

Product data overview

Vaculex[®] VL

Vacuum Lifting Systems



Vaculex[®] VL

Vaculex® VL

English

Introduction

Vaculex® VL, the versatile lifter - up to 250 kg [550 lbs]

Vaculex VL is an ergonomic vacuum lifter for any industry. This two-hand lifter can lift multiple objects at once, rotate the load, tilt sideways and much more. Vaculex VL's modular design can be customized to lift almost anything up to 250 kg [550 lbs].

Vaculex® VL design

The design consists of a pump, vacuum hose, lift tube, control unit and finally a suction foot or possibly a gripping tool which is adapted to your needs. This vacuum lifter is available in seven lift tube sizes, between 100-200 mm [3.94-7.87 in], with four different vacuum pumps and many accessories and suction feet for a virtually infinite number of combinations. Normally, Vaculex® VL is driven by an electric vacuum pump for best performance and flexibility but we can also provide pneumatic vacuum pumps if required.

Lift almost everything

With Vaculex® VL you can lift anything up to 250 kg [550 lbs] such as boxes, sacks, bags, drums, cans, bottles, metal sheets, doors, reels, stone slabs, computers, crates, barrels, windows, white goods, TVs and much more.

Good ergonomics is good economics

Repeated lifts do not have to be heavy to be both dangerous and costly. Most often, vacuum tube lifters lead to an increased work rate and better productivity. Costs for extended periods of sick leave are reduced and rehabilitation periods are avoided. Our tube lifters minimize that type of problem and also reduce the risk of accidents that can injure the user as well as damage the goods. Reducing repetitive strain injuries and sick leave is beneficial to everyone involved.

Benefits

- Handles almost any load between 30 and 250 kg [66 and 551 lbs]
- Very user friendly and flexible to fit your specific needs
- Can lift multiple objects at once, rotate the load, tilt sideways etc
- Increases productivity
- Reliable and with low service costs
- Ergonomic and Safe
 - o Reduces repetitive strain injuries and sick leave costs
 - o Reduces the risk of damage goods
- Modular system which can be reconfigured for new tasks over time
- Available with a wide range of accessories
- Available in A2 Stainless Steel
- Available in several ATEX certified versions
- Available with Vaculex ATOP for increased energy efficiency and maximum comfort

Identification

Product number consisting of a combination of the following set:

| | | | | | | | |
|------------------|--|-----------------------------|--|------------------------------|--|----------------------------|--|
| | | Lift tube size | | | | Three phase voltage | |
| | | 10 = Ø 100mm [3.94 inch] | | | | A = 50Hz / 200 - 220V Δ | |
| | | 12 = Ø 120mm [4.72 inch] 14 | | Pump Unit | | B = 50Hz / 220 - 240V Δ | |
| | | = Ø 140mm [5.51 inch] | | 152 = 15 Pump / 1.9 kW motor | | C = 50Hz / 380 - 420V Y | |
| | | 16 = Ø 160mm [6.30 inch] | | 203 = 20 Pump / 2.5 kW motor | | D = 60Hz / 200 - 220V Δ | |
| | | 18 = Ø 180mm [7.09 inch] | | 304 = 30 Pump / 4.6 kW motor | | E = 60Hz / 255 - 275V Δ | |
| Lift Unit | | 20 = Ø 200mm [7.87 inch] | | 405 = 40 Pump / 7.1 kW motor | | F = 60Hz / 440 - 480V Y | |
| 2 = VL | | | | | | G = 60Hz / 380V Y | |

2
16
1
304
S
04
C
14

| | | |
|--|---|--|
| <p>Number of suspension points on lift unit</p> <p>0 = No suspension point</p> <p>1 = One suspension point</p> <p>2 = Two suspension (Always for pneumatic pumps)</p> | <p>Options</p> <p>0 = Standard lift unit</p> <p>1 = Stainless steel</p> <p>3 = 3 meter lift tube [118 inch]</p> <p>4 = 4 meter lift tube [157 inch]</p> <p>5 = Silencing Box</p> <p>6 = Protection Valve</p> <p>7 = Stainless Control unit + top swivel</p> <p>8 = Stainless Control unit</p> <p>9 = Silencing Box with ventilating lid</p> <p>A = Quick Balance Device</p> <p>D = Split Control Handle</p> <p>G = Release Valve for Standard Handle</p> <p>H = Release Valve for Extended Handle</p> <p>I = Universal Joint</p> <p>J = Big Filter Assembly Complete</p> <p>K = Stainless filter unit</p> <p>M = Electrically grounded lift unit</p> <p>S = Special, for when multiple options are used</p> <p>T = ATOP energy saving system</p> | <p>Multiple options</p> <p>If "Options" is set to "S", then "Multiple options" will consist of several of the options, in alphabetical order.</p> <p>Extended handle</p> <p>00 = Standard handle</p> <p>02 = 250mm extended handle [9.84 inch]</p> <p>03 = 350mm extended handle [13.79 inch]</p> <p>04 = 450mm extended handle [17.72 inch]</p> <p>06 = 650mm extended handle [25.59 inch]</p> <p>08 = 850mm extended handle [33.46 inch]</p> <p>0A = Any Length up to 1200mm [47.24 inch]</p> <p>2x* = 200mm [7.87 inch] + Xmm*</p> <p>3x* = 300mm [11.81 inch] + Xmm*</p> <p>4x* = 400mm [15.75 inch] + Xmm*</p> <p>5x* = 500mm [19.69 inch] + Xmm*</p> <p>7x* = 700mm [27.56 inch] + Xmm*</p> <p>0B = Any Length up to 1200mm* [47.24 inch]</p> <p>* = Two part extended handle with hinge.</p> <p>Length of the second handle.</p> <p>3 = 300 [11.81 inch], 5 = 500 [19.69 inch], 6 = 600 [23.62 inch] or 7 = 700 [27.56 inch].</p> |
|--|---|--|

Example:

2 16 1 304 S 04 C 14 = VL lift unit in stainless steel, 4m [157 inch], 160mm [6.30 inch] tube with one suspension point, 30 pump 380-420V 50Hz and a 450mm [17.72 inch] extended handle.

Vaculex® VL

English

Identification

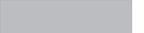
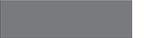
Clarification of Options:

- 0 = Standard lift unit.
- 1 = Stainless steel - All metal parts in the lift unit are made from stainless steel grade 304.
- 3 = 3 meter lift tube - The length of the lift tube is 3m [118 inch].
- 4 = 4 meter lift tube - The length of the lift tube is 4m [157 inch].
- 5 = Silencing Box.
- 6 = Protection Valve - The lifter is equipped with a mechanical protection valve (anti jump valve) that prevents the lifter from jumping up in high speed in the unlikely event of dropping the load. Should be used in combination with dead end tools or situations where there is a risk of dropping the load, but the suction foot is still covered by part of the lift object.
- 7 = Stainless Control unit + top swivel.
- 8 = Partly stainless steel - All metal parts in the control unit are made from stainless steel grade 304.
- 9 = Silencing Box with ventilating lid.
- A = Quick Balance Device.
- D = Split Control Handle - The control handle is split in two parts. The vacuum hose is mounted above the tool and the control handle is mounted somewhere on the tool. Both parts are connected by a flexible hose.
- G = Release Valve for Standard Handle - Release valve for standard handle. Recommend when you have high safety factor of the suction foot and needs extra help to release the object. This is also good when you need to release the object before its firmly put down on the underlying surface. Eg. loading on to a moving conveyor belt.
- H = Release Valve for Extended Handle - Please see the explanation for release valve for standard handle. Recommended to always include this option together with an extended handle.
- I = Universal Joint.
- J = Big Filter Assembly Complete.
- K = Stainless filter unit - Filter unit in stainless steel grade 304.
- M = Electrically grounded lift unit - Grounded lift unit without cover sock.
- S = Special, for when multiple options are used.
- T = ATOP energy saving system - The system detects when the lifter has been inactive for x seconds and automatically turns the pump unit off. Supplied with remote control used to start the pump again.

Vaculex® VL

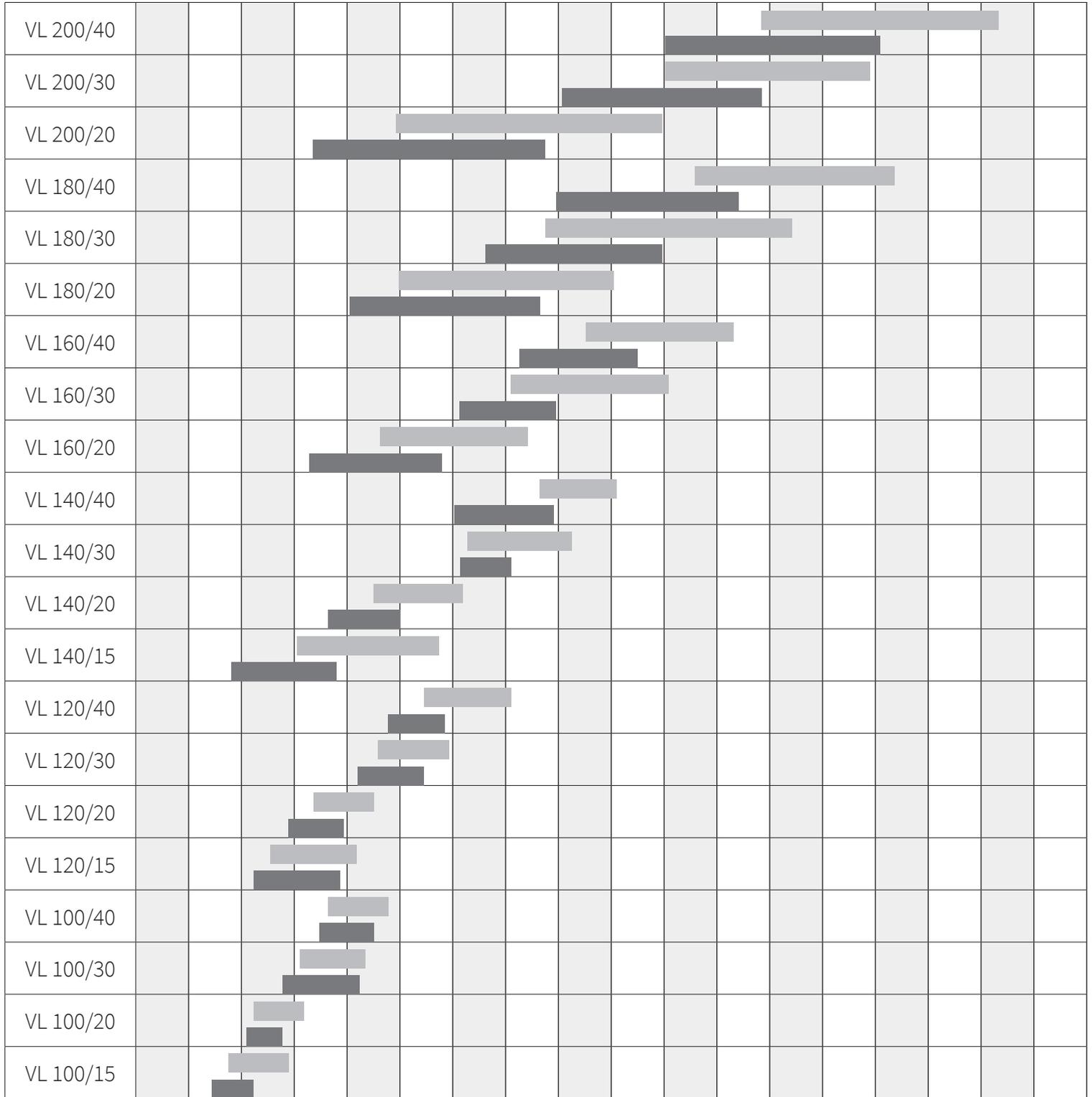
Lifting Capacity

Find the best Lift Unit/Pump combination:

Non porous Lifting object 
 Porous Lifting object 

English

| | | | | | | | | | | | | | | | | | | |
|-----|---|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Kg | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 |
| Lbs | 0 | 22 | 44 | 66 | 88 | 110 | 133 | 154 | 176 | 198 | 220 | 243 | 265 | 287 | 309 | 331 | 353 | 375 |



| | | | | | | | | | | | | | | | | | | |
|-----|---|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Kg | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 |
| Lbs | 0 | 22 | 44 | 66 | 88 | 110 | 133 | 154 | 176 | 198 | 220 | 243 | 265 | 287 | 309 | 331 | 353 | 375 |

The bars show recommended “weight interval” in kg [lbs] (for the lifted objects) regarding actual Lift Unit/Pump combination. To the left of the bar it takes 2 seconds for the Lift Unit/Pump combination to evacuate and lift 1 meter [39.4]. To the right it takes 4 seconds. We have been using a rectangular suction foot during our tests, therefore you must consider the extra weight if you choose a heavier suction foot.
 Note! Try to choose as big Lift Tube as possible. This will give you a “softer” and smother Lift Unit.

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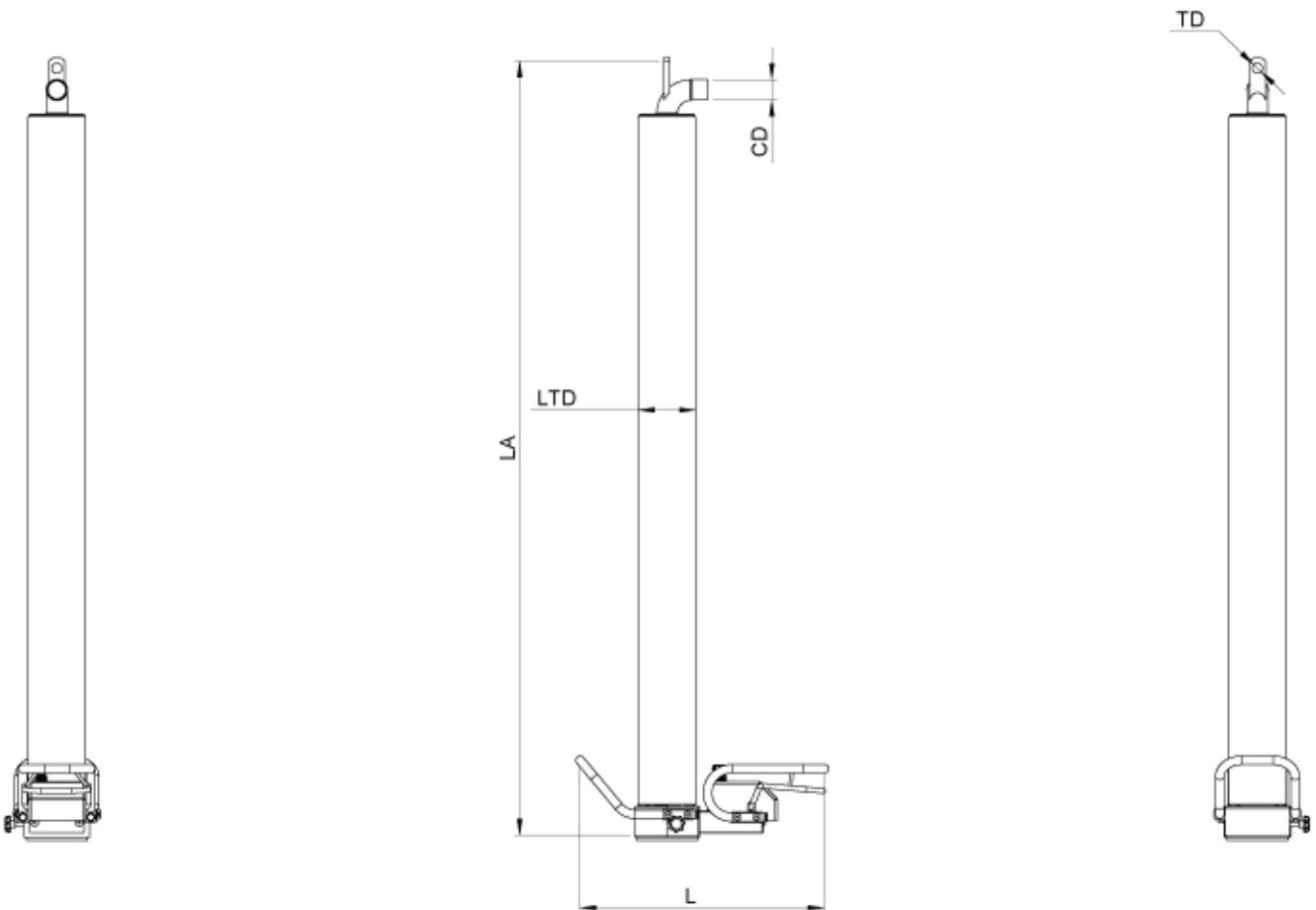
Drawing overview

Simplified drawings with key measurements.

Without suction foot or similar (with the possibility to choose suitable foot).

Dimension mm [in]

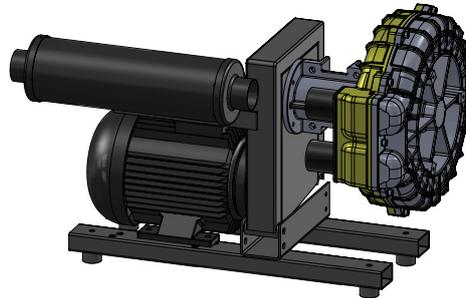
| Model | LTD | LA | TD | CD | L |
|-------|------------|---------------------------------------|-----------|-----------|-------------|
| VL100 | 100 [3.94] | Max: 2657 [104.6] Stroke: 1720 [67.7] | 19 [0.75] | 38 [1.50] | 450 [17.72] |
| VL120 | 120 [4.72] | Max: 2657 [104.6] Stroke: 1750 [68.9] | 19 [0.75] | 38 [1.50] | 450 [17.72] |
| VL140 | 140 [5.5] | Max: 2657 [104.6] Stroke: 1720 [67.7] | 19 [0.75] | 38 [1.50] | 450 [17.72] |
| VL160 | 160 [6.30] | Max: 2657 [104.6] Stroke: 1650 [65] | 19 [0.75] | 51 [2] | 485 [19.01] |
| VL180 | 180 [7.01] | Max: 2657 [104.6] Stroke: 1670 [65.7] | 19 [0.75] | 51 [2] | 485 [19.01] |
| VL200 | 200 [7.87] | Max: 2657 [104.6] Stroke: 1580 [62.2] | 19 [0.75] | 51 [2] | 485 [19.01] |



Vaculex® VL

Pump

These are the electrical and pneumatic pumps for the ML series.



| Pumpunit, electric | 15 | | 20 | | 30 | | 40 | |
|---------------------------------|------------------------------------|----|----------------------------------|----|------------------------------------|----|------------------------------------|----|
| Frequency(Hz) | 50 | 60 | 50 | 60 | 50 | 60 | 50 | 60 |
| Power (kW) | 2.2 | | 3 | | 4.6 | | 7.1 | |
| Voltage (V) | X* | Y* | X* | Y* | X* | Y* | X* | Y* |
| Weight (kg) [lbs] | 36 [79.4] | | 40 [88.2] | | 57 [125.7] | | 86 [189.6] | |
| Dimensions LxWxH (mm) [inch] | 580x270x410 [22.83x10.63x16.14] | | 640x200x430 [25.2x7.87x16.93] | | 694x352x429 [27.38x13.86x16.89] | | 795x499x366 [31.29x19.65x14.41] | |
| Sound level (dBA) | 74 | | 77 | | 82 | | 96 | |

| X = 50Hz, 3 - phase | Y = 60Hz, 3 - phase |
|---------------------|---------------------|
| 200 - 220V Δ | 200 - 220V Δ |
| 220 - 240V Δ | 230V Δ |
| 380-420V Y | 255 - 275V Δ |
| | 380V Y |
| | 440 - 480V Y |
| | 575V Y |

Crane and Over Head system

Several types of Crane and Over Head system can be used with the Vaculex® VL.

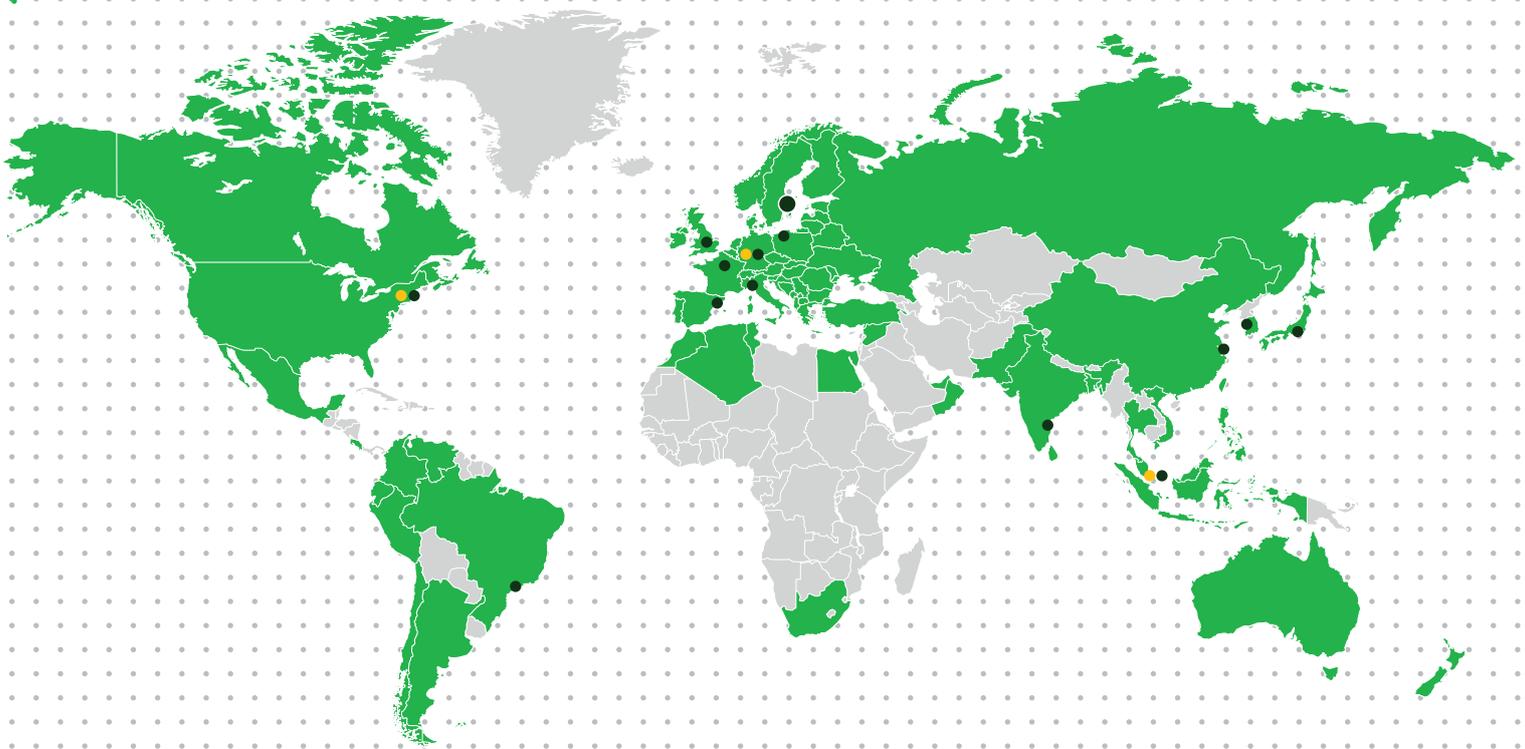
These are the most common systems. More info in the separate datasheet for Cranes and Over Head systems.



Bridge Cranes



Slewing Jib 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