

Data sheet

Operating data

| | |
|-------------|-------|
| Fluid media | Water |
|-------------|-------|

Hydraulic data

| | |
|------------------------------------|------------------------|
| Maximum operating pressure P_N | 10 bar |
| Head max H_{max} | 4.0 m |
| Flow max Q_{max} | 15.5 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} | 90 °C |
| Min. ambient temperature T_{min} | -10 °C |
| Max. ambient temperature T_{max} | 40 °C |

Motor data

| | |
|-------------------------------|--|
| Energy efficiency index (EEI) | 0.19 |
| Mains connection | 1~230 V ±10%, 50/60 Hz |
| Min current I_{min} | 0.11 A |
| Max current I_{max} | 0.93 A |
| Rated power P_2 | 99 W |
| Min. speed n_{min} | 750 1/min |
| Max. speed n_{max} | 2600 1/min |
| Power consumption $P_{1 min}$ | 7 W |
| Power consumption $P_{1 max}$ | 130 W |
| Interference emission | EN 61800-3;2004+A1;2012 /residential area (C1) |
| Interference immunity | EN 61800-3;2004+A1;2012 /industrial environment (C2) |
| Insulation class | F |
| Protection class | IPX4D |

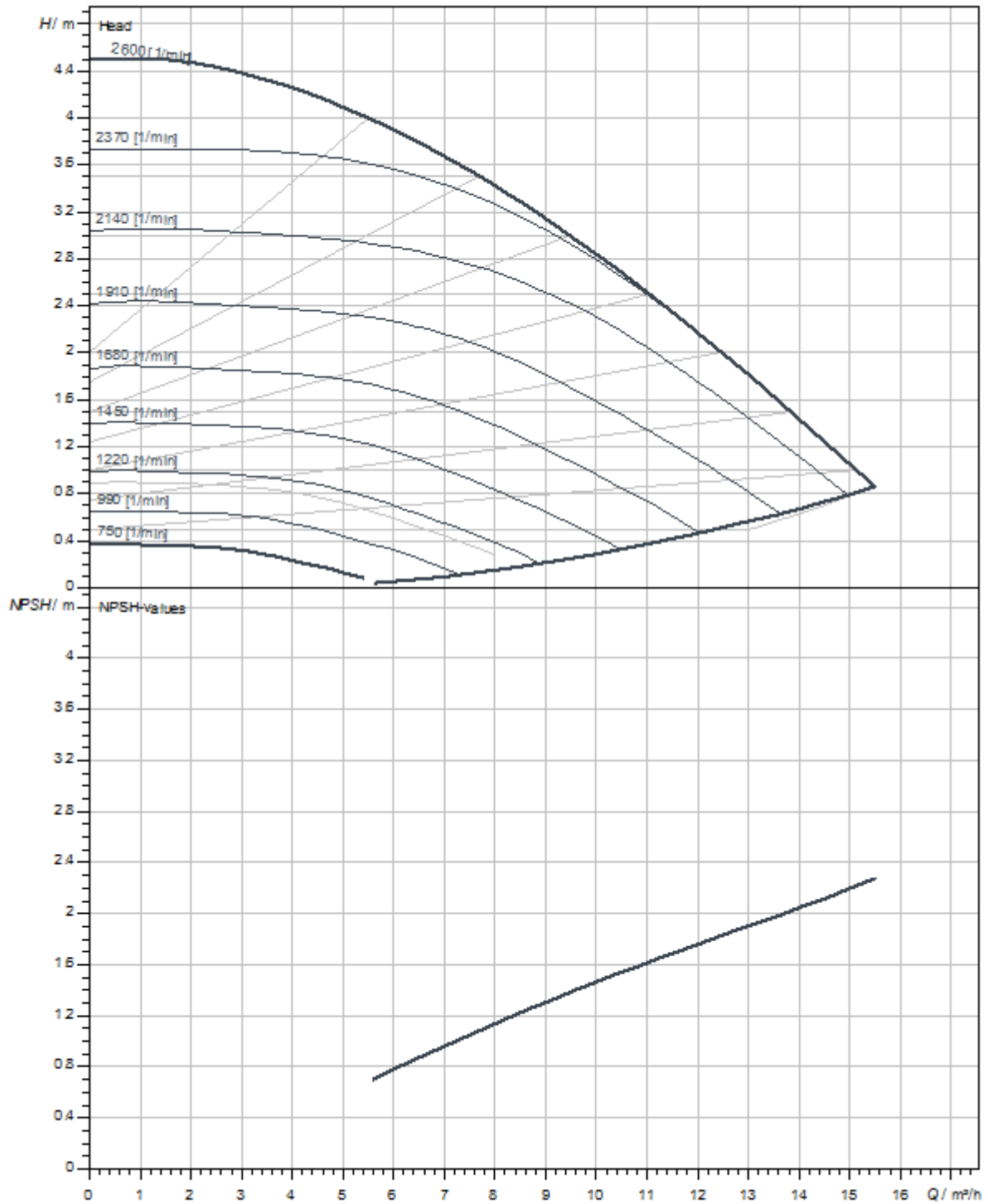
Installation dimensions

| | |
|---|--------|
| Pipe connection on the suction side DNs | DN 40 |
| Pipe connection on the discharge side DNd | DN 40 |
| Port-to-port length LO | 220 mm |

Materials

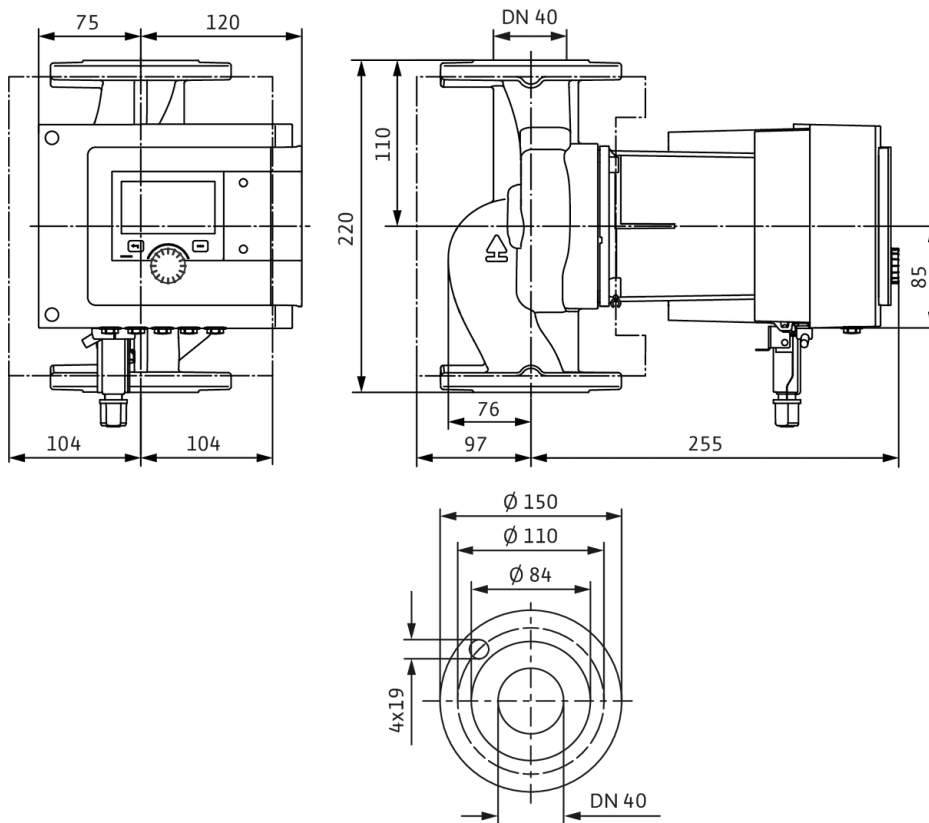
| | |
|--------------|-----------------|
| Pump housing | Cast iron |
| Impeller | PPS-GF40 |
| Shaft | Stainless steel |
| Bearing | Carbon-graphite |

Pump curves



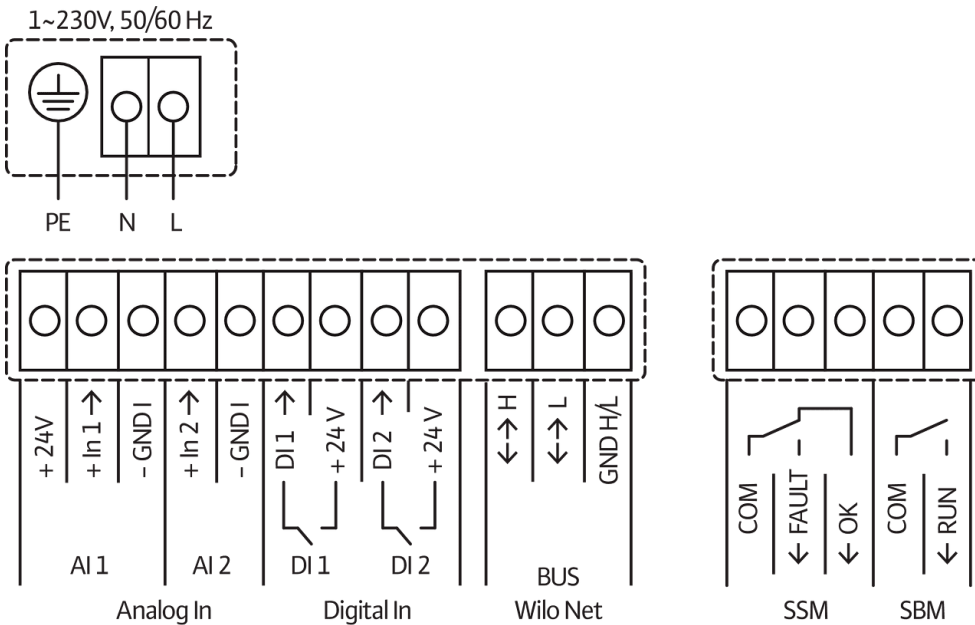
Dimensions and dimensions drawings

Stratos MAXO 40/0,5-4 PN6/10-R7



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 ~)

Ordering information

Product data

| | |
|----------------------------|---------------------------------|
| Brand | Wilo |
| Product description | Stratos MAXO 40/0,5-4 PN6/10-R7 |
| Article number | 2217949 |
| EAN number | 4062679195087 |
| Colour | Green/black/silver |
| Minimum order quantity | 1 |
| Date of sales availability | 2021-09-01 |

Dimension, weight

| | |
|--------------------------------|---------|
| Length with packaging | 600 mm |
| Length <i>L</i> | 355 mm |
| Height with packaging | 394 mm |
| Height <i>H</i> | 220 mm |
| Width with packaging | 400 mm |
| Width <i>W</i> | 227 mm |
| Gross weight, approx. <i>m</i> | 14.8 kg |
| Net weight, approx. <i>m</i> | 11 kg |

Packaging

| | |
|--------------------|---------------------|
| Number per layer | 4 |
| Packaging property | Transport packaging |
| Packaging type | Cardboard box |
| Pieces per pallet | 8 |

Tender text

Premium smart-pump Wilo-Stratos MAXO-R7

High efficiency in-line glandless pump with EC motor and electronic power adjustment. Can be used for cold 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 power adjustment 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) (automatic, possible with Stratos MAXO temperature sensor)
- > Adjustable volume flow limiter using the Q-Limit function (**Q_{min.}** and **Q_{max.}**)
- > Operating modes of twin-head pumps: 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 **setback operation** (possible with Stratos MAXO temperature sensor)
- > Automatic **deblocking function** and integrated **full motor protection**
- > **Dry-running detection**

Display:

- > Control mode
- > Setpoint
- > Volume flow
- > Temperature (possible with Stratos MAXO temperature sensor)
- > 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**; twin-head pump operation and Wilo-Smart Gateway
- > 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 twin-head 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 connection M16 x 1.5
- > 2x gaskets
- > Thermal insulation shell
- > Concise Installation and operating instructions

Optional accessories:

- > KlimaForm 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
- > Smart Gateway
- > Stratos MAXO temperature sensor (can be retrofitted for recording and displaying the fluid temperature and using the temperature-controlled control modes T-const., dT-const.)

Operating data

| | |
|-----------------------------------|--------|
| Fluid media | Water |
| Fluid temperature T | -10 °C |
| Ambient temperature T | -10 °C |
| Maximum operating pressure PN | 10 bar |
| 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 |

Motor data

| | |
|-------------------------------|--|
| Energy efficiency index (EEI) | 0.19 |
| Interference emission | EN 61800-3;2004+A1;2012 /residential area (C1) |
| Interference immunity | EN 61800-3;2004+A1;2012 /industrial environment (C2) |
| Mains connection | 1~230 V, 50/60 Hz |
| Power consumption $P_{1\max}$ | 130 W |
| Min. speed n_{\min} | 750 1/min |
| Max. speed n_{\max} | 2600 1/min |
| Protection class motor | IPX4D |
| Threaded cable connection | 5 x M16x1.5 |

Materials

| | |
|--------------|-----------------|
| Pump housing | Cast iron |
| Impeller | PPS-GF40 |
| Shaft | Stainless steel |
| Bearing | Carbon-graphite |

Installation dimensions

| | |
|--|--------|
| Pipe connection on the suction side DN_s | DN 40 |
| Pipe connection on the discharge side DN_d | DN 40 |
| Port-to-port length L_0 | 220 mm |

Ordering information

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|-------------------------|---------------------------------|
| Brand | Wilo |
| Product description | Stratos MAXO 40/0,5-4 PN6/10-R7 |
| Net weight, approx. m | 11 kg |
| Article number | 2217949 |