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Made in Czech Republic

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- LS** LED sensor
- MS** Magnetic sensor
- WS** Magnetic sensor water meter
- S0** Output



Characteristics

LS (LED sensor)

- The LED sensor scans LED impulses on the meter, which indicates consumption by flashing.
- The LED sensor is particularly suitable for power meters that support LED pulse sensing (the LED on the meter is marked "imp").
- The sensor's scanner is affixed with glue above the LED diode of the meter signaling indication of consumption.
- The sensor is connected to the internal terminal of the RFTM-1 converter.

MS (Magnetic sensor)

- The magnetic sensor scans movement of the numeral, upon which a permanent magnet is placed.
- The MS sensor is particularly suitable for gas meters that support magnetic sensing.
- The sensing sensor is glued over the last number of the face dial measured.
- The sensor is connected to the internal terminal of the RFTM-1 converter.

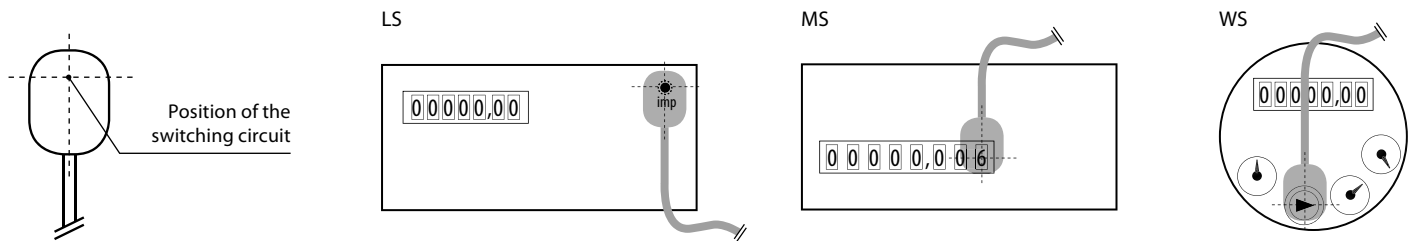
WS (magnetic sensor water meter)

- A magnetic sensor that detects the pulse that is created by each rotation of the magnet placed on the unit dial meter.
- The WS sensor is especially suitable for water meters that support magnetic sensing.
- The sensing sensor is glued over the circular unit face of the gauge (the scanning dial is different from the other indicators, e.g. the white arrow wheel).
- The sensor is connected to the internal terminal of the RFTM-1 converter.

Output S0

- The meter generates a certain number of impulses (typically between 250 and 10000 imp / kWh), with S0 output being switched to the pulse of these pulses. The same is true for water meters or gas meters.
- S0 output is a controlled switch that switches to the pulse rhythm bound to the current consumption.
- It is necessary to distinguish the terminals S0+ and S0-, see wiring.
- Pulse output can be made in the form of terminals or output cable (water meter, gas meter).

Positioning the Sensing Sensor on the Meter



Clean the sensor surface (depending on the sensor type) and attach the sensor. On the RFTM-1 blinks red LED when the pulse is detected. Attach the sensor to the scanning position. The cable must be loose. Check the scanning accuracy.

The sensor does not effect meter consumption, nor does it interfere with the reading measurements the meter makes.

Notice:

Electricity meters, water meters and gas meters are the property of energy suppliers. Without their knowledge and permission, you are not allowed to interfere with the internal connections (seals, supply lines, etc.).

Technical parameters

LS

Voltage range:	2.5 .. 3.7V
Minimum consumption (idle mode):	0.5uA *
Maximum power consumption (pulses 100Hz):	max. 2uA *
Working temperature:	-20 .. 50 °C

Sensor LS responds only to light pulses, i.e. it does not detect static state LEDs.

MS

Voltage range:	1.6 .. 3.6V
Consumption:	7uA *
Output load:	max. 3mA
Scanning period:	100ms
Switch sensing sensitivity (output L):	$\pm(2.3 .. 4.7)$ mT
Opening detection sensitivity (output-> H):	$\pm(0.9 .. 3.8)$ mT
Hysteresis:	1mT
Working temperature:	-40 .. 80 °C

WS

Voltage range:	1.65 .. 5.5V
Consumption:	1.5uA *
Output load:	max. 150uA
Switch sensing sensitivity:	$\pm(0.3 .. 1.1)$ mT
Opening detection sensitivity:	$\pm(0.2 .. 0.9)$ mT
Hysteresis:	0.2mT
Working temperature:	-40 .. 80 °C

Common data

Cross-section of connecting wires:	max. 3.5 mm
Wire length:	1.5 m
Protection:	IP20

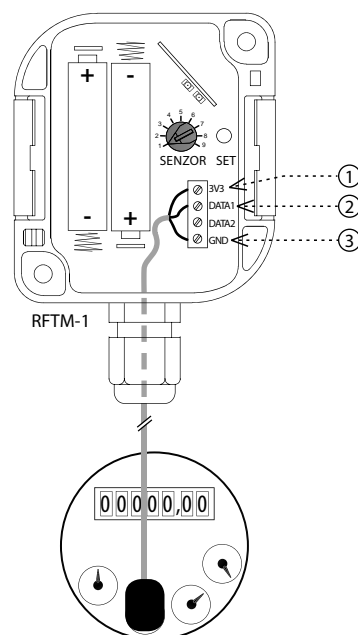
* Measured at 3V, no load output.

Warning

Instruction manual is designated for mounting and also for user of the device. It is always a part of its packing. Installation and connection can be carried out only by a person with adequate professional qualification upon understanding this instruction manual and functions of the device, and while observing all valid regulations. Trouble-free function of the device also depends on transportation, storing and handling. In case you notice any sign of damage, deformation, malfunction or missing part, do not install this device and return it to its seller. It is necessary to treat this product and its parts as electronic waste after its lifetime is terminated. Before starting installation, make sure that all wires, connected parts or terminals are de-energized. While mounting and servicing observe safety regulations, norms, directives and professional, and export regulations for working with electrical devices. Do not touch parts of the device that are energized - life threat. Due to transmissivity of RF signal, observe correct location of RF components in a building where the installation is taking place. RF Control is designated only for mounting in interiors. The must not be installed into metal switchboards and into plastic switchboards with metal door - transmissivity of RF signal is then impossible. RF Control is not recommended for pulleys etc. - radiofrequency signal can be shielded by an obstruction, interfered, battery of the transceiver can get flat etc. and thus disable remote control.

Connection to RFTM-1

LS / MS / WS



1. Brown wire
2. Green wire
3. White wire

Output S0

