

Series description: Wilo-DrainLift L



Design

Sewage lifting unit with 1 or 2 integrated pumps

Application

Sewage lifting unit for drainage of residential housing and commercial buildings (e.g. restaurants, department stores, etc.). Raw sewage that cannot be piped to the sewer system through the use of natural inclines and sewage from toilet systems below the backflow level are to be piped to the public sewer system by means of an automatic lifting unit in accordance with DIN EN 12056/DIN 1986100. Sewage containing mineral oils or explosive admixtures must be guided through oil precipitators and/or petrol precipitators; those containing fatty substances must go through grease traps and those with sand through grit chambers. In cases where the flow to the lifting unit must not be interrupted during normal operation, one lifting unit must be equipped with a second pumping unit (DrainLift L2) that has the same performance capacity and switches on automatically when needed (DIN EN 12050-1 A1).

Type key

| | |
|-------------|--|
| Example: | Wilo-DrainLift L1/25-C (3~) |
| L1 | L1 = single-pump system L2 = double-pump system |
| 25 | Max. delivery head [m] |
| C | Comfort version |
| (3~) | 3~: Three-phase version |

Special features/product advantages

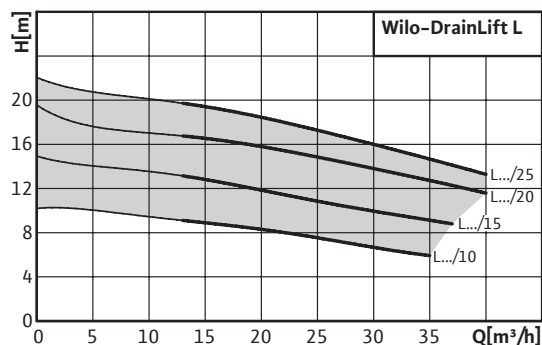
- Easy to install due to:
 - Low weight
 - Only one pressure outlet with double-pump system (integrated Y-pipe)
 - Built-in non-return valve
 - Large scope of delivery
- Flexible due to:
 - Freely selectable inlets
 - Wide performance range
- Safe due to:
 - Large tank volume
 - Mains-independent alarm function
 - Additional potential-free contact
 - Comfort version "C" with individual fault signal

Materials

- Motor housing: stainless steel 1.4404 (AISI 316L)
- Hydraulic housing: PE/PUR plastic
- Impeller: PUR plastic
- Tank: PE plastic

Technical data

- Mains connection 3~400 V, 50 Hz
- Power consumption P_1 from 2.95 to 5.3 kW, depending on type
- Cable length from system to switchgear/plug 4 m
- Operating mode S3-15%, 120 sec
- Fluid temperature max. 40 °C, for short periods up to 60 °C
- Max. ambient temperature of 40 °C
- Free ball passage 40 mm
- Pressure port DN 65 / DN 80



Equipment/function

- Ready-to-plug
- Thermal motor monitoring
- Level control with float switch
- Mains-independent alarm
- Potential-free contact
- Pump cable detachable
- Non-return valve
- Inlet seal
- Hole saw for inlet borehole
- Hose connection for ventilation
- Hose connection for diaphragm hand pump
- Kit for pressure pipe connection
- Fixation material
- Soundproofing material
- Switchgear

Description/design

Fully submersible sewage lifting unit, ready for connection (flooding height: 2 mWS, overflow time: 7 days) with a collection tank that is impermeable to gas and water and that is equipped with buoyancy safeguards. Centrifugal pump with vortex impeller.

DrainLift L1:

Single-pump system with three-phase motor for automatic operation. Switchgear with CEE plug, potential-free contact, integrated alarm (mains-independent, due to built-in rechargeable battery*) and adjustable follow-up time.

DrainLift L2:

Double-pump system with three-phase motor for automatic operation (with automatic duty cycling, standby and peak-load operation). Due to the integrated double non-return valve, only one pressure pipe connection is required. Switchgear with CEE plug, potential-free contact, integrated alarm (mains-independent, due to built-in rechargeable battery*) and adjustable follow-up time.

Option:

"C" version: switchgear with individual fault signal.

Attention: The switchgear is not submersible and must therefore be arranged in such a way that it is overflow-proof.

* The battery is not included in the scope of delivery and can be ordered as an accessory.

Scope of delivery

Sewage lifting unit, ready for connection, including:

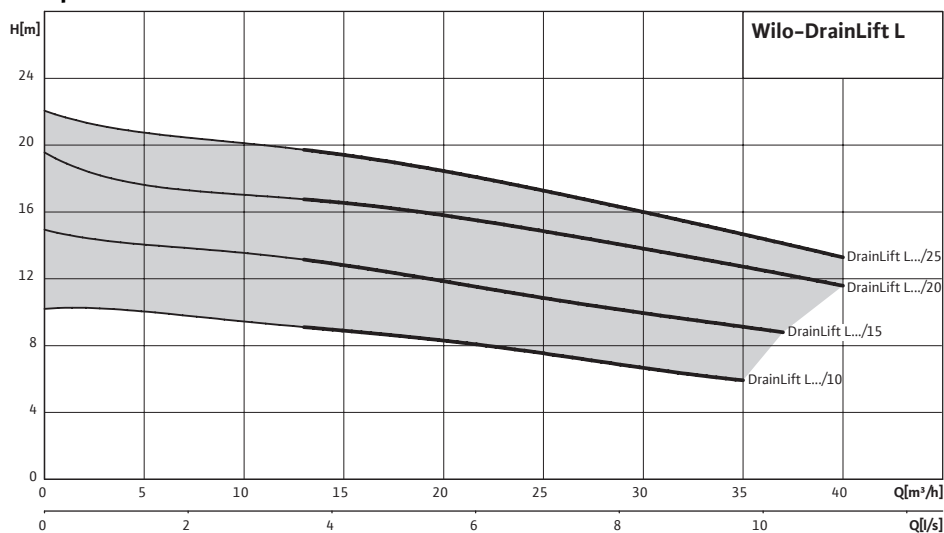
- Switchgear (mains-independent alarm)
- Inlet seal DN100 (for pipe Ø 110 mm)
- Keyhole saw Ø124 for inlet DN100
- PVC hose section Ø 50 mm with clamps for inlet connection DN50
- Hose section DN50 with hose clips for pipe connection of diaphragm hand pump or an inlet DN40
- Sleeve for ventilation connection DN70
- Fixation material
- Sound absorption strip for insulation of structure-borne noise
- Flange piece DN80/100 with flat gasket, flexible hose section, hose clips, screws and nuts for connection of pressure pipeline DN100
- Installation and operating instructions

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- Inlet connection DN 40 / DN 100 / DN 150
- Ventilation connection DN 70
- Min. suction head (installation level to middle of inlet) 180 mm
- Protection class (without switchgear) IP 67
- Gross tank volume 90...130 l, depending on type
- Switching volume 35 ... 50 l, depending on type

Duty chart: Wilo-DrainLift L

Pump curves Wilo-DrainLift L



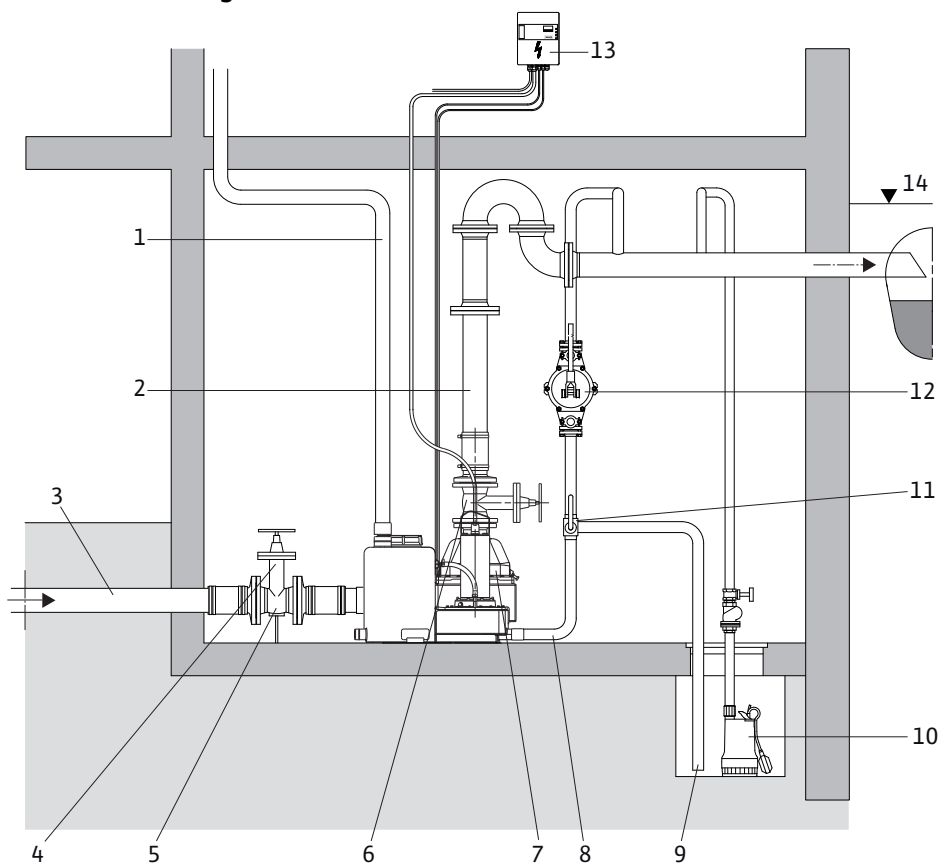
Equipment/function: Wilo-DrainLift L

| Design | |
|--|---|
| Submersible | • |
| Single-pump system | • |
| Double-pump system | • |
| Single-phase AC motor | - |
| Three-phase motor | • |
| Pump position: motor components outside the tank | • |
| Pump position: outside the tank | - |
| Pump position: in tank | - |
| Sealing chamber | • |
| Sealing for mechanical seal on fluid side | • |
| Sealing for rotary shaft seal on fluid side | - |
| Integrated non-return valve | • |
| Sheath current cooling | - |
| Single-channel impeller | - |
| Multi-channel impeller | - |
| Vortex impeller | • |
| Macerator | - |
| Equipment/function | |
| Inlet position freely selectable | • |
| Active carbon filter | - |
| Level control: with float switch | • |
| Level control: with level sensor | - |
| Level control: with pneumatic pressure transducer | - |
| Motor temperature monitoring | • |
| Motor leakage monitoring | - |
| Mains-independent alarm | • |
| Alarm for potential-free contact | • |
| Ready-to-plug | • |
| Connecting cable detachable | • |
| Switchgear | • |
| Hose connection for diaphragm hand pump | • |
| Seal for suction pipe connection for diaphragm hand pump | - |
| Hose connection for ventilation | • |
| Installation sundries | |
| Kit for pressure pipe connection | • |
| Curve cutter for inlet borehole | - |
| Keyhole saw for inlet borehole | • |
| Inlet seal | • |
| Soundproofing material | • |

• = available, - = not available; = optional

Installation drawings: Wilo-DrainLift L

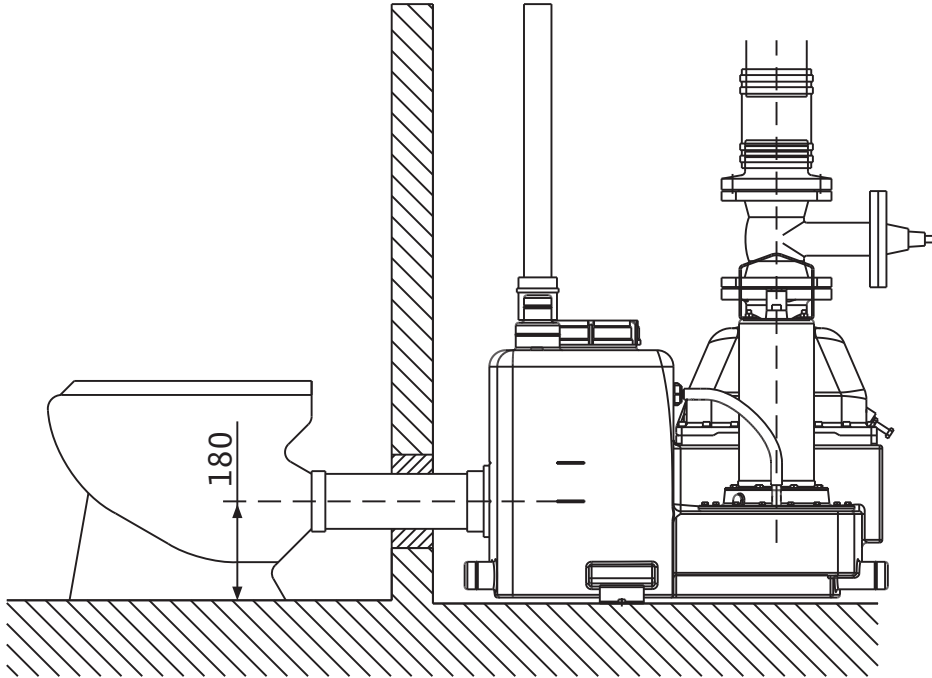
Installation drawing Wilo-DrainLift L



Installation drawings: Wilo-DrainLift L

Installation drawing Wilo-DrainLift L

Toilet direct connection - floor-mounted toilet



Installation drawings: Wilo-DrainLift L

Installation drawing Wilo-DrainLift L

Toilet direct connection - wall-mounted toilet

