

Grundfos UPM3

The next generation of OEM circulators

Intelligent solutions for all HVAC systems



be
think
innovate

GRUNDFOS 

Introducing UPM3

“The new generation of Grundfos UPM3 circulators is designed with our customers’ needs and challenges in mind. The range offers the flexibility to meet any HVAC demand, the intelligence to do this with top-class efficiency, and the reliability to provide years and years of trouble-free operation.”

– Henrik Bonde, President, Grundfos HVAC OEM

The HVAC industry faces the constant challenge of delivering smaller and more efficient products. This places great demands on the components inside. Our range of UPM3 circulators sets new standards for system integration, allowing you to exceed your customers’ expectation.

Made to integrate – easily and efficiently

The UPM3 range comes with:

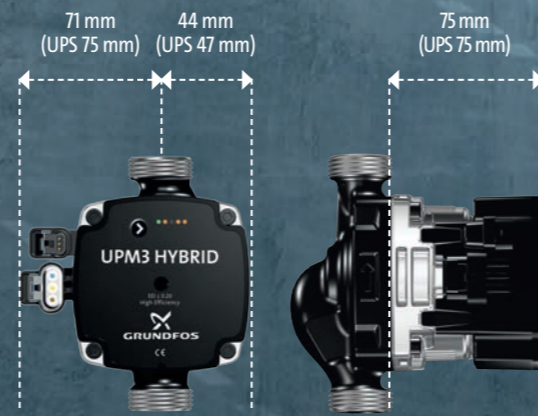
- » Optimised design fit for easy accessibility
- » Intelligent configuration
- » High efficiency (exceeding the Ecodesign benchmark level)
- » Unmatched reliability

Two platforms. Unlimited possibilities.

The basic UPM3 hardware model is controlled via a signal cable entry and does not feature a user interface. The UPM3 Hybrid, on the other hand, combines external signal controlling and internal self-controlling, providing you with access to a full range of settings that will cover any circulator challenge you might encounter.

The UPM3 range is designed for all kinds of HVAC applications:

- » Boiler systems
- » Heat pumps
- » Solar thermal systems
- » Heating kits
- » DHW systems
- » Micro CHP systems

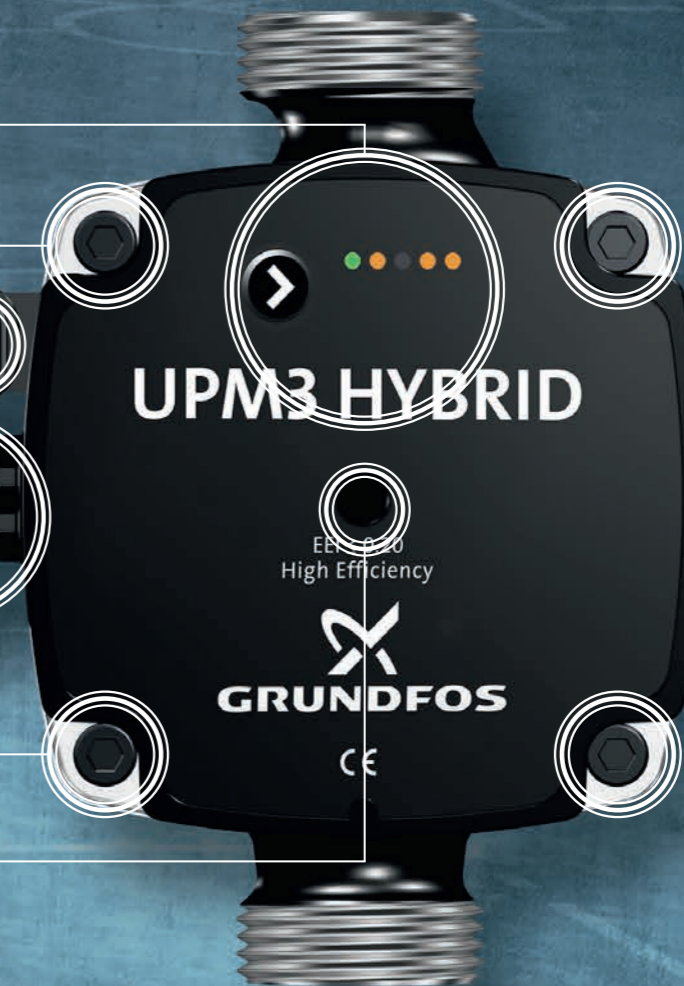


Easy access to the pump head screws from the front

Easy access to the user interface from front

Easy access to the connectors from front

Easy access to the de-blocking screw from front



130 mm

SIZE 1:1

THE SMALLEST GRUNDFOS OEM CIRCULATOR EVER

THE UPM3 IS THE SMALLEST CIRCULATOR FOR SYSTEM INTEGRATION THAT WE HAVE EVER BUILT. JUST AS COMPACT AS THE UPS 15, IT OFFERS A FULL RANGE OF TECHNOLOGICAL INNOVATIONS, AS WELL.

Made for **trouble-free operations**

ULTIMATE RELIABILITY

We know that no amount of features will ever make up for lacking reliability. That is why the UPM3 is made from only the most durable materials and with high quality craftsmanship in every welding.

To continue the success of the UPM2 and provide the lowest failure rate ever, the UPM3 comes with

- » Field and lab tested product quality
- » Ceramic bearing shaft
- » Double de-blocking system
- » High temperature resilience

Pushing **the limits of innovation**

Exceeding efficiency benchmarks

With its new advanced hydraulic system, the UPM3 exceeds the Ecodesign 2015 requirements of EEI < 0,20

Excellent product quality

To ensure that the UPM3 range lives up to the world-renowned Grundfos quality, the range has been extensively lab and field-tested. And it has passed with flying colours.

**INSTALLED IN OVER
200 MILLION CIRCULATORS**

SAFE!

Ceramic bearing shaft

The UPM3 comes equipped with ceramic bearing shafts for a long and trouble-free lifetime. The ceramic material is extremely durable and will not wear.

**MANUAL BACK-UP
FUNCTION**

SAFE!

Double de-blocking system

The UPM3 features a double safety de-blocking system: Electronic de-blocking that maintains the maximum starting torque up to 25 Ncm and manual de-blocking accessible from the front without demounting the control box.

Active inrush current limitation

In the new UPM3, the inrush current level is actively limited to a level that will not harm standard power relays. This reduces contact wear and extends product lifetime.

**BUILT FOR UP TO 70° C
AMBIENT TEMPERATURES**

SAFE!

High temperature resilience

The UPM3 is designed to perform perfectly in ambient temperatures of up to 70° Celsius. The resilience to heat will enhance the possibilities of system integration enormously.

Two advanced platforms. Same superior hardware.



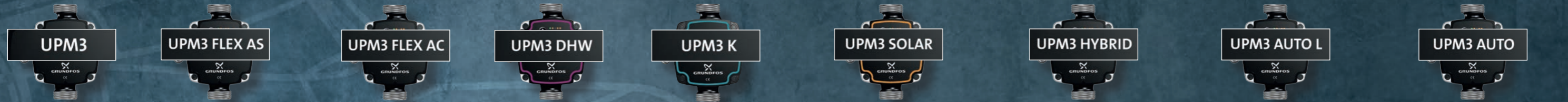
TWO PLATFORMS



The NEW UPM3 generation

← WITH PWM SIGNAL

WITHOUT PWM SIGNAL →



VERSIONS	P1	VERSIONS	P1	VERSIONS	P1	VERSIONS	P1	VERSIONS	P1	VERSIONS	P1	VERSIONS	P1	VERSIONS	P1		
UPM3 xx - 75	60 W	UPM3 FLEX AS xx - 75	60 W	UPM3 FLEX AC xx - 75	60 W	UPM3 DHW xx - 70	52 W	UPM3K xx - 75	60 W	UPM3 SOLAR xx - 145	60 W	UPM3 HYBRID xx - 70	52 W	UPM3 AUTO L xx - 70	52 W	UPM3 AUTO xx - 70	52 W
UPM3 xx - 70	52 W	UPM3 FLEX AS xx - 70	52 W	UPM3 FLEX AC xx - 70	52 W	UPM3 DHW xx - 50	33 W	UPM3K xx - 70	52 W	UPM3 SOLAR xx - 105	52 W	UPM3 HYBRID xx - 50	33 W	UPM3 AUTO L xx - 50	33 W	UPM3 AUTO xx - 50	33 W
UPM3 xx - 60	39 W	UPM3 FLEX AS xx - 50	33 W	UPM3 FLEX AC xx - 50	33 W	UPM3 DHW xx - 20	11 W	UPM3K xx - 50	33 W	UPM3 SOLAR xx - 75	45 W						
UPM3 xx - 50	33 W																
UPM3 xx - 40	25 W																

THERE IS A UPM3 FOR EVERY PROJECT

No matter if you are looking for a circulator with one fixed setting or a more flexible solution, with or without PWM signal, there is a UPM3 to meet your demands.

Take for instance the UPM 3 Hybrid. By combining external controlling with internal self-controlling, the UPM3 Hybrid is actually two advanced platforms in one. This gives you access to a full range settings, covering all your circulator needs.



SOLAR THERMAL SYSTEMS



HEAT PUMP SYSTEMS



BOILER SYSTEMS



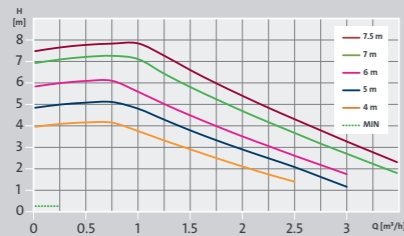
DHW KIT SYSTEMS



HEATING KIT SYSTEMS

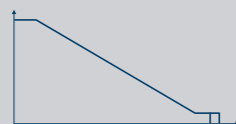


HEATING/COOLING SYSTEMS

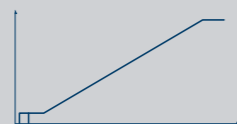


SETTING OPTIONS

EXTERNALLY CONTROLLED BY	MAX HEAD
PWM PROFILE A	7,5 M
PWM PROFILE C	7 M
KM BUS	6 M
	5 M
	4 M



PWM PROFILE A



PWM PROFILE C

UPM3

UPM3 is the right choice for all projects and appliances produced on a big scale where only one specific external control mode with one specific speed range is requested.

UPM3 is externally controlled via a signal cable entry available as versions with maximum head between 4 and 7,5 m and a wide range of standard and customized housings.

VERSIONS	P1	EEI
UPM3 15-75 130	60 W	EEI ≤ 0.20
UPM3 25-75 130	60 W	EEI ≤ 0.20
UPM3 25-75 180	60 W	EEI ≤ 0.20
UPM3 15-70 130	52 W	EEI ≤ 0.20
UPM3 25-70 130	52 W	EEI ≤ 0.20
UPM3 25-70 180	52 W	EEI ≤ 0.20
UPM3 15-60 130	39 W	EEI ≤ 0.20
UPM3 25-60 130	39 W	EEI ≤ 0.20
UPM3 25-60 180	39 W	EEI ≤ 0.20
UPM3 15-50 130	33 W	EEI ≤ 0.20
UPM3 25-50 130	33 W	EEI ≤ 0.20
UPM3 25-50 180	33 W	EEI ≤ 0.20
UPM3 15-40 130	25 W	EEI ≤ 0.20
UPM3 25-40 130	25 W	EEI ≤ 0.20
UPM3 25-40 180	25 W	EEI ≤ 0.20

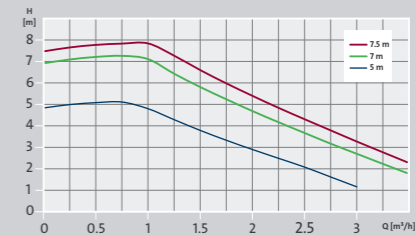
UPM3 FLEX AS

UPM3 FLEX AS is a flexible solution for boiler systems now and in the future. It is designed to work both with and without PWM signal, allowing you to upgrade your systems without having to change the controller available as 7,5, 7 or 5 m version.

VERSIONS	P1	EEI
UPM3 FLEX AS 15-75 130	60 W	EEI ≤ 0.20
UPM3 FLEX AS 25-75 130	60 W	EEI ≤ 0.20
UPM3 FLEX AS 25-75 180	60 W	EEI ≤ 0.20
UPM3 FLEX AS 15-70 130	52 W	EEI ≤ 0.20
UPM3 FLEX AS 25-70 130	52 W	EEI ≤ 0.20
UPM3 FLEX AS 25-70 180	52 W	EEI ≤ 0.20
UPM3 FLEX AS 15-50 130	33 W	EEI ≤ 0.20
UPM3 FLEX AS 25-50 130	33 W	EEI ≤ 0.20
UPM3 FLEX AS 25-50 180	33 W	EEI ≤ 0.20

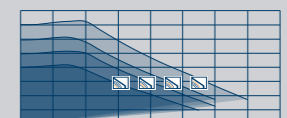
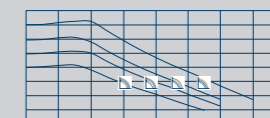
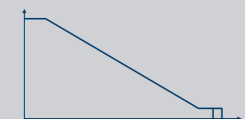
SETTING VIEW

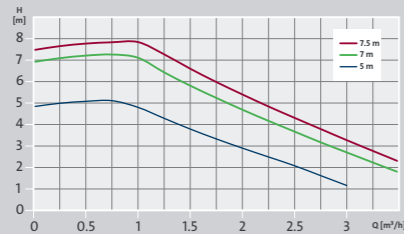
PWM PROFILE A: CURVE 1		
PWM PROFILE A: CURVE 2		
PWM PROFILE A: CURVE 3		
PWM PROFILE A: CURVE 4		



SETTING OPTIONS

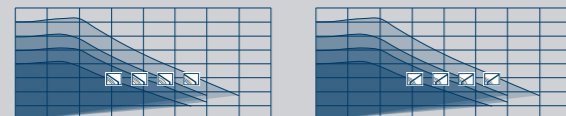
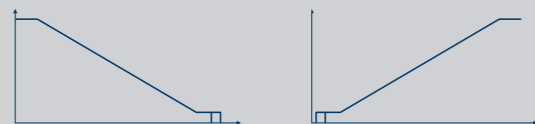
PUMP RUNS WITHOUT PWM SIGNAL			PUMP RUNS WITH PWM SIGNAL		
MAXIMUM CURVE			PWM PROFILE A		
2 M	4 M	4 M	2 M	4 M	4 M
3 M	5 M	5 M	3 M	5 M	5 M
4 M	6 M	6 M	4 M	6 M	6 M
5 M	7 M	7,5 M	5 M	7 M	7,5 M





SETTING OPTIONS

PUMP RUNS WITHOUT PWM SIGNAL			PUMP RUNS WITH PWM SIGNAL			PUMP RUNS WITH PWM SIGNAL		
PWM PROFILE A			PWM PROFILE C			PWM PROFILE C		
2 M	4 M	4 M	2 M	4 M	4 M	2 M	4 M	4 M
3 M	5 M	5 M	3 M	5 M	5 M	3 M	5 M	5 M
4 M	6 M	6 M	4 M	6 M	6 M	4 M	6 M	6 M
5 M	7 M	7,5 M	5 M	7 M	7,5 M	5 M	7 M	7,5 M



UPM3 FLEX AC

By combining 2 PWM profiles, the UPM3 FLEX AC brings new flexibility to the system developer, the OEM production and even to the field installation.

Without changing the hardware, the settings can easily be changed: with 4 maximum curves either with PWM profile A for heating or PWM profile C for solar available as 7 m version.

VERSIONS	P1	EEI
UPM3 FLEX AC 15-75 130	60 W	EEI ≤ 0.20
UPM3 FLEX AC 25-75 130	60 W	EEI ≤ 0.20
UPM3 FLEX AC 25-75 180	60 W	EEI ≤ 0.20
UPM3 FLEX AC 15-70 130	52 W	EEI ≤ 0.20
UPM3 FLEX AC 25-70 130	52 W	EEI ≤ 0.20
UPM3 FLEX AC 25-70 180	52 W	EEI ≤ 0.20
UPM3 FLEX AC 15-50 130	33 W	EEI ≤ 0.20
UPM3 FLEX AC 25-50 130	33 W	EEI ≤ 0.20
UPM3 FLEX AC 25-50 180	33 W	EEI ≤ 0.20

SETTING VIEW

PWM PROFILE A: CURVE 1		
PWM PROFILE A: CURVE 2		
PWM PROFILE A: CURVE 3		
PWM PROFILE A: CURVE 4		
PWM PROFILE C: CURVE 1		
PWM PROFILE C: CURVE 2		
PWM PROFILE C: CURVE 3		
PWM PROFILE C: CURVE 4		

UPM3 K

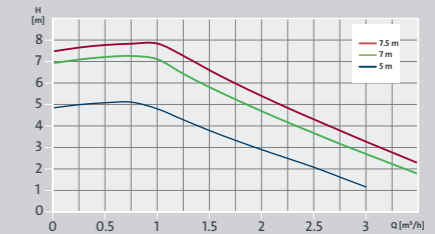
UPM3 K are UPM3 variants for applications with occasionally condensation as systems for heating and cooling with medium temperature 2°C ...110°C.

All UPM3 versions are available with cataphoretic coated stator housing and drain hole in versions with 7,5, 7 or 5 m head.

VERSIONS	P1	EEI
UPM3 K 15-75 130	60 W	EEI ≤ 0.20
UPM3 K 25-75 130	60 W	EEI ≤ 0.20
UPM3 K 25-75 180	60 W	EEI ≤ 0.20
UPM3 K 15-70 130	52 W	EEI ≤ 0.20
UPM3 K 25-70 130	52 W	EEI ≤ 0.20
UPM3 K 25-70 180	52 W	EEI ≤ 0.20
UPM3 K 15-50 130	33 W	EEI ≤ 0.20
UPM3 K 25-50 130	33 W	EEI ≤ 0.20
UPM3 K 25-50 180	33 W	EEI ≤ 0.20

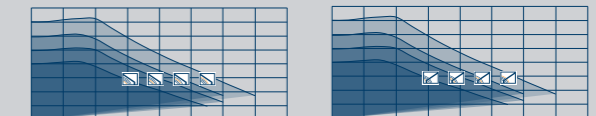
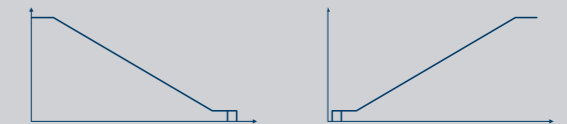
SETTING VIEW

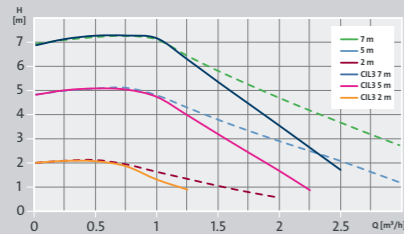
PWM PROFILE A: CURVE 1		
PWM PROFILE A: CURVE 2		
PWM PROFILE A: CURVE 3		
PWM PROFILE A: CURVE 4		
PWM PROFILE C: CURVE 1		
PWM PROFILE C: CURVE 2		
PWM PROFILE C: CURVE 3		
PWM PROFILE C: CURVE 4		



SETTING OPTIONS

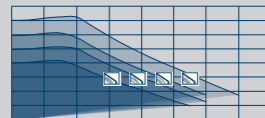
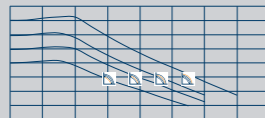
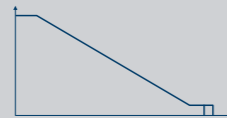
PUMP RUNS WITHOUT PWM SIGNAL			PUMP RUNS WITH PWM SIGNAL			PUMP RUNS WITH PWM SIGNAL		
PWM PROFILE A			PWM PROFILE C			PWM PROFILE C		
2 M	4 M	4 M	2 M	4 M	4 M	2 M	4 M	4 M
3 M	5 M	5 M	3 M	5 M	5 M	3 M	5 M	5 M
4 M	6 M	6 M	4 M	6 M	6 M	4 M	6 M	6 M
5 M	7 M	7,5 M	5 M	7 M	7,5 M	5 M	7 M	7,5 M





SETTING OPTIONS

PUMP RUNS WITHOUT PWM SIGNAL			PUMP RUNS WITH PWM SIGNAL		
MAXIMUM CURVE			PWM PROFILE A		
0,5 M	2 M	4 M	0,5 M	2 M	4 M
1 M	3 M	5 M	1 M	3 M	5 M
1,5 M	4 M	6 M	1,5 M	4 M	6 M
2 M	5 M	7 M	2 M	5 M	7 M



UPM3 DHW

UPM3 DHW is an OEM high efficient circulator offering flexible solutions for potable drinking water systems.

It is designed to recirculate domestic hot water using drinking water approved housings made out of stainless steel or PPS.

It is available in 2, 5 or 7 m versions applicable for domestic hot water systems with or without externally PWM speed control

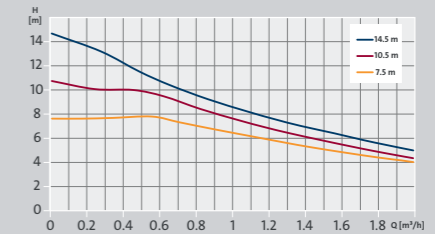
VERSIONS	P1	EEI
UPM3 DHW 15-70 CIL3 PPS	52 W	EEI ≤ 0.20
UPM3 DHW 25-70 130 N	52 W	EEI ≤ 0.20
UPM3 DHW 25-70 180 N	52 W	EEI ≤ 0.20
UPM3 DHW 15-50 CIL3 PPS	33 W	EEI ≤ 0.20
UPM3 DHW 25-50 130 N	33 W	EEI ≤ 0.20
UPM3 DHW 25-50 180 N	33 W	EEI ≤ 0.20
UPM3 DHW 15-20 CIL3 PPS	11 W	EEI ≤ 0.20
UPM3 DHW 25-20 130 N	11 W	EEI ≤ 0.20
UPM3 DHW 25-20 180 N	11 W	EEI ≤ 0.20

SETTING VIEW

PWM PROFILE A: CURVE 1		
PWM PROFILE A: CURVE 2		
PWM PROFILE A: CURVE 3		
PWM PROFILE A: CURVE 4		

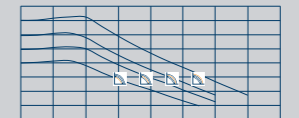
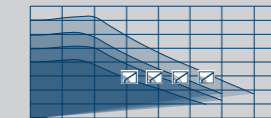
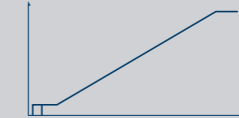
UPM3 SOLAR

UPM3 SOLAR is an OEM high efficient circulator offering flexible solutions for thermal solar systems - no matter if matched flow, constant flow or drainback. It is applicable for solar fluid up to 130°C and designed to work both with and without PWM signal, allowing you to upgrade your systems without having to change the controller available as 7,5, 10,5 or 14,5 m version.



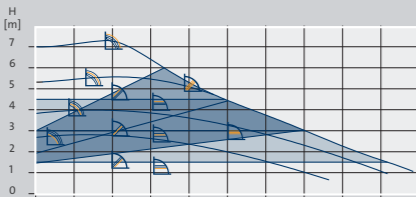
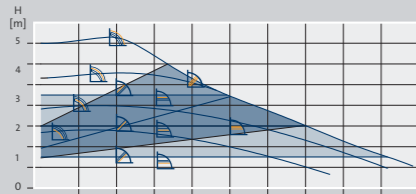
SETTING OPTIONS

PWM PROFILE C			CONSTANT CURVE		
4,5 M	4,5 M	6,5 M	4,5 M	4,5 M	6,5 M
5,5 M	6,5 M	8,5 M	5,5 M	6,5 M	8,5 M
6,5 M	8,5 M	10,5 M	6,5 M	8,5 M	10,5 M
7,5 M	10,5 M	14,5 M	7,5 M	10,5 M	14,5 M



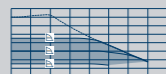
SETTING VIEW

CONST. CURVE: CURVE 1		
CONST. CURVE: CURVE 2		
CONST. CURVE: CURVE 3		
CONST. CURVE: CURVE 4		
PWM PROFILE C: CURVE 1		
PWM PROFILE C: CURVE 2		
PWM PROFILE C: CURVE 3		
PWM PROFILE C: CURVE 4		



SETTING OPTIONS

PROPORTIONAL PRESSURE	CONSTANT PRESSURE	CONSTANT CURVE
CURVE 1	CURVE 1	2 M 4 M
CURVE 2	CURVE 2	3 M 5 M
CURVE 3	CURVE 3	4 M 6 M
AUTOADAPT	AUTOADAPT	5 M 7 M



UPM3 AUTO

UPM3 AUTO is for all applications in which an internally controlled pump is needed. It is designed to be used in appliances or cabinets with increased ambient temperatures and limited space options; either in standalone applications or in kit systems without PWM controller available as 7 or 5 m version.

VERSIONS	P1	EEI
UPM3 AUTO 15-70 130	52 W	EEI ≤ 0.20
UPM3 AUTO 25-70 130	52 W	EEI ≤ 0.20
UPM3 AUTO 25-70 180	52 W	EEI ≤ 0.20
UPM3 AUTO 15-50 130	33 W	EEI ≤ 0.20
UPM3 AUTO 25-50 130	33 W	EEI ≤ 0.20
UPM3 AUTO 25-50 180	33 W	EEI ≤ 0.20

SETTING VIEW

PROP. PRESS.: CURVE 1		
PROP. PRESS.: CURVE 2		
PROP. PRESS.: CURVE 3		
PROP. PRESS.: AUTOADAPT		
CONST. PRESS.: CURVE 1		
CONST. PRESS.: CURVE 2		
CONST. PRESS.: CURVE 3		
CONST. PRESS.: AUTOADAPT		
CONST. CURVE: CURVE 1		
CONST. CURVE: CURVE 2		
CONST. CURVE: CURVE 3		
CONST. CURVE: CURVE 4		

UPM3 AUTO L

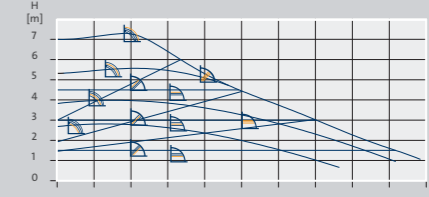
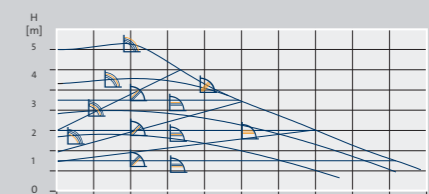
UPM3 AUTO L is for all applications in which an internally controlled pump is needed. It is designed to be used in appliances or cabinets with increased ambient temperatures and limited space options; either in standalone applications or in kit systems without PWM controller. available as 7 or 5 m version.

The AUTO L does not feature AUTOADAPT modes.

VERSIONS	P1	EEI
UPM3 AUTO L 15-70 130	52 W	EEI ≤ 0.20
UPM3 AUTO L 25-70 130	52 W	EEI ≤ 0.20
UPM3 AUTO L 25-70 180	52 W	EEI ≤ 0.20
UPM3 AUTO L 15-50 130	33 W	EEI ≤ 0.20
UPM3 AUTO L 25-50 130	33 W	EEI ≤ 0.20
UPM3 AUTO L 25-50 180	33 W	EEI ≤ 0.20

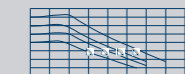
SETTING VIEW

PROP. PRESS.: CURVE 1		
PROP. PRESS.: CURVE 2		
PROP. PRESS.: CURVE 3		
CONST. PRESS.: CURVE 1		
CONST. PRESS.: CURVE 2		
CONST. PRESS.: CURVE 3		
CONST. CURVE: CURVE 1		
CONST. CURVE: CURVE 2		
CONST. CURVE: CURVE 3		
CONST. CURVE: CURVE 4		



SETTING OPTIONS

PROPORTIONAL PRESSURE	CONSTANT PRESSURE	CONSTANT CURVE
CURVE 1	CURVE 1	2 M 4 M
CURVE 2	CURVE 2	3 M 5 M
CURVE 3	CURVE 3	4 M 6 M
		5 M 7 M





VERSIONS	P1	EEI
UPM3 HYBRID 15-70 130	52 W	EEI ≤ 0.20
UPM3 HYBRID 25-70 130	52 W	EEI ≤ 0.20
UPM3 HYBRID 25-70 180	52 W	EEI ≤ 0.20
UPM3 HYBRID 15-50 130	33 W	EEI ≤ 0.20
UPM3 HYBRID 25-50 130	33 W	EEI ≤ 0.20
UPM3 HYBRID 25-50 180	33 W	EEI ≤ 0.20

SETTING OPTIONS

PROPORTIONAL PRESSURE	CONSTANT PRESSURE	CONSTANT CURVE	
CURVE 1	CURVE 1	2 M	4 M
CURVE 2	CURVE 2	3 M	5 M
CURVE 3	CURVE 3	4 M	6 M
AUTOADAPT	AUTOADAPT	5 M	7 M

SETTING OPTIONS

PWM PROFILE A		PWM PROFILE C	
2 M	4 M	2 M	4 M
3 M	5 M	3 M	5 M
4 M	6 M	4 M	6 M
5 M	7 M	5 M	7 M

UPM3 HYBRID

By combining external controlling through signal entry with internal self-controlling, the UPM3 HYBRID covers all your circulator needs in one product, providing you with access to a full range of settings available as 7 or 5 m version.

SETTING VIEW

PROP. PRESS.: CURVE 1		
PROP. PRESS.: CURVE 2		
PROP. PRESS.: CURVE 3		
PROP. PRESS.: AUTOADAPT		
CONST. PRESS.: CURVE 1		
CONST. PRESS.: CURVE 2		
CONST. PRESS.: CURVE 3		
CONST. PRESS.: AUTOADAPT		
CONST. CURVE: CURVE 1		
CONST. CURVE: CURVE 2		
CONST. CURVE: CURVE 3		
CONST. CURVE: CURVE 4		
PWM PROFILE A: CURVE 1		
PWM PROFILE A: CURVE 2		
PWM PROFILE A: CURVE 3		
PWM PROFILE A: CURVE 4		
PWM C PROFILE: CURVE 1		
PWM C PROFILE: CURVE 2		
PWM C PROFILE: CURVE 3		
PWM C PROFILE: CURVE 4		

Wide range of dedicated OEM pump housings generation

UPM3 are available with a wide range of dedicated standard or customized pump housings with different dimensions, materials, design or additional functionalities.



CED 15x130mm



CED 25x130mm



CED 25x180mm



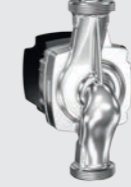
CED 32x180mm



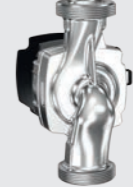
CIL3 15x130mm



NIRO 25x130mm



NIRO 25x180mm



NIRO 32x180mm



CES3



GGES3



GGMBP3



GGBP3



AOKR



CAOD



CIAO2



CIAO AC



CACAO



CESAO1



CESAO2



CESAO4

