

# **Data sheet**

# **Operating data**

Fluid media	Water
Hydraulic data	
Maximum operating pressure <i>PN</i>	10 bar
Head max H max	15.0 m
Flow max Q max	20.5 m³/h
Minimum suction head at 50 °C $m$	5 m
Minimum suction head at 95 °C <i>m</i>	12 m
Minimum suction head at 110 °C	18 m
Min. fluid temperature $T_{\min}$	-10 °C
Max. fluid temperature $T_{\rm max}$	90 °C
Min. ambient temperature $T_{\min}$	-10 °C
Max. ambient temperature $T_{\rm max}$	40 °C

### **Motor data**

Energy efficiency index (EEI)	0.17
Mains connection	1~230 V ±10%, 50/60 Hz
Min current $I_{\min}$	0.2 A
Max current $I_{max}$	2.23 A
Rated power P <sub>2</sub>	433 W
Min. speed $n_{\min}$	650 1/min
Max. speed $n_{\text{max}}$	4950 1/min
Power consumption P <sub>1 min</sub>	10 W
Power consumption P <sub>1 max</sub>	510 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**

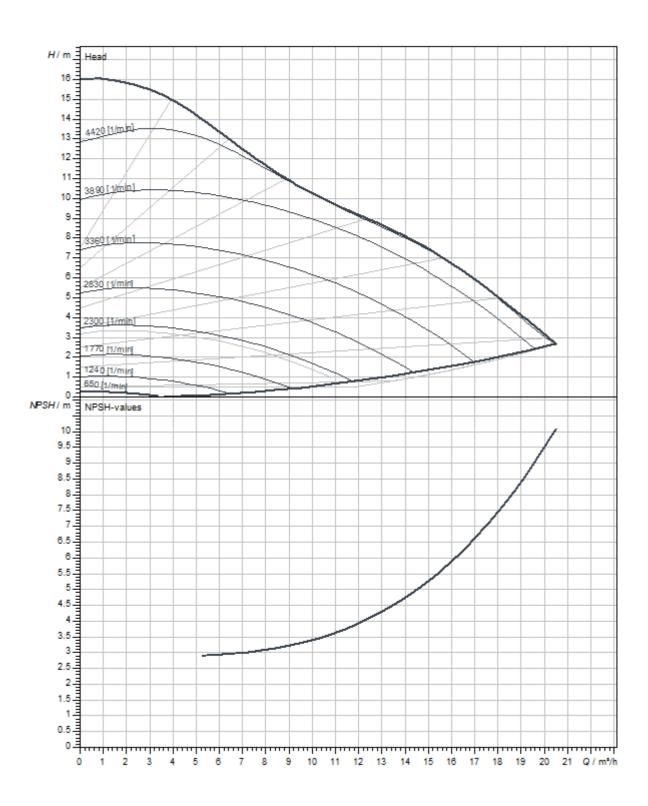
Pipe connection on the suction side <i>DNs</i>	DN 32
Pipe connection on the discharge side <i>DNd</i>	DN 32
Port-to-port length <i>L0</i>	220 mm

### Materials

Pump housing	Cast iron
Impeller	PPS-GF40
Shaft	1.4028, DLC-coated
Bearing	Carbon, antimony- impregnated



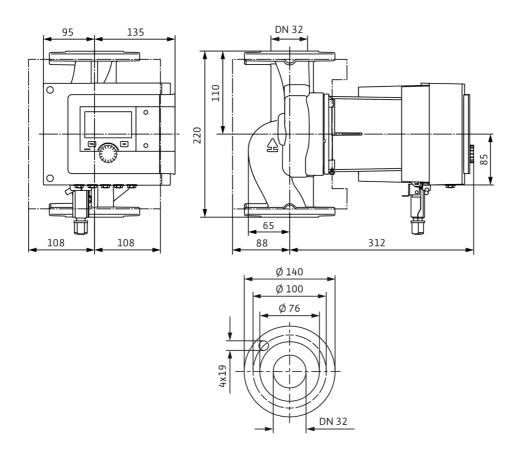
### **Pump curves**





# **Dimensions and dimensions drawings**

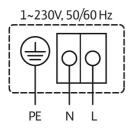
# Stratos MAXO 32/0,5-16 PN6/10-R7

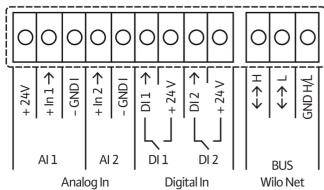


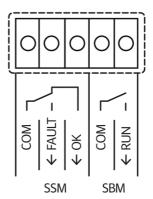


### Wiring diagram

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 32/0,5-16 PN6/10-R7
Article number	2217948
EAN number	4062679195070
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 <i>L</i>	400 mm
Height with packaging	394 mm
Height <i>H</i>	220 mm
Width with packaging	400 mm
Width W	243 mm
Gross weight, approx. <i>m</i>	18.8 kg
Net weight, approx. <i>m</i>	15 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  $\leq 0.17$  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
- > 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 <i>T</i>	-10 °C
Maximum operating pressure <i>PN</i>	10 bar
Minimum suction head at 50 °C <i>m</i>	5 m
Minimum suction head at 95 °C <i>m</i>	12 m
Minimum suction head at 110 °C	18 m

### **Motor data**

Energy efficiency index (EEI)	0.17
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 <sub>1 max</sub>	510 W
Min. speed $n_{\min}$	650 1/min
Max. speed $n_{\text{max}}$	4950 1/min
Protection class motor	IPX4D
Threaded cable connection	5 x M16x1.5

#### **Materials**

Pump housing	Cast iron
Impeller	PPS-GF40
Shaft	1.4028, DLC-coated
Bearing	Carbon, antimony- impregnated

#### **Installation dimensions**

Pipe connection on the suction side <i>DNs</i>	DN 32
Pipe connection on the discharge side <i>DNd</i>	DN 32
Port-to-port length <i>L0</i>	220 mm

### **Ordering information**

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