

Coming together is a beginning. Keeping together is progress. Working together is success.

(Henry Ford)





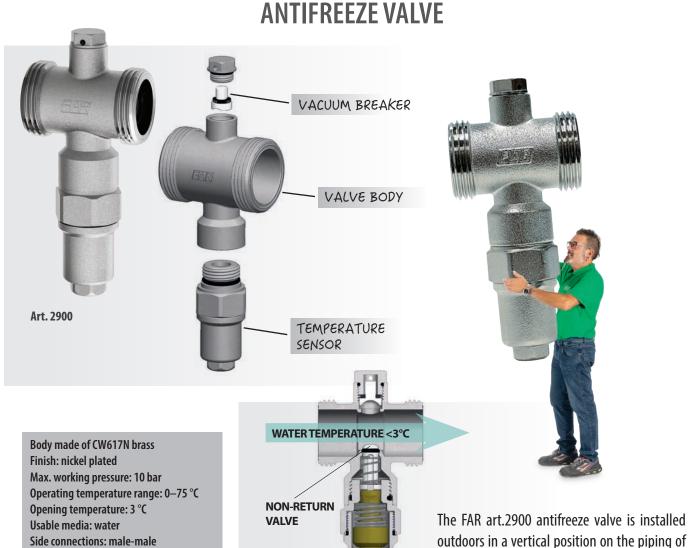




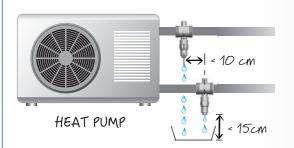




# ANGEL\*



For a heat pump with an outdoor unit, the water in the piping can be connected with the indoor unit. During use in the wintertime, where outside temperatures can drop very low, this water can freeze compromising the operation of the system or causing breakages. The valve is activated through an internal sensor at a temperature of approximately 3°C, which opens a small hole allowing water to drip out towards the outside environment.



Connections sizes: 1"-1"1/4-1"1/2

The valve must be installed in a position that ensures drainage of the water, preventing blocks of ice from forming. A clearance of approximately  $15 \div 20$  cm from the ground is sufficient. When positioning the antifreeze valve, the position of the delivery pipe with respect to the return pipe must also be considered, trying to offset the position of the two pipes and separating them from each other.

heating/cooling systems with a heat pump.



### **INERTIAL ACCUMULATOR**

Inertial accumulator for heat pump.

Designed to combine the functions of an inertia tank, hydraulic separator and a distribution manifold into one component.

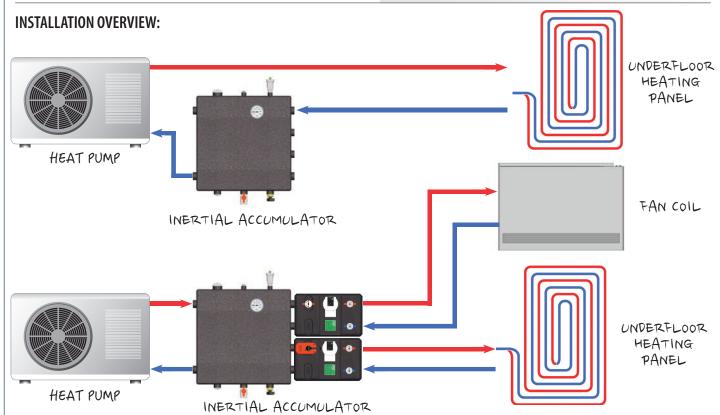
It makes the most of the space with is compact size. It is right/left reversible and can be wall mounted.

- Available in 40L and 80L versions
- Complete with insulation
- Complete with wall brackets
- Heat pump side connections 1"1/4M
- System side connections 1"M

### Complete with:

- temperature gauge
- automatic air vent valve with non-return valve
- magnetic insert with discharge valve
- expansion vessel connection
- set up for the connection of max. 2 booster units
- set up for support heating elements







# BOOSTER UNITS FOR HEATING AND COOLING SYSTEMS

New line of booster units designed to be used on cooling and heating systems with 1 "and 1" 1/4 connections and 125mm centre distance.

They are available in direct version and with mixing valve with 3-point or 0-10V actuator complete with:

- high efficiency pump with 6, 7, 8, or 10m head depending on the model
- shut-off valves with  $0 \div 80^{\circ}\text{C}$  temperature gauges
- insulation shell
- connection fittings



Direct version art. 2187



With 3-Point actuator



With 0-10V actuator

# Smart Art. 2282

Chrome-plated swiveling dirt separator for heating systems, complete with magnetic insert for ferrous particles removal.

- Body made of CB753S brass
- Connection to pipelines: F-F
- Connection to 1/2" upper part with plug
- Drain cock for dirt removal
- Nominal pressure: 10 bar
- Max. working temperature: 110°C
- Supplied with PE pre-formed anti-condensation insulation
- Removable magnetic inserts
- Patented

### **COMPONENTS FOR HEAT PUMPS**



Art. 2264

Swiveling deaerator for heating systems.

- Body made of CB753S brass
- Connection to pipelines: F-F
- Connection to 1/2" upper part with plug
- Swiveling air vent valve
- Nominal pressure: 10 bar
- Max. discharge pressure: 10 bar
- Max. working temperature: 110°C
- Supplied with PE pre-formed anti-condensation insulation
- Patented



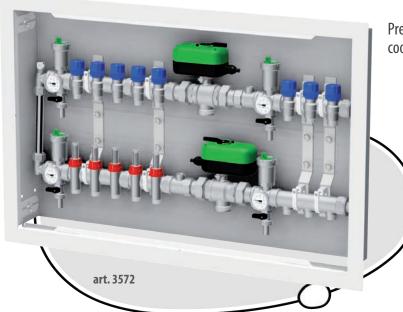
### Art. 300720CT

Chrome-plated 3-way diverter zone control ball valve equipped with unions, nuts and 230 V actuator with manual release.

- Connections: male-male
- Full bore flow
- Supplied with PE pre-formed anti-condensation insulation



# PRE-ASSEMBLED UNIT FOR MIXED UNDERFLOOR HEATING AND COOLING SYSTEMS WITH FAN COIL



Pre-assembled unit for mixed underfloor heating and cooling systems with fan coil, complete with:

- painted sheet steel wall box
- three-way zone valves with 220 V actuator, opening time 40 seconds
- main connection with 2-piece 1"M fittings

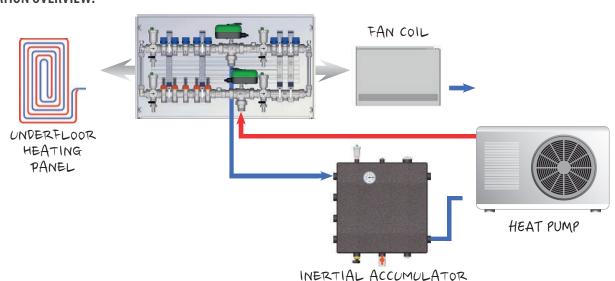
### **UNDERFLOOR HEATING SIDE**

- supply manifold with interchangeable connections for copper, plastic and multilayer pipes with 0-5 l/min flowmeters
- return manifold with interchangeable connections for copper, plastic and multilayer pipes with shut-off valves
- flow and return temperature gauge, by-pass kit
- automatic air vent valves, filling and drain cocks

### **FAN COIL SYSTEM SIDE**

- supply manifold with interchangeable connections for copper, plastic and multilayer pipe
- return manifold with interchangeable connections for copper, plastic and multilayer pipes with shut-off valves
- flow and return temperature gauge, by-pass kit
- automatic air vent valves, filling and drain cocks

### **INSTALLATION OVERVIEW:**





### SUPPLY AND RETURN BOOSTER UNIT FOR SOLAR SYSTEMS



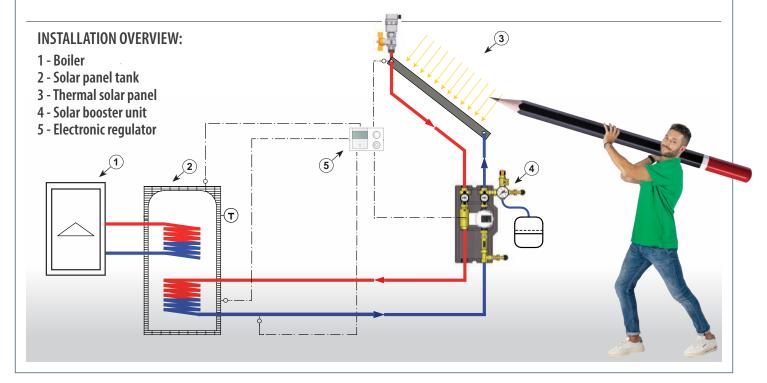
Supply and return booster unit for solar systems complete with:

- high efficiency pump with PWM modulation
- shut-off valves
- temperature gauge with 0÷160°C scale
- PPE insulation
- adjustable flow meter
- taps for system loading/washing
- 0÷10 bar pressure gauge
- 6 bar safety valve
- deaerator on the supply circuit
- electronic regulator for modulating pump
- Connections centre distance: 100 mm
- Connections: 3/4" female

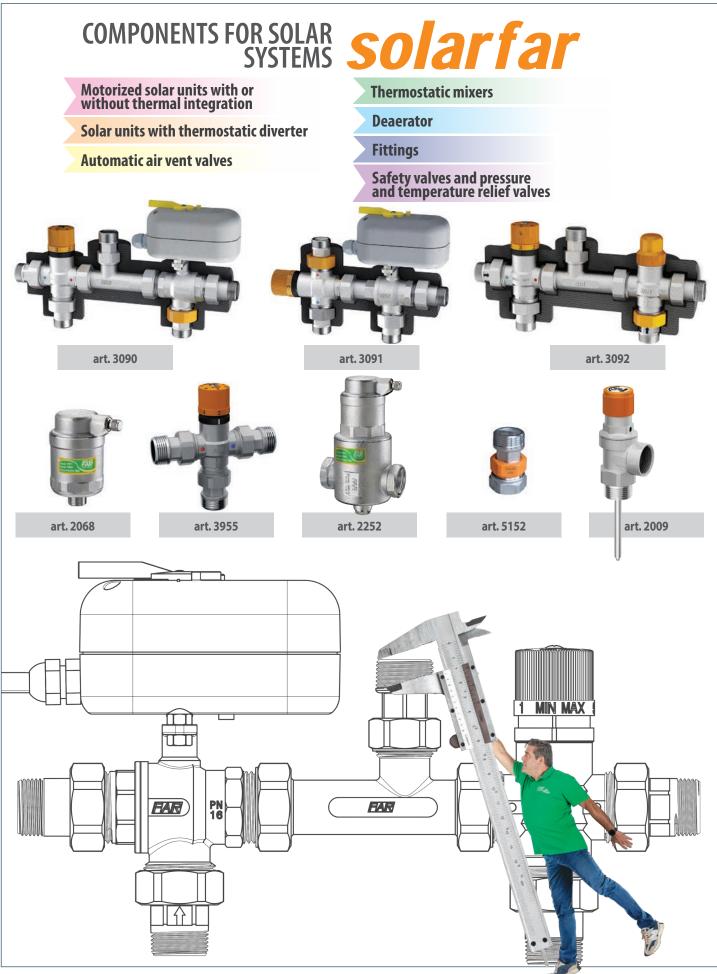
Return booster unit for solar systems complete with:

- high efficiency pump with PWM modulation
- shut-off valves
- temperature gauge with 0÷160°C scale
- PPE insulation
- adjustable flow meter
- taps for system loading/washing
- 0÷10 bar pressure gauge
- 6 bar safety valve
- electronic regulator for modulating pump











## DIRT SEPARATORS AND DEAERATORS FOR CENTRAL HEATING







# art. 2208 WITH INSULATION art. 2207







### UNITS FOR CENTRAL HEATING

FAR offers a wide range of products designed for small and medium central heating systems. The booster units have 1" DN25 size and Art. 2166 and Art. 2168 are also available in 1"1/4 DN32 size. They are equipped with high efficiency pump with 6, 7,8 or 11m.



Booster unit for high temperature, complete with pump and insulation.



Set point booster unit, complete with thermostatic mixer, pump and insulation.

〔1″〕 1″1/4



Booster unit, complete with valve with 3-point mixing actuator, pump and insulation.



Manifold for central heating available in the following sizes:

- 1"1/4 with 1" connections 2+1 and 3+1 ports
- 2" with 1"1/4 connections 2+1, 3+1 and 4+1 ports



Distribution unit for central heating, complete with 1"1/4 hydraulic separator and manifold, suitable for use with up to four booster units.

Connection kit Art. 2193 is available for 2" distribution manifolds for DN32 booster units. allowing the connection to the hydraulic separator Art. 2161 2.



New version with 0-10V actuator.



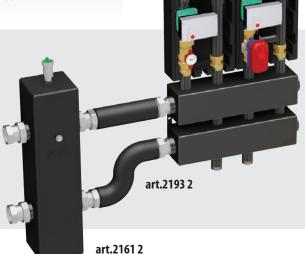


art.2161

Hydraulic separator complete with insulation, drain cock and automatic air vent valve.

### Available sizes:

- flanged 1", 1"1/4, 1"1/2, 2"
- flanged DN50, DN65, DN80, DN100, DN125, DN150.



In order to complete the range, different types of electronic regulation are available:

- Art. 9611 CElectronic controller for heating systems complete with delivery probe and external probe.
- Art. 9614 Electronic controller for heating and cooling systems.

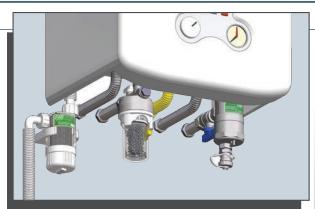




The SKUDOFAR product line protects the system, ensuring the correct operation of all installed components.

By installing SKUDOFAR products you get advantages, such as:

- Consumption reduction
- Improved efficiency
- Noise reduction
- Long life of components
- · Good treatment of incoming water and condensation



Installation example of the acid condensate neutralizer, the PolyFAR dosing filter and the CompactFAR dirt separator under a domestic boiler.

### These products have been designed and manufactured following the right installation rules and the current standards.



### **ACID CONDENSATE NEUTRALIZER**

Useful to treat the acid condensate produced by condensing boilers before directing it into the drain system. By neutralizing the condensation, the problem of corrosion on gutters, channels or drainage pipes is avoided.



**POLYFAR POLYPHOSPHATE DOSING FILTER** 

Current regulations require the installation, at the entrance of the sanitary system, of a filter and a device that acts on the hardness of the water, reducing it, in order to eliminate limescale. PolyFAR is a device that combines two needs: it reduces the hardness of the water thanks to polyphosphates and stops impurities through a built-in filter cartridge.



**DEAERATORS** 

The removal of air bubbles in the heating and cooling circuits allows to reduce consumption, noise and preserve the integrity of the system components. The Standards in force provide the installation of special devices that allow the air to be separated and automatically discharged outside. FAR deaerators, installed near the heat generator, remove the air bubbles in the system thanks to the patented cartridge and the efficient swiveling discharge system.



**DIRT SEPARATOR** WITH MAGNETIC **INSERT** 

Magnetic dirt separators are essential components to ensure the efficiency of the heating and cooling systems and FAR offers a wide range. All models have a high separation efficiency of suspended particles thanks to the patented cartridge and to the combination of the magnetic and gravitational effect, preserving the integrity of all installed components.



### SKUDOFAR CHEMICAL ADDITIVES

According to the current Standard, FAR offers a range of chemical additives for the water treatment for new and existing heating and cooling systems.

SKUD01

protection against corrosion, encrustations, limestone, **Liquid inhibitor** hydrogen formation and microbial growth.

**Liquid cleaner** the correct operation of the system.

**SKUD03** removal of sludge, encrustations and debris restoring

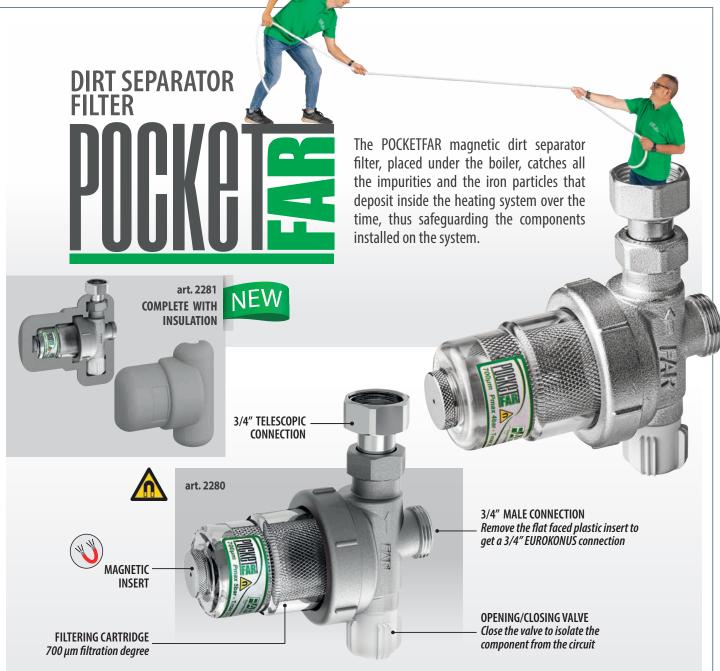
**SKUD07** control and removal of microbial, bacterial and algae

**Liquid biocide** growth.

Single-dose additive

**SKUDOMONO** protection against corrosion and algae growth.

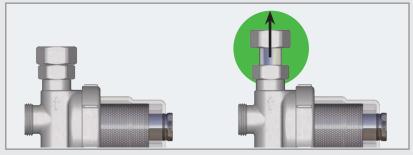






### **INSTALLATION**

PocketFAR should be placed on the return line before the boiler, in order to catch all the impurities that might damage the boiler and the pump.



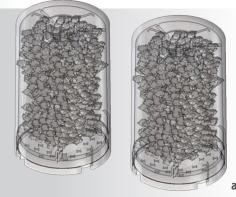
PocketFAR is equipped with an extensible joint (1cm extension) that makes installation easier.



# Polyfar proportional polyphosphate dosing filter



POLYFAR is the new proportional polyphosphate dosing filter, useful to protect the domestic system from limescale and incrustations. The special proportional dosing system allows to correct the hardness of the water preserving the integrity of all installed components as well as the domestic appliances. The 100µm steel filter ensures better protection by removing suspended particulate in the water.



art. 9452



For proper operation of the system, check periodically the device and, if necessary, replace the refill cartridge with a new one.

# OPERATION AND INSTALLATION OVERVIEW





PolyFAR dosing filter must be installed on the cold water pipeline upline of the domestic hot water supply system, to protect boilers, water heaters, washing machines and dishwashers. Thanks to the filter with steel mesh of 100  $\mu$ m integrated in the cartridge, it is not necessary to install any additional safety filter to protect the hot water production system according to the UNI 8065 standard.

PolyFAR can be installed on both L-shaped and straight pipelines thanks to the special three-connection fitting.

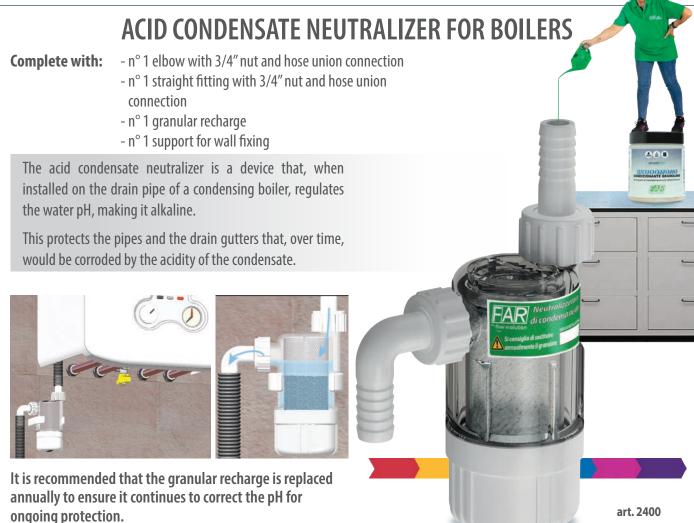




Thanks to the fitting with non-return valve and to the built-in ball valve, PolyFAR can be quickly isolated from the circuit to carry out the maintenance or the replacement of the polyphosphate refill.



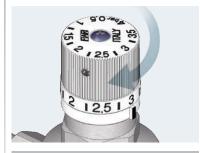
www.far.eu



## **AUTOMATIC FILLING UNIT**

Installation of the automatic filling unit is recommended for heating and air-conditioning systems. Such a device is able to fill the system up to a pressure between 0,5 and 4 bar.

It is equipped with 1/2'' connections and it stands a maximum upstream pressure of 10 bar and a maximum temperature of 95°C.



Technical features: Inlet connection (unit): 1/2" male Outlet connection: 1/2" female Pressure gauge connection: 1/4" female Max. working temperature: 95°C Minimum working temperature: 5°C Max. upstream pressure: 10 bar

Set pressure: 0,5÷4 bar

Turn the handle in the upper section of the device in order to set the pressure, until you reach the desired value. An anti-tampering locking screw is located on the handle side.

The automatic filling unit is equipped with stop cock, non-return valve and pressure gauge connection. The device is supplied with a strainer to grant a better functioning of the component and to stop any impurities which can be found in the system.





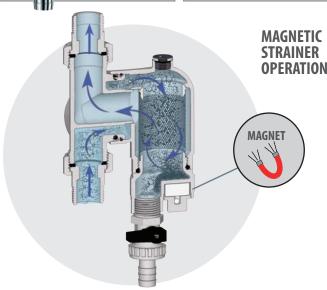
# MAGNETIC STRAINERS WITH STRAIGHT AND SWIVELING CONNECTIONS

FAR swiveling and straight strainers guarantee an accurate filtering of sanitary water, preserving over time the functioning and the duration of the installed components. The incoming water follows a guided path entering the filtering net from above and then moves in a radial direction, getting rid of impurities. The particles thus stick to the net or fall down, accumulating near the drain valve. The ferrous particles are attracted downwards by the magnetic insert placed on the bottom. Both versions are also available without magnetic insert. All versions are available with M-M, M-F, F-F connections and already complete with pressure gauge if necessary.









### PRE-ADJUSTABLE PRESSURE REDUCING VALVES



FAR offers a new range of pre-adjustable pressure reducing valves.

These new pressure reducing valves are available in 1/2" and 3/4" M-M sizes, with the possibility of regulating the downstream pressure from 1 to 6 bar.

They can be used on sanitary systems with PN 25bar and Tmax 75 ° C.

A particular version with inlet filter allows to eliminate suspended particles and guarantee a better operation of the system.







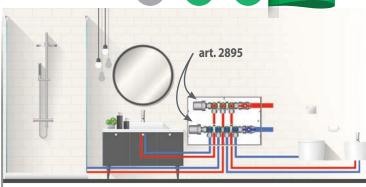
## WATER HAMMER ARRESTER













The water hammer arrester can be installed on distribution manifolds or directly on each circuit (e.g. wash-basin).

The water hammer arrester for domestic services mitigates the effect of overpressure, preserving the correct functioning of the components in the system. The device can withstand a maximum pressure of 50 bar and a maximum working temperature of 90°C.

### **ZONE VALVES**











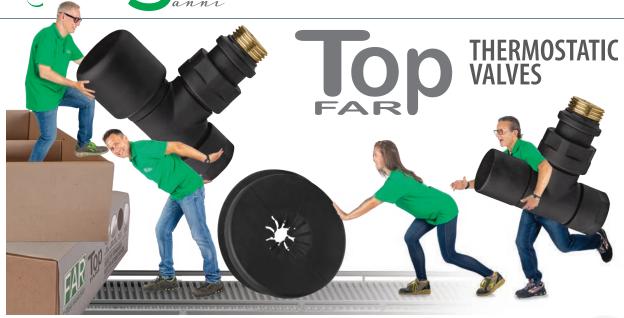


# **Small** actuators

- 2, 3 and 4-way zone control ball valve equipped with on-off actuator.
- Pmax: 16 bar
- Tmax: 95°C

- Actuator feed voltage: 24 V or 230 V
- Torque: from 6 to 35 Nm
- Opening time: from 8 s.to 80s.
- Available sizes: ½", ¾", 1", 1 ¼", 1 ½" and 2"





TopFAR thermostatic valves stand out for their linear, sober and refined shape and satisfy the most modern design requirements.

The new MATT WHITE and MATT BLACK finishes integrate those already available to complete the range.





THERMOSTATIC ANGLED SINGLE/DOUBLE PIPE VALVE







THERMOSTATIC HEADS

The thermostatic head is provided with a liquid sensor, which detects temperature variations and opens or closes the valve accordingly. It has a regulating scale numbered from 1 to 5 to permit selection of the desired

The thermostatic head is available in 5 different finishing: white, matt white, black, matt black and glossy chrome.



WALL COVERING PLATES

In order to complete the range and satisfy the multiple design solutions, FAR has created the new range of wall covering plates available with the same finishing as the thermostatic head.



### WALL COVERING PLATES FOR SINGLE-PIPE AND DOUBLE-PIPE VALVES

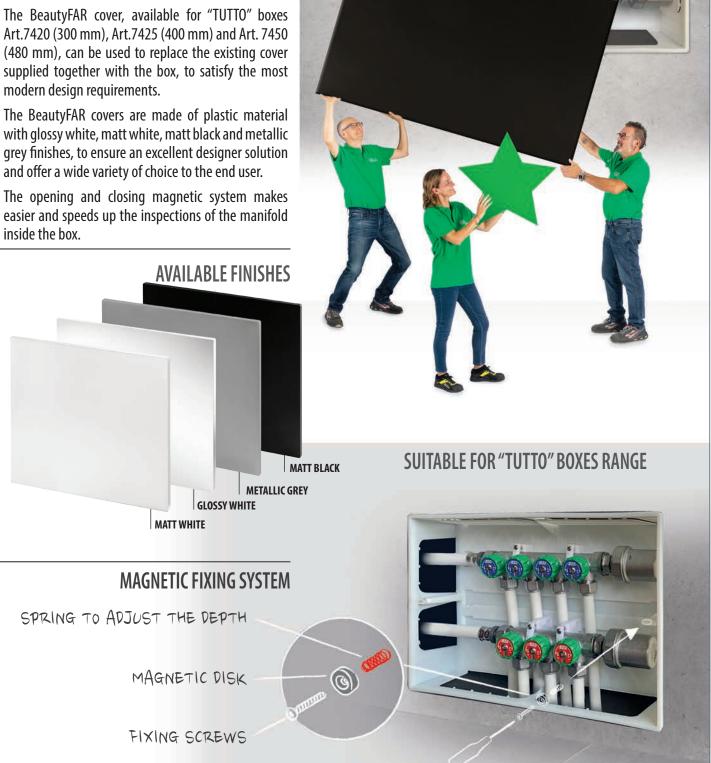
New wall covering plate for Topfar single pipe and double pipe valves. Available for 35mm and 50mm centre distances. For pipes from Ø10mm to Ø20mm



### **MAGNETIC COVER** FOR INSPECTION BOXES

and offer a wide variety of choice to the end user.

inside the box.





# PRESSFAR THE UNIVERSAL SOLUTION







The universal system of press fittings for multilayer pipes, suitable for pressing with three different profiles: TH-U-H



### **Brass Body**

 Internal machining which allows full bore flow and minimal pressure drops.

Profile designed with safety calibration.

### TEA® Surface Treatment

To grant high water quality.
 Corrosion protection in underfloor systems.



### Flat EPDM Washers

- Larger contact surface to grant a better seal.
- Designed to avoid the possibility of being damaged when inserting the pipe.

### Plastic ring in different colors

Pipe thickness easy to identify.

### Stainless steel bush

- Long-lasting seal.
- Pipe position easy to check.



| RING<br>COLOR | MULTILAYER PIPE SIZES |         |      |         |        |      |      |        |        |        |
|---------------|-----------------------|---------|------|---------|--------|------|------|--------|--------|--------|
| GREY          | 14x2                  | 16x2    | 18x2 | 20x2    | -      | 26x3 | 32x3 | 40x4   | 50x4   | -      |
| WHITE         | -                     | 16x2,25 | -    | 20x2,25 | -      | -    | -    | -      | -      | -      |
| GREEN         | -                     | -       | -    | 20x2,5  | 25x2,5 | -    | -    | 40x4,5 | 50x4,5 | 63x4,5 |











# PRESS FITTINGS FOR GEOTHERMAL AND DISTRICT HEATING SYSTEMS



**MALE FITTING** 



**DOUBLE FITTING** 

A new system of press fittings for standard SDR11 pipes in PE100 or PEX, suitable for use in geothermal and district heating plants. The fittings are made of brass with stainless steel bush and EPDM gaskets. They are guaranteed up to a pressure of 16 bar and a temperature of 95°C.

Available sizes

• 25x2,3

• 50x4,6

(according to the version):

• 32x2.9 • 63x5.8

• 40x3,7

The press fitting system is compatible with profiles: TH - U - H



TEMPERATURE GAUGE HOLDER BALL VALVE with press connection and 1"swiveling nut



FITTING WITH SWIVELING NUT



### **SET POINT REGULATING UNITS**

FAR introduces two new set point regulating units for use on radiant panel systems.



Set point regulating unit complete with thermostatic mixer.

Set point regulating unit complete with thermostatic head with capillary sensor.



FAR thermo-electric manifolds are suitable for use on radiant panel systems. The presence of the flowmeter on each outlet allows to set the desired flow value in the circuit based on the project data. The flow rate value can be read on a special graduated scale. FAR thermo-electric manifolds are available with 1" and 1"1/4 male-female side connections, or with 1" flanged connections.



The special shape of FAR manifolds makes easier the flow passage, thus reducing flow resistances. This feature makes it possible to optimize the choice of the manifold diameter in relation to the number of circuits to be connected.



Depending on the version, FAR thermo-electric manifolds are available pre-assembled on brackets. Upon request they are available pre-assembled in a box, with or without mixing system.















www.far.eu

MULTIFAR Like you've never seen it before!

Displayed at the main headquarters in Gozzano Special realization for the 50th Company Anniversary MULTIFAR manifold, art. 3850 34

Built with **LEGO** bricks

**30.075** pieces

**120** hours of construction by skilled hands

40 hours of design

