



Product summary	4
Platform	6
Door	14
Shaft	28
Communication	32
Drive	33
Drawings	34
FAQ	43
Features and benefits	46
Overview of the platforms	47

Due to continuous product development, specifications are subject to change without notice. With reservations for misprint and articles out of stock.





### Butler - the world's smallest homelift

Butler is the smallest and most compact homelift in our product range and on the market. The lift has been designed to meet all requirements for comfort, space and design. The lift is available in several different sizes, with an option to personalize it with details such as glass walls, a range of varied colours and different materials.

Butler	
Technical compliance:	European Machine directive 2006/42/EC European standard EN 81-41
Drive system:	Patented screw/nut system
Rated speed (max):	0,15 m/s
Travel height:	250 -13 000 mm
Number of stops:	Max. 6 stops per lift
Number of doors:	Max. 6 doors per lift
Number of doors per floor:	Max. 2 doors per floor
Pit:	50 mm (no pit is required when there is a threshold/ramp)
Top height:	Always 2 300 mm
Platform control:	"Hold to run", the destination button must be kept pressed down during the whole ride
Landing control (on door):	One-touch call
Environment:	Indoor
Emergency lowering:	Battery operated emergency lowering
Control voltage:	24V
Motor:	1,5kW
Power supply:	1-phase 230V 50Hz/6.6A/16A slow
Rated load:	250 kg

### Platform

Butler is available in 3 different platform sizes. The rated load is 250 kg and the power supply needed is 230 V 1-phase.

Platformsize B –side x A/C-side (mm)	Max load (kg)	Power supply
805 x 580	250	230 V 1-phase
805 x 880	250	230 V 1-phase
805 x 1080	250	230 V 1-phase



Platform

Load limits per power supply	400V 3-phase	400V 3-phase 60Hz	230V 3-phase	23 3-pha ł
250 kg	٠	•	•	
410 kg	•	•	•	
500 kg	٠		٠	

### **Product summary - Vector**

### Vector - our most versatile homelift

Vector is our most versatile homelift with various options for own personalization and design. Choose among several different sizes, glass walls and colours. This is the choice for those of you who would like to customize the lift to your own liking.

Vector		
Technical compliance:	European Machine directive 2006/42/EC European standard EN 81-41	
Drive system:	Patented screw/nut system	
Rated speed (max):	0,15 m/s	
Travel height:	250 -13 000 <sup>1)</sup> mm <sup>1)</sup> Travel height when having a half door is maximum 3 000 mm	
Number of stops:	Max. 6 stops per lift	
Number of doors:	Max. 6 doors per lift	
Number of doors per floor:	Max. 2 doors per floor	
Pit:	50 mm (no pit is required when there is a threshold/ramp)	
Top height:	Minimum 2240 mm (1100-1600 mm with half height door)	
Platform control:	"Hold to run", the destination button must be kept pressed down during the whole ride	
Landing control (on door):	One-touch call	
Environment:	Indoor	
Emergency lowering:	Manual lowering with a winch as standard. (Battery operated emergency lowering as option)	
Control voltage:	24V	
Motor:	2,2kW	
Power supply:	1-phase 230V 50 Hz/9 A/16 A slow 3-phase 230V 50 Hz/9 A/16 A slow 3-phase 400V 50 Hz/5.2 A/16 A slow	
Rated load:	250, 410 or 500 kg (depending on platform size)	

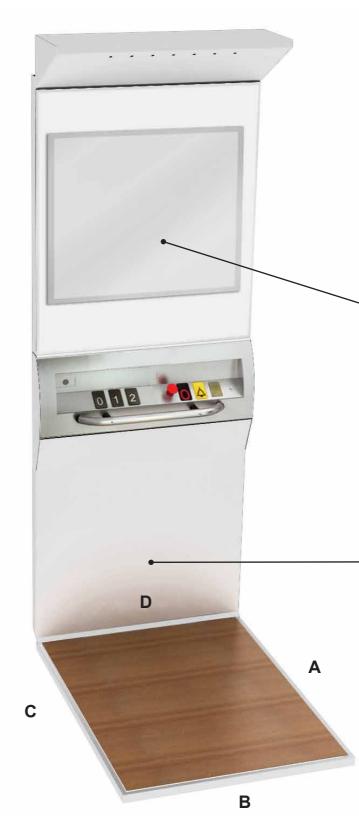
Vector is available in 6 different platform sizes. The rated load depends on the platform size.



Platform floor area A/C x B (mm)	Max load (kg)
900 x 1040	250
900 x 1280	410
900 x 1480	410, 500
1000 x 1280	410
1000 x 1480	410, 500
1100 x 1480	410, 500

### **Platform Butler, Vector**





A,B,C and D-side of platform.

### **Platform - Butler**

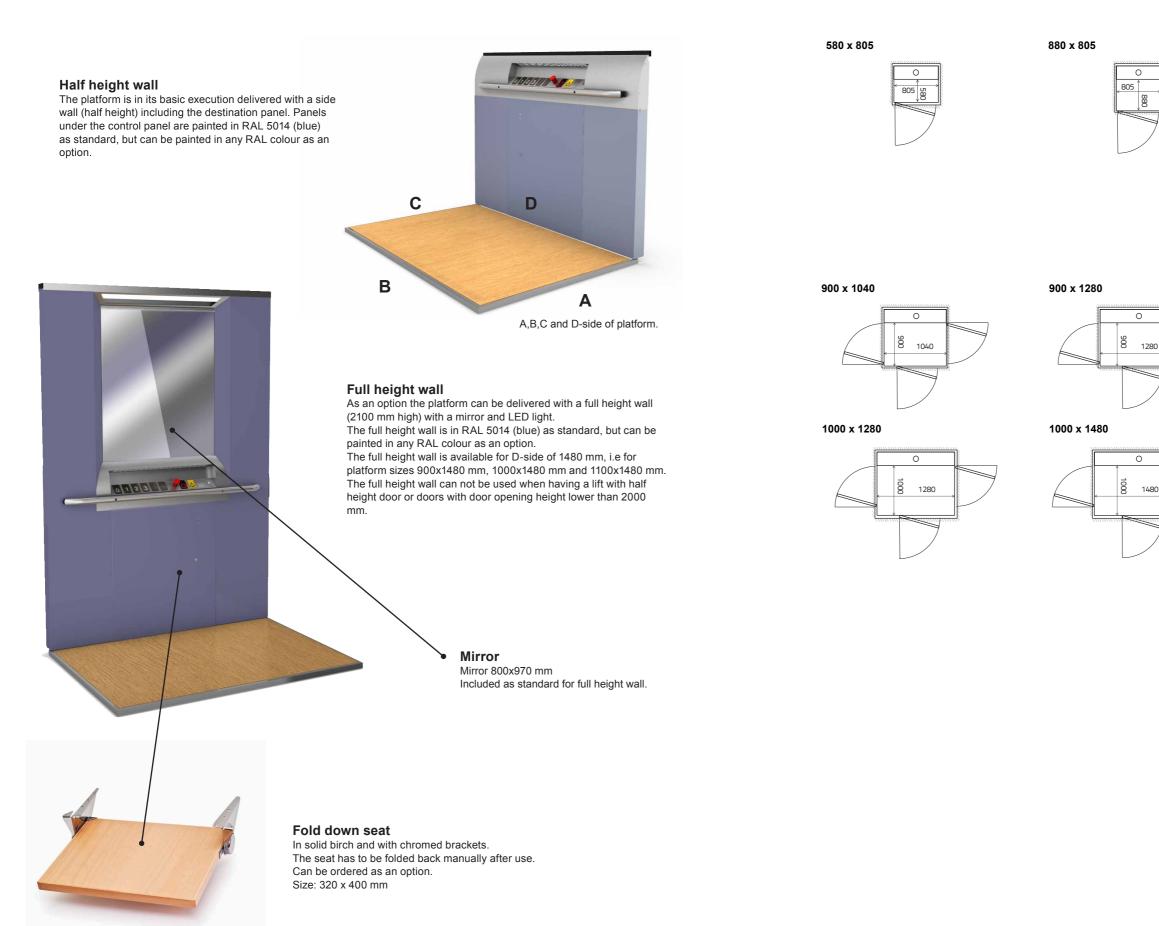
**Full height wall** The platform is in its basic execution delivered with a side wall (full height) including the destination panel. It comes with LED lightening as standard. The panel under the destination panel and the small roof over the mirror is painted in RAL 9003 (white) as standard, but can be painted in any RAL colour as an option.

Mirror A mirror 600x750 mm can be ordered as an option.



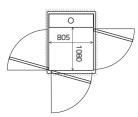
### Foot box

As an option a special plate with a niche can be ordered for the bottom part of the plat-form. The niche adds a little bit of extra room at the bottom of the platform panel. Size of niche: Depth 80 mm, height: 197 mm, length: 456 mm.



### **Overview Butler**

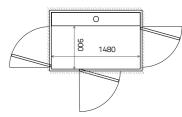
1080 x 805



### **Overview Vector**

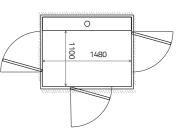
900 x 1480





1100 x 1480





For more detailed drawings see page 34.

### **Platform - Butler and Vector**

### **Destination panel**

The destination panel is always placed on the machine side (D-side) of the platform. It contains the destination buttons, emergency stop, alarm button, autodialer (option), landing indicator (option), company logo, max weight and number of persons allowed. All text and logos are screen printed to ensure good quality. On request a partner logo can be screen printed on the destination panel.

The location of the platform buttons and the handrail are according to E81-41.

• Anodized aluminium - standard

Stainless steel - option

### **Destination buttons**

Destination buttons are according to EN 81-41 and EN81-70 for disabled. The location of the buttons are within the limits in the standard, i.e. height between platform floor and the center line of the buttons is between 900-1100 mm.

Standard buttons are engraved with braille. The buttons are of polycarbonate plastic. Following buttons are available: -2, -1, 0, 1, 2, 3, 4, 5, 6, B, BG, BV, G, K, KV, P, U, E. Individual special characters can also be ordered as an option. Maximum 2 characters per button. These buttons will also be engraved. If a lift is ordered with any button that is not 0, 1, 2, 3 all buttons will be engraved.



44 131-0 44 131-1 44 131-2 44 131-3 44 131-ALARM Active area 2800 mm<sup>2</sup> 0.5 mm braille ∧ 0.8 mm relief Braille and relief profile for best tactile feeling Black/white for best contrast Polycarbonate plastic

Buttons 0, 1, 2, 3 can also be molded with braille. The buttons are of anodized aluminum with 2component paint. If a lift is ordered with only buttons 0, 1, 2, 3 molded buttons will be delivered.



44 131-xx-F Active area 2800 mm<sup>2</sup> 0.5 mm braille 0.8 mm relief

Anodized aluminum with nponent pain

### Handrail

A handrail is mandatory according to EN81-41 and delivered as a standard. Height of handrail is 875 mm from the platform floor. Handrail diameter is 36 mm. The ends of the handrail are closed and turned the platform. Anodized aluminum (standard)

Stainless steel (option)



### **Faceplate** panel

The faceplate panel in anodized aluminum (chemically polished) gives a soft finish to the platform.

To prevent any trapping, a safety list is mounted behind the faceplate panel which cuts off the security circuit when pressed down.

Light LED lights are installed over the destination panel.

 $\mathbf{X} \ge 5$ STOP 410 kg Maintenir le bouton enfoncé pendant le déplacement 2 0



Alarm button A standard alarm button is always delivered with the lift. When it is pressed a buzzer sounds. This is only a signal to the user that the button is pressed. The alarm button may be connected to an external alarm sounder or an autodialer.

### External alarm sounder

External alarm sounder mounted outside the lift. It is connected to the alarm button and when the alarm button is pressed the external





### Key switch on platform

Key switch placed on destination panel. The key switch locks the platform functions and prohibits unauthorized use. One key switch per platform can be provided. The key switch can be serial connected to all destination buttons or the key switch is connected to one destination button.

Two brands to choose from:

- · ASSA (Nordic markets only)
- Telemecanique

Can be ordered as option.



**Emergency stop button** Button in "mushroom" type for emergency situations. Is always included as standard.





### Landing indicator

Digital display positioned at the destination panel. It shows which floor the lift is on at the moment. The indicator can also be fitted with a voice announcer available in Danish, Dutch, English, Finnish, French, German, Norwegian, Polish, Russian and Swedish.

The landing indicator can also show information from the system.

- · Warning if the batteries are low.
- · A bell when the alarm button has been pressed.
- · Number of starts and total run time since installation or since last reset.
- A weight symbol will appear if the lift is overloaded.
- · If connected to the buildings fire alarm a "Fire" symbol will be shown when alarm is activated.

Can be ordered as an option.

### Platform - Butler and Vector

**Flooring** Choose between the following options for vinyl and rubber floorings:

### Standard:

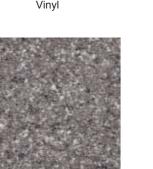


Beige Vinyl





Sand Vinyl



Grey Vinyl



European oak Vinyl



Classic Beech Vinyl





Checker Stud – Blue Rubber





Checker Stud – Black Rubber

### Door **Butler, Vector**



### General information

The landing doors installed at each landing are made of toughened galvanized steel and laminated and toughened glass, 8 mm thick. All doors for Butler are painted in RAL 9003 (White) but can be painted in any RAL colour as an option. The door frame and door blade can be painted in the same colour or the frame in one colour and the blade in another colour. For the same lift all doors must be painted in the same colour. A glassed area according to EN81-41 is standard for all doors. Standard is with tinted glass (JT16). Optional is to have clear (JT0), dark tinted (JT5) or frosted glass (JT23).

The profiles around the glass are made of aluminium. The profiles can be painted in any RAL colour. If the door blade is in RAL 9003 (White) the profiles can be painted in the same colour as an option. If the door blade is painted in another RAL colour, the profiles will be in aluminium as standard, but can be painted in the same RAL colour as the door blade as an option. Note that aluminium profiles are standard and that painted profiles are an option.

All doors can be left- or right hinged. Doors are always delivered with door frames. It is not possible to order the door or the frame separately. Doors on B side are 800 mm wide. It is also possible to have doors on the A and C side for platform size 1080 mm. These doors are 900 mm wide.

### Large glass door

Large glass door with one glass window. Opening widths: 800, 900 mm Opening heights: 1800, 1900, 2000 mm The actual height of the door is 40 mm higher since a plate that covers the joint between the door and the frame is mounted on the door. 612x1472 mm (800 mm wide door) Glass window: 712x1472 mm (900 mm wide door) (vision)

### Standard:

• Door blade and door frame in RAL 9003 (White)

Glass window: tinted glass (JT16)

### Options:

• Door blade and / or door frame in other RAL colour

• Glass window: clear (JT0), dark tinted (JT5), frosted (JT23)

	Door opening width (mm)	Door opening height (mm)	Available for B-side (mm)	Availabl A/C side (n
	800	18001)/19001)/2000	805	-
	900 1) Not available on ton	1800 <sup>1)</sup> /1900 <sup>1)</sup> /2000	- -	1080
<sup>1)</sup> Not available on top floor since top height of shaft is always 2300 mm			always 2300 mm	

### Double hinged glass door

Double hinged glass doors are made of 17,5 mm laminated glass and always delivered with two internal door openers which opens the doors automatically. If the space infront of the door is limited it is a good solution to use the double hinged glass door. Ope

Opening width:	800, 900 mm
Opening height:	2000 mm
	The actual height of the door is 40 mm higher since
	that covers the joint between the door and the fram mounted on the door.
Door blade:	Two blades 400 mm or 450 mm wide
Glass window: (vision)	Two glasses 332 x 1950 mm or 394 x 1950 mm

### Standard:

• Door blade and door frame in RAL 9003 (White) Glass window: tinted (JT16)

### Options:

Door blade and /or door frame in other RAL colour

Glass window: clear glass (JT0), dark tinted (JT5), frosted (JT23)

Door opening width (mm)	Door opening height (mm)	Available for B-side (mm)	Available for A/C-side (mm)
800	2000	805	-
900	2000	-	1080

News. New door profiles possible to paint in any RALcolour.

### **Door - Butler**



e a plate ne is







### Door frame

On the A and C side the door is always delivered with a frame. The height of the frame depends on the door opening height and is always 240 mm higher than the door opening height. On the B-side there is no place for a door frame and the door is mounted without a frame. Frame size on A/C-side 1160 mm.

Door opening height (mm)	Frame height (mm)
1800	2040
1900	2140
2000	2240

### Door opening height

The actual height of the door is 40 mm higher since a plate that covers the joint between the door and the frame is mounted on the door. For door opening height 2000 mm the actual door height is 2040 mm.



# 2040

### Examples with door opening height 2000 mm.



The landing doors installed at each landing are made of toughened galvanized steel and laminated and toughened glass, 8 mm thick. All doors for Vector are painted in RAL 9003 (White) but can be painted in any RAL colour as an option. The door frame and door blade can be painted in same colour or the frame in one colour and the blade in another colour. For the same lift all doors must be painted in the same colour.

A glassed area according to EN81-41 is standard for all doors. Standard is with clear glass (JT0). Optional is to have tinted (JT16), dark tinted (JT5) or frosted glass (JT23).

The profiles around the glass are made of aluminium. The profiles can be painted in any RAL colour. If the door blade is in RAL 9003 (White) the profiles can be painted in the same colour as an option. If the door blade is painted in another RAL colour, the profiles will be in aluminium as standard, but can be painted in the same RAL colour as the door blade as an option. Note that aluminium profiles are standard and that painted profiles are an option.

All doors can be left- or right hinged. Doors are always delivered with door frame. It is not possible to order the door or the frame separately.

### Large glass door

Large glass door with one glass window.

Opening widths:	800, 900 mm
Opening heights:	1800, 1900, 2000, 2100 mm
	The actual height of the door is 40 mm higher si
	a plate that covers the joint between the door an
	the frame is mounted on the door.
Glass window:	612x1472 mm (800 mm wide door)
(vision)	712x1472 mm (900 mm wide door)

### Standard:

• Door blade and door frame in RAL 9003 (White) • Glass window: clear glass (JT0)

### Options:

• Door blade and /or door frame in other RAL colour

Glass window: tinted (JT16), dark tinted (JT5), frosted (JT23)

Door opening width (mm)	Door opening height (mm)	Available for B-side (mm)
800	1800/1900/2000/2100	1040
900	1800/1900/2000/2100	1280/1480

2240

2000

### **Door - Vector**

since nd



vailable fo side (r 900 1000/1100



### Double-hinged glass door

Double hinged glass doors are made of 17,5 mm laminated glass and always delivered with two internal door openers which opens the doors automatically. If the space in front of the door is limited it is a good solution to use the double hinged glass door.

door and the frame is mounted on the door

Two blades 400 mm or 450 mm wide Two glasses 332 x 1950 mm or 394 x 1950 mm

Opening width:	800, 900 mm
Opening height:	2000 mm

### The actual height of the door is 40 mm higher since a plate that covers the joint between the

Door blade: Glass window:

### (vision)

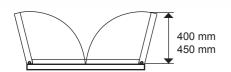
### Standard:

- Door blade and door frame in RAL 9003 (White)
- Glass window: clear glass (JT0)

### Options:

- · Door blade and /or door frame in other RAL colour
- Glass window: tinted (JT16), dark tinted (JT5), frosted (JT23)

Door opening width (mm)	Door opening height (mm)	Available for B-side (mm)	Available for A/C-side (mm)
800	2000	1040	900
900	2000		1000/1100



### Half height door with glass

Half height door with one glass window. If you require an open shaft or if the head space is low, the use of a half height door may be a good solution. According to EN81-41 the half height door is only allowed for lifts with a travel height up to 3 meters (within EU). The half height door can not be combined with EI60 fire & smoke proof doors.

### Opening widths: 800, 900 mm

Opening heights: 1100-1600 mm Glass windows: 612x670 mm (800 mm wide door) (vision) 712x670 mm (900 mm wide door)

### Standard:

• Door blade and door frame in RAL 9003 (White) • Glass window: clear glass (JT0)

### Options:

• Door blade and /or door frame in other RAL colour Glass window: tinted (JT16), dark tinted (JT5), frosted (JT23)

Note that when using a half height door 1100-1600 mm the shaft and the half height door will end at the same height. It is not possible to have a higher shaft than the half door.

Door opening width (mm)	Door opening height (mm)	Available for B-side (mm)	Availabl A/C-si (mm
800	1100 1101-1600 <sup>1)</sup>	1040	900
900	1100 1101-1600 <sup>1)</sup>	1280/1480	1000/11
<sup>1)</sup> Custom height			

### A half height door can be used in the following cases:

- 1100 mm high half height door:
- When you have an open shaft and a top height of 1100 mm (even shaft).
- 1101-1600 mm high half height door:

When you have a low travel height with a standard door or a door with frame top on the bottom floor and a custom height half height door is needed to get an even shaft (see page 20 for details). When you have a higher travel height, but a standard door or a door with a frame top on second top floor and a custom height half door is needed to get an even shaft.

- It is not possible to have a lower half height door than the top height of the shaft this means that you can't have a 1100 mm height door on a lift with shaft height of for example 1400 mm.
- Note that it is not possible to have two half height doors on the same lift.

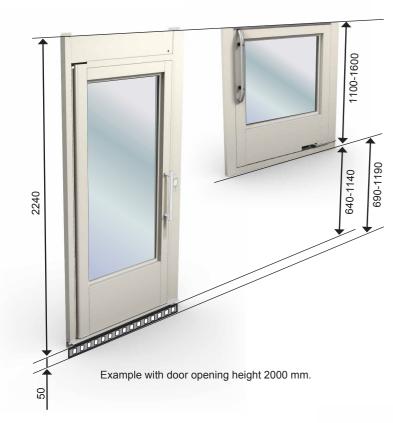
### **Door - Vector**





### Travel heights

When using a customed height half door, consider the following criteria regarding travel height. Note that the travel height is depending on if the lift is installed with or without a pit.



For large glass door, double glass door and double hinged glass door.

Door opening height (mm)¹)	Travel height when a ramp on first level (mm)	Travel height with a pit on first level (mm)
1800	490 - 990	440 - 940
1900	590 - 1090	540 - 1040
2000	690 – 1190	640 - 1140
2100	790 – 1290	740 – 1240

 $^{\mbox{\tiny 1)}}$  The height of the frame is always 240 mm higher than the door opening height



door and the frame is mounted on the door. For door opening height 2000 mm the actual door height is 2040 mm.



### Frame top - 50 mm

If space is limited on the top floor or you like to have an even shaft at low traveling heights, a 50 mm frame top instead of the normal door frame can be delivered. With the 50 mm frame top the height of the door frame will be 70 mm higher than the door opening height. Using a standard door frame the height of the frame will be 240 mm higher than the door opening height:

For a door with opening height of 2 000 mm:

- With the 50 mm frame top, the door frame is 2070 mm (70 mm higher than door opening height)
- With a standard door frame, the door frame height is 2240 mm (240 mm higher than door opening height).

Frame top is available for large glass door. It is not available for EI60 Fire & smoke proof doors and double hinged glass doors. Note that only external door opener and closer are available for doors with frame top. Internal door opener and closers are not available since there is not enough space in the door frame. The frame top is available for top floor only.

For large glass door and double glass door with 50 mm frame top.

Door opening height (mm)	Travel height when a ramp on first level (mm)	Travel height with a pit on first level (mm)
1800	320 - 820	270 – 770
1900	420 - 920	370 – 870
2000	520 - 1020	470 – 970
2100 <sup>1)</sup> The height of the fra	620 - 1120 me when using a 50 mm f	570 – 1070 rame top is always 70

mm higher than the door opening height.



### **Door - Vector**

Door opening height (mm)	Frame height (mm)
1800	2040
1900	2140
2000	2240
2100	2340

### A/C -side

Platform side (mm)	Frame size (mm)
900	1060
1000	1160
1100	1260

### B -side

Platform side (mm)	Frame size (mm)
1040	1060
1280	1300
1480	1500

Example with door opening height 2000 mm.



Example with door opening height 2000 mm.

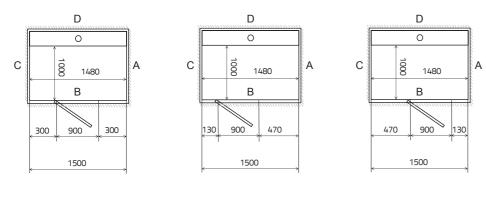
### Displacement of door on B-side

If it is not possible to fit the door on the B-side in the standard location, it is possible to place the door to the left or to the right. This is only possible for doors with door opening width 900 and for doors on B-side; 1280 and 1480 mm. Large glass door and half height doors can be displaced. It is not possible to displace El60 fire & smoke proof doors or double hinged glass doors.

### Door opening 900 mm.

Platform size on B-side (mm)	Frame size (mm)	Standard frame (mm)	Displaced to the left (mm)	Displaced to the right (mm)
		Left / Right side of door	Left / Right side of door	Left / Right side of door
1280	1300	200 / 200	130 / 270	270 / 130
1480	1500	300 / 300	130 / 470	470 / 130

Examples of possible displacement of door on B-side (door opening 900 mm, platform size on B-side 1480 mm, frame 1500 mm) :



Standard frame

Displaced to the left

Displaced to the right



Opening width: 800, 900 mm

Installation:

### Standard:

Options:

### Door ope width (r 800

900

### El60 – Fire & smoke proof door frame

A door frame is always delivered with the door. The size of the frame depends on platform size and the door opening width and height. The height of the frame is always 220 mm higher than the door opening height.

A/C-side				
oor opening	Frame height	Platform	side (mm)	Frame size (mm)
eight (mm)	(mm)	90	00	1060
1900	2120	10	00	1160
2000	2220	11	00	1260
2100	2320			

### Widening panel for A and C side

As an option a widening panel for the A- and C -side can be ordered to cover the machine side part. The widening panel is available with or without a hatch for the electrical cabinet. The widening panel is available for door opening height 1900, 2000 and 2100 mm and has the same height as the door frame. The width of the panel is 213 mm.

### **Door - Vector**

### EI60 – Fire & smoke proof door

EI60 - Fire & smoke proof door complies with the lift directive 95/16/ EC and EN 81-58. As standard the EI60 door is delivered with a frame. As an option a widening panel for the A and C side can be ordered to cover the machine side part. The widening panel is available with or without a hatch to cover the electrical cabinet.

- **Opening height:** 1900, 2000, 2100 mm
  - The actual height of the door is 20 mm higher since a plate that covers the joint between the door and the frame is mounted on the door.

Not in combination with half height door.

• Door blade and door frame in RAL 9003 (White) • Glass window: clear glass (JT0)

• Door blade and /or door frame in other RAL colour

Door opening height (mm)	Available for B-side measure (mm)	Available for A/C - side measure (mm)
1900 2000/2100	1040	900
1900 2000/2100	1280/1480	1000/1100

B-side	
Platform side (mm)	Frame size (mm)
1040	1060
1280	1300
1480	1500

For B-side 1580 mm and 1980 mm fire doors are not available.

### **Door - Butler and Vector**

### **Door control**

The door control is either placed on the door frame of each landing door and/or placed away from the lift as an external control.



### Door control on door frame

Door control placed on the door frame on the lift. For Vector there is always place on the door frame for a door faceplate (except when having double hinged glass doors). For Butler there will only be place for a door faceplate on the A and C side (except when having a double hinged glass door).



### Call button

The call button comes with a background lit frame which indicates the status of the lift.

- Green light indicates that the lift is at your floor. Lit only on the floor where the platform is at the moment
- Red light indicates that the lift is occupied. It is busy and you can't call for it.
- The flashing light indicates that the security circuit is broken, e.g. that the emergency button is pressed, the door is open on another floor for more than one minute, the door is blocked or the safety frame is pressed down. The flashing light can also be activated by a sum alarm, more information is then available in the service memory.

The same call button is used when the door control is placed on the door frame, externally or as a radio controlled call button.



### **Door faceplate**

The door faceplate can be placed directly on the door frame or externally in an external call station box. The door faceplate is in standard in anodized aluminum. As option it can be delivered in stainless steel

The door faceplate can hold:

- Call button
- Key switch Telemecanique / School locking
- Key switch prepared for Assa / School locking
- Key switch prepared for EUR / School locking



### Key switch / School locking

Instead of having a normal call button on the door faceplate you can have a key switch. You then need to have the key to be able to call for the lift and to access the lift. Includes school locking function which automatically locks the door 10 seconds after it is closed.

Two brands to choose from:

- · ASSA (Nordic markets only).
- EUR
- Telemecanique
- Access BDD can provide one key switch per door.

### External door control – placed away from lift

Door control placed away from the lift in an external call station box connected to the lift via a cable or as a radio controlled call button without any cable. For Butler when having a door on the B-side there is no frame and thus no place for a door faceplate. Standard solution for the B-side on Butler is to have the call button in a white plastic box . It is also possible to have an external call station box. Both connected to the lift with a cable.

Note that for double hinged glass doors there is no place for door control in the door frame. External door control must be used.



### Radio controlled call button

The radio controlled button, placed in a white plastic box, gives the customer the freedom to place the call button wherever they would like within 10 meters from the lift. The radio controlled call button runs on batteries and provides remote controlled access to the lift. The call button has the same function as the one placed in the door faceplate. Can be ordered as an option.



### Call button in white plastic box

Butler does not have a door frame on the B-side of the lift and therefore there is no place for a door faceplate on the lift. Standard solution for the B-side on Butler is to have the call button in a white plastic box connected to the lift via a cable.

### **Door - Butler and Vector**





### External call station box

The door faceplate can be placed away from the lift and will then be placed in an external call station box. The colour of the external call station box is RAL 9003 (white). The box can either be mounted exterior on a wall (wall mount) or in the wall so that you only see the door faceplate (flush mounted).

The external call station box can be ordered as an option. The standard length of the cable delivered with the external call station box is 1.5 m, as an option it can be 10 m long.

Size flush mount: 82x150x50 mm Size wall mount: 95x185x50 mm

### **Door - Butler and Vector**

### **Door machinery**

The landing doors are always delivered with either a door opener or a door closer. Depending on the door type you can either have it mounted internally (in the door frame so that you can't see it from the outside) or externally (in a box visible from the outside).

Door opener: Opens and closes the door automatically. Door open time and the opening speed are adjustable.

Door closer: Door is opened manually. The door is closed automatically after a preset time.

All openers and closers are available for both left and right hinged doors.

When having two doors on the same landing, both doors will be opened at the same time when having door openers.



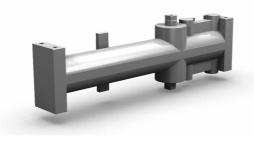
### External door opener

Opens and closes the door automatically after a preset time. Can be ordered as option. Cover and sides painted in RAL 9003 (White) as standard. If the door blade is painted in another color, the cover will be painted in the same color. The sides will still be in White.



**Internal door opener** Opens and closes the door automatically. It is built into the door frame and can't be seen from the outside. Can be ordered as option. Standard for double hinged glass doors.

Door type	Internal door closer	Internal door opener	External door closer	External door opener
Large glass door				
Standard	•	•	٠	•
With 50 mm frametop			•	•
Half height glass door	•	•		•
EI60 – fire & smoke proof door	•			•
Double hinged glass door		•		



### Internal door closer

Closes the door automatically after a preset time. It is built into the door frame and is invisible form the outside. Includes function to keep door open until the user manually closes the door. Standard for all doors except large glass doors with 50 mm frametop.



Closes the door automatically after a preset time. Can be ordered as an option.



Hold open arm Keeps the door open until the user manually closes the door. Can be combined with external door closer only. Can be ordered as an option.



### Door handle

Door handle with a diamater of 30 mm is delivered as standard for all doors (except for double hinged glass door, where no door handle is needed).

- Anodized aluminum (standard)
- Stainless steel (option)

Note that the door handle on a door on B-side of an Butler could hit the building wall if the lift is installed very close to the wall on A or C side. This is since the door on the B-side does not have a door frame.



### Ramp

If the lift is installed without a pit a ramp is mandatory according to EN81.41. The ramp is made of galvanized steel covered with corrugated aluminum to prevent slipping. The vertical rise of the ramp is less than 1:4. The ramp can be ordered as an option for lifts installed without a pit. Ramp dimensions for Vector: Height 50 mm, width 420 mm,

length 1160 mm.

### **Door - Butler and Vector**



### Landing indicator on door

Digital display positioned at the door frame. It shows which floor the lift is on at the moment.

The landing indicator can also show following system information:

- Warning if the lift batteries are low.
- A bell when the alarm button has been pressed.
- Number of starts and total run time since installation or since last reset.
- · A weight symbol will appear if the lift is overloaded.
- If connected to the buildings fire alarm a "Fire" symbol will be shown when alarm is activated.



### Arrival gong

The arrival gong gives an audible signal (ding dong) when the platform arrives at each landing. It is placed in the door frame on each landing. Can be ordered as an option.

### Cover plate

If the door control is placed externally and not on the door frame a cover plate that covers the hole in the door frame is delivered with the lift. The cover plate is always delivered with the lift in the same colour as the door frame. Standard colour is RAL 9003 (White).

### Shaft **Butler, Vector**

### Shaft Butler

The lift is always delivered with a self supporting shaft. The top heigt of the shaft (distance from top floor to top of shaft) is always 2 300 mm. If the lift isn't installed against a wall, machine side cladding can be added on the outside of the lift on the machine side. For all sides except for machine side you can choose to have shaft panels in steel or glass.

### Machine side cladding

The machine side cladding in steel covers the backside of the machine side if the lift is not mounted against a wall. The machine side cladding can be ordered as an option and can run from bottom to top height. It can also be ordered partly if the lift is partly mounted to a wall. The cladding is painted in same colour as the shaft. Size: Travel height plus top height.

### Shaft panels

Standard is 25 mm thick shaft panels with EPS (polystyrene) core and steel plates. The panels are painted in RAL 9003 (White) as standard. If the shaft is painted in another colour the shaft panels will be painted in the same colour and the shaft panels will have a rock-wool core.

The height of the shaft panel is 575 mm.

### Cover plate for top of the mast

Plate to cover the equipment placed at the top of the mast, such as battery operated emergency lowering). Can be ordered as an option.



# Glass

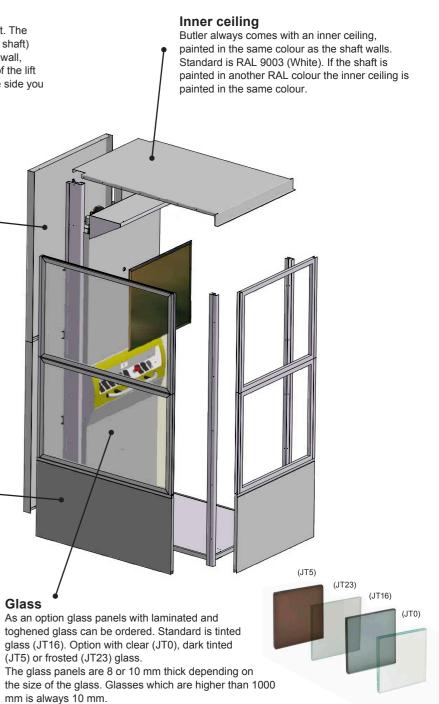
(JT5) or frosted (JT23) glass. mm is always 10 mm.

Height (mm)	
736	
1472	
2208	
Customized 1)	



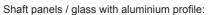
News. New shaft profiles possible to paint in any RAL colour.

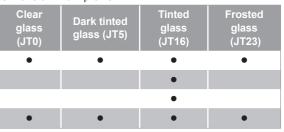
### Shaft - Butler



The glasses are fitted in aluminium profiles. These profiles are in alu-

minium as standard, but can be painted in a RAL colour as an option. For a shaft painted in the RAL 9003 (White) the profiles can be painted in the same colour. For a shaft painted in another RAL colour the profiles are as standard aluminium. As an option the profiles can be painted in the same RAL colour. Note that this has to be ordered separately.





<sup>1)</sup> Additional cost per mm. Maximum height per glass panel is 2500 mm

### **Shaft - Vector**

### Shaft Vector

The lift is always delivered with a self supporting shaft. The lift always comes with cladding panels on the inside of the shaft on the machine side. If the lift is not installed against a wall, machine side cladding can be added on the outside of the lift to cover the machine side. For all sides except for the machine side you can choose to have shaft panels in steel or glass. The top height of the shaft for Vector is not fixed. When having a standard door on the top floor, the minimum top height depends on the door opening height and the frame height. For a door opening height of 2000 mm the standard frame height is 2 240 mm, which is the lowest top height. Higher top height can be ordered.

### **Cladding panels**

Cladding panels covering the inside of the machine side are delivered as standard. As standard the panels are in RAL 9003 (White), but if shaft is painted in another colour the panels will be painted in the same colour.

### Machine side cladding

The machine side cladding in steel covers the backside of the machine side if the lift is not mounted against a wall. The machine side cladding can be ordered as an option and can run from bottom to top height. It can also be ordered partly if the lift is partly mounted to a wall. The cladding is painted in same colour as shaft panels.

Size: Travel height plus top height.

### Inner ceiling

For a closed shaft you could add an inner ceiling as an option. The inner ceiling is painted in the RAL 9003 (White) as standard, but will be painted in the same colour as the shaft if the shaft is painted in another colour. It comes with LED lights, which complies with LUX regulations.

See image p.28

### Shaft panels

Standard is 25 mm thick shaft panels with EPS (polystyrene) core and steel plates. The panels are painted in RAL 9003 (White) as standard. If the shaft is painted in another colour the shaft panels will be painted in the same colour and the shaft panels will have a rock-wool core. The height of the shaft panel is 575 mm.

(JT5)

(JT23)

(JT16)

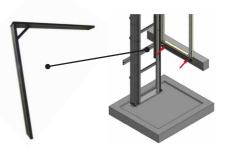


### Mast

For Vector the lift can be delivered in different ways, depending on the length of the lift.

- For travel heights 2 465 -13 000 mm the mast is always delivered in parts.
- For travel heights 1 720 2 464 mm the mast is delivered in parts as standard, but can be delivered in one part if required.
- For travel heights up to 1 720 mm the mast is always delivered in one part.
- For travel heights up to 2 464 mm it is possible to have the mast prepared for splitting.

For Butler the mast is always delivered in parts.



Shaft support bracket / L-bracket - Vector Installed to stabilize the shaft when it is not mounted against a wall. One shaft support bracket shall be used per floor, except the bottom floor. Available in two sizes - one to fit platform width 1040 and

one for 1280 and 1480 mm.



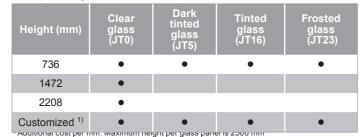
### Shaft support frame - Butler

Used as an alternative fixing method when the mast is not mounted against a wall. One support frame for each floor is needed, except for bottom floor. The support frame is painted in RAL 9003 (White) as standard. If the shaft is painted in another colour the support frame will be painted in the same colour. The support frame consists of four jointed parts, designed for tButler080 mm platform. However, two of the balks are prepared with small drilled holes so they can be cut to fit the other, smaller platform sizes.

**Glass** As an option glass panels with laminated and toghened glass can be ordered. Standard is clear glass (JT0). Option with tinted (JT16), dark tinted (JT5) or frosted (JT23) glass.

The glass panels are 8 or 10 mm thick depending on the size of the glass. Glasses which are higher than 1000 mm is always 10 mm. The glasses are fitted in aluminium profiles. These profiles are in aluminium as standard, but can be painted in a RAL colour as an option. For a shaft painted in the RAL 9003 (White) the profiles can be painted in the same colour. For a shaft painted in another RAL colour the profiles are as standard aluminium. As an option the profiles can be painted in the same RAL colour. Note that this has to be ordered separately.

Shaft panels / glass with aluminium profile:





### **Electrical cabinet - Vector**

The standard position of the electrical cabinet is in the shaft, at the upper floor where the landing door is located. If the standard position of the electrical cabinet proves difficult we offer the option to move it to another landing or to place it externally in a locable casing.

For platform size 900x1040 mm the electrical cabinet is mounted behind the platform panel and in the top of the shaft.

Size of standard electrical cabinet (placed in shaft): 180 x 880 mm. Size of external electrical cabinet (placed in an external box): Height 500 mm, depth: 160 mm, width: 400 mm.



### External service panel

A service panel is always placed in the electrical cabinet. It is used to run tests etc., and for emergency running the lift. An external service panel is available for mounting outside the lift as an option. In this case a wire connects it with the service panel in the electrical cabinet.

For Vector platform size 900 x 1040 and for all platform sizes for Butler the electrical cabinet and the standard service panel is mounted in the top part of the shaft and can't be reached from outside. Therefore it is connected to an external service panel (wall mount) which is mounted in a faceplate box. The external service panel must be activated with a 3 edge key before it can be used. Size: 95 x 185 mm

### Extra anti-rust protection

In order to protect the lift when exposed to humid environments, e.g. when sea transport or when the packed lift is exposed to humid conditions during transport or at the installation site, the lift is delivered with yellow chromate guides. Can be ordered as an option.

### **Communication - Butler and Vector**

Two way communication is mandatory according to EN81-41. Choose from one of the following options or install your own phone.

### Autodialer

Equipment for emergency calls. Integrated on the destination panel. Dials automatically when the alarm button is pressed.

When unanswered after a predefined time, the call is automatically forwarded to the next number. The autodialer can be equipped with a GSM module.





### DC converter

When more autodialers are connected in series on one phone line the power on the phone line is not enough to drive more than one autodialer. In this case, a DCconverter is needed for each lift. The DC-converter 12-24 V is used as external power supply for the autodialer.

### Phone

The telephone works as a standard telephone but is intended foremergency calls. The phone is mounted on the platform panel. Equipped with redial memory, mute button and a lamp indicator for on/off.

Can be equipped with a GSM module.







### Power supply

### For Vector you have the following options:

- 3-phase 400V 50 Hz/5.2 A/16 A slow
- Standard for all lifts
- For 250, 410 and 500 kg

### Can also be delivered for 60Hz

- 3-phase 400V 50 Hz/5.2 A/16 A slow frequency converter
- Option
- Frequency converter with built in soft start and stop
  For 250, 410 and 500 kg

### 1-phase 230V 50 Hz/9 A/16 A slow

- Option when building don't support 400V 3-phase
  Frequency converter with built in soft start and stop
- For 250 and 410 kg
- 3-phase 230V 50 Hz/9 A/16 A slow

### Option

- Note that this is rarely used except for example in Norway
- For 250, 410 and 500 kg
- · Can also be delivered for 60Hz

### For Butler the following is valid:

### 1-phase 230 V/50Hz/6.6A/16A slow

- Frequency converter with built in soft start and stop
  For 250 kg
- For 250 kg

### Soft start

It provides a smoother start when pressing a destination button. For Vector 3-phase lifts, soft start can be ordered as an option. It is not available for 1-phase lifts, as they come with a frequency control as standard which includes both soft start and stop. For 500 kg lifts soft start is included as standard.

### Battery guard

The battery guard ensures that the batteries are not damaged and that there is enough power so that you can run the lift in the case where the power to the lift is cut. It ensures that the lift is turned off (all power consumers are turned off) when the power of the batteries reaches 22 V. This means that when you go on vacation you don't need to turn of the lift even if you turn of the power in the house, the battery saver will ensure that the batteries are not discharged. The battery guard can be order as an option.



### Lubrication

The screw must be oiled at regular

### intervals.

### Manual Lubrication

A brush fixed to the platform oils the screw when using the lift (a tray with lubrication oil in the bottom of the shaft). Standard for Vector. Not applicable for Butler.

### Automatic Lubrication

Oils the driving screw at regulated time intervals even if the lift is not in use. The lubrication frequency is adjustable. Standard for Butler. Option for Vector. Standard for lifts with a travel height of over 8000 mm. Recommended for lifts that are seldom used or that are not used regularly to travel from ground to top floor.



### Manual emergency lowering

Manual emergency lowering with a winch is standard for Vector. Not applicable for Butler.



### Battery operated emergency lowering

You can lower yourself from inside the lift and get out by yourself when there is a power failure. Possible to run the lift to nearest level from the platform (possible to go down) - Executed when pressing a destination button. Can also be run externally from the call button (hold to run) or service box.

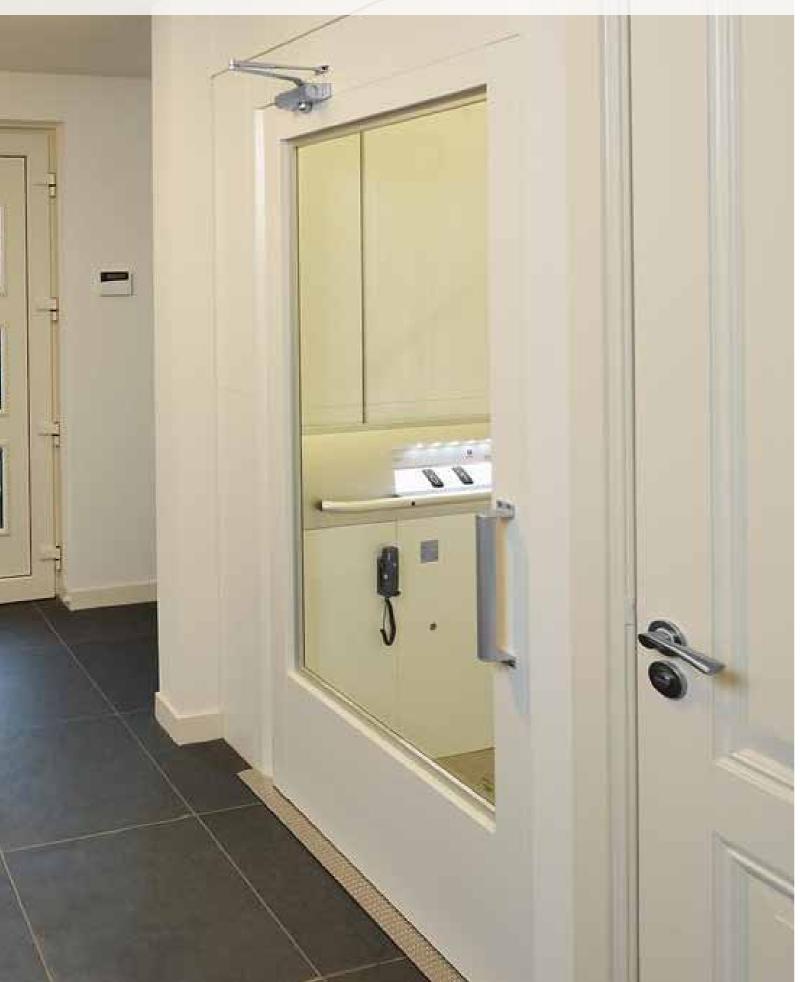
Standard for Butler. Option for Vector.

Mandatory if the position of the electrical cabinet is on an alternate landing than the top floor. Battery operated emergency lowering is mandatory for platform size 900x1040 mm since the electrical cabinet is mounted behind the platform panel and in top of the shaft and therefore can't be reached from outside.

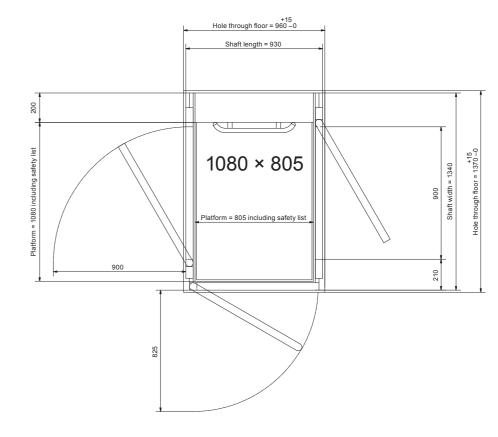
### Phase sequence relay

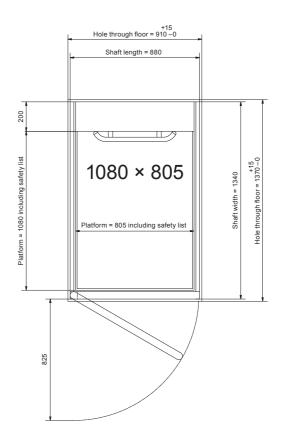
Extra protection and to secure that the lift does not run in the wrong direction when the phases are connected incorrectly. Option introduced for Vector, 3-phase lifts (not needed for 3-phase with frequency converter).

# Drawings Butler, Vector



Platform 1080 × 805

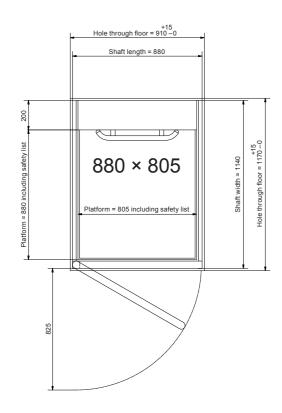




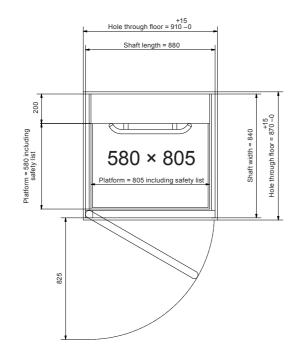
### Drawings - Butler

### Drawings - Butler

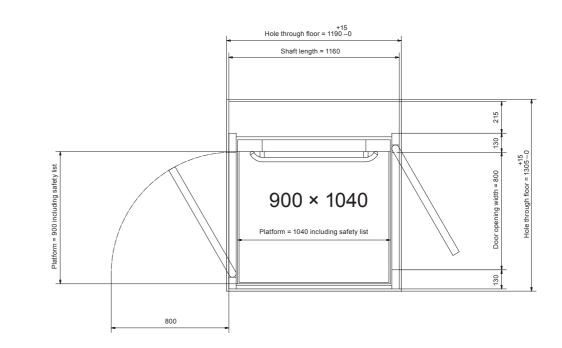
Platform 880 × 805

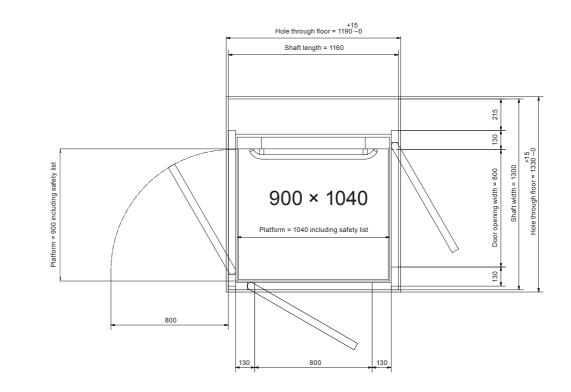


### Platform 580 × 805



Platform 900 × 1040



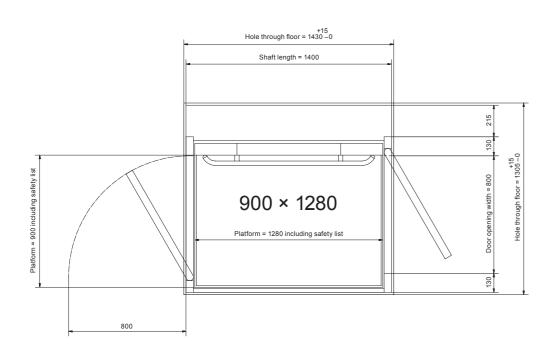


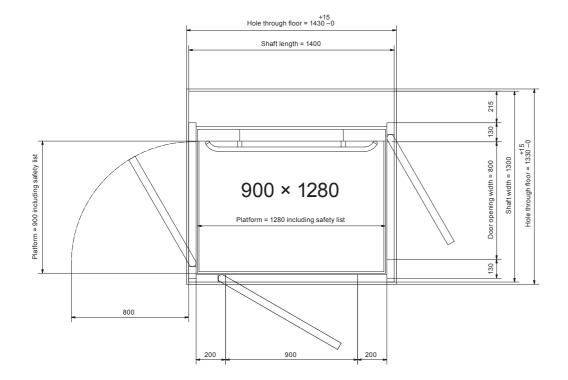
### **Drawings - Vector**

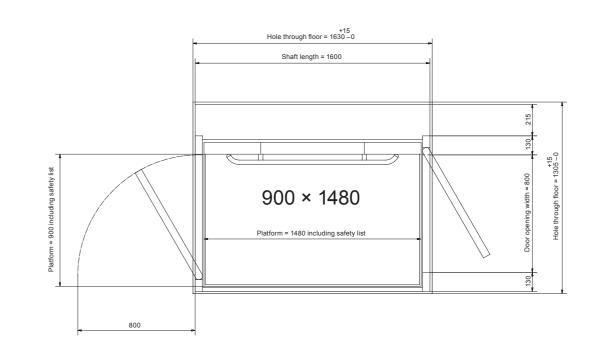
### **Drawings - Vector**

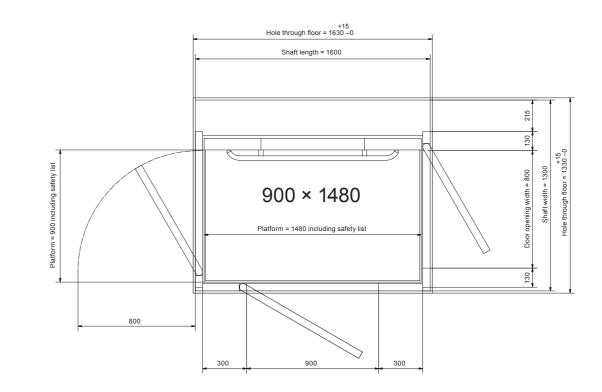
Platform 900 × 1280

Platform 900 × 1480







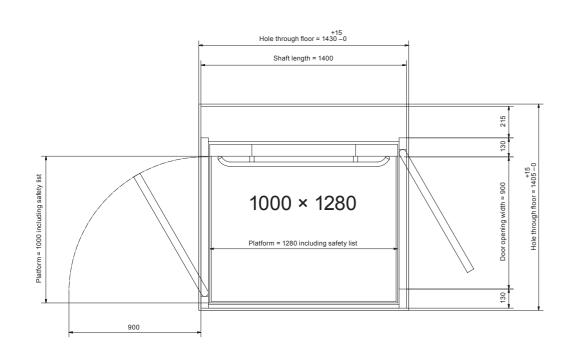


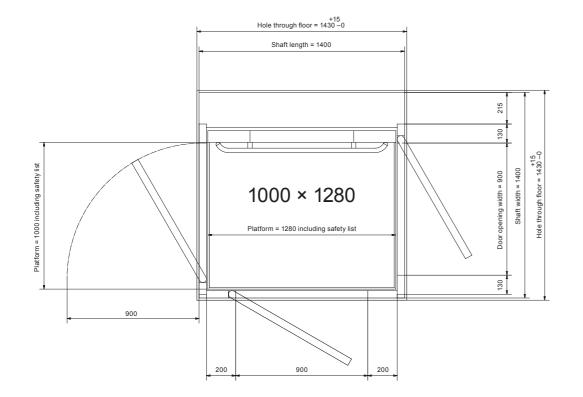
### **Drawings - Vector**

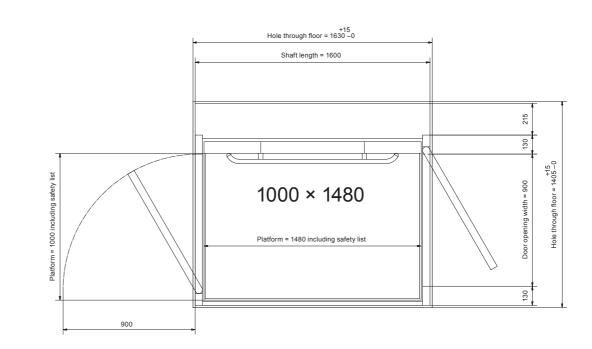
### **Drawings - Vector**

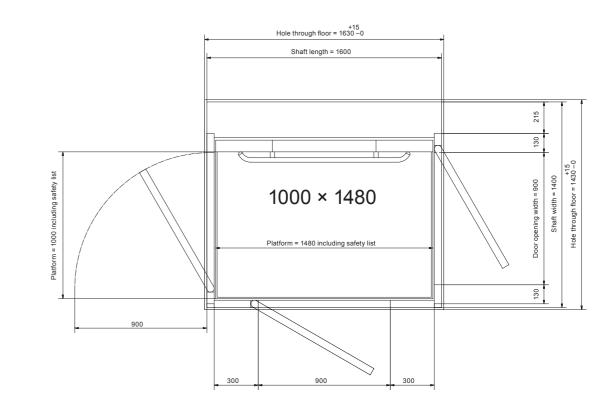
Platform 1000 × 1280

Platform 1000 × 1480





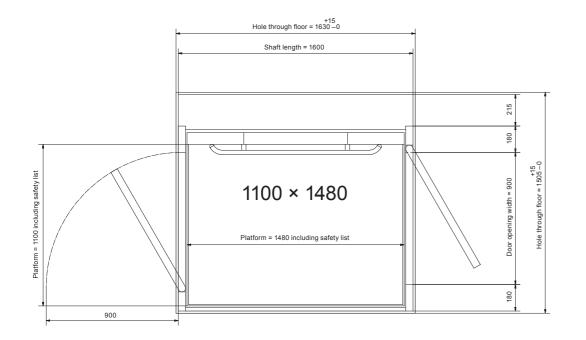


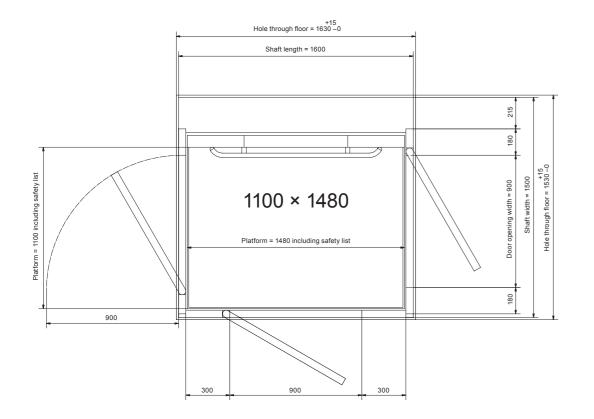


### **Drawings - Vector**

### **Drawings - Vector**

### Platform 1100 × 1480





## FAQ

### 1. Can I have the lift painted in any colour?

Both Butler and Vector can be painted in any RAL colour or Metallic colour silver.

Following choices are available:

### Whole lift painted in standard colour RAL 9003 (White):

 Whole lift painted in RAL 9003 except for the destination panels which are painted in RAL 5014 (blue) for Vector.

### Whole lift painted in other colour:

- Whole lift painted in optional colour (Incl. shaft, doors and platform panels.) Lift partially painted in different colours:
- Shaft in one colour (Incl. shaft panels, corner profiles, Architraves, etc.)
- All door blades in one colour.
- All door frames in one colour (Also includes the door faceplate.)
- Platform panels in one colour.
- One of the above choices or a combination of them.

Note that all doors must be painted in the same way. It is not possible to paint them differently.

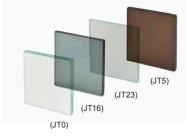
Definition of White is RAL 9003 structure with gloss 20 (i.e. it is a matte colour). When ordering another RAL colour on the lift it will be without structure and with gloss 85 (i.e. glossy colour). The same is valid for platform panels on half and full height wall, where you have RAL 5014 with gloss 85 (glossy colour) as standard. The lift is powder coated.

Any RAL colour means in this case any RAL color from tVector13 colur RAL chart K7 classic. Note that only Metallic colour silver, gloss 100+/-5% is available for sales.

### 2. What is the standard glass for door and shaft?

For Vector the standard glass of door and shaft is clear glass (JT0) and for Butler it is tinted glass (JT16). For all lifts it is possible to choose any of the following glass types; clear (JT0), tinted (JT16), dark tinted (JT5) and frosted (JT23) glass. Note that for Butler when choosing clear glass the screw will be seen from outside the lift.





### 3. To which standards do the lifts comply?:

Butler and Vector comply with the Machine Directive 2006/42/EC, by following the harmonized standard EN 81-41. The lifts are also compliant with the Electromagnetic compatibility (EMC) – 2004 and Low voltage Directive 2006/95/EC. The lifts are type approved, CE marked. El60 – Fire & smoke proof door complies with the lift directive 95/16/EC and EN 81-58. A certificate for respective lift is available on partner desktop.

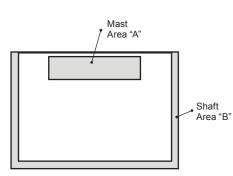
### 4. What are the reaction forces on the building and force on fixings to support frame to wall?

Details regarding the forces are available in the installation manual for Butler and Vector.

### Vector

### Reaction forces from the lift to the building:

• Maximum force as a function of the lift's travel. The force is distributed to the floor through the mast bottom with the area "A" and to the shaft bottom with the area "B".



Travel height (m)	Area "A" F(kN)	Area "B" Shaft panels F(kN)	Area "B" Glass Shaft F(kN)
1	7,8	2,55	3,30
2	8,5	3,40	4,40
3	9,2	4,25	5,50
4	9,9	5,10	6,60
5	10,7	5,95	7,70
6	11,5	6,80	8,80
7	12,0	7,65	9,90
8	12,8	8,50	11,00
9	13,4	9,35	12,10
10	14,2	10,20	13,20
11	14,9	11,05	14,30
12	15,6	11,90	15,40

### Butler

### Reaction forces from the lift to the building:

• Reaction forces on the lift to the building: Maximum force as a function of the lift's travel. The force is distributed to the floor through the mast bottom with area "A" and the shaft bottom with the area "B".

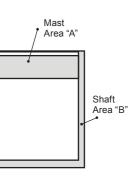
### Force on fixing to to support frame (mast) to wall:

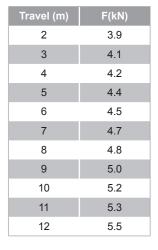
- c -c = distance (height) from the floor to the highest fixing into the wall.
- The maximum distance between two fixings or lower floor and the lowest fixing is 4.0 m.
- The minimum distance between lower floor and the highest fixing is 2.0 m.

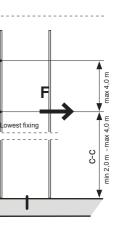
### Force on fixing to to support frame (mast) to wall:

- c -c = distance (height) from the floor to the highest fixing into the wall.
- The maximum distance between two fixings or lower floor and the lowest fixing is 4,0m.
- The miniumum distance between lower floor and the highest fixing is 2,0 m.
- c -t = distance from the top of the mast to the highest fixing into the wall.
- The maximum distance between the top of the mast and highest fixing is 1,2 m

max 1,2 m	c -c (m)	F(kN) 410 kg load	F(kN) 500 kg load
₹5	2	1.5	2.2
<b>F</b> max 4,0 m	3	1.0	1.5
<b>→</b>	4	0.8	1.1
max 4,0 m	5	0.6	0.9
	6	0.5	0.7
<b>A</b>	7	0.4	0.6
max 4,0 m min 2,0 m	8	0.5	0.5
<b></b>	9	0.3	0.5
	10	0.3	0.4







c-c (m)	F(kN) 225 kg load
2	0.84
3	0.56
4	0.42
5	0.34
6	0.28
7	0.24
8	0.21
9	0.19
10	0.17

### Features and benefits

### You can always get out of the lift by yourself

· If there is a power failure, you can always get out of the lift by yourself with battery operated emergency lowering. Use the platform buttons and the lift will take you to the closest lower floor and you can open the door and get out by yourself.

### The lift can't fall down

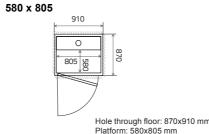
· With the self locking concept, i.e the friction between screw and nut will prevent the lift from falling down. No additional brake system is needed.



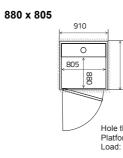
Easy installation Means that the lift is both easy and fast to install. A normal installation only takes two days.

Low operation and maintenance cost.

· Lowest on the market.



Load: 250 kg



### Minimum builders work and small footprint • The lift can be installed without a pit, with a ramp

without ramp). • All parts are included in the shaft - no extra machine room or head room needed.

(or with a 50 mm pit

No hydraulics, which mean no leakage or smell No additional space needed for hydraulic unit.



**Environmental Product Declaration** 

Environmental Product Declaration

· We are the first lift manufacturer with an

• More than 95% of the parts are recyclable.

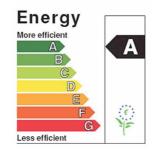
47

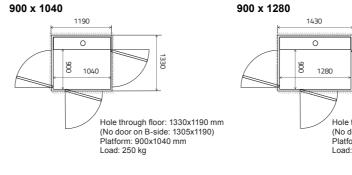
### Robust shaft

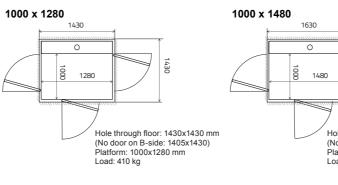
- 25 mm shaft panels. Robust and resistant to damage.
- Good noise and acoustical isolation.

Low energy consumption

- Minimum stand-by power consumption 15 W - not more
- than a computer or a TV.
- Energy class A as per VDI 4707.



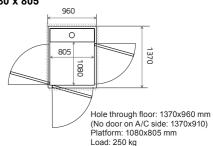




### **Overview Butler**







Hole through floor: 1170x910 mm Platform: 880x805 mm Load: 250 kg

### **Overview Vector**

