

Product data overview

Vaculex[®] VL

Vacuum Lifting Systems



Vaculex[®] VL

Vaculex® VL

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		Pump Unit		Three phase voltage	
10 = Ø 100mm [3.94 inch]		152 = 15 Pump / 1.9 kW motor		A = 50Hz / 200 - 220V Δ	
12 = Ø 120mm [4.72 inch]	14	203 = 20 Pump / 2.5 kW motor		B = 50Hz / 220 - 240V Δ	
= Ø 140mm [5.51 inch]		304 = 30 Pump / 4.6 kW motor		C = 50Hz / 380 - 420V Y	
16 = Ø 160mm [6.30 inch]		405 = 40 Pump / 7.1 kW motor		D = 60Hz / 200 - 220V Δ	
18 = Ø 180mm [7.09 inch]				E = 60Hz / 255 - 275V Δ	
20 = Ø 200mm [7.87 inch]				F = 60Hz / 440 - 480V Y	
				G = 60Hz / 380V Y	
Lift Unit		Options		Multiple options	
2 = VL		0 = Standard lift unit		If "Options" is set to "S", then "Multiple options" will consist of several of the options, in alphabetical order.	
		1 = Stainless steel		Extended handle	
		3 = 3 meter lift tube [118 inch]		00 = Standard handle	
		4 = 4 meter lift tube [157 inch]		02 = 250mm extended handle [9.84 inch]	
		5 = Silencing Box		03 = 350mm extended handle [13.79 inch]	
		6 = Protection Valve		04 = 450mm extended handle [17.72 inch]	
		7 = Stainless Control unit + top swivel		06 = 650mm extended handle [25.59 inch]	
		8 = Stainless Control unit		08 = 850mm extended handle [33.46 inch]	
		9 = Silencing Box with ventilating lid		0A = Any Length up to 1200mm [47.24 inch]	
		A = Quick Balance Divice		2x* = 200mm [7.87 inch] + Xmm*	
		D = Split Control Handle		3x* = 300mm [11.81 inch] + Xmm*	
		G = Release Valve for Standard Handle		4x* = 400mm [15.75 inch] + Xmm*	
		H = Release Valve for Extended Handle		5x* = 500mm [19.69 inch] + Xmm*	
		I = Universal Joint		7x* = 700mm [27.56 inch] + Xmm*	
		J = Big Filter Assembly Complete		0B = Any Length up to 1200mm* [47.24 inch]	
		K = Stainless filter unit		* = Two part extended handle with hinge.	
		M = Electrically grounded lift unit		Length of the second handle.	
		S = Special, for when multiple options are used		3 = 300 [11.81 inch], 5 = 500 [19.69 inch],	
		T = ATOP energy saving system		6 = 600 [23.62 inch] or 7 = 700 [27.56 inch].	

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.

Identification

Clarification of Options:

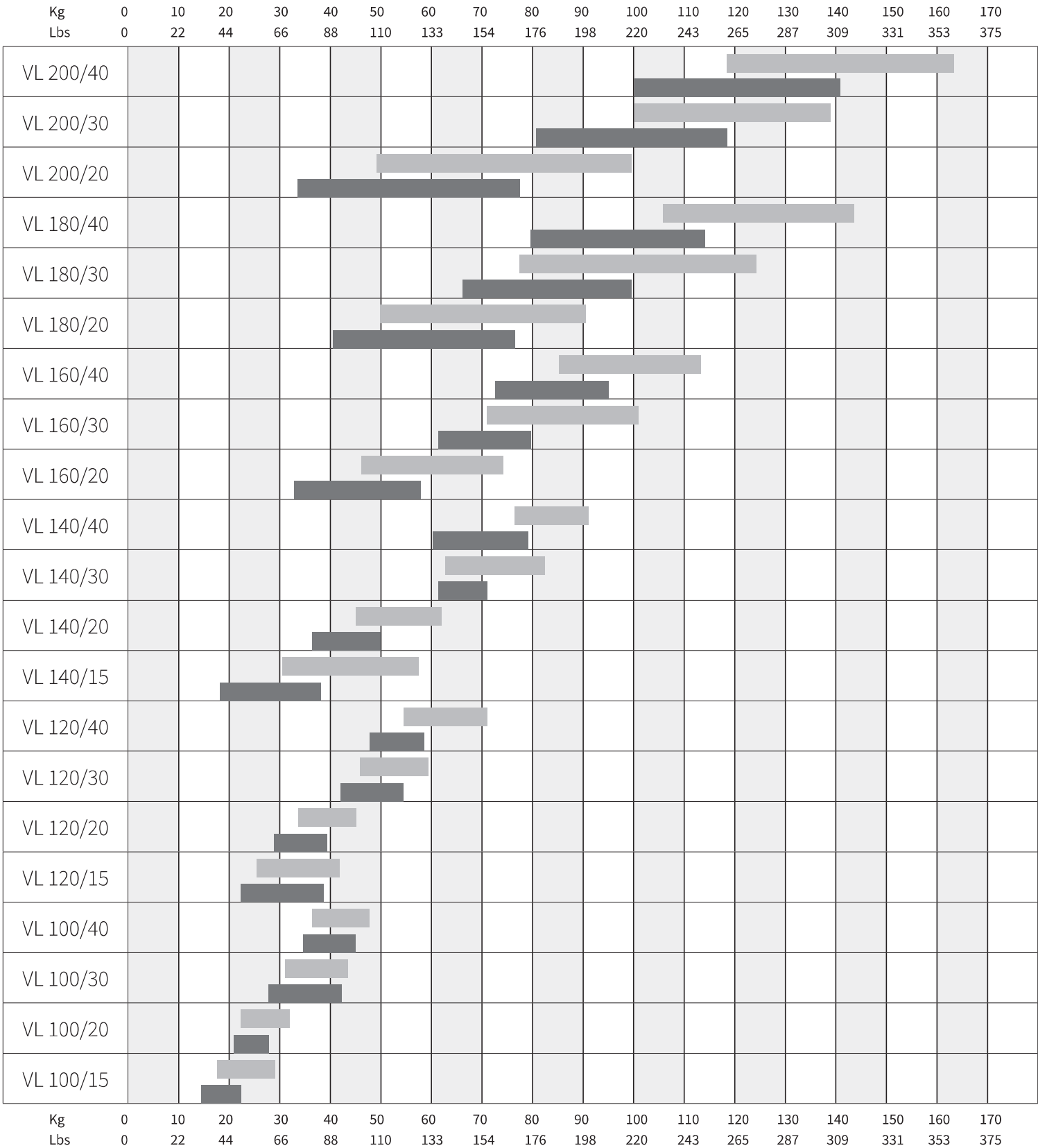
- 0 = Standard lift unit.
- 1 = Stainless steel - All metal parts in the lift unit are made from stainless steel grade 304.
- 3 = 3 meter lift tube - The length of the lift tube is 3m [118 inch].
- 4 = 4 meter lift tube - The length of the lift tube is 4m [157 inch].
- 5 = Silencing Box.
- 6 = Protection 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 house 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 downed 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.

Lifting Capacity

Find the best Lift Unit/Pump combination:

Non porous Lifting object
Porous Lifting object

English



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.

Vaculex® VL

English

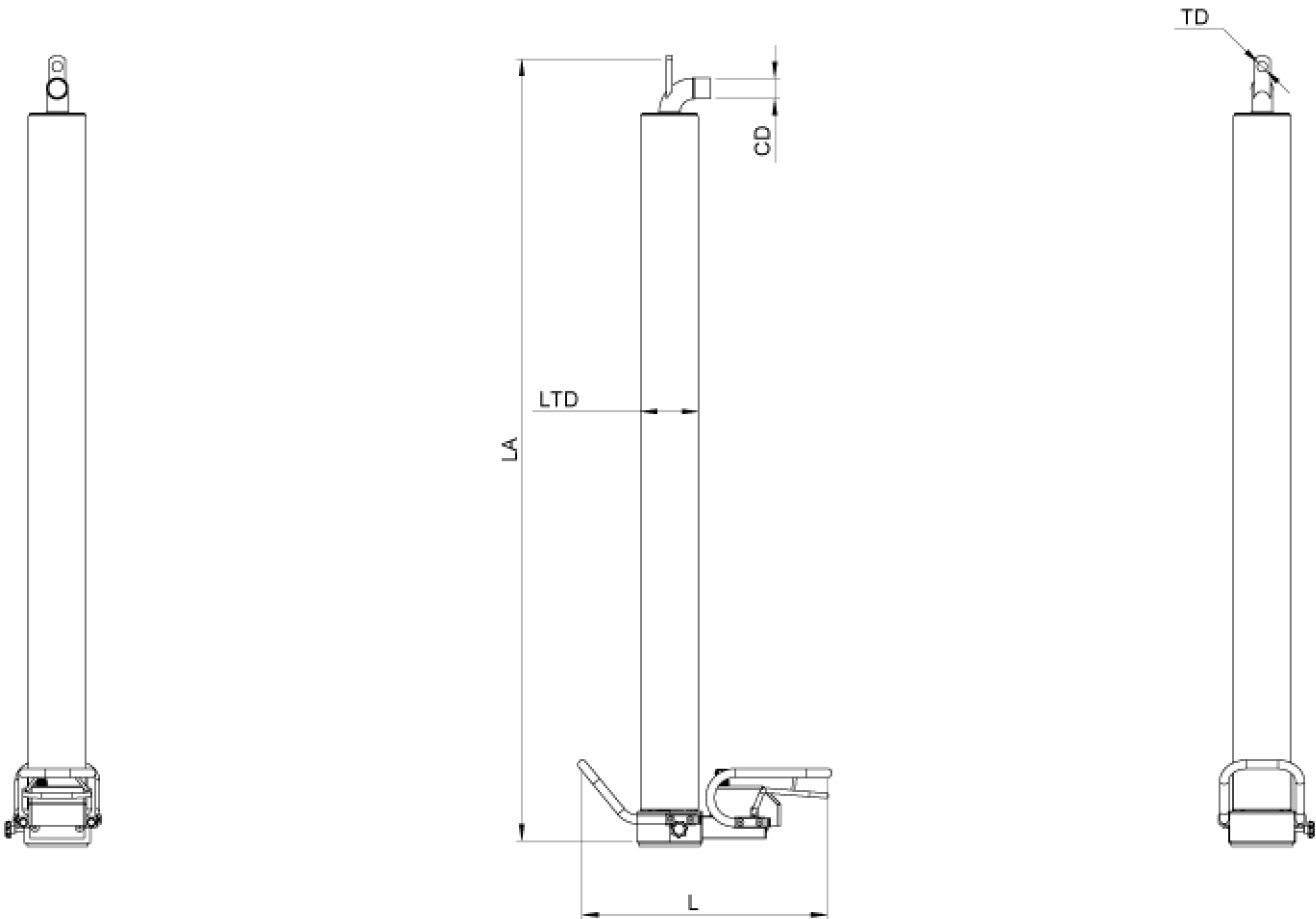
Drawing overview

Simplified drawings with key measurements.

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

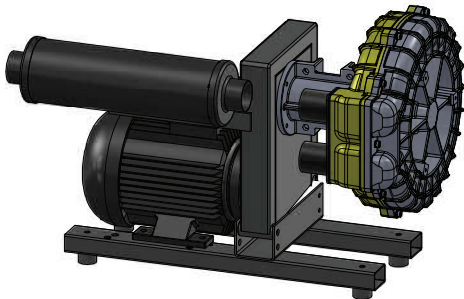
Dimension mm [in]

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]



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