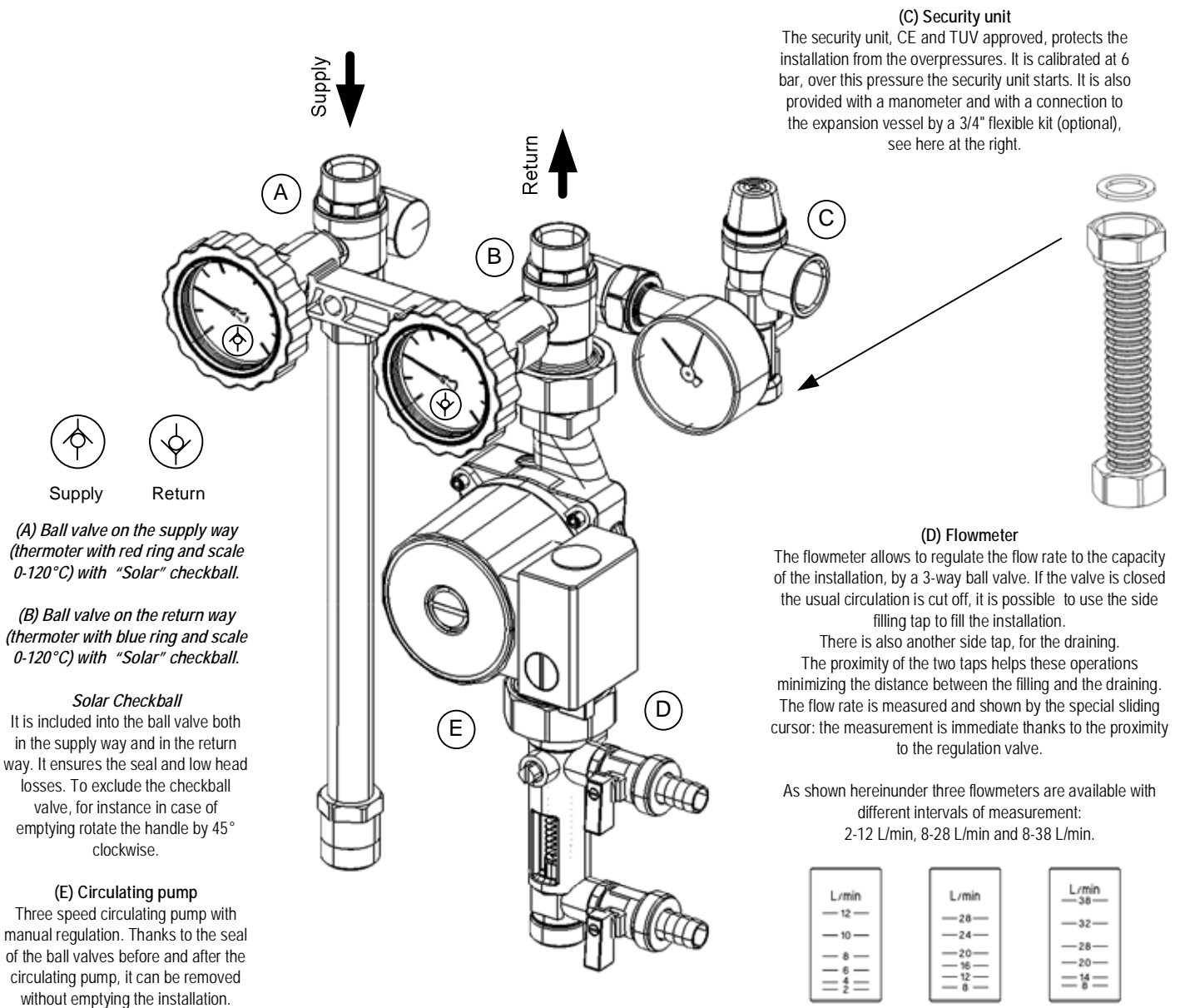


Pumping station 2-way "Solar20"



(C) Security unit

The security unit, CE and TUV approved, protects the installation from the overpressures. It is calibrated at 6 bar, over this pressure the security unit starts. It is also provided with a manometer and with a connection to the expansion vessel by a 3/4" flexible kit (optional), see here at the right.



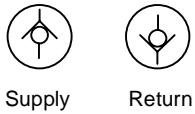
(D) Flowmeter

The flowmeter allows to regulate the flow rate to the capacity of the installation, by a 3-way ball valve. If the valve is closed the usual circulation is cut off, it is possible to use the side filling tap to fill the installation.

There is also another side tap, for the draining.

The proximity of the two taps helps these operations minimizing the distance between the filling and the draining. The flow rate is measured and shown by the special sliding cursor: the measurement is immediate thanks to the proximity to the regulation valve.

As shown hereinunder three flowmeters are available with different intervals of measurement:
2-12 L/min, 8-28 L/min and 8-38 L/min.



Supply Return

(A) Ball valve on the supply way (thermoter with red ring and scale 0-120°C) with "Solar" checkball.

(B) Ball valve on the return way (thermoter with blue ring and scale 0-120°C) with "Solar" checkball.

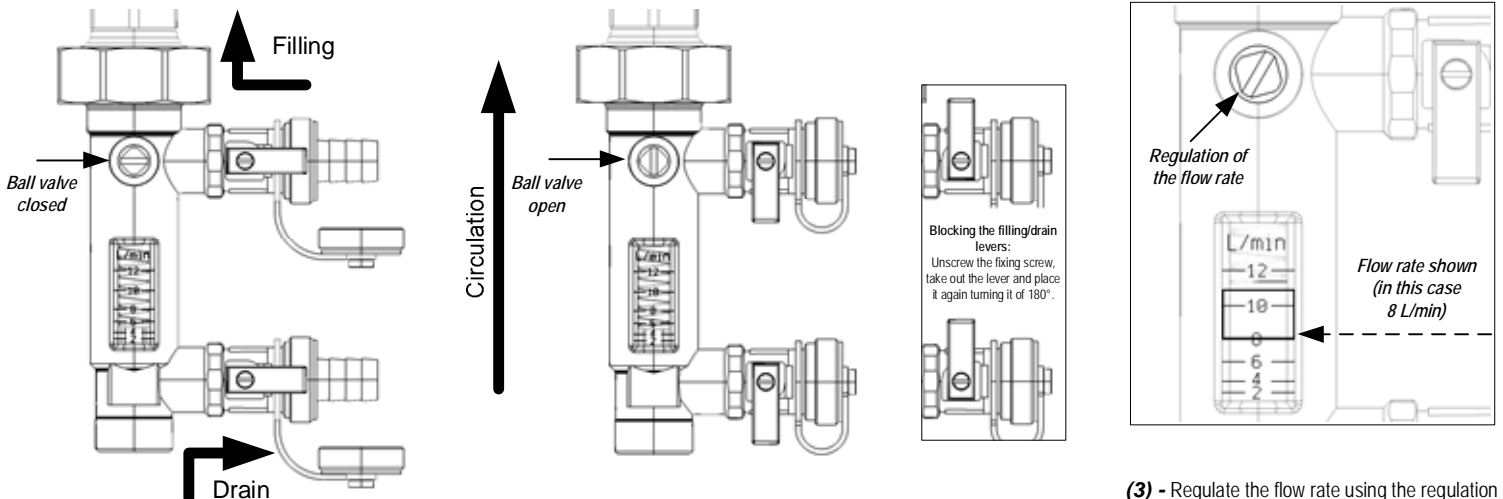
Solar Checkball

It is included into the ball valve both in the supply way and in the return way. It ensures the seal and low head losses. To exclude the checkball valve, for instance in case of emptying rotate the handle by 45° clockwise.

(E) Circulating pump

Three speed circulating pump with manual regulation. Thanks to the seal of the ball valves before and after the circulating pump, it can be removed without emptying the installation.

Directions for the use of the flowmeter to fill the installation:



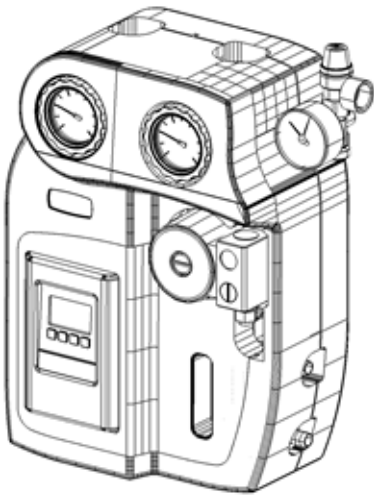
(1) - Filling the installation:
Remove the plugs from the side valves and connect the hose unions. Close the ball valve and open the side filling valve and draining valve.

(2) - Starting the installation working:
Open the ball valve and close the side filling and draining valves. Remove the hose unions and screw again the plugs.
To avoid any casual opening of the side valves, it is better to stop the levers in the close position, as shown here aside.

(3) - Regulate the flow rate using the regulation rod until the right flow rate is shown.

N.B. The flow rate is shown taking as reference the lower edge of the sliding cursor. (see picture)

Pumping station 2-way "Solar30"

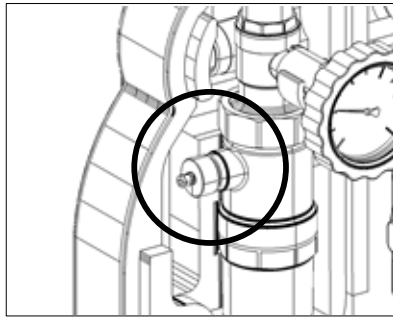


Epp insulation box

Measurements 308x434x169.

It includes a controller holder insert suitable for the course of the power supply cable and of the temperature sensor cables. Side opening on the back part of the insulation box for the security unit. Inside daps for the housing of the 22 mm pipe.

A special window allows to read to adjust the flow without taking off the cover. Back plate to fasten the unit to the wall or to the cylinder.



Model with the vent air

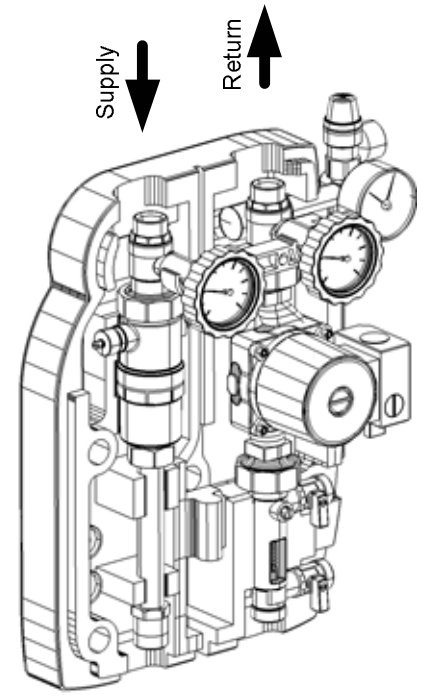
The vent air is a device that devides continually the air that can be in circulation together with the fluid.

The air goes to the upper part of the vent air and it can be eliminated through the special drain while the installation is working. Unscrew of half a turn the knurled metal ring lock.

This operation has to be done at intervals.

TAKE CARE!

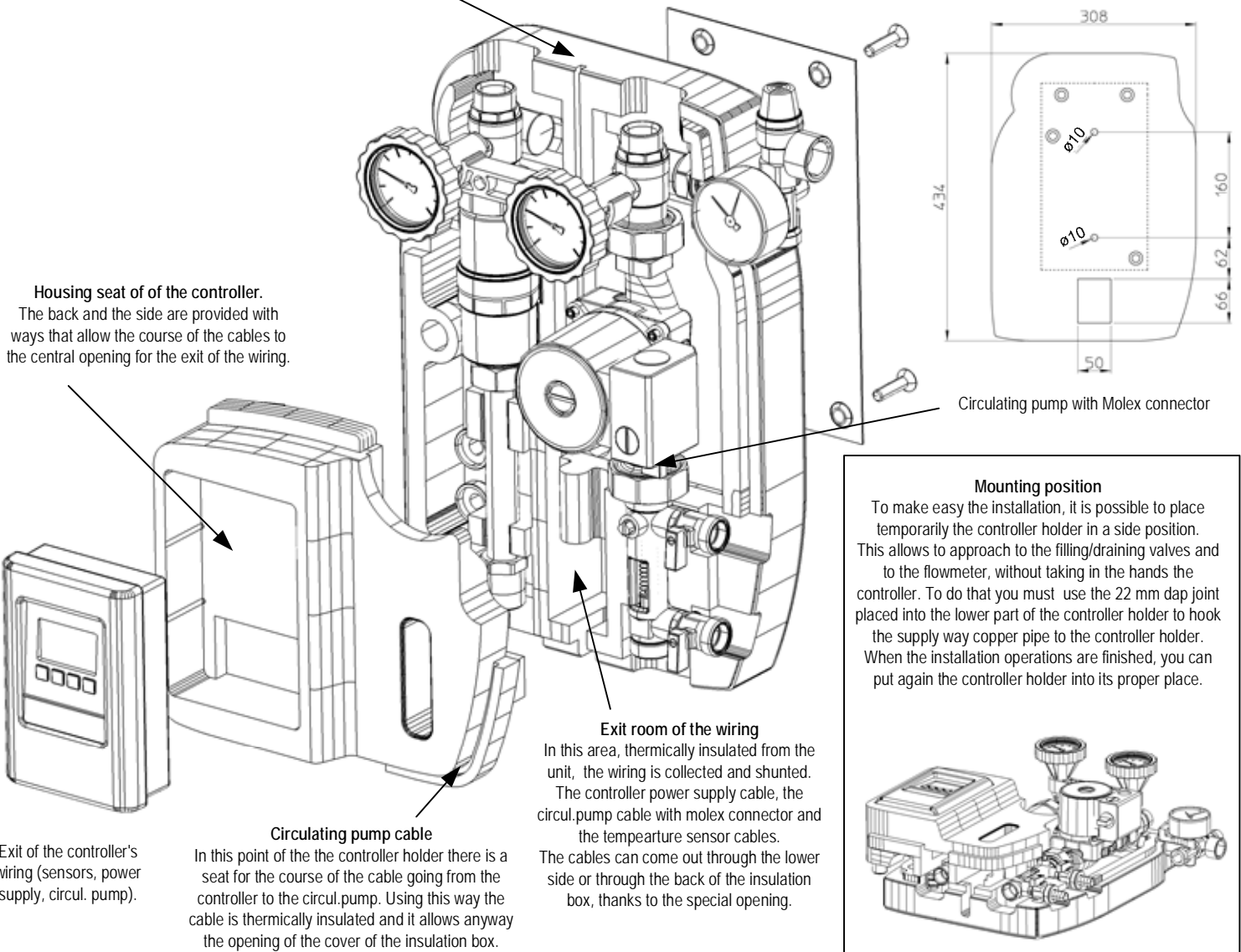
To avoid any leakage of the fluid, taking into cosideration the very high working temperature, we recommend to fasten a pipe to the end of the drain.



TAKE CARE: as regards the installation and the working of the controller, please look to the here enclosed manual.

Empty way for the solar collector sensor

Back plate to fasten the unit to the wall or to the cylinder.



Housing seat of of the controller.

The back and the side are provided with ways that allow the course of the cables to the central opening for the exit of the wiring.

Circulating pump with Molex connector

Exit room of the wiring

In this area, thermically insulated from the unit, the wiring is collected and shunted. The controller power supply cable, the circul.pump cable with molex connector and the tempearture sensor cables. The cables can come out through the lower side or through the back of the insulation box, thanks to the special opening.

Mounting position

To make easy the installation, it is possible to place temporarily the controller holder in a side position. This allows to approach to the filling/draining valves and to the flowmeter, without taking in the hands the controller. To do that you must use the 22 mm dap joint placed into the lower part of the controller holder to hook the supply way copper pipe to the controller holder. When the installation operations are finished, you can put again the controller holder into its proper place.

Circulating pump cable

In this point of the the controller holder there is a seat for the course of the cable going from the controller to the circul.pump. Using this way the cable is thermically insulated and it allows anyway the opening of the cover of the insulation box.

Exit of the controller's wiring (sensors, power supply, circul. pump).

