

# **FLOW SWITCH**

## **Type SPIN**



### **User manual**

## Flow switch with adjustable shut down timer and automatic reset

Spin is a device for protection against dry operation of the electric pumps and other similar equipment. It can also be used for automatic start-up and shut down of the electric pumps that collect water from water reserves placed at a certain height. On start-up, the device activates the electric pump and keeps it in operation, provided as specific water flow is present in the pipeline. When the flow in the pipeline falls to zero, a timer is activated which delays shut down of the pump after a time interval settable in the device. The pump is also started up when the valve inside the device is activated by a spontaneous transit of water (for example under gravity when water is collected from a higher position). The red failure light will switch on only in the case of low rate equal to zero and the pump continues to run because the pressure switch cannot cut off.

### Technical data

Power supply :	230/115V ~ ± 10% - 50/60Hz
Max. current :	12A
Min. detectable current :	1A*
Timer setting range :	10 - 180 seconds
Default timer setting :	10 seconds
Max. pressure :	10 bars
Max liquid temperature :	55°C
Protection rating :	IP20 (version with electric socket)
Connections :	inlet et outlet 1" G MÂLE - ISO228

\*Warning : the pump stops only if the absorbed current exceeds 1.0 Amp.

### Safety precaution

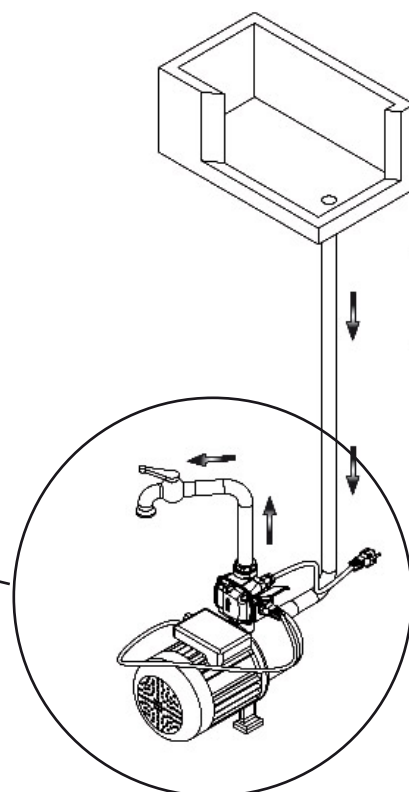
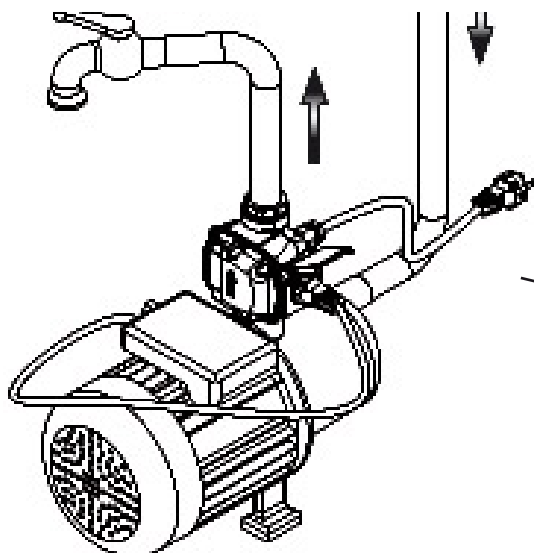
To avoid electric shocks and the risk of fire, strictly observe the following :

- Devices equipped with schuko sockets must be installed, observing the horizontal or vertical direction of the socket design;
- Always disconnect the power supply before any operation;
- Ensure that the electric cables used have a section suited to the output of the pump used, and that the electrical connections, especially with regard to the female schuko socket, are in no way subject to contact with water;
- If the pump output is greater than ½ Hp and the ambient temperature greater than 25° C use cables with a heat resistance of at least 99°C;
- Always use a residual current circuit breaker with  $I_{\Delta n}=30$  mA in the case of applications in swimming pools, fountains, ponds or similar.

### Application examples

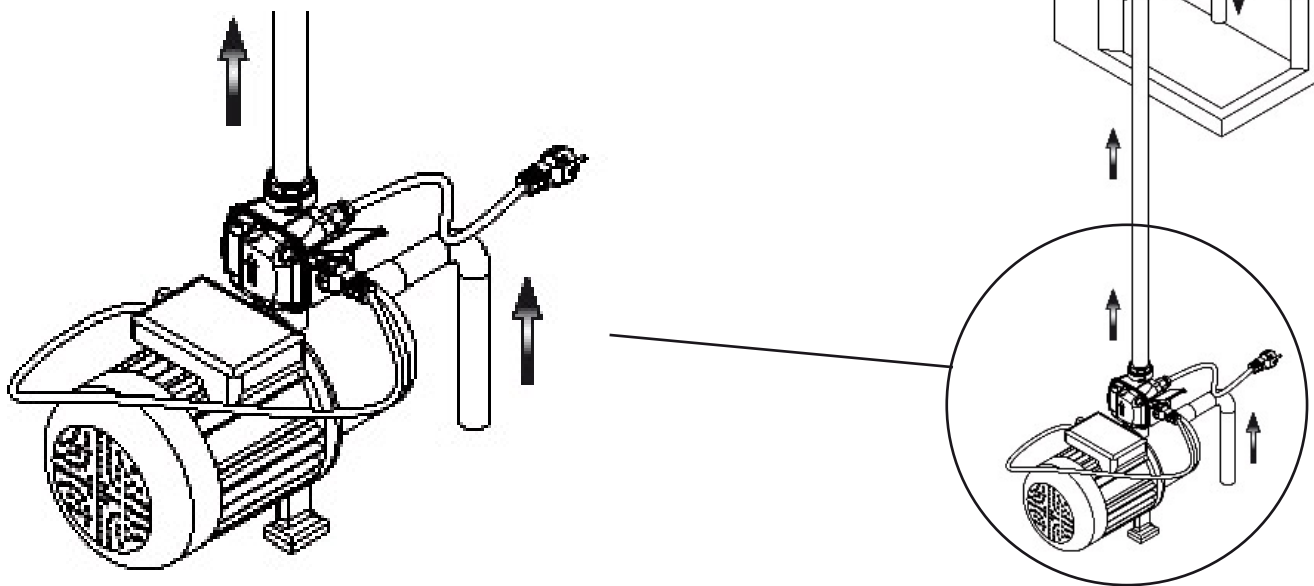
#### FILLING FUNCTION

Install SPIN on outlet from the pump to protect it from operation under no load in the event of no water on intake.



## DRAINING FONCTION

Install spin on outlet from the pump for automatic start-up and shutdown according to opening and closing the valves.

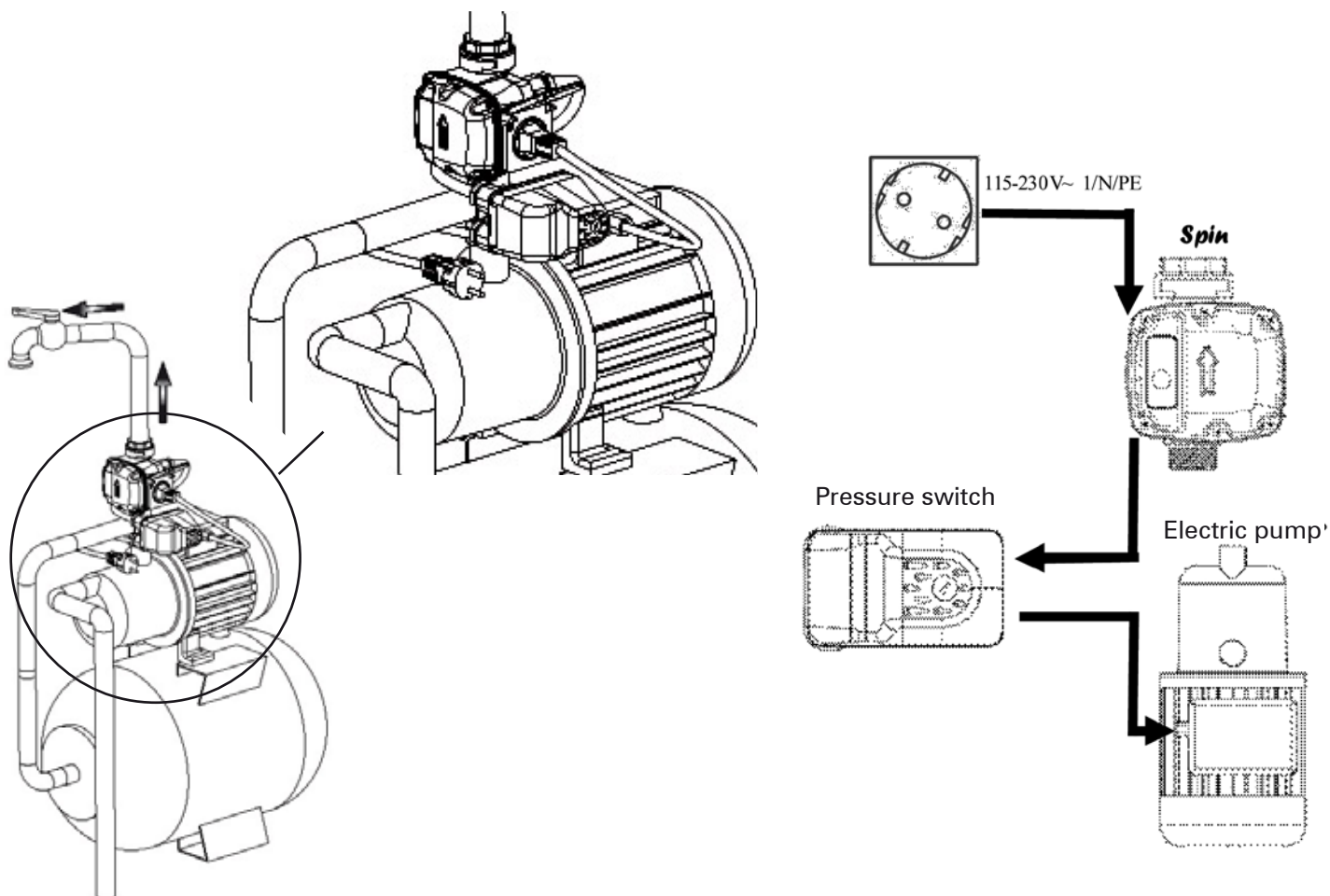


## USE WITH PRESSURISATION UNITS OR AUTOCLAVE SYSTEMS

Install Spin on outlet from the pressurisation unit to protect the system against operation in dry conditions. The electrical connections must be made in the following order :

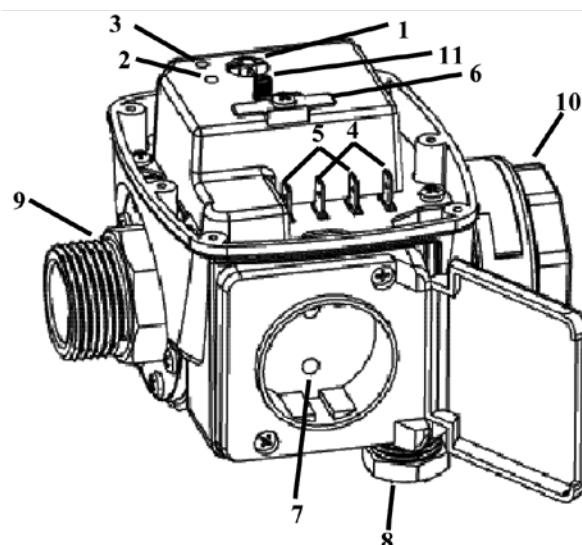
**Electric line > SPIN > Pressure switch > Electric pump.**

Set the delay on shutdown by means of the internal knob according to the expansion vessel used so that on each closure of utilities the electric pump has time to fill the water reserve and to switch the pressure switch.



## Functional parts

1	<b>Reset key</b> (reset the unit after shutdown due to lack of water)
2	<b>Dry state shutdown indicator</b> (flashing indicates interruption of water transit; fixed light indicates shutdown due to lack of water)
3	<b>Mains voltage indicator</b>
4	<b>Motor connection</b>
5	<b>Power line connection</b>
6	<b>Earthing connection</b>
7	<b>Optionnal schuko socket</b>
8	<b>Mains power inlet cable clamp</b>
9	<b>Water inlet connection</b>
10	<b>Water outlet connection</b>
11	<b>Stop delay setting connection</b> (minimum 10 seconds, maximum 18 seconds).



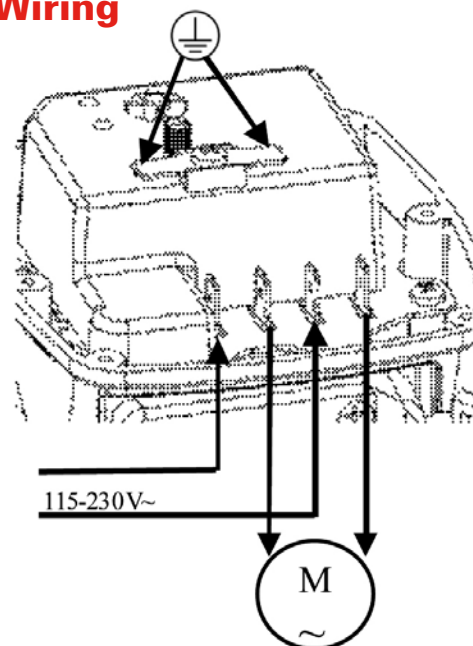
## Shutdown delay setting

Use a slotted screwdriver on the internal adjustment knob to modify the shut down delay ; the table a long side provides some guide line values for settings according to the type of pump and expansion vessel installed.

**WARNING :** do not force the adjustment screw beyond the minimum and maximum turning points as this may cause irreparable damage. When setting the shutdown delay time, refer to the limits specified by the electric pump manufacturer regarding the maximum operating time in dry conditions admissible with out the risk of damage to the pump.

	TANK VOLUME	
<b>PUMP</b>	24 L	50 L
1,0 Hp	60 s	80 S
2,0 Hp	30 s	40 S

## Wiring



## Automatic reset

Spin is equipped with an automatic reset function that restarts the pump at regular intervals after interruption due to lack of water. The time interval between automatic start-ups and the maximum number of attempts are specified on the pack and vary from model to model (standard 4 attempts at intervals of 60 minutes)

## Trouble shooting

ANOMALIE	SOLUTION
Le SPIN blocks frequently and indicates a lack of water	<ul style="list-style-type: none"> <li>- Check that no pipelines or filters are clogged ;</li> <li>- Try to increase the device shutdown delay</li> </ul>
Le SPIN doesn't stop the pump	<ul style="list-style-type: none"> <li>- Check for possible presence of foreign objects on inlet to the device;</li> <li>- Contact the dealer</li> </ul>
Le SPIN doesn't deliver water	<ul style="list-style-type: none"> <li>- Check to ensure correct pump intake and direction of assembly of Spin ;</li> <li>- Press and hold the reset key to run the pump continuously.</li> </ul>

## Guarantee

The product is covered by a guarantee against possible manufacturing defects for a period of 24 months from the date of purchase provided that this can be documented and that the device has not be disassembled and/or tampered with.