

## **VLT-900**

### Electric Fowler Bed



The VLT-900 bed is designed to fit the measurements of general hospitals. Its slim length and width make it easy to transport and reduce the space needed for its use. These features, combined with its low height, make it easier for the patient to use, as well as for the nursing staff to handle. The high bars provide greater safety, reducing the risk of falling, allowing the use of mattresses with greater heights, within the normative safety standards. The grid movement mechanism requires less space for actuation, still reducing the necessary lateral spaces. It has an abdominal compensation system on the back (double pivoting shaft), which reduces abdominal pressure during the movement of the dorsal section.

#### MATRESS PLATFORM

Bed in 4 sections, and can be manufactured in painted steel sheets or in blown high-density polyethylene (removable to facilitate cleaning). It has vents for ventilation of the mattress, specific points for patient restraint along its entire length, and hooks for collection bags.

#### HEADBOARD AND FOOTBOARD

Removable, blown in high-density polyethylene.

#### SIDERAILS

Articulated, blown in high density polyethylene, with unlocking and articulation mechanisms in the lateral direction of the bed, moving only 6.5 cm to lower the grid, using a reduced lateral space. Its height of 40 cm from the bed, provides greater safety to the user. It has built-in indicators for the angle of inclination of the back and trendelemburg.

#### MOVEMENTS

Activation by electric motors, controlled by membrane keypads on the lateral grids (internal and external). The control on the backrest is optional. Through the internal membranes, only the movements of back, legs and night light are accessible to the patient. For the external nursing side, it is possible to control all movements of the bed, as well as programmed positions such as armchair, self-contouring, trendelemburg, reverse trendelemburg, as well as individual locking of motor functions.

#### CASTERS

Central brake pedal system with directional wheel located near the foot of the bed, with optional individual brakes on the castors



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# Design. Comfort. Resistance. Durability.

## One bed for many tasks

NIGHT POSITION LAMP

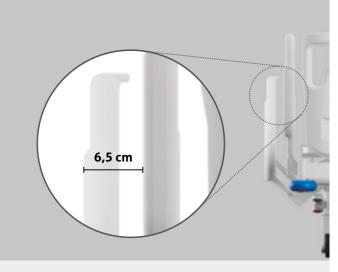
The VLT-900 medical-surgical bed was developed to offer easy usability, while providing advanced features that make the day-to-day care of acu-

It has features that simplify the routine of nurses and caregivers, ensuring maximum patient safety while facilitating and stimulating mobility.

When used with the Vallitech Connectivity System, it becomes even more powerful in delivering better care results, improving productivity and relieving professional stress.



Easy and immediate access for maintenance, cleaning and

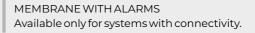


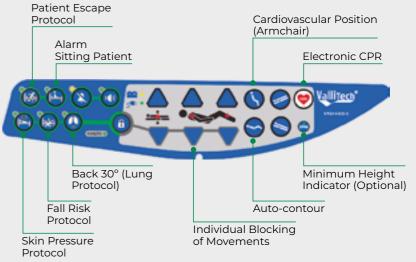
Lateral movement with damping. Amplitude: 6.5 cm.





Bed made of high-density blown polyethylene. High resistance and durability, allied to easy cleaning due to its removability.





## **Features**

- CPR Fast back return drive.
- Back and trendelemburg degree gauge.
- Abdominal compensation system.
- Mattress 3 layers double sided profiled with leather cover and zipper.
- Individual brakes on all 4 wheels.
- Central brake with directional wheel
- Nursing command on the footboard.
- 5th wheel.
- IV Pole.
- Bed extender.
- Bed frame in painted steel plate.
- Digital Scale.
- Wired hand control.
- Balkan Frame.
- Linen tray.Trapeze.

#### MATTRESSES

Mattresses: Basic foam or viscoelastic with or without anti-flame, bactericidal, waterproof, breathable, and electronically welded cover.

 $\label{lem:compressor} Active \, \mathsf{mattress} \, \mathsf{for} \, \mathsf{pressure} \, \mathsf{ulcer} \, \mathsf{prevention}, \\ \mathsf{with} \, \mathsf{air} \, \mathsf{compressor}.$ 



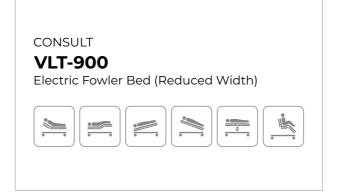












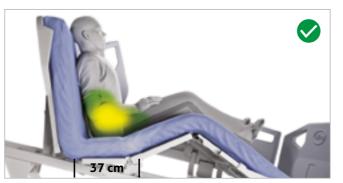


### Conformance with IEC 60601-2-52



Hinged and retractable side rails made of high density polyethylene, certified by the new standard ABNT NBR IEC 60601-2-52:2013, which standardizes safety measures for the patient such as: minimum grid height of 220 mm (above the mattress) covering more than 50% of the bed, smaller spacing of 60 mm between side grids and between headboard/side and side grids, openings built into the grids/headboard/side smaller than 120 mm and other spacing avoiding neck, chest and head entrapment. It has a mechanism for unlocking and moving the bed sideways, allowing it to be folded under the bed, facilitating patient transfer and avoiding problems with probed patients.

### Abdominal Compensation System





An abdominal compensation system designed to reduce the pressure on the patient's abdomen, where a 110 mm offset in the back is performed during movement.

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# Graphical User Interface

An embedded LCM (Liquid Crystal Module) display with special graphic controllers, color display, and touchscreen interaction serves as the support for the graphical user interface. The operation is intuitive, facilitating the visualization of the bed's status by caregivers and the Clinical Engineering team.

It provides visualizations of patient information such as backrest angle, Trendelenburg and reverse Trendelenburg positions, and activation of medical care protocols. Any detected changes will trigger an audible alarm on the bed and a pop-up will appear on the dis



### Grid Control and Supervisor Command

(Optional): allows for controlling bed rail locks and bed functions in a supervisory position.



# Connectivity

The connectivity system is designed for remote monitoring of the bed directly at the nursing station.

With the help of sensors, protocols were pre-set directly on the bed's processor, allowing better control in reducing patient falls, care times, nursing calls, positioning of the patient in bed, degree of back tilting due to pulmonary problems, and intervals for changing decubitus in order to provide greater comfort and avoid complications due to prolonged immobility, such as: decompressing the areas of bony prominence, preventing pulmonary complications and pressure ulcers, and stimulating circulation.

When the protocols are enabled, the bed monitors their functions, and if any changes are detected, an audible alarm on the bed and a pop-up on the monitoring screen in the nurse will be initiated.

Points monitored: rails, brakes, bed height, presence of patient in bed, patient lying or sitting, weight, back slope, and decubitus change time.



### Main Sections of the Connectivity System

The LCM Display interface features three main areas directly related to patient care. The Home area displays general status information regarding bed inclination and backrest. The Connectivity section is where care protocols are activated and monitored. The Scale section monitors weight, weight variation, height, and patient BMI data, allowing data recording and viewing of historical records.





Bed Inclination and Backrest Status

Care Protocols



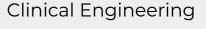


Alert Episode

Weight, Weight Variation, Height, and BMI Data







For the Clinical Engineering team of the healthcare institution, the system provides strategic information for assessing equipment integrity and overuse, monitoring performance and lifespan. It also provides data integration with the network.













# **Technical**

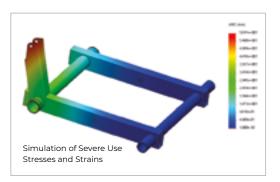
# Parameters

Vallitech beds are designed and manufactured to ensure that the daily use in the hospital does not bring premature and/or permanent wear and tear to the equipment.

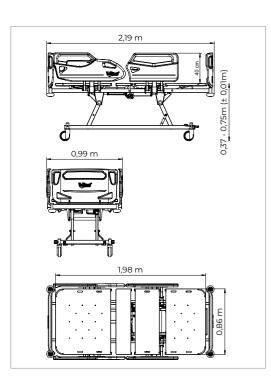
They are produced with a high-quality carbon steel structure, coated with electrostatic paint and designed with the help of finite element engineering software, which simulates the efforts and tensions of severe use in a hospital.

With these results it is possible to predict and reinforce the main points of demand, bringing a much longer useful life to the product.

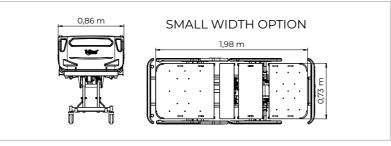
They are exhaustively tested in the laboratory and in the factory to guarantee an extended useful life of 10 years, without noise, vibrations, and deformations.

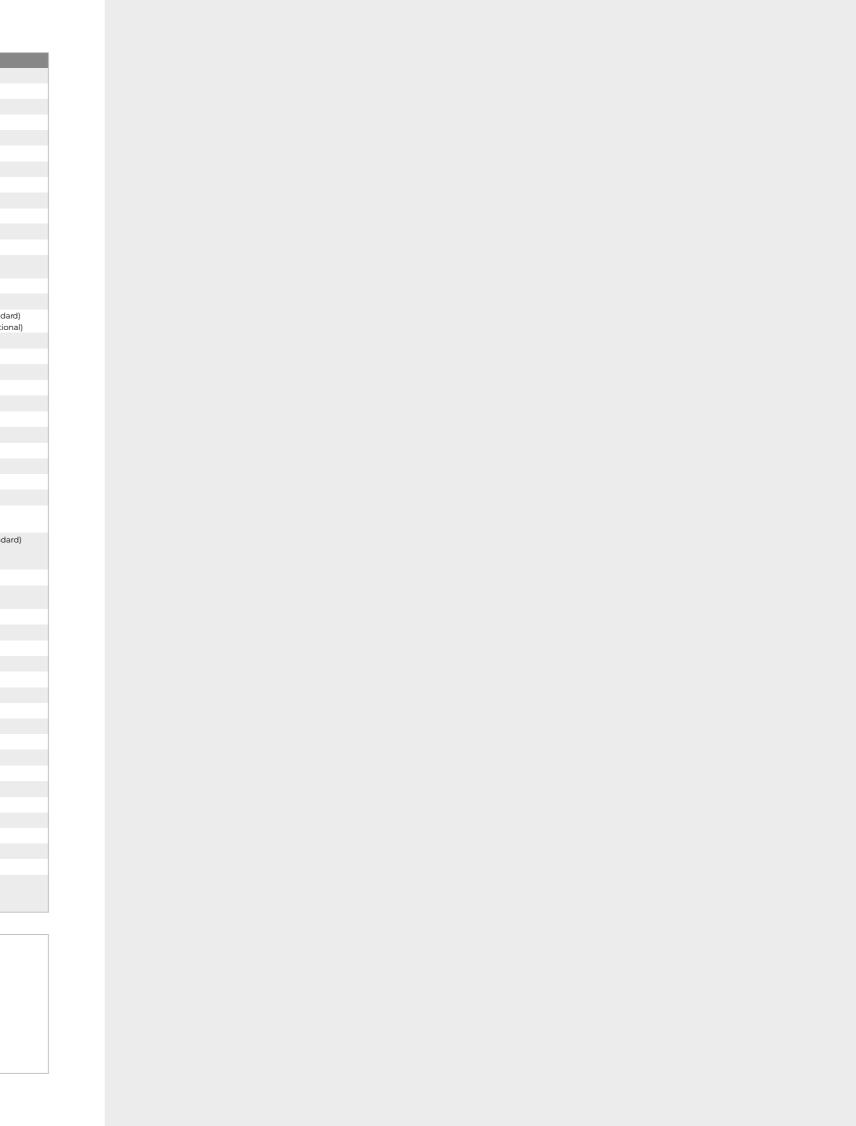






Função	Parâmetro
Overall Length	2,19 m (± 0,01 m)
Overall Length with Extender (optional)	2,50 m (± 0,01 m)
Width with rails up	0,99 m (± 0,01 m)
Height Variation	0,37 m – 0,75 m (± 0,01 m)
Mattress Platform	0,86 m × 2,00 m (± 0,01 m)
Maximum back degree	70° (± 5)
Maximum degree of legs	30° (± 5)
Trendelenburg	15,5° +- 2°
Reverse Trendelenburg	- 15,5° +- 2°
Height of the rails from the mattress platform	40 cm
Maximum mattress height indicated	16 cm
Maximum safety load	250 kg
Abdominal compensation when lifting the back section	12 cm +- 2 cm
(double pivot shaft)	12 Cm +- 2 cm
Lateral grid clearance when retracting (lowering)	6,5 cm
Caster dimensions	100, 125 e 150 mm
Brake System	Central by foot pedal (standard) or individual on caster (optional)
5th Wheel	Optional
Mechanical and electronic CPR	Yes
Radiotransparent back (x-ray)	Optional
Bed extender (31 cm)	Optional
Oxygen Holder	Optional
Removable headboard and footboard	Yes
Cardiac position button	Standard
Rotating bumpers at the 4 corners of the bed	Standard
Socket for IV Pole in the 4 corners of the bed	Standard
Night light	Standard
Back grade indicator	Standard
Trendelemburg and reverse Trendelemburg grade indicator	Standard
Membrane keypads in the grids	Internal and External (standard) Bedside (optional) Wired Control (optional)
Collection bag holder	Standard
Matress Platform	Painted plate (standard) ABS (optional)
Patient restriction socket	Standard
Auto-contour	Standard
IV Pole	Optional
Keyboard on the back of the bed	Optional
Patient exit alarms	Optional
Sitting patient alarm	Optional
Skin pressure alarm	Optional
Fall hazard alarm	Optional
Brake activated alarm	Optional
Back Alarm 30°	Optional
Nurse call	Optional
Minimum height indicator	Optional
Simple foam mattress	Optional
Double-density viscoelastic mattress	Optional
Power supply	100 – 240 VAC, 50 – 60 Hz
Battery Backup	Yes
Protection against water	IPX4
Regulatory Standards	IEC 60601-1 IEC 6.0601-2-52 IEC 60601-1-2













Autorização de funcionamento junto ao Ministério da Saúde / Agência Nacional de Vigilância Sanitária n° 801.056-7.











