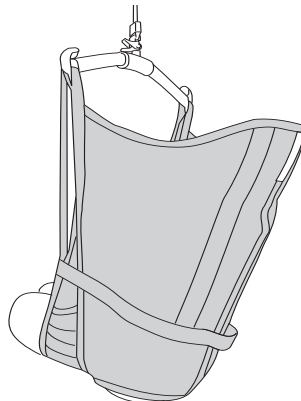


## Instructions for Use



### Product Description

#### Intended Use:

Amputee Slings are specially designed as an aid to lifting patients with double sided leg amputations. It is also recommended to use Amputee sling for patients who are not amputees, but who tend to slide out of similar type of slings. Amputee may be appropriate for other patients, such as single sided amputees.

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

**Liko** AmputeeSling is a safe, easy-to-use sling that has been specially designed as an aid to lifting patients with high double-sided leg amputations. It is also recommended to use AmputeeSling for patients who are not amputees, but who tend to slide out of similar types of slings. AmputeeSling may be appropriate for other patients, such as single-sided amputees.

#### Leg Supports

The leg supports are normally overlapped under both thighs. AmputeeSling have reinforced leg supports which distributes pressure evenly and prevents the sling from creasing under the thighs.

The guide loops on the side of the sling assure correct positioning of the leg supports and help to prevent the opening for the seat from widening, thus providing added security during lifting. The arms are held inside the sling.

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

#### Sizes

A correctly fitted and carefully applied AmputeeSling ensures a high degree of comfort and a feeling of security for the patient. AmputeeSling has a head support.

For large patients or people who are particularly sensitive to pressure around the shoulders, it is recommended a combination with Universal Slingbar 600.

#### Fabrics

AmputeeSling is available in polyester. This material is very durable and is easy to work with, due to its low friction, which makes the sling easy to apply and easy to remove. This model is also available in net polyester in cases where the sling is to be left in the chair after lifting, or simply when you want a ventilated alternative.

AmputeeSling can be applied and removed in either the seated or horizontal positions.

#### Suitable Lifts

The AmputeeSling 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.

# 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.
- The total maximum load for a lift system is always determined by the product in the system with the lowest specified maximum load.
- For safety and hygiene reasons, use individual slings.
- 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.
- It is recommended to remove the sling after the transfer. If for some reason it is preferable to leave the sling after transfer, it is recommended to use a sling in net polyester.

**⚠ Incorrect attachment of sling to slingbar 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 operate, store, or transport the sling in the vicinity of pets, pests, or unattended children!**

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

**⚠ 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](http://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		<b>Caution!</b> 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 Maintenance

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.

### If the sling is used for bath or shower:

After use in bath and shower situations, the sling should be placed so that it dries as soon as possible.

### Washing and Disinfection Instructions:

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

### Material:

The AmputeeSling is available in polyester. The medium size is also available in 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. For protocols please contact your Hillrom representative.

### Expected Life Time

The product has an expected life time of 5 years during 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.

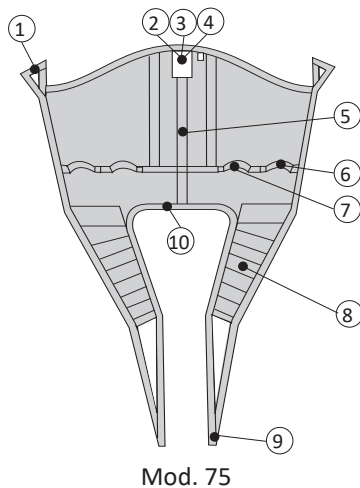
### Recycling Instructions



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.

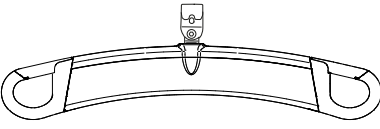
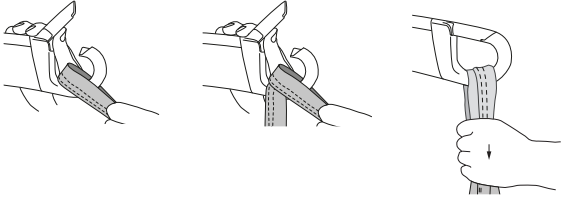
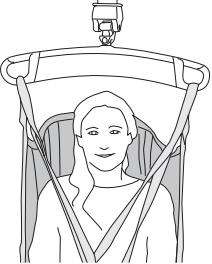
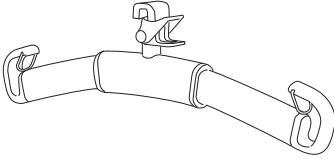
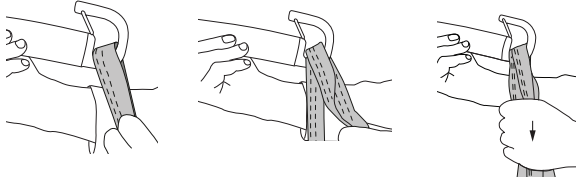

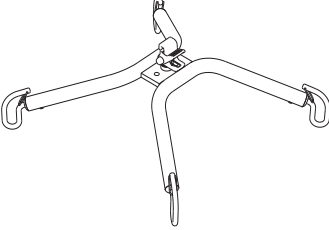
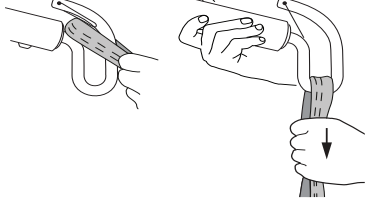
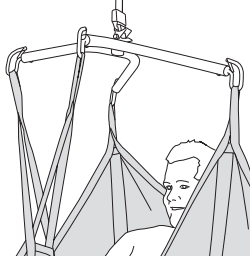
If in doubt, the user of the device shall first contact Hillrom Technical Support for guidance on safe disposal protocols.

## Definitions

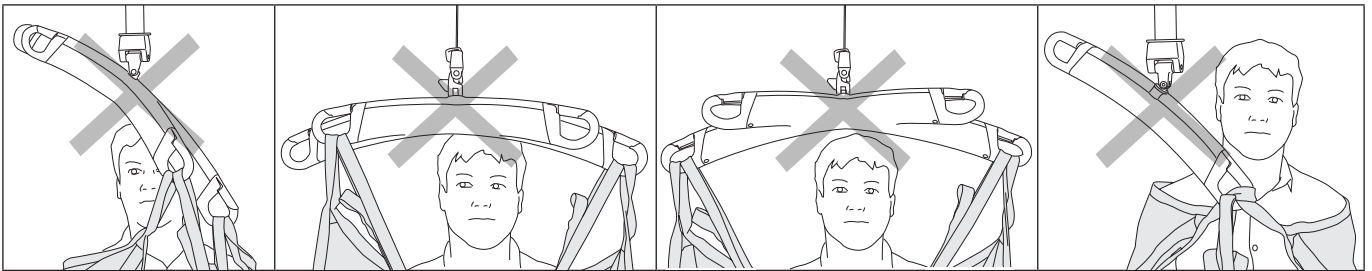


1. Upper strap loop
2. Product label, including:  
Manufacturing year and month (  )  
Serial number (  )
3. Label: Periodic Inspection
4. Label: Individual marking (Belongs to)
5. Center back strap with size marking:  
(S = Orange, M = Yellow, L = Blue, XL = Black)
6. Guide loop
7. Handle
8. Leg support
9. Leg support loop
10. Lower edge

## How to Attach a Sling to Different Sling Bars


Sling bar	Sling loops to sling bar hooks	Correct
 <p data-bbox="280 499 424 533">SlingGuard</p>		
 <p data-bbox="292 790 416 824">Universal</p>		
 <p data-bbox="304 1088 432 1122">Cross-bar</p>		

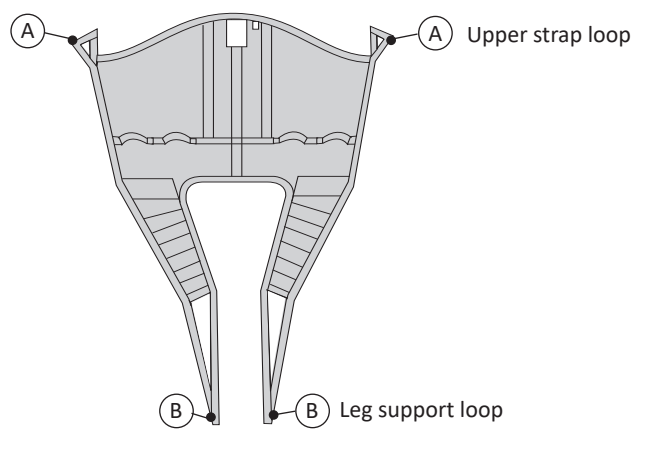
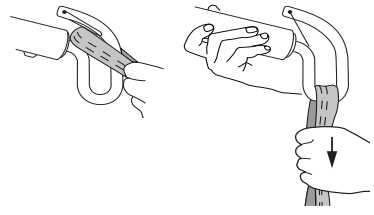
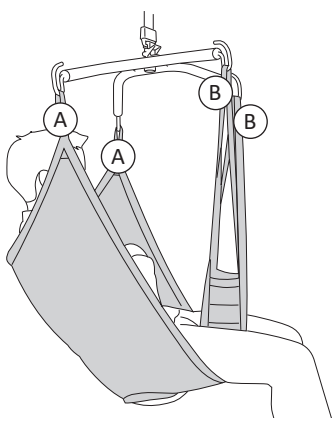
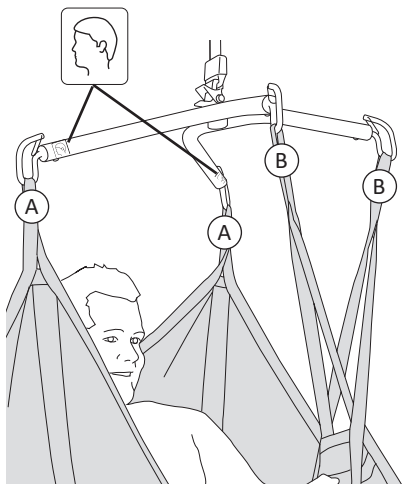
### Wrong!



The illustrations show a twin bar but this also applies to a Cross-bar.

# How to Attach an AmputeeSling to a Sling Bar with 4 hooks

 AmputeeSling in combination with a Cross-bar is intended for patients with both legs intact.

 <p>A Upper strap loop</p> <p>B Leg support loop</p>	<p>1.</p> 
<p>2. When using an AmputeeSling with a Cross-bar the leg supports should be placed crosswise in front of the body.</p> 	<p>3. Cross-bar 670</p>  <p>Illustrations 1, 2, and 3 show a Cross-bar 670, but this also applies to the Cross-bar 450, and SlingBar 600 with Side Bars.</p>

## How to Select Sling Size

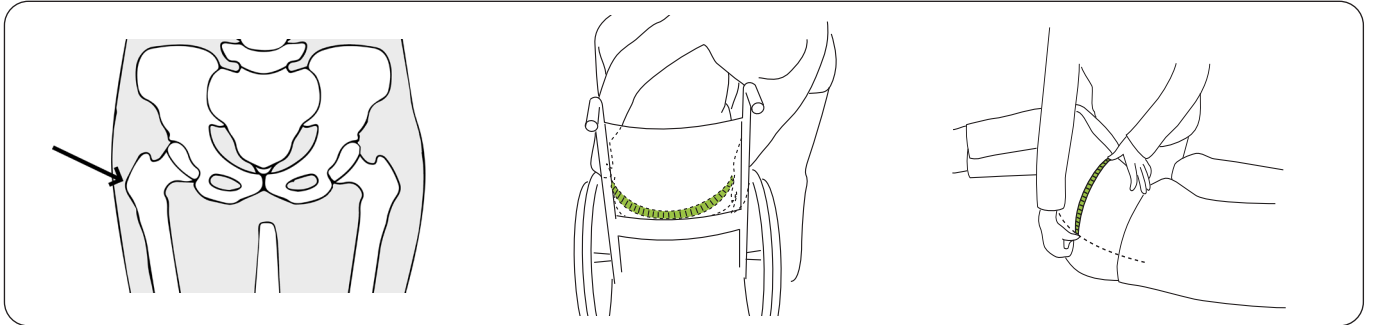
**⚠️ Only use a sling that is the correct size for the patient. Correct size must be assessed by a trained caregiver. Patient entrapment or asphyxiation could occur.**

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:

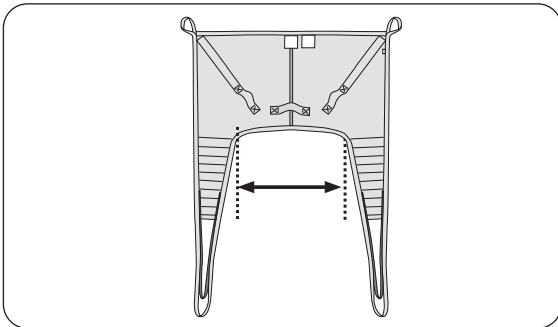


**Trochanter:** The trochanter is the part of the femur that can be felt at the patient's hip. Apply gentle pressure to find the trochanter for measurement.

**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.

### Measure the hip width of the sling as follows:



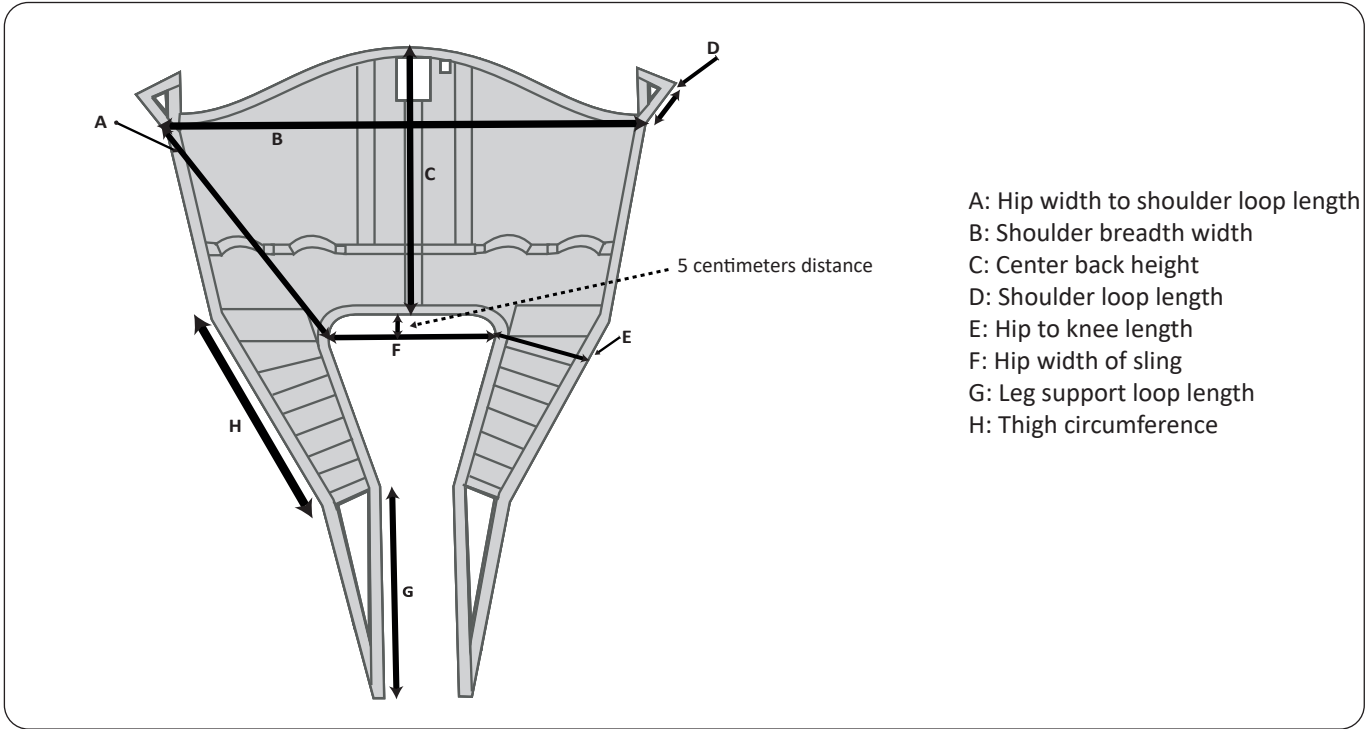
Measure the distance between the leg supports on the sling.

### Hip width measurement

Sling Size (model #)	Hip Width
S (3575114)	43 (17)
M (3575115)	46 (18)
L (3575116)	59 (23)
XL (3575117)	67 (26)
M (3575315)	46 (18)

All measurements are in cm (in.).

## Dimensions



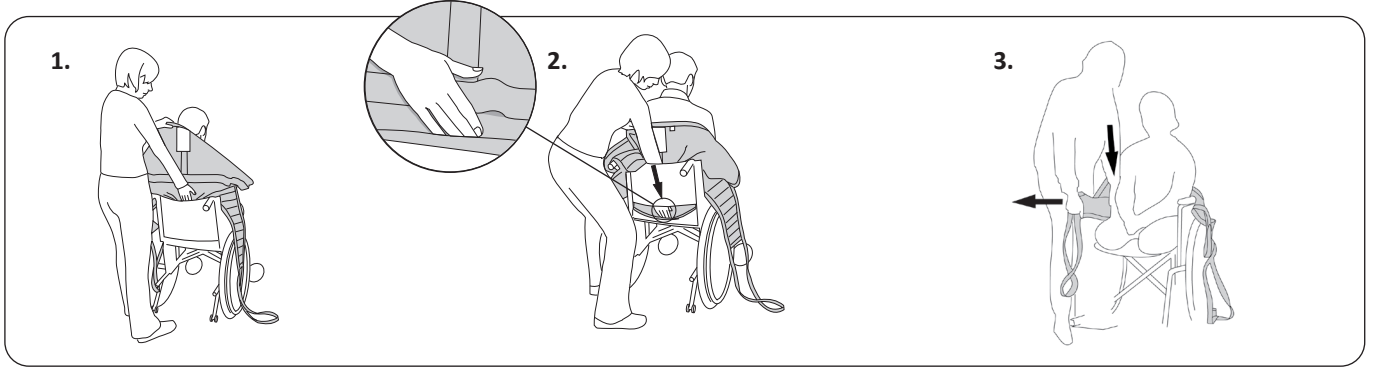
### Size Measurements in Centimeters

SIZE	A	B	C	D	E	F	G	H	Maximum load (kg)	Prod. No.#
S	69	95	84	12	20	43	65	69	200	3575114
M	78	109	90	12	20	46	69	66	200	3575115
L	78	109	94	12	20	59	70	73	200	3575116
XL	86	131	100	12	26	67	77	80	300	3575117
M	78	109	90	12	20	46	69	66	200	3575315

### Size Measurements in Inches

SIZE	A	B	C	D	E	F	G	H	Maximum load (lbs)	Prod. No.#
S	27	37	33	5	8	17	26	27	440	3575114
M	31	43	35	5	8	18	27	26	440	3575115
L	31	43	37	5	8	23	28	29	440	3575116
XL	34	52	39	5	10	26	30	32	660	3575117
M	31	43	35	5	8	18	27	26	440	3575315

## Lifting from a Seated Position

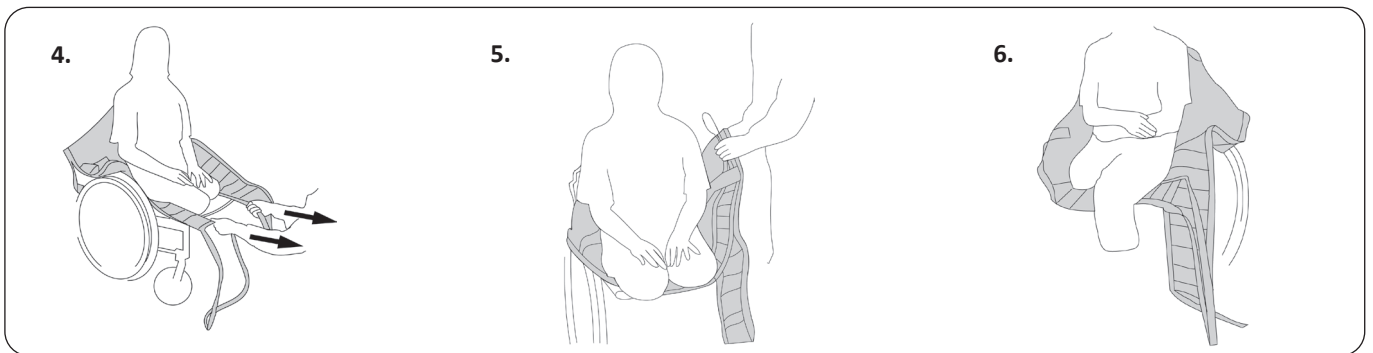


1. Place the sling behind the patient's back, with the label facing out.

Fold the lower edge over your fingertips to make it easier to guide the sling into position.

2. 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 is leaned forward slightly.

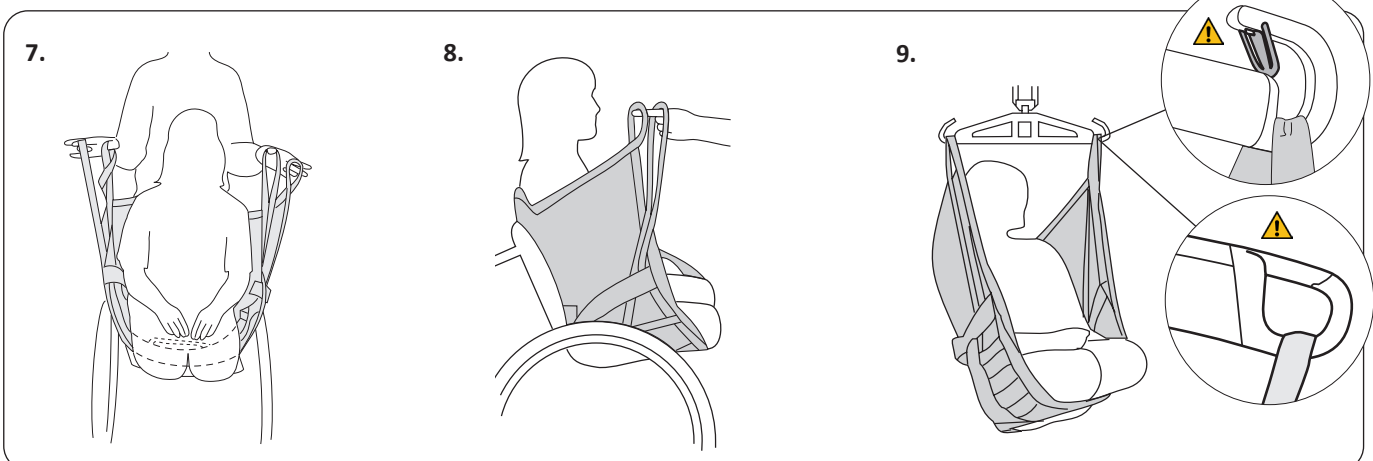
3. Pull the leg supports out alongside the outside of the thighs. **Helpful hint:** By placing your palm between the body and the sling, you can guide the leg support's lower edge strap down to the seat. At the same time, pull the leg support forward with your other hand to remove any slack in the fabric.



4. Ensure that the lower edge of the sling is taut against the buttocks by carefully pulling the leg support loops. **Tip:** Gentle pressure against the patient's hip can make it easier to pull the leg supports forward.

5. The leg support on the side of the patient's shortest limb should be put closest to the patient. If, for example, the right thigh has a higher amputation, the right leg support should be placed before the left in order to avoid pressure against the distal end.

6. Place one leg support under the patient's thigh or thighs, guiding it far in towards the buttocks. Pass the leg support loop through the guide loop on the inside of the sling.



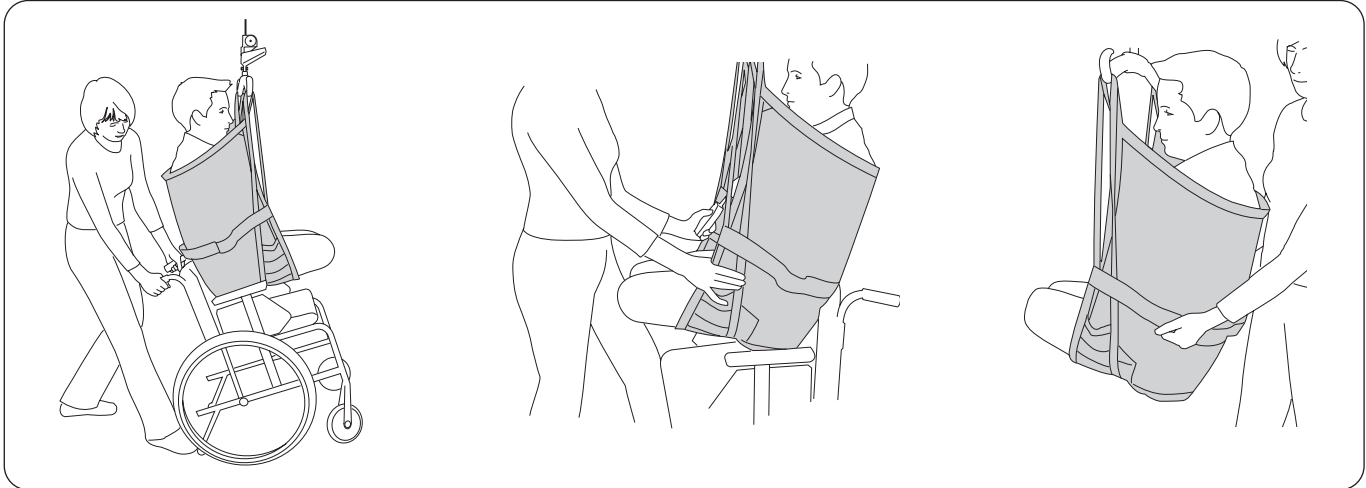
7. Similarly, place the other leg support under the first and pass the leg support loop through the guide loop on the outside of the sling.

8. **Important:** Make sure the leg support loop reaches as high as the upper strap loop. If not, adjust the position of the leg support.

9. Connect the upper strap and leg support loops to the sling bar. See "How to Attach a Sling to Different Sling Bars" on page 5 and "How to Attach an Amputee Sling to a Sling Bar with 4 hooks" on page 6 for instructions on how to attach the sling loops to different sling bars. Lift the patient. Check to ensure that the patient is sitting comfortably and securely before starting the transfer.

## 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.



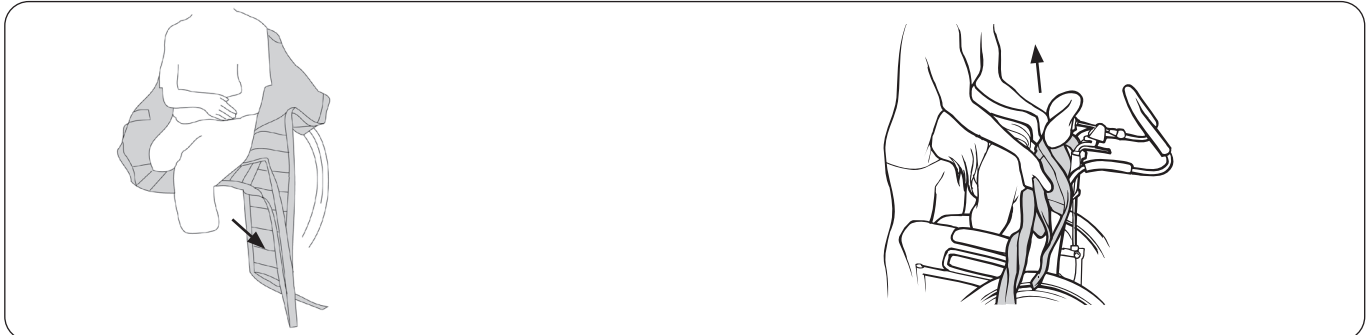
*When placing a patient in a wheelchair:* Lean the chair backwards during the lowering of the patient. Let the buttocks slide down the backrest during the last part. Control the angle of the wheelchair with your foot on the tipping support.

*When placing a patient in a chair or on a toilet (Alternative method for wheelchair):* Apply gentle pressure under the patient's thighs 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.**

## Removing the Sling in a Chair/Wheelchair/Toilet

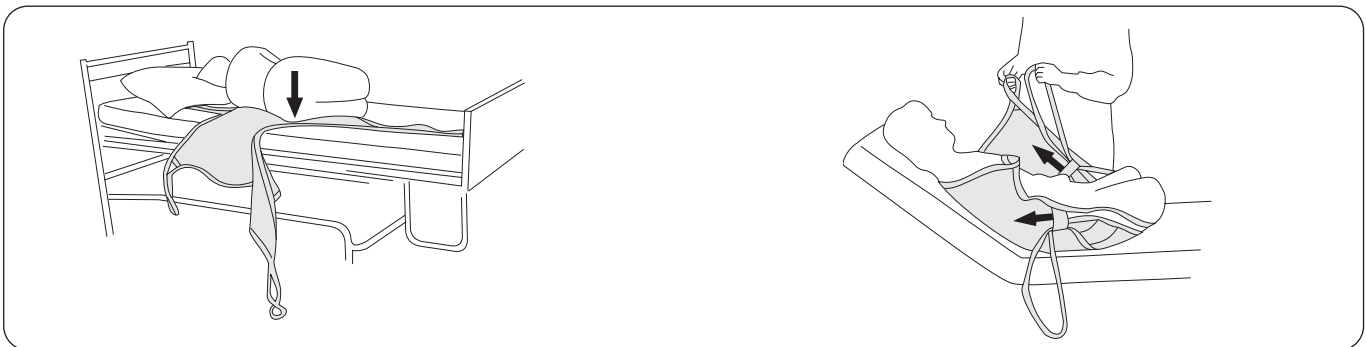
It is recommended to remove the sling after the transfer. Do not leave the sling on when you transfer a patient to a toilet.



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.

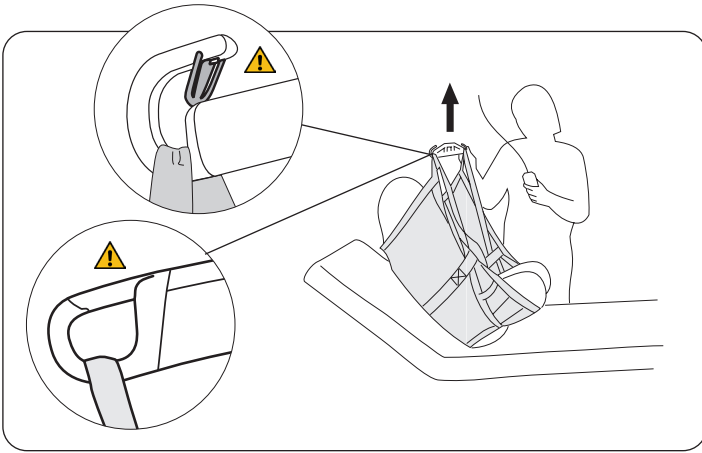
Remove the sling by carefully pulling it up.

## Lifting from a Horizontal Position



If the bed is equipped for height adjustment, etc., use these features to achieve the best function and ergonomics. Start by raising the bed to a height that is appropriate for the caregiver(s). Turn the patient toward 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. Fold the sling so that its center back strap corresponds to the patient's spine when the patient is turned back again gently. Carefully pull the sling out from the other side.

Place one leg support under both thighs, guiding it far in towards the buttocks. The leg support on the side of the patient's shortest limb should be put closest to the patient. If, for example, the right thigh has a higher amputation, the right leg support should be placed before the left in order to avoid pressure against the distal end. Pass the leg support loop through the guide loop on the inside of the sling. Do the same with the other leg support and pass its strap loop through the guide loop on the outside of the sling.



Raise the headrest. Check that all support loops are at an equal height when they are stretched prior to lifting. Connect the strap loops and leg support loops to the slingbar. See "How to Attach a Sling to Different Sling Bars" on page 5 and "How to Attach an AmputeeSling to a Sling Bar with 4 hooks" on page 6 for instructions on how to attach the sling loops to different sling bars. Lift the patient. Make sure the patient is sitting comfortably and securely before beginning the transfer.

## Lifting to a Horizontal Position

Raise the head of the bed before placing the patient in the bed, as this is more comfortable for the patient. Move the leg supports away and remove the sling by carefully pulling it up behind the back, or lower the backrest and turn the patient on one side. Fold the sling under the back, carefully turn the patient back on the other side and pull out the sling.

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



The sling may not have been pulled far enough down the back during application. The patient's seat is hanging out and the patient is leaning back too far.

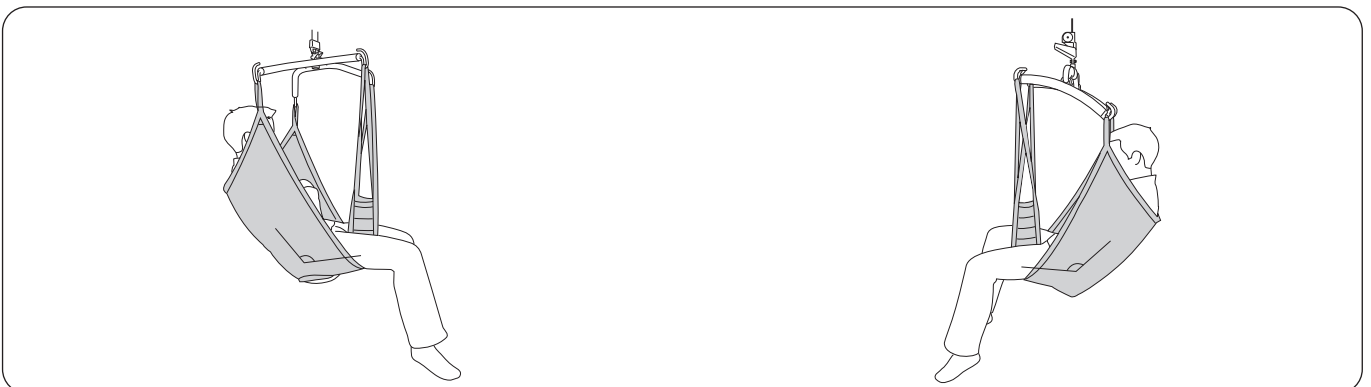
Lower the patient and adjust the position of the sling. It is essential that **all the strap loops reach the same height** (are equally long) before lifting begins. See "How to Attach a Sling to Different Sling Bars" on page 5 and "How to Attach an AmputeeSling to a Sling Bar with 4 hooks" on page 6.

## Lifting with Crossed Leg Supports

In some cases, it may be appropriate to lift a patient who is not a leg amputee using AmputeeSling with "crossed leg supports". Apart from the description below, the instructions given here are not intended for that procedure. Instead, we refer you to the instruction for **Liko Original Highback Sling Mod. 200/210**.

## Lifting with an Open Hip Angle Greater than 90°

For patients who need to be lifted with an open hip angle, but have both legs intact, it is recommended to use AmputeeSling size medium in combination with Sling Cross-bar 670. Alternatively, Universal Slingbar 450 or 600 can be used in combination with Side bars.



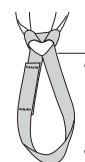
AmputeeSling, medium with Sling Cross-bar 450 or 670.

AmputeeSling medium with Side bars 450.

## 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 AmputeeSling Mod. 75

Product	Prod. No.	Size		Patient's Weight <sup>1</sup>	Max. Load <sup>2</sup>
Liko AmputeeSling HB, polyester	3575114	S	Small	< 40 kg (< 88 lbs)	200 kg (440 lbs)
Liko AmputeeSling HB, polyester	3575115	M	Medium	40-60 kg (88-132 lbs)	200 kg (440 lbs)
Liko AmputeeSling HB, polyester	3575116	L	Large	60-80 kg (132-176 lbs)	200 kg (440 lbs)
Liko AmputeeSling HB, polyester	3575117	XL	Extra Large	> 70 kg (> 154 lbs)	300 kg (660 lbs)
Liko AmputeeSling HB, net polyester	3575315	M	Medium	40-60 kg (88-132lbs)	200 kg (440 lbs)

<sup>1</sup> The indicated patient weight is a guideline only – there may be deviations.

<sup>2</sup> To maintain maximum load, lift/accessories intended for the same load or more are required.

**A sling that is too small may provide insufficient support and may be difficult to apply.**

**If the sling is too large, the patient may risk slipping out of it.**

### Recommended Combinations

Recommended combinations of AmputeeSlings and LIKO slingbars:	Universal SlingBar 450	Standard 450	SlingGuard 450	Universal SlingBar 600	Univ. 600 + Sidebars	Sling Cross-Bar 450	Sling Cross-Bar	Sling Cross-Bar 670
AmputeeSling, S	✓	✓	✓	✓	✓ <sup>1</sup>	✓ <sup>1</sup>	✓ <sup>1</sup>	✓ <sup>1</sup>
AmputeeSling, M	✓	✓	✓	✓	✓ <sup>1</sup>	✓ <sup>1</sup>	✓ <sup>1</sup>	✓ <sup>1</sup>
AmputeeSling, L	✓	✓	✓	✓	✓ <sup>1</sup>	✓ <sup>1</sup>	✓ <sup>1</sup>	✓ <sup>1</sup>
AmputeeSling, XL	✓	✓	✓	✓	✓ <sup>1</sup>	✓ <sup>1</sup>	✓ <sup>1</sup>	✓ <sup>1</sup>

<sup>1</sup> The sling's leg supports are placed crosswise in front of the body, see "Lifting with an Open Hip Angle Greater than 90°" on page 11.

<sup>1</sup> ⚠ **Intended for patients with both legs intact.**

**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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