

Series 100

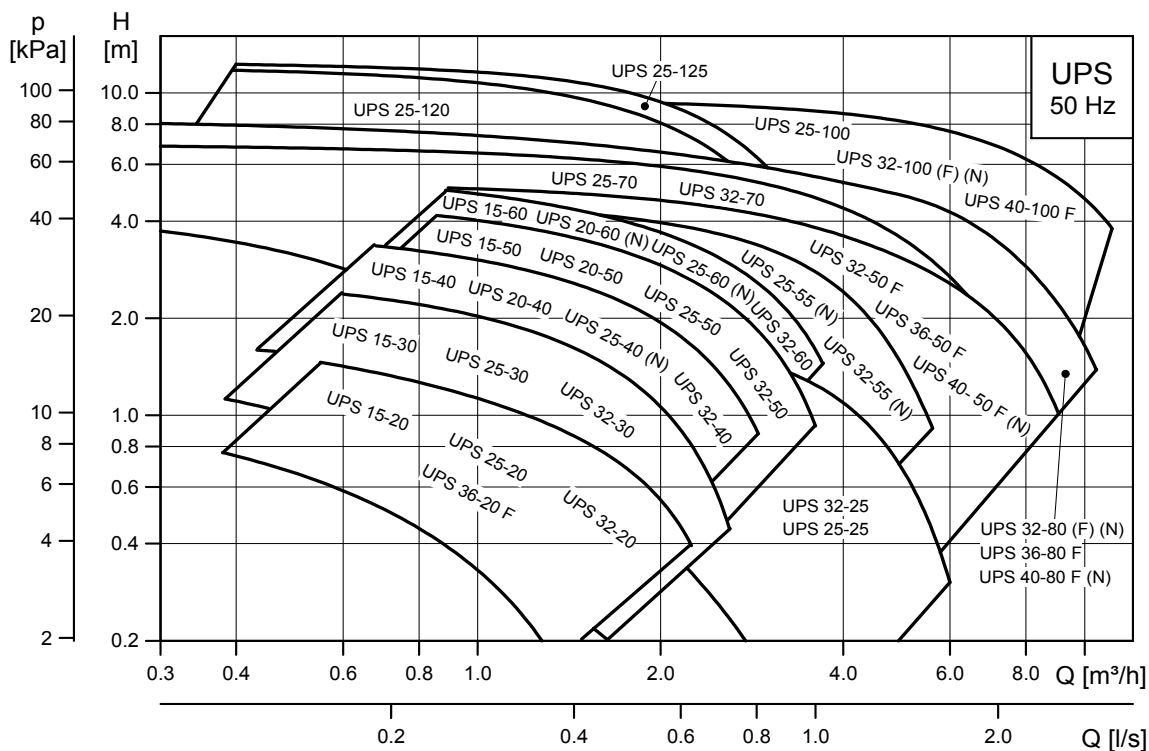
Series 100 circulator pumps

50/60 Hz

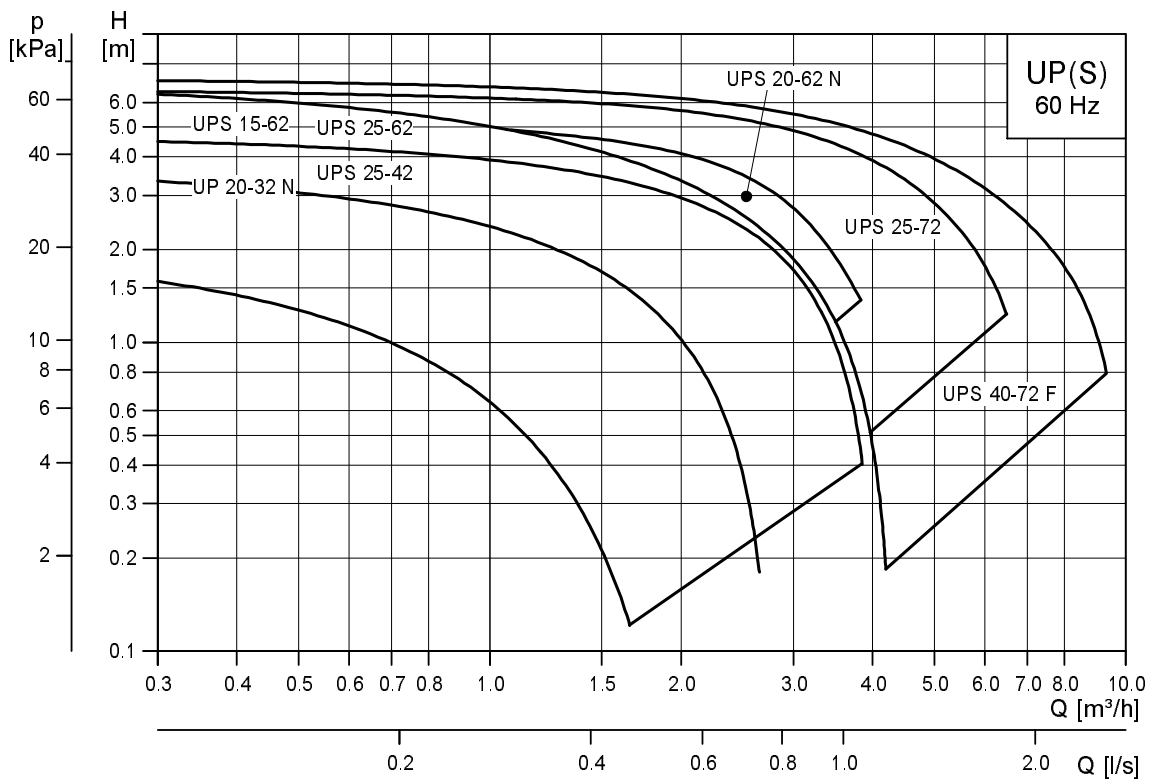


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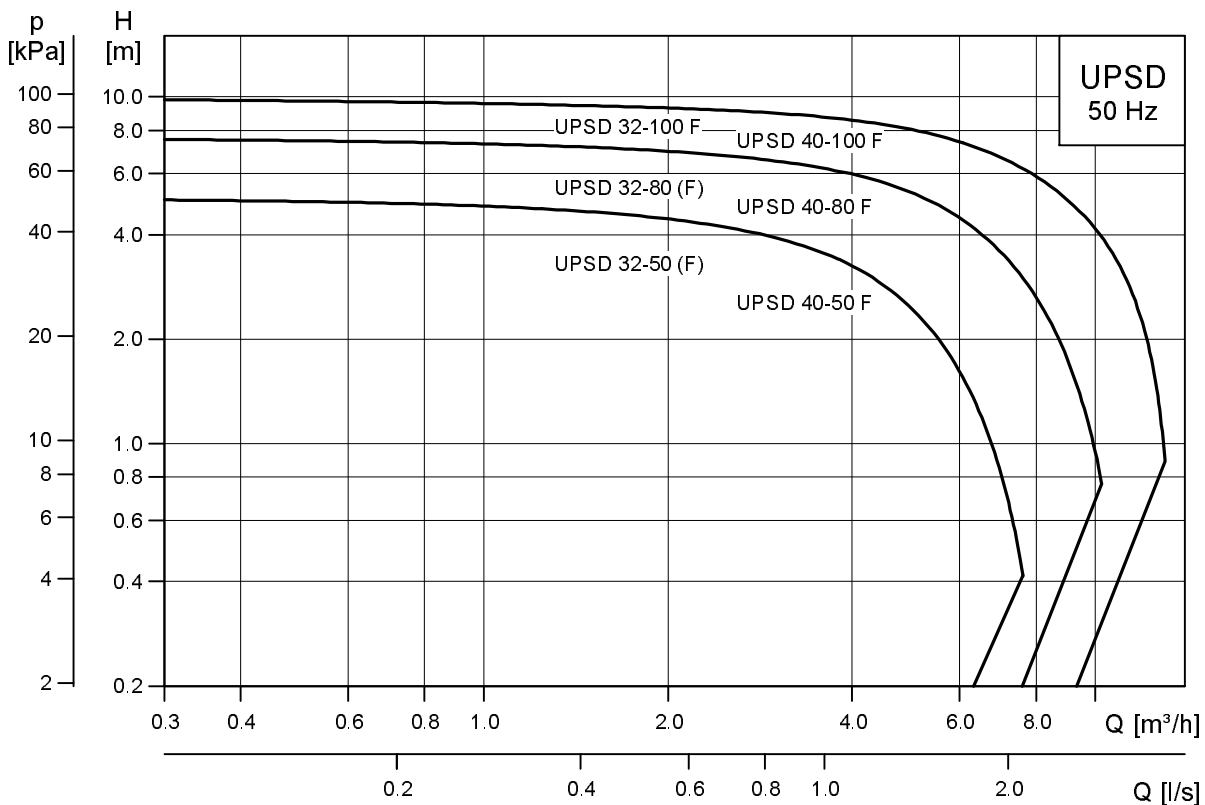
1. Performance range



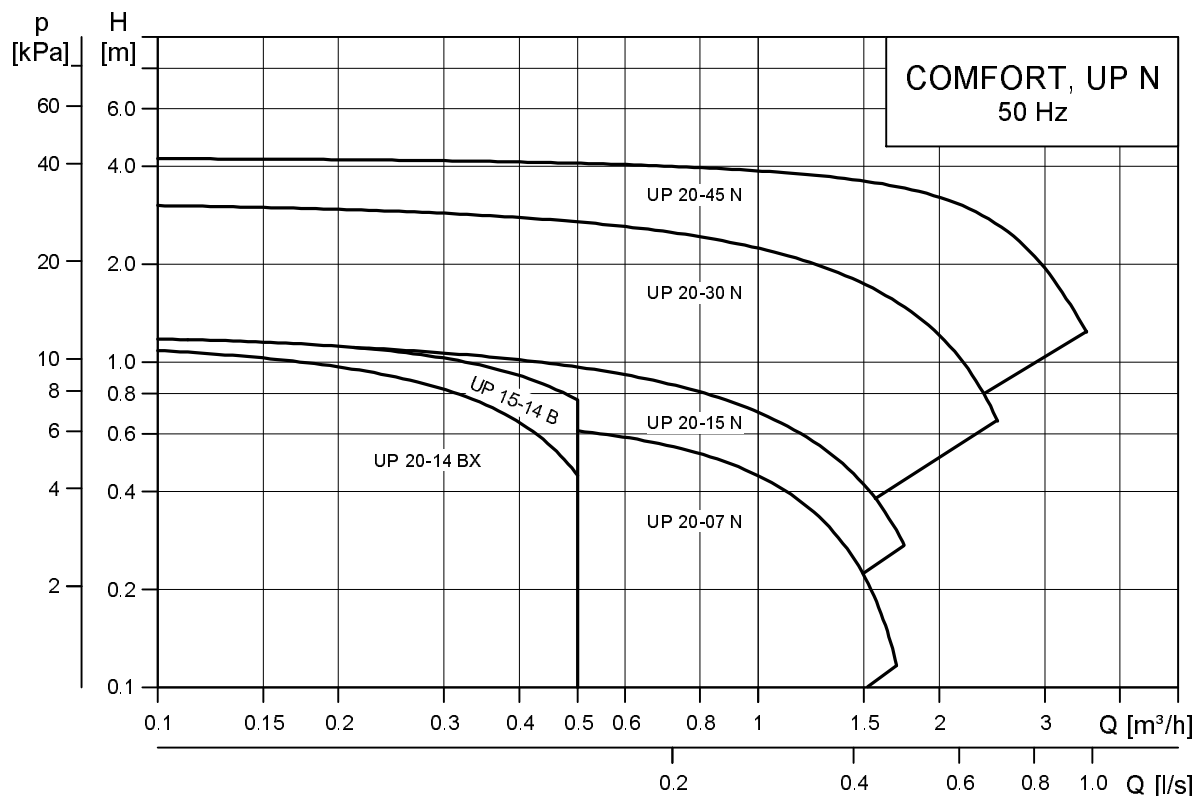
TM00 9602 1709



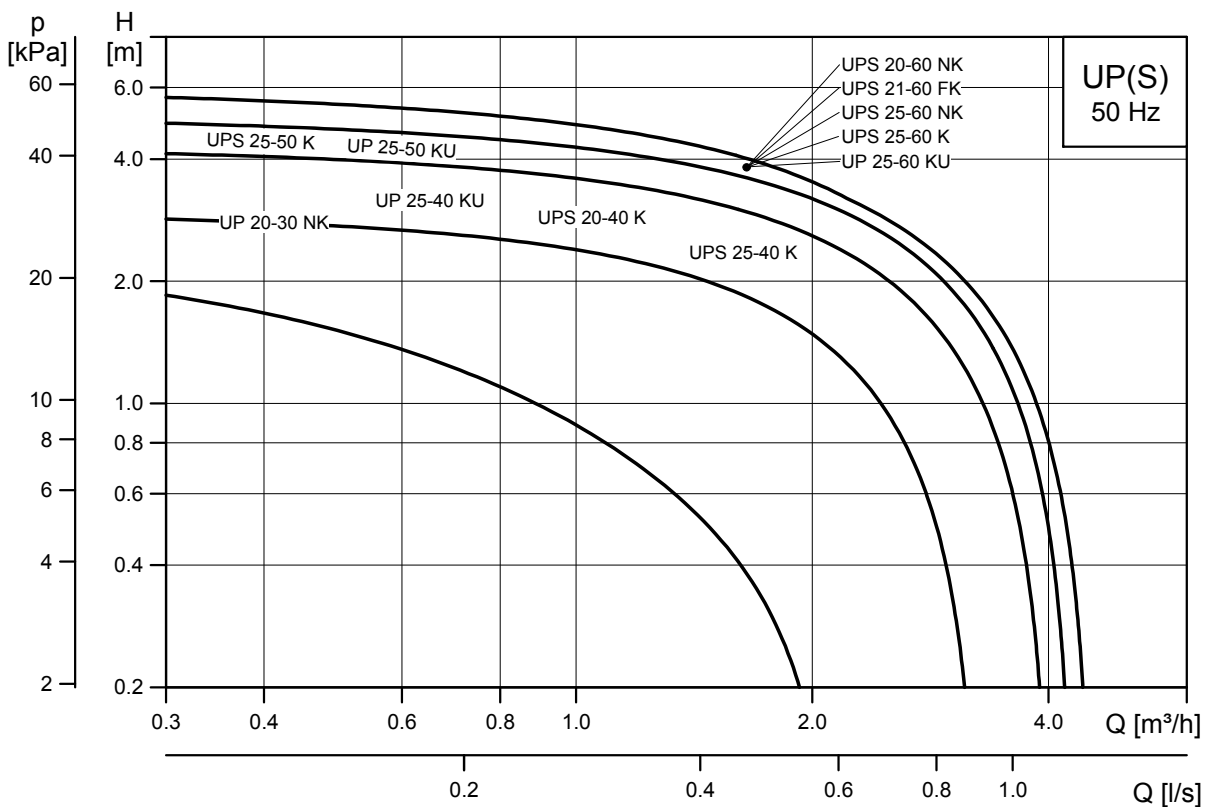
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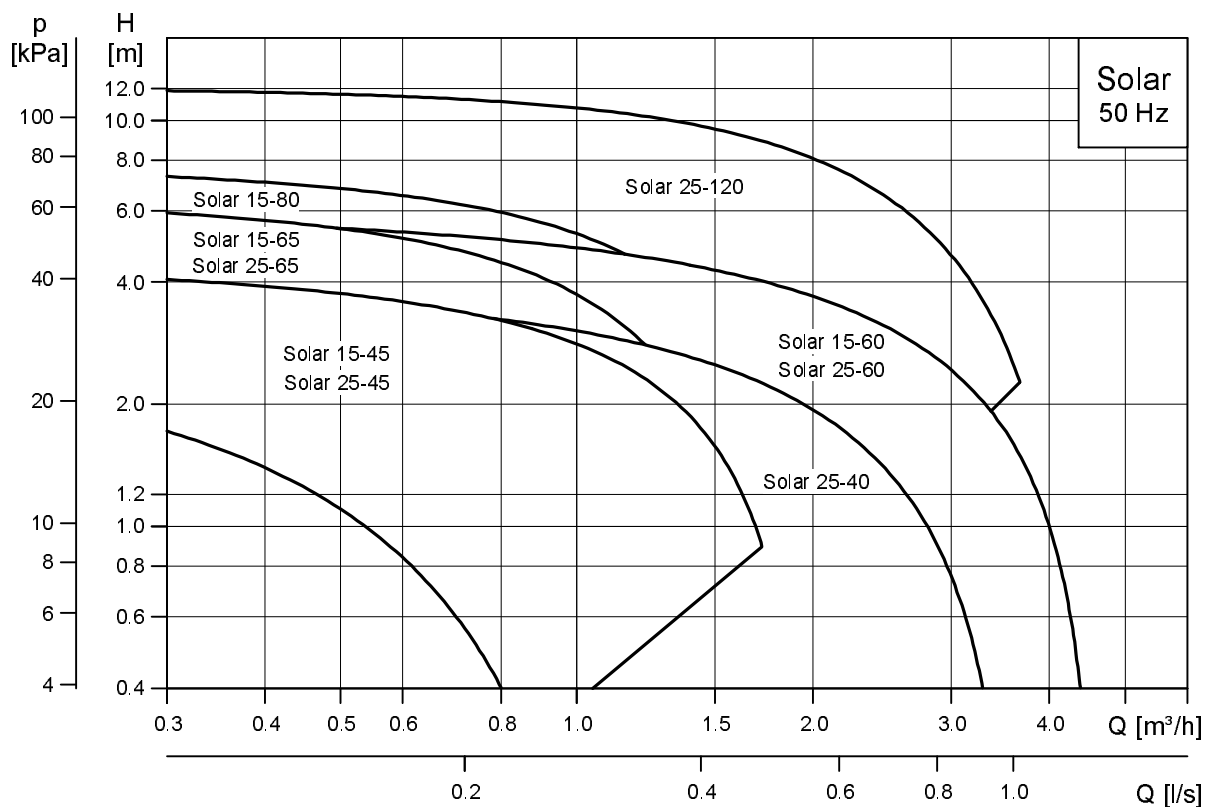
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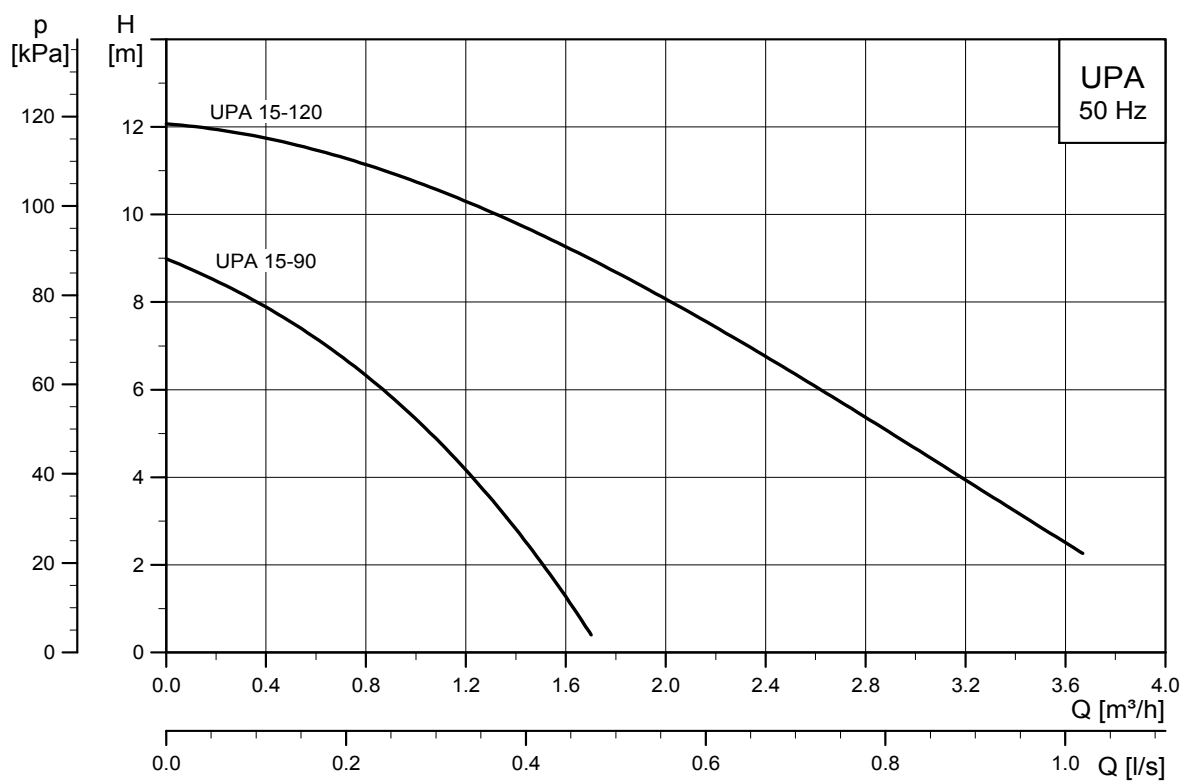
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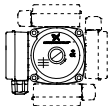
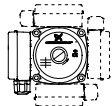

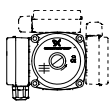
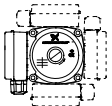
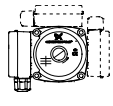




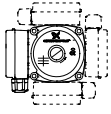
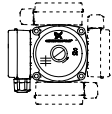

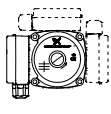
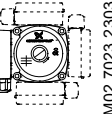
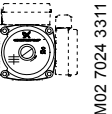

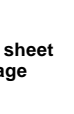
TM05 5114 3212

2. Product range

Circulator pumps for heating systems

The stainless steel circulators are suitable for drinking water only. Therefore, they are out of scope of the EuP requirements and can be sold in the EU after 2013 (these pumps are marked with an *).

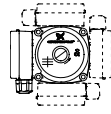
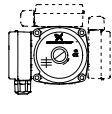
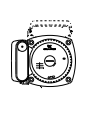
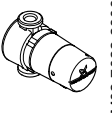

Pump material	Cast iron	Cast iron	Cast iron	Cast iron K-version	Stainless steel	Stainless steel	Stainless steel		
Liquid temperature	+2 to +95 °C	+2 to +110 °C	-25 to +110 °C	-25 to +95 °C	+2 to +110 °C	-25 to +95 °C	-25 to +110 °C		
Terminal box position	 TM02 7023 2303	 TM02 7023 2303	 TM04 2810 3408	 TM04 2810 3408	 TM02 7024 2303	 TM02 7023 2303	 TM02 7024 3311	 TM04 2810 3408	Data sheet page
UPS, UP, 1 x 230 V, 50 Hz									
UPS 15-20		•							19
UPS 25-20 ★		•							19
UPS 32-20		•							19
UPS 36-20			•						19
UPS 25-25			•						22
UPS 32-25			•						23
UPS 15-30		•							24
UPS 25-30 ★		•							24
UPS 32-30		•							24
UPS 15-40		•							26
UPS 20-40		•		•					26
UPS 25-40 ★		•		•	•*				26
UPS 32-40		•							26
UPS 15-50		•							28
UPS 20-50		•							28
UPS 25-50		•		•					28
UPS 32-50		•							28
UPS 32-50			•						28
UPS 36-50			•						30
UPS 40-50			•				•*		29
UPS 25-55			•				•*		31
UPS 32-55			•				•*		32
UPS 15-60		•							33
UPS 20-60		•							33
UPS 21-40		•							34
UPS 21-50		•							35
UPS 21-60		•		•					36
UPS 25-60 ★		•		•	•*				37
UPS 32-60		•							39
UPS 25-70		•							40
UPS 32-70		•							40
UPS 25-80			•				•*		42
UPS 32-80			•				•*		43
UPS 36-80			•						45
UPS 40-80			•				•*		44
UPS 25-100			•						46
UPS 32-100			•				•*		47
UPS 40-100			•						47
UPS 25-120	•								48
UPS 25-125	•								49
UPS, UP, 3 x 230 V, 50 Hz									
UPS 25-50		•							50
UPS, UP, 3 x 400 V, 50 Hz									
UPS 25-20		•							51
UPS 32-20		•							51
UPS 25-40		•							52
UPS 32-40		•							52
UPS 25-50		•							53
UPS 32-50		•							53
UPS 25-60		•			•*				54

Pump material	Cast iron	Cast iron	Cast iron	Cast iron K-version	Stainless steel	Stainless steel	Stainless steel		
Liquid temperature	+2 to +95 °C	+2 to +110 °C	-25 to +110 °C	-25 to +95 °C	+2 to +110 °C	-25 to +95 °C	-25 to +110 °C		
Terminal box position	 TM02 7023 2303	 TM02 7023 2303		 TM04 2810 3408	 TM02 7024 2303	 TM02 7023 2303	 TM02 7024 3311	 TM04 2810 3408	Data sheet page
UPS 32-60		•							54
UPS, UP, 1 x 220 V, 60 Hz									
UPS 15-62		•							55
UPS 25-42		•							56
UPS 25-62		•		•					57
UPS 25-72		•							58
UPS 40-72			•						59
UPSD twin-head pumps, 1 x 230 V, 50 Hz									
UPSD 32-50			•						60
UPSD 40-50			•						61
UPSD 32-80			•						62
UPSD 40-80			•						63
UPSD 32-100			•						64
UPSD 40-100			•						64

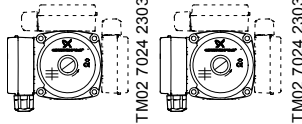
★ **On request:** Pump housing with air separator, type A.

Circulator pumps for domestic hot-water systems

The stainless steel and brass circulators are suitable for drinking water only. Therefore, they are out of scope of the EuP requirements and can be sold in the EU after 2013 (these pumps are marked with an *).

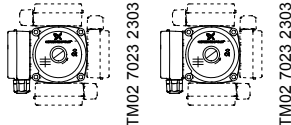
Pump material	Stainless steel	Stainless steel	Stainless steel	Brass		
Liquid temperature	+2 to +110 °C	-25 to +95 °C	-25 to +110 °C	+2 to +95 °C		
Terminal box position	 TM02 7023 2303	 TM02 7024 2303	 TM02 7023 2303	 TM04 2810 3408	 TM02 7022 2303	Data sheet page
COMFORT UP, UPS, UP, 1 x 230 V, 50 Hz						
COMFORT UP 15-14 B				•*	65	
COMFORT UP 15-14 B PM				•*	67	
COMFORT UP 15-14 BA PM				•*		
COMFORT UP 20-14 BX				•*	66	
COMFORT UP 20-14 BX PM				•*	69	
COMFORT UP 20-14 BXA PM				•*		
UP 20-07 N	•*				71	
UP 20-15 N	•*				72	
UP 20-30 N	•*	•*			73	
UP 20-45 N			•*		74	
UPS 20-60 N	•*		•*		75	
UPS, UP, 1 x 240 V, 50 Hz						
UP 20-30 N	•*				76	
UPS 20-60 N	•*				77	
UPS, UP, 3 x 220 V, 50 Hz						
UP 20-30 N	•*				78	
UPS, UP, 3 x 400 V, 50 Hz						
UP 20-15 N	•*				79	
UP 20-30 N	•*				80	
UPS, UP, 1 x 220 V, 60 Hz						
UP 20-32 N	•*				82	
UPS 20-62 N	•*				82	

Circulator pumps for cooling and air-conditioning systems

Pump material	Cast iron	Stainless steel	
Liquid temperature	-25 to +95 °C	-25 to +95 °C	
Terminal box position			Data sheet page
UPS, 1 x 230 V, 50 Hz			
UPS 20-30 NK	•	•	83
UPS 20-40 K	•		84
UPS 25-40 K	•		85
UPS 25-50 K	•		86
UPS 21-60 FK	•		88
UPS 25-60 K	•		89
UPS 25-60 NK	•	•	89
UPS, 1 x 240 V, 50 Hz			
UPS 20-60 NK	•	•	87
UP, 1 x 230 V, 50 Hz			
UP 25-40 KU	•		90
UP 25-50 KU	•		91
UP 25-60 KU	•		92

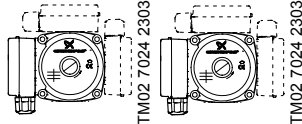
Circulator pumps for solar heating systems

Circulator pumps for solar heating systems are out of scope of the EuP requirements and can be sold in the EU after 2013 (these pumps are marked with an *).

Pump material	Cast iron	Cast iron	
Liquid temperature	+2 to +95 °C	+2 to +110 °C	
Terminal box position			Data sheet page
SOLAR, 1 x 230 V, 50 Hz			
SOLAR 25-40		•*	93
SOLAR 15-45		•*	94
SOLAR 25-45		•*	94
SOLAR 15-60		•*	95
SOLAR 25-60		•*	95
SOLAR 15-65		•*	96
SOLAR 25-65		•*	96
SOLAR 15-80	•*		97
SOLAR 25-120	•*		98

Circulator pumps for home booster systems

Circulator pumps for home booster systems are out of scope of the EuP requirements and can be sold in the EU after 2013 (these pumps are marked with an *).

Pump material	Stainless steel (N)	Cast iron	
Liquid temperature	+2 to +95 °C	+2 to +95 °C	
Terminal box position			Data sheet page
UPA, 1 x 230 V, 50 Hz			
UPA 15-90	•*	•*	99
UPA 15-120		•*	100

3. Type keys

UP, UPS, UPSD

Example	UP	S	D	40	-50	F
Type range						
S = electric speed control						
Twin-head pump						
Nominal diameter (DN) of suction and discharge ports [mm]						
Maximum head [dm]						
Pipe connection:						
= pipe thread (no letter)						
F = flange						
Pump housing:						
= cast iron (no letter)						
N = stainless steel						
A = pump housing with air separator, upward water flow						
K = cold-water version						
KU = cold-water version (foam-filled terminal box and stator)						

GRUNDFOS COMFORT (PM)

Example	UP	20	-14	B	X	U	T	A
Type range								
Nominal diameter (DN) of suction and discharge ports [mm]								
15 = length 80 mm / Rp 1/2								
20 = length 110 mm / G 1 1/4								
Maximum head [dm]								
Brass pump housing								
Integrated isolating and non-return valves								
24-hour timer								
Thermostat								
AUTO _{ADAPT}								

PM = Permanent-magnet motor

UPS SOLAR

Example	UPS SOLAR	15	-65	130
Type range				
Nominal diameter (DN) of suction and discharge ports [mm]				
Maximum head [dm]				
Port-to-port length [mm]				

UPA

Example	UP	A	40	-50	N
Type range					
A = automatic control (with internal or external flow switch)					
Nominal diameter (DN) of suction and discharge ports [mm] (15-90: 3/4", 15-120: 1")					
Maximum head [dm]					
= cast iron (no letter)					
N = stainless steel					

4. Applications

The Grundfos circulator pumps, Series 100, are specifically designed for heating systems. The pumps are also suitable for circulation of domestic hot water and for circulation of liquid in cooling and air-conditioning systems.

UPS SOLAR pumps are suitable for circulation of water in residential solar thermal heating systems.

Heating systems

For central and district heating systems, use pump type UPS.

The UPS can be operated at three different speeds.

The pumps are used primarily for one- and two-pipe heating systems, but are, for example, also suitable for mixing loops in large systems.

For underfloor heating systems, we recommend using pump type UP(S) N, as the pumped liquid may often become aerated, causing an ordinary cast-iron pump housing to corrode.

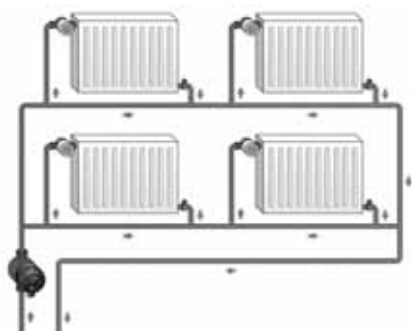


Fig. 1 One-pipe heating system

TM03 8990 4507

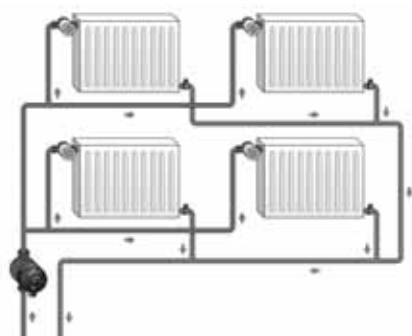


Fig. 2 Two-pipe heating system

TM03 8989 4507

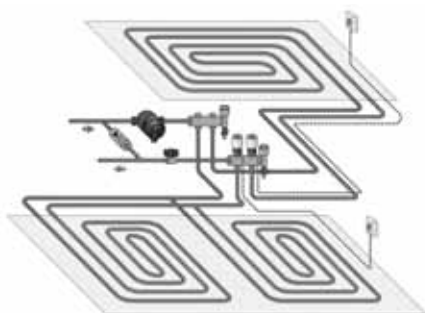


Fig. 3 Underfloor heating system

TM03 9890 4507

Domestic hot-water systems

For circulation in domestic hot-water systems, use pump type GRUNDFOS COMFORT or UP N with stainless-steel, brass or bronze pump housing.

The UP N can be connected to an on/off time switch to save energy. The on/off time switch can switch the pump on/off to limit pump operation to periods when hot water is usually required.

GRUNDFOS COMFORT is available with integrated timer, thermostat and AUTO_{ADAPT} function.

GRUNDFOS COMFORT AUTO versions (BA/BXA)

The built-in AUTO_{ADAPT} function adapts the operating hours of the pump according to the changing demand for domestic hot water. This means that the COMFORT AUTO_{ADAPT} provides the maximum comfort and saves energy at the same time.

The AUTO_{ADAPT} function has been developed for domestic hot-water systems with hot-water tanks as primary heating source.

In domestic hot-water systems with integrated temperature control functionality for raising and lowering the temperature on the recirculation pipe, Grundfos recommends using the COMFORT BX or COMFORT B models.

To get the full advantages of the COMFORT AUTO model with the AUTO_{ADAPT} feature, Grundfos recommends installing the pump in systems with hot water storage tanks.

We recommend keeping the operating temperature below 65 °C to eliminate the risk of lime precipitation.

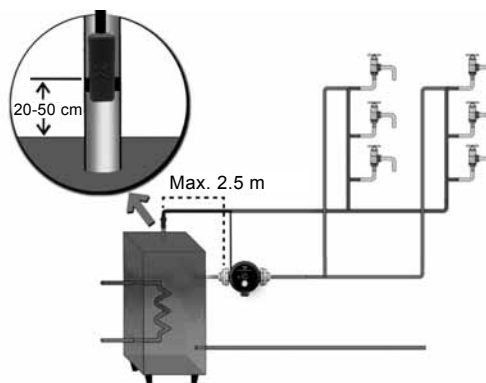


Fig. 4 Domestic hot-water system

TM04 9359 4010

Cooling and air-conditioning systems

For cooling and air-conditioning systems, use standard UPS pumps or the special versions, types UPS K and UP KU, depending on type and size. See product ranges on pages 7 to 9.

Temperature ranges: -25 to +95 °C
-25 to +110 °C.

These pumps are thus suitable for circulation of both cold and hot water.

Solar heating systems

For circulation in solar heating systems, use UPS SOLAR pumps. Solar heating systems often operate with very low flows compared to other heating systems, and the pump must be designed to handle the following:

- water with anti-freeze
- high liquid temperatures
- large temperature fluctuations.

The UPS SOLAR is optimised for operation specifically under these conditions. During start-up at low outside temperatures, the stagnant water in the pipes may be very cold and may create condensed water in the stator. Therefore, the UPS SOLAR windings are double-coated, the stator housing has drain holes, and the pump housing is electro-coated. Very high liquid temperatures may also occur, for example if the tank is heated to maximum while the sun is still shining. The UPS SOLAR can work with temperatures up to 140 °C for a short time.

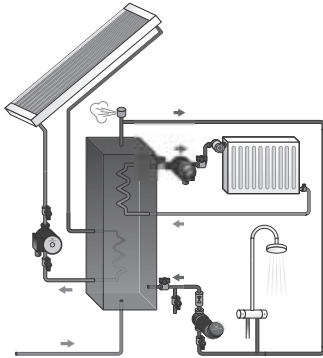


Fig. 5 Solar heating system

TM04 4623 1809

Home booster systems

For pressure-boosting of domestic hot water in residential buildings supplied from an external source, use UPA pumps.

The pump increases the pressure so that the required pressure is available at showers, taps and similar tapping points.

The UPA is used in open systems and can also be connected directly to the water main.

The pump incorporates a flow switch which starts and stops the pump when a tap is opened and closed, respectively.

Pumped liquids

Depending on type, Grundfos circulator pumps are suitable for the following liquids:

- clean, thin, non-aggressive and non-explosive liquids without solid particles or fibres
- cooling liquids, not containing mineral oil
- domestic hot water, max. 14 °dH, max. 65 °C, peak max. 70 °C
- softened water.

The kinematic viscosity of water is $\nu = 1 \text{ mm}^2/\text{s}$ (1 cSt) at 20 °C. If the pump is used for a liquid with a higher viscosity, the hydraulic performance of the pump will be reduced.

Example: 50 % glycol at 20 °C means a viscosity of approx. 10 mm²/s (10 cSt) and a reduction of pump performance by approx. 15 %.

Do not pump liquids containing additives that in any way can/will disturb the functionality of the pump.

When selecting a pump, the viscosity of the pumped liquid must be taken into consideration.

Temperatures

Liquid temperature

Liquid temperatures, see tables on pages 7 to 9.

Ambient and liquid temperatures

The ambient temperature for standard pumps with a permissible minimum liquid temperature of +2 °C should always be lower than the liquid temperature, as condensation may otherwise form in the stator housing.

Maximum system pressure

Pump with unions (PN 10): 1.0 MPa (10 bar).

Flanged pump (PN 6/10): 0.6/1.0 MPa (6/10 bar).

Pump with Grundfos flanges: 1.0 MPa (10 bar).

Inlet pressure

To avoid cavitation noise and damage to the pump bearings, the following minimum pressures are required at the pump suction port.

Liquid temperature	85 °C	90 °C	110 °C
Inlet pressure	0.5 m head 0.049 bar	2.8 m head 0.27 bar	11.0 m head 1.08 bar

5. Construction

UP, UPA, UPS(D) and SOLAR

The UP, UPA, UPS(D) and SOLAR pumps are of the canned-rotor type, i.e. pump and motor form an integral unit without shaft seal and with only two gaskets for sealing. The bearings are lubricated by the pumped liquid.

The pumps are characterised by the following:

- ceramic shaft and radial bearing
- carbon thrust bearing
- stainless-steel rotor can and bearing plate
- impeller of corrosion-resistant material
- pump housing of cast iron or stainless steel.

The UPS SOLAR pumps are furthermore characterised by the following:

- glycol-resistant components
- pump housing of electro-coated cast iron.

Motor

The motor is a 2- or 4-pole, asynchronous, squirrel-cage motor in conformity with the EMC directive.

Standards used: EN 61000-6-2 and EN 61000-6-3.

The terminal box is easily accessible and has functional cable connecting terminals. The cable entry is tight and incorporates cable relief.

The terminal box and the motor-pump unit have been wet-tested according to the Low Voltage Directive.

Standards used: EN 60335-1 and EN 60335-2-51.

The cable entry of single-phase motors can be pushed out of its guide to facilitate correct fitting of the cable.

Insulation class: F/H.

Cable connection: Pg 11 for 5.6 to 10 mm cable.

The motor incorporates thermal overload or impedance protection. Therefore, no external motor protection is required.

GRUNDFOS COMFORT (PM)

GRUNDFOS COMFORT (PM) circulator pumps come with various pump housing versions and lengths incorporating isolating and non-return valves or prepared for subsequent fitting of such valves.

The motor can be separated from the pump housing, enabling easy maintenance and replacement.

The rotor bearing is self-adjusting and lubricated by the pumped liquid.

The pumps have the following characteristics:

- Parts in contact with the pumped liquid are hermetically separated from the stator by a stainless-steel spherical separator.
- The bearing has no play, and as it has only a single bearing point, it generates very low friction, resulting in reduced power input and noise.

Motor

The terminal box is easily accessible and has functional cable connecting terminals. The cable entry is tight and incorporates cable relief.

The terminal box and the motor-pump unit have been wet-tested according to the Low Voltage Directive.

Standards used: EN 60335-1 and EN 60335-2-51.

The motor is impedance-protected and consequently short-circuit-proof. No additional motor protection is required.

COMFORT PM, high-efficiency pump

The motor is a single-phase, 12-pole, permanent-magnet motor in conformity with the EMC directive.

The permanent-magnet motor has no rotating bearing shaft. A green indicator light on the motor is on when the motor is running.

COMFORT, low-efficiency pump

This version has a spherical motor. In contrast to conventional canned-rotor motors, the spherical motor has no rotating bearing shaft. The stator transfers the magnetic field to the rotor in the water-conducting part of the pump.

Sectional drawings and material specifications

UP, UPA, UPS(D) and SOLAR

This section shows sectional drawings of the four pump versions which differ as to construction:

- three-phase UP
- single-phase UP
- UPS 25-120
- UPS xx-100.

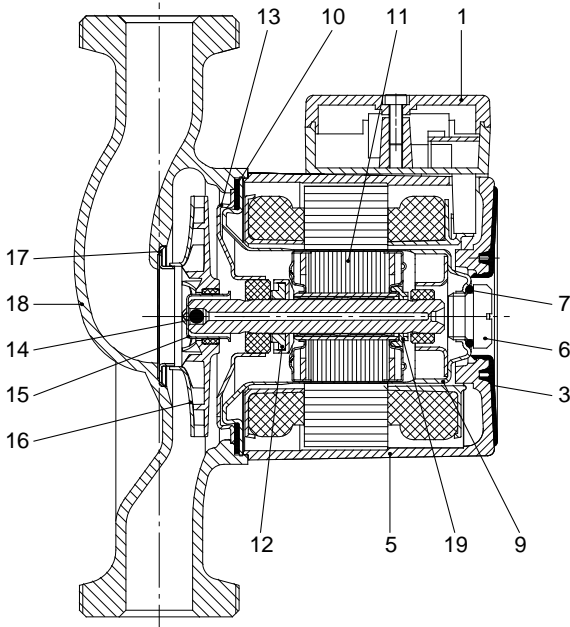


Fig. 6 Three-phase UP pump

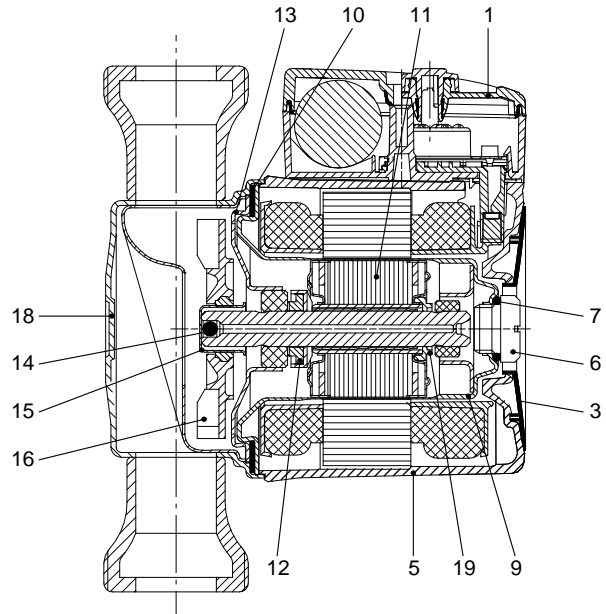


Fig. 7 Single-phase UP SOLAR pump

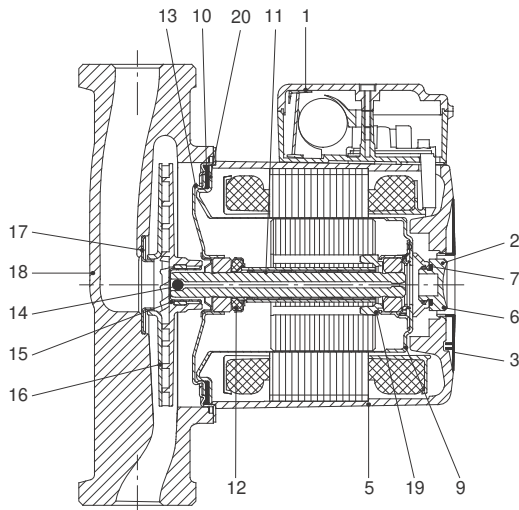


Fig. 8 UPS 25-120 and UPA 15-120*

* The UPA 15-120 is supplied with an external flow switch which must be installed on the discharge side of the pump. See page 15 for further information.

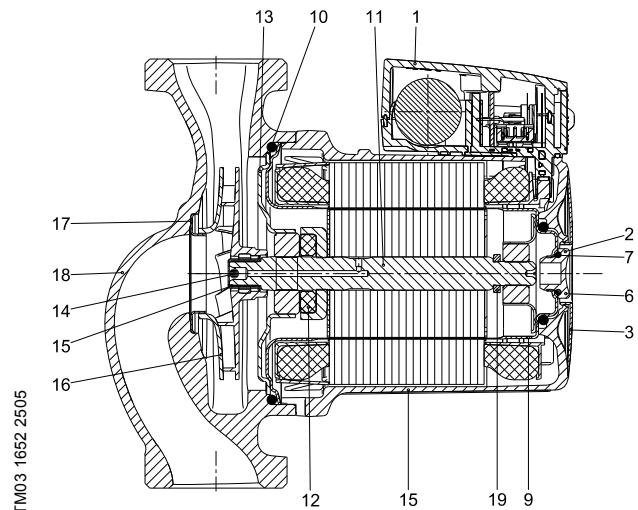


Fig. 9 UPS xx-100

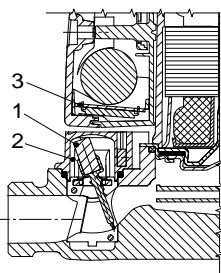
Pos.	Component	Material	EN	AISI
1	Terminal box	Composite, PPE/PS		
	• Terminal box cover	Composite, PPE/PS		
	• Electric unit (single-phase only)	Composite, PET		
2	Radial bearing	Ceramics		
3	Nameplate	Composite, PA66		
5	Stator housing	Aluminium, AlSi10Cu ₂		
	• Stator winding cap	Composite, PET		
6	Air vent screw	Brass, nickel-plated, Ms58	2.0401.30	
7, 10	Gaskets	EPDM rubber		
9	Rotor can	Stainless steel	1.4301/1.4521	304
11	Shaft, complete	Ceramics		
		Stainless steel for UPS xx-100	1.4404	316L
12	Thrust bearing	Carbon		
	• Thrust bearing retainer	EPDM rubber		
13	Bearing plate	Stainless steel	1.4301	304
14	Ball (non-return valve)	EPDM rubber		
15	Split cone	Stainless steel	1.4301	304
16	Impeller	Composite, PES/PP 30 % GF		
17	Neck ring	Stainless steel	1.4301	304
18	Pump housing	Cast iron	EN-JL1020	A48-25B
			EN-JL1030	A48-30B
		Stainless steel	1.4301	304
			1.4308	CF8
19	Stop ring	Composite, PES		
	Non-return valve casing (twin-head pump)	Composite		
	Valve flap (twin-head pump)	EPDM rubber		
20	Intermediate ring	Stainless steel	1.4301	304

Flow switch for UPA 15-90 and 15-120

The UPA pumps are supplied with an internal or external flow switch which starts or stops the pump when a tapping point is opened or closed.

UPA 15-90

The UPA 15-90 incorporates a flow switch. The flow switch consists of an arm fitted with a magnet (1) moving in a chamber (2). When liquid passes through the pump, the arm with the magnet tips and a magnetic contact (3) in the terminal box are activated. The pump is then switched on.



TM01 7251 3202

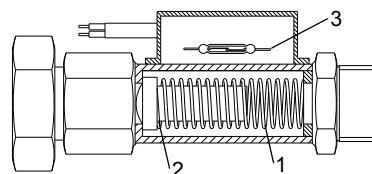
Fig. 10 Internal flow switch, UPA 15-90

The integrated flow switch has the following settings:

I (OFF)	The pump is switched off.
II (AUTO)	The pump automatically starts when the flow in the system exceeds 120 l/h and stops when the flow falls below 90 l/h.
III (MANUAL)	The pump runs continuously, even if tapping points are closed.

UPA 15-120

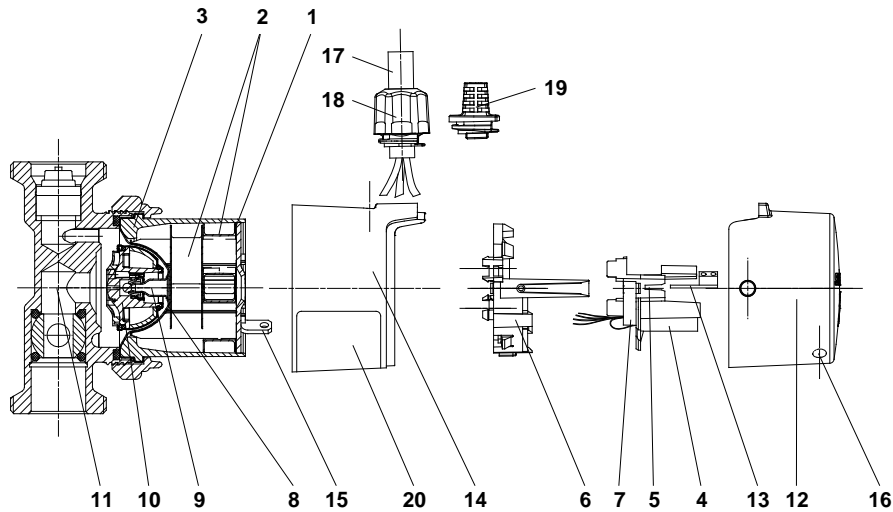
The UPA 15-120 is supplied with an external flow switch. The flow switch consists of a cylinder containing a spring (1) and a magnet (2). When the liquid passes through the pump, the magnet will slide and its magnetic field will activate the reed switch (3). The pump is then switched on.



TM05 4844 2712

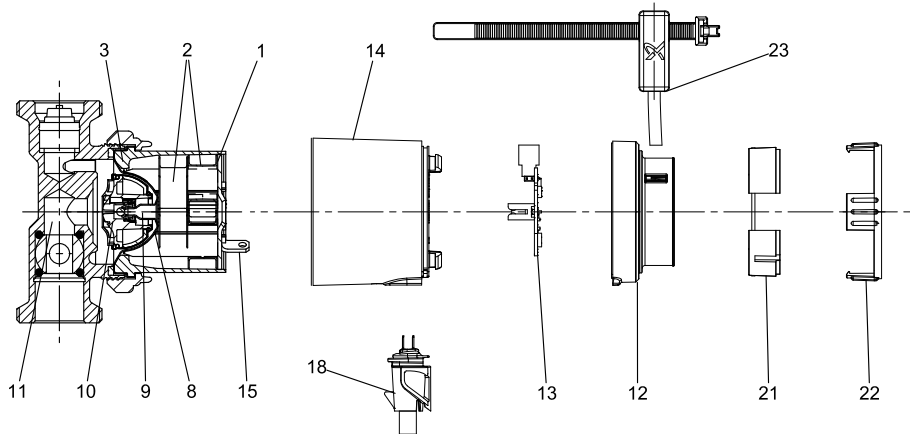
Fig. 11 External flow switch, UPA 15-120

GRUNDFOS COMFORT (PM)



TM01 8532 1602

Fig. 12 Sectional drawing of the COMFORT pump, except COMFORT PM



TM05 1937 3911

Fig. 13 Sectional drawing of the COMFORT PM pump

Pos.	Component	Material	EN	AISI
1	Stator lamination	Steel		
2	Stator windings	Copper wire and enamel		
3	Stator housing	Aluminium/P66		
4	Capacitor	Metallised PP film		
5	Contact for PC board	Tin-plated brass		
6	Retainer for PC board, lower	PA66/6		
7	Retainer for PC board, upper	PA66/6		
8	Spherical separator	Stainless steel	1.4016	430
9	Rotor can, complete	Stainless steel/tungsten carbide	1.4571	316 Ti
10	Rotor, impeller	Stainless steel, EPDM, PPO, PFTE, graphite		
11	Pump housing	Brass MS 58		
12	Terminal box cover	PC/ABS		
13	PC board with diode	FR 4		
14	Motor cover	PPO		
15	Screw	Stainless steel	1.4301	304
16	Light	Lexan		
17	Cable	PVC		
18	Plug/Alpha plug (BA/BXA)	PA66		
19	Insulation cover	EPP 55		
20	Nameplate	PET 50		
21	Cable ring 1	PC/ABS		
22	Cable ring 2	PC/ABS		
23	Temperature sensor			

6. Installation

The pump must always be installed with horizontal motor shaft. At start-up, the rotor can must be vented by removing the plug in the top of the motor.

Within a short time, the rotor forces the remaining air out into the system via the shaft.



TM05 5204 3412

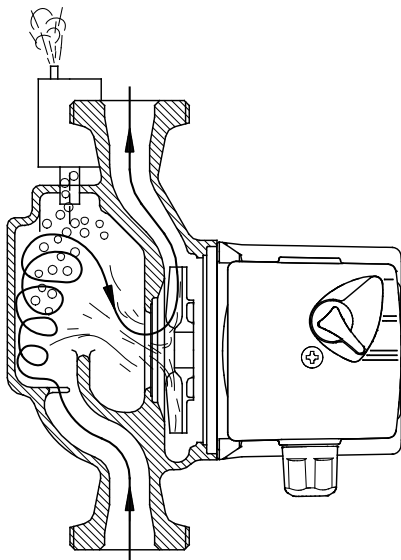
Fig. 14 Pumps with horizontal motor shaft

Air separator pump

Grundfos Airlectric is a combined circulator pump and air separator. The air separator removes air from the centre of the system and thus offers optimum operating conditions for any automatic air vent, without extra installation cost.

The air-containing liquid is guided from the suction port to the nozzle of the air-separating chamber. In the nozzle, the liquid is caused to circulate considerably in the relatively large chamber, thus creating a low pressure in the top of the chamber. This low pressure combined with the now reduced low velocity of the liquid will cause a separation of air from the liquid. Due to its lower density, the air will escape through an automatic air vent fitted to the air-separating chamber. The air separator pump is only available for upward water flow.

The pump housing has an Rp 3/8 thread for the air vent. The air vent is not supplied with the pump.



TM00 8966 4296

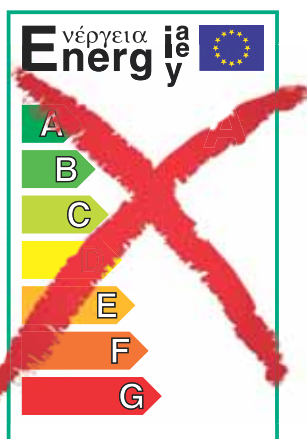
Fig. 15 Air separator pump

7. Curve conditions

The guidelines below apply to the performance curves on the following pages:

- Test liquid: airless water.
- The measurements for UP, UPA and UPS have been made at a water temperature of 20 °C.
- All curves show average values and **should not be used as guarantee curves**. If a specific minimum performance is required, individual measurements must be made.
- The UP and UPS curves apply to a kinematic viscosity of $\nu = 1 \text{ mm}^2/\text{s}$ (1 cSt).
- The conversion between head H [m] and pressure p [kPa] has been made for water with a density of $\rho = 1000 \text{ kg/m}^3$. For liquids with other densities, for example hot water, the discharge pressure is proportional to the density.

Energy labelling



TM05 3936 1712

From 1 January 2013, the old A to G energy label will no longer be effective.

The new energy efficiency index (EEI) must be stated on circulator pumps in order to sell them in the EU.

UPS circulator pumps with pump housing in stainless steel are not covered by the EuP requirements from 2013 as these are drinking water circulators specifically designed to be used in the recirculation of water intended for human consumption¹.

Circulator pumps for domestic hot-water systems are not covered by the EuP requirements from 2013 as the pumps are suitable for drinking water only and must therefore be used for purposes as such².

The UPA pumps for home booster systems are not covered by the EuP requirements from 2013 as the pumps are not covered by the defined purposes³.

Circulator pumps in the COMFORT range are not covered by the EuP requirements from 2013 as the hydraulic performance is below 1 W^3 .

1: Commission Regulation (EU) No 622/2012, definitions (6).

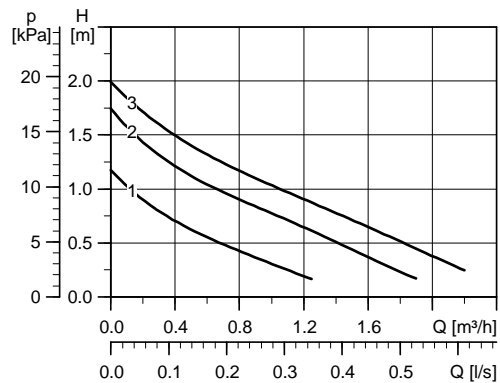
2: Commission Regulation (EU) No 622/2012, subject matter and scope 2. (a).

3: Commission Regulation (EU) No 622/2012, definitions (1).

8. Performance curves and technical data

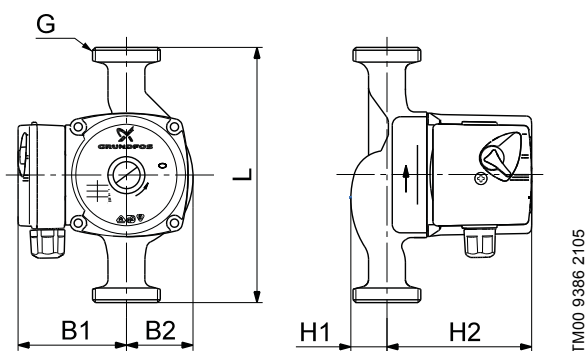
Heating systems

UPS 15-20, UPS 25-20, UPS 32-20



Speed	P1 [W]	I _{1/I1} [A]
3	65	0.26
2	40	0.18
1	25	0.11

1 x 230 V, 50 Hz



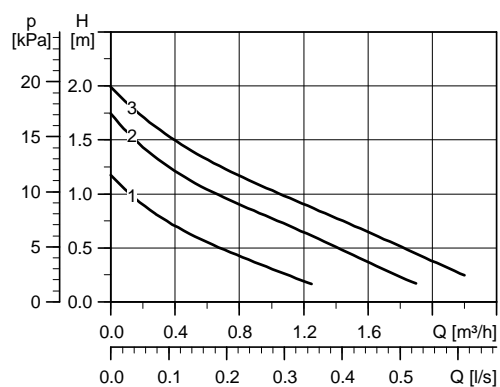
Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 15-20	130	32	102	75	47	1"	2.4	2.6	0.004
UPS 25-20	130	32	102	75	47	1 1/2"	2.4	2.6	0.004
UPS 25-20	160	32	102	75	47	1 1/2"	2.4	2.6	0.004
UPS 25-20	180	32	102	75	47	1 1/2"	2.4	2.6	0.004
UPS 32-20	180	39	102	75	47	2"	2.6	2.8	0.004

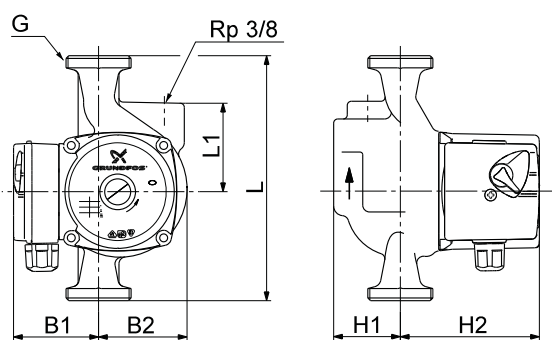
UPS 25-20 A



TM00 9756 4708

Speed	P1 [W]	I _{1/1} [A]
3	65	0.26
2	40	0.18
1	25	0.11

1 x 230 V, 50 Hz



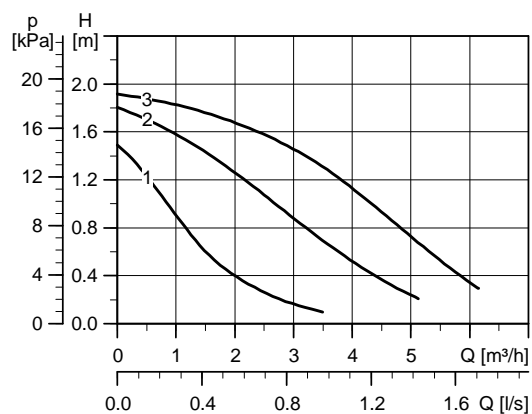
TM00 8931 2205

Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: +2 to +110 °C (TF 110)
 Air separator, type A: Rp 3/8 thread for the air vent. The air vent is not supplied with the pump.

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-20 A	180	49	112	61	65	1 1/2"	3.5	3.7	0.0053

Heating systems

UPS 36-20 F

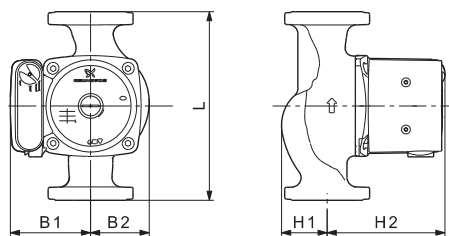
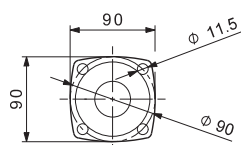


TM04 3811 2409

Speed	P1 [W]	I _{1/1} [A]
3	50	0.22
2	40	0.18
1	25	0.12

The pump incorporates overload protection.

1 x 230 V, 50 Hz



TM04 3843 0109

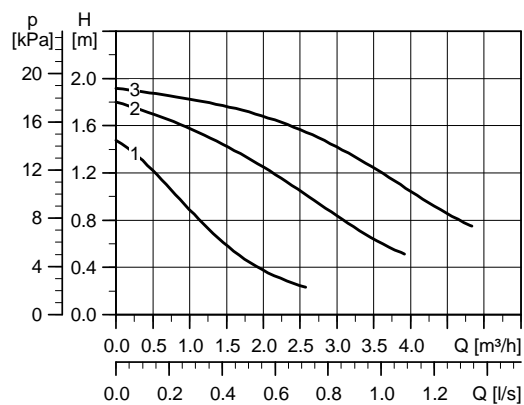
Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

Liquid temperature: -25 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 36-20 F	200	48	125	85	62	-	5.6	5.9	0.010

UPS 25-25

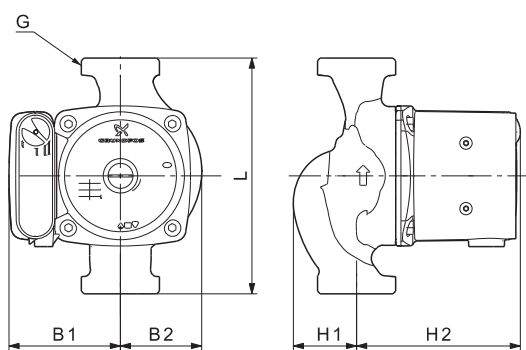


TM04 3750 2409

Speed	P1 [W]	I _{1/1} [A]
3	50	0.22
2	40	0.18
1	25	0.12

The pump incorporates overload protection.

1 x 230 V, 50 Hz



TM04 3847 5108

Connections: See *Pipe connections*, page 101.

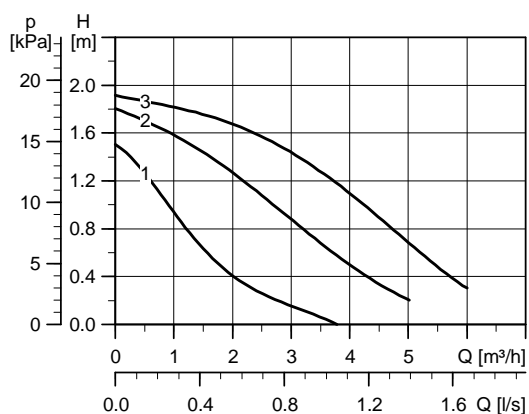
System pressure: Max. 10 bar

Liquid temperature: -25 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-25	180	46	125	85	62	1 1/2"	4.4	4.6	0.008

Heating systems

UPS 32-25

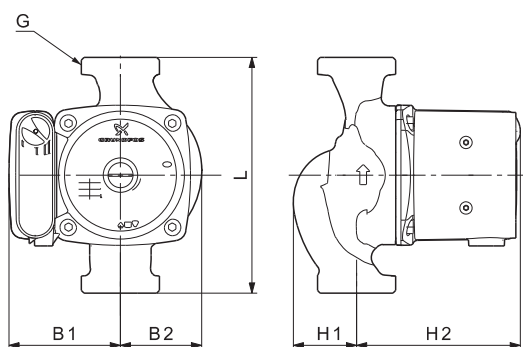


TM04 3759 2409

Speed	P1 [W]	I _{1/1} [A]
3	50	0.22
2	40	0.18
1	25	0.12

The pump incorporates overload protection.

1 x 230 V, 50 Hz



TM04 3847 5108

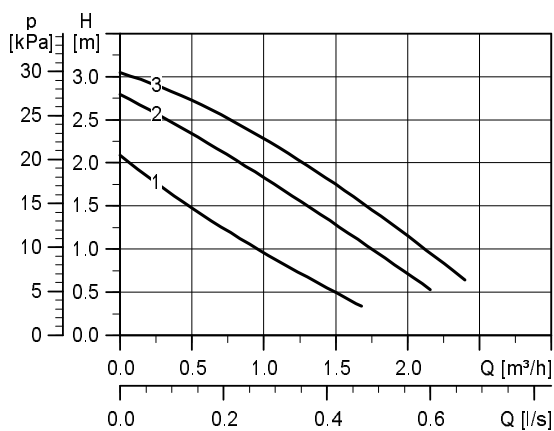
Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

Liquid temperature: -25 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 32-25	180	48	125	85	62	2"	4.5	4.8	0.008

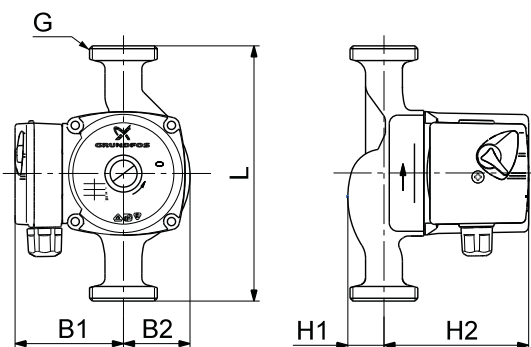
UPS 15-30, UPS 25-30, UPS 32-30



TM04 5836 4009

Speed	P1 [W]	I _{1/1} [A]
3	55	0.24
2	35	0.17
1	25	0.11

1 x 230 V, 50 Hz



TM00 9386 2105

Connections: See *Pipe connections*, page 101.

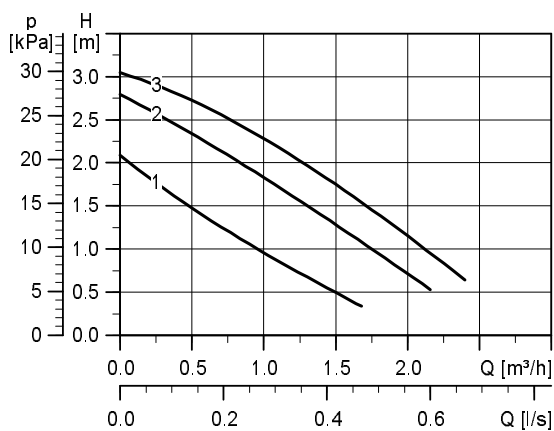
System pressure: Max. 10 bar

Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 15-30	130	28	102	75	47	1"	2.3	2.5	0.004
UPS 25-30	180	32	102	75	47	1 1/2"	2.6	2.8	0.004
UPS 32-30	180	39	102	75	47	2"	2.6	2.8	0.004

Heating systems

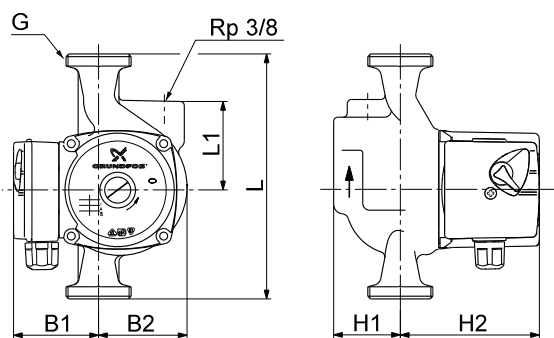
UPS 25-30 A



TM04 5836 4009

Speed	P1 [W]	I _{1/1} [A]
3	55	0.24
2	35	0.17
1	25	0.11

1 x 230 V, 50 Hz

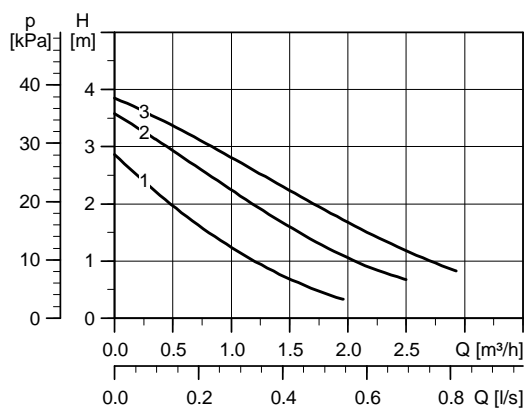


TM00 8931 2205

Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: +2 to +110 °C (TF 110)
 Air separator, type A: Rp 3/8 thread for the air vent. The air vent is not supplied with the pump.

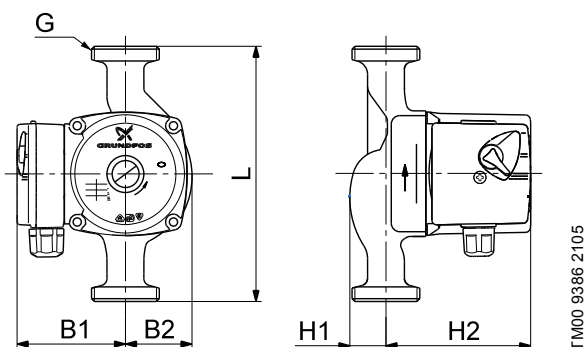
Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-30 A	180	49	112	61	65	1 1/2"	3.5	3.7	0.004

UPS 15-40, UPS 20-40, UPS 25-40 (N), UPS 32-40



Speed	P1 [W]	I _{1/1} [A]
3	45	0.20
2	35	0.16
1	25	0.12

1 x 230 V, 50 Hz



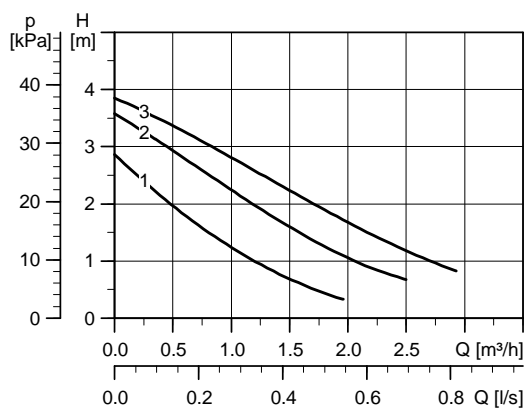
Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: +2 to +110 °C (TF 110)
 Also available with: Stainless-steel pump housing, type N
 (only UPS 25-40 180)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 15-40	130	28	102	75	47	1"	2.3	2.5	0.004
UPS 20-40	130	28	102	75	47	1 1/4"	2.6	2.8	0.004
UPS 25-40	130	32	102	75	47	1 1/2"	2.4	2.6	0.004
UPS 25-40	160	32	102	75	47	1 1/2"	2.5	2.7	0.004
UPS 25-40	180	32	102	75	47	1 1/2"	2.6	2.8	0.004
UPS 25-40 N*	180	32	102	75	51	1 1/2"	2.6	2.8	0.004
UPS 32-40	180	39	102	75	47	2"	2.6	2.8	0.004

* This circulator is suitable for drinking water only.

Heating systems

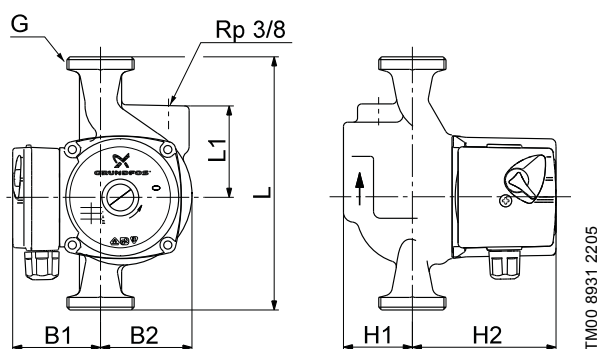
UPS 25-40 A



TM00 9749 4708

Speed	P1 [W]	I _{1/1} [A]
3	45	0.20
2	35	0.16
1	25	0.12

1 x 230 V, 50 Hz

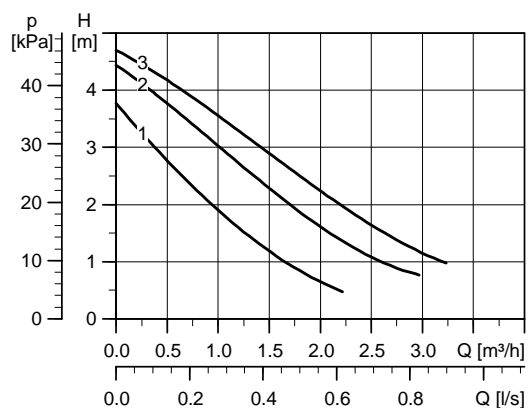


TM00 8931 2205

Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: +2 to +110 °C (TF 110)
 Air separator, type A: Rp 3/8 thread for the air vent. The air vent is not supplied with the pump.

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-40 A	180	49	112	61	65	1 1/2"	3.5	3.7	0.0053

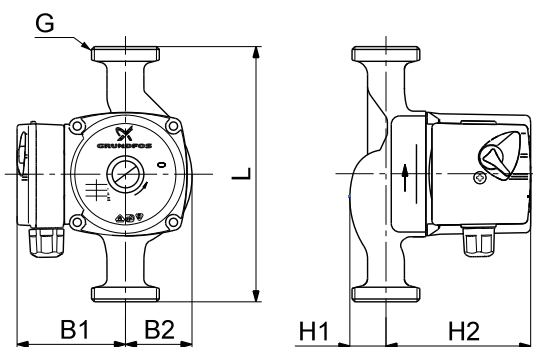
UPS 15-50 (N), UPS 20-50, UPS 25-50, UPS 32-50



TM00 9750 2105

Speed	P1 [W]	I _{1/1} [A]
3	50	0.23
2	45	0.20
1	35	0.16

1 x 230 V, 50 Hz



TM00 9386 2105

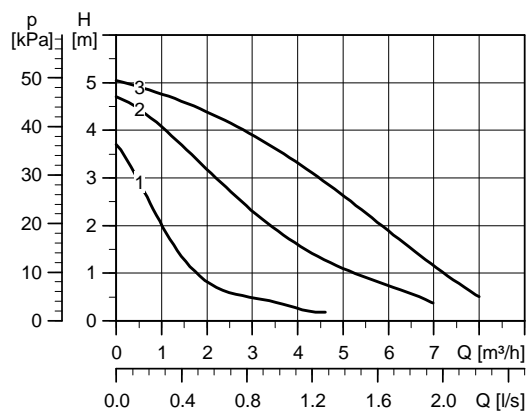
Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: +2 to +110 °C (TF 110)
 Also available with: Stainless-steel pump housing, type N (only UPS 15-50 130)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 15-50	130	32	102	75	47	1"	2.4	2.5	0.004
UPS 15-50 N*	130	28	102	75	51	1 1/2"	1.9	2.4	0.004
UPS 20-50	130	28	102	75	47	1 1/4"	2.6	2.8	0.004
UPS 25-50	130	32	102	75	47	1 1/2"	2.4	2.6	0.004
UPS 25-50	160	32	102	75	47	1 1/2"	2.5	2.7	0.004
UPS 25-50	180	32	102	75	47	1 1/2"	2.6	2.8	0.004
UPS 32-50	180	39	102	75	47	2"	2.6	2.8	0.004

* This circulator is suitable for drinking water only.

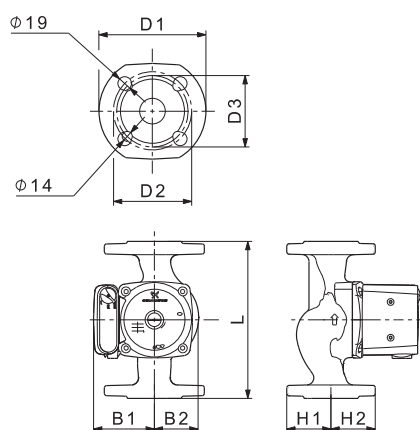
Heating systems

UPS 32-50 F, UPS 40-50 FN



Speed	P1 [W]	I _{1/I1} [A]
3	105	0.46
2	100	0.44
1	75	0.32

1 x 230 V, 50 Hz

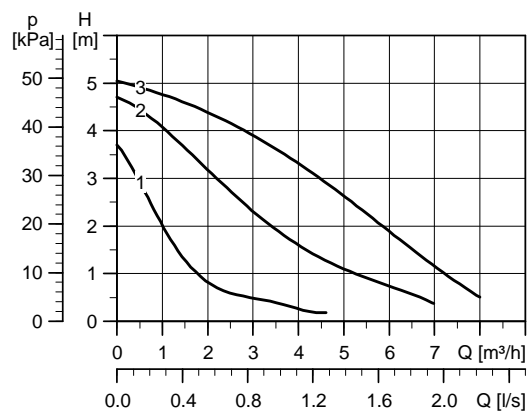


Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: -25 to +110 °C (TF 110)
 Also available with: Stainless-steel pump housing, type N
 (only UPS 40-50 F 250)

Pump type	Dimensions [mm]									Weights [kg]		Ship. vol. [m ³]
	L	D1	D2	D3	H1	H2	B1	B2	G	Net	Gross	
UPS 32-50 F	220	140	100	90	62	125	85	62	-	7.4	7.7	0.010
UPS 40-50 F	250	150	110	100	67	125	85	62	-	7.8	8.5	0.011
UPS 40-50 FN*	250	150	110	100	67	125	85	62	-	8.4	8.9	0.011

* This circulator is suitable for drinking water only.

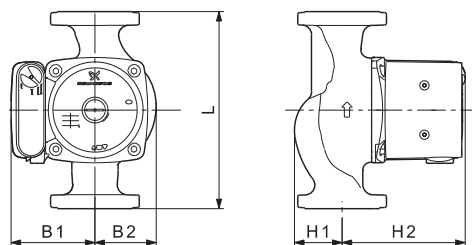
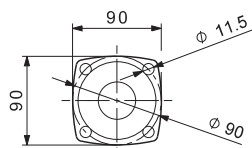
UPS 36-50 F



TM04 3760 2409

Speed	P1 [W]	I _{1/1} [A]
3	105	0.46
2	100	0.44
1	75	0.32

1 x 230 V, 50 Hz



TM04 3843 0109

Connections: See *Pipe connections*, page 101.

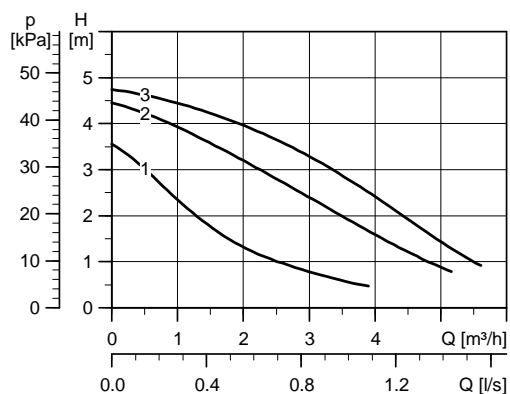
System pressure: Max. 10 bar

Liquid temperature: -25 to +110 °C (TF 110)

Pump type	Dimensions [mm]					Weights [kg]		Ship. vol. [m ³]	
	L	H1	H2	B1	B2	Net	Gross		
UPS 36-50 F	200	48	125	85	62	-	5.7	6.3	0.010

Heating systems

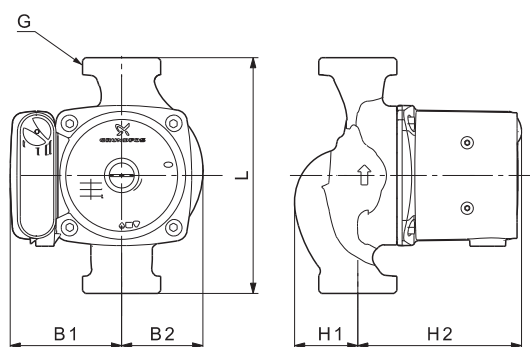
UPS 25-55 (N)



TM04 3751 2409

Speed	P1 [W]	I _{1/1} [A]
3	85	0.38
2	80	0.36
1	65	0.30

1 x 230 V, 50 Hz



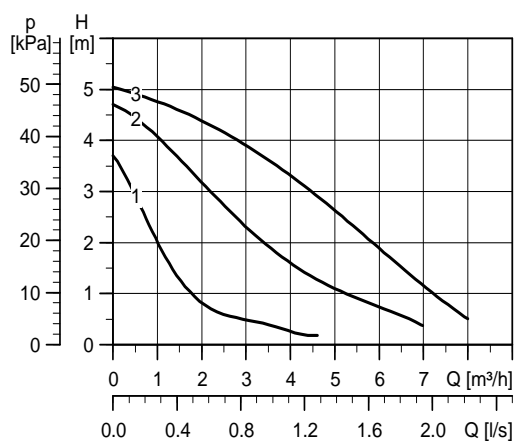
TM04 3847 5108

Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: -25 to +110 °C (TF 110)
 Also available with: Stainless-steel pump housing, type N (only UPS 25-55 180)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-55 (N)*	180	46	125	85	62	1 1/2"	4.7	5.4	0.008

* N-version: This circulator is suitable for drinking water only.

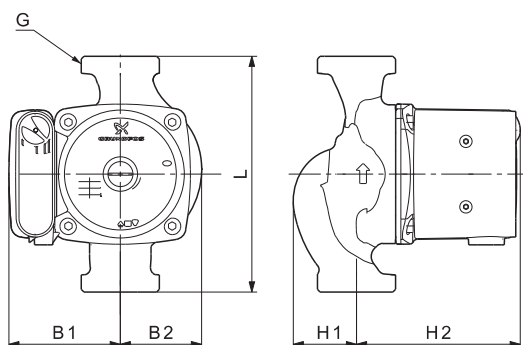
UPS 32-55 (N)



TM04 3760 2409

Speed	P1 [W]	I _{1/1} [A]
3	105	0.46
2	100	0.44
1	65	0.32

1 x 230 V, 50 Hz



TM04 3847 5108

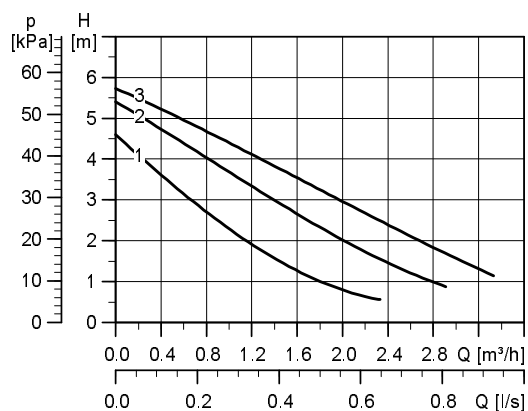
Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: -25 to +110 °C (TF 110)
 Also available with: Stainless-steel pump housing, type N
 (only UPS 32-55 180)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 32-55	180	48	125	85	62	2"	4.6	4.9	0.008
UPS 32-55 N*	180	48	125	85	62	2"	4.9	5.4	0.008

* This circulator is suitable for drinking water only.

Heating systems

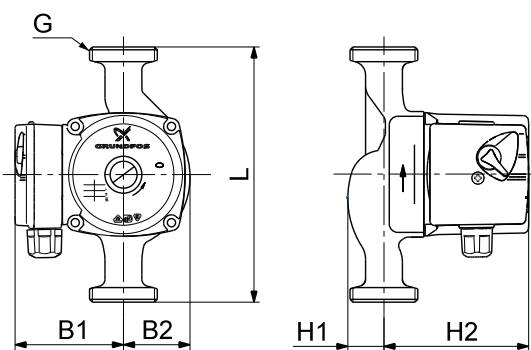
UPS 15-60, UPS 20-60 (N)



TM04 3760 2409

Speed	P1 [W]	I _{1/1} [A]
3	105	0.46
2	100	0.44
1	65	0.32

1 x 230 V, 50 Hz



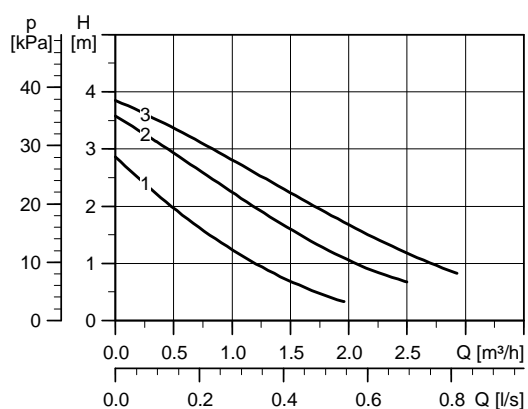
TM04 3847 5108

Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: +2 to +110 °C (TF 110)
 Also available with: Stainless-steel pump housing, type N
 (only UPS 20-60 130)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 15-60	130	28	102	75	47	1"	2.3	2.5	0.004
UPS 20-60	130	28	102	75	47	1 1/4"	2.4	2.6	0.004
UPS 20-60 N*	150	28	102	75	51	1 1/4"	3.5	3.8	0.004

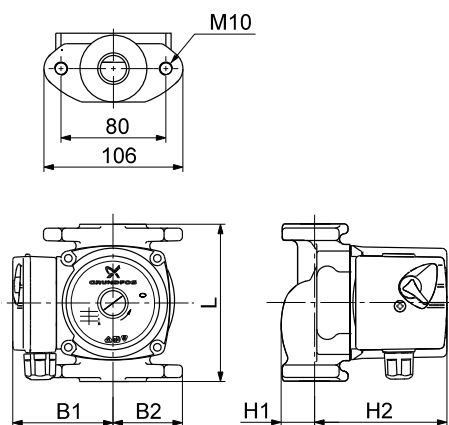
* This circulator is suitable for drinking water only.

UPS 21-40 F



Speed	P1 [W]	I _{1/1} [A]
3	45	0.20
2	35	0.16
1	25	0.12

1 x 230 V, 50 Hz

Connections: See *Pipe connections*, page 101.

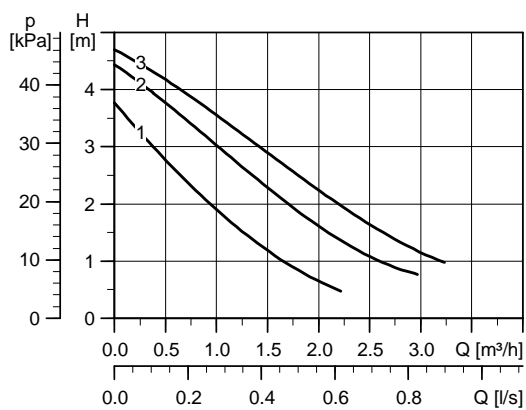
System pressure: Max. 10 bar

Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]					Weights [kg]		Ship. vol. [m ³]	
	L	H1	H2	B1	B2	G	Net		Gross
UPS 21-40 F	120	32	102	75	53	-	2.9	3.1	0.004

Heating systems

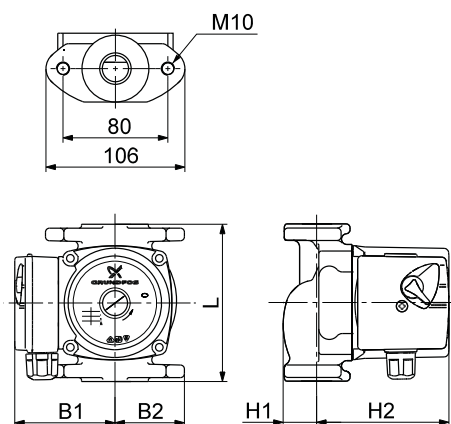
UPS 21-50 F



TM00 9750 4708

Speed	P1 [W]	I _{1/1} [A]
3	50	0.23
2	45	0.20
1	35	0.16

1 x 230 V, 50 Hz



TM00 8929 2105

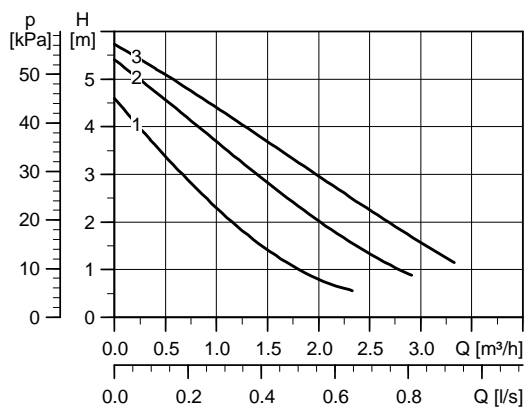
Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

Liquid temperature: +2 to +110 °C (TF 110)

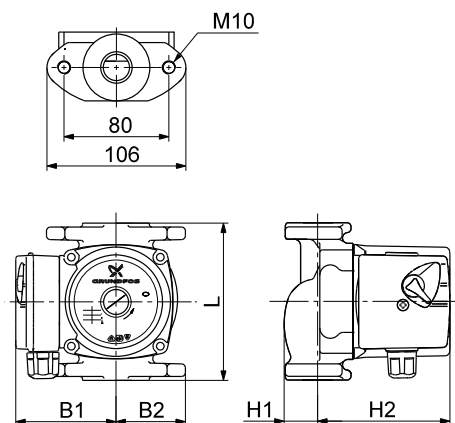
Pump type	Dimensions [mm]					Weights [kg]		Ship. vol. [m ³]	
	L	H1	H2	B1	B2	G	Net		Gross
UPS 21-50 F	120	32	102	75	53	-	2.9	3.1	0.004

UPS 21-60 F



Speed	P1 [W]	I _{1/I1} [A]
3	70	0.30
2	60	0.27
1	50	0.22

1 x 230 V, 50 Hz

Connections: See *Pipe connections*, page 101.

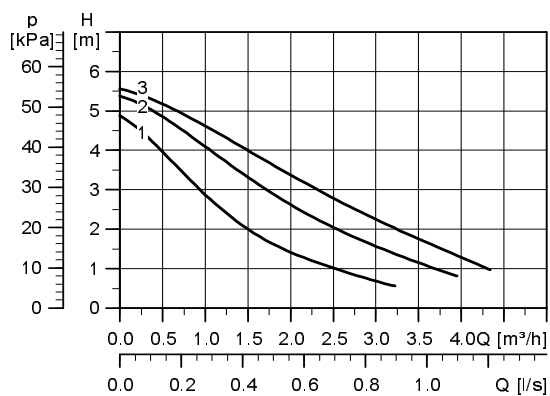
System pressure: Max. 10 bar

Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]					Weights [kg]		Ship. vol. [m ³]	
	L	H1	H2	B1	B2	G	Net		Gross
UPS 21-60 F	120	32	102	75	53	-	2.9	3.1	0.004

Heating systems

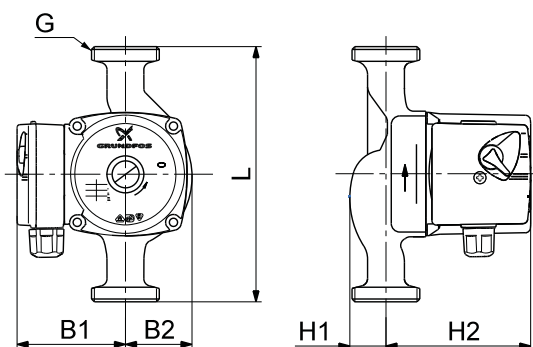
UPS 25-60 (N)



TM04 5012 2409

Speed	P1 [W]	I _{1/1} [A]
3	60	0.28
2	55	0.25
1	50	0.21

1 x 230 V, 50 Hz



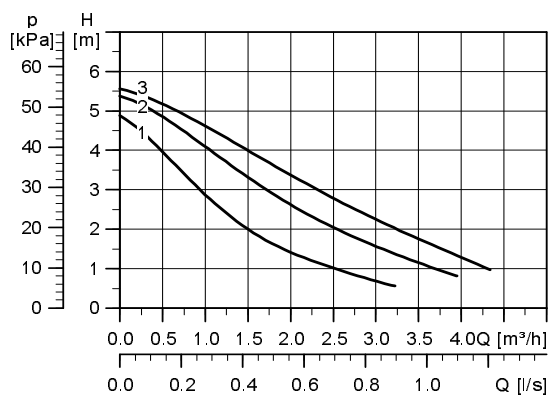
TM00 8945 2105

Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: +2 to +110 °C (TF 110)
 Also available with: Stainless-steel pump housing, type N
 (only UPS 25-60 180)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-60	130	32	102	75	47	1 1/2"	2.4	2.6	0.004
UPS 25-60	180	38	96	75	50	1 1/2"	2.6	2.8	0.004
UPS 25-60 N*	180	39	96	75	51	1 1/2"	2.0	3.0	0.004

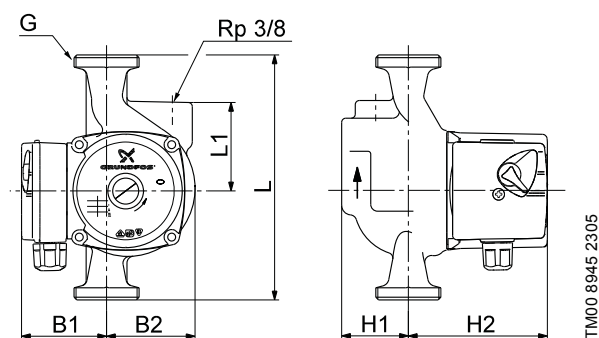
* This circulator is suitable for drinking water only.

UPS 25-60 A



Speed	P1 [W]	I _{1/1} [A]
3	60	0.28
2	55	0.25
1	50	0.21

1 x 230 V, 50 Hz

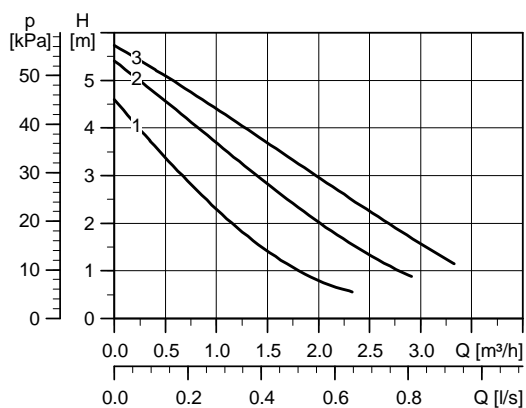


Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: +2 to +110 °C (TF 110)
 Air separator, type A: Rp 3/8 thread for the air vent. The air vent is not supplied with the pump.

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-60 A	180	49	112	61	65	1 1/2"	3.5	3.7	0.0053

Heating systems

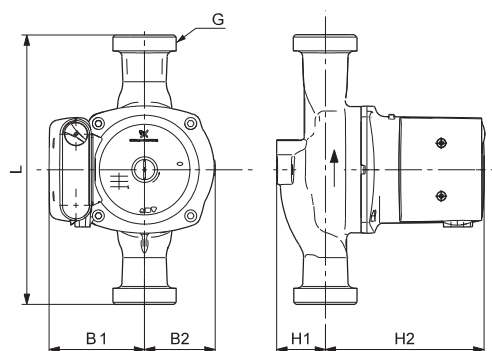
UPS 32-60



TM00 9751 4708

Speed	P1 [W]	I _{1/1} [A]
3	70	0.30
2	60	0.27
1	50	0.22

1 x 230 V, 50 Hz



TM04 2809 3408

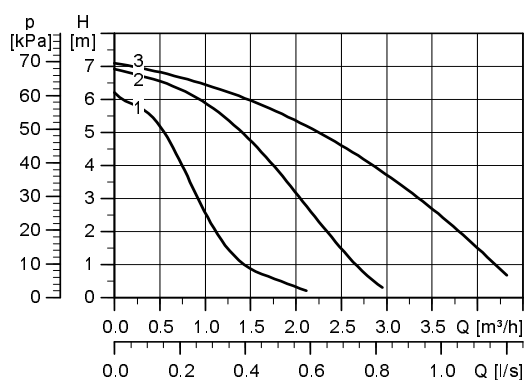
Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 32-60	180	38	96	75	50	2"	2.6	2.8	0.004

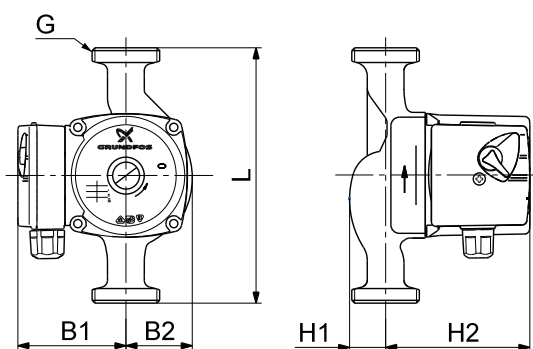
UPS 25-70, UPS 32-70



TM04 5007 2409

Speed	P1 [W]	I _{1/1} [A]
3	140	0.62
2	120	0.56
1	95	0.45

1 x 230 V, 50 Hz



TM00 9386 2105

Connections: See *Pipe connections*, page 101.

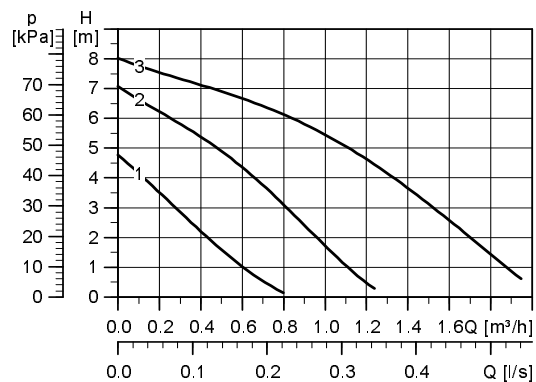
System pressure: Max. 10 bar

Liquid temperature: +2 to +95 °C (TF 95)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-70	130	32	102	75	47	1 1/2"	2.4	2.6	0.004
UPS 25-70	180	32	102	75	47	1 1/2"	2.4	2.6	0.004
UPS 32-70	180	32	102	75	47	2"	2.6	2.8	0.004

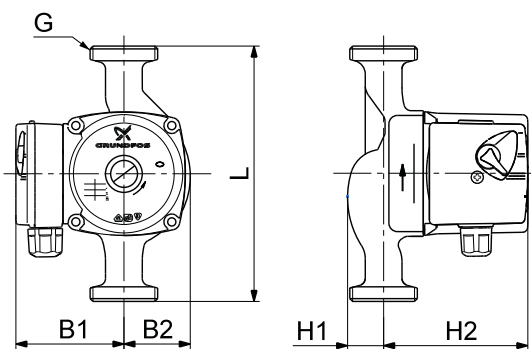
Heating systems

UPS 15-80



Speed	P1 [W]	I _{1/I1} [A]
3	110	0.47
2	75	0.34
1	45	0.22

1 x 230 V, 50 Hz

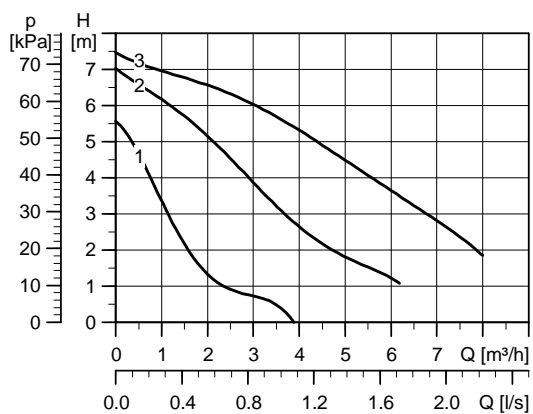
Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 15-80	130	28	102	75	47	1"	2.3	2.5	0.004

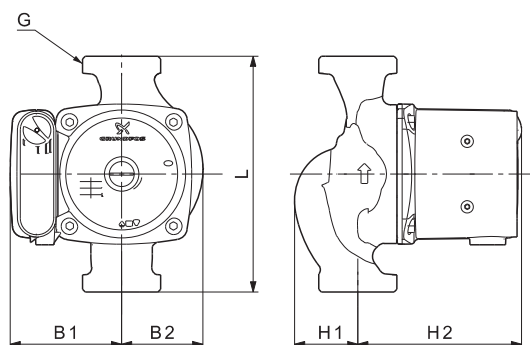
UPS 25-80 (N)



TM04 3754 2409

Speed	P1 [W]	I _{1/I1} [A]
3	165	0.70
2	155	0.70
1	110	0.50

1 x 230 V, 50 Hz



TM04 3847 5108

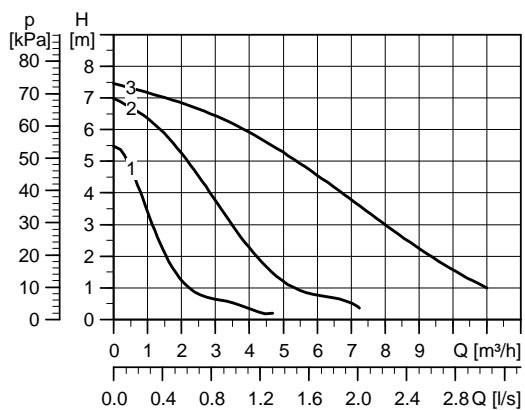
Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: -25 to +110 °C (TF 110)
 Also available with: Stainless-steel pump housing, type N
 (only UPS 25-80 180)

Pump type	Dimensions [mm]					Weights [kg]		Ship. vol. [m ³]	
	L	H1	H2	B1	B2	Net	Gross		
UPS 25-80 (N)*	180	46	125	85	62	1 1/2"	4.4	5.2	0.008

* N-version: This circulator is suitable for drinking water only.

Heating systems

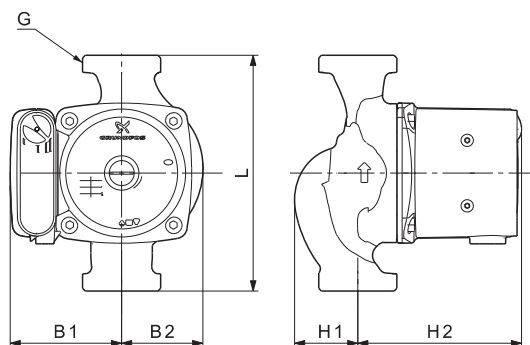
UPS 32-80 (N)



TM04 3761 2409

Speed	P1 [W]	I _{1/1} [A]
3	220	0.98
2	200	0.90
1	135	0.60

1 x 230 V, 50 Hz



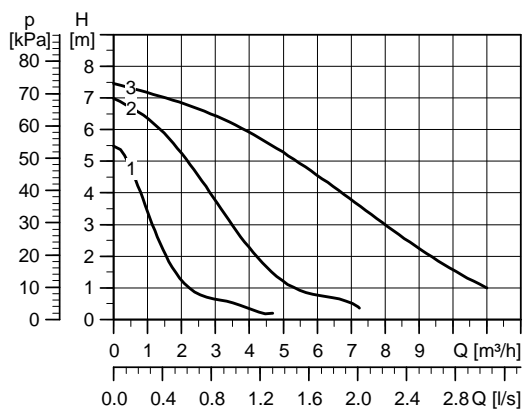
TM04 3847 5108

Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: -25 to +110 °C (TF 110)
 Also available with: Stainless-steel pump housing, type N
 (only UPS 32-80 180)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 32-80	180	48	125	85	62	2"	4.6	5.0	0.008
UPS 32-80 N*	180	48	125	85	62	2"	4.9	5.2	0.008

* This circulator is suitable for drinking water only.

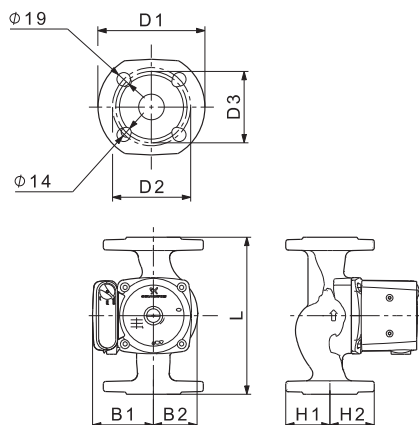
UPS 32-80 F, UPS 40-80 F (N)



TM04 3761 2409

Speed	P1 [W]	I _{1/1} [A]
3	220	0.98
2	200	0.90
1	135	0.60

1 x 230 V, 50 Hz



TM04 6005 4609

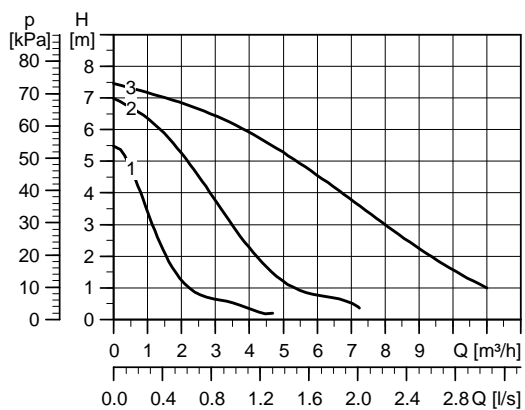
Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: -25 to +110 °C (TF 110)
 Also available with: Stainless-steel pump housing, type N
 (only UPS 40-80 F 250)

Pump type	Dimensions [mm]									Weights [kg]		Ship. vol. [m³]
	L	D1	D2	D3	H1	H2	B1	B2	G	Net	Gross	
UPS 32-80 F	220	140	100	90	62	125	85	62	-	7.5	7.9	0.010
UPS 40-80 F	250	150	110	100	67	125	85	62	-	8.1	8.6	0.011
UPS 40-80 FN*	250	150	110	100	67	125	85	62	-	8.5	8.9	0.011

* This circulator is suitable for drinking water only.

Heating systems

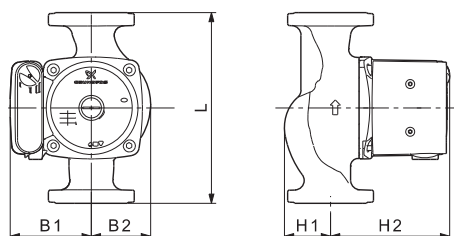
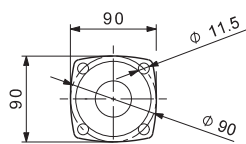
UPS 36-80 F



TM04 3761 2409

Speed	P1 [W]	I _{1/1} [A]
3	220	0.98
2	200	0.90
1	135	0.60

1 x 230 V, 50 Hz



TM04 3843 0109

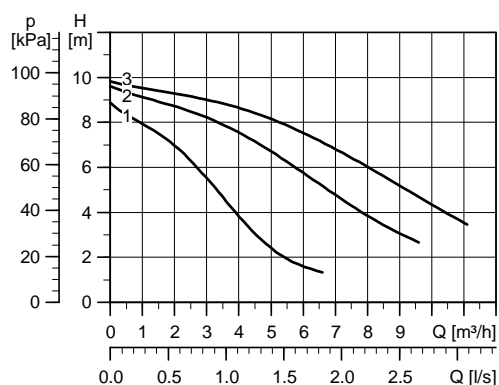
Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

Liquid temperature: -25 to +110 °C (TF 110)

Pump type	Dimensions [mm]					G	Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2		Net	Gross	
UPS 36-80 F	200	48	125	85	62	-	5.7	6.1	0.010

UPS 25-100, UPS 32-100 (N)

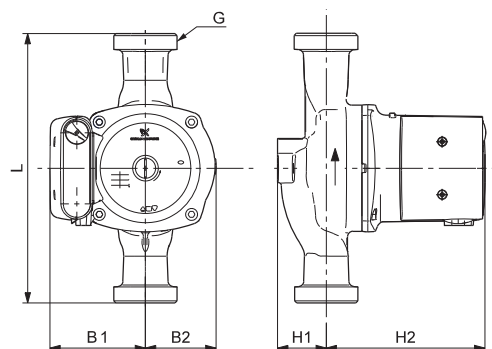


TM04 3614 4708

Speed	P1 [W]	I _{1/1} [A]
3	345	1.52
2	340	1.50
1	280	1.30

The pump has a built-in thermal switch and requires no additional motor protection.

1 x 230 V, 50 Hz



TM04 2809 3408

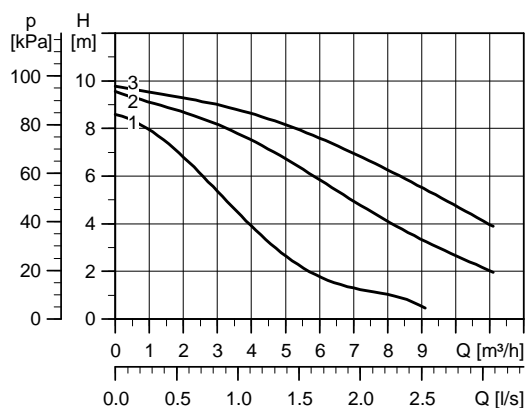
- Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: -25 to +110 °C (TF 110)
 Also available with: Stainless-steel pump housing, type N (only UPS 32-100 180)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-100	180	47	150	90	68	1 1/2"	6.3	6.9	0.012
UPS 32-100 (N)*	180	47	150	90	68	2"	6.4	7.0	0.012

* N-version: This circulator is suitable for drinking water only.

Heating systems

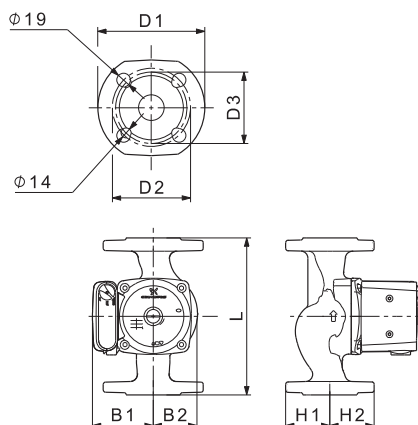
UPS 32-100 F, UPS 40-100 F



Speed	P1 [W]	I _{1/1} [A]
3	345	1.52
2	340	1.50
1	280	1.30

The pump has a built-in thermal switch and requires no additional motor protection.

1 x 230 V, 50 Hz



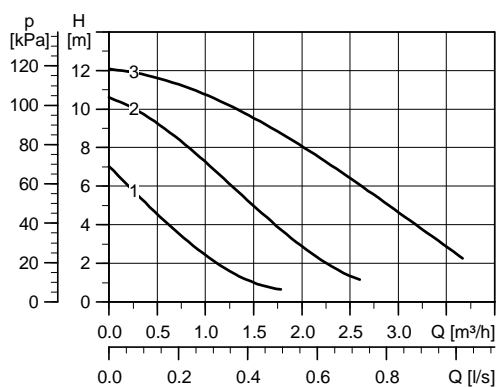
Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

Liquid temperature: -25 to +110 °C (TF 110)

Pump type	Dimensions [mm]									Weights [kg]		Ship. vol. [m ³]
	L	D1	D2	D3	H1	H2	B1	B2	G	Net	Gross	
UPS 32-100 F	220	140	100	90	62	150	90	68	-	9.0	9.8	0.016
UPS 40-100 F	250	150	110	100	62	150	90	68	-	9.6	10.4	0.016

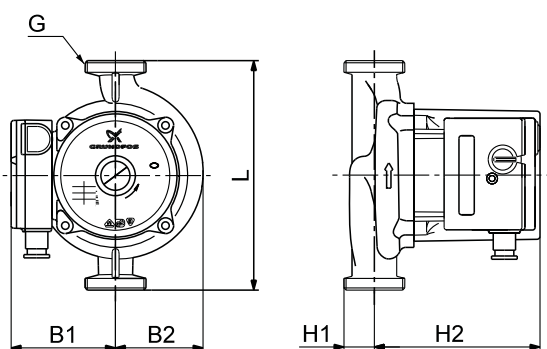
UPS 25-120



TM02 2205 4708

Speed	P1 [W]	I _{1/1} [A]
3	235	1.02
2	180	0.78
1	120	0.53

1 x 230 V, 50 Hz



TM02 1329 2105

Connections: See *Pipe connections*, page 101.

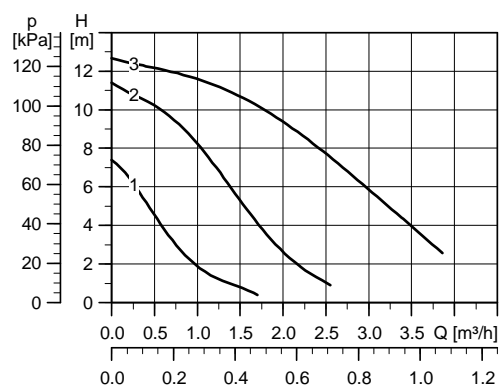
System pressure: Max. 10 bar

Liquid temperature: +2 to +95 °C (TF 95)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-120	180	32	130	82	69	1 1/2"	4.4	4.6	0.006

Heating systems

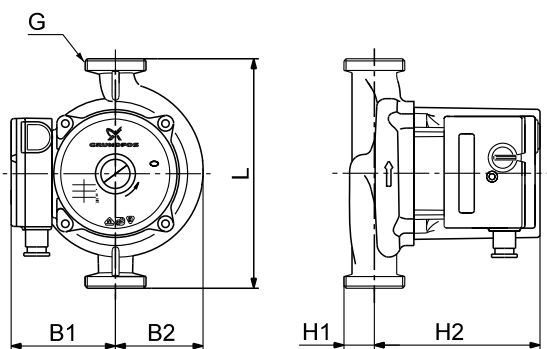
UPS 25-125



TM02.2204.4708

Speed	P1 [W]	I _{1/1} [A]
3	270	1.18
2	210	0.93
1	135	0.61

1 x 230 V, 50 Hz



TM02.1329.2105

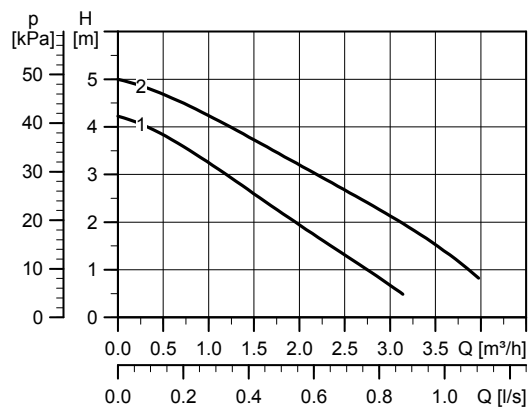
Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

Liquid temperature: +2 to +60 °C (TF 60)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-125	180	32	130	82	69	1 1/2"	4.4	4.6	0.006

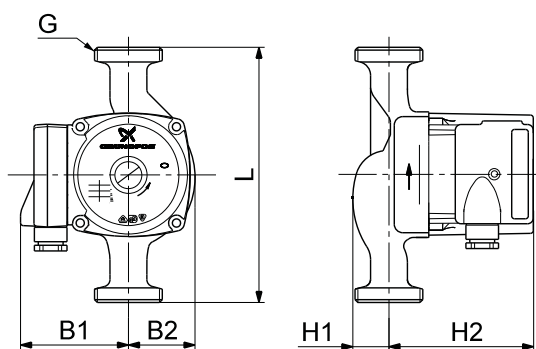
UPS 25-50



TM05 1719 3611

Speed	P1 [W]	I _{1/I1} [A]
2	110	0.37
1	115	0.37

3 x 230 V, 50 Hz



TM00 8960 2105

Connections: See *Pipe connections*, page 101.

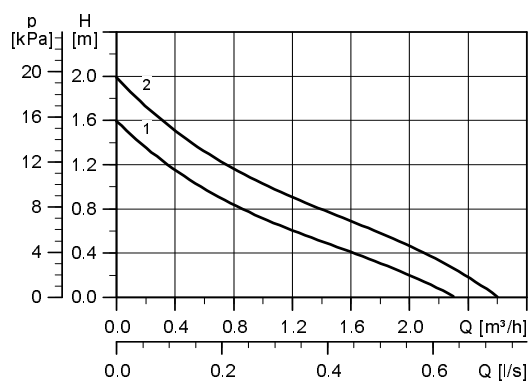
System pressure: Max. 10 bar

Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-50	180	32	102	75	47	1 1/2"	2.6	2.8	0.004

Heating systems

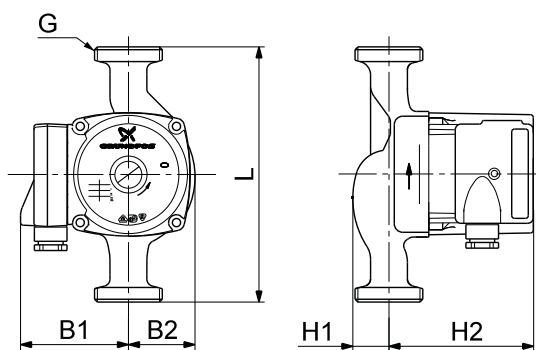
UPS 25-20, UPS 32-20



TM04 5009 2409

Speed	P1 [W]	I _{1/1} [A]
2	60	0.15
1	85	0.16

3 x 400 V, 50 Hz

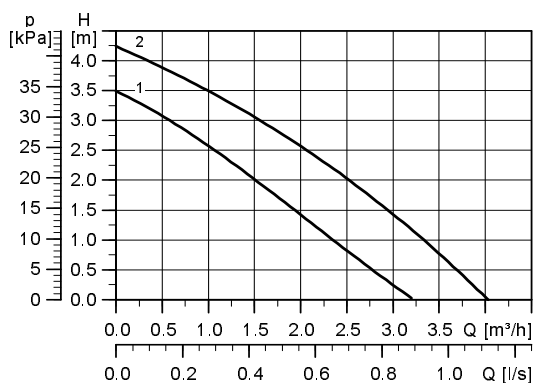


TM00 8960 2105

Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: +2 to +110 °C (TF 110)

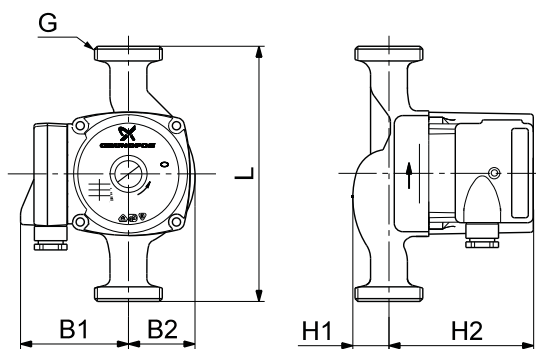
Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-20	180	32	102	75	47	1 1/2"	2.6	2.8	0.004
UPS 32-20	180	39	102	73	47	2"	2.6	2.8	0.004

UPS 25-40, UPS 32-40



Speed	P1 [W]	I _{1/1} [A]
2	95	0.18
1	110	0.20

3 x 400 V, 50 Hz



Connections: See *Pipe connections*, page 101.

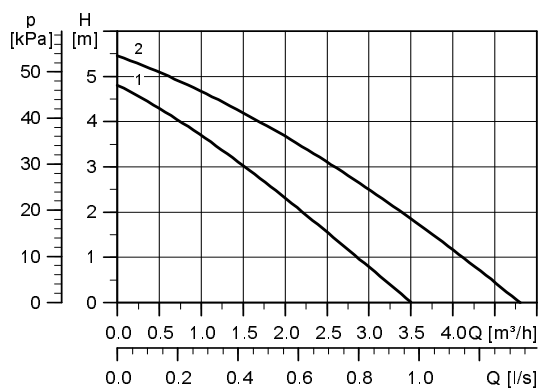
System pressure: Max. 10 bar

Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-40	130	32	102	73	47	1 1/2"	2.5	2.7	0.004
UPS 25-40	180	32	102	73	47	1 1/2"	2.5	2.7	0.004
UPS 32-40	180	39	102	73	47	2"	2.6	2.8	0.004

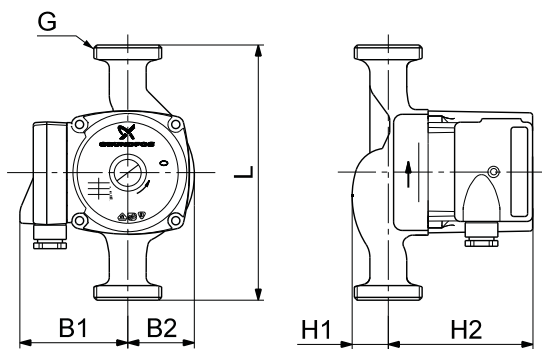
Heating systems

UPS 25-50, UPS 32-50



Speed	P1 [W]	I _{1/1} [A]
2	115	0.20
1	130	0.22

3 x 400 V, 50 Hz



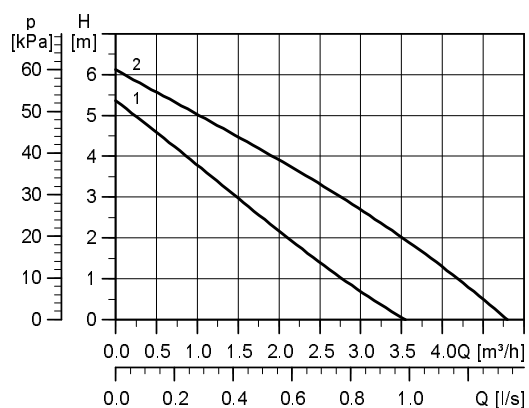
Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-50	180	32	102	73	47	1 1/2"	2.5	2.7	0.004
UPS 32-50	180	39	102	73	47	2"	2.6	2.8	0.004

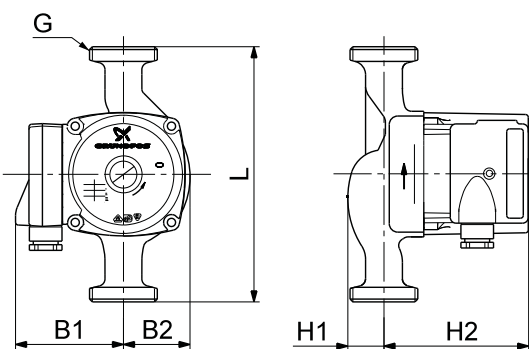
UPS 25-60 (N), UPS 32-60



TM04 8116 3110

Speed	P1 [W]	I _{1/1} [A]
2	115	0.20
1	130	0.22

3 x 400 V, 50 Hz



TM00 8960 2105

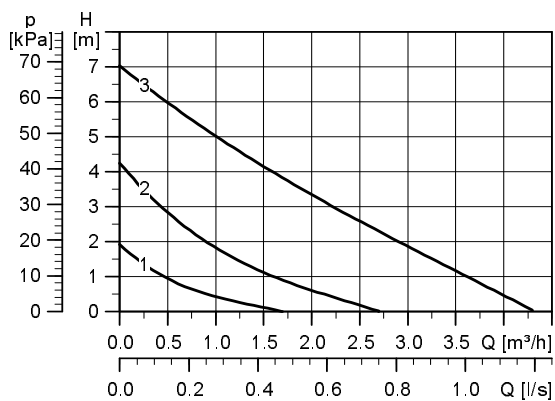
Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: +2 to +110 °C (TF 110)
 Also available with: Stainless-steel pump housing, type N
 (only UPS 25-60 180)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-60	180	32	102	73	47	1 1/2"	2.5	2.7	0.004
UPS 25-60 N*	180	32	102	73	51	1 1/2"	2.5	2.7	0.004
UPS 32-60	180	39	102	73	47	2"	2.6	2.8	0.004

* This circulator is suitable for drinking water only.

Heating systems

UPS 15-62 K

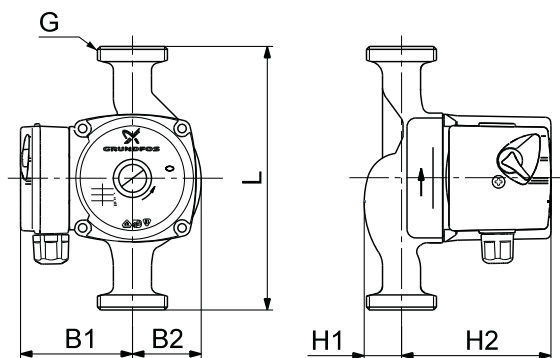


TM04 5021 2409

Speed	P1 [W]	I _{1/1} [A]
3	115	0.51
2	65	0.30
1	35	0.17

The pump has a built-in thermal switch and requires no additional motor protection.

1 x 220 V, 60 Hz

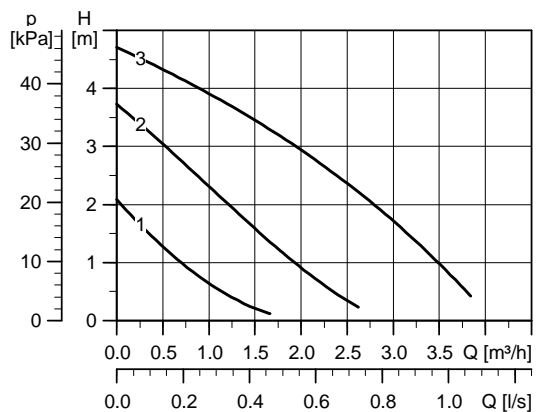


TM00 9386 2105

Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: -25 to +95 °C (cast iron, K-version)

Pump type	Dimensions [mm]					Weights [kg]		Ship. vol. [m ³]	
	L	H1	H2	B1	B2	Net	Gross		
UPS 15-62 K	130	32	102	75	47	1 1/2"	2.6	2.8	0.004

UPS 25-42

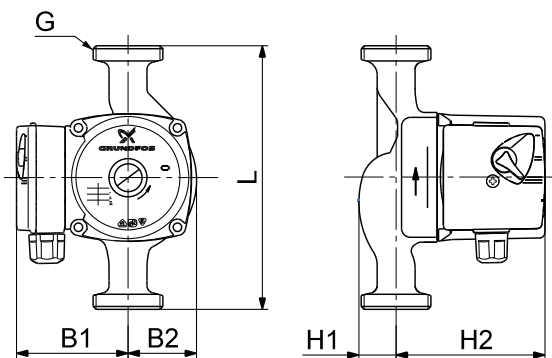


TM01 0152 4708

Speed	P1 [W]	I _{1/1} [A]
3	85	0.40
2	50	0.26
1	30	0.15

The pump has a built-in thermal switch and requires no additional motor protection.

1 x 220 V, 60 Hz



TM00 9386 2105

Connections: See *Pipe connections*, page 101.

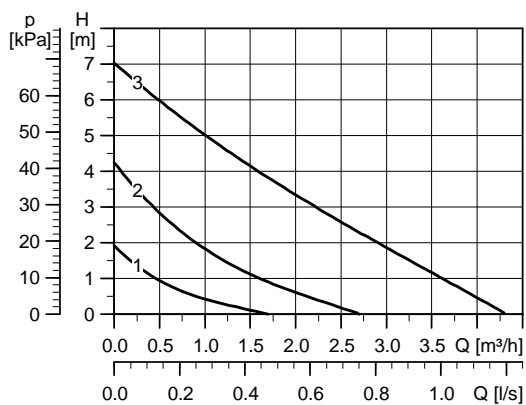
System pressure: Max. 10 bar

Liquid temperature: +2 to +95 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-42	180	32	102	75	47	1 1/2"	2.6	2.8	0.004

Heating systems

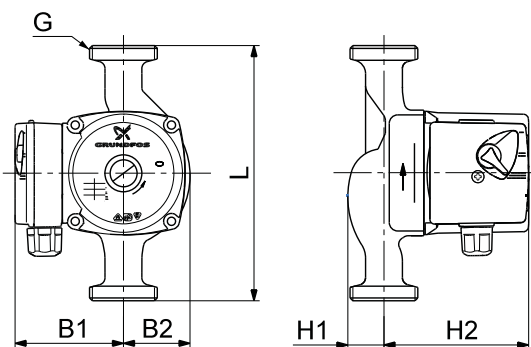
UPS 25-62 (K)



TM01 0153 4708

Speed	P1 [W]	I _{1/1} [A]
3	115	0.51
2	65	0.30
1	35	0.17

1 x 220 V, 60 Hz

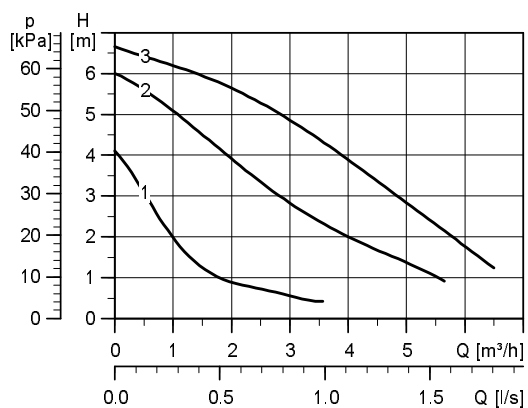


TM00 9386 2105

Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: +2 to +110 °C (TF 110)
 -25 to +95 °C (cast iron, K-version)

Pump type	Dimensions [mm]					Weights [kg]		Ship. vol. [m ³]	
	L	H1	H2	B1	B2	Net	Gross		
UPS 25-62 (K)	180	32	102	75	47	1 1/2"	2.6	2.8	0.004

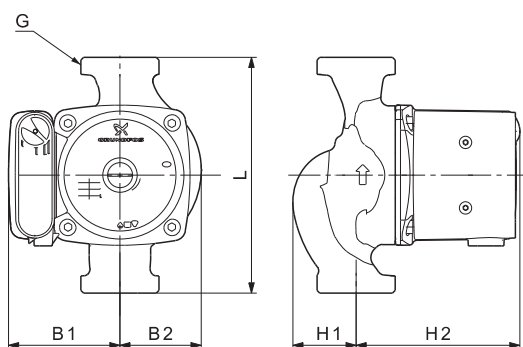
UPS 25-72



TM04 5564 3409

Speed	P1 [W]	I _{1/1} [A]
3	135	0.60
2	125	0.58
1	90	0.44

1 x 220 V, 60 Hz



TM04 3647 5108

Connections: See *Pipe connections*, page 101.

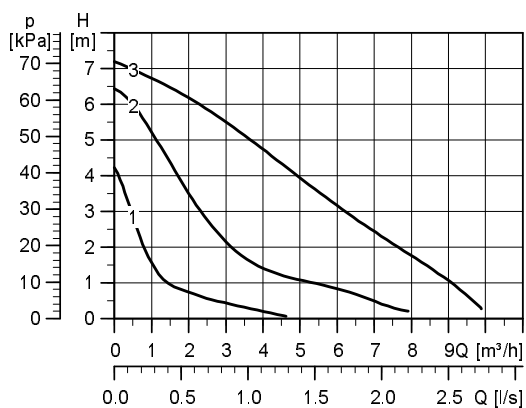
System pressure: Max. 10 bar

Liquid temperature: -25 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-72	180	46	125	85	62	1 1/2"	4.0	4.7	0.008

Heating systems

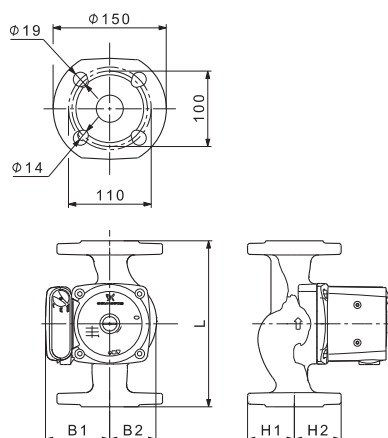
UPS 40-72 F



TM04 5565 3409

Speed	P1 [W]	I _{1/1} [A]
3	160	0.72
2	140	0.68
1	90	0.44

1 x 220 V, 60 Hz



TM04 3845 5108

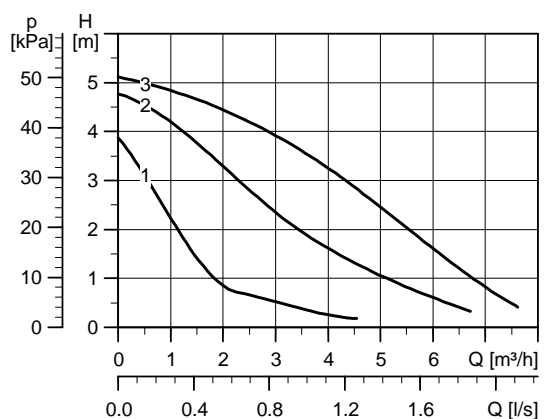
Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

Liquid temperature: -25 to +110 °C (TF 110)

Pump type	Dimensions [mm]					G	Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2		Net	Gross	
UPS 40-72 F	250	67	125	85	62	-	7.4	9.7	0.013

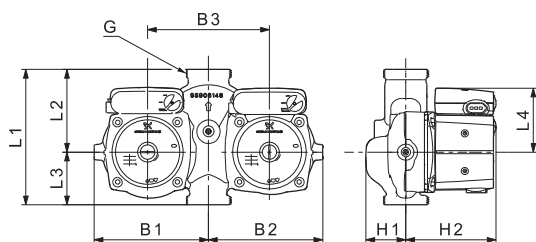
UPSD 32-50



TM04 3793 0000

Speed	P1 [W]	I _{1/1} [A]
3	105	0.46
2	100	0.44
1	75	0.32

1 x 230 V, 50 Hz



TM04 3841 5108

Connections: See *Pipe connections*, page 101.

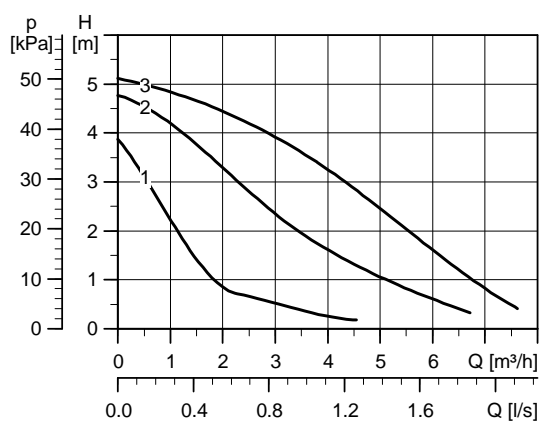
System pressure: Max. 10 bar

Liquid temperature: -25 to +110 °C (TF 110)

Pump type	Dimensions [mm]										Weights [kg]		Ship. vol. [m ³]
	L1	L2	L3	L4	H1	H2	B1	B2	B3	G	Net	Gross	
UPSD 32-50	180	110	70	85	53	120	166	152	162	2"	10.7	11.2	0.018

Heating systems

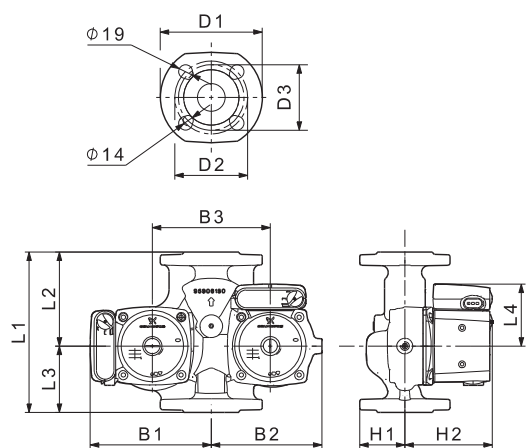
UPSD 32-50 F, UPSD 40-50 F



TM04 3793 0000

Speed	P1 [W]	I _{1/1} [A]
3	105	0.46
2	100	0.44
1	75	0.32

1 x 230 V, 50 Hz



TM04 6006 4609

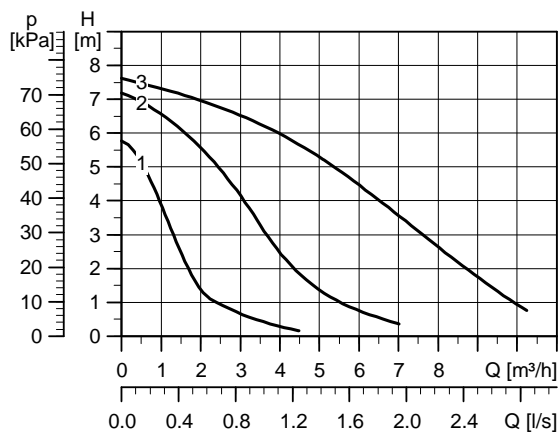
Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

Liquid temperature: -25 to +110 °C (TF 110)

Pump type	Dimensions [mm]											Weights [kg]		Ship. vol. [m ³]		
	L1	D1	D2	D3	L2	L3	L4	H1	H2	B1	B2	B3	G		Net	Gross
UPSD 32-50 F	220	140	100	90	129	91	85	62	120	166	152	162	-	13.6	14.2	0.018
UPSD 40-50 F	250	150	110	100	129	121	85	67	120	166	152	162	-	14.1	14.8	0.021

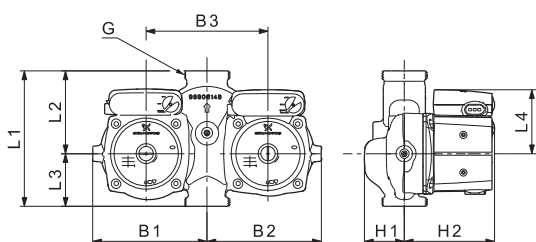
UPSD 32-80



TM04 3794 0000

Speed	P1 [W]	I _{1/1} [A]
3	105	0.46
2	100	0.44
1	75	0.32

1 x 230 V, 50 Hz



TM04 3841 5108

Connections: See *Pipe connections*, page 101.

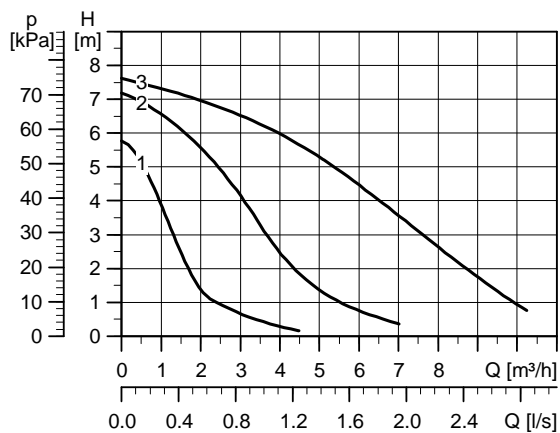
System pressure: Max. 10 bar

Liquid temperature: -25 to +110 °C (TF 110)

Pump type	Dimensions [mm]										Weights [kg]		Ship. vol. [m ³]
	L1	L2	L3	L4	H1	H2	B1	B2	B3	G	Net	Gross	
UPSD 32-80	180	110	70	85	53	120	166	152	162	2"	10.8	12.0	0.015

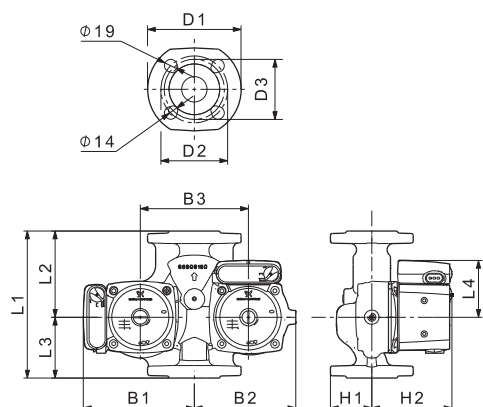
Heating systems

UPSD 32-80 F, UPSD 40-80 F



Speed	P1 [W]	I _{1/1} [A]
3	105	0.46
2	100	0.44
1	75	0.32

1 x 230 V, 50 Hz

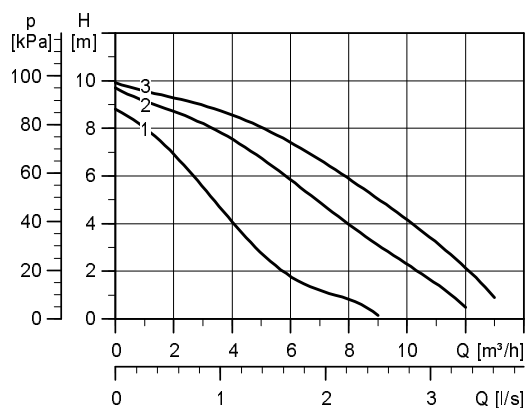
Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

Liquid temperature: -25 to +110 °C (TF 110)

Pump type	Dimensions [mm]												Weights [kg]		Ship. vol. [m ³]	
	L1	D1	D2	D3	L2	L3	L4	H1	H2	B1	B2	B3	G	Net		Gross
UPSD 32-80 F	220	140	100	90	129	91	85	62	120	166	152	162	-	13.6	14.3	0.018
UPSD 40-80 F	250	150	110	100	129	121	85	67	120	166	152	162	-	14.2	14.8	0.021

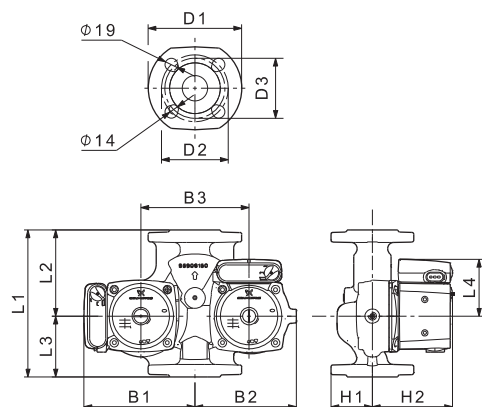
UPSD 32-100 F, UPS 40-100 F



Speed	P1 [W]	I _{1/1} [A]
3	345	1.52
2	340	1.50
1	280	1.30

The pump has a built-in thermal switch and requires no additional motor protection.

1 x 230 V, 50 Hz



Connections: See *Pipe connections*, page 101.

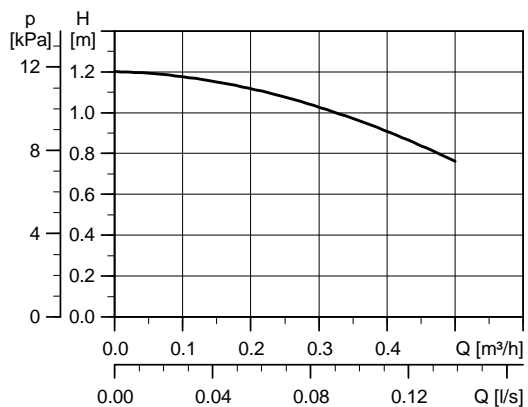
System pressure: Max. 10 bar

Liquid temperature: -25 to +110 °C (TF 110)

Pump type	Dimensions [mm]												Weights [kg]		Ship. vol. [m ³]	
	L1	D1	D2	D3	L2	L3	L4	H1	H2	B1	B2	B3	G	Net		Gross
UPSD 32-100 F	220	140	100	90	125	95	90	62	145	175	162	170	-	17.5	18.4	0.03
UPSD 40-100 F	250	150	110	100	140	110	90	67	145	175	162	170	-	18.3	19.3	0.03

Domestic hot-water systems

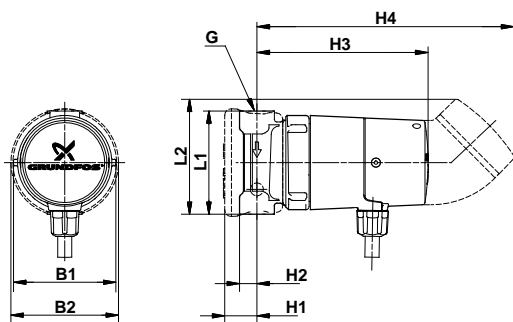
COMFORT UP 15-14 B (U) (T)



TM01 9070 4708

P1 [W]	I _{1/1} [A]
25	0.11

1 x 230 V, 50 Hz



TM01 8554 1602

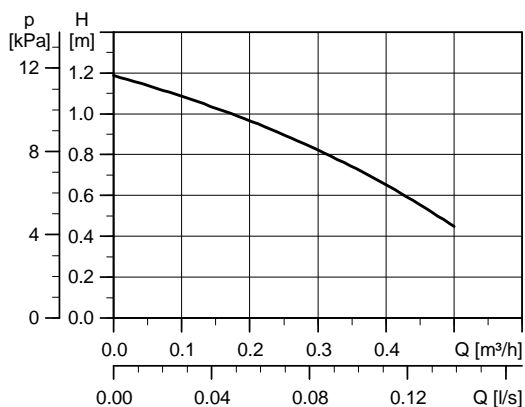
Connections: See *Fittings for COMFORT*, page 104.
 System pressure: Max. 10 bar
 Liquid temperature: +2 to +95 °C (TF 95)

Pump type	Dimensions [mm]									Weights [kg]		Ship. vol. [m ³]
	L1	L2	H1	H2	H3	H4	B1	B2	G	Net	Gross	
UP 15-14 B*	80	-	25	13.5	133	-	79.5	84	Rp 1/2	1.00	1.12	0.0026
UP 15-14 BU*	80	90	25	13.5	-	205	79.5	84	Rp 1/2	1.15	1.31	0.0034
UP 15-14 BT*	80	-	25	13.5	155	-	79.5	84	Rp 1/2	1.05	1.24	0.0034
UP 15-14 BUT*	80	90	25	13.5	-	205	79.5	84	Rp 1/2	1.16	1.32	0.0034

* This circulator is suitable for drinking water only.

Domestic hot-water systems

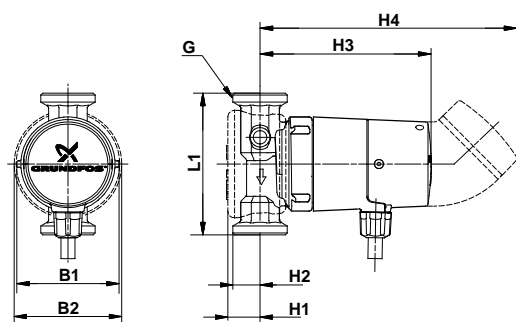
COMFORT UP 20-14 BX (U) (T)



TM01 9098 4708

P1 [W]	I_{1/1} [A]
25	0.11

1 x 230 V, 50 Hz



TM01 8555 1602

Connections: See *Fittings for COMFORT*, page 104.

System pressure: Max. 10 bar

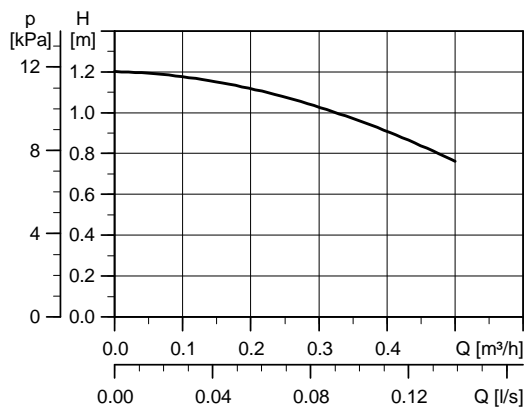
Liquid temperature: +2 to +95 °C (TF 95)

Pump type	Dimensions [mm]								Weights [kg]		Ship. vol. [m ³]
	L1	H1	H2	H3	H4	B1	B2	G	Net	Gross	
UP 20-14 BX*	110	25	21	133	-	79.5	84	G 1 1/4	1.20	1.35	0.0026
UP 20-14 BXU*	110	25	21	-	205	79.5	84	G 1 1/4	1.35	1.51	0.0034
UP 20-14 BXT*	110	25	21	155	-	79.5	84	G 1 1/4	1.25	1.44	0.0034
UP 20-14 BXUT*	110	25	21	-	205	79.5	84	G 1 1/4	1.36	1.52	0.0034

* This circulator is suitable for drinking water only.

Domestic hot-water systems

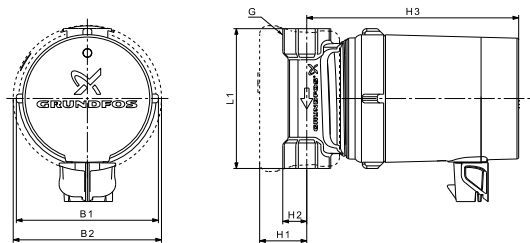
COMFORT UP 15-14 B PM



TM01 9070 4708

P1 [W]	I _{1/1} [A]
8	0.07

1 x 230 V, 50 Hz



TM05 1650 3411

Connections: See *Fittings for COMFORT*, page 104.

System pressure: Max. 10 bar

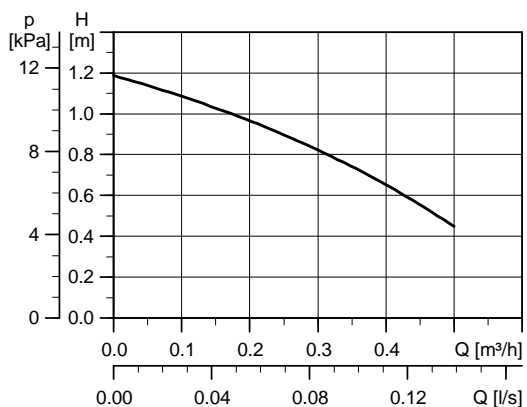
Liquid temperature: +2 to +95 °C (TF 95)

Pump type	Dimensions [mm]							Weights [kg]		Ship. vol. [m ³]
	L1	H1	H2	H3	B1	B2	G	Net	Gross	
UP 15-14 B PM*	80	25	13.5	119	79.5	84	Rp 1/2	1.00	1.12	0.0026

* This circulator is suitable for drinking water only.

Domestic hot-water systems

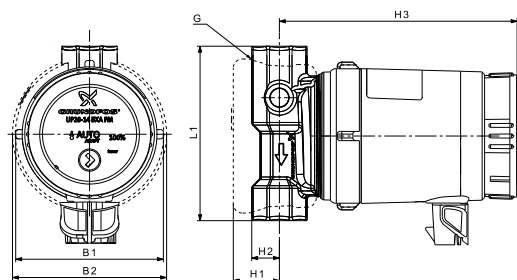
COMFORT UP 15-14 BA PM



TM01 9098 4708

P1 [W]	I _{1/1} [A]
8	0.07

1 x 230 V, 50 Hz



TM05 2202 4611

Connections: See *Fittings for COMFORT*, page 104.

System pressure: Max. 10 bar

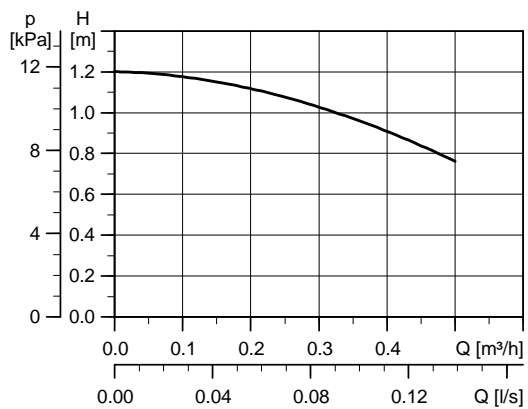
Liquid temperature: +2 to +95 °C (TF 95)

Pump type	Dimensions [mm]							Weights [kg]		Ship. vol. [m³]
	L1	H1	H2	H3	B1	B2	G	Net	Gross	
UP 15-14 BA PM*	80	25	13.5	129	79.5	84	Rp 1/2	1.00	1.12	0.0026

* This circulator is suitable for drinking water only.

Domestic hot-water systems

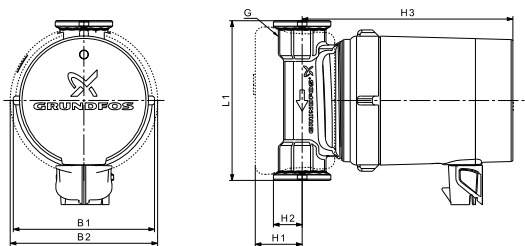
COMFORT UP 20-14 BX PM



TM01 9070 4708

P1 [W]	I_{1/1} [A]
8	0.07

1 x 230 V, 50 Hz



TM05 2203 4611

Connections: See *Fittings for COMFORT*, page 104.

System pressure: Max. 10 bar

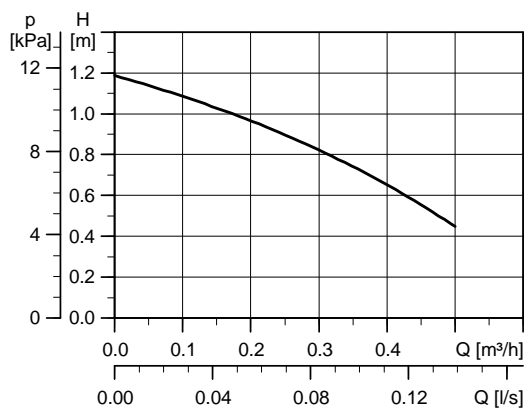
Liquid temperature: +2 to +95 °C (TF 95)

Pump type	Dimensions [mm]							Weights [kg]		Ship. vol. [m ³]
	L1	H1	H2	H3	B1	B2	G	Net	Gross	
UP 20-14 BX PM*	110	25	21	119	79.5	84	G 1 1/4	1.35	1.51	0.0034

* This circulator is suitable for drinking water only.

Domestic hot-water systems

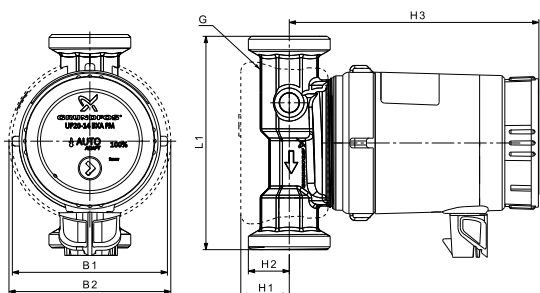
COMFORT UP 20-14 BXA PM



TM01 9098 4708

P1 [W]	I_{1/1} [A]
8	0.07

1 x 230 V, 50 Hz



TM05 1651 3411

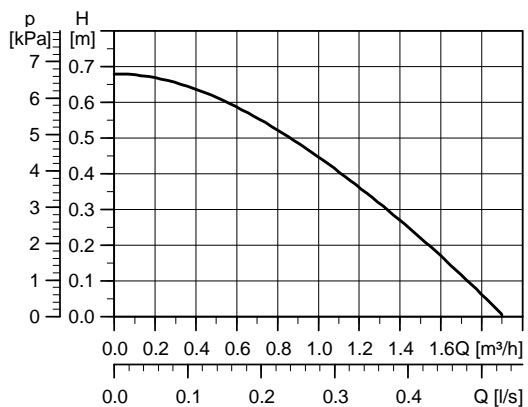
Connections: See *Fittings for COMFORT*, page 104.
 System pressure: Max. 10 bar
 Liquid temperature: +2 to +95 °C (TF 95)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]	
	L1	H1	H2	H3	B1	B2	G	Net		Gross
UP 20-14 BXA PM*	110	25	21	129	79.5	84	G 1 1/4	1.35	1.51	0.0034

* This circulator is suitable for drinking water only.

Domestic hot-water systems

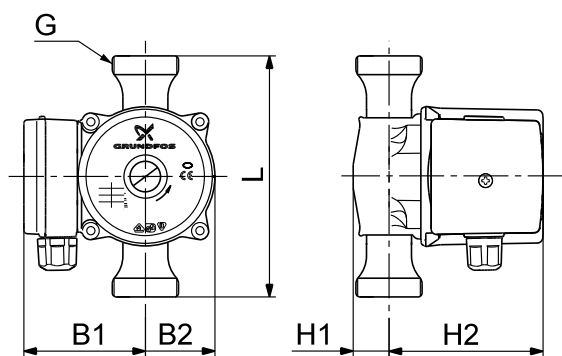
UP 20-07 N



TM00 9760 4708

Speed	P1 [W]	I _{1/1} [A]
1	50	0.24

1 x 230 V, 50 Hz



TM00 8932 2105

Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

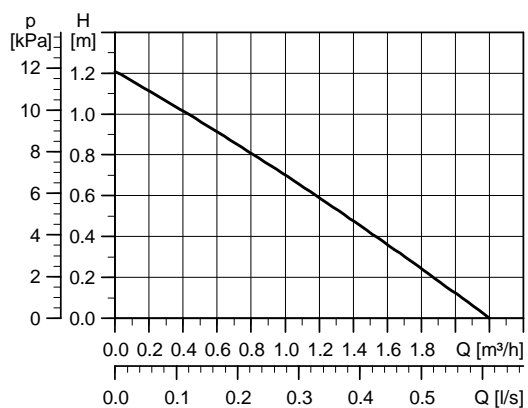
Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m³]
	L	H1	H2	B1	B2	G	Net	Gross	
UP 20-07 N*	150	25	100	75	43	1 1/4"	2.1	2.3	0.004

* This circulator is suitable for drinking water only.

Domestic hot-water systems

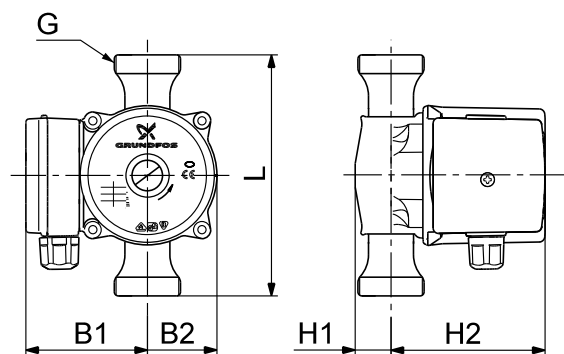
UP 20-15 N



TM00 9765 4705

Speed	P1 [W]	I _{1/1} [A]
1	65	0.28

1 x 230 V, 50 Hz



TM00 8932 2105

Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

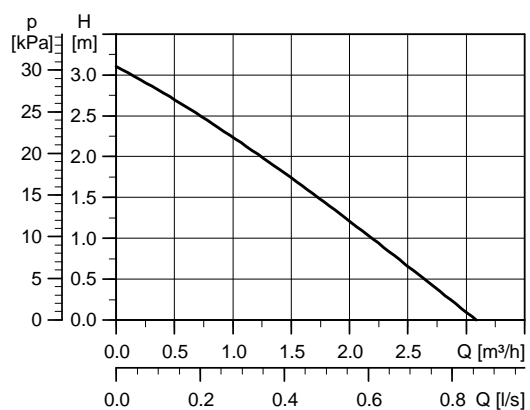
Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m³]
	L	H1	H2	B1	B2	G	Net	Gross	
UP 20-15 N*	150	28	100	75	43	1 1/4"	2.1	2.3	0.004

* This circulator is suitable for drinking water only.

Domestic hot-water systems

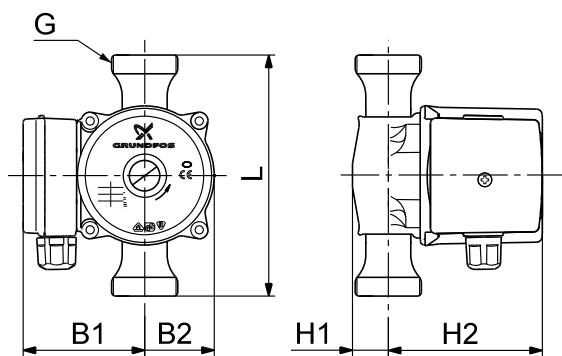
UP 20-30 N



TM00 9752 4708

Speed	P1 [W]	I _{1/1} [A]
1	75	0.31

1 x 230 V, 50 Hz



TM00 8932 2105

Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

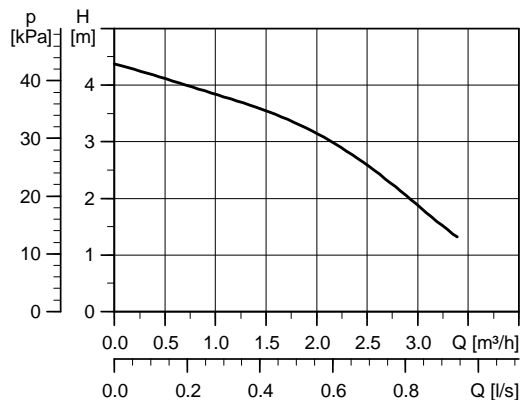
Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m³]
	L	H1	H2	B1	B2	G	Net	Gross	
UP 20-30 N*	150	28	100	75	43	1 1/4"	2.1	2.3	0.004

* This circulator is suitable for drinking water only.

Domestic hot-water systems

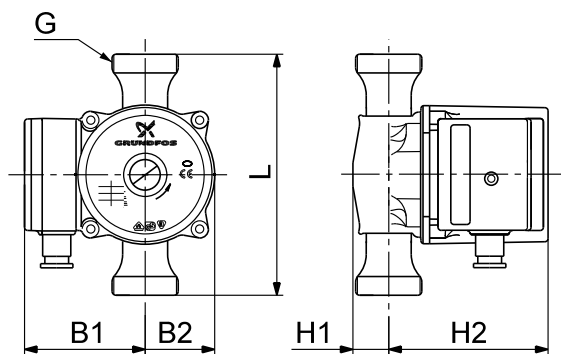
UP 20-45 N



TM04 3749 24/09

Speed	P1 [W]	I _{1/1} [A]
1	110	0.5

1 x 230 V, 50 Hz



TM00 9388 21/05

Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

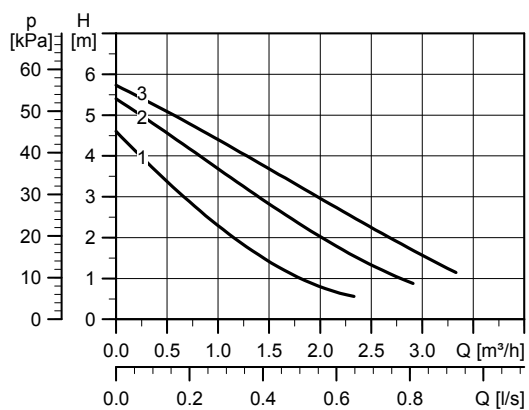
Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m³]
	L	H1	H2	B1	B2	G	Net	Gross	
UP 20-45 N*	150	25	126	85	53.5	1 1/4"	3.6	3.8	0.008

* This circulator is suitable for drinking water only.

Domestic hot-water systems

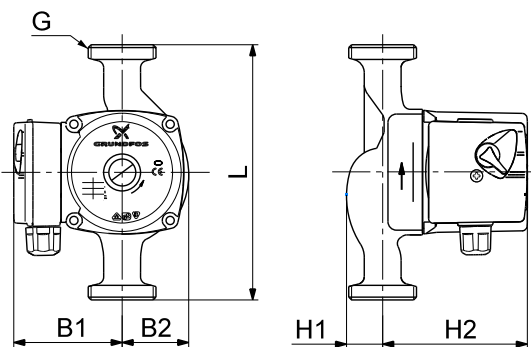
UPS 20-60 N



TM05 1720 3611

Speed	P1 [W]	I _{1/1} [A]
3	70	0.30
2	60	0.27
1	50	0.22

1 x 230 V, 50 Hz



TM00 9388 2105

Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

Liquid temperature: +2 to +110 °C (TF 110)

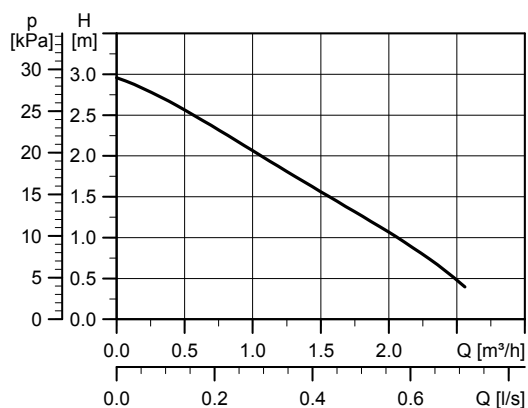
-25 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 20-60 N*	150	28	102	75	47	1 1/4"	3.5	3.8	0.004

* This circulator is suitable for drinking water only.

Domestic hot-water systems

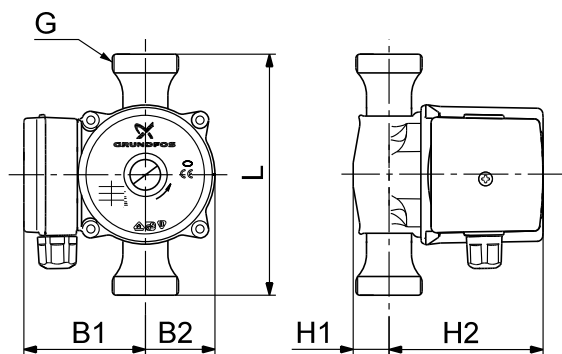
UP 20-30 N



TM05 1721 3611

Speed	P1 [W]	I _{1/1} [A]
1	80	0.33

1 x 240 V, 50 Hz



TM00 8932 2105

Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

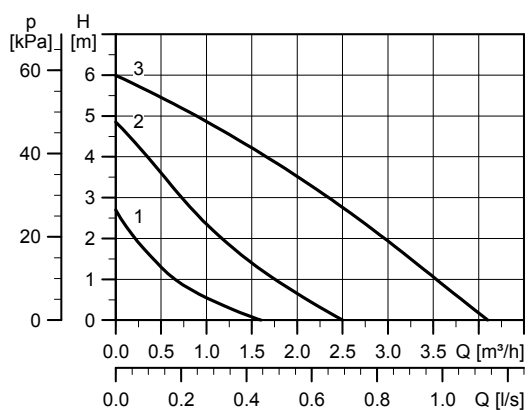
Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m³]
	L	H1	H2	B1	B2	G	Net	Gross	
UP 20-30 N*	150	28	100	75	43	1 1/4"	2.1	2.3	0.004

* This circulator is suitable for drinking water only.

Domestic hot-water systems

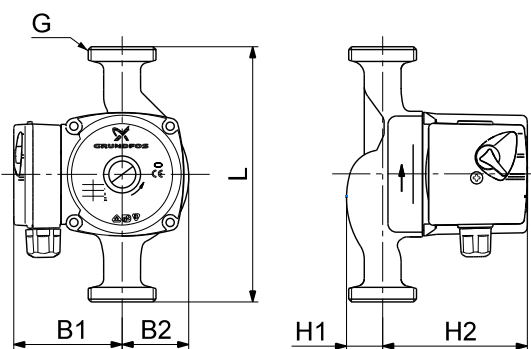
UPS 20-60 N



TM05 1756 3611

Speed	P1 [W]	I _{1/1} [A]
3	90	0.37
	60	0.25
1	35	0.15

1 x 240 V, 50 Hz



TM00 9388 2105

Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

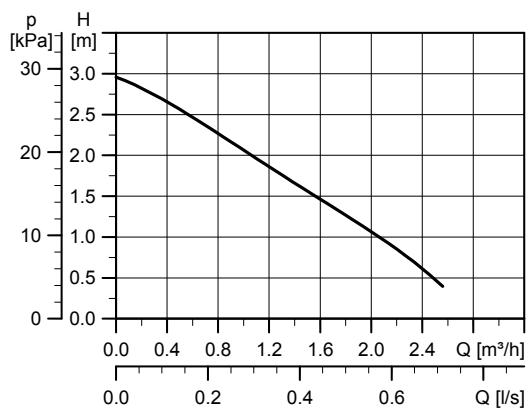
Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 20-60 N*	150	28	102	75	51	1 1/4"	2.4	2.7	0.004

* This circulator is suitable for drinking water only.

Domestic hot-water systems

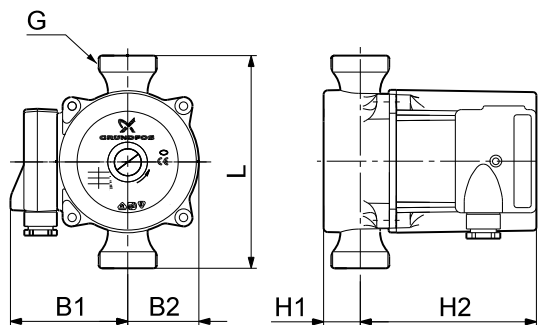
UP 20-30 N



TM05 1757 3611

Speed	P1 [W]	I _{1/1} [A]
1	115	0.38

3 x 220 V, 50 Hz



TM00 8964 4296

Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

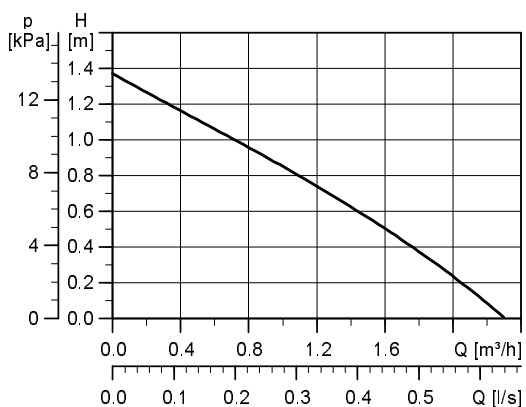
Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UP 20-30 N*	150	25	123	80	51	1 1/4"	4.0	4.3	0.008

* This circulator is suitable for drinking water only.

Domestic hot-water systems

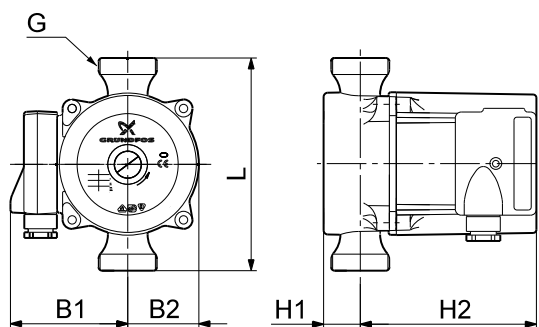
UP 20-15 N



TM04 5561 3409

Speed	P1 [W]	I _{1/1} [A]
1	75	0.19

3 x 400 V, 50 Hz



TM00 8964 4296

Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

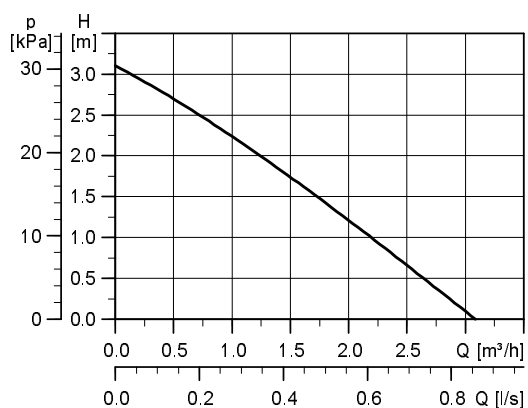
Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m³]
	L	H1	H2	B1	B2	G	Net	Gross	
UP 20-15 N*	150	28	100	73	43	1 1/4"	2.1	2.3	0.004

* This circulator is suitable for drinking water only.

Domestic hot-water systems

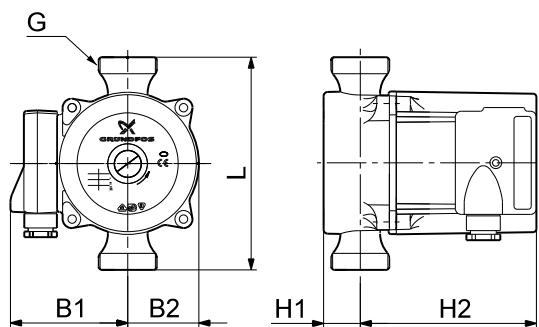
UP 20-30 N



TM04 5562 3409

Speed	P1 [W]	I _{1/1} [A]
1	100	0.18

3 x 400 V, 50 Hz



TM00 8964 4296

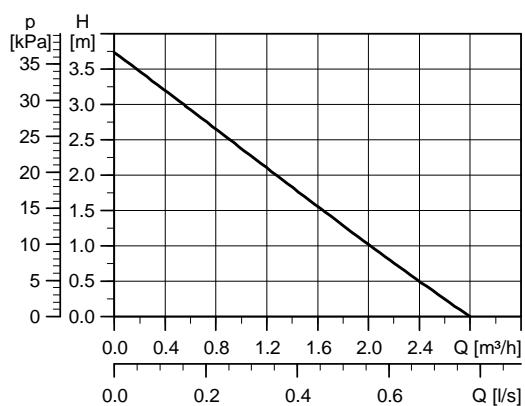
Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UP 20-30 N*	150	28	100	73	43	1 1/4"	2.1	2.3	0.004

* This circulator is suitable for drinking water only.

Domestic hot-water systems

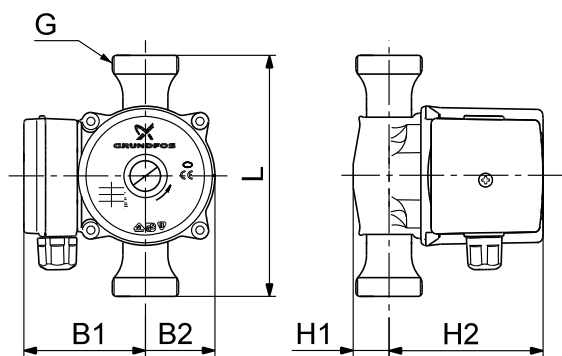
UP 20-32 N



TM01 0154 4708

Speed	P1 [W]	I _{1/1} [A]
1	95	0.43

1 x 220 V, 60 Hz



TM00 8932 2105

Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

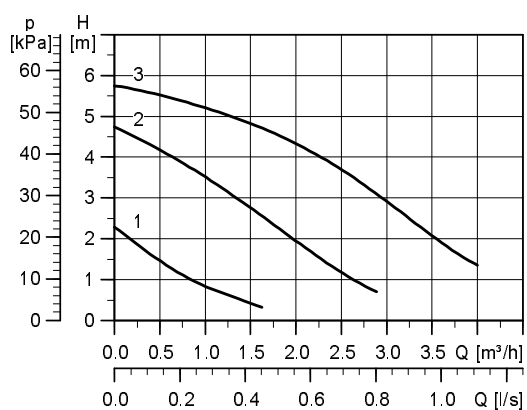
Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UP 20-32 N*	150	28	100	75	43	1 1/4"	2.1	2.3	0.004

* This circulator is suitable for drinking water only.

Domestic hot-water systems

UPS 20-62 N

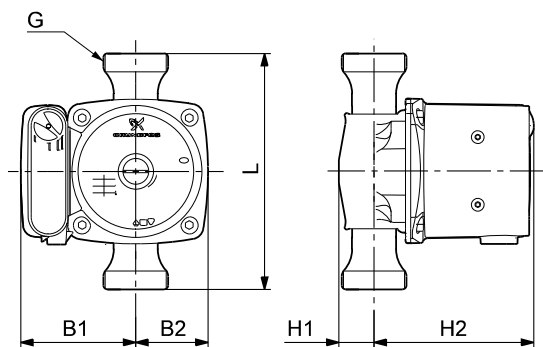


TM04 5563 4009

Speed	P1 [W]	I _{1/1} [A]
3	150	0.68
2	135	0.64
1	90	0.44

The pump has a built-in thermal switch and requires no additional motor protection.

1 x 220 V, 60 Hz



TM04 2811 3405

Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

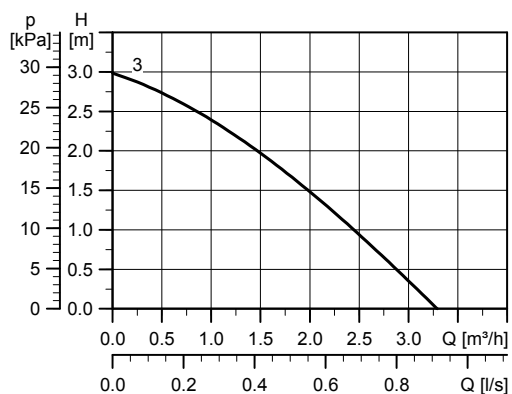
Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 20-62 N*	150	25	126	85	53.5	1 1/4"	3.0	3.8	0.008

* This circulator is suitable for drinking water only.

Cooling and air-conditioning systems

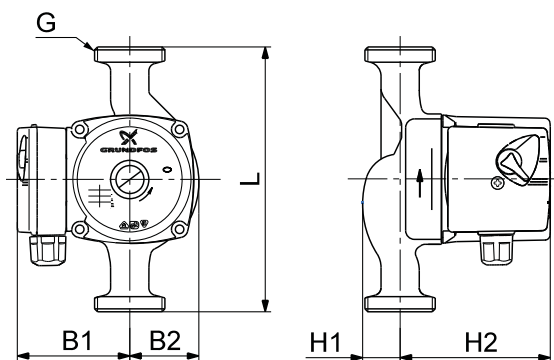
UPS 20-30 NK



TM05 5349 3612

Speed	P1 [W]	I _{1/1} [A]
1	75	0.33

1 x 230 V, 50 Hz



TM00 9386 2105 - TM03 0870 0705

Connections: See *Pipe connections*, page 101.

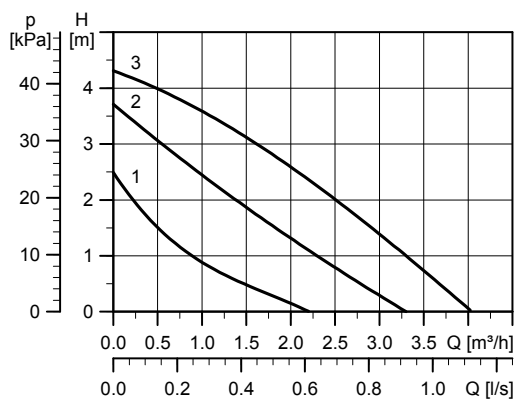
System pressure: Max. 10 bar

Liquid temperature: -25 to +95 °C (TF 95)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 20-30 NK	150	28	100	75	51	1 1/4"	2.1	2.3	0.004

Cooling and air-conditioning systems

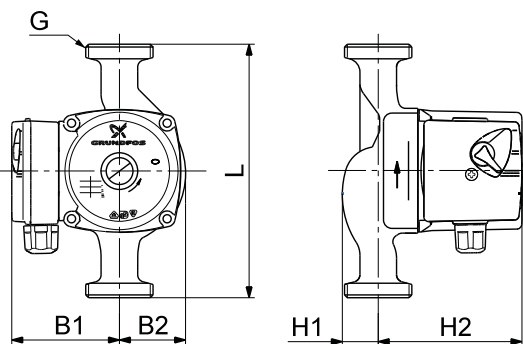
UPS 20-40 K



TM05 5343 3612

Speed	P1 [W]	I _{1/1} [A]
3	75	0.32
2	55	0.25
1	35	0.16

1 x 240 V, 50 Hz



TM00 9386 2105

Connections: See *Pipe connections*, page 101.

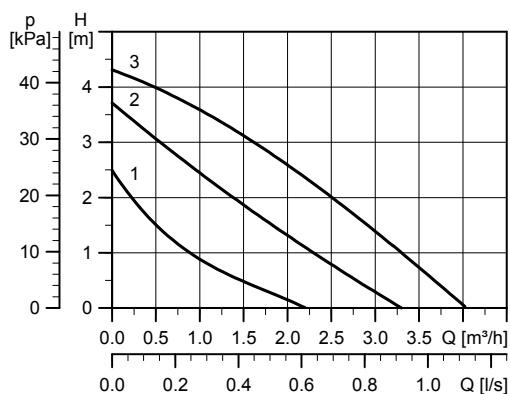
System pressure: Max. 10 bar

Liquid temperature: -25 to +95 °C (TF 95)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UP 20-40 K	130	28	102	75	47	1 1/4"	2.6	2.8	0.004

Cooling and air-conditioning systems

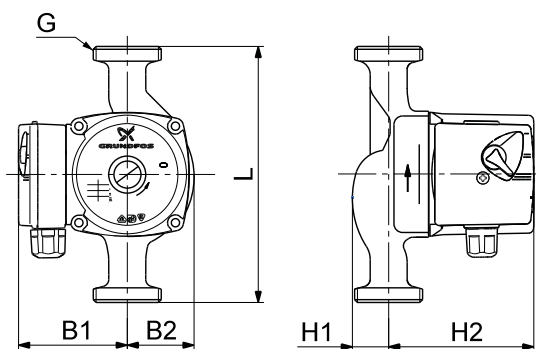
UPS 25-40 K



TM05 5343 3612

Speed	P1 [W]	I _{1/1} [A]
3	75	0.32
2	55	0.25
1	35	0.16

1 x 230 V, 50 Hz



TM00 9386 2105

Connections: See *Pipe connections*, page 101.

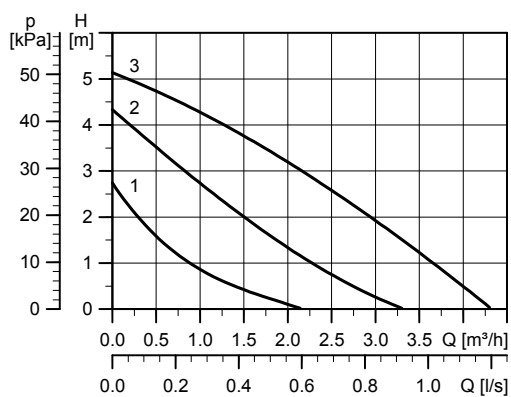
System pressure: Max. 10 bar

Liquid temperature: -25 to +95 °C (TF 95)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-40 K	180	28	102	75	47	1 1/4"	2.6	2.8	0.004

Cooling and air-conditioning systems

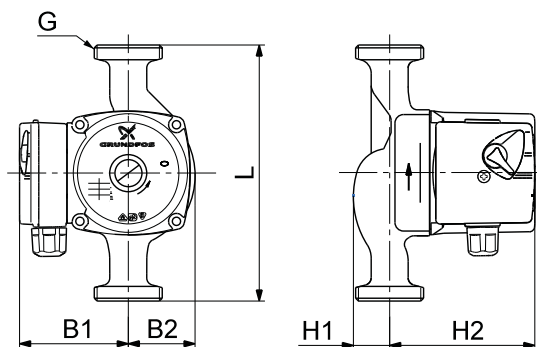
UPS 25-50 K



TM05 5344 3612

Speed	P1 [W]	I _{1/1} [A]
3	85	0.36
2	65	0.29
1	40	0.18

1 x 230 V, 50 Hz



TM00 9386 2105

Connections: See *Pipe connections*, page 101.

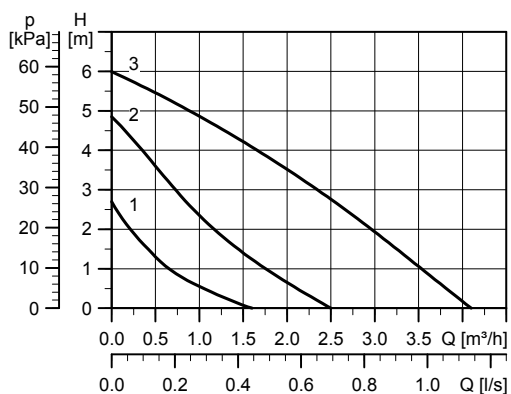
System pressure: Max. 10 bar

Liquid temperature: -25 to +95 °C (TF 95)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-50 K	180	32	102	75	47	1 1/2"	2.6	2.8	0.004

Cooling and air-conditioning systems

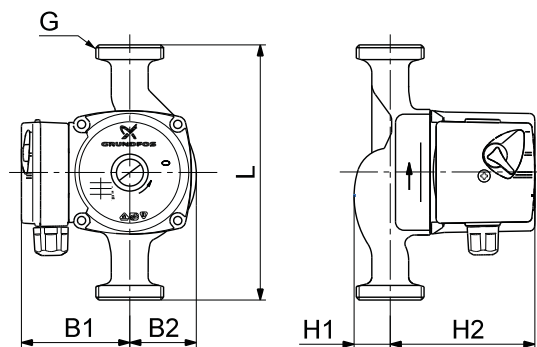
UPS 20-60 NK



TM05 5348 3612

Speed	P1 [W]	I _{1/1} [A]
3	90	0.37
2	60	0.25
1	35	0.15

1 x 240 V, 50 Hz



TM00 9386 2105

Connections: See *Pipe connections*, page 101.

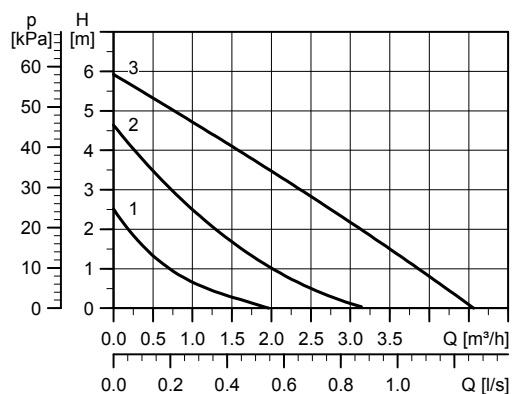
System pressure: Max. 10 bar

Liquid temperature: -25 to +95 °C (TF 95)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 20-60 NK	150	28	102	75	51	1 1/4"	2.4	2.7	0.004

Cooling and air-conditioning systems

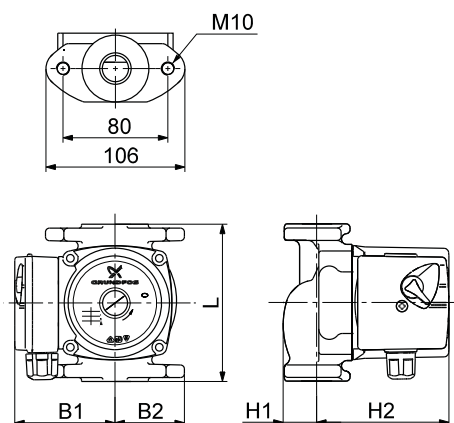
UPS 21-60 FK



TM05 5342 36 12

Speed	P1 [W]	I _{1/1} [A]
3	95	0.41
2	70	0.31
1	45	0.2

1 x 230 V, 50 Hz



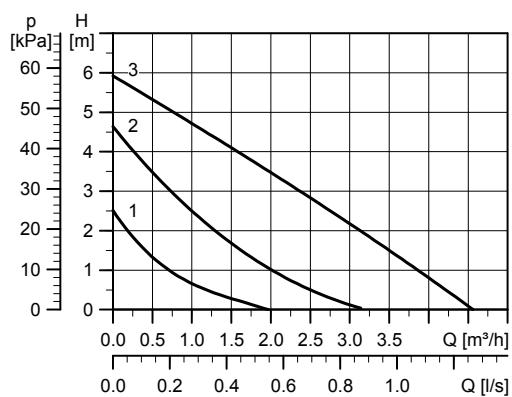
TM00 8929 21 05

Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: -25 to +95 °C (TF 95)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 21-60 FK	120	32	102	75	53	-	2.9	3.1	0.004

Cooling and air-conditioning systems

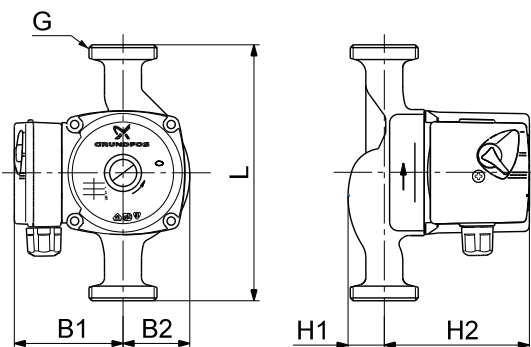
UPS 25-60 (N)K



TM05 5342 3612

Speed	P1 [W]	I _{1/1} [A]
3	95	0.41
2	70	0.31
1	45	0.20

1 x 230 V, 50 Hz



TM00 9386 2105

Connections: See *Pipe connections*, page 101.

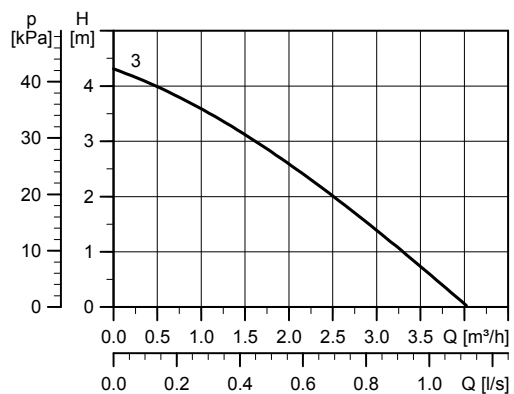
System pressure: Max. 10 bar

Liquid temperature: -25 to +95 °C (TF 95)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UPS 25-60 K	180	32	102	75	47	1 1/2"	2.6	2.8	0.004
UPS 25-60 NK	130	32	102	75	51	1 1/2"	1.9	2.4	0.004

Cooling and air-conditioning systems

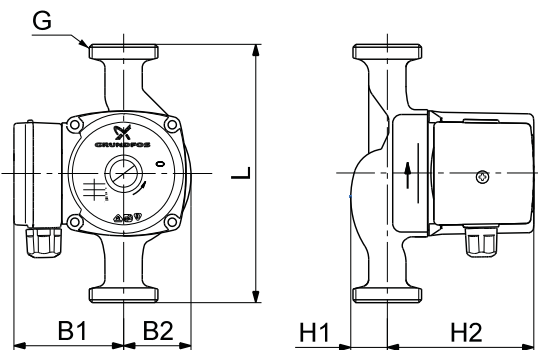
UP 25-40 KU



TM05 5345 3612

Speed	P1 [W]	I _{1/1} [A]
1	60	0.26

1 x 230 V, 50 Hz



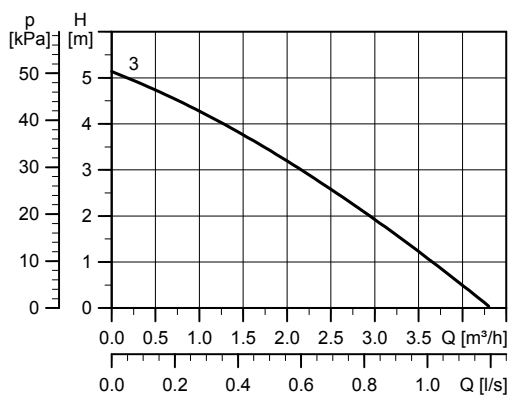
TM00 8933 2105

Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: -25 to +95 °C (TF 95)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m³]
	L	H1	H2	B1	B2	G	Net	Gross	
UP 25-40 KU	180	32	102	75	47	1 1/2"	2.6	2.8	0.004

Cooling and air-conditioning systems

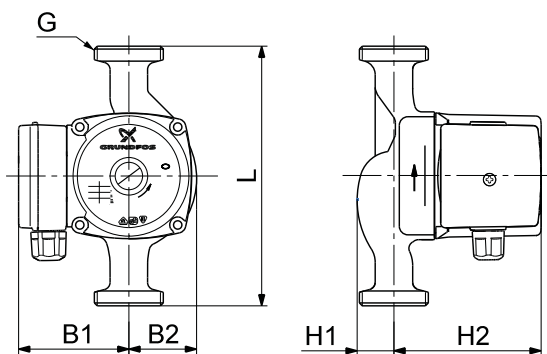
UP 25-50 KU



TM05 5346 3612

Speed	P1 [W]	I _{1/1} [A]
1	80	0.34

1 x 230 V, 50 Hz



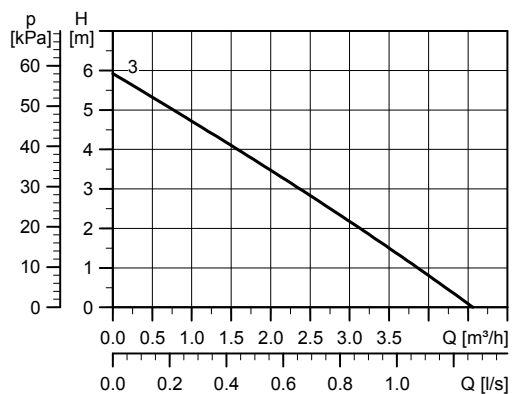
TM00 8933 2105

Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: -25 to +95 °C (TF 95)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UP 25-50 KU	180	32	102	75	47	1 1/2"	2.6	2.8	0.004

Cooling and air-conditioning systems

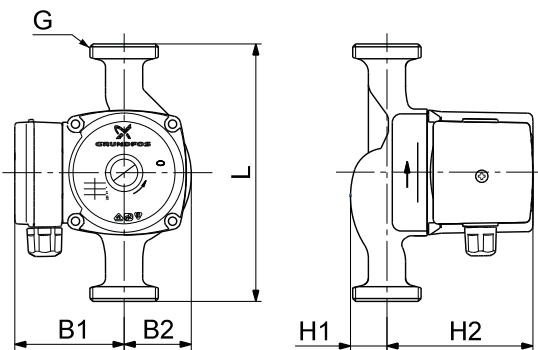
UP 25-60 KU



TM05 5347 3612

Speed	P1 [W]	I _{1/1} [A]
1	90	0.40

1 x 230 V, 50 Hz



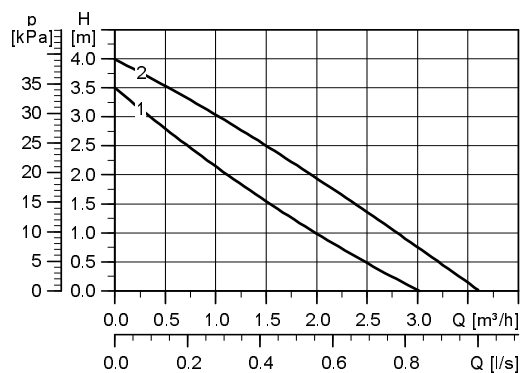
TM00 8933 2105

Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: -25 to +95 °C (TF 95)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
UP 25-60 KU	180	32	102	75	47	1 1/2"	2.6	2.8	0.004

Solar heating systems

SOLAR 25-40

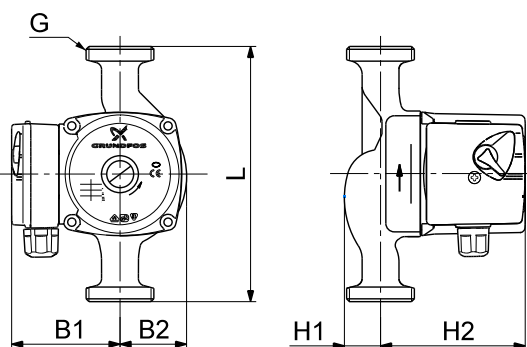


TM04 5015 2409

Speed	P1 [W]	I _{1/1} [A]
2	55	0.16
1	35	0.25

The pump has a built-in thermal switch and requires no additional motor protection.

1 x 230 V, 50 Hz



TM00 9386 2105

Connections: See *Pipe connections*, page 101.

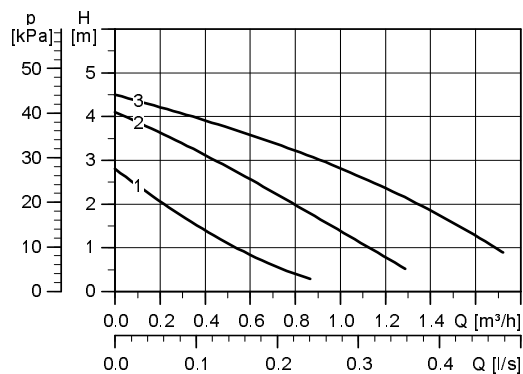
System pressure: Max. 10 bar

Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m³]
	L	H1	H2	B1	B2	G	Net	Gross	
SOLAR 25-40	180	32	102	75	47	1 1/2"	2.6	2.8	0.004

Solar heating systems

SOLAR 15-45, SOLAR 25-45

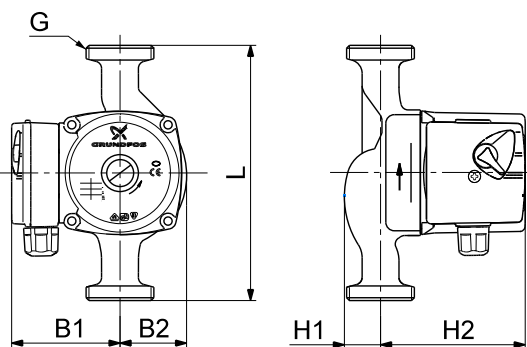


TM04 5016 2409

Speed	P1 [W]	I _{1/1} [A]
3	50	0.21
2	35	0.16
1	20	0.10

The pump has a built-in thermal switch and requires no additional motor protection.

1 x 230 V, 50 Hz



TM00 9386 2105

Connections: See *Pipe connections*, page 101.

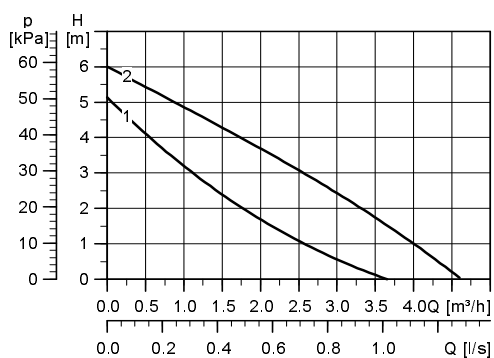
System pressure: Max. 10 bar

Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
SOLAR 15-45	130	24	102	75	47	1"	2.3	2.5	0.004
SOLAR 15-45	180	32	102	75	51	1 1/2"	2.6	2.8	0.004
SOLAR 25-45	130	24	102	75	47	1 1/2"	2.4	2.6	0.004
SOLAR 25-45	180	26	102	75	47	1 1/2"	2.6	2.8	0.004

Solar heating systems

SOLAR 15-60, SOLAR 25-60

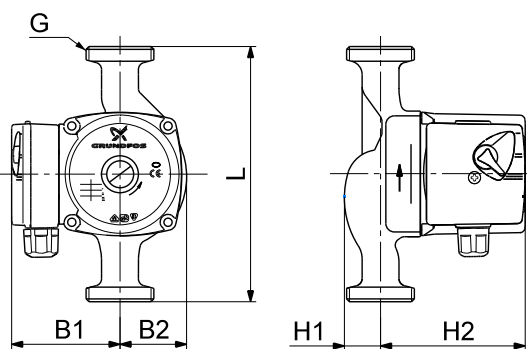


TM04 5017 2409

Speed	P1 [W]	I _{1/1} [A]
2	80	0.28
1	65	0.34

The pump has a built-in thermal switch and requires no additional motor protection.

1 x 230 V, 50 Hz



TM00 9386 2105

Connections: See *Pipe connections*, page 101.

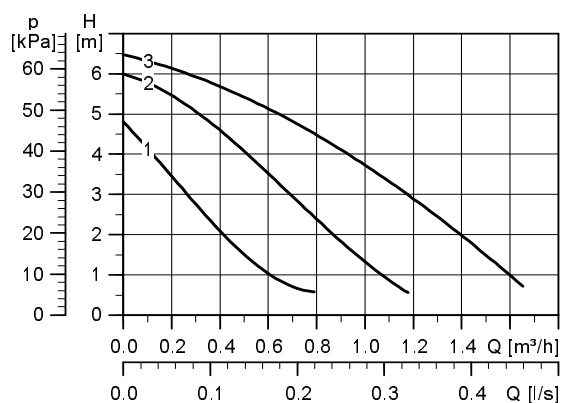
System pressure: Max. 10 bar

Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]					Weights [kg]		Ship. vol. [m ³]	
	L	H1	H2	B1	B2	G	Net		Gross
SOLAR 15-60	130	32	102	75	47	1"	2.6	2.8	0.004
SOLAR 25-60	180	32	102	75	47	1 1/2"	2.6	2.8	0.004

Solar heating systems

SOLAR 15-65, SOLAR 25-65

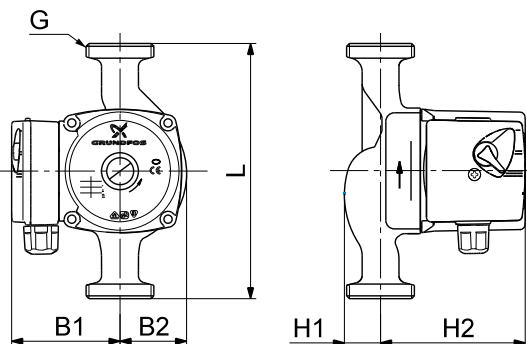


TM04 5018 2409

Speed	P1 [W]	I _{1/1} [A]
3	80	0.36
2	65	0.30
1	50	0.24

The pump has a built-in thermal switch and requires no additional motor protection.

1 x 230 V, 50 Hz



TM00 9386 2105

Connections: See *Pipe connections*, page 101.

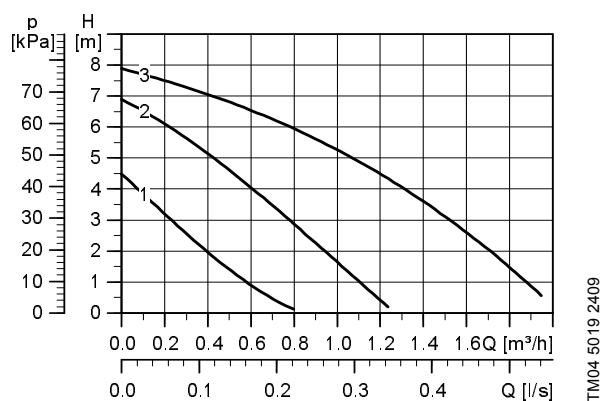
System pressure: Max. 10 bar

Liquid temperature: +2 to +110 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
SOLAR 15-65	130	24	102	75	47	1"	2.3	2.5	0.004
SOLAR 25-65	130	24	102	75	47	1 1/2"	2.4	2.6	0.004
SOLAR 25-65	180	26	102	75	47	1 1/2"	2.6	2.8	0.004

Solar heating systems

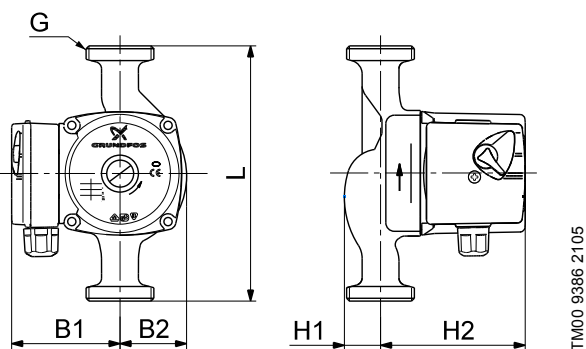
SOLAR 15-80



Speed	P1 [W]	I _{1/1} [A]
3	80	0.36
2	65	0.30
1	50	0.24

The pump has a built-in thermal switch and requires no additional motor protection.

1 x 230 V, 50 Hz



Connections: See *Pipe connections*, page 101.

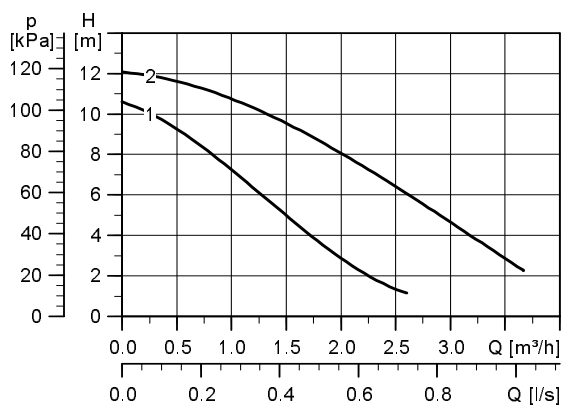
System pressure: Max. 10 bar

Liquid temperature: +2 to +95 °C (TF 95)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
SOLAR 15-80	130	32	103	75	47	1"	2.6	2.8	0.004

Solar heating systems

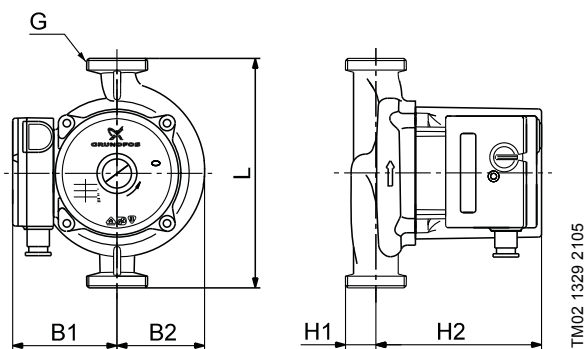
SOLAR 25-120



Speed	P1 [W]	I _{1/1} [A]
2	180	0.79
1	230	1.01

The pump has a built-in thermal switch and requires no additional motor protection.

1 x 230 V, 50 Hz



Connections: See *Pipe connections*, page 101.

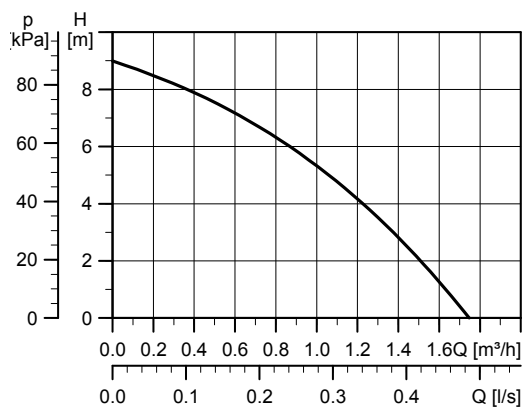
System pressure: Max. 10 bar

Liquid temperature: +2 to +95 °C (TF 110)

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m ³]
	L	H1	H2	B1	B2	G	Net	Gross	
SOLAR 25-120	180	32	130	82	69	1 1/2"	2.6	2.8	0.004

Home booster systems

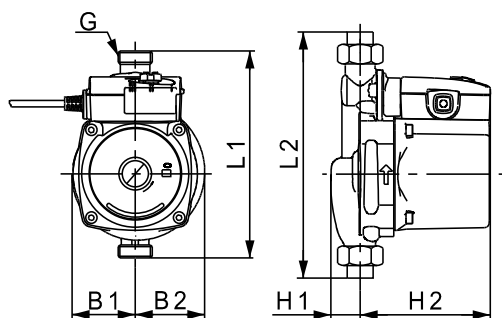
UPA 15-90 (N)



TM05 1755 3611

Speed	P1 [W]	I _{1/I1} [A]
Max.	118	0.48

1 x 230 V, 50 Hz



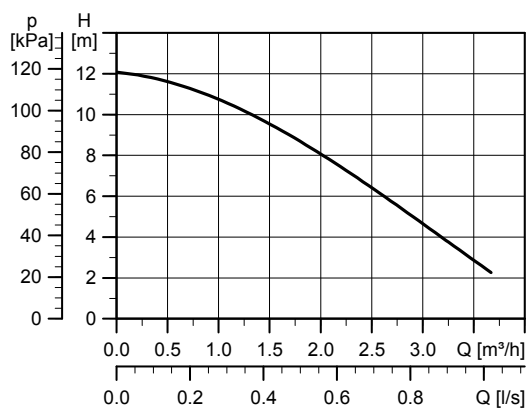
TM05 1769 3711

Connections: See *Pipe connections*, page 101.
 System pressure: Max. 10 bar
 Liquid temperature: +2 to +95 °C (TF 95)
 IP class: X2D

Pump type	Dimensions [mm]							Weights [kg]		Ship. vol. [m³]
	L1	L2	H1	H2	B1	B2	G	Net	Gross	
UPA 15-90 (N)	160	214	23	103	50	54	3/4"	2.5	2.7	0.003

Home booster systems

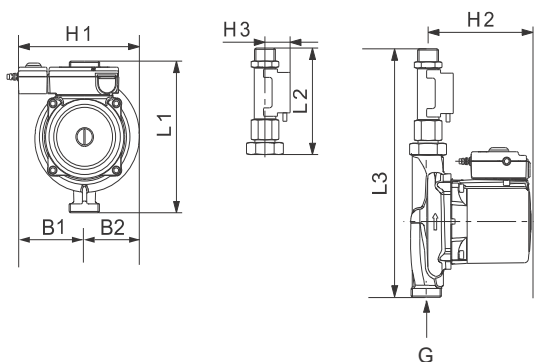
UPA 15-120



TM05 1754 3611

Speed	P1 [W]	I _{1/1} [A]
Max.	235	1.02

1 x 230 V, 50 Hz



TM05 4779 2612

Connections: See *Pipe connections*, page 101.

System pressure: Max. 10 bar

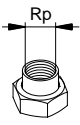
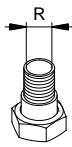
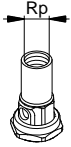
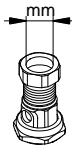
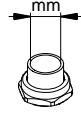
Liquid temperature: +2 to +95 °C (TF 95)

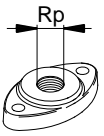
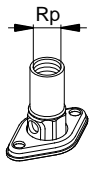
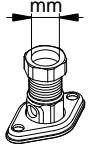
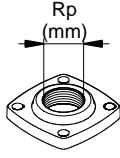
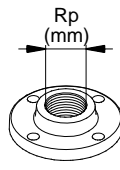
IP class: X2D

Pump type	Dimensions [mm]						Weights [kg]		Ship. vol. [m³]
	L1	L2	H1	H2	H3	G	Net	Gross	
UPA 15-120	180	126.5	151.2	131.1	31.5	1"	2.5	2.7	0.003

9. Accessories

Pipe connections

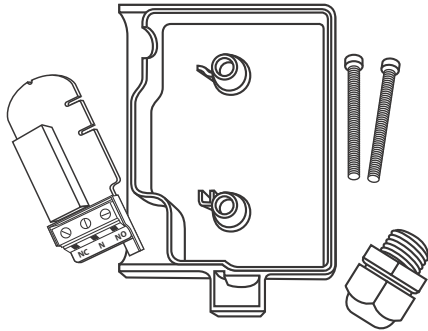
		Product numbers, unions														
Pump type	Connection															
		3/4	1	1 1/4	1	1 1/4	3/4	1	1 1/4	Ø22	Ø28	Ø15	Ø18	Ø22	Ø28	Ø42
20-xx	G 1 1/4	529932 ¹⁾														
20-xx N		529982 ²⁾			529983 ²⁾		519802 ²⁾			519801 ²⁾		529986 ²⁾ 529987 ²⁾ 529988 ²⁾ 529989 ²⁾				
25-xx	G 1 1/2	529921 ¹⁾ 529922 ¹⁾ 529821 ¹⁾			529925 ¹⁾ 529924 ¹⁾											
25-xx N		529971 ²⁾ 529972 ²⁾					519805 ²⁾ 519806 ²⁾ 519807 ²⁾			519808 ²⁾ 519809 ²⁾		529977 ²⁾ 529978 ²⁾ 529979 ²⁾				
32-xx	G 2	509921 ¹⁾ 509922 ¹⁾														
32-xx N		509971 ²⁾														529995 ²⁾

		Product numbers, flanges																		
Pump type	Connection																			
		3/4	1	1 1/4	1 1/2	3/4	1	1 1/4	Ø22	Ø28	3/4	1	1 1/4	1 1/2	2	Ø32	Ø40	Ø50	1 1/4	1 1/2
21-xx F	Oval	529607 ¹⁾ 529604 ¹⁾ 529605 ¹⁾ 529606 ¹⁾				519705 ²⁾ 519706 ²⁾ 519707 ²⁾		519708 ²⁾ 519709 ²⁾												
36-xx F		Square									509901 ¹⁾ 509902 ¹⁾ 509903 ¹⁾ 509904 ¹⁾ 509905 ¹⁾ 509908 ¹⁾ 509909 ¹⁾ 509910 ¹⁾									
32-xx F			PN 6															539903 ¹⁾		
		PN 10															539703 ¹⁾ 96427029 ²⁾ 539704 ¹⁾ 96427030 ²⁾ 539904 ¹⁾			
40-xx F	PN 6															539701 ¹⁾ 539901 ¹⁾ 539711 ²⁾ 539911 ²⁾				
	PN 10															539702 ¹⁾ 539902 ¹⁾ 539712 ²⁾ 539912 ²⁾				

1) Cast iron.
 2) Brass/bronze.
 Blank = not available.

Alarm module

The alarm module offers the possibility of monitoring the pump for failures via external equipment. The module comes with both an NC (normally closed) and an NO (normally open) galvanically separated output. The alarm output is activated either when the power supply fails or when the thermistor has cut out the motor.

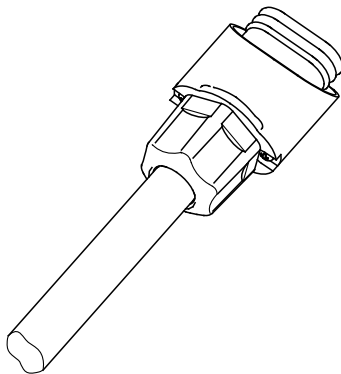


TM04 3958 0509

Fig. 16 Alarm module

Type	Product number
Alarm module	95906254

Service kit for ALPHA plug



TM01 9911 3400

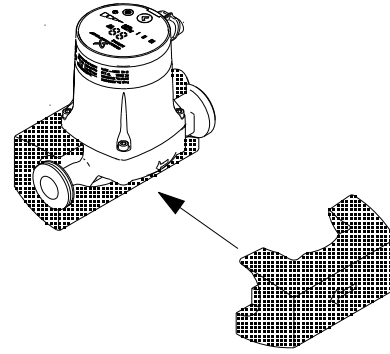
Fig. 17 Plug

Type	Product number
Plug, COMFORT UP 15-14 B (A) PM	
Plug, COMFORT UP 20-14 BX (A) PM	
Plug, UPS xx-25	
Plug, UPS 40-50 F	
Plug, UPS xx-55	595562
Plug, UPS xx-80 (F)	
Plug, UPS xx-100 (F)	
Plug, UPSD	

Insulation kits

Series 100 can be fitted with two insulating shells. The thickness of the insulating shells corresponds to the nominal diameter of the pump.

The insulation kit, which is tailored to the individual pump type, encloses the entire pump housing. The two shells are easily fitted around the pump.



TM03 9505 4107

Fig. 18 Insulating shells

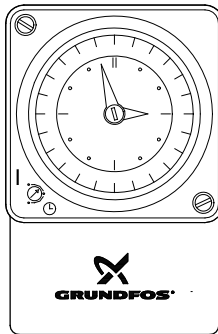
Insulation kit for pump type	Product number
UPS 25-20	505821
UPS 32-20	505821
UPS 25-25	95906655
UPS 25-30	505821
UPS 32-25	95906655
UPS 32-30	505821
UPS 25-40	505821
UPS 32-40	505821
UPS 25-55	95906655
UPS 25-60	505821
UPS 32-55	95906655
UPS 32-60	505821
UPS 25-80	95906655
UPS 25-100	95906653
UPS 32-100	95906653
UPS 25-20 A	505822
UPS 25-30 A	505822
UPS 25-40 A	505822
UPS 25-60 A	505822
UPS 40-50 F	95906655
UPS 40-80 F	95906655

Grundfos controllers

TS 3: On/off time switch

The on/off time switch is designed for wall mounting. The time switch automatically switches the pump on/off at preset intervals. It is available with 24-hour or week dial.

Type	Time switch	Product number 1 x 220 V
TS 3/T	24-hour dial	96406992
TS 3/W	Week dial	96406993



TM01 0205 2602

Fig. 19 TS 3

ET 2: Temperature switch

The ET 2 temperature switch can be used in conjunction with the SAT 200 and GES 200. The ET 2 switch performs control according to the outdoor, room, flow-pipe or return-pipe temperature.

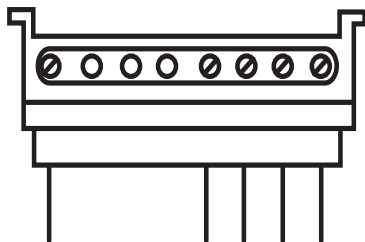
Control signal	Type	Temperature switch	Product number
Temperature (outdoor, room, flow pipe, return pipe)	ET 2	With housing and outdoor sensor	ID4383
		With sensor for external pipe mounting	ID4384
		With sensor for internal pipe mounting and bushing	ID4385

Differential-pressure controllers are also available.

Terminal block

The terminal block is fitted to the terminal box and used for the connection of external controllers (for example for external changeover between two speeds).



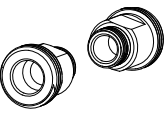



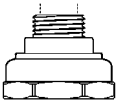
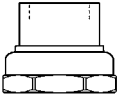
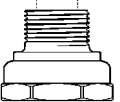
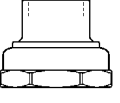
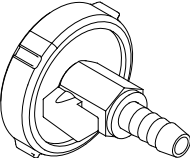
Type	Product number
Terminal block	605003



TM00 5144 5094

Fig. 20 Terminal block

Fittings for COMFORT

Pump type	Fitting	Description	Connection	Material	Product number
		TM01 8539 0300 Extension set Length = 35 mm each	Rp 1/2 / G 1 1/4	Brass	96433911
		TM01 8540 0300 Extension set Length = 25 mm each	Rp 1/2 / G 1 1/2	Brass	96433912
UP 15-XX		TM01 8541 0300 Extension set Length = 30 mm each	Rp 1/2 / G 1	Brass	96433913
		TM01 8647 0300 Non-return valve	1/2"	Brass	96433904
		TM01 8648 0300 Isolating valve	1/2"	Brass	96433905
		TM01 8542 0300 Extension set Length = 40 mm	G 1 1/4 / G 1 1/4	Brass	96436559
		TM01 8643 0300 Union set	G 1 1/4 x 15 mm int./ R 1/2 ext.	Brass	96433907
UP 20-XX		TM01 8644 0300 Union set	G 1 1/4 x Rp 3/4 int.	Brass	96433908
		TM01 8645 0300 Union set	G 1 1/4 x Rp 1/2 int./ R 3/4 ext.	Brass	96433909
		TM01 8646 0300 Union set	G 1/4 x 22 mm int.	Brass	96433910
UP 15-XX UP 20-XX		TM01 8560 0300 Venting flange	Flange Union nut Hose	PP CuZn40Pb2 PE	96433906

Timer and thermostat for COMFORT

According to the table below, the B, BT, BX and BXT pump types can be upgraded with a 24-hour timer.

The timer for the BT and BXT pump types includes a thermostat for replacement.

Pump type	Supplied with			Product number	
	24-hour timer	Thermostat	Isolating valve and non-return valve	24-hour timer	24-hour timer and thermostat
UP 15-14 B				96433891	
UP 15-14 BU	•				
UP 15-14 BT		•			96433892
UP 15-14 BUT	•	•			
UP 20-14 BX			•	96433891	
UP 20-14 BXU	•		•		
UP 20-14 BXT		•	•		96433892
UP 20-14 BXUT	•	•	•		

Product range

UP, Europe, 50 Hz

Region	Pump type	Product number	Supplied with			Dimensions		Accessories		Data sheet
			24-hour timer	Thermostat	Isolating valve and non-return valve	Port-to-port length [mm]	Connection	24-hour timer	24-hour timer and thermostat	Page
Europe	UP 15-14 B	96433883						96433891		65
	UP 15-14 BU	96433884	•						-	65
	UP 15-14 BT	96433885		•					96433892	65
	UP 15-14 BUT	96433886	•	•		80	1/2"		-	65
	UP 15-14 B PM	97916771								67
	UP 15-14 BA PM	97916757								68
	UP 20-14 BX	96433887			•			96433891		66
	UP 20-14 BXU	96433888	•		•					66
	UP 20-14 BXT	96433889		•	•				96433892	66
	UP 20-14 BXUT	96433890	•	•	•	110	1 1/4"			66
	UP 20-14 BX PM	97916772								69
	UP 20-14 BXA PM	97916749								70

UP, USA, 60 Hz

Region	Pump type	Product number	Supplied with			Dimensions		Accessories		Data sheet
			12-hour timer	Thermostat	Line cord and plug	Isolating valve and non-return valve	Port-to-port length [inches]	Connection	12-hour timer	Page
USA	UP 10-16 BN5 LC	96433897			•				96433903	-
	UP 10-16 BN5 TLC	96433898	•		•			1/2"		-
	UP 10-16 BN5 ATLC	96433899	•	•	•					-
USA**	UP 10-16 B5 LC	97525905			•				96433903	-
	UP 10-16 B5 TLC	97525907	•		•		3 1/8"	1/2**		-
	UP 10-16 B5 ATLC	97525908	•	•	•					-
	UP 10-16 BN5 LC	97525909			•				96433903	-
	UP 10-16 BN5 TLC	97525910	•		•			1/2"		-
	UP 10-16 BN5 ATLC	97525921	•	•	•					-
	UP 10-16 BU ATLC	97525922	•	•	•	•	4 1/3"	1 1/4"		-

* Internal sweat.

** Lead-free pump housing.

Product numbers

UPA, 50/60 Hz

Connection	Supply voltage [V]	Frequency [Hz]	Pump type	Max. system pressure [bar]	Product number	Market	Data sheet page
G 3/4	1 x 220	50	UPA 15-90	6	59539500	China	99
			UPA 15-90	6	59539502	Argentina	99
			UPA 15-90	6	59539514	Czech	99
			UPA 15-90	6	59539515	Turkey	99
			UPA 15-90	6	59539516	Romania	99
		UPA 15-90	6	59539519	Indonesia	99	
		60	UPA 15-90	6	59539507	Taiwan	99
			UPA 15-90	6	59539513	Korea	99
			UPA 15-90	6	59539517	Brazil	99
			1 x 110	UPA 15-90	6	59539506	Taiwan
	UPA 15-90			6	59539518	Brazil	99
	1 x 240	50	UPA 15-90 N	6	59539508	Australia/ New Zealand	99
			UPA 15-90 N	6	59539509	Singapore	99
		60	UPA 15-90 N	10	96621403	Netherlands	99
			UPA 15-90 N	6	97620721	United Kingdom	99
			UPA 15-90	6	59539510	United Kingdom	99
			UPA 15-90	6	59539511	India	99
			UPA 15-90	6	59539512	Russia	99
			UPA 15-90	10	59539521	Global	99
	1 x 100	60	UPA 15-90 N	6	59539505	Japan	99
1 x 127	60	UPA 15-90	6	59539520	Mexico	99	
G 1	1 x 220	50	UPA 15-120	6	52588355	China	100
			UPA 15-120	6	52588413		100
	1 x 110	60	UPA 15-120	6	52588414	Taiwan	100
			UPA 15-120	6	52588415	Singapore	100
	1 x 220	50	UPA 15-120	6	52588416	India	100
			UPA 15-120	6	52588420		100
	1 x 110	60	UPA 15-120	6	52588421	Brazil	100
			UPA 15-120	6	52588423	Argentina	100
	1 x 220	60	UPA 15-120	6	52588422	Mexico	100
			UPA 15-120	6	52588418	Korea	100
	1 x 230	50	UPA 15-120	10	98120014	Europe	100

UP, UPS circulator pumps, 50 Hz

Connection	Supply voltage [V]	Pump type	Max. system pressure [bar]	Product number		Data sheet page
				Current	Cancelled	
Oval flange "21"	1 x 230	UPS 21-40 F	10	96281386	59554500	34
		UPS 21-50 F	10	96281434	59555500	35
		UPS 21-60 F	10	96281490	59556500	36
G 1	1 x 230	UPS 15-20	10	59502503		19
		UPS 15-30	10	59503000		24
		UPS 15-40	10	96281368	59504500	26
		UPS 15-50	10	96281418	59505500	28
		UPS 15-60	10	96281471	59506500	33
		UPS 15-80 High head	10	59509513		41
		UPS 20-40	10	96281371	59514500	26
G 1 1/4	1 x 230	UPS 20-50	10	96281420	59515500	28
		UPS 20-60	10	96281472	59516500	33
		UPS 25-20	10	59522500		19
G 1 1/2	1 x 230	UPS 25-40	10	96281376	59524500	26
		UPS 25-50	10	96281424	59525500	28
		UPS 25-60	10	96281476	59526500	37
		UPS 25-60	10	96281480	59526612	37
		UPS 25-70	10	96621356		40
G 1 1/2	1 x 230	UPS 25-20	10	59532500		19
		UPS 25-40	10	96281378	59534500	26
		UPS 25-50	10	96281430	59535500	28
G 1 1/2	1 x 230	UPS 25-20	10	59542500		19
		UPS 25-25	10	95906400	52015130	22
		UPS 25-30	10	59543000		24
		UPS 25-40	10	96281384	59544500	26
		UPS 25-40	10	96281379	59544083	26
		UPS 25-50	10	96281432	59545500	28
		UPS 25-55	10	95906404	52002110	31
		UPS 25-60	10	96281483	59546500	37
		UPS 25-60	10	96281485	59546517	37
		UPS 25-70	10	96621354		40
		UPS 25-80	10	95906429	52001110	42
		UPS 25-80	10		52000063	42
		UPS 25-100	10	95906480		46
		UPS 25-120 High head	10	52588336		48
		UPS 25-125 High head	10	52588344		49
G 1 1/2	3 x 220	UPS 25-50	10	59545701		50
		UPS 25-20	10	59542800		53
	3 x 400	UPS 25-40	10	59524802		52
		UPS 25-40	10	59544800		52
		UPS 25-50	10	59545800		53
		UPS 25-60	10	59546800		54

Connection	Supply voltage [V]	Pump type	Max. system pressure [bar]	Product number		Data sheet page
				Current	Cancelled	
G 2	1 x 230	UPS 32-20	10	59582500		19
		UPS 32-25	10	95906401	52014061	23
		UPS 32-30	10	59583000		24
		UPS 32-40	10	96281390	59584500	26
		UPS 32-50	10	96281435	59585500	28
		UPS 32-55	10	95906409	52001011	32
		UPS 32-60	10	96281494	59586500	39
		UPS 32-70	10	96621355		40
		UPS 32-80	10	95906442	52052010	43
		UPS 32-100	10	95906500		46
	3 x 400	UPS 32-20	10	59582800		51
		UPS 32-40	10	59584800		52
		UPS 32-50	10	59585800		53
		UPS 32-60	10	59586800		54
Flange "36"	1 x 230	UPS 36-20 F	10	95906402	52034040	21
		UPS 36-50 F	10	95906417	52011110	30
		UPS 36-80 F	10	95906461	52012110	45
Flange DN 32 PN 6/10	1 x 230	UPS 32-50 F	10	95906415	52052043	29
		UPS 32-80 F	10	95906458	52052042	44
		UPS 32-100 F	10	95906483		47
Flange DN 40 PN 6/10	1 x 230	UPS 40-50 F	10	95906420	52031310	29
		UPS 40-80 F	10	95906462	52022110	44
		UPS 40-100 F	10	95906486		47

Air separator pumps, 50 Hz

Connection	Supply voltage [V]	Pump type	Max. system pressure [bar]	Product number		Data sheet page
				Current	Cancelled	
G 1 1/2	1 x 230	UPS 25-20 A	10	59562502		20
		UPS 25-30 A	10	59563000		25
		UPS 25-40 A	10	96281387	59564502	27
		UPS 25-60 A	10	96281491	59566503	38

Twin-head pumps, 50 Hz

Connection	Supply voltage [V]	Pump type	Max. system pressure [bar]	Product number	Data sheet page
	UPSD 32-80	10	95906455	62	
Flange DN 32 PN 6/10	1 x 230	UPSD 32-50 F	10	95906416	61
		UPSD 32-80 F	10	95906459	63
		UPSD 32-100 F	10	95906484	64
Flange DN 40 PN 6/10	1 x 230	UPSD 40-50 F	10	95906423	61
		UPSD 40-80 F	10	95906465	63
		UPSD 40-100 F	10	95906487	64

Stainless-steel circulator pumps, 50 Hz

Connection	Supply voltage [V]	Pump type	Max. system pressure [bar]	Product number		Data sheet page	
				Current	Cancelled		
G 1 1/4	1 x 230	UP 20-07 N	10	59640506		71	
		UP 20-15 N	10	59641500		72	
		UP 20-30 N	10	59643500		73	
		UP 20-45 N	10	95906472		74	
		UPS 20-60 N	10	96913106		93	
	1 x 240	UP 20-30 N	10	59643600		76	
		UPS 20-60 N	10	96913096		75	
		3 x 220	UP 20-30 N	10	59643701		78
		3 x 400	UP 20-15 N	10	59641800		79
			UP 20-30 N	10	59643800		80
G 1 1/2	1 x 230	UPS 25-40 N	10	96913060	96913060	26	
		UPS 25-55 N	10	95906408		31	
		UPS 25-60 N	10	96913090		37	
			10	96913085			
		UPS 25-80 N	10	95906439		42	
	3 x 400	UPS 25-60 N	10	96913058	52004490		
			10		96281506	54	
			10				
G 2	1 x 230	UPS 32-80 N	10	95906450	52062224	43	
		UPS 32-80 N	10	95906448	52062210		
		UPS 32-100 N	10	95906489		46	
Flange DN 40 PN 6/10	1 x 230	UPS 40-50 FN	10	95906422		29	
		UPS 40-80 FN	10	95906466		44	

Cold-water circulator pumps, 50 Hz

Connection	Supply voltage [V]	Pump type	Max. system pressure [bar]	Product number	Data sheet page
Cast iron, K					
Oval flange "21"	1 x 230	UPS 21-60 FK	10	59556502	88
G 1 1/4	1 x 230	UPS 20-40 K	10	59514517	84
		UPS 25-40 K	10	59544505	85
G 1 1/2	1 x 230	UPS 25-50 K	10	59545502	86
		UPS 25-60 K	10	59546508	89
Cast iron, KU, including cable 1145 mm					
G 1 1/4	1 x 230	UP 25-40 KU	10	59544524	90
		UP 25-50 KU	10	59545520	91
		UP 25-60 KU	10	59546510	92
Stainless steel, NK					
G 1 1/2	1 x 240	UPS 20-60 NK	10	96913097	87
	1 x 230	UPS 25-60 NK	10	96913059	89
Stainless steel, NK					
G 1 1/4	1 x 230	UP 20-30 NK	10	59643501	83

Standard circulator pumps, 60 Hz

Connection	Supply voltage [V]	Pump type	Max. system pressure [bar]	Product number	Data sheet page
G 1 1/2	1 x 220	UPS 15-62 K	10	59506597	55
G 1 1/4	1 x 220	UPS 20-62 N	10	95906736	82
G 1 1/2	1 x 220	UPS 25-42	10	59544561	56
G 1 1/2	1 x 220	UPS 25-62	10	59546515	57
G 1 1/2	1 x 220	UPS 25-62 K	10	59546499	57
G 1 1/2	1 x 220	UPS 25-72	10	95906739	58
Flange DN 40 PN 6/10	1 x 220	UPS 40-72 F	10	95906741	59
G 1 1/4	1 x 220	UP 20-32 N	10	59643502	93

SOLAR circulator pumps, 50 Hz

Connection	Supply voltage [V]	Pump type	Max. system pressure [bar]	Product number	Data sheet page
G 1	1 x 230	SOLAR 15-45	10	96817710	94
G 1		SOLAR 15-60	10	96705819	95
G 1		SOLAR 15-65	10	96817649	96
G 1		SOLAR 15-80	10	59508500	97
G 1 1/2		SOLAR 25-40	10	59544183	93
G 1 1/2		SOLAR 25-45	10	96817722	94
G 1 1/2		SOLAR 25-45	10	96817725	94
G 1 1/2		SOLAR 25-60	10	59546639	95
G 1 1/2		SOLAR 25-65	10	96817652	96
G 1 1/2		SOLAR 25-65	10	96817707	96
G 1 1/2		SOLAR 25-120	10	52588352	98

UP, UPS, UPD, UPSD circulator pumps, UK range

The UK product range is subdivided on the basis of the following:

- size and type of pipe connection (thread or flange)
- supply voltage, 1 x 230 V, 1 x 240 V and 3 x 415 V
- pump type
- port-to-port length [mm]
- terminal box position
- product number with indication of current number and possibly the cancelled number
- page reference to the data sheet for the specific pump.

The UK product range differs from the main range as in many cases fittings (unions and valves) are supplied together with the pumps.

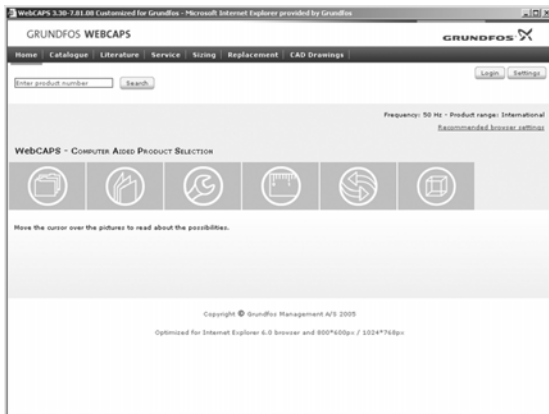
Another difference is approvals such as BSI and WRAS.

UP, UPS circulator pumps, UK, 50 Hz

Connection	Supply voltage [V]	Pump type	Max. system pressure [bar]	Product number		Data sheet page	
				Current	Cancelled		
G 1 1/2 (1" union)	1 x 230	UPS 15-50 N	10	96913107		28	
G 1 1/2		UPS 15-50 x 18 Selectric	10	96281426	59525600	-	
G 1 1/2		UPS 15-60 x 18 Super Selectric	10	96281478	59526600	-	
Oval flange "21"		UPS 15-50 F	10	96802221		-	
G 1 1/4 (3/4" - 22 union valve)		UP 20-07 N		10	59640605		71
G 1 1/4 (3/4" union)				10	59640606		
G 1 1/4 (3/4" union)		UP 20-15 N		10	59641602		72
G 1 1/4 (3/4" - 22 union valve)				10	59641603		
G 1 1/4 (3/4" union)		UP 20-30 N		10	59643604		73
G 1 1/4 (3/4" - 22 union valve)				10	59643605		
G 1 1/4 (3/4" union)		UP 20-45 N		10	95906473		74
G 1 1/4 (3/4" - 22 union valve)				10	95906475		
G 1 1/2		UPS 25-50 x18	10	96281427	59525601	28	
G 1 1/2 (1 1/4" union)		UPS 25-55	10	95906403		31	
G 1 1/2 (1 1/2" union)			10	95906405			
G 1 1/4 (3/4" - 22 union valve)		UPS 25-55 N	10	95906407		31	
G 1 1/2 (1 1/2" union)		UPS 25-80		10	95906430		42
G 1 1/2 (1 1/4" union)				10	95906431		
G 2 (1 1/4" union)		UPS 32-55	10	95906411		32	
		UPS 32-55 N	10	95906412		32	
		UPS 32-80	10	95906454		43	
Flange DN 36		UPS 36-50 F	10	95906419		30	
Flange DN 40 PN 6/10		UPS 40-50 FN	10	95906421		29	
Flange DN 40 PN 6/10		UPS 40-80 F	10	95906463		44	
G 2 (1 1/4" union)		UPSD 32-50	10	95906414	52588334	60	
G 2 (1 1/4" union)		UPSD 32-80	10	95906457		62	
Flange DN 40 PN 6/10		UPSD 40-50 F	10	95906424		61	
Flange DN 40 PN 6/10		UPSD 40-80 F	10	95906464		63	

10. Further product information

WebCAPS



WebCAPS is a **Web-based Computer Aided Product Selection** program available on www.grundfos.com.

WebCAPS contains detailed information on more than 220,000 Grundfos products in more than 30 languages.

Information in WebCAPS is divided into six sections:

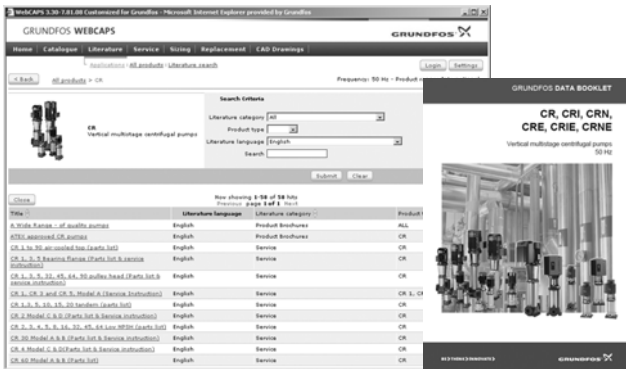
- Catalogue
- Literature
- Service
- Sizing
- Replacement
- CAD drawings.



Catalogue

Based on fields of application and pump types, this section contains the following:

- technical data
- curves (QH, Eta, P1, P2, etc.) which can be adapted to the density and viscosity of the pumped liquid and show the number of pumps in operation
- product photos
- dimensional drawings
- wiring diagrams
- quotation texts, etc.



Literature

This section contains all the latest documents of a given pump, such as

- data booklets
- installation and operating instructions
- service documentation, such as Service kit catalogue and Service kit instructions
- quick guides
- product brochures.



Service

This section contains an easy-to-use interactive service catalogue. Here you can find and identify service parts of both existing and discontinued Grundfos pumps.

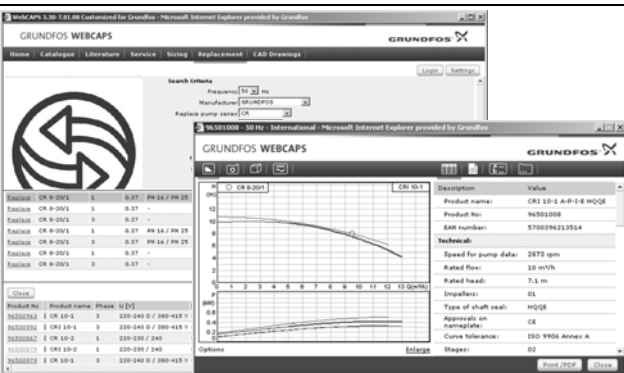
Furthermore, the section contains service videos showing you how to replace service parts.



Sizing

This section is based on different fields of application and installation examples and gives easy step-by-step instructions in how to size a product:

- Select the most suitable and efficient pump for your installation.
- Carry out advanced calculations based on energy, consumption, payback periods, load profiles, life cycle costs, etc.
- Analyse your selected pump via the built-in life cycle cost tool.
- Determine the flow velocity in wastewater applications, etc.

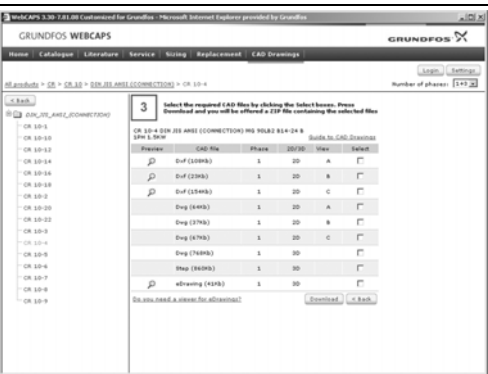


Replacement

In this section you find a guide to selecting and comparing replacement data of an installed pump in order to replace the pump with a more efficient Grundfos pump.

The section contains replacement data of a wide range of pumps produced by other manufacturers than Grundfos.

Based on an easy step-by-step guide, you can compare Grundfos pumps with the one you have installed on your site. When you have specified the installed pump, the guide will suggest a number of Grundfos pumps which can improve both comfort and efficiency.



CAD drawings

In this section, it is possible to download 2-dimensional (2D) and 3-dimensional (3D) CAD drawings of most Grundfos pumps.

These formats are available in WebCAPS:

2-dimensional drawings:

- .dxf, wireframe drawings
- .dwg, wireframe drawings.

3-dimensional drawings:

- .dwg, wireframe drawings (without surfaces)
- .stp, solid drawings (with surfaces)
- .eprt, E-drawings.

WinCAPS



Fig. 21 WinCAPS DVD

WinCAPS is a **Windows-based Computer Aided Product Selection** program containing detailed information on more than 220,000 Grundfos products in more than 30 languages.

The program contains the same features and functions as WebCAPS, but is an ideal solution if no internet connection is available.

WinCAPS is available on DVD and updated once a year.

GO CAPS

Mobile solution for professionals on the GO!



CAPS functionality on the mobile workplace.



Subject to alterations.

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