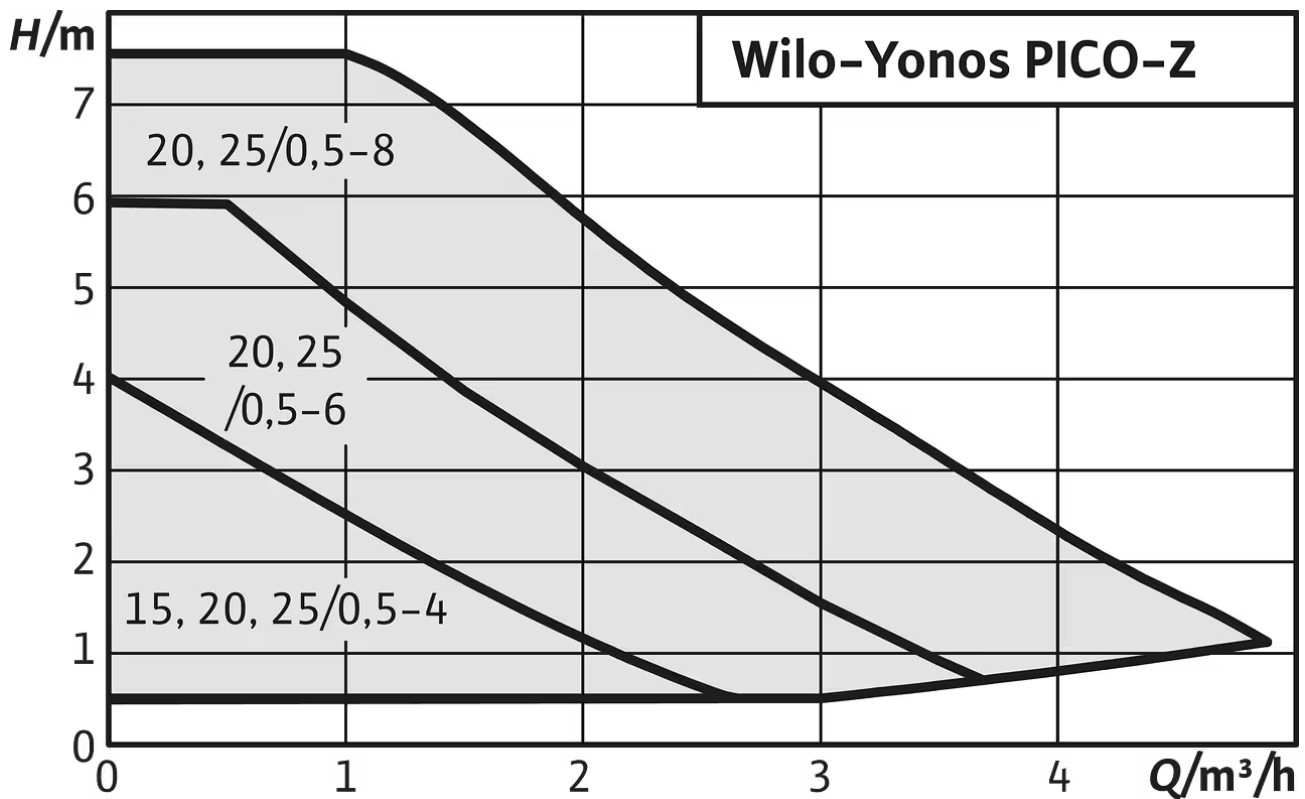




Design

Glandless circulator with screwed connection, blocking-current proof EC motor and integrated electronic power control.

Application

Domestic hot water circulation systems in building services and industry.

Equipment/function

Operating modes

- > Δp -c for constant differential pressure
- > Constant speed (3 constant speed stages)
- > Constant speed (continuously adjustable)

Manual functions

- > Setting the operating mode
- > Setting of pump output (delivery head)
- > Setting the constant speed (continuous or fixed)
- > Pump venting function
- > Manual restart

Automatic functions

- > Continuous power adjustment according to the operating mode
- > Automatic restart
- > Automatic dry-running detection

Signal and display functions

- > Display of the current power consumption in W
- > Display of the current flow in m³/h
- > Displays during setting:
 - > Delivery head in m
 - > Constant speed (c1, c2; c3)
 - > Speed during continuous adjustment (n/100)
- > Display of fault messages (error codes)
- > Display of manually activated restart or pump venting function

Equipment

- > Wrench attachment point on pump body
- > Quick electrical connection with Wilo-Connector
- > Blocking-current proof motor
- > Particle filter
- > Thermal insulation as standard

Typekey

Example: Wilo-Yonos PICO-Z 20/0,5-4 150
 Yonos High-efficiency pump (screw-end pump),
 PICO electronically controlled
 -Z Domestic hot water circulation
 20/ Nominal connection diameter
 0,5-4 Nominal delivery head range [m]

Technical data

- Fluid temperature +2 °C to +95 °C
- Mains connection 1~230 V, 50 Hz
- IP rating IPX4D
- Screwed connection G1, G1½, G1¼
- Max. operating pressure 10 bar

Materials

- Pump housing: Stainless steel
- Impeller: Plastic
- Shaft: Oxide ceramic
- Bearing: Carbon, synthetic resin-impregnated

Scope of delivery

- Pump
- Thermal insulation
- Wilo-Connector
- Gaskets for threaded connection
- Installation and operating instructions

Accessories

- Screwed connections
- Adapter fittings
- Wilo-Connector with 2 m connection cable and shockproof plug
- Angle plug with 2 m connection cable



Data sheet

Hydraulic data

Maximum operating pressure P_N	10 bar
Max. fluid temperature $T_{\max}$	95 °C
Min. fluid temperature $T_{\min}$	2 °C
Min. ambient temperature $T_{\min}$	-10 °C
Max. ambient temperature $T_{\max}$	40 °C
Temperature range at max. ambient temperature +40 °C T	+2...+70
Max. permitted total water hardness	3.57 mmol/l (20°dH)

Motor data

Mains connection	1~230 V, 50/60 Hz
Rated power P_2	0,02 kW
Rated current I_N	0,26 A
Min. speed $n_{\min}$	700 1/min
Max. speed $n_{\max}$	3400 1/min
Power consumption $P_{1 \min}$	4 W
Power consumption $P_{1 \max}$	20 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Insulation class	F
Protection class motor	IPX4D
Speed control	Frequency converter
Motor protection	integrated

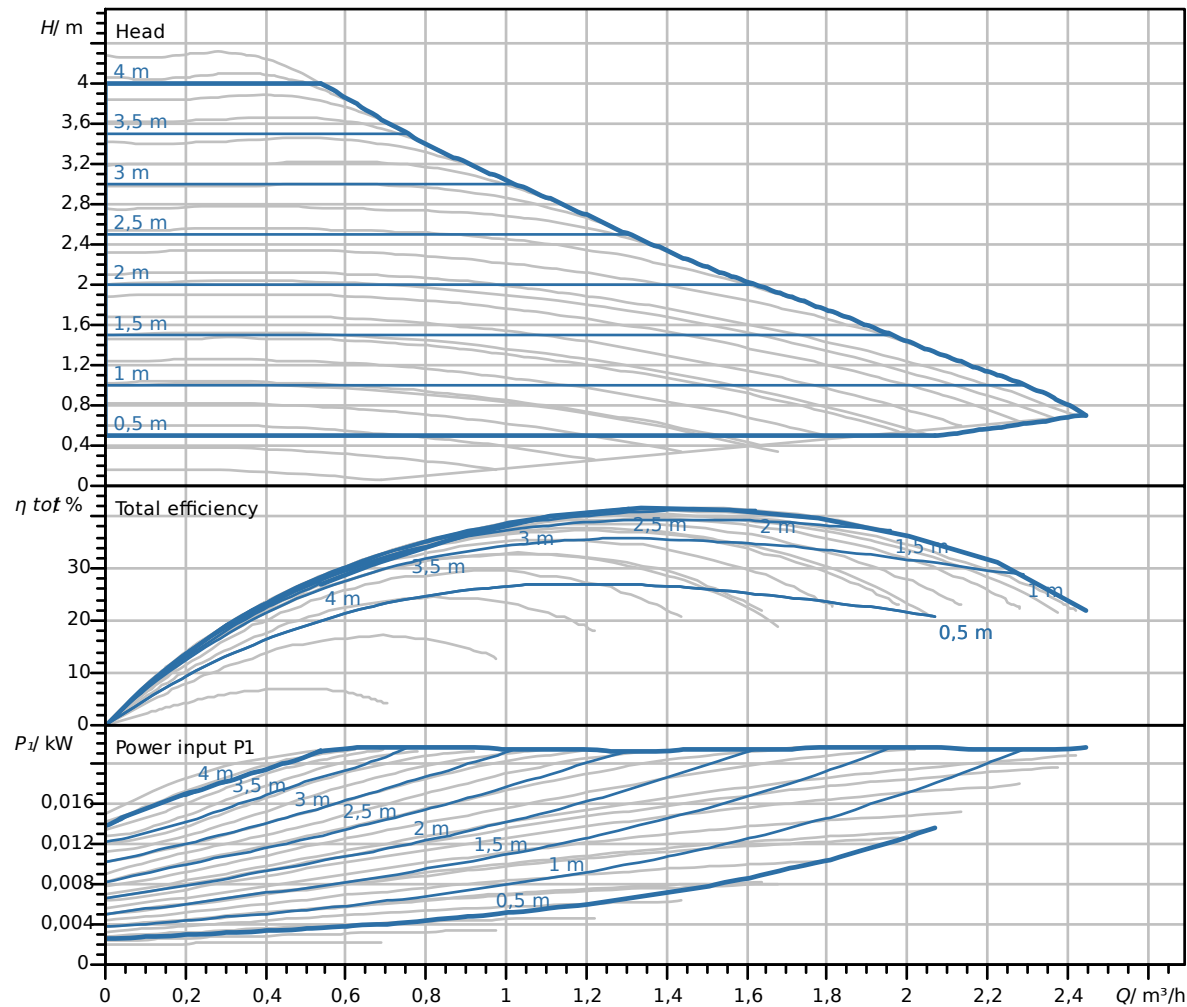
Materials

Pump housing	1.4409
Impeller	PPO-GF30
Shaft	Oxide ceramic
Bearing	Carbon-graphite

Installation dimensions

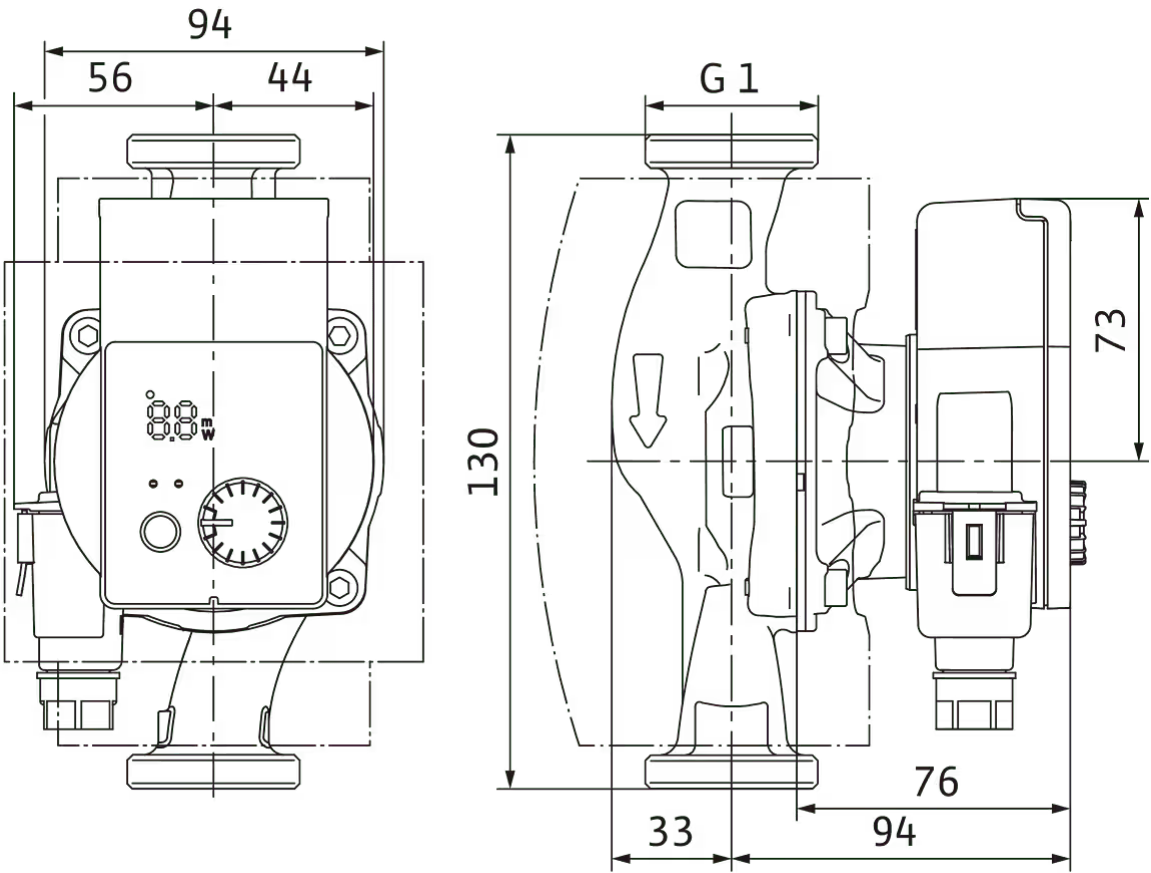
Pipe connection on the suction side DN_s	G 1
Pipe connection on the discharge side DN_d	G 1
Port-to-port length L_0	130 mm

Pump curves



Dimensions and dimensions drawings

Yonos PICO-Z 15/0,5-4 130





Data sheet

Hydraulic data

Maximum operating pressure P_N	10 bar
Max. fluid temperature $T_{\max}$	95 °C
Min. fluid temperature $T_{\min}$	2 °C
Min. ambient temperature $T_{\min}$	-10 °C
Max. ambient temperature $T_{\max}$	40 °C
Temperature range at max. ambient temperature +40 °C T	+2...+70
Max. permitted total water hardness	3.57 mmol/l (20°dH)

Motor data

Mains connection	1~230 V, 50/60 Hz
Rated power P_2	0,02 kW
Rated current I_N	0,26 A
Min. speed $n_{\min}$	700 1/min
Max. speed $n_{\max}$	3400 1/min
Power consumption $P_{1 \min}$	4 W
Power consumption $P_{1 \max}$	20 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Insulation class	F
Protection class motor	IPX4D
Speed control	Frequency converter
Motor protection	integrated

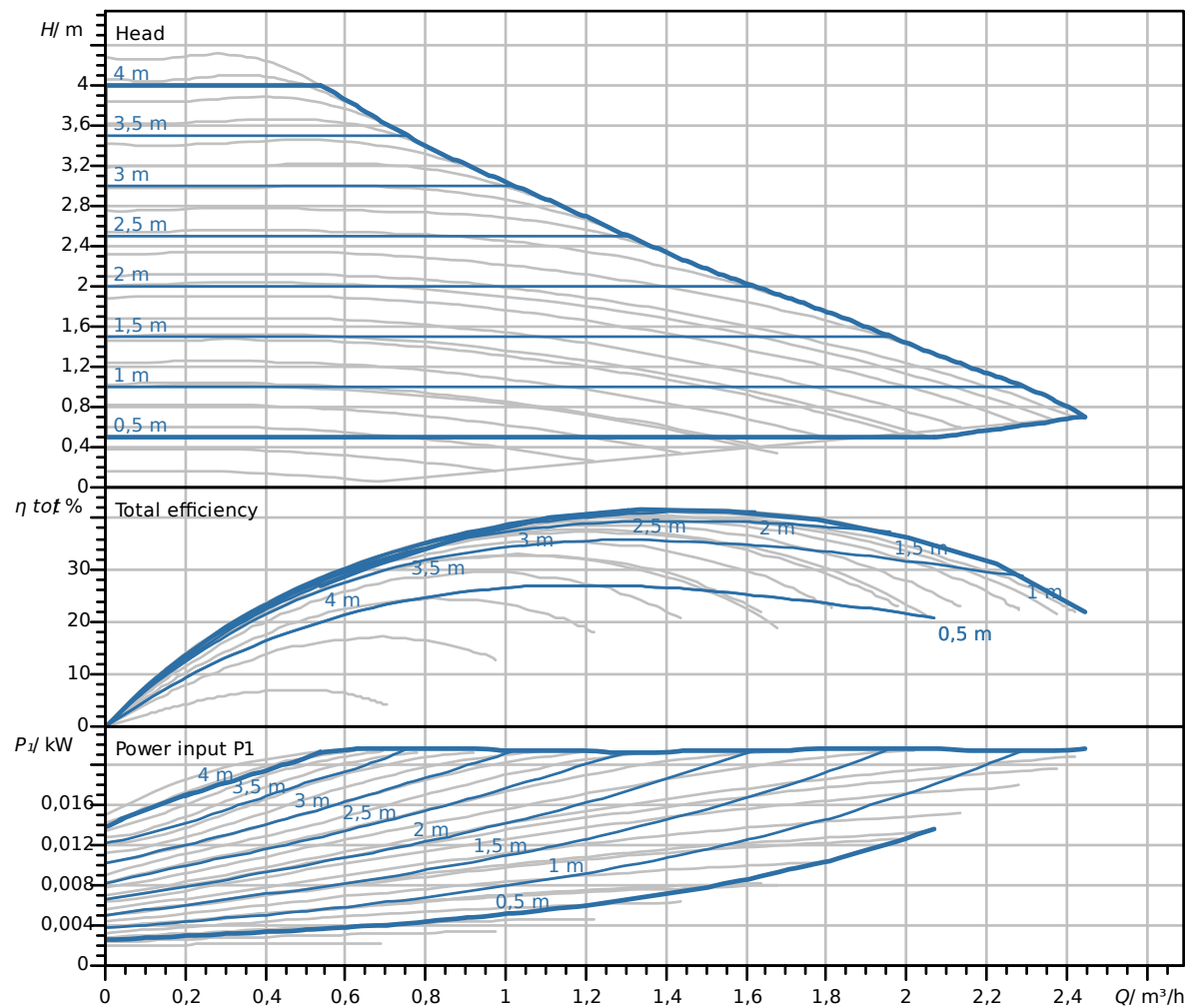
Materials

Pump housing	1.4409
Impeller	PPO-GF30
Shaft	Oxide ceramic
Bearing	Carbon-graphite

Installation dimensions

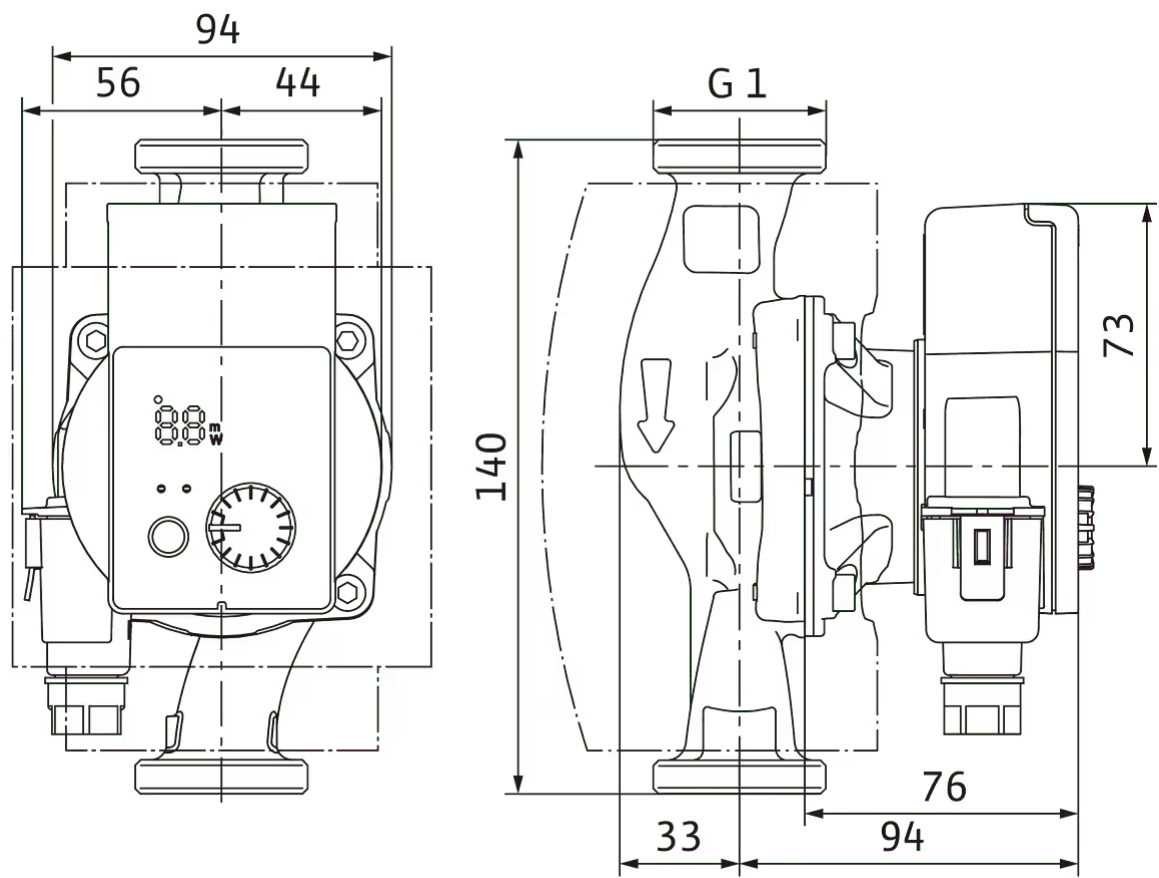
Pipe connection on the suction side DN_s	G 1
Pipe connection on the discharge side DN_d	G 1
Port-to-port length L_0	140 mm

Pump curves



Dimensions and dimensions drawings

Yonos PICO-Z 15/0,5-4 140





Data sheet

Hydraulic data

Maximum operating pressure P_N	10 bar
Max. fluid temperature $T_{\max}$	95 °C
Min. fluid temperature $T_{\min}$	2 °C
Min. ambient temperature $T_{\min}$	-10 °C
Max. ambient temperature $T_{\max}$	40 °C
Temperature range at max. ambient temperature +40 °C T	+2...+70
Max. permitted total water hardness	3.57 mmol/l (20°dH)

Motor data

Mains connection	1~230 V, 50/60 Hz
Rated power P_2	0,02 kW
Rated current I_N	0,26 A
Min. speed $n_{\min}$	700 1/min
Max. speed $n_{\max}$	3400 1/min
Power consumption $P_{1 \min}$	4 W
Power consumption $P_{1 \max}$	20 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Insulation class	F
Protection class motor	IPX4D
Speed control	Frequency converter
Motor protection	integrated

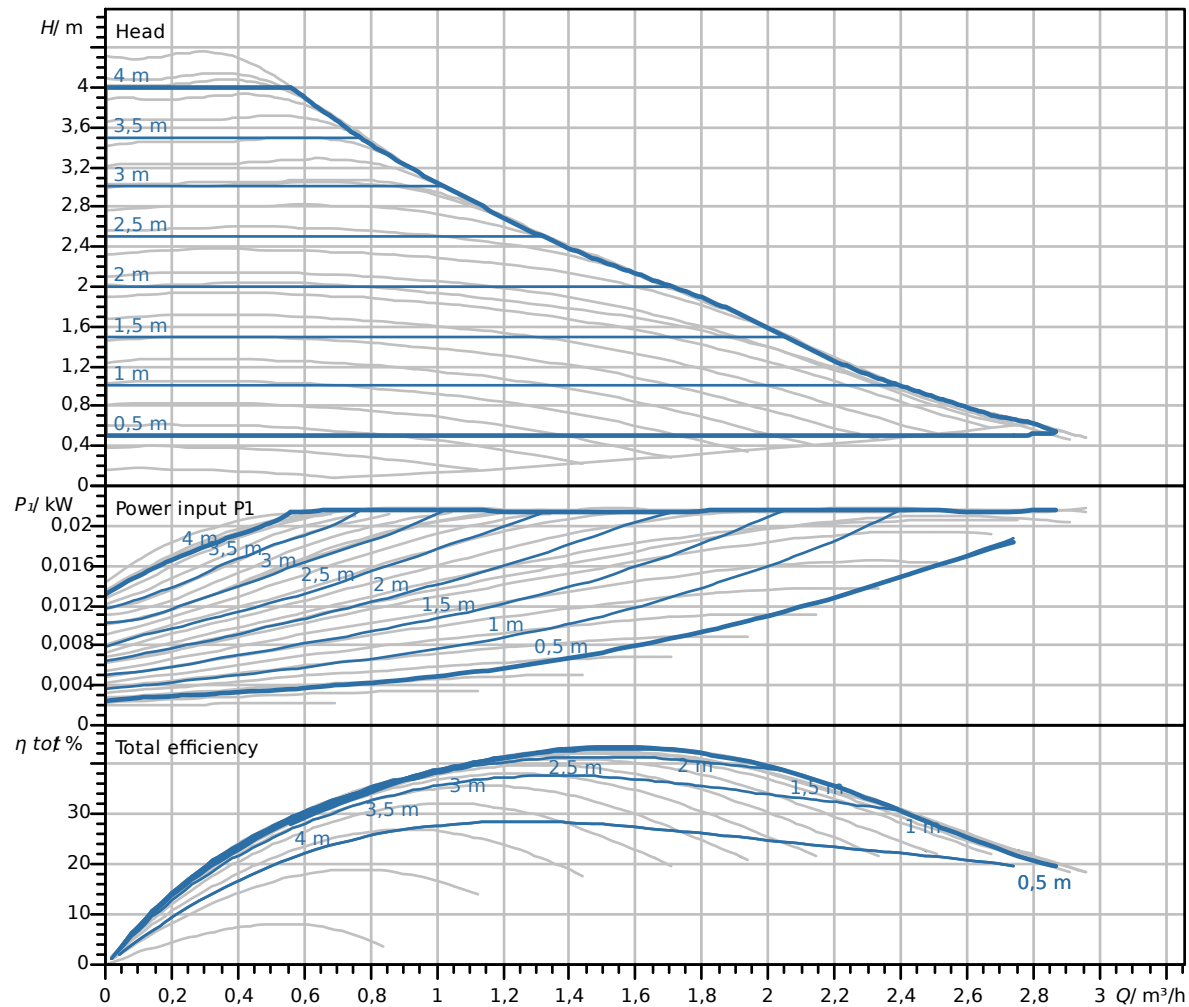
Materials

Pump housing	1.4409
Impeller	PPO-GF30
Shaft	Oxide ceramic
Bearing	Carbon-graphite

Installation dimensions

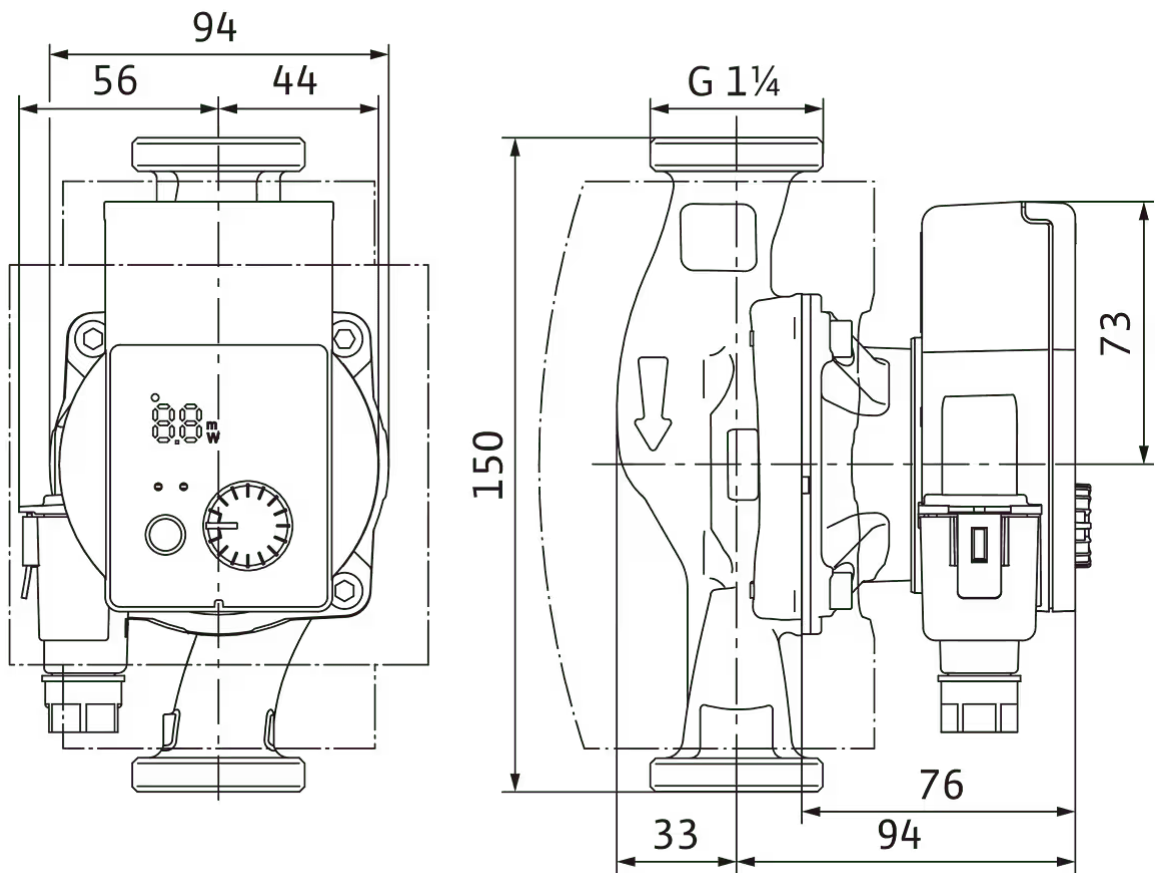
Pipe connection on the suction side DN_s	G 1¼
Pipe connection on the discharge side DN_d	G 1¼
Port-to-port length L_0	150 mm

Pump curves



Dimensions and dimensions drawings

Yonos PICO-Z 20/0,5-4 150





Data sheet

Hydraulic data

Maximum operating pressure P_N	10 bar
Max. fluid temperature $T_{\max}$	95 °C
Min. fluid temperature $T_{\min}$	2 °C
Min. ambient temperature $T_{\min}$	-10 °C
Max. ambient temperature $T_{\max}$	40 °C
Temperature range at max. ambient temperature +40 °C T	+2...+70
Max. permitted total water hardness	3.57 mmol/l (20°dH)

Motor data

Mains connection	1~230 V, 50/60 Hz
Rated power P_2	0,03 kW
Rated current I_N	0,44 A
Min. speed $n_{\min}$	700 1/min
Max. speed $n_{\max}$	4200 1/min
Power consumption $P_{1 \min}$	4 W
Power consumption $P_{1 \max}$	40 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Insulation class	F
Protection class motor	IPX4D
Speed control	Frequency converter
Motor protection	integrated

Materials

Pump housing	1.4409
Impeller	PPO-GF30
Shaft	Oxide ceramic
Bearing	Carbon-graphite

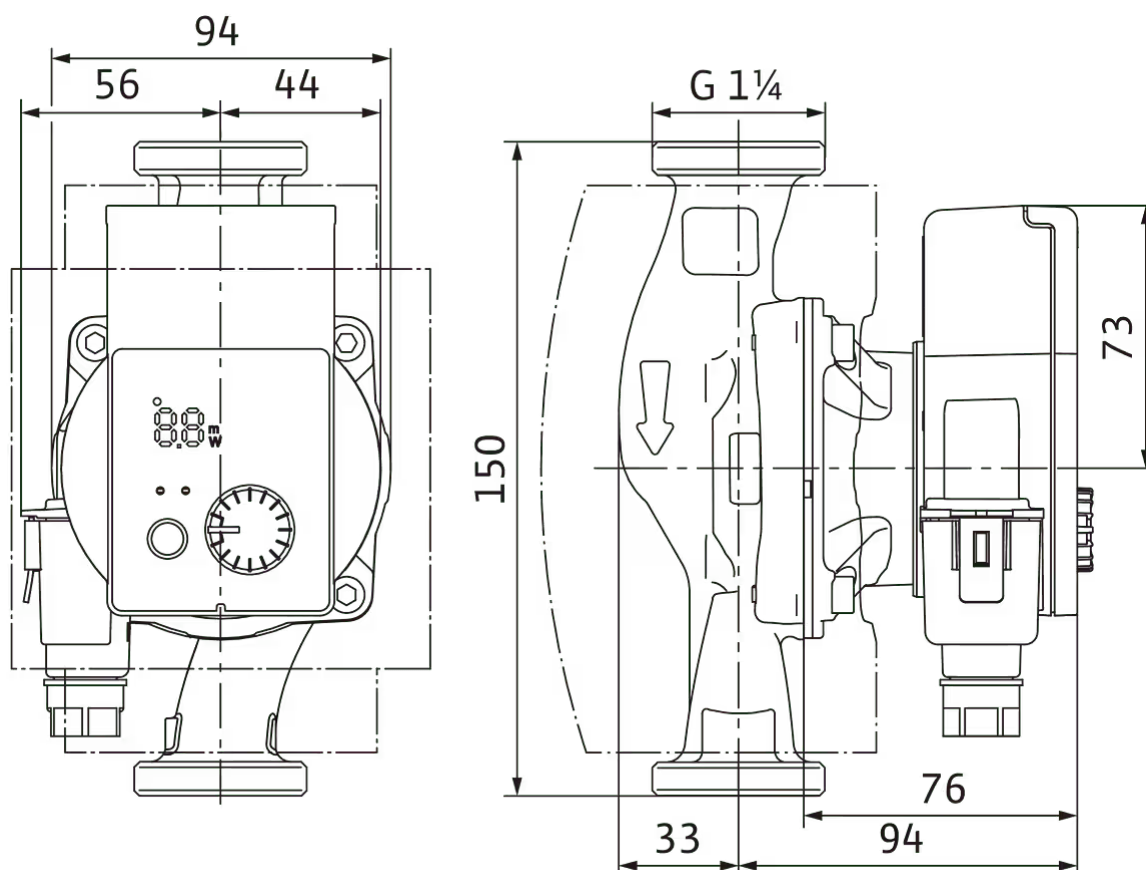
Installation dimensions

Pipe connection on the suction side DN_s	G 1¼
Pipe connection on the discharge side DN_d	G 1¼
Port-to-port length L_0	150 mm

Pump curves

Dimensions and dimensions drawings

Yonos PICO-Z 20/0,5-6 150





Data sheet

Hydraulic data

Maximum operating pressure P_N	10 bar
Max. fluid temperature $T_{\max}$	95 °C
Min. fluid temperature $T_{\min}$	2 °C
Min. ambient temperature $T_{\min}$	-10 °C
Max. ambient temperature $T_{\max}$	40 °C
Temperature range at max. ambient temperature +40 °C T	+2...+70
Max. permitted total water hardness	3.57 mmol/l (20°dH)

Motor data

Mains connection	1~230 V, 50/60 Hz
Rated power P_2	0,03 kW
Rated current I_N	0,44 A
Min. speed $n_{\min}$	700 1/min
Max. speed $n_{\max}$	4200 1/min
Power consumption $P_{1 \min}$	4 W
Power consumption $P_{1 \max}$	40 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Insulation class	F
Protection class motor	IPX4D
Speed control	Frequency converter
Motor protection	integrated

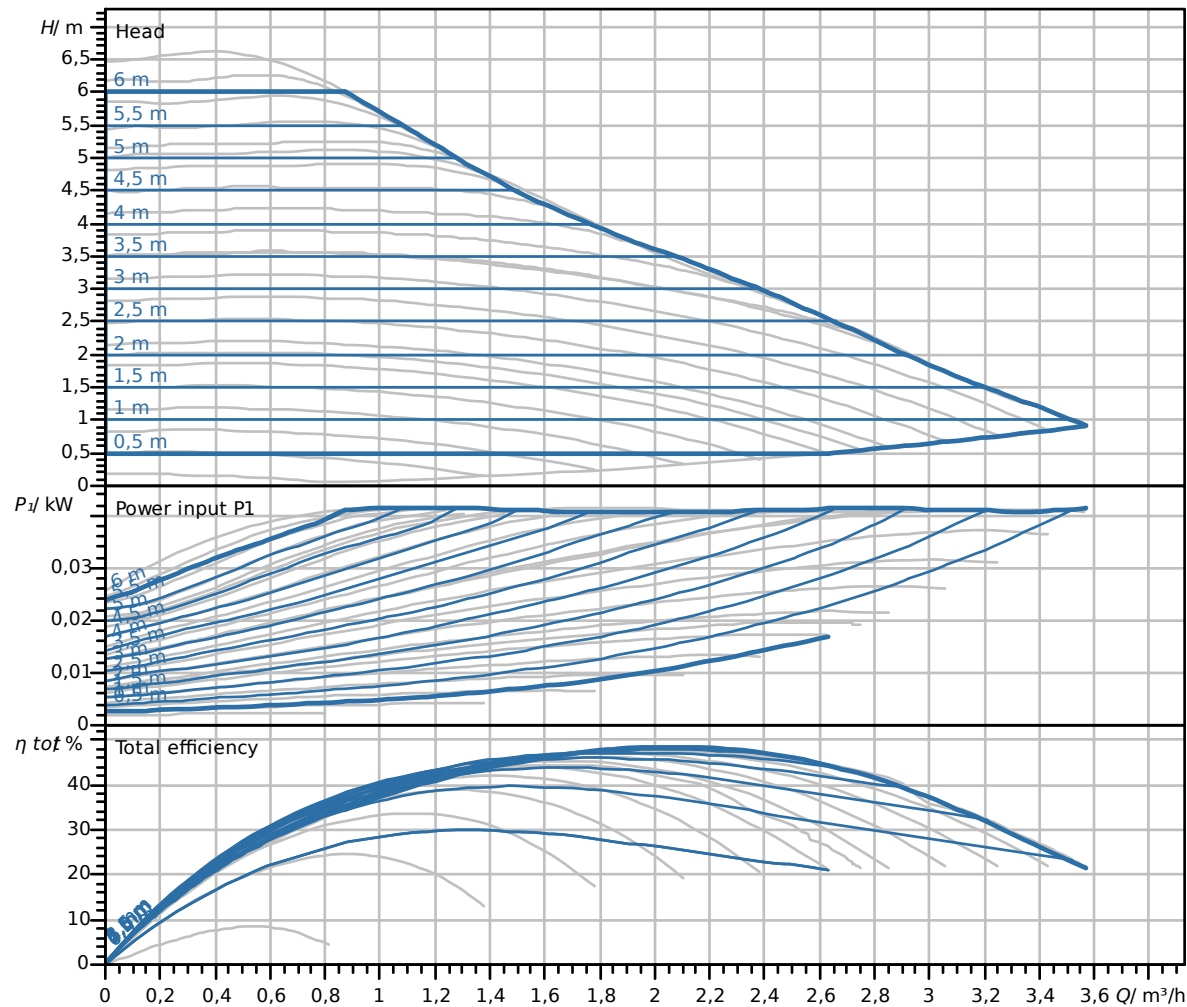
Materials

Pump housing	1.4409
Impeller	PPO-GF30
Shaft	Oxide ceramic
Bearing	Carbon-graphite

Installation dimensions

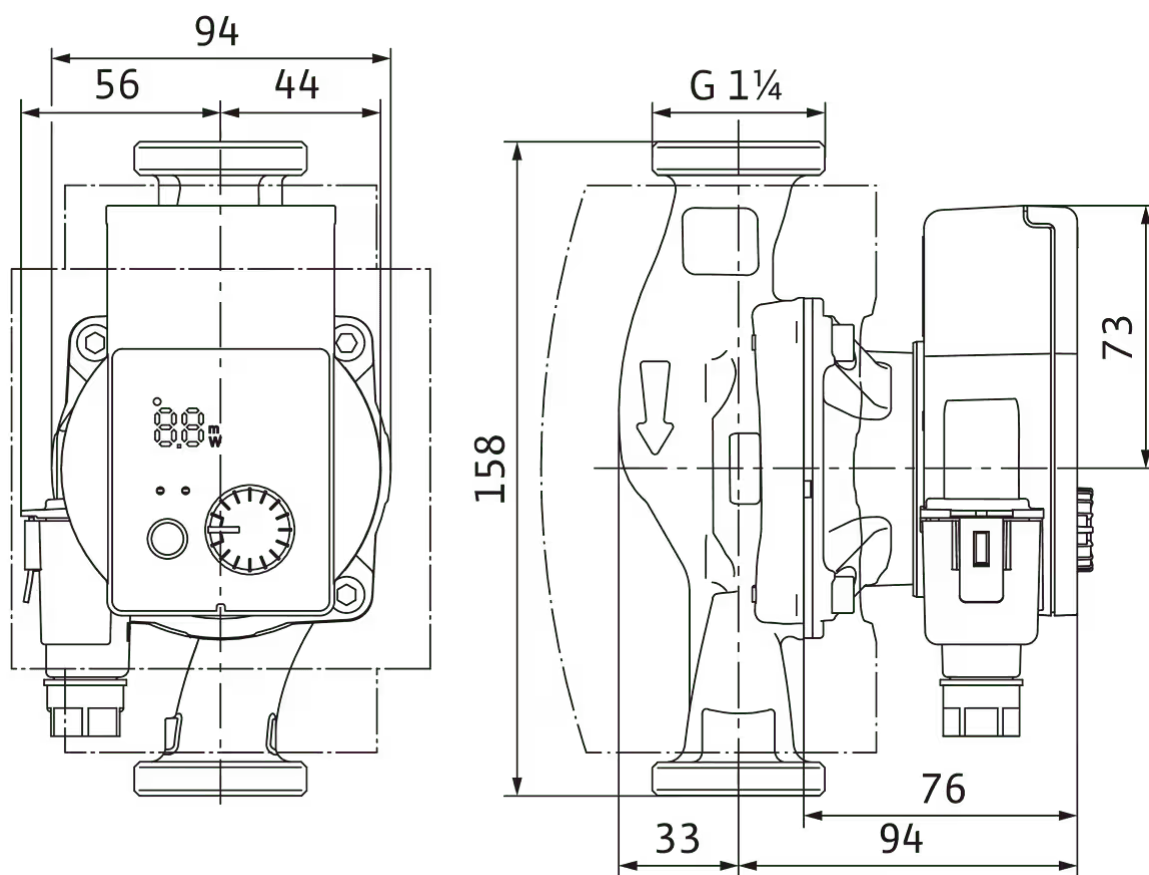
Pipe connection on the suction side DN_s	G 1¼
Pipe connection on the discharge side DN_d	G 1¼
Port-to-port length L_0	158 mm

Pump curves



Dimensions and dimensions drawings

Yonos PICO-Z 20/0,5-6 158





Data sheet

Hydraulic data

Maximum operating pressure P_N	10 bar
Max. fluid temperature $T_{\max}$	95 °C
Min. fluid temperature $T_{\min}$	2 °C
Min. ambient temperature $T_{\min}$	-10 °C
Max. ambient temperature $T_{\max}$	40 °C
Temperature range at max. ambient temperature +40 °C T	+2...+70
Max. permitted total water hardness	3.57 mmol/l (20°dH)

Motor data

Mains connection	1~230 V, 50/60 Hz
Rated power P_2	0,06 kW
Rated current I_N	0,7 A
Min. speed $n_{\min}$	500 1/min
Max. speed $n_{\max}$	4800 1/min
Power consumption $P_{1 \min}$	4 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 motor	IPX4D
Speed control	Frequency converter
Motor protection	integrated

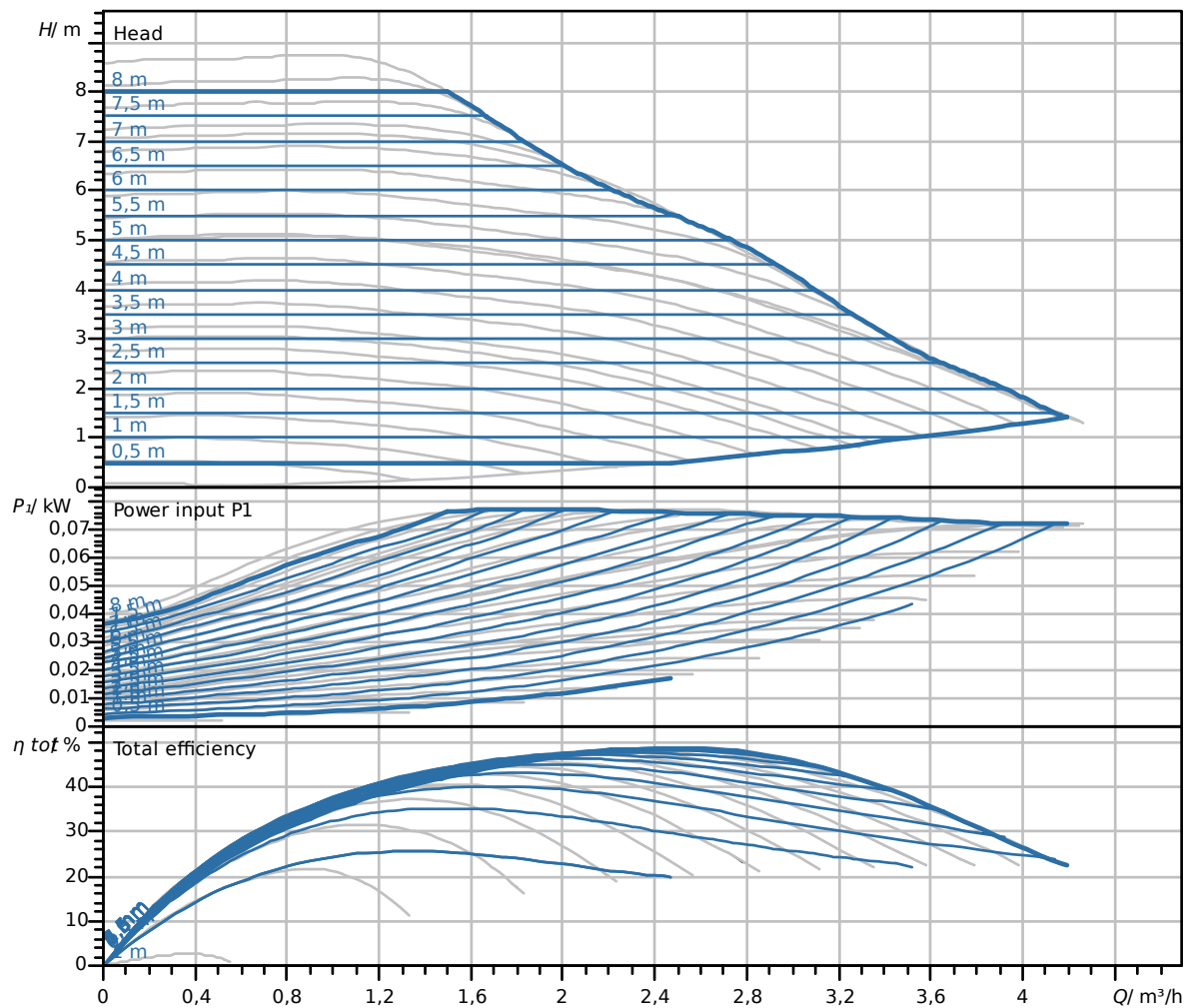
Materials

Pump housing	1.4409
Impeller	PPO-GF30
Shaft	Oxide ceramic
Bearing	Carbon-graphite

Installation dimensions

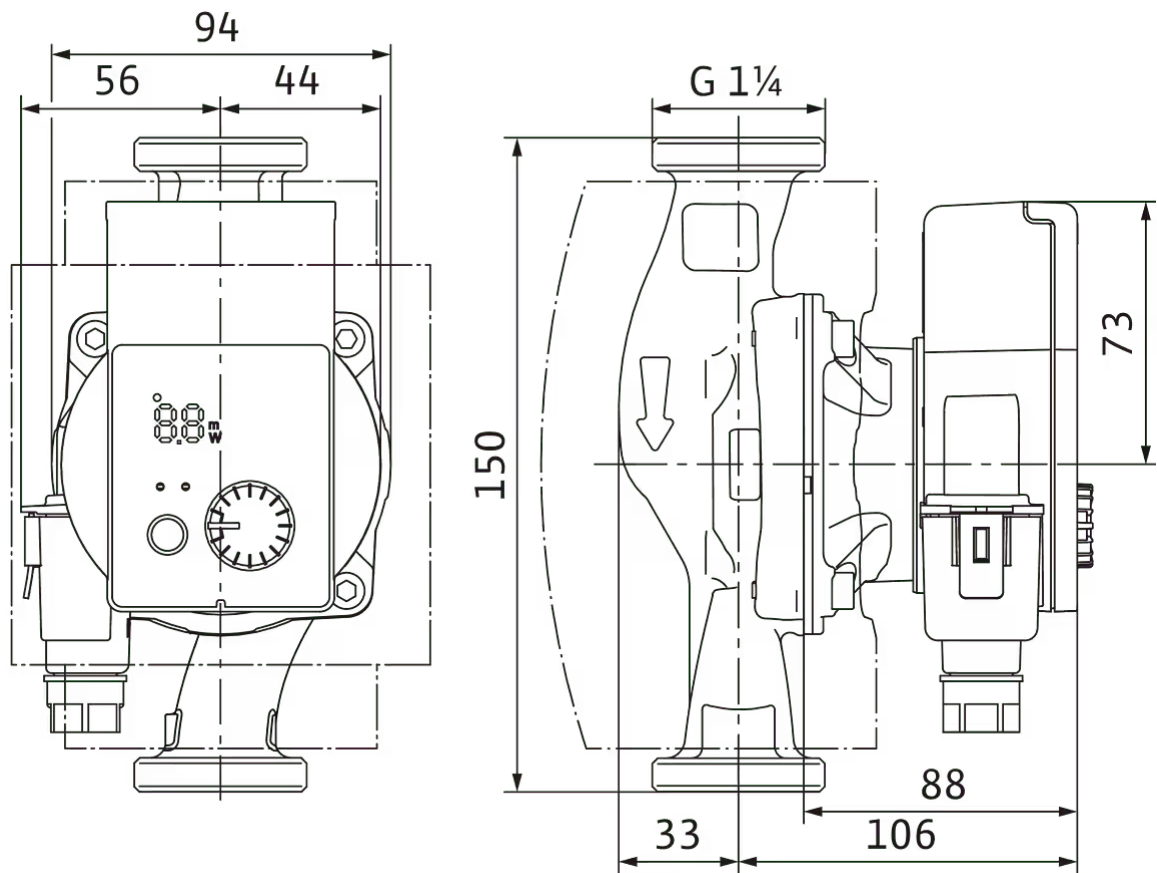
Pipe connection on the suction side DN_s	G 1¼
Pipe connection on the discharge side DN_d	G 1¼
Port-to-port length L_0	150 mm

Pump curves



Dimensions and dimensions drawings

Yonos PICO-Z 20/0,5-8 150





Data sheet

Hydraulic data

Maximum operating pressure P_N	10 bar
Max. fluid temperature T_{max}	95 °C
Min. fluid temperature T_{min}	2 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C
Temperature range at max. ambient temperature +40 °C T	+2...+70
Max. permitted total water hardness	3.57 mmol/l (20°dH)

Motor data

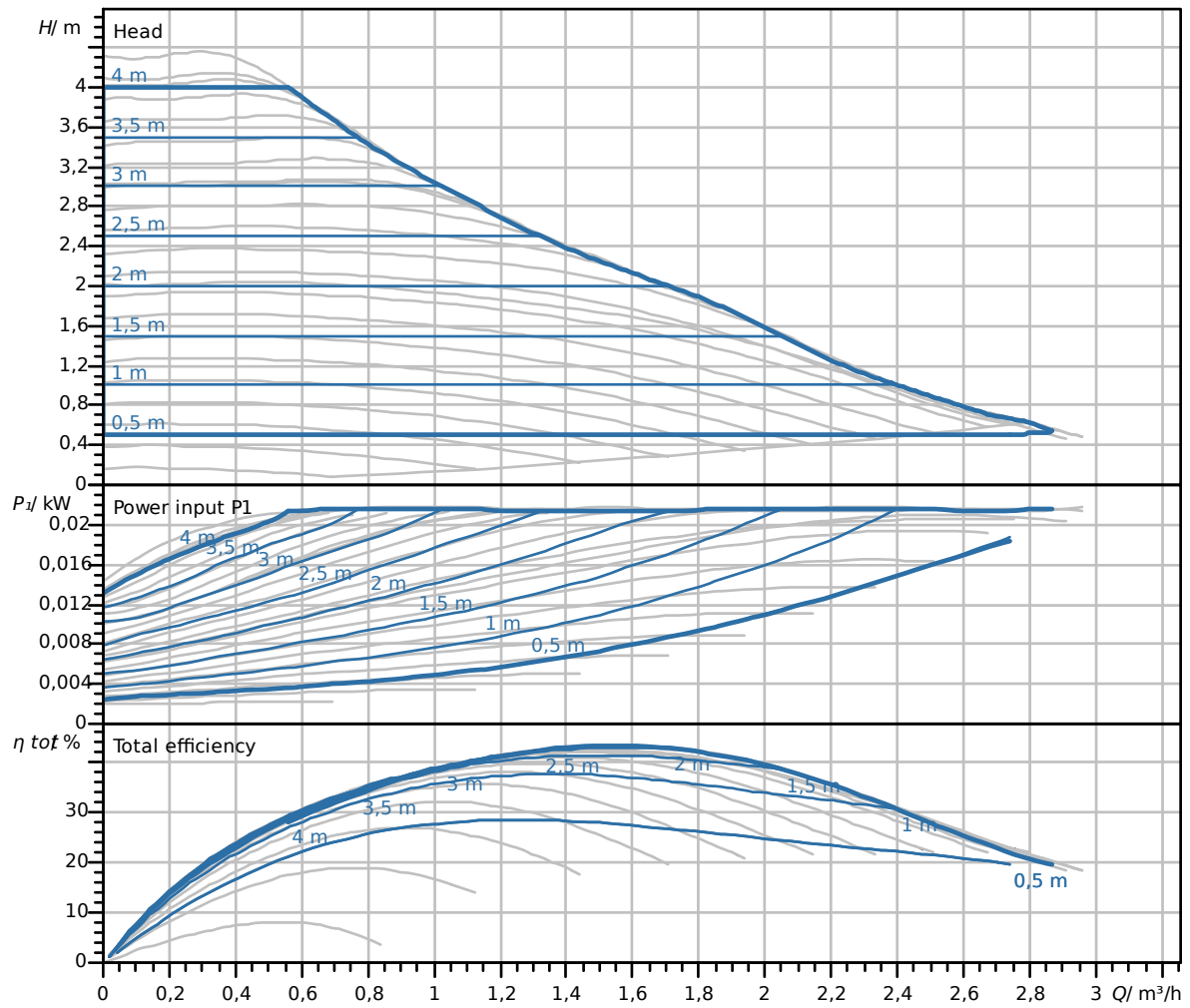
Mains connection	1~230 V, 50/60 Hz
Rated power P_2	0,02 kW
Rated current I_N	0,26 A
Min. speed n_{min}	700 1/min
Max. speed n_{max}	3400 1/min
Power consumption $P_{1 min}$	4 W
Power consumption $P_{1 max}$	20 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Insulation class	F
Protection class motor	IPX4D
Speed control	Frequency converter
Motor protection	integrated

Materials

Pump housing	1.4409
Impeller	PPO-GF30
Shaft	Oxide ceramic
Bearing	Carbon-graphite

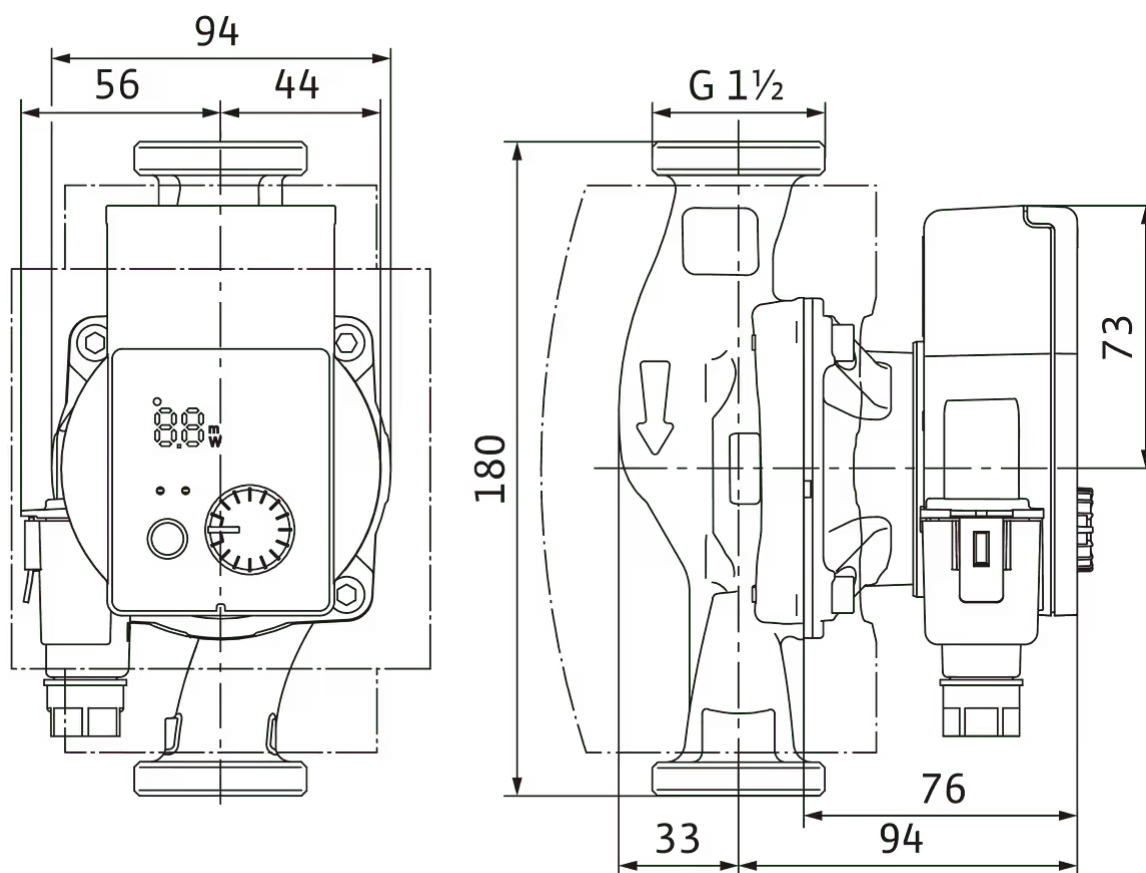
Installation dimensions

Pipe connection on the suction side DN_s	G 1½
Pipe connection on the discharge side DN_d	G 1½
Port-to-port length L_0	180 mm

Pump curves

Dimensions and dimensions drawings

Yonos PICO-Z 25/0,5-4 180





Data sheet

Hydraulic data

Maximum operating pressure P_N	10 bar
Max. fluid temperature $T_{\max}$	95 °C
Min. fluid temperature $T_{\min}$	2 °C
Min. ambient temperature $T_{\min}$	-10 °C
Max. ambient temperature $T_{\max}$	40 °C
Temperature range at max. ambient temperature +40 °C T	+2...+70
Max. permitted total water hardness	3.57 mmol/l (20°dH)

Motor data

Mains connection	1~230 V, 50/60 Hz
Rated power P_2	0,03 kW
Rated current I_N	0,44 A
Min. speed $n_{\min}$	700 1/min
Max. speed $n_{\max}$	4200 1/min
Power consumption $P_{1 \min}$	4 W
Power consumption $P_{1 \max}$	40 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Insulation class	F
Protection class motor	IPX4D
Speed control	Frequency converter
Motor protection	integrated

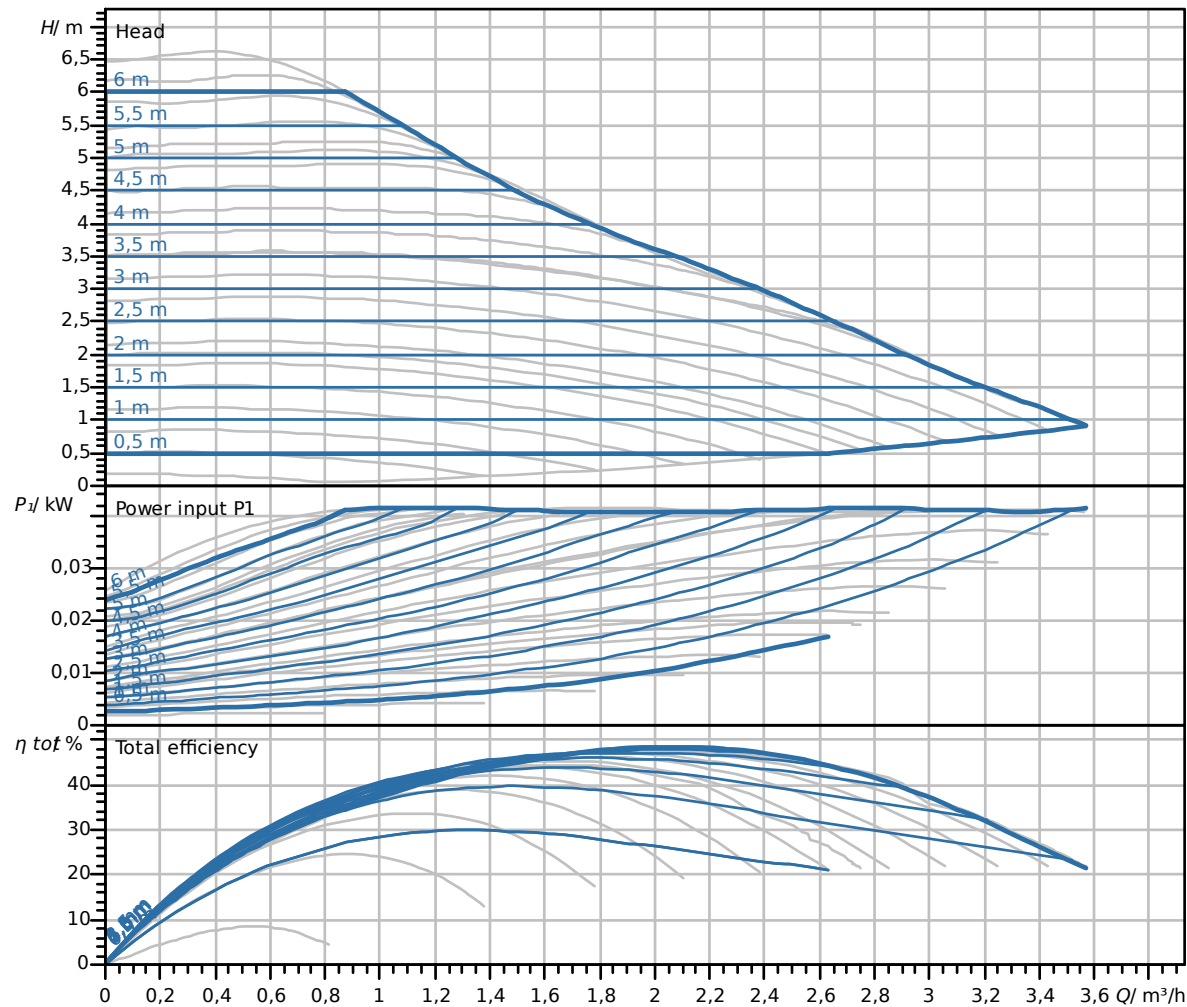
Materials

Pump housing	1.4409
Impeller	PPO-GF30
Shaft	Oxide ceramic
Bearing	Carbon-graphite

Installation dimensions

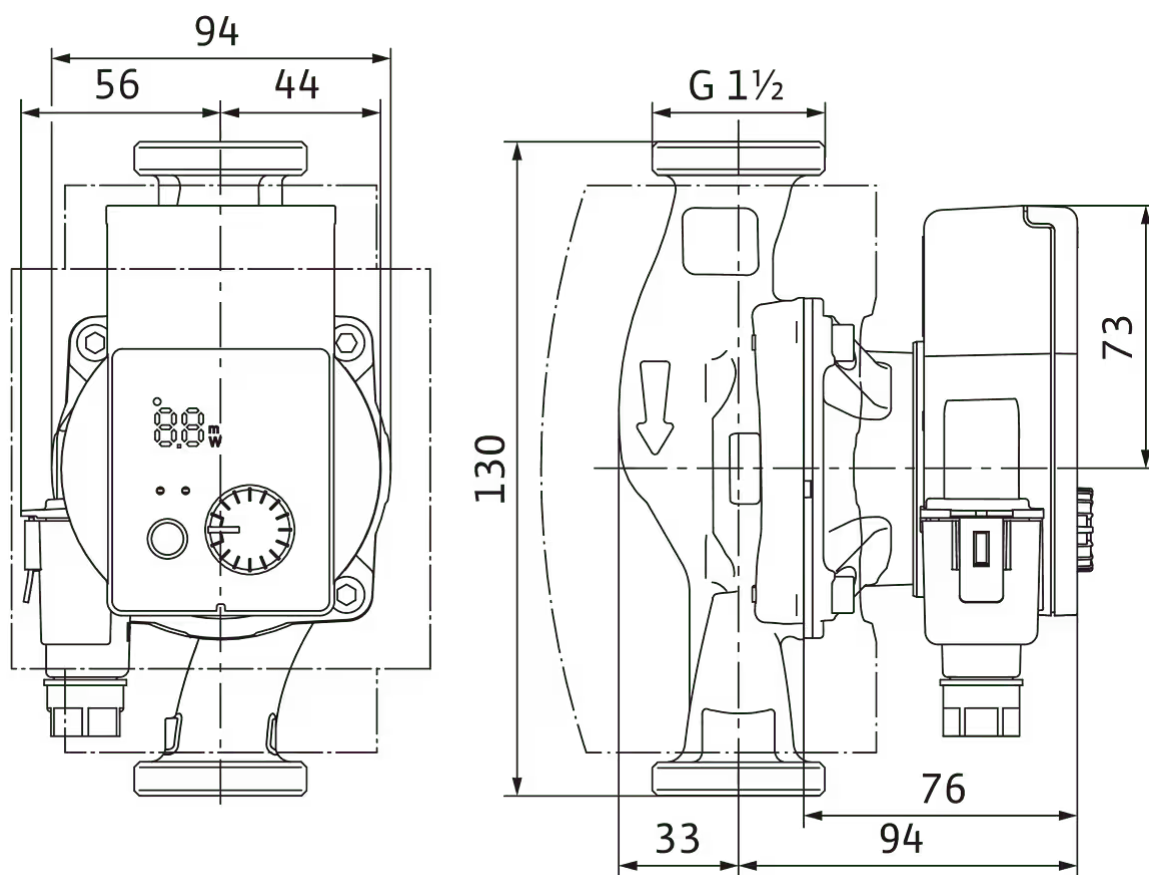
Pipe connection on the suction side DN_s	G 1½
Pipe connection on the discharge side DN_d	G 1½
Port-to-port length L_0	130 mm

Pump curves



Dimensions and dimensions drawings

Yonos PICO-Z 25/0,5-6 130





Data sheet

Hydraulic data

Maximum operating pressure P_N	10 bar
Max. fluid temperature T_{max}	95 °C
Min. fluid temperature T_{min}	2 °C
Min. ambient temperature T_{min}	-10 °C
Max. ambient temperature T_{max}	40 °C
Temperature range at max. ambient temperature +40 °C T	+2...+70
Max. permitted total water hardness	3.57 mmol/l (20°dH)

Motor data

Mains connection	1~230 V, 50/60 Hz
Rated power P_2	0,03 kW
Rated current I_N	0,44 A
Min. speed n_{min}	700 1/min
Max. speed n_{max}	4200 1/min
Power consumption $P_{1 min}$	4 W
Power consumption $P_{1 max}$	40 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Electromagnetic compatibility	EN 61800-3
Insulation class	F
Protection class motor	IPX4D
Speed control	Frequency converter
Motor protection	integrated

Materials

Pump housing	1.4409
Impeller	PPO-GF30
Shaft	Oxide ceramic
Bearing	Carbon-graphite

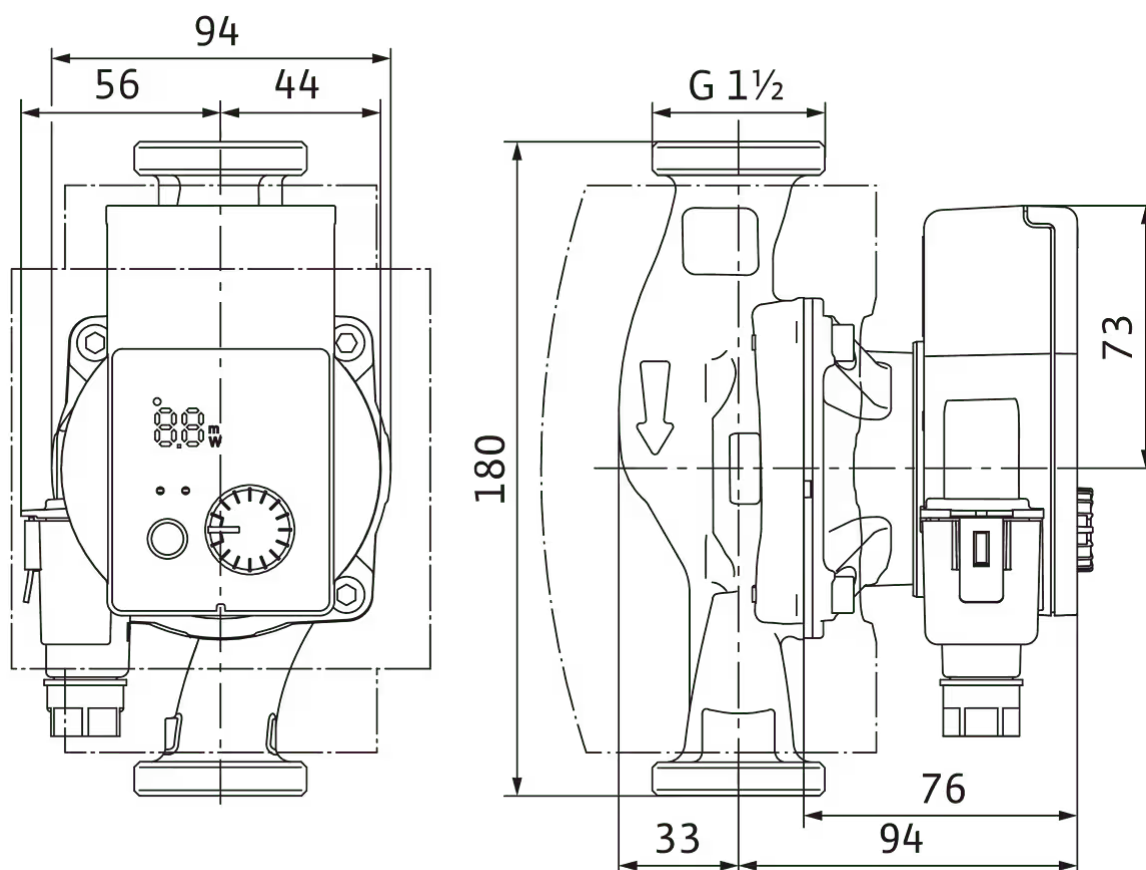
Installation dimensions

Pipe connection on the suction side DN_s	G 1½
Pipe connection on the discharge side DN_d	G 1½
Port-to-port length L_0	180 mm

Pump curves

Dimensions and dimensions drawings

Yonos PICO-Z 25/0,5-6 180





Data sheet

Hydraulic data

Maximum operating pressure P_N	10 bar
Max. fluid temperature $T_{\max}$	95 °C
Min. fluid temperature $T_{\min}$	2 °C
Min. ambient temperature $T_{\min}$	-10 °C
Max. ambient temperature $T_{\max}$	40 °C
Temperature range at max. ambient temperature +40 °C T	+2...+70
Max. permitted total water hardness	3.57 mmol/l (20°dH)

Motor data

Mains connection	1~230 V, 50/60 Hz
Rated power P_2	0,06 kW
Rated current I_N	0,7 A
Min. speed $n_{\min}$	500 1/min
Max. speed $n_{\max}$	4800 1/min
Power consumption $P_{1 \min}$	4 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 motor	IPX4D
Speed control	Frequency converter
Motor protection	integrated

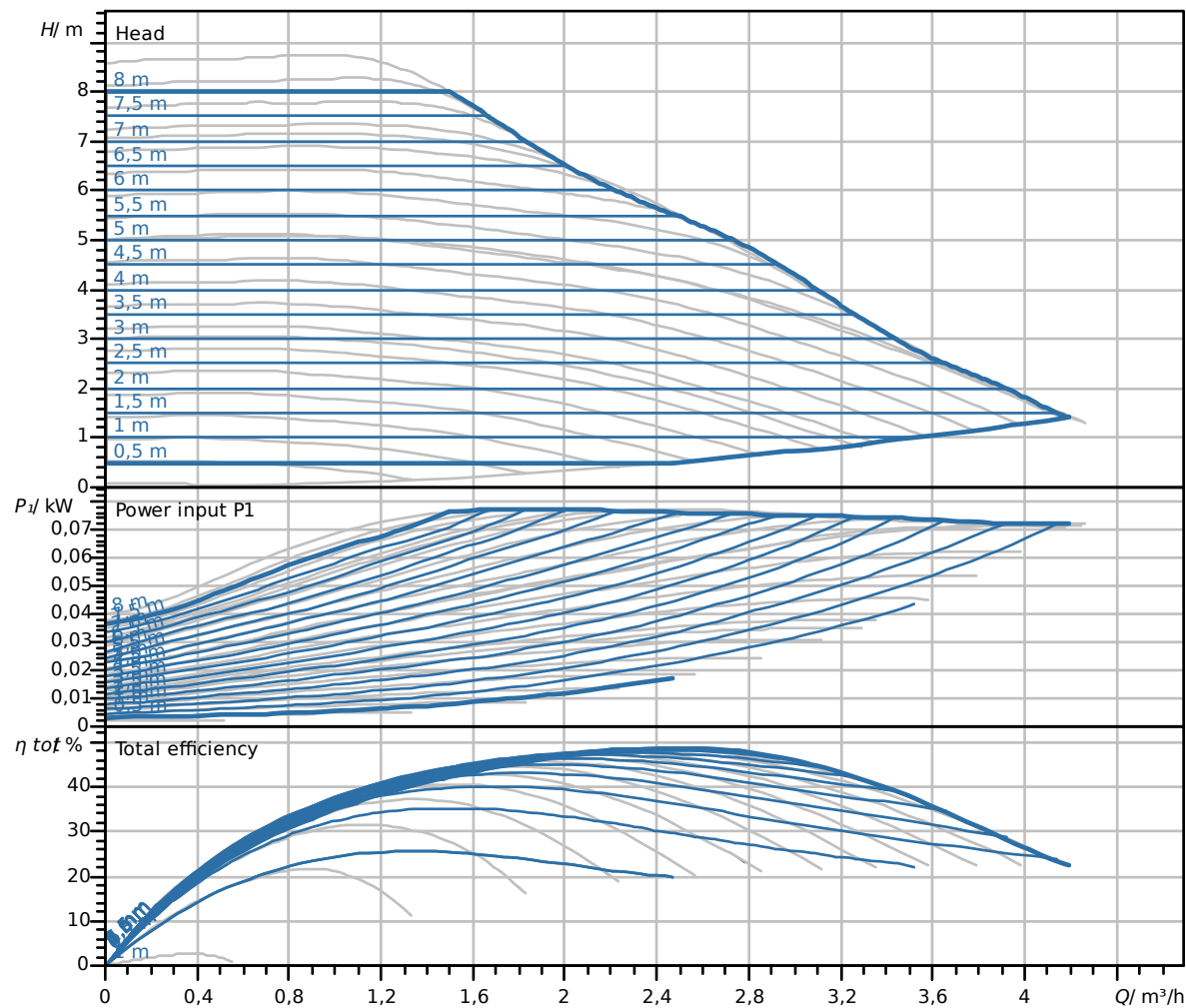
Materials

Pump housing	1.4409
Impeller	PPO-GF30
Shaft	Oxide ceramic
Bearing	Carbon-graphite

Installation dimensions

Pipe connection on the suction side DN_s	G 1½
Pipe connection on the discharge side DN_d	G 1½
Port-to-port length L_0	180 mm

Pump curves



Dimensions and dimensions drawings

Yonos PICO-Z 25/0,5-8 180

