

# Product data overview

## piLIFT<sup>®</sup> SMART

Vacuum Lifting Systems



# piLIFT® SMART

English

## Introduction

The piLIFT® SMART – Intuitive express handling up to 40kg [90 lbs].

The piLIFT® SMART combines the best of vacuum lifting technology with low energy consumption, minimal sound level and smart data features, the quick and intuitive piLIFT® SMART is truly a leap forward. The piLIFT® SMART is designed with the natural movement in mind. Everything is designed for optimal ergonomics.

There are several new SMART functions to increase the ergonomics:

- **Auto Release** is a new feature that takes the user experience to a new level. By just pressing the lower trigger, the load will automatically be released from the suction foot once a fixed surface is reached.
- **Auto pick/Auto place** where the piLIFT® SMART automatically goes down and pick/place the load.
- **Auto Balance** gives the piLIFT® SMART an instant balance, it doesn't matter if a load is lifted or not. As soon as you stop pressing on the up or down trigger, the piLIFT® SMART will balance in the exact position.
- **Variable Speed control** lets the user maneuver the up and down movement with precision. The harder the buttons are pressed, the faster it goes.
- **Auto height with and without load** gives the user the opportunity to set a chosen height with and without load, not dependent on weight or porosity of the object. The piLIFT® SMART will automatically go up to the chosen position.

The piLIFT® SMART is equipped with a swivel that lets the load be rotated 360° in horizontal position. With the angle adapter the load can be tilted 90°.

### INDUSTRY 4.0

The piLIFT® SMART is the first vacuum tube lifter ever that meets the needs of industry 4.0. It brings the latest technology to enable both operator and operation to obtain live information on the performance. Maintenance will benefit from service indicators that will enable peak operating performance.

The SMART Platform gives our customers the opportunity to log in to a web-based platform, where usage data can be viewed either live or obtained as defined reports, e.g. total weight and number of units handled.

# piLIFT® SMART

## Benefits

### **Industry 4.0**

Never before has a vacuum lifter been able to be implemented to Industry 4.0

### **Safe and Intuitive**

A vacuum lifter has never been easier to use. The variable speed control follows the users every move and the automatic balance lets the piLIFT® SMART stay in the exact position.

### **Ergonomic**

piLIFT® SMART is designed with natural movements in mind.

### **Decreases Strain Injuries**

Lifting fast in poor posture does not require heavy weights to cause pain and strain injuries.

### **Increases Productivity**

piLIFT® SMART will increase efficiency.

### **SMARTER**

The piLIFT® SMART is the smartest vacuum lifter yet.

### **Energy Consumption**

Save over 70% in energy in comparison to any other vacuum tube lifter. This will reduce our customer's carbon footprint.

### **Total Cost of Ownership**

The SMART features let our customers optimize and overview maintenance and thereby avoid downtime.

### **Sound Level**

The sound level is so low, that the pump and lift unit is barely noticed.

### **Program Update**

The piLIFT® SMART is possible to upgrade through remote updates, this means that the piLIFT® SMART will always be up to date.

# piLIFT® SMART

English

## Control unit - functions

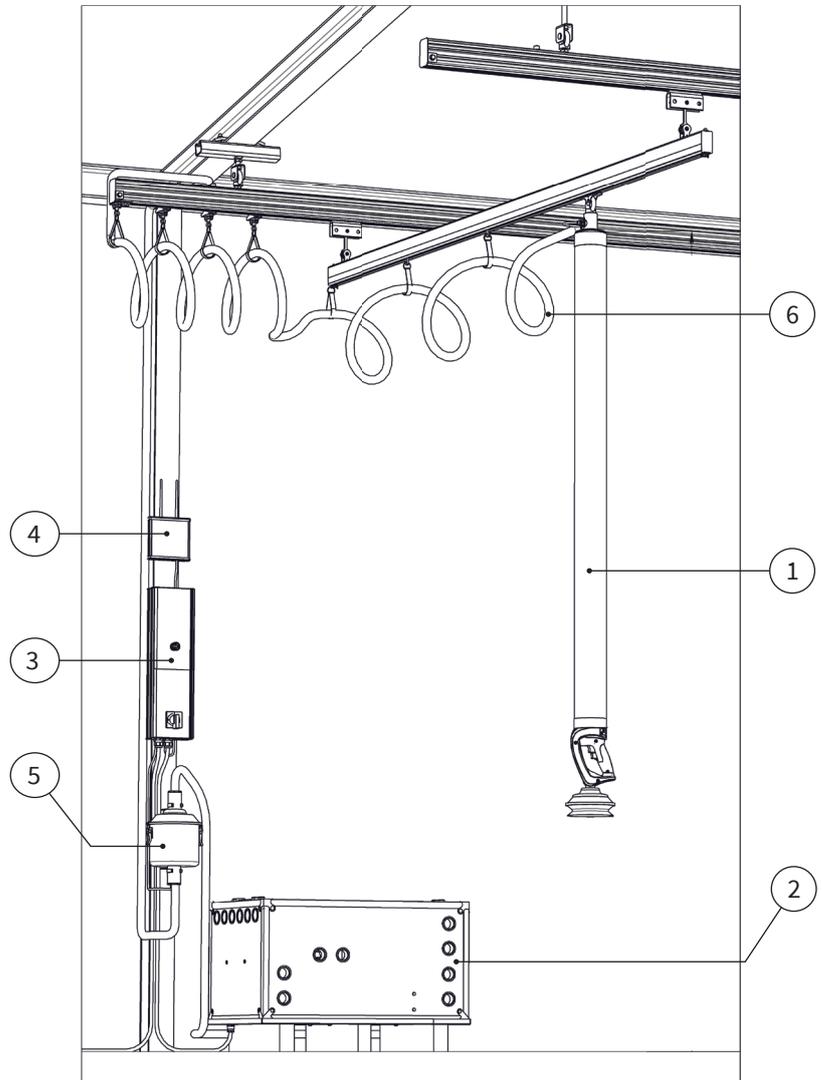
- ① Upper and lower control triggers or the Variable speed control buttons. With these two buttons, the user is managing the up and down movement. The speed is directly related to how hard it is pressed.
- ② Auto pick/place and quick release buttons include two functions. If the button is pressed for a few seconds the load will be directly released from the current height. If it is pressed once quickly, the piLIFT® SMART will go down and place, or pick up, the load for you automatically. piLIFT® SMART will then go back to the former height without any manual effort from the operator. The quick and auto pick/place button is placed on each side of the control unit, so it can easily be used for right as well as left-handed.
- ③ Swivel and Angle adapter. The swivel lets the load be rotated 360° degrees in the horizontal position. The angle adapter gives the possibility to pick and place the loads in the vertical position (0°-90°).
- ④ Enter button can be used to set the auto heights with and without load. Press the enter button when a suitable height is reached without load. Grip a load and then press the down trigger until the load is released on a fixed surface. piLIFT® SMART will then automatically return to the pre-set position without the need to press the upper trigger. The same procedure can be used for picking up a load, press on the enter button with a load and then release load by pressing the lower trigger until a fixed surface is reached. When a load is picked up the next time, piLIFT® SMART will automatically return to the pre-set position without the need to press the upper trigger. piLIFT® SMART will memorize the pre-set two heights, with and without load in accordance to your preferences. The heights are memorized until it's turned off or new heights is selected.
- ⑤ Standby button. This button lets the piLIFT® SMART go into, or wake up from, sleep mode.
- ⑥ Display where the current weight of the load is shown.
- ⑦ Ergonomic grip and protective hand guard.
- ⑧ B150 suction cup.
- ⑨ Lift tube with a cover sock.



# piLIFT® SMART

## The piLIFT® SMART package

- ① piLIFT® SMART lift unit
- ② Pump unit
- ③ Electric cabinet – VFD Variable Frequency Drive
- ④ SMART platform
- ⑤ Filter unit
- ⑥ Vacuum hose + electrical cable



# piLIFT® SMART

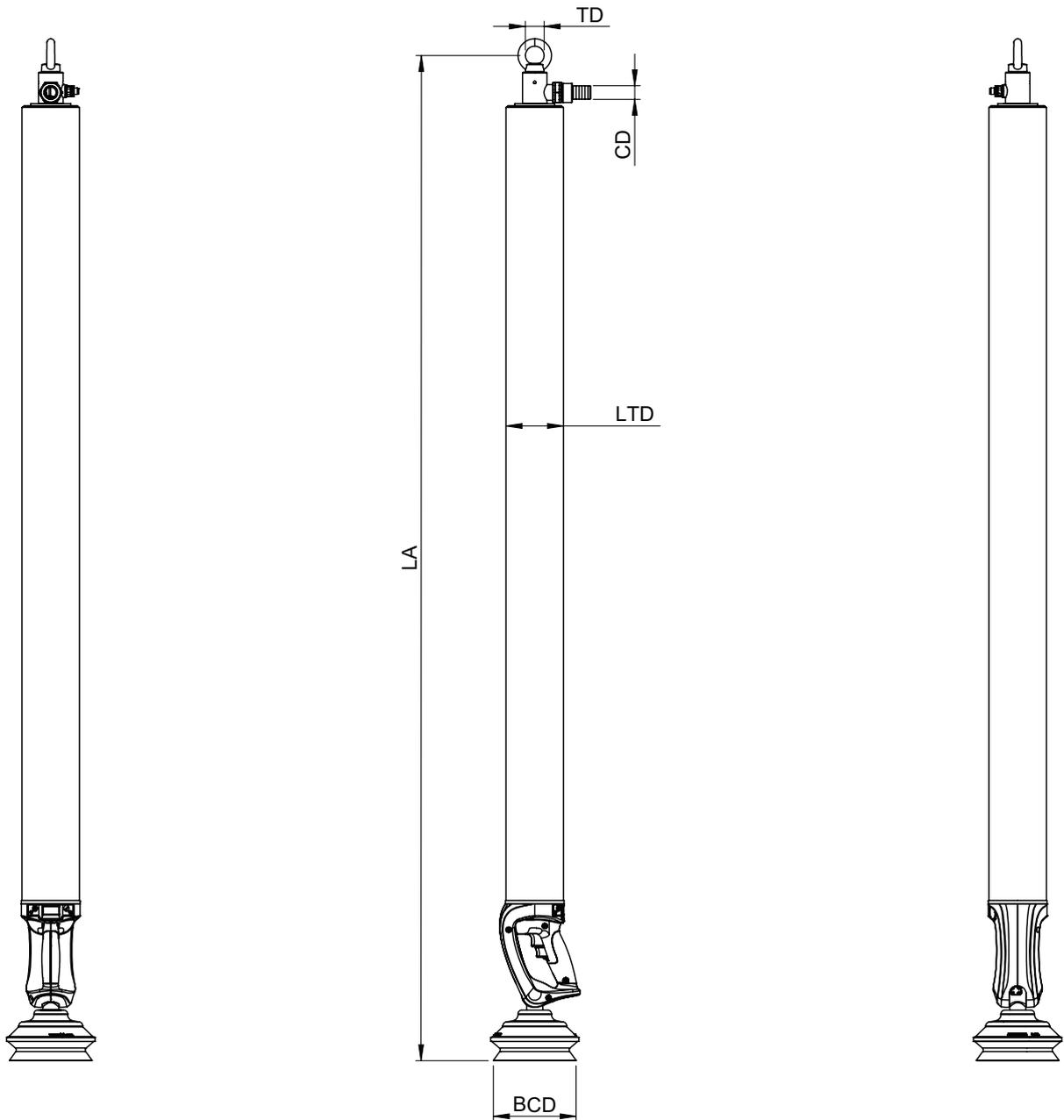
English

## Drawing overview

Simplified drawings with key measurements.  
Dimension mm [inch] (If nothing else is stated)

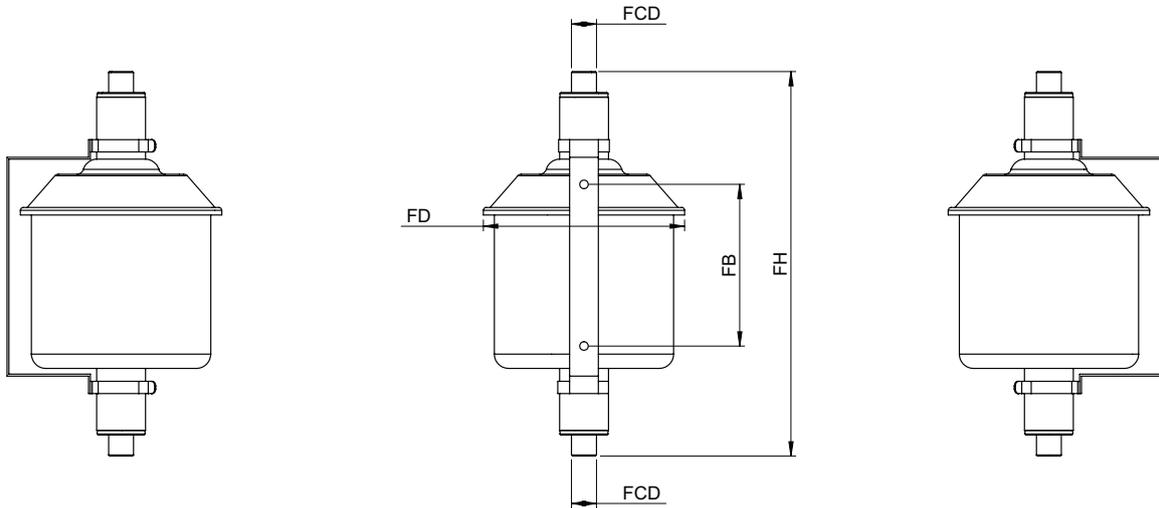
Lift unit

TD	CD	LTD	BCD	LA	Stroke	Weight
35 [1.38]	25 [0.98]	100 [3.94]	150 [5.90]	2950 [116.1]	1720 [67.7]	6.7kg [14.7 lbs]



Filter unit

FD	FB	FH	FCD	Weight
210 [8.26]	170 [6.69]	404 [15.90]	25 [0.98]	2.4kg [5.28 lbs]

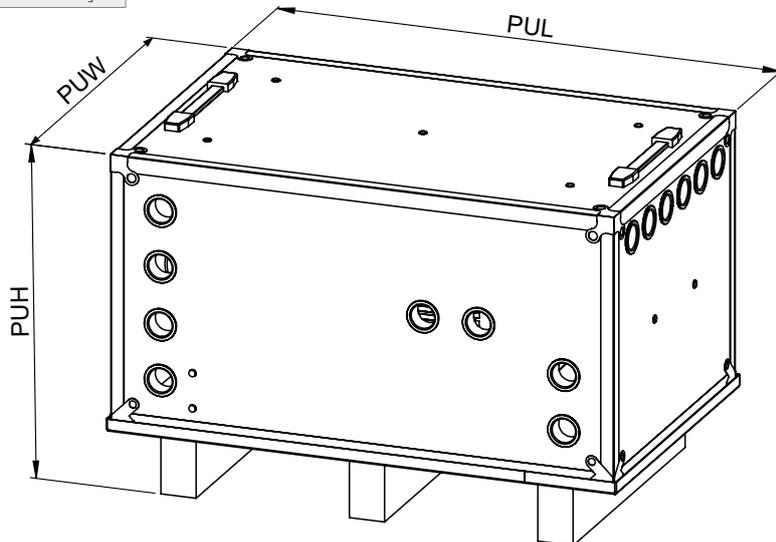


Pump unit

The pump unit is connected through the VFD (electric cabinet). See the specifications below for the electric cabinet.

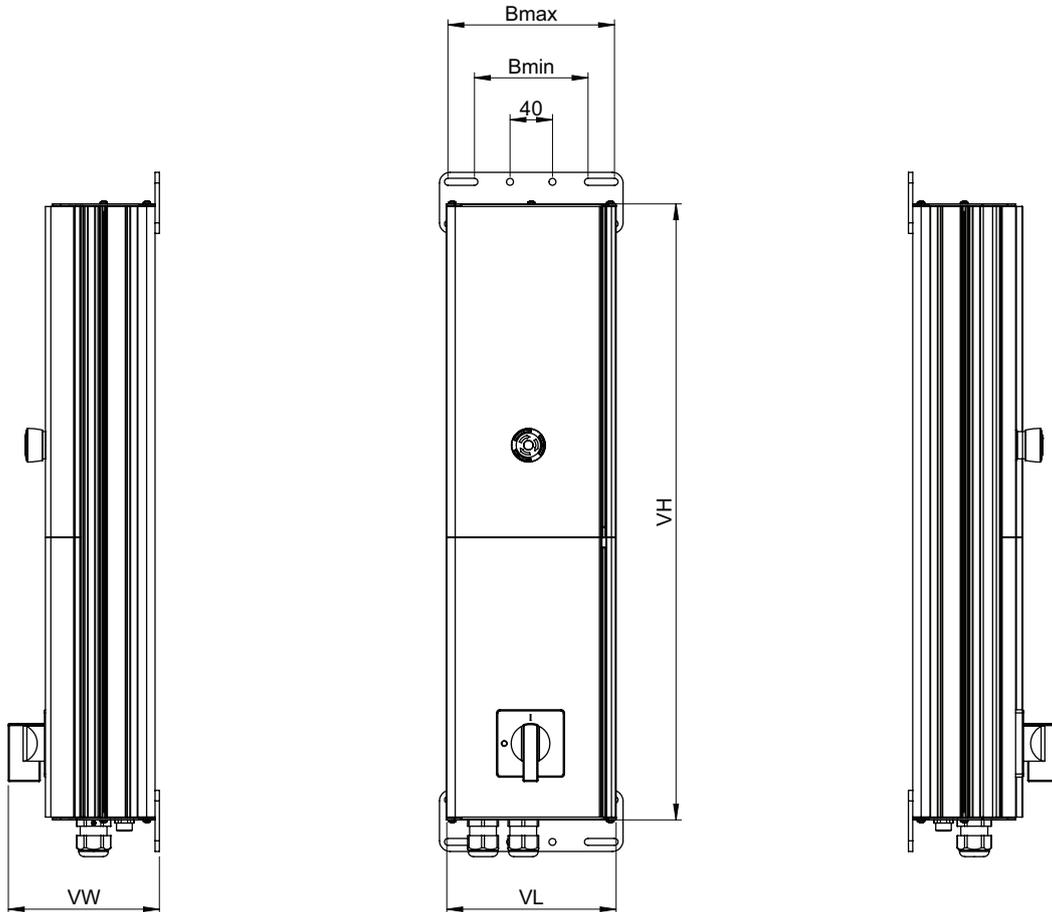
Pump unit, electric	
Frequency	50Hz
Max / Min Ampere	7.8 / 0.2
Recommended fuse	16A
Voltage (V)	400
Weight (kg) [lbs]	73kg [160.9 lbs]
Dimensions PULxPUWxPUH (mm) [inch]	869x559x576 [34.21x22.00x22.67]

Neutral conductor required



VFD – Variable Frequency Control

Bmax	Bmin	VH	VL	VW	Weight
150 [5.90]	100 [3.93]	585 [23.03]	160 [6.30]	143 [5.63]	7 kg [15.4 lbs}



## Crane and Over Head system

Several types of Crane and Over Head system can be used with the piLIFT® SMART.

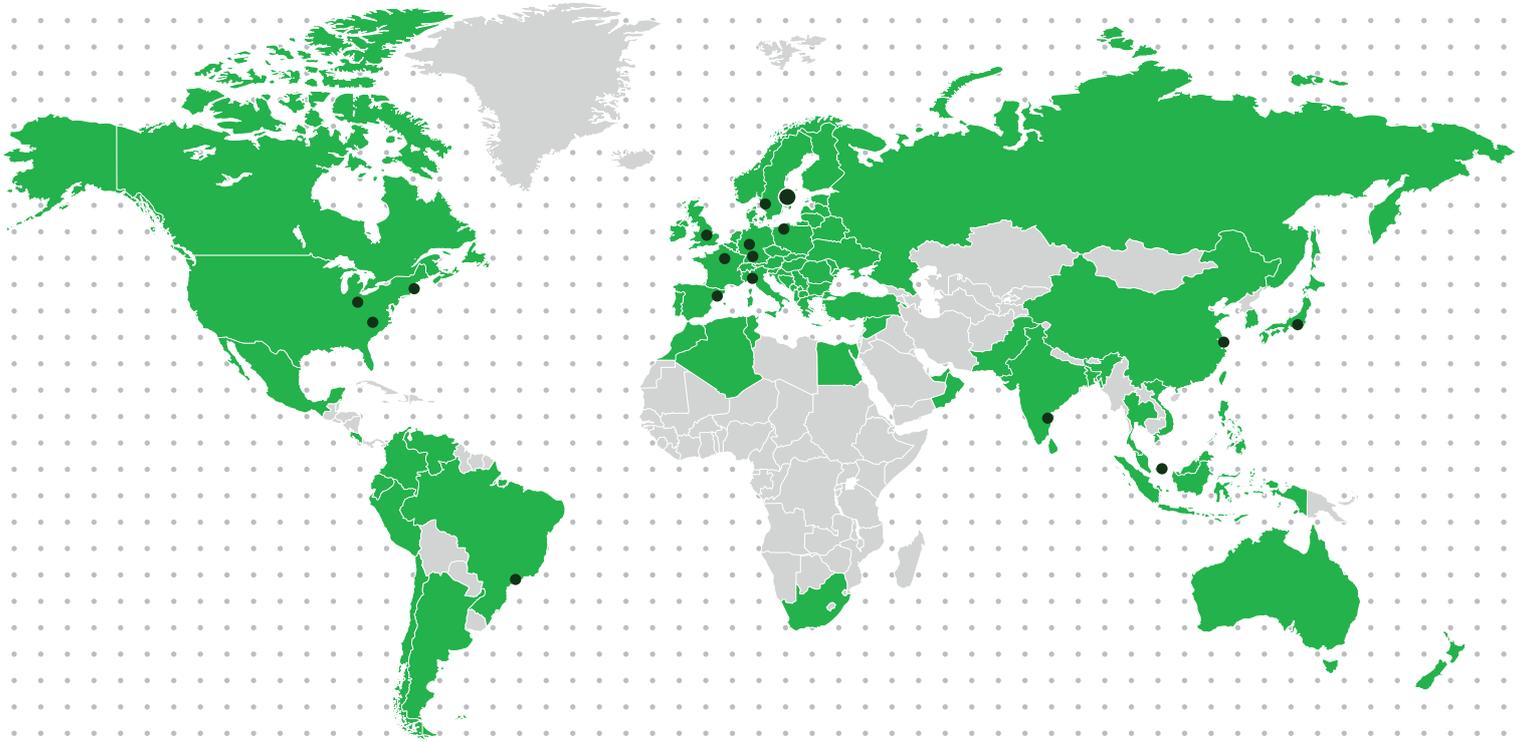
These are the most common systems.



**Slewing Jib Cranes**



**Bridge Cranes**



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