Liko™ ComfortSling Plus, Mod. 300, 310, 350, 360

Instruction Guide

Product Description

Liko ComfortSling Plus provides a comfortable sitting position and safe patient transfer between, e.g. the bed and wheelchair. It adapts to suit the patient and no individual adjustments are required. A properly fitted and carefully applied ComfortSling Plus provides the patient with a good sense of security and a high degree of comfort, along with good back and head support (Mod. 350 and 360).

ComfortSling Plus is gentle to apply since the patient is in a supine position during the application and the sling remains in the chair after the transfer. When the patient later is ready to be moved back to bed, the sling is already in place. The strap loops can then easily be connected to the sling bar and the lift can do the work.

ComfortSling Plus is suitable for patients who are especially sensitive due to muscle or joint pain.

ComfortSling Plus is often suitable even for amputees because it provides support under the entire sitting surface.

For lifting to and from the toilet, we recommend Liko ComfortSling Plus with Hygiene Opening (Mod. 310 and 360).

ComfortSling Plus High (Mod. 350 and 360) are equipped with built-in head support and provide a comfortable reclined sitting position. It is highly suitable for patients who have poor torso and head stability.

ComfortSling Plus comes in a variety of fabrics and designs to suit different usage requirements.

If the sling is to remain under the patient after the transfer to a seated position, we recommend the use of a sling in airy net polyester.

For the bath and shower, a plastic coated net design is available, which is water permeable and can easily be wiped dry. This material dries quickly and does not chill the patient in the same way as a damp, absorbent fabric.

ComfortSling Plus is also available with a soft padded seat (synthetic sheepskin) for patients who are very sensitive to pressure.

ComfortSling Plus is available in a number of different sizes. See the overview on the last page.

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

⚠️ Is a warning triangle used for situations that demand extra care and attention.

Read the instruction guide for both the sling and the lift used. Instruction guides are available for downloading, free of charge, at www.liko.com.
Safety Instructions

⚠️ Before lifting, remember the following:

- Policy should be established to decide on a case by case basis whether one or more caregivers are needed.
- Ensure that the correct sling has been chosen, with respect to model, size, material and design to safely meet the needs of the patient.
- For safety and hygiene reasons, use individual slings.
- Before lifting, plan the lifting operation so that it can be done as safely and smoothly as possible.
- Before lifting, check that the lifting accessory hangs vertically and can move freely.
- Although Liko's slingbars are equipped with latches, special caution must be exercised: Before the patient is lifted from the underlying surface, but after the straps have been fully extended, make sure the straps are properly 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.
- Never leave a patient unattended during a lifting situation.
- 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.
- When the sling is not being used, do not place in direct sun light.

Medical technical class I product

Liko ComfortSling Plus complies with the harmonized standard ISO10535:2006.

The management system for both manufacturing and development of the product is certified in accordance with ISO9001 and its equivalent for the medical device industry, ISO13485. The management system is also certified in accordance with the environmental standard ISO14001.

PATENT [www.hill-rom.com/patents]
May be covered by one or more patents. See above Internet address.
The Hill-Rom companies are the proprietors of European, US, and other patents and pending patent applications.

Design and Quality by Liko in Sweden

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

⚠️ IMPORTANT!
Lifting and transferring a patient always involves a certain level of risk. Read the instruction guide for both the patient lift and lifting accessories before use. It is important to completely understand the contents of the instruction guide. The equipment should only be used by trained personnel. 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.
Care and Maintenance
Inspect the sling before each use. Inspect the following points with regard to wear and damage:
• Fabric
• Straps
• Seams
• Suspension loops
⚠️ Do not use damaged lifting accessories.
If anything is unclear, please contact the manufacturer or supplier.

Washing instructions: Please see the sling’s product label and the attached appendix “Care and Maintenance of Liko Slings”.

Expected Life Time
The product has an expected life time of 1-3 years during normal use. Life time varies depending on material, use frequency, washing procedure, and weight carried.

Periodic Inspection
The product must be inspected at least once every 6 months. More frequent inspections might be required if the products are used or washed more often than normal. See Liko’s protocol Periodic Inspection for the respective product.

Definitions

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<tbody>
<tr>
<td>Mod. 300, 310</td>
<td>Mod. 350, 360</td>
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<td>Mod. 300, 310</td>
<td>Mod. 350, 360</td>
<td>Mod. 350, 360</td>
<td>Mod. 300, 310</td>
</tr>
</tbody>
</table>
# How to Attach a Sling to Different Sling Bars

<table>
<thead>
<tr>
<th>Sling bar</th>
<th>Sling loops to sling bar hooks</th>
<th>Correct</th>
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<tbody>
<tr>
<td>SlingGuard™</td>
<td><img src="slingguard.png" alt="Diagram" /></td>
<td><img src="correct.jpg" alt="Correct" /></td>
</tr>
<tr>
<td>Universal</td>
<td><img src="universal.png" alt="Diagram" /></td>
<td><img src="correct.jpg" alt="Correct" /></td>
</tr>
<tr>
<td>SlingGuard™ Twin</td>
<td><img src="slingguard-twin.png" alt="Diagram" /></td>
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</tr>
<tr>
<td>Universal Twin</td>
<td><img src="universal-twin.png" alt="Diagram" /></td>
<td><img src="correct.jpg" alt="Correct" /></td>
</tr>
<tr>
<td>Cross-bar</td>
<td><img src="cross-bar.png" alt="Diagram" /></td>
<td><img src="wrong.jpg" alt="Wrong" /></td>
</tr>
</tbody>
</table>

**Wrong!**
Liko™ ComfortSling Plus • 7EN160183 Rev. 5

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

1. The illustrations 1, 2, and 3 shows a twin bar but this also applies to a Cross-bar.

Lifting from a Supine Position

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

Turn the patient toward you to prevent him or her from falling out of the bed. Place the edge of the sling as far in under the patient as possible, and with its lower edge just below the bend in the patient’s knees.

Fold the sling a couple of times so that its center back strap follows the patient’s backbone when the patient is carefully rotated back.
Returning to the Supine Position

Think about your own work posture as well as the comfort of the patient. Use the bed’s raising and lowering functions. Lower the patient onto the bed and disconnect the sling’s strap loops from the sling bar.

Removing the Sling

Fold the sling in under itself and press it in as far under the patient as possible. Carefully turn the patient towards you. Hint: Use the sling in order to facilitate the turn. Carefully pull away the sling.

Lifting from the Floor

When lifting from the floor, we recommend Liko ComfortSling Plus High, Mod. 350 or 360, which provides good head support.
Lifting to a Wheelchair

When placing a patient in a wheelchair, it is important that the patient is far back in the chair in order to sit well. There are several ways to accomplish this.

In order to facilitate placement in the wheelchair, the chair can be leaned back during the lowering sequence. Let the buttocks slide down along the back support for the final part. Monitor the location of the wheelchair with your foot on the tipping protection plate.

An alternate method is to apply slight pressure under the patient’s knees during the lowering sequence so that the buttocks are pressed in against the back support. If there is a handle on the sling, this can be used to steer.

After a completed lift to a chair or wheelchair, disconnect the strap loops from the sling bar and fold the sling out of the way.

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

Lifting from a Wheelchair

△ Make sure that the sling is placed correctly before transferring the patient from the wheelchair.
Sometimes, the patient may have shifted forward in the wheelchair, and on the sling as well. The sling should cover at least half of the bottom of the thigh to ensure a safe lift. If this is not the case, the patient should be positioned manually to an appropriate position.

Lifting to/from the Toilet

Liko ComfortSling Plus is also available with a hygiene opening (Mod. 310 and 360) for lifts to and from the toilet. The Liko range also includes other slings that are suitable for toilet-related lifts, e.g. Liko HygieneSling, Mod. 40, 41, 45 or 46 and Liko HygieneVest, Mod. 50 or 55.

Place the sling according to the instructions (see page 4) with the lower edge just below the bend in the patient’s knees. Once the patient has been lifted, the sling’s lower edge will be about 0-10 cm (0-3.9 inch.) above the bend in the knees. You may need to adjust the position to suit individual proportions to ensure that the hygiene opening is in the right place.
Different Sitting Positions Depending on Choice of Sling Bar

Liko ComfortSling Plus, Mod. 300, 310

1. Liko ComfortSling Plus, Mod. 300 and 310 in combination with Liko Universal SlingBar 450 provides an upright sitting position.

2. Liko ComfortSling Plus, Mod. 300 and 310, in combination with a twin bar 670, provides a somewhat reclined sitting position as well as additional room for the shoulders.

3. Liko ComfortSling Plus, Mod. 300 and 310 in combination with Liko Sling Cross-bar 450 or 670 provides a reclining sitting position with less bend in the hip joint. Cross-bar 670 also provides additional room for the shoulders.

Liko Universal SlingBar 450 in combination with SideBars provides the same kind of reclined sitting position.

For the combinations listed under point 3, 12 cm Extension Loops must always be used on the upper strap loops. When lifting, make sure that the lower edge of the sling is at the level of the bend in the knees. This also applies in combination with the older Liko Sling Cross-bar.

Liko ComfortSling Plus High, Mod. 350, 360

1. Liko ComfortSling Plus, Mod. 350 and 360 in combination with Liko Universal SlingBar 450 provides a comfortable, reclined sitting position.

2. Liko ComfortSling Plus, Mod. 350 and 360 in combination with a twin bar 670, provides a reclined sitting position as well as less bend in the hips and more room for the shoulders.

3. Liko ComfortSling Plus, Mod. 350 and 360 in combination with Liko Sling Cross-bar 450 or 670, provides a reclined sitting position. Cross-bar 670 also provides additional room for the shoulders.

Liko Universal SlingBar 450 in combination with SideBars provides the same kind of reclined sitting position.

For the combinations listed under point 3, 12 cm Extension Loops must always be used on the upper strap loops. When lifting, make sure that the lower edge of the sling is at the level of the bend in the knees. This also applies in combination with the older Liko Sling Cross-bar.
Different Sling Bars

Universal SlingBar 450*
Prod. No. 3156075

SlingGuard 450*
Prod. No. 3308020

Universal TwinBar 670*
Prod. No. 3156077

SlingGuard 670 Twin*
Prod. No. 3308040

Sling Cross-bar 450*
Prod. No. 3156021

Sling Cross-bar 670*
Prod. No. 3156018

Universal SideBars 450
Prod. No. 3156079

* The slingbars come in different designs, see Liko’s Product List.

Overview, Liko ComfortSling Plus, Mod. 300, 310, 350, 360

<table>
<thead>
<tr>
<th>Name</th>
<th>Prod. No.</th>
<th>Size</th>
<th>Maximum load¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liko ComfortSling Plus, Mod. 300</td>
<td>35300 - - 5</td>
<td>M Medium</td>
<td>200 kg (440 lbs.)</td>
</tr>
<tr>
<td>Liko ComfortSling Plus, Mod. 300</td>
<td>35300 - - 6</td>
<td>L Large</td>
<td>200 kg (440 lbs.)</td>
</tr>
<tr>
<td>Liko ComfortSling Plus, Mod. 300</td>
<td>35300 - - 7</td>
<td>XL Extra large</td>
<td>300 kg (660 lbs.)</td>
</tr>
<tr>
<td>Liko ComfortSling Plus with Hygiene Opening, Mod. 310</td>
<td>35310 - - 5</td>
<td>M Medium</td>
<td>200 kg (440 lbs.)</td>
</tr>
<tr>
<td>Liko ComfortSling Plus with Hygiene Opening, Mod. 310</td>
<td>35310 - - 6</td>
<td>L Large</td>
<td>200 kg (440 lbs.)</td>
</tr>
<tr>
<td>Liko ComfortSling Plus with Hygiene Opening, Mod. 310</td>
<td>35310 - - 7</td>
<td>XL Extra large</td>
<td>300 kg (660 lbs.)</td>
</tr>
<tr>
<td>Liko ComfortSling Plus High, Mod. 350</td>
<td>35350 - - 5</td>
<td>M Medium</td>
<td>200 kg (440 lbs.)</td>
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<tr>
<td>Liko ComfortSling Plus High, Mod. 350</td>
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<td>Liko ComfortSling Plus High, Mod. 350</td>
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<td>XL Extra large</td>
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<tr>
<td>Liko ComfortSling Plus High with Hygiene Opening, Mod. 360</td>
<td>35360 - - 5</td>
<td>M Medium</td>
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<tr>
<td>Liko ComfortSling Plus High with Hygiene Opening, Mod. 360</td>
<td>35360 - - 6</td>
<td>L Large</td>
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<td>Liko ComfortSling Plus High with Hygiene Opening, Mod. 360</td>
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<td>XL Extra large</td>
<td>300 kg (660 lbs.)</td>
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¹For retained maximum load, lift/accessories intended for the same load or more are required.

<table>
<thead>
<tr>
<th>Model</th>
<th>Size</th>
<th>Patient’s weight²</th>
<th>Width (A)</th>
<th>Height (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>300/310</td>
<td>M Medium</td>
<td>40-80 kg (88-176 lbs)</td>
<td>56 cm (22 in.)</td>
<td>100 cm (39.5 in.)</td>
</tr>
<tr>
<td>300/310</td>
<td>L Large</td>
<td>70-110 kg (154-243 lbs)</td>
<td>78 cm (31 in.)</td>
<td>121 cm (48 in.)</td>
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<tr>
<td>300/310</td>
<td>XL Extra large</td>
<td>&gt; 100 kg (&gt; 220 lbs)</td>
<td>80 cm (31.5 in.)</td>
<td>128 cm (50.5 in.)</td>
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<tr>
<td>350/360</td>
<td>M Medium</td>
<td>40-80 kg (88-176 lbs)</td>
<td>56 cm (22 in.)</td>
<td>136 cm (53.5 in.)</td>
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<tr>
<td>350/360</td>
<td>L Large</td>
<td>70-110 kg (154-243 lbs)</td>
<td>67 cm (26.5 in.)</td>
<td>145 cm (57 in.)</td>
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<tr>
<td>350/360</td>
<td>XL Extra large</td>
<td>&gt; 100 kg (&gt; 220 lbs)</td>
<td>67 cm (26.5 in.)</td>
<td>153 cm (60.5 in.)</td>
</tr>
</tbody>
</table>

²The indicated patient weight is only a guideline – there may be deviations.

If the patient has poor muscle tone and sinks too low in the ComfortSling, you should consider a smaller size.

Description of product number

3 Net polyester
2 Without reinforcement or padding
0 Seat padded with synthetic sheepskin
5 Indicates size
 Indicates sling model

Product number example: 353 - - 5
**Recommended Combinations**

<table>
<thead>
<tr>
<th>Combinations of Liko™ ComfortSling Plus with Liko's sling bars:</th>
<th>Mini 220</th>
<th>Slim 350</th>
<th>Universal 350</th>
<th>Sling bar 450²</th>
<th>Universal 600</th>
<th>Wide 670</th>
<th>Twin bars 670³</th>
<th>Sling Cross-bar 450</th>
<th>Uni, SlingBars + SlingCross-bar 670</th>
<th>SideBars + Universal 350</th>
<th>Uni, SlingBars + Universal 600</th>
<th>SideBars + Universal 600</th>
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<tr>
<td>ComfortSling Plus, Mod. 300, 310, M</td>
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<tr>
<td>ComfortSling Plus, Mod. 300, 310, L</td>
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<td>1</td>
<td>1</td>
</tr>
<tr>
<td>ComfortSling Plus High, Mod. 350, 360, M</td>
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<td>2</td>
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<tr>
<td>ComfortSling Plus High, Mod. 350, 360, L</td>
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<tr>
<td>ComfortSling Plus High, Mod. 350, 360, XL</td>
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</tbody>
</table>

**Explanation:**

1 = Recommended, 2 = May work, 3 = Not advised, 4 = Inappropriate

1. Always use the Extension Loops 12 cm on the upper strap loops.
   When sitting, the lower edge of the sling should be near the bend in the knees.

2. Sling bar 450 relates to Universal SlingBar 450 Prod. No. 3156075, 3156085, and 3156095, SlingBar Standard 450 Prod. No. 3156001, 3156003, 3156007, and 3156016, and also SlingGuard 450 Prod. No. 3308020 and 3308520.


For combinations with other Liko sling bars, please contact Hill-Rom.

**Other combinations**

Other combinations of accessories/products than those recommended by Liko could jeopardize patient safety.