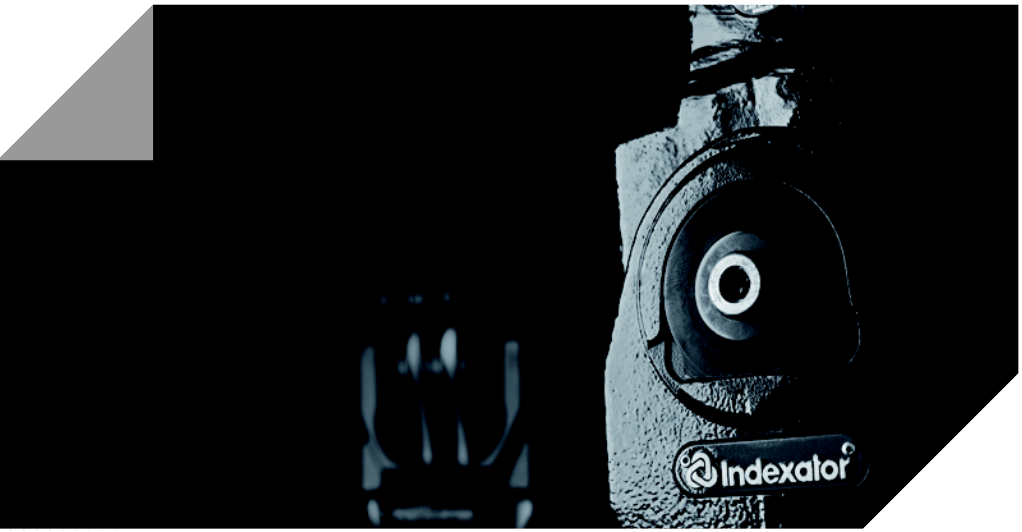
Indexator
Rotator Systems

User manual



LINK

Swing damper -184 M52 3T
–184
–184 HD
S-184 HD
Swing damper -184 HD
Swing damper S-184 HD

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Content

Introduction

This manual is intended for installation engineers, maintenance personnel or users of the product.

As installation and maintenance personnel or the end user, it is presumed that you have basic knowledge of mechanics and hydraulics.

Read through the manual carefully and ensure that you understand its content prior to installing, repairing or using the product.

Installation and maintenance may only be performed by authorised personnel.

Storage and distribution of the manual

The manual is part of the product and should always be kept in an easily-accessible place, for example, in the driver's cab. Replace any lost manuals immediately.

Guarantee and claims

Contact your dealer.

Indexator AB cannot be held responsible for unauthorised repairs and/or modifications made to the product.

Other information

The information in this manual was correct at the time of going to print. No liability is accepted for any errors or omissions in this manual. Every effort has been made to ensure that the content is accurate and complete.

Indexator AB reserves the right to make technical improvements and modifications to the product as part of further development, and without changing the product's basic functions. These improvements and modifications do not necessarily mean that the manual will need updating. Contact your local dealer for information about any changes.

Safety instructions

General

Any possible risks have been minimised for this product. No protective or safety devices, however well designed they are, can replace the care and alertness of the machine operator.

Read through the manual carefully and ensure that you understand its content before using the product. Carelessness during installation, repair or use can result in serious, even life-threatening injury.

Description of warning texts

Terms regarding **personal safety** are classed in three levels as below, depending on the severity of the consequences of an accident.

DANGER

Danger means that an accident will occur if the regulations are not followed. The accident will cause serious personal injury or even death.

Warning

Warning means that an accident may occur if the regulations are not followed. The accident may cause serious personal injury or even death.

Caution

Caution means that an accident may occur if the regulations are not followed. An accident may lead to personal injury.

Terms regarding **other safety** (property, processes or environment) and management are classed as below.

Important

Important means that an accident may occur if the regulations are not followed. The accident may lead to damage to property, processes or the environment.

Additional information is marked as below.

Attention!

N.B. is important additional information that helps you understand or carry out a particular action.

Product-specific warnings

Transportation and transfer

Caution
Risk of personal injury. Always use a lifting aid when lifting the uninstalled product.

Important
Risk of product damage. When moving, the product must be relieved from the crane arm/tool's own weight to avoid breakage.

Before use

Warning
Risk of crushing. Before use check that no person is within the machine working area.

During work

Warning
Risk of crushing. The area under hanging loads/tools is a strictly prohibited area.

Caution
Risk of personal injury. Watch out for falling objects.

Attention!
Risk of collision between tool and base machine. Fitted tools will change the basic machine's geometry. Exercise caution during working.

Attention!
Risk of product damage. Ensure that the working area is sufficient for handling hanging loads. Avoid letting the product come into contact with the end position in the crane tip.

During maintenance

Warning
Risk of personal injury. The torque from the adjustment device causes potential energy to build up, which can have an explosive effect if a screw is damaged. Stand to the side of the adjustment device when tightening.

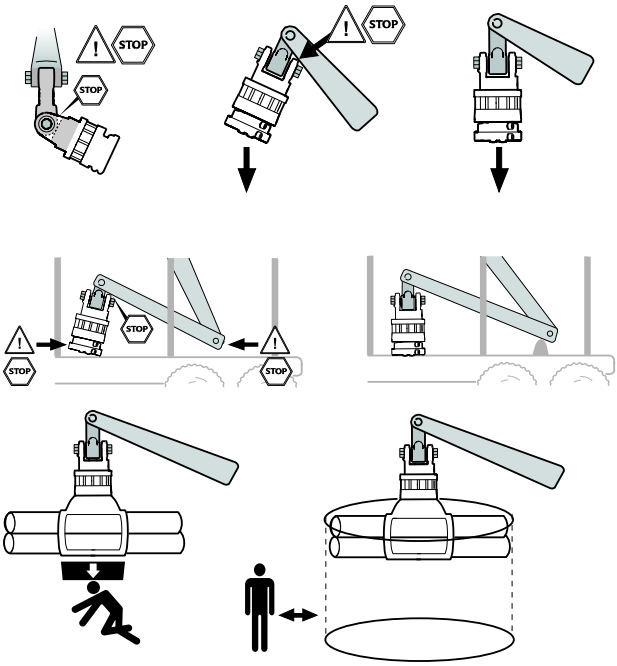
Safety

Risk area

The size of the risk area depends on the application and is determined by the application manufacturer. The risk area must be at least as big as the largest load, or as the width of the tool on a horizontal plane. The manufacturer must provide clear warnings about this.

DANGER

No personnel are permitted in the area under hanging loads/tools. It is a strictly prohibited area.



Caution

Risk of skin irritation/allergic reactions. There can be a number of chemical preparations on the product. Use protective gloves when handling.

Description

General

The product is a link or a swing damper.

The product is designed to be fitted between the rotator and the crane tip.

The product is designed to be used for positioning freely-hanging vertical loads.

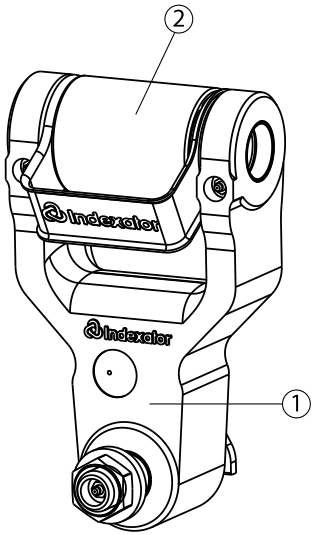


Image 1 Link

1. Link
2. Hose control

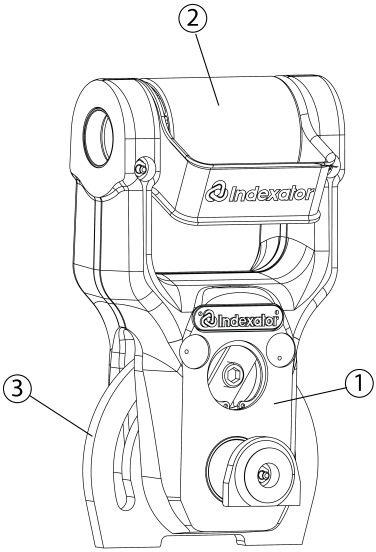


Image 2 Swing damper

1. *Link*
2. *Hose control*
3. *Brakes*

Link

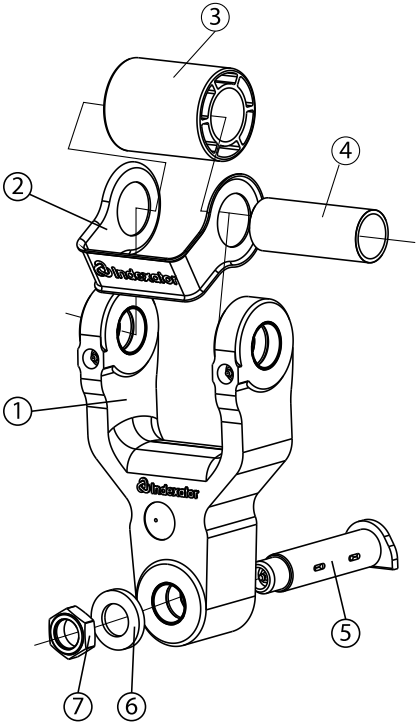


Image 3 Link

1. *Link*
2. *Hose control*
3. *Hose reel*
4. *Tube*
5. *Pin*
6. *Spacer*
7. *Nut*

Swing damper

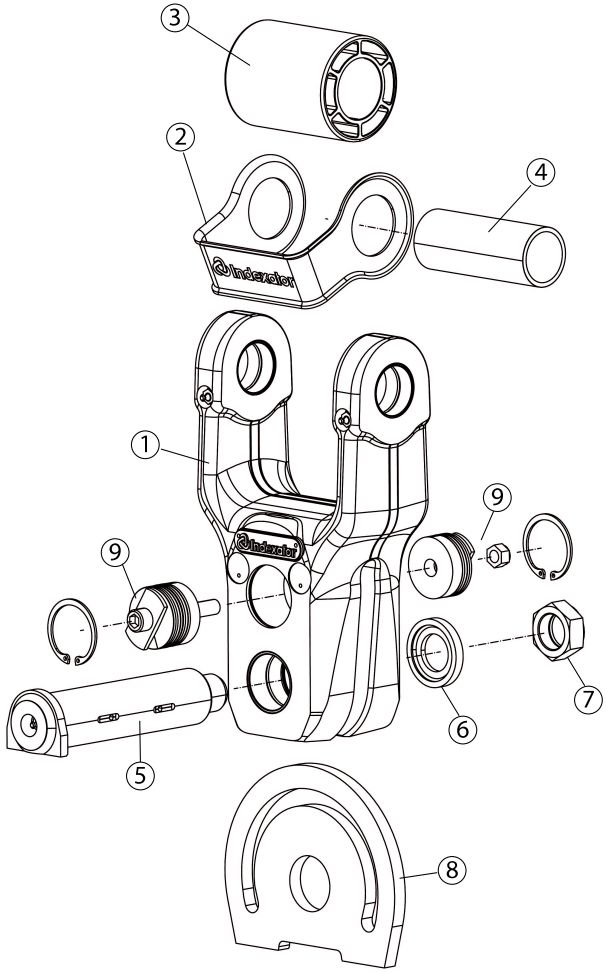


Image 4 Swing damper

1. *Link*
2. *Hose control*
3. *Hose reel*
4. *Tube*
5. *Pin*
6. *Spacer*
7. *Nut*
8. *Brake disc*
9. *Brake block*

Swing damper M52

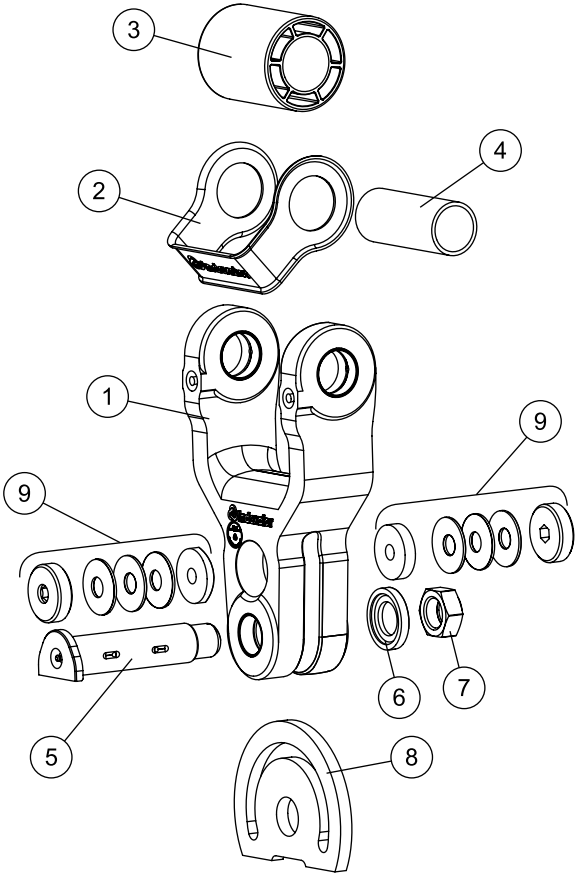


Image 5

1. *Link*
2. *Hose control*
3. *Hose reel*
4. *Tube*
5. *Pin*
6. *Spacer*
7. *Nut*
8. *Brake disc*
9. *Brake block*

Description

Brake kit (swing damper only)

Brake function

The brake kit is designed to brake the swinging movement in the actual direction. To ensure correct functioning, clean grease and oil from the brake disc.

Warning

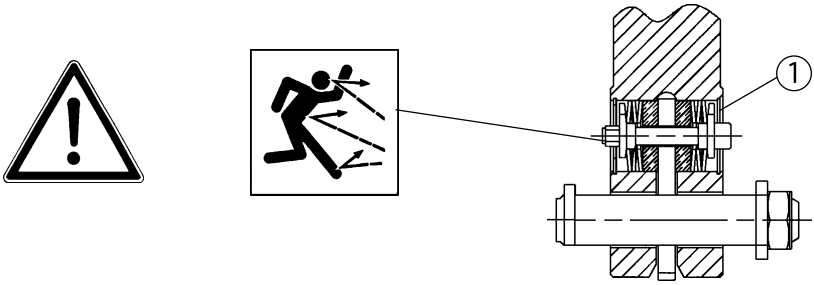


Image 6
1. Locking ring

Locking rings are a safety detail which stop parts being thrown out from the sprung brake unit if a screw is damaged. It is important that the locking ring is correctly in place during adjustment/tightening. Only when the brake unit springs are not pressurised (loosely adjusted) may the locking rings be removed, for example when changing the brake blocks.

Adjustment

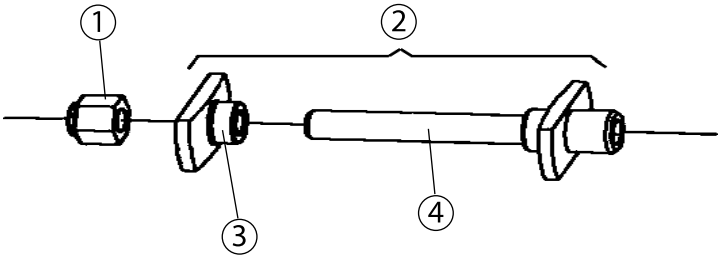


Image 7
1. Locking nut
2. Screw joint
3. Flange nut
4. Screw

For safety reasons, keep the locking rings in position. Loosen the locking nut before tightening. Hold the flange nut and tighten the screw. The maximum tightening torque for the screw joint is 30 Nm. Wear increases if tightening torque too high. After adjusting, the screw joint is locked by the locking nut.

Adjusting M52

Maximum tightening torque 75 Nm.

Changing the brake block

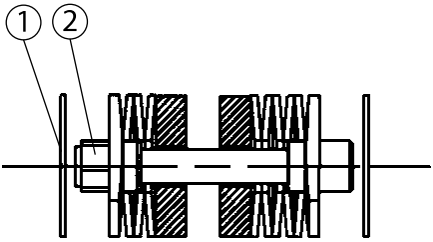


Image 8 S-184
1. *Locking ring*
2. *Locking nut*

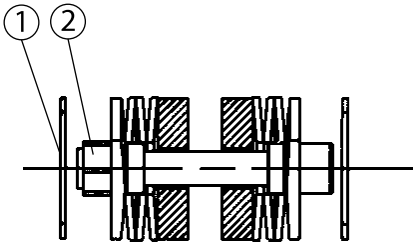


Image 9 -184
1. *Locking ring*
2. *Locking nut*

Loosen the locking nut. Loosen the screw joint. Remove the locking rings and change the brake blocks.

Cup springs assembled as per figure 1. If reassembly is carried out in any other way, parts of the brake kit can protrude, and can be damaged during swinging by the rotator/crane tip.

Remember to assemble the locking rings before tightening. Position the locking rings so that they can easily be accessed with the tool/pliers. It is important that the block is changed in good time so that the steel plate glued to the block does not rub/damage the brake disc.

Replacing brake block M52

Loosen the screw joint.

Remove the cup springs and replace blocks.

Reinstall in reverse order.

Installation

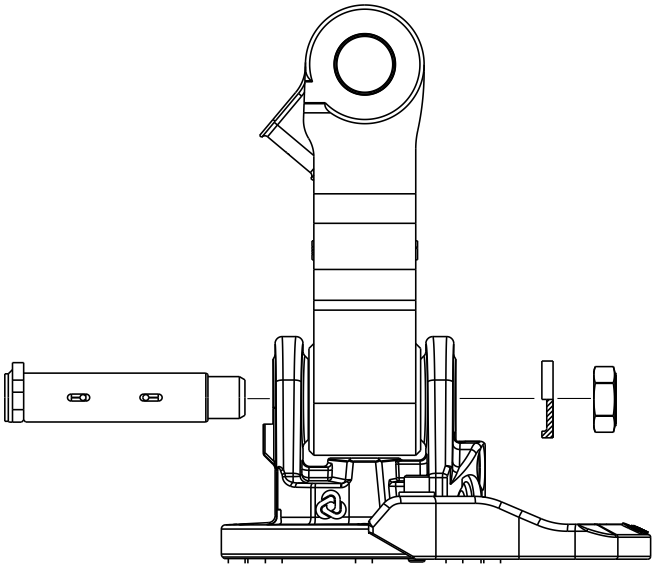


Image 10

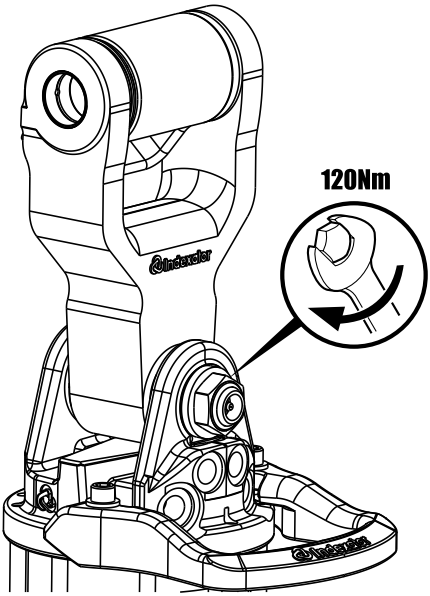


Image 11

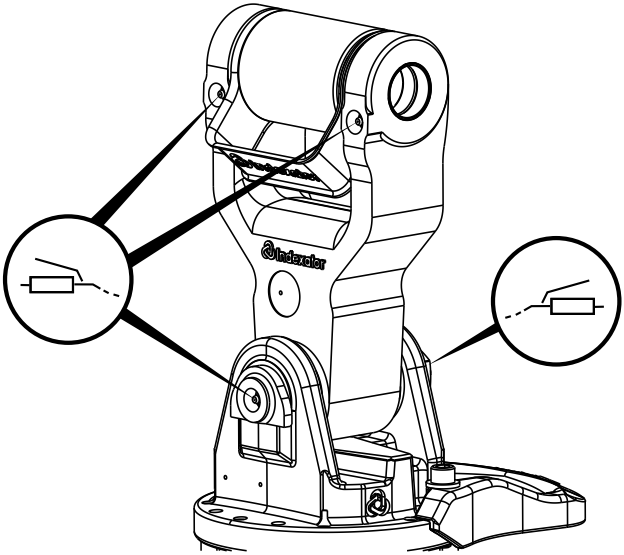


Image 12

Maintenance

Maintenance overview

Important
Irregular maintenance can lead to product damage.

Preventative maintenance, as required

Braking power	Check, adjustment

Every 50 hours

Bushings	Lubrication

Every 250 hours

Attachment	Check for cracks, change if necessary
Bushings	Check the size of play, possible change
Pin	Tighten the nut

Every 600 hours

Brake kit	Check for wear, clean components, and make replacements where necessary
Brake discs	Check for wear, clean components, and make replacements where necessary

Connect a grease gun with sufficient lubrication to the grease nipples. Keep on pumping until you see grease between the pin and the link.

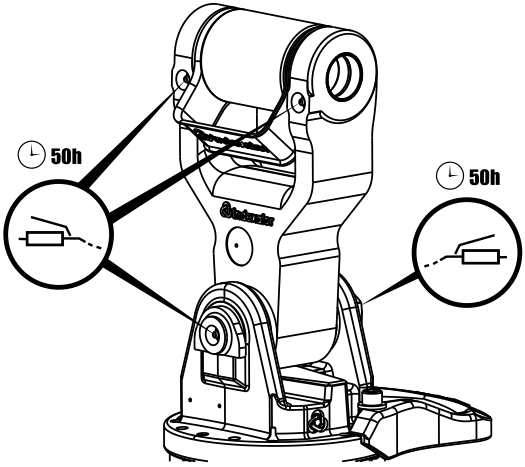


Image 13 Bushings

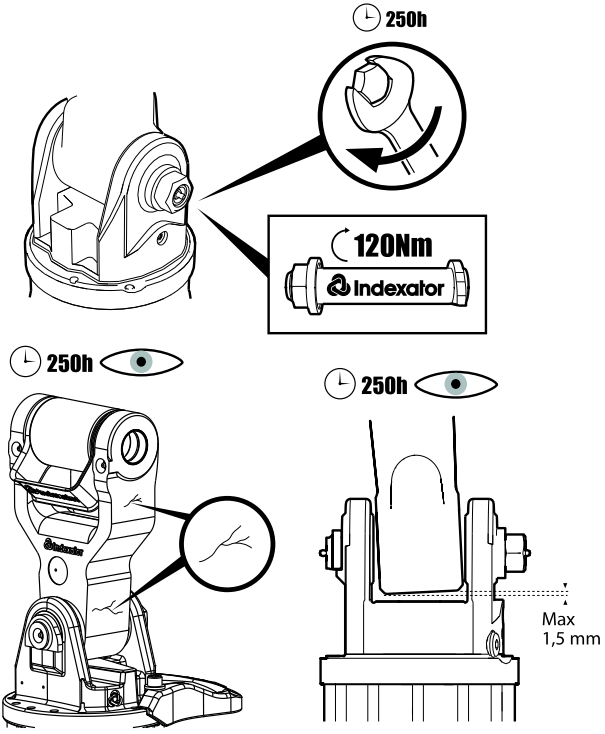


Image 14

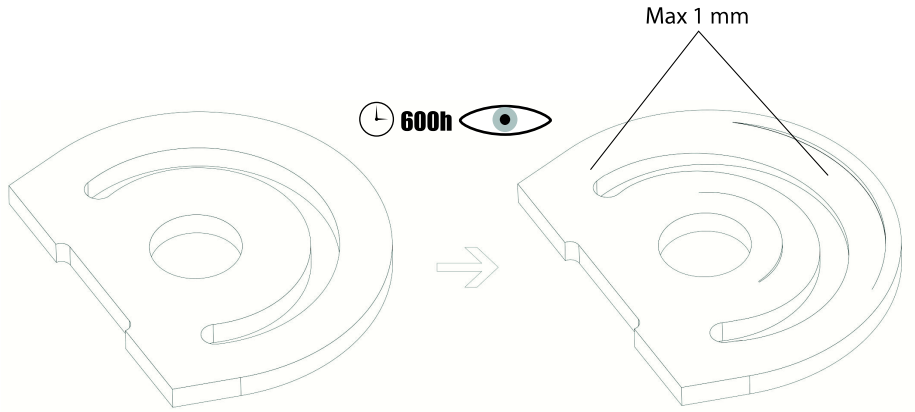


Image 15

Repair instructions

Attachment

If there is a fracture in the attachment, the link must be replaced. Contact your dealer for more information.

Bushings

1. Disassemble the product.
2. Press out the bushings using a hydraulic press.
3. Press in the new bushings.

Removing product from crane tip and rotator

1. Place the rotator on a flat surface.
2. Tie a rope or similar around the product and fix it up on the machine's point, or other high location, so that the product cannot fall when the crane tip is loosened.

Caution

Risk of crushing injuries. Check that the product cannot fall before it is loosened from the crane tip.

3. Remove the upper pin so that the product is loosened from the crane tip.
4. Remove the upper pin so that the product is loosened from the rotator.
5. Remove the product.

Technical data

Link –184

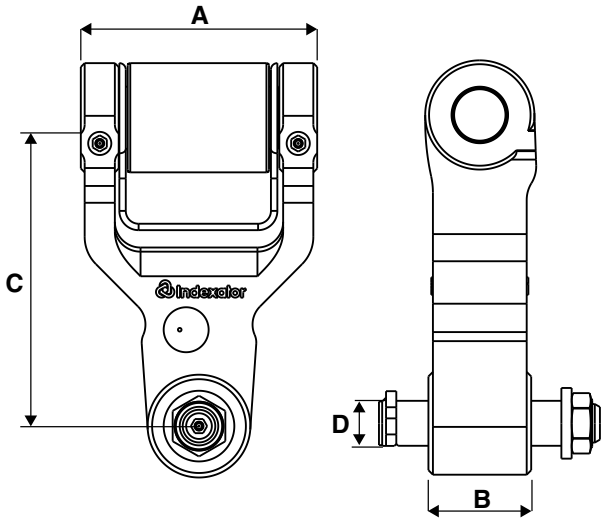


Image 16

	Swing damper –184 3T	Link –184	Link –184 HD	Link S-184 HD
A	184 mm	184 mm	184 mm	184 mm
B	80 mm	80 mm	80 mm	100 mm
C	240 mm	240 mm	240 mm	240 mm
DØ	Ø35	Ø35	Ø35	Ø45
Weight (kg)	13,5	13,5	17.2	23,5
Max. load	3 tonnes	10 tonnes	10 tonnes	16 tonnes
Max. rotator size	GV 6	GV 12	GV 12	GV 17S

	Swing damper –184 HD	Swing damper S-184 HD
A	184 mm	184 mm
B	80 mm	100 mm
C	240 mm	240 mm
DØ	Ø35	Ø45
Weight (kg)	16.5	22,5
Max. load	10 tonnes	16 tonnes
Max. rotator size	GV 12	GV 17S

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