Pioneering for You

Wilo-Varios PICO-STG

The most versatile replacement pump of all time.

The Wilo-Varios PICO-STG is the universal replacement solution in the heating, air conditioning and cooling sector for residential dwellings, as well as for solar and geothermal installations. It offers either standard mode or external control mode, and the settings of the pump it replaces can be easily imported using the Sync assistant. Its compact construction and the adoption of characteristic curves from the old pump with the new synchronisation function make installation and commissioning particularly easy. And with the Green Button Technology the operability is highly convenient.

Recommended services

System Optimisation

Energy Solutions

Your advantages

- The most compatible replacement solution for all applications, including solar and geothermal energy, thanks to compact design, innovative control modes (such as iPWM) and the Sync assistant in the Wilo-Assistant app
- Maximum operating convenience thanks to its LED display and Green Button Technology featuring a button for control mode and a button for setting the pump
- Easy installation owing to a compact design, adjustable electrical connections and maintenance functions such as venting
- Maximum operational reliability based on proven technology

Product features

1. Compact, standardised design
2. Direct access to the motor screws
3. Cataphoresis pump housing
4. Dual Electrical connection (Molex type & Wilo-Connector)
5. LED-Screen
6. Pressure buttons for control mode setting
7. Faults reported as error codes
8. Sync assistant, pump venting, manual restart

Eco-friendly features

- High-efficiency pump with automatic power adjustment (EEI ≤ 0.20)
- Sustainable and carbon-neutral production and processes in our European factories

Product list

Product description	Pump connection	EEI *	Port-to-port length *L0*	Maximum operating pressure *PN*	Mains connection	Gross weight, approx. *m*	Pieces per pallet	Article number
Varios PICO-STG 15/1-7	G 1	≤0,20	130 mm	10 bar	1~230 V, 50/60 Hz	1,8 kg	198	4215540
Varios PICO-STG 15/1-8	G 1	≤0,23	130 mm	10 bar	1~230 V, 50/60 Hz	2 kg	198	4232742
Varios PICO-STG 15/1-13	G 1	≤0,23	130 mm	10 bar	1~230 V, 50/60 Hz	2 kg	198	4232746
Varios PICO-STG 15/1-13-180	G 1	≤0,23	180 mm	10 bar	1~230 V, 50/60 Hz	2,1 kg	198	4232747
Varios PICO-STG 25/1-7	G 1½	≤0,20	180 mm	10 bar	1~230 V, 50/60 Hz	2,1 kg	198	4215542
Varios PICO-STG 25/1-7-130	G 1½	≤0,20	130 mm	10 bar	1~230 V, 50/60 Hz	1,9 kg	198	4215541
Varios PICO-STG 25/1-8	G 1½	≤0,23	180 mm	10 bar	1~230 V, 50/60 Hz	2,3 kg	198	4232743
Varios PICO-STG 25/1-8-130	G 1½	≤0,23	130 mm	10 bar	1~230 V, 50/60 Hz	2 kg	198	4232744
Varios PICO-STG 30/1-8	G 2	≤0,23	180 mm	10 bar	1~230 V, 50/60 Hz	2,4 kg	198	4232745

* The benchmark for the most efficient circulators is EEI ≤ 0.20

Data sheet

Hydraulic data

Maximum operating pressure *PN*	10 bar
Head max H_{max}	7,8 m
Flow max Q_{max}	3,8 m³/h
Minimum suction head at 50 °C *m*	0,5 m
Minimum suction head at 95 °C *m*	3 m
Minimum suction head at 110 °C	10 m
Min. fluid temperature T_{min}	-10 °C
Max. fluid temperature T_{max}	95 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C

Motor data

Energy efficiency index (EEI) *	≤0,20
Mains connection	1~230 V ±10%, 50/60 Hz
Rated power P_2	38 W
Min. speed n_{min}	2340 1/min
Max. speed n_{max}	4366 1/min
Power consumption $P_{1\ min}$	1 W
Power consumption $P_{1\ max}$	50 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Threaded cable connection	1 x PG11
Insulation class	F
Protection class	IPX4D

* The benchmark for the most efficient circulators is EEI ≤ 0.20

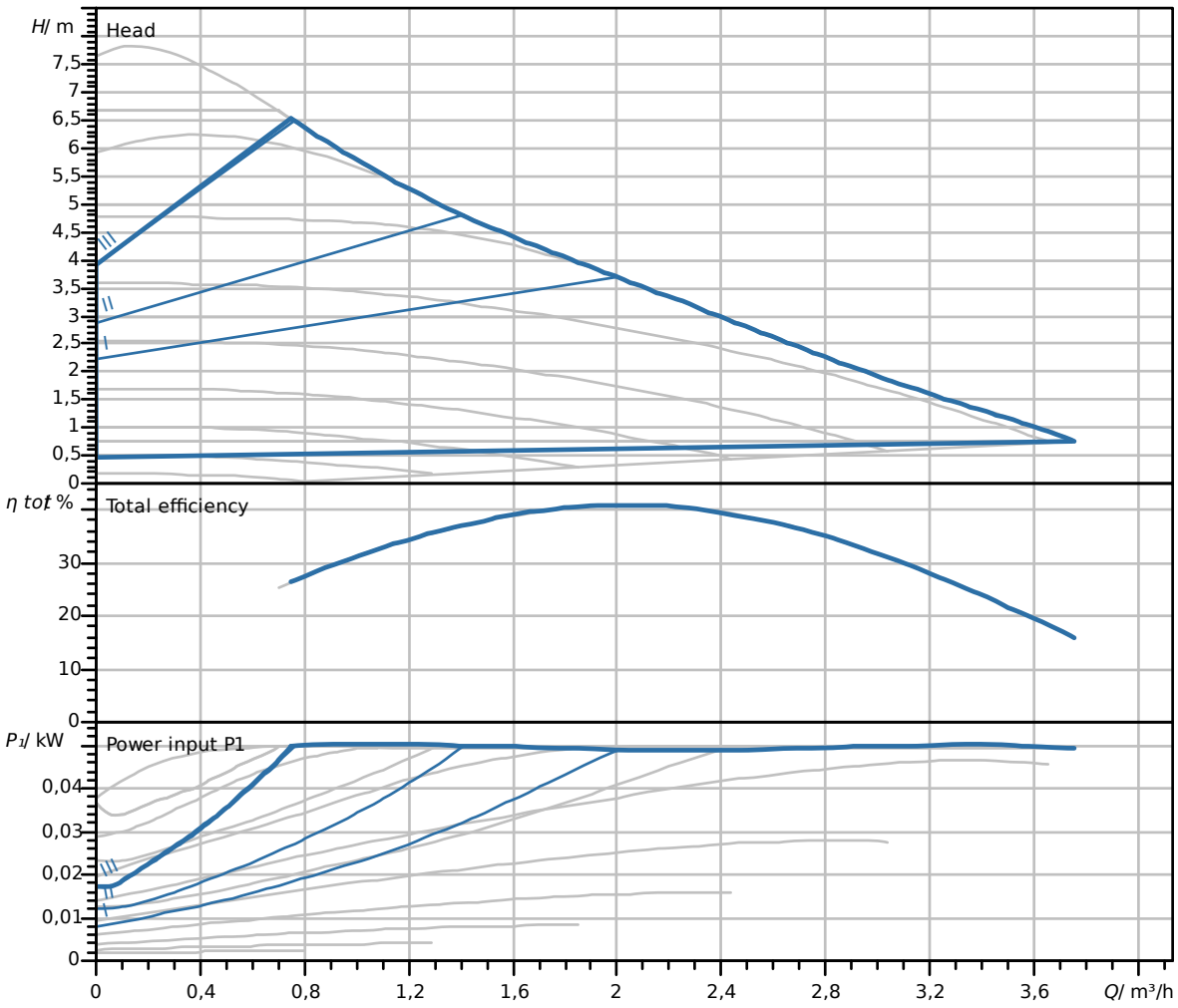
Materials

Pump housing	Grey cast iron
Impeller	PP-GF40
Shaft	Stainless steel
Bearing	Carbon, metal-impregnated

Installation dimensions

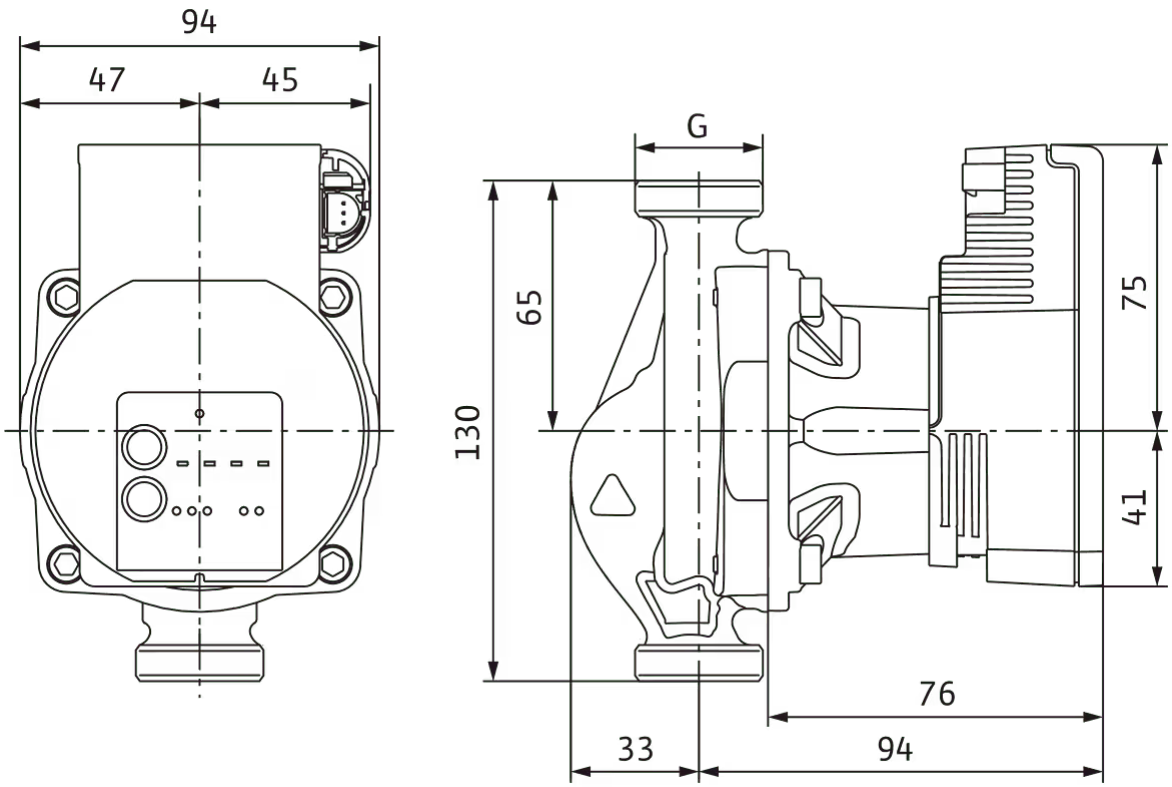
Pipe connection on the discharge side *DNd*	G 1
Pipe connection on the suction side *DNs*	G 1
Port-to-port length *L0*	130 mm

Pump curves

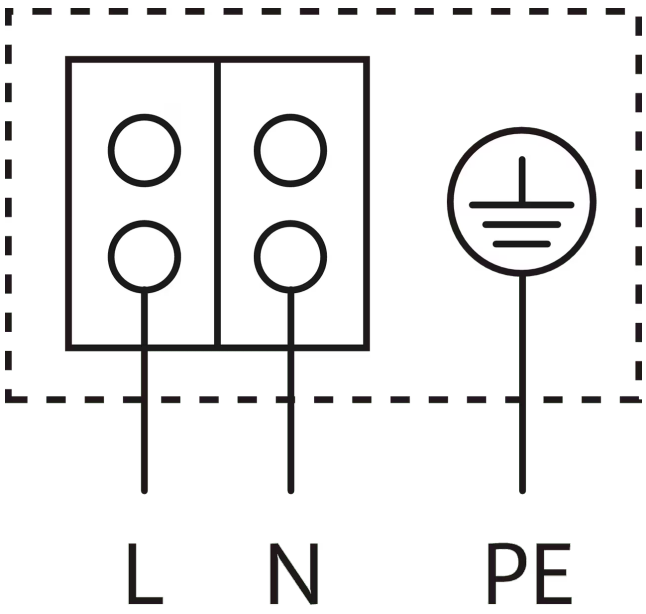

H/ m
Head
7,5
7
6,5
6
5,5
5
4,5
4
3,5
3
2,5
2
1,5
1
0,5
0
III
II
I
η tot/ %
Total efficiency
30
20
10
0
P1/ kW
Power input P1
0,04
0,03
0,02
0,01
0
0
0,4
0,8
1,2
1,6
2
2,4
2,8
3,2
3,6
Q/ m³/h

Dimensions and dimensions drawings

Varios PICO-STG 15/1-7



Wiring diagram



Blocking current-proof motor

Single-phase motor (EM) 2-pole - 1~230 V, 50 Hz

Tender text

High-efficiency pump Wilo-Varios PICO-STG, electronically controlled. Maintenance-free glandless circulator with screwed connection, blocking-current proof synchronous motor according to ECM technology and built-in electronic power control for variable differential pressure control. Can be used for all heating and air-conditioning applications, as well as for solar and geothermal systems.

Standard-equipped with:

- Preselectable control modes for optimum load adjustment:
  - Differential pressure constant (Δp-c), 3 pre-defined pump curves
  - Differential pressure variable (Δp-v), 3 pre-defined pump curves
  - Constant speed (3 speed stages)
  - External control by iPWM GT (Heating/Geothermal) or iPWM ST (Solar) signal
- Sync function (manual programming mode) for reprogramming the pump in the event of replacement
- Manual pump venting function for venting the rotor chamber
- Manual restart
- LED display
  - Display of selected control mode und pump curve
  - Status display during venting and manual restart
  - LED coding during the sync function
  - Operation and fault display
- Integrated motor protection
- Automatic deblocking function
- Electrical connection cable with 3-pole plug connection and Wilo-Connector
- PWM connection
- Cataphoretically-coated pump housing

Operating data

Min. fluid temperature T_{min}	-10 °C
Max. fluid temperature T_{max}	95 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C
Maximum operating pressure *PN*	10 bar
Minimum suction head at 50 °C *m*	0,5 m
Minimum suction head at 95 °C *m*	3 m
Minimum suction head at 110 °C	10 m

Motor data

Energy efficiency index (EEI) *	≤0,20
Mains connection	1~230 V ±10%, 50/60 Hz
Rated power P_2	38 W
Min. speed n_{min}	2340 1/min
Max. speed n_{max}	4366 1/min
Power consumption $P_{1\ min}$	1 W
Power consumption $P_{1\ max}$	50 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Insulation class	F
Protection class	IPX4D
Threaded cable connection	1 x PG11

* The benchmark for the most efficient circulators is EEI ≤ 0.20

Materials

Pump housing	Grey cast iron
Impeller	PP-GF40
Shaft	Stainless steel
Bearing	Carbon, metal-impregnated

Installation dimensions

Pipe connection on the suction side *DNs*	G 1
Pipe connection on the discharge side *DNd*	G 1
Port-to-port length *L0*	130 mm

Ordering information

Brand	Wilo
Product description	Varios PICO-STG 15/1-7
Net weight, approx. *m*	1,6 kg
Article number	4215540

Electrical accessories

Pump control

Timer switch SK 601N

Switchgear SK 601N	2120443	EUR 215.-

Plug

Angle plug

Angle plug	4150229	EUR 26.-

Connector

Wilo-Connector	4200870	EUR 32.-

PWM signal cable

PWM signal cable	4193901	EUR 24.-
Bidirectional iPWM control cable	4222049	EUR 25.-

Data sheet

Hydraulic data

Maximum operating pressure *PN*	10 bar
Head max H_{max}	8,4 m
Flow max Q_{max}	4,5 m³/h
Min. fluid temperature T_{min}	-20 °C
Max. fluid temperature T_{max}	110 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C

Motor data

Energy efficiency index (EEI) *	≤0,23
Mains connection	1~230 V ±10%, 50/60 Hz
Rated power P_2	55 W
Min. speed n_{min}	2695 1/min
Max. speed n_{max}	4686 1/min
Power consumption $P_{1\,min}$	1 W
Power consumption $P_{1\,max}$	75 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Threaded cable connection	1 x PG11
Insulation class	F
Protection class	IPX4D

* The benchmark for the most efficient circulators is EEI ≤ 0.20

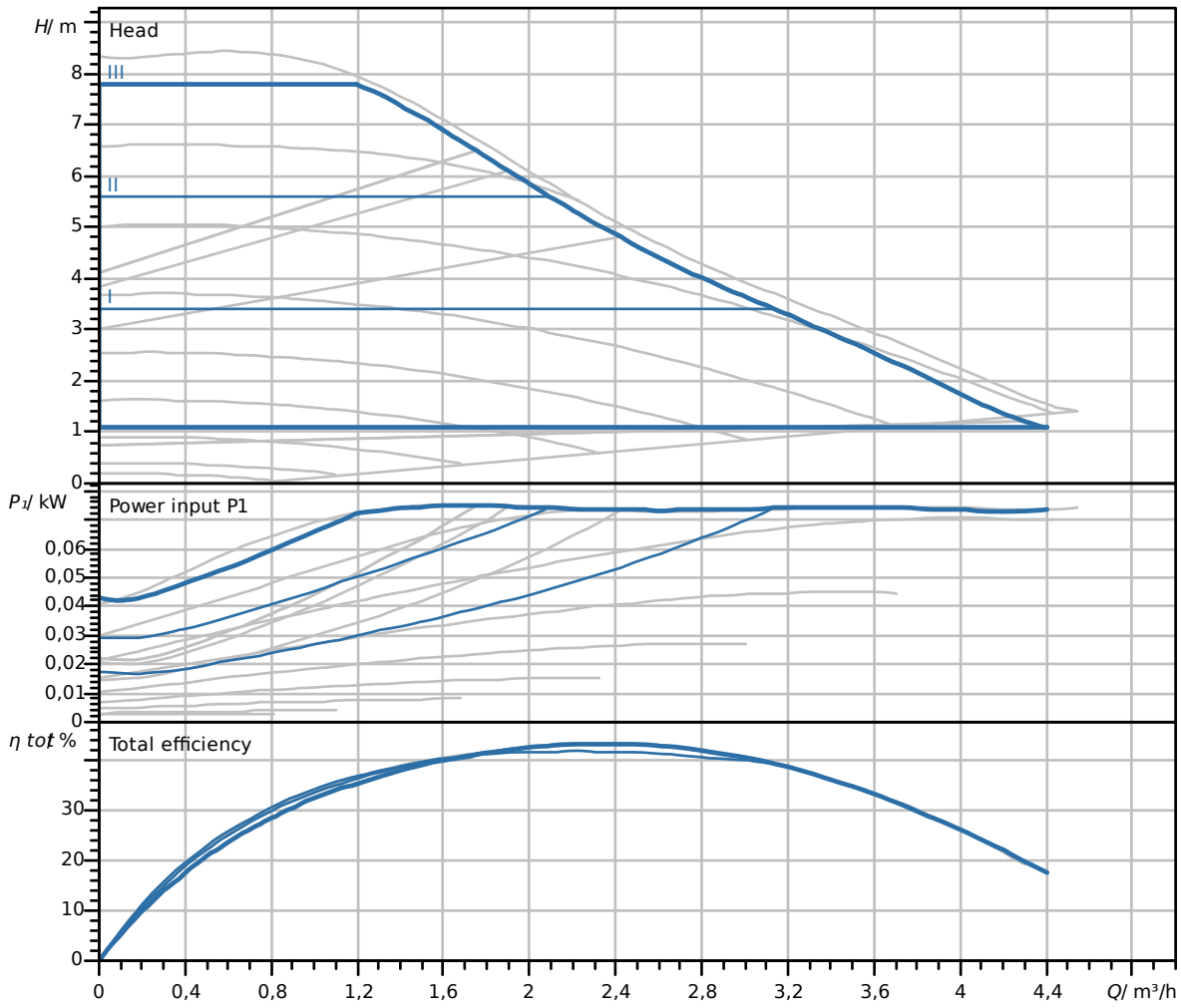
Materials

Pump housing	Grey cast iron
Impeller	PP-GF40
Shaft	Stainless steel
Bearing	Carbon, metal-impregnated

Installation dimensions

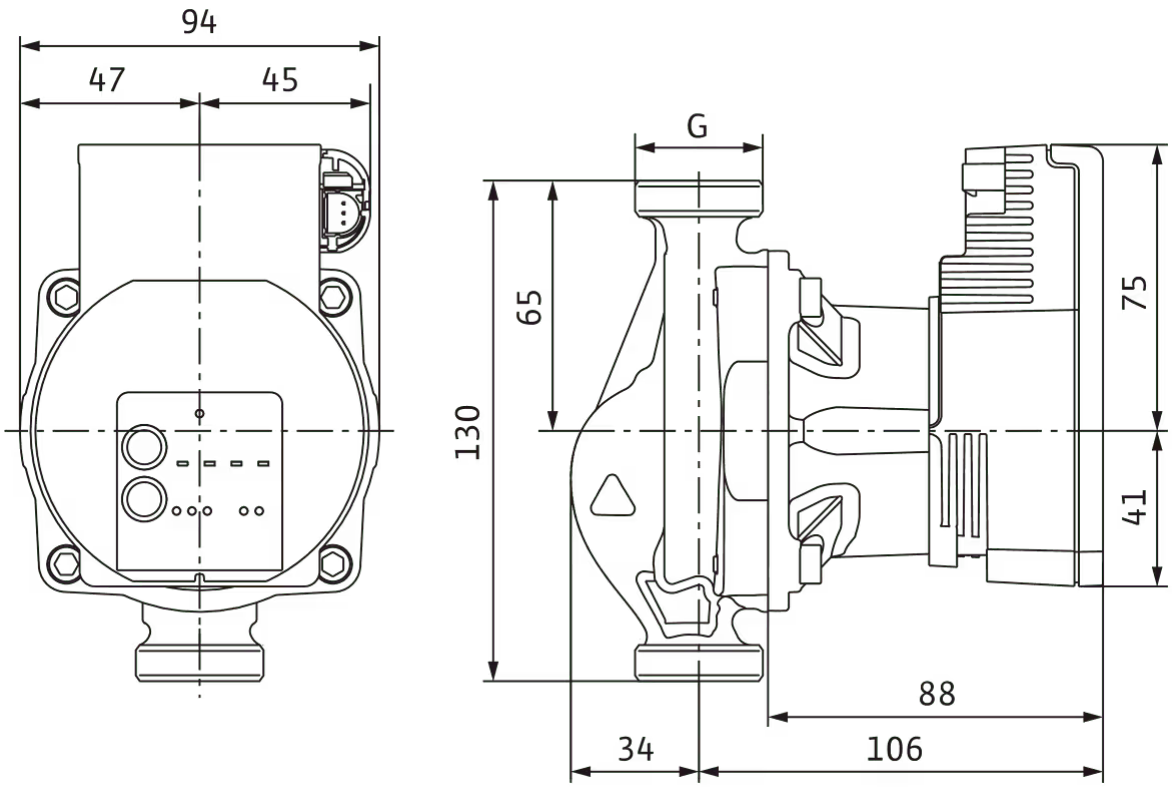
Pipe connection on the discharge side *DNd*	G 1
Pipe connection on the suction side *DNs*	G 1
Port-to-port length *L0*	130 mm

Pump curves

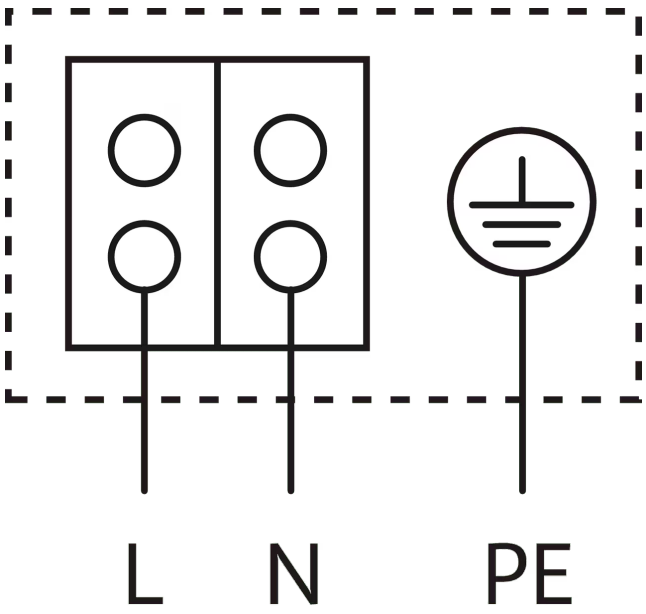

H/ m
Head
III
II
I
P1/ kW
Power input P1
η tot/ %
Total efficiency
0
0,4
0,8
1,2
1,6
2
2,4
2,8
3,2
3,6
4
4,4
Q/ m³/h

Dimensions and dimensions drawings

Varios PICO-STG 15/1-8



Wiring diagram



Blocking current-proof motor

Single-phase motor (EM) 2-pole - 1~230 V, 50 Hz

Tender text

High-efficiency pump Wilo-Varios PICO-STG, electronically controlled. Maintenance-free glandless circulator with screwed connection, blocking-current proof synchronous motor according to ECM technology and built-in electronic power control for variable differential pressure control. Can be used for all heating and air-conditioning applications, as well as for solar and geothermal systems.

Standard-equipped with:

- Preselectable control modes for optimum load adjustment:
  - Differential pressure constant (Δp-c), 3 pre-defined pump curves
  - Differential pressure variable (Δp-v), 3 pre-defined pump curves
  - Constant speed (3 speed stages)
  - External control by iPWM GT (Heating/Geothermal) or iPWM ST (Solar) signal
- Sync function (manual programming mode) for reprogramming the pump in the event of replacement
- Manual pump venting function for venting the rotor chamber
- Manual restart
- LED display
  - Display of selected control mode und pump curve
  - Status display during venting and manual restart
  - LED coding during the sync function
  - Operation and fault display
- Integrated motor protection
- Automatic deblocking function
- Electrical connection cable with 3-pole plug connection and Wilo-Connector
- PWM connection
- Cataphoretically-coated pump housing

Operating data

Min. fluid temperature T_{min}	-20 °C
Max. fluid temperature T_{max}	110 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C
Maximum operating pressure *PN*	10 bar

Motor data

Energy efficiency index (EEI) *	≤0,23
Mains connection	1~230 V ±10%, 50/60 Hz
Rated power P_2	55 W
Min. speed n_{min}	2695 1/min
Max. speed n_{max}	4686 1/min
Power consumption $P_{1\ min}$	1 W
Power consumption $P_{1\ max}$	75 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Insulation class	F
Protection class	IPX4D
Threaded cable connection	1 x PG11

* The benchmark for the most efficient circulators is EEI ≤ 0.20

Materials

Pump housing	Grey cast iron
Impeller	PP-GF40
Shaft	Stainless steel
Bearing	Carbon, metal-impregnated

Installation dimensions

Pipe connection on the suction side *DNs*	G 1
Pipe connection on the discharge side *DNd*	G 1
Port-to-port length *L0*	130 mm

Ordering information

Brand	Wilo
Product description	Varios PICO-STG 15/1-8
Net weight, approx. *m*	1,8 kg
Article number	4232742

Electrical accessories

Pump control

Timer switch SK 601N

Switchgear SK 601N	2120443	EUR 215.-

Plug

Angle plug

Angle plug	4150229	EUR 26.-

Connector

Wilo-Connector	4200870	EUR 32.-

PWM signal cable

PWM signal cable	4193901	EUR 24.-
Bidirectional iPWM control cable	4222049	EUR 25.-

Data sheet

Hydraulic data

Maximum operating pressure *PN*	10 bar
Head max H_{max}	13,6 m
Flow max Q_{max}	2,4 m³/h
Min. fluid temperature T_{min}	-20 °C
Max. fluid temperature T_{max}	110 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C

Motor data

Energy efficiency index (EEI) *	≤0,23
Mains connection	1~230 V ±10%, 50/60 Hz
Rated power P_2	55 W
Min. speed n_{min}	2957 1/min
Max. speed n_{max}	4807 1/min
Power consumption $P_{1\,min}$	1 W
Power consumption $P_{1\,max}$	75 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Threaded cable connection	1 x PG11
Insulation class	F
Protection class	IPX4D

* The benchmark for the most efficient circulators is EEI ≤ 0.20

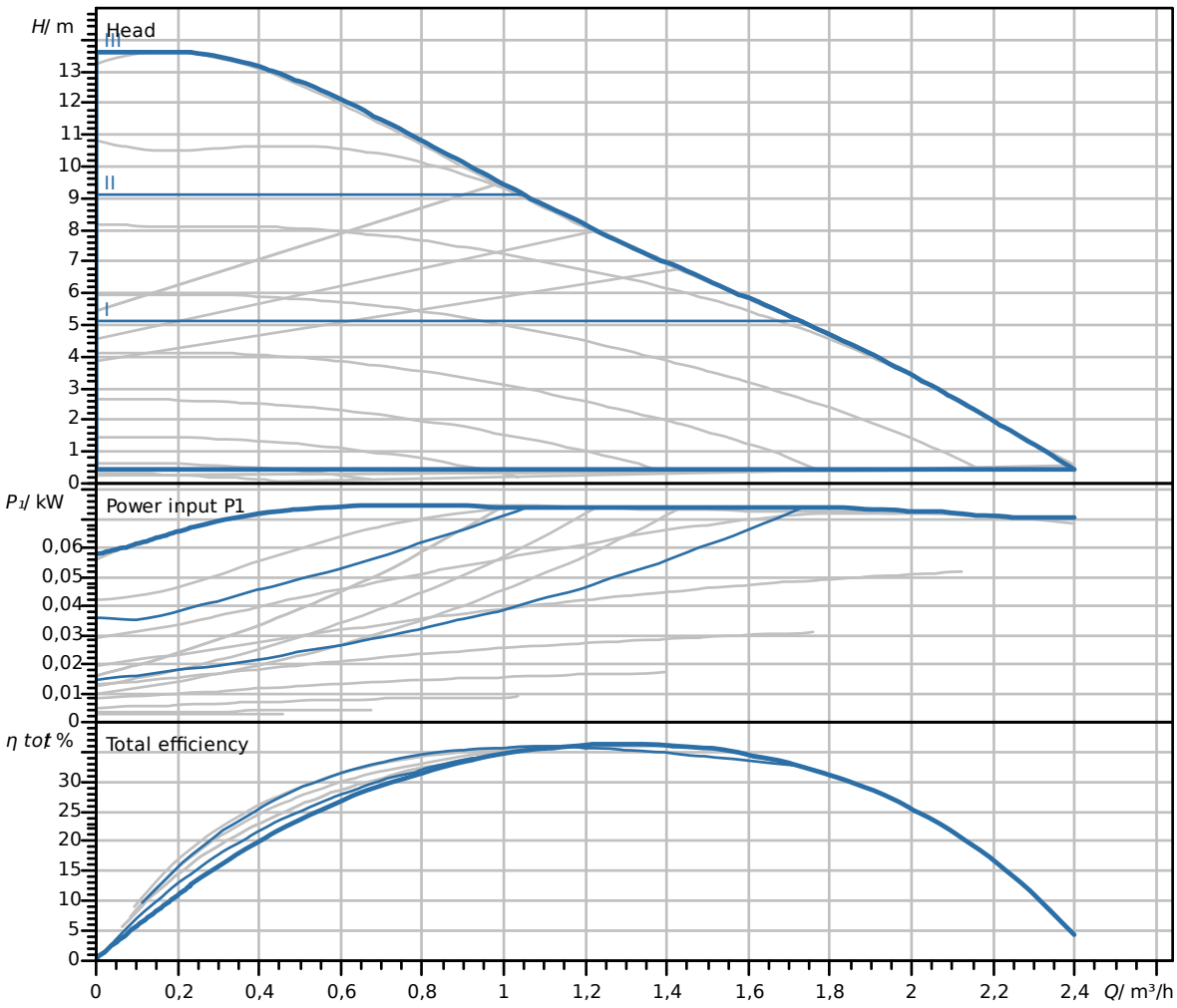
Materials

Pump housing	Grey cast iron
Impeller	PPO/PS-GF30
Shaft	Stainless steel
Bearing	Carbon, metal-impregnated

Installation dimensions

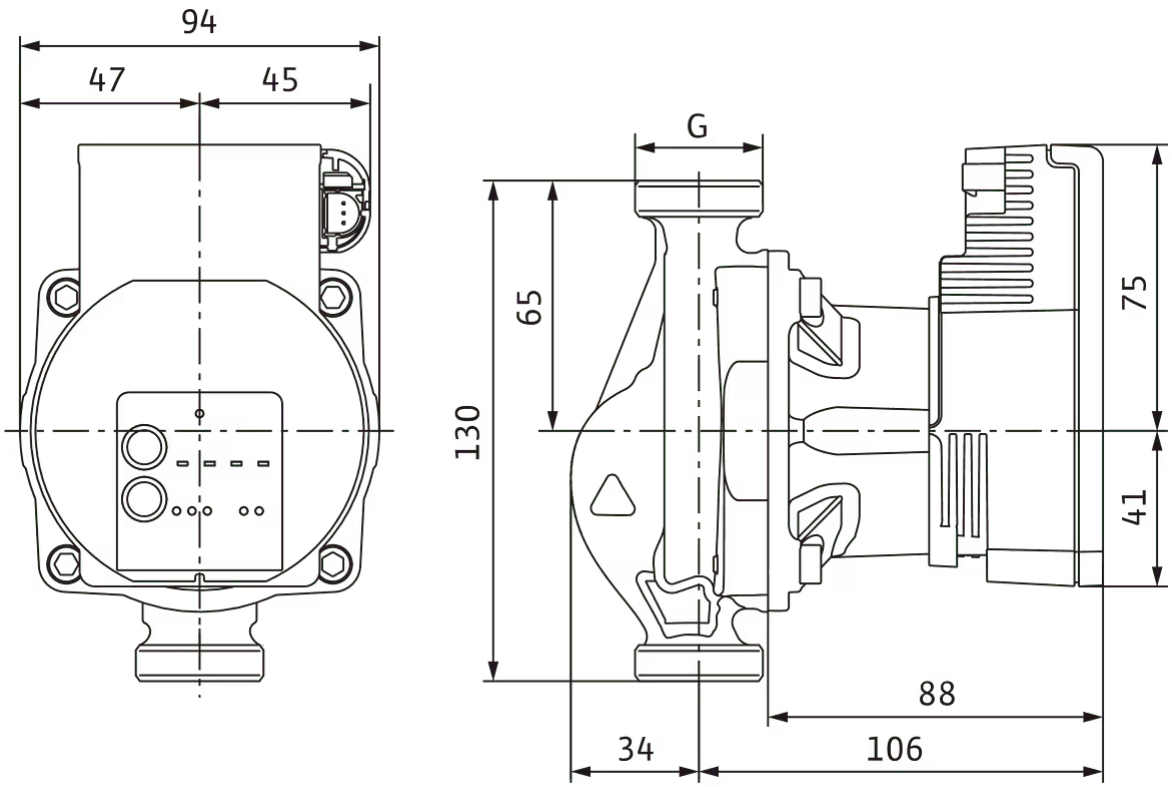
Pipe connection on the discharge side *DNd*	G 1
Pipe connection on the suction side *DNs*	G 1
Port-to-port length *L0*	130 mm

Pump curves

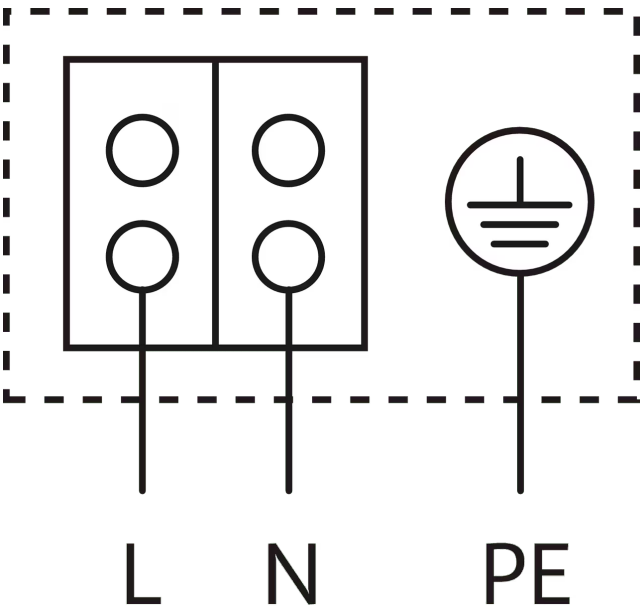

H/ m
Head
III
II
I
P1/ kW
Power input P1
η tot/ %
Total efficiency
Q/ m³/h
0
0,2
0,4
0,6
0,8
1
1,2
1,4
1,6
1,8
2
2,2
2,4

Dimensions and dimensions drawings

Varios PICO-STG 15/1-13



Wiring diagram



Blocking current-proof motor

Single-phase motor (EM) 2-pole - 1~230 V, 50 Hz

Tender text

High-efficiency pump Wilo-Varios PICO-STG, electronically controlled. Maintenance-free glandless circulator with screwed connection, blocking-current proof synchronous motor according to ECM technology and built-in electronic power control for variable differential pressure control. Can be used for all heating and air-conditioning applications, as well as for solar installations.

Standard-equipped with:

- Preselectable control modes for optimum load adjustment:
  - Differential pressure constant (Δp-c), 3 pre-defined pump curves
  - Differential pressure variable (Δp-v), 3 pre-defined pump curves
  - Constant speed (3 speed stages)
  - External control by iPWM ST (solar) signal
- Sync function (manual programming mode) for reprogramming the pump in the event of replacement
- Manual pump venting function for venting the rotor chamber
- Manual restart
- LED display
  - Display of selected control mode und pump curve
  - Status display during venting and manual restart
  - LED coding during the sync function
  - Operation and fault display
- Integrated motor protection
- Automatic deblocking function
- Electrical connection cable with 3-pole plug connection and Wilo-Connector
- PWM connection
- Cataphoretically-coated pump housing

Operating data

Min. fluid temperature T_{min}	-20 °C
Max. fluid temperature T_{max}	110 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C
Maximum operating pressure *PN*	10 bar

Motor data

Energy efficiency index (EEI) *	≤0,23
Mains connection	1~230 V ±10%, 50/60 Hz
Rated power P_2	55 W
Min. speed n_{min}	2957 1/min
Max. speed n_{max}	4807 1/min
Power consumption $P_{1\ min}$	1 W
Power consumption $P_{1\ max}$	75 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Insulation class	F
Protection class	IPX4D
Threaded cable connection	1 x PG11

* The benchmark for the most efficient circulators is EEI ≤ 0.20

Materials

Pump housing	Grey cast iron
Impeller	PPO/PS-GF30
Shaft	Stainless steel
Bearing	Carbon, metal-impregnated

Installation dimensions

Pipe connection on the suction side *DNs*	G 1
Pipe connection on the discharge side *DNd*	G 1
Port-to-port length *L0*	130 mm

Ordering information

Brand	Wilo
Product description	Varios PICO-STG 15/1-13
Net weight, approx. *m*	1,8 kg
Article number	4232746

Electrical accessories

Pump control

Timer switch SK 601N

Switchgear SK 601N	2120443	EUR 215.-

Plug

Angle plug

Angle plug	4150229	EUR 26.-

Connector

Wilo-Connector	4200870	EUR 32.-

PWM signal cable

PWM signal cable	4193901	EUR 24.-
Bidirectional iPWM control cable	4222049	EUR 25.-

Data sheet

Hydraulic data

Maximum operating pressure *PN*	10 bar
Head max H_{max}	13,6 m
Flow max Q_{max}	2,4 m³/h
Min. fluid temperature T_{min}	-20 °C
Max. fluid temperature T_{max}	110 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C

Motor data

Energy efficiency index (EEI) *	≤0,23
Mains connection	1~230 V ±10%, 50/60 Hz
Rated power P_2	55 W
Min. speed n_{min}	2957 1/min
Max. speed n_{max}	4807 1/min
Power consumption $P_{1\,min}$	1 W
Power consumption $P_{1\,max}$	75 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Threaded cable connection	1 x PG11
Insulation class	F
Protection class	IPX4D

* The benchmark for the most efficient circulators is EEI ≤ 0.20

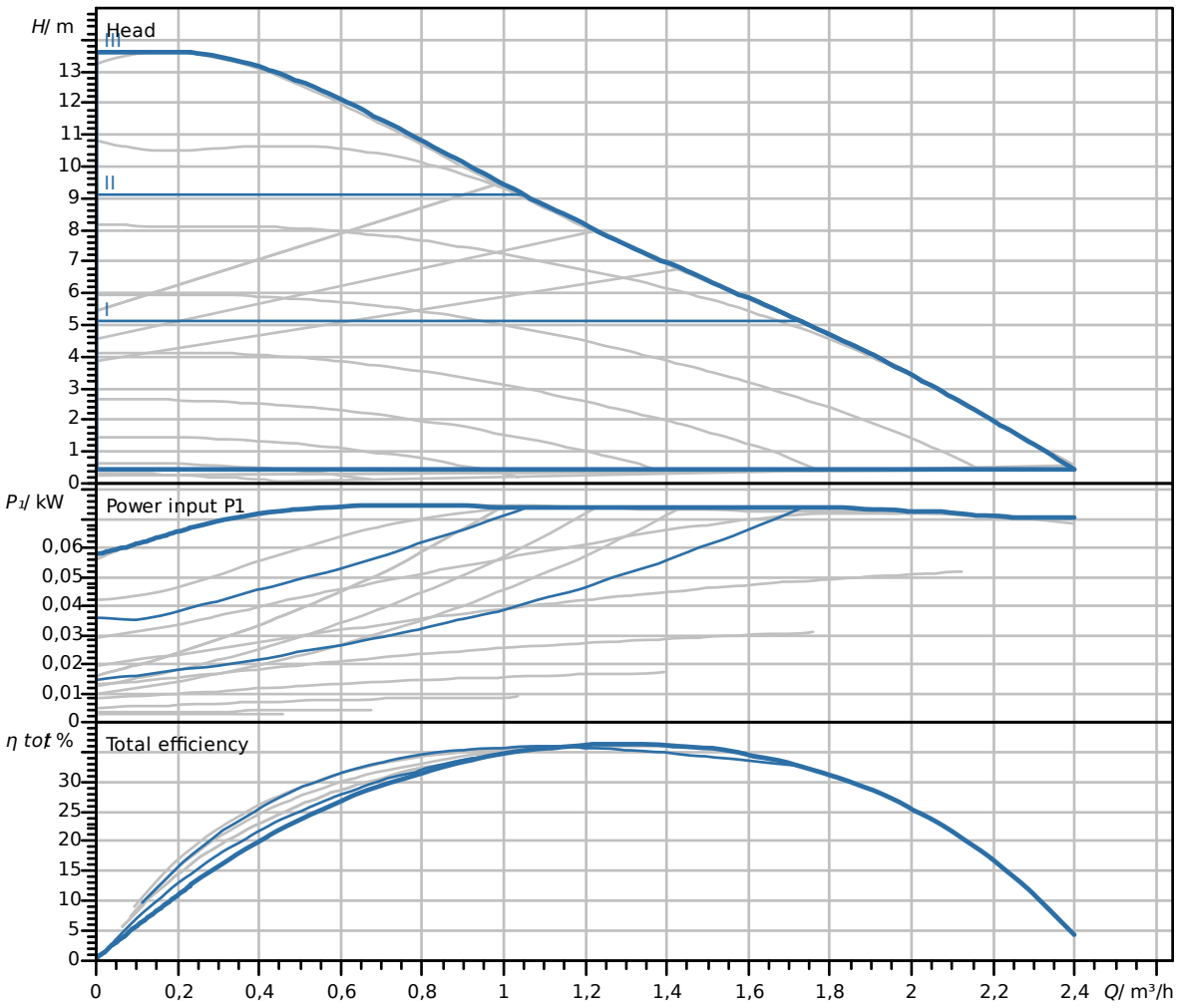
Materials

Pump housing	Grey cast iron
Impeller	PPO/PS-GF30
Shaft	Stainless steel
Bearing	Carbon, metal-impregnated

Installation dimensions

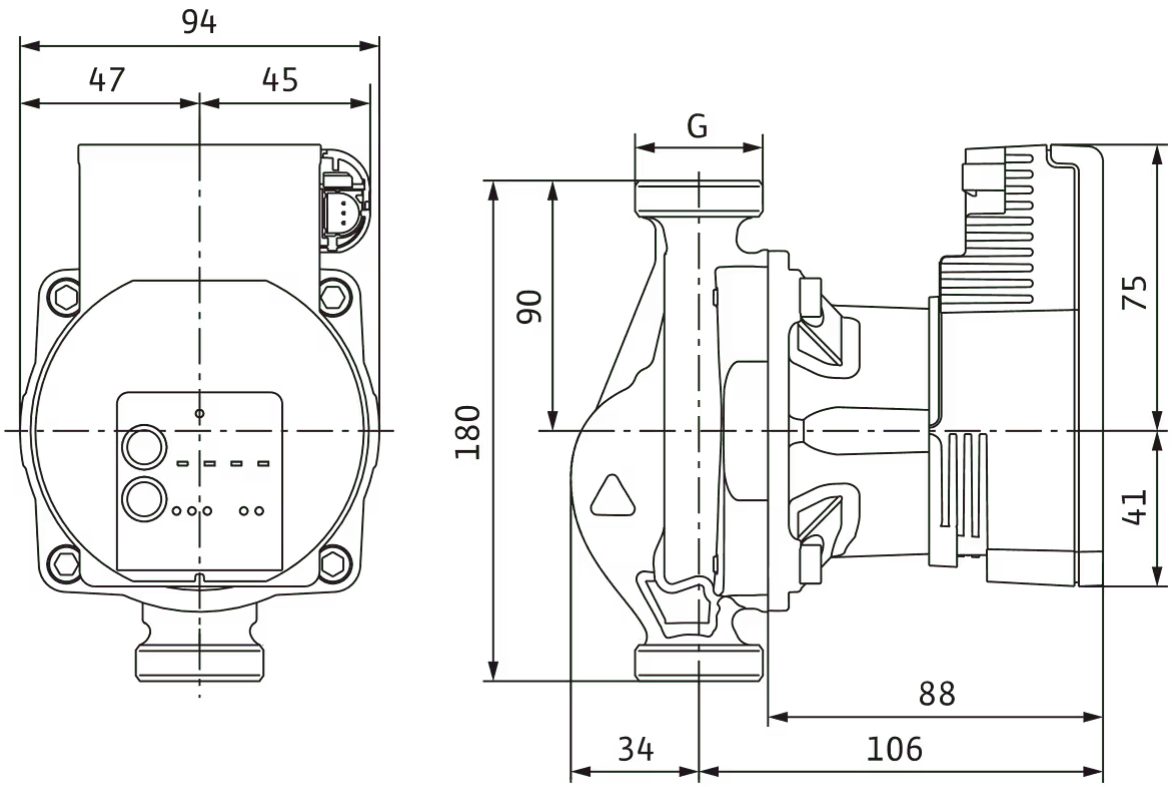
Pipe connection on the discharge side *DNd*	G 1
Pipe connection on the suction side *DNs*	G 1
Port-to-port length *L0*	180 mm

Pump curves

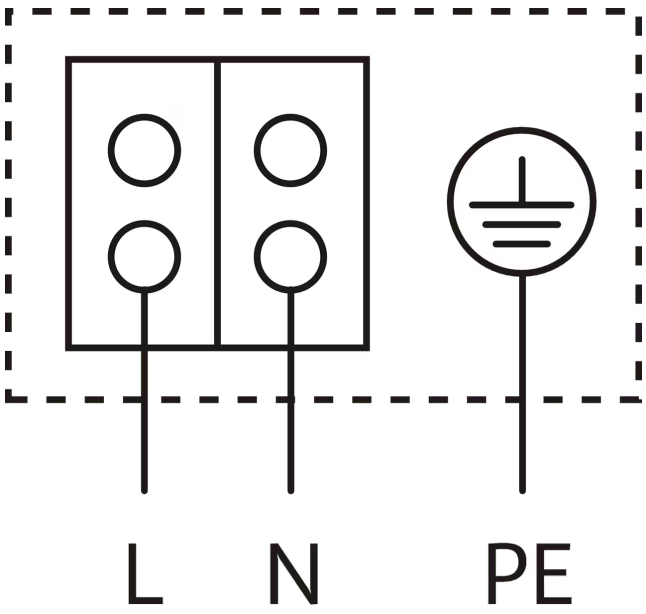

H/ m
Head
III
II
I
P1/ kW
Power input P1
η tot/ %
Total efficiency
Q/ m³/h

Dimensions and dimensions drawings

Varios PICO-STG 15/1-13-180



Wiring diagram



Blocking current-proof motor

Single-phase motor (EM) 2-pole - 1~230 V, 50 Hz

Tender text

High-efficiency pump Wilo-Varios PICO-STG, electronically controlled. Maintenance-free glandless circulator with screwed connection, blocking-current proof synchronous motor according to ECM technology and built-in electronic power control for variable differential pressure control. Can be used for all heating and air-conditioning applications, as well as for solar installations.

Standard-equipped with:

- Preselectable control modes for optimum load adjustment:
  - Differential pressure constant (Δp-c), 3 pre-defined pump curves
  - Differential pressure variable (Δp-v), 3 pre-defined pump curves
  - Constant speed (3 speed stages)
  - External control by iPWM ST (solar) signal
- Sync function (manual programming mode) for reprogramming the pump in the event of replacement
- Manual pump venting function for venting the rotor chamber
- Manual restart
- LED display
  - Display of selected control mode und pump curve
  - Status display during venting and manual restart
  - LED coding during the sync function
  - Operation and fault display
- Integrated motor protection
- Automatic deblocking function
- Electrical connection cable with 3-pole plug connection and Wilo-Connector
- PWM connection
- Cataphoretically-coated pump housing

Operating data

Min. fluid temperature T_{min}	-20 °C
Max. fluid temperature T_{max}	110 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C
Maximum operating pressure *PN*	10 bar

Motor data

Energy efficiency index (EEI) *	≤0,23
Mains connection	1~230 V ±10%, 50/60 Hz
Rated power P_2	55 W
Min. speed n_{min}	2957 1/min
Max. speed n_{max}	4807 1/min
Power consumption $P_{1\ min}$	1 W
Power consumption $P_{1\ max}$	75 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Insulation class	F
Protection class	IPX4D
Threaded cable connection	1 x PG11

* The benchmark for the most efficient circulators is EEI ≤ 0.20

Materials

Pump housing	Grey cast iron
Impeller	PPO/PS-GF30
Shaft	Stainless steel
Bearing	Carbon, metal-impregnated

Installation dimensions

Pipe connection on the suction side *DNs*	G 1
Pipe connection on the discharge side *DNd*	G 1
Port-to-port length *L0*	180 mm

Ordering information

Brand	Wilo
Product description	Varios PICO-STG 15/1-13-180
Net weight, approx. *m*	1,9 kg
Article number	4232747

Electrical accessories

Pump control

Timer switch SK 601N

Switchgear SK 601N	2120443	EUR 215.-

Plug

Angle plug

Angle plug	4150229	EUR 26.-

Connector

Wilo-Connector	4200870	EUR 32.-

PWM signal cable

PWM signal cable	4193901	EUR 24.-
Bidirectional iPWM control cable	4222049	EUR 25.-

Data sheet

Hydraulic data

Maximum operating pressure *PN*	10 bar
Head max H_{max}	7,8 m
Flow max Q_{max}	3,8 m³/h
Minimum suction head at 50 °C *m*	0,5 m
Minimum suction head at 95 °C *m*	3 m
Minimum suction head at 110 °C	10 m
Min. fluid temperature T_{min}	-10 °C
Max. fluid temperature T_{max}	95 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C

Motor data

Energy efficiency index (EEI) *	≤0,20
Mains connection	1~230 V ±10%, 50/60 Hz
Rated power P_2	38 W
Min. speed n_{min}	2340 1/min
Max. speed n_{max}	4366 1/min
Power consumption $P_{1\ min}$	1 W
Power consumption $P_{1\ max}$	50 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Threaded cable connection	1 x PG11
Insulation class	F
Protection class	IPX4D

* The benchmark for the most efficient circulators is EEI ≤ 0.20

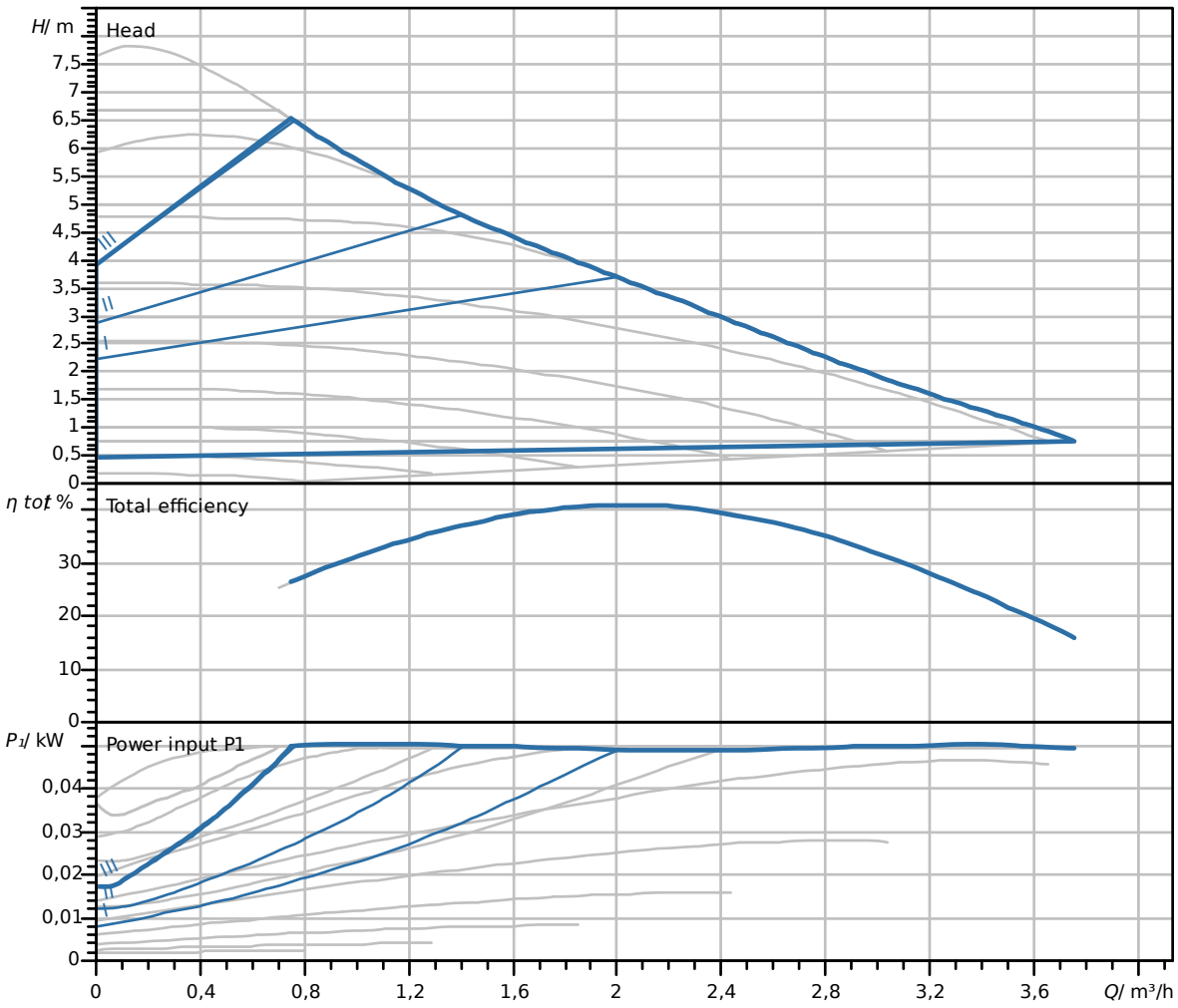
Materials

Pump housing	Grey cast iron
Impeller	PP-GF40
Shaft	Stainless steel
Bearing	Carbon, metal-impregnated

Installation dimensions

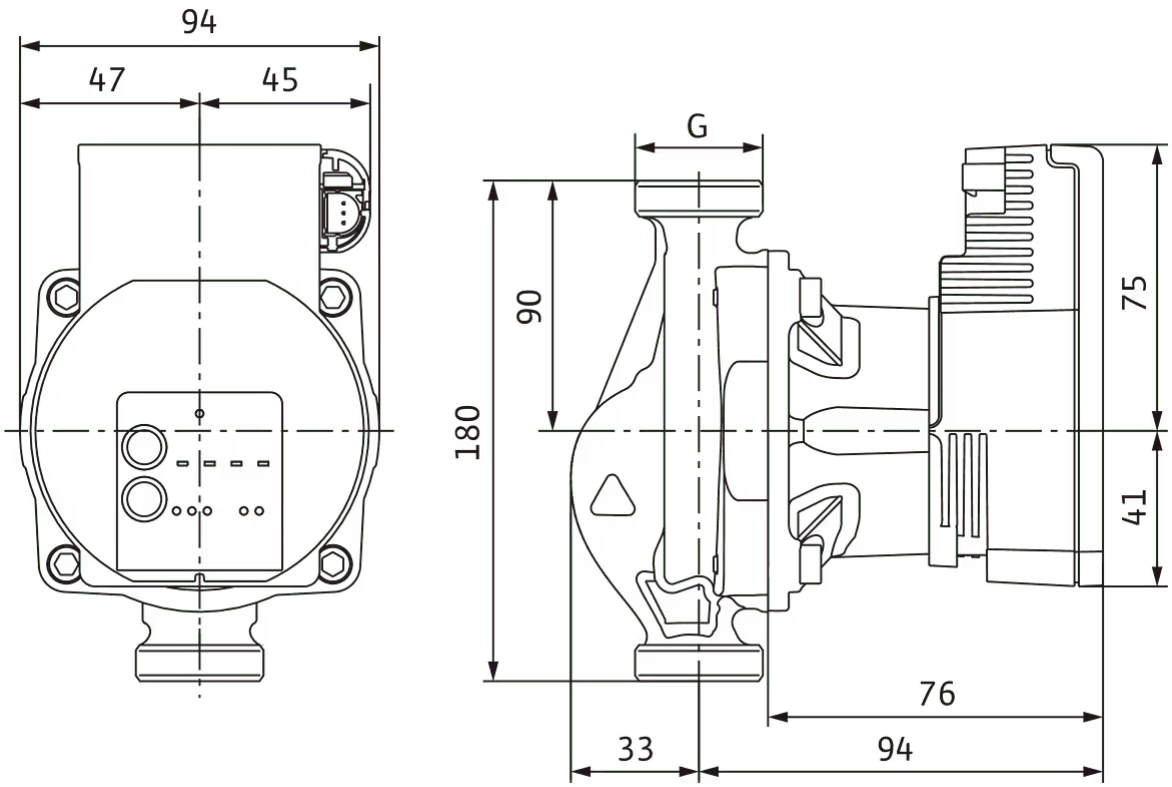
Pipe connection on the discharge side *DNd*	G 1½
Pipe connection on the suction side *DNs*	G 1½
Port-to-port length *L0*	180 mm

Pump curves

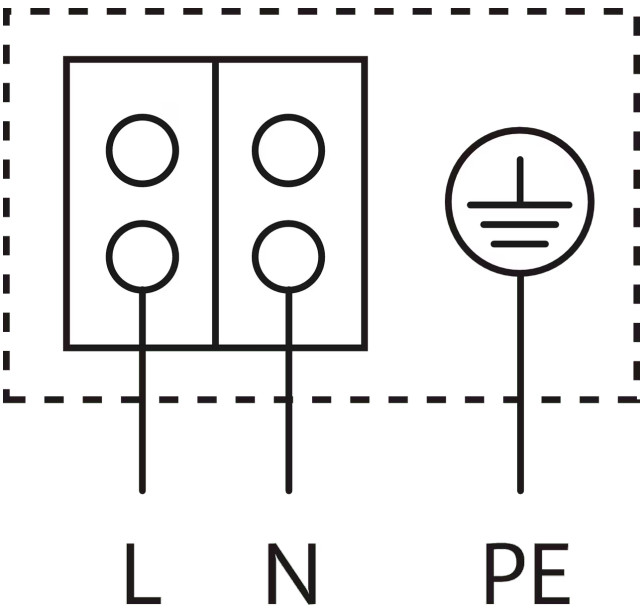

H/ m
Head
7,5
7
6,5
6
5,5
5
4,5
4
3,5
3
2,5
2
1,5
1
0,5
0
III
II
I
η tot/ %
Total efficiency
30
20
10
0
P1/ kW
Power input P1
0,04
0,03
0,02
0,01
0
0
0,4
0,8
1,2
1,6
2
2,4
2,8
3,2
3,6
Q/ m³/h

Dimensions and dimensions drawings

Varios PICO-STG 25/1-7



Wiring diagram



Blocking current-proof motor

Single-phase motor (EM) 2-pole - 1~230 V, 50 Hz

Tender text

High-efficiency pump Wilo-Varios PICO-STG, electronically controlled. Maintenance-free glandless circulator with screwed connection, blocking-current proof synchronous motor according to ECM technology and built-in electronic power control for variable differential pressure control. Can be used for all heating and air-conditioning applications, as well as for solar and geothermal systems.

Standard-equipped with:

- Preselectable control modes for optimum load adjustment:
  - Differential pressure constant (Δp-c), 3 pre-defined pump curves
  - Differential pressure variable (Δp-v), 3 pre-defined pump curves
  - Constant speed (3 speed stages)
  - External control by iPWM GT (Heating/Geothermal) or iPWM ST (Solar) signal
- Sync function (manual programming mode) for reprogramming the pump in the event of replacement
- Manual pump venting function for venting the rotor chamber
- Manual restart
- LED display
  - Display of selected control mode und pump curve
  - Status display during venting and manual restart
  - LED coding during the sync function
  - Operation and fault display
- Integrated motor protection
- Automatic deblocking function
- Electrical connection cable with 3-pole plug connection and Wilo-Connector
- PWM connection
- Cataphoretically-coated pump housing

Operating data

Min. fluid temperature T_{min}	-10 °C
Max. fluid temperature T_{max}	95 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C
Maximum operating pressure *PN*	10 bar
Minimum suction head at 50 °C *m*	0,5 m
Minimum suction head at 95 °C *m*	3 m
Minimum suction head at 110 °C	10 m

Motor data

Energy efficiency index (EEI) *	≤0,20
Mains connection	1~230 V ±10%, 50/60 Hz
Rated power P_2	38 W
Min. speed n_{min}	2340 1/min
Max. speed n_{max}	4366 1/min
Power consumption $P_{1\ min}$	1 W
Power consumption $P_{1\ max}$	50 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Insulation class	F
Protection class	IPX4D
Threaded cable connection	1 x PG11

* The benchmark for the most efficient circulators is EEI ≤ 0.20

Materials

Pump housing	Grey cast iron
Impeller	PP-GF40
Shaft	Stainless steel
Bearing	Carbon, metal-impregnated

Installation dimensions

Pipe connection on the suction side *DNs*	G 1½
Pipe connection on the discharge side *DNd*	G 1½
Port-to-port length *L0*	180 mm

Ordering information

Brand	Wilo
Product description	Varios PICO-STG 25/1-7
Net weight, approx. *m*	1,8 kg
Article number	4215542

Electrical accessories

Pump control

Timer switch SK 601N

Switchgear SK 601N	2120443	EUR 215.-

Plug

Angle plug

Angle plug	4150229	EUR 26.-

Connector

Wilo-Connector	4200870	EUR 32.-

PWM signal cable

PWM signal cable	4193901	EUR 24.-
Bidirectional iPWM control cable	4222049	EUR 25.-

Data sheet

Hydraulic data

Maximum operating pressure *PN*	10 bar
Head max H_{max}	7,8 m
Flow max Q_{max}	3,8 m³/h
Minimum suction head at 50 °C *m*	0,5 m
Minimum suction head at 95 °C *m*	3 m
Minimum suction head at 110 °C	10 m
Min. fluid temperature T_{min}	-10 °C
Max. fluid temperature T_{max}	95 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C

Motor data

Energy efficiency index (EEI) *	≤0,20
Mains connection	1~230 V ±10%, 50/60 Hz
Rated power P_2	38 W
Min. speed n_{min}	2340 1/min
Max. speed n_{max}	4366 1/min
Power consumption $P_{1\ min}$	1 W
Power consumption $P_{1\ max}$	50 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Threaded cable connection	1 x PG11
Insulation class	F
Protection class	IPX4D

* The benchmark for the most efficient circulators is EEI ≤ 0.20

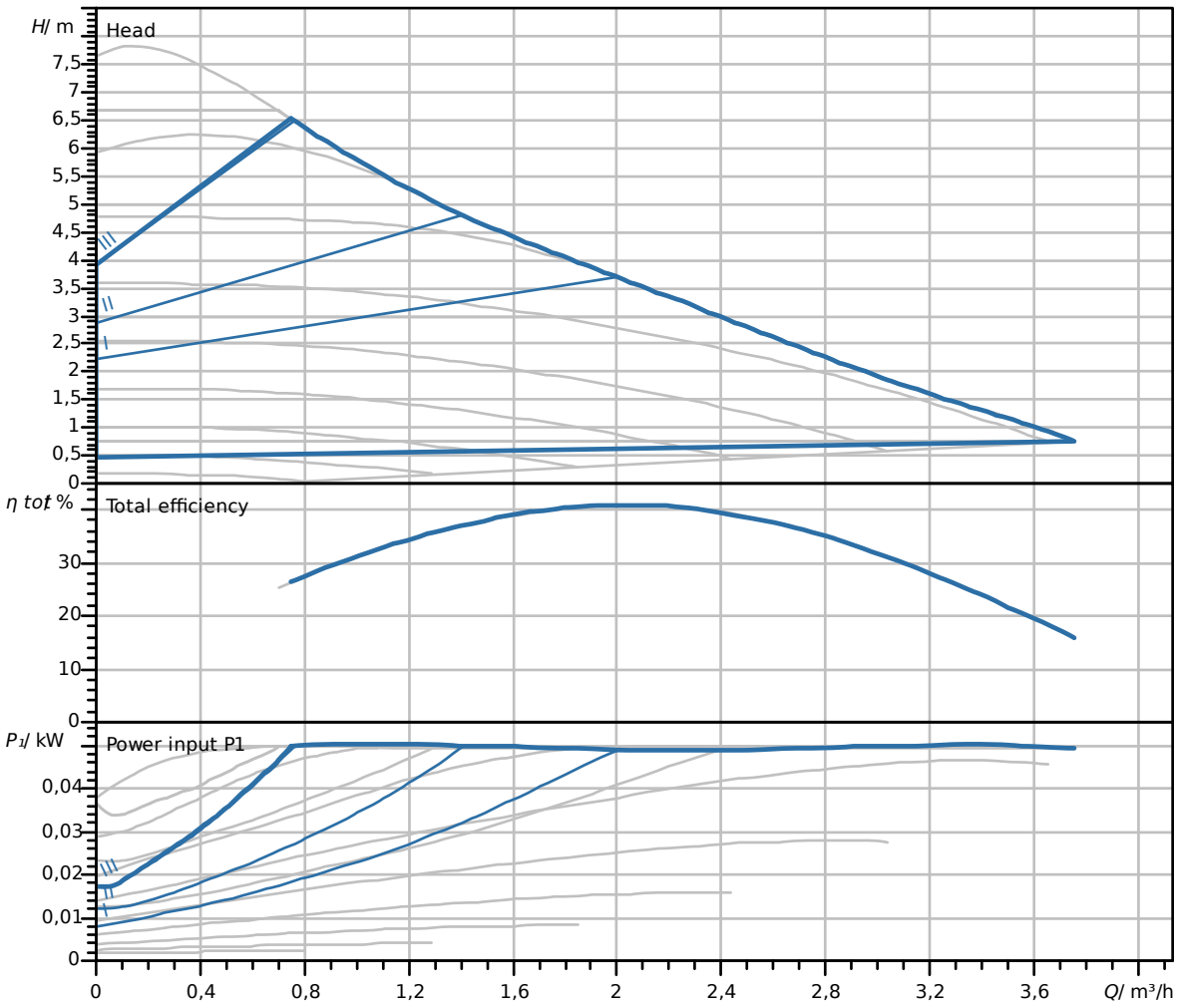
Materials

Pump housing	Grey cast iron
Impeller	PP-GF40
Shaft	Stainless steel
Bearing	Carbon, metal-impregnated

Installation dimensions

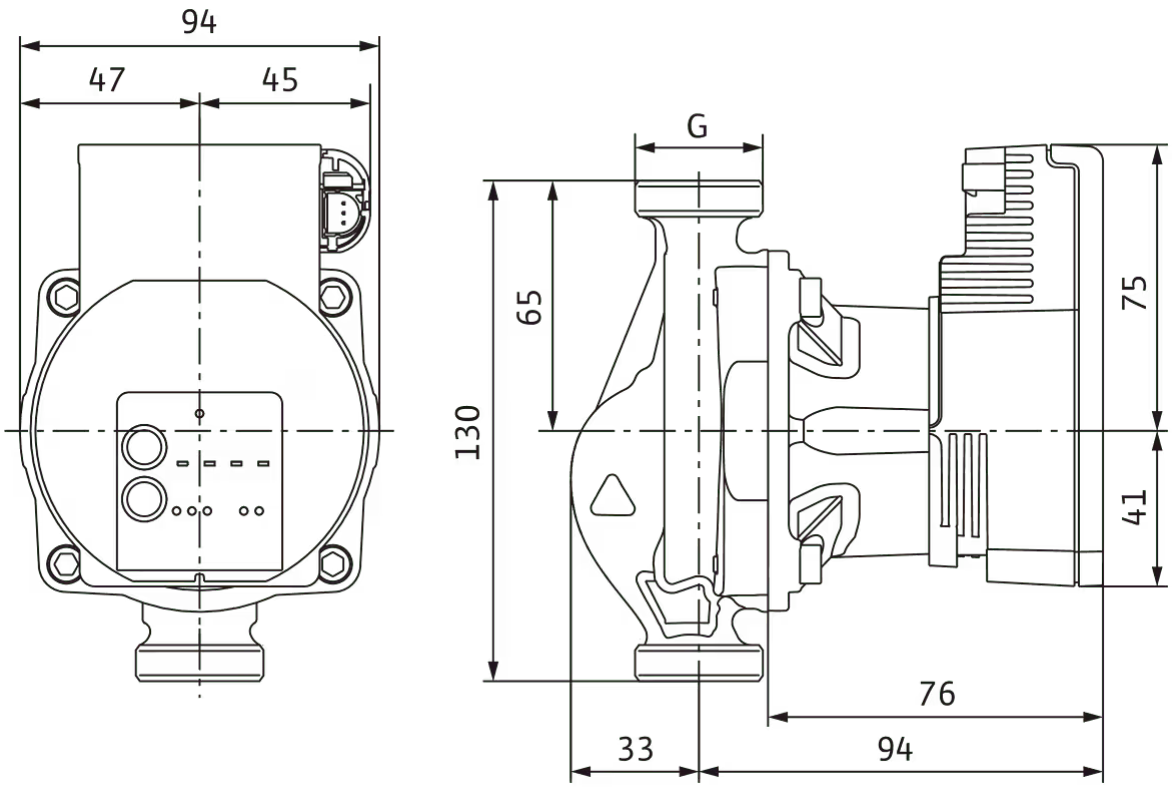
Pipe connection on the discharge side *DNd*	G 1½
Pipe connection on the suction side *DNs*	G 1½
Port-to-port length *L0*	130 mm

Pump curves

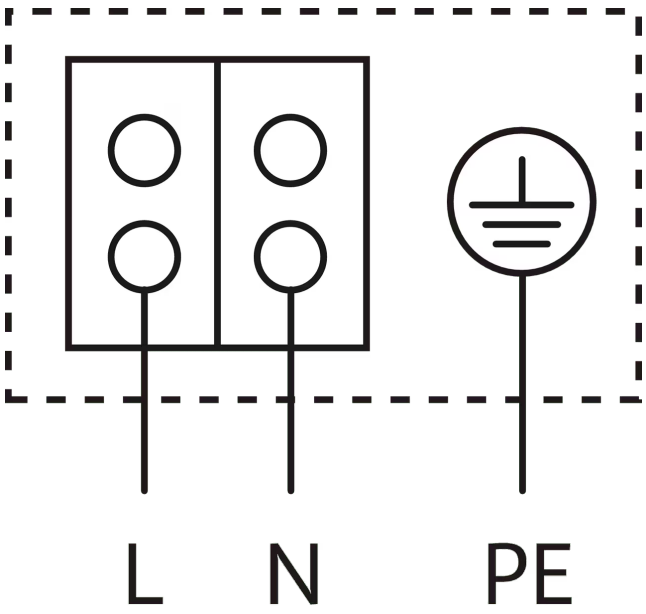

H/ m
Head
7,5
7
6,5
6
5,5
5
4,5
4
3,5
3
2,5
2
1,5
1
0,5
0
III
II
I
η tot/ %
Total efficiency
30
20
10
0
P1/ kW
Power input P1
0,04
0,03
0,02
0,01
0
0
0,4
0,8
1,2
1,6
2
2,4
2,8
3,2
3,6
Q/ m³/h

Dimensions and dimensions drawings

Varios PICO-STG 25/1-7-130



Wiring diagram



Blocking current-proof motor

Single-phase motor (EM) 2-pole - 1~230 V, 50 Hz

Tender text

High-efficiency pump Wilo-Varios PICO-STG, electronically controlled. Maintenance-free glandless circulator with screwed connection, blocking-current proof synchronous motor according to ECM technology and built-in electronic power control for variable differential pressure control. Can be used for all heating and air-conditioning applications, as well as for solar and geothermal systems.

Standard-equipped with:

- Preselectable control modes for optimum load adjustment:
  - Differential pressure constant (Δp-c), 3 pre-defined pump curves
  - Differential pressure variable (Δp-v), 3 pre-defined pump curves
  - Constant speed (3 speed stages)
  - External control by iPWM GT (Heating/Geothermal) or iPWM ST (Solar) signal
- Sync function (manual programming mode) for reprogramming the pump in the event of replacement
- Manual pump venting function for venting the rotor chamber
- Manual restart
- LED display
  - Display of selected control mode und pump curve
  - Status display during venting and manual restart
  - LED coding during the sync function
  - Operation and fault display
- Integrated motor protection
- Automatic deblocking function
- Electrical connection cable with 3-pole plug connection and Wilo-Connector
- PWM connection
- Cataphoretically-coated pump housing

Operating data

Min. fluid temperature T_{min}	-10 °C
Max. fluid temperature T_{max}	95 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C
Maximum operating pressure *PN*	10 bar
Minimum suction head at 50 °C *m*	0,5 m
Minimum suction head at 95 °C *m*	3 m
Minimum suction head at 110 °C	10 m

Motor data

Energy efficiency index (EEI) *	≤0,20
Mains connection	1~230 V ±10%, 50/60 Hz
Rated power P_2	38 W
Min. speed n_{min}	2340 1/min
Max. speed n_{max}	4366 1/min
Power consumption $P_{1\ min}$	1 W
Power consumption $P_{1\ max}$	50 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Insulation class	F
Protection class	IPX4D
Threaded cable connection	1 x PG11

* The benchmark for the most efficient circulators is EEI ≤ 0.20

Materials

Pump housing	Grey cast iron
Impeller	PP-GF40
Shaft	Stainless steel
Bearing	Carbon, metal-impregnated

Installation dimensions

Pipe connection on the suction side *DNs*	G 1½
Pipe connection on the discharge side *DNd*	G 1½
Port-to-port length *L0*	130 mm

Ordering information

Brand	Wilo
Product description	Varios PICO-STG 25/1-7-130
Net weight, approx. *m*	1,7 kg
Article number	4215541

Electrical accessories

Pump control

Timer switch SK 601N

Switchgear SK 601N	2120443	EUR 215.-

Plug

Angle plug

Angle plug	4150229	EUR 26.-

Connector

Wilo-Connector	4200870	EUR 32.-

PWM signal cable

PWM signal cable	4193901	EUR 24.-
Bidirectional iPWM control cable	4222049	EUR 25.-

Data sheet

Hydraulic data

Maximum operating pressure *PN*	10 bar
Head max H_{max}	8,4 m
Flow max Q_{max}	4,5 m³/h
Min. fluid temperature T_{min}	-20 °C
Max. fluid temperature T_{max}	110 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C

Motor data

Energy efficiency index (EEI) *	≤0,23
Mains connection	1~230 V ±10%, 50/60 Hz
Rated power P_2	55 W
Min. speed n_{min}	2695 1/min
Max. speed n_{max}	4686 1/min
Power consumption $P_{1\,min}$	1 W
Power consumption $P_{1\,max}$	75 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Threaded cable connection	1 x PG11
Insulation class	F
Protection class	IPX4D

* The benchmark for the most efficient circulators is EEI ≤ 0.20

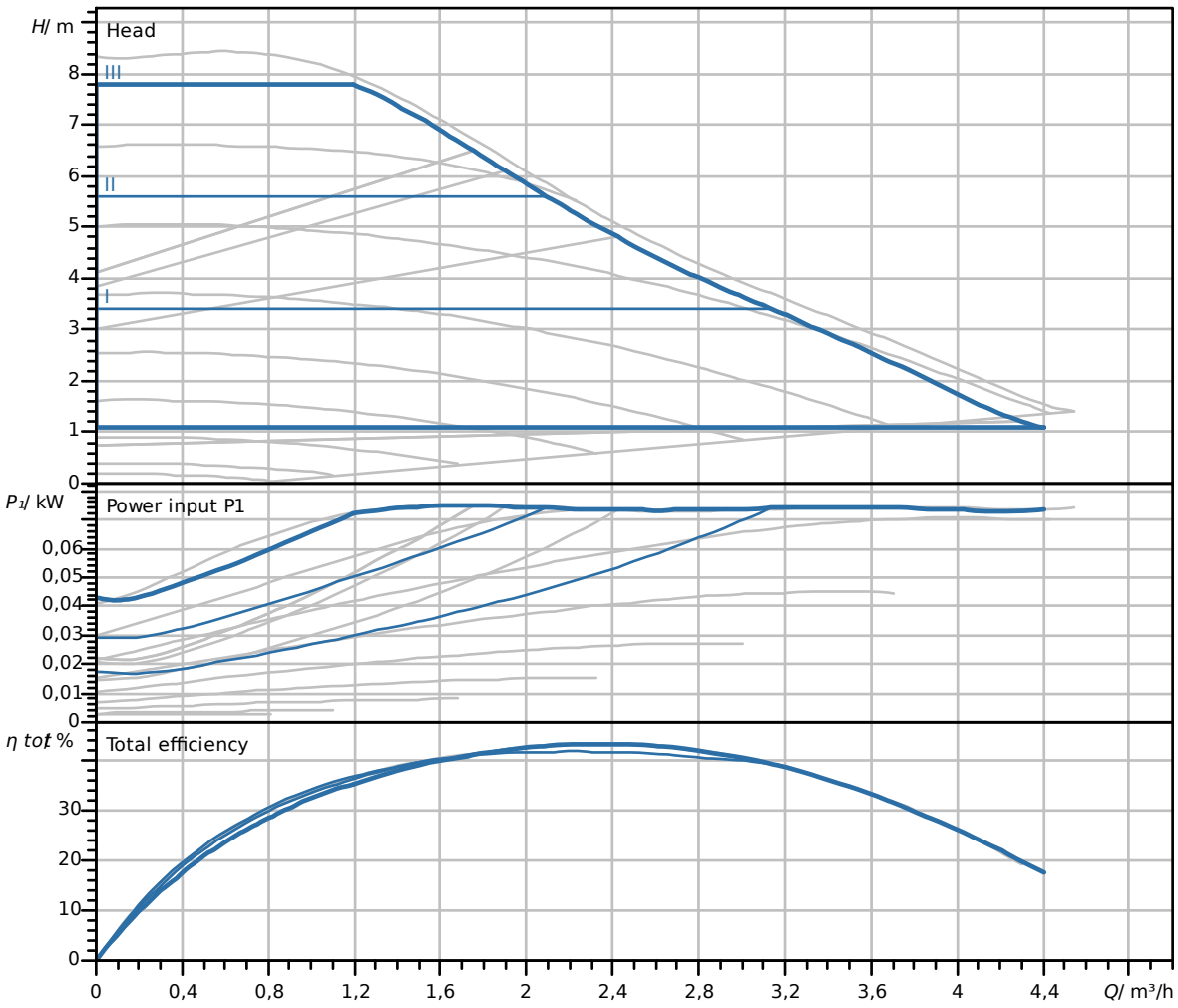
Materials

Pump housing	Grey cast iron
Impeller	PP-GF40
Shaft	Stainless steel
Bearing	Carbon, metal-impregnated

Installation dimensions

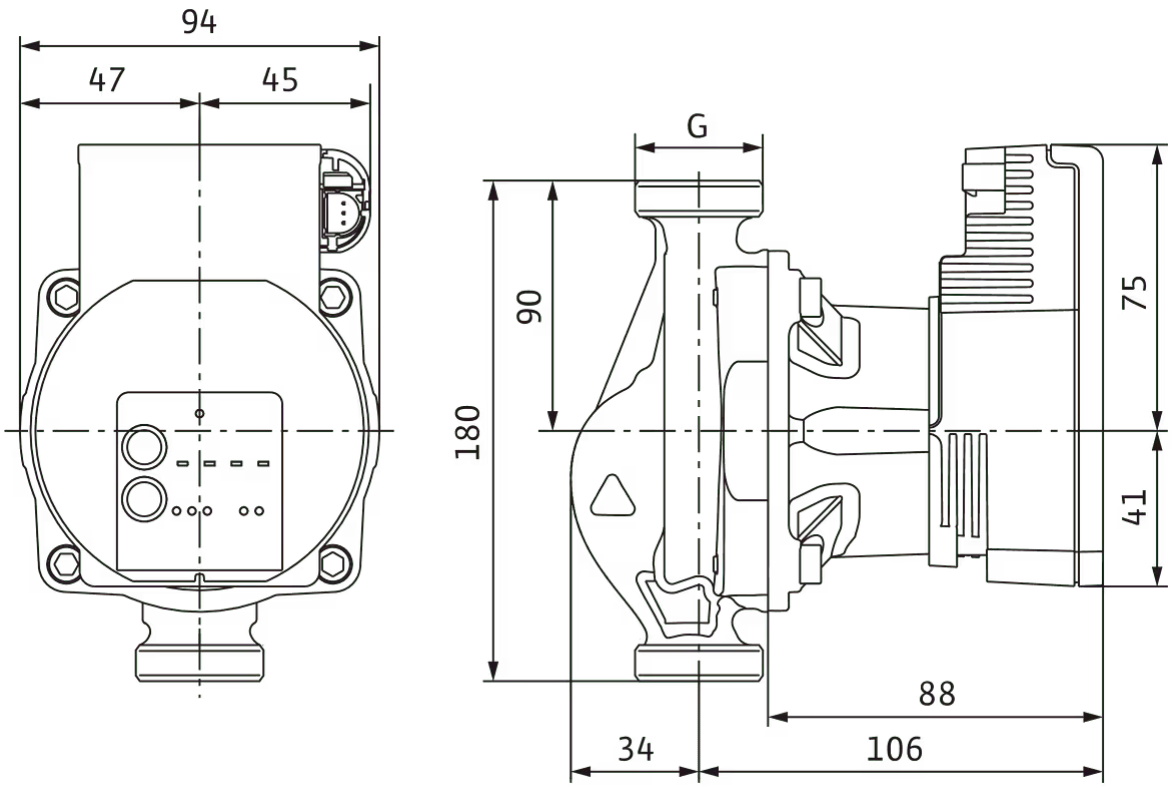
Pipe connection on the discharge side *DNd*	G 1½
Pipe connection on the suction side *DNs*	G 1½
Port-to-port length *L0*	180 mm

Pump curves

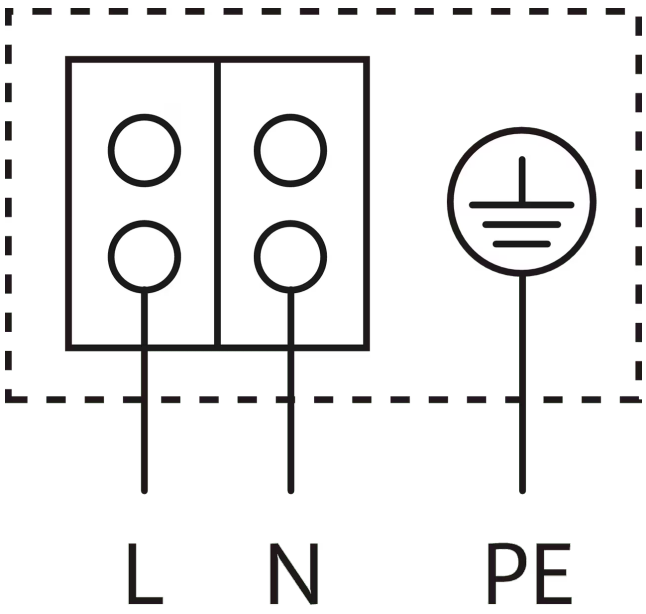

H/ m
Head
III
II
I
P1/ kW
Power input P1
η tot/ %
Total efficiency
0
0,4
0,8
1,2
1,6
2
2,4
2,8
3,2
3,6
4
4,4
Q/ m³/h

Dimensions and dimensions drawings

Varios PICO-STG 25/1-8



Wiring diagram



Blocking current-proof motor

Single-phase motor (EM) 2-pole - 1~230 V, 50 Hz

Tender text

High-efficiency pump Wilo-Varios PICO-STG, electronically controlled. Maintenance-free glandless circulator with screwed connection, blocking-current proof synchronous motor according to ECM technology and built-in electronic power control for variable differential pressure control. Can be used for all heating and air-conditioning applications, as well as for solar and geothermal systems.

Standard-equipped with:

- Preselectable control modes for optimum load adjustment:
  - Differential pressure constant (Δp-c), 3 pre-defined pump curves
  - Differential pressure variable (Δp-v), 3 pre-defined pump curves
  - Constant speed (3 speed stages)
  - External control by iPWM GT (Heating/Geothermal) or iPWM ST (Solar) signal
- Sync function (manual programming mode) for reprogramming the pump in the event of replacement
- Manual pump venting function for venting the rotor chamber
- Manual restart
- LED display
  - Display of selected control mode und pump curve
  - Status display during venting and manual restart
  - LED coding during the sync function
  - Operation and fault display
- Integrated motor protection
- Automatic deblocking function
- Electrical connection cable with 3-pole plug connection and Wilo-Connector
- PWM connection
- Cataphoretically-coated pump housing

Operating data

Min. fluid temperature T_{min}	-20 °C
Max. fluid temperature T_{max}	110 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C
Maximum operating pressure *PN*	10 bar

Motor data

Energy efficiency index (EEI) *	≤0,23
Mains connection	1~230 V ±10%, 50/60 Hz
Rated power P_2	55 W
Min. speed n_{min}	2695 1/min
Max. speed n_{max}	4686 1/min
Power consumption $P_{1\ min}$	1 W
Power consumption $P_{1\ max}$	75 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Insulation class	F
Protection class	IPX4D
Threaded cable connection	1 x PG11

* The benchmark for the most efficient circulators is EEI ≤ 0.20

Materials

Pump housing	Grey cast iron
Impeller	PP-GF40
Shaft	Stainless steel
Bearing	Carbon, metal-impregnated

Installation dimensions

Pipe connection on the suction side *DNs*	G 1½
Pipe connection on the discharge side *DNd*	G 1½
Port-to-port length *L0*	180 mm

Ordering information

Brand	Wilo
Product description	Varios PICO-STG 25/1-8
Net weight, approx. *m*	2 kg
Article number	4232743

Electrical accessories

Pump control

Timer switch SK 601N

Switchgear SK 601N	2120443	EUR 215.-

Plug

Angle plug

Angle plug	4150229	EUR 26.-

Connector

Wilo-Connector	4200870	EUR 32.-

PWM signal cable

PWM signal cable	4193901	EUR 24.-
Bidirectional iPWM control cable	4222049	EUR 25.-

Data sheet

Hydraulic data

Maximum operating pressure *PN*	10 bar
Head max H_{max}	8,4 m
Flow max Q_{max}	4,5 m³/h
Min. fluid temperature T_{min}	-20 °C
Max. fluid temperature T_{max}	110 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C

Motor data

Energy efficiency index (EEI) *	≤0,23
Mains connection	1~230 V ±10%, 50/60 Hz
Rated power P_2	55 W
Min. speed n_{min}	2695 1/min
Max. speed n_{max}	4686 1/min
Power consumption $P_{1\,min}$	1 W
Power consumption $P_{1\,max}$	75 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Threaded cable connection	1 x PG11
Insulation class	F
Protection class	IPX4D

* The benchmark for the most efficient circulators is EEI ≤ 0.20

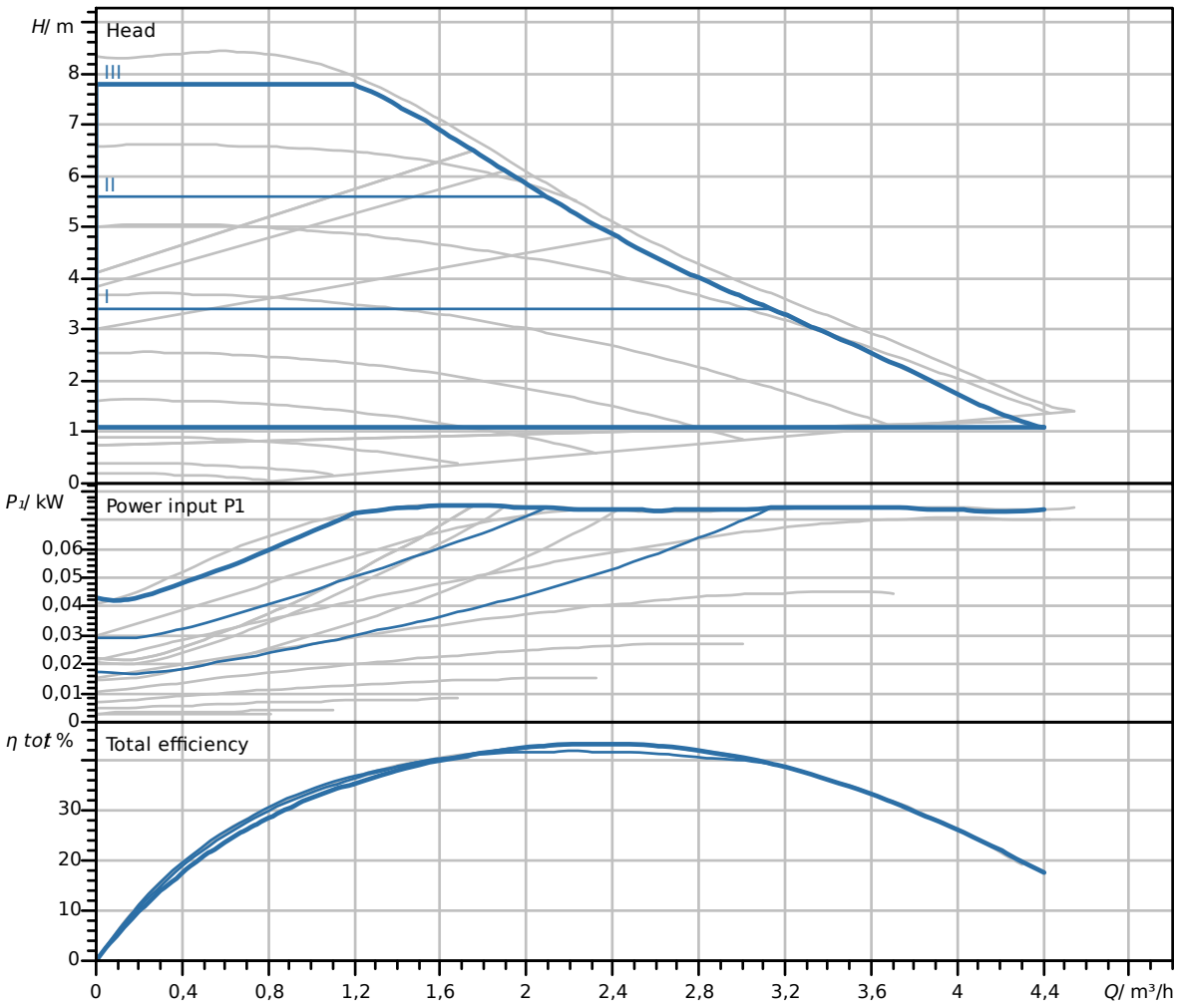
Materials

Pump housing	Grey cast iron
Impeller	PP-GF40
Shaft	Stainless steel
Bearing	Carbon, metal-impregnated

Installation dimensions

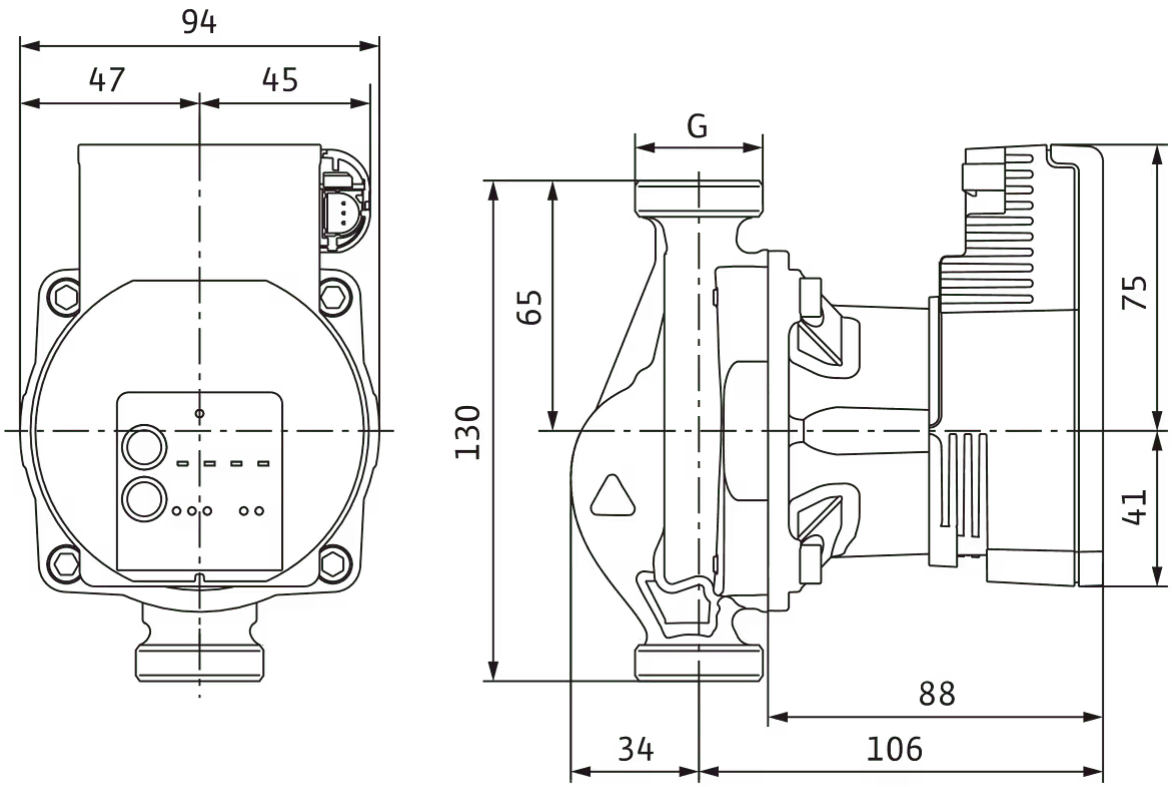
Pipe connection on the discharge side *DNd*	G 1½
Pipe connection on the suction side *DNs*	G 1½
Port-to-port length *L0*	130 mm

Pump curves

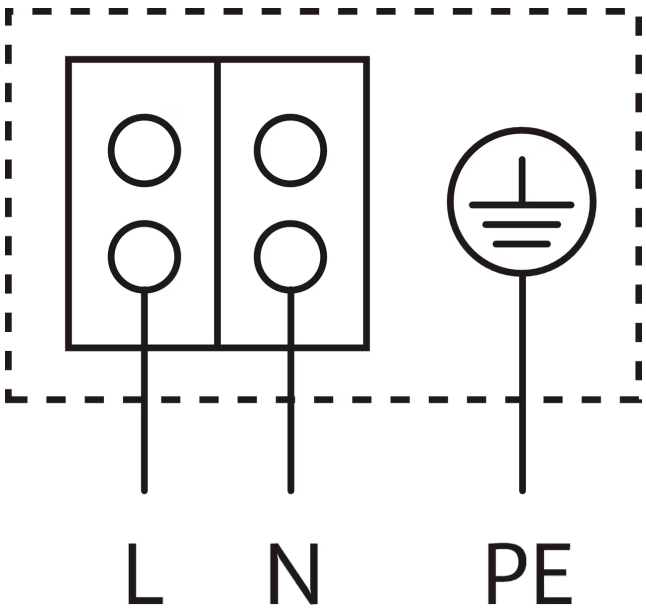

H/ m
Head
III
II
I
P1/ kW
Power input P1
η tot/ %
Total efficiency
0
0,4
0,8
1,2
1,6
2
2,4
2,8
3,2
3,6
4
4,4
Q/ m³/h

Dimensions and dimensions drawings

Varios PICO-STG 25/1-8-130



Wiring diagram



Blocking current-proof motor

Single-phase motor (EM) 2-pole - 1~230 V, 50 Hz

Tender text

High-efficiency pump Wilo-Varios PICO-STG, electronically controlled. Maintenance-free glandless circulator with screwed connection, blocking-current proof synchronous motor according to ECM technology and built-in electronic power control for variable differential pressure control. Can be used for all heating and air-conditioning applications, as well as for solar and geothermal systems.

Standard-equipped with:

- Preselectable control modes for optimum load adjustment:
  - Differential pressure constant (Δp-c), 3 pre-defined pump curves
  - Differential pressure variable (Δp-v), 3 pre-defined pump curves
  - Constant speed (3 speed stages)
  - External control by iPWM GT (Heating/Geothermal) or iPWM ST (Solar) signal
- Sync function (manual programming mode) for reprogramming the pump in the event of replacement
- Manual pump venting function for venting the rotor chamber
- Manual restart
- LED display
  - Display of selected control mode und pump curve
  - Status display during venting and manual restart
  - LED coding during the sync function
  - Operation and fault display
- Integrated motor protection
- Automatic deblocking function
- Electrical connection cable with 3-pole plug connection and Wilo-Connector
- PWM connection
- Cataphoretically-coated pump housing

Operating data

Min. fluid temperature T_{min}	-20 °C
Max. fluid temperature T_{max}	110 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C
Maximum operating pressure *PN*	10 bar

Motor data

Energy efficiency index (EEI) *	≤0,23
Mains connection	1~230 V ±10%, 50/60 Hz
Rated power P_2	55 W
Min. speed n_{min}	2695 1/min
Max. speed n_{max}	4686 1/min
Power consumption $P_{1\ min}$	1 W
Power consumption $P_{1\ max}$	75 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Insulation class	F
Protection class	IPX4D
Threaded cable connection	1 x PG11

* The benchmark for the most efficient circulators is EEI ≤ 0.20

Materials

Pump housing	Grey cast iron
Impeller	PP-GF40
Shaft	Stainless steel
Bearing	Carbon, metal-impregnated

Installation dimensions

Pipe connection on the suction side *DNs*	G 1½
Pipe connection on the discharge side *DNd*	G 1½
Port-to-port length *L0*	130 mm

Ordering information

Brand	Wilo
Product description	Varios PICO-STG 25/1-8-130
Net weight, approx. *m*	1,9 kg
Article number	4232744

Electrical accessories

Pump control

Timer switch SK 601N

Switchgear SK 601N	2120443	EUR 215.-

Plug

Angle plug

Angle plug	4150229	EUR 26.-

Connector

Wilo-Connector	4200870	EUR 32.-

PWM signal cable

PWM signal cable	4193901	EUR 24.-
Bidirectional iPWM control cable	4222049	EUR 25.-

Data sheet

Hydraulic data

Maximum operating pressure *PN*	10 bar
Head max H_{max}	8,4 m
Flow max Q_{max}	4,5 m³/h
Min. fluid temperature T_{min}	-20 °C
Max. fluid temperature T_{max}	110 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C

Motor data

Energy efficiency index (EEI) *	≤0,23
Mains connection	1~230 V ±10%, 50/60 Hz
Rated power P_2	55 W
Min. speed n_{min}	2695 1/min
Max. speed n_{max}	4686 1/min
Power consumption $P_{1\,min}$	1 W
Power consumption $P_{1\,max}$	75 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Threaded cable connection	1 x PG11
Insulation class	F
Protection class	IPX4D

* The benchmark for the most efficient circulators is EEI ≤ 0.20

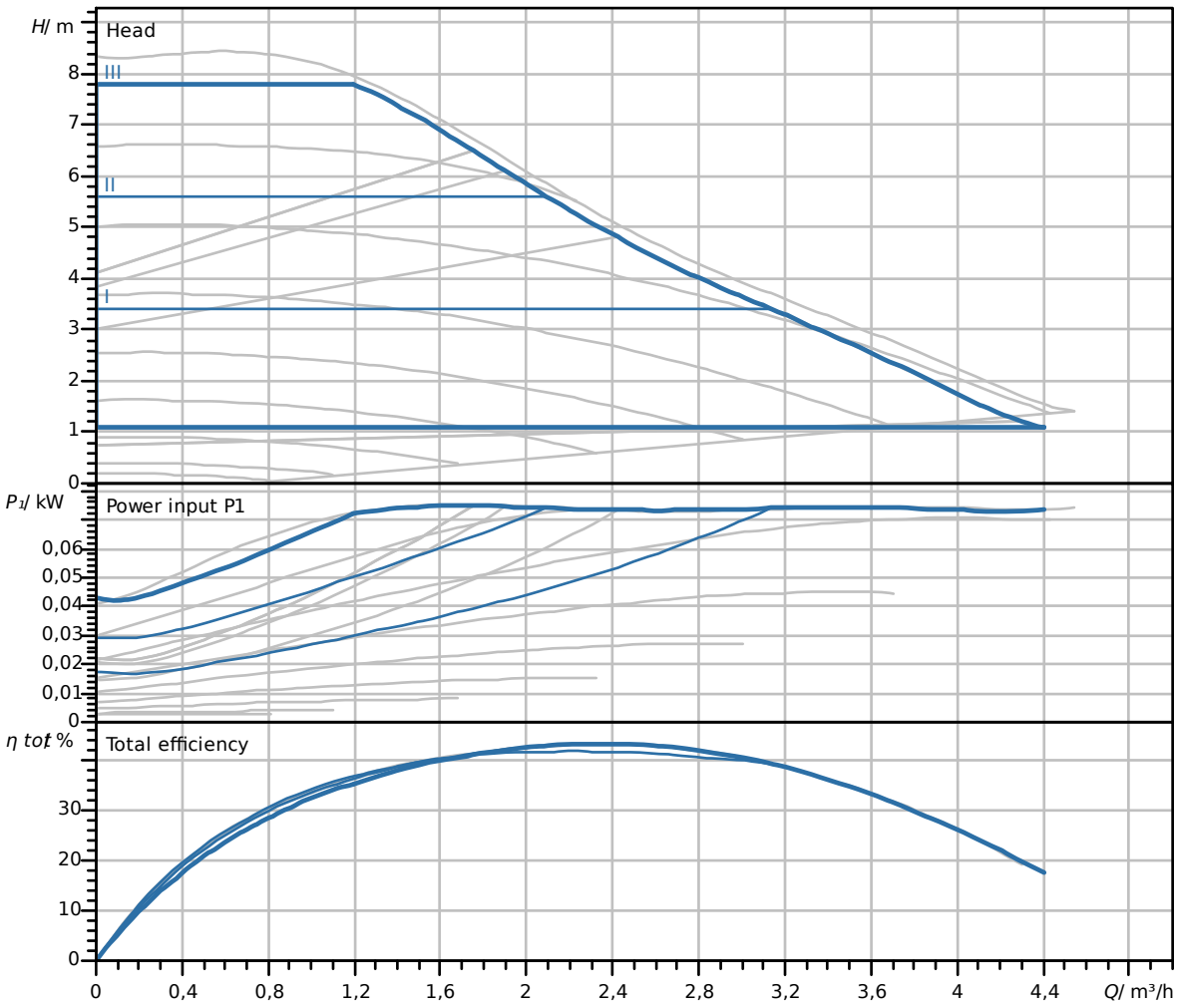
Materials

Pump housing	Grey cast iron
Impeller	PP-GF40
Shaft	Stainless steel
Bearing	Carbon, metal-impregnated

Installation dimensions

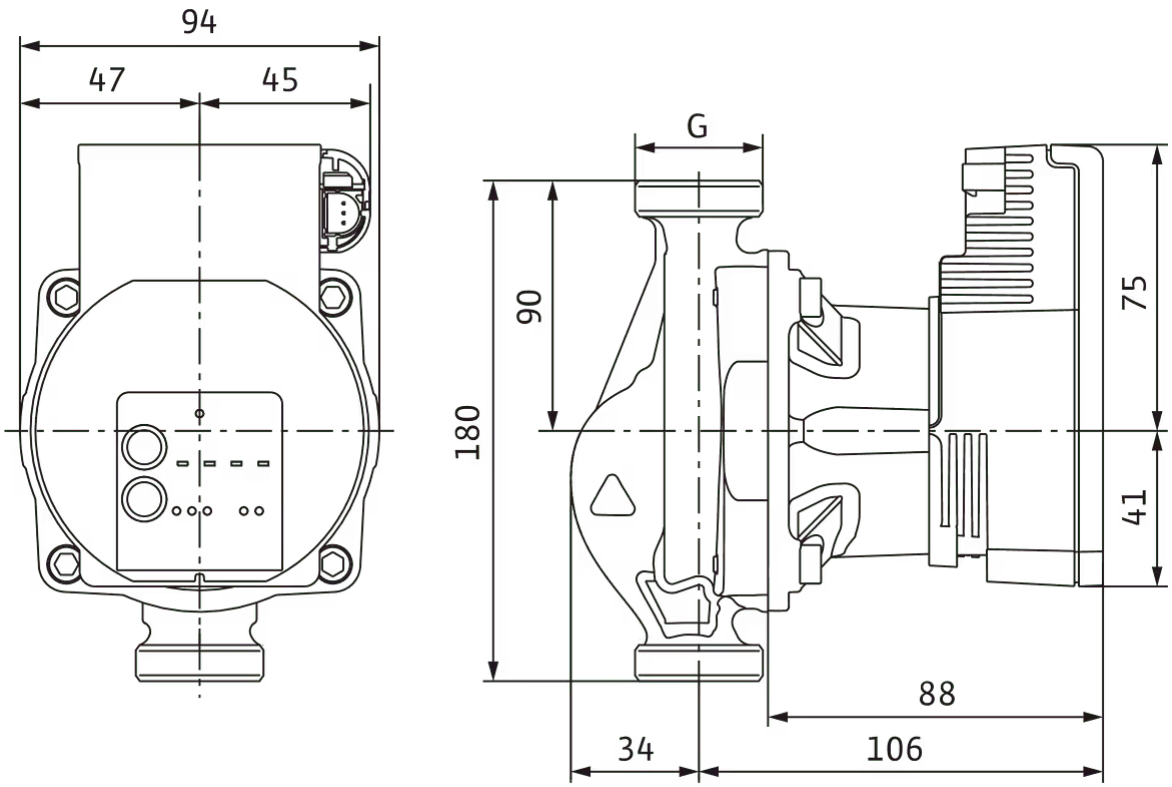
Pipe connection on the discharge side *DNd*	G 2
Pipe connection on the suction side *DNs*	G 2
Port-to-port length *L0*	180 mm

Pump curves

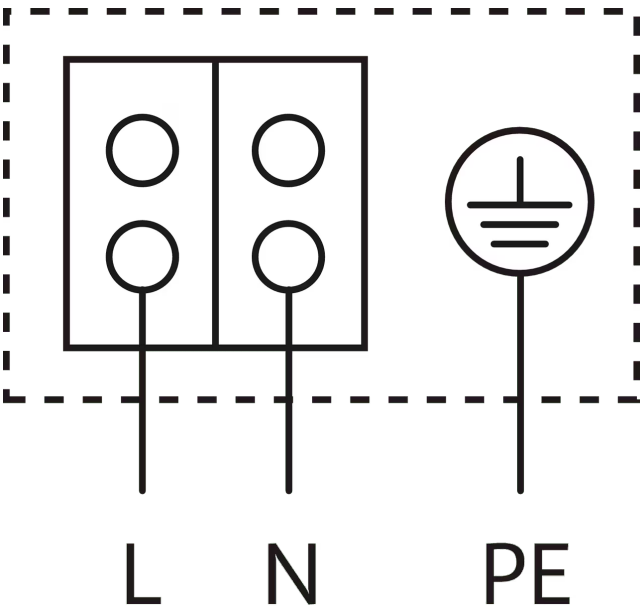

H/ m
Head
III
II
I
P1/ kW
Power input P1
η tot/ %
Total efficiency
Q/ m³/h
0
0,4
0,8
1,2
1,6
2
2,4
2,8
3,2
3,6
4
4,4

Dimensions and dimensions drawings

Varios PICO-STG 30/1-8



Wiring diagram



Blocking current-proof motor

Single-phase motor (EM) 2-pole - 1~230 V, 50 Hz

Tender text

High-efficiency pump Wilo-Varios PICO-STG, electronically controlled. Maintenance-free glandless circulator with screwed connection, blocking-current proof synchronous motor according to ECM technology and built-in electronic power control for variable differential pressure control. Can be used for all heating and air-conditioning applications, as well as for solar and geothermal systems.

Standard-equipped with:

- Preselectable control modes for optimum load adjustment:
  - Differential pressure constant (Δp-c), 3 pre-defined pump curves
  - Differential pressure variable (Δp-v), 3 pre-defined pump curves
  - Constant speed (3 speed stages)
  - External control by iPWM GT (Heating/Geothermal) or iPWM ST (Solar) signal
- Sync function (manual programming mode) for reprogramming the pump in the event of replacement
- Manual pump venting function for venting the rotor chamber
- Manual restart
- LED display
  - Display of selected control mode und pump curve
  - Status display during venting and manual restart
  - LED coding during the sync function
  - Operation and fault display
- Integrated motor protection
- Automatic deblocking function
- Electrical connection cable with 3-pole plug connection and Wilo-Connector
- PWM connection
- Cataphoretically-coated pump housing

Operating data

Min. fluid temperature T_{min}	-20 °C
Max. fluid temperature T_{max}	110 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C
Maximum operating pressure *PN*	10 bar

Motor data

Energy efficiency index (EEI) *	≤0,23
Mains connection	1~230 V ±10%, 50/60 Hz
Rated power P_2	55 W
Min. speed n_{min}	2695 1/min
Max. speed n_{max}	4686 1/min
Power consumption $P_{1\ min}$	1 W
Power consumption $P_{1\ max}$	75 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Insulation class	F
Protection class	IPX4D
Threaded cable connection	1 x PG11

* The benchmark for the most efficient circulators is EEI ≤ 0.20

Materials

Pump housing	Grey cast iron
Impeller	PP-GF40
Shaft	Stainless steel
Bearing	Carbon, metal-impregnated

Installation dimensions

Pipe connection on the suction side *DNs*	G 2
Pipe connection on the discharge side *DNd*	G 2
Port-to-port length *L0*	180 mm

Ordering information

Brand	Wilo
Product description	Varios PICO-STG 30/1-8
Net weight, approx. *m*	2,2 kg
Article number	4232745

Electrical accessories

Pump control

Timer switch SK 601N

Switchgear SK 601N	2120443	EUR 215.-

Plug

Angle plug

Angle plug	4150229	EUR 26.-

Connector

Wilo-Connector	4200870	EUR 32.-

PWM signal cable

PWM signal cable	4193901	EUR 24.-
Bidirectional iPWM control cable	4222049	EUR 25.-

Pioneering for You

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