Series description: Wilo-Helix V

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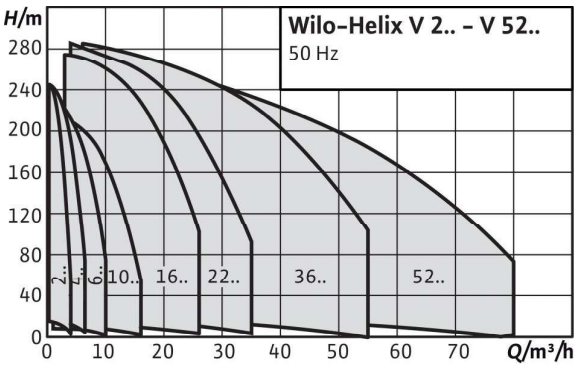


Pump curves in accordance with ISO 9906: 2012 3B

ErP READY APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS

Design

Non-self-priming, high-efficiency multistage high-pressure centrifugal pump in vertical design with in-line connections

Application

- Water supply and pressure boosting
- Industrial circulation systems
- Process water
- Closed cooling circuits
- Fire extinguishing systems
- Washing systems
- Irrigation

Type key

Series description: Wilo-Helix V

Type key

Example:	**Helix V 2202/2-1/16/E/X/KS/../400-50**
Helix V	Vertical high-pressure multistage centrifugal pump in in-line design
22	Flow rate in m^3/h
02	Number of impellers
2	Number of trimmed impellers (optionally)
1	Pump material 1 = Pump housing 1.4301 (AISI 304) Hydraulics 1.4307 (AISI 304L) 2 = Pump housing 1.4409 (AISI 316L) Hydraulics 1.4404 (AISI 316L) 3 = Pump housing EN-GJL-250 (cataphoretic-coated) Hydraulics 1.4307 (AISI 304L) 4 = Monobloc pump housing EN-GJL-250 (cataphoretic-coated) Hydraulics 1.4307 (AISI 304L) [Only Helix VE 22.. and larger]
16	Maximum operating pressure in bar 16 = 16 bar (PN 16 flange) 25 = 25 bar (PN 25 flange) 30 = 30 bar (PN 40 flange)
E	Gasket type E = EPDM V = FKM
X	"X-Care" special version
K	Cartridge type mechanical seal
S	The coupling guard is on a line with suction and discharge ports of the pump.
..	Optional
400	Connection voltage in V
50	Frequency in Hz

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)

Technical data

- Minimum Efficiency Index (MEI) ≥ 0.5
- Electrical connection: 3~400 V (±10 %), 50 Hz
  - ≤ 4 kW 230 V/ 400 V; Δ/Y
  - > 4 kW 400 V/ 690 V; Δ/Y
- Fluid temperature range:
  - Helix V 2 – 16 (EPDM): -30 to 120 °C (130 °C on request)
  - Helix V 2 – 16 for aggressive media (FKM): -15 to 90 °C
  - Helix V22 – 52 (EPDM): -20 to 120 °C (130 °C on request)
  - Helix V22 – 52 for aggressive media (FKM): -15 to 90 °C
- Max. operating pressure: 16/25/30 bar
- Protection class: IP 55
- Max. ambient temperature: +40°C (extended temperature ranges on request)
- Available versions:
  - Helix V 2 – 16: PN 16 with oval flanges, PN 25/PN 40 with round flanges according to ISO 2531 and ISO 7005 (Victaulic coupling on request)
  - Helix V 22 – 52: PN 16/PN 25/PN 40 with round flanges according to ISO 2531 and ISO 7005

Equipment/function

- Corrosion-resistant impellers, guide vanes and stage housings

Description/design

- Pumps can be adapted to specific circumstances on request (e.g. motor protection, ATEX, extended ambient temperature range).
- The Helix series is also available with an integrated frequency converter.

Materials

Helix V 2, 4, 6, 10, 16:

Standard version

- Impellers, stage housings and guide vanes made of stainless steel 1.4307 (AISI 304L)
- Pump housing made of stainless steel 1.4301 (AISI 304)
- Baseplate and lantern in EN-GJL-250 (cataphoretic coated)
- Shaft made of stainless steel 1.4301 (AISI 304) or 1.4462 (AISI 318LN) (depending on version)
- Sleeve under the mechanical seal 1.4404 (AISI 316L)
- O-ring of EPDM (FKM gasket on request)
- Jacket pipe made of stainless steel 1.4301 (AISI 304)

For aggressive media

- Impellers, stage housings and guide vane apparatuses of stainless steel 1.4404 (AISI 316L)
- Pump housing made of stainless steel 1.4404 (AISI 316L)
- Shaft made of stainless steel 1.4404 (AISI 316L) or 1.4462 (AISI 318LN) (depending on version)
- Sleeve under the mechanical seal 1.4404 (AISI 316L)
- O-ring of FKM (EPDM gasket on request)
- Jacket pipe made of stainless steel 1.4404 (AISI 316L)

Helix V 22, 36, 52:

Standard version

- Stage housings, impellers, guide vane apparatuses made of stainless steel 1.4307 (AISI 304L)
- Pump housing made of stainless steel 1.4308 (AISI 304) or cataphoretic-coated grey cast iron EN-GJL 250, loose flanges made of cataphoretic-coated grey cast iron EN-GJL 250 for Helix V 22 / EN-GJS 400 for Helix V 36-52.
- Shaft made of stainless steel 1.4057 (AISI 431)
- Sleeve under the mechanical seal 1.4404 (AISI 316L)
- O-ring of EPDM (FKM gasket on request)
- Jacket pipe made of stainless steel 1.4301 (AISI 304)

For aggressive media

- Stage housings, impellers, and guide vane apparatuses made of stainless steel 1.4404 (AISI 316L)
- Pump housing: all parts which come in contact with the media are made of cast stainless steel 1.4409 (AISI 316L); loose flanges of cataphoretic-coated grey cast iron EN-GJL 250 for Helix V 22 / EN-GJS 400 for Helix V 36-52.
- Baseplate made of stainless steel 1.4301 (AISI 304)
- Shaft made of stainless steel 1.4404 (AISI 316L) or 1.4462 (AISI 318LN) (depending on version)
- Sleeve under the mechanical seal 1.4404 (AISI 316L)
- O-ring of FKM (EPDM gasket on request)
- Pressure shroud made of stainless steel 1.4404 (AISI 316L)

Scope of delivery

- Helix V high-pressure multistage centrifugal pump
- Installation and operating instructions
- Helix V 2 – 16 (version PN16 with oval flanges): counter flanges made of stainless steel with the corresponding screws, nuts and gaskets

General notes - ErP (ecological design-) directive

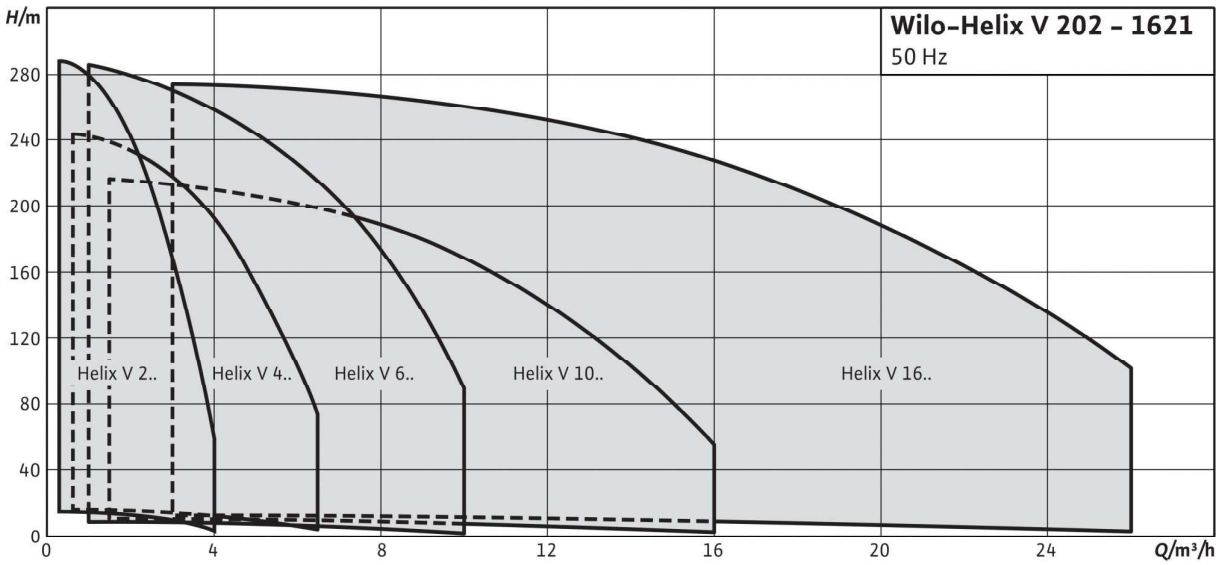
Series description: Wilo-Helix V

General notes - ErP (ecological design-) directive

The benchmark for most efficient water pumps is MEI ≥ 0.70The efficiency of a pump with a trimmed impeller is usually lower than that of a pump with the full impeller diameter. The trimming of the impeller will adapt the pump to a fixed duty point, leading to reduced energy consumption. The minimum efficiency index (MEI) is based on the full impeller diameter.The operation of this water pump with variable duty points may be more efficient and economic when controlled, for example, by the use of a variable speed drive that matches the pump duty to the system.Information on benchmark efficiency is available at www.europump.org/efficiencychartsPumps with power consumption > 150 kW or a volume flow QBEP < 6 m3/h are not subject to the Ecodesign Directive for water pumps. Therefore, no MEI value is shown.

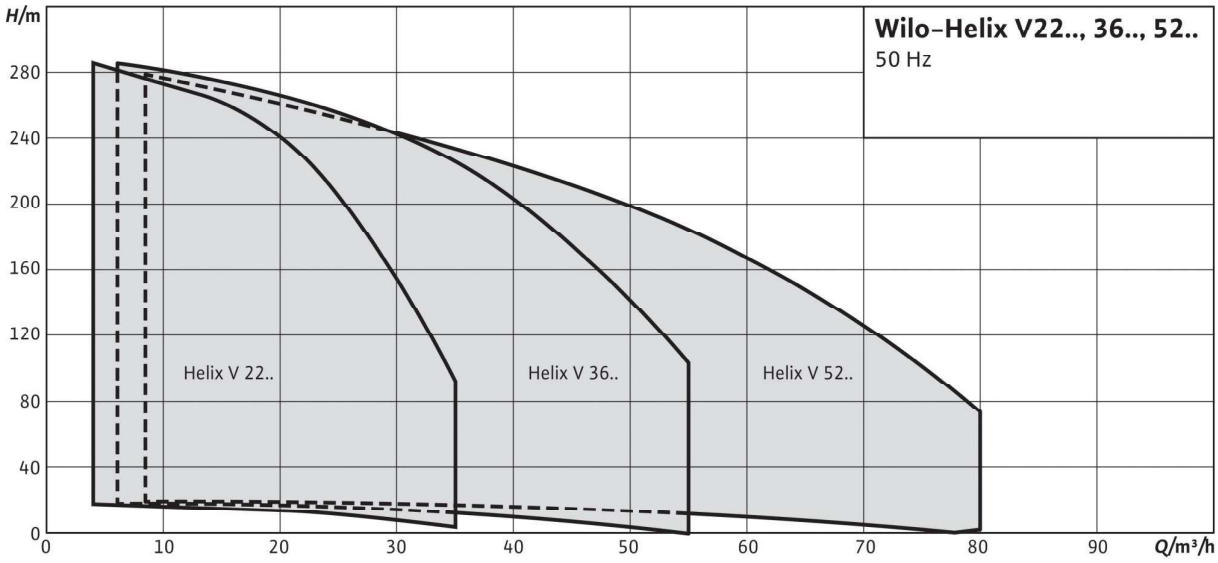
Duty chart: Wilo-Helix V

Pump curves Minimum Efficiency Index (MEI): ≥ 0.7



Pump curves in accordance with ISO 9906: 2012 3B

Pump curves Minimum Efficiency Index (MEI): ≥ 0.7



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