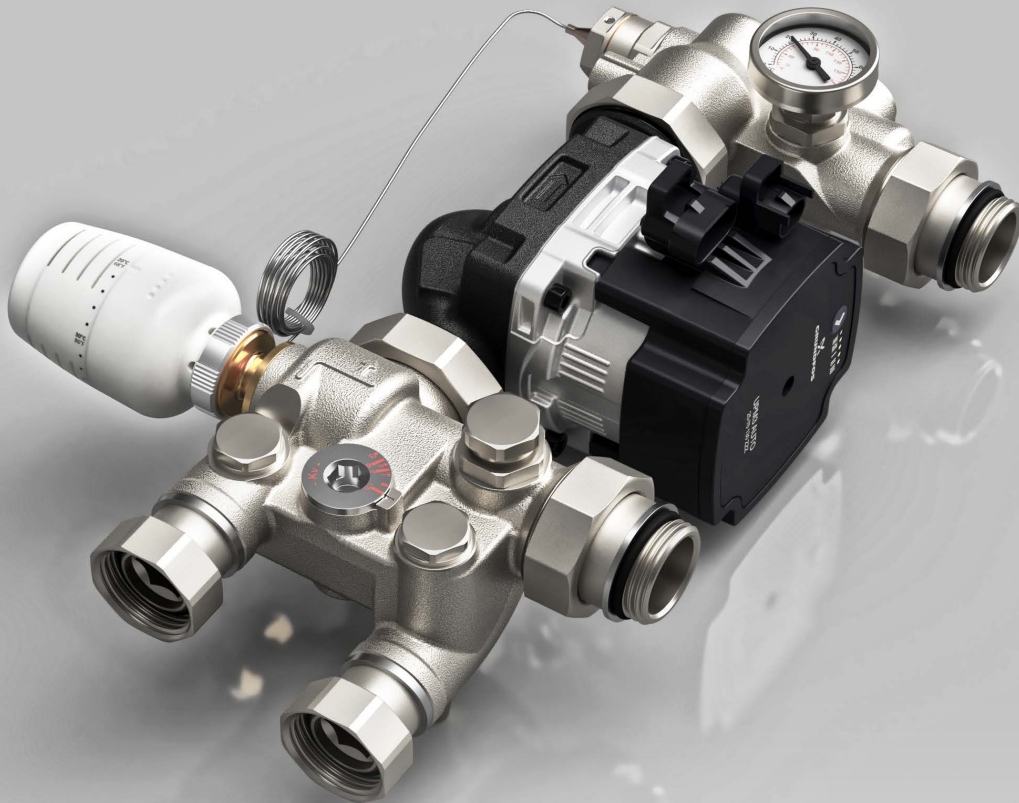


# Warmup S3 Mixing Unit

WHS-M-S3-MIX



## Full 3-way mixing control

Full control mixing valve with adjustable bypasses enables renewable heat sources to be used with no loss in efficiency.

## Circulator isolation valve

Prevents water bypass during the manifold filling process, ensuring air is efficiently removed from all circuits and minimises water loss during circulator replacement.

## Grundfos UPM3 25-70 130 circulator

Provides constant pressure regulation for stable circuit flow rates ensuring consistent heating performance across all active circuits.

## Anti-tampering

Anti-tampering device fitted within Capillary Thermostat deters unwanted adjustments.

## Overview

The Warmup S3 Mixing Unit is necessary when the heat source's flow temperature could surpass the design water temperature of the floor heating system. This applies to heat sources that occasionally overheat during sterilisation cycles or uncontrolled heating.

The mixing unit provides true 3-way mixing control. It blends heated water from the primary heating circuit with water from the secondary floor circuits through the manifold. The adjustable primary bypass ensures a minimum flow rate for any heat source, like heat pumps, is always met. It facilitates easy commissioning of primary circuits before the underfloor heating (UFH) is operational and also includes an adjustable secondary bypass.

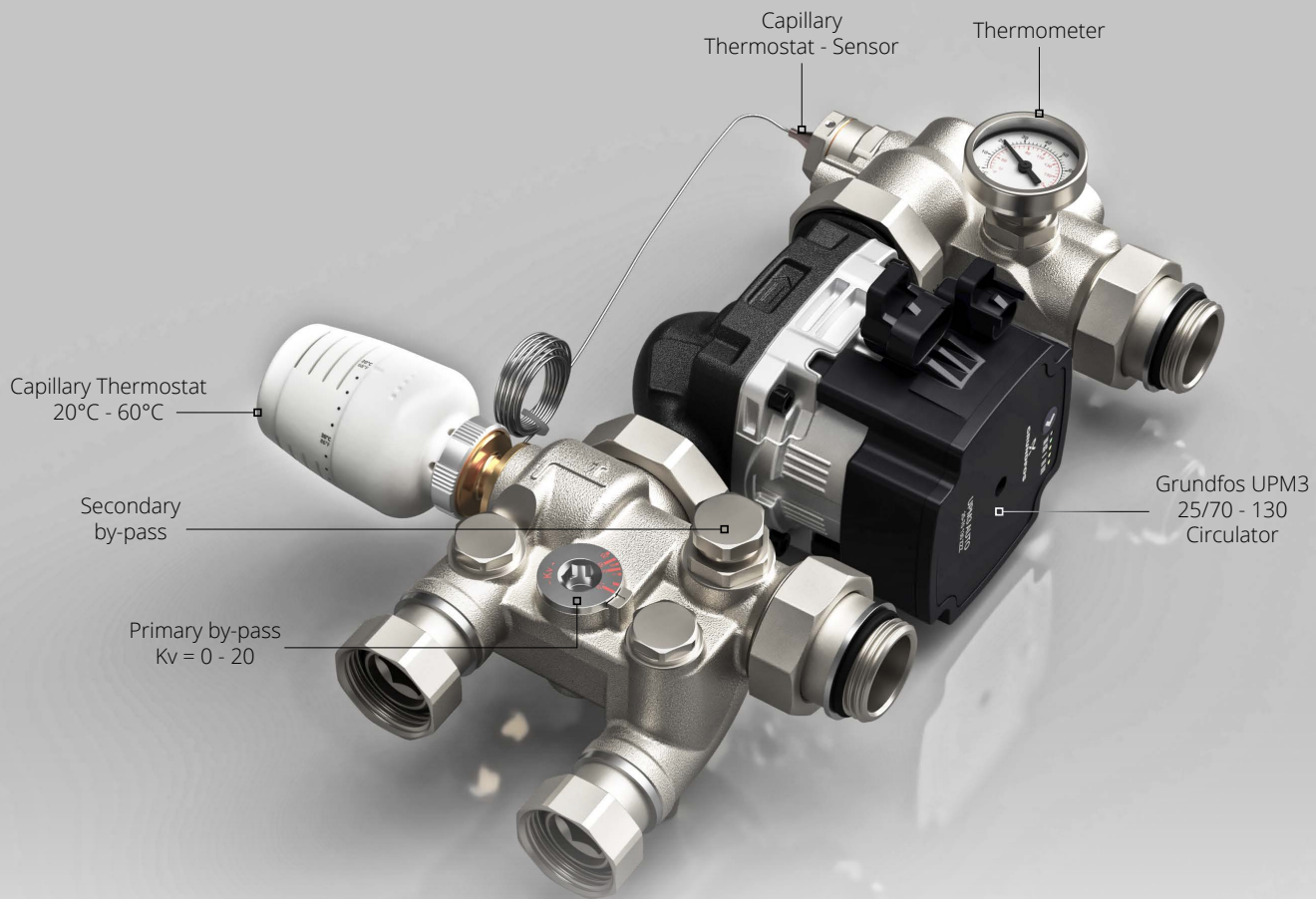
The Grundfos UPM3 25-70 130 circulator is highly efficient, surpassing EcoDesign requirements. It features a neodymium permanent magnet and a 3-phase ECM stator with 6 windings. In Constant Pressure Mode, the circulator

maintains a constant flow rate through each active circuit, regardless of the number of circuits.

The mixing unit also includes a circulator isolation valve, which prevents water from bypassing circuits during manifold filling and minimises water loss during circulator replacement. Unlike check valves, it doesn't add flow resistance or noise.

Temperature control for the underfloor heating system is achieved through a capillary actuator. It allows adjustable set points between 20°C and 60°C, complying with EN1264:4 requirements for 25°C screed commissioning. The actuator's adjustable head is tamper-resistant, restricting temperature adjustments to a set limit or locking it in position.

# Mixing Unit Overview



## Technical specifications

### UPM3 AUTO 25-70 130 ZZZ

#### Electrical data

Power input - P1	5 - 52 W
Rated voltage	1 x 230 V; 50Hz
Maximum current consumption	0.07 - 0.52 A
Enclosure class (IEC 34-5)	IP44
Thermal protec	ELEC

#### Liquid

Pumped liquid	Water
Liquid temperature range	2 - 110 °C
Selected liquid temperature	60 °C
Density	983.2 kg/m <sup>3</sup>

#### Installation

Maximum ambient temperature	70 °C
Maximum operating pressure	10 bar
Port-to-port length	130 mm

#### Technical

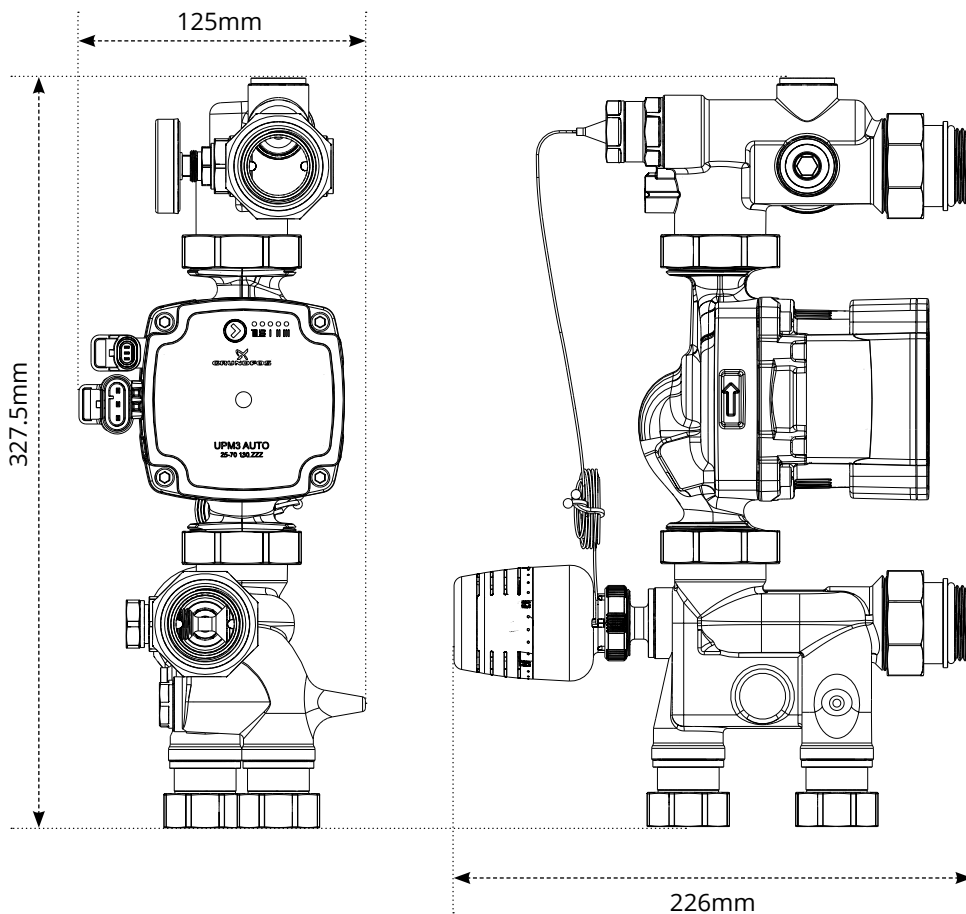
Maximum head	70 dm
TF class	110
Approvals	CE, UKCA, VDE
Warranty	2 Year

\* 10 Year warranty on the S3 Mixing Unit with stand-alone 2 Year warranty on the Grundfos UPM3 AUTO pump

## Capillary Thermostat

Product code	WHS-M-S3-SENSOR
Type	Liquid expansion thermostat
Setting range	20 - 60°C
Hysteresis	0.6 K
Max heat transfer fluid temperature	80°C
Knob	ABS
Head body	PC and ABS blend
Limiting and locking washer	PA 6 + 30% GF
Ring nut	CW617N brass
Safety device	- cartridge and spindle: POM - spring: spring steel wire DIN 17223 class D

## Dimensions



# Components & parts



**WHS-M-S3-UPM3**  
Spare Part  
Grundfos UPM3 Auto Pump



**WHS-M-S3-SENSOR**  
Spare Part  
S3 Mixing Unit - Capillary Thermostat



**MFD-S3-MIXVALVE**  
Spare Part  
S3 Mixing Unit - Mixing Cartridge

## Contact

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