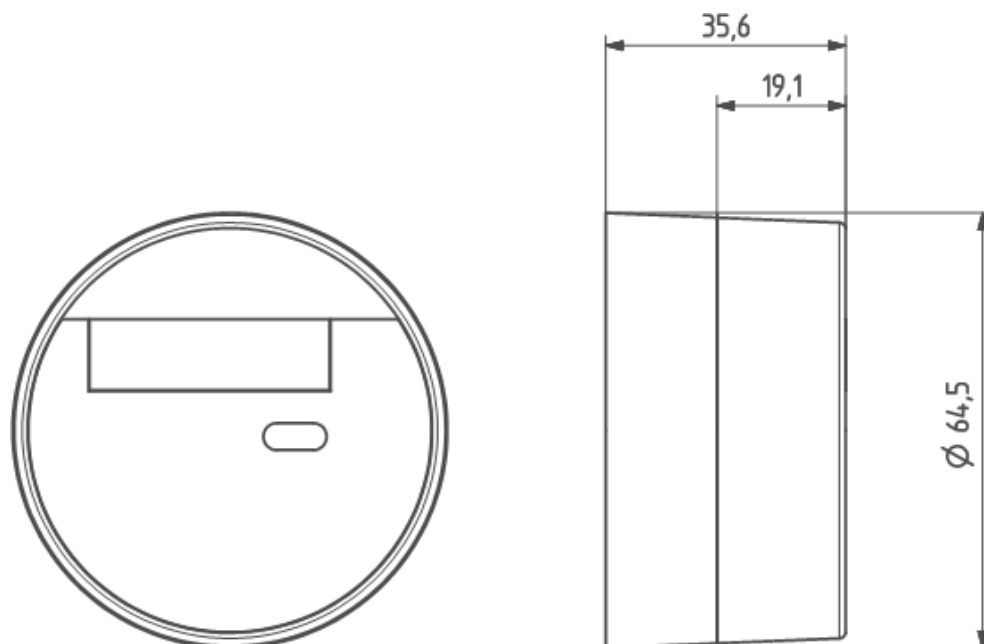**WFZ16.EL / WFZ166.EL**

Technical data
WFZ16.DM / WFZ166.DM

General device data	Rated voltage	DC 3 V
	Service life	12 years + 12 months reserve
	Data transmission according to	EN 13757/4
	Frequency band	868.0 MHz to 868.6 MHz
	Transmission power	Typically 5 dBm
	Channel assignment	< 1 %
	Pulse value	5 litres
	Permissible ambient temperature during transport during storage and in operation	-10 °C to max. +60 °C 0 °C to max. +55 °C

Standards and norms	CE conformity	Directive 1995/5/EC (R&TTE Directive) Legislation concerning radio systems and telecommunications equipment (FTEG)
	Protection rating	IP 54
	Electromagnetic compatibility Interference resistance Emitted interference	EN 61000-6-2 EN 61000-6-3
	Security of IT equipment	EN 60950-1

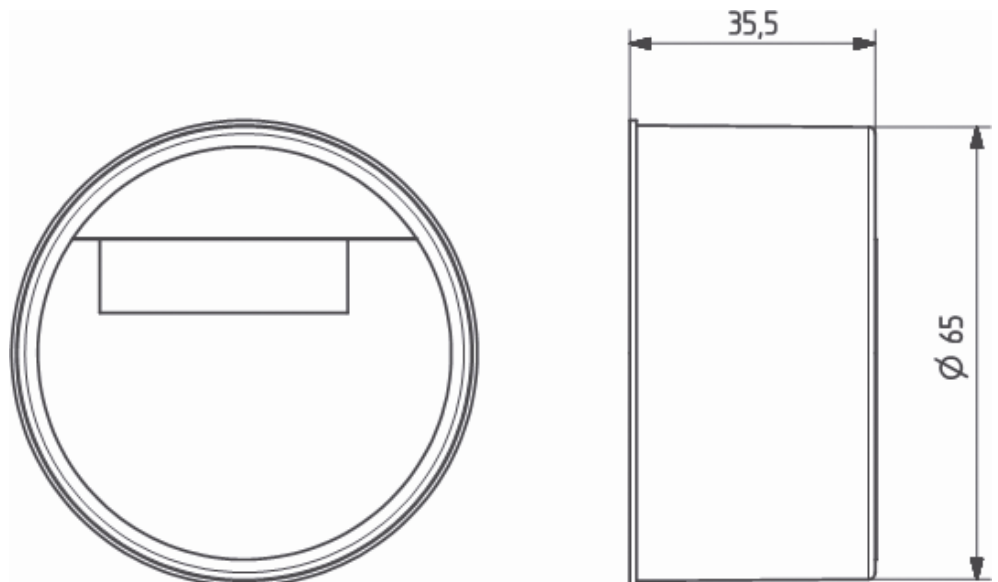**Dimensional drawing**
WFZ16.DM / WFZ166.DM

Technical data
WFZ16.WG / WFZ166.WG

General device data	Rated voltage	DC 3 V
	Service life	12 years + 12 months reserve
	Data transmission according to	EN 13757/4
	Frequency band	868.0 MHz to 868.6 MHz
	Transmission power	Typically 5 dBm
	Channel assignment	< 1 %
	Pulse value	5 litres
	Permissible ambient temperature	
	during transport	-10 °C to max. +60 °C
	during storage and in operation	0 °C to max. +55 °C

Standards and norms	CE conformity	Directive 1995/5/EC (R&TTE Directive) Legislation concerning radio systems and telecommunications equipment (FTEG)
	Protection rating	IP 54
	Electromagnetic compatibility	
	Interference resistance	EN 61000-6-2
	Emitted interference	EN 61000-6-3
	Security of IT equipment	EN 60950-1

Dimensional drawing
WFZ16.WG / WFZ166.WG

Technical data
WFZ16.AL / WFZ166.AL

General device data

Rated voltage	DC 3 V
Service life	12 years + 12 months reserve
Data transmission according to	EN 13757/4
Frequency band	868.0 MHz to 868.6 MHz
Transmission power	Typically 5 dBm
Transmission frequency	< 1 %
Pulse value	1 litres
Permissible ambient temperature	
during transport	-20 °C to max. +70 °C
during storage	-5 °C to +55 °C
during operation	+5 °C to +65 °C

Standards and norms

CE conformity	Directive 1995/5/EC (R&TTE Directive) Legislation concerning radio systems and telecommunications equipment (FTEG)
Protection rating	IP 65
Electromagnetic compatibility	
Interference resistance	EN 301 489 EN 61000-6-2
Emitted interferenc	EN 300 220-2 EN 61000-6-3
Security of IT equipment	EN 60950-1

Dimensional drawing
WFZ16.AL / WFZ166.AL

Änderungen vorbehalten

Add-on radio module