SCHEDA N°	DATA AGG.
0162349001	04/2024



## Set point mixing unit group Art. 8155 – 8155p



### 100% MADE IN ITALY

Function The set point mixing group with integrated thermostatic mixing valve, suitable to be used on all Pintossi + C stainless steel manifolds series, is the best solution to obtain an important **energy saving** in underfloor heating systems.

The mixing unit allows to control fluid's distribution temperature of the heating circuit, maintaining it constant to a set value. The regulation can be done using the thermostatic mixing valve placed at the inlet of both the circuit coming from the heat generator and the return from the radiant system.

The valve is equipped with a sensor immersed in the fluid that regulates the temperature of the mixed water. In this way the hot water flow coming from the heat generator is regulated by the thermostatic valve according to the actual demand, compensating in this way the thermal power transferred to the system and recovering the heat still present in the fluid, thus ensuring considerable savings.

The unit is equipped with 1" connections. The sealing is guaranteed by **PTM system (Pintossi soft sealing)**, which allow a quick and safe installation, without the use of additional sealing materials, like hemp or PTFE ribbon. Nickel plated.

On request, the unit can be supplied complete with Grundfos UPM3 AUTO 25-70 52W high efficiency circulator.

# Technical specifications

Max glycole: Max working temp.: Max working pressure: Max differential pressure: TMV temperature range:

Fluids:

Water or glycol solutions 30% 70°C (with flowmeter) – 90°C (with lockshield) 6 bar (with flowmeter) – 10 bar (with lockshield) 1 bar 20-55°C Materials

Body: Gaskets: Handles: Mixing screw: Spring Probe:

211,5

35

Brass CW617N EPDM Plastic Brass CW614N Stainless steel Wax

## Dimensions





2



To use mixing unit group art.8155 with Pintossi pre-assembled manifolds, it is necessary to reverse the manifolds bar. The supply manifold in the upper side and the return manifold in the bottom side.



**Reversibility** Thanks to the swivel fitting located in the connection part of the inlet manifold, the unit can be installed on both sides of the manifold's composition.

The temperature can always be read thanks to the presence of the liquid crystal thermometer placed on both sides of the mixing group.



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## interaxis

Manifolds variable The presence of the swivel connection allows the creation of multiple interaxis with the manifold connections (200mm e 211mm the most popular in the market).



## Thermostatic mixing valve

The thermostatic mixing valve, thanks to the wax sensor completely immersed in the fluid, guarantees an accurate and reliable measurement of mixed water, with very short adjustment times. The temperature of the mixed water can be set in a range from 20°C to 55°C, depending on the setting of the knob. Each number corresponds to a temperature value as from the scheme to the side.



To handle the knob, it is first necessary to unscrew

anticlockwise

N°	MIXED TEMPERATURE
MIN	20°C
1	28°C
2	35°C
3	41°C
4	47°C
5	51°C
MAX	55°C

the screw in the center, so as to disable the tamper-proof device. This device prevents accidental rotation of the knob, which would lead to changes of the mixed temperature.To reactivate the tamper-proof device, simply screw the knob screw clockwise.

#### For a proper setting of the mixing temperature of the thermostatic mixing valve, it is important to carry out the operation First start system when the system is cold.

To realize the first setting, follow these steps:

- 1. Unscrew counterclockwise the locking screw of the knob;
- 2. Set a temperature value slightly below the desired mixed temperature;
- 3. Turn on the heat generator and wait until the working temperature is reached;
- 4. Activate the pump of the unit and wait until the mixing temperature is settled, using the thermometer located on the instrument coupling;
- 5. Turn the knob slowly until the desired value is reached.
- 6. Close the knob locking screw.

## Circulation The mixing unit can be equipped with GRUNDFOS circulation pump. pump HIGH EFFICIENCY CIRCULATOR – GRUNDFOS UPM3 AUTO 25-70 52W

### DATI TECNICI MOTORE

POWER-SUPPLY VOLTAGE	1 x 230 V ( + 10%-15%); FREQUENCY 50/60 HZ
ENERGY EFFICIENCY INDEX	EEI ≤ 0,20 PART3
PROTECTION RATING	IP44 (NON-CONDENSING) – IPX4D (CONDENSING)

### PERFORMANCE AND REGULATION DIAGRAM



LINE	DESCRIPTION	
	CONSTANT CURVE	
	PROPORTIONAL PRESSURE	
	CONSTANT PRESSURE	

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L1	L3	B1	B2	H1	H2	H3
130	90	72	45	36	92	128



GIM

GIM

GIM

## Fluid characteristics

Reference standard for water treatments in heating systems is Norm UNI 8065:2019 which regulates the parameters that must be observed to avoid scale and corrosion phenomena.

In order to grant product warranty, the fluid characterstics must comply with the rules in force in the country of relevance or at least present features not less to the ones prescribed by the Norm UNI 8065:2019.

In particular, minimum standards necessary but not sufficient to control are the following:

Fluid aspect:	Limpid
PH:	Between 7 and 8
Iron (FE):	< 0,5 mg/kg (< 0,1 mg/kg for steam)
Copper (CU):	< 0,1 mg/kg (< 0,05 mg/kg for steam)
Antifreeze:	Passiveted Propylene Glycol
Conditioning:	as indicated by the producer

In any case when using antifreeze and conditioning solutions, is required to control and verify the correct compatibility between these substances and the construction materials stated in Pintossi+C technical datasheet.