

# **Data sheet**

# **Operating data**

| Fluid media                             | Water     |
|---|-----------|
|   |           |
| Hydraulic data                          |           |
| Energy efficiency index (EEI)           | 0.19      |
| Maximum operating pressure <i>PN</i>    | 10 bar    |
| Head max H max                          | 10.0 m    |
| Flow max hr Q max hr                    | 12.0 m³/h |
| Flow max add Q max add                  | 17.8 m³/h |
| Minimum suction head at 50 °C <i>m</i>  | 3 m       |
| Minimum suction head at 95 °C <i>m</i>  | 10 m      |
| Minimum suction head at 110 °C          | 16 m      |
| Min. fluid temperature $T_{\min}$       | -10 °C    |
| Max. fluid temperature $T_{\text{max}}$ | 90 °C     |
| Min. ambient temperature $T_{\min}$     | -10 °C    |
| Max. ambient temperature $T_{\rm max}$  | 40 °C     |

## **Motor data**

| Mains connection                     | 1~230 V ±10%, 50/60 Hz                                      |
|--------------------------------------|---|
| Min current I <sub>min</sub>         | 0.11 A  |
| Max current $I_{\text{max}}$         | 1.2 A   |
| Min. speed $n_{\min}$                | 750 1/min   |
| Max. speed $n_{\text{max}}$          | 3950 1/min  |
| Power consumption P <sub>1 min</sub> | 7 W   |
| Power consumption P <sub>1 max</sub> | 275 W   |
| Interference emission                | EN 61800-<br>3;2004+A1;2012 /residential<br>area (C1)       |
| Interference immunity                | EN 61800-<br>3;2004+A1;2012 /industrial<br>environment (C2) |
| Insulation class                     | F   |
| Protection class                     | IPX4D   |

## Materials

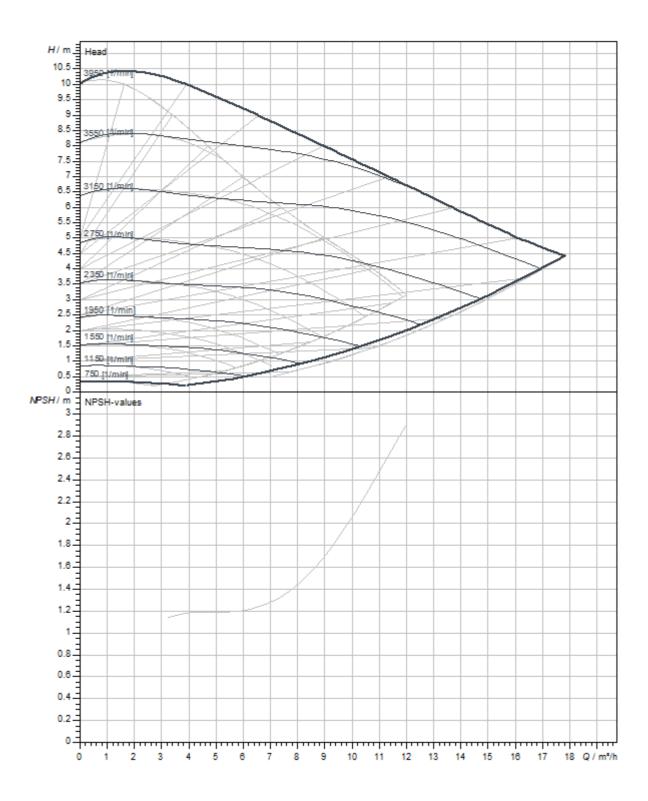
| Pump housing | Cast iron                        |
|--------------|----------------------------------|
| Impeller     | PPS-GF40                         |
| Shaft        | 1.4122, DLC-coated               |
| Bearing      | Carbon, antimony-<br>impregnated |

## **Installation dimensions**

| Pipe connection on the discharge side <i>DNd</i> | G 2    |
|--|--------|
| Pipe connection on the suction side <i>DNs</i>   | G 2    |
| Port-to-port length <i>L0</i>                    | 180 mm |



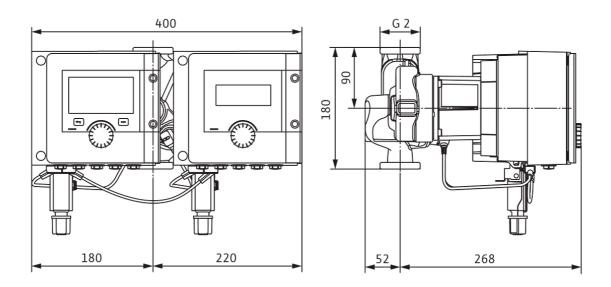
## **Pump curves**





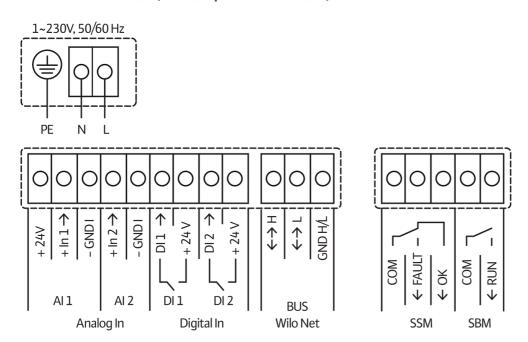
## **Dimensions and dimensions drawings**

## Stratos MAXO-D 30/0,5-10 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 ~)



# **Ordering information**

## **Product data**

| Brand                      | Wilo                                |
|----------------------------|-------------------------------------|
| Product description        | Stratos MAXO-D 30/0,5-10<br>PN10-R7 |
| Article number             | 2217904                             |
| EAN number                 | 4062679192116                       |
| Colour                     | Green/black/silver                  |
| Minimum order quantity     | 1                                   |
| Date of sales availability | 2021-07-09                          |

## **Packaging**

| Number per layer   | 2                   |
|--------------------|---------------------|
| Packaging property | Transport packaging |
| Packaging type     | Cardboard box       |
| Pieces per pallet  | 4                   |

# Dimension, weight

| Length with packaging          | 800 mm  |
|--------------------------------|---------|
| Length <i>L</i>                | 180 mm  |
| Height with packaging          | 394 mm  |
| Height <i>H</i>                | 350 mm  |
| Width with packaging           | 600 mm  |
| Width W                        | 400 mm  |
| Gross weight, approx. <i>m</i> | 21.2 kg |
| Net weight, approx. <i>m</i>   | 17 kg   |



#### **Tender text**

Premium smart-pump Wilo-Stratos MAXO-D-R7

High-efficiency in-line glandless twin-head 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  $\leq$  0.17 and  $\leq$  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<sub>min.</sub> and Q<sub>max.</sub>)
- > Operating modes of twin-head pumps: Efficiencyoptimised 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

### Scope of delivery

- > Pump
- > 2x optimised Wilo-Connector, suitable for all sizes
- > 4x threaded cable gland, M16 x 1.5
- > 2x gaskets
- > Concise Installation and operating instructions



### **Optional accessories:**

- > 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 <i>T</i>             | -10 °C |
| Ambient temperature <i>T</i>           | -10 °C |
| Maximum operating pressure <i>PN</i>   | 10 bar |
| Minimum suction head at 50 °C <i>m</i> | 3 m    |
| Minimum suction head at 95 °C <i>m</i> | 10 m   |
| Minimum suction head at 110 °C         | 16 m   |

### **Motor data**

| Energy efficiency index (EEI)        | 0.19  |
|--------------------------------------|---|
| Interference emission                | EN 61800-<br>3;2004+A1;2012 /residential<br>area (C1)       |
| Interference immunity                | EN 61800-<br>3;2004+A1;2012 /industrial<br>environment (C2) |
| Mains connection                     | 1~230 V, 50/60 Hz   |
| Power consumption P <sub>1 max</sub> | 275 W   |
| Min. speed $n_{\min}$                | 750 1/min   |
| Max. speed $n_{\text{max}}$          | 3950 1/min  |
| Protection class motor               | IPX4D   |
| Threaded cable connection            | 5 x M16x1.5   |

### **Materials**

| Pump housing | Cast iron                        |
|--------------|----------------------------------|
| Impeller     | PPS-GF40                         |
| Shaft        | 1.4122, DLC-coated               |
| Bearing      | Carbon, antimony-<br>impregnated |

### **Installation dimensions**

| Pipe connection on the suction side <i>DNs</i>   | G 2    |
|--|--------|
| 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-D 30/0,5-10<br>PN10-R7 |
| Net weight, approx. <i>m</i> | 17 kg                               |
| Article number               | 2217904                             |