Data sheet

Operating data

Fluid media	Water

Hydraulic data

Maximum operating pressure *PN*	10 bar
Head max H_{max}	4.0 m
Flow max Q_{max}	15.5 m³/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

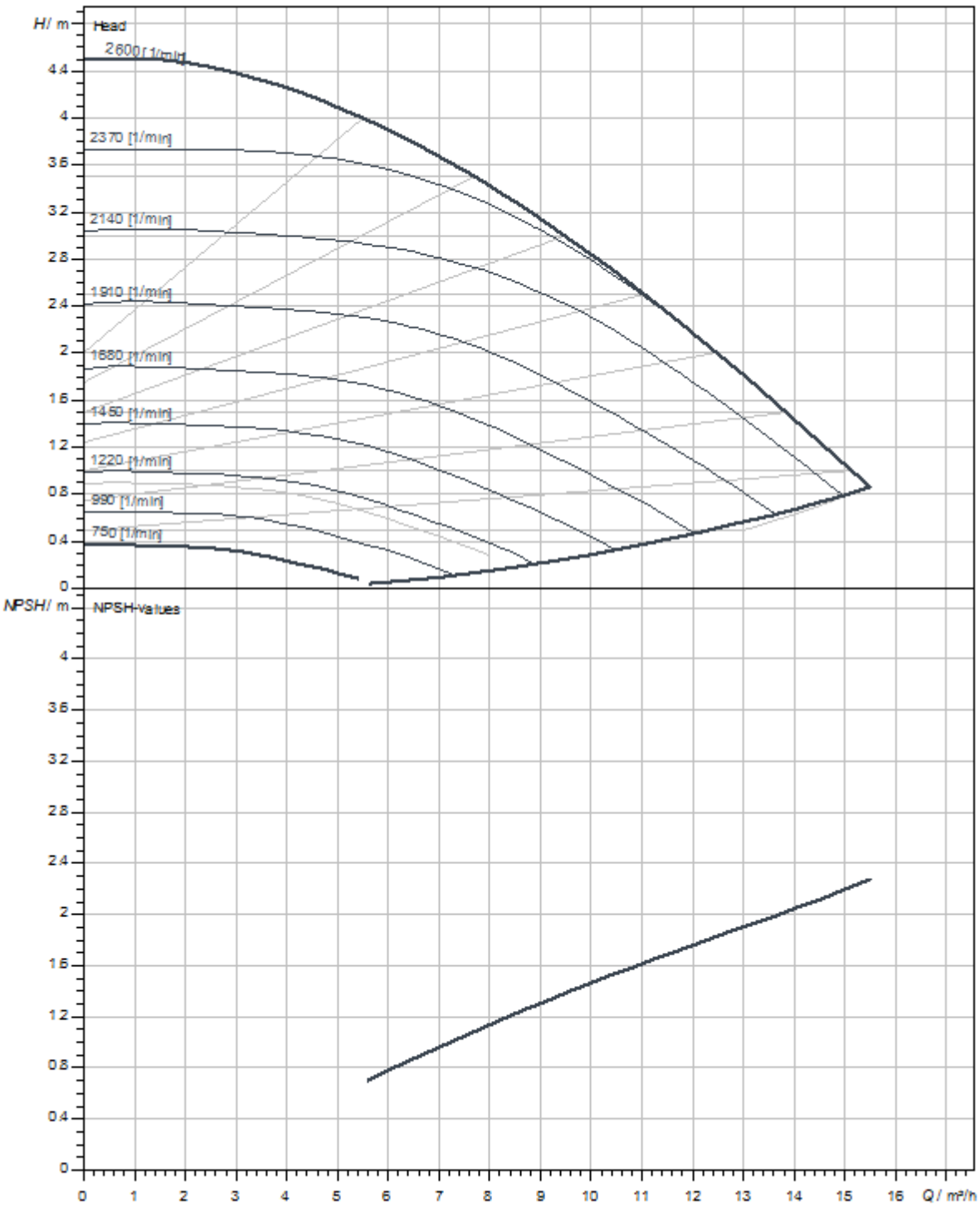
Installation dimensions

Pipe connection on the suction side *DNs*	DN 40
Pipe connection on the discharge side *DNd*	DN 40
Port-to-port length *L0*	220 mm

Materials

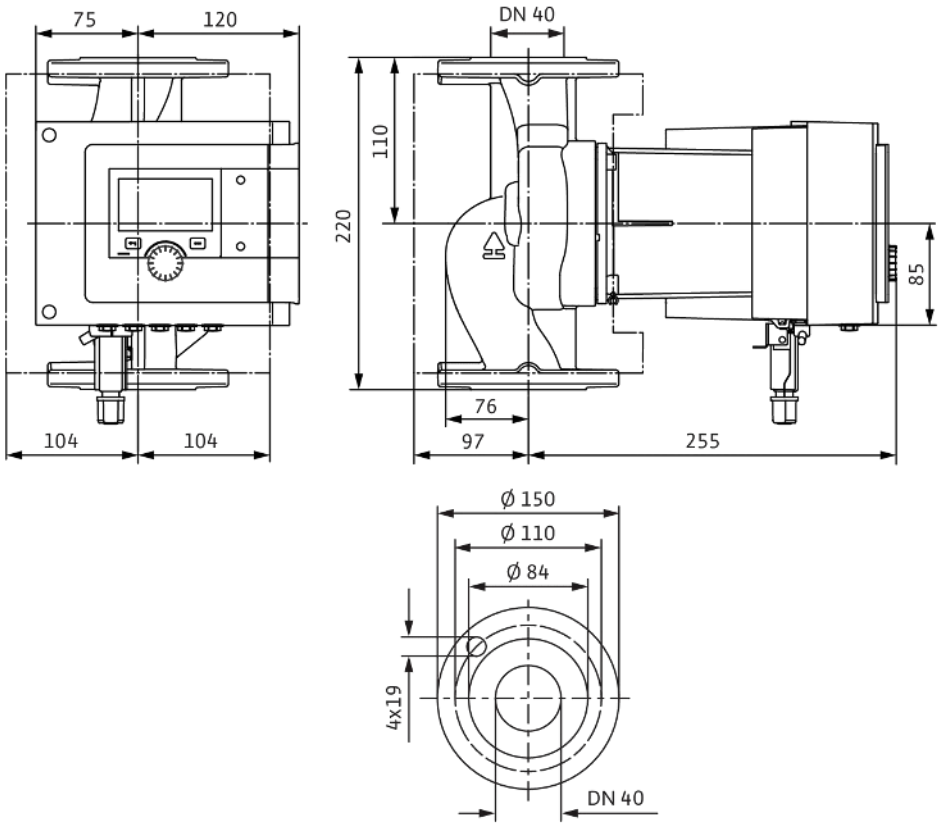
Pump housing	Cast iron
Impeller	PPS-GF40
Shaft	Stainless steel
Bearing	Carbon-graphite

Pump curves


H/ m
Head
2600 [1/min]
2370 [1/min]
2140 [1/min]
1910 [1/min]
1680 [1/min]
1450 [1/min]
1220 [1/min]
990 [1/min]
750 [1/min]
NPSH/ m
NPSH-values
Q/ m³/h

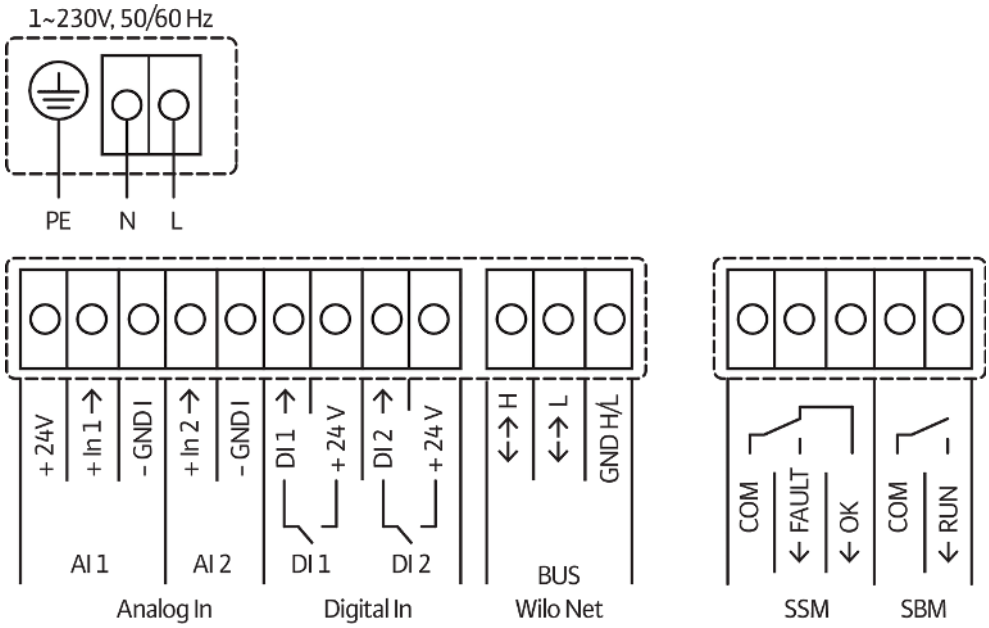
Dimensions and dimensions drawings

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

Packaging

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

Dimension, weight

Length with packaging	600 mm
Length *L*	355 mm
Height with packaging	394 mm
Height *H*	220 mm
Width with packaging	400 mm
Width *W*	227 mm
Gross weight, approx. *m*	14.8 kg
Net weight, approx. *m*	11 kg

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:

- 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
- 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 *DNs*	DN 40
Pipe connection on the discharge side *DNd*	DN 40
Port-to-port length *L0*	220 mm

Ordering information

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