

## Pump groups DN 20

# SA, SMTc, SMT



**WOMIX**

Ul. Sportowa 31

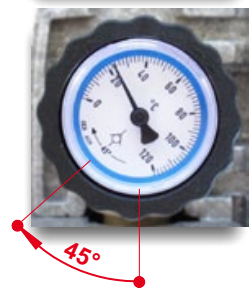
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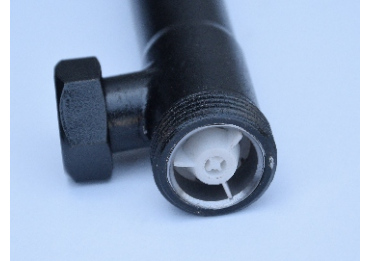
## CHECK VALVE

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

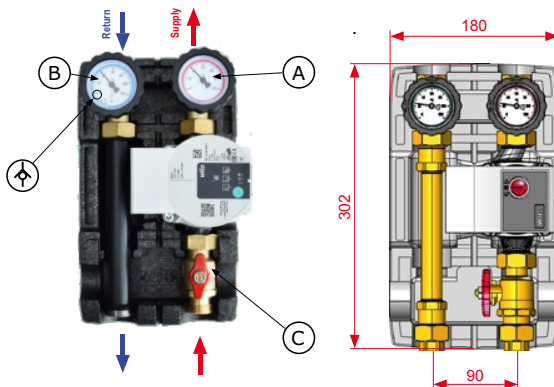


Check valve for groups with mixing valve.

We recommend that each mixing group has a non-return valve. It is important that the check valve is installed before connecting the return to the mixing valve. The place for the check valve on the SMT DN 20 and SMT DN 20 groups is in the fitting (See photo).



The compact SA 90 - DN 20 pump group is equipped with three brass valves, including two with supply and return water thermometers (with built-in non-return valve), steel connector and insulation. The pump group is equipped with a Wilo or Grundfos pump.



## Dimension

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

Measurements: 180x302x142 mm.

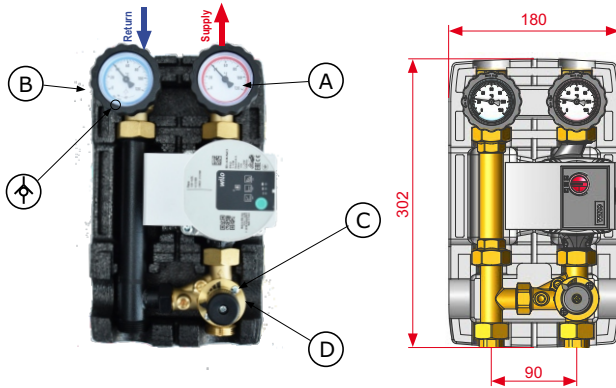
## SERVICE

To operate an incidental service/replacement of the circulating pump, close the ball valve (A) and (C) by rotating the relevant handles clockwise. Once the service ended, open again the two ball valves and restore the pressure of the installation.

## Technical data:

Max pressure:	8 bar
Max temperature:	95°C
Axle spacing:	90 mm
Insulation material:	EPP black 40 g/l
Gaskets material:	VITON or EPDM
Connections:	
Installation side:	3/4" F
Boiler side:	1" M
Installation length of pump:	130 mm

The compact mixing and pumping group SMT 90 - DN 20 is equipped with a brass 3-way mixing valve, two brass ball valves with supply and return water thermometers (with a built-in non-return valve), a steel connector and insulation. The pump group is equipped with a Wilo or Grundfos pump. In addition, to ensure automatic operation of the mixing valve, the group should be equipped with an MP 10 - 10 Nm actuator.



**Dimension**

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

Measurements: 180x302x142 mm.

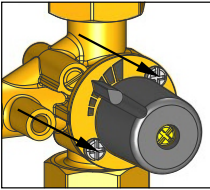
**Technical data:**

Max pressure:	8 bar
Max temperature:	110°C
Axle spacing:	90 mm
kvs mixing valve:	5,2
Insulation material:	EPP black 40 g/l
Gaskets material:	VITON or EPDM
Connections:	
Installation side:	3/4" F
Boiler side:	1" M
Installation length of pump:	130 mm

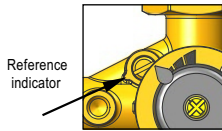
**Attention!** The group is delivered with the feed side on the right side. It does not have the ability to change the supply and return pages.

Pump units are supplied with the recycling by-pass fully open. To adjust the quantity of recycling through the by-pass you must move the regulation rod, that can be turned clockwise or anti clockwise indifferently. Follow these steps:

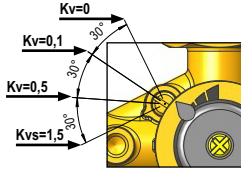
1. Loosen the fixing screws of the handle stopper (indicated by the arrows in the image to the left) to unlock the adjustment rod of the by-pass;
2. Select the desired position of the rod:



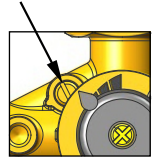
Arrows show the fixing screws of the handle stopper and of the adjusting rod.



The by-pass is fully open and it allows the maximum recycling. The screwdriver slot is lined up to the reference notch.



position and it allows a partial recycling. As reference you can take the Kv values indicated in the picture.



The by-pass is fully closed and there is no recycling. The screwdriver slot is in orthogonal position (90°) as to the reference notch.

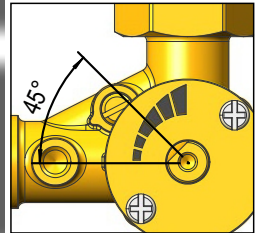
3. Screw again the fixing screws of the rod stopper to lock the adjustment rod.

#### BY-PASS

M2 MIX33 pump units have an adjustable by-pass integrated into the mixing valve (C). By means of the control rod (front side adjustable) it is possible to mix to the supply way a quantity of water coming from the return way.

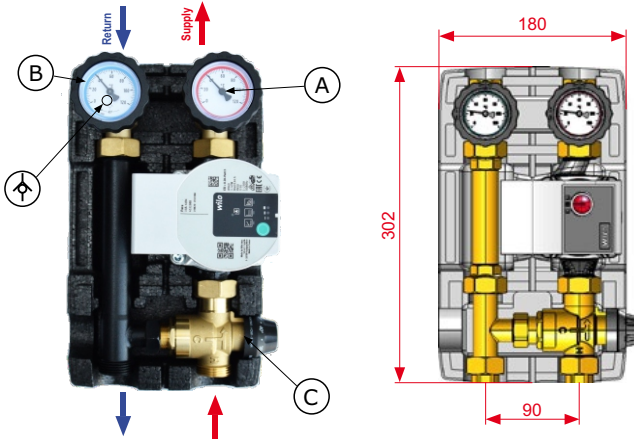


**TAKE CARE:** do not move the mixing valve (C), it stays always on the right way, also the electric wirings of the possible servomotor do not change. The mixing valve always opens clockwise. To mount the servomotor please put the control rod at 45° and refer to the special label for the electric wirings.



**Mounting of servomotor:** to be placed at 45° of the rod

The SMTC 90 - DN 20 compact mixing and pump group is equipped with a thermostatic brass three-way mixing valve with a temperature range of 20 degrees C - 45 degrees C, two brass ball valves with supply and return water thermometers (with a built-in non-return valve), a steel connector and insulation. The pump group is equipped with a Wilo or Grundfos pump.

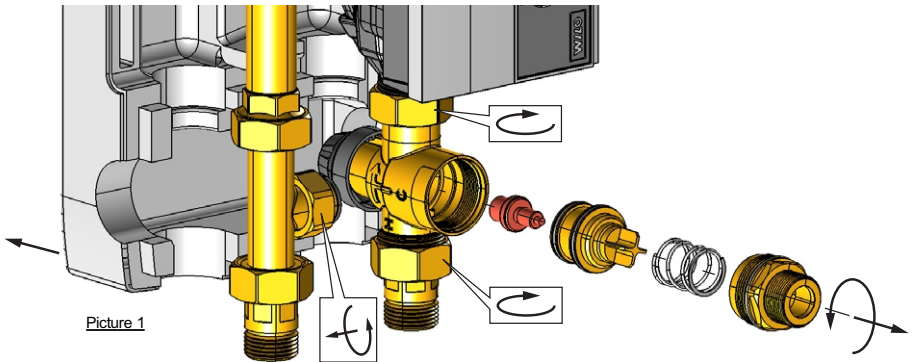


**SERVICE**

Valves (A), (B) are ball valves that allow easy replacement of the pump. After completing the service, open the valves again and restore the system pressure.

**Technical data:**

Max pressure:	8 bar
Max temperature:	95°C
Axle spacing:	90 mm
kvs mixing valve:	2,0
Insulation material:	EPP black 40 g/l
Gaskets material:	VITON or EPDM
Connections:	
Installation side:	3/4" F
Boiler side:	1" M
Installation length of pump:	130 mm



Picture 1



**THERMOSTATIC MIXER:**

The sensor of the thermostatic mixer MultiMix, in case of need, can fully close the inlet of recycling (C gate). This possibility allows the pump unit to give the maximum supply temperature, the same as the one of the inlet hot water (H gate). If lower temperatures are requested, to allow a regular and continuous mixing, it is necessary that the inlet hot water temperature is 3÷5 K higher than the requested value of the outlet mixed temperature.