

Grundfos UPM3 Flex AS

User Manual





The Grundfos UPM3 Flex is a highly efficient, A-rated circulation pump.

Compact and easy to install, the UPM3 Flex is ideal for underfloor heating systems, offering energy savings up to 80% and working with or without a PWM signal for future-proofing systems, featuring internal controls for constant curves and low energy use.



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Overview

Grundfos UPM3 Flex AS 25–75 130mm Circulation Pump

The Grundfos UPM3 FLEX AS 25–70 130 Pump is a high efficiency A Rated circulation pump and a reliable work horse for water underfloor heating systems. The lightweight design and compact size makes installation simple even in tight spaces.

UPM3 is suitable for a wide variety of applications from boilers to underfloor heating systems. UPM3 is controlled via a digital signal to ensure the optimum operation.

Designed for best-in-class efficiency with low maintenance. Compared to conventional circulators they cut energy consumption by up to 80%, while delivering noise-free performance.

Design Specifications

A wet running circulation pump with G 6/4" M connections.

Maximum head	70 dm
TF class	110
Impeller	PES 30% GF
Maximum ambient temperature	70 °C
Maximum operating pressure	10 bar
Port-to-port length	130 mm
Pumped liquid	Water
Liquid temperature range	2 – 110 °C
Selected liquid temperature	60 °C
Density	983.2 kg/m ³
Power input	PI: 2 – 52 W
Mains frequency	50Hz
Rated voltage	1 x 230 V
Maximum current consumption	0.04 – 0.52 A
Enclosure class (IEC 34-5)	IP44
Thermal protection	ELEC
Energy (EEI)	0.20
Net weight	1.88 kg
Gross weight	2.24 kg

Performance

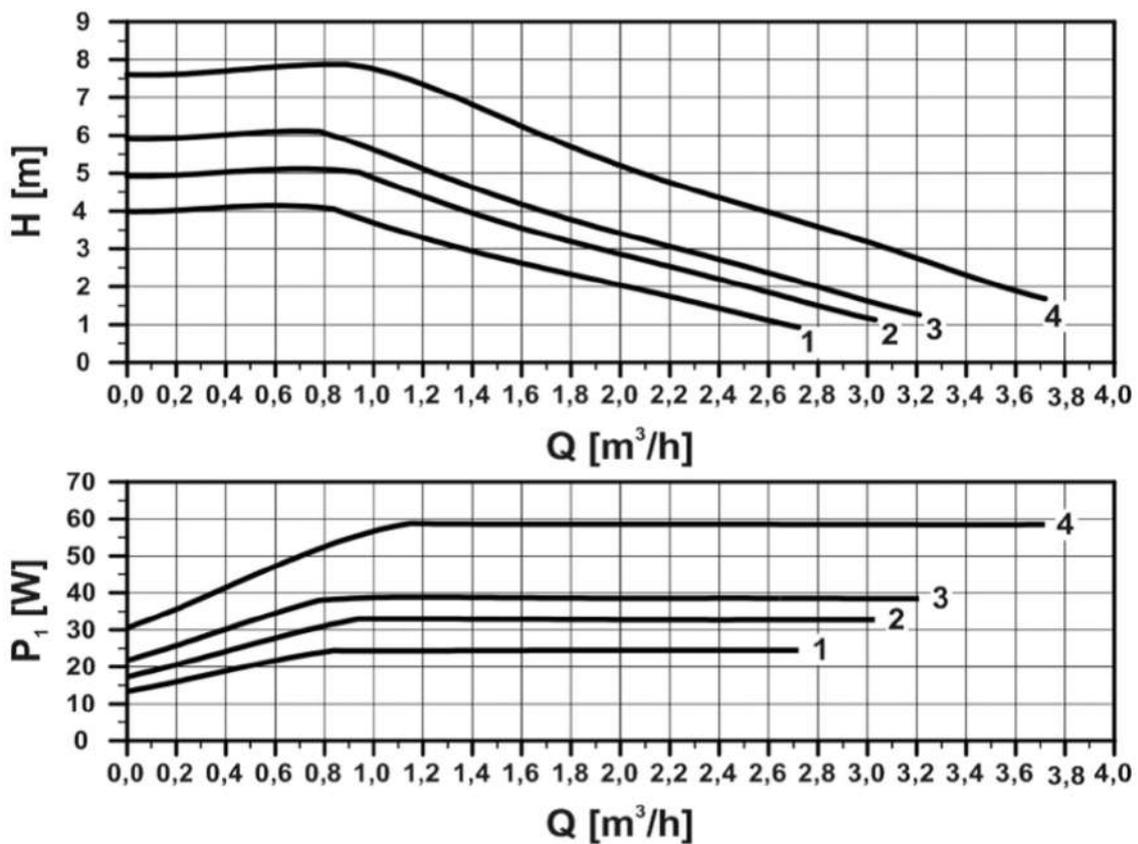
Pump Control

The circulation pump can be controlled by an external PWM signal (profile for use in heating systems) or without a PWM signal by selecting a pump performance curve.

A maximum curve of a pump working range can be defined.

- with PWM signal the pump speed changes with the signal value up to the maximum of the selected curve.
- without PWM signal the pump runs at the max. speed according to the selected curve.

Performance Curves



Curve	Max. H	Max. P1
	(upper graph)	(lower graph)
1	4m	25 W
2	5m	33W
3	6m	39W
4	7,5m	60 W

Performance (continued)

Performance Display

When the pump is switched on it runs at factory settings or the last setting. The display shows the momentary pump performance.

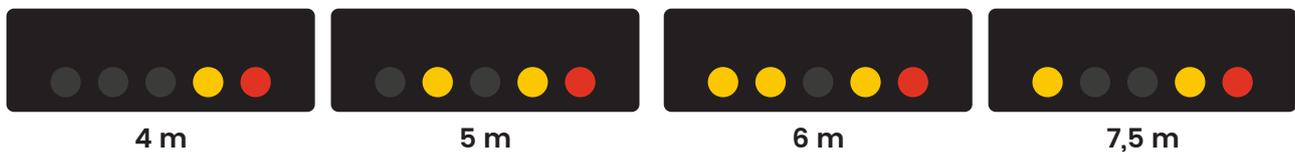
Display	State	Performance in % of P1 max
1 Flashing Green LED	Standby Mode (external control only)	0
1 Green + 1 Yellow LEDs	Low Performance	0-25
1 Green + 2 Yellow LEDs	Medium-Low Performance	25-50
1 Green + 3 Yellow LEDs	Medium-High Performance	50-75
1 Green + 4 Yellow LEDs	High Performance	75-100

Settings Display

WARNING: LEDs may be turned by 180°, depending on the specific pump type.

By pressing the button the display switches to 'performance view' and the current settings will be shown by LEDs for 2 seconds (see figures below).

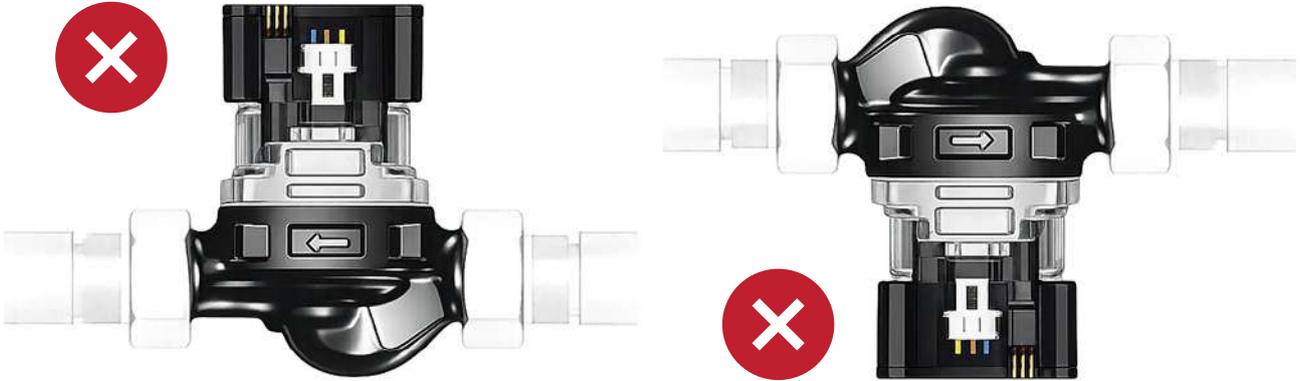
1. Press the push button until the LEDs start flashing, the pump will switch to adjustment selection mode.
2. To select your desired setting, press the button repeatedly until you find the setting you need (see the figures below). If you pass the desired setting, you have to go one more round until it appears again – there is no way back in the loop.



3. Release the button for more than 10s and the LEDs will return to 'performance view', while the last setting is saved.

Pump Positions & Wiring

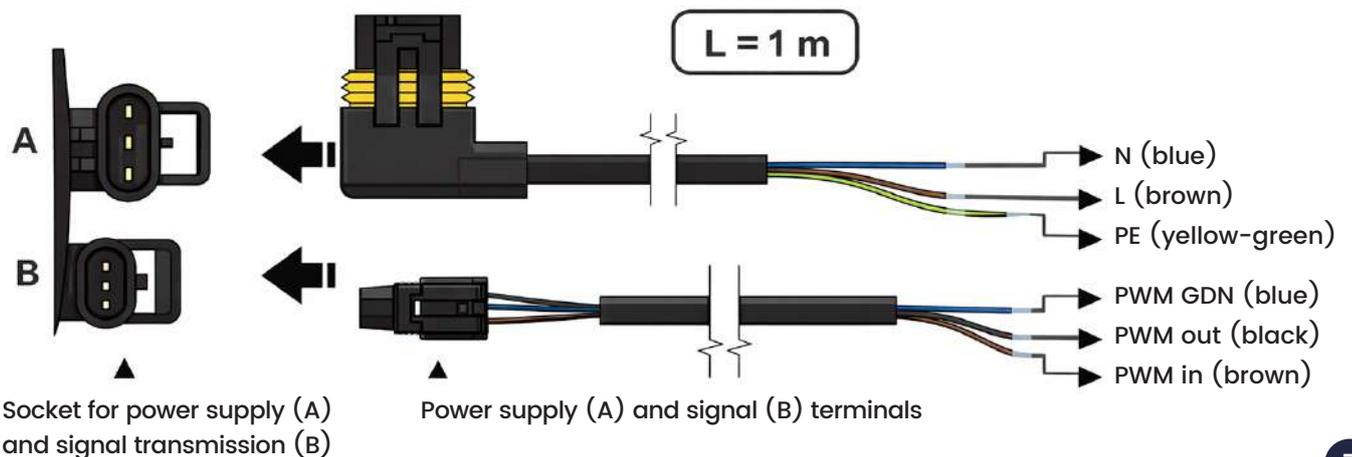
Prohibited Pump Positions



Permissible Pump (Actuator) Positions



Pump Wiring

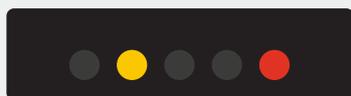


Troubleshooting

Alarm Status & Fault



Seized Pump



Low Voltage



Electrical Fault

Fault	Display	Solution
<p>OFF 0 V</p>		<p>Pump does not function, no power.</p> <p>A Check the power plug is plugged in. B Check the switch is turned on.</p>
<p>ON 230 V</p>		<p>The LED is lit - an axle or impeller is stuck.</p> <p>To release the axle/impeller, press on the screw in front of the pump and turn it using a screwdriver.</p>
<p>ON <160 V</p>		<p>The LED is lit - Supply Voltage too low.</p> <p>Check the supply voltage.</p>
<p>ON 230 V</p>		<p>The LED is lit - Supply Voltage too low, Severe Malfunction.</p> <p>Check the supply voltage. Replace the pump.</p>

Warranty



Grundfos Pumps come with a **2 Year** Warranty.

The 2 Year Warranty covers defects in materials and workmanship. It does not cover issues from normal wear and tear or defects due to incorrect installation or use.

Please visit website for full terms & conditions.

www.theunderfloorheatingcompany.co.uk





Get in touch...



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Drop us an email, we'll get straight back to you...
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Excellent  ★ Trustpilot

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