

Protection system
against leaks
Runxin F104H/F104I



PURPOSE

The Runxin F104H/F104I leak protection system (hereinafter referred to as the system) is designed to automatically shut off the water supply in water supply systems with temperatures up to +50°C, in apartments, private houses, or industrial facilities.

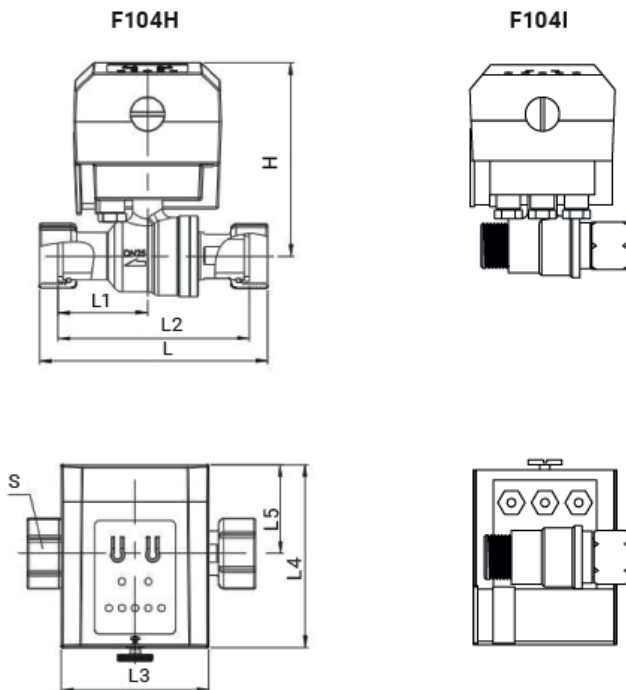
In the event of a leak, the wireless sensor included in the set and installed in an area where leakage may occur sends a signal to the valve control unit, which automatically shuts off the water supply.

SYSTEM ADVANTAGES

- The valve has a built-in lithium rechargeable battery, providing 24-hour operation of the device during power outages.
- In case of a leak, the valve automatically shuts off the water supply.
- The ball valve with a ceramic core, possessing low rotational torque, has low power consumption, high reliability, and a long service life.
- Up to 5 wireless sensors can be connected to one automatic valve.
- The wireless leak sensor operates on a replaceable battery with low power consumption and has a waterproof design.

MAIN DIMENSIONS

Automatic shut-off valve



Wireless sensor

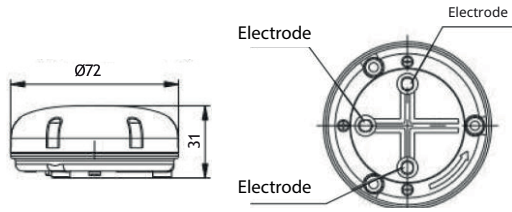


Fig. 2.

Model	L	L1	L2	L3	L4	L5	H	S
F104H	86,7	41	73,5	84	104	50,5	100,2	29
F104I	130	51	109	84	104	50,5	110,2	36

TECHNICAL SPECIFICATIONS

Input voltage	100~240V AC
Output voltage	DC12V
Built-in battery parameters	2500mAh/7.4V lithium rechargeable battery
Operating temperature, °C	+5...+50
Connection dimensions: F104H valve F104I valve	3/4" (male thread at inlet, union nut with female thread at outlet) 1" two sliding union nuts

PRODUCT COMPOSITION

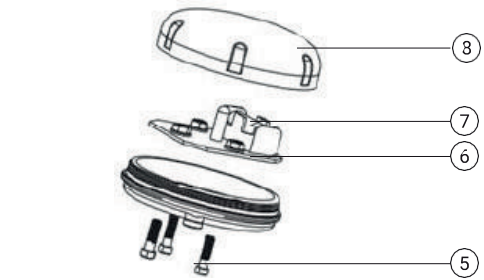
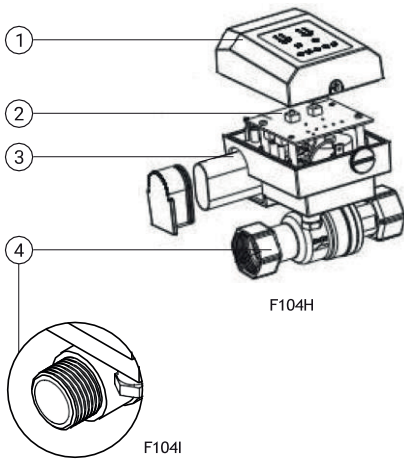


Fig. 3.

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|-------------------------------------|-------------------------------|
| 1. Valve dust cover | 5. Stainless steel electrodes |
| 2. Control board | 6. Sensor board |
| 3. Lithium rechargeable battery | 7. Alkaline battery |
| 4. Ceramic core ball valve assembly | 8. Upper sensor cover |

Attention! The standard package **includes one wireless sensor**. Additional sensors must be ordered separately.

SYSTEM INSTALLATION AND OPERATION

Valve installation

1. Before starting the installation, read this manual carefully and prepare all necessary materials and tools to ensure proper and safe use of the valve after installation.
2. Identify the section of the pipeline that needs to be shut off during a leak or maintenance.
3. Install the valve on the selected pipeline section so that the direction of water flow corresponds to the arrow on the valve body.
4. Ensure that the connections are securely fastened and airtight.

Attention! Correct orientation of the ball valve according to the water flow direction ensures its proper operation and durability.

Wireless sensor installation

The electrodes are designed to detect the presence of a water leak.

1. Install the sensor on the floor in a location where water may accumulate in the event of a leak to ensure effective detection.
2. Select an installation location with good signal reception.

After selecting the location:

3. Briefly short-circuit the two electrodes (positive and negative poles) on the sensor.
4. Check whether the valve receives a leak alarm signal to make sure the sensor is installed correctly and the signal is effective.

Attention! Do not install the valve in confined areas where the signal may be blocked, such as behind thick load-bearing walls, inside enclosed metal spaces, or in locations with strong magnetic interference. Such conditions may prevent communication between the sensor and the valve.

Attention! Before installation, always check that a reliable signal is available at the selected location.

OPERATION

Interface

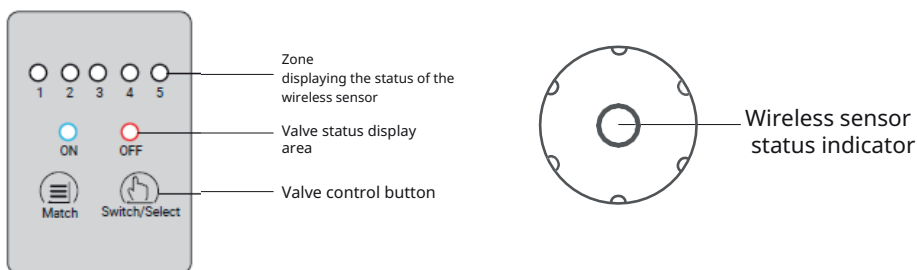


Fig. 4.

PAIRING

The wireless sensor included in the package was paired with the valve by default before leaving the factory. Before installation, check that the wireless sensor and the valve are paired correctly (test method: place the electrode of the wireless water immersion detector in water). Check whether the valve receives an alarm signal. If the corresponding indicator (for example, No. 1) starts flashing, the pairing is successful. If there is no alarm signal and the corresponding indicator does not flash, repeat the pairing procedure.

PAIRING METHOD (Fig. 5)

Start setup:

Press and hold the "Match" button



on the valve for more than 3 seconds, at which point indicator No. 1 will start flashing.

Select indicator number:

Press the



Switch/Select

(without holding),

button to select the desired number for the sensor being connected.



Pairing the sensor and valve:

After selecting the desired sensor, connect any positive and negative poles of the wireless sensor.

Confirming pairing:

After connection, the wireless sensor indicator will start flashing, and you will hear a "Di" sound from the valve. The indicator on the valve will remain lit, which means successful pairing.

Status check:

To verify that pairing was successful, short-circuit the positive and negative electrodes on the wireless sensor. If the valve produces an alarm signal, the wireless sensor has been paired successfully.

Attention! Up to 5 wireless sensors can be connected to the valve.

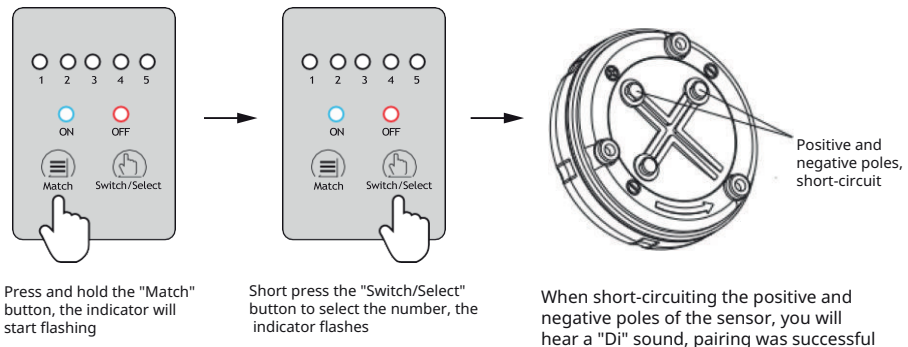


Fig. 5.

WATER LEAKAGE STATUS

The electrode of the wireless sensor will detect the leak, and the sensor indicator will start flashing within a maximum of 10 seconds.

- The valve will quickly switch to the closed state, shutting off the water source.
- The indicator of the sensor associated with the valve will start flashing rapidly.
- The buzzer will continue to sound an alarm.
- The red "OFF" indicator on the control ball valve will be constantly lit, confirming its closure.

VALVE UNLOCKING

- Wipe the electrodes on the wireless sensor dry.
- Press and hold the button on the valve (fig. 6).
- The valve will open the ball valve.
- At this time, the green "ON" indicator will light up on the ball valve, and an audible signal will sound.

Attention! Under normal operating conditions, a short press of the button is used to turn the valve ON and OFF.

BATTERY LIFE AND REPLACEMENT

Valve battery

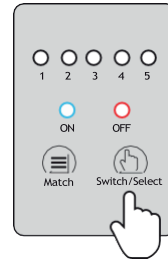
- The built-in rechargeable lithium batteries provide 24–48 hours of operation in the event of a power outage.
- The valve can be closed and opened approximately 5 times on a full battery charge, which is especially important during a power outage.
- The battery life is about 3 years. With longer use, there is a possibility of battery damage due to overcharging, which can lead to power failure.

Battery replacement is shown in Fig. 7.

Sensor battery

- When the battery runs low, the light indicator of the corresponding sensor and the "OFF" indicator start flashing simultaneously, and the buzzer sounds. This is a signal that it is necessary to replace the battery in the sensor.
- After replacing the battery, the flashing light indicators and audible signal should disappear, confirming a successful replacement.
- The battery life is about 3 years.

The battery replacement method is shown in Fig. 8.



Press and hold the "Switch/Select" button, the valve moves to the open position

Fig. 6.

Remove the lithium battery

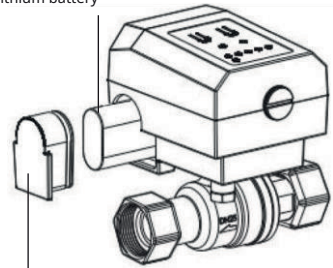


Fig. 7.

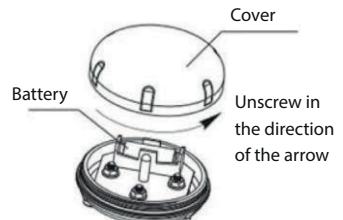


Fig. 8.

WARRANTY OBLIGATIONS

The warranty period is 12 months from the date of sale. In the absence of a date of sale and the stamp of the selling organization, the warranty period is calculated from the date of manufacture of the system. The warranty does not cover replaceable elements.

The manufacturer disclaims responsibility for the operation of the system and possible consequences (the warranty does not apply in cases) if:

- defects arose through the fault of the consumer or third parties as a result of violations of the rules of transportation, storage, installation, and operating conditions specified in this instruction manual;
- there are deficiencies in the installation or repair work performed at the time of connection, as well as after installation (during operation), which led to causing harm to the health and/or property of the consumer or third parties due to violation of standards, requirements, and instructions for installation and operation of the product;
- if the completeness of the product or its components has been compromised during connection or operation;
- if the technical parameters of the product are outside the limits specified by the manufacturer in this operating manual;
- the system or components have mechanical damage;
- premature failure of parts of the product occurred due to untimely replacement of components;
- the consumer independently made changes to the design during repair or modernization;
- damage was caused by the use of non-original and (or) low-quality (damaged) consumable materials, accessories, spare parts, elements, and other devices;
- circumstances of force majeure occurred and other cases provided by legislation.

The service life of the system is 5 years from the date of manufacture.

Upon expiration of the service life, the system must be replaced ^[1].

After the expiration of the service life, the manufacturer ceases to be responsible in all cases of further operation of the product.

^[1] Upon expiration of the system's service life, it is necessary to dismantle it and replace it with a new one, because due to natural wear and tear of materials, a product with an expired service life may pose a danger to life and/or health of the consumer and/or may cause harm to their property or the environment.

PRECAUTIONS

Protect the system from impacts, falls, direct sunlight, and sub-zero temperatures.

Do not make any modifications to the system design.

The shelf life in the original unopened packaging is 3 years.

Do not install the system near heat sources, in areas with high humidity, or in locations where it may be exposed to chemically active substances, strong electromagnetic radiation, or intense external vibration. This system is not intended for outdoor use.

System operating conditions:

- Water temperature: +5°C to +50°C
- Water pressure: 0.20 MPa to 0.6 MPa

If the water supply pressure exceeds 0.6 MPa, a pressure-reducing valve must be installed on the inlet pipeline. If the water pressure does not exceed 0.20 MPa, a booster pump must be installed on the water supply line.

Do not allow children to touch or play with the system, as improper handling may result in changes to its operating mode.

Store at a temperature of +5°C to +25°C, indoors, at least 1 m away from heating appliances.