

Pioneering for You

wilo

Water Management Solutions



HAMZA WATERTIGHTSOLUTIONS
SINCE 1949

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About HAMZA Group

For 70 years, Hamza Group has been pioneering the water solutions industry, first with the introduction of PRP in the market, to importing top-notch-german brands to Egypt, to introducing local manufacturing with Hamza AS, GS and TS - and today - to owning the water journey.



Our partnerships across the years, and our commitment to being an exclusive companion for water solutions in Egypt & the MENA region, have made us validated & approved by esteemed quality certifications from Egypt, Holland, England & Germany.

About Wilo

The Wilo Group is one of the world's leading premium suppliers of pumps and pump systems for the building services, water management and industrial sectors. In the past decade, we have developed from a hidden champion into a visible and connected champion. Today, Wilo has 8.457 employees worldwide.

Our innovative solutions, smart products and individual services move water in an intelligent, efficient and climate-friendly manner. We are also making an important contribution to climate protection with our sustainability strategy and in conjunction with our partners. We are systematically pressing ahead with the digital transformation of the Group. We are already the digital pioneer in the industry with our products and solutions, processes and business models.

Market Segments



BUILDING SERVICES RESIDENTIAL

We are a full-range supplier
and customers' first choice.



BUILDING SERVICES COMMERCIAL

We are a market, innovation
and smart solutions leader.



OEM

We are the preferred partner
for smart integrated solutions.



WATER MANAGEMENT

We are a global market player
and digital solutions provider.



INDUSTRY

We specialise in selected
sectors and applications.

WILO BRINGS THE FUTURE.

Ground-breaking solutions for an ever more complex world.



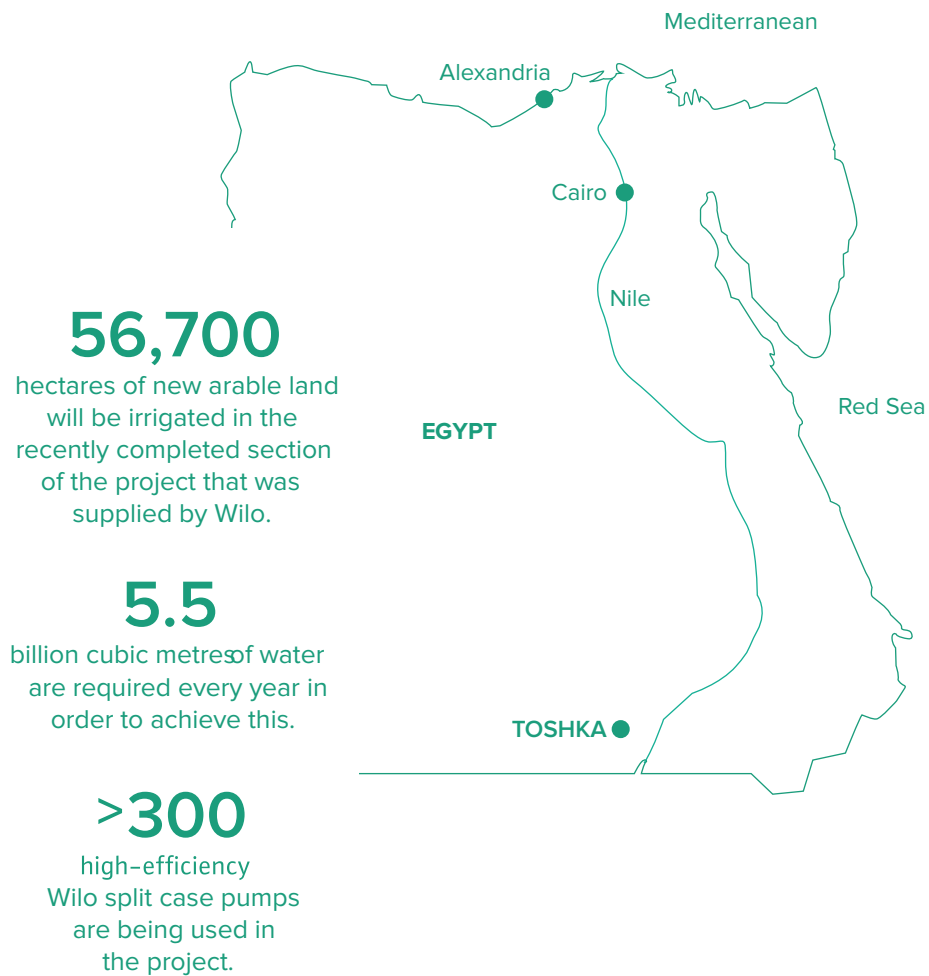
Member of
German Water
Partnership

RECLAIMING LAND FOR SUSTAINABLE USE

Food Security

Toshka





FIRST CONCEIVED DECADES AGO, the Toshka project in southern Egypt has gained new momentum under the current presidency of Abdel Fattah el-Sisi. The aim is for the country to become less dependent on food imports. Wilo is supplying important technologies for irrigating the Egyptian deserts.

The idea of converting around a million hectares of desert into arable land was first proposed in the mid-1990s. The objective: To make Egypt independent from grain imports in the long term and secure the food supply. The Toshka project was born. It is intended to help ensure the country's sustainable development as part of the "Egypt Vision 2030" agenda, which was developed in line with the Sustainable Development Goals (SDGs) and the Sustainable Development Strategy for Africa 2063.

Initial JET Series

The basic pump for a more secure domestic water supply





Special features/product advantages

- Self-priming pump (except peripheral model)
- Draw water up to 8 meter depth
- Easy installation and maintenance

Applications

- Water supply for household
- Small farming and gardening
- Water lifting and distribution in domestic fittings by small and medium sized tanks

Motor

- Two-pole induction model
- Insulation class F
- Protection IP44/IPX4

Materials

- Pump body: Cast iron
- Motor support: Cast iron/Aluminium
- Impeller : Noryl
Stainless steel
- Diffuser: Noryl
- Pump flange: Stainless steel
- Shaft with rotor: Stainless steel
BQ1PFF
- Mechanical seal: Ceramic/Graphite
NBR

Operating Conditions

- Liquid temperature up to 35°C
- Ambient temperature up to 40°C
- Total suction lift up to 8 meters
- Continuous duty

Initial Peripheral



Hydraulic data

Maximum operating pressure P_N	6 bar
Discharge port	G 1
Min. fluid temperature T_{min}	5 °C
Max. fluid temperature T_{max}	60 °C
Min. ambient temperature T_{min}	0 °C
Max. ambient temperature T_{max}	40 °C

Motor data

Mains connection	1~230 V, 50 Hz
Voltage tolerance	±10 %
Shaft power $P_2(Q=_{max.})$ of selected impeller * number of pumps NO VALUE	600 W
Rated power P_2	0.6 kW
Rated current I_N	3.8 A
Rated speed n	2850 1/min
Insulation class	F
Protection class	IP44

Materials

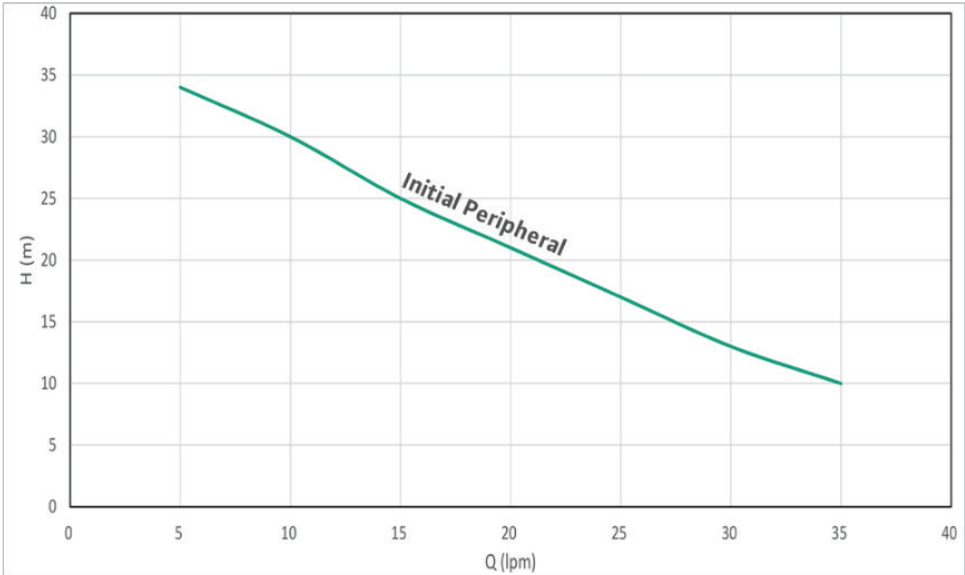
Pump housing	Grey cast iron
Impeller	Copper
Shaft	Stainless steel
Shaft seal	Ceramic/graphite
Gasket material	NBR

Installation dimensions

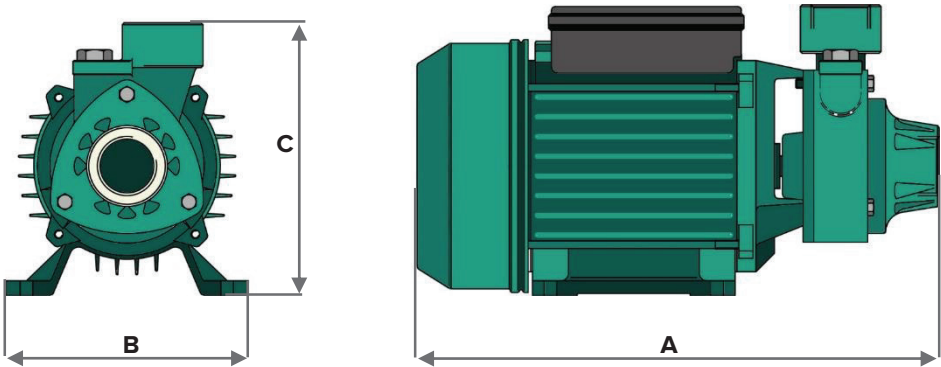
Pipe connection on the suction side DN_s	G 1
Pipe connection on the discharge side DN_d	G 1

Initial Peripheral

Pump curves



Model	Rated Power		Power Source			Max. Head	Max. Flow	Dimension (mm)			Weight
	HP	kW	Ph	V	Hz	(m)	(lpm)	A	B	C	Kg
Initial Peripheral	0.5	0.37	1	230	50	34	35	255	120	144	6.5



Initial JET 3-4



Hydraulic data

Maximum operating pressure PN	6 bar
Discharge port	G 1
Min. fluid temperature T_{min}	5 °C
Max. fluid temperature T_{max}	35 °C
Min. ambient temperature T_{min}	0 °C
Max. ambient temperature T_{max}	40 °C

Motor data

Mains connection	1~230 V, 50 Hz
Voltage tolerance	±10 %
Shaft power $P_2(Q=\max.)$ of selected impeller * number of pumps NO VALUE	600 W
Rated power P_2	0.6 kW
Rated current I_N	3.8 A
Rated speed n	2850 1/min
Insulation class	F
Protection class	IPX4

Materials

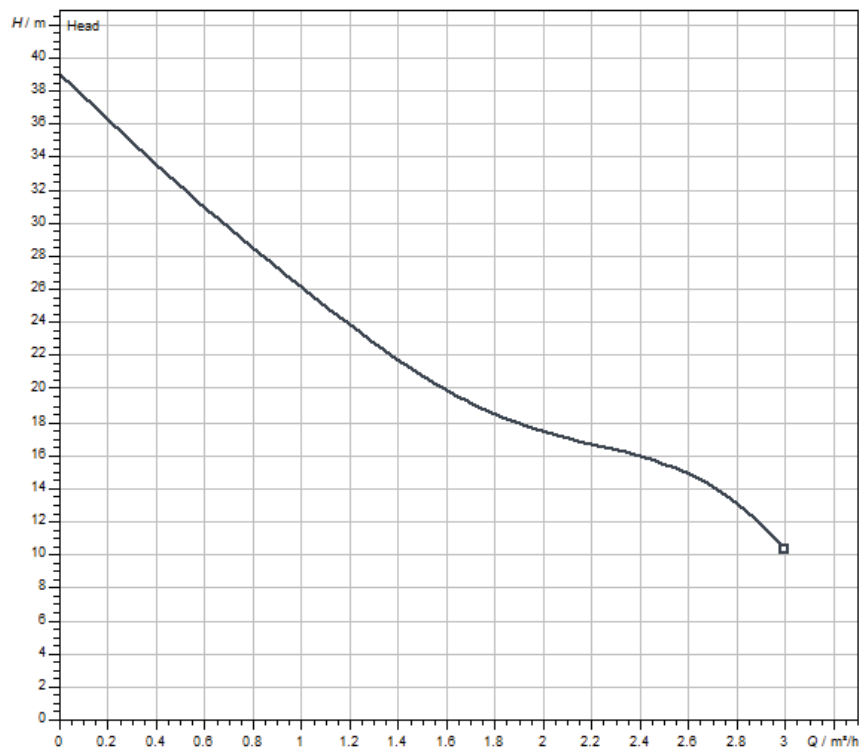
Pump housing	Grey cast iron
Impeller	PPE/PS-GF20
Shaft	Steel
Shaft seal	BQ1PFF
Gasket material	NBR

Installation dimensions

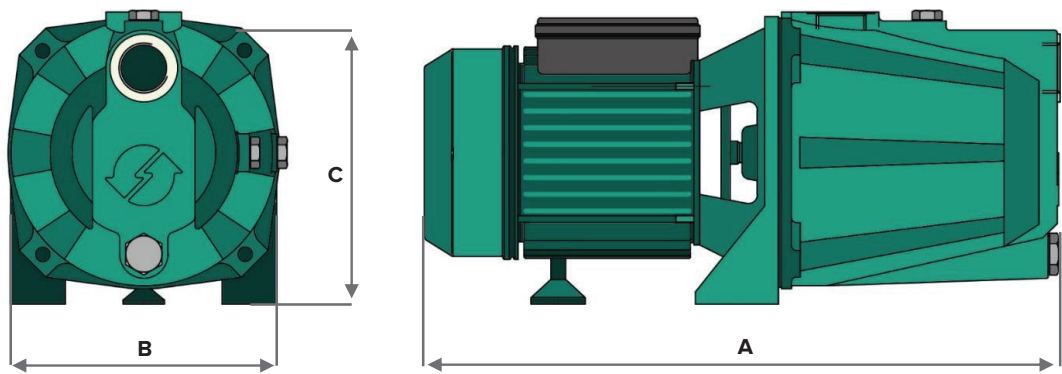
Pipe connection on the suction side DN_s	G 1
Pipe connection on the discharge side DN_d	G 1

Initial JET 3-4

Pump curves



Model	Rated Power		Power Source			Max. Head	Max. Flow	Dimension (mm)			Weight
	HP	kW	Ph	V	Hz	(m)	(lpm)	A	B	C	Kg
Initial JET 3-4	0.8	0.6	1	230	50	38	60	330	161	193	9.4



Initial JET 4-4



Hydraulic data

Maximum operating pressure PN	6 bar
Discharge port	G 1
Min. fluid temperature T_{min}	5 °C
Max. fluid temperature T_{max}	35 °C
Min. ambient temperature T_{min}	0 °C
Max. ambient temperature T_{max}	40 °C

Motor data

Mains connection	1~230 V, 50 Hz
Voltage tolerance	±10 %
Shaft power $P_2(Q=\max.)$ of selected impeller * number of pumps NO VALUE	750 W
Rated power P_2	0.7 kW
Rated current I_N	5 A
Rated speed n	2850 1/min
Insulation class	F
Protection class	IPX4

Materials

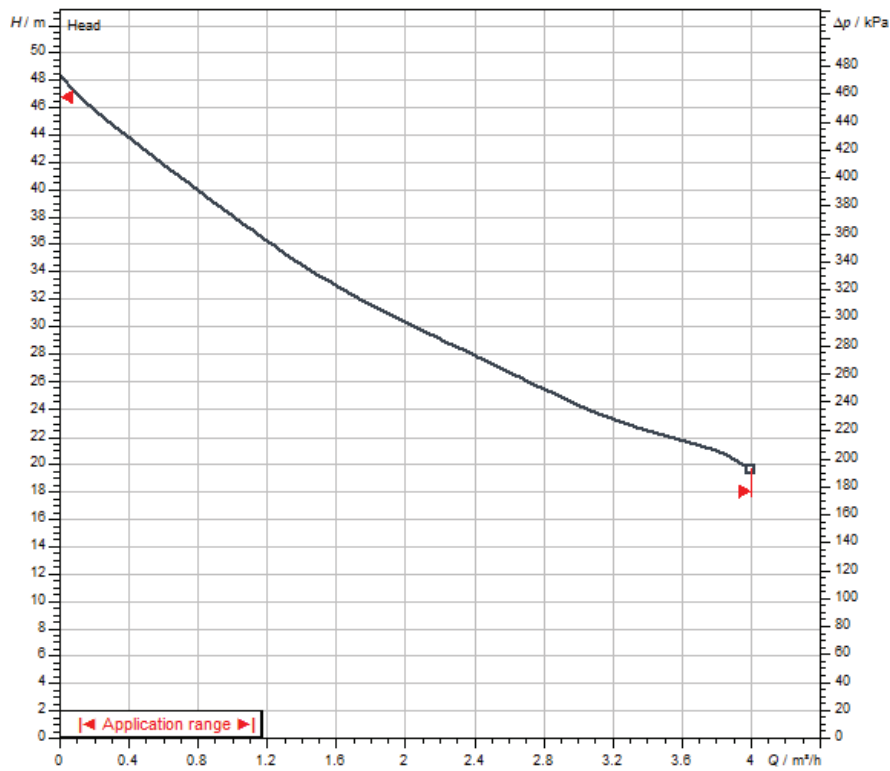
Pump housing	Grey cast iron
Impeller	Stainless steel
Shaft	Steel
Shaft seal	BQ1PFF
Gasket material	NBR

Installation dimensions

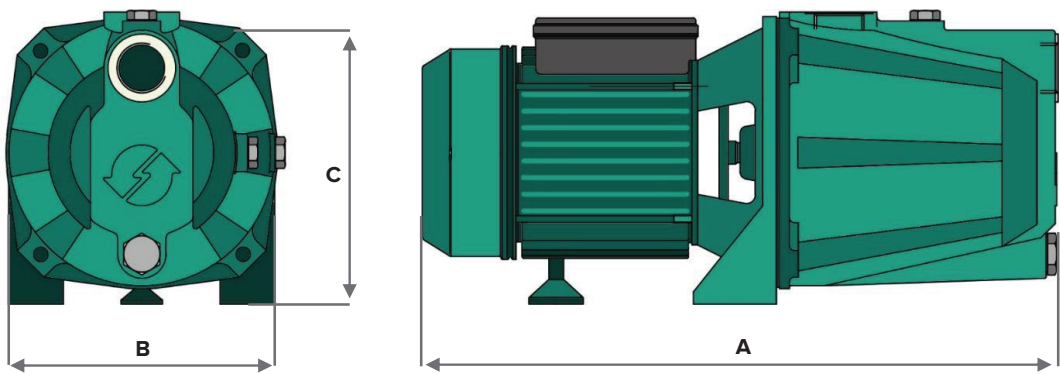
Pipe connection on the suction side DN_s	G 1
Pipe connection on the discharge side DN_d	G 1

Initial JET 4-4

Pump curves



Model	Rated Power		Power Source			Max. Head	Max. Flow	Dimension (mm)			Weight
	HP	kW	Ph	V	Hz	(m)	(lpm)	A	B	C	Kg
Initial JET 4-4	1	0.75	1	230	50	45	65	435	187	204	15.4



Initial JET 9-4



Hydraulic data

Maximum operating pressure PN	6 bar
Discharge port	G 1
Min. fluid temperature T_{min}	5 °C
Max. fluid temperature T_{max}	35 °C
Min. ambient temperature T_{min}	0 °C
Max. ambient temperature T_{max}	40 °C

Motor data

Mains connection	1~230 V, 50 Hz
Voltage tolerance	±10 %
Shaft power $P_2(Q=\max.)$ of selected impeller * number of pumps NO VALUE	1100 W
Rated power P_2	1.1 kW
Rated current I_N	7 A
Rated speed n	2850 1/min
Insulation class	F
Protection class	IPX4

Materials

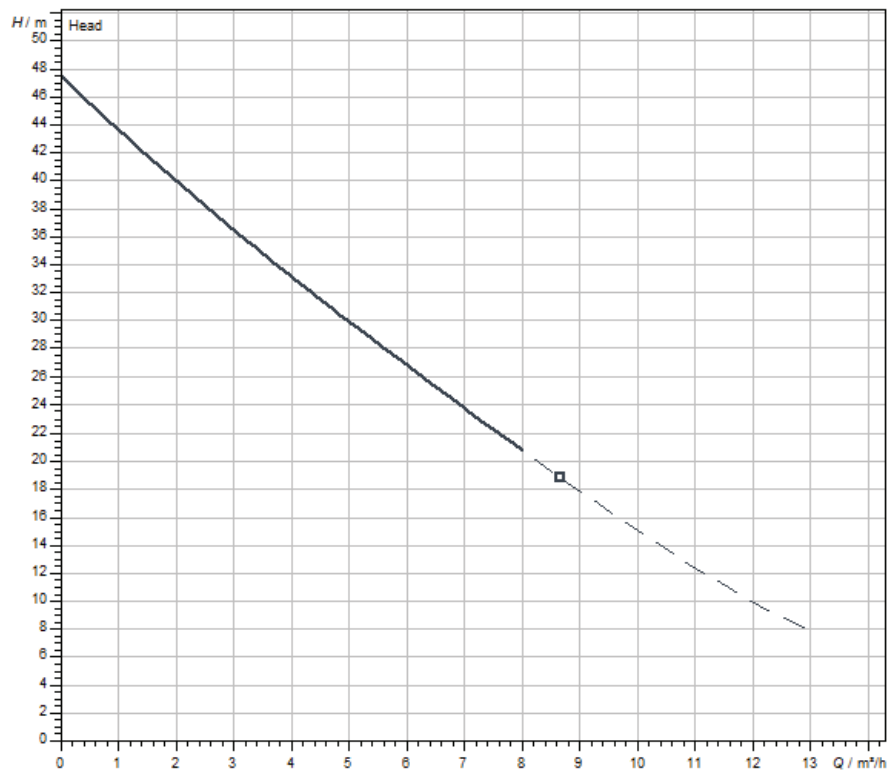
Pump housing	Grey cast iron
Impeller	Stainless steel
Shaft	Steel
Shaft seal	BQ1PFF
Gasket material	NBR

Installation dimensions

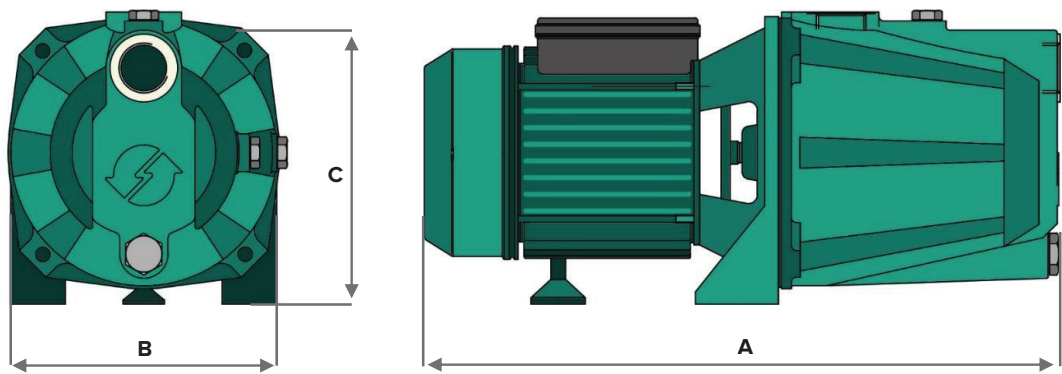
Pipe connection on the suction side DN_s	G 1 $\frac{1}{4}$
Pipe connection on the discharge side DN_d	G 1

Initial JET 9-4

Pump curves



Model	Rated Power		Power Source			Max. Head	Max. Flow	Dimension (mm)			Weight
	HP	kW	Ph	V	Hz	(m)	(lpm)	A	B	C	Kg
Initial JET 9-4	1.5	1.1	1	230	50	45	150	570	236	274	28.9



Initial JET 10-5



Hydraulic data

Maximum operating pressure P_N	6 bar
Discharge port	G 1
Min. fluid temperature T_{min}	5 °C
Max. fluid temperature T_{max}	35 °C
Min. ambient temperature T_{min}	0 °C
Max. ambient temperature T_{max}	40 °C

Motor data

Mains connection	1~230 V, 50 Hz
Voltage tolerance	±10 %
Shaft power $P_2(Q=_{max.})$ of selected impeller * number of pumps NO VALUE	1500 W
Rated power P_2	1.5 kW
Rated current I_N	9 A
Rated speed n	2850 1/min
Insulation class	F
Protection class	IPX4

Materials

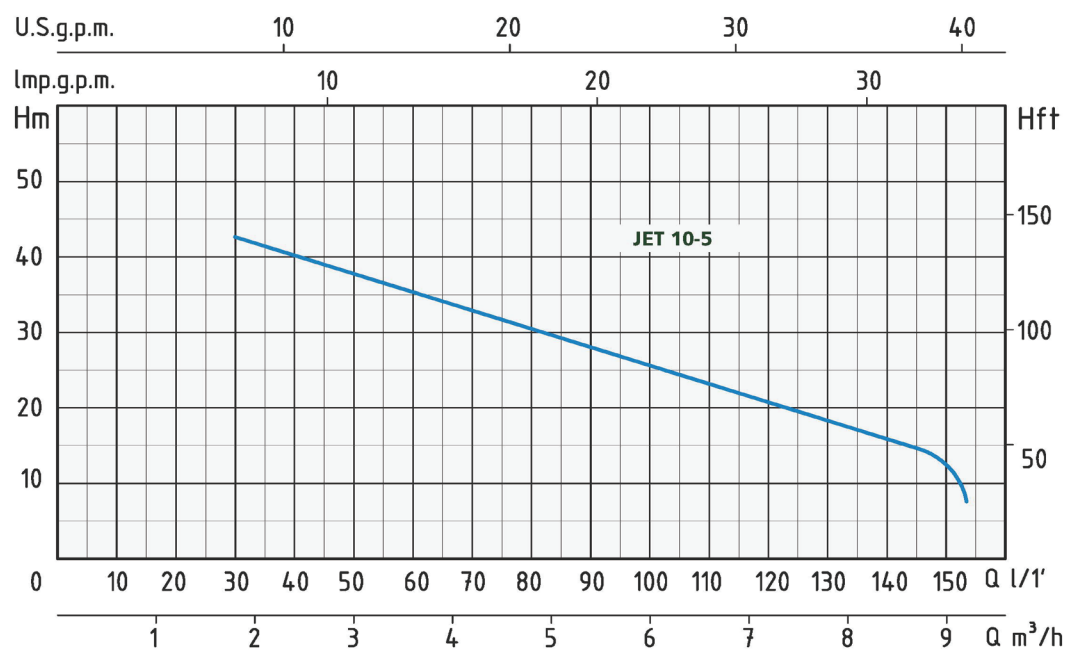
Pump housing	Grey cast iron
Impeller	Stainless steel
Shaft	Stainless Steel
Shaft seal	Ceramic/Graphite/NBR
Gasket material	NBR

Installation dimensions

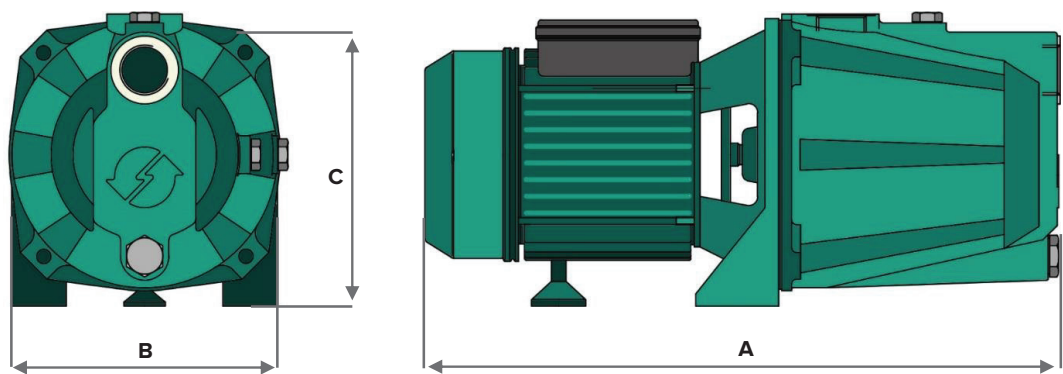
Pipe connection on the suction side DNs	G 1 $\frac{1}{4}$
Pipe connection on the discharge side DNd	G 1

Initial JET 10-5

Pump curves



Model	Rated Power		Power Source			Max. Head	Max. Flow	Dimension (mm)			Weight
	HP	kW	Ph	V	Hz	(m)	(lpm)	A	B	C	Kg
Initial JET 10-5	2	1.5	1	230	50	47	150	570	236	274	28.9



Helix FIRST V Series

High-pressure centrifugal pump.



Product advantages

- Efficiency-optimised, laser-welded, optimised 2D/3D hydraulics
- Corrosion-resistant impellers, guide vanes and stage housings
- Flow and degassing-optimised hydraulic parts
- Reinforced pump housing, flow and NPSH optimised
- Space-saving and easy maintenance thanks to compact design
- Particularly sturdy coupling guard

Applications

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

Helix FIRST V 204-5/16/E/S/



Hydraulic data

Minimum efficiency index (MEI)	≥0.7
Maximum inlet pressure p_{inl}	10 bar
Maximum operating pressure t	16 bar
Discharge port	G 1
Min. fluid temperature T_{min}	-20 °C
Max. fluid temperature T_{max}	120 °C
Max. ambient temperature T_{min}	-15 °C
Max. ambient temperature T_{max}	50 °C

Installation dimensions

Pipe connection on the suction side DN_s	G 1
Pipe connection on the discharge side DN_d	G 1

Motor data

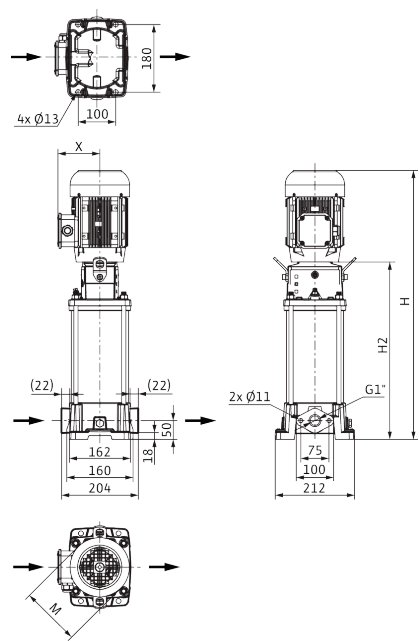
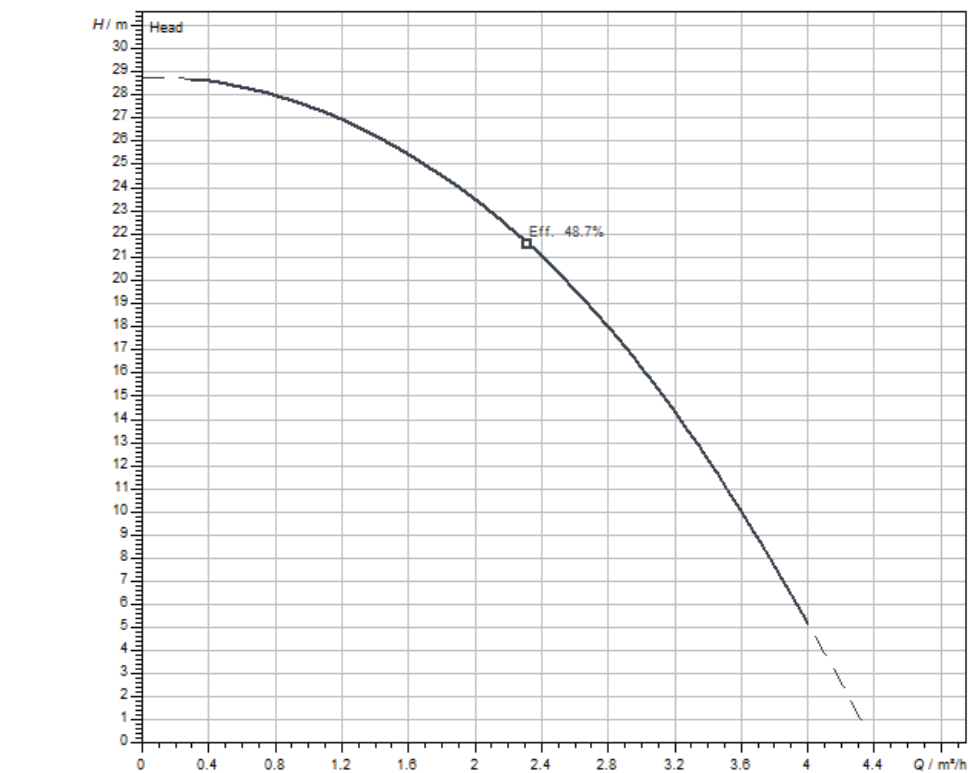
Mains connection	3~400 V, 50 Hz
Voltage tolerance	±10 %
Motor efficiency class	IE2
Rated power P_2	0.37 kW
Rated current I_N	0.95 A
Rated speed n	2900 1/min
Power factor $\cos \varphi_{100}$	0.91
Activation type	Direct On Line (DOL)
Motor efficiency 50% η_M 50%	65.4 %
Motor efficiency 75% η_M 75%	65.6 %
Motor efficiency 100% η_M 100%	64.7 %
Insulation class	F
Protection class	IP55

Materials

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

Helix FIRST V 204-5/16/E/S/

Pump curves



Dimensions H	563 mm
Dimensions H1	98 mm
Dimensions L1	102 mm
Dimensions X	119 mm
Dimensions Ø g	138 mm
Pipe connection on the suction side DN _s	G 1
Pipe connection on the discharge side DN _d	G 1
Motor diameter X	121 mm

Helix FIRST V 206-5/16/E/S/



Hydraulic data

Minimum efficiency index (MEI)	≥0.7
Maximum inlet pressure p_{inl}	10 bar
Maximum operating pressure t	16 bar
Discharge port	G 1
Min. fluid temperature T_{min}	-20 °C
Max. fluid temperature T_{max}	120 °C
Max. ambient temperature T_{min}	-15 °C
Max. ambient temperature T_{max}	50 °C

Installation dimensions

Pipe connection on the suction side DN_s	G 1
Pipe connection on the discharge side DN_d	G 1

Motor data

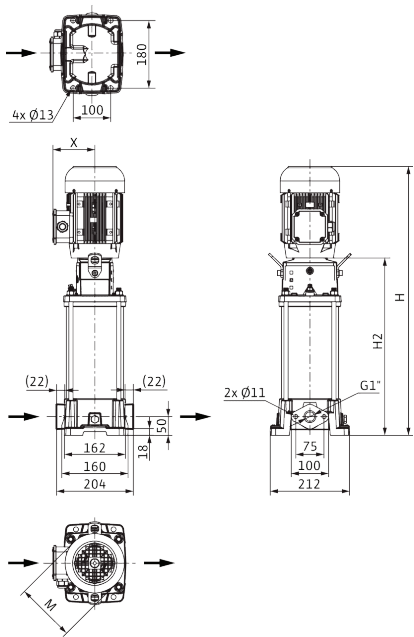
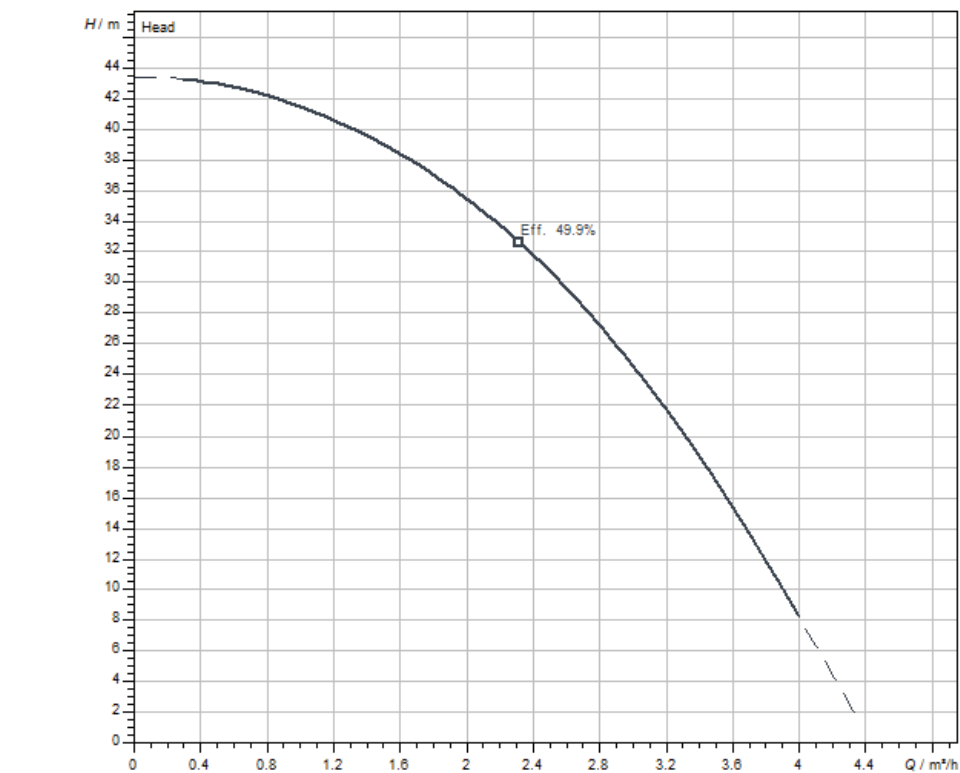
Mains connection	3~400 V, 50 Hz
Voltage tolerance	±10 %
Motor efficiency class	IE2
Rated power P_2	0.55 kW
Rated current I_N	1.32 A
Rated speed n	2900 1/min
Power factor $\cos \varphi_{100}$	0.85
Activation type	Direct On Line (DOL)
Motor efficiency 50% η_M 50%	72.8 %
Motor efficiency 75% η_M 75%	76.7 %
Motor efficiency 100% η_M 100%	77.2 %
Insulation class	F
Protection class	IP55

Materials

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

Helix FIRST V 206-5/16/E/S/

Pump curves



Dimensions H	612 mm
Dimensions H1	98 mm
Dimensions L1	102 mm
Dimensions X	119 mm
Dimensions Ø g	138 mm
Pipe connection on the suction side DN _s	G 1
Pipe connection on the discharge side DN _d	G 1
Motor diameter X	121 mm

Helix FIRST V 407-5/16/E/S/



Hydraulic data

Minimum efficiency index (MEI)	≥0.7
Maximum inlet pressure p_{inl}	10 bar
Maximum operating pressure t	16 bar
Discharge port	G 1
Min. fluid temperature T_{min}	-20 °C
Max. fluid temperature T_{max}	120 °C
Max. ambient temperature T_{min}	-15 °C
Max. ambient temperature T_{max}	50 °C

Installation dimensions

Pipe connection on the suction side DN_s	G 1
Pipe connection on the discharge side DN_d	G 1

Motor data

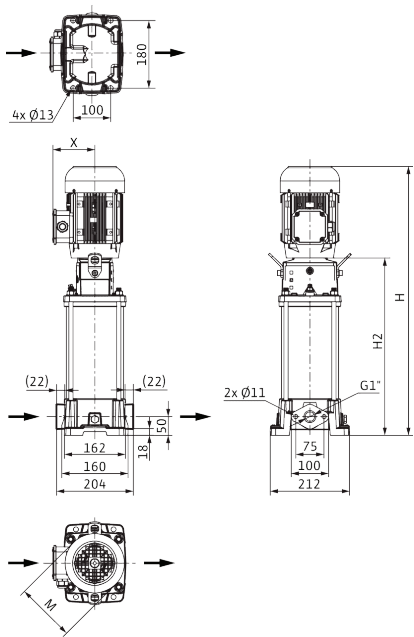
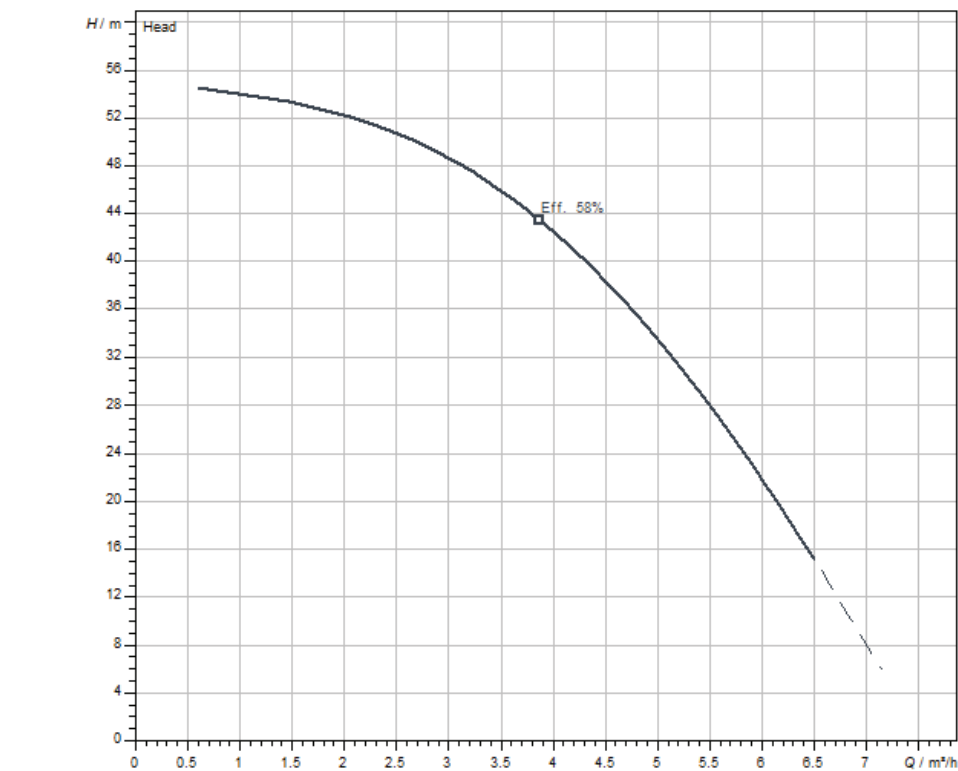
Mains connection	3~400 V, 50 Hz
Voltage tolerance	±10 %
Motor efficiency class	IE3
Rated power P_2	1.1 kW
Rated current I_N	2.5 A
Rated speed n	2900 1/min
Power factor $\cos \varphi_{100}$	0.80
Activation type	Direct On Line (DOL)
Motor efficiency 50% η_M 50%	78.7 %
Motor efficiency 75% η_M 75%	82 %
Motor efficiency 100% η_M 100%	82.7 %
Insulation class	F
Protection class	IP55

Materials

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

Helix FIRST V 407-5/16/E/S/

Pump curves



Dimensions H	652 mm
Dimensions H1	98 mm
Dimensions L1	102 mm
Dimensions X	115 mm
Dimensions Ø g	158 mm
Pipe connection on the suction side DN _s	G 1
Pipe connection on the discharge side DN _d	G 1
Motor diameter X	136 mm

Rexa FIT

Submersible Sewage Pump



Product advantages

- Ready to plug in and use
- Attached float switch (A-model) enables easy operation
- Safe vortex hydraulics with large, free ball passage to prevent clogging during operation
- Sealing chamber with optional external monitoring
- Low weight

Equipment / Function

- Winding temperature monitoring with bimetal strip
- Optional external pencil electrode for sealing chamber control

Scope of delivery

- Submersible sewage pump with 10 m cable
- Cable version depending on the variant:
 - With bare cable ends (O)
 - With plug (P)
 - With float switch and plug (A)
- Operating and maintenance manual

Seal

- There is a sealing chamber between the motor and hydraulics.
- This is filled with medicinal white oil.
- The fluid-side and motor-side seals are provided by two mechanical seals which rotate independently of each other.

Construction

- Submersible sewage pump as submersible monobloc unit for stationary and portable wet installation, as well as stationary dry installation in intermittent operation.
- External sealing chamber monitoring for monitoring the oil barrier chamber

Hydraulics

- The outlet on the pressure side is designed as horizontal flange connection.
- The maximum possible dry matter is 8 % (depending on the hydraulics)
- Vortex impellers are used as the impeller shape.

Design

- Submersible sewage pump for intermittent operation for stationary and portable wet installation.

Applications

- Pumping of:
- Sewage containing faeces in accordance with EN 12050-1
 - Wastewater

Accessories

- Suspension unit or pump base
- External sealing chamber monitoring for monitoring the oil barrier chamber
- Chains
- Switchgears, relays and plugs
- Fixation sets with anchor bolts

Motor

The motors available are surface-cooled motors in single-phase version (with built-in operating capacitor) and three-phase version for the direct starting.

The waste heat is given off directly to the surrounding fluid via the motor housing.

These motors can be operated immersed in continuous duty (S1) and non-immersed in short-time duty (S2) or intermittent operation (S3).

Furthermore the motors are equipped with thermal motor monitoring.

This protects the motor windings against overheating.

For units with single-phase AC motors this is built-in and switches automatically.

I.e. if the motor is switched off due to overheating and then cools down it is automatically switched on again.

Bimetallic strips are used for this as standard.

In addition the motor can be equipped with an external sealing chamber electrode for monitoring the oil barrier chamber.

This signals if there is water ingress into the oil barrier chamber through the mechanical seal on the fluid side.

The connection cable has a length of 10 m as standard and is available in following versions:

- With bare cable ends
- With plug
- With float switch and plug

Commissioning

Operation in wet well installation with non-immersed motor:

The motor can be run non-immersed.

The operating times are defined here by the "Operating mode for non-immersed operation".

This information must be strictly observed!

Short-term operation S2: The maximum operating time is 15 minutes (S2-15minutes).

Intermittent operation S3: By default, the maximum operating time is 1 minute in S3 operation (S3 10%).

If the motor is completely immersed for 1 minute before a re-start and the necessary cooling of the motor has thus taken place,

the maximum running time in S3 operation can be 2.5 minutes (S3 25%)!

The maximum ambient and fluid temperature is 40 °C

Dry-running protection system:

The hydraulics housing must always be immersed.

In the case of fluctuating fluid levels, the system should shut down automatically once the minimum water submersion is reached.

Please refer to the dimension drawings for this.

Horizontal installation:

Horizontal installation is not possible!

Rexa FIT-V05-224A/21T025-540/O



Materials

Motor housing	1.4301
Hydraulic housing	EN-GJL250
Impeller	EN-GJL250
Static seals	NBR
Sealing on pump side	SiC/SiC
Sealing on motor side	C/MgSiO4
Shaft end	Stainless steel 1.4021

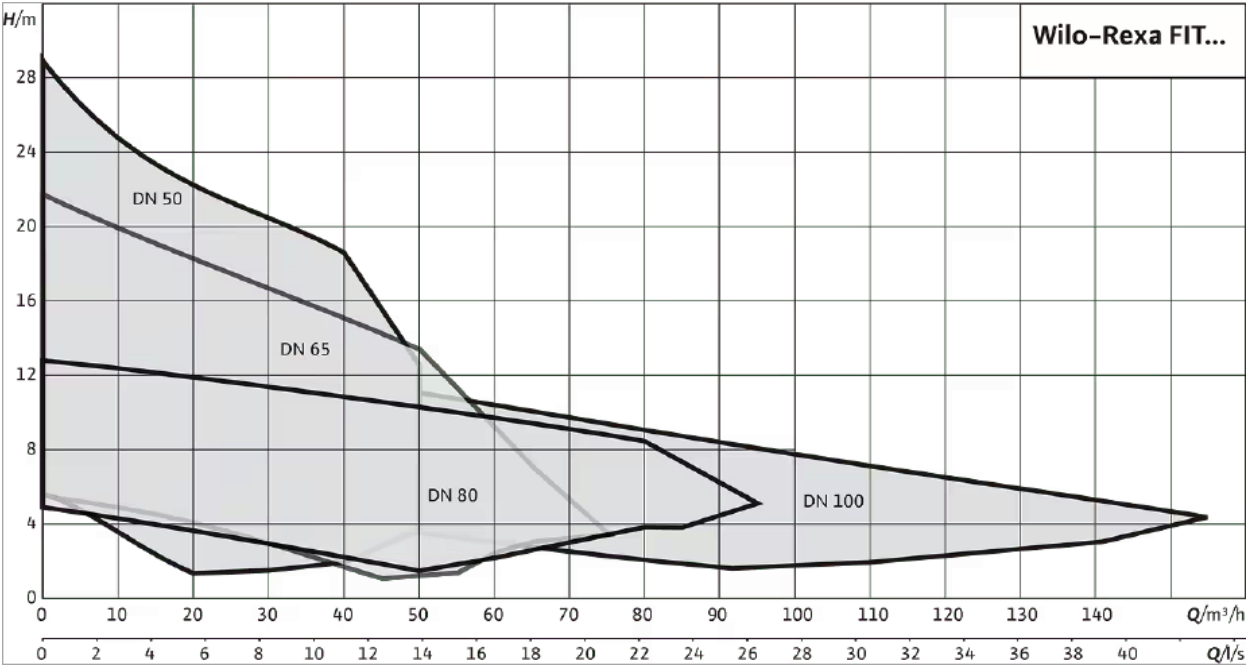
Dry well installation

Dry well installation is possible. The operating times are defined here by the "Operating mode for non-immersed operation". This information must be strictly observed!

Short-term operation S2	Max. Time 15 Minutes (S2-15 Minutes)
Intermittent operation S3	Max. Time 1 Minutes (S3 10%)
The maximum fluid Temp.	40 °C
The maximum ambient Temp.	40 °C

Rexa FIT-V05-224A/21T025-540/O

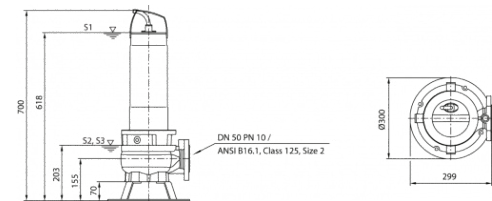
Pump curves



Model	Discharge port	Rated power P2	Float switch	Mains plug	Mains connection		Free ball passage of the hydraulics	Article Num
	DN	kW			V	Hz	mm	
Rexa FIT-V05-224A/21T025-540/O	50	2.5	NO	NO	3-400	50	50	6098162

Technical data

Mains connection	1~230 V, 50 Hz or 3~400 V, 50 Hz
Immersed operating mode	S1
Non-immersed operating mode	S2-15 min; S3 10%
Protection class	IP 68
Insulation class	F
Fluid temperature	3 - 40°C, max. 60°C for 3 min
Free passage	50 / 65 / 80 mm
Cable length	10 m



HiSewlift 3-35



Product advantages

- HiSewlift 3-135 in particularly narrow version (less than 149 mm width) for a simple concealed-wall installation
- Low-noise operation and installed active carbon filter for high user comfort
- Reliable capacity and low electricity consumption for efficient sewage disposal
- Simple installation with flexible connection options
- Ready for connection

Applications

- Pumping of sewage containing faeces (according to DIN EN 12050-3) that cannot be piped to the sewer system via a natural downward slope

Design

- Small sewage lifting unit with macerator

HiSewlift 3-35



Materials

Pump housing	PPGF30
Motor housing:	PPGF30
Gasket	EPDM
Tank Material	PP

Construction

Automatically operating small lifting unit with macerator, built-in non-return valve, active carbon filter, flexible pressure port and connection options for one toilet, as well as two or three additional drainage fixtures (depending on the model). Odour-free exhaust ventilation into the installation room is implemented by means of an integrated active carbon filter.

Equipment / Function

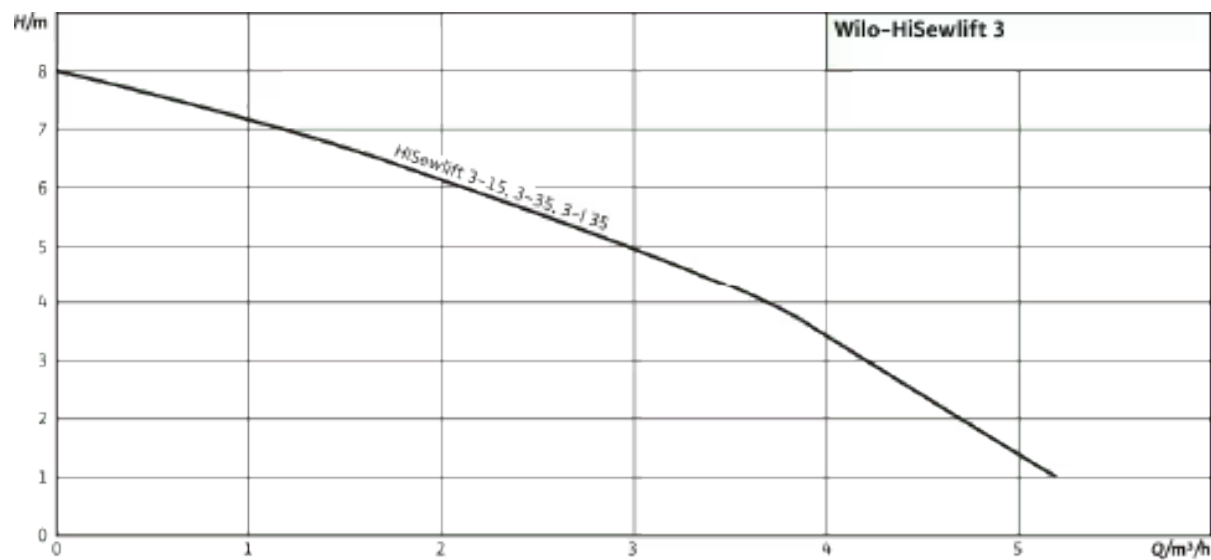
- Ready-to-plug
- Thermal motor protection
- Level checking via a pneumatic pressure transducer
- Integrated non-return valve
- Fixation material
- Active carbon filter

Scope of delivery

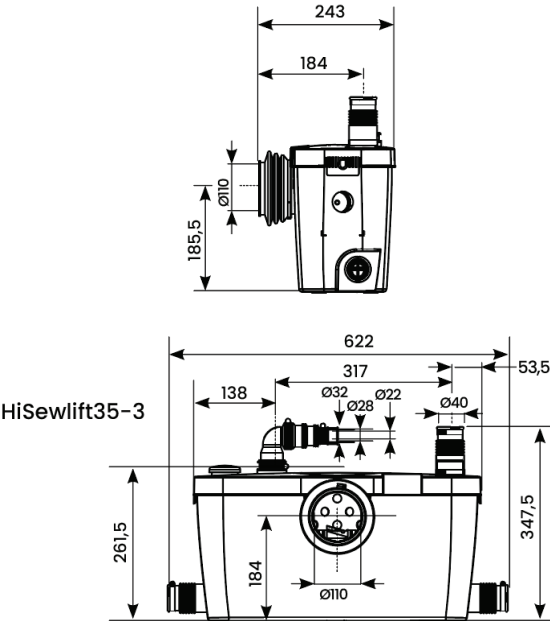
- Ready for connection sewage lifting unit with macerator, active carbon filter and integrated non-return valves
- Installation and operating instructions
- Connection set for inlet and discharge pipes

HiSewlift 3-35

Pump curves



Model	Width without packaging B	Height without packaging H	Overall Length L	Net weight, aptprox.	Mains connection		Article Number
	mm	mm	mm	kg	V	Hz	
HiSewlift 3-35	243	353	622	5.7	1-230	50	4191677



Technical data

Mains connection	1~230 V, 50 Hz
Mains connection cable	1.5 m, with shock-proof plug
Fluid temperature max.	35 °C
Pressure connection	DN 32
Inlet connection	DN 40
Protection class I	IP 44
Gross tank volume 1	14.4 l / 17.4 l / 17.4 l
Switching volume	1 l



HiControl 1

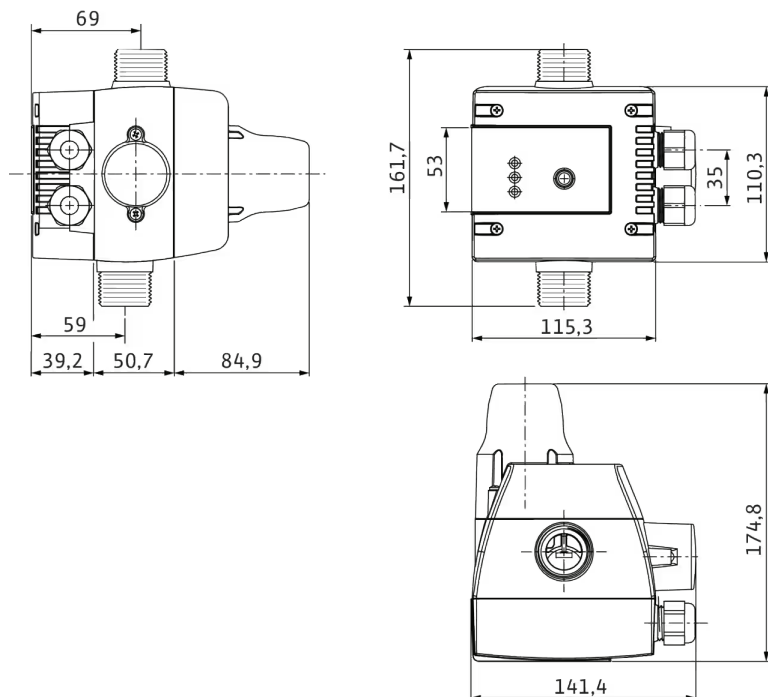
The Wilo HiControl 1 series is used for borehole pumps to enable automatic operation. Wilo-HiControl 1 protects the pump against operation with low volume flow. Thanks to a volume flow sensor and pressure sensor, Wilo-HiControl 1 automates the pump between two values, the start-up pressure and the shut-down volume flow. If the pressure in the network is lower than the start-up pressure, Wilo-HiControl 1 starts the pump. The pump continues to operate until the volume flow falls below the value of the shut-off volume flow. The interior small container prevents water hammering and cycling. Wilo-HiControl 1 can be mounted on surface pumps or connected to submersible pumps for domestic water supply.

Features

- Simple installation
- Especially compact design makes it suitable for many types of installation locations
- High operational reliability due to electronic fault signal
- Protection of the connected pumps due to built-in protection against low water levels
- Simple operation due to clear operating state display
- No additional diaphragm pressure vessel required
- Perfect corrosion protection, due to rust-free materials

Technical data

Hydraulic data	
Maximum operating pressure	10 bar
Hydraulic connection diameter	1" male, screwed (DN25)
Position of connection ports	In line
Temperature range	
Min/Max fluid temperature	+5°C/50°C
Min/Max ambient temperature	+5°C/50°C
Electrical data	
Protection class	IP 65
Max. current	10 A
Frequency	50/60 Hz
Voltage	~ 220/240 V
Rated current	1.9 A
Working data	
Pressure threshold below which the pump will restart	1.5 bar
Flow rate threshold below which the pump will stop	95 l/h





Pioneering for You

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