Pioneering for You

wilo

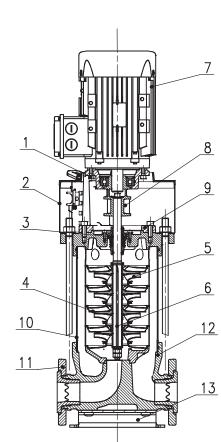
Wilo-Helix V 22–36–52 Wilo-Helix V FIRST 22–36–52

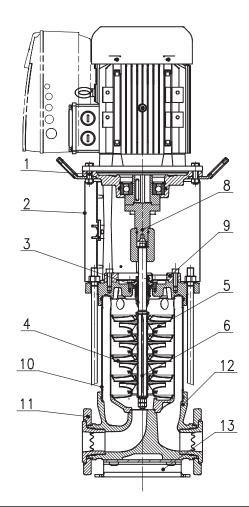




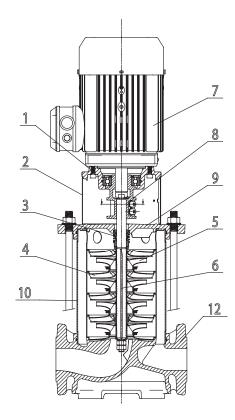
- de Einbau- und Betriebsanleitung
- **en** Installation and operating instructions
- **fr** Notice de montage et de mise en service
- **nl** Inbouw- en bedieningsvoorschriften
- **ги** Инструкция по монтажу и эксплуатации
- es Istruzioni di montaggio, uso e manutenzione
- it Istruzioni di montaggio, uso e manutenzione
- pt Manual de Instalação e funcionamento
- tr Návod k montáži a obsluze
- el Инструкция по монтажу и эксплуатации
- sv Інструкція з монтажу та експлуатації
- no Paigaldus- ja kasutusjuhend
- fi Uzstādīšanas un ekspluatācijas instrukcija

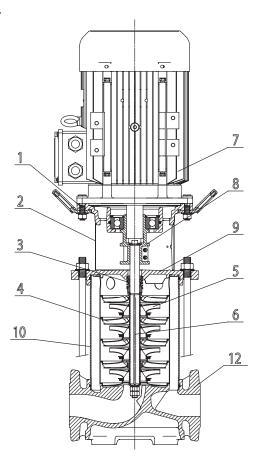
- da Montavimo ir naudojimo instrukcija
- hu Beépítési és üzemeltetési utasítás
- pl Instrukcja montażu i obsługi
- cs Návod k montáži a obsluze
- et Paigaldus- ja kasutusjuhend
- lv Uzstādīšanas un ekspluatācijas instrukcija
- It It Montavimo ir naudojimo instrukcija
- sk Návod na montáž a obsluhu
- sl Navodila za vgradnjo in obratovanje
- hr Upute za ugradnju i uporabu
- sr Uputstvo za ugradnju i upotrebu
- ro Instrucțiuni de montaj și exploatare
- bg Инструкция за монтаж и експлоатация

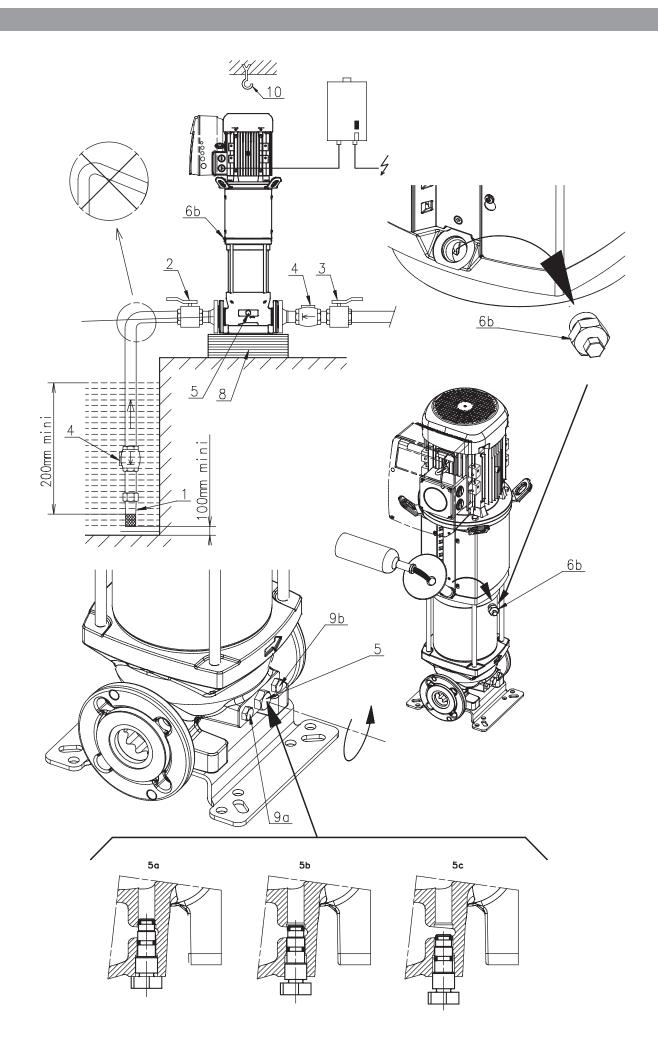


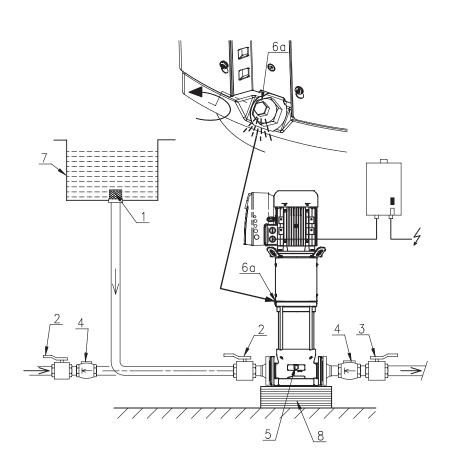


FIRST









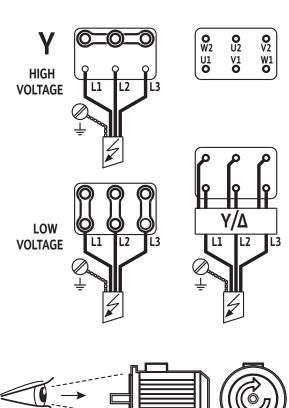
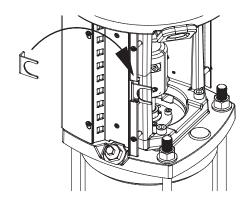
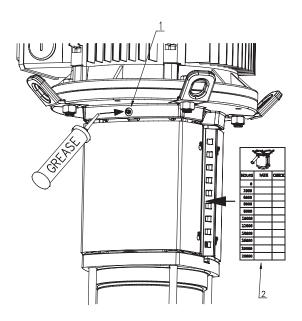
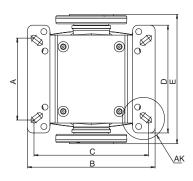


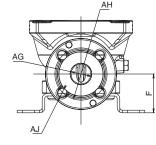
Fig. 6

Fig.









Material code -2 -3

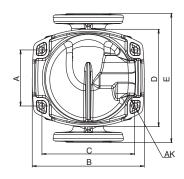
	.			(mm)										
	Туре	А	В	С	D	Е	F	G	Н	J	К			
	Helix V 22	PN16/PN25/ PN30	130	296	215	250	300	90	DN50	125	4 x M16			
1		PN16	170	200	240		220	1.05	DNGE		4 x M16	16 x		
	Helix V 36	PN25/PN30	or 220	296	220	250	320	105	DN65		8 x M16	Ø14		
	Helix V 52	PN16/PN25/ PN30	190 or 220	296	266 or 220		365	140	DN80	160	8 x M16			

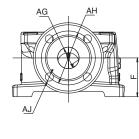
Κ

4 x Ø14

Material code -4 -5

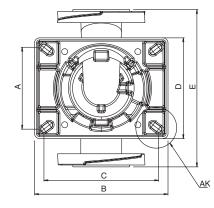
	_		(mm)											
_	Туре		А	В	С	D	E	F	G	Н	J			
	Helix FIRST V22	PN16/PN25/ PN30	130	260	215	226	300	90	DN50	125	4 x M16			
	Helix FIRST	PN16	170	20/	24.0	226	220	100	DN65		4 x M16			
	V36	PN25PN30	170	294	240	220	520	105	כסאום		8 x M16			
	Helix FIRST V52	PN16/PN25/ PN30	190 or 170	295	266 or 240		365	140	DN80	160	8 x M16			





Material code -1

_			(mm)											
Туре		А	В	С	D	Е	F	G	Н	J	К			
Helix V 22	PN16/PN25	130	255	215	226	300	90	DN50	125	4 x M16				
	PN16	170	204	24.0	220	220	105		DNG		4 x M16	4 x Ø14		
Helix V 36	PN25	1/0	284	240	230	320	105	DN65		8 x M16	· · ·			
Helix V 52	PN16/PN25	190 or 170	310	266 or 240		365	140	DN80	160	8 x M16				



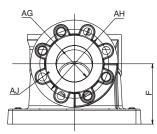
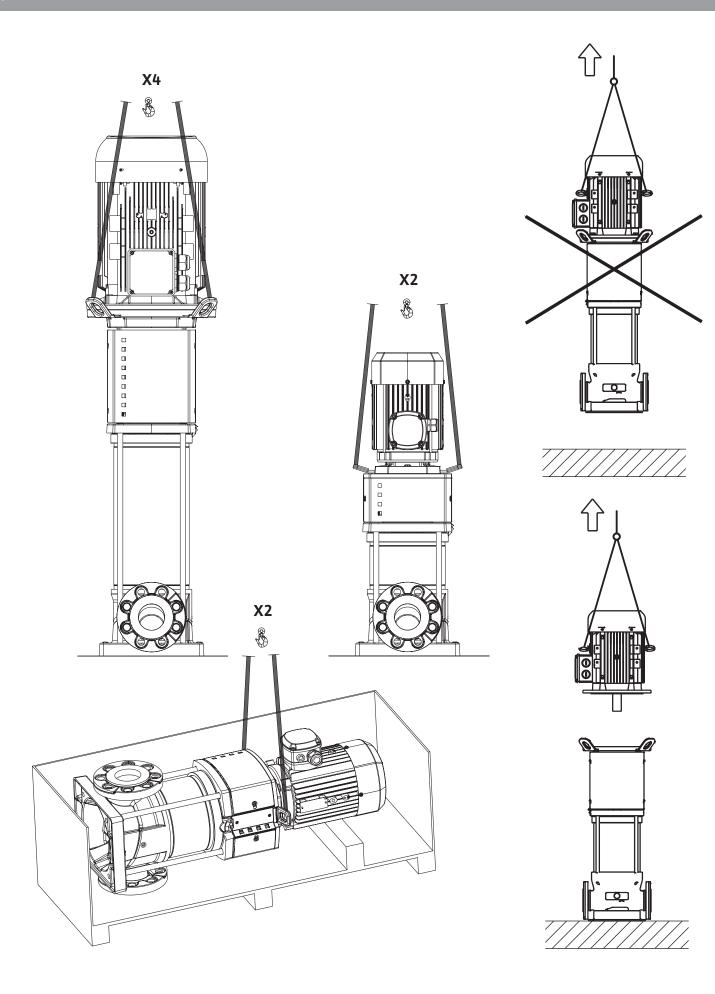


Fig. 4



1. General

1.1 About this document

The language of the original operating instructions is English. All other languages of these instructions are translations of the original operating instructions.

These installation and operating instructions are an integral part of the product. They must be kept readily available at the place where the product is installed. Strict adherence to these instructions is a precondition for the proper use and correct operation of the product.

These installation and operating instructions correspond to the relevant version of the product and the underlying safety standards valid at the time of going to print.

EC declaration of conformity:

A copy of the EC declaration of conformity is a component of these operating instructions.

If a technical modification is made on the designs named there without our agreement, this declaration loses its validity.

2. Safety

These instructions contain important information which must be followed when installing and operating the pump. It is therefore imperative that they be read by both the installer and the operator before the circulator is installed or started up. Both the general safety instructions in the 'Safety precautions' section and those in subsequent sections indicated by danger symbols should be carefully observed.

2.1 Symbols and signal words used in these operating instructions

Symbols

General safety symbol.

Hazards from electrical causes.

NOTE:

Signal words:

DANGER! Imminently hazardous situation. Will result in death or serious injury if not avoided.

WARNING! Risk of (serious) injury. 'Warning' implies that failure to comply with the safety instructions is likely to result in (severe) personal injury.

CAUTION! Risk of damage to the pump/installation. 'Caution' alerts to user to potential product damage due to non-compliance with the safety instructions.

NOTE: Useful information on the handling of the product.

It alerts the user to potential difficulties.

2.2 Personnel qualification

The personnel installing the pump must have the appropriate qualification for this work.

2.3 Risks incurred by failure to comply with the safety instructions

Failure to comply with the safety precautions could result in personal injury or damage to the pump or installation. Failure to comply with the safety precautions could also invalidate any claim for damages.

In particular, failure to comply with these safety instructions could give rise, for example, to the following risks:

- the failure of important parts of the pump or installation,
- personal injury due to electrical and mechanical causes,
- material damage.

2.4 Safety instructions for the operator

Existing regulations for the prevention of accidents must be observed.

National Electrical Codes, local codes and regulations must be followed.

2.5 Safety instructions for inspection and assembly

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

- If hot or cold components on the product/the unit lead to hazards, local measures must be taken to guard them against touching.
- Guards protecting against touching moving components (such as the coupling) must not be removed whilst the product is in operation.
- Leakages (e.g. from the shaft seals) of hazardous fluids (which are explosive, toxic or hot) must be led away so that no danger to persons or to the environment arises. National statutory provisions are to be complied with.
- Highly flammable materials are always to be kept at a safe distance from the product.
- Danger from electrical current must be eliminated. Local directives or general directives [e.g. IEC, VDE etc.] and local power supply companies must be adhered to.

2.6 Unauthorised modification and manufacture of spare parts

Alterations to the pump or installation may only be carried out with the manufacturer's consent. The use of original spare parts and accessories authorized by the manufacturer will ensure safety. The use of any other parts may invalidate claims invoking the liability of the manufacturer for any consequences.

2.7 Improper use

The operational safety of the pump or installation supplied can only be guaranteed if it is used in accordance with paragraph 4 of the operating instructions. The limits given in the catalogue or data sheet must under no circumstances be exceeded.

2.8 Improper use

The operating safety of the supplied product is only guaranteed for conventional use in accordance with Section 4 of the operating instructions. The limit values must on no account fall under or exceed those specified in the catalogue/ data sheet.

3. Transport and interim storage

When receiving the material, check that there has been no damage during the transport. If shipping damage has occurred, take all necessary steps with the carrier within the allowed time.



CAUTION! Outside influences may cause damages. If the delivered material is to be installed later on, store it in a dry place and protect it from impacts and any outside influences (humidity, frost etc.).

The product should be cleaned thoroughly before it is put into temporary storage. The product can be stored for at least one year.

Handle the pump carefully so as not to damage the unit prior to installation.

4. Application

This pump's basic function is to pump hot or cold water, water with glycol or other low viscosity fluids that contain no mineral oil, solid or abrasive substances, or materials having long fibres. The manufacturer's approval is required for use to pump corrosive chemicals.



CAUTION! Risk of explosion!

Do not use this pump to handle flammable or explosive liquids.

4.1 Applications areas

- water distribution and boosting installations,
- industrial circulation systems,
- process fluids,
- cooling water circuits,
- fire-fighting and washing stations,
- watering installations, etc.

5. Technical data

5.1 Type key

Example: Helix V2205/2-1/16/E/KS/400-50xxxx							
Helix V Helix FIRST V	Vertical high–pressure multistage centrifugal pump in in–line design						
22	Nominal flow in m3/h						
05	Number of impellers						
2	Number of trimmed impellers (if any)						
1	Pump material code Pump housing Stainless steel 1.4308 (AISI 304) Hydraulics 1.4307 (AISI 304) Modular pump housing Stain- less steel 1.4409 (AISI 316L) Hydraulics 1.4404 (AISI 316L) Modular pump housing Cast lron EN-GJL-250 (ACS and WRAS approved coating) Hydraulics 1.4307 (AISI 304) Monobloc Pump housing cast iron EN-GJL-250 (ACS and WRAS approved coating) Hydraulics 1.4307 (AISI 304) Monobloc Pump housing cast iron EN-GJL-250 (ACS and WRAS approved coating) Hydraulics 1.4307 (AISI 304) Monobloc Pump housing cast iron EN-GJL-250 (standard coating) Hydraulics 1.4307 (AISI 304) 						
16	Pipe connection 16 = PN16 25 = PN25 30 = PN40						
E	Seal type code E = EPDM V = FKM Viton						
KS	K = Cartridge seal, versions wit- hout "K" are equipped with simple mechanical seal S = Lantern orientation align with suction pipe X = X-Care version						
400 460	Motor electrical voltage (V)						
50 60	Motor frequency (Hz)						
хххх	Options code (if any)						

5.2 Technical data

Maximum operating pressure													
Pump casing	16,	25 οι	u 30 bars	depe	end o	on th	ne mo	bde	el				
10 bars Note : real inlet pressure (Pinlet)+ pressure at 0 flow delivered by the pump must be below the maximum operating pressure of the pump. In case of exceeding maximum operating pressure, the ball bearing and the mechanical seal could be damaged or lifetime could decrease. P Inlet + P at 0 flow ≤ Pmax pump See pump nameplate to know the maximum operating pressure: Pmax									. In d the				
Temperature range													
Liquid temperatures	 -20°C to +120 °C -30°C to +120° C (if full stainless steel) -15°C to + 90°C (Viton version for O'ring and mechanical seal) 												
Ambient temperature	-15° to +40 °C Other temperature on request												
Electrical data	Electrical data												
Motor efficiency	Motor according to IEC 60034–30												
Motor Protection index	IP 5	5											
Insulation class	155	(F)											
Frequency	See	moto	or plating										
Electrical voltage	See	moto	or plating										
Other data													
Humidity	< 90)% sa	ans conde	ensat	tion								
Altitude	< 1000 m (> 1000m on request)												
Maximum suction head	according to NPSH of the pump												
							P	ow.	ver (kW)				
Sound pressure level dB(A)			0.55 0.75					4	5.5 7.5		18.5 22	30	37 45
0/+3 dB(A)	50Hz	56 60	57 61	5	-	62 67		58 72	69 74	71 78	74 81		76 84
	OUHZ	60	01	6	2	0/	11	' Z	/4	/8	δ1		5-

Outline and pipe dimensions (Fig. 4).

5.3 Scope of Supply

- Multistage pump.Installation and operating instructions.

5.4 Accessories

Original accessories are available for HELIX range:

Designation		Article no.
2 Round counterflanges, stainless steel, 1.4404	(PN16 – DN50)	4038587
2 Round counterflanges, stainless steel, 1.4404	(PN25 – DN50)	4038589
2 Round counterflanges, steel,	(PN16 – DN50)	4038585
2 Round counterflanges, steel,	(PN25 – DN50)	4038588
2 Round counterflanges, stainless steel, 1.4404	(PN16 – DN65)	4038592
2 Round counterflanges, stainless steel, 1.4404	(PN25 – DN65)	4038594
2 Round counterflanges, steel,	(PN16 – DN65)	4038591
2 Round counterflanges, steel,	(PN25 – DN65)	4038593
2 Round counterflanges, stainless steel, 1.4404	(PN16 – DN80)	4073797
2 Round counterflanges, stainless steel, 1.4404	(PN25 – DN80)	4073799
2 Round counterflanges, steel,	(PN16 – DN80)	4072534
2 Round counterflanges, steel,	(PN25 – DN80)	4072536
Bypass kit 25 bar		4124994
Bypass kit (with pressure gauge 25 bar)	4124995	
Baseplate with dampers for pumps up to 5.	5kW	4157154

The use of new accessories is recommended.

6. Description and function

6.1 Product description

- FIG. 1
- 1 Motor connection bolt
- 2 Coupling guard
- 3 Mechanical seal
- 4- Hydraulic stage casing
- 5 Impeller
- 6 Pump shaft
- 7 Motor
- 8 Coupling
- 9 Lantern
- 10 Tube liner
- 11 Flange
- Pump housing
 Base plate

FIG. 2, 3

- 1 Strainer
- 2 Pump suction valve
- 3 Pump discharge valve
- 4 Check valve
- 5 Drain + priming plug
- 6 Air bleed screw + Filling plug
- 7 Tank
- 8 Foundation block
- 9 In option : pressure plugs (a-suction,
- b-discharge)
- 10 Lifting hook

6.2 Design of product

 HELIX pumps are vertical high pressure non-self priming pumps with inline connection based on multistage design.

- HELIX pumps combine use of both high efficiency hydraulics and motors (if any).
- All metallic parts in contact with water are made of stainless steel or grey cast iron.
- For aggressive fluid, special versions exist with stainless steel only for all wetted components.
- Helix pumps are equipped with a simple mechanical seal or with a cartridge seal to facilitate maintenance.
- In addition, for heaviest motor, a specific coupling allows to change this seal without removing the motor.
- HELIX lantern design integrates an additional ball bearing that withstand hydraulic axial forces: this allows the pump to use a fully standard motor.
- Special handling devices are integrated in order to facilitate pump installation (Fig. 8).

7. Installation and electrical connection

Installation and electrical work in compliance with any local codes and by qualified personnel only.



WARNING! Bodily injury!

Existing regulations for the prevention of accidents must be observed.



WARNING! Electrical shock hazard!

Dangers caused by electrical energy must be excluded.

7.1 Commissioning

Unpack the pump and dispose of the packaging in an environmentally-responsible manner.

7.2 Installation

The pump must be installed in a dry, well-ventilated and frost-free place.



CAUTION! Possible damage of the pump!

Dirt and solder drops in to the pump body can effect the pump operation.

It is recommended that any welding and soldering work be done before installing the pump.
Thoroughly flush the system out before installing the pump.

- The pump must be installed in an easily accessible position to facilitate inspection or replacement.
- For heavy pumps, install a lifting hook (Fig. 2, item 10) above the pump in order to ease its disassembly.



WARNING! Risk of accident by hot surfaces!

The pump must be positioned so that someone cannot come into contact with the hot pump surfaces while operation.

 The pump must be installed in an easily accessible position to facilitate inspection or replacement.



WARNING! Risk of fall!

The pump must be screwed to the ground.

 Place the pump where it will be easy to reach, to facilitate inspection and removal work. The pump must always be installed perfectly upright on a sufficiently heavy concrete base.



CAUTION! Risk of parts inside the pump!

Take care to remove closure members of the pump housing before installation.



NOTE: Each pumps could be tested regarding hydraulic features in factory, some water may remain in them. It is recommended for hygienic purposes, to carry out a rinsing of the pump before any using with potable water supply.

- The installation and connection dimensions are given § 5.2.
- Lift the pump carefully by using the integrated hooks rings, if necessary with a hoist and suitable slings according to the current hoist guidelines.



WARNING! Risk of fall!

Take care to pump fixations especially for the highest pumps whose centre of gravity may lead to risk during pump handling.



WARNING! Risk of fall!

Use integrated rings only if they are not damaged (no corrosion ...). Replace them if needed.

WARNING! Risk of fall!

The pump must be never carried by using motor hooks: these are only designed to lift the motor alone.

7.3 Pipe connection

- Connect the pump to the pipes by using appropriate counterflanges, bolts, nuts and gaskets.



CAUTION!

Tightening of bolts must not exceed 80 Nm Use of impact wrench is prohibited.

- The circulation sense of the fluid is indicated on the identification label of the pump.
- Pump must be installed in such a way that it is not stressed by the pipework. The pipes must be attached so that the pump does not bear their weight.
- It is recommended that isolation valves be installed on the suction and discharge side of the pump.
- Use of expansion joints may mitigate noise and vibration of the pump.
- As regards the nominal cross-section of the suction pipe, we recommend a cross-section at least as large as that of the pump connection.
- A check valve could be placed on the discharge pipe in order to protect the pump against hammer shock.
- For direct connection to a public drinking water system, the suction pipe must also have a check valve and a guard valve.
- For indirect connection via a tank, the suction pipe must have a strainer to keep any impurities out of the pump and a check valve.
- In case of half flanges pump design, it is recommended to connect the hydraulic network and

then keep out the plastic fixation links to prevent any leakage risk.

7.4 Motor connection for bare-shaft pump (without motor)

- Remove coupling guards.



NOTE: Helix pumps are equipped with captive screws as required in the Machinery Directive.

 Install the motor on the pump by using screws (FT lantern size – see product designation) or bolts, nuts and handling devices (FF lantern size – see product designation) provided with the pump : check motor power and dimension in WILO catalogue.

 (\mathbf{i})

NOTE: Depending on fluid characteristics, motor power could be modified. Contact WILO Customer Services if needed.

- Close the coupling guards by screwing all screws provided with the pump.

7.5 Electrical connection

WARNING! Electrical shock hazard!



Dangers caused by electrical energy must be excluded.

• Electrical work by a qualified electrician only!

• All electrical connections must be performed after the electrical supply has been switched off and secured against unauthorized switching.

• For safe installation and operation a proper grounding of the pump to the power supply's grounding terminals is required.

- Check that operating current, voltage and frequency used comply with motor plating data.
- The pump must be connected to the power supply by a solid cable equipped with a grounded plug-connection or a main power switch.
- Three-Phase motors must be connected to an approved motor starter. The set nominal current must correspond to the electrical data on the pump motor name plate
- The supply cable must be laid so that it never touches the pipework and/or the pump and motor casing.
- The pump/installation should be grounded in compliance with local regulations. A ground fault interrupter can be used as extra protection.
- The connection to the network must be in accordance with the connection plan (Fig. 5).

7.6 Operation with frequency converter

- Motors used can be connected to a frequency converter in order to adapt pump performance to duty point.
- The converter must not generate voltage peaks at motor terminals higher than 850V and dU/dt slope higher than 2500 V/ $\!\mu s.$
- In case of higher value, an appropriate filter must be used : contact converter manufacturer for this filter definition and selection.
- Strictly follow instructions provided by the converter manufacturer data sheet for installation.
- Minimum variable speed should not be set below 40% of pump nominal speed.

8. Start up

8.1 System filling - Venting



CAUTION! Possible damage of the pump!

Never operate the pump dry. The system must be filled before starting the pump.

- 8.1.1 Air evacuation process Pump with sufficient supply pressure (Fig. 3)
 - Close the two guard valves (2, 3).
 - Unscrew the air bleed screw from filling plug (6a).
 - Slowly open the guard valve on the suction side (2).
 - Retighten the air-bleed screw when air escapes at the air bleed screw and the pumped liquid flows (6a).



WARNING!

When the pumped liquid is hot and the pressure high, the stream escaping at the air bleed screw may cause burns or other injuries.

- Open the guard valve on the suction side completely (2).
- Start the pump and check if direction of rotation matches the one printed on pump plating. If this is not the case, interchange 2 phases in the terminal box.



CALITION

A wrong direction of rotation will cause bad pump performances and possibly coupling damage.

- Open the guard valve on the discharge side (3).

8.1.2 Air evacuation process – Pump in suction (Fig. 2)

- Close the guard valve on the discharge side (3). Open the guard valve on the suction side (2).
- Remove the filling plug with air bleed screw (6b).
- Open the drain-priming plug not completely (5b).
- Fill the pump and the suction pipe with water.
- Make sure that there is no air in the pump and in the suction pipe : refilling until complete removal of air is required.
- Close the filling plug with air bleed screw (6b).
- Start the pump and check if direction of rotation matches the one printed on pump plating. If this is not the case, interchange two phases in the terminal box.



CAUTION!

A wrong direction of rotation will cause bad pump performances and possibly coupling damage.

- Open the guard valve on the discharge side a little (3).
- Unscrew the air bleed screw from filling plug for air venting (6a).
- Retighten the air-bleed screw when air escapes at the air bleed screw and the pumped liquid flows.



WARNING!

When the pumped liquid is hot and the pressure high, the stream escaping at the air bleed screw may cause burns or other injuries.

- Open the guard valve on the discharge side completely (3).
- Close the drain-priming plug (5a).





CAUTION!

The pump must not operate at zero flow (closed discharge valve).

WARNING! Risk of injury!

When the pump runs, coupling guards must be in place, tightened with all appropriate screws.

WARNING! Important noise!

Noise emitted by most powerful pumps could be very high : protection must be used in case of long stay close to the pump.

WARNING!

Installation must be designed in order that no one could be hurt in case of fluid leakage (mechanical seal failure ...).

9. Maintenance - Service

All servicing should be performed by an authorized service representative!



WARNING! Electrical shock hazard!

Dangers caused by electrical energy must be excluded.

All electrical work must be performed after the electrical supply has been switched off and secured against unauthorized switching.



WARNING! Risk of scalding!

At high water temperatures and system pressure close isolating valves before and after the pump. First, allow pump to cool down.

- These pumps are maintenance free. Nevertheless a regular check is recommended every 15 000 hours.
- Optionally, the mechanical seal for certain models can be replaced easily thanks to its cartridge design.
- In case of pump with half flanges design and installation again after maintenance operation, it is suggested to add plastic link to maintain in easy way the half flanges together.
- For pumps equipped with one grease feeder (Fig. 7, pos. 1), respect lubrication frequences mentioned on sticker glued on lantern part (2).
- Insert its adjusting wedge in its housing (Fig. 6) once mechanical seal position is set.
- Always keep the pump perfectly clean.
- Pumps which are not being used during periods of frost should be drained to avoid damage: Close the guard valves, open completely the drain-priming plug and the air bleed screw.
- Service life : 10 years depending on the operating conditions and whether all requirements described in the operation manual have been met.

10. Defects - causes - remedies



WARNING! Electrical shock hazard!

Dangers caused by electrical energy must be excluded. All electrical work must be performed after the electrical supply has been switched off and secured against unauthorized switching.



WARNING! Risk of scalding!

At high water temperatures and system pressure close isolating valves before and after the pump. First, allow pump to cool down.

Defects	Causes	Remedies
Pump fails to operate	No current	Check the fuses, the wiring, and the connectors
	The thermistor tripping device has trip- ped out, cutting off power	Eliminate any cause of overloading of the motor
Pump runs but delivers too little	Wrong direction of rotation	Check the direction of rotation of the motor and correct it if necessary
	Parts of the pump are obstructed by for- eign bodies	Check and clean the pipe
	Air in suction pipe	Make the suction pipe airtight
	Suction pipe too narrow	Install a larger suction pipe
	The valve is not open far enough	Open the valve properly
Pump delivers unevenly	Air in pump	Evacuate the air in the pump; check that the suction pipe is airtight. If required, start the pump 20–30s – open the air bleed screw in order to move air away – close the air bleed screw and repeat it several times until no more air is going out of the pump
Pump vibrates or is noisy	Foreign bodies in pump	Remove the foreign bodies
	Pump not properly attached to ground	Retighten the screws
	Bearing damaged	Call WILO Customer Service
Motor overheats. Its protection trips out	A phase is open-circuit	Check the fuses, the wiring, and the connectors
	Ambient temperature too high	Provide cooling
Mechanical seal is leaking	Mechanical seal is damaged	Replace the mechanical seal

If the fault cannot be solved, please contact WILO customer services.

11. Spare parts

All spare parts must be ordered through WILO Customer Services.

In order to avoid any mistakes, please specify the name plate data for orders.

Spare parts catalogue is available at www.wilo. com.

12. Safe disposal

Proper disposal and recycling of this product prevents damage to the environment and risks to personal health.

Disposal in accordance with the regulations requires the product to be drained and cleaned. Lubricants must be collected. The pump components are to be separated according to material (metal, plastic, electronics).

1. Use public or private disposal organizations when disposing of all or part of the product.

2. For more information on proper disposal, please contact your local

council or waste disposal office or the supplier from whom you obtained the product.

(i)

NOTE: The pump must not be disposed of along with household waste. Further information on recycling can be found at www.wilo-recycling.com.

Subject to technical alterations!

Wilo – International (Subsidiaries)

Argentina

WILO SALMSON Argentina S.A. C1295ABI Ciudad Autónoma de Buenos Aires T+ 54 11 4361 5929 info@salmson.com.a

Australia

WILO Australia Pty Limited Murrarrie, Queensland, 4172 T +61 7 3907 6900 chris.dayton@wilo.com.au

Austria

WILO Pumpen Österreich GmbH 2351 Wiener Neudorf T+43 507 507-0 office@wilo.at

Azerbaijan

WILO Caspian LLC 1014 Baku T +994 12 5962372 info@wilo.az

Belarus

WILO Bel OOO 220035 Minsk T +375 17 2535363 wilo@wilo.by

Belgium

WILO SA/NV 1083 Ganshoren T +32 2 4823333 info@wilo.be

Bulgaria

WILO Bulgaria Ltd. 1125 Sofia T +359 2 9701970 info@wilo.bg

Brazil

WILO Brasil Ltda Jundiaí – São Paulo – Brasil ZIP Code: 13.213-105 T +55 11 2923 (WILO) 9456 wilo@wilo-brasil.com.br

China WILO China Ltd. 101300 Beijing T +86 10 58041888 wilobi@wilo.com.cn

Canada

WILO Canada Inc.

T +1 403 2769456

Calgary, Alberta T2A 5L4

bill.lowe@wilo-na.com

Croatia Wilo Hrvatska d.o.o. 10430 Samobor T +38 51 3430914 wilo-hrvatska@wilo.hr

Czech Republic WILO CS, s.r.o. 25101 Cestlice T +420 234 098711 info@wilo.cz

Denmark WILO Danmark A/S 2690 Karlslunde T +45 70 253312 wilo@wilo.dk

Estonia

WILO Eesti OÜ 12618 Tallinn T +372 6 509780 info@wilo.ee

Finland WILO Finland OY 02330 Espoo T +358 207401540 wilo@wilo.fi

France WILO S.A.S. 78390 Bois d'Arcy T +33 1 30050930 info@wilo.fr

Great Britain

WILO (U.K.) Ltd. Burton Upon Trent DE14 2WJ T +44 1283 523000 sales@wilo.co.uk

Greece WILO Hellas AG 14569 Anixi (Attika) T +302 10 6248300 wilo.info@wilo.gr

Hungary

WILO Magyarország Kft 2045 Törökbálint (Budapest) T +36 23 889500 wilo@wilo.hu

India

WILO India Mather and Platt Pumps Ltd. Pune 411019 T +91 20 27442100 services@matherplatt.com

Indonesia

WILO Pumps Indonesia Jakarta Selatan 12140 T +62 21 7247676 citrawilo@cbn.net.id

Ireland WILO Ireland Limerick T +353 61 227566 sales@wilo.ie

Italy WILO Italia s.r.l. 20068 Peschiera Borromeo (Milano) T +39 25538351 wilo.italia@wilo.it

Kazakhstan WILO Central Asia 050002 Almaty T +7 727 2785961 info@wilo.kz

Korea

WILO Pumps Ltd. 618-220 Gangseo, Busan T +82 51 950 8000 wilo@wilo.co.kr

Latvia WILO Baltic SIA T +371 6714-5229

Lebanon WILO LEBANON SARL Jdeideh 1202 2030 Lebanon T+9611888910 info@wilo.com.lb

Lithuania WILO Lietuva UAB 03202 Vilnius T +370 5 2136495 mail@wilo.lt

Morocco WILO MAROC SARL 20600 CASABLANCA T + 212 (0) 5 22 66 09 24/28 contact@wilo.ma

The Netherlands WILO Nederland b.v. 1551 NA Westzaan T +31 88 9456 000 info@wilo.nl

Norway WILO Norge AS 0975 Oslo T +47 22 804570 wilo@wilo.no

Poland WILO Polska Sp. z.o.o. 05-506 Lesznowola T +48 22 7026161 wilo@wilo.pl

Portugal

Bombas Wilo-Salmson Portugal Lda. 4050-040 Porto T +351 22 2080350 bombas@wilo.pt

Romania WILO Romania s.r.l. 077040 Com. Chiaina Jud. Ilfov T +40 21 3170164 wilo@wilo.ro

Russia WILO Rus ooo 123592 Moscow T+74957810690 wilo@wilo.ru

Saudi Arabia WILO ME - Riyadh Riyadh 11465 T +966 1 4624430 wshoula@wataniaind.com

Serbia and Montenegro WILO Beograd d.o.o. 11000 Beograd T +381 11 2851278 office@wilo.rs

Slovakia WILO CS s.r.o., org. Zložka 83106 Bratislava T +421 2 33014511 info@wilo.sk

Slovenia WILO Adriatic d.o.o. 1000 Ljubljana T +386 1 5838130 wilo.adriatic@wilo.si

South Africa Salmson South Africa 1610 Edenvale T +27 11 6082780 errol.cornelius@ salmson.co.za

Spain

WILO Ibérica S.A. 28806 Alcalá de Henares (Madrid) T +34 91 8797100 wilo.iberica@wilo.es

Sweden WILO Sverige AB 35246 Växjö T +46 470 727600 wilo@wilo.se

Switzerland EMB Pumpen AG 4310 Rheinfelden T +41 61 83680-20 info@emb-pumpen.ch

Taiwan

WILO Taiwan Company Ltd. Sanchong Dist., New Taipei City 24159 T +886 2 2999 8676 nelson.wu@wilo.com.tw

Turkey

WILO Pompa Sistemleri San. ve Tic. A.S. 34956 İstanbul T +90 216 2509400 wilo@wilo.com.tr

Ukraina WILO Ukraina t.o.w. 01033 Kiew T +38 044 2011870 wilo@wilo.ua

United Arab Emirates WILO Middle East FZE Jebel Ali Free Zone–South PO Box 262720 Dubai T +971 4 880 91 77 info@wilo.ae

USA WILO USA LLC Rosemont, IL 60018 T +1 866 945 6872 info@wilo-usa.com

Vietnam

WILO Vietnam Co Ltd. Ho Chi Minh City, Vietnam T +84 8 38109975 nkminh@wilo.vn

Further subsidiaries, representation and sales offices on www.wilo.com

1019 Riga info@wilo.lv

wilo

WILO SE Nortkirchenstraße 100 D-44263 Dortmund Germany T +49(0)231 4102-0 F +49(0)231 4102-7363 wilo@wilo.com www.wilo.com