alerta®
Proactive Patient Care

User manual

alerta® mini135

ALT-PL135
Powerlifter
Mini 135

alerta® midi150

ALT-PL150
Powerlifter
Midi 150

alerta® maxi175

ALT-PL175
Powerlifter
Maxi 175

UK Version

Contents

1. Features, warranty & technical service

This product is intended by the manufacturer to be used on humans for the purpose of lifting, lowering and moving users. If the buyer or user allows unauthorised personnel to operate the product or fails to observe the cleaning and maintenance recommendations contained in this manual, all warranty rights and liability claims will be forfeited.

Our products have a 2 year warranty against any manufacturing fault (12 months in the case of batteries and electrical equipment).

Alerta Medical sells all its products through a network of distributors. In the event of a problem, the end user should contact the DISTRIBUTOR from whom they have purchased the product. Alerta Medical provides distributors with the spare parts needed to undertake maintenance work on the products.

Alerta Medical operates a policy of continuous improvement of all its products. Hence, device specifications may change without prior notice.

2. Safety precautions

Any person using or assembling these items must first read and understand the assembly, operating and cleaning instructions provided. Read all safety information contained in this manual (highlighted with the symbol ⚠) carefully. Failure to follow these instructions may result in damage to property and/or personal injury.

2.1 Recommendations

Familiarise yourself with the safety controls and devices before operating the hoist. Use a sling that is EC marked and check that its size and other characteristics are appropriate to the patient. Do not use a sling that is frayed or worn, and always follow the instructions provided with it.

Check that the combined weight of the patient and the sling does not exceed the maximum working load displayed on the hoist. Preferably, the patient should be as close to the floor as possible prior to transferring him or her.

A loaded hoist should always be used on flat, smooth surfaces that are free of obstacles. If moving a patient along a sloping surface, the gradient must not be greater than 5° and it is recommended to use the assistance of a helper. Never leave a hoist loaded with a patient on a sloping surface. Transfer the patient with the hoist legs in parallel position at a maximum speed of 3 km/h (0.8 m/s). Keep the hoist away from water, humidity, splashes and corrosive atmospheres (indoor swimming pools, the sea, etc.). Do not use the electric hoist in the shower or recharge the battery in the bathroom.

Do not force the safety controls and devices. Do not push the mast, the boom or the patient to move the hoist.

2.2 Braking and moving

⚠

While the hoist is stationary, **the brakes should always be on, except when lifting or lowering a patient.** If the wheels are free to rotate during these operations, the hoist will find the centre of gravity of the hoist patient unit. On the other hand, if the wheels are locked, the patient will be dragged to the centre of gravity of the hoist patient unit, which will result in discomfort.

2.3 Before moving a patient

Consider individual hazards, including:

- Risk of crushing/squeezing.
- Potential falls.
- Disturbed patients.
- Patients with learning difficulties.
- Small children and pregnant women.
- Persons without the mental capacity to recognise unsafe behaviour.
- Unauthorised persons.

Anybody who is authorised to use the hoist must be able to do so in a safe and controlled way.

⚠

Due to the continuous, smooth lifting action of the moving parts, there is risk of entrapment. When operating these parts, the user and/or the carer must make sure that there are no body parts in the areas where they may become trapped.

2.4 Identifying risk patients

The following recommendations are aimed at care personnel to help reduce the specific risks that may affect certain patients. These hazards are listed in a number of reports drawn up by national government agencies with recommendations to reduce them.

It is recommended to establish a patient admission procedure that enables identifying risk profiles and applying measures suited to the health condition and behaviour of such patients. Risk profiles include:

- Elderly and/or disabled patients.
- Patients with dementia, mental illness, hydrocephaly or disorientation.
- Agitated and/or aggressive patients.

The measures tested and approved include establishing a protocol with the following points:

1. When and for what purpose the hoist may be used, as well as the type of sling, immobilisation equipment and any other specific measures.
2. When and for what purpose the patient should be immobilised or the use of other means to reduce the risk of falls is required (e.g. laying foam on the floor).
3 If special means are used to immobilise a patient, closely following the instructions and advice provided by the manufacturer.
4. How a patient should be monitored or immobilised, including during intervals.

2.5 Electrical safety precautions

All the hoist's electrical connections must comply with the International Electrotechnical Commission (IEC) standards. The power supply should be equipped with an earth leakage circuit breaker with a maximum operating current of 30 mA, as prescribed by standard IEC 364-5-53.

This product complies with the standards EN 60601-1 and EN 60601-1-2 on electrical apparatus and the electromagnetic interference of medical devices. Therefore, it does not interfere or is not interfered when combined with other medical devices that also comply with the electromagnetic standards.

Some apparatus, particularly older devices, that do not comply with electromagnetic compatibility standards may, however, cause or be affected by interference when used with this hoist. If using such apparatus, you must make sure that any potential malfunction will not harm the patient or any other person.

Before moving the hoist, make sure the power supply cable is unplugged from the mains. Any work on electrical parts may only be undertaken by authorised, qualified personnel.

3. Assembly

Alerta patient lifting hoists must be assembled and installed by a competent person and checked for safety before first use. No tools are necessary to assemble the hoist, although some parts are considerably heavy. It is therefore advisable to use the assistance of a helper when handling such parts. Pay attention to avoid being knocked or trapped.

3.1. Components

Carefully remove the packaging and place the two pre-assembled structures supplied in a clear area. (Picture 1)

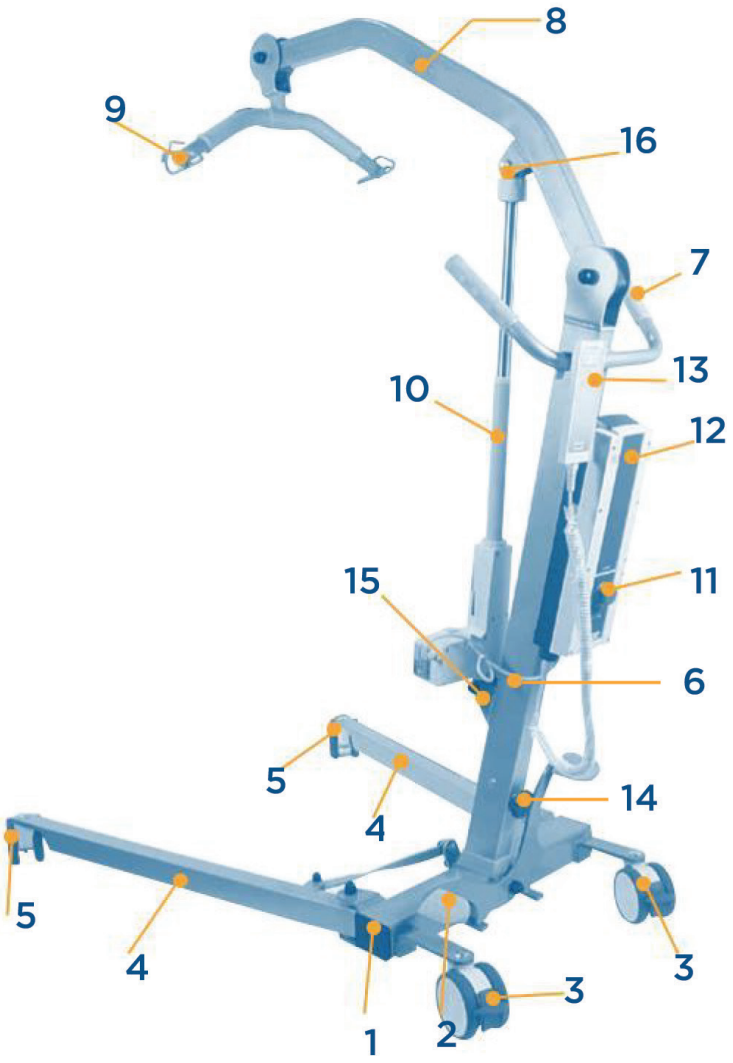
BASE STRUCTURE

1. Mast base
2. Pedals
3. Rear wheels (with brakes)
4. Legs
5. Front wheels (no brakes)

MAST-BOOM STRUCTURE

6. Mast
7. Handle
8. Boom
9. Two-hook spreader bar
10. Electric actuator
11. Battery charging base
12. Removable battery
13. Hand control
14. Locking knob (initially on mast base (1))
15. Mast bracket (actuator lower support)
16. Boom bracket (actuator top support)

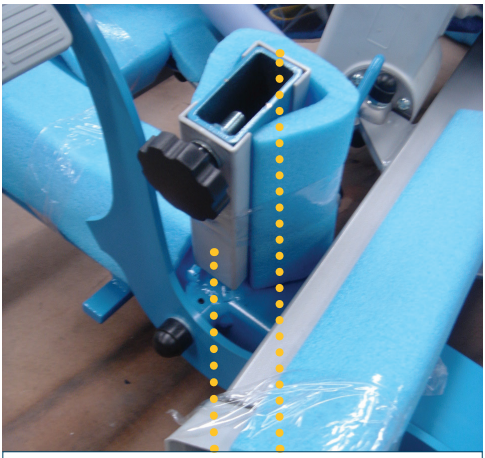
Model Alerta Powerlifter



Picture 1

3.2 Joining the pre-assembled structures

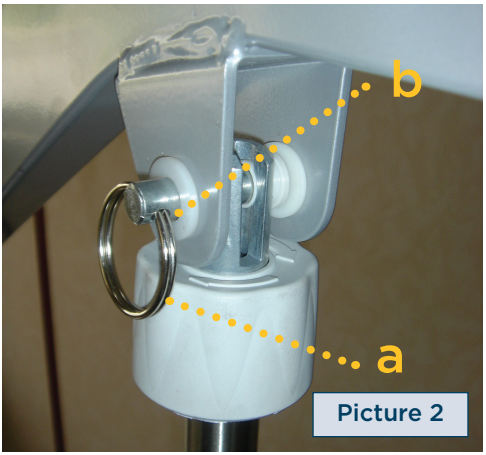
Place the base structure on the floor with the brakes on the rear wheels (3) on. Remove the locking knob (14), DON'T REMOVE THE GREY PLASTIC PIECES OF THE MAST BASE and insert the mast-boom structure in the mast base (1). Align the holes in the mast (6) and base and put the locking knob (14) back in place, making sure it is tight and secure.



DON'T REMOVE THE GREY PLASTIC PIECES OF THE MAST BASE ⚠

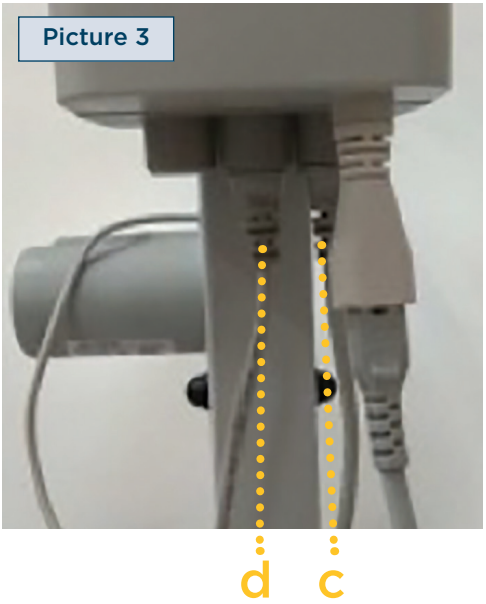
Check that the legs (4) open and close correctly and that the wheels rotate freely.

The actuator (10) is supplied and mounted on the hoist in the factory. If you need to disassemble the actuator, loosen the ring (a) securing the pin (b). To reassemble do the opposite operation. (Picture 2)



Picture 2

Connect **FIRMLY** the hand control plug (c) and the actuator jack (d) to the bottom of the charging base (11). (Picture 3)



Picture 3

4. Operating instructions

4.1 Spreading and narrowing the legs

The hoist's legs can be narrowed or spread to allow access to a wheelchair. To spread the legs, step on the left pedal (2). To narrow the legs, step on the right pedal. While transferring patients and to negotiate doors and confined corridors, the legs should preferably be narrowed.

4.2 Lifting and lowering

Lifting and lowering the patient is achieved by the electric actuator's action on the hoist boom. These movements are easy to control using the two buttons (up and down) provided on the hand control. When the boom reaches the upper or lower limit of its run, it stops automatically. (Picture 4)

Picture 4

⚠

When lifting or lowering a patient, it is recommended to press and hold the relevant button. Repeatedly pressing and releasing the buttons will cause the actuator motor to start and stop each time, using more battery and shortening its operating lifetime.

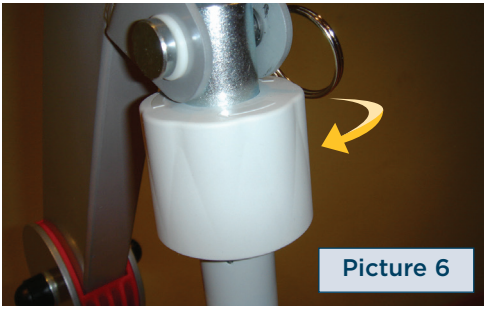
4.3 Emergency stop and safety lowering

The electrical system includes a red emergency stop button. When the red button is in the out position, the battery will operate normally. When the red button is depressed, the power from the battery is cut off.

To reset the button to the out position, turn it clockwise and release. (Picture 5) The hoist can also be raised and lowered using the up and down arrow buttons.

Picture 5

The actuator is equipped with a quick release device that allows lowering the patient manually in the event of battery failure. To do this, rotate the grey collar clockwise. The patient will be lowered slowly. (Picture 6)



Picture 6

4.4 Braking and moving

While the hoist is stationary, **the brakes should always be on, except when lifting or lowering a patient.** If the wheels are free to rotate during these operations, the hoist will find the centre of gravity of the hoist patient unit. On the other hand, if the wheels are locked, the patient will be dragged to the centre of gravity of the hoist patient unit, which will result in discomfort.

4.5 Recharging the battery

During lifting or lowering, the charging status lights on both the charging base and the hand control light up green. 2 green lights indicate capacity between 66-100%, 1 green light indicates capacity between 33-66% and 1 orange light indicates capacity less than 33%).

The system emits an acoustic warning when the battery is about to run out, allowing several complete cycles to be carried out.

If you only have a removable battery and a charging base, you must bring the hoist closer to a power outlet and connect the cable (e) to the charging base and then connect to the mains.

While the battery is being recharged, the hoist motor does not work, the emergency stop must not be pressed and the green light comes on. Battery stripes flash. When it is fully charged the 3 stripes will remain fixed. The green light will remain on until the network cable is disconnected.

Do not disconnect the plug from the charger by pulling on the cable as it could be damaged .

If you use the hoist daily, it is recommended to recharge the battery at night. The charger does not allow the battery to overcharge. If you are not going to use the lift for a long time, it is advisable to recharge the battery at least every three months so that it is in its optimal state of use.

If you have an additional charging base (on request) you can recharge the battery by removing it from the charging base installed on the lift and placing it in an additional charging base installed next to a power outlet.

4.6 Changing the battery

To remove the battery, hold it by the upper handle and release the metal guide from the control box support. To place it back on the charging base, rest the battery on the charging base and insert the guide again until you hear a “click”.

4.7 Overload

The control box stops working if the actuator is overloaded (due to excess load or excessive continuous operating time). It will work again after a few minutes when the overload has been removed. Approx. duty cycle: 2 minutes in continuous use and 18 minutes in rest.

4.8 Improper use

Improper use of this hoist may result in injury to the users and/or damage to the device, in addition to invalidating the warranty. Examples of improper use are:

- Use by persons who have not read this user manual and/or who have not been trained by a member of the authorised personnel.
- Use of the hoist, functions, accessories or movement by persons not qualified to operate the device safely.
- Use of the electrical functions by more than one person simultaneously.
- Use with a load exceeding the maximum working load displayed on the hoist.
- Faulty connection to the mains when charging the battery.
- Connecting any devices to the hoist that have not been authorised by the manufacturer.
- Pulling the power supply cable to move the hoist.
- Cleaning the hoist with excessive water, pressure jets or in a wash tunnel.
- Using the hoist outdoors or to move a patient inside a vehicle.
- Using the hoist on soft, unprepared terrain.
- Using the hoist on terrain with a slope gradient greater than 5° (loaded with a patient).
- Extreme, intensive use of the actuator failing to observe the maximum working load displayed on the label.
- Using devices and/or accessories other than those recommended by the manufacturer.
- Any other use of the hoist that is not in accordance with its intended purpose.

5. Maintenance

5.1 Safety rules for cleaning and disinfecting

The hoist has been designed for easy cleaning and optimal disinfection. Failure to observe any of the following recommendations may result in damage jeopardising the proper operation of the hoist and the warranty of the material.

- Make sure the hoist is immobilised and disconnected from the electricity mains.
- Press the red stop button to shut off the electrical functions.
- Never clean the hoist with copious water, with a high pressure jet or in a wash tunnel.
- Do not use water at a temperature above 60°C.
- Avoid any excess water on the connector sockets.
- Dry the hoist thoroughly before using again.

5.2 Recommended products and materials for cleaning and disinfecting

- Clean cloths, disposable or recyclable. Cleaning gloves.
- A diluted solution of detergent or disinfectant, or a spray on disinfectant.

5.3 Recommended method for cleaning and disinfecting

- Use a cloth to clean from top to bottom and from the cleaner to the dirtier parts
- Dampen the cloth as often as necessary and wring out excess water.
- Allow the product to dry for the period of time recommended by the manufacturer to ensure maximum efficiency.
- If necessary, rinse following the instructions provided by the disinfectant supplier.
- Change the cloth when cleaning from the less dirty to the medium dirty or very dirty parts.
- Change the cloth to start cleaning another hoist.
- Dry the hoist after cleaning.

5.4 Safety rules for maintenance

Before performing any maintenance or repair operation:

- Make sure the hoist is immobilised (if no movement is envisaged) and disconnected from the electricity mains.
- Press the red stop button to shut off the electrical functions.
- Do not under any circumstances open or puncture an electric motor.

5.5 Preventative maintenance

It is advisable to carry out a yearly maintenance check of the hoist and its accessories to ensure they are kept in good working order. Special attention should be paid to the following aspects:

- Operating controls and mechanisms.
- The hinges where the hoist and accessories move.
- The condition of the electric cables and the water tightness of the electrical devices.
- The condition of the sling (wear and fraying, tears, distortion, etc.).

It is recommended to grease the hoist's hinges regularly.

Adapt the frequency and intervals of maintenance checks to the condition of the hoist, the specific circumstances of its use and in line with local laws.

5.6 List of spare parts

Replacements for the electrical equipment (including the battery) and parts are available on request.

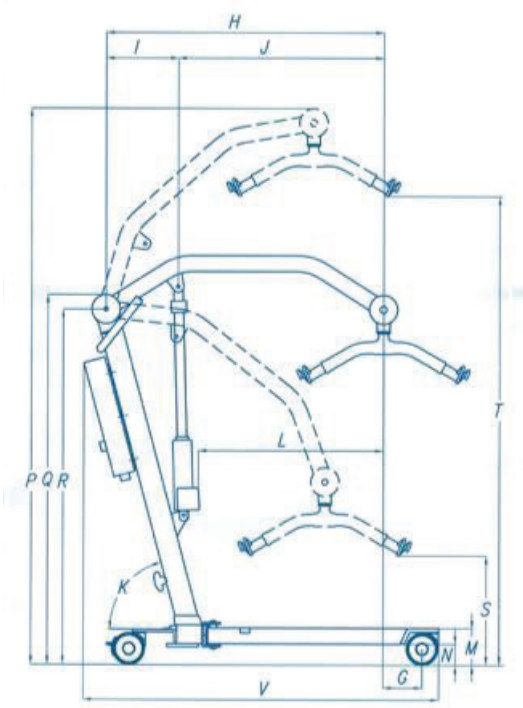
5.7 Transport and storage

All necessary precautions must be taken to ensure the safe transport of the hoist and its accessories, avoiding knocks and dust. During transport, the hoist must be in the low position, with its functions disconnected and the brakes on the wheels on. Additionally, it must be secured with straps and protected against water and humidity (75%), at a temperature between -20°C and +50°C.

5.8 Troubleshooting

PROBLEM	CAUSE	REMEDY
The actuator is not working	The red emergency stop is activated	Turn the red button clockwise to deactivate
	The battery is connected to the electricity mains for recharging	Unplug the black power supply cable from the mains
	The battery is low	Recharge the battery
	The battery is not properly connected	Remove the battery and put it back in place
	The hand control or actuator cables are not properly connected	Insert the cables correctly **to the bottom**
	Hand control and/or actuator failure	Replace the hand control and/or the actuator
The battery will not charge	Mains failure	Check mains supply
	Malfunctioning battery and/or charging base	Replace the battery and/or the charging base
The actuator stops	Hoist overloaded	Reduce the load and wait a few minutes
	The battery is low	Recharge the battery
Noisy hinges	Lubrication is required	Apply lubricant to the hinges
The patient cannot be lowered	Actuator and/or hand control failure while the boom was raised	Lower slowly the patient turning the collar on the actuator (see 4.3. above)
The mast has too much clearance with the mast base	The grey plastic pieces of the mast base are been removed	Put the grey plastic pieces on the mast base again
The wheels do not rotate or brake properly	Dirt	Clean the wheels

6. Technical specifications



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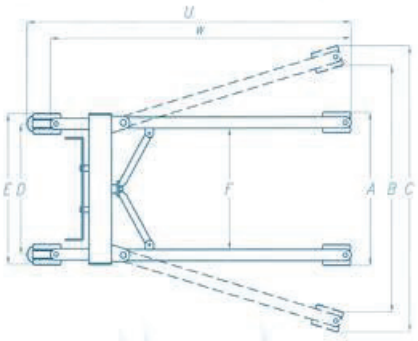


Powerlift 150 hoist

Approx. size (cm)	A	B	C	D	E	F	G	H	I	J	K
	54	83	102	46	54	43	23	88	23	65	75°
	L	M	N	P	Q	R	S	T	U	V	W
	57,5	11,5	6,5	174,5	115,5	111	34	147	116	123	108

- Height: minimum 115.5 cm (Q) maximum 174.5 cm (P)
- Width: minimum 54 cm (A) maximum 102 cm (C)
- Length: 123 cm (V)

- Internal width at maximum reach: 77 cm
- Reach from base with legs spread to 700 mm: 57 cm
- Maximum reach from base: 60 cm
- Maximum reach at 600 mm (benchmark): 59 cm
- Turning radius: 135 cm.

- Maximum working load 135 kg (including sling)

- Sound pressure <55 dBA

- Total weight (unloaded): 34 kg
- (Base structure: 16.5 kg) – Mast-boom structure: 17.5 kg)
- Duty cycle: 2' on /18' off
- Battery charge: 40 complete cycles
- Expected operating lifetime: 11,000 cycles at maximum working load (adhering to the maintenance and storage guidelines set out above)
- Operating forces
  Finger <5 N Hand/arm <105 N Foot <300 N

Powerlift 175 hoist

Approx. size (cm)	A	B	C	D	E	F	G	H	I	J	K
	64	94,5	114	55,5	63	52	34	94	24	70	75°
	L	M	N	P	Q	R	S	T	U	V	W
	63	11,5	6,5	186	133	128	45	159	128	136	120

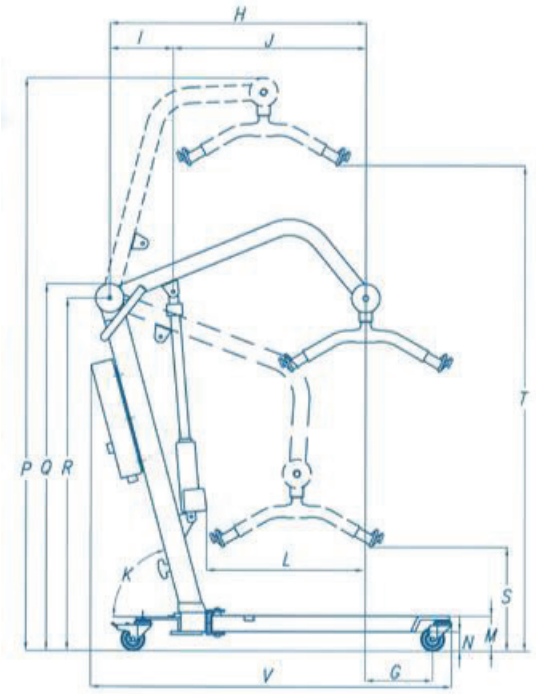
- Height: minimum 133 cm (Q) maximum 186 cm (P)
- Width: minimum 64 cm (A) maximum 114 cm (C)
- Length: 136 cm (V)

- Internal width at maximum reach: 82 cm
- Reach from base with legs spread to 700 mm: 38 cm
- Maximum reach from base: 62 cm
- Maximum reach at 600 mm (benchmark): 61 cm
- Turning radius: 150 cm.

- Maximum working load 175 kg (including sling)

- Sound pressure <55 dBA

- Total weight (unloaded): 36,5 kg
  (Base structure: 18.5 kg) – Mast-boom structure: 18 kg)
- Duty cycle: 2’ on /18’ off
- Battery charge: 40 complete cycles
- Expected operating lifetime: 11,000 cycles at maximum working load
  (adhering to the maintenance and storage guidelines set out above)
- Operating forces
  Finger <5 N Hand/arm <105 N Foot <300 N



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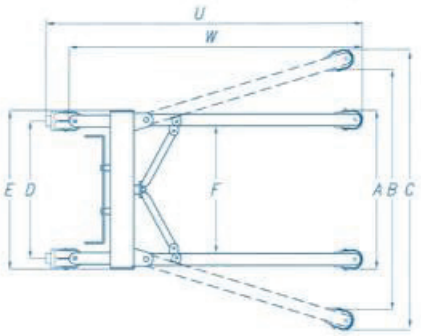

Powerlift 135 Mini HOIST

Approx. size (cm)	A	B	C	D	E	F	G	H	I	J	K
	54	84	96	47	53	43	22	81	20	61	75°
	L	M	N	P	Q	R	S	T	U	V	W
	52	11	6	181	116	111,5	33	154	106	113	99

- Height: minimum 116 cm (Q) maximum 181 cm (P)
- Width: minimum 54 cm (A) maximum 96 cm (C)
- Length: 113 cm (V)

- Internal width at maximum reach: 77 cm
- Reach from base with legs spread to 700 mm: 57 cm
- Maximum reach from base: 60 cm
- Maximum reach at 600 mm (benchmark): 59 cm
- Turning radius: 122 cm.

- Maximum working load 135 kg (including sling)

- Sound pressure <55 dBA

- Total weight (unloaded): 33 kg
  (Base structure: 16.5 kg) – Mast-boom structure: 16,5 kg)

- Duty cycle: 2' on /18' off
- Battery charge: 40 complete cycles
- Expected operating lifetime: 11,000 cycles at maximum working load (adhering to the maintenance and storage guidelines set out above)
- Operating forces
  Finger <5 N Hand/arm <105 N Foot <300 N

Notes

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Proactive Patient Care

UK CA | CE EU 2017/745

EC REP

CS Lifesciences Europe Ltd
The Black Church
St. Mary's Place
Dublin 7
D07 P4AX
Ireland

eurep@cslifesciences.com

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Making **cutting-edge** medical equipment **affordable**

Head Office
Alerta Medical
4 Symington Place
Riverside Business Park
Irvine
KA11 5DE
United Kingdom

www.alertamedical.com