



Similar to figure

Data sheet

Hydraulic data

Maximum operating pressure P_N	10 bar
Head max H_{\max}	4.2 m
Flow max Q_{\max}	8.1 m ³ /h
Minimum suction head at 50 °C m	3 m
Minimum suction head at 95 °C m	10 m
Minimum suction head at 110 °C	16 m
Min. fluid temperature T_{\min}	-10 °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)	≤0.18
Mains connection	1~230 V ±10%, 50/60 Hz
Min current I_{\min}	0.11 A
Max current I_{\max}	0.58 A
Rated power P_2	69 W
Min. speed n_{\min}	750 1/min
Max. speed n_{\max}	2550 1/min
Power consumption $P_{1 \min}$	7 W
Power consumption $P_{1 \max}$	80 W
Emitted interference	EN 61800-3;2004+A1;2012 /residential area (C1)
Interference resistance	EN 61800-3;2004+A1;2012 /industrial environment (C2)
Insulation class	F
Protection class	IPX4D
Threaded cable connection	5 x M16x1.5

Installation dimensions

Pipe connection on the suction side D_Ns	G 2
Pipe connection on the discharge side D_Nd	G 2
Port-to-port length L_O	180 mm

Materials

Pump housing	Grey cast iron
Impeller	PPS-GF40
Shaft	Stainless steel
Bearing	Carbon-graphite

Equipment/function**Function**

Control mode	<u>Δp-v for variable differential pressure</u>
	<u>Δp-c for constant differential pressure</u>
	<u>Q limit for limiting the maximum volume flow</u>
	<u>Dynamic Adapt plus</u>
	<u>ΔT-const. for constant differential temperature control</u>
	<u>T-const. for constant temperature control</u>
	<u>Constant Q for constant volume flow control</u>
	<u>Multi Flow Adaptation</u>
	<u>Δ T-const. for constant differential temperature control</u>
	<u>User-defined PID control</u>
Special features of the series	<u>Constant speed (n-const.)</u>
	<u>Heating/Cooling switching</u>
	<u>Night set back</u>
	<u>Heat quantity measurement</u>
	<u>Cooling quantity measurement</u>
	<u>Key locking function</u>
	<u>No-Flow Stop</u>
	<u>Reset function to factory setting</u>
	<u>Adjustable volume flow limiter</u>
	<u>Ability to save and restore configured pump settings (3 restoration points)</u>
Multi pump operation	<u>Fault message and warning message in plain text including suggested remedy</u>
	<u>Main/Standy</u>
Measurement value logging	<u>Parallel operation</u>
	<u>Heat and cooling capacity measurement</u>
Display	<u>Setpoint</u>
	<u>Actual delivery head</u>
	<u>Actual volume flow</u>
	<u>Actual power consumption</u>
	<u>Energy consumption</u>
	<u>Temperature (version "R7": current fluid temperature possible with Stratos MAXO temperature sensor)</u>
	<u>Warning messages in plain text (display status: yellow)</u>
	<u>Error messages in plain text (display: red)</u>
	<u>Pump venting (display status: blue)</u>
	<u>Control mode</u>
	<u>Active influences (e.g. STOP)</u>

Function

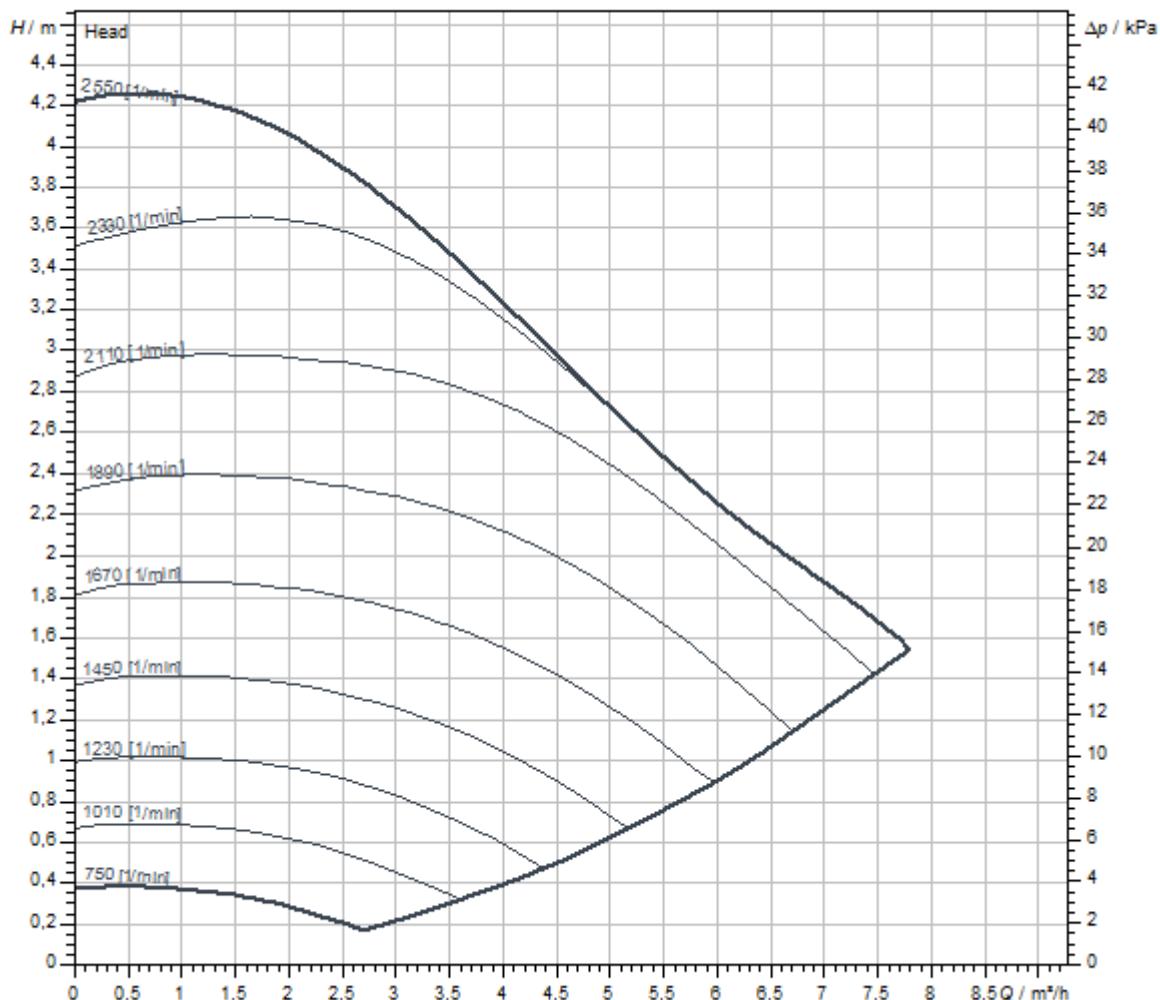
Display (can also be selected)	<u>Speed</u>
	<u>Heating quantity</u>
	<u>Cooling quantity</u>
	<u>Operating hours</u>
	<u>Mains voltage</u>
	<u>Warning message</u>
Pump venting function	<u>Error message</u>
	<u>Yes</u>

Equipment

Approvals and labels	<u>CE</u>
	<u>VDE</u>
	<u>EAC</u>
Cold water insulation shell	<u>As accessories</u>
Display	<u>Graphic colour display (4.3 inches)</u>
Display information	<u>Comfort Version: LCD display (large) for showing the head, flow volume, actual und cumulated current.</u>
Pump control	<u>Electronic-controlled pump</u>
Quick electrical connection	<u>Wilo Connector</u>
Thermal insulation shell	<u>Yes</u>
Blocking-current proof motor	<u>yes</u>
Particle filter	<u>yes</u>
Key lock	<u>yes</u>

Connectivity

Access via the Wilo-Assistant app	Yes
	0-10 V
	2-10 V
Analogue signal as standard	4-20 mA
	0-20 mA
	PT1000
Bus communication via additional accessories	BACnet MS/TP
	LON
	Modbus RTU
	CANopen
	PLR
	BACnet IP
	Modbus TCP
Connection for Wilo-Smart Cloud	Via Wilo-Smart Gateway
Digital input	Ext. OFF
	Ext. MIN
	Ext. MAX
	MANUAL (BMS-OFF)
	Key lock
	Switchover between heating/cooling mode
Digital output	SSM
	SBM
wire data exchange and remote operation	Bluetooth

Pump curves

Fluid media

Water 100 %

Fluid temperature T

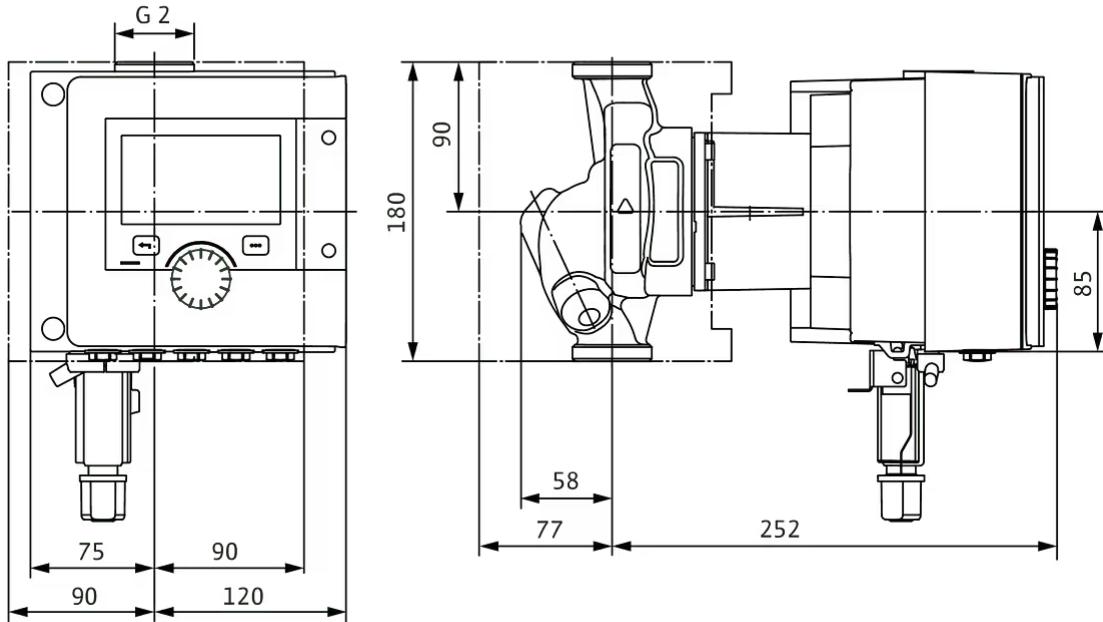
20,00 °C

speed at duty point n hydr. @ OP

2.219 1/min

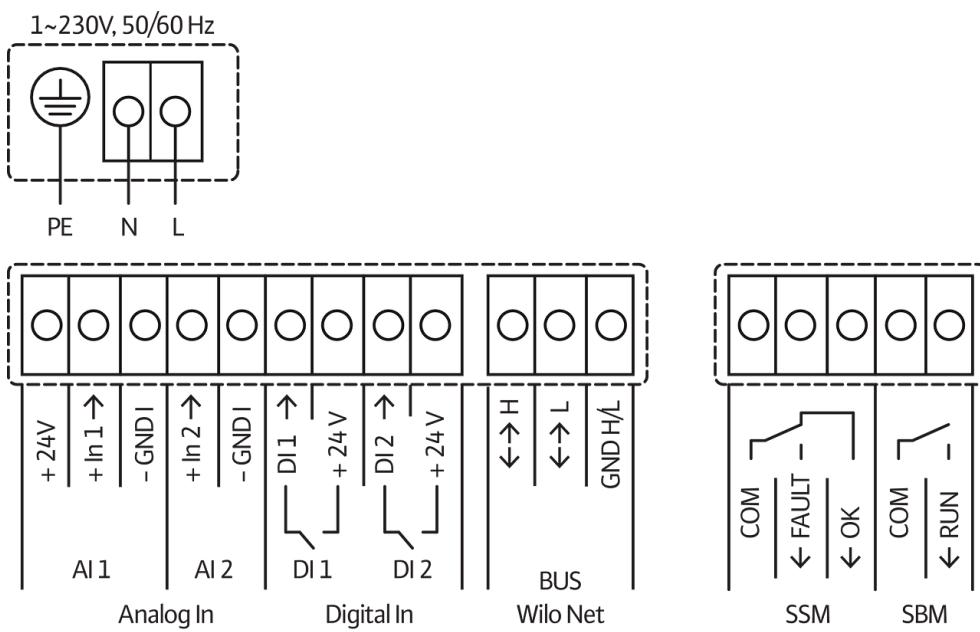
Dimensions and dimensions drawings

Stratos MAXO 30/0,5-4 PN 10



Wiring diagram

Standard: 1~ 230 V, 50/60 Hz, Option: 3~ 230 V, 50/60 Hz



SSM: Collective fault signal (NC contact in accordance with VDI 3814, load capacity 1 A, 250 V ~)

Tender text

Premium smart-pump Wilo-Stratos MAXO

High-efficiency in-line glandless pump with EC motor and electronic power adjustment. Can be used for chilled water, heating water and water/glycol mixtures. Energy efficiency index (EEI) between ≤ 0.17 and ≤ 0.19 depending on pump type.

Control modes:

- Permanent, automatic performance adjustment according to system requirements without setpoint specification **Wilo Dynamic Adapt plus** (factory setting). Up to 20% energy savings compared to dp-v control mode.
- Constant temperature (**T-const.**)
- Constant differential temperature (**dT-const.**)
- Needs-based volume flow optimisation of the feeder pump through connectivity and communication between multiple pumps (**Multi-Flow Adaptation**).
- Constant volume flow (**Q-const.**)
- Differential pressure control (dp-c) to a remote point in the pipe network (**index circuit evaluator**)
- Constant differential pressure (**dp-c**)
- Variable differential pressure (**dp-v**) with the option to set the nominal duty point
- Constant speed (**n-const.**)
- User-defined **PID** control

Functions:

- Heat quantity measurement
- Cooling quantity measurement
- Pump automatically deactivates when no flow is detected (**No-Flow Stop**)
- Switchover between heating and cooling mode (automatic, external or manual)
- Adjustable volume flow limiter using the Q-Limit function (**Q_{min.} and Q_{max.}**)
- Dual-pump operations: Efficiency-optimised **parallel operation** for dp-c and dp-v, main and standby operation
- Ability to save and restore configured pump settings (**3 restoration points**)
- **Fault and warning messages** shown in plain text with advice on resolving the issue
- **Pump venting function** for automatic venting of the rotor chamber
- Automatic **night setback**
- Automatic **deblocking function** and integrated **full motor protection**
- **Dry-running detection**

Display:

- Control mode
- Setpoint
- Volume flow
- Temperature
- Power consumption
- Electric consumption
- Active influences (e.g. STOP, No-Flow Stop)

Version:

- **2 configurable analogue inputs:** 0–10 V, 2–10 V, 0–20 mA, 4–20 mA and commercially available PT1000; +24 V DC power supply
- **2 configurable digital inputs** (Ext. OFF, Ext. Min, Ext. Max, heating/cooling, manual override (uncoupled from building automation), operation lock (key lock and remote operation configuration protection))
- **2 configurable signal relays for run signals and fault messages**
- **Slot for Wilo-CIF modules** with interfaces for building automation BA (optional accessories: CIF modules Modbus RTU, Modbus TCP, BACnet MS/TP, BACnet IP, LON, PLR, CANopen)
- Wilo Net as a Wilo system bus for communication between Wilo products, e.g. **Multi-Flow Adaptation**; dual-pump operation and Wilo-Smart Gateway
- **Integrated temperature sensor**
- Automatic **emergency operation** with definable pump speed for exceptional circumstances, e.g. bus communication or sensor value malfunction
- **Graphic colour display** (4.3 inches) with one-button manual operation
- Use the Wilo-Assistant app to read and set operating data and –among other things– set up a commissioning protocol through the Bluetooth interface (no further accessories required)
- Integrated **dual-pump management** (twin-head pumps are prewired) when using 2 single pumps as two-pump unit (connection via Wilo Net)
- Cable break detection when using an analogue signal (in connection with 2 – 10 V or 4 – 20 mA)
- Outdoor installation with weather protection possible in accordance with the installation and operating instructions
- Pre-set date and time
- Thermal insulation shell for heating applications

Scope of delivery

- > Pump
- > Optimised Wilo-Connector the same for all sizes
- > 2x threaded cable gland M16 x 1.5
- > Washers for flange screws M12 and M16 (for nominal connection diameters DN 32 to DN 65)
- > 2x gaskets for threaded connection
- > Thermal insulation shell
- > Concise Installation and operating instructions

Optional accessories:

- > ClimaForm cold insulation to avoid the formation of condensate
- > CIF module: Modbus TCP, Modbus RTU, BACnet IP, BACnet MS/TP, LON, PLR, CANopen
- > PT 1000 (B) pipe contact sensor (for domestic hot water)
- > PT 1000 (AA) sensor for installation in immersion well
- > Differential pressure sensor

Operating Data

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Maximum operating pressure PN	10 bar
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Pipe connection on the discharge side <i>DNd</i>	G 2
Port-to-port length <i>L0</i>	180 mm

Ordering information

Brand	Wilo
Product description	Stratos MAXO 30/0,5-4 PN 10
Net weight, approx. <i>m</i>	7.2 kg
Article number	2164572 