

UC/FC

DESCRIPTION

Pettinaroli modular drinking water accounting unit **UC/FC** for floor distribution of centralized installation.

The Pettinaroli **UC/FC** is a perfect solution for metering and recording of hot and cold water consumption of a single apartment in a central heating system. The unit is **compact** and fully featured for drinking water supply to the flats. Moreover, the **insulating case** reduces heat losses.

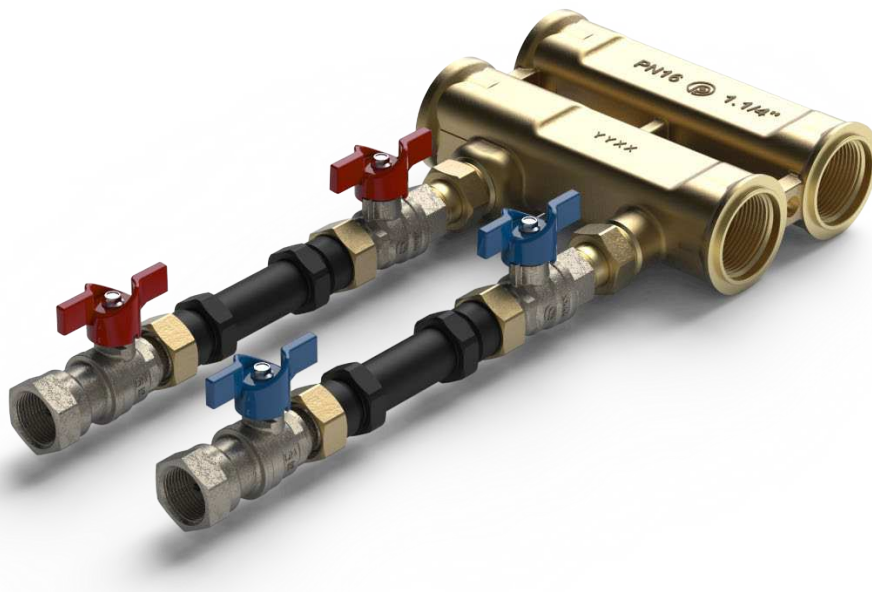
Perfect **modularity** is always achieved through the dedicated manifold, equipped of O-Rings and M10 connecting screw: the

floor distribution can be adapted according to the specific requirements of each floor, adding units wherever it needs. The resulting installation is still very **compact**.

Safety is always guaranteed: the ball valves with the integrated **check valve** prevent any accidental contaminated water return into the main distribution network.

The **maintenance** is also eased: four ball valves ensure fully isolation for water meter replacement or any other operation into the flat. Each unit is **factory tested**.

The unit maximizes the benefit of centralized production of domestic hot water: energy efficiency of one hot water generator and freedom of an individual accounting system.



- **Compact**
- Quick installation: manifold, isolating valves, water meter set-up pipe already **assembled and factory tested**
- **Flexible installation:** the manifold can be connected on the right or on the left to the riser
- **Direct coupling** between manifold with O-Ring and M10 screw.
- **Safe:** hot water and cold water lines have a check valve each.
- **Easy maintenance:** 4 ball valves for isolation of the lines.
- Water meter: removable $\frac{3}{4}$ " plastic sleeve, 110 mm long. The water meter can be installed just when needed
- **20 mm insulation case.** Contact Fratelli Pettinaroli to know which heat meters suit the case.
- **Accessories** to connect the manifold to the risers:
 - Main line isolating valves;
 - 3 pieces unions;
 - Cap;

COMPONENTS

- 1 x **8090** manifold
- 2 x **52MET** ball valve (red and blue handles)
- 2 x **42MET** ball valve with integrated check valves (red and blue handles)
- 1 x plastic sleeve
- 1 x brackets to install the kit on the wall
- 1 x insulating case (for specific variations)

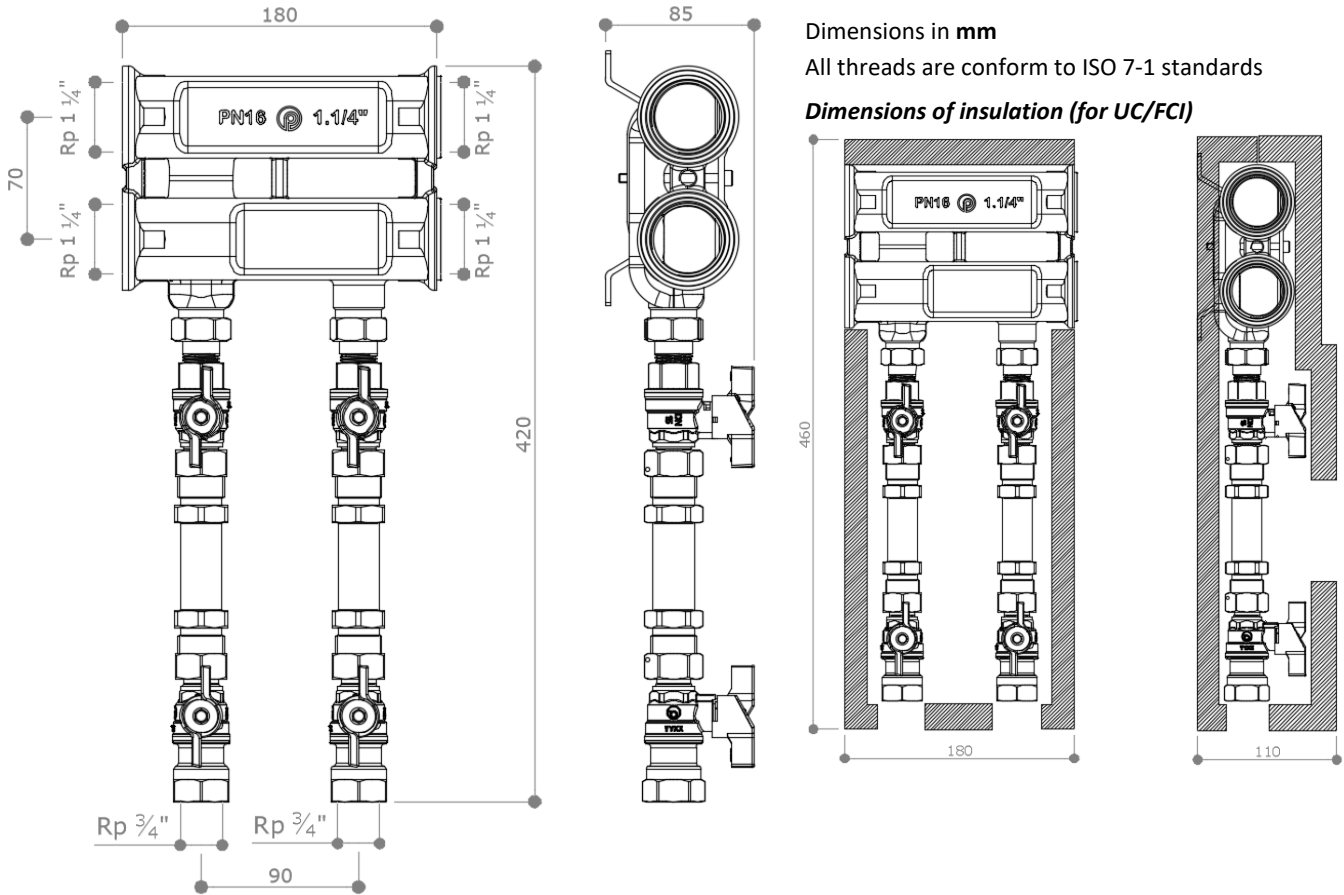
WATER METERS NOT INCLUDED

VARIANTIONS

UC/FC: modular hot and cold water metering unit **without** insulation

UC/FCI: modular hot and cold water metering unit **with** insulation

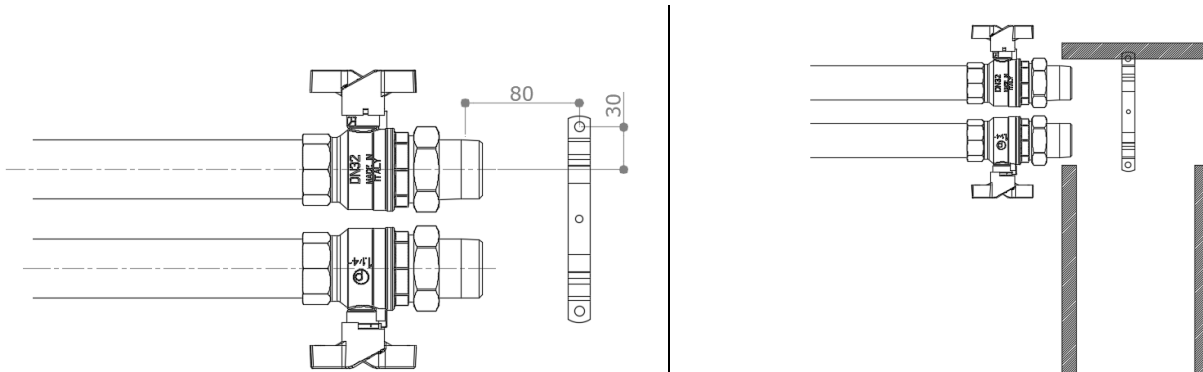
DIMENSIONS



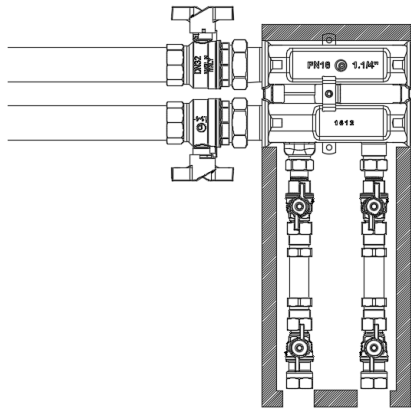
MATERIALS

Manifold	Casted brass UNI EN 1982-CB 753S
Isolating valve	CW617N (EN 12165) CuZn40Pb2 T.E.A. Plus plated
110 mm plastic pipe	PA66 GF30
Unions and nuts	CW617N (EN 12165) CuZn40Pb2

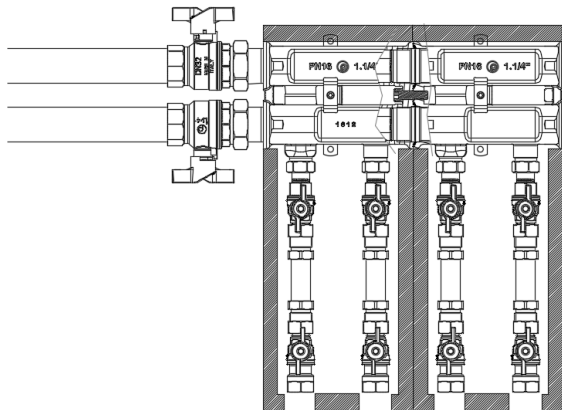
INSTALLATION



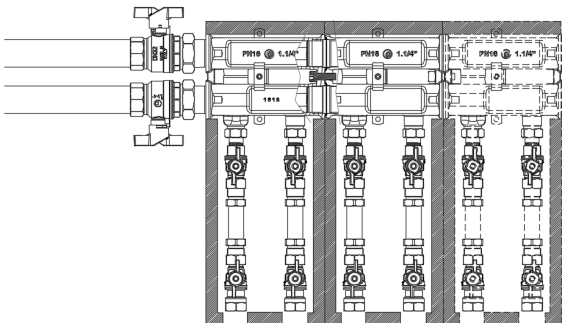
1. Fix the bracket on the wall, in the suggested position (mm)
2. Place the bottom side of the insulation



3. Install the unit and fix it to the bracket. Connect the risers unions to the manifolds



5. Fix the unit at the bracket: be sure the manifolds are correctly aligned and close one each other.



7. Add the required number of units.

9. Connect the pipes going to the flat, connecting the valve with integrated check valve (purple).

10. The water meter can be installed.

11. Open the isolating valves and fill the pipes.

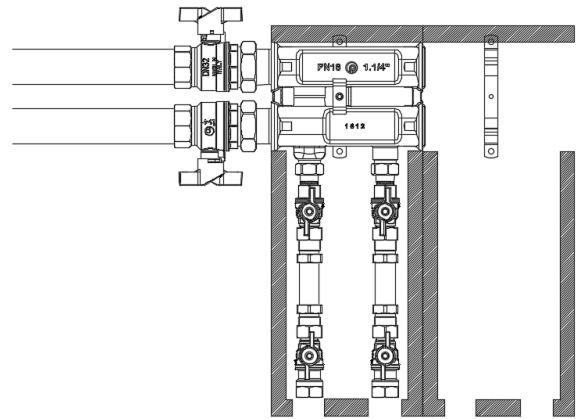
The unit manifold is symmetrical and it can be connected to the riser on the right or on the left. The upper manifold is the domestic hot water line and the lower one is the domestic cold water one. In any case, the butterfly handles of the ball valves can be changed and reversed.

Please verify the available network pressure to provide the suitable flow rate each flat and therefore identify the maximum number of coupled manifolds.

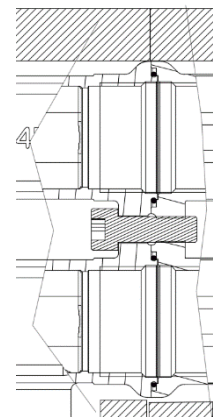
TECHNICAL FEATURES

Nominal pressure*	10 bar	Check v. opening pres.	Min 1.5 kPa
Max temperature*	90°C	Minimum bore	13.5 mm
Face to face water meter	110 mm	Fluid	Water
Water meter connection	¾" flat end	Pipe connections	Rp ¾" F
Kv ball valves with check valve	7.4		

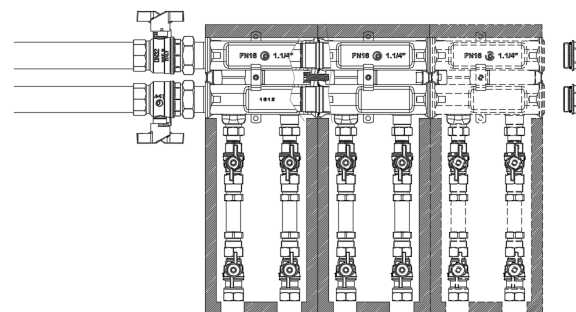
* with plastic sleeve on. Verify technical specifications of water meters.



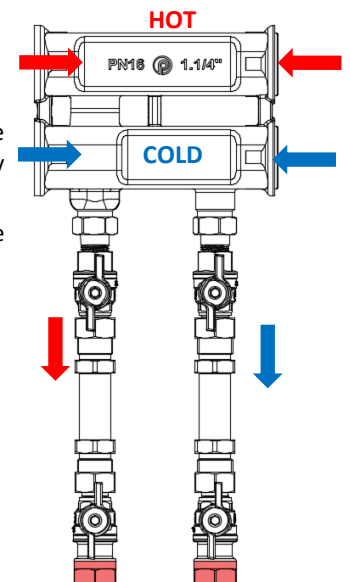
4. Fix the following bracket, 180 mm far from the previous one, at the same level. Place the insulation.



6. Tighten the connecting M10 screw between the manifolds.



8. Tighten the cap (not included)

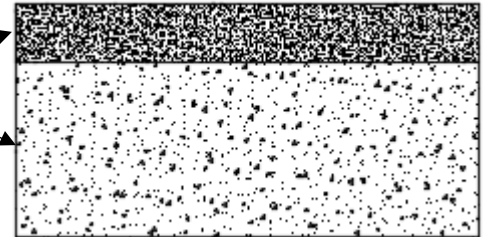


INSULATING CASE

Unit insulation is made by 2 shells connected with **Velcro®**. Thickness 20 mm.

Materials

- Body (external layer)** Polyethylene cross linked foam, density 80 kg/m³
- Body (internal layer)** Polyethylene cross linked foam, density 29 kg/m³



Technical features

	Standard	Insulation case		Unit of measure
Density	ISO 845	29	80	Kg/m ³
Compression stress (50% deflection)	ISO 3386/1	88	260	kPa
Tensile strength longitudinal	ISO 1798	0.18	0.8	MPa
Extension longitudinal stretch	ISO 1798	120 (at break)	170 (at break)	%
Residual distortion 22 h at 23°C Deflection of 25% 24h after release	ISO 1856	13	1.5	%
Operating temperature range	-	-60/+90	-60/+90	°C
Thermal conductivity	EN 12667	0.040	0.049	W/mK
Fire resistance	UL94	HF1	HF2	-

ACCESSORIES

- 1 1/4" 3-pieces union connection:

- 701 (straight)
- 700 (elbow)



- 1 1/4" isolating valve with union connection

- 52CE/3 (red handle) and 52CE/3B (blue handle)



- 1 1/4" end cap 3522M+O with O-Ring



GENERALS

Pettinaroli does not accept any liability for improper or wrong use of this product.



Example of installation. Meters not included