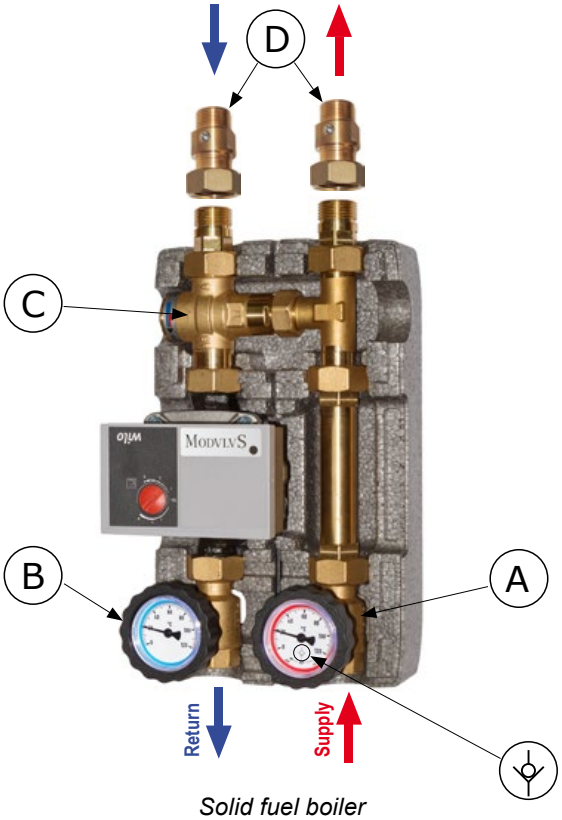
Installation instructions

Heating installation
buffer tank



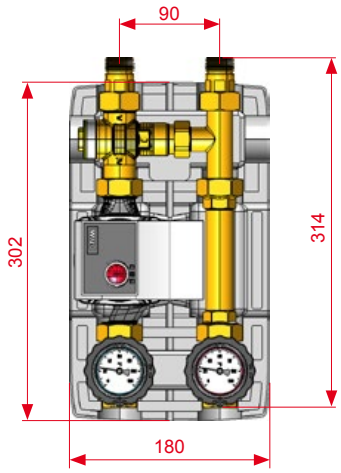
Solid fuel boiler

NOTE: a pump unit with right supply is depicted

MEASUREMENTS

EPP insulation box: the insulation covering includes a central inside part that allows the passage of the cable of the circulating pump. Outles for the passage of cables towards the high part and the low part of the insulation box are available.

Measurements: 180x302x142 mm.

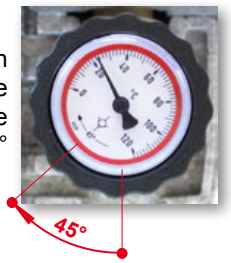


SERVICE

We recommend you to install two isolating ball valves (D) (optional) before the pump unit to allow an easy service or replacement of the pump unit components. In this case close the valves (A), (B) and (D) by rotationg the relevant controls clockwise. If the water is very dirty it is possible to clean the obturator of the thermic valve in an easy way **(Pict 1.)**.Once the service ended, open again the valves and restore the pressure of the installation.

20mbar CHECK VALVE

It is always inside the ball valve **(A)** of the return way, it prevents the natural circulation of the fluid (thermosiphon effect).The check valve can be excluded by rotationg the handle by 45° clockwise from the opening position.



TECHNICAL FEATURES

PN 10. Maximum temperature 100°C

External connections:

- 3/4" Female to the heat source.

- 3/4" Male swivel union to the users.

FIELD OF UTILIZATION

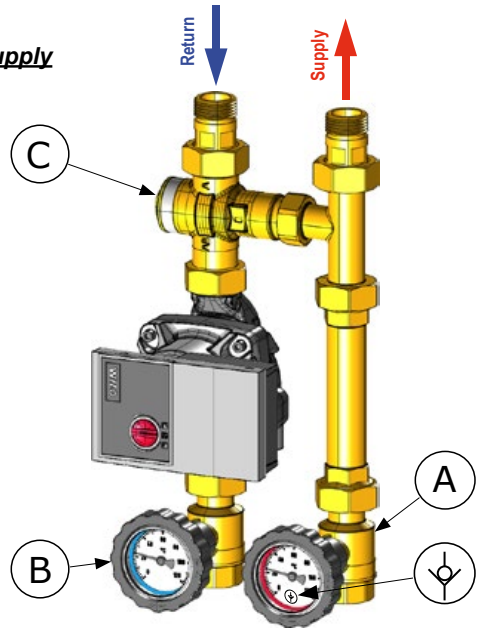
For power up to 28 kW (with Δt 20 K) and maximum flow 1200 l/h.
Kvs Value: 2,8.

Approximate data calculated with a 6 m nominal lifting power circulating pump.
For an accurate measuring or for higher flows, please refer to the curve of the circulating pump.

INVERSION OF THE PUMP UNIT. LEFT SUPPLY.

All **M2 FIX3 CS** pump units can be inversed to change the supply way from right side (the most popular execution) tio the left side.

Right supply

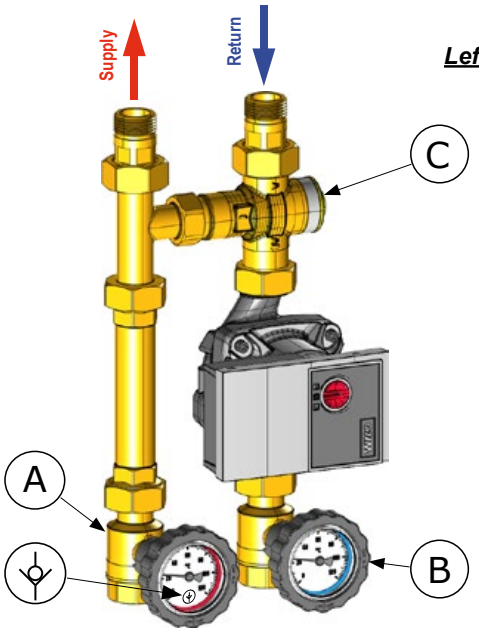


MOVE THE BALL VALVE (A) TO THE PLACE OF (B) BALL VALVE AND VICE VERSA. REVERSE THE ANTI-CONDENSING THERMIC UNIT (C).

Circulating pump:
move the circulation pump to the opposite way and rotate the motor by 180°(unscrew the special screws, rotate, screw again)

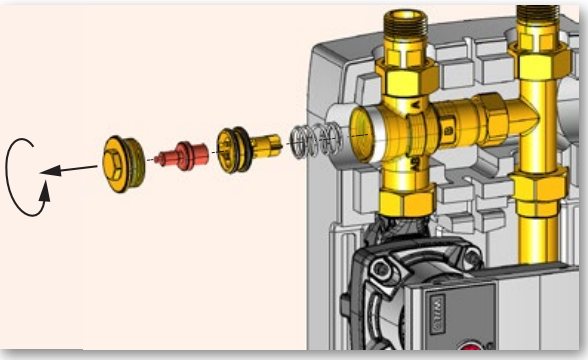
Check valve:
Always inside the ball valve **(A)** of the supply way (in-handle thermometer coded red).

Left supply

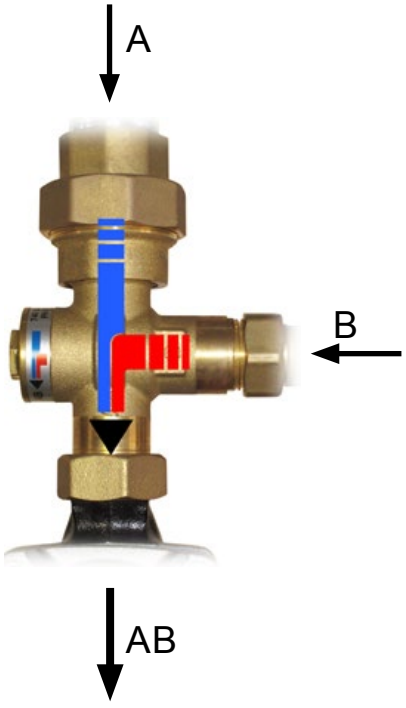


(A) Ball valve on the supply way (in-handle thermometer coded red) with check valve.
(B) Ball valve on the return way (in-handle thermometer coded blue).

SERVICE: The anti-condensing valve **(C)** can be removed for service. Uncrew the plug with hexagon 17 by means of a suitable key. Take out the components, clean, oil and reassemble following the sequence of the **(Pict.1)**.



Picture 1



WORKING WAY:

(1) - When the boiler starts the thermic valve is closed towards the users until when the fluid of the heat source loop reach the opening temperature of the thermic valve (f.i. 55°C). During this step the fluid is recycling trhough the by-pass **(B)**.

(2) - When the opening temperature of the thermic valve is reached (f.i. 55°C), the third way **(A)** towards the users is proportionnaly opening and the by-pass is closed.

(3) - Now the supply temperature is increasing in a progressive way. This happens at about 10K more than the opening temperature (in our case at about 65°C). Now the installation is operative and the supply fluid temperature can increase up to the selected value.