

# Product data overview

## Vaculex<sup>®</sup> TP

Vacuum Lifting Systems



Vaculex<sup>®</sup> TP

Smart solutions for the automated world™



# Vaculex® TP

English

## Introduction

Vaculex® TP - Express handling up to 65 kg [140 lbs].

Vaculex® TP is a vacuum lift specifically designed for rapid manual handling of goods. Thanks to the 360° joint the flexibility makes it ideal for any type of parcel handling at logistics-, order fulfillment- or distribution centers, as well as baggage handling at airports and ports. With the 90° angle adapter and you can also tilt the object 90°. The Vaculex® TP family includes TPH, TP Scale, TP BaggageLift and the TP Combi.

### Extremely versatile

Vaculex® TP is extremely versatile and handles a great variety of goods in size, shape and weight.

Vaculex® grips the goods from any side and lifts it, you can easily rotate either the lift or the goods 360° to place it where required.

Vaculex® TP is designed for very rapid handling of goods up to 40 kg [88lbs] but is also available in versions for lifting goods up to 65 kg [140 lbs].

### Vaculex® TP decreases strain injuries

Lifting fast in poor posture does not require heavy weights to cause pain and strain injuries. Vaculex® TP is very user-friendly and requires minimal training to operate. It is so light and easily managed that working speed and productivity are maintained or in many cases increased, which is usually the contrary when using a lifting aid.

### Benefits

- Handles almost any load between 5 and 65 kg [11 to 140 lbs]
- Extremely fast
- Ergonomic
- Safe
- User-friendly
- Light and flexible
- Increases productivity
- Causes less parcel damage
- Low investment
- Low service cost
- Available with Automatic Turn Off Pump (ATOP) for increased energy efficiency and maximum comfort
- Available with a wide range of accessories

## Identification

Product number consisting of a combination of the following set:

TP series	Lift tube size	TP series	Three phase voltage
TP	08 = Ø 80mm [3.15 inch]	150 = 150 pneumatic ejector	[none] = No electricity (for ejectors)
TPH	10 = Ø 100mm [3.94 inch]	802 = 812 pump, noise hood	A = 50Hz / 200 - 220V Δ
	12 = Ø 120mm [4.72 inch]	902 = 912 pump, noise hood	B = 50Hz / 220 - 240V Δ
	14 = Ø 140mm [5.50 inch]		C = 50Hz / 380 - 420V Y
			D = 60Hz / 200 - 220V Δ
			E = 60Hz / 255 - 275V Δ
			F = 60Hz / 440 - 480V Y
			G = 60Hz / 380V Y

TP 10 1 902 S 00 C 13

Number of suspension points on lift unit	Options	Extended handle
0 = No suspension point	0 = Bellows suction cup Ø150mm [6.1 inch]	00 = Standard handle
1 = One suspension point	1* = Stainless steel	03 = 300mm [11.8 inch] extended handle
2 = Two suspension	3* = 3 meter lift tube	
	4* = 4 meter lift tube	
	6* = Protection valve	
	8* = Stainless Control unit	
	I = Universal Joint	
	IL = Universal Joint + Baggage foot	
	LZ = TP/ML adaptor + Baggage foot	
	K* = Stainless filter unit	
	M* = Electrically grounded lift unit	
	S = Special, for when multiple options are used	
	T* = ATOP energy saving system	
	U = Silicone bellows suction cup Ø150mm [6.1 inch]	
	V* = Protection Regulator	
	Y* = No suction foot	
	Z* = TP/ML adaptor	

**Multiple options**  
 If "Options" is set to "S", then "Multiple options" will consist of several of the options, in alphabetical order.

\*6 = Option available for TP120 and TP140. Protection valve is always required for these. E.g TP xxx xxx Sxx x 16

Example:

TP 10 1 902 S 00 C 13 = TP lift unit in stainless steel, 3m [118 inch], 100mm [3.94 inch] tube with one suspension point, 902 pump with noise hood 380-420V 50Hz and a standard handle.

# Vaculex® TP

## Identification

### Clarification of Options:

- 0 = Bellows suction cup - Bellows Cup Ø150mm [6.1 inch] (only for TP80 & TP100).
- 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].
- 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.
- 8 = Stainless Control unit - All metal parts in the control unit are made from stainless steel grade 304.
- I = Universal Joint - Option to make the suction foot more flexible.
- IL = Universal Joint + Baggage foot - Universal joint together with the baggage foot for handling baggage.
- LZ = TP/ML adaptor + Baggage foot - TP/ML adapter and baggage foot to be able to handle baggage and use other types of suction feet.
- 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.
- U = Silicone bellows suction cup 150mm [6.1 inch] - Bellows Cup Ø150mm [6.1 inch] in silicon (only for TP081 & TP101).
- V = Protection Regulator - Protection regulator to set the maximum allowed vacuum level in the system. E.g. to ensure that it's not possible to lift more than the maximum allowed load.
- Y = No suction foot - Without suction foot, only air inlet.
- Z = TP/ML adaptor - Adapter that is required when using ML-suction feet to TP - Adapter that is required when using ML-suction feet to TP.

Options	TP80+TP100	TP120+TP140	TPH
0	●		●
1	●	●	
3	●	●	
4	●	●	
6	●	●	
8	●	●	●
I	●		●
IL	●		●
LZ	●		●
K	●	●	●
M	●	●	
S	●		
T	●	●	●
U	●		●
V	●	●	●
Y	●	●	●
Z	●	●	●

# Vaculex® TP

## Working Load Limit (WLL)

Each lifter in the Vaculex® TP series has a maximum work load limit, which should never be exceeded. Note that the crane or bridge system that the Vaculex® TP series product is suspended in may have a maximum load limit that is lower than the one of the lift unit.

**!** Always respect the load limit of every part of the system.

The maximum load limits for the Vaculex® TP series standard products are:  
mm and kg [inch and lbs]

TP series	Lift tube	Pump type	Pump size	WLL
TP	80 [3.15]	Electric	802	35 [77.2]
TP	80 [3.15]	Electric	902	35 [77.2]
TP	80 [3.15]	Pneumatic	150	19 [41.9]
TP	100 [3.94]	Electric	802	35 [77.2]
TP	100 [3.94]	Electric	902	45 [99.2]
TP	100 [3.94]	Pneumatic	150	35 [77.2]
TP	120 [4.72]	Electric	902	65 [143]
TP	140 [5.51]	Electric	802	56 [123]
TP	140 [5.51]	Electric	902	65 [143]
TPH	100 [3.94]	Electric	902	45 [99.2]

Please note that in some cases, the WLL of the lift unit can be lower than the values in the table. Always refer to the WLL marked on the lift unit.

# Vaculex® TP

English

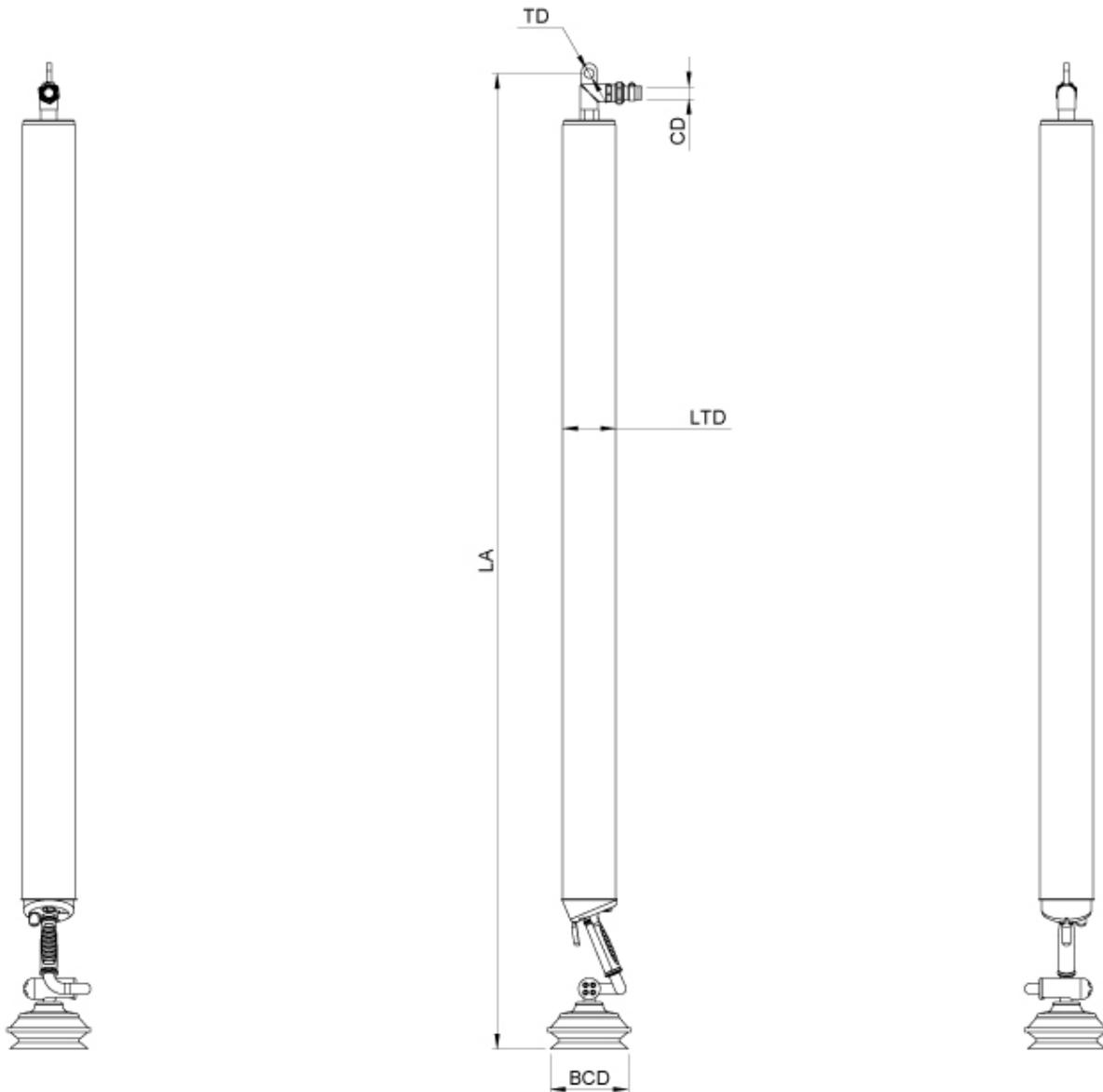
## Drawing overview

Simplified drawings with key measurements.

With bellows cup for handling of parcels and many other types of goods.

Dimension mm [inch]

Model	LTD	LA	TD	CD
TP080	80 [3.15]	Max: 3010 [118.5] Stroke: 1847 [72.7]	19 [0.75]	25 [0.98]
TP100	100 [3.94]	Max: 2936 [115.6] Stroke: 1720 [67.7]	19 [0.75]	25 [0.98]
TP120	120 [4.72]	Max: 3128 [123.2] Stroke: 1750 [68.9]	19 [0.75]	25 [0.98]
TP140	140 [5.50]	Max: 3114 [122.6] Stroke: 1725 [67.9]	19 [0.75]	25 [0.98]

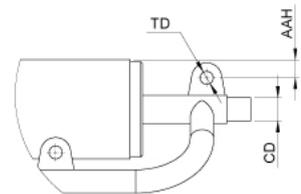
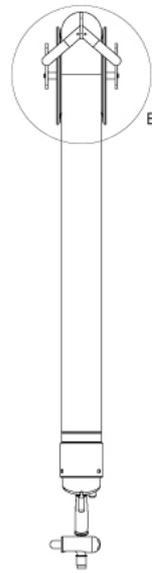
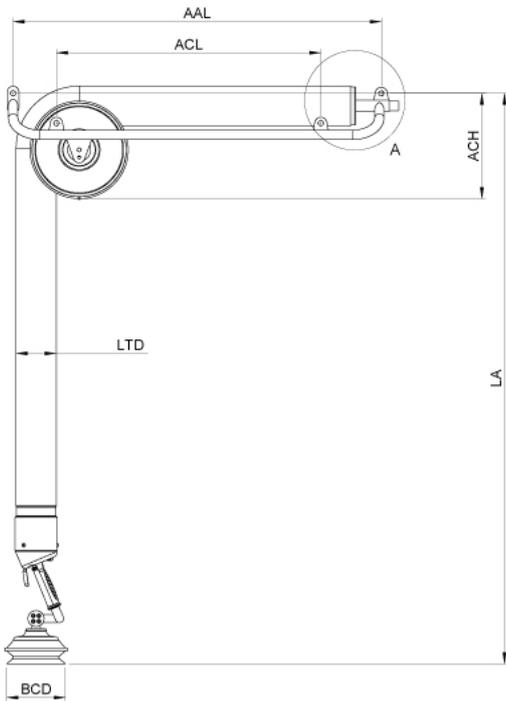


# Vaculex® TP

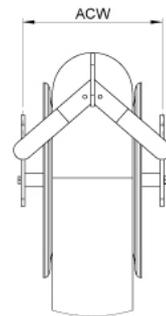
## Drawing overview

TPH: With bellows cup for handling of parcels and many other types of goods in low head room areas.  
 Dimension mm [inch]

Model	LTD	LA	TD	CD	AAL	AACL	ACH	AAH	ACW
TPH100	100 [3.94]	Max: 2243 [88.3] Stroke: 1630 [64.2]	19 [0.75]	25 [0.98]	975 [38.4]	700 [27.6]	280 [11.0]	20 [0.79]	184 [7.24]



DETAIL A  
SCALE 1 : 4



DETAIL B  
SCALE 1 : 5

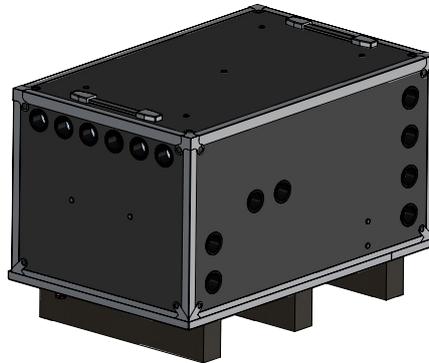


# Vaculex® TP

English

## Pump

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



Pump unit, electric	802		902		X = 50Hz, 3 - phase	Y = 60Hz, 3 - phase
	50Hz	60Hz	50Hz	60Hz		
Power (kW)	1.25	1.5	2.2	2.6	200V Δ	220V Δ
Voltage (V)	X*	Y*	X*	Y*	230V Δ	265V Δ
Weight (kg) [lbs]	69 [152]		101 [223]		350V Y	380-400V Y
Dimensions LxWxH (mm) [inch]	815x515x540 [32x20.3x21.25]		870x560x575 [34.25x22x22.6]		400V Y	460V Y
Sound level (dBA)	54	56	63	65		

Pump unit, pneumatic	150
Air consumption (NI/m at 6 bar) [scfm at 87 psi]	630 [22.2]
Sound level (dBA)	60-65

## Crane and Over Head system

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

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



**Slewing Jib Cranes**



**Articulated Jib Cranes**



**Bridge Cranes**