

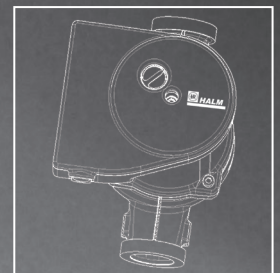


# HALM

effiziente Pumpentechnologie

## Circulation pumps

Wet rotor circulators and accessories



# CATALOGUE 2010

Heating, air-conditioning, solar, domestic water



Subject to technical changes without notice. Errors and omissions excepted.  
The latest versions of our sales, delivery, and payment conditions as well as guarantee terms can be found on the internet at [www.halm-pumps.de](http://www.halm-pumps.de)



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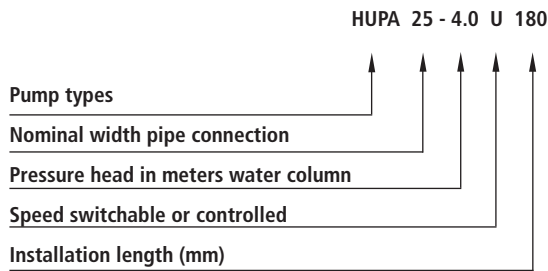
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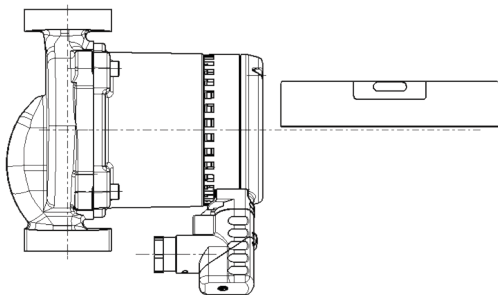
Fax: +49 (0)7153 49168

## Halm type key



## Installation options

Circulation pumps must be installed with a horizontal shaft.



## Construction

Halm circulation pumps are inline wet rotor circulators. They are maintenance-free and fitted with opposite-facing connecting nozzles of the same nominal width. The pump, motor, and terminal box comprise one unit and are optimally matched with one another.

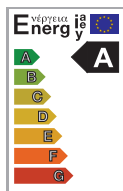
A stainless steel can separates the rotor chamber and stator winding. It features static seals at both ends.

## Bearing

Both bearings are made of oxide ceramic. This is particularly suitable because of its hardness, surface quality, and corrosion resistance. They ensure smooth running and a long service life. Air cavities in the can well are evacuated via the hollow shaft.

# Controlled high efficiency pumps

HEP series, HP product group



## Technical data

Rate of flow: up to 3.2 m<sup>3</sup> / h  
 Pressure head: 4 m / 6 m  
 Control range: 4-23 W / 4-50 W  
 Media temperature: +2 °C to 95 °C  
 Installation length: 130 and 180 mm  
 Threaded connection: 1", 1½" and 2"  
 Protection class: IP 42  
 Insulation class: F  
 Control: Δp or const. P

## Product features

- compact design
- manual start-up feature
- smooth running
- very low energy consumption
- integrated night economy feature
- air-vent screw
- convenient operation
- pre-mounted, screwable angle entry-plug
- space-saving axially integrated terminal box
- automatic adjustment to pressure conditions

## Use

The electronically controlled HEP high efficiency wet rotor circulators with permanent magnet technology are designed for use in heating systems with variable or constant rate of flow.

## Mode of operation

When thermostatic valves in heating systems close, the volume flow drops. This results in slight pipe resistance. The declining flow rate means that the circulation pump requires a lower pressure head. This is identified by the automatic control of the circulation pump. It automatically adjusts to the system and reduces its performance. This leads to not only trouble-free and quiet operation but also reduces energy consumption to a minimum.

## Main areas of use

- Heating, air-conditioning, and industry systems as
- dual pipe system
  - underfloor heating
  - boiler / primary circuit
  - storage charging circuit
  - solar systems and heating pumps

## Flow media

- heating water as per VDI 2035
- pure, thin, non-aggressive and non-explosive, mineral oil-free media without solid or long-fibre components
- media with a max. viscosity of 10 mm<sup>2</sup> / s
- operating data must be checked above 20 % glycol

## Materials

Component	Material	Material No.
Pump body	Grey-cast iron	0.6020
Impeller	Polyamide (PA - GF 35)	
Shaft	Ceramic	
Bearing	Ceramic	
Bearing plate	Stainless steel	1.4301
Can	Stainless steel	1.4301

## Temperature range

Ambient temperature: 0 °C to 40 °C  
 Temperature class: TF 95  
 Media temperature: +2 °C to 95 °C

To avoid condensation forming in the terminal box and stator, the media temperature must always be the same or higher than the ambient temperature.

Ambient temp.	Media temp. min.	Media temp. max.
0	2	95
10	10	95
20	20	95
30	30	95
35	35	90
40	40	70

## Motor protection / electronic control

The motor winding is resistant to stall current, so that motor protection is not required. The electronic control is integrated in the terminal box.

## Integrated night economy feature

When the automatic night economy feature is activated, the circulation pump switches between normal mode and economy mode (characteristic curve MIN). The flow temperature is detected by a temperature sensor, the pump reacts accordingly. For this, it is necessary for the circulation pump to be installed in flow.

## Minimum inflow pressure

Please determine the minimum inflow pressure for corresponding temperature from the following table.

Media temperature	< 75 °C	> 90 °C
Minimum inflow pressure	0.05 bar	0.28 bar

## Enclosure pressure

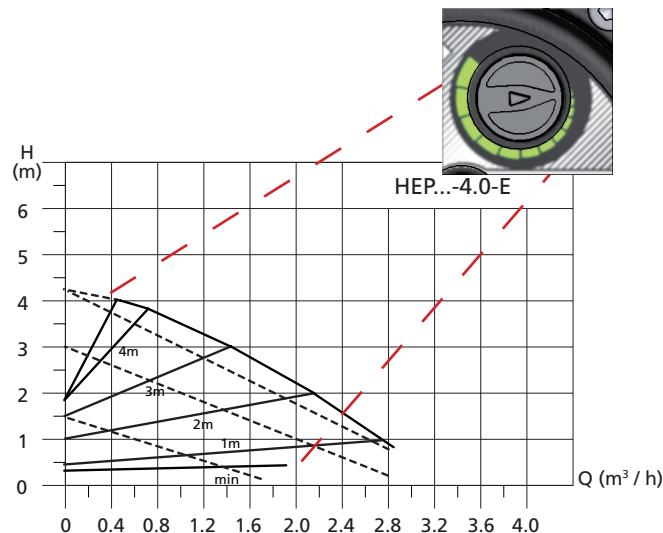
10 bar

## Sound pressure level

The sound pressure level is < 45 dB (A)

## Choice of control characteristic

The control characteristics and the fixed speed steps can be adjusted via the potentiometer on the axial terminal box. At the factory settings, the potentiometer is in the centre position. This position corresponds to the reference characteristic curve with optimal efficiency. If noises are heard in this position, the characteristic curve can be adjusted by turning anti-clockwise. If the pressure head is not sufficient (some radiators remain cold despite hydraulic equalisation), the characteristic curve can be corrected upwards.





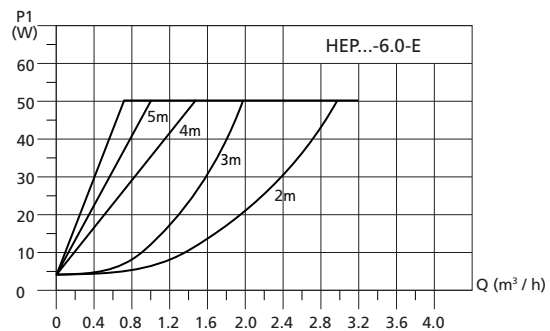
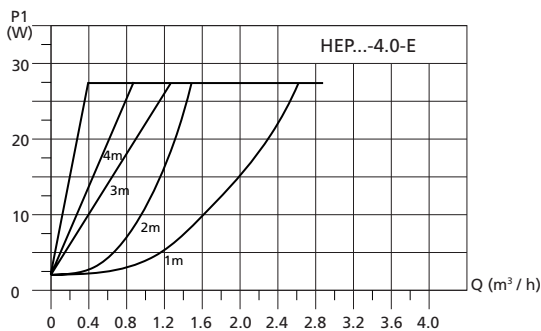
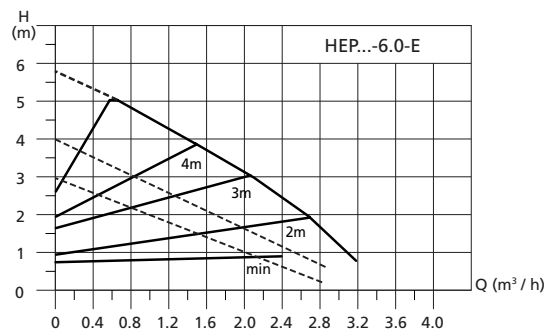
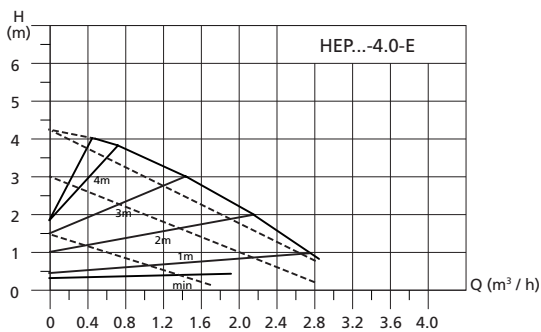
# Controlled high efficiency circulation pumps

HEP series, HP product group



## Technical data

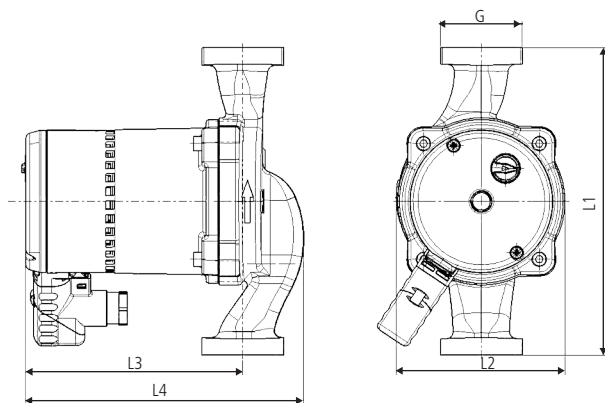
Type	Connection pipe	Threaded connection	Installation length (mm)	P1 (W)	In (A)	Weight (kg)	Product No.	Eff. Class
HEP 15-4.0 E 130	½"	1"	130	4 ... 23	... 0.3	2.7	0321-34004.5	A
HEP 15-6.0 E 130	½"	1"	130	4 ... 50	... 0.46	2.7	0321-34006.5	A
HEP 25-4.0 E 130	1"	1½"	130	4 ... 23	... 0.3	2.7	0323-34004.5	A
HEP 25-6.0 E 130	1"	1½"	130	4 ... 50	... 0.46	2.7	0323-34006.5	A
HEP 25-4.0 E 180	1"	1½"	180	4 ... 23	... 0.3	2.7	0323-34204.5	A
HEP 25-6.0 E 180	1"	1½"	180	4 ... 50	... 0.46	2.7	0323-34206.5	A
HEP 30-4.0 E 180	1¼"	2"	180	4 ... 23	... 0.3	2.8	0324-34204.5	A
HEP 30-6.0 E 180	1¼"	2"	180	4 ... 50	... 0.46	2.8	0324-34206.5	A



## Dimensions

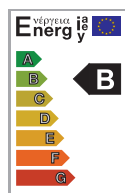
Type	L1	L2	L3	L4
HEP	130 / 180	98	127	163

## Dimension illustration



# Controlled circulation pumps

## HUE series, HE product group



### Technical data

Rate of flow:	up to 3.2 m <sup>3</sup> / h
Pressure head:	4 m / 6 m
Media temperature:	+2 °C to 95 °C
Installation length:	130 and 180 mm
Threaded connection:	1", 1½" and 2"
Protection class:	IP 42
Insulation class:	F
Control:	Δp or const. P

### Product features

- compact design
- energy-optimised
- smooth running
- low energy consumption
- integrated night economy feature
- manual start-up feature
- convenient operation
- pre-mounted, screwable angle entry-plug
- space-saving axially integrated terminal box

### Use

The electronically controlled HUE wet rotor heating circulators feature a newly-designed drive unit with variable-frequency inverter and improved hydraulics. As a result, the 4 m and 6 m pumps attain energy efficiency class "B". These circulation pumps are designed for use in heating systems with variable or constant flow rates.

### Mode of operation

When thermostatic valves in heating systems close, the volume flow drops. This results in slight pipe resistance. The declining flow rate means that the circulation pump requires a lower pressure head. This is identified by the automatic control of the circulation pump. It automatically adjusts to the system and reduces its performance. This leads not only to trouble-free and quiet operation but also reduces energy consumption.

### Main areas of use

Heating, air-conditioning, and industry systems as

- dual pipe system
- underfloor heating
- boiler / primary circuit
- storage charging circuit

### Flow media

- heating water as per VDI 2035
- pure, thin, non-aggressive and non-explosive, mineral oil-free media without solid or long-fibre components
- media with a max. viscosity of 10 mm<sup>2</sup> / s
- operating data must be checked above 20 % glycol

### Materials

Component	Material	Material No.
Pump body	Grey-cast iron	0.6020
Impeller	Polyamide (PA - GF 35)	
Shaft	Ceramic	
Bearing	Ceramic	
Bearing plate	Stainless steel	1.4301
Can	Stainless steel	1.4301

### Temperature range

Ambient temperature:	0 °C to 40 °C
Temperature class:	TF 95
Media temperature:	+2 °C to 95 °C

To prevent the build-up of condensation in the terminal box and stator, the media temperature must always be the same or higher than the ambient temperature.

Ambient temp.	Media temp. min.	Media temp. max.
0	2	95
10	10	95
20	20	95
30	30	95
35	35	90
40	40	70

### Motor protection / electronic control

The motor winding is resistant to stall current, so that motor protection is not required. The electronic control is integrated in the terminal box.

### Integrated night economy feature

When the automatic night economy feature is activated, the circulation pump switches between normal mode and economy mode (characteristic curve MIN). The flow temperature is detected by a temperature sensor, the pump reacts accordingly. For this, it is necessary for the circulation pump to be installed in flow.

### Minimum inflow pressure

Please determine the minimum inflow pressure for corresponding temperature from the following table.

Media temperature	< 75 °C	> 90 °C
Minimum inflow pressure	0.05 bar	0.28 bar

### Enclosure pressure

10 bar

### Sound pressure level

The sound pressure level is < 45 dB (A)

### Choice of control characteristic

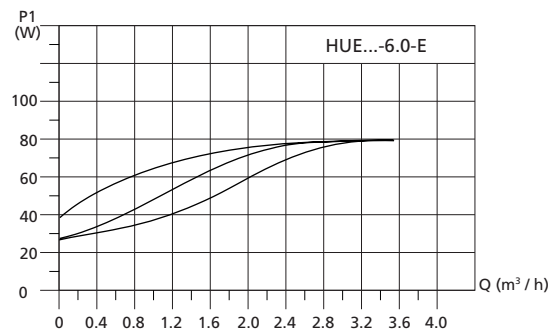
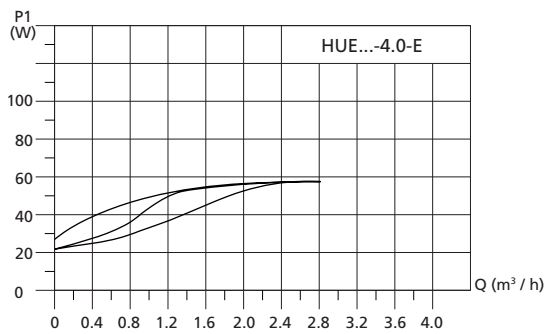
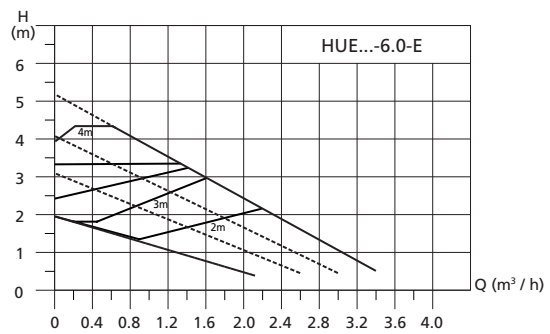
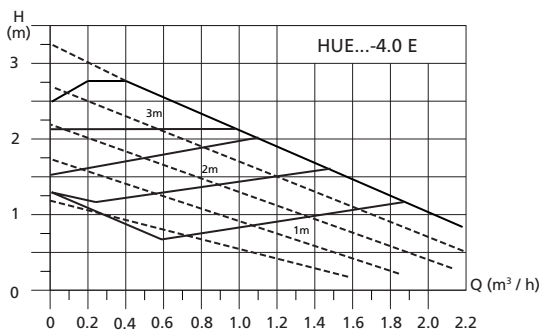
The control characteristics and the fixed speed steps can be adjusted via the potentiometer on the axial terminal box. At the factory settings, the potentiometer is in the centre position. This position corresponds to the reference characteristic curve with optimal efficiency. If noises are heard in this position, the characteristic curve can be adjusted by turning anti-clockwise. If the pressure head is not sufficient (some radiators remain cold despite hydraulic equalization), the characteristic curve can be corrected upwards.





### Technical data

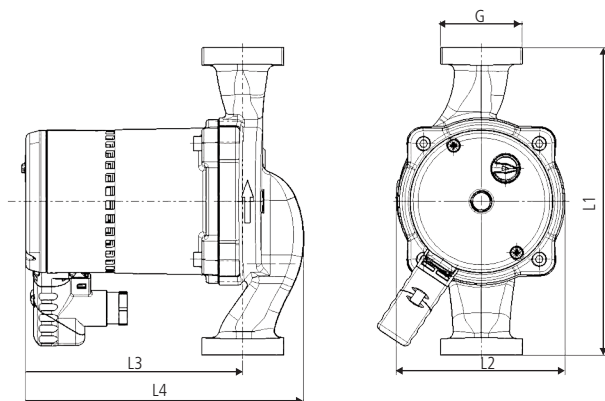
Type	Connection pipe	Threaded connection	Installation length (mm)	P1 (W)	In (A)	Weight (kg)	Product No.	Eff. Class
HUE 15-4.0 E 130	½"	1"	130	22 ... 56	0.24	2.7	0321-33004.5	B
HUE 15-6.0 E 130	½"	1"	130	27 ... 79	0.27	2.7	0321-33006.5	B
HUE 25-4.0 E 130	1"	1½"	130	22 ... 56	0.24	2.7	0323-33004.5	B
HUE 25-6.0 E 130	1"	1½"	130	27 ... 79	0.27	2.7	0323-33006.5	B
HUE 25-4.0 E 180	1"	1½"	180	22 ... 56	0.24	2.7	0323-33204.5	B
HUE 25-6.0 E 180	1"	1½"	180	27 ... 79	0.27	2.7	0323-33206.5	B
HUE 30-4.0 E 180	1¼"	2"	180	22 ... 56	0.24	2.8	0324-33204.5	B
HUE 30-6.0 E 180	1¼"	2"	180	27 ... 79	0.27	2.8	0324-33206.5	B



### Dimensions

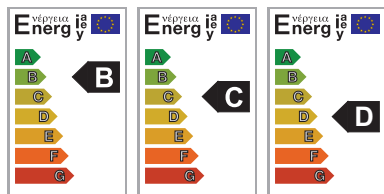
Type	L1	L2	L3	L4
HUE	130 / 180	98	127	163

### Dimension illustration



# Standard heating circulation pumps

## HUPA series, H product group



### Technical data

Rate of flow:	up to 3.8 m <sup>3</sup> / h
Pressure head:	up to 7 m
Media temperature:	+2 °C to 110 °C
Installation length:	130 and 180 mm
Threaded connection:	1", 1½" and 2"
Protection class:	IP 44
Insulation class:	H
Control:	3-step switch with manual speed selection

### Product features

- energy-optimised
- manual start-up feature
- space-saving axially integrated terminal box

### Use

The HUPA series circulation pumps are wet rotor circulators designed for use in heating systems with constant or weakly variable flow rates. With the 3-step rotary switch and the finely graded default programme, almost every working point on a system can be set economically.

### Main areas of use

Heating, air-conditioning, and industry systems as

- dual pipe system
- single pipe systems
- underfloor heating
- boiler / primary circuit
- storage charging circuit

### Flow media

- heating water as per VDI 2035
- pure, thin, non-aggressive and non-explosive, mineral oil-free media without solid or long-fibre components
- media with a max. viscosity of 10 mm<sup>2</sup> / s
- operating data must be checked above 20 % glycol

### Materials

Component	Material	Material No.
Pump body	Grey-cast iron	0.6020
Impeller	Polyamide (PA - GF 35)	
Shaft	Ceramic	
Bearing	Ceramic	
Bearing plate	Stainless steel	1.4301
Can	Stainless steel	1.4301

### Temperature range

Ambient temperature:	0 °C to 40 °C
Temperature class:	TF 110
Media temperature:	+2 °C to 110 °C

### Ambient temperature

To avoid the build-up of condensation, the ambient temperature must always be lower than the media temperature.

Media temperature	110	105	100	90	80	60	40	20
max. ambient temperature	35	55	60	70	80	60	40	0

\* cold water version on request

### Motor protection

The motor winding is resistant to stall current, so that motor protection is not required.

### Speed switching

The respective speed is set via a rotary switch integrated in the axial terminal box.

### Sound pressure level

The sound pressure level is < 45 dB (A)

### Minimum inflow pressure

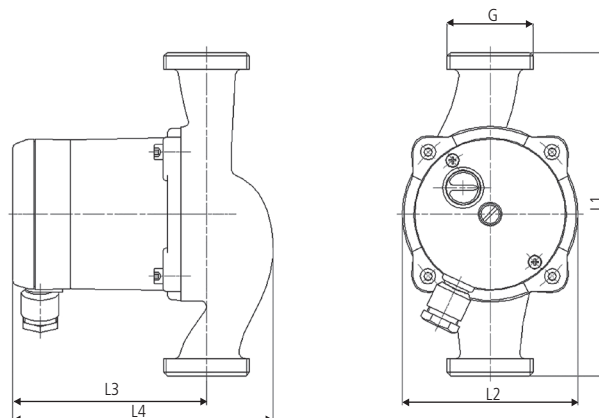
Please determine the minimum inflow pressure for corresponding temperature from the following table.

Media temperature	< 85 °C	90 °C	110 °C
Minimum inflow pressure	0.05 bar	0.3 bar	1.10 bar

### Dimensions

Type	L1	L2	L3	L4
HUPA	130 / 180	98	108	145

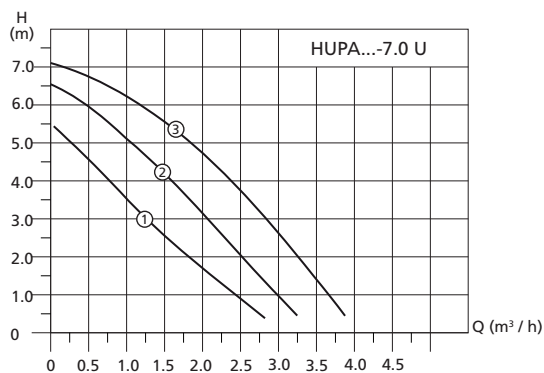
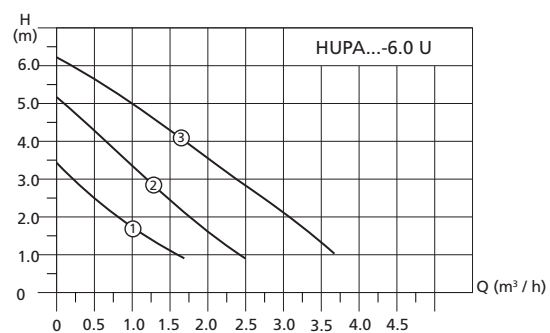
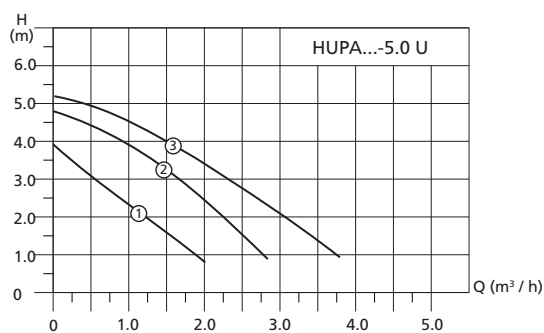
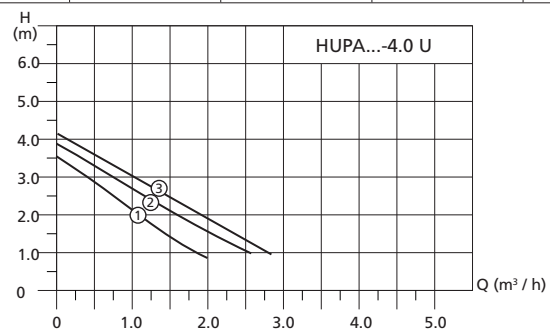
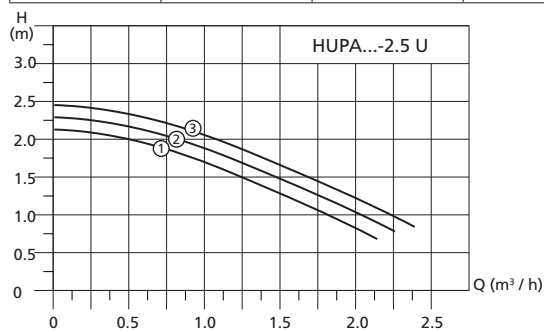
### Dimension illustration





### Technical data

Type	Connection pipe	Threaded connection	Installation length (mm)	P1 (W)	In (A)	Weight (kg)	Product No.	Eff. Class
HUPA 15-2.5 U 130	½"	1"	130	27 ... 35	0.12 ... 0.15	2.6	0321-33003	B
HUPA 15-4.0 U 130	½"	1"	130	33 ... 44	0.14 ... 0.19	2.6	0321-33004	B
HUPA 15-5.0 U 130	½"	1"	130	43 ... 77	0.19 ... 0.34	2.6	0321-33005	C
HUPA 15-6.0 U 130	½"	1"	130	43 ... 80	0.19 ... 0.34	2.6	0321-33006	C
HUPA 15-7.0 U 130	½"	1"	130	54 ... 97	0.24 ... 0.39	2.6	0321-33007	D
HUPA 25-2.5 U 130	1"	1½"	130	27 ... 35	0.12 ... 0.15	2.6	0323-33003	B
HUPA 25-4.0 U 130	1"	1½"	130	33 ... 44	0.14 ... 0.19	2.6	0323-33004	B
HUPA 25-5.0 U 130	1"	1½"	130	43 ... 77	0.19 ... 0.34	2.6	0323-33005	C
HUPA 25-6.0 U 130	1"	1½"	130	43 ... 80	0.19 ... 0.34	2.6	0323-33006	C
HUPA 25-7.0 U 130	1"	1½"	130	54 ... 97	0.24 ... 0.39	2.6	0323-33007	D
HUPA 25-2.5 U 180	1"	1½"	180	27 ... 35	0.12 ... 0.15	2.7	0323-33203	B
HUPA 25-4.0 U 180	1"	1½"	180	33 ... 44	0.14 ... 0.19	2.7	0323-33204	B
HUPA 25-5.0 U 180	1"	1½"	180	43 ... 77	0.19 ... 0.34	2.7	0323-33205	C
HUPA 25-6.0 U 180	1"	1½"	180	43 ... 80	0.19 ... 0.34	2.8	0323-33206	C
HUPA 25-7.0 U 180	1"	1½"	180	54 ... 97	0.24 ... 0.39	2.8	0323-33207	D
HUPA 30-2.5 U 180	1¼"	2"	180	27 ... 35	0.12 ... 0.15	2.8	0324-33203	B
HUPA 30-4.0 U 180	1¼"	2"	180	33 ... 44	0.14 ... 0.19	2.8	0324-33204	B
HUPA 30-5.0 U 180	1¼"	2"	180	43 ... 77	0.19 ... 0.34	2.8	0324-33205	C
HUPA 30-6.0 U 180	1¼"	2"	180	43 ... 80	0.19 ... 0.34	2.8	0324-33206	C
HUPA 30-7.0 U 180	1¼"	2"	180	54 ... 97	0.24 ... 0.39	2.8	0324-33207	D



# Heating circulation pumps

## HGPA series, HG product group



### Technical data

Rate of flow:	up to 12 m <sup>3</sup> / h
Pressure head:	up to 12 m
Media temperature:	+2 °C to 110 °C
Installation length:	180 mm
Threaded connection:	1½" and 2"
Protection class:	IP 44
Insulation class:	H
Control:	3-step switch with manual speed selection

### Product features

- compact design
- smooth running
- convenient operation
- manual start-up feature
- space-saving axially integrated terminal box

### Use

The HGPA circulation pump range from Halm was specially designed for heating systems in which large pressure heads and capacities are equally required. These circulation pumps are designed for use in heating systems with variable or constant flow rates.

### Main areas of use

Heating, air-conditioning, and industry systems as

- dual pipe system
- underfloor heating
- boiler / primary circuit
- storage charging circuit

### Flow media

- heating water as per VDI 2035
- pure, thin, non-aggressive and non-explosive, mineral oil-free media without solid or long-fibre components
- media with a max. viscosity of 10 mm<sup>2</sup> / s
- operating data must be checked above 20 % glycol

### Materials

Component	Material	Material No.
Pump body	Grey-cast iron	0.6020
Impeller	Polypropylene (PP - GF 50)	
Shaft	Ceramic	
Bearing	Ceramic	
Bearing plate	Brass	2.0401
Can	Stainless steel	1.4301

### Temperature range

Ambient temperature:	0 °C to 40 °C
Temperature class:	TF 110
Media temperature:	+2 °C to 110 °C

### Ambient temperature

To avoid the build-up of condensation, the ambient temperature must always be lower than the media temperature.

Media temperature	110	105	100	90	80	60	40	20
max. ambient temperature	35	55	60	70	80	60	40	0

\* cold water version see KGPA series

### Motor protection

The motor includes an integrated motor-protective circuit-breaker. External motor protection is not required.

### Speed switching

The respective speed is set via a rotary switch integrated in the axial terminal box.

### Sound pressure level

The sound pressure level is < 45 dB (A)

### Minimum inflow pressure

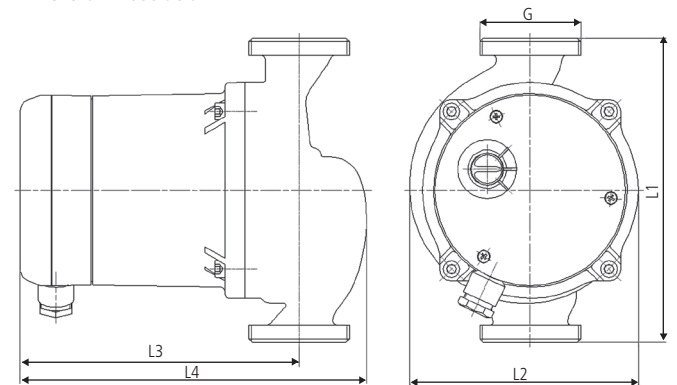
Please determine the minimum inflow pressure for corresponding temperature from the following table.

Media temperature	< 85 °C	90 °C	110 °C
Minimum inflow pressure	0.05 bar	0.3 bar	1.10 bar

### Dimensions

Type	L1	L2	L3	L4
HGPA	180	135.5	166	206

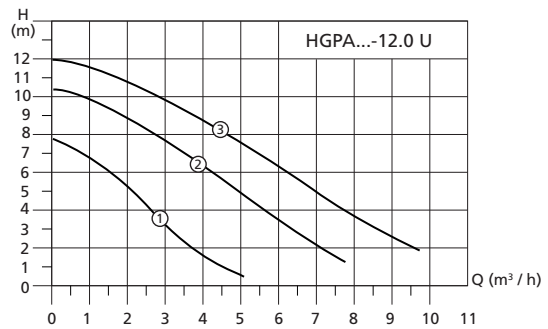
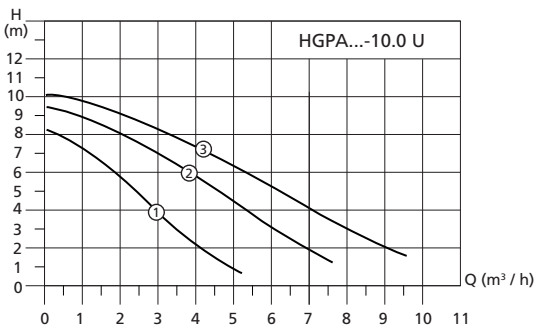
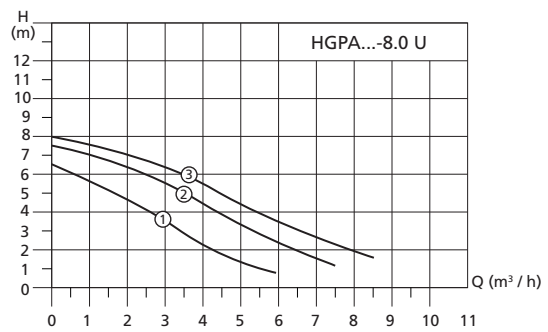
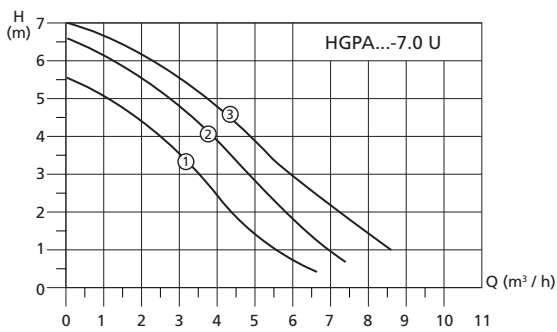
### Dimension illustration





### Technical data

Type	Connection pipe	Threaded connection	Installation length (mm)	P1 (W)	In (A)	Weight (kg)	Product No.
HGPA 25-7.0 U 180	1"	1½"	180	220 ... 260	1.03 ... 1.13	6.5	0323-41207
HGPA 25-8.0 U 180	1"	1½"	180	260 ... 286	1.23 ... 1.25	6.5	0323-41208
HGPA 25-10.0 U 180	1"	1½"	180	283 ... 357	1.35 ... 1.56	6.5	0323-41210
HGPA 25-12.0 U 180	1"	1½"	180	285 ... 400	1.36 ... 1.73	6.5	0323-41212
HGPA 30-7.0 U 180	1¼"	2"	180	220 ... 260	1.03 ... 1.13	6.6	0324-41207
HGPA 30-8.0 U 180	1¼"	2"	180	260 ... 286	1.23 ... 1.25	6.6	0324-41208
HGPA 30-10.0 U 180	1¼"	2"	180	283 ... 357	1.35 ... 1.56	6.6	0324-41210
HGPA 30-12.0 U 180	1¼"	2"	180	285 ... 400	1.36 ... 1.73	6.6	0324-41212



# Standard circulation pumps

## BUPA series, B product group



### Technical data

Rate of flow:	up to 5.0 m <sup>3</sup> / h
Pressure head:	up to 6 m
Media temperature:	+2 °C to 110 °C
Installation length:	130, 150 and 180 mm
Threaded connection:	1", 1¼" and 1½"
Protection class:	IP 44
Insulation class:	H
Control:	3-step switch with manual speed selection

### Product features

- manual start-up feature
- space-saving axially integrated terminal box

### Use

The BUPA series circulation pumps are wet rotor circulators designed for use in heating systems with constant or weakly variable flow rates. They feature a corrosion-resistant enclosure in bronze and are thus suitable for use in drinking water circulation systems.

### Main areas of use

Drinking water systems in building and industry installations as

- circulation circuit
- storage charging circuit
- cooling and heating circuit
- underfloor heating

### Flow media

- drinking water and heated drinking water to a temperature of 65 °C and a degree of hardness of 14 °dH (temporary hardness)
- pure, thin, non-aggressive and non-explosive, mineral oil-free media without solid or long-fibre components
- media with a max. viscosity of 10 mm<sup>2</sup> / s

### Materials

Component	Material	Material No.
Pump body	Bronze (RG 5)	2.1096 (low-lead)
Impeller	PSU - GF 20	
Shaft	Ceramic	
Bearing	Ceramic	
Bearing plate	Stainless steel	1.4301
Can	Stainless steel	1.4301

### Temperature range

Ambient temperature:	0 °C to 40 °C
Temperature class:	TF 110
Media temperature:	+2 °C to 110 °C

### Ambient temperature

To avoid condensation forming in the terminal box and stator, the media temperature must always be the same or higher than the ambient temperature.

Media temperature	110	105	100	90	80	60	40	20
max. ambient temperature	35	55	60	70	80	60	40	0

\* cold water version see BUP series

### Motor protection

The motor winding is resistant to stall current, so that motor protection is not required.

### Speed switching

The respective speed is set via a rotary switch integrated in the axial terminal box.

### Sound pressure level

The sound pressure level is < 45 dB (A)

### Minimum inflow pressure

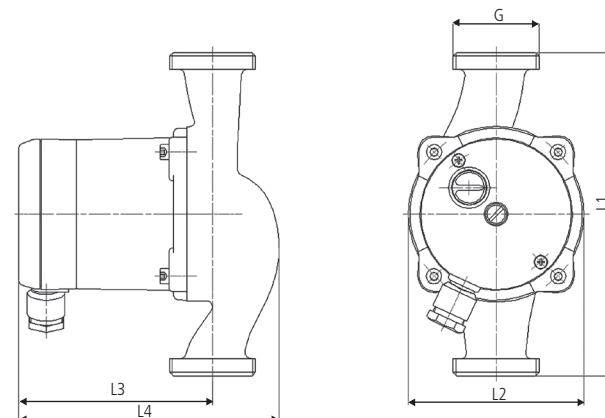
Please determine the minimum inflow pressure at corresponding temperature from the following table.

Media temperature	< 85 °C	90 °C	110 °C
Minimum inflow pressure	0.05 bar	0.3 bar	1.10 bar

### Dimensions

Type	L1	L2	L3	L4
BUPA	130 / 130 / 180	98	108	145

### Dimension illustration

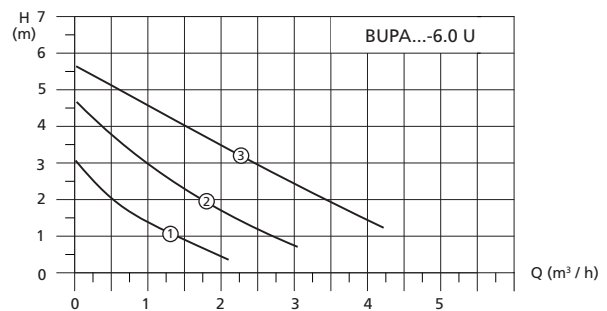
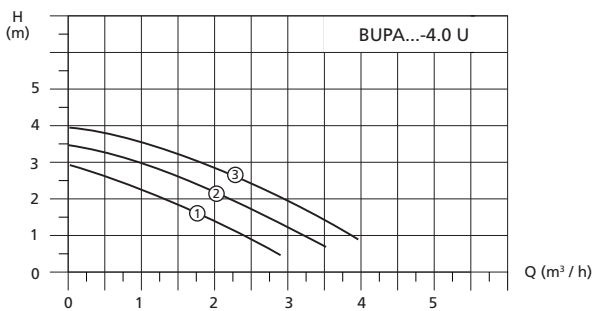
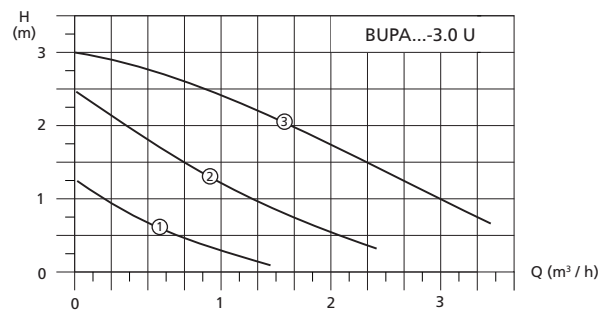
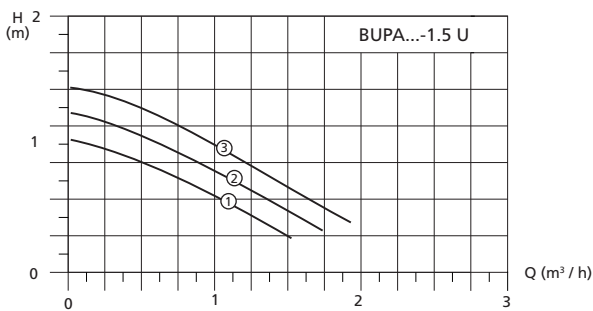






### Technical data

Type	Connection pipe	Threaded connection	Installation length (mm)	P1 (W)	In (A)	Weight (kg)	Product No.
BUPA 15-1.5 U 130	½"	1"	130	28 ... 58	0.16 ... 0.2	2.7	0331-31002
BUPA 15-3.0 U 130	½"	1"	130	33 ... 63	0.17 ... 0.3	2.7	0331-31003
BUPA 15-4.0 U 130	½"	1"	130	40 ... 70	0.27 ... 0.44	2.7	0331-31004
BUPA 15-6.0 U 130	½"	1"	130	56 ... 100	0.27 ... 0.44	2.7	0331-31006
BUPA 20-1.5 U 150	¾"	1¼"	150	28 ... 58	0.16 ... 0.28	2.7	0332-31102
BUPA 20-3.0 U 150	¾"	1¼"	150	33 ... 63	0.17 ... 0.3	2.7	0332-31103
BUPA 20-4.0 U 150	¾"	1¼"	150	40 ... 70	0.27 ... 0.44	2.7	0332-31104
BUPA 20-6.0 U 150	¾"	1¼"	150	56 ... 100	0.27 ... 0.44	2.7	0332-31106
BUPA 25-1.5 U 130	1"	1½"	130	28 ... 58	0.16 ... 0.28	2.7	0333-31002
BUPA 25-3.0 U 130	1"	1½"	130	33 ... 63	0.17 ... 0.3	2.7	0333-31003
BUPA 25-4.0 U 130	1"	1½"	130	40 ... 70	0.27 ... 0.44	2.7	0333-31004
BUPA 25-6.0 U 130	1"	1½"	130	55 ... 90	0.27 ... 0.44	2.7	0333-31006
BUPA 25-1.5 U 180	1"	1½"	180	40 ... 70	0.27 ... 0.44	2.8	0333-31202
BUPA 25-3.0 U 180	1"	1½"	180	56 ... 100	0.27 ... 0.44	2.8	0333-31203
BUPA 25-4.0 U 180	1"	1½"	180	40 ... 70	0.27 ... 0.44	2.8	0333-31204
BUPA 25-6.0 U 180	1"	1½"	180	56 ... 100	0.27 ... 0.44	2.8	0333-31206



# Circulation pumps for domestic water

## BGPA series, BG product group



### Technical data

Rate of flow:	up to 12.0 m <sup>3</sup> / h
Pressure head:	up to 12 m
Media temperature:	+2 °C to 110 °C
Installation length:	130, 150 and 180 mm
Threaded connection:	1¼" and 1½"
Protection class:	IP 44
Insulation class:	H
Control:	3-step switch with manual speed selection

### Product features

- manual start-up feature
- space-saving axially integrated terminal box
- pump enclosure in bronze

### Use

The BGPA series circulation pumps are wet rotor circulators designed for use in heating systems with a flow rate of > 5 m<sup>3</sup> / h. They feature a corrosion-resistant enclosure in bronze and are thus designed for use in drinking water circulation systems.

### Main areas of use

Drinking water systems in building and industry installations as

- circulation circuit
- storage charging circuit
- cooling and heating circuit
- underfloor heating

### Flow media

- drinking water and heated drinking water to a temperature of 65 °C and a degree of hardness of 14 °dH (temporary hardness)
- pure, thin, non-aggressive and non-explosive, mineral oil-free media without solid or long-fibre components
- media with a max. viscosity of 10 mm<sup>2</sup> / s

### Materials

Component	Material	Material No.
Pump body	Bronze (RG 5)	2.1096 (low-lead)
Impeller	Polypropylene (PP - GF 30)	
Shaft	Ceramic	
Bearing	Ceramic	
Bearing plate	Brass	2.0401
Can	Stainless steel	1.4301

### Temperature range

Ambient temperature:	0 °C to 40 °C
Temperature class:	TF 110
Media temperature:	+2 °C to 110 °C

### Ambient temperature

To avoid the build-up of condensation, the ambient temperature must always be lower than the media temperature.

Media temperature	110	105	100	90	80	60	40	20
max. ambient temperature	35	55	60	70	80	60	40	0

\* cold water version see KGPA series

### Motor protection

The motor includes an integrated motor-protective circuit-breaker. External motor protection is not required.

### Speed switching

The respective speed is set via a rotary switch integrated in the axial terminal box.

### Sound pressure level

The sound pressure level is < 45 dB (A)

### Minimum inflow pressure

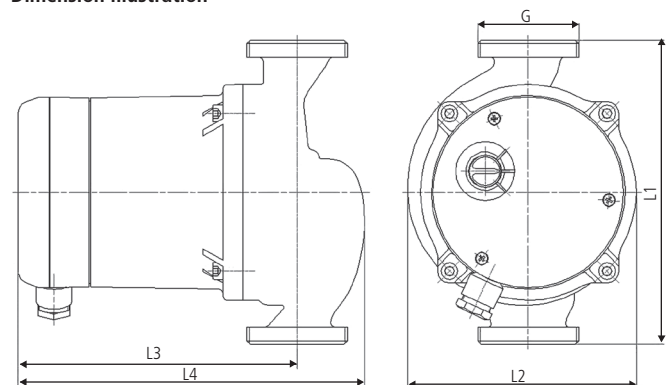
Please determine the minimum inflow pressure for corresponding temperature from the following table.

Media temperature	< 85 °C	90 °C	110 °C
Minimum inflow pressure	0.05 bar	0.3 bar	1.10 bar

### Dimensions

Type	L1	L2	L3	L4
BGPA	180	135,5	166	206

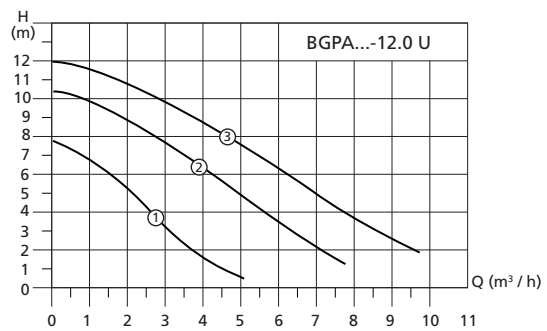
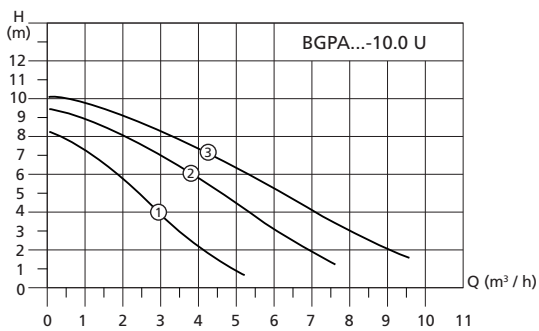
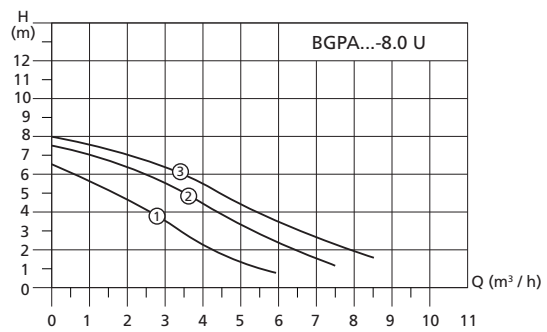
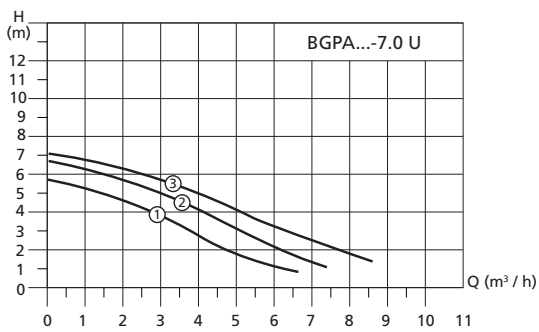
### Dimension illustration





### Technical data

Type	Connection pipe	Threaded connection	Installation length (mm)	P1 (W)	In (A)	Weight (kg)	Product No.
BGPA 20-7.0 U 180	¾"	1¼"	180	220 ... 260	1.03 ... 1.13	6.5	0332-41207
BGPA 20-8.0 U 180	¾"	1¼"	180	260 ... 286	1.23 ... 1.25	6.5	0332-41208
BGPA 20-10.0 U 180	¾"	1¼"	180	283 ... 357	1.35 ... 1.56	6.5	0332-41210
BGPA 20-12.0 U 180	¾"	1¼"	180	285 ... 400	1.36 ... 1.73	6.5	0332-41212
BGPA 25-7.0 U 180	1"	1½"	180	220 ... 260	1.03 ... 1.13	6.5	0333-41207
BGPA 25-8.0 U 180	1"	1½"	180	260 ... 286	1.23 ... 1.25	6.5	0333-41208
BGPA 25-10.0 U 180	1"	1½"	180	283 ... 357	1.35 ... 1.56	6.5	0333-41210
BGPA 25-12.0 U 180	1"	1½"	180	285 ... 400	1.36 ... 1.73	6.5	0333-41212



# Circulation pumps for solar systems

## SUP series, S product group



### Technical data

Rate of flow:	up to 5 m <sup>3</sup> / h
Pressure head:	up to 6 m
Media temperature:	-10 °C to 110 °C (< 2 h 130 °C)
Installation length:	130 and 180 mm
Threaded connection:	1" and 1½"
Protection class:	IP 44
Insulation class:	H
Control:	3-step switch with manual speed selection

### Product features

- particularly suited for high temperatures with sealed motor
- flow rate up to 5 m<sup>3</sup> / h
- manual start-up feature
- space-saving axially integrated terminal box

### Use

The SUP series circulation pumps are wet rotor circulators designed for use in solar systems with pure water or water-glycol mixtures. Media temperatures up to short periods at 130 °C and a glycol ratio of up to 50 % are possible. The pump enclosure is resistant to corrosion with a KTL coating.

### Main areas of use

Solar systems, especially high-flow systems

### Flow media

- heating water as per VDI 2035
- pure, thin, non-aggressive and non-explosive, mineral oil-free media without solid or long-fibre components
- media with a max. viscosity of 10 mm<sup>2</sup> / s
- operating data must be checked above 50 % glycol

### Materials

Component	Material	Material No.
Pump body	Grey-cast iron	0.6020
Impeller	PSU - GF 20	
Shaft	Ceramic	
Bearing	Ceramic	
Bearing plate	Stainless steel	1.4301
Can	Stainless steel	1.4301

### Temperature range

Ambient temperature:	0 °C to 40 °C
Temperature class:	TF 110
Media temperature:	-10 °C to 110 °C

### Ambient temperature

To avoid the build-up of condensation, the ambient temperature must always be lower than the media temperature.

Media temperature	110	105	100	90	80	60	40	20
max. ambient temperature	35	55	60	70	80	60	40	0

### Motor protection

The motor winding is resistant to stall current, so that motor protection is not required.

### Speed switching

The respective speed is set via a rotary switch integrated in the axial terminal box.

### Sound pressure level

The sound pressure level is < 45 dB (A)

### Minimum inflow pressure

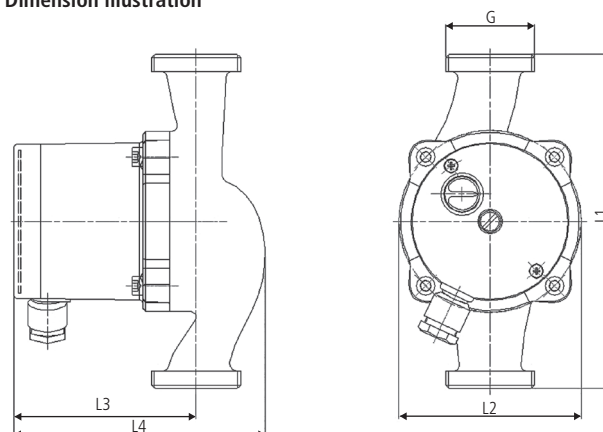
Please determine the minimum inflow pressure for corresponding temperature from the following table.

Media temperature	< 85 °C	90 °C	110 °C
Minimum inflow pressure	0.05 bar	0.3 bar	1.10 bar

### Dimensions

Type	L1	L2	L3	L4
SUP	130 / 180	98	98	135

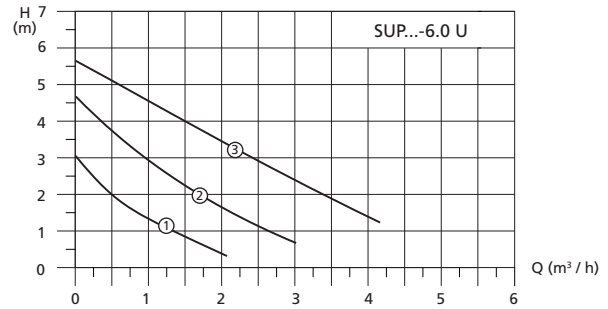
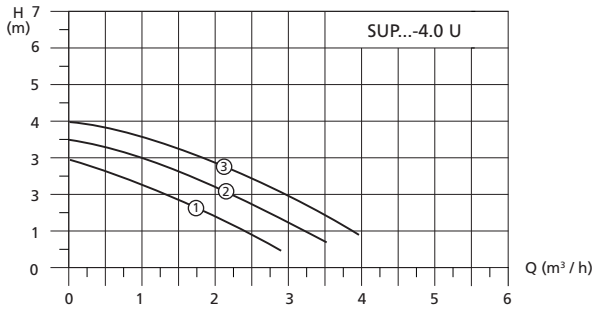
### Dimension illustration





### Technical data

Type	Connection pipe	Threaded connection	Installation length (mm)	P1 (W)	In (A)	Weight (kg)	Product No.
SUP 15-4.0 U 130	½"	1"	130	40 ... 70	0.19 ... 0.33	2.8	0311-21004
SUP 15-6.0 U 130	½"	1"	130	56 ... 100	0.27 ... 0.44	2.8	0311-21006
SUP 25-4.0 U 180	1"	1½"	180	40 ... 70	0.19 ... 0.33	2.8	0313-21204
SUP 25-6.0 U 180	1"	1½"	180	56 ... 100	0.27 ... 0.44	2.8	0313-21206





# Cold water circulation pumps (geothermy, air-conditioning, refrigeration)

KGPA series, KG product group



## Technical data

Rate of flow: up to 12.0 m<sup>3</sup> / h  
 Pressure head: up to 12 m  
 Media temperature: -25 °C to 110 °C  
 Installation length: 180 mm  
 Threaded connection: 1½" and 1¼"  
 Protection class: IP 44  
 Insulation class: H  
 Control: 3-step switch with manual speed selection

## Product features

- manual start-up feature
- space-saving axially integrated terminal box
- pump enclosure with KTL coating

## Use

The KGPA series circulation pumps are wet rotor circulators designed for use in cold water systems with a flow rate of > 5 m<sup>3</sup> / h. They feature an enclosure resistant to corrosion with KTL coating and a sealed motor winding. On request, pumps from the KGPA series are also available with a bronze enclosure (KGPB).

## Main areas of use

- cold water systems
- geothermy
- air-conditioning
- refrigeration

## Flow media

- pure, thin, non-aggressive and non-explosive, mineral oil-free media without solid or long-fibre components
- media with a max. viscosity of 10 mm<sup>2</sup> / s

## Materials

Component	Material	Material No.
Pump body	Grey-cast iron	0.6020
Impeller	Polypropylene (PP - GF 30)	
Shaft	Ceramic	
Bearing	Ceramic	
Bearing plate	Brass	2.0401
Can	Stainless steel	1.4301

## Temperature range

Ambient temperature: 0 °C to 40 °C  
 Temperature class: TF 110  
 Media temperature: -25 °C to 110 °C

## Motor protection

The motor includes an integrated motor-protective circuit-breaker. External motor protection is not required.

## Speed switching

The respective speed is set via a rotary switch integrated in the axial terminal box.

## Sound pressure level

The sound pressure level is < 45 dB (A)

## Minimum inflow pressure

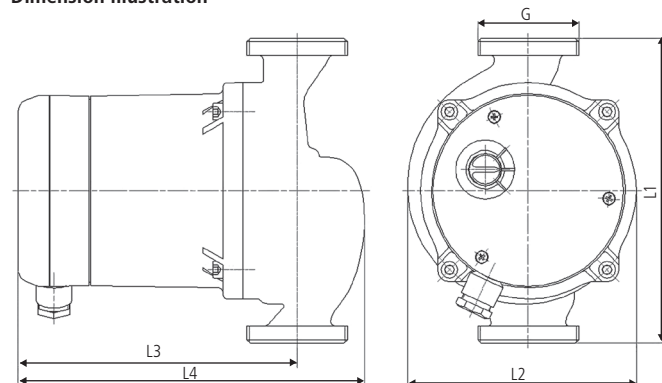
Please determine the minimum inflow pressure for corresponding temperature from the following table.

Media temperature	< 85 °C	90 °C	110 °C
Minimum inflow pressure	0.05 bar	0.3 bar	1.10 bar

## Dimensions

Type	L1	L2	L3	L4
KGPA	180	135.5	166	206

## Dimension illustration





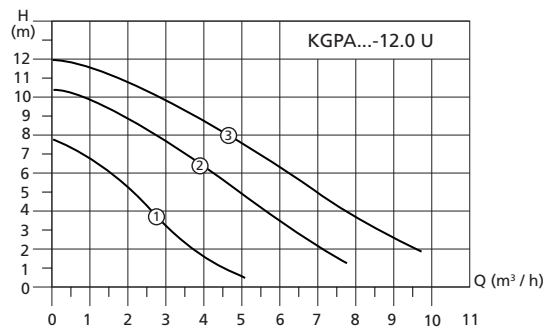
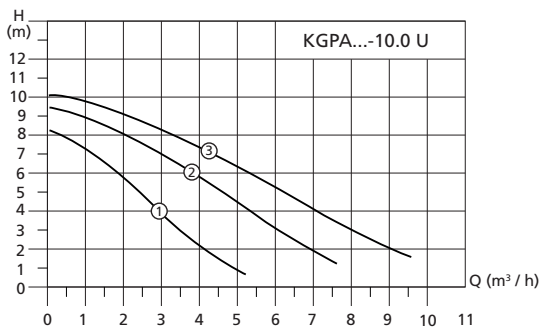
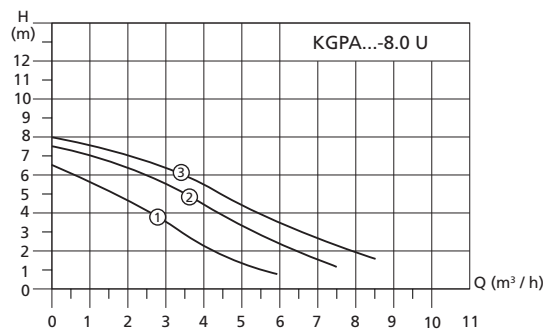
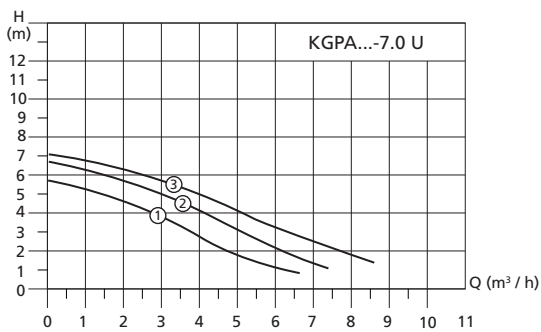
# Cold water circulation pumps (geothermy, air-conditioning, refrigeration)

KGPA series, KG product group



## Technical data

Type	Connection pipe	Threaded connection	Installation length (mm)	P1 (W)	In (A)	Weight (kg)	Product No.
KGPA 25-7.0 U 180	1"	1½"	180	220 ... 260	1.03 ... 1.13	6.5	0313-51207
KGPA 25-8.0 U 180	1"	1½"	180	260 ... 286	1.23 ... 1.25	6.5	0313-51208
KGPA 25-10.0 U 180	1"	1½"	180	283 ... 357	1.35 ... 1.56	6.5	0313-51210
KGPA 25-12.0 U 180	1"	1½"	180	285 ... 400	1.36 ... 1.73	6.5	0313-51212
KGPA 30-7.0 U 180	1¼"	2"	180	220 ... 260	1.03 ... 1.13	6.6	0314-51207
KGPA 30-8.0 U 180	1¼"	2"	180	260 ... 286	1.23 ... 1.25	6.6	0314-51208
KGPA 30-10.0 U 180	1¼"	2"	180	283 ... 357	1.35 ... 1.56	6.6	0314-51210
KGPA 30-12.0 U 180	1¼"	2"	180	285 ... 400	1.36 ... 1.73	6.6	0314-51212



# Circulation pumps (resistant to condensation)

## BUP series, UB product group



### Technical data

Rate of flow:	up to 5.0 m <sup>3</sup> / h
Pressure head:	up to 6 m
Media temperature:	-10 °C to 110 °C
Installation length:	130, 150 and 180 mm
Threaded connection:	1", 1¼" and 1½"
Protection class:	IP 44
Insulation class:	H
Control:	3-step switch with manual speed selection

### Product features

- manual start-up feature
- space-saving axially integrated terminal box
- permanent, reliable protection from condensation with sealed motor

### Use

The BUP series circulation pumps feature a motor sealed with epoxy resin. The motor is thus permanently protected from condensation. They feature a corrosion-resistant enclosure in bronze and are thus designed for use in drinking water circulation systems.

### Main areas of use

Drinking water systems in building and industry installations as

- circulation circuit
- storage charging circuit
- cooling and heating circuit
- underfloor heating

### Flow media

- drinking water and heated drinking water to a temperature of 65 °C and a degree of hardness of 14 °dH (temporary hardness)
- pure, thin, non-aggressive and non-explosive, mineral oil-free media without solid or long-fibre components
- media with a max. viscosity of 10 mm<sup>2</sup> / s

### Materials

Component	Material	Material No.
Pump body	Bronze (RG 5)	2.1096 (low-lead)
Impeller	PSU - GF 20	
Shaft	Ceramic	
Bearing	Ceramic	
Bearing plate	Stainless steel	1.4301
Can	Stainless steel	1.4301

### Temperature range

Ambient temperature:	0 °C to 40 °C
Temperature class:	TF 110
Media temperature:	-10 °C to 110 °C

### Ambient temperature

To avoid the build-up of condensation, the ambient temperature must always be lower than the media temperature.

Media temperature	110	105	100	90	80	60	40	20
max. ambient temperature	35	55	60	70	80	60	40	0

\* cold water version with KTL enclosure on request

### Motor protection

The motor winding is resistant to stall current, so that motor protection is not required.

### Speed switching

The respective speed is set via a rotary switch integrated in the axial terminal box.

### Sound pressure level

The sound pressure level is < 45 dB (A)

### Minimum inflow pressure

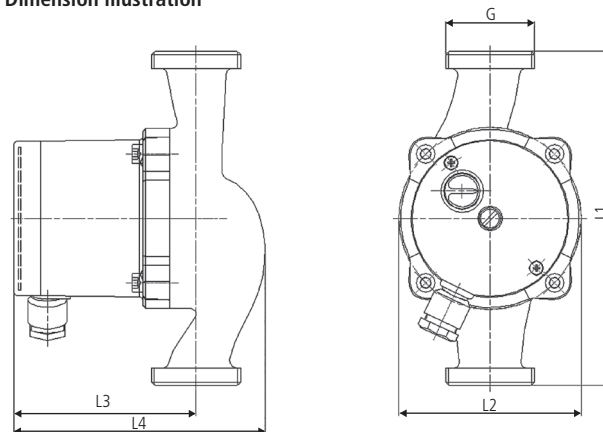
Please determine the minimum inflow pressure for corresponding temperature from the following table.

Media temperature	< 85 °C	90 °C	110 °C
Minimum inflow pressure	0.05 bar	0.3 bar	1.10 bar

### Dimensions

Type	L1	L2	L3	L4
BUP	130 / 150 / 180	98	98	135

### Dimension illustration



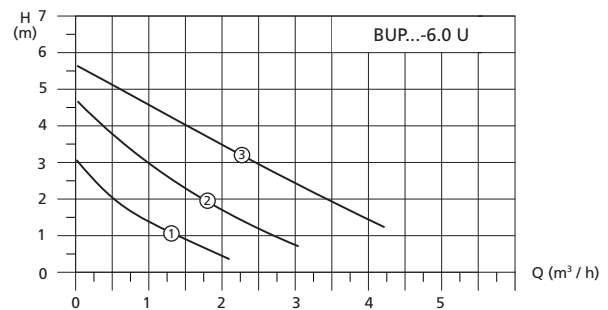
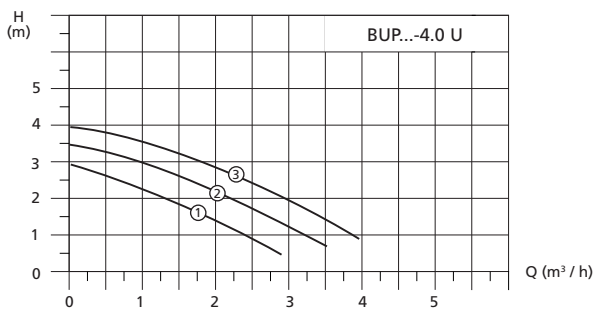
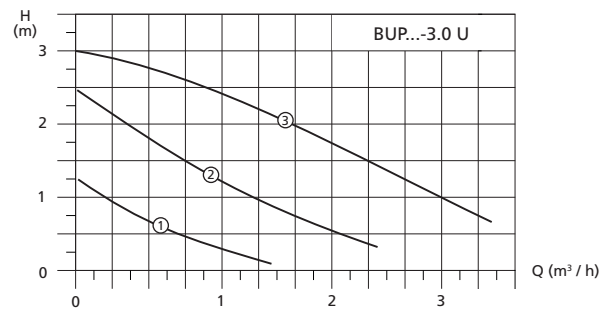
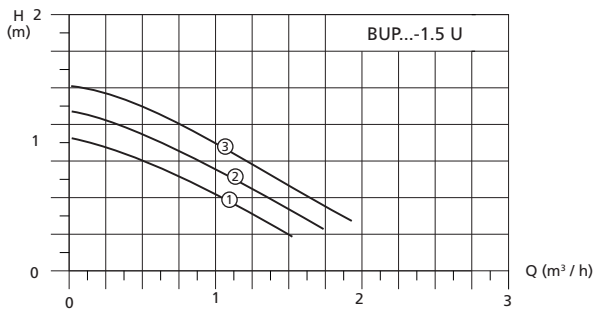
# Circulation pumps (resistant to condensation)

BUP series, UB product group



## Technical data

Type	Connection pipe	Threaded connection	Installation length (mm)	P1 (W)	In (A)	Weight (kg)	Product No.
BUP 15-1.5 U 130	½"	1"	130	28 ... 58	0.16 ... 0.28	2.7	0331-0103
BUP 15-3.0 U 130	½"	1"	130	33 ... 63	0.17 ... 0.3	2.7	0331-0104
BUP 15-4.0 U 130	½"	1"	130	40 ... 70	0.27 ... 0.44	2.7	0331-0105
BUP 15-6.0 U 130	½"	1"	130	56 ... 100	0.27 ... 0.44	2.7	0331-0107
BUP 25-1.5 U 130	1"	1½"	130	28 ... 58	0.16 ... 0.28	2.7	0333-0103
BUP 25-3.0 U 130	1"	1½"	130	33 ... 63	0.17 ... 0.3	2.7	0333-0104
BUP 25-4.0 U 130	1"	1½"	130	40 ... 70	0.27 ... 0.44	2.7	0333-0105
BUP 25-6.0 U 130	1"	1½"	130	55 ... 90	0.27 ... 0.44	2.7	0333-0107
BUP 20-1.5 U 150	¾"	1¼"	150	28 ... 58	0.16 ... 0.28	2.7	0332-0113
BUP 20-3.0 U 150	¾"	1¼"	150	33 ... 63	0.17 ... 0.3	2.7	0332-0114
BUP 20-4.0 U 150	¾"	1¼"	150	40 ... 70	0.27 ... 0.44	2.7	0332-0115
BUP 20-6.0 U 150	¾"	1¼"	150	56 ... 100	0.27 ... 0.44	2.7	0332-0117
BUP 25-4.0 U 180	1"	1½"	180	40 ... 70	0.27 ... 0.44	2.8	0333-0125
BUP 25-6.0 U 180	1"	1½"	180	56 ... 100	0.27 ... 0.44	2.8	0333-0127



# Circulation pumps (resistant to condensation)

## HUP series, U product group



### Technical data

Rate of flow:	up to 5 m <sup>3</sup> / h
Pressure head:	up to 6 m
Media temperature:	-10 °C to 110 °C
Installation length:	130 and 180 mm
Threaded connection:	1", 1½" and 2"
Protection class:	IP 44
Insulation class:	H
Control:	3-step rotary switch

### Product features

- sealed motor
- flow rate up to 5 m<sup>3</sup> / h
- manual start-up feature
- space-saving axially integrated terminal box

### Use

The HUP series wet rotor circulators feature a sealed motor. This provides them with permanent and reliable protection from condensation. The HUP series pumps are also particularly quiet.

### Main areas of use

For universal use, predominantly where condensation can form in the motor on account of media and ambient temperatures or where the pump must be particularly quiet.

### Flow media

- heating water as per VDI 2035
- pure, thin, non-aggressive and non-explosive, mineral oil-free media without solid or long-fibre components
- media with a max. viscosity of 10 mm<sup>2</sup> / s
- operating data must be checked above 50 % glycol

### Materials

Component	Material	Material No.
Pump body	Grey-cast iron	0.6020
Impeller	PSU - GF 20	
Shaft	Ceramic	
Bearing	Ceramic	
Bearing plate	Stainless steel	1.4301
Can	Stainless steel	1.4301

### Temperature range

Ambient temperature:	0 °C to 40 °C
Temperature class:	TF 110
Media temperature:	-10 °C to 110 °C

### Ambient temperature

To avoid the build-up of condensation, the ambient temperature must always be lower than the media temperature.

Media temperature	110	105	100	90	80	60	40	20
max. ambient temperature	35	55	60	70	80	60	40	0

\* cold water version on request

### Motor protection

The motor winding is resistant to stall current, so that motor protection is not required.

### Speed switching

The respective speed is set via a rotary switch integrated in the axial terminal box.

### Sound pressure level

The sound pressure level is < 45 dB (A)

### Minimum inflow pressure

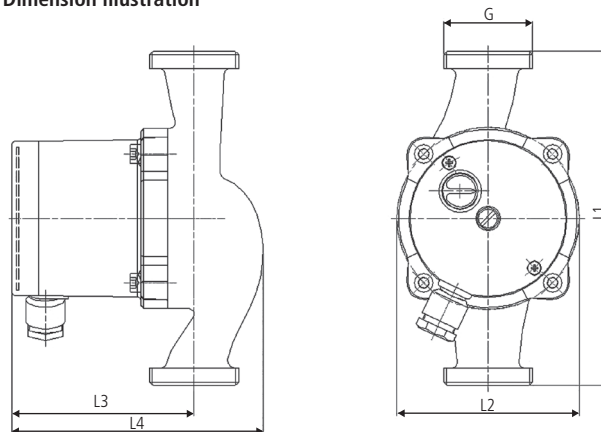
Please determine the minimum inflow pressure for corresponding temperature from the following table.

Media temperature	< 85 °C	90 °C	110 °C
Minimum inflow pressure	0.05 bar	0.3 bar	1.10 bar

### Dimensions

Type	L1	L2	L3	L4
HUP	130 / 150 / 180	98	98	135

### Dimension illustration



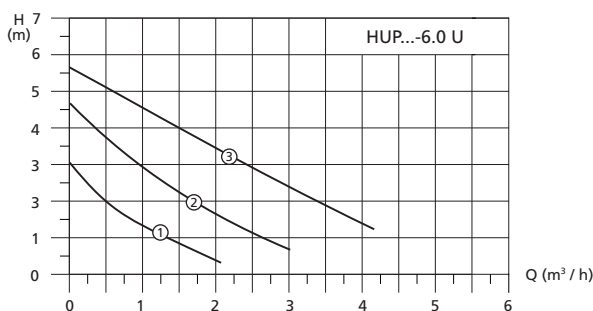
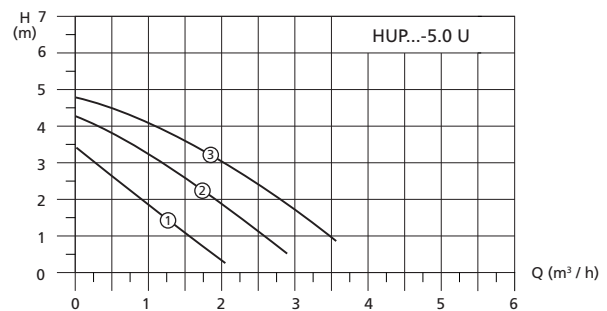
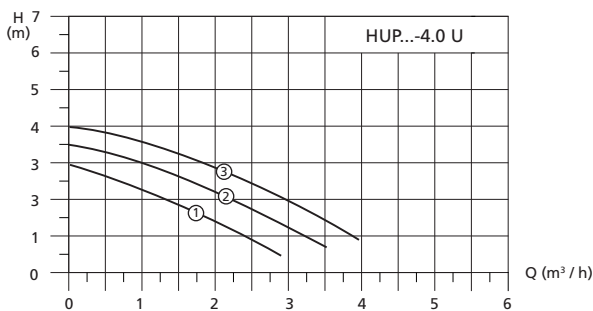
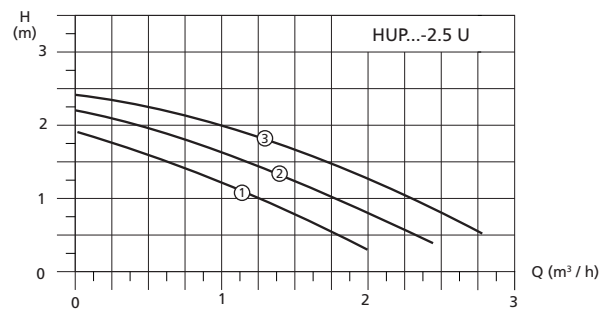
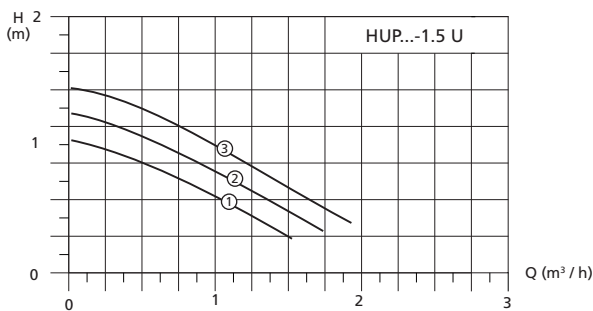
# Circulation pumps (resistant to condensation)

HUP series, U product group



## Technical data

Type	Connection pipe	Threaded connection	Installation length (mm)	P1 (W)	In (A)	Weight (kg)	Product No.
HUP 15 - 1.5 U 130	½"	1"	130	28 ... 58	0.16 ... 0.28	2.7	0321-0103
HUP 15 - 2.5 U 130	½"	1"	130	33 ... 63	0.17 ... 0.3	2.7	0321-0104
HUP 15 - 4.0 U 130	½"	1"	130	40 ... 70	0.19 ... 0.33	2.7	0321-0105
HUP 15 - 6.0 U 130	½"	1"	130	56 ... 100	0.27 ... 0.44	2.7	0321-0107
HUP 20 - 1.5 U 130	¾"	1½"	130	28 ... 58	0.16 ... 0.28	2.7	0322-0103
HUP 20 - 2.5 U 130	¾"	1½"	130	33 ... 63	0.17 ... 0.3	2.7	0322-0104
HUP 20 - 4.0 U 130	¾"	1½"	130	40 ... 70	0.19 ... 0.33	2.7	0322-0105
HUP 20 - 5.0 U 130	¾"	1½"	130	55 ... 90	0.25 ... 0.39	2.7	0322-0106
HUP 20 - 6.0 U 130	¾"	1½"	130	56 ... 100	0.27 ... 0.44	2.7	0322-0107
HUP 25 - 1.5 U 180	1"	1½"	180	28 ... 58	0.16 ... 0.28	2.8	0323-0123
HUP 25 - 2.5 U 180	1"	1½"	180	33 ... 63	0.17 ... 0.3	2.8	0323-0124
HUP 25 - 4.0 U 180	1"	1½"	180	40 ... 70	0.19 ... 0.33	2.8	0323-0125
HUP 25 - 5.0 U 180	1"	1½"	180	55 ... 90	0.25 ... 0.39	2.8	0323-0126
HUP 25 - 6.0 U 180	1"	1½"	180	56 ... 100	0.27 ... 0.44	2.8	0323-0127
HUP 30 - 2.5 U 180	1¼"	2"	180	33 ... 63	0.17 ... 0.3	2.9	0324-0124
HUP 30 - 4.0 U 180	1¼"	2"	180	40 ... 70	0.19 ... 0.33	2.9	0324-0125
HUP 30 - 5.0 U 180	1¼"	2"	180	55 ... 90	0.25 ... 0.39	2.9	0324-0126
HUP 30 - 6.0 U 180	1¼"	2"	180	56 ... 100	0.7 ... 0.44	2.9	0324-0127





## Accessories

### Product group Z

#### Plugs for screw pumps ("plug & pump")

- screwable universal plug complete with motor connection / socket only
- for universal use with all Halm screw pumps
- for simple and quick connection



Description	Product No.
Plug complete	3219-2205-01
Socket only	3219-2204

Further accessories on request.



# Replacement lists

## Grundfos - Wilo - KSB - Biral - Speck - Laing - Halm



### Product group HP

#### HEP series

Grundfos	Wilo	KSB	Biral	Speck	Laing	Halm	Halm product no.
Alpha 2 15-40	-	-	-	-	E4 auto 15 / 130 G	HEP 15-4.0 E 130	0321-34204.5
Alpha 2 15-60	-	-	-	-	E6 auto 15 / 130 G	HEP 15-6.0 E 130	0321-34206.5
Alpha 2 25-40 Alpha Pro 25-40	Stratos Eco 25 1/3	Riotronic Eco 25-40	A / AX 12-1	-	E4 auto 25 / 180 G	HEP 25-4.0 E 180	0323-34204.5
Alpha 2 25-60 Alpha Pro 25-60	Stratos Eco 25 1/5	Riotronic Eco 25-60	A / AX 13-1	-	E6 auto 25 / 180 G	HEP 25-6.0 E 180	0323-34206.5
Alpha 2 32-40 Alpha Pro 32-40	Stratos Eco 30 1/3	Riotronic Eco 30-40	A / AX 12-2	-	E4 auto 32 / 180 G	HEP 30-4.0 E 180	0324-34204.5
Alpha 2 32-60 Alpha Pro 32-60	Stratos Eco 30 1/5	Riotronic Eco 30-60	A / AX 13-2	-	E6 auto 32 / 180 G	HEP 30 -6.0 E 180	0324-34206.5

### Product group HE

#### HUE series

Grundfos	Wilo	KSB	Biral	Speck	Laing	Halm	Halm product no.
Alpha + 25-40	Star-E 25/1-3	Riotronic S 25-40	MXE / MC 12-1	NE 25/30	-	HUE 25-4.0 E 180	0323-33204.5
Alpha + 25-60	Star-E 25/1-5	Riotronic S 25-60	MXE / MC 13-1	NE 25/50 N 25/64-E	-	HUE 25-6.0 E 180	0323-33206.5
Alpha + 32-40	Star-E 30/1-3	Riotronic S 30-40	MXE / MC 12-2	NE 32/30	-	HUE 30-4.0 E 180	0324-33204.5
Alpha + 32-60	Star-E 30/1-5	Riotronic S 30-60	MXE / MC 13-2	NE 32/50 N 32/64-E	-	HUE 30-6.0 E 180	0324-33206.5



### Product group H

#### HUPA series

Grundfos	Wilo	KSB	Biral	Speck	Laing	Halm	Halm product no.
UPS 15-30,130	Star-RS 15/2	-	MX / M 10 - 4	-	E4 vario 15 / 130 G	HUPA 15-2.5 U 130	0321-33003
UPS 15-40 130	Star-RS 15/4	Rio C 15-40 130	MX / M 12 - 4	-	E4 vario 15 / 130 G	HUPA 15-4.0 U 130	0321-33004
UPS 15-60 130	Star-RS 15/6	Rio C 15-60 130	MX / M 13 - 4	-	E6 vario 15 / 130 G	HUPA 15-6.0 U 130	0321-33006
UPS 25-25	Star-RS 25/2	Rio C 25-25	MX / M 10 - 1	N 25/33 VA 25/2	E4 vario 25 / 180 G	HUPA 25-2.5 U 180	0323-33203
UPS 25-40	Star-RS 25/4	Rio C 25-40	MX / M 12 - 1	N 25/33 VA 25/4	E4 vario 25 / 180 G	HUPA 25-4.0 U 180	0323-33204
UPS 25-50	Star-RS 25/5	Rio C 22 / 50	MX / M 12 - 1	N 25/53 VA 25/52	E6 vario 25 / 180 G	HUPA 25-5.0 U 180	0323-33205
UPS 25-60	Star-RS 25/6	Rio C 25-60	MX / M 13 - 1	N 25/33 VA 25/64	E6 vario 25 / 180 G	HUPA 25-6.0 U 180	0323-33206
-	-	-	MX / M 14 - 1	VA 25/64	-	HUPA 25-7.0 U 180	0323-33207
UPS 32-30	Star-RS 30/2	Rio C 30-25	MX / M 10 - 2	N 32/33	E4 vario 32 / 180 G	HUPA 30-2.5 U 180	0324-33203
UPS 32-40	Star-S 30/4	Rio C 30-40	MX / M 12 - 2	N 32/33 VA 32/43	E4 vario 32 / 180 G	HUPA 30-4.0 U 180	0324-33204
UPS 32-50	Star-RS 30/6	Rio C 32/60	MX / M 12 - 2	N 32/53 VA 32/52	E6 vario 32 / 180 G	HUPA 30-5.0 U 180	0324-33205
UPS 32-60	Star-RS 30/6	Rio C 30-60	MX / M 13 - 2	N 32/53 VA 32/64	E6 vario 32 / 180 G	HUPA 30-6.0 U 180	0324-33206
UPS 32-80	TOP-S 30/7 (OEM: TOP-RL 30/6.5 TOP-RL 30/7.5)	-	MX / M 14 - 2	VA 32/73	-	HGPA 30-7.0 U 180	0324-41207

### Product group HG

#### HGPA series

Grundfos	Wilo	KSB	Biral	Speck	Laing	Halm	Halm product no.
-	TOP-S 25/7	Rio 25 - 70	MX / M 14 - 1	VA 25/64	-	HGPA 25-7.0 U 180	0323-41207
UPS 25-80	-	-	MX / M 15 - 1	-	-	HGPA 25-8.0 U 180	0323-41208
UPS 32-80	TOP-S 30/7	Rio 30 - 70	MX / M 14 - 2	VA 32/73	-	HGPA 30-7.0 U 180	0324-41207
-	-	Rio 30 - 70	-	-	-	HGPA 30-8.0 U 180	0324-41208
-	TOP-S 30/10	Rio 30 - 100	MX / M 15 - 2	VA 32/86	-	HGPA 30-10.0 U 180	0324-41210
-	-	Rio 30 - 100	-	-	-	HGPA 30-12.0 U 180	0324-41212

# Replacement lists

## Grundfos - Wilo - KSB - Biral - Speck - Laing - Halm



### Product group UB, B

#### BUP, BUPA series

Grundfos	Wilo	KSB	Biral	Speck	Laing	Halm	Halm product no.
UP 15-14 B/N	Z 15 *	Riotherm C 20-10	W 12 120 *	BN 15	S1-15 / 700 B	BUP 15-1.5 U 130 BUPA 15-1.5 U 130	0331-0103 0331-31002
-	-	R 12 - 1 E *	W 13	-	-	BUP 15-3.0 U 130 BUPA 15-3.0 U 130	0331-0104 0331-31003
-	-	-	W 14	-	-	BUP 15-4.0 U 130 BUPA 15-4.0 U 130	0331-0105 0331-31004
-	-	-	W 14	-	-	BUP 15-6.0 U 130 BUPA 15-6.0 U 130	0331-0107 0331-31006
UP 20-14 / 15 B / N	Star-Z 20/1 *	-	W 12 120 *	-	S1-13 / 100 B	BUP 20-1.5 U 150 BUPA 20-1.5 U 150	0332-0113 0332-31102
UPS 20-15 N	Star-Z 20/2	C 20-15	W 13	-	-	BUP 20-3.0 U 150 BUPA 20-3.0 U 150	0332-0114 0332-31103
UP 20-30 N	TOP-Z 20/4	C 20-30	W 14	BA 25/41	-	BUP 20-4.0 U 150 BUPA 20-4.0 U 150	0332-0115 0332-31104
UP 20-42 N	TOP-Z 20/4	-	W 14	BA 25/4 3	-	BUP 20-6.0 U 150 BUPA 20-6.0 U 150	0332-0117 0332-31106
-	-	-	W 12	BN 20/22 150	S1-13 / 100 B	BUP 25-1.5 U 130 BUPA 25-1.5 U 130	0333-0103 0333-31002
-	-	Riotherm C 25-20	W 13	BN 20/43 150	-	BUP 25-3.0 U 130 BUPA 25-3.0 U 130	0333-0104 0333-31003
-	-	-	W 14	BVA 25/41	-	BUP 25-6.0 U 130 BUPA 25-6.0 U 130	0333-0107 0333-31006
UPS 25-40 B	Star-Z 25/2	-	W 14	BVA 25/43	-	BUP 25-4.0 U 180 BUPA 25-4.0 U 180	0333-0125 0333-31204
UPS 25-60 B	Star-Z 25/6	Riotherm C 25-60	W 14	-	-	BUP 25-6.0 U 180 BUPA 25-6.0 U 180	0333-0127 0333-31206

\* note differing installation lengths

### Product group S

#### SUP series

Grundfos	Wilo	KSB	Biral	Speck	Laing	Halm	Halm product no.
-	Star-ST 15/4	-	-	-	-	SUP 15-4.0 U 130	0311-21004
-	Star-ST 15/6	-	-	-	-	SUP 15-6.0 U 130	0311-21006
Solar 25-40	Star-ST 25/4	-	-	-	-	SUP 25-4.0 U 180	0313-21204
Solar 25-60	Star-ST 25/6	-	-	-	-	SUP 25-6.0 U 180	0313-21206



### Product group KG

#### KGPA series

Grundfos	Wilo	KSB	Biral	Speck	Laing	Halm	Halm product no.
-	TOP-S 25/7	Rio 25 - 70	MX / M 14 - 1	VA 25/64	-	KGPA 25-7.0 U 180	0313-51207
UPS 25-80	-	-	MX / M 15 - 1	-	-	KGPA 25-8.0 U 180	0313-51208
UPS 32-80	TOP-S 30/7	Rio 30 - 70	MX / M 14 - 2	VA 32/73	-	KGPA 30-7.0 U 180	0314-51207
-	-	Rio 30 - 70	-	-	-	KGPA 30-8.0 U 180	0314-51208
-	TOP-S 30/10	Rio 30 - 100	MX / M 15 - 2	VA 32/86	-	KGPA 30-10.0 U 180	0314-51210
-	-	Rio 30 - 100	-	-	-	KGPA 30-12.0 U 180	0314-51212



### Product group U

#### HUP series

Grundfos	Wilo	KSB	Biral	Speck	Laing	Halm	Halm product no.
UPS 15-20 130	Star RS 15/2	Rio C 15-15 130	MX / M 10 - 4	-	E4 vario 15 / 130 G	HUP 15 - 1.5 U 130	0321 - 0103
UPS 15-30 130	Star-RS 15/2	-	MX / M 10 - 4	-	E4 vario 15 / 130 G	HUP 15 - 2.5 U 130	0321 - 0104
UPS 15-40 130	Star-RS 15/4	Rio C 15-40 130	MX / M 12 - 4	-	E4 vario 15 / 130 G	HUP 15 - 4.0 U 130	0321 - 0105
UPS 15-60 130	Star-RS 15/6	Rio C 15-60 130	MX / M 13 - 4	-	E6 vario 15 / 130 G	HUP 15 - 6.0 U 130	0321 - 0107
UPS 20-20 130	Star-RS 25/2	-	MX / M 10 - 3	-	-	HUP 20 - 1.5 U 130 HUP 20 - 2.5 U 130	0322 - 0103 0322 - 0104
UPS 20-40 130	Star-RS 25/4	Rio C 12/40	MX / M 12 - 3	N 20/33 AU 20/43 180	-	HUP 20 - 4.0 U 130	0322 - 0105
UPS 20-50 130	Star-RS 25/5	-	MX / M 12 - 3	-	-	HUP 20 - 5.0 U 130	0322 - 0106
UPS 20-60 130	Star-RS 25/6	Rio C 12/60	MX / M 13 - 3	AU 20/64 180	-	HUP 20 - 6.0 U 130	0322 - 0107
UPS 25-20	Star-RS 25/2	Rio C 25-15	MX / M 10 - 1	-	E4 vario 25 / 180 G	HUP 25 - 1.5 U 180	0323 - 0123
UPS 25-25	Star-RS 25/2	Rio C 25-25	MX / M 10 - 1	N 25/33 VA 25/2	E4 vario 25 / 180 G	HUP 25 - 2.5 U 180	0323 - 0124
UPS 25-40	Star-RS 25/4	Rio C 25-40	MX / M 12 - 1	N 25/33 VA 25/4	E4 vario 25 / 180 G	HUP 25 - 4.0 U 180	0323 - 0125
UPS 25-50	Star-RS 25/5	Rio C 25-50	MX / M 12 - 1	N 25/53 VA 25/52	E6 vario 25 / 180 G	HUP 25 - 5.0 U 180	0323 - 0126
UPS 25-60	Star-RS 25/6	Rio C 25-60	MX / M 13 - 1	N 25/33 VA 25/64	E6 vario 25 / 180 G	HUP 25 - 6.0 U 180	0323 - 0127
UPS 32-30	Star-RS 30/2	Rio C 30-25	MX / M 10 - 2	N 32/33	E4 vario 32 / 180 G	HUP 30 - 2.5 U 180	0324 - 0124
UPS 32-40	Star-RS 30/4	Rio C 30-40	MX / M 12 - 2	N 32/33 VA 32/43	E4 vario 32 / 180 G	HUP 30 - 4.0 U 180	0324 - 0125
UPS 32-50	Star-RS 30/6	Rio C 32/60	MX / M 12 - 2	N 32/53 VA 32/52	E6 vario 32 / 180 G	HUP 30 - 5.0 U 180	0324 - 0126
UPS 32-60	Star-RS 30/6	Rio C 30-60	MX / M 13 - 2	N 32/53 VA 32/64	E6 vario 32 / 180 G	HUP 30 - 6.0 U 180	0324 - 0127















**HALM**

*effiziente Pumpentechnologie*

Your representative:

