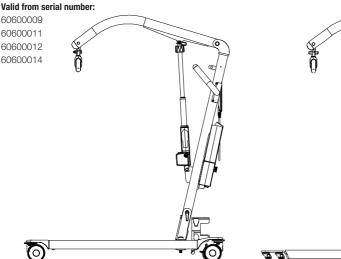
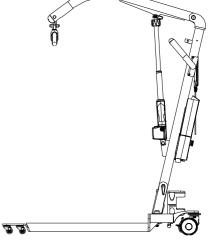
Service manual - English

Carina350EM/EE, with low legs

SystemRoMedic





SWL: 165 kg/350 lbs



Safety information

Visual inspection

Inspect lift functions regularly. Check to ensure that material is free from damage.

Before use

Ensure that the product is correctly assembled.

Check slingbar connection and safety latch function.

Check lift and base-width movement.

Check to ensure that the guick-connecting locking pin for the actuator is correctly installed.



Always read the user manual

Always read the user manuals for all assistive devices used during a transfer.

Keep the user manual where it is accessible to users of the product.

The lift may only be used by persons who have received instruction in the operation of the lift.



Table of contents

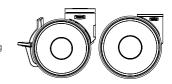
Assembly

-Final inspection	3
Using the product	
- Important information	4
- Trouble-shooting	4
Exploded view and components	5-9
Spare part list	10-11
Changing spare parts	12-13
Periodic inspection - protocol	14
- Description for periodic inspection	15
- Periodic inspection - instruction	16-17
Maintenance	18
Symbols	19
Technical information	19
- Nimensions	20-23

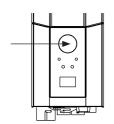
Final inspection

Inspect the lift for signs of wear and damage. Check all castors and castor brakes.

Check all connections and fixtures including screws and bolts. Check the packaging to ensure that there are no loose parts.



Check the emergency stop function by activating the emergency stop button, and then pressing either the up or down button. If nothing happens when the up or down buttons are pressed, the emergency stop is functioning properly.

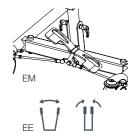


Grasp the hand control, press the up button and run the lift arm all the way up. Then, press the down button and run the liftarm all the way down.



Test base-width adjustment function by pushing down on the respective pedals for widening and narrowing the base. For EE use the buttons on the hand control.

Test lift function by lifting a person (not a user) using an approved sling. At the same time, check the emergency lowering function with someone in the lift, see section on Emergency lowering.



NOTE!

Before the lift is used for the first time:

- it must be charged for at least 4 hours. See section on charging batteries.
- the control box service counter needs to be reset. To reset the service counters press both lift buttons on the hand control at the same time for 5 seconds.

 An audio signal will indicate that the timer has been reset.



Keep the user manual where it is accessible to users of the product.

Using the product



Important Information

- The lift must be assembled according to the instructions provided by Handicare.
- The lift may only be used on a level floor.
- · Lifting accessories must be properly fitted and tested in relation to the user's needs and functional ability.
- Do not leave the user unattended during a transfer situation.



- Under no circumstances may the safe working load be exceeded. See section on Safe working load.
- Never move the lift by pulling on the actuator!



- The lift must not be used or immersed in or under water including showering.
- The lift should not be left / stored in a high humidity environment.
- The lift must not be charged in a wet room.
- To ensure optimal function, the lift must be inspected regularly. See section on other maintenance details.
- Warranty applies only if repairs or alterations are made to the product by personnel who are authorized by Handicare.
- Using lifting accessories other than those approved can entail a risk.
- Note that there is a pinch point between the manual emergency lowering mechanism and the lift arm when the lift arm is in its highest and lowest positions.



• Verify that all lifting accessories hang vertically and can move freely.

Trouble shooting

If the lift or base-width adjustment cannot be activated, check the following:

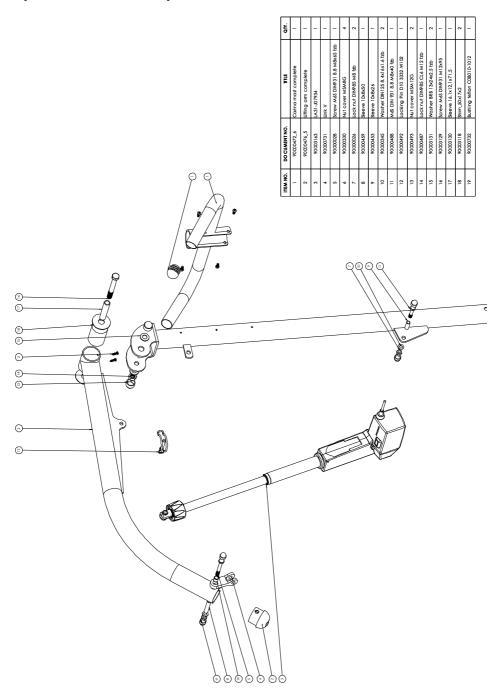
- That the emergency stop button is not pressed in.
- That all cables are properly and securely connected. Pull out the contact and plug it in again firmly.
- That battery charging is not in progress.
- That the battery is charged.

If the lift is not working properly, contact your dealer.

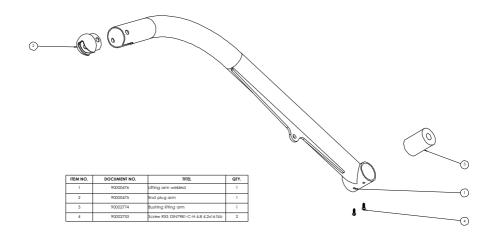
If the lift makes unusual noises:

- Try to determine the source of the sound. Take the lift out of operation and contact your dealer.

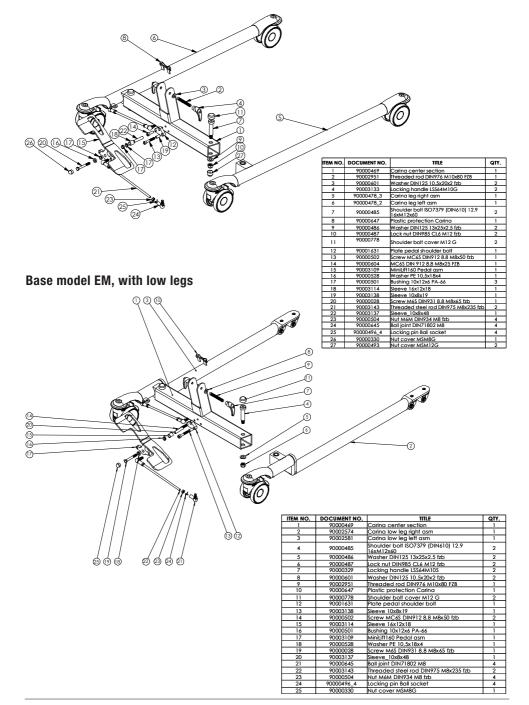
Exploded view and components - mast/bom



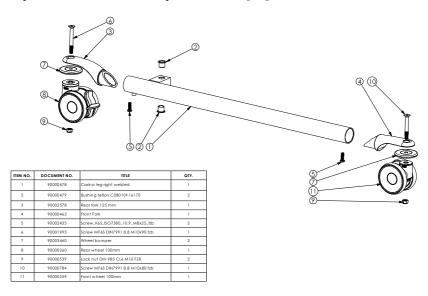
Exploded view and components - Lifting arm



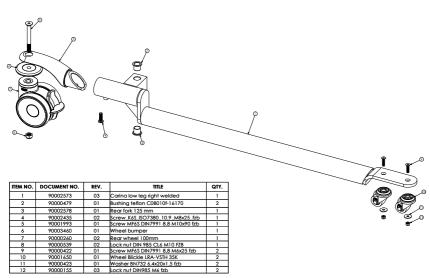
Exploded view and components - Base model EM



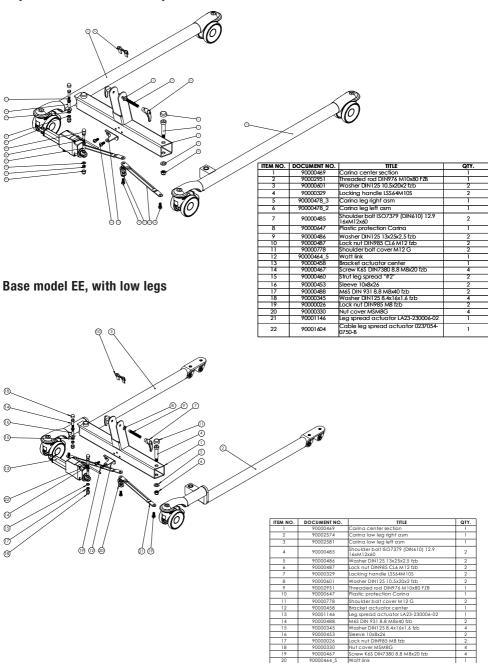
Exploded view and components - Leg right model EM



Leg right model EM, with low legs



Exploded view and components - Base model EE



SystemRoMedic" 9

Cable leg spread actuator 0237054-0750-B

Spare part list

Article no.	Product	Unit	Components	Images
80100156	Hand control HB32-4 (Model EE)	1 pce	1 x Hand control	
80100155	Hand control HB31-2 (Model EM)	1 pce	1 x Hand control	
80100168	Control box CBJC	1 pce	1 x Control box 0,5 x Cardboard	
80100161	Battery box CBJ BAJ1	1 pce		
80100057	Battery CBJ	1 pair	2 x Batteries	
80100056	Actuator legspreading (Model EE)	1 set	1 x Actuator 1 x Motor cable 2 x Locking nut M8 0,25 x Cardboard	
80100152	Actuator mast LA31	1 set	1 x Actuator LA31 2 x Locking nut M8 0,5 x Card board	
80100048	Cable for charger EU (Model EE)	1 pce	1 x Charger cable	
80100046	Cable for charger UK (Model EE)	1 pce	1 x Charger cable	
80100045	Cable for charger US (Model EE)	1 pce	1 x Charger cable	
80100047	Cable for charger AUS (Model EE)	1 pce	1 x Charger cable	

10 System<mark>RoMedic</mark>"

Article no.	Product	Unit	Components	Images
80100058	Sling bar lock, for Alu sling bar	1 set	10 x Cargo barrier 20 x Screw M5x12	
80100069	Quick-connecting locking pin	1 pce	1 x Quick- connecting locking pin	
80100001	Front castor 100 mm (Art no. 60600009, 60600011)	1 set	1 x Front castor 1 x Locking nut M10	- P
80100002	Rear castor 100 mm (Art no. 60600009, 60600011)	1 set	1 x Rear castor 1 x Locking nut M10	00 00
80100126	Front castor EML (Art no: 60600012, 60600014)	1 pce	1 x Rear castor 1 x Locking nut M10	
80100067	Locking handles	1 set	2 x Locking handle 2 x Washer DIN 125 1 x Threaded steel rod M10x80 fzb	
80100074	Bumper kit 80 mm	1 set	4 x Rubber bumper	
80100151	Bushing kit for foot pedal	1 pce		

Changing spare parts

80100155, -156 Hand control HB31-2, Hand control HB32-4

Activate the emergency stop, and then disconnect the hand control. Connect the new hand control.

80100168 Control box CBJC

Activate the emergency stop, and then disconnect the actuator and hand control. Remove the battery, loosen the two long screws and remove the control box. Install the new control box and secure it with the two crews. Replace the battery, and then connect the actuator and hand control.

80100161 Battery box CBJ BAJ1

Remove the battery by lifting it straight up and out of the holder in the control box. Install the new battery in the holder. Note! The battery must be charged for at least four hours before it is used for the first time.

80100057 Battery CBJ

Remove the lift battery and remove the screws. Disconnect the battery contacts and remove the batteries. Install the new batteries in the battery box and connect the contacts. Place the cover on the box and secure it with the screws. Note! The battery must be charged for at least 4 hours before it is used for the first time.

80100056 Actuator leg legspreading

Connect the motor cable to the actuator.

Run the actuator until the legs are drawn in fully. Activate emergency stop. Disconnect the actuator from the control box. Loosen and remove the screw that holds the actuator to the leg. Remove the screw covers and loosen the screw and nut. Remove the actuator.

Install the new actuator; start by securing the end that is secured to the leg. Use the accompanying lock nut, and then secure the end that is connected to the base of the mobile lift. Use the accompanying lock nut. Replace the screw covers. Connect the actuator to the control box.

80100152 Actuator mast LA31

Lower the boom to the lowest position. Activate emergency stop. Disconnect the actuator from the control box. Free the upper end of the actuator by first removing the screw covers, and then removing the screws and nuts. Then, free the lower end in the same way. Lift the boom and remove the actuator. Install the new actuator. Start by fitting the lower end, and then lift the boom and fit the upper end. Secure the actuator with the existing screws and the new, accompanying lock nuts. Replace the screw covers and connect the actuator to the control box.

80100045, -46, -47, -48 Charger

Connect the charger cable to the control box, and then plug it into a wall socket.

80100058 Slingbar lock for slingbar alu

Remove the screws on either side of the safety latch and remove it. Install the new safety latch and secure it with the two accompanying M5x12 screws. Position the safety latch, so that the bevelled side is facing in towards the lift hook.

80100069 Quick-connecting locking pin

Remove the old locking pin and replace it with the new one.

80100001, 80100002 Front/rear castor 100 mm

Using an Allen key, remove the screw that holds the castor in place. Replace the castor, apply Loctite 2701 or similar, and then secure the castor with the screw.

80100126 Front castor EML

Using an Allen key, remove the screw that holds the castor in place. Replace the castor, apply Loctite 2701 or similar, and then secure the castor with the screw.

80100067 Locking handles

Unscrew the old handle and install the new one.

80100074 Bumper kit

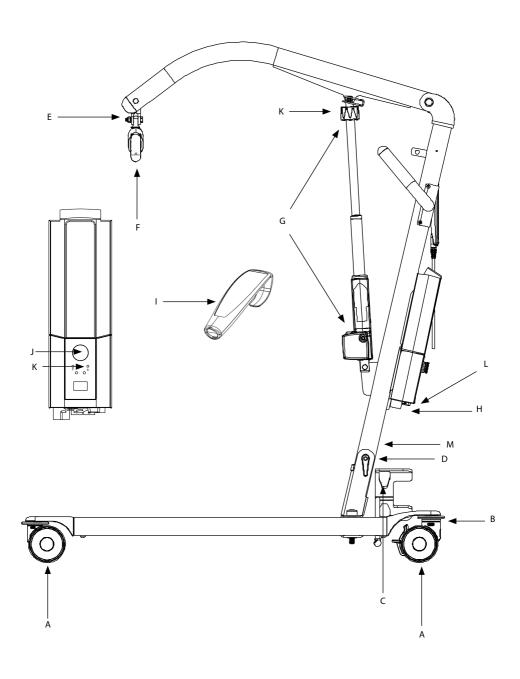
Remove the castors and remove the bumper. Install the new bumper and castors.

80100151 Bushing kit for foot pedal

Remove the nut cover. Unscrew the screw which holds the foot pedal. Remove the old bushing and replace it with the new one. Mount the screw and put the nut cover back.

Lift type	Odic inspection - protocol	Contract no:			
s/n:		Name:			
Version: Prod. year:		Address:			
Sling bar id.:		Situation of use:	Home	Institution	Other
Comme	nts: 1. Attention 2. Correct 3. Do not use!				
Base:					
	Check for visible damage				
	Check:				
А	Castor				
В	Brakes				
С	Legspreading EM/EE				
Mast:	-				
	Inspect the mast				
	Check:				
D	Locking handle				
Е	Link				
F	Slingbar and the function of the safety latches				
G	Mast actuator				
Н	Battery and cable installations				
1	Hand control				
J	Emergency stop				
К	Emergency lowering				
L	Charging				
М	Product label				
Took of	- and consider lands				
iest oi	safe working load:				
	Safe working load test mast				
	Safe working load test base				
	Mechanical emergency lowering				
Access	enrine:				
A00000	-				
Docum	entation:				
	Instructions / manuals				
Control	II box:				
	Reset the control box service counter				
Date:					
	est weight:		Sen	viced by:	

Description for periodic inspection



Periodic inspection - instruction

Base

-Check the base for visible damage to the surfaces, finish, etc.

Castors

- -Roll the lift unloaded on the floor, check that the castors roll and turn freely.
- -Check that the castor fasteners are tight.

Brakes

-Lock the brakes. Check that the castors do not turn when the lift is pushed.

Check the legspreading actuator

- -Check the legspreading actuator for visible damage to the surfaces, finish, etc.
- -Check screws, bolts and links etc.

Mast

- -Check the mast for visible damage to the surfaces, finish etc.
- -Check screws, nuts, bolts etc.

Locking handle

-Check the locking handle that secures the mast to the chassie.

Screws

-Check screws, and listen for peculiar noises and vibrations.

Liftarm, hardware

- -Check the liftarm for visible damage to the surfaces, finish etc.
- -Check screws, nuts, bolts etc.

Link

- -Check the link, slingbar to mast, hardware and covers.
- -Check screws, bolts and links etc.

Slingbar and safety latch function

- -Check to ensure that there is no visible wear or damage.
- Check the function of the safety latches.

Mast actuator

- -Verify that the upper and lower actuator fasteners to the mast are tight.
- -Visual inspection.
- -Check of abnormal noise level.

Periodic inspection - instruction

Battery and cable installations

- Check battery and electrical cable.
- Verify that all cables are properly inserted.

Controlbox

-Verify that all functions on the control panel are working

Handcontrol

-Verify that all functions on the handset are working.

Emergency stop

-Verify that the lift does not operate when emergency stop is pressed in.

Emergency lowering

-Verify the function of emergency lowering.

Charging

-Verify that charging is operating. Yellow lamp on the controllbox should light up when charging.

Product label

- Check the serial number so that the label is there and readable. Note the serial number on the protocol.

Test of safe working load

Mast safe working load

-Run the lift with safe working load, all the way up and down, listen for peculiar noises and vibrations.

Base safe working load

-Widen the base with safe working load, listen for peculiar noises and vibrations.

Accessories

-Check the accessories to the lift.

Documentation

- Check that the manual is available and up-to-date.

To reset the service counters press both lift buttons on the hand control at the same time for 5 seconds. An audio signal will indicate that the timer has been reset.





Maintenance

The lift must undergo thorough inspection at least once per year. Inspection must be performed by authorized personnel and in accordance with Handicare's service manual.

Repairs and maintenance may only be done by authorized personnel using original spare parts.



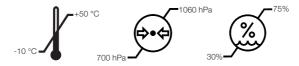
Used batteries are to be left at the nearest recycling station. Used batteries can also be returned to Handicare or a Handicare dealer for recycling.

Cleaning/disinfection

If necessary, clean the lift with warm water or a soap solution and check that the castors are free from dirt and hair. Do not use cleaning agents containing phenol or chlorine, as this could damage the aluminium and the plastic materials. If disinfection is needed, 70 % ethanol, 45 % isopropanol or similar should be used.

Storage and transportation

If the lift is not to be used for some time or e.g., during transport, we recommend that the emergency stop button be pressed in. The lift should be transported and stored in -10 ° C to +50 ° C and in normal humidity, 30% -75%. The air pressure should be between 700 and 1060 hPa. Let the lift reach room temperature before the batteries are charged or the lift is used.



Service agreements

Handicare offers the possibility of service agreements for maintenance and regular testing of your mobile lift. Contact your local Handicare representative.

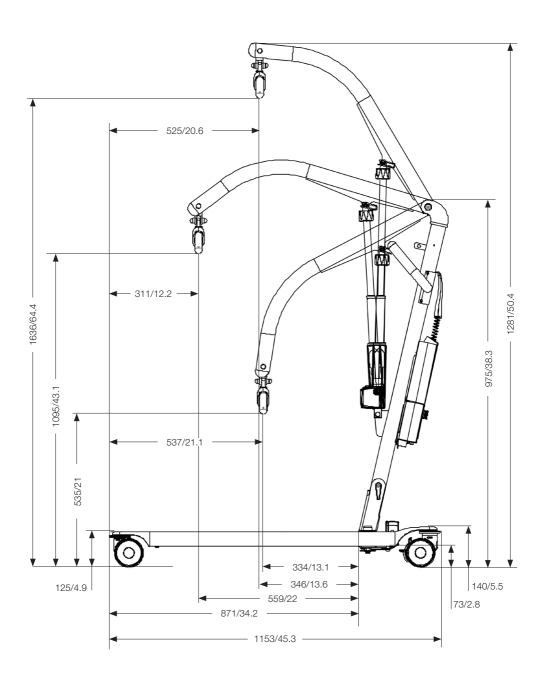
Symbols

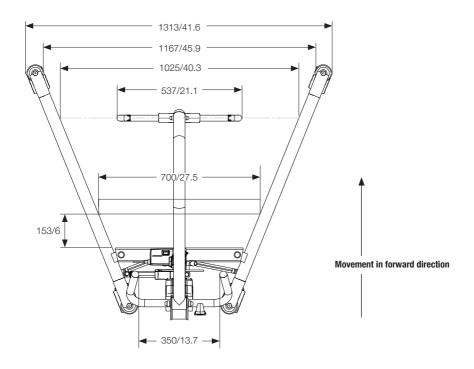
ॐ ∏i	Read user manual
X	May not be discarded in domestic waste
CE	The product complies with the requirements of the Medical Devices Directive 93/42/EEC.
☀	Type B, according to the degree of protection against electric shock.
()	The device is intended for indoor use.
	Class II equipment
\triangle	Always read the user manual

Technical Information

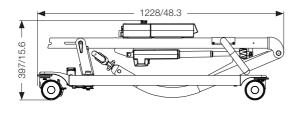
Lifting speed	23 mm/s without load.
Batteries	Two 12 V, 2.9 Ah valve-regulated, sealed, lead accumulator (gel-type batteries)
Charger	Max. 400 mA
Motor (mast)	DC 24 V, 5 A. IP X4. Operationtime: 10% at maximum continous running of 2 minutes, maximum 5 switching cycles per minute. Push: 6000N.
Motor (base)	DC 24 V, 5 A, IP X4. Operationtime: 10% at maximum continous operation of 2 minutes, maximum 5 cycles per minute. Push: 3000N.
Sound level	With load: upwards: 43 dB(A) downwards: 44 dB(A).
Material	Powdercoated Steel
Emergency lowering	Manual and electrical
Castors	Front 4", 100 mm, back 4", 100mm
Weight	33 kg/73 lbs
Weight of heaviest comp.	17,5 kg / 38,58 lbs
Turning diameter	48.4", 1230 mm
IP class	IP X4
Expected lifetime	10 years
Operating forces buttons on handset	4 N
Max. load:	165 kg/ 350 lbs

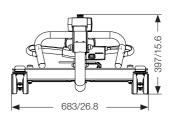
Medical Device Class I. The product complies with the requirements of the Medical Devices Directive 93/42/EEC.

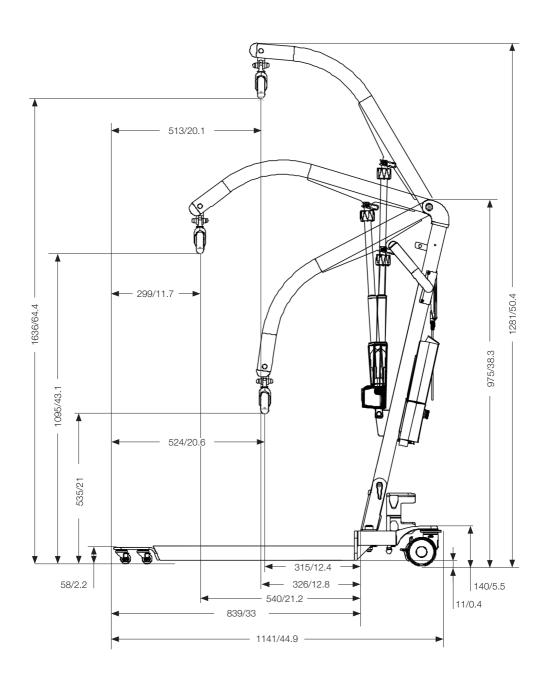


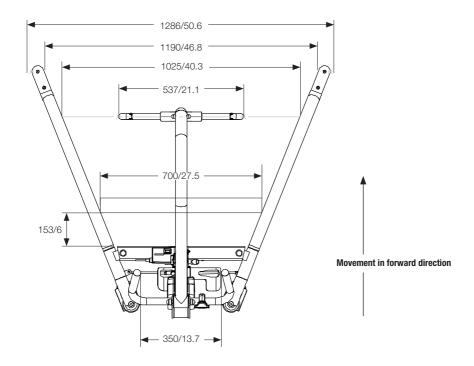


Dimensions Carina350EM/EE - collapsible

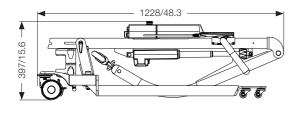


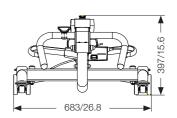






Dimensions Carina350EM/EE - collapsible





SystemRoMedic™

Simple solutions for great results

SystemRoMedic™ is the name of Handicare's unique easy transfer concept, the market's widest and most comprehensive range of clever, easy-to-use and safe transfer and lifting aids designed to make life easier, both for the user and for the caregiver. SystemRoMedic™ is a complete solution that provides for the majority of patient transfer or manual handling requirements. From the simplest to the most complex scenarios, from the lightest to the heaviest. The concept encompasses assistive devices for four different categories of transfers:

- Transfer, assistive devices for manual transfers of users between two locations.
- Positioning, assistive devices for manual repositioning of users within the same location.
- Support, assistive devices for mobility support e.g., during sit-to-stand or gait training.
- Lifting, assistive devices for manual and mechanical lifting of users.

Improved work environment, improved quality of care and cost savings

The philosophy behind SystemRoMedic™ is focused on the prevention and reduction of occupational injuries while allowing users to experience a greater sense of independence and dignity. Through a unique combination of training and a complete range of efficient transfer aids, SystemRoMedic™ offers improvement of both work environment and quality of care and, at the same time, achieves significant cost savings.

Always make sure that you have the correct version of the manual

The most recent version of all manuals are available for downloading at/from our website; www.handicare.com.

For questions about the product and its use

Please contact your local Handicare and SystemRoMedic™ representative. A complete list of all our partners with their contact details can be found on our website; www.handicare.com.

Handicare offers solutions and support to increase the independence of disabled or elderly people as well as to improve the convenience of those who are caring for them.

The Handicare Group is one of the leading healthcare companies in Europe with its own manufacturing organizations and sales companies in Norway, Sweden, Denmark, Germany, the Netherlands, Great Britain, France, China, Canada and the USA. Handicare's products are also distributed by partners in more than 40 countries worldwide. Our wide range of high-quality products includes a complete easy transfer system and other patient handling aids, stairlifts, car adaptations and bathing and toileting products.



Handicare AB
Maskinvägen 17
SE-972 54 Luleå, SWEDEN
Tel: +46 (0)8-557 62 200
Fax:+46 (0)8-557 62 299
E-mail: info@handicare.se
www.handicare.com