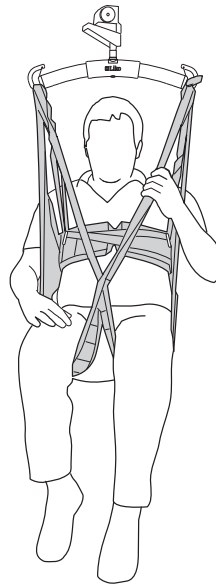


Instructions for Use



Mod. 45

Product Description

Intended Use:

Liko HygieneSling (Mod 45) has been designed to facilitate dressing and undressing in connection with lifts to and from the lavatory. It is intended for use in following environments: Health care, Intensive care, Emergency ward, Rehabilitation, Habilitation and Home health care environment.

This instruction for use is valid for **Liko HygieneSling with SafetyBelt Mod 45** but in the following text we will only use the name **Liko HygieneSling**.

Caregivers often experience such lifting operations as heavy and difficult. With HygieneSling, dressing and undressing can be done during the actual lifting operation, thanks to the large opening around the seat of the sling.

Experience has shown that HygieneSling also works for patients wearing long trousers or skirts and tights (pantyhose).

Liko HygieneSling is easy to apply, even if space around the wheelchair is very limited.

Liko HygieneSling is often the most appropriate alternative for patients with a certain degree of stiffness.

HygieneSling is made of green polyester and the leg supports are reinforced and padded with a polyester/cotton fabric.

The patient should have good torso and head stability to be able to sit comfortably and securely in HygieneSling. For patients with poor muscle tone, it is recommended a smaller size of HygieneSling or HygieneVest, Mod. 55.

For patients who tend to sink down in the sling, the safety belt distributes pressure and provides extra support during the lift.

The HygieneSling can be used with all **Liko** overhead and mobile lifts. You can choose between **LikoGuard** overhead lift, **Likorall** overhead lift, and **Multirall** overhead lift or **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 this 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.

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

 **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!**

 **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.**

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

 **The HygieneSling has not been tested for use in the Magnetic Resonance Imaging (MRI) setting. Transfer the patient to a compatible surface to do an MRI, and remove the sling from the MRI room.**

 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























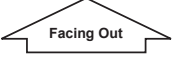


Liko is quality certified according to ISO 9001 and its equivalent for the medical device industry ISO 13485. Liko is also certified according to environmental standard ISO 14001.

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 | | |
|  | 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 |  | Tumble drying |
|  | Do not iron |  | Do not tumble dry |
|  | Do not bleach |  | Line drying in shade |
|  | Washing Symbol is always in combination with recommended temperature in °C and °F. | | |
|  | Latex Free | | |
|  | Periodic inspection | | |
|  | Single patient use |  | Patient name |
|  | 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:

Hygiene sling is made of 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 lifetime of 5 years during normal use. Expected life time varies depending on the fabric, use frequency, washing procedure, and weight carried. Hillrom recommends the product be used only during its expected life time.

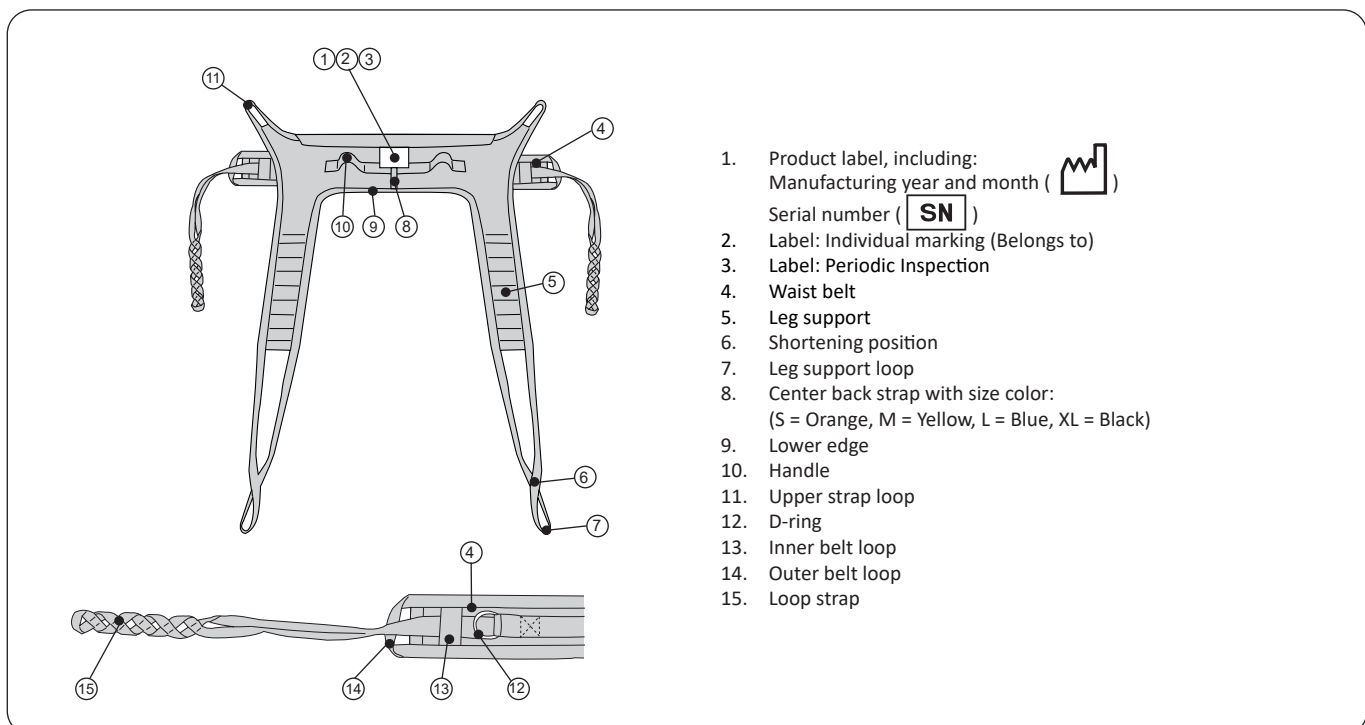
Recycling Instructions

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

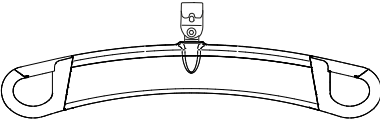
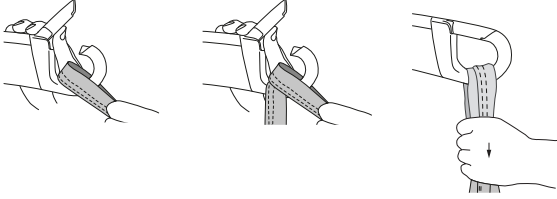
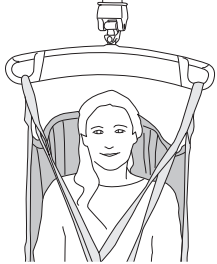
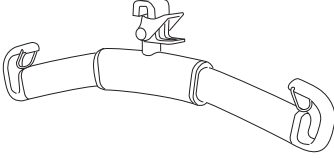
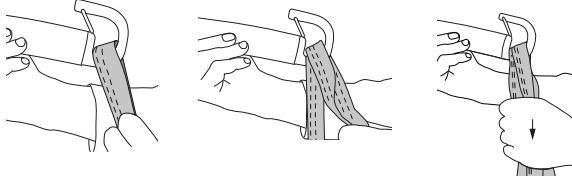

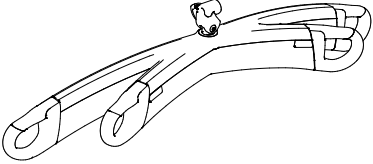
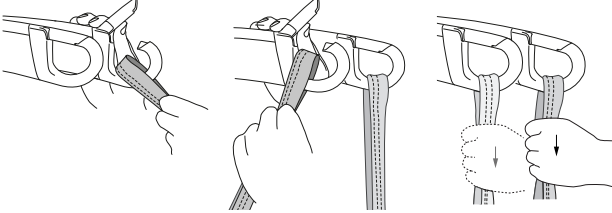
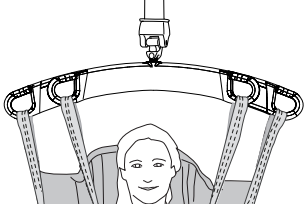
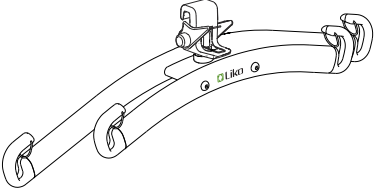
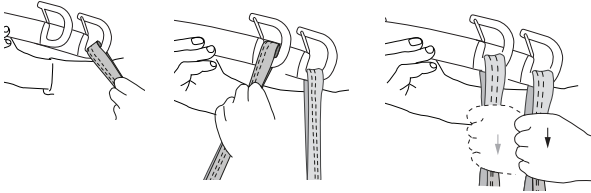
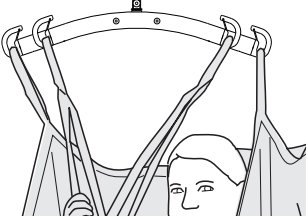
Hillrom evaluates and provides guidance to its users on the safe handling and disposal of its devices to aid in the prevention of injury, including, but not limited to: cuts, punctures of the skin, abrasions, and any required cleaning and disinfection of the medical device after use and prior to its 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

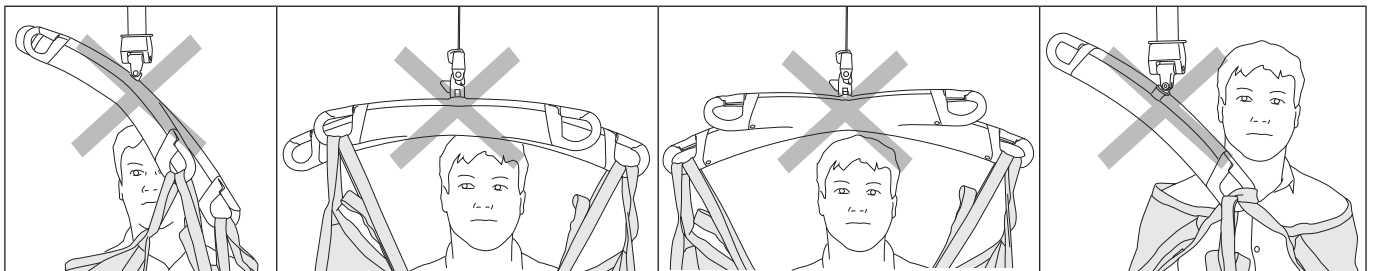
Definitions



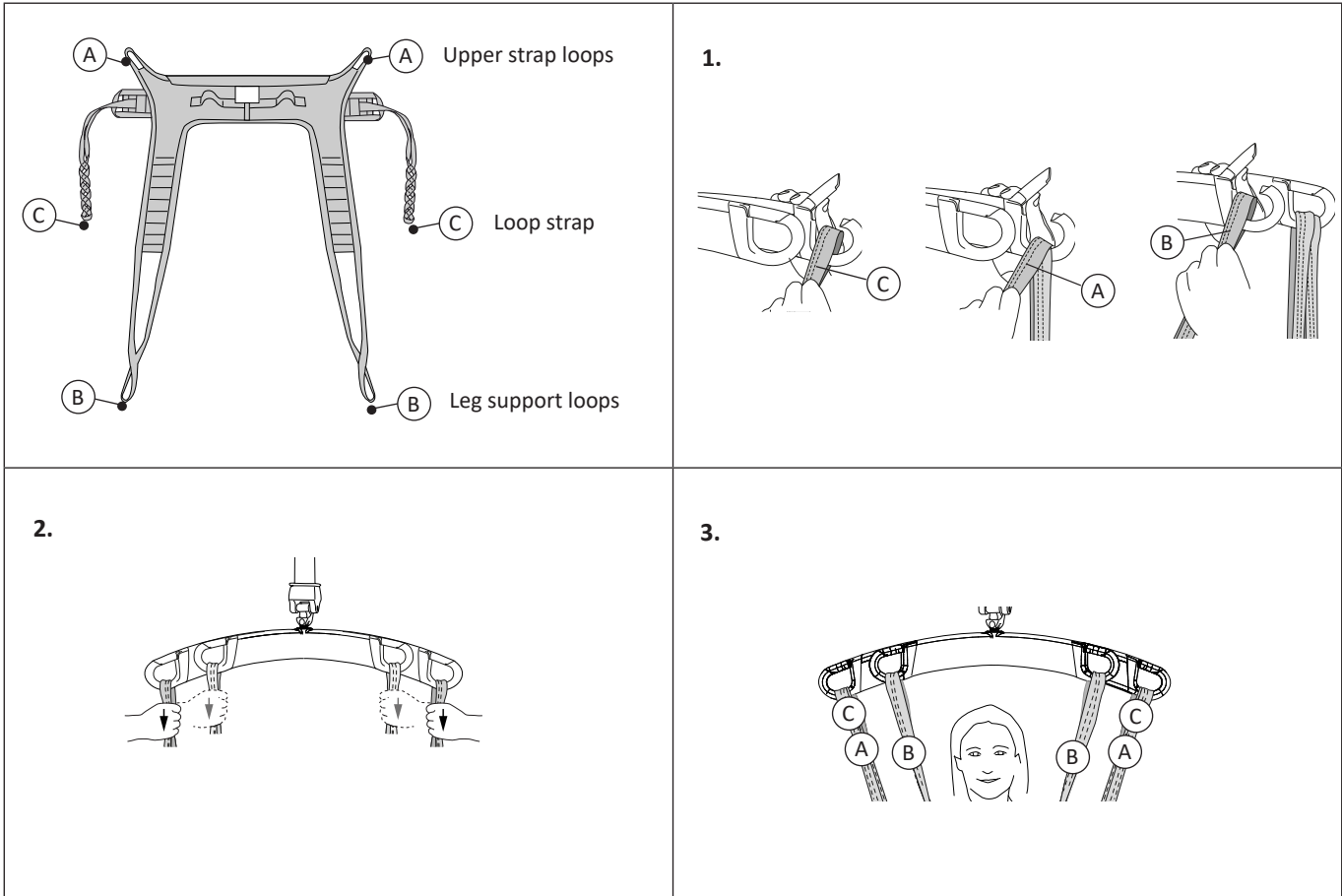
How to Attach a Sling to Different Sling Bars

| Sling bar | Sling loops to sling bar hooks | Correct |
|---|--|---|
|  <p data-bbox="280 501 422 533">SlingGuard</p> |  |  |
|  <p data-bbox="292 792 414 824">Universal</p> |  |  |
|  <p data-bbox="245 1077 459 1108">SlingGuard Twin</p> |  |  |
|  <p data-bbox="256 1375 446 1406">Universal Twin</p> |  |  |

Wrong!



How to Attach a HygieneSling to a Sling Bar with 4 Hooks (Twin Bars)



How to Select Sling Size

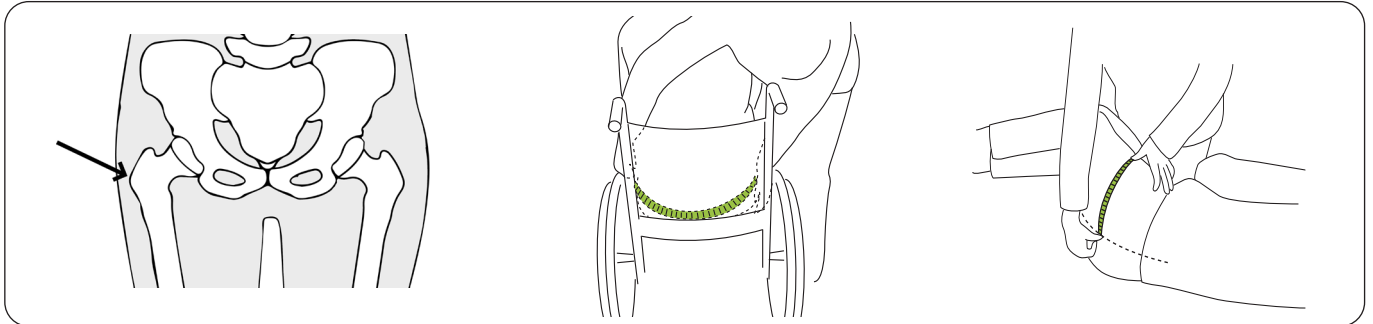
⚠️ Only use a sling that is the correct size for the patient. Correct size must be assessed by a trained caregiver. Patient entrapment or asphyxiation could occur.

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:

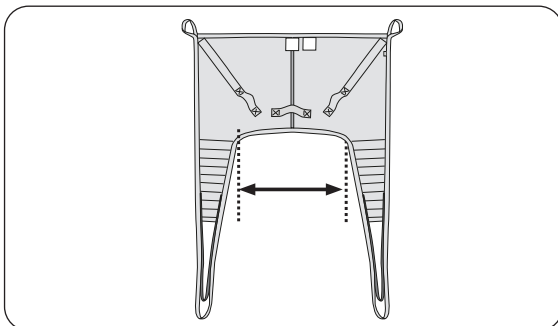


Trochanter: The trochanter is the part of the femur that can be felt at the patient's hip. Apply gentle pressure to find the trochanter for measurement.

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.

Refer to "Dimensions" on page 8 for the hip width of the sling as follows:



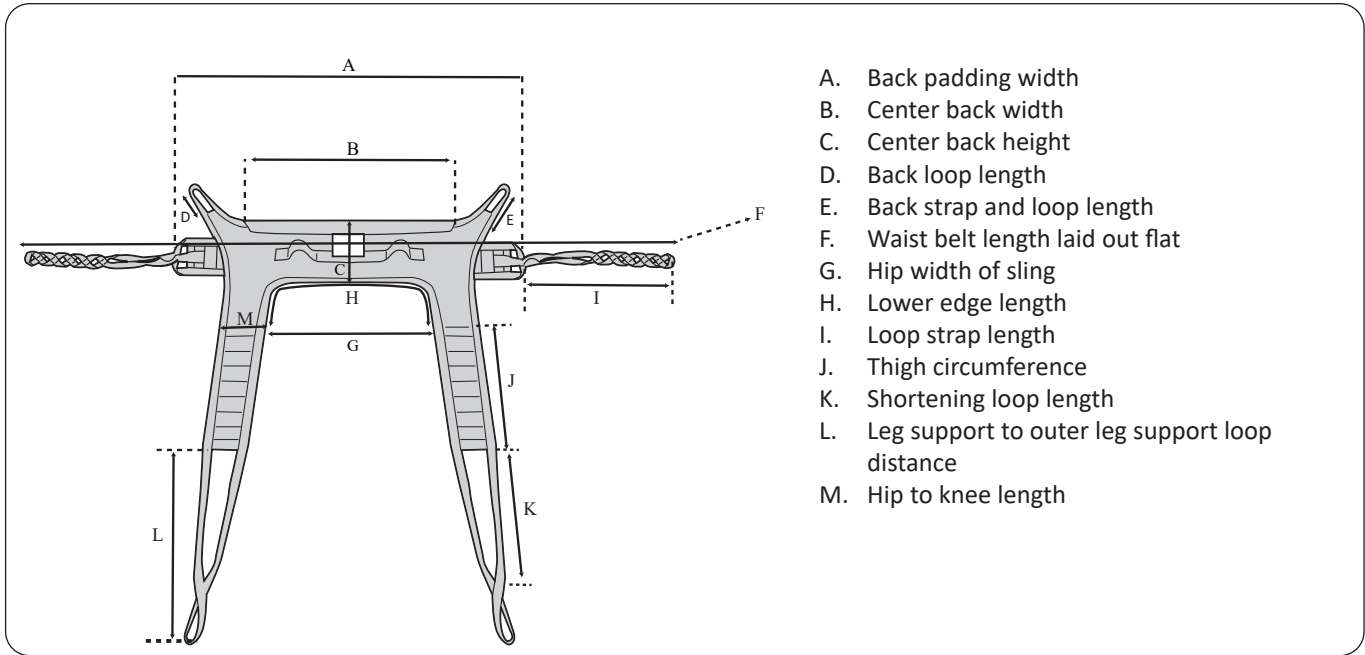
Measure the distance between the leg supports on the sling.

Hip width measurement

| Sling Size | Hip Width |
|------------|-----------|
| S | 54 (21) |
| M | 68 (27) |
| L | 70 (28) |
| XL | 81 (32) |

All measurements are in cm (in.).

Dimensions



- A. Back padding width
- B. Center back width
- C. Center back height
- D. Back loop length
- E. Back strap and loop length
- F. Waist belt length laid out flat
- G. Hip width of sling
- H. Lower edge length
- I. Loop strap length
- J. Thigh circumference
- K. Shortening loop length
- L. Leg support to outer leg support loop distance
- M. Hip to knee length

Size Measurements in Centimeters

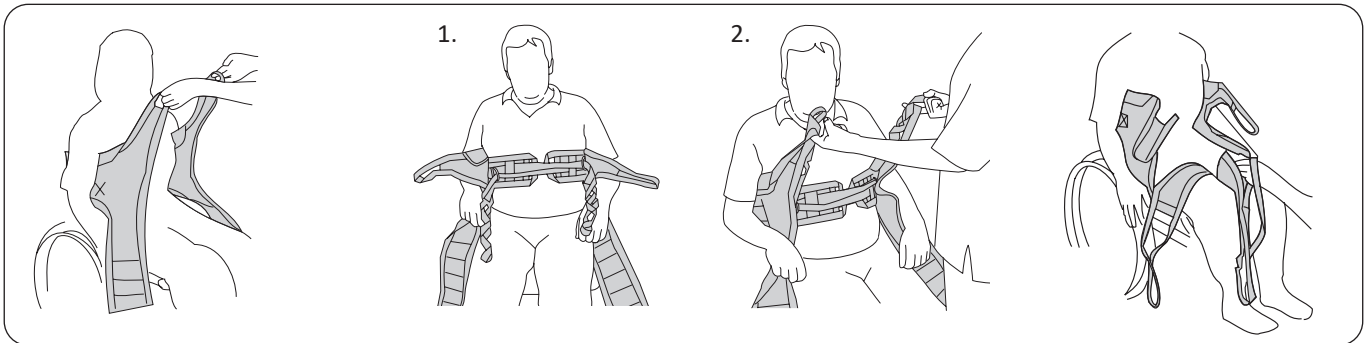
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | Maximum load (kg) | Prod. No. |
|------|-----|-----|----|----|----|-----|----|-----|----|----|----|----|----|-------------------|-----------|
| S | 97 | 69 | 21 | 27 | 38 | 223 | 54 | 81 | 63 | 46 | 45 | 60 | 15 | 200 | 3545134 |
| M | 111 | 79 | 24 | 21 | 32 | 234 | 68 | 100 | 61 | 46 | 45 | 60 | 15 | 200 | 3545135 |
| L | 132 | 91 | 28 | 21 | 31 | 264 | 70 | 88 | 67 | 60 | 48 | 64 | 15 | 200 | 3545136 |
| XL | 152 | 104 | 28 | 15 | 23 | 265 | 81 | 102 | 57 | 60 | 49 | 63 | 15 | 300 | 3545137 |

Size Measurements in Inches

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | Maximum load (lbs) | Prod. No. |
|------|----|----|----|----|----|-----|----|----|----|----|----|----|---|--------------------|-----------|
| S | 38 | 27 | 8 | 10 | 15 | 88 | 21 | 32 | 25 | 18 | 18 | 24 | 6 | 440 | 3545134 |
| M | 44 | 31 | 9 | 8 | 13 | 92 | 27 | 39 | 24 | 18 | 18 | 24 | 6 | 440 | 3545135 |
| L | 52 | 36 | 11 | 8 | 12 | 104 | 28 | 35 | 26 | 24 | 19 | 25 | 6 | 440 | 3545136 |
| XL | 60 | 41 | 11 | 6 | 9 | 104 | 32 | 40 | 22 | 24 | 19 | 25 | 6 | 660 | 3545137 |

Lifting from Wheelchair to Toilet

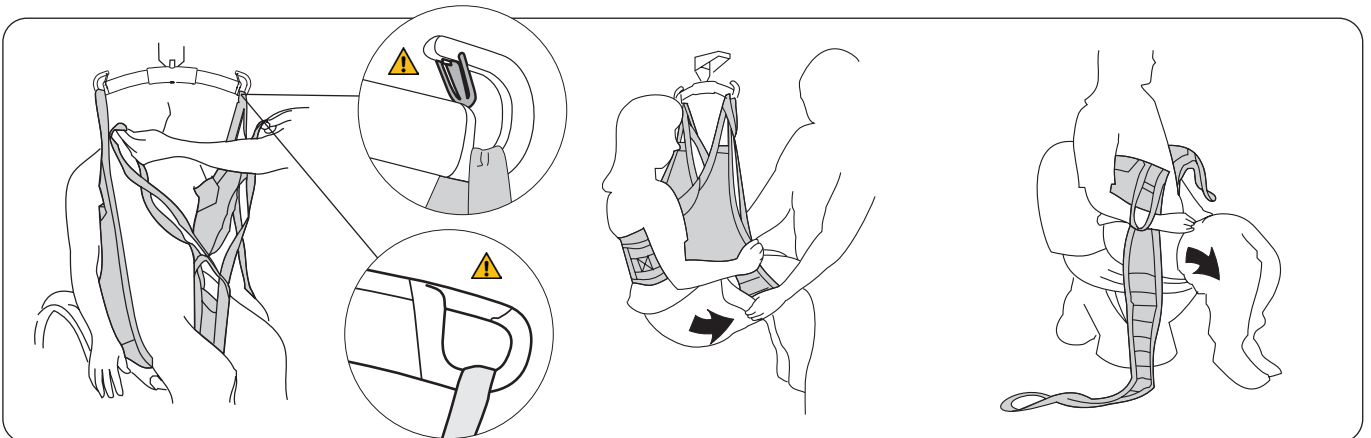
Study the description and instructions for safety belt and its adjustment first. Prepare to undress the patient by first undoing buttons and opening zippers.



Place HygieneSling behind the patient, with the product label facing out about halfway down the back. The soft-padded upper edge should be just under the armpits.

1. Draw right loop strap through left D-ring. Draw left loop strap through right D-ring.
2. Test the appropriate loops by pulling HygieneSling's upper strap loop and one of the loop strap's loops at the same time, as in the illustration above.

Place the leg supports under the patient's thighs. Cross the leg supports by drawing one leg support loop through the other.



Move the sling bar forward and connect the loop straps first. Then connect the upper strap loops, and finally, the leg support loops. See page 5 and page 6 for instructions on how to attach the sling loops to different sling bars.

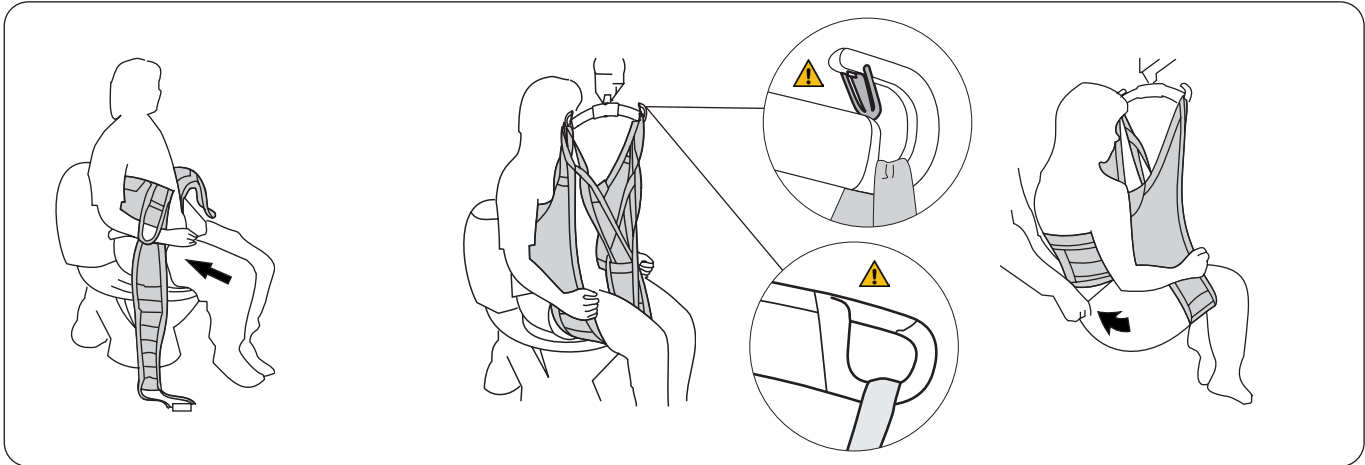
Lift the patient. Pull the patient's pants down as far as possible.

Lower to the toilet. Move the leg supports aside and lower the patient's pants even further to enable better access.

Return from Toilet to Wheelchair

Below, we describe two ways of dressing the patient after the visit to the toilet is concluded. The most appropriate alternative depends on the patient's physical condition and clothing.

Alternative 1: Leg supports outside trousers. This is appropriate with non-stretch trousers.

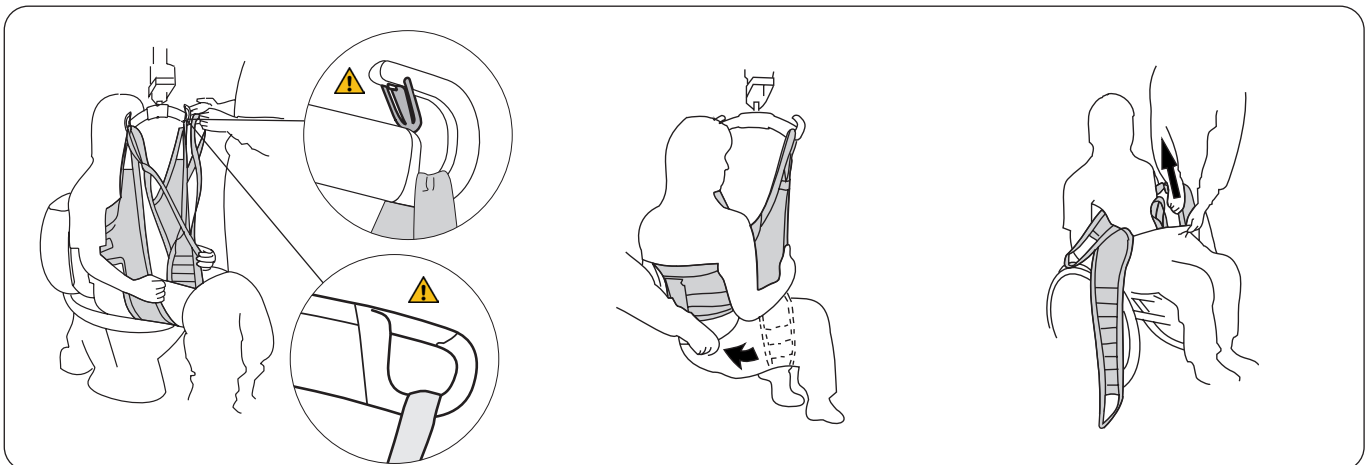


Pull the trousers up as far as possible towards the crotch.

Place the leg supports under the legs, but outside the trousers. Connect all the loops. See page 5 and page 6 for instructions on how to attach the sling loops to different sling bars. Lift the patient.

If an incontinence pad is to be used, fit it in place before the trousers are pulled all the way up. Make the transfer and lower to the chair.

Alternative 2: Leg supports first – trousers outside. This method is suitable with stretch-fabric trousers.



Apply HygieneSling according to the instructions on page 9. Connect all of the loops. See page 5 and page 6 for instructions on how to attach the sling loops to different sling bars. Lift the patient. If an incontinence pad is to be used, fit it in place inside the crossed leg supports.

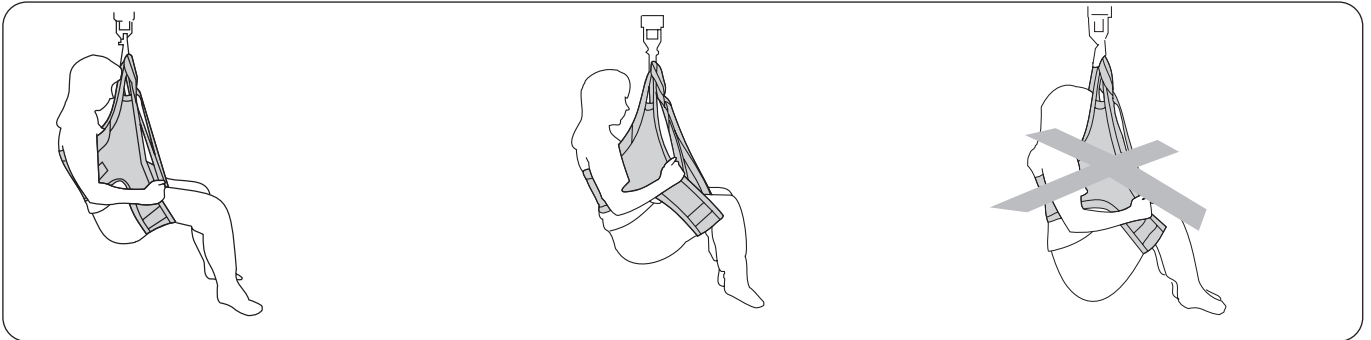
Pull the trousers right up over the seat and sling while the patient is still sitting in HygieneSling. Lower to the chair.

Disconnect the sling from the sling bar. Carefully work the leg supports out of the trousers and remove HygieneSling.

Advice for Trial Fitting

⚠ The sitting position depends on where the leg supports are placed under the patient's legs. For someone with poor muscle tone, they should be placed high up toward the groin so that the patient does not sit too low in the sling.

Patients with poor muscle tone usually sit better in a smaller HygieneSling size. For users with high muscle tone, the opposite applies. They sit better in a larger HygieneSling, provided that the back support is placed high enough and the leg supports are close enough to the bends in the knees.



In most cases, and especially in the case of patients with weak musculature, the leg supports should be placed as close as possible to the crotch.

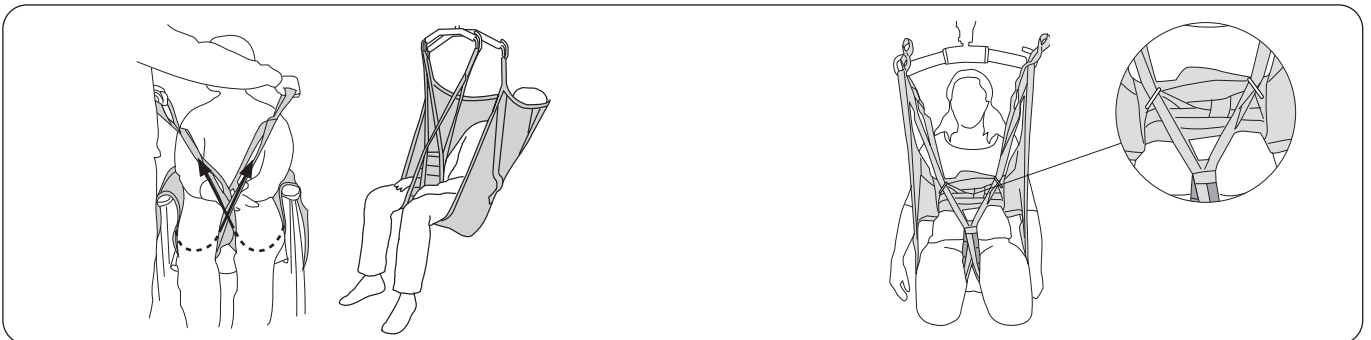
On a patient with good muscle tone, the leg supports can be placed closer to the knees. This makes dressing and undressing easier and helps to ease spasticity.

A sunken and uncomfortable sitting posture is either a result of the leg supports being placed too close to the knees and/or the sling being too large. Try a smaller size.

Different Ways of Connecting Leg Supports

Before a connection alternative is chosen, an individual assessment should be performed to anticipate possible risks.

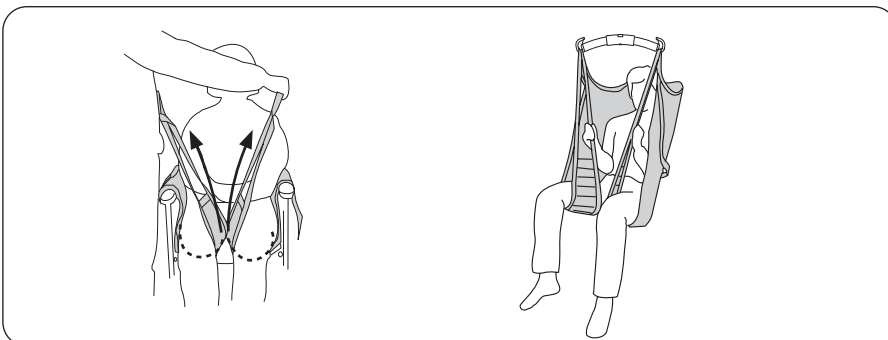
The following are general advice since the same principles are valid for several sling models.



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.

For some patients, e.g. amputees, it may be helpful to pull the leg support loops through the metal D-rings, before attaching them to the sling bar. This prevents the leg supports from sliding forward on the legs.



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.



Shortening Position

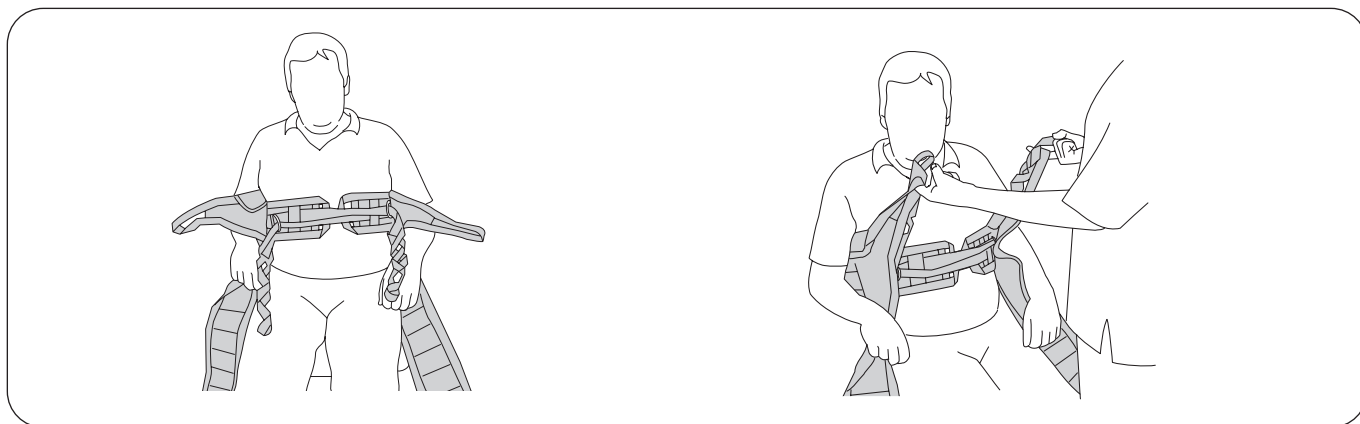
In certain cases, it can be advantageous to shorten the leg support loop in order for the patient to sit well in the sling. The shortening position can be used temporarily in order to test for the right length, but extended use may damage the stitching. If you want to shorten the leg support loop for long-term use, however, it is recommended 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.

Description of SafetyBelt

The safety belt provides extra support for patients with poor muscle tone. The belt supports the upper body of the patient who tends to sink down in the sling during lifting.

However, the safety belt must not be so tightly fastened that it lifts the patient's body initially; i.e., the safety belt must not lift before HygieneSling's upper strap loops begin to lift. If this occurs, it may cause the patient to lean back inappropriately.

Adjustment of Loop Straps



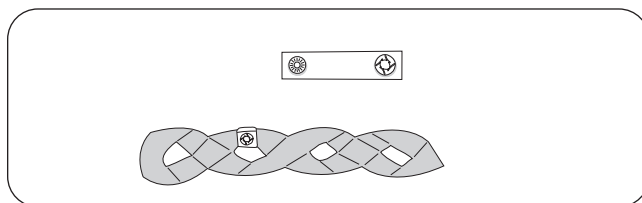
The loop straps must be crossed and pulled through the D-rings before the selected strap loop is hung on the sling bar.

The degree of tension applied by the loop straps around the upper body depends on which of these loops is hooked to the sling bar. By test lifting with different loops at the same time as HygieneSling's upper strap loops are used, you can determine which position gives the right tension. An inner loop gives more tension, while an outer loop reduces the tension.

When correctly adjusted, the loop straps provide less tension than the HygieneSling's upper strap loops.

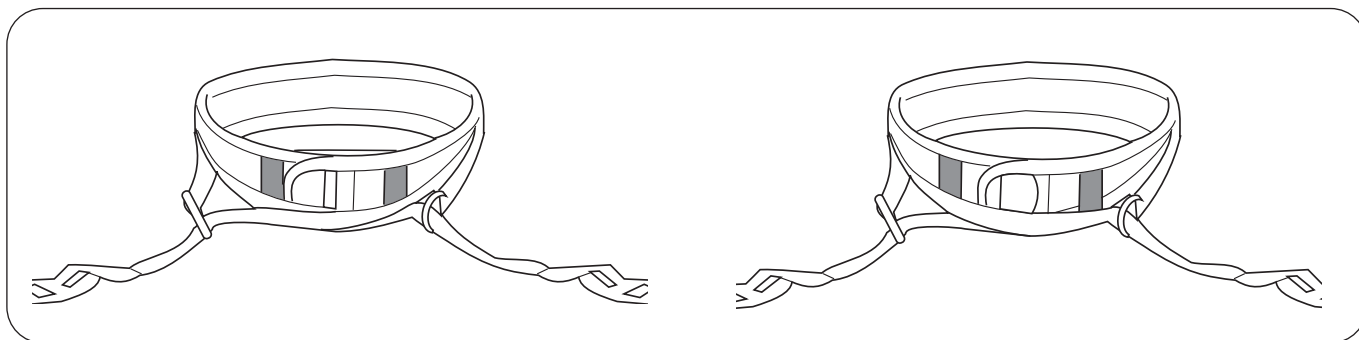
Loop Clips

This practical component is used to mark the loops that have been tried out for a certain person. It makes it easier for the caregivers to choose the right loop to attach to the sling bar.



Adapt the Length of the Strap to the Patient's Girth

If necessary, for optimal function, the length of the waist belt can be adapted to the girth of the patient.



Alt. A: For very thin patients

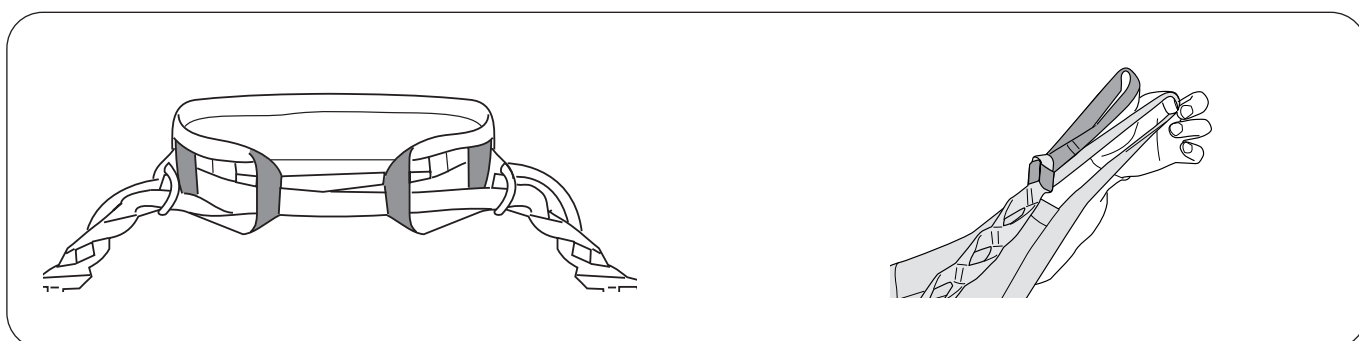
Pull the loop straps out of the inner belt loops before drawing them through the metal rings.

This enables maximum tension.

Alt. B: Intermediate size

Pull only one loop strap out of the inner belt loop.

Cross the loop straps and draw them through the metal rings.



Alt. C: For larger patients

Pass the loop straps through both the inner and outer belt loops before drawing them through the metal rings.

Helpful hint: To accommodate an even wider girth, the loop straps can be lengthened with **Liko Extension Loops**.

Alternative Slings for Lifting to and from the Toilet

In our wide selection of slings, there are many models that can be used for toilet-related lifting situations. Please refer to the list below for possible alternative slings and visit www.hillrom.com for more information.

Liko HygieneSling with Belt, Mod. 41

Liko HygieneVest High Back, Mod. 55

Liko MasterVest, Mod. 60

Liko MasterVest front closure, Mod. 64

Recommended Lifting Accessories

Extension Loop

Extension Loop, green, 12 cm (5 in)

Extension Loop, green, 22 cm (9 in)

Extension Loop, grey, 12 cm (5 in)

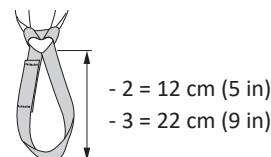
Extension Loop, grey, 22 cm (9 in)

Prod. No. 3691102

Prod. No. 3691103

Prod. No. 3691302

Prod. No. 3691303



Optional Components

Loop Clips

Loop Clips, red, 4 pcs

Loop Clips, orange, 4 pcs

Loop Clips, yellow, 4 pcs

Loop Clips, blue, 4 pcs

Loop Clips, black, 4 pcs

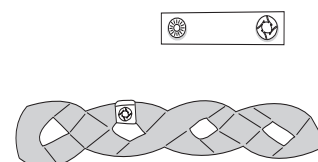
Prod. No. 3666033

Prod. No. 3666034

Prod. No. 3666035

Prod. No. 3666036

Prod. No. 3666037



Overview LIKO HygieneSling Mod. 45

| Product | Prod. No. | Size | Patient weight ¹ | Max. Load ² |
|-------------------|-----------|------|-----------------------------|------------------------|
| Liko HygieneSling | 3545134 | S | 25-50 kg (55-110 lbs.) | 200 kg (440 lbs) |
| Liko HygieneSling | 3545135 | M | 40-90 kg (88-198 lbs.) | 200 kg (440 lbs) |
| Liko HygieneSling | 3545136 | L | 80-120 kg (176-264 lbs.) | 200 kg (440 lbs) |
| Liko HygieneSling | 3545137 | XL | >100kg (>220lbs.) | 300 kg (660 lbs) |

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

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

Recommended Combinations

| Sling bar Compatibility Chart: | Mini 220 | Universal SlingBar 350 | Universal SlingBar 450 | Standard 450 | SlingGuard 450 | Universal SlingBar 600 | SlingGuard 670 Twin | Universal TwinBar 670 | Sabina II 350 Slingbar* |
|--------------------------------|----------|------------------------|------------------------|--------------|----------------|------------------------|---------------------|-----------------------|-------------------------|
| Liko HygieneSling, S | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ |
| Liko HygieneSling, M | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Liko HygieneSling, L | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Liko HygieneSling, XL | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |


* The HygieneSling can be used for passive lifting. Refer to the Sabina II Instructions for Use.

Explanation: ✓ = Recommended

Combinations with Liko Hygiene Sling and Cross-bar, Cross-bar 450/670 or SideBars is not appropriate.

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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