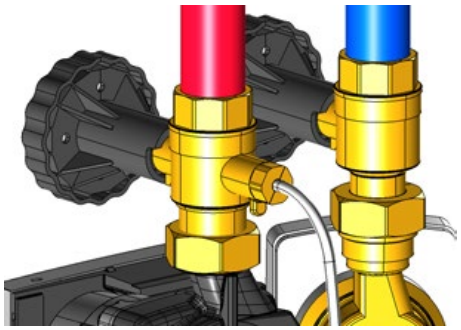
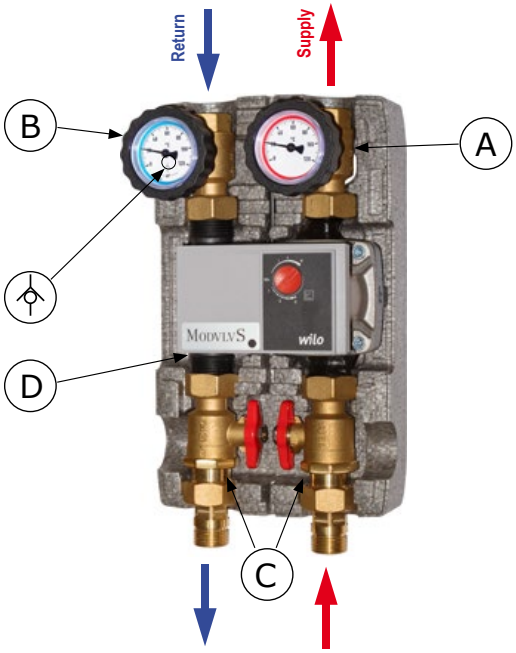
Installation instructions

Energy pump units are made to meter the energy in centralized heating and cooling installations.
These pump units, thanks to two isolating valves on the return way, allow an easy mounting of the DN15 or DN20 energy meter.
The second temperature sensor is directly put into the isolating valve of the supply way (Pict. 1), without any adapter or pit.
This special 3-way ball valve, placedafter the circulating pump, allows the lead sealing of the sensor and also the replacement of it without draining the installation: to isolate the sensor from the hydraulic circuit it is enough to close the valve.In this way the placement of the energy meter, after having cleaned and serviced the circuit or replaced it, is very easy.

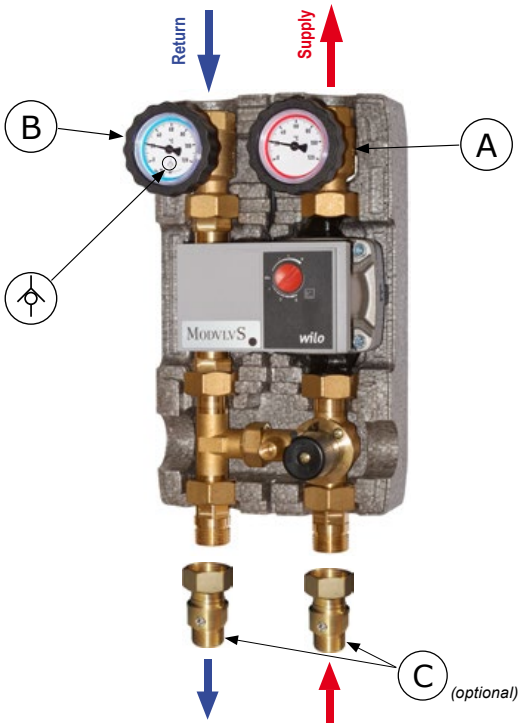


Picture 1

Unmixed Pump Unit



(*) Mixed Pump Unit



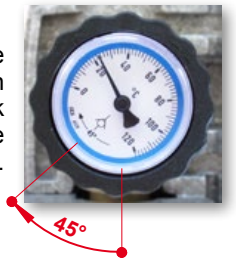
SERVICE

To make a possible service/replacement of the pump units components, close the valves **(A)**, **(B)** and **(C)** by rotating the relevant controls clockwise. The energy meter must be placed on the place of the plastic distant piece **(D)** after having cleaned the installation.Once the service ended, open again the valves and restore the pressure of the installation.

*(*) For the mixed pump units,we recommend to install the two isolating ball valves **(C)** (optional) before the pump unit to allow an easy service or replacement of the components of the pump unit.*

20mbar 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.



TECHNICAL FEATURES

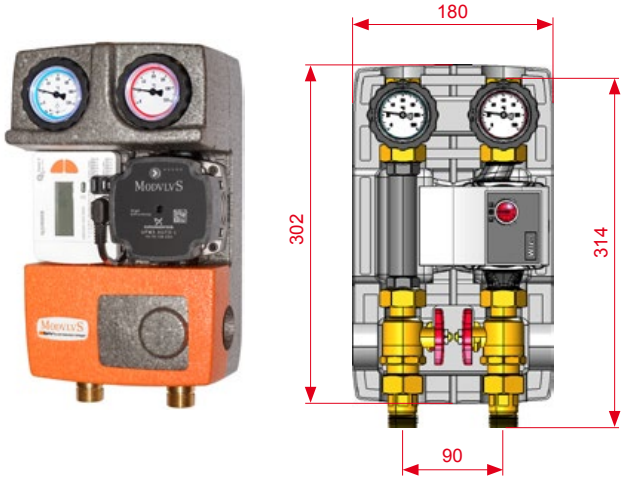
PN 10. Maximum temperature 90°C.

External connections:
- **3/4" Male swivel union to the heat source or to the distributor.**
- **3/4" Female to the users.**

MEASUREMENTS

EPP insulation box: the insulation covering includes a central inside part that has to be removed to place the heat counter. Outles for the passage of cables towards the high part and the low part of the insulation box and another outlet for the temperature sensor are available.

Measurements: 180x302x142 mm.



Rev.0 - 25/09/2014

M2 ENERGY UNMIXED PUMP UNITS - DN20 SERIES

FIELD OF UTILIZATION

For power up to 35 kW (with Δt 20 K) and maximum flow 1500 l/h (*).
Kvs Value: 6,0 (*).
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.
(*) The data are relevant to the pump unit without energy meter installed.

Approximate data to select the appropriate meter						
Model	*Energy meter*	*Δt*	*Kvs of the unit (*)*	*Approximate power and flow of the installation*	*Recommended circulating pump*	*Residual lifting power*
M2 G21	*1,5 m³/h*	*20 K*	*2,7*	*16 kw - 700 l/h*	*Wilo Yonos Para RS 15/6*	*5,5 mH_2O*
M2 G21	*2,5 m³/h*	*20 K*	*3,8*	*23 kw - 1000 l/h*	*Wilo Yonos Para RS 15/6*	*5 mH_2O*
M2 G21	*2,5 m³/h*	*20 K*	*3,8*	*39 kw - 1700 l/h*	*Wilo Yonos Para RS 15/7,5*	*5 mH_2O*
(*) The indicated Kvs concerns the unit including the energy meter installed						

M2 MIX3 ENERGY MIXED PUMP UNITS - DN20 SERIES

FIELD OF UTILIZATION

For power up to 28 kW (with Δt 20 K) and maximum flow 1200 l/h (*).
Kvs Value: 4,0 (*).
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.
(*) The data are relevant to the pump unit without energy meter installed.

Approximate data to select the appropriate meter						
Model	*Energy meter*	*Δt*	*Kvs of the unit (*)*	*Approximate power and flow of the installation*	*Recommended circulating pump*	*Residual lifting power*
M2 MIX3 G21	*1,5 m³/h*	*20 K*	*2,4*	*14 kw - 600 l/h*	*Wilo Yonos Para RS 15/6*	*5,5 mH_2O*
M2 MIX3 G21	*2,5 m³/h*	*20 K*	*3,1*	*21 kw - 900 l/h*	*Wilo Yonos Para RS 15/6*	*5 mH_2O*
M2 MIX3 G21	*2,5 m³/h*	*20 K*	*3,1*	*35 kw - 1500 l/h*	*Wilo Yonos Para RS 15/7,5*	*5 mH_2O*
(*) The indicated Kvs concerns the unit including the energy meter installed						

M2 FIX3 ENERGY MIXED PUMP UNITS - DN20 SERIES

FIELD OF UTILIZATION

For power up to 22 kW (with Δt 20 K) and maximum flow 1000 l/h (*).
Kvs Value: 2,0 (*).
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.
(*) The data are relevant to the pump unit without energy meter installed.

Approximate data to select the appropriate meter							
Model	*Field of regulation*	*Energy meter*	*Δt*	*Kvs of the unit (*)*	*Approximate power and flow of the installation*	*Recommended circulating pump*	*Residual lifting power*
F1	*20-45°C*	*1,5 m³/h*	*8 K*	*1,7*	*4 kw - 400 l/h*	*Wilo Yonos Para RS 15/6*	*5,5 mH_2O*
F2	*45-70°C*	*1,5 m³/h*	*20 K*	*1,7*	*9 kw - 400 l/h*	*Wilo Yonos Para RS 15/6*	*5,5 mH_2O*
F1	*20-45°C*	*2,5 m³/h*	*8 K*	*1,9*	*9 kw - 1000 l/h*	*Wilo Yonos Para RS 15/7,5*	*5 mH_2O*
F2	*45-70°C*	*2,5 m³/h*	*20 K*	*1,9*	*23 kw - 1000 l/h*	*Wilo Yonos Para RS 15/7,5*	*5 mH_2O*
(*) The indicated Kvs concerns the unit including the energy meter installed							