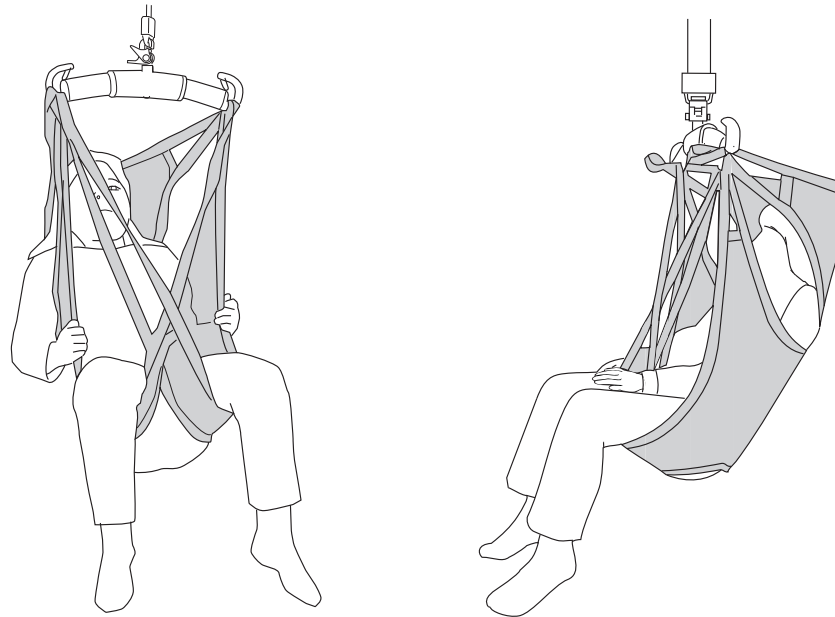


Liko SilhouetteSling Mod. 22



Instructions for Use



Product Description

Intended Use: Liko SilhouetteSling is a pliable sling which adapts to the body and requires minimal space in the wheelchair. It provides for a slightly reclined sitting posture and excellent support for the entire body, which is good for patients with reduced head and torso stability. The patient can hold the arms either outside or inside the sling. The head support is adjustable.

Design and material make Silhouette Sling particularly suitable for lifting to molded seats, since the sling is usually left in the wheelchair after the lifting operation is completed. This makes it very popular in care and rehabilitation situations, where sitting shells and molded seats are commonly used. Silhouette Sling can also be used in bathing and showering situations.

It is intended for use in following environments: Health care, Intensive care, Emergency ward, Rehabilitation, Habilitation and Home healthcare environment

A properly fitted and carefully applied sling will give the patient an excellent sense of security, as well as a high degree of comfort.

Sizes

The SilhouetteSling is available in different sizes. It is important to choose the correct size in order to achieve the highest level of comfort and safety. A sling which is too large increases the risk of the patient sliding out of it, while one which is too small can cut into the groin and cause discomfort.

Fabrics

SilhouetteSling is made of a comfortable, pliable net polyester fabric which allows body heat and moisture to pass through.

Suitable Lifts

The SilhouetteSling can be used with all Liko overhead and mobile lifts. You can choose between the LikoGuard overhead lift, Likorall overhead lift, and Multirall overhead lift, or the Golvo mobile lift, Viking mobile lift, Uno mobile lift, and Liko M220/M230 mobile lift.

In this document, the person being lifted is referred to as the patient, and the person helping is referred to as the caregiver.

IMPORTANT!

Lifting and transferring a patient always involves a certain level of risk. Read the instructions for use for both the patient lift and lifting accessories before use. It is important to completely understand the contents of the instructions for use. The equipment should only be used by a trained caregiver. To be trained, a caregiver needs to read and understand the Instructions for Use. Ensure that the lifting accessories are suitable for the lift used. Exercise care and caution during use. As a caregiver, you are always responsible for the patient's safety. You must be aware of the patient's ability to make it through the lifting situation. If something is unclear, contact the manufacturer or supplier.

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Safety Information

⚠ Before lifting, keep the following points in mind:

- A responsible person within your organization should decide on a case-by-case basis whether one or more caregivers are needed.
- Ensure that the sling selected meets the patient's needs with reference to model, size, fabric and design.
- To protect patient safety and hygiene, launder the sling between patients.
- Plan the lifting operation so that it can be done as safely and smoothly as possible.
- Check that the lifting accessory hangs vertically and can move freely.
- Although the Liko sling bars are equipped with latches, special caution must be exercised. Before the patient is lifted from the underlying surface, but when the straps are fully extended, make sure the straps are correctly connected to the sling bar hooks.
- Make sure the patient is sitting securely in the sling before transferring to another location.
- Never lift a patient higher off the underlying surface than is needed to complete the lifting and transfer procedure.
- Make sure that the wheels on the wheelchair, bed, gurney, etc., are locked during the lifting/transfer operation.
- Always work ergonomically. Use the patient's ability to actively participate in the operations.

⚠ Incorrect attachment of sling to sling bar may cause severe injury to the patient.

⚠ Manually turning the patient in bed may cause injuries to the caregiver.

⚠ Never leave a patient unattended during a lifting situation!

⚠ Never leave children unattended in the vicinity of the sling!

⚠ Do not store the sling where it will be exposed to direct sunlight or heat sources, such as a radiator, fireplace, or stove/oven!

⚠ Do not operate, store, or transport the sling in the vicinity of pets, pests, or unattended children!

⚠ Pinching or minor injuries can be caused by usage of a worn sling, if a sling is placed uneven on the patient or if the sling is not removed carefully.

⚠ Make sure that the patient and caregiver stay clear of pinch points and moving parts during a lifting event. Injury could occur.

⚠ Evaluate patients for entrapment risk and monitor patients appropriately. Make sure that the patient's head and limbs are not in or between sling loops during lifting event. Failure to do either of these could cause serious injury or death.

CE Medical Device Class I Product

PATENT www.hillrom.com/patents

May be covered by one or more patents. See above Internet address.

The Hillrom companies are the proprietors of European, US, and other patents and pending patent applications.

Product Changes

Liko products undergo continuous development, which is why we reserve the right to make product changes without prior notice. Contact your Hillrom representative for advice and information about product upgrades.

Design and Quality by Liko in Sweden






























Liko is quality certified according to ISO 9001 and its equivalent for the medical device industry ISO 13485. Liko is also certified according to environmental standard ISO 14001.

Notice to Users and/or Patients in EU

Any serious incident that has occurred in relation to the device, should be reported to the manufacturer and the competent authority of the Member State in which the user and/or patient is established.

Symbol Description

These symbols may be found in this document and/or on the product.

Symbol	Description	Symbol	Description
	Warning; this situation requires extra care and attention. This symbol is a yellow triangle with a black border, and a black exclamation mark at the center.		
	Recyclable		
	Read instructions for use before use. This symbol is a blue circle with a white image of a person reading a book.		
	Read instructions for use before use		Caution! Consult instructions for use.
	CE-mark. European Union medical device conformity mark, Class I Medical Device.		
	Swiss authorized representative		
	Legal manufacturer		Date of manufacture
	Product Identifier		Medical device
	Serial Number		Unique device identification
	Do not dry clean		Line drying in shade
	Do not iron		Do not bleach
	Tumble drying		Do not wash
	Do not tumble dry		
	Washing Symbol is always in combination with recommended temperature in °C and °F.		
	Latex Free		
	Periodic inspection		
	Do not use product. (Only on Solo products, and only visible after wash when use is prohibited)		Patient name
	Single patient use (only on Solo products)		
	Direction upwards and symbol on outside of equipment.		Symbol on outside of equipment.
	GS1 Data Matrix Barcode that may contain following information. (01) Global Trade Item Number (11) Production Date (21) Serial Number		

Care and Inspection

Check the sling before each use. Check the following points with regard to wear and damage:

- Fabric
- Straps
- Seams
- Loops

⚠ Do not use damaged lifting accessories.

If anything is unclear, please contact the manufacturer or supplier.

Washing and Disinfection Instructions:

Please see the sling's product label and the attached appendix "Care and Maintenance of Liko Slings".

Material: SilhouetteSling is made of net polyester.

Periodic Inspection

The product must be inspected at least once every 6 months. More frequent inspections might be required if the product is used or washed more often than normal. See Liko protocol "Periodic Inspection Liko Textile Products". For protocols please contact your Hillrom representative.

Expected Life Time

The product has an expected life time of 3 years with normal use. Expected life time varies depending on the fabric, use frequency, washing procedure, and weight carried. Hillrom recommends that the product only be used during its expected life time.

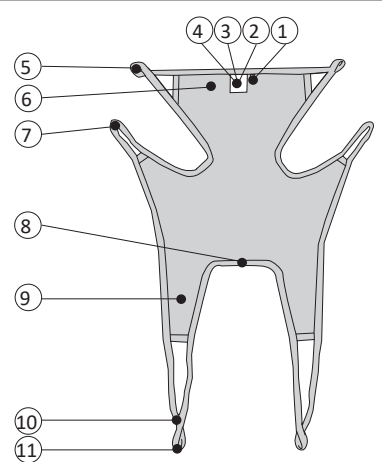
Recycling Instructions



The entire sling, including laths, padding material, etc. should be sorted as Combustible waste.

Hillrom evaluates and provides guidance to its users on the safe handling and disposal of its devices to aid in the prevention of injury, including, but not limited to: cuts, punctures of the skin, abrasions, and any required cleaning and disinfection of the medical device after use and prior to its disposal. Customers should adhere to all federal, state, regional, and/or local laws and regulations as it pertains to the safe disposal of medical devices and accessories.

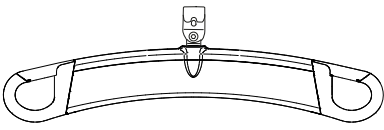
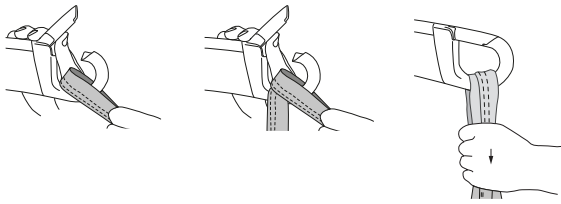

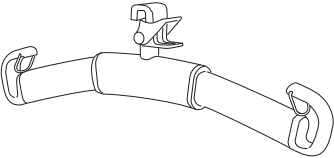
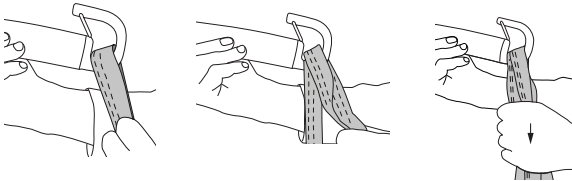

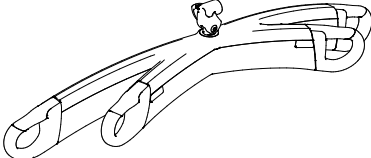
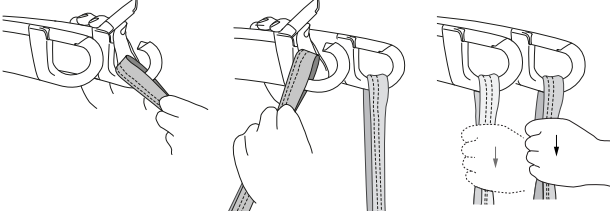
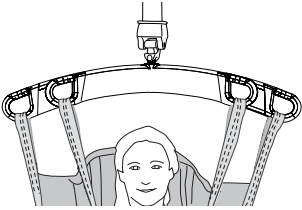
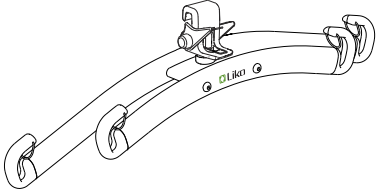
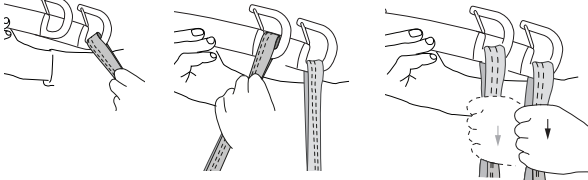
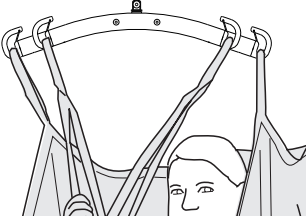
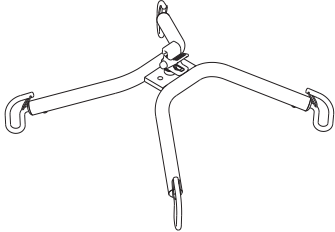
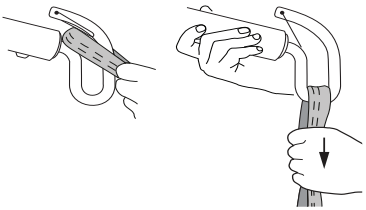
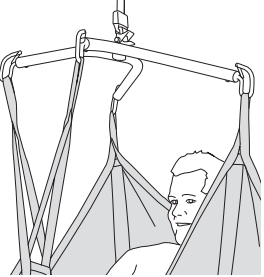
If in doubt, the user of the device shall first contact Hillrom Technical Support for guidance on safe disposal protocols

Definitions

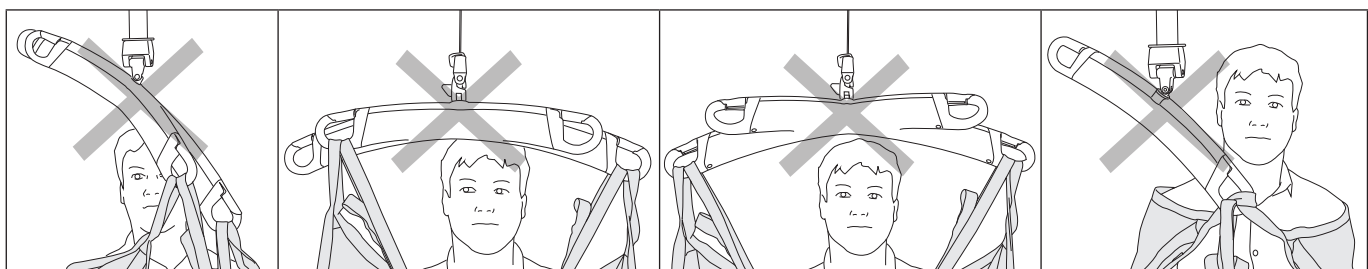


1. Size marking:
(XS = Red, S = Orange, M = Yellow, L = Blue)
2. Product label, including:
Manufacturing year and month ()
Serial number ()
3. Label: Periodic Inspection
4. Label: Individual marking (Belongs to)
5. Upper strap loop
6. Head support
7. Torso loop
8. Lower edge
9. Leg support
10. Shortening position
11. Leg support loop

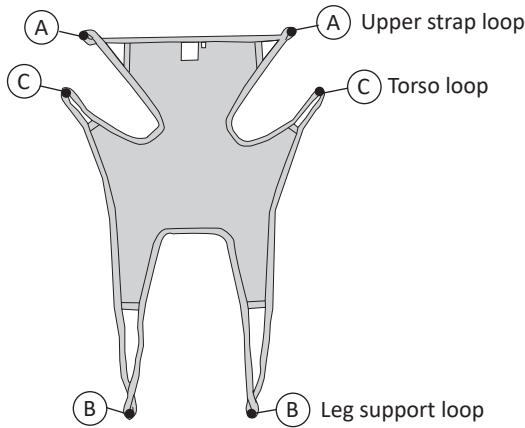
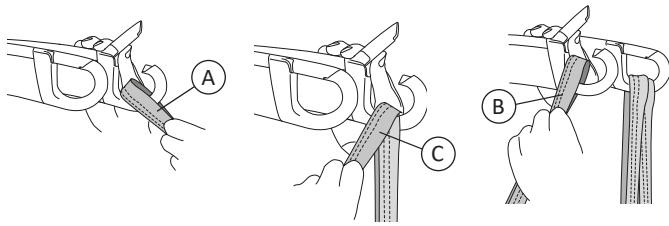
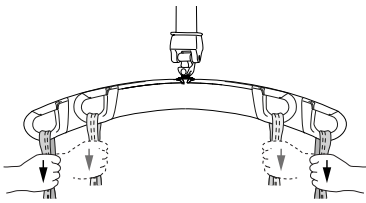
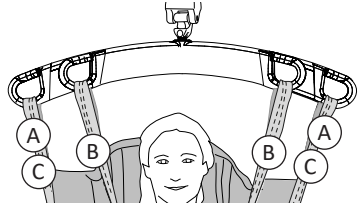
How to Attach a Sling to Different Sling Bars

Sling bar	Sling loops to sling bar hooks	Correct
 <p style="text-align: center;">SlingGuard</p>		
 <p style="text-align: center;">Universal</p>		
 <p style="text-align: center;">SlingGuard Twin</p>		
 <p style="text-align: center;">Universal Twin</p>		
 <p style="text-align: center;">Cross-bar</p>		

Wrong!



How to Attach a SilhouetteSling to a Sling Bar with 4 Hooks (Twin Bars and Cross Bars)

 <p style="margin-left: 20px;"> A Upper strap loop C Torso loop B Leg support loop </p>	<p>1.</p> 
<p>2.</p> 	<p>3.</p>  <p>Illustrations 1, 2, and 3 show a twin bar but this also applies to a Cross-bar, or sling bar with SideBars.</p>

How to Select Sling Size

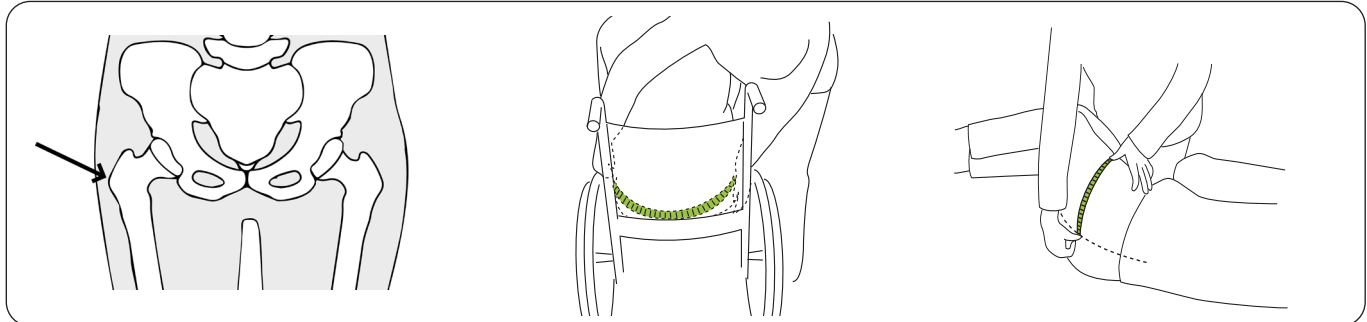
⚠️ Only use a sling that is the correct size for the patient. Correct size must be assessed by a trained caregiver. Patient entrapment or asphyxiation could occur.

The hip width measurement on the patient and on the sling gives guidance when choosing the size of the sling. Compare the measurement of the patient (see instruction for measuring) and the measurement of the sling (see table or instruction for measuring).

Choosing the correct size:

Choose a sling with a hip width measurement that is within +/- 8 cm (3 in.) of the patient's hip width measurement.

Measure the hip width of the patient as follows:



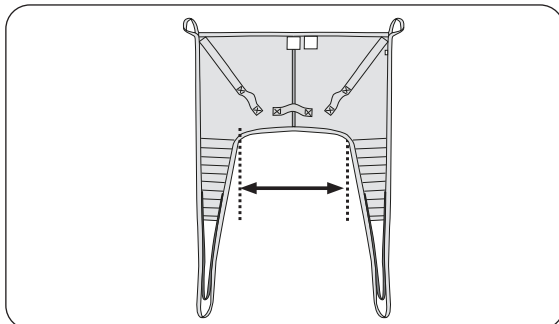
Trochanter: The trochanter is the part of the femur that can be felt at the patient's hip. Apply gentle pressure to find the trochanter for measurement

Alternative A. With the patient leaned forward, measure the hip width at the widest place i.e. from one trochanter to the other trochanter.

Alternative B. With the patient on their side, measure from the trochanter to the midline/backbone and multiply by 2.

See "Dimensions" on page 9 for the hip width of the sling as follows:

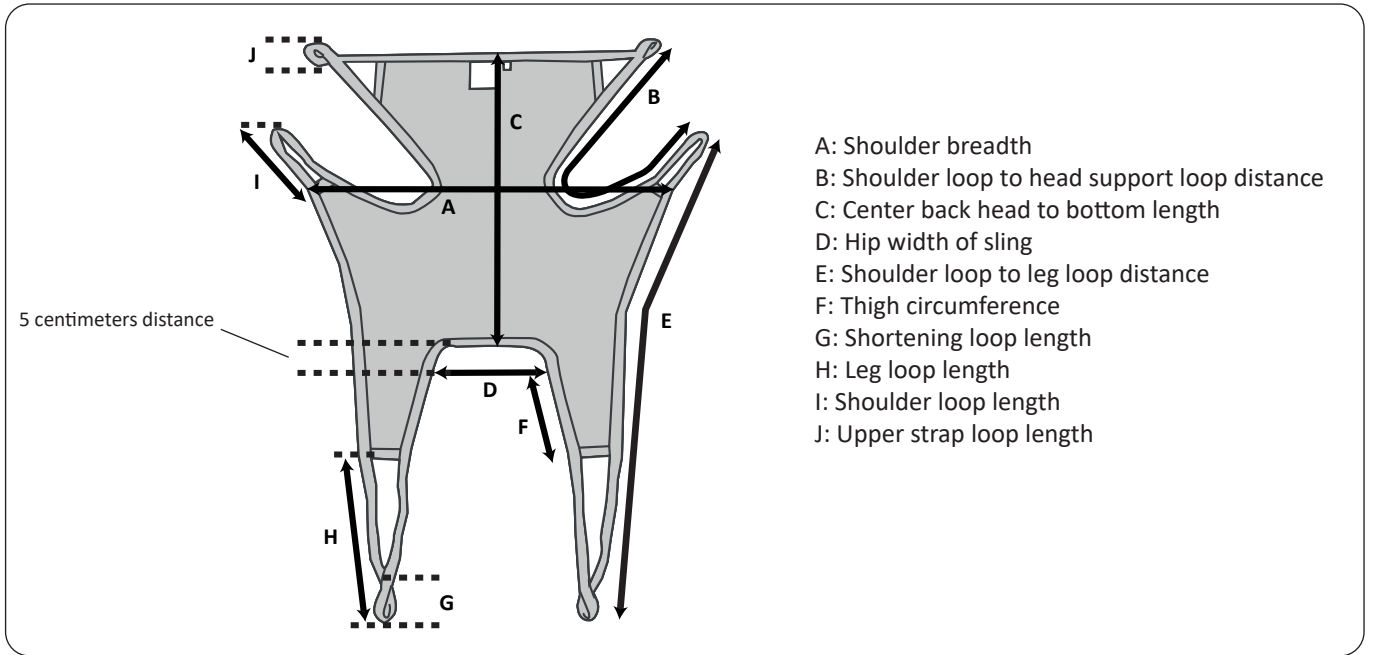
Hip width measurement



Sling Size	Hip Width
XS	31 (12)
S	35 (14)
M	40 (16)
L	56 (22)

All measurements are in cm (in.).

Dimensions



Size Measurements in Centimeters

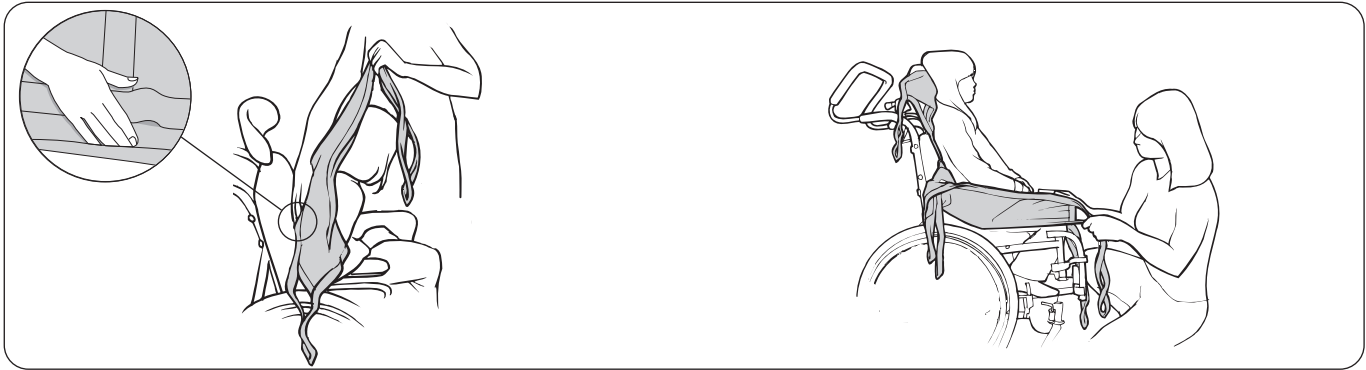
SIZE	A	B	C	D	E	F	G	H	I	J	Maximum load (kg)	Prod. No.
XS	85	106	70	31	138	29	10	49	15	8	200	3522603
S	96	108	87	35	160	30	10	54	20	8	200	3522604
M	104	134	98	40	188	42	10	58	31	8	200	3522605
L	125	140	98	56	194	43	10	60	31	8	200	3522306

Size Measurements in inches

SIZE	A	B	C	D	E	F	G	H	I	J	Maximum load (lbs)	Prod. No.
XS	34	42	27	12	54	11	4	19	6	3	440	3522603
S	38	43	34	14	63	12	4	21	8	3	440	3522604
M	41	53	38	16	74	17	4	23	12	3	440	3522605
L	49	55	39	22	76	17	4	23	12	3	440	3522306

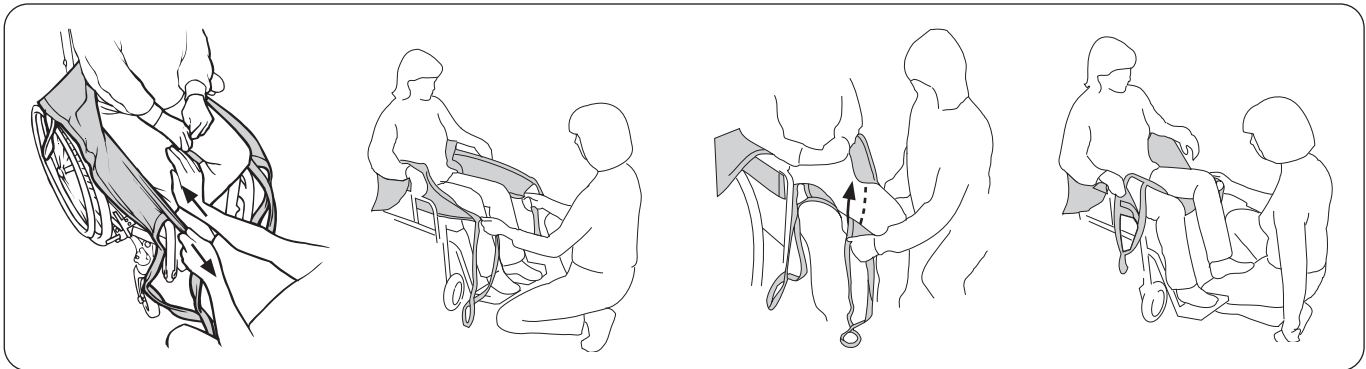
Lifting from a Sitting Position

The patient is usually tilted forward during the application, and it is then important that a caregiver stand in front of the patient to prevent them from falling forwards.



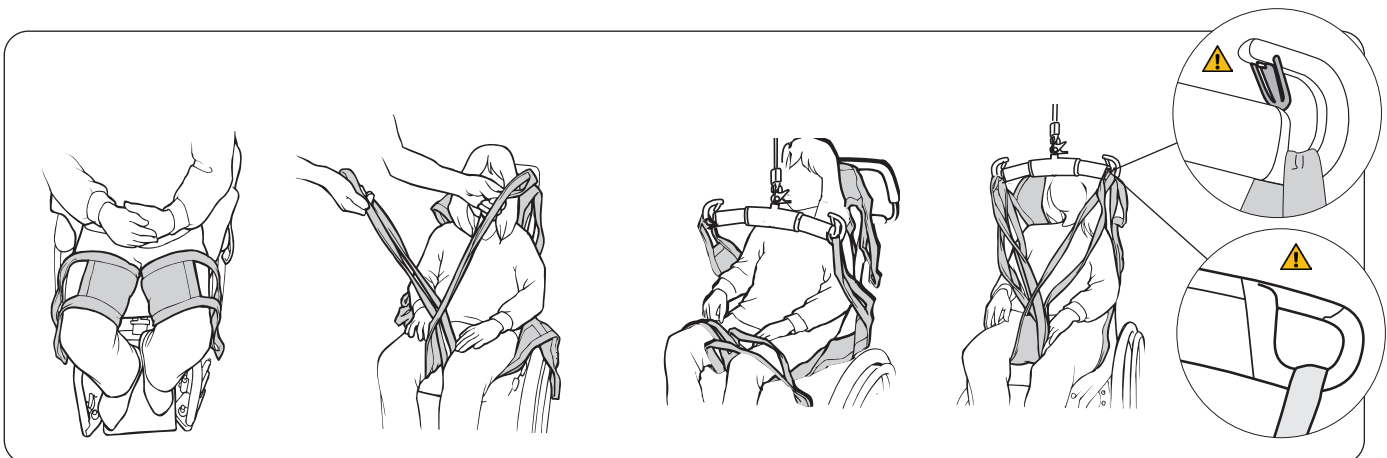
Place the sling behind the patient's back with the product label outwards. Fold up the lower edge of the sling around your finger tips to facilitate guiding the sling into place. Using the palm of your hand, push the lower edge of the sling down to the level of the patient's coccyx - **this is very important**. **Tip:** Correct positioning is facilitated if the patient leans/is leaned forward slightly.

Pull the sling's leg supports forward along the outside of the patient's thighs. Place the palm of your hand between the patient's body and the sling and push the leg support's lower edge down towards the seat. Simultaneously, pull the leg support forward with the other hand to extend it.



Pull the leg supports forward to smooth out any creases in the back. **Tip:** Gentle pressure on the patient's lower legs makes it easier to pull the leg supports forward. Check that both leg supports protrude the same distance.

Insert the leg supports under each thigh. **Tip:** The application of the leg supports is facilitated if the patient's legs are slightly raised from the seat. This can be achieved by placing the patient's feet on the foot-rests or on your own leg, as illustrated.

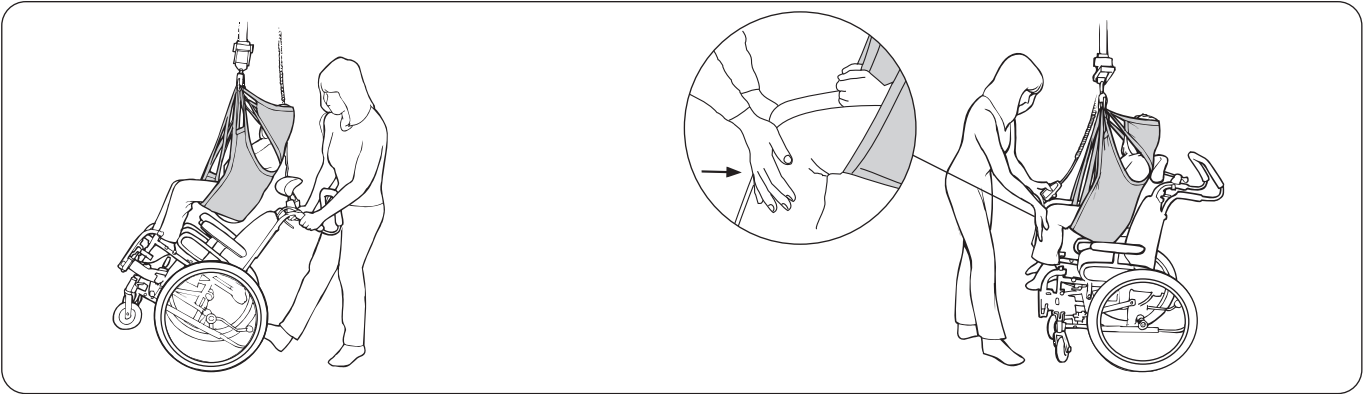


Make sure the fabric lies flat and that it reaches properly around the leg. Prepare the connection of the leg supports. The most common way of applying the sling is with crossed leg supports. For alternative methods, see "Different Ways of Connecting Leg Supports" on page 14.

First, connect the torso loops to the sling bar. The patient's arms can be placed either inside or outside the sling. Then connect the upper strap loops to the sling bar. Choose loops according to the patient's needs, see "Adjustment of Head Support" on page 14. Finally, connect the leg support loops to the sling bar. See page 6 and page 7 for instructions on how to attach the sling loops to different sling bars. Lift the patient.

Lifting to a Sitting Position

When placing a patient in a wheelchair or chair, or on a toilet, it is important that the patient gets far enough back to sit comfortably and securely. This can be accomplished in several ways.



When placing a patient in a wheelchair: Lean the chair backwards during the lowering of the patient. Let the buttocks slide down the backrest during the last part. Control the angle of the wheelchair with your foot on the tipping support.

When placing a patient in a chair or on a toilet (Alternative method for wheelchair): Apply gentle pressure under the patient's knees during the lowering sequence, so that the buttocks are guided towards the backrest of the chair or the correct position on the toilet.

If the sling has handles, these can be used to guide.

⚠ Do not use the handles to lift! Excessive force on the handles can cause the sling to tear.

Most often the SilhouetteSling is left in the chair after completed lift and then the strap loops and also the leg supports can be folded away and stashed in the chair.

Removing the Sling in a Chair/Wheelchair/Toilet

It is recommended to remove the sling after the transfer. Do not leave the sling on when you transfer a patient to a toilet.



Carefully remove the leg support. The gentlest way of doing this is by pulling out the leg support loops under the fabric part of the leg support.

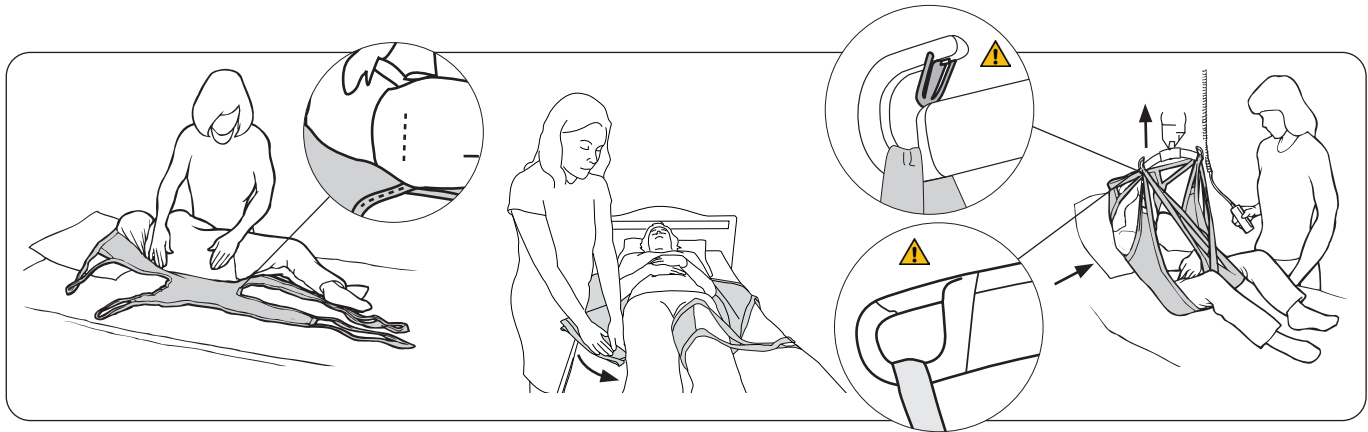
Remove the sling by carefully pulling it up.

Lifting from the Bed

We recommend applying the sling when the patient is lying horizontally, as this is the easiest procedure. In some cases, e.g., if the patient cannot lie horizontally, the sling can be applied with the patient sitting up in bed (see **Alternative method of applying the sling** below).

Think about your own work posture as well as the comfort of the patient. Use the bed's raising and lowering functions.

⚠ If the bed is not equipped with a head end that can be raised/lowered, special attention must be paid during the first part of the lift, in order for the patient's neck not to be strained. The caregiver should then support the neck manually.



Turn the patient towards you to prevent the patient from falling out of the bed. Insert the sling's edge under the patient with the lower edge **level with the coccyx**. The upper edge of the head support should not be lower than the head in order to give enough head support during the lift. Fold the sling so that its center corresponds to the patient's spine when the patient is turned back again gently. Carefully pull the sling out from the other side.

Insert the leg supports under the legs. This is best done by pressing the leg support down against the mattress while you put the leg support under the thigh. Make sure the fabric lies flat and that it reaches properly around the leg. The leg supports can be connected in different ways, see "Different Ways of Connecting Leg Supports" on page 14

Raise the head end of the bed. First, connect the torso loops to the sling bar and then the upper strap loops. Choose loops according to the patient's needs, see "Adjustment of Head Support" on page 14. Finally, connect the leg support loops to the sling bar. See page 6 and page 7 for instructions on how to attach the sling loops to different sling bars. Lift the patient.

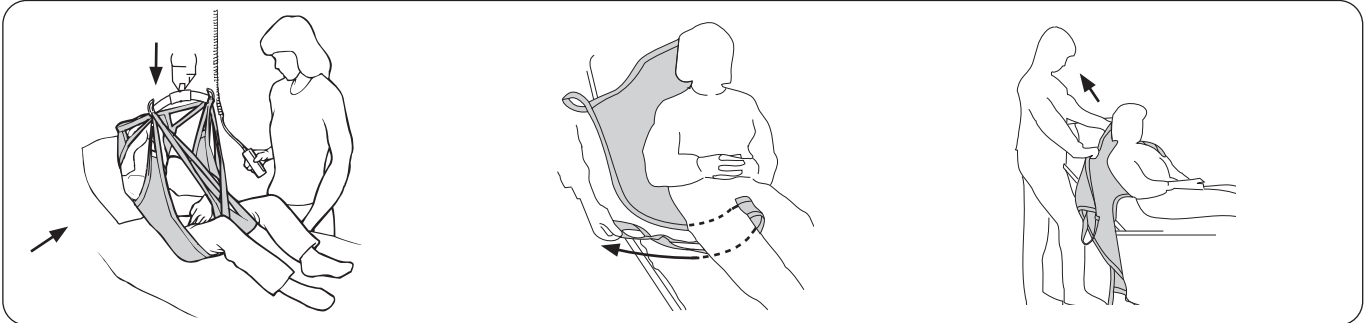
Alternative method of applying the sling: Raise the head end of the bed behind the patient. Lay the sling on the bed with the product label facing down towards the mattress. Slide the sling down behind the patient's back so that the lower edge is **level with the coccyx**. **Tip!** The application is facilitated if the patient is leaned forward.

Lifting to the Bed

Think about your own work posture as well as the comfort of the patient. Use the bed's raising and lowering functions.

⚠️ If the bed is not equipped with a head end that can be raised/lowered, special attention must be paid during the last part of the lowering, in order for the patient's neck not to be strained. The caregiver should then support the neck manually.

Removing the Sling when the Patient is Sitting in Bed

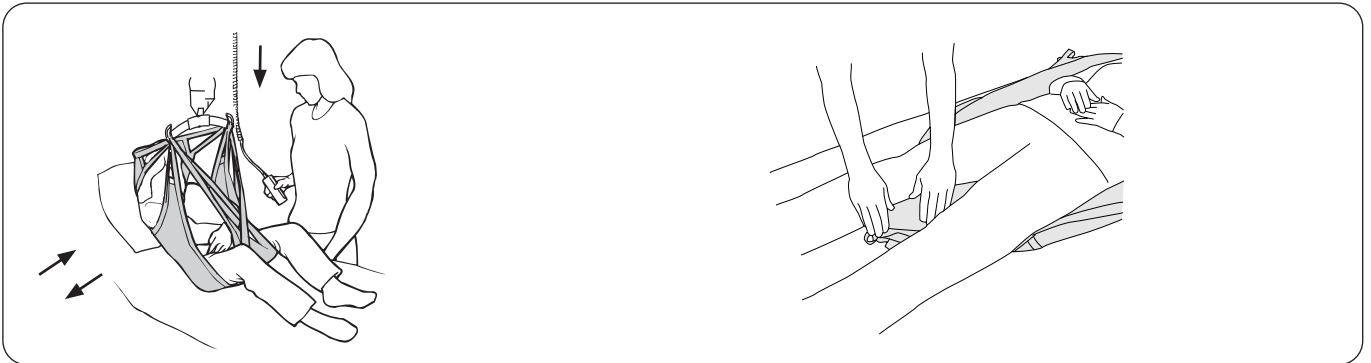


Position the patient above the bed. Raise the head end of the bed. Lower the patient onto the bed.

Remove the leg supports by pulling out the leg support loops under the fabric part of the leg support. **Tip:** This is facilitated if the patient's legs are bent.

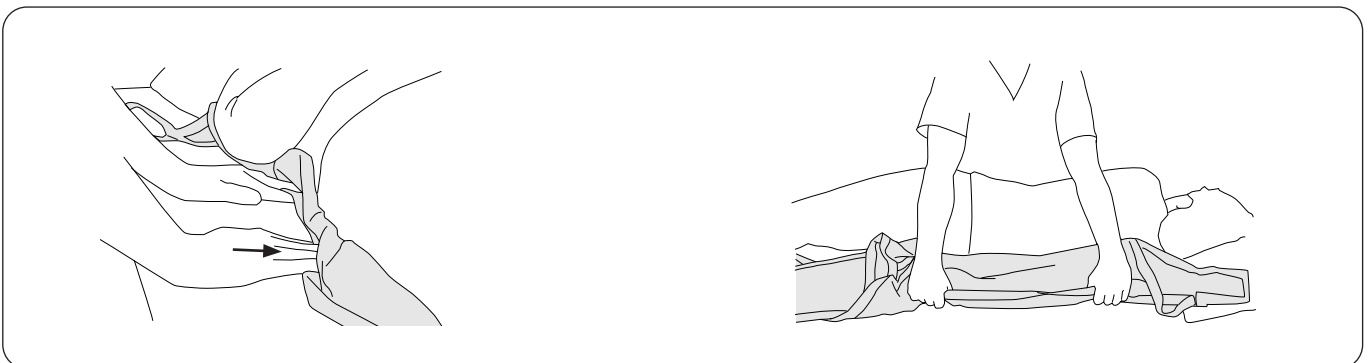
Remove the sling by carefully pulling it up.

Removing the Sling when the Patient is Lying in Bed



Position the patient above the bed. Raise the head end of the bed. Lower the patient onto the bed. Lower the head end of the bed.

Place the leg support loops under the leg supports between the patient's legs.



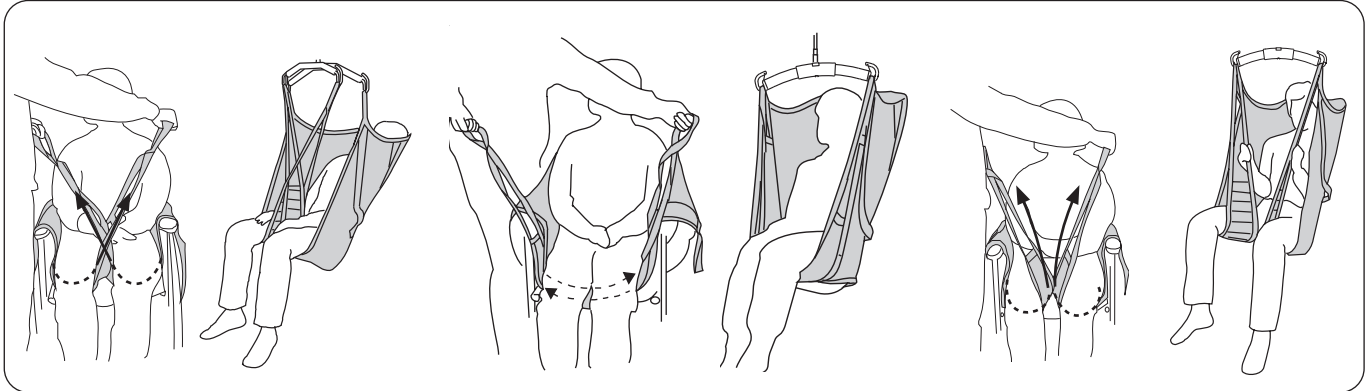
Grasp the edge of the sling. Push in the sling under itself. Press the sling against the mattress and in under the patient.

Carefully turn the patient onto the side. Grasp the sling from below and remove it carefully.

Fitting Advice

Different Ways of Connecting Leg Supports

Before a connection alternative is chosen, an individual assessment should be performed to anticipate possible risks. The following are general advice since the same principles are valid for several sling models.



Crossed-over leg supports.

The most common way of applying the sling. One leg support loop is passed through the other before the loops are connected to the sling bar.

Overlapped under both thighs.

This can be appropriate, for example when lifting a patient with amputated legs. **Tip:** In order to avoid the patient's sitting posture being too reclined, Extension Loops can be attached to the leg support loops.

Each leg support connected separately to the sling bar.

This can be appropriate when lifting patients with particularly sensitive genitals.

⚠ **Increased risk of sliding out.**

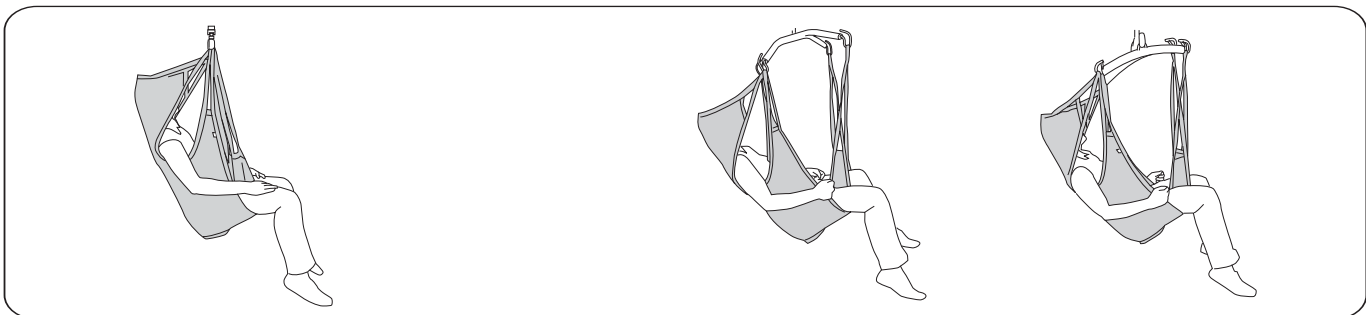
Adjustment of Head Support

The head support of the SilhouetteSling can be adjusted for two different positions.

Alternative 1: The outer loop of the upper strap loop is connected to the sling bar. The patient's head will then be in a slightly reclined posture.

Alternative 2: The inner loop of the upper strap loop is connected to the sling bar. The patient's head will then be in a more upright posture.

Different Sitting Positions Depending on Choice of Sling Bar



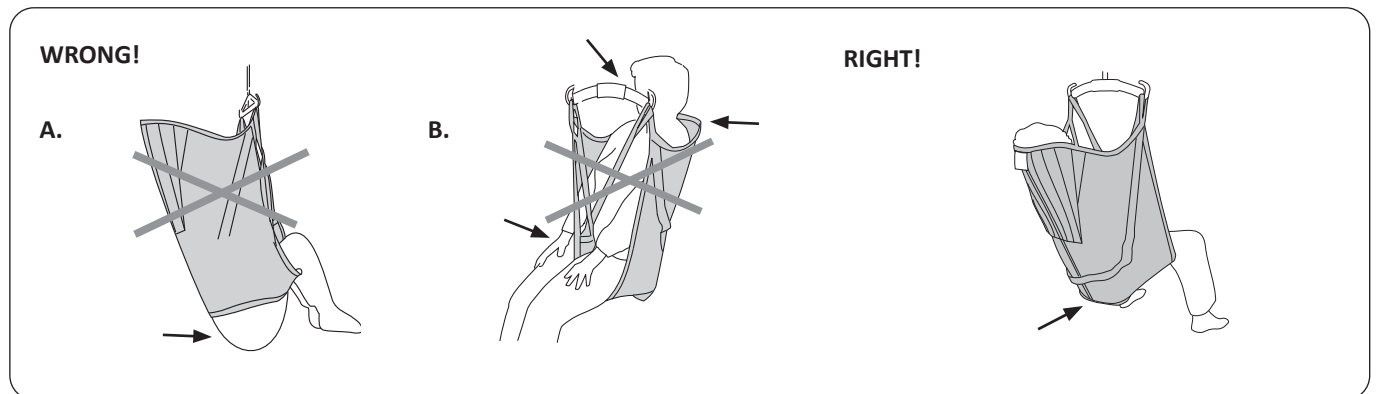
SilhouetteSling in combination with **Liko Universal SlingBar 350/450** or **SlingGuard 450** provides a slightly reclined sitting posture.

SilhouetteSling in combination with **Liko Sling Cross-bar 450/670** provides a more reclined sitting posture.

Universal SlingBar 350/450 in combination with **SideBars** provides the same degree of reclined sitting posture.

The Patient does not Sit Well in the Sling – Why is This?

The following are general advice since the same principles are valid for several sling models.



A. Risk of sliding out. The buttocks hang down. The sling may be too large. It can also be due to the fact that the sling has not been pulled down the patient's back sufficiently.

Before lifting, check that the lower edge is extended and that the fabric reaches properly around the legs.

B. A sling that is too small can cause the leg supports to cut into the groin, causing discomfort and the sling bar to be too close to the face and/or the head to get sufficient support.

The lower edge of the sling is at the same level as the coccyx. The leg supports are properly positioned under the legs.

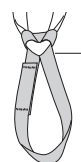
Shortening Position

In certain cases, it can be advantageous to shorten the leg support loop in order for the patient to sit well in the sling. The shortening position can be used temporarily in order to test for the right length, but extended use may damage the seams. If you want to shorten the leg support loop for long-term use, however, we recommend that you tie a knot in the loop to shorten it about 10 cm (4 in). In this case, it is the outer leg support loop which should be connected to the sling bar.

Accessories

Extension Loop, green, 12 cm (5 in)
 Extension Loop, green, 22 cm (9 in)
 Extension Loop, grey, 12 cm (5 in)
 Extension Loop, grey, 22 cm (9 in)

Prod. No. 3691102
 Prod. No. 3691103
 Prod. No. 3691302
 Prod. No. 3691303



- 2 = 12 cm (5 in)
 - 3 = 22 cm (9 in)

Overview LIKO SilhouetteSling Mod. 22

Product	Prod. No.	Size		Patient's Weight ¹	Max. Load ²
Liko SilhouetteSling	3522603	XS	Extra Small	20-28 kg (44-62 lbs)	200 kg (440 lbs)
Liko SilhouetteSling	3522604	S	Small	25-50 kg (55-110 lbs)	200 kg (440 lbs)
Liko SilhouetteSling	3522605	M	Medium	45-75 kg (99-165 lbs)	200 kg (440 lbs)
Liko SilhouetteSling	3522306	L	Large	65-100 kg (143-220 lbs)	200 kg (440 lbs)

¹The indicated patient weight is only a guideline – there may be deviations.

²For retained maximum load, lift/accessories intended for the same load or more are required.

Recommended Combinations

Recommended combinations of the SilhouetteSling and LIKO sling bars:	Mini SlingBar 220	Universal SlingBar 350	Universal SlingBar 450	Standard SlingBar 450	SlingGuard 450	Universal SlingBar 600	SlingGuard 670 Twin	Universal TwinBar 670	Sling Cross-bar 450	Sling Cross-bar 670	Univ. SideBars + Universal 350	Univ. SideBars + Universal 450
	SilhouetteSling, XS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SilhouetteSling, S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SilhouetteSling, M	✓ ¹	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SilhouetteSling, L	✓ ¹	✓ ¹	✓	✓	✓	✓	✓	✓	✓	✓	✓ ¹	✓

¹ Arms outside the sling

Explanation: ✓ = Recommended

While this chart serves as guidance, it is important to acknowledge that various circumstances may render sling- sling bar combinations inappropriate. Approved combinations in the matrix must still be assessed and validated by a trained health care professional.

Other Combinations

⚠ Combinations of accessories/products other than those recommended by Liko can result in risks for the safety of the patient. Injury could occur.

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