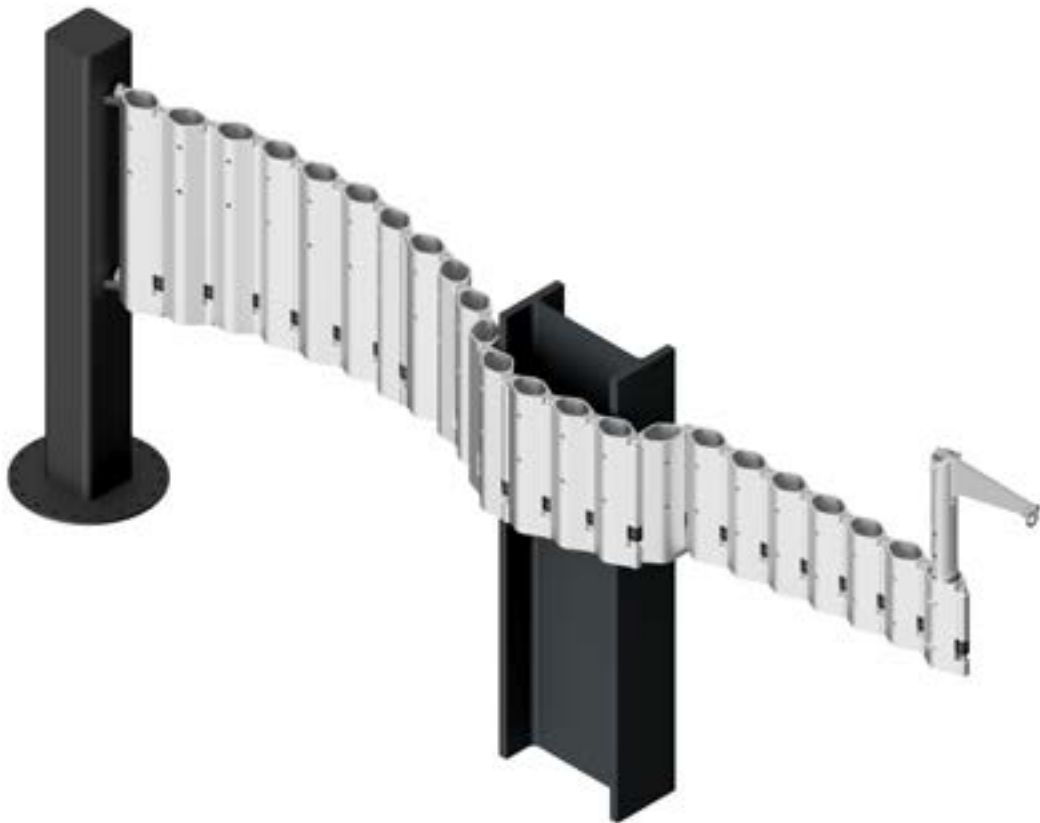


---

# User Manual - XL

Adding efficiency & safety to manual handling



---

[www.jibflex.com](http://www.jibflex.com)





# Contents

<b>1</b>	<b>INTRODUCTION .....</b>	<b>2</b>
1.1	LIMITATIONS .....	<b>FEJL! BOGMÆRKE ER IKKE DEFINERET.</b>
<b>2</b>	<b>SYSTEM DESCRIPTION.....</b>	<b>FEJL! BOGMÆRKE ER IKKE DEFINERET.</b>
2.1	COMPONENTS.....	<b>FEJL! BOGMÆRKE ER IKKE DEFINERET.</b>
<b>3</b>	<b>INSTALLATION &amp; OPERATING CONDITIONS .....</b>	<b>FEJL! BOGMÆRKE ER IKKE DEFINERET.</b>
3.1	MAGNET ASSEMBLY .....	<b>5</b>
3.1	MAINTENANCE ASSEMBLY/DISASSEMBLY.....	<b>FEJL! BOGMÆRKE ER IKKE DEFINERET.</b>
<b>4</b>	<b>INSTALLING THE MAGNETIC BRACKET .....</b>	<b>14</b>
4.1	PREPARING THE MAGNETS .....	<b>FEJL! BOGMÆRKE ER IKKE DEFINERET.</b>
4.2	MAGNETIC BRACKET INSTALLATION PROCEDURE .....	<b>FEJL! BOGMÆRKE ER IKKE DEFINERET.</b>
<b>5</b>	<b>LOAD TEST BEFORE FIRST USE .....</b>	<b>FEJL! BOGMÆRKE ER IKKE DEFINERET.</b>
<b>6</b>	<b>DISASSEMBLY OF JIBFLEX MAGNETIC BRACKET .....</b>	<b>FEJL! BOGMÆRKE ER IKKE DEFINERET.</b>

# 1 Introduction

This user manual provides the information required for safe installation, configuration, operation, inspection, and maintenance of the JibFlex system. It is intended for installers, operators, supervisors, and personnel responsible for inspection and maintenance. The manual shall be kept available at the installation site for the entire service life of the equipment.

## 1.1 Intended Use

The JibFlex system is intended for manual positioning and handling of suspended loads within the rated Working Load Limit (WLL) and the specified working radius for the configuration in use.

## 1.2 Product overview

JibFlex is a modular, flexible jib crane available in two versions: JibFlex & JibFlex XL.

## 1.3 User groups / Intended audience

This manual is intended for the following user groups:

- Installers / assembly personnel responsible for mounting and assembly of the system.
- Operators responsible for handling the load and operating the system during lifting operations.
- Supervisors / lifting responsible personnel responsible for planning and controlling lifting operations and ensuring compliance with site rules.
- Inspection and maintenance personnel responsible for periodic inspection, maintenance, and record keeping.

## 1.4 Qualifications and responsibilities

JibFlex shall be installed, operated, inspected, and maintained only by competent personnel familiar with safe lifting practices and local site rules.

The user is responsible for:

- Ensuring the WLL (Working Load Limit) and working radius of the JibFlex are not exceeded,
- Ensuring the supporting structure and anchoring solution are approved and correctly installed,
- Keeping the lifting area clear and preventing access under suspended loads,
- Performing the required pre-use checks and arranging periodic inspections,
- Removing the equipment from service if damage, deformation, or abnormal function is observed.



## 2 Safety

### 2.1 General safety instructions

Any lifting operation performed with JibFlex shall be planned and carried out in accordance with safe lifting practices and local site rules. Ensure that the selected JibFlex configuration is suitable for the task and that the system is correctly installed on an approved supporting structure. Before use, verify the Working Load Limit (WLL) and that the lifting area is clear of personnel and obstacles. Only competent operators shall use JibFlex, and the instructions and warnings in this section shall always be followed.

#### Safety warnings & prohibitions



##### READ THE USER MANUAL BEFORE USE

Follow all safety guidelines described in the JibFlex manual before operating the equipment.



##### TWO-PERSON OPERATION

Two people are required to operate JibFlex, one to control the load and one to adjust the flexible arm.



##### SUSPENDED LOAD HAZARD

Never stand or work under a suspended load. Keep the lifting area clear and maintain a safe distance. Plan the lift so that people, objects, and obstacles do not obstruct JibFlex movement.



##### PINCH / CRUSH HAZARD

Keep hands and fingers away from pinch points during operation and assembly. Use controlled movements and suitable tools.



##### OVERLOAD HAZARD

Do not exceed the rated Working Load Limit (WLL). Overloading may cause structural failure.



##### STABILITY / ANCHORING WARNING

Do not use the JibFlex unless it is correctly mounted on anchoring/lifting points designed and approved for this purpose. Verify fasteners and torque before use. JibFlex shall be mounted on stable ground, i.e. it is not designed for moving/rolling vessels.



##### WIND LIMITATION WARNING

Do not operate JibFlex in high wind. The crane is flexible and may move in side wind. A guidance limit is 15 m/s gust wind, but conditions shall always be assessed on site.








##### NO LIFTING OF PERSONNEL

Lifting of personnel with JibFlex is **NOT** allowed.



## 2.2 Personal Protective Equipment

Appropriate personal protective equipment (PPE) shall be worn during installation, handling, inspection, and maintenance of the JibFlex system and its components. The required PPE depends on the task and the local site rules. As a minimum, wear the PPE listed below when handling heavy loads, tools, and fastening hardware. Always inspect PPE before use and replace damaged equipment.

PPE requirements	
	<p><b>WEAR SAFETY GOGGLES</b></p> <p>Always wear approved safety glasses when using hand tools or working near suspended loads.</p>
	<p><b>WEAR PROTECTIVE GLOVES</b></p> <p>Always wear suitable protective gloves to prevent pinch injuries and cuts when handling loads, fasteners, and potential sharp edges.</p>
	<p><b>WEAR PROTECTIVE SHOES</b></p> <p>Always wear approved safety shoes with reinforced toes to protect your feet from heavy objects, dropped tools, or other impact hazards during installation and handling.</p>
	<p><b>WEAR A SAFETY HELMET (if required)</b></p> <p>Wear a safety helmet when required by site rules or when working where overhead hazards or suspended loads may be present.</p>
	<p><b>WEAR HIGH-VISIBILITY VEST (if required)</b></p> <p>Wear a high-visibility vest when required by site rules or when working in shared areas with vehicle traffic, forklifts, or other moving equipment.</p>

### 3 The JibFlex

#### 3.1 System overview

JibFlex is a modular, flexible jib crane system designed to support lifting operations. It is available in two versions: JibFlex Standard and JibFlex XL. Each module weighs a maximum of 20 kg and is designed to be hand-carried and installed in areas where crane access is otherwise not available. JibFlex can be assembled by one person. For JibFlex XL, two-person assembly is recommended.

The JibFlex modules are made from extruded aluminium 6082-T6, offering high strength, seawater resistance, and suitability for offshore and harsh environments.

Depending on configuration, JibFlex can be assembled in up to 33 modules and reach a maximum length of seven metres. At this reach, the system has a Working Load Limit (WLL) of up to 300 kg. When modules are removed, higher loads can be carried. The maximum WLL for JibFlex Standard is 500 kg at a 3 m radius, while JibFlex XL can carry up to 1.000 kg at a 3 m radius. See the table below for available configurations of working radius and WLL.

Table 1 - JibFlex configurations.

		Working radius [m]					
		2 (8 modules)	3 (13 modules)	4 (18 modules)	5 (23 modules)	6 (28 modules)	7 (33 modules)
WLL [kg]	50	JF 50-2	JF 50-3	JF 50-4	JF 50-5	JF 50-6	JF 50-7
	100	JF 100-2	JF 100-3	JF 100-4	JF 100-5	JF 100-6	JF 100-7
	150	JF 150-2	JF 150-3	JF 150-4	JF 150-5	JF 150-6	JF 150-7
	200	JF 200-2	JF 200-3	JF 200-4	JF 200-5	JF 200-6	JF 200-7
	250	JF 250-2	JF 250-3	JF 250-4	JF 250-5	JF 250-6	JF 250-7
	300	JF 300-2	JF 300-3	JF 300-4	JF 300-5	JF 300-6	JF 300-7
	350	JF 350-2	JF 350-3	JF 350-4	JF 350-5	JF 350-6	
	400	JF 400-2	JF 400-3	JF 400-4	JF 400-5	JF 400-6	
	450	JF 450-2	JF 450-3	JF 450-4	JF 450-5		
	500	JF 500-2	JF 500-3	JF 500-4	JF 500-5		
	600	JF 600-2	JF 600-3	JF 600-4			
	750	JF 750-2	JF 750-3	JF 750-4			
	1000	JF 1000-2	JF 1000-3				
	1200	JF 1200-2	JF 1200-3				

Std. config. = ●

XL config. = ●

## 3.2 Technical specifications

The table below lists the main JibFlex components with their material specification and weight. The values are provided for reference and may vary slightly due to manufacturing tolerances and product revisions. Total weights for each JibFlex configuration are stated in the respective configuration datasheets.

Table 2 - JibFlex component specifications.

Part	Material	Weight [kg]
JF module 400	aluminium 6082-T6	7
JF module 425	aluminium 6082-T6	7
JF module 450	aluminium 6082-T6	8
JF module 475	aluminium 6082-T6	8
JF module 500	aluminium 6082-T6	9
JF module 525	aluminium 6082-T6	9
JF module 550	aluminium 6082-T6	10
JF module 575	aluminium 6082-T6	10
JF module 600	aluminium 6082-T6	10
JF module 625	aluminium 6082-T6	11
JF module 650	aluminium 6082-T6	11
JF module 675	aluminium 6082-T6	12
JF module 700	aluminium 6082-T6	12
JF module 725	aluminium 6082-T6	12
JF module 750	aluminium 6082-T6	13
JF module 775	aluminium 6082-T6	13
JF module 800	aluminium 6082-T6	14
JF module 825	aluminium 6082-T6	14
JF module 850	aluminium 6082-T6	15
JF module 875	aluminium 6082-T6	15
JF module 900	aluminium 6082-T6	15
JF module 925	aluminium 6082-T6	16
JF anchor point	S355J2 base + AISI 316L pin	2
JF Stork 500	aluminium 6082-T6 + AISI 316L pins	12
XL module 925	aluminium 6082-T6	17
XL-transition module 925	aluminium 6082-T6	20
XL anchor point	S355J2	4
JF Stork 1200	aluminium 6082-T6 + AISI 316L pins	16

\*Note: Weights are nominal and rounded up to the nearest whole kilogram.



## 1.1 The JibFlex modules

JibFlex is built from interchangeable aluminium modules that connect to form the jib crane. Each module is an extruded profile (Aluminium 6082-T6) designed for quick handling and assembly on site.

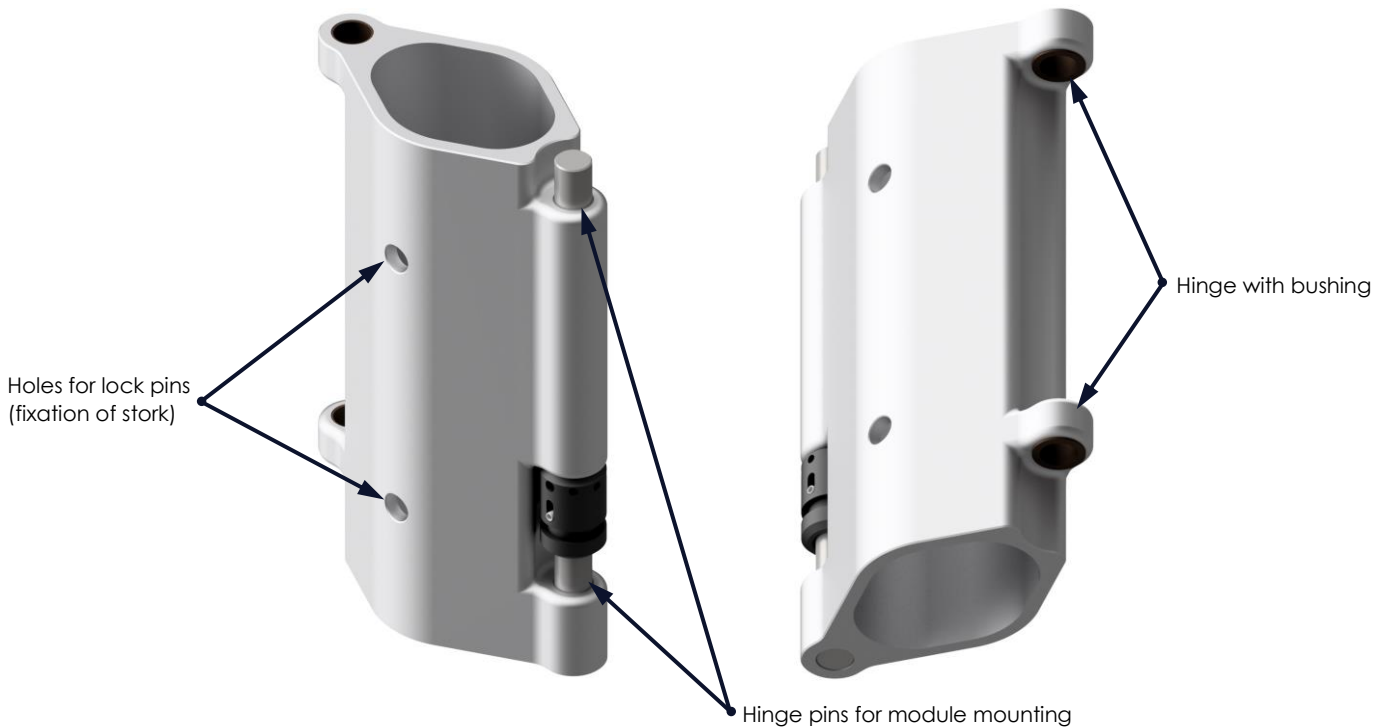


Figure 1 – The JibFlex module.

Each module includes:

- Integrated hinges with bushings to provide smooth rotation between modules.
- Hinge pin used to connect adjacent modules during assembly.
- Lock pin holes for securing the “Stork” to the JibFlex.

The modules are designed to allow up to 62° of relative rotation between adjacent modules. This corresponds to a minimum turning diameter of approximately 500 mm, as shown in Figure 2. If rotation beyond 62° is attempted, the modules will make contact and mechanically limit further movement. This built-in stop prevents over-rotation, and therefore the modules cannot be damaged by turning past the allowed angle.

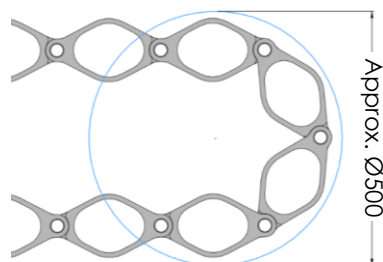


Figure 2 - JibFlex rotation radius.

The module-to-module connection is a hinged joint that allows controlled movement of the JibFlex during handling while maintaining structural continuity. During operation, the JibFlex follows the manual guidance applied by the operators to position the suspended load.

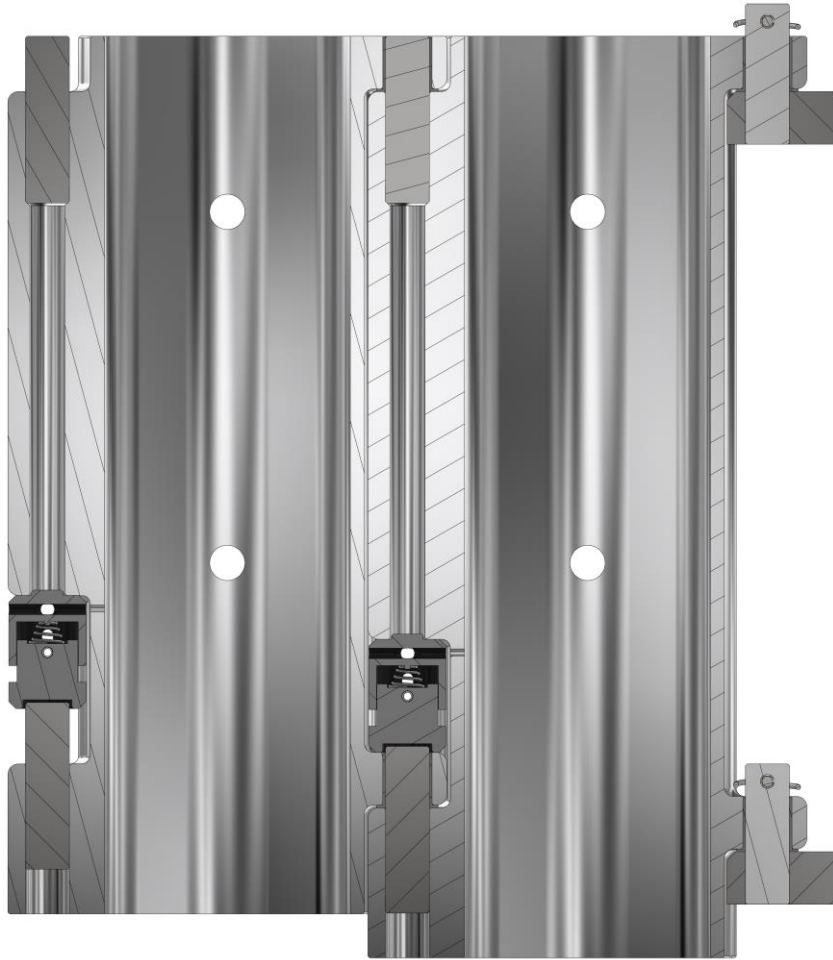


Figure 3 - JibFlex module connection (section view): Cross-sectional view of two adjacent JibFlex modules positioned for assembly, showing the hinge interface with bushing, hinge pin engagement, and the lock bracket mechanism used to secure the joint.



**OBS:** Only original JibFlex modules shall be used. Do not modify modules, hinge pins, or bushings. If a module shows cracks, deformation, corrosion, or excessive play in the hinge/bushing interface, it shall be removed from service and replaced.

## 1.1 The XL modules

JibFlex XL is built from interchangeable aluminium modules designed for higher lifting capacity while maintaining the same flexible, modular concept as JibFlex Standard. Each XL module is an extruded Aluminium 6082-T6 profile, optimized for handling and on-site assembly.

The XL modules connect via the same hinged joint principle as the Standard modules, allowing the arm to flex and be positioned by the operator during lifting operations. The hinge interface includes bushings to reduce wear and ensure smooth movement between modules. Modules are aligned during assembly, the hinge pin is inserted, and the joint is secured in accordance with the procedure in this manual.



Two-person assembly is recommended for JibFlex XL. Due to the higher module weight and the forces involved when aligning and pinning the joints, module-to-module assembly should be performed by two competent persons.

The XL modules allow the same relative rotation between adjacent modules as the Standard modules and therefore provide comparable flexibility and turning capability. If rotation beyond the allowed limit is attempted, the modules will contact and mechanically restrict further movement.

### 3.3 The Stork

The JibFlex solution is delivered with a lifting appliance (Stork) that can be mounted on the last module.

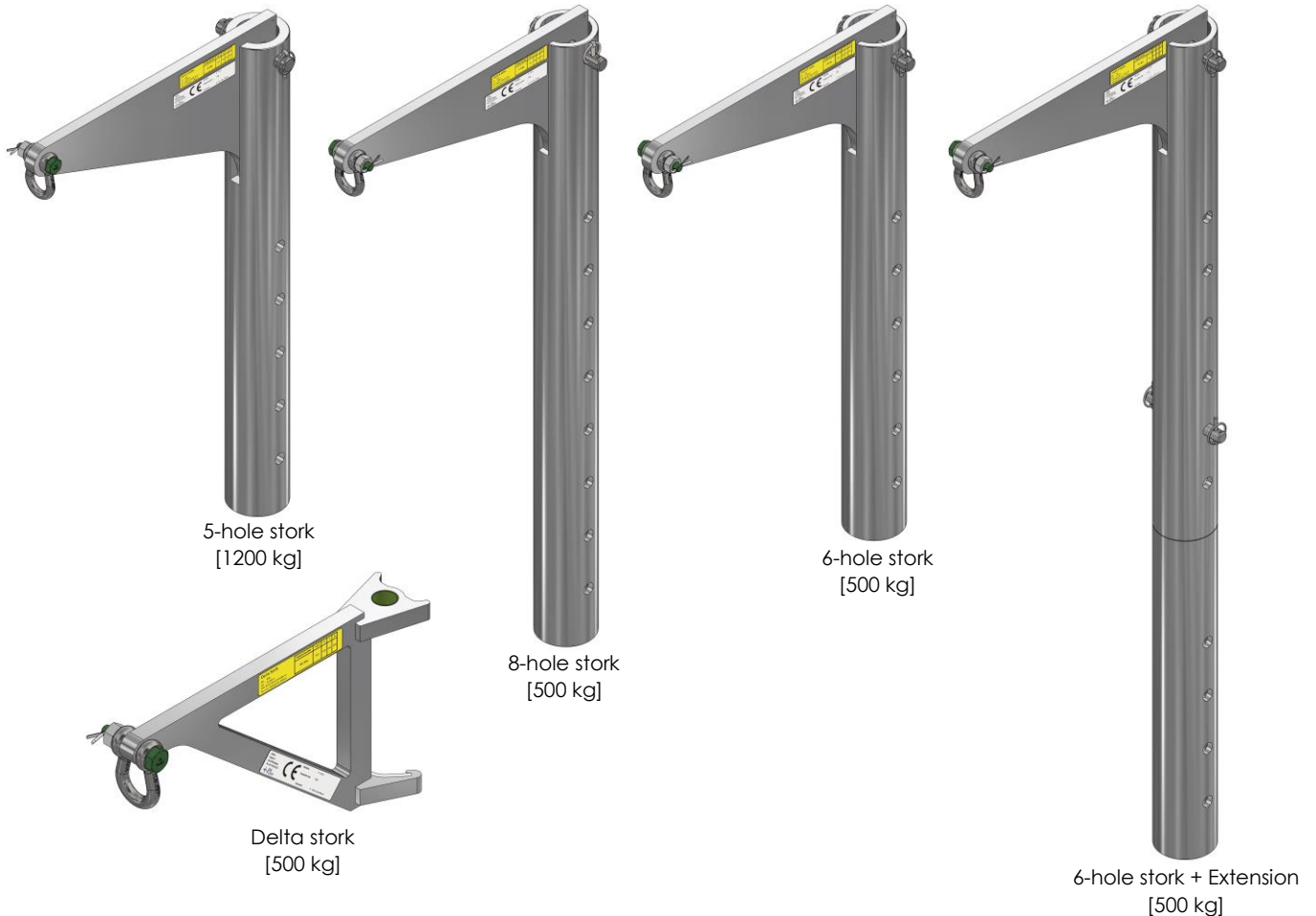


Figure 4 - Stork solutions.

The different stork variants provide different lifting heights and adjustment options. The Delta stork is the simplest and most cost-effective option, but it provides only one fixed lifting height. The 6-hole and 8-hole storks allow height adjustment by utilizing the needed hole position. The extension is used with either the 6 or 8-hole stork (500 kg) to increase lifting height further and is not applicable to the 5-hole stork (1200 kg). All stork variants weigh less than 17 kg and can be carried by one person.



**NOTE:** Always attach the load using a shackle fitted in the lifting eye at the end of the stork blade.

### 3.4 Anchor points & solutions

JibFlex must be mounted to a suitable anchoring solution that is designed to transfer the operational loads into a supporting structure (e.g., wall, column, or beam). The supporting structure and the anchoring solution must be able to withstand the forces generated during lifting and positioning. Always ensure the anchoring solution is installed correctly and that the mounting surface is sound, level, and free of damage, corrosion, or deformation.

#### 3.4.1 JibFlex anchor point

The JF anchor point is a hinge-pin socket used across all JibFlex anchoring solutions. It interfaces directly with the JibFlex module and provides a simple, robust connection between the supporting structure and the JibFlex system. The anchor point can be welded or bolted directly to a suitable supporting structure, and it also forms the interface in several other JibFlex anchoring solutions, for example it is bolted to the Flat bracket, welded to mounting columns, and integrated with Magnetic and Container bracket solutions.

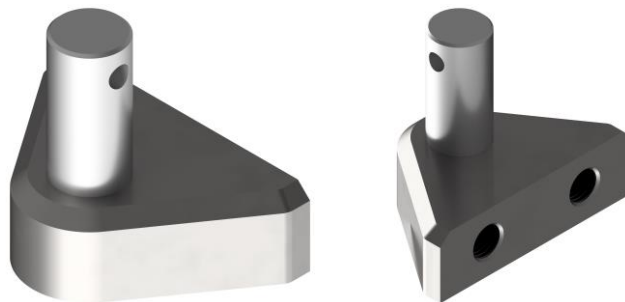


Figure 5 - JF anchor point, front and rear views.

#### 3.4.2 XL anchor point

XL anchor points are dedicated anchoring interfaces for the JibFlex XL system. They provide a reinforced hinge-pin socket connection to the XL modules and are designed to transfer the higher loads the supporting structure. The anchor points are installed by bolting/welding to the supporting structure ensuring a rigid and reliable attachment for XL configurations.

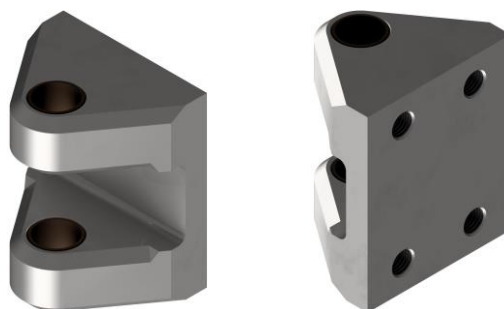


Figure 6 - XL anchor point, front and rear views.

### 3.4.3 JibFlex Flat bracket

Where front-side bolting is required, the anchor point can be supplied as a flat bracket. The flat bracket is an anchor point welded to a mounting plate with bolt holes, allowing the assembly to be fastened directly to the supporting structure using suitable bolts and backing.



Figure 7 - JF module mounted on a Flat bracket.

### 3.4.4 JibFlex XL Flat bracket

XL modules can also be anchored using an XL Flat Bracket.

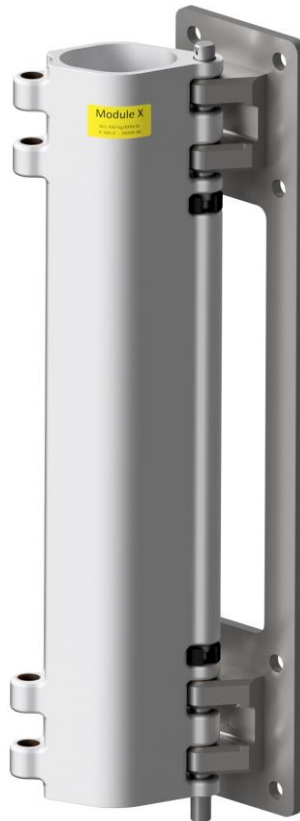


Figure 8 - XL module mounted on a XL Flat bracket.

### 3.4.5 Other anchoring solutions

Depending on the installation location and the supporting structure, JibFlex can also be supplied with additional anchoring solutions, such as:

- Container bracket – for mounting to ISO container corner castings or similar steel structures without welding or drilling.
- Magnetic bracket – for temporary mounting to suitable ferromagnetic steel surfaces.
- H-beam bracket – for mounting to structural steel beams.
- Custom solution – an anchoring solution custom made to customers' needs or wishes.

### 3.4.6 Configuration-dependent requirements

The loads acting on the anchoring solution vary with the selected configuration (WLL, radius, and module combination). For this reason, the required anchoring forces and required distance/spacing between anchoring points are specified in the datasheet for the selected configuration. Always use the relevant datasheet when selecting the mounting location and verifying the supporting structure.

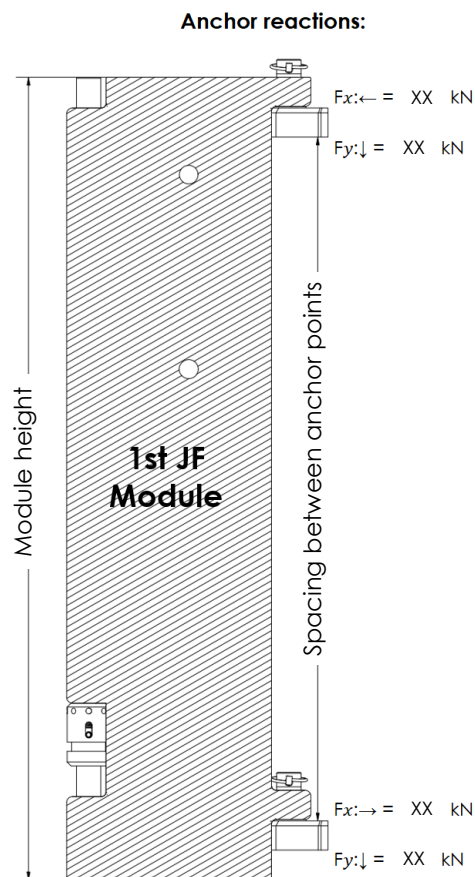





Figure 9 - Example of configuration-dependent anchor reactions and required anchor spacing (as stated in the relevant datasheet).

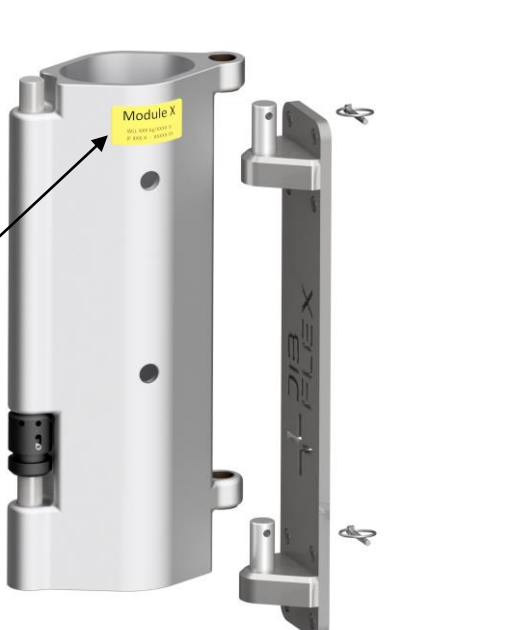
## 4 Installation

This section describes how to install JibFlex and XL modules. Before starting, verify that the supporting structure is suitable and that the correct configuration datasheet is available. Ensure the installation area is clear and that all components are undamaged and present before assembly.

	<p><b>LIFT CORRECTLY</b></p> <p>Use correct lifting technique: keep your back straight, bend at the knees, keep the load close to the body, and avoid twisting. Keep fingers clear of pinch points at hinges and anchor points.</p>
	<p><b>WEAR PROTECTIVE GLOVES</b></p> <p>Always wear suitable protective gloves to prevent pinch injuries and cuts when handling modules, fasteners, and potential sharp edges.</p>
	<p><b>WEAR PROTECTIVE SHOES</b></p> <p>Always wear approved safety shoes with reinforced toes to protect your feet from heavy objects, dropped modules, tools or other impact hazards during installation and handling.</p>

### 4.1 Step-by-step installation guide JibFlex

Standard JibFlex configurations can typically be assembled by one person, as each module is designed for manual handling. Always support the module during positioning and do not release it until it is fully seated on the hinge pins.

Step NO.	Description	Illustration
1	<p><b>Anchoring &amp; Installing First Module</b></p> <p>Select a mounting location (wall/column/deck) that is documented as sufficiently strong and level for the selected JibFlex configuration. Module 1 is identified by a yellow "Module 1" label.</p> <p>Handle modules carefully to avoid pinch points around hinges and anchor points. The heaviest standard module weighs up to 17 kg and can be carried by one person.</p> <p>Place Module 1 onto the anchor point hinge pins and secure the module using the supplied linchpins.</p>	

Step NO.	Description	Illustration
----------	-------------	--------------

**2 Fit Second Module**

Module 2 is identified by a yellow "Module 2" label and fits onto the hinge pins of Module 1.

Before fitting Module 2, pull the lock bracket clear to allow connection between the modules.  
Align the modules and slide Module 2 into position on the hinge pins.



**3 Check fit and alignment**

When correctly assembled, Modules 1 and 2 fit closely and rotate freely.

Verify that the top edges of Modules 1 and 2 are level with each other. Misalignment indicates incorrect seating on the hinge pins.



Step NO.	Description	Illustration
----------	-------------	--------------

**4 Install Lock Bracket**

Rotate the modules to create space for the lock bracket.

Compress the lock bracket and insert it into the gap between the modules so it rests on the hinge interface of Module 1.

Pull the slack wire from the inside of the module to guide the lock bracket into its final position.

A distinct “click” indicates that the lock bracket has engaged.



**5 Verify Lock Bracket Seating**

Verify that the lock bracket sits fully seated and tight between the modules. The modules shall remain able to rotate freely while the joint is secured.



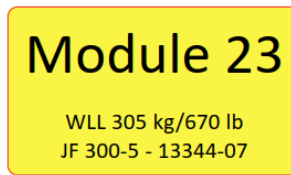
Step NO.	Description	Illustration
----------	-------------	--------------

**6 Repeat + module order + label meaning**

Modules 3, 4, 5, etc. are installed in the same way as Module 2 is connected to Module 1. The JibFlex system can consist of up to 33 modules, and the modules shall always be assembled in ascending order.

Each module is identified by a yellow module sticker showing the module number and the corresponding WLL. The bottom line on the sticker states the JibFlex configuration and the product ID.

LABEL EXAMPLE:



## 4.2 Step-by-step installation guide XL

XL configurations must be installed/assembled by two people. During assembly, the modules cannot be hung on other modules or the anchor point and must be held in position until the hinge pin is fully inserted, and the hinge is locked. Do not release a module until it is correctly seated and secured.



### TWO-PERSON INSTALLATION

XL configurations must be installed/assembled by two people.

Step NO.	Description	Illustration
1	<p><b>Anchoring &amp; Installing First Module</b></p> <p>Select a mounting location (wall/column/deck) that is documented as sufficiently strong and level for the selected XL configuration. Module 1 is identified by a yellow "Module 1" label.</p> <p>XL modules can weigh up to 20 kg, use correct lifting technique.</p> <p>Lift Module 1 into position and align it with the XL anchor point. While one person supports and holds the module in place, the second person inserts the lock pins (which act as the hinge pins) and secures with the lock pin locks. Do not release the module until both lock pins are fully inserted and secured.</p>	

## 2 Install Module 2

Module 2 is identified by the yellow "Module 2" label and is installed to Module 1 at the hinge interface.

Lift and align Module 2 to Module 1 so the hinge lugs line up. While one person supports the module, the second person inserts Module 2's lock pins through the aligned hinge holes and secures them with the lock pin locks. Do not release the module until both lock pins are fully inserted and locked.

In this XL guide, Module 2 is the transition module. It is installed to Module 1 in the same way as any other XL module, but it also provides the interface for continuing the assembly with standard JibFlex modules.

**Note:** Any additional XL module is installed using the same procedure. The transition module is used to convert from XL to standard JibFlex modules, and an XL JibFlex configuration consists of a combination of XL modules, standard modules, and one (1) transition module only.



Step NO.	Description	Illustration
----------	-------------	--------------

**3 Check fit and alignment**

When correctly installed, Modules 1 and 2 shall sit tight together and rotate freely without binding.

Verify that:

- The hinge interfaces are fully seated, with no visible gap between the modules.
- The top edges of the Modules are level with each other.
- All lock pins are fully inserted and secured with the lock pin locks.

If the modules do not align or rotate freely, support the modules, remove the lock pins, realign the hinge lugs, and reinstall the lock pins before proceeding.



Step NO.	Description	Illustration
----------	-------------	--------------

**4 Install remaining JibFlex modules**

After the XL transition module has been installed, the remaining modules are assembled using the same procedure as for standard JibFlex modules.

**Quick guide: JF module install**

Place the module on the hinges of the previous module. Rotate the modules to create clearance for the lock bracket.

Compress the lock bracket and insert it into the gap between the modules until it seats on the hinge interface. Pull the slack wire from inside the module to guide the lock bracket into its final position.

A distinct “click” confirms that the lock bracket has engaged correctly.



**5 Repeat + module order + label meaning**

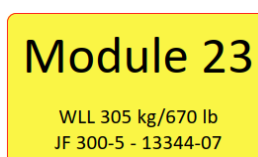
Additional XL modules and the transition module are installed in the same way as Module 1 and Module 2 in this guide.

Many XL configurations also include standard JibFlex modules. Once the transition module is installed, assemble the remaining modules by following the standard JibFlex step-by-step installation procedure.

Modules shall always be assembled in ascending order.

Each module is identified by a yellow module label showing the module number and the corresponding WLL. The bottom line on the label states the JibFlex configuration and the product ID.

LABEL EXAMPLE:

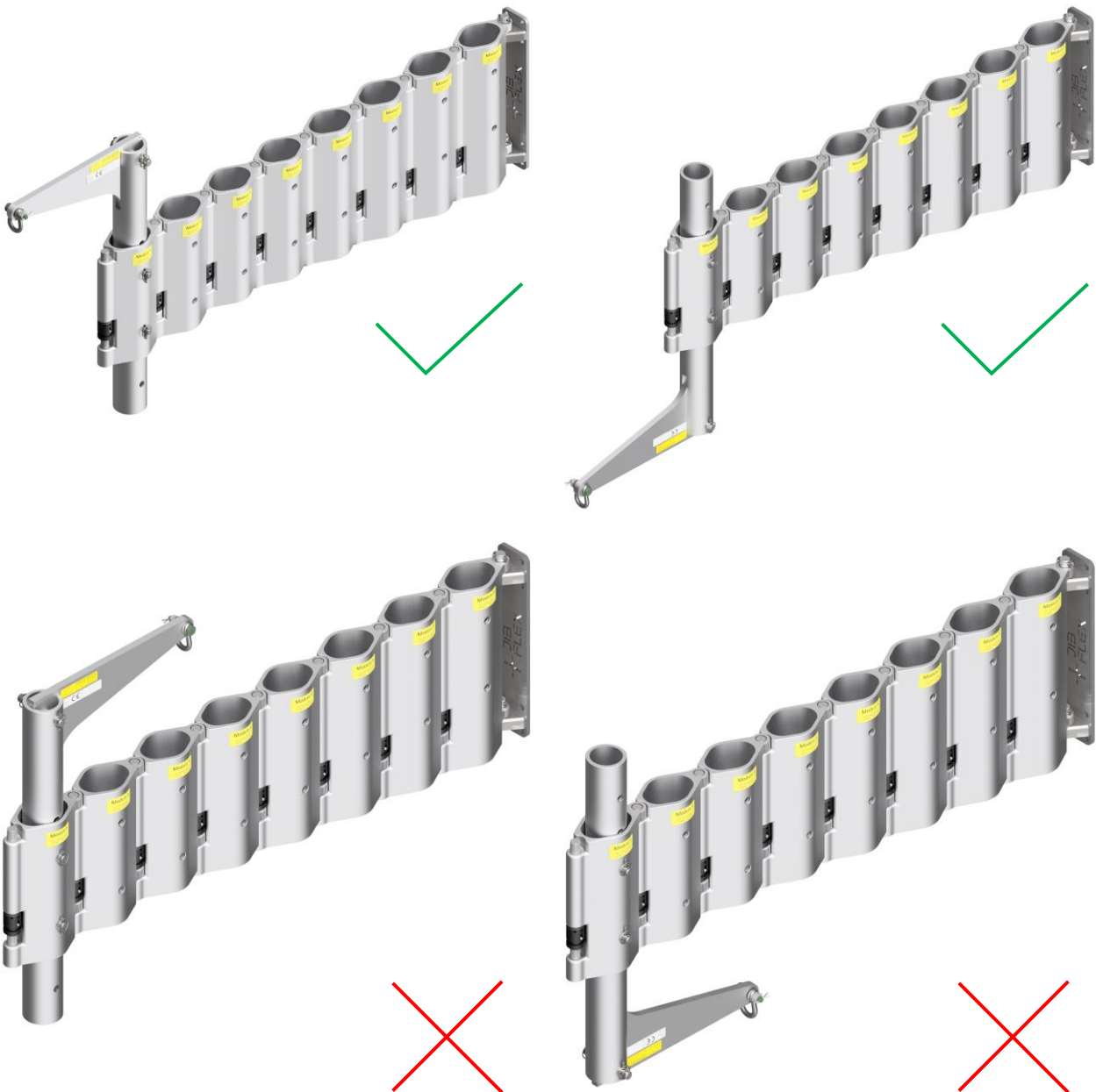


### 4.3 Stork installation

One stork is delivered with the JibFlex solution and only one stork is allowed installed and always in the last module. If a shorter JibFlex is desired, modules shall be removed before the stork is placed in the last one.

#### Correct Stork placement

The stork blade shall point away from the anchor point, but it can have the blade pointing up or down. The stork blade **cannot** point towards the anchor point since the load will be obstructed by the modules. The stork shall always sit in the last module.



A shackle Ø16 is attached to the stork eye. Note that this corresponds with a shackle with WLL 2tonnes, but that it is not allowed to lift 2 tonnes in it. Allowed lifting weights in the stork is limited by which module it is placed in. The stork label shall be followed in regard to allowed lifting weights.

Stork 8 holes					
No. 011 For JF 250-2.0 WLL depends on module no. See user manual for details					
Module Number	1 to 4	5	6	7	8
WLL [kg], Up to 0.12 m/s	500	455	380	330	285

Figure 10 - Stork label example.

### 4.3.1 Step-by-step Stork installation

Step No.	Description	Illustration
1	<p><b>Installing the Stork</b></p> <p>The stork must be installed in the outermost JibFlex module. Lower the stork vertically from above into the module until the holes are correctly aligned.</p> <p>Once positioned, insert the lock-pins through the module and the stork.</p> <p>Secure each lock-pin with the corresponding linch pins. Ensure that a total of four linch pins are installed, two at each end of the lock pins, to prevent them from coming loose.</p>	

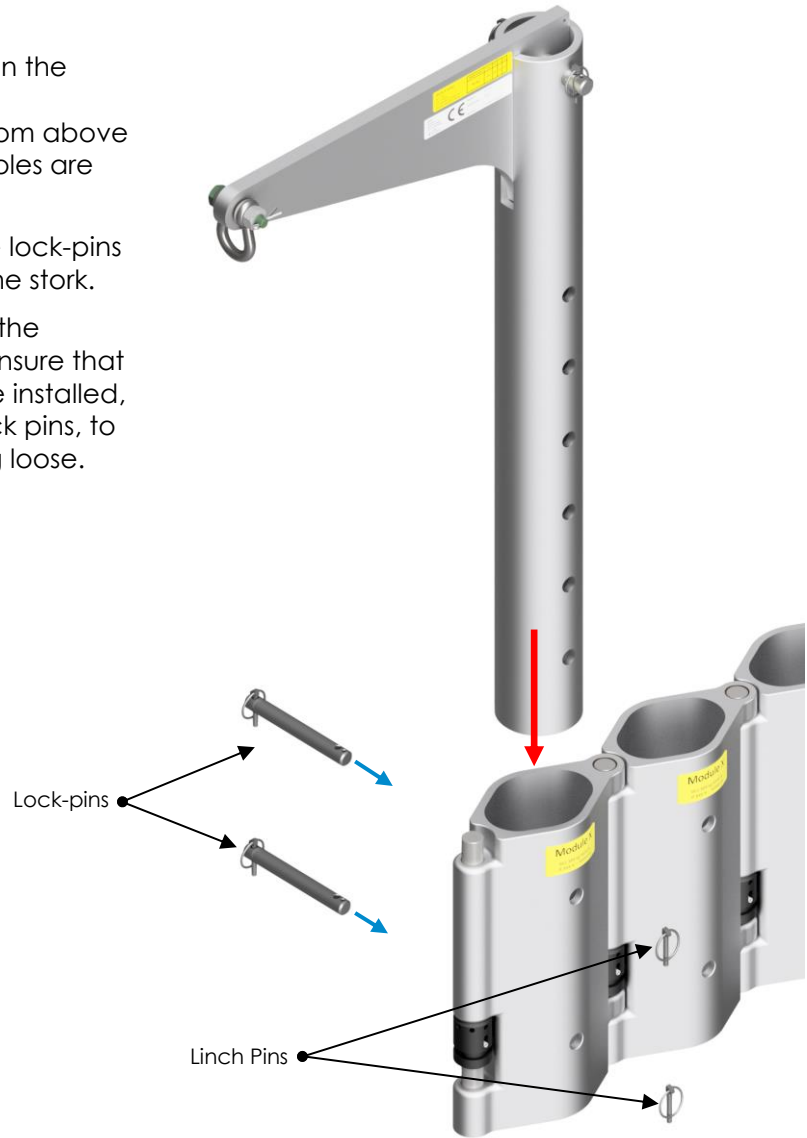
Step No.	Description	Illustration
----------	-------------	--------------

**1 Installing the Stork**

The stork must be installed in the outermost JibFlex module. Lower the stork vertically from above into the module until the holes are correctly aligned.

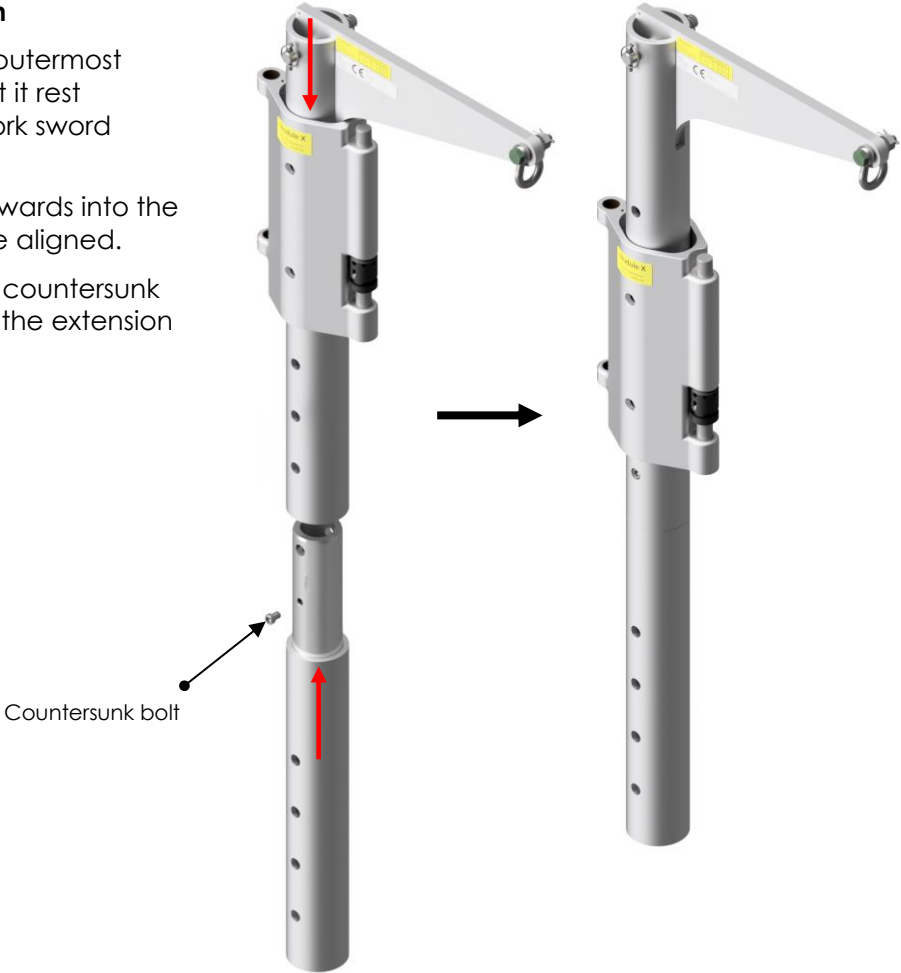
Once positioned, insert the lock-pins through the module and the stork.

Secure each lock-pin with the corresponding linch pins. Ensure that a total of four linch pins are installed, two at each end of the lock pins, to prevent them from coming loose.



### 4.3.2 Installing Stork extension

The following is the 6-hole stork with extension installation shown step by step.

Step No.	Description	Illustration
1	<p><b>Installing the Extension</b></p> <p>Place the stork in the outermost JibFlex module and let it rest supported with the Stork sword against the module.</p> <p>Slide the extension upwards into the stork until the holes are aligned.</p> <p>Install and tighten the countersunk locking bolt to secure the extension in the stork.</p>	

Step No.	Description	Illustration
----------	-------------	--------------

**2 Fixating the Stork with the Extension**

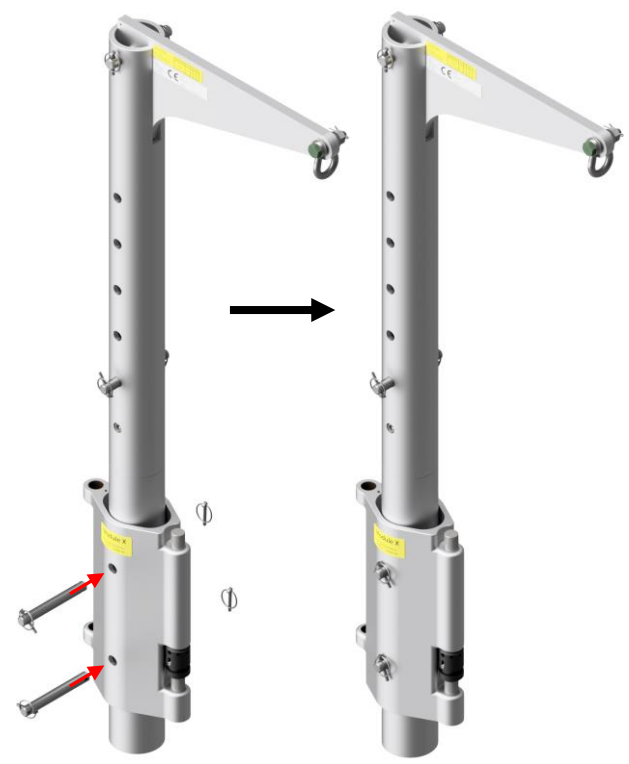
Slide the stork + extension assembly to the desired height in the module.

Align the holes and insert the lock-pins through the module and the stork/extension interface.

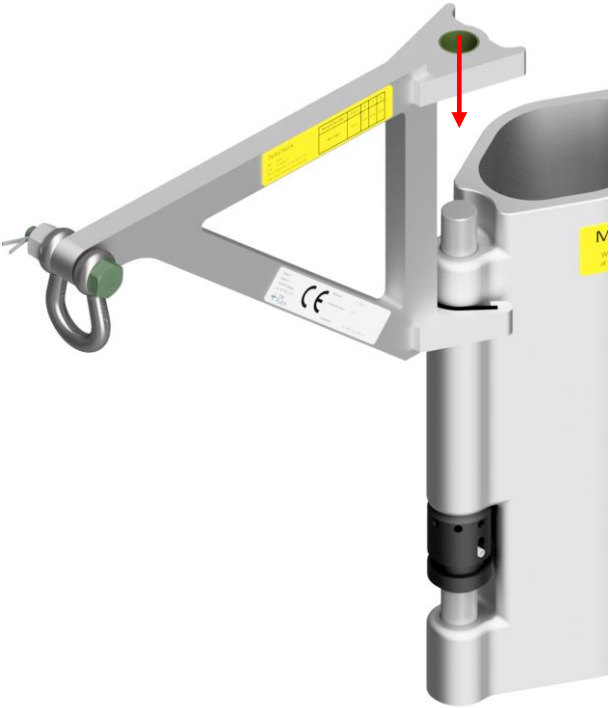
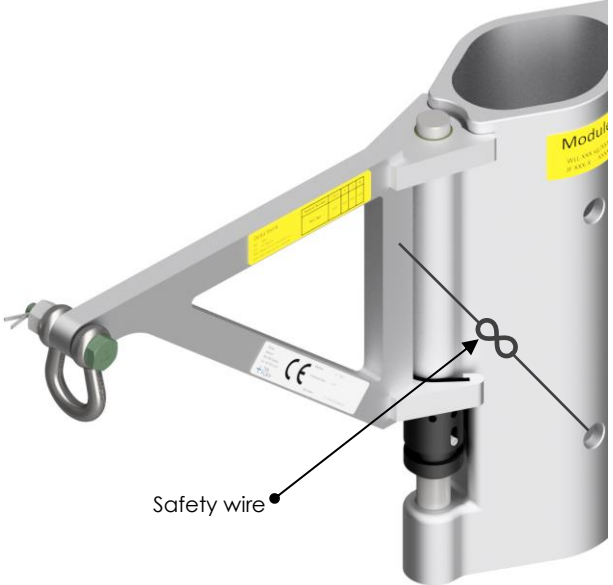
Secure each lock-pin with the corresponding linch pins (one at each end).

Insert an additional lock-pin in the hole directly above the countersunk locking bolt hole and secure it with linch pins.

Verify all pins are fully seated and all linch pins are correctly locked.



### 4.3.3 Delta Stork

Step No.	Description	Illustration
1	<p><b>Installing the Delta Stork</b></p> <p>Place the Delta Stork in the outermost JibFlex module. Lower it vertically from above until the Delta Stork is seated and supported against the module.</p>	
2	<p><b>Fixating the Delta Stork</b></p> <p>Once the Delta Stork is fully seated in the module, install the safety wire through the designated holes and secure it to prevent unintended movement.</p>	

## 5 Hoists

The JibFlex solution is designed for use with a hoist mounted in the stork. When a hoist is installed, its self-weight must be deducted from the stated WLL.

Manual hoists are generally permitted for all configurations.



### **ELECTRIC HOIST REQUIREMENT**

When used with JibFlex, the electric hoist must be equipped with WFD (frequency drive) or an equivalent gentle/soft start and stop function to limit dynamic loads. This feature is standard on most modern electric hoists.



## 5.1 Flex hose for electrical hoists


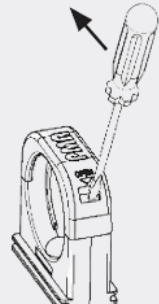
For electric hoists, the power cable can be routed along the JibFlex in a flex hose. The flex hose is supported by flex hose clips mounted on top of each JibFlex module using threaded holes. This keeps the cable protected, guided, and clear of moving parts during operation.

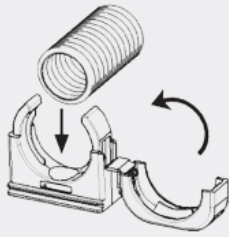


Figure 11 - JibFlex with flex hose clips.

Before installation, verify that you have the required number of clips, that the flex hose length matches the boom configuration, and that the cable can move freely along the full working range without pinching or tension.

The flex hose installation procedure is described below:

	<p><b>PLACE REQUIRED FLEX HOSE CLIPS</b></p> <p>Position the flex hose clips on the JibFlex modules at the required locations along the hose route. Mount each clip using the threaded holes on top of each module and secure it with the supplied hex socket bolt.</p>
	<p><b>OPEN CLIPS WITH SCREWDRIVER</b></p> <p>Insert a screwdriver into the hole on the side of the clip and lever the clip open.</p>



#### PLACE FLEX HOSE & CLOSE CLIP

Place the flex hose in the clip and press it closed until it snaps shut. A clear "click" confirms the clip is fully locked.

## 6 Before Using the JibFlex

### 6.1 Training

JibFlex can provide operator training and train internal trainers. Daily operation training is a one-day course. A competent person is defined as a person who has completed the one-day training and is familiar with the contents of this manual.

### 6.2 First time use

Before using the JibFlex for the first time, a competent person shall inspect the following:

- **Anchor points:** Must be plumb/level and correctly welded and/or bolted to the supporting structure. Hinge pins and sockets must be undamaged.
- **Modules:** All modules must be level at the top, rotate freely, and the crane must be straight without a tendency to swing to one side.
- **Lock brackets:** All lock brackets must be correctly installed. They lock the modules in the vertical direction so the modules cant be They help prevent finger pinching between modules.
- **Stork:** The stork must be securely installed in the last module. Ensure lock pins and lynch pins are correctly fitted. The blade must point away from the anchor point.
- **Shackle:** Must be undamaged and fully tightened/locked.
- **Hoist connection:** The hoist must be securely attached to the shackle.
- **Maximum WLL:** Verify the maximum WLL for the configuration in use. The stork is included in the stated WLL, but the hoist self-weight is not. Subtract the hoist weight from the WLL stated on the last module.

## 7 Inspection & maintenance

Disassemble the JibFlex Magnetic Bracket by performing the installation steps in reverse order.

Reinstall the protective pads on all magnets after removal. Store the magnets and bracket components dry and secure.

## 8 Decommissioning