



# Data sheet

#### **Product data**

Product description

HELIX V3601/1-2/16/V/KS/400-50

# Hydraulic data

Minimum efficiency index (MEI)	≥0.7
Maximum inlet pressure <i>p inl</i>	10 bar
Maximum operating pressure PN	16 bar
Discharge port	DN 65
Min. fluid temperature $T_{\min}$	-15 °C
Max. fluid temperature $T_{\rm max}$	90 °C
Min. ambient temperature $T_{\min}$	-15 °C
Max. ambient temperature $T_{\rm max}$	50 °C

#### Motor data

Mains connection	3~400 V, 50 Hz
Voltage tolerance	±10 %
Rated power <i>P</i> <sub>2</sub>	2.2 kW
Motor efficiency class	IE3
Rated current $I_{\rm N}$	4.3 A
Rated speed <i>n</i>	2900 1/min
Power factor $cos \varphi_{100}$	0.87
Activation type	Direct On Line (DOL)
Motor efficiency 50% η <sub>M</sub> 50%	84.8 %
Motor efficiency 75% $\eta_{\rm M}$ 75%	86.2 %
Motor efficiency 100% $\eta_{\rm M}$ 100%	85.9 %
Insulation class	F
Protection class motor	IP55

#### Materials

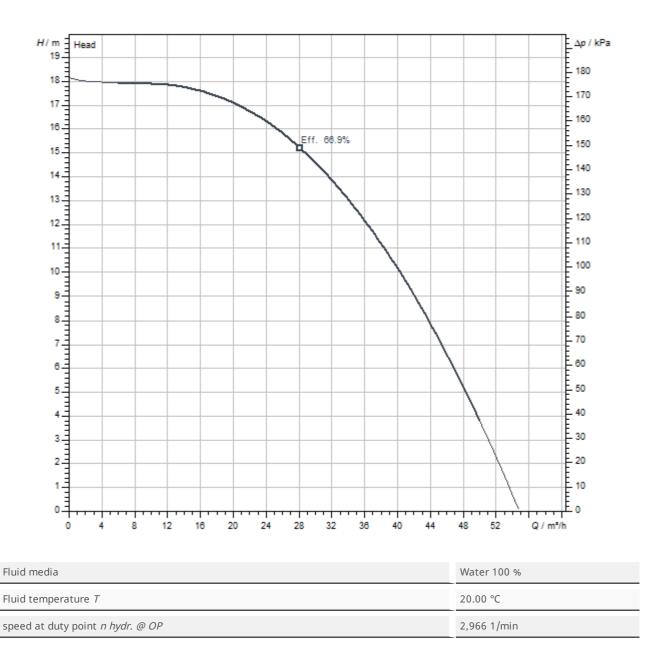
Pump housing	1.4409
Impeller	Stainless steel
Shaft	Stainless steel
Mechanical seal	BQ1VGG
Gasket material	FKM

### Installation dimensions

Pipe connection on the suction side <i>DNs</i>	DN 65
Pipe connection on the discharge side DNd	DN 65



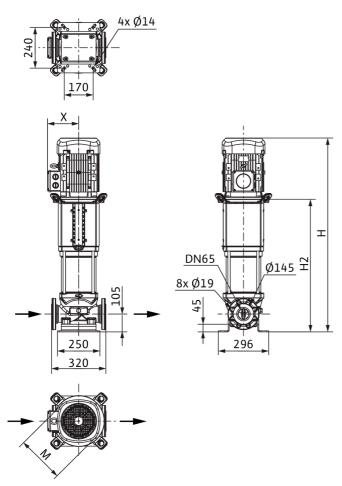
# **Pump curves**





# Dimensions and dimensions drawings

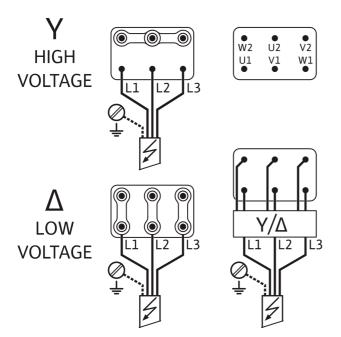
Helix V 36



Dimensions H	816 mm
Dimensions H1	187 mm
Dimensions L1	160 mm
Dimensions X	132 mm
Dimensions $\emptyset g$	193 mm
Pipe connection on the suction side <i>DNs</i>	DN 65
Pipe connection on the discharge side DNd	DN 65
Motor diameter X	132 mm



# Wiring diagram





# Tender text

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, while 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)

## **Operating Data**

## Product data

Min. fluid temperature T <sub>min</sub>	-15 °C
Max. fluid temperature $T_{\rm max}$	90 °C
Max. ambient temperature <i>T</i> <sub>max</sub>	50 °C
Maximum operating pressure PN	16 bar
Maximum inlet pressure <i>p inl</i>	10 bar
Minimum efficiency index (MEI)	≥0.7

#### Scope of delivery

- > Wilo-Helix V high-pressure multistage centrifugal pump
- > Installation and operating instructions

#### Design notes

- > Motor protection for 3-phase motor is to be provided on request or onsite
- > Single-phase AC motor equipped with built-in thermal motor protection and capacitor
- 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 user-friendly mechanical seal in a cartridge design and standard gasket for easy maintenance
- > The spacer coupling (from  $\ge$  7.5 kW) allows the mechanical seal to be replaced without removing the motor
- > 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(F) VdS certified version upon request

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Rated current <i>I</i> <sub>N</sub>	4.3 A
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Power factor $cos \ \varphi_{100}$	0.87
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Insulation class	F
Protection class	IP55

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## Materials

Pump housing	1.4409
Impeller	Stainless steel
Shaft	Stainless steel
Shaft seal	BQ1VGG
Gasket material	FKM

# Installation dimensions

Pipe connection on the suction side <i>DNs</i>		DN 65
Pipe connection on the discharge side DNd		DN 65
Ordering information		
Brand	Wilo	
Product description	HELIX V3601/1-2/16/V/KS/400-50	
Net weight, approx. <i>m</i>	73 kg	
Article number	4150744 🛃	



# Installation type

In inlet mode	
Counter flange (stainless steel)	
Stainless steel counter flange (round, 2 piece), PN 16 DN 65	4038592
Counter flange (steel)	
Steel counter flange (round, 2 piece), PN 16 DN 65	4038591
Stainless steel compensator	
Stainless steel compensator DN 65, PN 16	2514242
Baseplate	
Base plate	4157154
Level control with fault signal	
Float switch WAO	
Float switch WAO 65, 10 m cable	2006027
Float switch WAO 65, 20 m cable	2004429
Float switch WAO 65, 30 m cable	2004430
Float switch WAO 65, 5 m cable	503211595
Level control without fault signal	
Float switch WAO	
Float switch WAO 65, 10 m cable	2006027
Float switch WAO 65, 20 m cable	2004429
Float switch WAO 65, 30 m cable	2004430
Float switch WAO 65, 5 m cable	503211595
Pressure control with fault signal	
Wilo-EFC	
EFC2.2 3x380-480V 50/60Hz IP55	2193434
Sensor kit	
Sensor kit	2501886