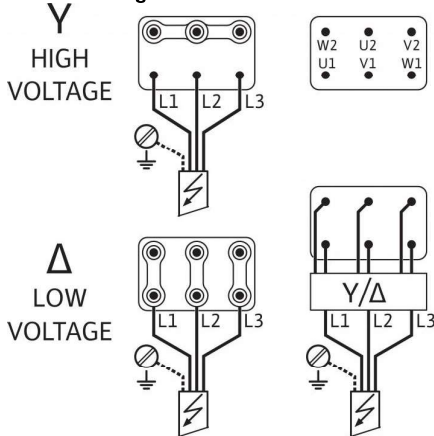


Data sheet: Helix V 1603-1/16/E/S

Terminal diagram



Power

Fluid temperature T	-30...+120 °C
Max. ambient temperature T	40 °C
Maximum operating pressure p_{max}	16 bar

Minimum Efficiency Index (MEI)

Minimum Efficiency Index (MEI)	≥ 0.50
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Motor

Insulation class	F
Protection class	IP 55
Mains connection	3~400 V, 50 Hz
Rated power P_2	2.2 kW
Power consumption P_1	2.5 kW
Nominal current 3~230 V, 50 Hz I_N	8.03 A
Nominal current 3~400 V, 50 Hz I_N	4.5 A
Motor efficiency $\eta_{m 50\%}$	83.1 %
Motor efficiency $\eta_{m 75\%}$	85.6 %
Motor efficiency $\eta_{m 100\%}$	85.9 %

Connections

Nominal diameter, flange (on the pressure side)	G 2
Nominal diameter, flange (on the suction side)	G 2
Rated pressure level (on the pressure side) PN	PN 16
Rated pressure level (on the suction side) PN	PN 16

Materials

Impeller	1.4307 [AISI304L]
Pump housing	1.4301 [AISI304]
Pump shaft	1.4301 [AISI304]
Static seal	EPDM
Mechanical seal	Q1BE3GG

Information for order placements

Make	Wilo
Type	Helix V 1603
Art no.	4201316
Weight approx. m	36.8 kg

• = available, - = not available

Note on inlet pressure

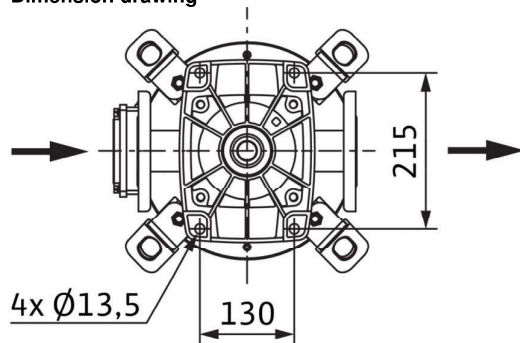
The max. inlet pressure is calculated by subtracting the max. delivery head of the pump at $Q=0$ from the max. operating pressure of the system.

Note on materials

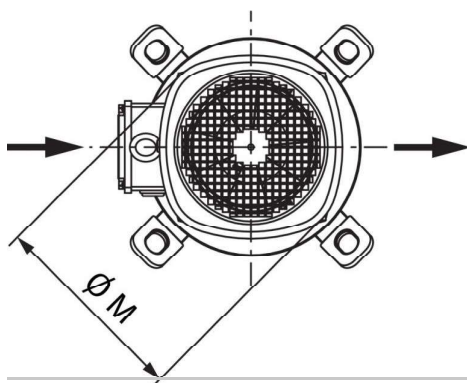
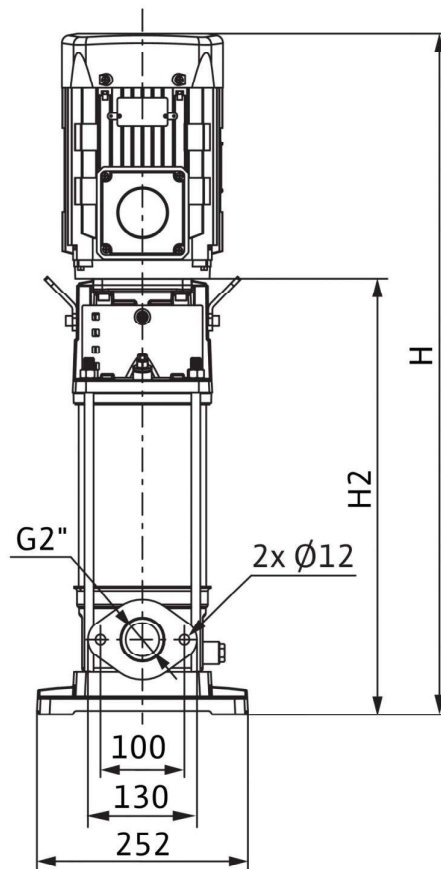
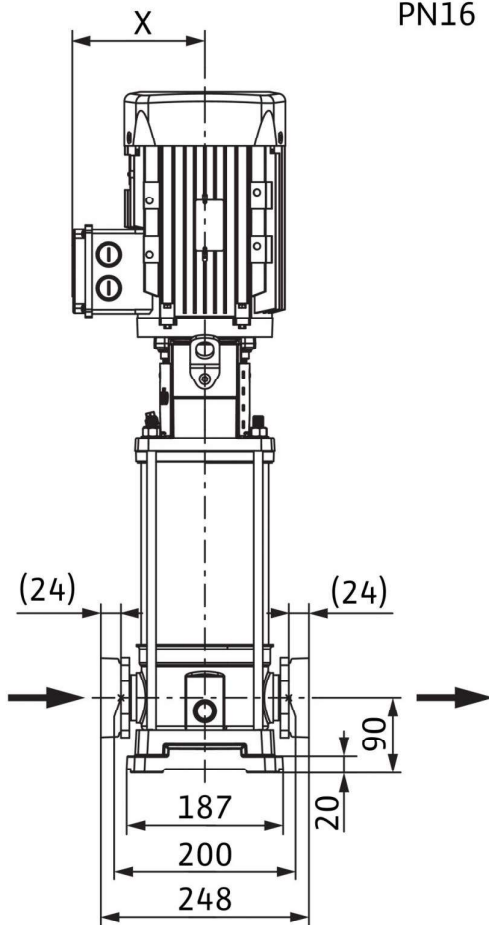
1.4307 corresponds to AISI 304L, 1.4404 corresponds to AISI 316L.

Dimensions and dimensions drawings: Helix V 1603-1/16/E/S

Dimension drawing



PN16



Dimensions and dimensions drawings: Helix V 1603-1/16/E/S

Dimensions <i>H</i>	728 mm
Dimensions <i>H2</i>	461 mm
Dimensions <i>X</i>	132 mm
Dimensions $\varnothing M$	193 mm
Weight approx. <i>m</i>	37 kg

Pump curves: Helix V 1603-1/16/E/S

Ordering information: Helix V 1603-1/16/E/S

Make	Wilo
Type	Helix V 1603
Art no.	4201316
EAN number	4048482591889
Colour	green/silver
Minimum order quantity	1
Minimum order quantity unit	PCE
Weight (net) <i>kg</i>	36.8
Length (net) <i>mm</i>	273
Width (net) <i>mm</i>	252
Height (net) <i>mm</i>	728
Weight (gross) <i>kg</i>	44.8
Length (gross) <i>mm</i>	1200
Width (gross) <i>mm</i>	400
Height (gross) <i>mm</i>	400
Packaging type	Cardboard box
Packaging property	Transport packaging
Pieces per pallet	1
Number per layer	1

Tender text: Helix V 1603-1/16/E/S

Highly efficient high-pressure multistage centrifugal pump in vertical design with in-line connections.

The non self-priming high-pressure multistage centrifugal pump has a compact overall design and is particularly efficient and easy to maintain. The pump shaft and the motor shaft of the IEC standard motor are connected by means of a clamp coupling.

A separate lantern roller bearing ensures optimum admission of axial thrusts. Intermediate bearings in the hydraulics and corrosion-resistant shaft due to stainless steel sleeve ensure a long service life. Special, permanently attached lifting eyes enable easy pump installation.

The pump is suitable for water supply, water distribution and pressure boosting, industrial recirculation systems, process water and closed cooling circuits. It can also be used in fire extinguishing systems, washing systems as well as for irrigation.

Special features/product advantages

- Efficiency-optimised, laser-welded 2D/3D hydraulics, flow and degassing optimised
- Corrosion-resistant impellers, guide vanes and stage housings
- Flow and NPSH-optimised pump housing
- Maintenance-friendly design with particularly robust coupling guard
- Drinking water approval for pumps with parts that come in contact with the fluid made of stainless steel (EPDM version)

Scope of delivery

- Wilo-Helix V high-pressure multistage centrifugal pump
- Installation and operating instructions
- PN16 version with oval flanges: Cast iron counter flanges with the corresponding screws, nuts and gaskets

Design notes

- Motor protection is to be provided on request or onsite.
- In its standard position, the terminal box is aligned with the suction flange, but this can be changed if necessary.
- The Wilo-Helix V is equipped with a standard mechanical seal
- The flexible lantern design, which is available in two alignments, enables direct access to the mechanical seal.
- For pump versions PN16, PN25 and Pmax = 30 bar, round counter flanges in cast iron or stainless steel, screws, nuts and gaskets are available as accessories.
- Bypass sets are available as accessories.
- The Wilo-Helix V in ATEX version upon request

Power

Fluid temperature T : -30...+120 °C
 Max. ambient temperature T : 40 °C
 Maximum operating pressure p_{\max} : 16 bar

Minimum Efficiency Index (MEI)

Minimum Efficiency Index (MEI): ≥ 0.50

Motor

Insulation class: F
 Protection class: IP 55
 Mains connection: 3~400 V, 50 Hz
 Rated power P_2 : 2.2 kW
 Power consumption P_1 : 2.5 kW
 Nominal current 3~230 V, 50 Hz I_N : 8.03 A
 Nominal current 3~400 V, 50 Hz I_N : 4.5 A
 Motor efficiency $\eta_{m 50\%}$: 83.1 %
 Motor efficiency $\eta_{m 75\%}$: 85.6 %
 Motor efficiency $\eta_{m 100\%}$: 85.9 %

Connections

Nominal diameter, flange (on the pressure side): G 2
 Nominal diameter, flange (on the suction side): G 2
 Rated pressure level (on the pressure side) PN : PN 16
 Rated pressure level (on the suction side) PN : PN 16

Materials

Impeller: 1.4307 [AISI304L]
 Pump housing: 1.4301 [AISI304]
 Pump shaft: 1.4301 [AISI304]
 Static seal: EPDM
 Mechanical seal: Q1BE3GG

Tender text: Helix V 1603-1/16/E/S

Information for order placements

Make: Wilo

Type: Helix V 1603

Art no.: 4201316

Weight approx. *m*: 36,8 kg