## **INSTRUCTIONS FOR USE**

# Sentego 600 Stretcher



## **Contents**

#### **WARNING**

To avoid injury always read these Instructions for Use and accompanied documents before using the product.



**Mandatory to read the Operating Instruction** 

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## **Warnings and Cautions**

Warning

Means: Safety Warning. Failure to understand and obey this warning may result in injury to you or to others.

**Caution** 

Means: Failure to follow these instructions may cause damage to all or part of the system or equipment.

Note

Means: This is important information for the correct use of this system or equipment.

Effective date: 2024-03-01

### **Serious Incident**

If a serious incident occurs in relation to this medical device, affecting the user or the patient, then the user or patient should report the serious incident to the medical device manufacturer or the distributor. In the European Union the user should also report the serious incident to the Competent Authority in the member state where they are located.

## **General Warnings**



#### WARNING

The age, size and condition of the patient should be assessed by a competent clinically qualified person before using the Sentego 600 Stretcher, considering the appropriate use of the safety sides.



#### WARNING

If any part is missing or damaged do NOT use the product



#### WARNING

Do not use accessories that are not designed or approved for use with the Sentego 600 Stretcher.



#### WARNING

Always apply the brakes when the Sentego 600 Stretcher is stationary.



#### WARNING

Always raise the side rails before moving the Sentego 600 Stretcher with a patient.



Children and restless or disorientated patients should not be left unattended on the product at any time.



Before turning (rolling) a patient on the Sentego 600 Stretcher or performing a lateral transfer, adjust the mattress platform to a comfortable working height; be aware that the Sentego 600 Stretcher may overbalance if the patient's weight is not evenly distributed across the mattress platform.

## Introduction

This manual gives instructions for the use and maintenance of the Sentego 600 Stretcher.



### **Intended Use**

The Sentego 600 Stretcher is intended for use in hospitals to provide a mattress support surface and to transport patients. The stretcher may be used for general and emergency admissions, examination, diagnostic x-ray and initial treatment. It is also appropriate for patient transfer between departments, wards and theatre.

The Sentego 600 Stretcher must be used by appropriately trained caregivers with adequate knowledge of the care environment, its common practices and procedures and in accordance with the guidelines in these Instructions for Use.

The Sentego 600 Stretcher should only be used for the purpose specified in these Instruction for Use. Any other use is prohibited.

## **Application Environment**

201.3.202

Acute care provided in a hospital or other medical facility where medical supervision and monitoring is required and ME Equipment used in medical procedures is often provided to help maintain or improve the condition of the patient.

### Patient assessment

We recommend that facilities establish regular assessment routines. Caregivers should assess each patient according to the following criteria prior to use:



- To ensure that the patient can use the stretcher safely, their age, size and condition should be assessed by clinically qualified person.
- The maximum Safe Working Load of the stretcher is 320kg (704 lbs).
- The maximum Patient weight for the Stretcher is 280kg (616 lbs)

If the patient does not meet these conditions an alternative system/equipment shall be used.

## **Expected Service Life**

The lifetime of the product is typically ten (10) years. "Lifetime" is defined as the period during which the product will maintain the specified level of performance and safety, provided it has been maintained and operated in accordance with the requirements and conditions of normal use specified in these Instructions for Use.

### **Standard Features**

- Electrically adjusted height and tilt angle.
- Electrically operated retracting backrest.
- Electrically operated elevating leg section.
- Manually adjusted calf section.
- Single button Fowler position function.
- Single button electrically operated CPR function.
- Manual CPR function.
- Lockable handset with display screen.
- Folding push handles at head and foot ends.
- Folding side rails.
- Integral folding IV pole.
- X-ray translucent top surface.
- C-arm or cassette imaging compatible.
- Battery back-up.
- Bag rail on both sides.

## **Optional Features**

- Easy clean decks for mattress platform
- Foot switches for hands-free height and tilt operation.

- Foot board
- Foot board with monitor shelf.
- Stainless steel DIN rails.
- Head-end Trendelenburg Pedal

## **Operation**

### **Safety**

For the safety of the operator, patient and equipment:

- Always use a mattress of the correct size and type
- Do not expose the equipment, especially the mattress, to naked flames, cigarettes etc.
- Before operating the Sentego 600 stretcher make sure that the patient is positioned correctly to avoid entrapment and imbalance.
- When the stretcher is operated, check that no obstacles are in its path.
- Keep these Instructions for Use for reference.

#### Installation

Connect the mains plug to a suitable socket outlet. Make sure the mains plug is easily accessible so that it can be disconnected quickly in an emergency.

When the Sentego 600 Stretcher is connected to the electricity supply, the stretcher will beep and an indicator light will glow on the control box, which is fitted on the underside of the cassette deck at the foot end of the stretcher, near to the short DIN rail.

The Arjo logo will also illuminate on the handset's display panel.





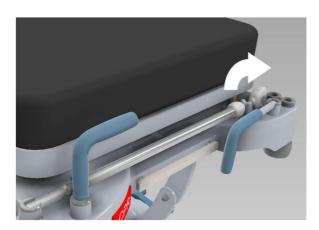
#### **Mattress**

There are optional easy-clean deck sheets for the patient platform. Both the standard and easy-clean decks feature integrated mattress retainers to keep the mattress in place.



#### **Push Handles**

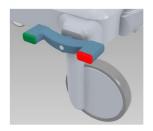
Push handles are located at both ends of the stretcher and are raised by lifting and rotating then lowering to engage in their sockets. The reverse action is used to lower the handles.

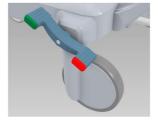


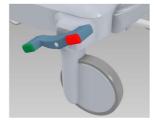
### **Brakes and Steering**

The stretcher has four castors with brake function located in the corners of the stretcher base, plus a centrally located fifth castor which is equipped with a directional locking steer function. Linked brake pedals are located at each corner of the stretcher base.

- When the pedals are horizontal the castors are free to rotate and swivel.
- When the pedals are in the BRAKE position (red pedal downwards) the brakes are applied on all castors.
- When the pedal is in the STEER position (green pedal downwards) the central fifth castor is prevented from swiveling and the stretcher can be pushed from either end.







Free Roam

**Brakes ON** 

**Directional Steer** 

#### **Control Handset**

The control handset is used to control all the electrically operated functions of the Sentego 600 Stretcher. The handset has a display screen which gives information on the stretcher functions. When the system is powered on and before any button is pressed the home screen is displayed as below. The handset is fitted with a storage hook and a long flexible cable for positioning around the stretcher as required. It is recommended that the handset is stored on the footboard when not in use (if this is ordered as an optional accessory).



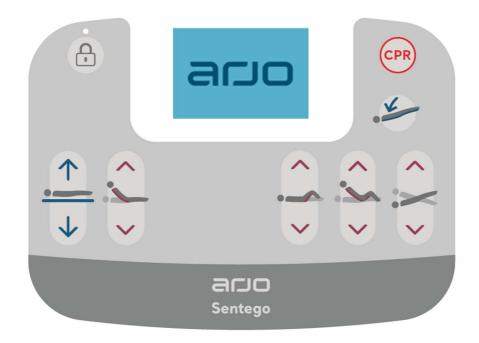


#### **Handset Buttons**



## WARNING

The handset must be kept out of reach of the patient.



Handset button functions are described as follows:

### **Mattress Platform Height**



These buttons raise and lower the mattress platform, press and hold the required arrow button and release when the desired height is achieved. The display screen shows the selected function, the direction of movement and the height of the mattress platform in cm.

### **Backrest Angle**



These buttons raise and lower the backrest, press and hold the required arrow button and release when the desired angle is achieved. The backrest motion will pause for 2 seconds at 30° and 45° from horizontal, continue to hold the button to move the backrest past these positions. Note that when tilt is applied the pause positions will compensate to maintain the preset angles. The display screen shows the selected function, the direction of movement and the angle of the backrest in degrees.

### **Leg Sections**



These buttons raise and lower the thigh section, press and hold the required arrow button and release when the desired angle is achieved. The display screen shows the selected function, the direction of movement and the angle of the thigh section in degrees.

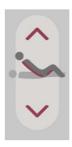
### Tilt (Trendelenburg)



These buttons raise and lower the head end or foot end of the stretcher, (Trendelenburg and reverse Trendelenburg positions).

Press and hold the required arrow button and release when the desired angle is achieved. The tilting motion will pause for 2 seconds when the mattress platform is in the horizontal position, continue to hold the button to move the mattress platform past the horizontal position. The display screen shows the selected function, the direction of movement and the angle of the mattress platform from horizontal in degrees.

#### **Fowler's Position**





The up button simultaneously raises the backrest and thigh section.

Press and hold the up-arrow to initiate the function, and release when the desired angle is achieved. The backrest motion will pause for 2 seconds at 30° and 45° from horizontal. To continue raising or lowering the backrest, keep the button pressed down.

Press and hold the down arrow button to return the mattress platform to the flat position. The display screen shows the selected function, the direction of movement and the angles of the backrest and thigh section from horizontal in degrees.

#### **Trendelenburg Position**



This button lowers the backrest and leg sections to the flat position and lowers the head end of the stretcher.

Press and hold to activate the function, release when the desired position is achieved. The display screen shows the selected function, the direction of movement and the angle of the mattress platform from horizontal in degrees.

#### **CPR Function**



This button simultaneously lowers the backrest and leg sections to the flat position and drives the stretcher to a predetermined level height.

Press and hold to activate the function, release when the desired position is achieved. The display screen flashes the CPR icon, flashing stops when movement is stopped.

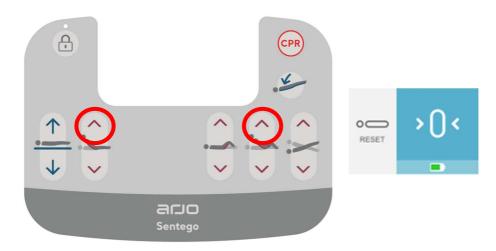
#### **Lockout Function**



Press and hold this button for 5 seconds to lock all key functions except for CPR. When function locks are applied a single beep is heard and LEDs illuminate next to locked functions. The display screen for each function shows the selected function, the extent of any movement and the lock symbol.

Press and hold again for 5 seconds to unlock, when functions are unlocked, 2 beeps are heard, and LEDs turn off.

#### **Reset Function**



Press and hold the backrest up and Fowler Position up arrows until the electrical profiled sections are horizontal and the stretcher is at maximum height. The stretcher will beep to acknowledge the reset. After the beeps are heard, continue to hold the buttons down for an additional 3 seconds to complete the reset.

The stretcher will drive to top height and the mattress platform to the flat position, the LED above the lock button will blink 3 times and 2 beeps will be heard when reset is complete. The display screen flashes the reset icon, flashing stops when movement is stopped.

### **Battery Operation**

The Sentego 600 Stretcher is provided with a back-up battery as standard.



#### CAUTION

To ensure that the battery is kept fully charged and to prevent damage to the battery the stretcher should be connected to the mains power supply at all times during normal use.

The back-up battery is intended for occasional short-term use and its life will be reduced if used to power the product for long periods.

The back-up battery allows operation of the product for short periods when it is disconnected from the power supply or in emergency situations when the electricity supply is not available.

NOTE: When the Sentego 600 Stretcher is unplugged from mains power, the stretcher will beep to alert it is now operating on battery power.

The battery charge level is indicated as follows:



The indicator on the display screen is as shown when the battery charge level is high, i.e. >25.2V



The indicator on the display screen is as shown when the battery charge level is medium, i.e. 24.4V – 25.2V



The indicator on the display screen is as shown when the battery charge level is low, i.e. <24.4V

### Recharging

To recharge the battery, connect the stretcher to the electricity supply. Allow a minimum of 8 hours to recharge the battery when it is completely discharged.

When the battery is recharging the indicator on the handset screen will flash alternately between the low and medium charge symbols.



#### WARNING

Only recharge the battery using the stretcher's built-in charger. Do not use any other charger or power supply.

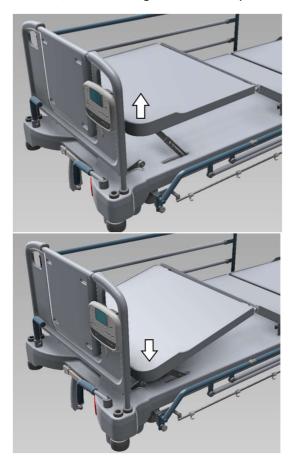
The battery must be well ventilated when charging. Do not cover the battery or obstruct the area around it.

### **Calf Section**

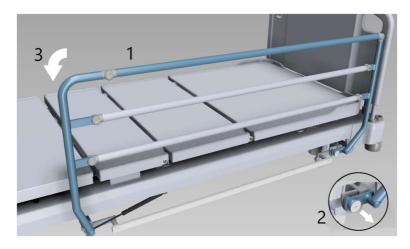
The calf section rises as the thigh section drives upwards.

Once raised on the rollers, the calf section can be manually raised to horizontal, if desired.

The calf section can be lowered manually by lifting slightly to disengage the ratchets, then allowing the section to pivot downwards.



#### **Side Rails**

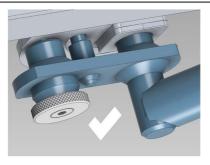


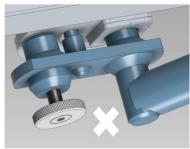
To lower the side rails, grip the top rail (1) near to the hinge, pull the catch knob (2) and lower the side rail toward the head end of the stretcher. To raise the side rail, grip the top rail near the hinge and pull up until an audible "click" is heard as the catch engages.



#### WARNING

Ensure that the locking mechanism is securely engaged when raising the side rails. Do not leave the side rail in the raised position if the locking bolt is visible behind the operating knob.



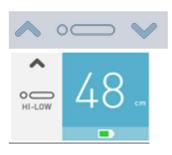


## **Foot Switches (Option)**

When fitted, Sentego 600 Stretcher can be operated by foot, by the switches on either side of the base and at the head end to allow hands-free operation of the height and tilt functions. A guard is fitted to prevent accidental operation.



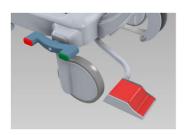
## **Mattress Platform Height**



Using your foot to lift the guard, press and hold the required foot switch and release when the desired height is achieved. The display screen shows the selected function, the direction of movement and the height of the mattress platform in cm. The display screen shows the selected function, the direction of movement and the height of the mattress platform in cm.

## Tilt (Trendelenburg)

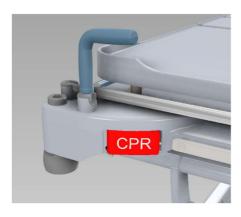




Using your foot to lift the guard, press and hold the required foot switch and release when the desired angle is achieved. The tilting motion will pause for 2 seconds when the mattress platform is in the horizontal position, continue to hold the button to move the mattress platform past the horizontal position. The display screen shows the selected function, the direction of movement and the angle of the mattress platform from horizontal in degrees.

An additional foot switch is provided at the head end of the base to give hands-free head down tilt in urgent situations.

#### **Manual CPR Release**



A manual CPR lever is provided at each end of the stretcher. Pulling either of these will lower the backrest quickly to the horizontal position to enable resuscitation to be carried out. This function operates regardless of whether the stretcher has mains or battery power.

### **IV Drip Rod**

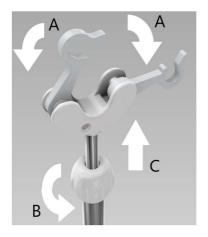
The built-in IV pole is located at the head end of the Sentego 600 Stretcher. To use the IV pole lift and rotate to vertical from the stored position until the pole locates in its socket.







Once the pole is securely located in the socket, fold out the hooks (A), rotate the nut (B) to release the inner rod and extend the inner rod upwards (C) to the desired height. Tighten the nut (B) to secure the pole. Use the reverse procedure to store away the pole.





Do not exceed the 5kg Safe Working Load of the IV Pole.

## **Foot Panel/Monitor Shelf (Option)**

The foot end panel is installed by fitting into the sockets at the foot end of the stretcher with the monitor shelf facing outwards.

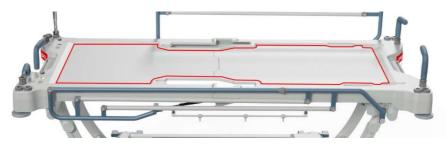




To raise the monitor shelf, rotate inwards until horizontal. Use the slots provided to secure the monitor with straps.

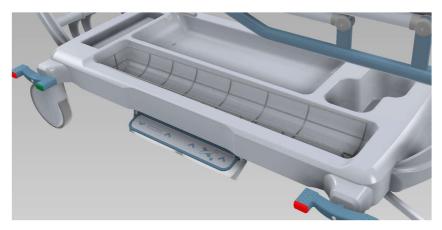
### X-Ray Cassette Deck

A cassette can be placed within the sunken area as shown, underneath the 4 section patient/mattress platform.



## **Oxygen Therapy Equipment**

The Sentego 600 Stretcher is fitted with a recess in the base which can accommodate oxygen cylinders up to F size.



In addition, there is an accessory rail at the head end of the stretcher where therapy equipment may be located using standard rail clamps from the equipment supplier.





Ensure that the oxygen line does not become trapped or entangled in the stretcher mechanism, which could cause loss of supply and/or damage to the line.

Ensure that any installed equipment does not collide with parts of the stretcher, especially at low height.

## **Mattress Compatibility**

The Arjo Sentego Mattress (code STSE001M) has been tested and verified to be compatible with the Sentego 600 Stretcher.

The Sentego mattress has been assessed and demonstrated compliance against the following requirements of IEC 60601-2-52:

 Clause 201.9.1.101 Area D Protection against PATIENT entrapment in non-moving parts
 Test result: PASS

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Clause 201.9.101 Protection against inadvertent PATIENT falls
 Test result: PASS

## **Options & Accessories**

Image	Description
	Easy Clean Decks
	Footboard
	Footboard with Monitor Shelf
	Oxygen Bottle Holder
	Detachable IV Pole
	Additional Length DIN Rail
	Trendelenburg Pedal (Head End) – for TT600
	Foot Switch Operation – for TT600

#### **Decontamination**

The Sentego 600 Stretcher should be regularly cleaned and disinfected.



#### WARNING

Disconnect the product from the mains supply before cleaning, do not allow the mains plug or cable to get wet. Always wear suitable protective clothing when carrying out decontamination procedures.

Remove the mattress and any accessories from the product. Remove the foot panel. Clean all surfaces with a disposable cloth moistened in hand-hot water and a neutral detergent. Start with the upper sections and work along all horizontal surfaces. Work methodically towards the lower sections of the product and clean the wheels last. Take extra care to clean any areas that may trap or collect dirt and dust.

Wipe over with a new disposable cloth moistened with clean water and dry with disposable paper towels.

Remove the easy clean deck sheets to check underneath for contamination, clean as above.

Allow the cleaned parts to fully dry before replacing.

To clean the mattress, refer to the manufacturer's instructions.

After cleaning the stretcher as described above, wipe all surfaces with sodium dichloroisocyanurate (NaDCC) at a concentration of 1,000 parts per million (0.1% of available chlorine.

In the case of pooling body fluids, e.g. blood, the concentration of NaDCC should be increased to 10,000 parts per million (1%) of available chlorine.

#### **Care and Preventive Maintenance**

The Sentego 600 Stretcher is subject to normal wear and tear during use. To ensure that the product continues to perform to its original specification preventive maintenance procedures should be carried out at the intervals shown.



#### WARNING

This list indicates the minimum recommended level of preventive maintenance. More frequent inspections should be carried out when the product is subject to heavy use or aggressive environments, or where required by local regulations.

Failure to carry out these checks or to correct any faults found may compromise the safety of patients and carers.

Actions to be carried out by carer	Daily	Weekly
Check correct operation of side rails	✓	
Check handset and cable		<b>✓</b>
Check power supply cable and mains plug		<b>✓</b>
Check castors/brakes		✓
Check mattress for damage or fluid ingress		<b>✓</b>
Check operation of manual CPR		<b>√</b>

Contact the manufacturer or an approved service agent if the result of any of these checks is unsatisfactory.



The procedures below must be carried out by suitably trained and qualified personnel. Failure to do so may result in injury or compromise the safety of the product.

Actions to be carried out by qualified personnel	Yearly
Carry out a full test of all electrical functions (backrest, height,	✓
tilt etc.)	
Check that the product works correctly using the back-up	✓
battery as described below in the <b>Battery Test</b> section.	
Check the function of the manual CPR release handles.	✓
Check the operation of the castors, brakes and steering	✓
functions.	
Examine the mains cable and plug, replace the complete	✓
assembly if damaged. Do not use a rewireable plug.	
Check the handset functions and examine the cable.	✓
Examine all accessible flexible cables for damage or	✓
deterioration.	
Check the function of the calf section ratchets.	<b>√</b>
Check that all accessible nuts, bolts and other fasteners are	<b>√</b>
present and correctly tightened.	
Check any accessories fitted to the stretcher, paying particular	<b>√</b>
attention to fasteners and moving parts.	

### **Battery Test**

Check the condition of the battery by carrying out the following test.



Disconnect the stretcher from the mains electricity supply.



Raise the mattress platform to maximum height.





Fully raise the backrest and leg sections.



Press and hold the CPR button until movement is completed.



Lower the mattress platform to minimum height.



Apply maximum head down tilt.



Return the mattress platform to horizontal and apply maximum foot down tilt.

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If this test is not completed successfully connect the product to the electricity supply for a minimum of 8 hours to recharge the battery, then repeat the test. If the test requirements are not met for a second time, contact the manufacturer or an approved service agent.

To maintain best performance, the backup battery should be replaced every 4 years by an approved service agent.

## **Troubleshooting**

Symptom	Possible Cause	Action
"Beeping" sound when	The product is	Check that the power
operating the controls.	operating from the	supply cord is plugged
	backup battery.	in, and the electricity
		supply is OK.
		Check the fuse in the
		mains plug (where
		fitted).
One or more product	Function(s) locked on	Unlock function(s) on
functions is	control handset.	handset.
inoperative.		
All functions	Height control	Raise the mattress
inoperative except for	software error.	platform to top height
raising mattress		to reset the software.
platform.		
Stretcher is difficult to	Brake pedals in "steer"	Place brake pedals in
manoeuvre.	position.	the "free" position.

### **Warranty and Service**

SEERS Medical Limited standard terms and conditions apply to this device.

A copy of this is available upon request. This contains full details of warranty terms and does not affect your statutory rights.

For any further information on this product, regarding spares, warranty, service or maintenance information, please contact:

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Manufactured in the UK by **SEERS** MEDICAL Limited.

As part of our ongoing development programme **SEERS** MEDICAL Limited reserves the right to modify specifications and materials of this product without prior notice.

## **Dimensions and Data**

General	
Safe working load	320kg
Maximum Patient Weight	280kg
Product weight	180kg
Operating conditions	
Temperature	-5°C to +45°C
Relative humidity	20% to 90% non-condensing
Atmospheric pressure	700 to 1060hPa
Dimensions	
Overall length	220cm
Overall Width	91cm
Head down tilt angle	15°
Foot down tilt angle	15°
Deck Height Lowest	48cm
Deck Height Highest	97cm
Castor Size (Diameter)	20cm
Seat Section Length	19.5cm
Under Deck Imaging Area	182cm x 52cm
Mattress size	195cm x 79cm x 13cm
Mattress platform angles	A = up to 70°
<b>\</b>	B = up to 30°
	C = up to 16°
d	D = 90° minimum
a b) c	

Electrical		
Control system manufacturer	Ti-Motion	
Input	100-240VAC, 50/60Hz, 2500mA	
IP rating	IP54	
Output	32V, 128VA	
Duty Cycle	10% max, 2 min ON / 18 min OFF	
Mains plug fuse rating (UK only)	5.0A x 1	
Electrical classification		
(IEC 60601-1)	Double Insulated	
Electrical classification	Class II	
Type BF equipment	<b>*</b>	
Battery Back-Up		
Manufacturer	Ti-Motion	
Output	25.6V, 2.0A, 51.2Wh	
IP rating	IP54	
Output	32V, 128VA	
Duty Cycle	10% max, 2 min ON / 18 min OFF	
Capacity	2000mAh	

#### **Environmental Protection**



This product is marked with the crossed out wheeled bin symbol to indicate that it is covered by EU Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE). This symbol indicates that all electrical and electronic products must be taken to a dedicated collection point at end of their working life. Contact your distributor or your local authority for advice on proper disposal.

Equipment that is subject to the WEEE regulation is marked with a crossed out wheeled bin logo denoting that is should not be disposed of as landfill waste.

Incorrect disposal of this equipment and its component parts, particularly gas springs, actuators and other electrical devices, may produce substances that are hazardous to the environment.

Transport and Storage		
Handle with care. Do not drop. Avoid shock or violent impact.		
This equipment should be stored in a clean, dry and well-ventilated area which meets the following conditions:		
Temperature -5°C to +45°C		
Relative humidity	nidity 20% to 90% non-condensing	
Atmospheric pressure	700 to 1060hPa	

Symbols			
SWL	Safe working load		Double Insulated (Class II)
$\sim$	Alternating current (AC)		Manufacturer
+ 🗥	Total weight of the equipment including its safe working load		Manufacturing date
$\triangle$	Caution/Warning	$\epsilon$	Conforms with the relevant EU directives
[]i	Refer to instructions For Use	SN	Serial number
<b>†</b>	Type BF applied part.	REF	Model number
MD	Medical device		Do not sit on the edge marked in place where symbol is attached.
Waste Electrical and Electronic Equipment (WEEE) - do not dispose of this product in general household or commercial waste			

#### Distributed by





#### Manufactured by



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# CE

The **C** mark on this product demonstrates conformity with MDR.

