Data sheet: Wilo-Stratos-D 40/1-12

Pump curves Δp-c (constant)

Pump curves Δp-v (variable)

Approved fluids (other fluids on request)

- Heating water (in accordance with VDI 2035)
- Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)

Permitted field of application

- Temperature range at max. ambient temperature +40 °C: -10...+110 °C
- Maximum permissible operating pressure: \( P_{\text{max}} \) 6/10 bar

Pipe connections

- Flange: Combination flange PN6/10 (PN 16 flange according to EN 1092-2)
- Nominal flange diameter: DN 40
- Overall length: \( l_0 \) 250 mm

Motor/electronics

- Energy efficiency index (EEI): ≤ 0.27
- Electromagnetic compatibility: EN 61800-3
- Emitted interference: EN 61000-6-3
- Interference resistance: EN 61000-6-2
- Speed control: Frequency converter
- Protection class: IP X4D
- Insulation class: F
- Mains connection: 1~230 V, 50/60 Hz
- Nominal motor power: \( P_2 \) 450.00 W
- Speed: \( n \) 1400 – 4600 rpm
- Power consumption: \( P_1 \) 25 – 550 W
- Current consumption: \( I \) 0.20 – 2.40 A
- Motor protection: integrated
- Threaded cable connection: \( PG \) 1x7/1x9/1x13.5

Materials

- Pump housing: Grey cast iron (EN-GJL-250)
- Impeller: Plastic (PPS – 40% GF)
- Pump shaft: Stainless steel (X30Cr13/X46Cr13)
- Bearing: Carbon, metal impregnated

Minimum suction head at suction port for avoiding cavitation at water pumping temperature
Data sheet: Wilo–Stratos-D 40/1-12

Minimum suction head at 50 / 95 / 110 °C
5 / 12 / 18 m

Information for order placements

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<th>Wilo</th>
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<tr>
<td>Art no.</td>
<td>2090464</td>
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<td>Weight approx.</td>
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Dimension drawing

Dimension drawing, flange

Terminal diagram

Collective fault signal
(NC contact according to VDI 3814, load capacity 1 A, 250 V ~)

SSM:
For function, see Wilo catalogue, chapter "Pump management Wilo–Control, consulting guide"
Dimensions and dimension drawings: Wilo-Stratos-D 40/1-12

Dimension drawing

Subject to change without prior notice.
Pump curves: Wilo-Stratos-D 40/1-12

Pump curves $\Delta p-c$ (constant)

$\Delta p-c$

Wilo-Stratos-D 40/1-12

1~230 V - DN 40

$\Delta p-c$

max.

min.
Pump curves: Wilo-Stratos-D 40/1-12

Pump curves $\Delta p$-$v$ (variable)

- $H/m$
- $p/kPa$
- $Q/m^3/h$
- $Q/l/s$
- $P_1/W$

Wilo-Stratos-D 40/1-12
1-230 V – DN 40

Subject to change without prior notice.

www.wilo.co.uk  50 Hz  2015-02
**Ordering information: Wilo–Stratos-D 40/1–12**

### Information for order placements

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Wilo–Stratos D high-efficiency pump
electronically controlled,
Glandless double pump with minimum operating costs, for pipe installation. Can be used for all HVAC applications (-10 °C to +110 °C). With built-in
electronic power control for constant/variable differential pressure. One-button manual operation level for each pump as standard, for:

- Pump on/off
- Selecting the operating mode: Main/standby operation, parallel operation (efficiency-optimised peak load cut-in / deactivation)(accessories: 2 pcs. Stratos IF–modules necessary)
- Selecting the control mode:
  - Automatic setback operation (self-learning)
  - Setpoint and speed adjustment

Graphical pump display for each pump, with rotatable display horizontal and vertical module mounting, for display of:

- Operating state
- Control mode
- Differential pressure or rotation speed setpoint
- Fault and warning signals
- Double–pump operating mode

Synchronous motor using ECM technology with very high efficiency and high starting torque, automatic deblocking function and built–in full motor protection.
Fault signal light, potential–free collective fault signal, infrared interface for wireless communication with Wilo IR-Monitor/IR–Stick operating and service device.

Pump housing made of cast iron with cataphoretic coating, impeller made of glass–fibre reinforced plastic, stainless steel shaft with metal impregnated carbon plain bearings.

Flange versions:

- Standard version for pumps DN 32 to DN 65: Combination flange PN 6/10 (flange PN 16 acc. to EN 1092–2) for counter flanges PN 6 and PN 16
- Standard version for pumps DN 80: Flange PN 6 (configured for PN 16 acc. to EN 1092–2) for counter flange PN 6
- Special version for pumps DN 32 to DN 80: Flange PN 16 (acc. to EN 1092–2) for counter flange PN 16

Materials
Pump housing: Grey cast iron (EN–GJL–250)
Impeller: Plastic (PPS - 40% GF)
Pump shaft: Stainless steel (X30Cr13/X46Cr13)
Bearing: Carbon, metal impregnated

Approved fluids (other fluids on request)
Max. volume flow: 35 m³/h
Max. delivery head: 12 m

Pipe connections
Nominal flange diameter: DN 40
Flange: Combination flange PN6/10 (PN 16 flange according to EN 1092–2)
Overall length: 250 mm

Motor/electronics
Energy efficiency index (EEI): ≤ 0.27
Electromagnetic compatibility: EN 61800-3
Emitted interference: EN 61000-6-3
Interference resistance: EN 61000-6-2
Speed control: Frequency converter
Protection class: IP X4D
Insulation class: F
Mains connection: 1~230 V, 50/60 Hz
Mains frequency: 50/60 Hz
Nominal motor power: 450 W
Speed: 1400 – 4600 rpm
Power consumption 1~230 V: 25 – 550 W
Current at 1~230V: 0.20 – 2.40 A
Motor protection: integrated
Threaded cable connection: 1x7/1x9/1x13.5

Information for order placements
Art no.: 2090464
EAN number: 4016322994237
Weight approx.: 25 kg
Make: Wilo
Type: Stratos-D 40/1–12
Installation positions: Wilo-Stratos-D 40/1-12

asim:tr(use.title1)}
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