

Hospital / ICU bed

# NewCare V3

Taking care from the beginning





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# About us

With more than 40 years of experience, PARDO is one of the leading international manufacturer of hospital beds&furniture and a provider of modern smart room solutions for hospitals and nursing homes.

Our ongoing research and development into new solutions is an important part of our commitment to provide our customers with unique product solutions based on technology and high quality.

High quality product is an essential and central part of PARDO, as its mandatory for us to provide top quality products and service to our customers.

PARDO has modern manufacturing facilities located in Zaragoza, Spain and all our products are manufactured “in house” and we are only using suppliers which all are approved and checked by of our high quality standards. Our production is modern, flexible and advanced as it's based on the LEAN principles. This means, that we can customize our production very quick and effective to the meet our customer's needs.

*“Your care, our mission”*

# 1

## ICU bed

The NewCare V3 bed is a fully electric hospital bed equipped with a compass lift system and linear actuators (level of protection IPX6, as well as chassis and patient ground protection).

The metal structure is made of cold rolled steel sheet of 1.5-2 mm. thickness with high resistance and a coating of 100-micron epoxy paint which guarantees durability and resistance.

In addition, the NewCare V3 bed has a wide range of accessories, which allows meeting the needs both for wards as well as for intensive care units.

Main features:

- Linear actuators with protection level IP66.
- Maximum safety load of 265 kg. (SWL)
- Mattress platform with removable HPL panel divided into 4 sections.
- 30 cm extension with one hand.
- 4 bumpers protection in each corner.
- Double regression system (16 cm) reduces the risk of pressure ulcers
- Full length split side rails made of polypropylene with hand grips area
- Side rails with gas spring for easy lowering
- X-ray transparent back section.
- Centralized braking system by means of a bar located in the base at foot area.
- Light bed, easy to handle the bed.
- Easy removable head and footboards with locking system.

# NewCare V3





# 2

## Mainframe

The NewCare V3 bed is manufactured with the highest quality materials on the market, it is equipped with linear actuators with IP66 protection level and security devices in all its components.

The metallic structure is made of high strength cold rolled steel sheet of 1.5-2 mm. and 100 microns epoxy coating ensuring durability and strength.

The compass system “clean” design facilitates the job of the cleaning staff by eliminating the need of moving the beds, and reduces the patient discomfort

The bed is equipped with bearings on the four corners to incorporate accessories, along with rails and hooks on both sides of the bed to hang drainage bags.

The outer dimensions of the bed, 101 x 222 cm, provide the right size to fit through doors, alleys and elevators.

There is enough place underneath to facilitate the use of cranes and the bed incorporates security elements to protect the cranes wear.

## Protective bumpers

Cylindrical side protections with an internal helical mesh. The length of the cylinder enhances the distribution of the energy involved in the impact in a more effective way than the disk solution due to the bigger surface.

In addition, the design based on internal helically shaped radii allows a greater deformation and absorption of the kinetic energy of the impact avoiding / minimizing its transmission to the wall.

This solution reduces damages to the facilities and helps to reduce maintenance costs of hospital facilities since they suffer less damage as a result of friction / shock caused by the beds hitting the walls, corners, etc.

## Accessories supports

Located on each corner of the bed there are supports for trapeze bars, IV poles and balkan frame.

These supports are placed outside the bed base to avoid any interference with the patient, increasing his safety.



## Supports for drainages and fastening systems

In the lower part of the chassis, on both sides of the bed, there are holders for drainages and nasogastric bags. This position out of the bed but close to the patient helps and facilitates the intervention of the medical staff.





# 3

## Bed base

Prevention and patient safety are mandatory functions in hospitals. Therefore, the NewCare V3 hospital bed is equipped with different and varied prevention systems to facilitate and accelerate the patient recovery.

For starters, the bed base comfort, divided into four sections, three of them articulated and a fixed central module.

The bed base is equipped with mattress retainers to hold the mattress, and retainers for safety belts.

The NewCare V3 hospital bed is equipped with a double autoregression (16cm) to avoid UPP's (pressure ulcers).



## Double autoregression

Changing the stance is the easiest and most effective way to avoid bedsores, when the patient's posture is changed regularly, the excessive pressure effect is avoided.

The repositioning of hospitalized patients is the easiest and most effective way to prevent pressure ulcers (Upp's). These ulcers occur in patients who stay bedridden for a long time and with reduced mobility, therefore, the prevention provided by the bed through this regression movement slows down and prevents their apparition, since these postural changes relieve the pressure over the skin.

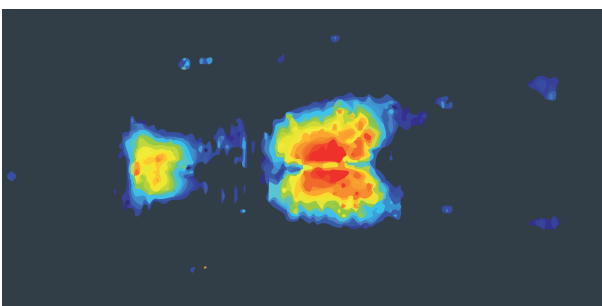
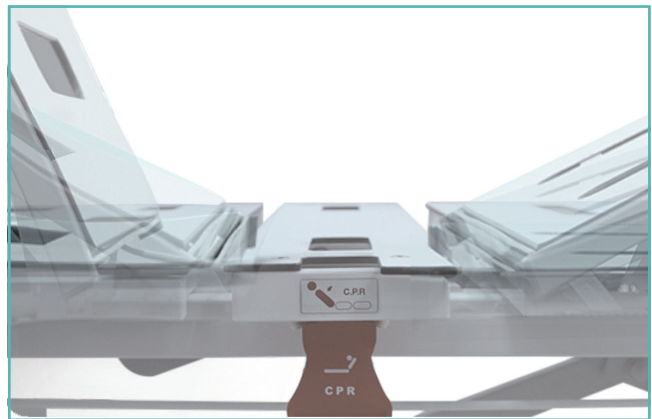
The NewCare V3 regulates the back and leg sections to place the patient in the seated position, maximizing the effect of the double autoregression.

This system reduces the pressure on the patient sacrum and calves when articulating the bed. The sections move back 16 cm during when elevated, changing the pressure zones and reducing the pressure applied to the patient's skin by the mattress in these areas.

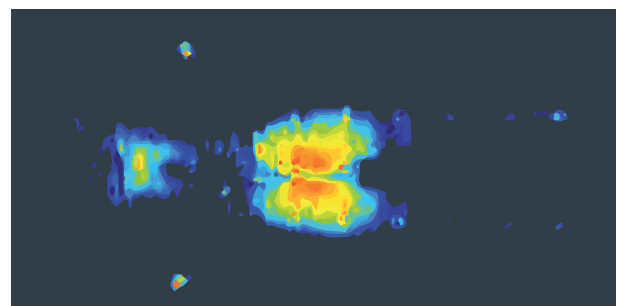
The autoregression is a great advantage for nursing staff since stance changing represents one of the most requested tasks.

Thanks to the pressure relief obtained through this system, the nursing staff also enjoys all the advantages and benefits of autoregression.

Images showing a comparison with and without the system.



Bed pressure map without autoregression



Bed pressure map with autoregression

## Bed base in HPL

This is the most technically advanced material at the present for hospital bed bases. Its main advantages are:

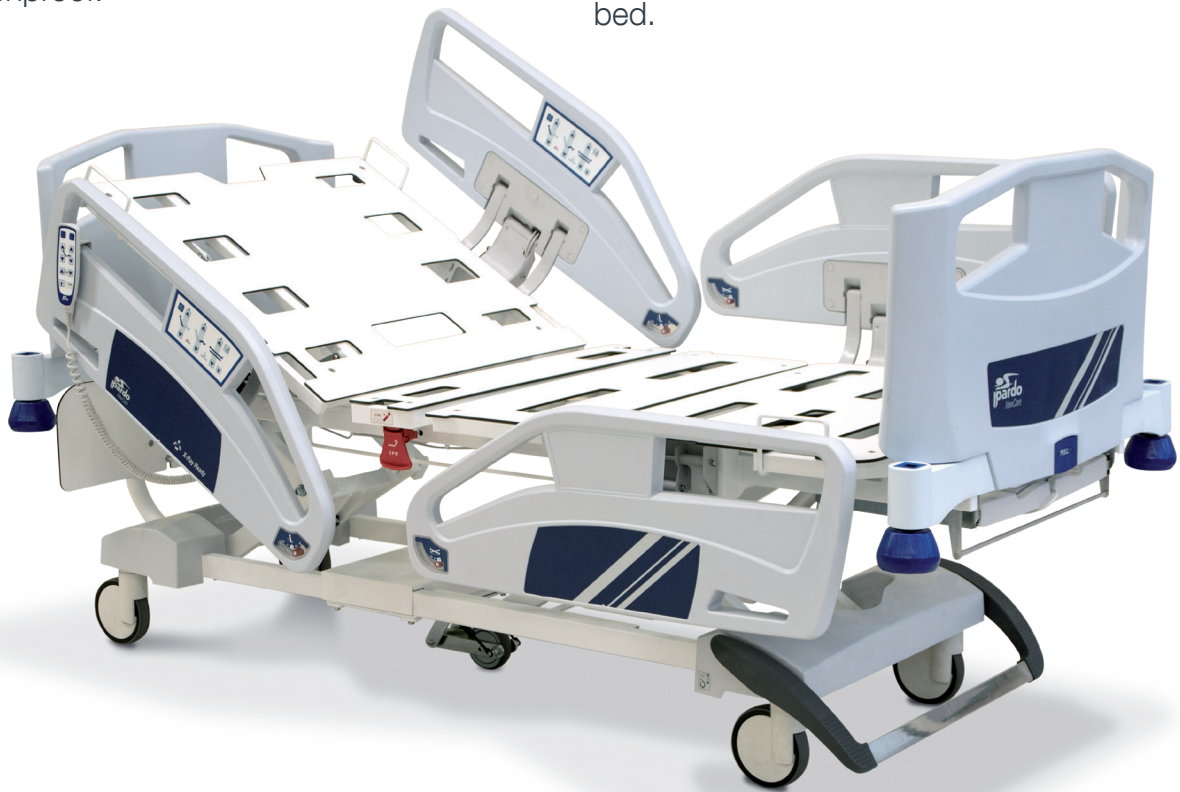
- High resistance to abrasive / cleaning agents.
- Completely smooth surface with no rough touch.
- Waterproof. Fireproof.
- Superior mechanical shock resistance, impacts, scratches, etc.
- Approved for food contact. Scratchproof.

- Easy to clean, resistant to chemicals.
- Crack resistant to impact and abrasion. Color is not altered.

In the base of the bed there are three areas in which can be placed SEGUFIX type fastening systems can be used.

## Mattress retainers

There is a mattress retainer on each corner of the bed to prevent the mattress from moving or losing its position when articulating the bed.



## Easy-to-remove bed base

An additional advantage of these bed bases lies on the easy extraction thanks to the new tool-free snap-fit system.



## Headboard and footboard

### Removable headboard and footboard with locking function

Removable polypropylene headboard and footboard

A manual locking without tools allows transporting the bed without gaps or risks. The one-handed extraction makes them very intuitive and easily removable in case of need or urgency.

Easily removable, in case of emergency the caregivers can reach the patient's head easily and quickly to perform any therapeutic tasks required.

The headboard and footboard are equipped with ergonomic handles to help when moving the bed.



### Customization

Headboards, footboards and siderails can be customized to include any color vinyl, any logo or graphics chosen by the hospital.

At the same time, the color of bed vinyl can be customized to fit within the global design of the specific area of the hospital where the bed is deployed.

# 5

## Siderails

### Siderails

Foldable siderails on both sides of the bed, with anti-entrapment system, according to IEC 60601-2-52 standard, maximum full-length protection, from the headboard to the footboard.

They are very fast to operate (only one hand) and the gas spring brings a slow and controlled descent avoiding slams. Furthermore, the siderails have an anti-entrapment system that prevents blocking in its lowermost position. The bending radius is very small, adapting to confined areas.

New design with a more ergonomic handle to improve the grip surface provided to the patient during bed entry and exit (along with the new pre-programmed safe exit function, the siderails bring the required support to reduce the efforts when getting up).

High-resistance polyolefin instead of ABS. Our siderails, thanks to their geometry and their internal nerves system, enjoy better mechanical characteristics than the ABS, with additional advantages such as:

- Lighter
- Greater chemical resistance to cleaning agents and abrasives.
- Greater recyclability (> 50% ABS).

Stow away siderails move below the mattress level facilitating the entry, exit and transfers of the patient.



### Short siderails

Short siderails new design at head of bed facilitating the patient safe exit through the foot end section. In addition, the membranes embedded in these siderails display different touch keys on the nurse and patient sides.



# Movements

## CPR

The bed has an emergency trunk positioning system to facilitate the cardiopulmonary maneuvers removing the need to use any handheld control. The system is activated through two levers placed on either side of the bed. These red colored levers are easy to use and locate.

This lever is accessible regardless the position of the siderail, both in upper or folded position



Minimum/maximum bed base height (without mattress)	400 / 800 mm. $\pm$ 10 mm.
Backrest tilting angle	$70^{\circ} \pm 5^{\circ}$
Extremities tilting angle	$47^{\circ} \pm 2^{\circ}$
Feet tilting angel	$18^{\circ} \pm 3^{\circ}$
Trend / Anti Trend position angles	$13^{\circ} / 15^{\circ} \pm 2^{\circ}$

## Feet positioning

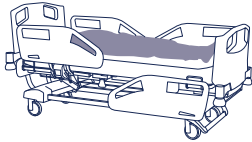
The bed base is composed of 4 sections and the inclination of the knee and feet sections is assisted by a gas spring.

Designed to facilitate the blood return circulation, this position becomes especially useful for long-term patients or suffering vascular problems.

The inclination can be adjusted at any point thanks to the gas spring, thus improving ergonomics and patient comfort.

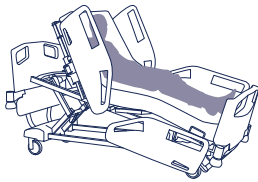


## Safe bed exit



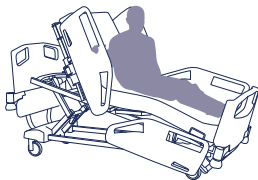
Put down the foot end siderail

Pull the lever of the siderail to bring it down and allow the patient exit through the foot end section



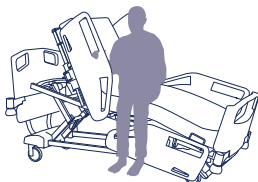
Place the bed in safe exit position.

To facilitate the patient's exit, press the safe exit button located in the membranes embedded in the siderails or in the nursing control. The bed will articulate to this position.



Lower the feet off the bed

Once the bed is placed in exit position, through a side of the bed, lower the feet off the bed using the siderail as a grip, and get up placing the feet on the floor. It is extremely easy since the bed is in the best position for such maneuver.



Get out of bed

Get out of bed, using the siderail as a grip and start walking, releasing your hand.



### Trend position

The patient is supine on a bed or tilted table so the head is at a lower level than the feet. This position is used whenever it is necessary for the blood to flow to the brain in events like a syncope.

### Anti-trend position

As the name suggests this position is the opposite of the above. The patient is supine with his head tilted at a higher level than the feet. It facilitates blood circulation at the level of the extremities, in some surgical procedures (goiter), in case of respiratory problems, if hiatal hernia.

### Fowler position

With the patient supine, the head of the bed is raised and thus the back resting on the bed describes a 45° horizontal angle

Lower extremities will be bent at the knee, being possible to place a pillow beneath them. This position can be used in some heart patients to let them feel more comfortable.

### Flat position

Position used to put in horizontal position the bed sided without lowering the height of the bed. Position for the rest of the patient.

### Cardiac chair position

Therapeutic essential position in hospital beds. The thorax plane regression greatly facilitates the patient comfort and prevents pressure on the abdominal area.

It reduces the number of patient transfers to the chair, enhancing comfort and safety.

### Maximum height position

Health care position.

This fully horizontal position in which the bed is lifted to its maximum height.

This facilitates examination of the patient by the medical team as well as the maintenance and hygiene.

### Minimum height position or RCP

Patient resting position.

Completely flat, the bed moves down to its minimum height. It increases safety, prevents damage from falling and facilitates the access to bed for the patient.

### 30° position

The patient is lying on the bed and the backrest is lifted to an angle of 30 degrees for comfort and well-being of the patient.



# 7

## Handheld controls

NewCare V3 bed design facilitates the job of the hospital staff and enhances the patient comfort during her stay at the hospital

Every bed function and the ergonomic controls simplify the procedures applied by the hospital staff, janitors and cleaning staff, being NewCare V3 the lightest on the market.

The type of control incorporated depends on the need of each hospital: patient control, nursing control providing access to all the bed functions.



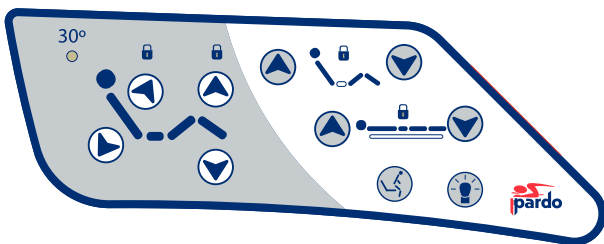
## Side rails control *(short split side rail version)*

They are designed to control the movements of the bed, lock or unlock functions and even include therapeutic and emergency pre-programmed positions making faster and more effective the caregivers' job.

The nursing membrane is equipped with LED indicators to highlight the lock status of the available movements, as well as the battery charge.

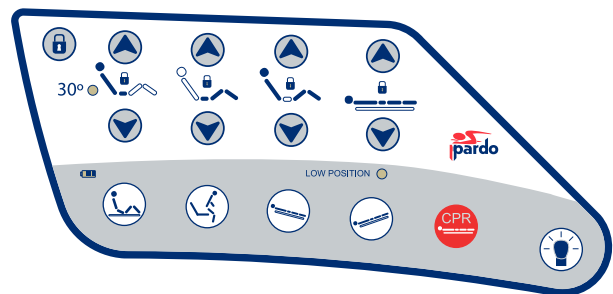
Basic functions included in the membrane:

- Lifting and lowering the back rest.
- Lifting and lowering the extremities.
- Simultaneous lifting and lowering of bodies (auto contour).
- Lifting and lowering the bed.
- Safe exit.



Pre-programmed and emergency functions:

- Function Lock.
- Emergency CPR.
- Cardiac chair
- Trend / Anti-trend.
- Safe exit
- 30° backup LED.



## Battery

The battery is located on the chassis of the bed, and performs the movements of the bed if it is unplugged or the power goes out, in any case allows over 300 complete movements.

- Rated capacity: 1.3 Ah 24V.
- Max.charge current: 500 mA.



# 8

## Transport made easy

The NewCare V3 hospital bed is designed to improve the caregivers' work and to make the patient's stay in hospital more comfortable. Every function of the bed, along with the ergonomic and intuitive controls, is conceived to facilitate the nursing procedures and the daily work.

Transport of patients represents one of the most common tasks of the nursing staff and facilitating such work is vital. The high maneuverability of the bed NewBabyCare thanks to its directional wheel makes the control of the bed significantly easier.

This possibility stabilizes the control of the bed and improves the patient comfort during transportation. In addition, the maneuverability in reduced spaces is improved. Headboards and footboards with the ergonomic handles also facilitate the control of the bed.

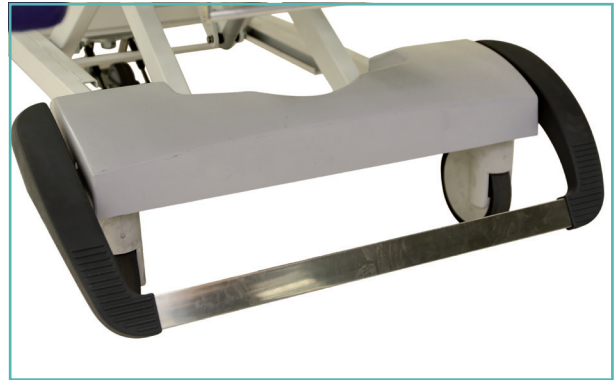
Every improvement applied to the transfer efficiency and speed with no impact in the patient comfort represents a benefit to his wellbeing and facilitates his stay.

## Multifunction pedal

Located at the foot of the bed, the multifunction pedal controls the centralized four-casters braking system and the activation of directionality for transporting bed.

Including all these functions centralized in a single element, such is this lever, facilitates the work of caregivers when transferring the patient from one place to another.

The new design of this pedal improves the medical staff accessibility by increasing the activation surface.



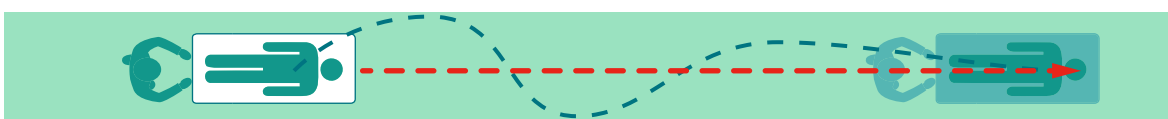
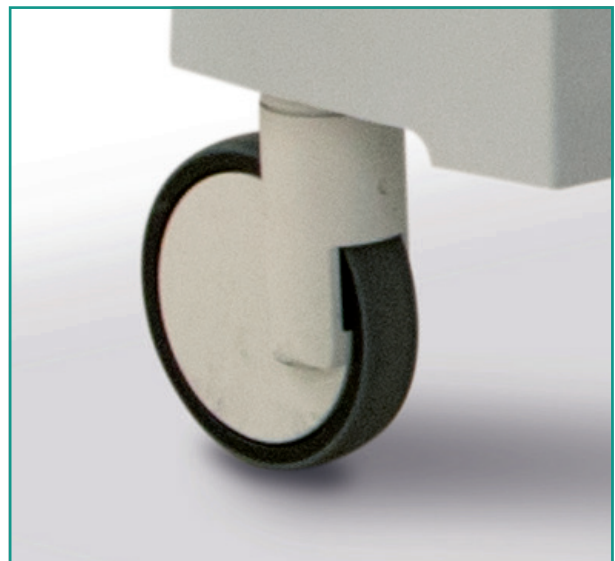
Rolling resistance	+++++
Motion noise	+++++
Wear	+++++
Protection against corrosion	+++++

## Casters

The NewCare V3 four casters (150mm) have high resistance and protection against rust, and are very quiet when moved; This makes the bed perfect for use in hospital environments.

The casters facilitate the movement in small areas (small rooms elevators, ...) thanks to the incorporated tread, reducing the friction and facilitating the movement.

Rotating caster with central braking, steel mounting plate, precision ball bearing in the rotatory head, with synthetic cover.



- Transfer with driving caster
- Transfer without driving caster

# 9

## Improvements

The NewCare V3 hospital bed includes many options to make the stay in the hospital more convenient and comfortable for the patient and for the physician and nursing staff, who work every day with the hospital furniture in the hospital like the electrical beds.

### RX and bed base

The NewCare V3 bed base includes a guide system to incorporate an X-ray plate holder tray and a radiolucent HPL in the thorax section. In consequence, all the beds in the hospital are radiolucent on the thorax area, reducing significantly the transfers, the inconvenience to the patients and the caregiver's workload. The tray fits the guiding system with the bed base flat or articulated.



### Inclination angle

Both rails have indicator degrees with a unique new design to facilitate proper positioning of the patient increasing the comfort.

The horizontal inclination angle is indicated in degrees on the backrest siderails, whereas the trend and anti-trend inclinations are indicated in the foot end siderails.



# Accessories and cleaning

## IV pole

Made of painted steel

- Ø25 mm tube
- Two metallic hooks for several droppers
- Stainless steel telescopic rod
- Adjustable height
- Easy to remove



## Cleaning

Easy-to-clean. No need to move each bed to clean / scrub the floor beneath them. The compass system “clean” design facilitates the job of the cleaning staff by eliminating the need of moving the beds, and reduces the patient discomfort.

### Cleaning methods

Disconnect all electronic controls and power accessories. Never spray liquid directly on the electronic components. Spray the cleaner on a cloth and then wipe the parts. Never allow liquids to drip into electronic controls. Remove the mattress and vacuum or use an air compressor to clean all dust and dirt from the bed. To disinfect, use germicidal cleaner and a damp cloth, apply the cleaner on the structure of the bed, any metallic part and the mattress

Clean the entire surface with a mix of 1:9 liquid soap (neutral pH) and water. Do not use soap or cleaning solutions containing alcohol, ketone, xylene, acetates or solvents (mineral / turpentine).

Completely remove excess cleaner with a white, clean, damp cloth.

Work from upside to downside, ensuring that all surfaces, including the bottom, are cleaned thoroughly. Apply the cleaner directly to hard-to-reach areas, including corners and casters.

Use the same techniques on the headboard, bed base and accessories. After cleaning, let air dry completely (at least 10 minutes).

# Technical information

## Dimensions and weights

Total length with headboard and footboard	2220 mm. $\pm$ 10 mm.
Total width	1010 mm. $\pm$ 10 mm.
Minimum/maximum bed base height (without mattress)	400 / 800 mm. $\pm$ 10 mm.
Patient lifter passing clearance height	170 mm.
Bed base sections length	790 / 170 / 320 / 620 mm.
Bed base sections width	830 mm.
Casters diameter	150 mm.
Backrest tilting angle	$70^{\circ} \pm 5^{\circ}$
Extremities tilting angle	$47^{\circ} \pm 2^{\circ}$
Feet tilting angle	$18^{\circ} \pm 2^{\circ}$
Bed base sections double regression	165 mm. $\pm$ 10 mm.
Trend / Anti trend position angles	$17^{\circ} / 17^{\circ} \pm 2^{\circ}$
Maximum patient weight (MPW)	205 kg.
Safe working load (SWL)	265 kg.
Unladen bed weight	140 kg.

\* Dimensions and technical information may change depending on the different configuration and options.

## Electrical information

Elevation system	Lineal motors
Backrest elevation system	Lineal motors
Extremities elevation system	Lineal motors
Voltage and frequency	110 V - 230 V / 50 - 60 Hz
Electric shock protection	Class II / Type B
Liquid penetration protection	IPX6
Maximum consumption	Max. 3 15A (maximum 400 W)
Intermittent motor operation	10% 2 min. - 18 min.

## Certificates

Industrias Pardo S.L. has the following certificates: UNE-EN ISO 9001, UNE-EN ISO 13485, UNE-EN ISO 14001.

NewCare V3 bed meets the following standards: UNE-EN ISO 12100, UNE 20324, UNE-EN 60204-1, UNE-EN 60601-1, UNE-EN 60601-1-2, EN 60601-2-52.



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