

### Hydraulic data

|  |                     |
|--|---------------------|
| Maximum operating pressure<br><i>P/N</i>                               | 10 bar              |
| Min. fluid temperature for<br>HVAC applications <i>T<sub>min</sub></i> | 0 °C                |
| Max. fluid temperature for<br>HVAC <i>T</i>                            | 80 °C               |
| Min. ambient temperature <i>T<sub>min</sub></i>                        | 0 °C                |
| Max. ambient temperature<br><i>T<sub>max</sub></i>                     | 40 °C               |
| Max. permitted total water<br>hardness                                 | 3.57 mmol/l (20°dH) |

### Motor data

|  |  |
|--|--|
| Energy efficiency index (EEI)              | 0.19   |
| Mains connection                           | 1~230 V, 50/60 Hz                                    |
| Rated power <i>P<sub>2</sub></i>           | 0.26 kW  |
| Rated current <i>I<sub>N</sub></i>         | 1.28 A   |
| Min. speed <i>n<sub>min</sub></i>          | 750 1/min  |
| Max. speed <i>n<sub>max</sub></i>          | 4350 1/min   |
| Power consumption <i>P<sub>1 min</sub></i> | 7.0 W  |
| Power consumption <i>P<sub>1 max</sub></i> | 295.0 W  |
| Interference emission                      | EN 61800-3;2004+A1;2012 /residential area (C1)       |
| Interference immunity                      | EN 61800-3;2004+A1;2012 /industrial environment (C2) |
| Speed control                              | Frequency converter                                  |
| Insulation class                           | F  |
| Protection class motor                     | IPX4D  |
| Motor protection                           | Internal protection<br>overheating and overcurrent   |

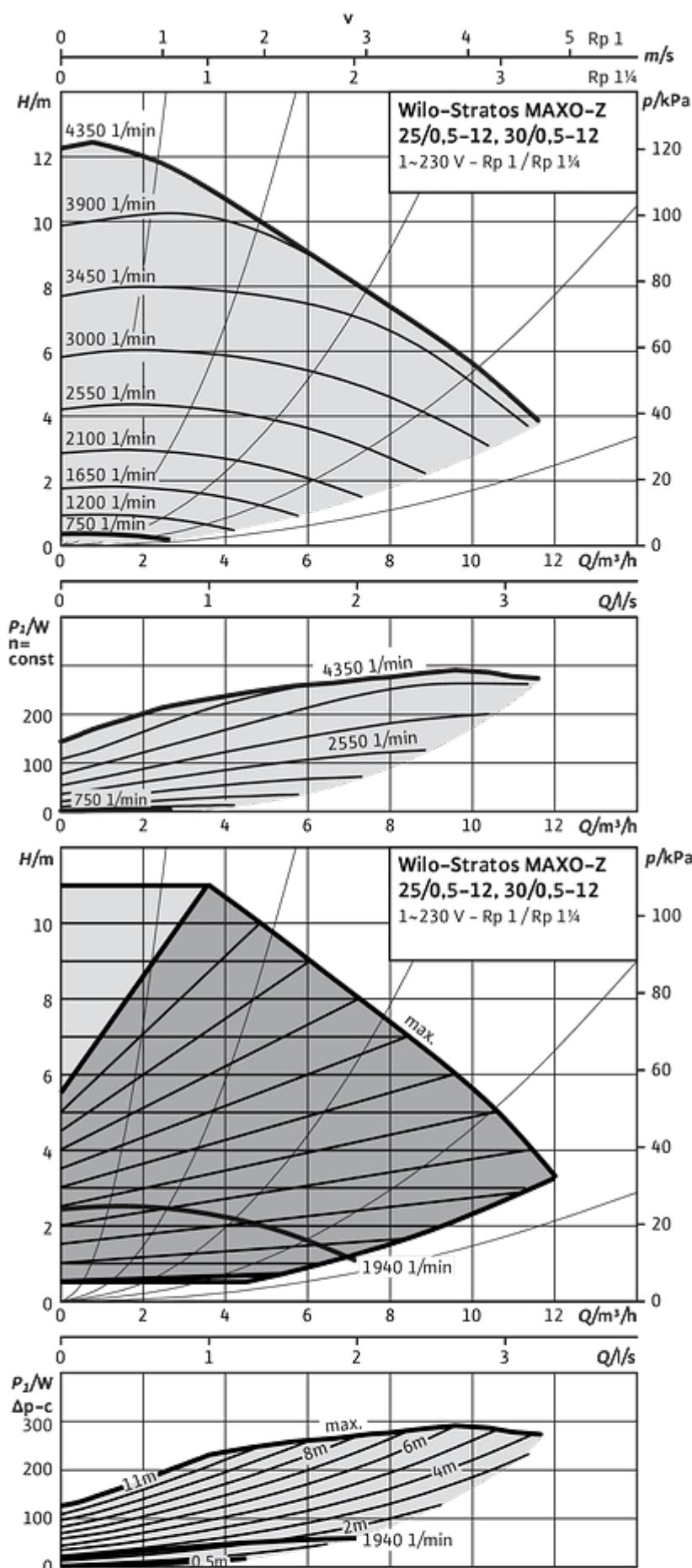
### Materials

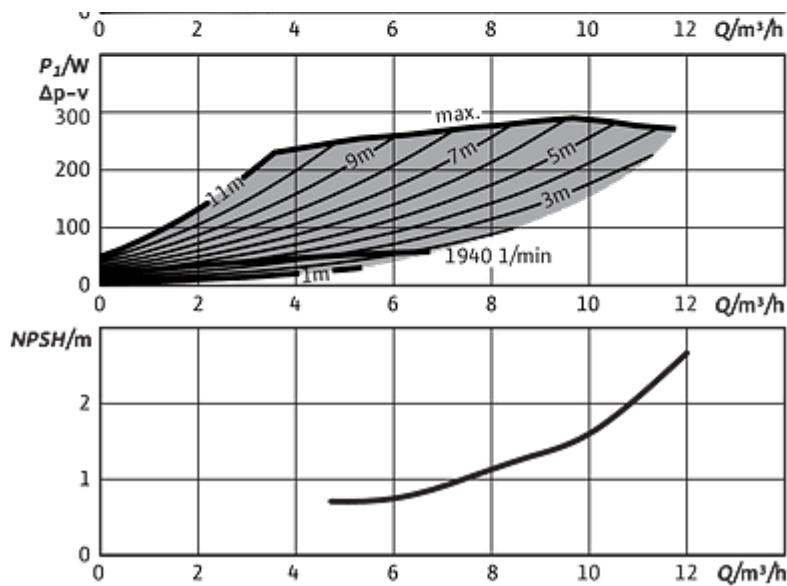
|              |                    |
|--------------|--------------------|
| Pump housing | Stainless steel    |
| Impeller     | PPS-GF40           |
| Shaft        | 1.4122, DLC-coated |
| Bearing      | Carbon-graphite    |

### Installation dimensions

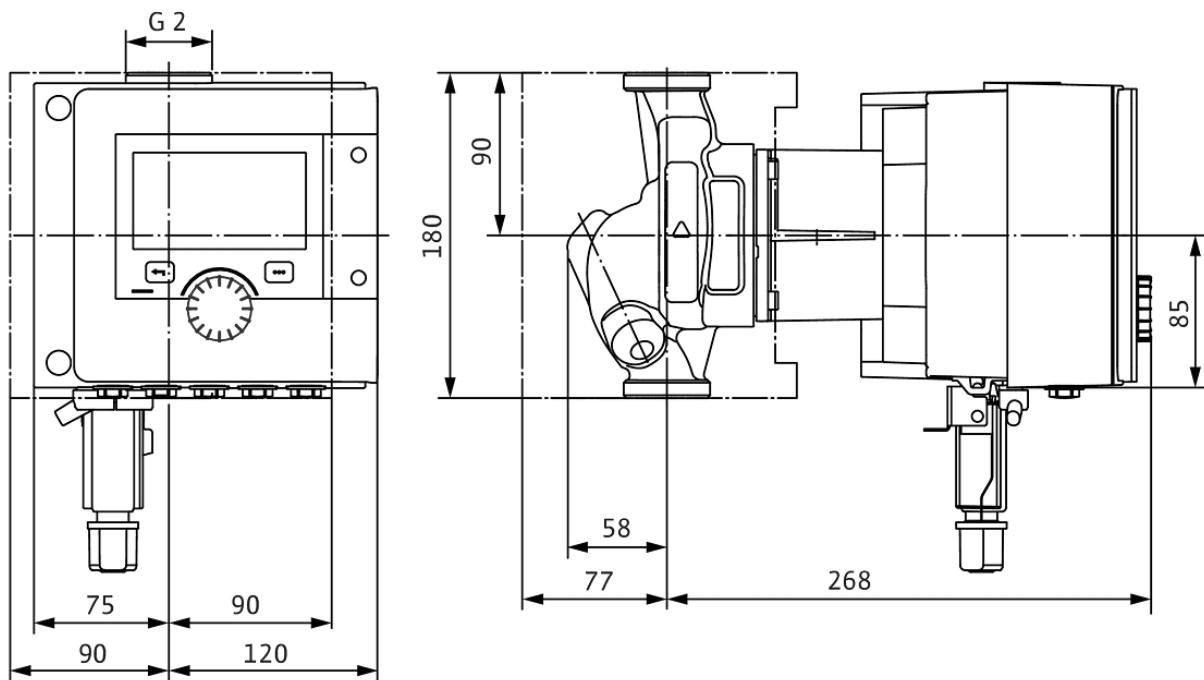
|  |        |
|--|--------|
| Pipe connection on the suction<br>side <i>DNs</i>  | G 2    |
| Pipe connection on the<br>pressure side <i>DNd</i> | G 2    |
| Port-to-port length <i>L<sub>O</sub></i>           | 180 mm |

Wilo-Stratos MAXO-Z 25/0,5-12, 30/0,5-12

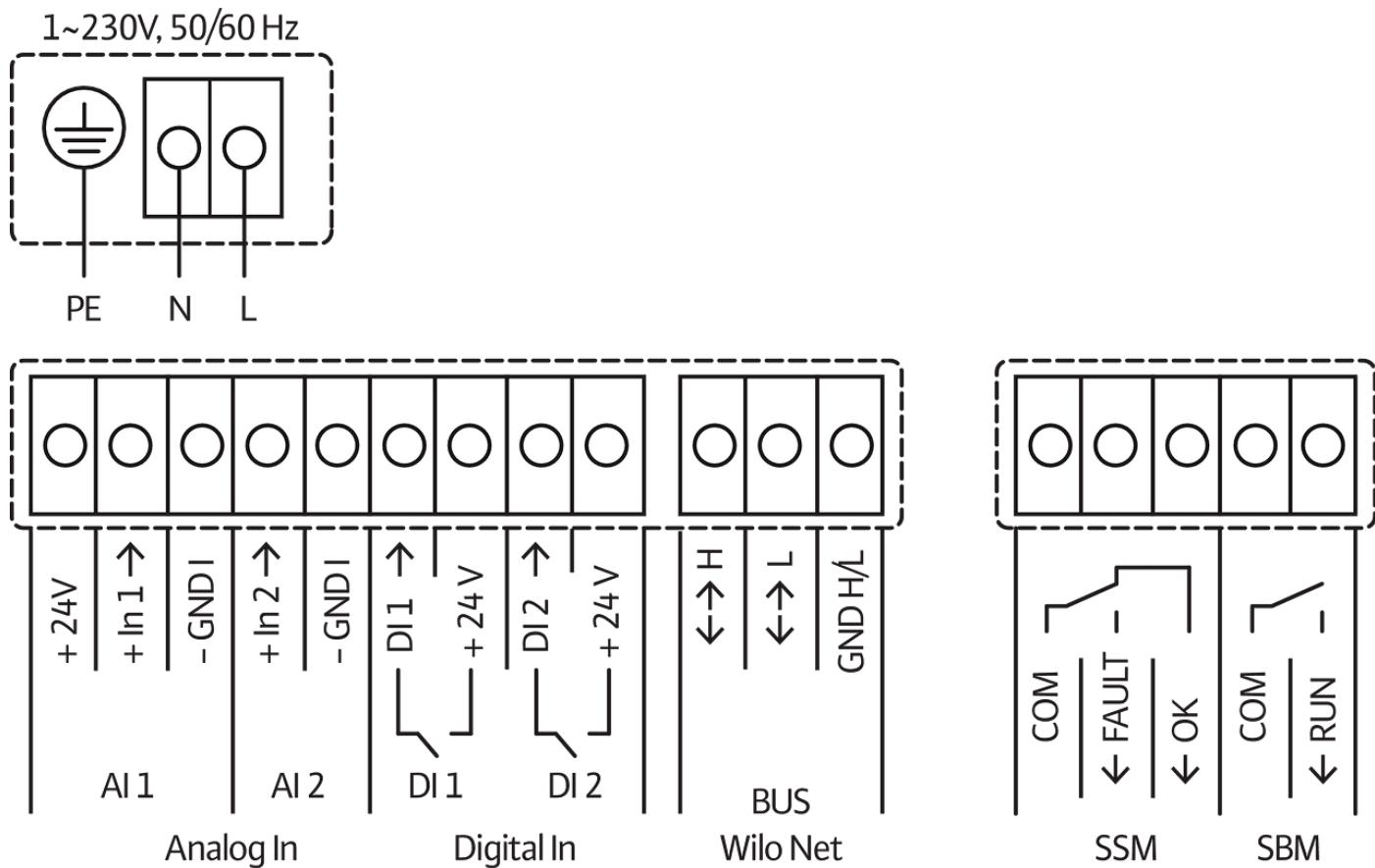




**Stratos MAXO-Z 30/0,5-12 PN 10**



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 ~)

**Product data**

|                                   |                          |
|-----------------------------------|--------------------------|
| <b>Brand</b>                      | Wilo                     |
| <b>Product description</b>        | Stratos MAXO-Z 30/0,5-12 |
| <b>Article number</b>             | 2164671                  |
| <b>EAN number</b>                 | 4048482700137            |
| <b>Colour</b>                     | Green/black/silver       |
| <b>Minimum order quantity</b>     | 1                        |
| <b>Date of sales availability</b> | 2018-11-01               |

**Packaging**

|                           |                     |
|---------------------------|---------------------|
| <b>Number per layer</b>   | 8                   |
| <b>Packaging property</b> | Transport packaging |
| <b>Packaging type</b>     | Cardboard box       |
| <b>Pieces per pallet</b>  | 32                  |

**Dimension, weight**

|                                       |        |
|---------------------------------------|--------|
| <b>Length with packaging</b>          | 400 mm |
| <b>Length <i>L</i></b>                | 350 mm |
| <b>Height with packaging</b>          | 263 mm |
| <b>Height <i>H</i></b>                | 180 mm |
| <b>Width with packaging</b>           | 300 mm |
| <b>Width <i>W</i></b>                 | 210 mm |
| <b>Gross weight, approx. <i>m</i></b> | 8.9 kg |
| <b>Net weight, approx. <i>m</i></b>   | 8 kg   |

Premium smart-pump Wilo-Stratos MAXO-Z

High-efficiency inline glandless pump with EC motor and electronic power adjustment. Can be used for drinking water, 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 performance adaptation to system requirements without setpoint specification  
**Wilo Dynamic Adapt plus.** Up to 20% energy savings compared to dp-v control mode.
- Constant temperature (**T-const.**, factory setting)
- 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<sub>min.</sub>** and **Q<sub>max.</sub>**)
- 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**
- Automatic **deblocking function** and integrated **full motor protection**
- **Dry-running detection**
- Automatic detection of thermal disinfection (for domestic hot water circulation) in conjunction with a separate temperature sensor

#### Operating data

|  |                     |
|--|---------------------|
| Fluid media                            | Water               |
| Fluid temperature <b>T</b>             | 0 °C                |
| Ambient temperature <b>T</b>           | 0 °C                |
| Maximum operating pressure <b>PN</b>   | 10 bar              |
| Minimum suction head at 50 °C <b>m</b> | 3.0 m               |
| Minimum suction head at 95 °C <b>m</b> | 10.0 m              |
| Minimum suction head at 110 °C         | 16.0 m              |
| Max. permitted total water hardness    | 3.57 mmol/l (20°dH) |

#### 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 <b>P<sub>1 max</sub></b> | 295.0 W  |
| Min. speed <b>n<sub>min</sub></b>          | 750 1/min  |
| Max. speed <b>n<sub>max</sub></b>          | 4350 1/min   |
| Protection class motor                     | IPX4D  |
| Threaded cable connection                  | 5 x M16x1.5  |

#### Materials

|              |                    |
|--------------|--------------------|
| Pump housing | Stainless steel    |
| Impeller     | PPS-GF40           |
| Shaft        | 1.4122, DLC-coated |
| Bearing      | Carbon-graphite    |

#### Installation dimensions

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

**Display:**

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

**Information for order placements**

|                              |                          |
|------------------------------|--------------------------|
| <b>Brand</b>                 | Wilo                     |
| <b>Product description</b>   | Stratos MAXO-Z 30/0,5-12 |
| <b>Net weight, approx. m</b> | 8 kg                     |
| <b>Article number</b>        | 2164671                  |

**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 operational 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, CAN)
- Wilo Net as a Wilo system bus for communication between Wilo products, e.g. **Multi-Flow Adaptation**; double 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)
- 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
- 2x threaded cable connection 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, CAN
- PT 1000 (B) pipe contact sensor (for domestic hot water)
- PT 1000 (AA) sensor for installation in immersion well
- Differential pressure sensor
- Smart Gateway