



Data sheet

Product data

Product description HELIX V5203/2-4/16/E/S/400-50-FF240

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 80
Min. fluid temperature T_{min}	-20 °C
Max. fluid temperature $T_{\rm max}$	120 °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 P_2	11 kW
Motor efficiency class	IE3
Rated current <i>I</i> _N	21 A
Rated speed <i>n</i>	2900 1/min
Power factor $\cos arphi_{100}$	0.84
Activation type	Direct/Star-Delta
Motor efficiency 50% η _M 50%	90.3 %
Motor efficiency 75% η _M 75%	91.3 %
Motor efficiency 100% $\eta_{ m M}$ 100%	91.2 %
Insulation class	F
Protection class motor	IP55

Materials

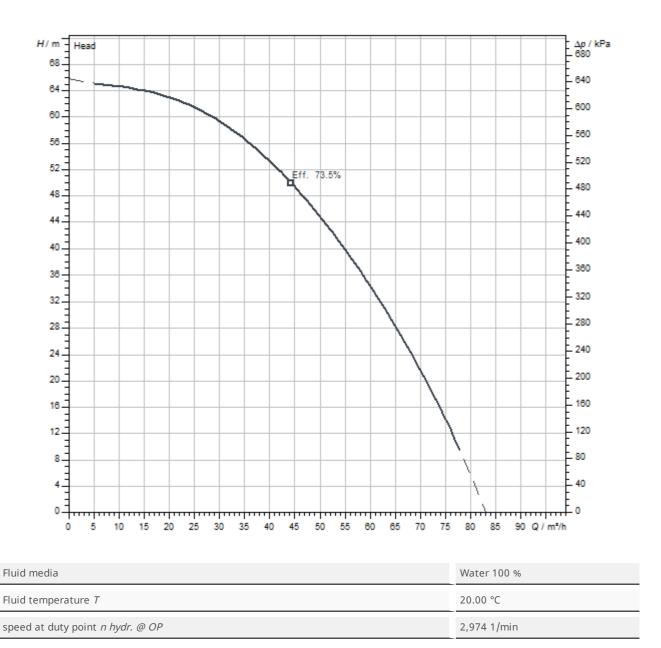
Pump housing	Grey cast iron
Impeller	Stainless steel
Shaft	Stainless steel
Mechanical seal	BQ1EGG
Gasket material	EPDM

Installation dimensions

Pipe connection on the suction side <i>DNs</i>	DN 80
Pipe connection on the discharge side DNd	DN 80



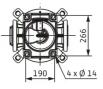
Pump curves

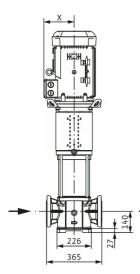


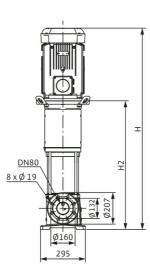


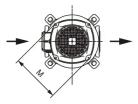
Dimensions and dimensions drawings

Helix V 52





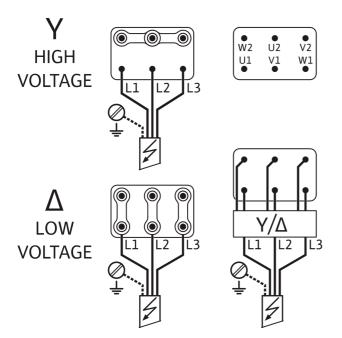




Dimensions H	1103 mm
Dimensions H1	222 mm
Dimensions L1	183 mm
Dimensions X	182 mm
Dimensions $\emptyset g$	279 mm
Pipe connection on the suction side <i>DNs</i>	DN 80
Pipe connection on the discharge side DNd	DN 80
Motor diameter X	191 mm



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 _{min}	-20 °C
Max. fluid temperature $T_{\rm max}$	120 °C
Max. ambient temperature <i>T</i> _{max}	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

Motor data

Mains connection	3~400 V, 50 Hz
Voltage tolerance	±10 %
Rated power <i>P</i> ₂	11 kW
Motor efficiency class	IE3
Rated current <i>I</i> _N	21 A
Rated speed <i>n</i>	2900 1/min
Power factor $\cos \varphi_{100}$	0.84
Motor efficiency 50% $\eta_{\rm M}$ 50%	90.3 %
Motor efficiency 75% $\eta_{\rm M}$ 75%	91.3 %
Motor efficiency 100% η _M 100%	91.2 %
Insulation class	F
Protection class	IP55

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Materials

Pump housing	Grey cast iron
Impeller	Stainless steel
Shaft	Stainless steel
Shaft seal	BQ1EGG
Gasket material	EPDM

Installation dimensions

Pipe connection on the suction side <i>DNs</i>	DN 80
Pipe connection on the discharge side DNd	DN 80

Ordering information

Brand	Wilo
Product description	HELIX V5203/2-4/16/E/S/400-50- FF240
Net weight, approx. <i>m</i>	125 kg
Article number	4183430 🔀



Installation type

Counter flange (steel) Steel counter flange (steel) Steel counter flange (round, 2 plece), PN 16 DN 80 Arr253 Stainless steel compensator Stainless steel compensator DN 80, PN 16 Baseplate Base plate Ievel control with fault signal Float switch WAO 65, 10 m cable Roat switch WAO 65, 30 m cable Roat switch WAO 65, 50 m cable Roat switch WAO	Counter flange (stainless steel)	
Steel counter flange (round, 2 piece), PN 16 DN 80 407233 Stainless steel compensator 251424 Baseplate 251424 Base plate 415715 Level control with fault signal 150424 Float switch WAO 65, 10 m cable 200927 Float switch WAO 65, 20 m cable 200428 Float switch WAO 65, 30 m cable 200428 Float switch WAO 65, 5 m cable 200429 Float switch WAO 65, 5 m cable <th>Stainless steel counter flange (round, 2 piece), PN 16 DN 80</th> <th>4073797</th>	Stainless steel counter flange (round, 2 piece), PN 16 DN 80	4073797
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Float switch WAO 65, 5 m cable 50321155 Pressure control with fault signal Wilo-EFC	Float switch WAO 65, 20 m cable	2004429
Pressure control with fault signal	Float switch WAO 65, 30 m cable	2004430
Wilo-EFC	Float switch WAO 65, 5 m cable	50321159
	Pressure control with fault signal	
EFC11 3x 380-480V 50/60Hz IP55 2193433	Wilo-EFC	
	EFC11 3x380-480V 50/60Hz IP55	2193439

Sensor kit

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