

Product data overview

piLIFT[®] SMART

Vacuum Lifting Systems



piLIFT® SMART

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/Auto Pick up** where the piLIFT® SMART automatically goes down and release/pick up 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 depending 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 movement in mind.

Decreases Strain Injuries

Lifting heavy weights fast in poor posture does not 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 with 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 are barely noticed.

Program Update

The piLIFT® SMART is possible to upgrade through remote updates and is always up-to-date.

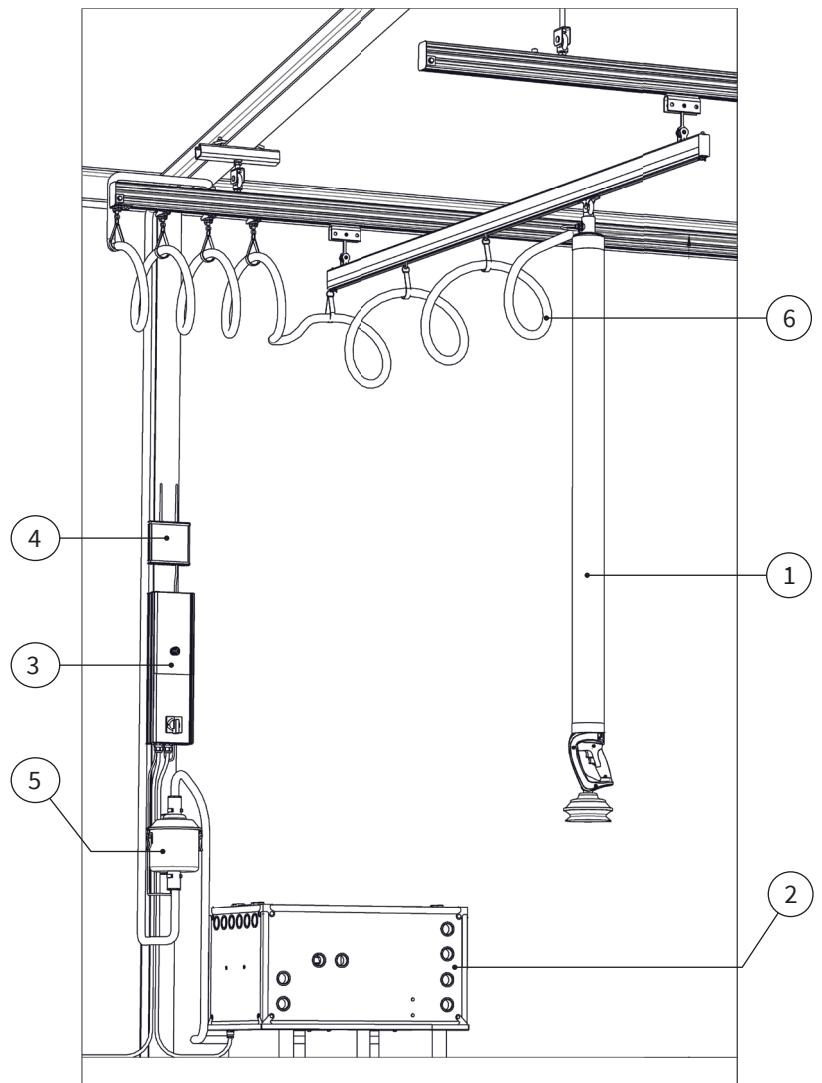
Control unit

- ① Up and down 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's pressed.
- ② Quick/auto release button. Here are two functions. If the button is pressed in for a few seconds the load will be released from the current position. If it's pressed once, the piLIFT® SMART will go down and drop, or pick up, the load and then go back in position. The quick and auto release button is placed on each side of the control unit, so it can easily be used for right and or 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 which is used to set the auto heights with and without load. Press the enter button when a suitable height is reached and the piLIFT® SMART will automatically go up to this position. This function can be used with and/or without load.
- 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.



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

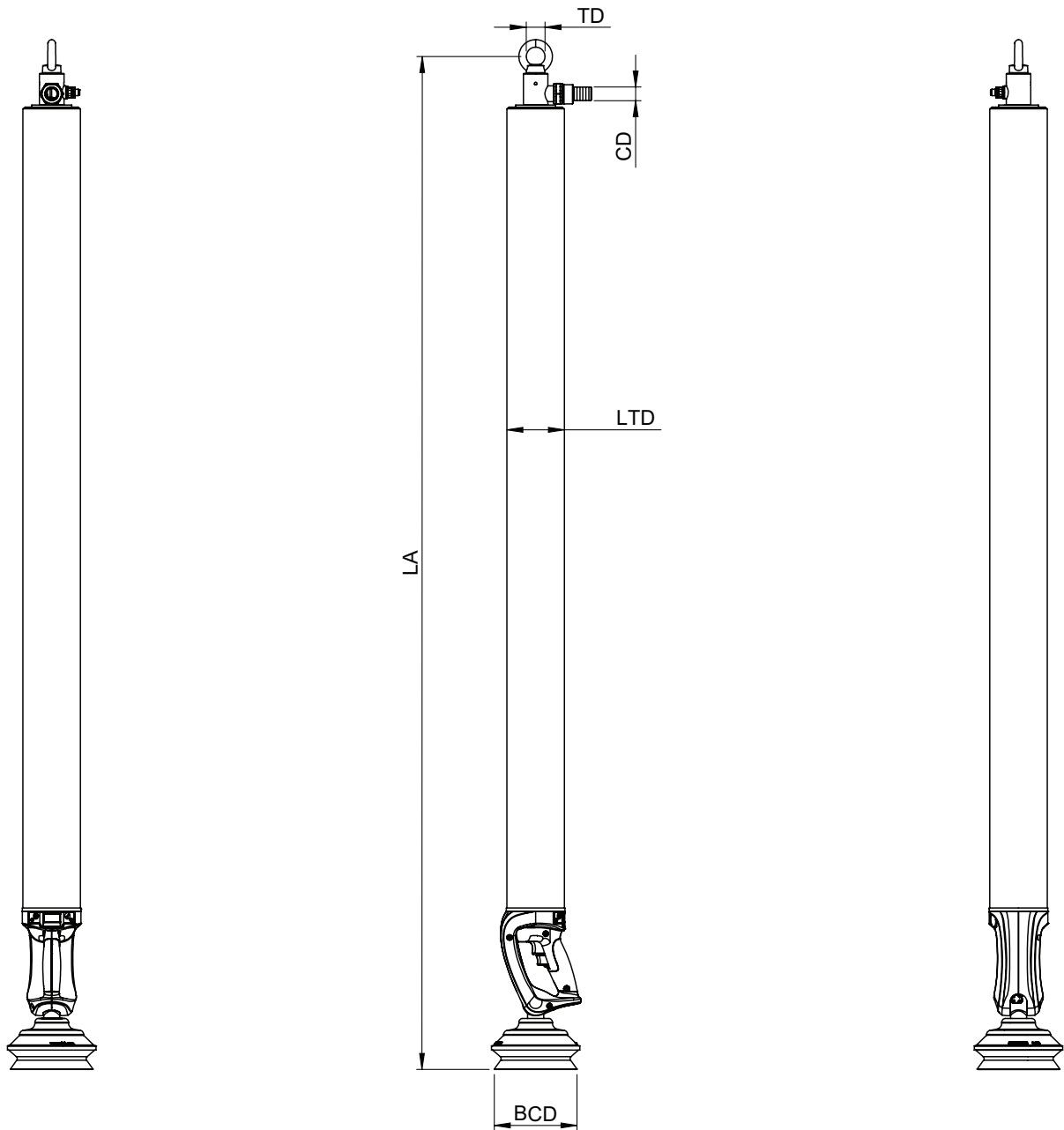


Drawing overview

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

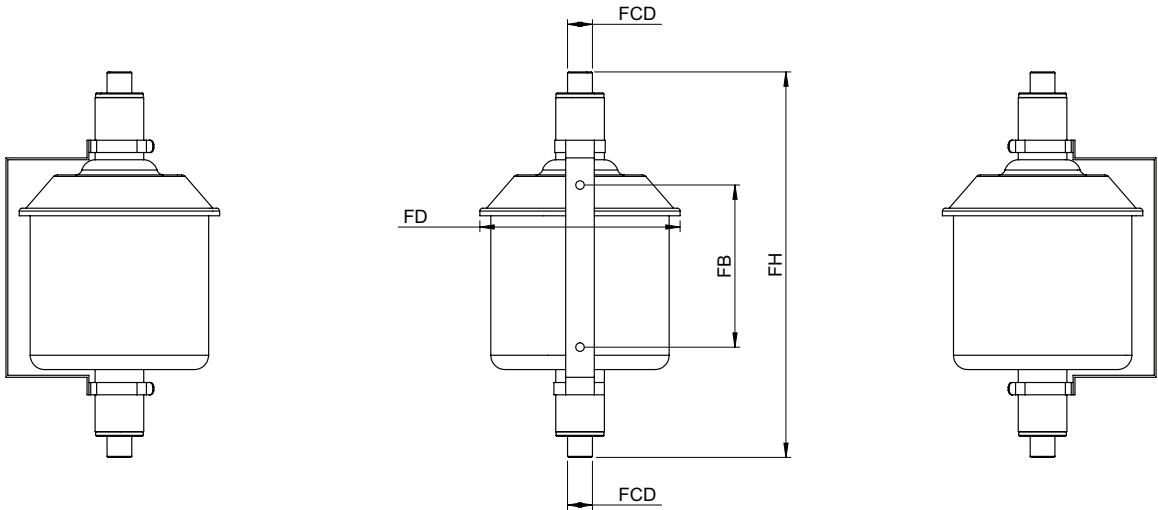
Lift unit

TD	CD	LTD	BCD	LA	LA min	Stroke	Weight
35 [1.38]	25 [0.98]	100 [3.94]	150 [5.90]	3000 [118.1]	1150 [45.3]	1850 [72.8]	6.7kg [14.77 lbs]



Filter unit

FD	FB	FH	FCD	Weight
210 [8.26]	170 [6.69]	404 [15.90]	25 [0.98]	2.4kg [5.3 lbs]

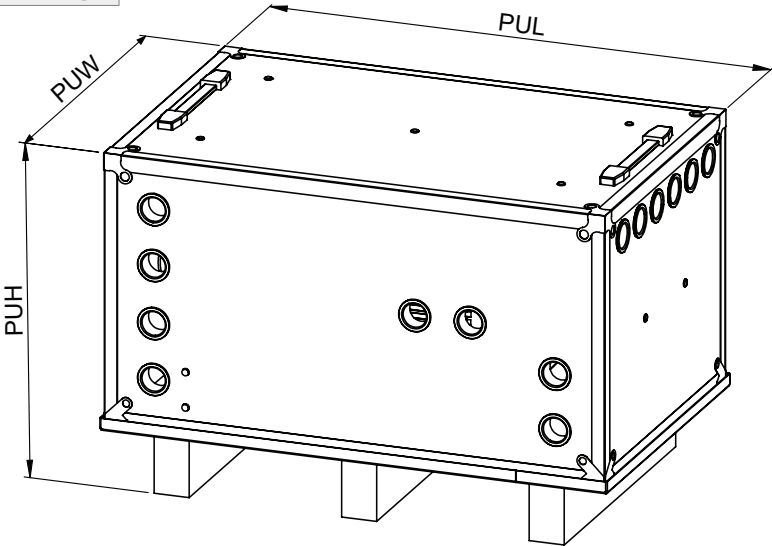


Pump unit

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

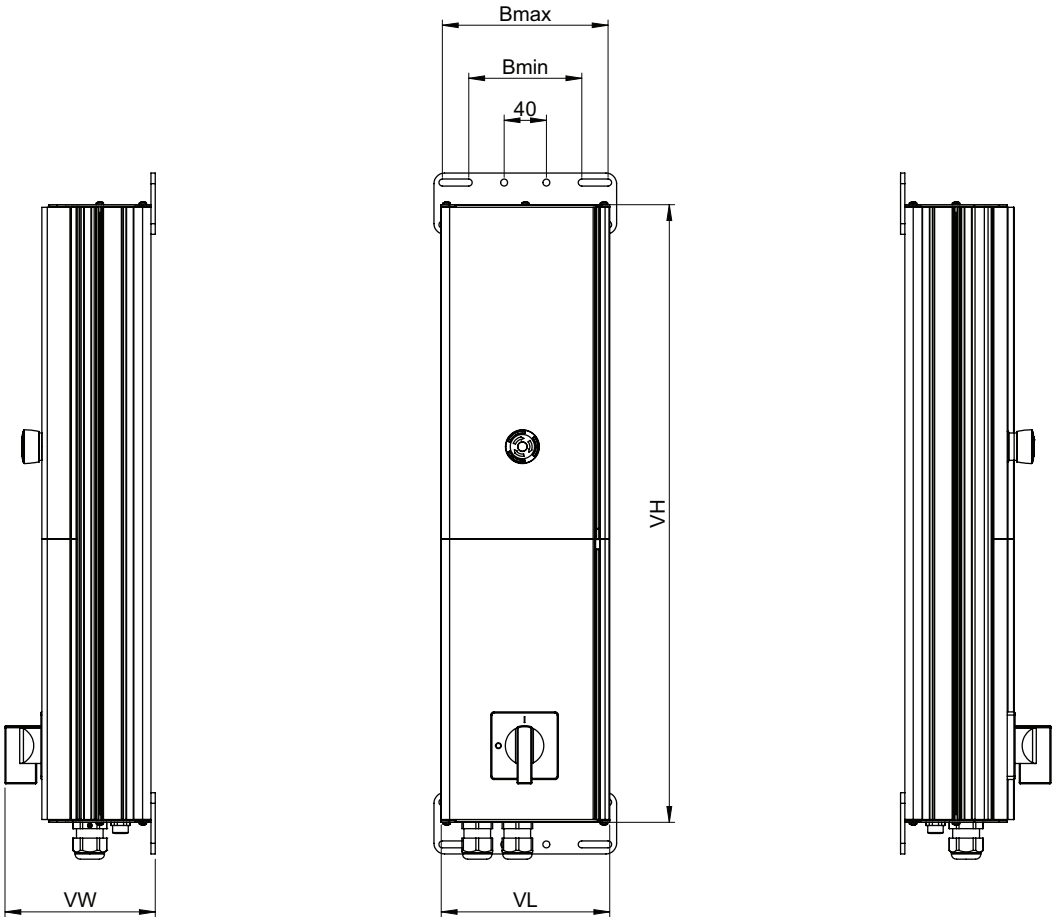
Pump unit, electric	
Frequenzy	50Hz
Max / Min Ampere	7.8 / 0.2
Recommended fuse	16A
Voltage (V)	400
Weight (kg) [lbs]	73kg [160.9 lbs]
Dimensions PULxPUWxPUH (mm) [inch]	869x559x576 [34.21x22.00x22.67]

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

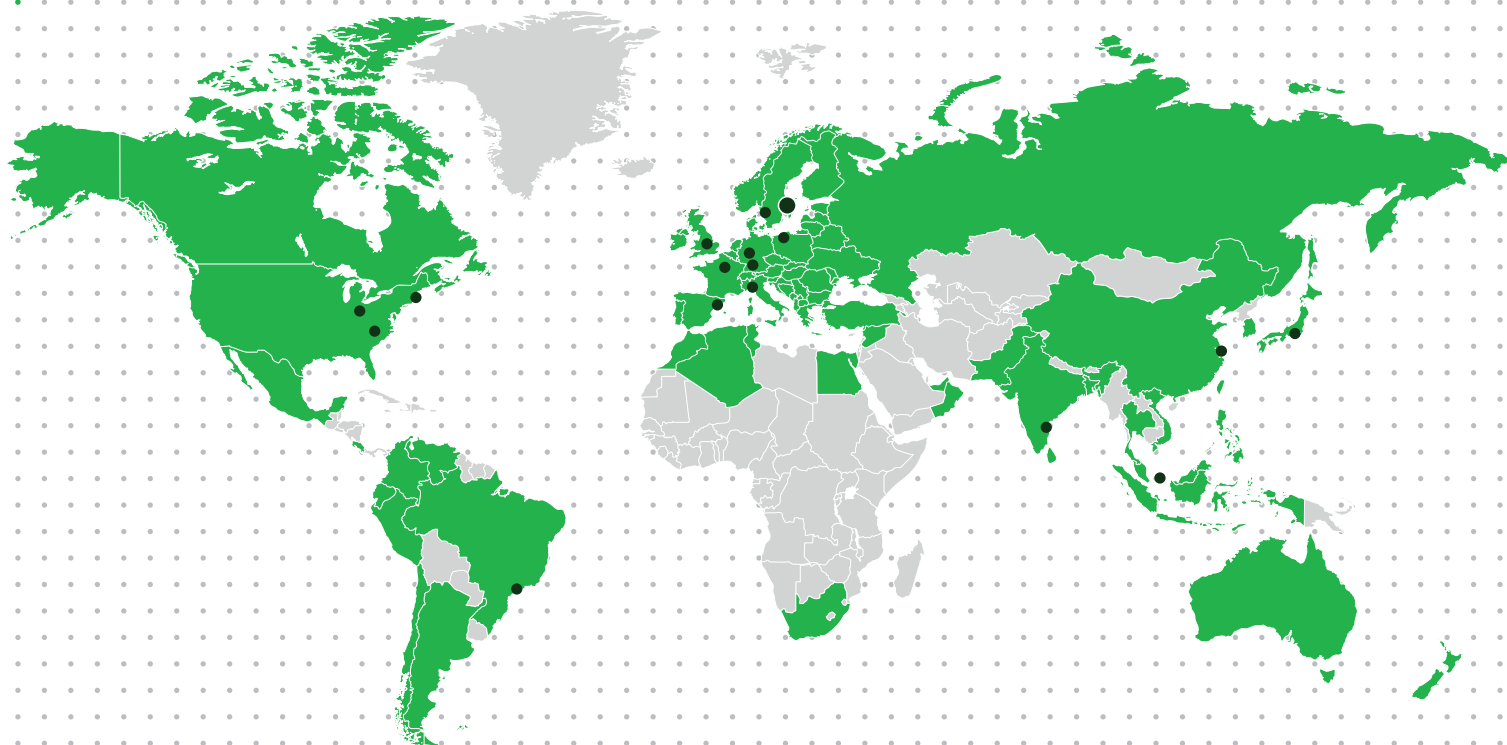
Several types of Crane and Over Head system can be used with the piLIFT® SMART.
These are the most common systems.



Slewing Jib Cranes



Bridge Cranes



www.piab.com

BRAZIL – Sao Paulo
Phone: +55 11 4492 9050
Email: info-brasil@piab.com

CANADA – Hingham MA (US)
Phone: +1 781 337 7309
Email: info-usa@piab.com

CHINA – Shanghai
Phone: +86 21 5237 6545
Email: info-china@piab.com

FRANCE – Lagny sur Marne
Phone: +33 1 6430 8267
Email: info-france@piab.com

GERMANY – Butzbach
Phone: +49 6033 7960-0
Email: info-germany@piab.com

GERMANY – Schmallenberg
Robotic gripping
Phone: +49 (0) 29 72/962 17-11
Email: info-germany@piab.com

MEXICO – Hingham MA (US)
Phone: +1 781 337 7309
Email: info-mxca@piab.com

INDIA – Chennai
Phone: +91 9444 25 36 48
Email: info-india@piab.com

ITALY – Torino
Phone: +39 011 226 36 66
Email: info-italy@piab.com

JAPAN – Tokyo
Phone: +81 3 6662 8118
Email: info-japan@piab.com

POLAND – Gdansk
Phone: +48 58 785 08 50
Email: info-poland@piab.com

SPAIN – Barcelona
Phone: +34 93 6333876
Email: info-spain@piab.com

SINGAPORE
Phone: +65 6455 7006
Email: info-singapore@piab.com

SOUTH KOREA – Dokok-Dong
Phone: +82 2 3463 0751
Email: info-korea@piab.com

SWEDEN – Stockholm (HQ)
Phone: +46 8 630 25 00
Email: info-sweden@piab.com

SWEDEN – Mölndal
Ergonomic handling
Phone: +46 31 67 01 00
Email: info-sweden@piab.com

UNITED KINGDOM –
Loughborough
Phone: +44 1509 857 010
Email: info-uk@piab.com

USA – Hingham (MA)
Phone: +1 781 337 7309
Email: info-usa@piab.com

USA – Xenia (OH)
Robotic gripping
Phone: +1 888 727 3628
Email: info-usa@piab.com

USA – Charlotte (NC)
Ergonomic handling
Phone: +1 704 527 5052
Email: info-usa@piab.com