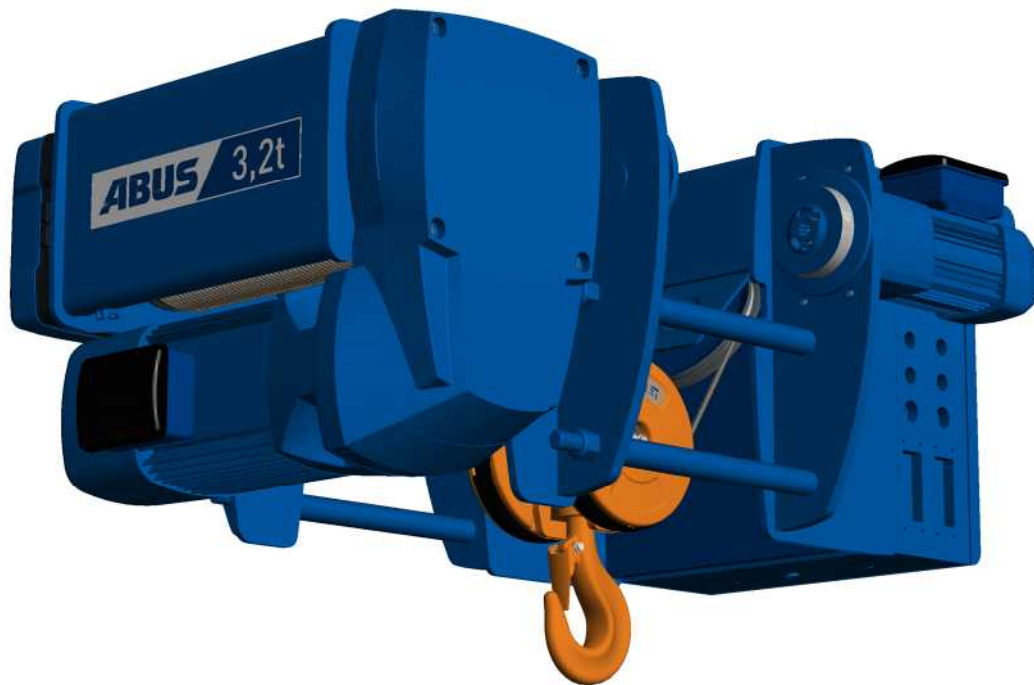


PRODUCT MANUAL



ABUS Wire rope hoist for overhead travelling cranes or single-rail trolley tracks

Single-rail trolley E



AT A GLANCE:

Checking the requirements: page 13

Inspecting the wire rope: page 20

Checking the load hook and bottom block: page 21

Replacing the wire rope: page 29

Overview of tightening torques: page 61

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2025-11-25

Original Operating Instructions

ABUS

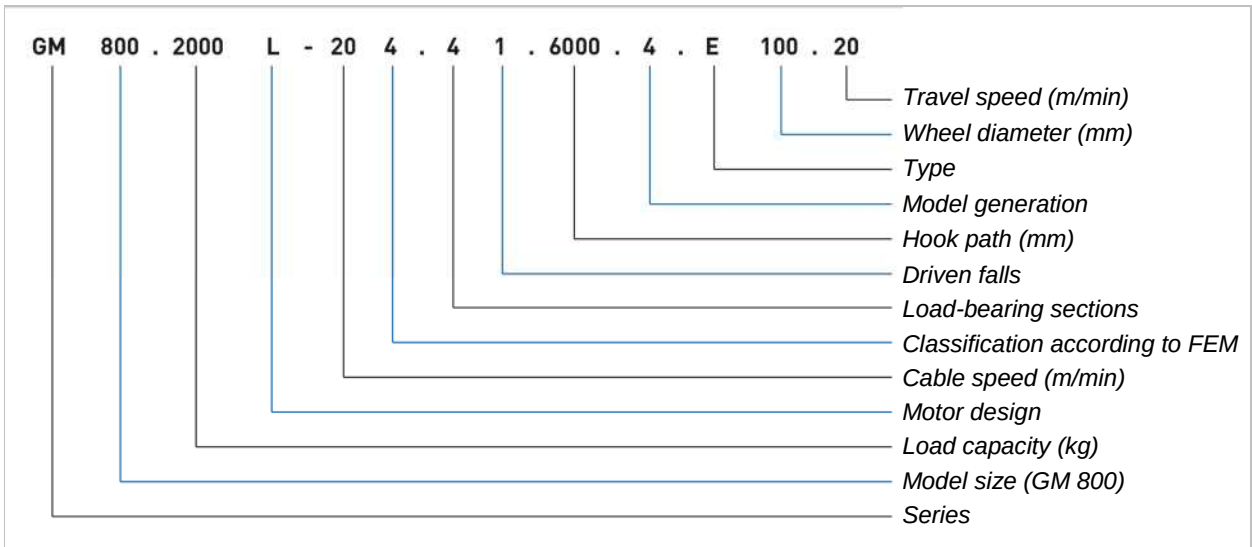
WIRE ROPE HOIST: VARIOUS TYPES, SIZES, VERSIONS AND OPTIONS

This product manual applies to wire rope hoists of various types, sizes, versions and options. The work steps described and the technical data differ depending on the wire rope hoist type, size, version and options. The areas of this product manual that do not apply to all wire rope hoists, but only under certain conditions, are framed by a dashed box. The types, sizes, versions and options to which the section applies are specified at the start of the box.

If a work step is described in a dashed box:

- ➡ At the start of the dashed box text, read the type, size, version or option to which this box applies.
 - ➡ Note page and turn to this first page.
 - ➡ Based on the images, determine which type, size, version or option applies to the wire rope hoist in question.
 - ➡ Turn back to the page with the associated dashed box for the next work steps.
- ➡ The type, size, version or option that applies to the wire rope hoist in question can also be determined by consulting the scope of delivery or the planning documents.

TYPE DESIGNATION



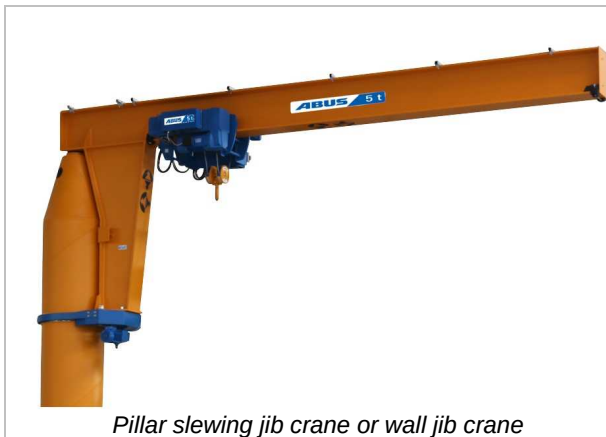
CRANE (TYPE)



Single-girder travelling crane



Single-rail trolley track



Pillar slewing jib crane or wall jib crane



Wall travelling crane

POWER SUPPLY (VERSION)



ABUPowerline energy chain

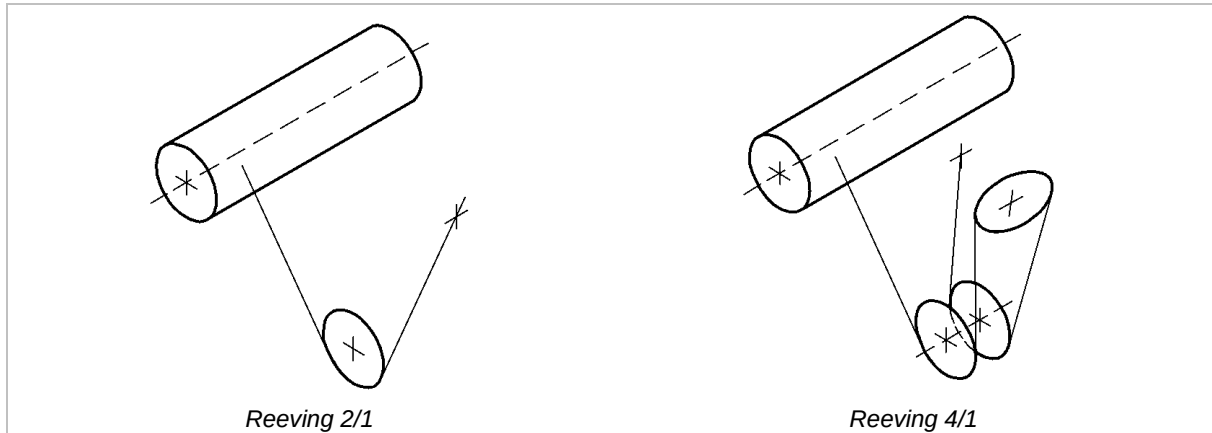


Festoon cable system

Note

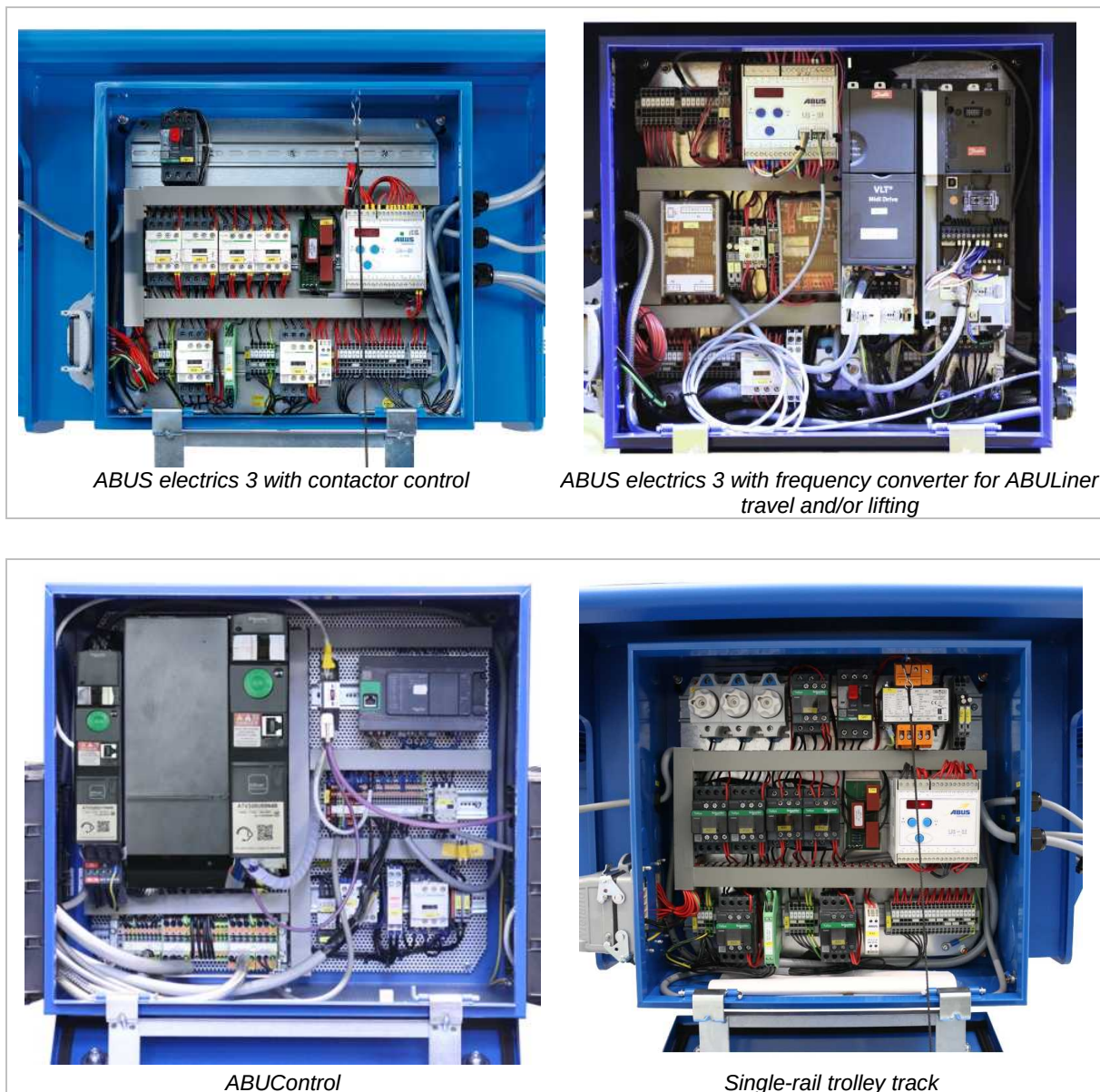
For a single-rail trolley track, the power supply can also be provided through a conductor system, but not through an energy chain however.

REEVING (VARIANT)



CONTROL (VERSION)

Example images:



CROSS-TYPE LIMIT SWITCH (OPTION)



Cross-type limit switch as trolley travel limit switch

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GENERAL INFORMATION

THIS SECTION APPLIES TO ANYONE WHO LIFTS LOADS USING THE CRANE, PERFORMS WORK ON THE CRANE, OR WORKS NEARBY.

AT THE START

USING THIS PRODUCT MANUAL

The following symbols are used in this product manual:



DANGER TO PERSONS!

This warning notice indicates hazards for persons.



DANGER FROM ELECTRIC SHOCK!

This warning notice indicates hazards for persons due to incorrect handling of the electrical system and electricity.



DANGER DUE TO FALLING LOAD

This warning notice describes hazardous situations that can lead to a load drop.



NOTICE OF POSSIBLE DAMAGE!

This notice describes situations in which a component could be damaged.



This is an instruction regarding an action and prompts you to perform a work step.

- This is the result of an action and describes what happens on the device.
- This is a list.

ONLY WITH...

A section that appears in a box framed by a dashed line is only applicable for certain types, versions or options. The condition to which the section applies is specified at the beginning in the heading “Only with...”.

INSTRUCTIONS FOR THE PRODUCT MANUAL

Read the product manual through carefully before starting work. Also be sure to observe additional product manuals for accessories and components.

Afterwards, keep the product manual available in the vicinity of the crane. It must be accessible to all who work with or on the crane.

If the crane is sold on or hired out, always provide the product manual together with the crane.

PROPER USE

Only with overhead travelling crane:

The wire rope hoist is intended for use on a correspondingly designed overhead travelling crane or wall travelling crane for area-wide movement of loads. The wire rope hoist therefore moves horizontally on an I-beam or a welded box girder.

- The wire rope hoist can move on I-beams or welded box girders.
- The wire rope hoist is intended for a trolley power supply using the ABUPowerline energy chain or an ABUS festoon cable system.

Only with single-rail trolley track:

The wire rope hoist is intended for use on a correspondingly designed single-rail trolley track for linear movement of loads. The wire rope hoist therefore moves horizontally on an I-beam or a welded box girder.

- The wire rope hoist can move on I-beams or welded box girders.
- The wire rope hoist is intended for a trolley power supply using an ABUS festoon cable system or a conductor system.

Only on pillar slewing jib crane or wall jib crane:

The wire rope hoist is intended for use on a correspondingly designed pillar slewing jib crane or wall jib crane for moving loads within a specific area. The wire rope hoist therefore moves horizontally on an I-beam or a welded box girder.

- The wire rope hoist can move on I-beams or welded box girders.
- The wire rope hoist is intended for a trolley power supply using the ABUPowerline energy chain or an ABUS festoon cable system.

REGULATIONS

The installation has been built and tested according to European standards, rules and regulations applicable at the time of its manufacture. The conventions applied during design and construction are specified in the Declaration of Conformity or the Declaration of Incorporation. The conventions must also be observed for installation, operation, inspection and maintenance, as must the applicable occupational health and safety regulations.



DANGER TO PERSONS!

Non-observance of the regulations can result in the death of persons or serious accidents.

To ensure that the work can be performed safely, thorough instruction in regard to this product manual and the regulations is necessary.

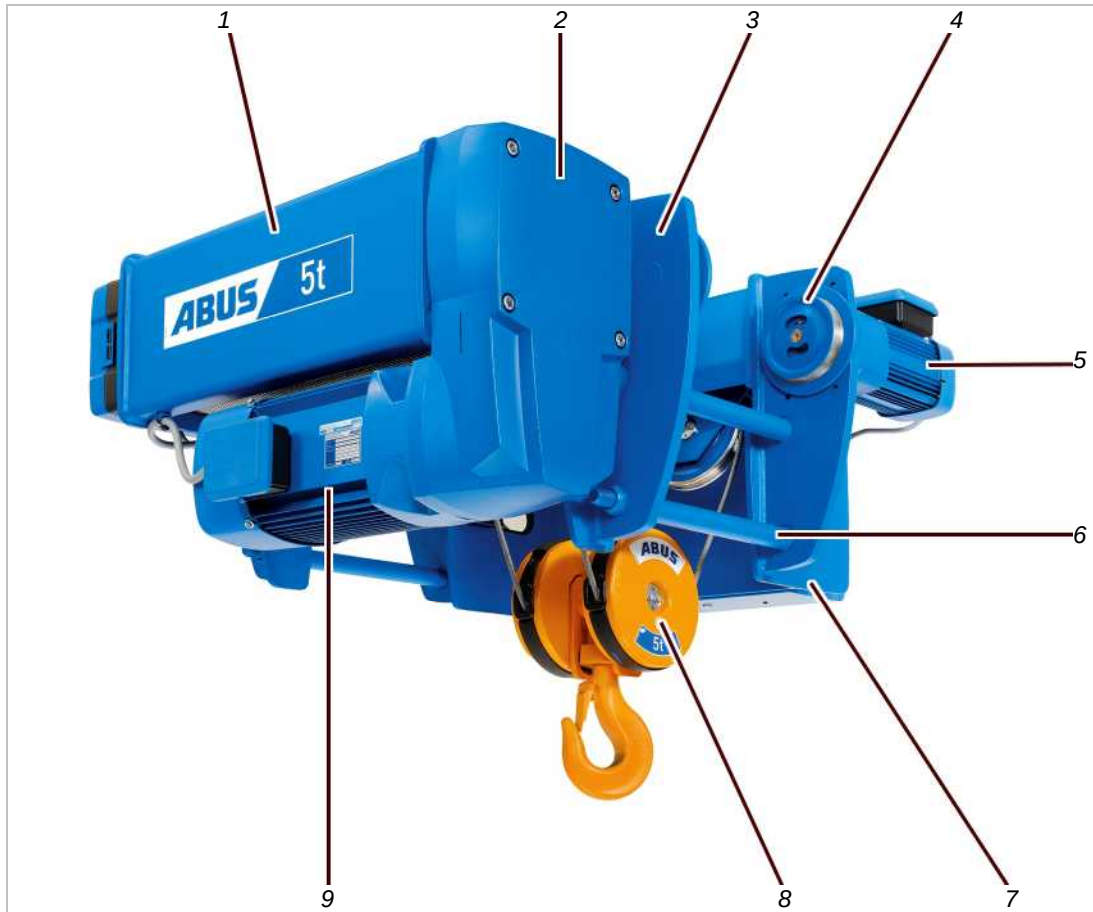
Which provision applies in individual cases will greatly depend on the crane's use and the national regulations. Review and observe all applicable and current regulations, including the occupational health and safety regulations. Refer also to the Declaration of Conformity or Declaration of Incorporation.

WARRANTY

- ABUS assumes no liability for damages that were caused by improper use, inadequately trained personnel, incorrect performance of work, nor for any changes, reconstruction or other modification of the crane or crane components which were not approved by ABUS.
- Any warranty claim becomes invalid if components were modified without consent, the crane or crane components were installed, used or serviced in any way other than that described in this product manual, or if parts other than original ABUS replacement parts were used.
- Safe operation of the crane or crane components is only guaranteed if original ABUS replacement parts are used.

THE WIRE ROPE HOIST

DESCRIPTION OF THE DEVICE SINGLE-RAIL TROLLEY (E)



- 1: Drum side
- 2: Hoisting gear
- 3: Trolley frame
- 4: Hoist trolley
- 5: Trolley drive
- 6: Spreader bolt
- 7: Counterweight side with panel
- 8: Bottom block and load hook
- 9: Hoist motor

PERFORMANCE FEATURES

The single-rail trolley (E):

- The hoist trolley travels on the lower flange of the main girder or along the single-rail trolley track and is preset for different flange widths. The flange width can only be adapted to a slight extent (a few mm).
- The wire rope hoist has two directly driven wheels and two non-driven wheels.
- The panel is located on the side opposite to the hoist drive and serves as a counterweight.
- The wire rope hoist covers a load capacity range of 1 t to 16 t.

The trolley drive:

- The drives are designed as pole-variable rotary current motors with electromagnetic brakes and gear units.
- The drives have a low and a high speed. The ratio of the two speeds is 1:4.
- The drive's gear unit is a maintenance-free, two-stage or three-stage planetary gear.

The hoist drive with pole-variable hoist motor:

- The hoist drive is powered by a pole-variable 2/12-pole hoist motor with gear unit.
- The hoist motor features an electro-magnetically actuated spring-loaded brake.
- The hoist drive has a slow lifting speed and a fast lifting speed. The ratio of the two lifting speeds is 1:6.
- Using plug-in connections in the connector housing directly on the hoist drive, the hoist drive can be quickly separated from the rest of the crane's electrics.
- The hoisting gear features a multi-stage, helical spur gear in an alloy housing. The gear wheels run in a sealed oil bath, which ensures they remain lubricated over their full service life.
- For further details on the pole-variable hoist drive, see the product manual "Pole-variable, modular ABUS hoist drive for wire rope hoists".

The hoist:

- The wire rope of the hoist is a special wire rope with a very high breaking strength. This gives it a considerably longer service life than a normal steel rope.
- The cable guide guarantees flawless winding and unwinding of the wire rope on the cable drum. It is made of wearproof, low-friction plastic.

TECHNICAL DATA

Ambient conditions for operation:

Ambient temperature (for normal operation)	-10 °C to +40 °C
Ambient temperature (for reduced duty cycle)	+40 °C to +65 °C
Housing	IP 55
Insulation class	F

Noise emissions:

Size	Sound pressure level LP, m dB(A) at distance of 4 m	Sound pressure level LW, m dB(A)
GM 800	62	82
GM 1000	64	84
GM 2000	66	86
GM 3000	67	87
GM 5000	68	88
GM 6000	68	88

Table: Noise emissions based on DIN 45635, Part 61 following the substitution process with an acoustic power source

In the table, the sound pressure level LP is specified for a distance of 4 m from the wire rope hoist. To calculate the sound pressure level LW, the sound pressure level at any distance may be used.

TRANSPORTING THE WIRE ROPE HOIST ON A LORRY

ONLY WITH UNINSTALLED WIRE ROPE HOISTS



DANGER TO PERSONS FROM FALLING COMPONENTS!

The wire rope hoist can fall from the lorry and kill or injure people if it is not correctly loaded and secured. Transport and securing of loads must be performed by trained persons.

Observe the following points amongst others:



- ➔ Secure all loose parts and wiring.
- ➔ Secure the load according to regional regulations.
- ➔ Secure the wire rope hoist to the loading area with suitable lifting tackle.
- ➔ Secure the load hook so that it cannot slide back and forth during transport.
 - The cable guide holds the wire rope firmly against the cable drum. Thus, no loops can form on the cable drum and the wire rope is free of kinks.

LOADING AND UNLOADING THE WIRE ROPE HOIST

ONLY WITH UNINSTALLED WIRE ROPE HOISTS



DANGER FROM FALLING COMPONENTS!

The wire rope hoist can fall and kill or injure people if it is not correctly attached and lifted. Attachment and loading should only be carried out by trained persons.

Observe the following points amongst others:

LIFTING WIRE ROPE HOIST WITH A CRANE



- ➔ Use suitable lifting tackle with load hooks.
- ➔ Insert the load hooks in the suspension eyelets on the wire rope hoist.
- ➔ Observe the occupational health and safety requirements and raise the wire rope hoist.

SETTING DOWN THE WIRE ROPE HOIST

- ➔ Place wooden slats on the floor as protection.
- ➔ Place the wire rope hoist with the trolley frame onto the wooden slats.
- ➔ Do not damage the bottom block when setting down.

WIRE ROPE HOIST DISPOSAL

If the wire rope hoist needs to be disposed of:

- ➔ Dismantle the wire rope hoist as far as is possible.
- ➔ Observe local regulations concerning disposal and recycling.
- ➔ Sort the individual parts by material and dispose of them in an environmentally sound manner.
- Dispose of oil and grease from the gear units as lubricants.
- Dispose of brake linings as multiple components (hazardous waste).
- Dispose of electronic components as scrap electronic parts.
- Dispose of cables, plug-in connections and pendant controls as scrap electronic parts.
- Dispose of the trolley frame, cable drum, deflection rollers, wire rope and other metal components as metal scrap.
- Dispose of the housing cover and housing base of the control as plastic waste.
- Parts of the wire rope hoist that have been repainted must be disposed of in accordance with the paint manufacturer's specifications.



This product or electrical device may not be disposed of with regular domestic waste at the end of its service life.

INSTALLING AND CONNECTING

THIS SECTION APPLIES TO ANYONE WHO WORKS ON THE CRANE PRIOR TO ITS USE

The end user of the crane is responsible for the proper qualifications of the commissioning personnel.



DANGER TO PERSONS!

Persons can be injured if the crane is incorrectly put into operation.

If personnel belonging to companies other than ABUS are employed to perform the crane commissioning, it is the end user's responsibility to ensure that these persons are adequately qualified. Follow the procedures described here precisely.

Examples of qualified persons:

- Persons with comprehensive knowledge from specialist training in engineering and in the electrical systems of cranes.
- Persons with sufficient experience in the operation, installation and maintenance of cranes.
- Persons with comprehensive knowledge regarding the relevant technical rules, directives and safety regulations applicable in the respective country.
- Persons receiving regular training from ABUS.

ABUS assumes no liability for damage due to incorrectly performed commissioning work done by unqualified personnel.

ABUS recommends having the commissioning work performed by the ABUS assembly team.

CHECKING THE REQUIREMENTS

The following requirements must be met in order for the wire rope hoist to be installed:

Among other things, these points must be coordinated as part of the technical authorisation process:

- The welded box girder or I-beam on which the wire rope hoist travels must meet the specifications of the enclosed dimension sheet and data sheet.
- The installation dimensions as well as the mains voltage and operating voltage must be correspondingly checked against the dimension sheet and the data sheet.
- The welded box girder or I-beam that the wire rope hoist travels on must have a straight lower flange or parallel flange.
- The dimension between the flanges of the wheels is permitted to be maximally 2 mm larger on each side than the measured width of the bottom block.
- The running surface that the wheels of the wire rope hoist travel on must be free of paint or other coatings.
- Only with overhead travelling crane, wall travelling crane or jib crane:
The trolley power supply must be executed as ABUPowerline energy chain or ABUS festoon cable system.
- Only with single-rail trolley track:
The trolley power supply must be executed as ABUS festoon cable system or conductor system.

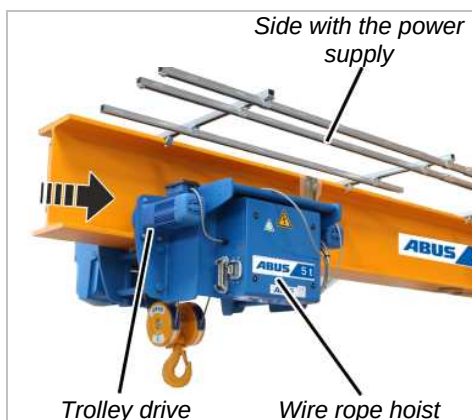
INSTALLING THE WIRE ROPE HOIST ON THE MAIN GIRDER OR ON A SINGLE-RAIL TROLLEY TRACK

If the wire rope hoist has not been installed yet, continue here. Otherwise, skip this section.

ONLY WITH AN OPEN MAIN GIRDER CONNECTION OR OPEN SINGLE-RAIL TROLLEY TRACK

If the main girder connection or the single-rail trolley track is not closed, the wire rope hoist can be pushed onto the lower flange.

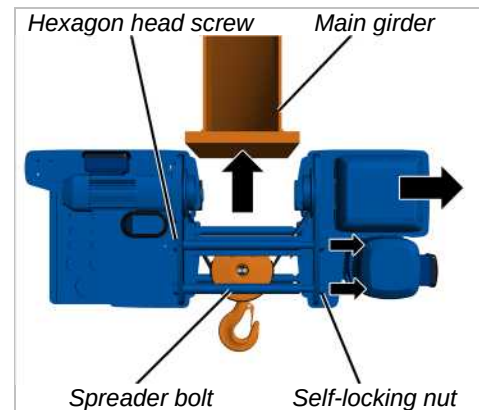
In the following, the assembly on a main girder is shown as an I-beam. The assembly on a box girder or a single-rail trolley track does not differ significantly.



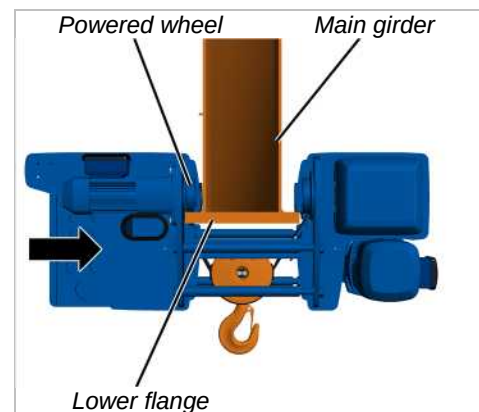
- ➔ Rotate the wire rope hoist so that the drives are facing the power supply side.
- ➔ Observe the occupational health and safety requirements, and raise the wire rope hoist.
- ➔ Push the wire rope hoist from the open side onto the main girder connection and set it down with the wheels.

ONLY WITH A CLOSED MAIN GIRDER CONNECTION OR CLOSED SINGLE-RAIL TROLLEY TRACK

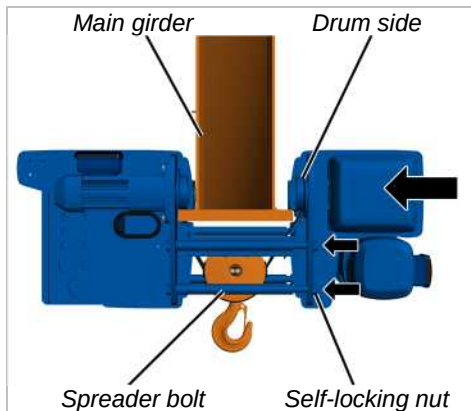
In the following, the assembly on a main girder is shown as a box girder. The assembly on an I-beam or a single-rail trolley track does not differ significantly.



- ➔ Release self-locking nuts (2x).
- ➔ Only loosen the self-locking nuts so far that they still remain on the thread of the screw.
- ➔ Push the wire rope hoist apart.
- ➔ The wire rope hoist must be pushed apart so far that the distance between the wheels is wider than the lower flange.
- ➔ Lift the wire rope hoist under the main girder using, for example, a lift truck.



- ➔ Rotate the wire rope hoist so that the drives are facing the power supply side.
- ➔ Place the powered wheels on the lower flange of the main girder.



➡ Push the drum side of the wire rope hoist onto the lower flange of the main girder.

The wheels must lie with their running surface fully on the lower flange!

➡ Tightly screw on the self-locking nuts.

Size	Self-locking nut	Tightening torque
GM 800	M20	85 Nm
GM 1000	M20	85 Nm
GM 1000	M24	150 Nm
GM 2000	M24	150 Nm
GM 2000	M30	290 Nm
GM 3000	M24	150 Nm
GM 3000	M30	290 Nm
GM 5000	M30	290 Nm
GM 6000	M30	290 Nm

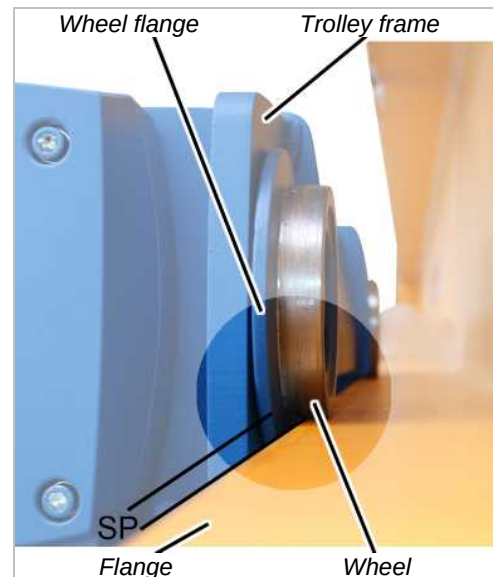
CHECKING THE TOLERANCE OF THE TRACK GAUGE



DANGER TO PERSONS FROM LOAD DROP!

If the tolerance of the track gauge is exceeded, the wire rope hoist with load could slip from the beam and seriously or fatally injure someone.

Before installing, check the tolerance precisely.



Measure the clearance between wheel flange and rail SP (distance between flange and wheel flange of the wheel) on both sides of the trolley frame.

All wheels must lie on the flange!

The measured value may not be larger than 2 mm on either side.

MOUNTING THE TROLLEY TOWING ARM

If the trolley towing arm has not been installed yet, continue here. Otherwise, skip this section.

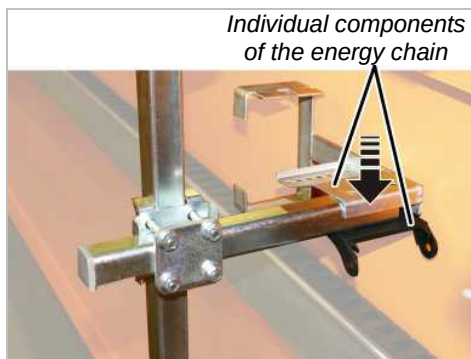
The trolley towing arm is installed above the hoist panel. It pulls the electrical cables for the trolley power supply (festoon cable system or energy chain) and the cross-type limit switch of the trolley travel limit switch back and forth parallel to the trolley.

The trolley towing arm must be installed differently, depending on the main girder (I-beam or box girder) and the type of power supply (festoon cable system or energy chain).

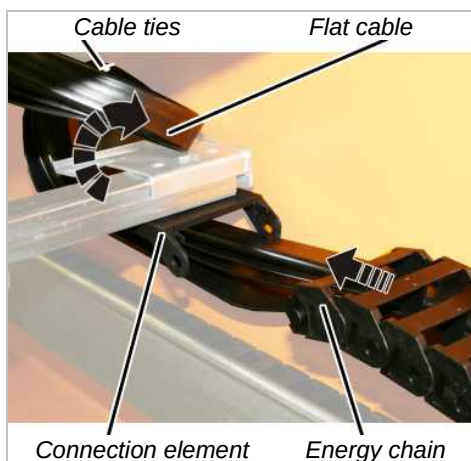
ONLY WITH ENERGY CHAINS

INSTALLING ENERGY CHAIN ON CARRYING TUBE

The energy chain is fastened to the horizontal carrying tube.



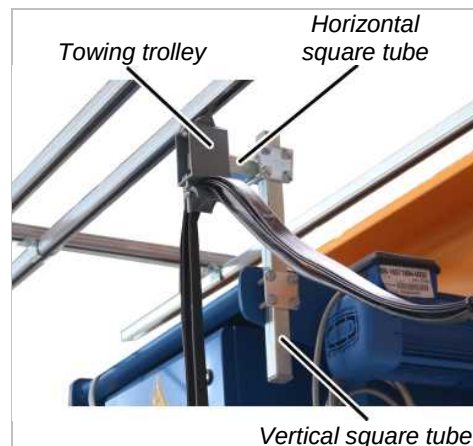
- ➔ Fasten the individual components of the energy chain (deflection bracket and connection element) with bolts and SL safety clip to the square tube.



- ➔ Lead through the flat cable from the energy chain and guide in a curve around the deflection bracket.
- ➔ Fasten the flat cable with cable ties to the upper section of the deflection bracket.
- ➔ Insert the energy chain into the connection element and click into place.

ONLY WITH FESTOON CABLE SYSTEM

MOUNTING THE TROLLEY TOWING ARM



- ➔ Screw the vertical square tube and the plate onto the wire rope hoist using rib screws M8. 15 Nm.
- ➔ Push the horizontal square tube into the towing trolley.
- ➔ Screw the horizontal square tube onto the vertical square tube using a pipe clamp. 15 Nm.

ONLY WITH CONDUCTOR SYSTEM

INSTALLING THE MAINS POWER CARRYING FORK

- ➔ Screw the vertical square tube and the plate onto the wire rope hoist using rib screws M8. 15 Nm.
- ➔ Screw the mains power carrying fork with pipe clamp on the square tube. 15 Nm.

INSTALLING THE CROSS-TYPE LIMIT SWITCH

ONLY WITH CROSS-TYPE LIMIT SWITCH

This section only applies if the wire rope hoist has a cross-type limit switch in the trolley travel direction.

Where and for which travel limit the cross-type limit switch is designed is specified on the wiring diagram.

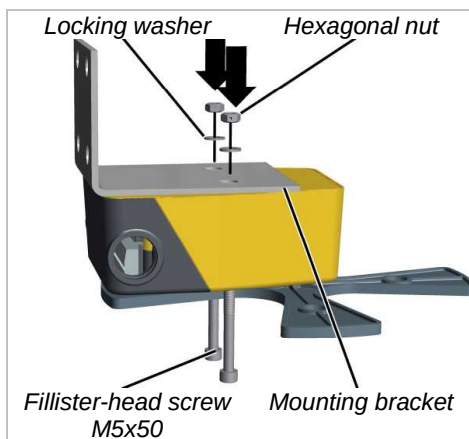
INSTALLING THE CROSS-TYPE LIMIT SWITCH



DANGER DUE TO MALFUNCTION!

If the cross-type limit switch is screwed on too tightly, the parts on the inside can become jammed and no longer function properly.

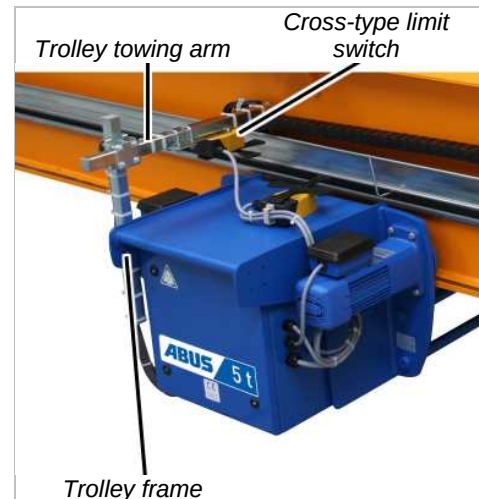
The tightening torque of 3 Nm must be strictly observed.



- ➔ Screw the mounting bracket onto the cross-type limit switch with the fillister-head screws M5x50 (2x).
- ➔ Screw on the mounting bracket using locking washers and M5 hex nuts (2x). 3 Nm.

INSTALLING THE CROSS-TYPE LIMIT SWITCH

The cross-type limit switch is installed either on the trolley towing arm or on the trolley frame. The installation on the trolley towing arm is shown here. The installation on the trolley frame does not differ significantly.



- ➔ Turn the cross-type limit switch to position 0.
 - ➔ The position of the cross-type limit switch is marked with an arrow that can be rotated further, depending on the switching state.
 - ➔ Attach the cross-type limit switch in such a way that the switching lug will activate it.
- The rotation direction of the cross-type limit switch for the respective travel direction must match the wiring diagram.
- ➔ Screw on the cross-type limit switch. 15 Nm.

CONNECTING THE CROSS-TYPE LIMIT SWITCH

- ➔ Route the connection cable (round cable or flat cable) from the cross-type limit switch to the panel.
- ➔ Route the connection cable with cable fitting into the panel.
- ➔ If necessary: Connect the connection cable to a coupler plug or connector.
- ➔ Fasten connection cable with cable grips, cable ties and adhesive clips.

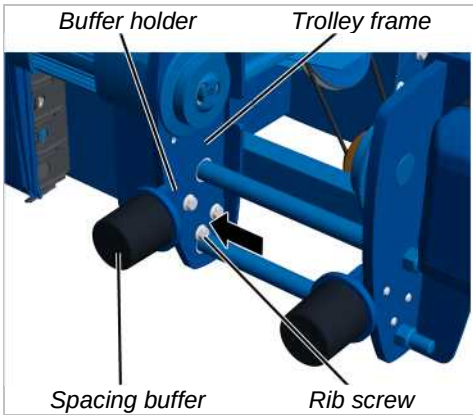
INSTALLING SPACING BUFFERS

If the spacing buffers are not yet mounted, continue here. Otherwise, skip this section.

ONLY WITH WIRE ROPE HOISTS
WITH SPACING BUFFERS

This section only applies if the wire rope hoist has spacing buffers. This is the case if two wire rope hoists are mounted on a crane. The spacing buffers prevent damage to the wire rope hoist if the wire rope hoists collide.

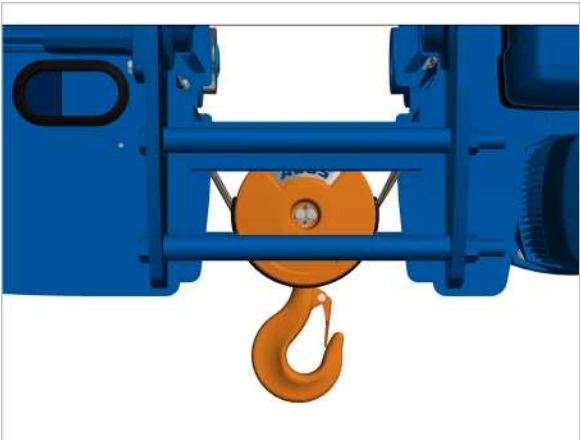
On both sides of the trolley frame:



- ➡ Screw the spacing buffer to the buffer holder. 3 Nm.
- The spacing buffer must be in contact with the buffer holder and there must be no gap between them, otherwise the impact will be absorbed by the screw and not by the spacing buffer.
- ➡ Screw the buffer holder with spacing buffer to the trolley frame using rib screws M12x30 (3x). 100 Nm.
- ➡ Run the single-rail trolleys together and check the buffer contact or position.
- ➡ Adjust the position of the buffer holders, if necessary.

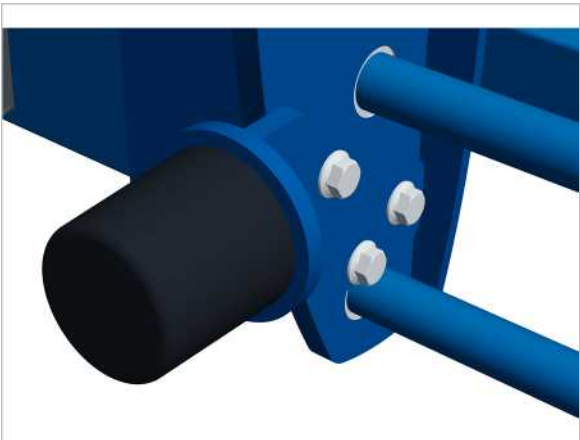
OVERVIEW OF TIGHTENING
TORQUES

SPREADER BOLT



Size	Self-locking nut	Tightening torque
GM 800	M20	85 Nm
GM 1000	M20	85 Nm
GM 1000	M24	150 Nm
GM 2000	M24	150 Nm
GM 2000	M30	290 Nm
GM 3000	M24	150 Nm
GM 3000	M30	290 Nm
GM 5000	M30	290 Nm
GM 6000	M30	290 Nm

BUFFER HOLDER



- Rib screw M12x30 (3x)
- 100 Nm

INSPECTION

THIS SECTION APPLIES TO ANYONE WHO INSPECTS AND ACCEPTS THE CRANE IN ACCORDANCE WITH OCCUPATIONAL HEALTH AND SAFETY REQUIREMENTS

The wire rope hoist must be inspected regularly to guarantee safe operation. The end user is responsible for this regular inspection.

AT THE START

TEST INTERVALS

The regular inspection is performed at least once annually.

Under certain conditions, more frequent regular inspections may be necessary. Reasons include:

- Frequent operation at the load capacity
- Working in multiple shifts
- Frequent use
- Dusty or chemically aggressive environment

The end user is responsible for checking the requirements and determining the test intervals. ABUS will gladly assist you if questions arise.

REQUIREMENTS FOR THE EXAMINER

The end user of the crane is responsible for the proper qualifications of the examiner.



DANGER TO PERSONS!

Persons can be injured if the test is performed incorrectly.

If personnel belonging to a company other than ABUS are employed to perform the test, it is the end user's responsibility to ensure that these persons are adequately qualified.

Examples of qualified persons:

- Persons with comprehensive knowledge from specialist training in engineering and in the electrical systems of cranes.
- Persons with sufficient experience in the operation, installation and maintenance of cranes.
- Persons with comprehensive knowledge regarding the relevant technical rules, directives and safety regulations applicable in the respective country.
- Persons receiving regular training from ABUS.

SCOPE OF THE TEST

The person qualified to inspect the wire rope hoist is responsible for the scope and type of inspection.

OVERVIEW: INSPECTING THE WIRE ROPE HOIST

In addition to the points described here, all points outlined in the other supplied product manuals must also be checked.

The decision as to whether the wire rope hoist is in a flawless condition is the sole responsibility of the examiner. Any inadequacies, if found, must be eliminated. The examiner decides whether the wire rope hoist needs to undergo inspection again afterwards.

If locally applicable regulations specify further tests, these are likewise to be carried out.

Additionally, at least the following points must be checked:

- ➔ Inspect the wire rope. See page 20.
 - ➔ Check the load hook and bottom block. See page 21.
 - ➔ Check the edge protection on the bottom block (visual inspection).
 - ➔ Inspect the fixed point crosshead. See page 24.
 - ➔ Inspect the deflection roller crosshead. See page 24.
 - ➔ Inspect the cable guide. See page 21.
 - ➔ Check the fixed point. See "25", page .
 - ➔ Inspect the end clamps on the cable drum. The end clamps (2x) must be installed and must not exhibit any heavy damage.
 - ➔ Check the wheel diameters. See "26".
 - ➔ Check the wheel flange wear of the wheels on the wire rope hoist. See "26".
 - ➔ Inspect the condition of the spacing buffers. See page 27.
 - ➔ Check the brake on the hoist drive or travel drive.
- See product manual "Pole-variable, modular ABUS hoist drive for wire rope hoists".
- ➔ Check the braking distance of the trolley drive.

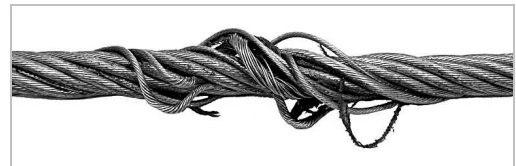
INSPECTING THE WIRE ROPE

- ➔ Inspect the entire wire rope for damage. The damage shown here or any similar damage should not be detectable on the wire rope.

Examples of damage:



The joining of the wire rope has opened. The inner strands of the wire rope are visible.



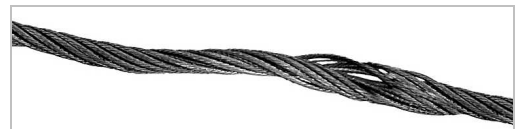
Loops have formed in the wire rope.



There is a kink in the wire rope. This can result, for example, from violent external forces being applied to the wire rope.



The wire rope is flattened at one point. This can result, for example, from the wire rope being pinched.



A bird cage has formed in the wire rope. This can result, for example, from violent untwisting of the wire rope.



The wire rope has a corkscrew-type deformation.

- ➔ Check the entire wire rope for broken wires. The wire rope must not exhibit more broken wires in a length of 6 times its diameter or 30 times its diameter than is specified for these lengths on the ABUS manufacturer's certificate for wire ropes in the test log book.

Examples of broken wires:



Multiple broken wires. Broken wires are signs of normal wear of the wire rope. They occur when the wire rope is bent on the reels under load.

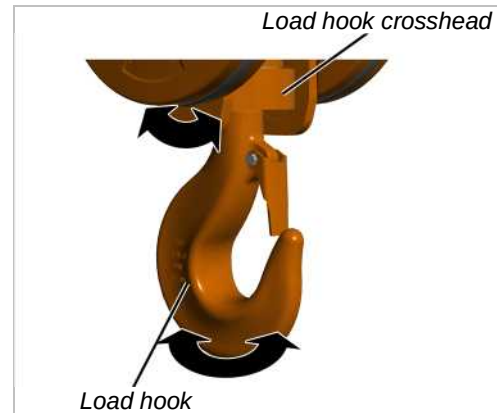


Broken wire with protruding wire end.

- ➔ If damage such as that pictured or similar damage is detected on the wire rope, replace the wire rope with a new one.
- ➔ If the wire rope has broken wires, but these do not exceed the permissible number, shorten the test interval until the next regular inspection.
- ➔ If the wire rope has more broken wires than permitted, replace the wire rope with a new one.

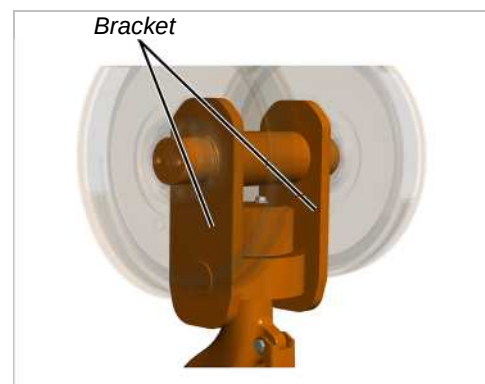
CHECKING THE LOAD HOOK AND BOTTOM BLOCK

CHECKING FOR EASE OF MOVEMENT



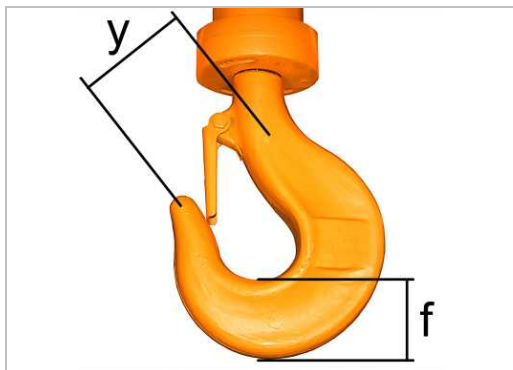
- ➔ Rotate the load hook to the left and right. The load hook must be easy to move and freely rotatable.
- ➔ Slew the load hook backwards and forwards at the load hook crosshead. The load hook crosshead must be freely slewable.
- ➔ If the load hook is not easy to move or freely rotatable or slewable, it must be repaired.

INSPECTING THE BRACKETS ON THE BOTTOM BLOCK



- ➔ Inspect the brackets. They must not exhibit any cracking, deformation or other signs of damage.
- ➔ If the brackets are deformed or damaged in any other way, they must be replaced.

MEASURING DEFORMATION AND WEAR OF THE LOAD HOOK



- ➔ Measure the distance 'y' between the two stamped markings on the load hook.
- ➔ Read the reference distance for 'y' from the test log book or, if applicable, from the load hook itself.

The measured distance 'y' must not be greater than 1.1 times the reference distance 'y'.

With ramshorn hooks, the distances 'y1' and 'y2' from the respective engraved marking on the tip of the load hook to the marking on the hook shank must each be measured and compared separately.

- ➔ Measure the base height 'f' of the load hook.
- ➔ Compare the measured value with the table.

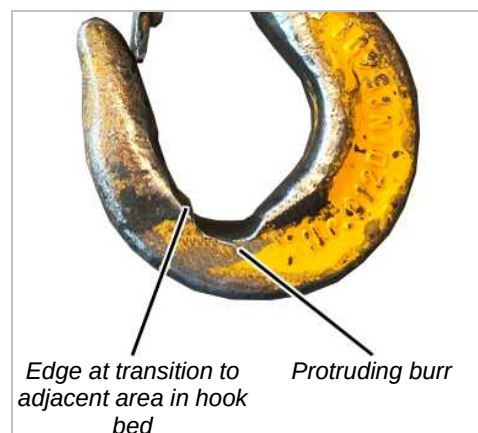
The measured base height 'f' must not be smaller than given in the table. The table specifies the minimum base height.

Size of load hook	Type of load hook	Minimum base height, 'f' [mm]
1	Normal hook	38
1.6	Normal hook	45.6
2.5	Ramshorn hook	47.5
2.5	Normal hook	55.1
4	Ramshorn hook	57
4	Normal hook	63.7
6	Ramshorn hook	71.3
6	Normal hook	80.8

Size of load hook	Type of load hook	Minimum base height, 'f' [mm]
8	Ramshorn hook	80.8
8	Normal hook	90.3
10	Ramshorn hook	90.3
10	Normal hook	100.7
12	Ramshorn hook	100.7
12	Normal hook	112.1

- ➔ If the load hook has been widened to a greater degree than is allowed or if the base height is below the permissible limit, replace the load hook.

Do not carry out any repair welding (e.g. build-up welding) on the load hook or on the load hook nut.



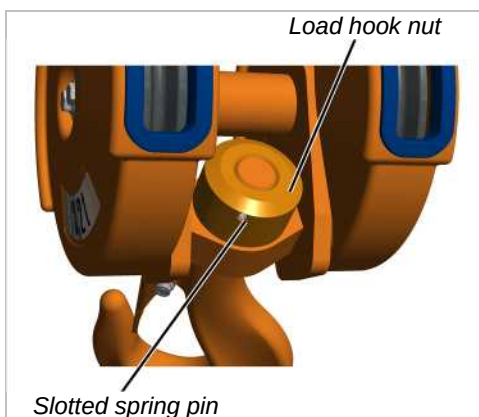
- ➔ Check the wear surfaces in the hook bed. They must merge gradually with the surrounding surfaces. They must not have any sharp score marks and edges or other surface faults.
- ➔ Inspect the edges. The side edges on the load hook should not have any exterior protruding burrs or similar surface faults.
- ➔ If the wear surfaces or side edges do have sharp score marks or edges, these may be smoothed (e.g. filed). The limit values for base height given above must be observed even after smoothing.

INSPECTING THE LOAD HOOK SURFACE

- ➔ Inspect the load hook surface. It must not have any faults, cracks or corrosion.
- ➔ If the surface of the load hook is to any extent not OK, disassemble the load hook and inspect the surface of the hook shank. It must not have any faults, cracks or corrosion.

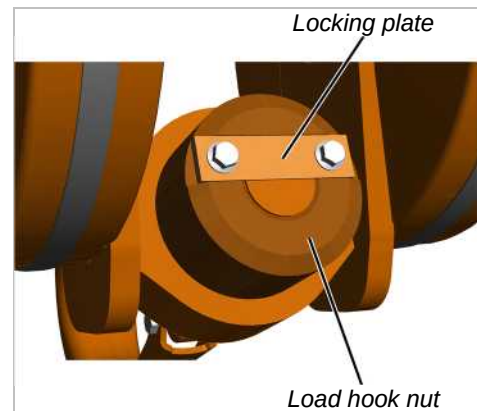
INSPECTING THE ANTI-ROTATION DEVICE OF THE LOAD HOOK NUT

For load hooks with anti-rotation device in the form of a slotted spring pin:



- ➔ Tilt the load hook until the anti-rotation device is clearly visible.
- ➔ Inspect the anti-rotation device. The slotted spring pin must be present, may not be damaged or broken and it must sit securely.
- ➔ If the slotted spring pin is missing or damaged, it must be replaced.

For load hooks with anti-rotation device by means of safety plate:



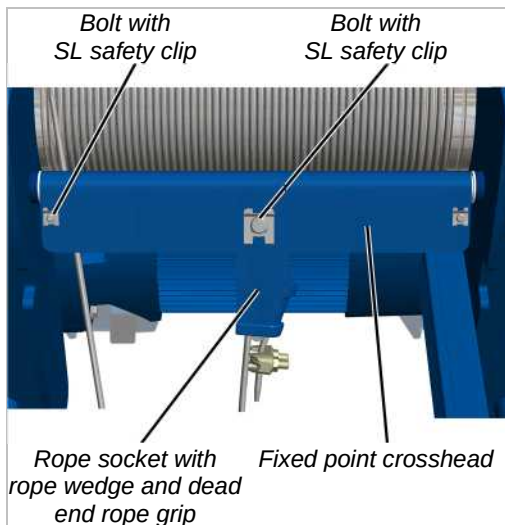
- ➔ Tilt the load hook until the anti-rotation device is clearly visible.
- ➔ Inspect the anti-rotation device. The safety plate must be present, undamaged and sit securely.
- ➔ If the safety plate is missing or damaged, it must be replaced.

INSPECTING THE HOOK SAFETY LATCH



- ➔ Inspect the hook safety latch. It must be present, functional and easy to move, and must not be deformed or damaged in any other way.
- ➔ If the hook safety latch is missing, damaged or not working properly, it must be replaced.

INSPECTING THE FIXED POINT CROSSHEAD



➔ Inspect the fastening. The fixed point crosshead must be securely fastened and all bolts must be secured with SL safety clips.

➔ Inspect the fixed point crosshead.

The drilled holes and the lower opening must not exhibit any cracking or other damage.

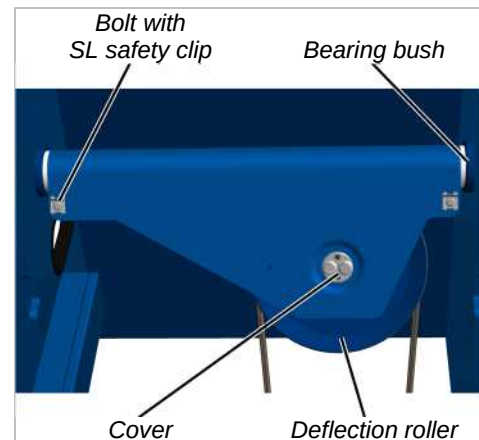
➔ Check bearing bushes for damage. The bearing bushes must not exhibit any cracking or other damage.

➔ If components are missing or damaged: replace the components.

See "Exchanging the fixed point crosshead with rope socket and rope wedge", page 44.

INSPECTING THE DEFLECTION ROLLER CROSSHEAD

ONLY WITH REEVING 4/1



➔ Inspect the deflection roller crosshead. The drilled holes must not exhibit any cracking or other damage.

➔ Inspect the deflection roller. It must not exhibit any deep grooves or heavy wear.

If necessary, the deflection roller can be carefully inspected using a special template. Please contact ABUS Service for this. See page 63.

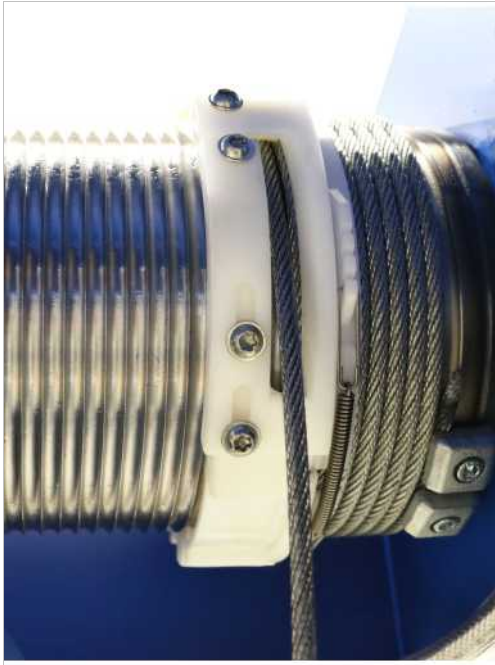
➔ Bolts and SL safety clips must be in place and secured.

➔ Check bearing bushes for damage. The bearing bushes must not exhibit any cracking or other damage.

➔ If components are missing or damaged: replace the components.

See "Exchanging the deflection roller crosshead" page 49.

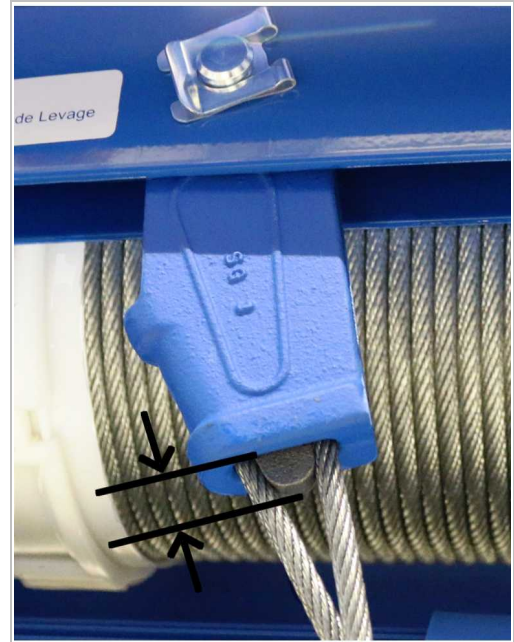
INSPECTING THE CABLE GUIDE



- ➔ Inspect the cable guide. The plastic parts must not be cracked, deformed or have abraded areas caused by the wire rope.
- ➔ Check the cable guide for ease of movement.
- ➔ Check the lubrication of the cable guide.
- ➔ If the cable guide is damaged: replace the cable guide. See "Replacing the wire rope", page 29.

CHECKING THE FIXED POINT

CHECKING THE ROPE WEDGE



- ➔ Measure the rope wedge protrusion (lower edge of rope wedge to lower edge of rope socket).
- ➔ Measure the rope clamp spacing (upper edge of dead end rope grip to lower edge of rope wedge).
- ➔ The measured values may not be higher than the values in the table.

Size	Maximum rope wedge projection	Minimum rope wedge projection
GM 800	19 mm	18 mm
GM 1000	4 mm	3 mm
GM 2000	2 mm	0 mm
GM 3000	18 mm	16 mm
GM 5000	22 mm	19 mm
GM 6000	31 mm	28 mm

- ➔ If the rope wedge protrudes too far out of the rope socket, or if the dead end rope grip is too close to the rope wedge: replace rope socket and rope wedge. See page 29.

Note

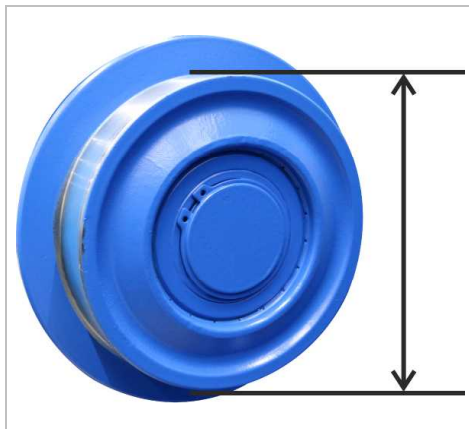
The minimum rope clamp spacing specified is always exactly equal to the wire rope diameter of the wire rope hoist.

CHECKING THE DIAMETER OF THE WHEELS

The running surfaces of the wheels become worn during operation. This reduces the diameter of the wheels.

This section shows how to check the diameter on a non-driven wheel. The check of the diameter on a powered wheel does not differ significantly.

MEASURING THE DIAMETER



➡ Measure the diameter of the wheel at multiple points over the width of the wheel.

➡ The diameter may not be smaller than is specified in the table.

If the diameter is smaller, the wheel must be replaced. See page 52.

Wheel	Maximum permissible wear	Minimum diameter
E 100	-3 mm	97 mm
E 130	-3 mm	127 mm
E 160	-3 mm	157 mm
E 200	-3 mm	197 mm

INSPECTING THE WHEEL FLANGE WEAR

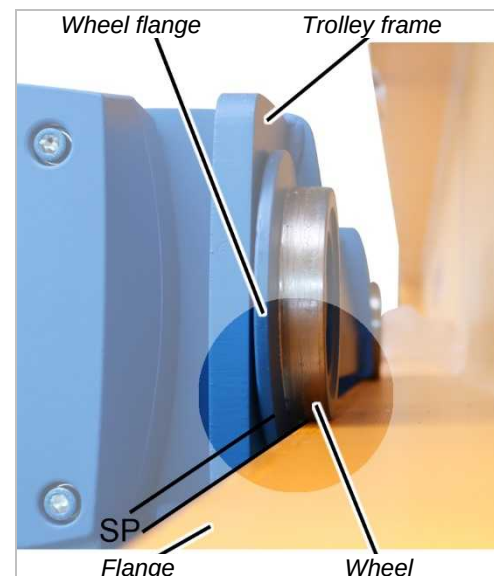
CHECKING THE TOLERANCE OF THE TRACK GAUGE



DANGER TO PERSONS FROM LOAD DROP!

If the tolerance of the track gauge is exceeded, the wire rope hoist with load could slip from the beam and seriously or fatally injure someone.

Before installing, check the tolerance precisely.



➡ Measure the clearance between wheel flange and rail SP (distance between flange and wheel flange of the wheel) on both sides of the trolley frame.

All wheels must lie on the flange!

The measured value may not be larger than 2 mm on either side.

INSPECTING THE SPACING BUFFERS

ONLY WITH WIRE ROPE HOISTS WITH SPACING BUFFERS

If spacing buffers are mounted:



- ➔ Inspect all spacing buffers.
The spacing buffers must not be porous, pinched, bent or otherwise damaged. If they are damaged: replace the spacing buffers.
- ➔ Inspect the rib screws M12x30.
The rib screws must be tightened with 100 Nm.
- ➔ Check the material of the spacing buffers all the way round.
The plastic must not be cracked anywhere on the surface.
- ➔ Press the spacing buffers with your finger.
The spacing buffers must be able to be pressed in slightly and be formable.
- ➔ If components are missing or damaged: replace the components.
- ➔ Even if one of the spacing buffers is only damaged to a certain degree, replace all spacing buffers on the wire rope hoist. See page 56.
- ➔ If one of the spacing buffers does not allow itself to be pressed in, replace all spacing buffers on the wire rope hoist. See page 56.

MAINTENANCE

THIS SECTION APPLIES TO ANYONE WHO MAINTAINS, REPAIRS OR MODIFIES THE CRANE.

The end user of the crane is responsible for the selection and proper qualifications of the maintenance personnel.



DANGER TO PERSONS!

Persons can be injured if the crane is incorrectly serviced.

If personnel other than that of the ABUS company are employed to perform maintenance on the crane, it is the end user's responsibility to ensure that these persons are adequately qualified. Follow the procedures described here precisely.

Examples of qualified persons:

- Persons with comprehensive knowledge from specialist training in engineering and in the electrical systems of cranes.
- Persons with sufficient experience in the operation, installation and maintenance of cranes.
- Persons with comprehensive knowledge regarding the relevant technical rules, directives and safety regulations applicable in the respective country.
- Persons receiving regular training from ABUS.

ABUS assumes no liability for damage due to incorrectly performed maintenance work done by unqualified personnel.

ABUS recommends having the maintenance work performed by ABUS Service.

Use only original ABUS replacement parts. Otherwise, all warranty claims will be rendered invalid.

INSTRUCTIONS REGARDING SAFETY WHEN PERFORMING MAINTENANCE WORK

Observe the following safety instructions during all maintenance work on the wire rope hoist.

- Switch off the mains switch. Secure the switch to ensure it cannot be turned back on accidentally.
- Open the fuse isolating link in the crane panel. Secure the fuse isolating link with a padlock so that it cannot be accidentally closed again.
- Use suitable lifting platforms and fall protection equipment.
- Adequately cordon off the operating range around the lifting platform.
- Switch off other cranes on the same crane track or cranes that are above or below the crane to be serviced. Secure the switches to ensure they cannot be turned back on accidentally. Other cranes could otherwise overturn the lifting platform or hit the crane to be serviced.
- Notify personnel in the area that maintenance work will be performed.
- Only trained electricians should work on the crane electrical system!
- Even after the emergency stop button has been pressed, life-threatening high voltages are still present in the crane control and in the trolley control.

These safety instructions apply specifically to the wire rope hoist:

- **Danger of crushing!**
Fingers could be crushed on the wheels, cable drum and deflection roller should the wire rope hoist make unforeseen movements, or if work is performed without sufficient attention. Secure the wire rope hoist. Work with caution!

REPLACING THE WIRE ROPE

If the wire rope is damaged or has more broken wires than permitted (see "Inspecting the wire rope", page 20), it must be replaced.

If the cable guide is damaged (see "Inspecting the cable guide", page 25), it must be replaced.

The wire rope and cable guides are wearing parts that are subject to heavy loads. They subject each other to wear during operation. This is why the wire rope and cable guide should always be replaced together.

The wire rope is a special lifting rope with a very high breaking strength. This ensures that it has a longer service life than a normal wire rope. This is why only genuine wire ropes from ABUS may be used.

If the rope wedge or the rope socket are damaged (see "Exchanging the fixed point crosshead with rope socket and rope wedge", page 44), they need to be replaced. They are usually replaced when the wire rope and cable guide are replaced.

These safety instructions apply specifically to changing the wire rope:

- Cordon off a generous space for the work area under the wire rope hoist.
- Ensure that the floor is swept clean.
This reduces soiling of the new wire rope.
- Scissors lift platform with adequate surface area for setting down the bottom block.
This is only possible with a reeving of 2/1 and 4/1.
Observe the load capacity of the lift platform!
- If an unrolling device is available to unroll the wire rope, sufficient free space for this is required.
- Position a scrap container or similar receptacle in the immediate vicinity of the lift platform and bottom block for the old wire rope.
- For a wire rope diameter larger than 11 mm, the rope change should be performed with the assistance of a second person.

PREPARING FOR WIRE ROPE REPLACEMENT

- ➔ Move the load hook under the upper limit switch range.
- ➔ Measure, and note the position of the load hook.

This makes adjusting the hoist limit switch after replacing the wire rope in many cases unnecessary.

ONLY WITH ABUCONTROL

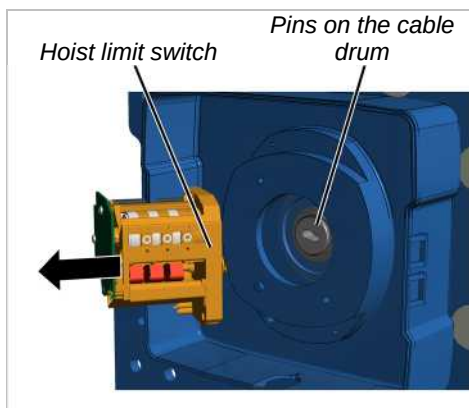
If ABUControl is installed for the wire rope hoist, refer to the product manual "ABUControl", section "Exchanging the wire rope" to prepare for the rope change.

Further steps for the wire rope change are then described in this product manual.

**ONLY FOR ABUS ELECTRICS 3
WITH CONTACTOR CONTROL OR
ABULINER**

**DISASSEMBLING THE HOIST LIMIT
SWITCH**

In order for the wire rope to be unwound from the cable drum using a motor, the hoist limit switch must be removed. Otherwise the cable drum will stop at the lowest hook position.



- ➡ Open the hoist limit switch housing.
 - ➡ Unscrew and remove screws (2x).
 - ➡ Pull off the hoist limit switch.
 - ➡ Leave the shaft of the hoist limit switch in the same position, and do not turn it.
- This makes adjusting the hoist limit switch after replacing the wire rope in many cases unnecessary.
- ➡ Secure the hoist limit switch to ensure it does not fall down or hang from the connection cables.

DISASSEMBLING THE FIXED POINT

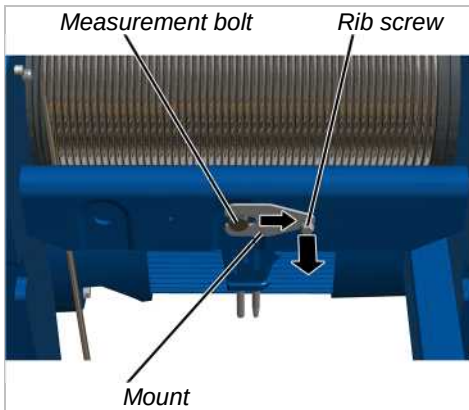


- ➡ Release the dead end rope grip.
- ➡ Pull the dead end rope grip from the end of the wire rope.

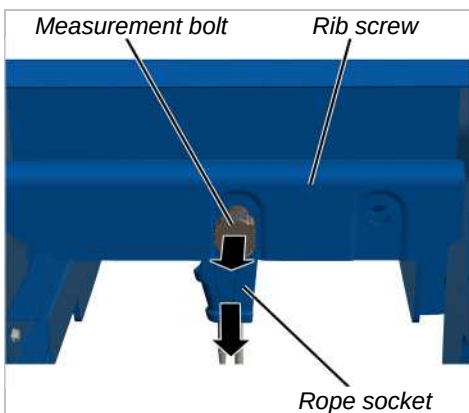
ONLY WITH EXCHANGE OF ROPE SOCKET WITH ROPE WEDGE

If the rope socket or the rope wedge are damaged, they must be replaced.

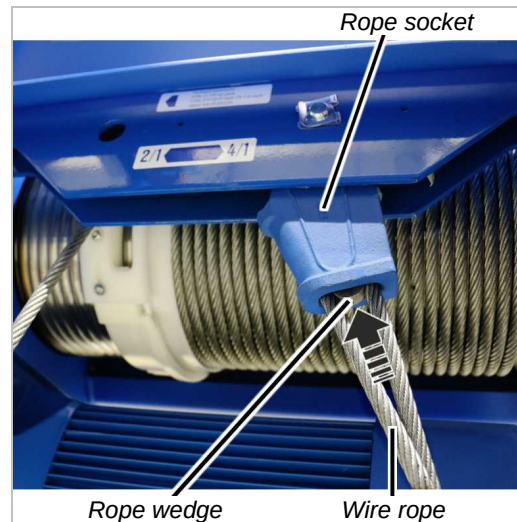
DISASSEMBLING THE ROPE SOCKET



- ➔ Release rib screw M6x12.
- ➔ Slide the mount from the measurement bolt.



- ➔ Pull the measurement bolt out of the fixed point crosshead and the rope socket.
- ➔ Pull the rope socket out of the fixed point crosshead.

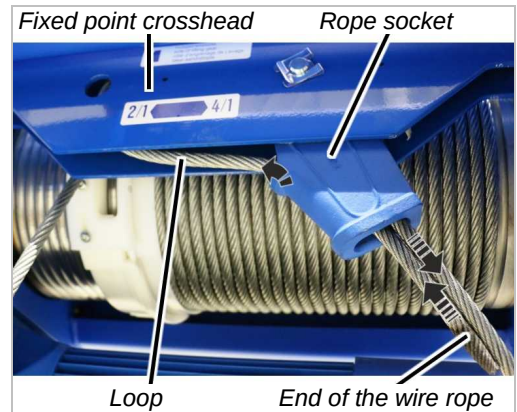


- ➔ Drive the rope wedge out of the rope socket and take it out.

If the rope wedge is stuck:

- ➔ Disassemble the rope socket.
- ➔ Turn the rope socket over and knock out the rope wedge from above.

The rope wedge can in this way be more easily knocked out of the rope socket.



- ➔ Push the end of the wire rope out of the rope socket.



➔ Pull the wire rope out of the rope socket.

PULLING THE WIRE ROPE OUT OF THE BOTTOM BLOCK

The rope guard in the bottom block will be damaged if the wire rope is pulled along the rope guard quickly to remove it from the bottom block. If the rope guard is to be used again, it should be disassembled beforehand.

ABUS recommends replacing the rope guard together with the wire rope.

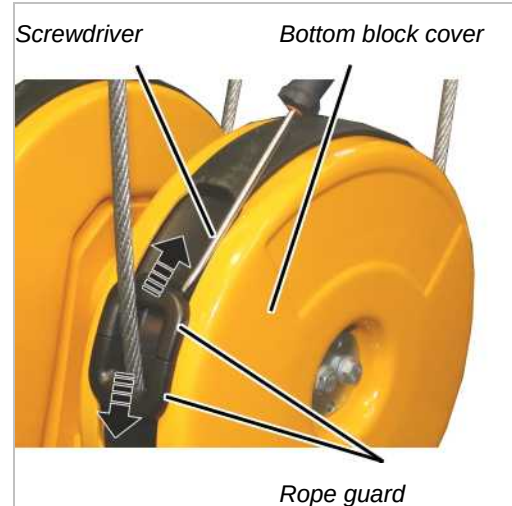


DO NOT PULL THE ROPE GUARD APART FORCEFULLY!

If the rope guard halves are pulled apart forcefully during disassembly, the catches will bend. This means the rope guard can no longer be fitted to be functional.

Carefully open the rope guard with a screwdriver.

On all openings on the bottom block:

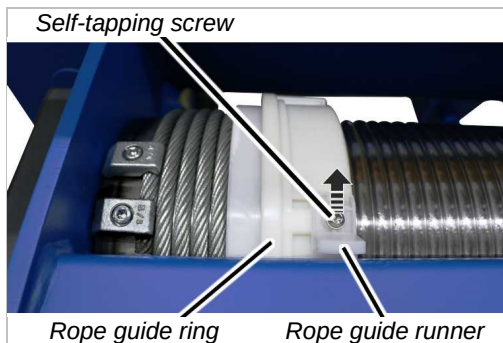


- ➔ Insert the screwdriver laterally between the rope guard and bottom block cover as shown in the figure.
- ➔ Use the screwdriver to unhook the load hooks on the left and right of the rope guard at the same time.
- ➔ Pull the rope guard (2x) apart and remove it from the bottom block.

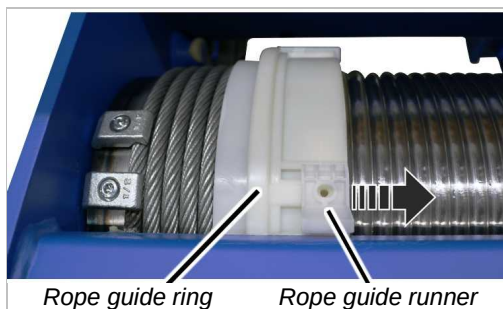


- ➔ Fit the bottom block.
- ➔ Pull the wire rope out of the bottom block.

DISASSEMBLING THE CABLE GUIDE



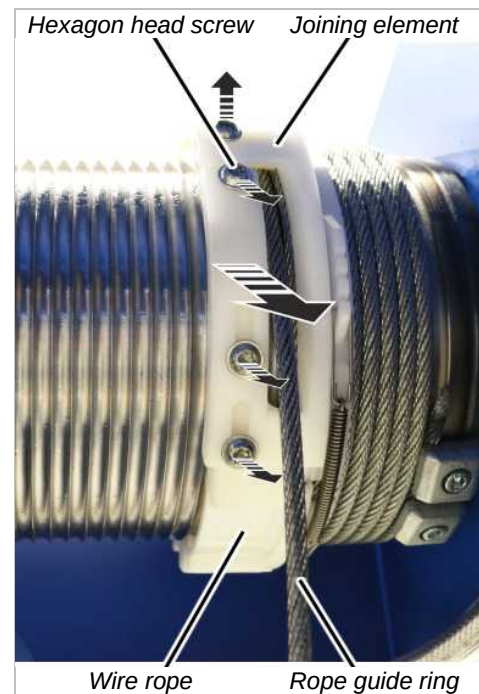
- ➔ Allow the wire rope to run off the cable drum using the motor.
- Several wire rope windings should remain on the cable drum.
- ➔ Unscrew the rope guide runner.



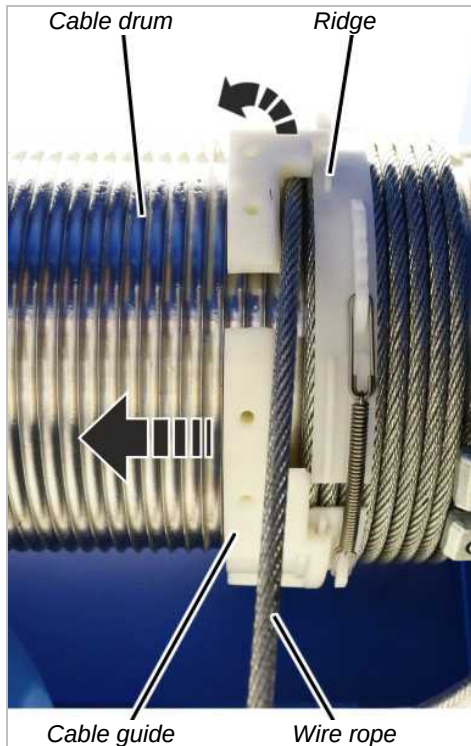
- ➔ Push the rope guide runner away to one side of the rope guide ring.
- The rope guide ring can now be turned freely on the cable drum.

ONLY WITH GM 800, GM 1000, GM 2000 AND GM 3000

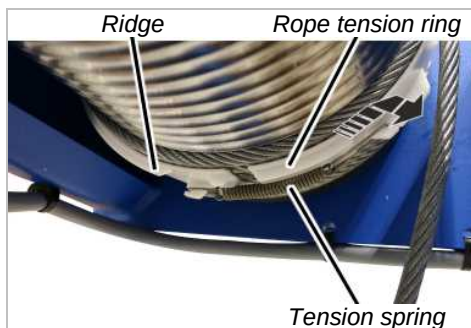
With a hoist drive of size GM 800 to GM 3000, the cable guide consists of a rope tension ring with rope guide ring and a joining element.



- ➔ Turn the rope guide ring so that the screws (4x) are easily accessible (e.g. upwards).
- ➔ Loosen screws (4x).
- ➔ Remove the joining element and unthread it from the wire rope.



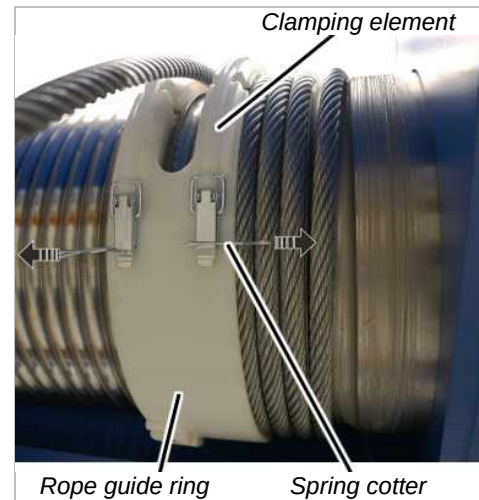
- Force the rope guide ring apart and pull it inwards and off the cable drum.



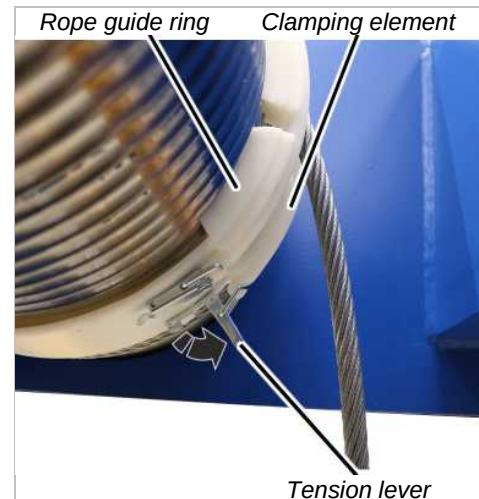
- Remove the tension spring from the rope tension ring.
- Force the rope tension ring apart and pull it inwards and off the cable drum.
- The cable guide has now been disassembled. The wire rope is now lying loose on the cable drum.

ONLY WITH GM 5000 AND GM 6000

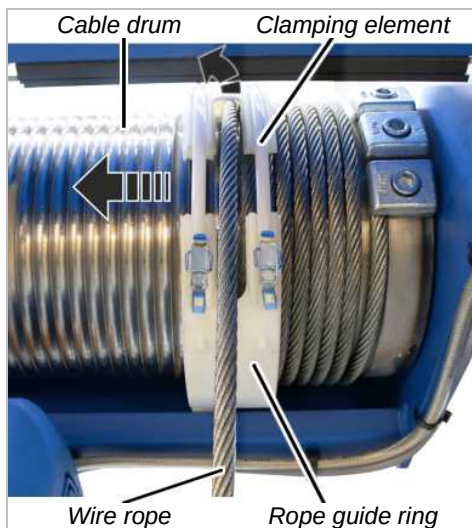
With a hoist drive of size GM 5000 and GM 6000, the cable guide consists of a rope guide ring with clamping elements.



- Pull the spring cotter out of the clamping elements on the rope guide ring.

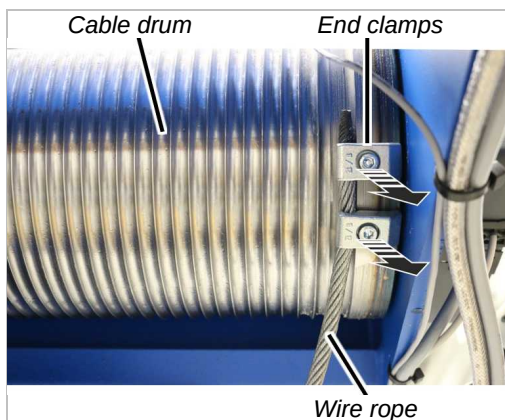


- Open and release the tension lever of the clamping element on the rope guide ring.



- ➔ Pull the rope guide ring with clamping elements from the cable drum.

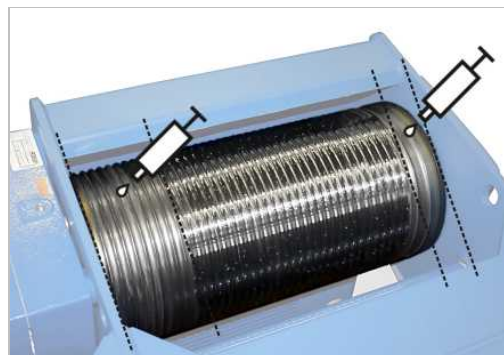
REMOVING THE WIRE ROPE FROM THE CABLE DRUM



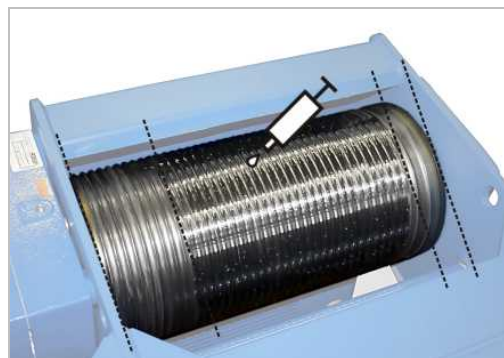
- ➔ Allow the wire rope to run off the cable drum using the motor.
- ➔ Release the end clamps (2x).
- ➔ Completely remove the wire rope from the cable drum.

CLEANING AND LUBRICATING THE CABLE DRUM

- ➔ Clean the cable drum.



- ➔ Lubricate the cable drum from the start to about the 8th or 10th turn.
 - ➔ Lubricate the cable drum behind the last turn.
- Lubricant: "Molykote PG-75". For details, see "Lubricants", page 57.



- ➔ Lubricate the cable drum behind the 8th/10th turn up to the last turn.
- Lubricant: "Chainlife S". For details, see "Lubricants", page 57.

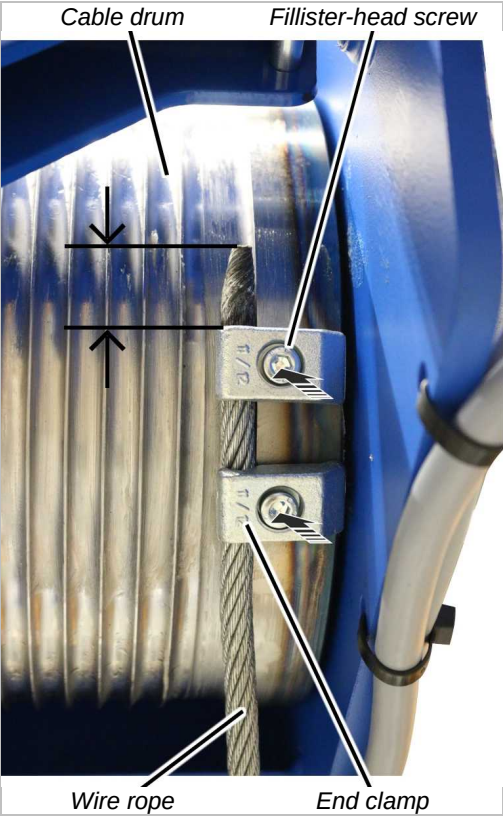
FASTENING THE WIRE ROPE TO THE CABLE DRUM

ROLL OUT THE WIRE ROPE WITHOUT TWISTING IT!

The wire rope will bend and become damaged if it is rolled out incorrectly.

Do not pull the wire rope upwards away from a horizontally lying ring.

Unroll the ring so it is vertically upright instead, and allow the wire rope to run onto the cable drum in the same direction as it was rolled onto the ring.



- ➔ Roll out the wire rope without twisting it.
- ➔ Thoroughly clean the fillister-head screws of the end clamps.

The fillister-head screws were previously bolted with a thread lock coating or a thread lock. The residues must be completely removed before the fillister-head screw may be used again.

The thread lock coating and thread lock are single-use only.
- ➔ Push the wire rope under the end clamps far enough that the rope protrusion is about 30 mm.
- ➔ Tighten the end clamps (2x) with fillister-head screws and secure with (medium strength) thread lock.

Size	Fillister-head screw	Number	Tightening torque
GM 800	M6x16	2	10 Nm
GM 1000	M8x20	2	25 Nm
GM 2000	M8x20	2	25 Nm
GM 3000	M8x20	2	25 Nm
GM 5000	M16x35	3	210 Nm
GM 6000	M16x35	3	210 Nm

- ➔ Pull the wire rope taut and use the motor to wind it onto the cable drum by 6 to 8 turns, ensuring it is taut and not twisted.

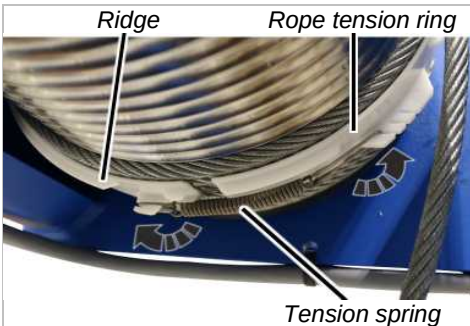
INSTALLING THE CABLE GUIDE

ONLY WITH GM 800, GM 1000, GM 2000 AND GM 3000

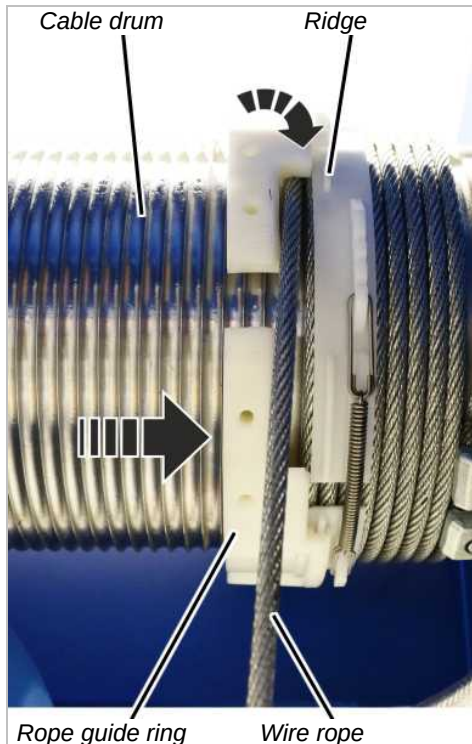
With a hoist drive of size GM 800 to GM 3000, the cable guide consists of a rope tension ring with rope guide ring and a joining element.



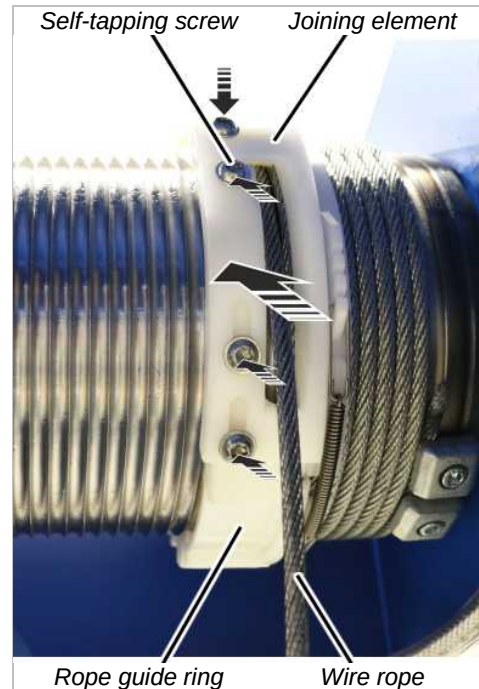
- ➔ Turn the rope tension ring so that the ridge is facing the hoisting gear.
- ➔ Force the rope tension ring apart and guide it over the wire rope on the cable drum.



- ➔ Hook the tension spring into one of the notches so that the rope tension ring is firmly seated on the wire rope but can still be turned freely.



- ➔ Grease the groove of the rope guide ring from the inside.
Lubricant: "Molykote PG-75". For details, see "Lubricants", page 57.
- ➔ Force the rope guide ring apart and push it over the cable drum.
- ➔ Place the rope guide ring with the groove into the ridge on the rope tension ring.
- ➔ Place the rope guide ring with the threaded segments into the free section of the cable drum.
- ➔ Check that both ends of the rope guide ring lie in the same groove of the cable drum.
The ends of the rope guide ring must be aligned.



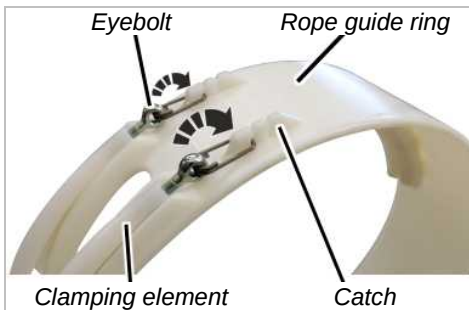
- ➔ Thread the joining element onto the wire rope.
- ➔ Push the joining element upwards and place it onto the rope guide ring.
- ➔ Tighten the joining element with self-tapping screws M6x16 (4x). 5 Nm.

When doing this, first secure the upper screws which do not lie in the elongated hole.

ONLY WITH GM 5000 AND GM 6000

With a hoist drive of size GM 5000 and GM 6000, the cable guide consists of a rope guide ring with clamping elements.

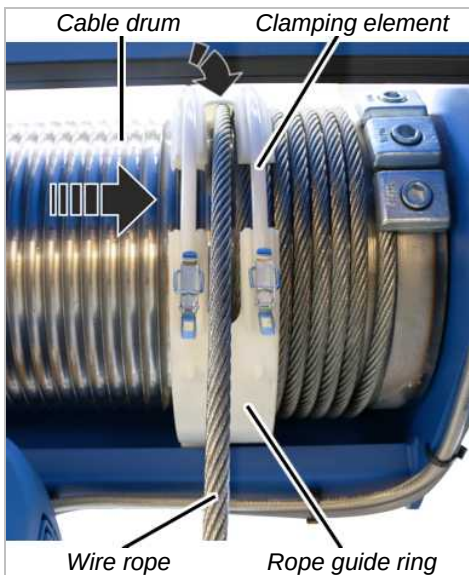
PREPARING THE CABLE GUIDE



- ➔ Insert the clamping elements (2x) with the eyebolts in the first catch on the rope guide ring.
- ➔ Grease the groove of the rope guide ring from the inside.

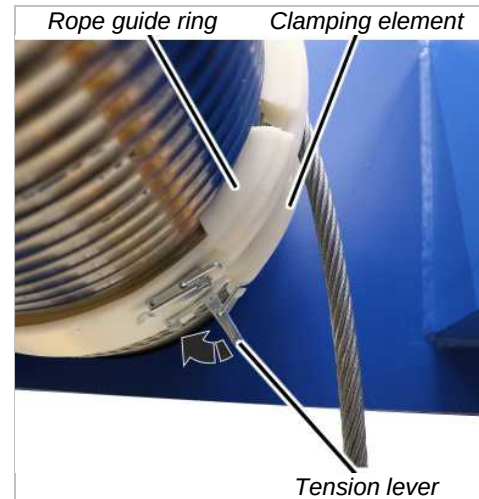
Lubricant: "Molykote PG-75". For details, see "Lubricants", page 57.

INSTALLING THE CABLE GUIDE



- ➔ Pull the rope guide ring with clamping elements onto the cable drum.
- ➔ Position the wire rope between the clamping elements.
- ➔ Check that both ends of the rope guide ring lie in the same groove of the cable drum.

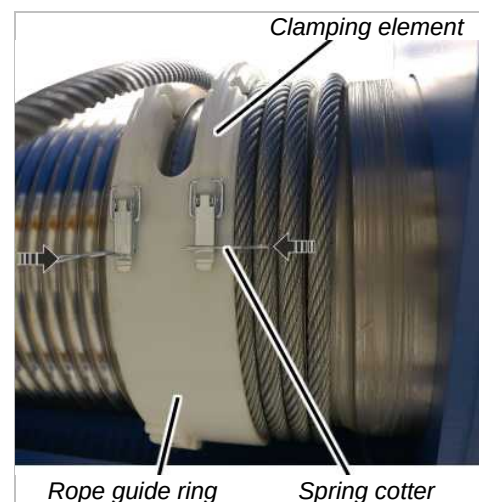
The ends of the rope guide ring must be aligned.



- ➔ Insert the tension lever on the clamping elements into the rope guide ring and close it.

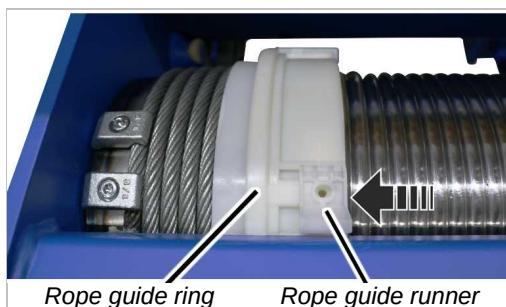
If necessary:

- ➔ Open the tension lever again and adjust the rope guide ring with the eyebolts so that the rope guide ring rests securely on the wire rope but can still be rotated.

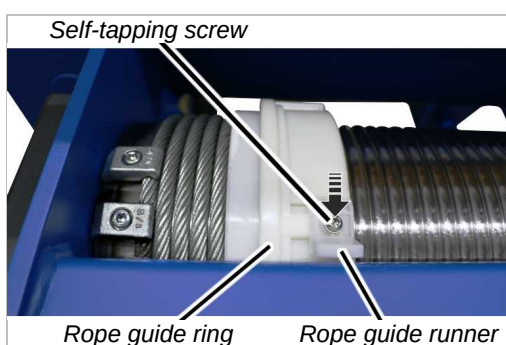


- ➔ Push the spring cotter into the tension lever of the clamping elements.

INSTALLING THE ROPE GUIDE RUNNER

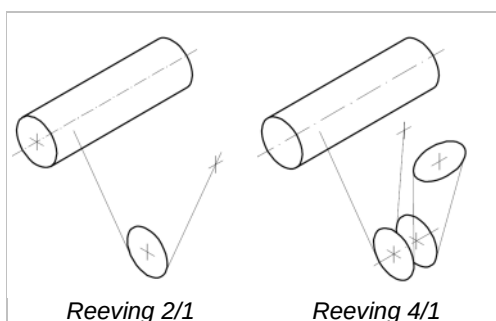


- ➔ Put the rope guide runner on the drum housing and push it laterally into the rope guide ring.



- ➔ Screw on the rope guide runner with the self-tapping screw M6x16. 5 Nm.

REEVING THE WIRE ROPE

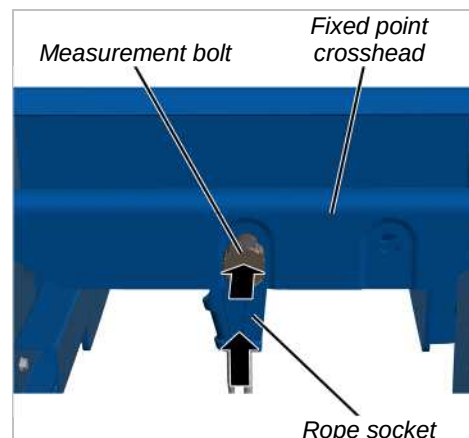


- ➔ For reeving 2/1: pull the wire rope from the cable drum and through the bottom block, without twisting it.
- ➔ For reeving 4/1: Pull the wire rope from the cable drum and through the bottom block, without twisting it, and through the deflection roller and once again through the bottom block.

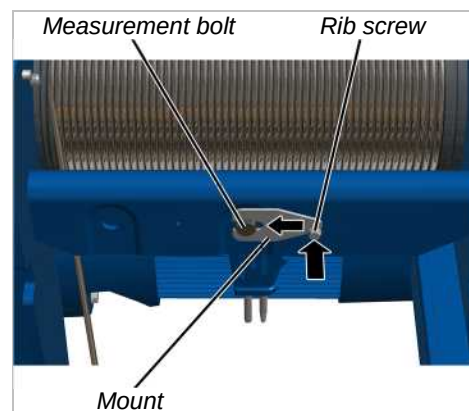
INSTALLING THE FIXED POINT

ONLY WITH EXCHANGE OF ROPE SOCKET WITH ROPE WEDGE

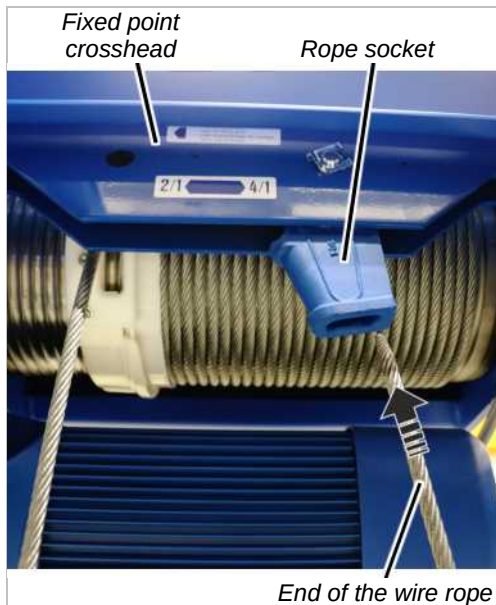
INSTALLING THE ROPE SOCKET



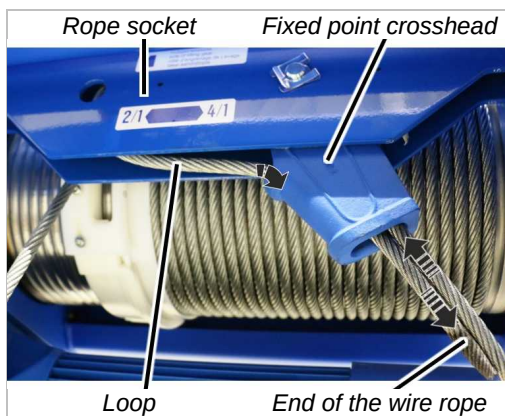
- ➔ Push the rope socket into the fixed point crosshead.
- Note the marking on the fixed point crosshead.
- ➔ Push the measurement bolt through the fixed point crosshead and the rope socket.
- The arrow on the measurement bolt must point downward!



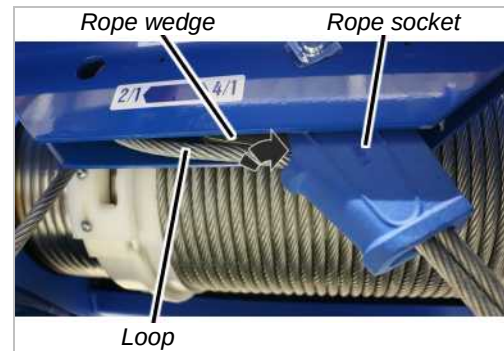
- ➔ Slide the mount onto the measurement bolt.
- The mount must allow itself to be inserted into the groove of the measurement bolt without tension.
- The measurement bolt should not have any pretension!
- ➔ Screw on the mount with the rib screw M6x12. 19 Nm.



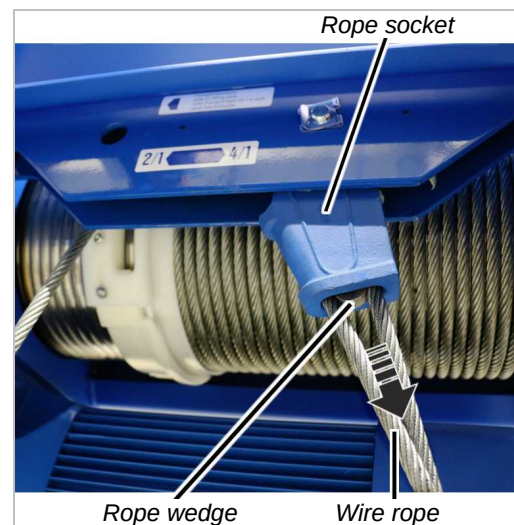
- Check the lubrication of the rope socket and grease it if necessary.
- Lubricant: "High temperature paste PBC 1574". For details, see "Lubricants", page 57.
- Do not lubricate the measurement bolt / collar bolt or the fixed point crosshead. No lubricant should contact the fixed point crosshead.
- Push the end of the wire rope into the rope socket from below.



- Push the end of the wire rope into the rope socket from above so that a loop forms.
- The end of the wire rope protrudes below about 150 mm out of the rope socket.



- Place the rope wedge in the loop.



- Give the wire rope a jolting tug.
- The rope wedge slips into the rope socket and the wire rope is tightly clamped.

INSTALLING THE ROPE GUARD ON THE BOTTOM BLOCK

On all openings on the bottom block:



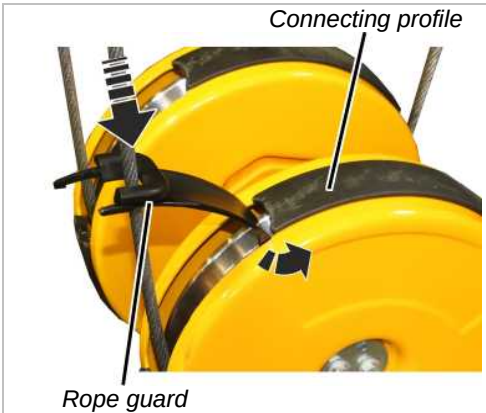
- ➔ Push the dead end rope grip over the end of the wire rope.

The dead end rope grip must be mounted, depending on the size and rope thickness, with the dimension from the following table, under the rope socket:

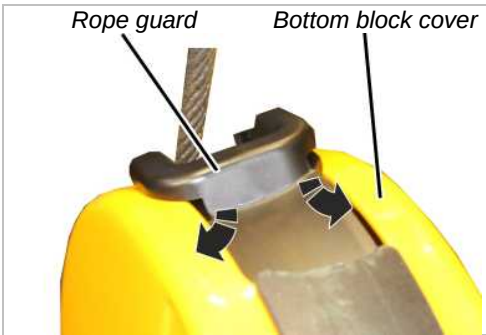
Size	Rope thickness	Distance from rope socket approx.
GM 800	6.5 mm	6 mm to 13 mm
GM 1000	8 mm	8 mm to 16 mm
GM 2000	9 mm	9 mm to 18 mm
GM 3000	11 mm	11 mm to 22 mm
GM 5000	14 mm	14 mm to 28 mm
GM 6000	16.2 mm	16 mm to 32 mm

- ➔ Screw the dead end rope grip tight.

Size	Rib nut	Tightening torque
GM 800	M6	5 Nm
GM 1000	M8	10 Nm
GM 2000	M8	10 Nm
GM 3000	M8	10 Nm
GM 5000	M12	33 Nm
GM 6000	M12	33 Nm



- ➔ Hold the rope guard on the wire rope as shown in the figure.
- ➔ Push the rope guard down along the wire rope with the front fork and bring the rear end under the connecting profile.



- ➔ First push the rope guard on the side with the short bracket into the bottom block cover.
- ➔ Then push the rope guard on the side with the long bracket into the bottom block cover.



- ➔ Push the second rope guard at the bottom into the connecting profile.
- ➔ Push the rope guard downwards behind the connecting profile and attach it above on the wire rope.
- ➔ First push the rope guard on the side with the short bracket into the bottom block cover.
- ➔ Then push the rope guard on the side with the long bracket into the bottom block cover.



- ➔ Connect the brackets of the rope guards (2x) and push them together.
 - A snapping sound can be heard.

COMPLETING WIRE ROPE REPLACEMENT

- ➔ Use the motor to wind up the wire rope completely.

ONLY WITH ABUCONTROL

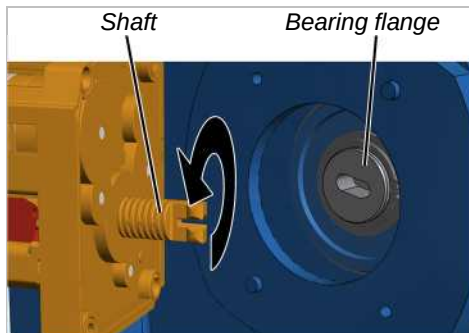
If ABUControl is installed for the wire rope hoist, refer to the "Exchanging the wire rope" section of the "ABUControl" product manual to complete the rope change.

Further steps are then described in this product manual.

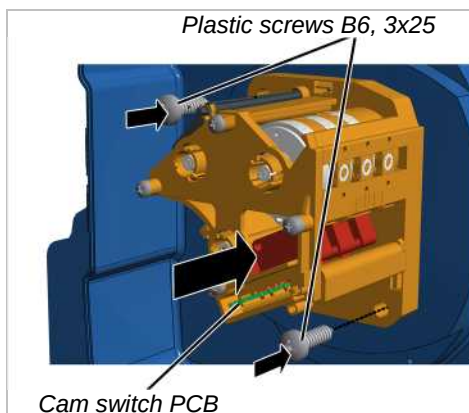
ONLY WITH ABUS ELECTRICS 3 WITH CONTACTOR CONTROL OR ABULINER

INSTALLING THE HOIST LIMIT SWITCH

- ➔ Move the load hooks to the position you noted previously.



- ➔ Open the housing cover of the hoist limit switch enclosure on the cable drum.
- ➔ Rotate the shaft of the gear limit switch so that it matches the elongated hole in the bearing flange of the cable drum.



- ➔ Insert the gear limit switch with the shaft in the elongated hole on the bearing flange and guide it onto the two pins.
- ➔ Screw the gear limit switch tight with the plastic screws B6, 3x25. 3 Nm.

CONNECTING THE HOIST LIMIT SWITCH

- ➔ Plug in the connector of the connection cable on the cam switch PCB.
- ➔ Close the housing cover.

If the switching points have moved:

Normally, the adjustment of the hoist limit switch after replacing the wire rope can in many cases be omitted, since the position of the load hook was previously measured and then travelled to again. In special cases (e.g. if the wire rope is severely damaged or has been incorrectly rolled onto the cable drum), the switching points may need to be readjusted.

- ➔ Reset switching points for the bottom hoist limiter, the top hoist limiter and the backup limiter.

With ABUS electrics 3 with contactor control: see product manual "ABUS gear limit switch".

With ABUS electrics 3 with ABULiner: see product manual "Frequency converter control of the lifting speed for ABUS electrics 3".

CHECKING THE ROPE WEDGE PROTRUSION



➡ Referring to the following table, suspend the load from the load hooks, raise it and load the wire rope this way.

Size	Reeving 2/1	Reeving 4/1
GM 800	800 kg	1600 kg
GM 1000	1250 kg	2500 kg
GM 2000	1600 kg	3200 kg
GM 3000	2000 kg	4000 kg
GM 5000	4000 kg	8000 kg
GM 6000	6300 kg	12500 kg

The details provided in the table are guide values, which should be observed with a tolerance of $\pm 20\%$.

Observe the maximum load capacity of the wire rope hoist and do not exceed it!

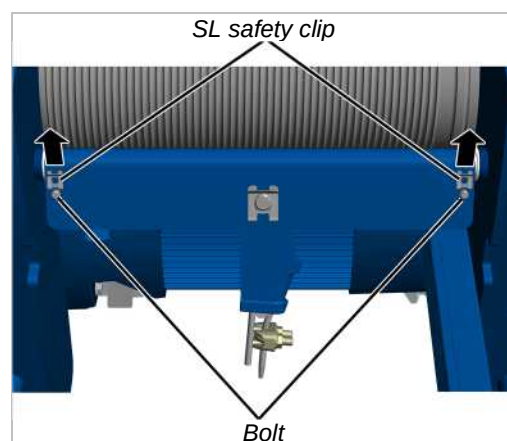
➡ Measure the rope wedge protrusion and check whether the dimensions specified in the table have been complied with.

Size	Maximum rope wedge protrusion	Minimum rope wedge protrusion
GM 800	19 mm	18 mm
GM 1000	4 mm	3 mm
GM 2000	2 mm	0 mm
GM 3000	18 mm	16 mm
GM 5000	22 mm	19 mm
GM 6000	31 mm	28 mm

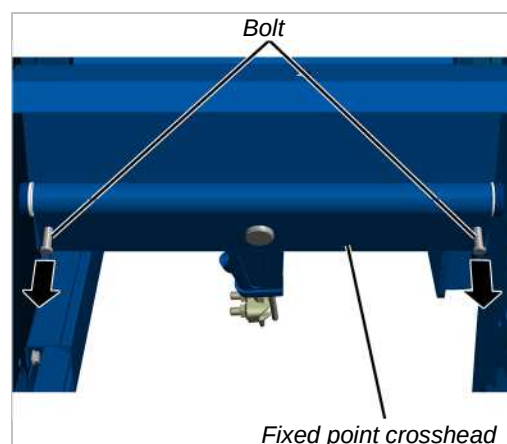
EXCHANGING THE FIXED POINT CROSSHEAD WITH ROPE SOCKET AND ROPE WEDGE

If the fixed point crosshead, the rope socket or the rope wedge are damaged, they must be replaced.

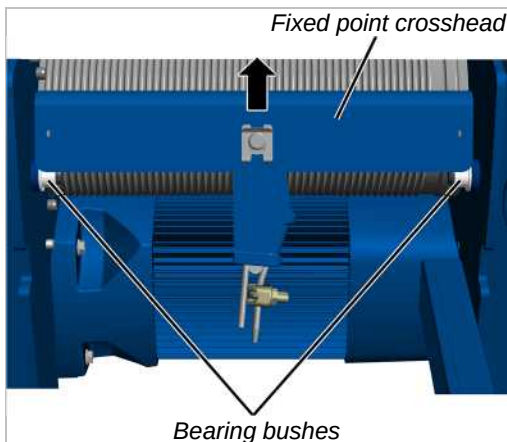
DISASSEMBLING THE FIXED POINT CROSSHEAD



➡ Pull the SL safety clips (2x) from the bolts.

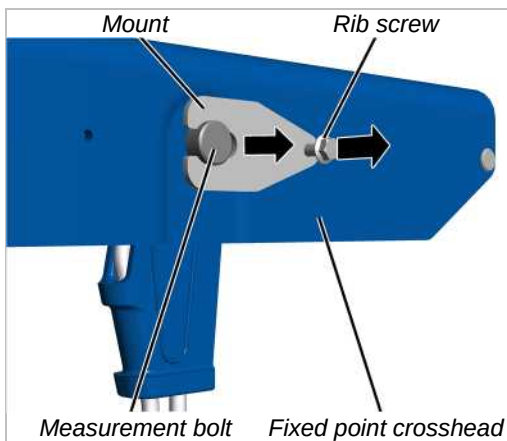


➡ Pull the bolts (2x) out of the fixed point crosshead.

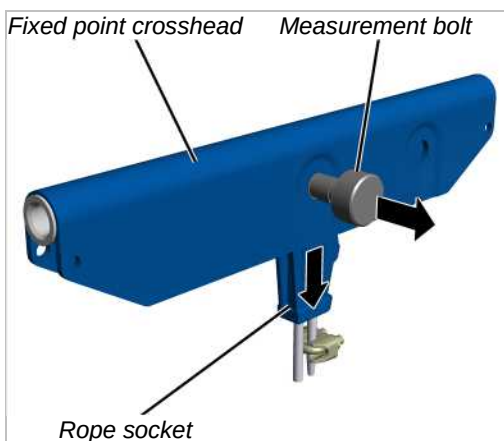


- ➡ Lift the fixed point crosshead from the bearing bushes.

DISASSEMBLING THE ROPE SOCKET

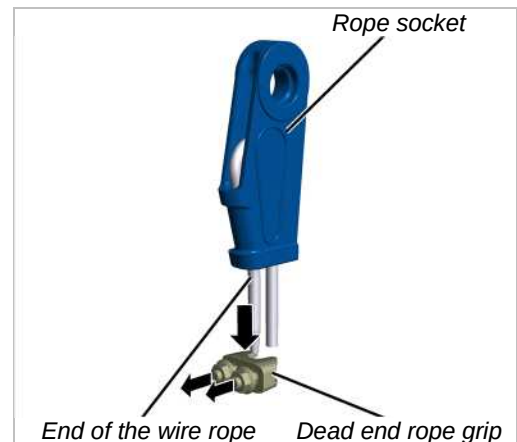


- ➡ Release rib screw M6x12.
- ➡ Slide the mount from the measurement bolt.

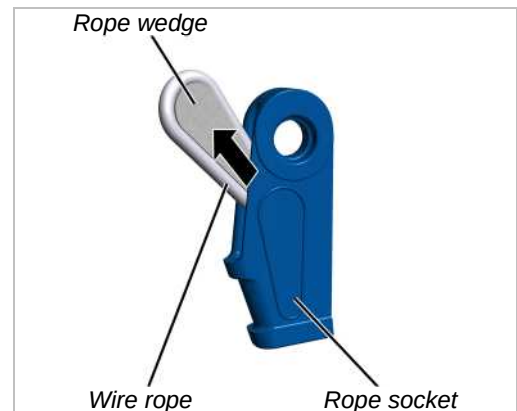


- ➡ Pull the measurement bolt out of the fixed point crosshead and the rope socket.
- ➡ Pull the rope socket out of the fixed point crosshead.

REMOVING THE ROPE WEDGE

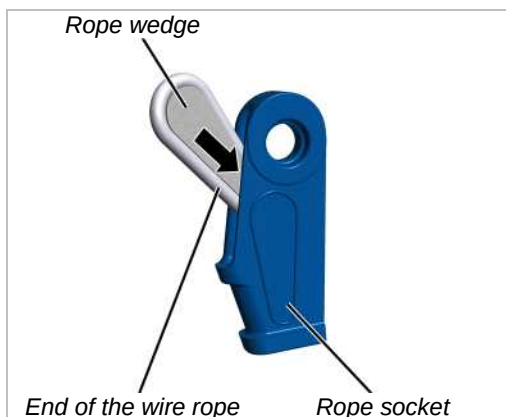


- ➡ Release the rib nuts on the dead end rope grip.
- ➡ Pull the dead end rope grip from the end of the wire rope.

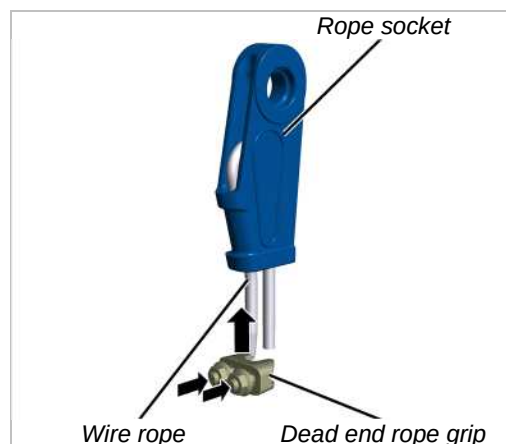


- ➡ Pull the rope wedge with wire rope out of the rope socket.

INSTALLING THE ROPE WEDGE



- ➔ Lay the end of the wire rope around the rope wedge.
The wire rope must lie level in the groove of the rope wedge!
- ➔ Push the rope wedge with wire rope into the rope socket and pull it to the end of the wire rope with a jolting tug.
- The rope wedge slips into the rope socket and clamps the wire rope.



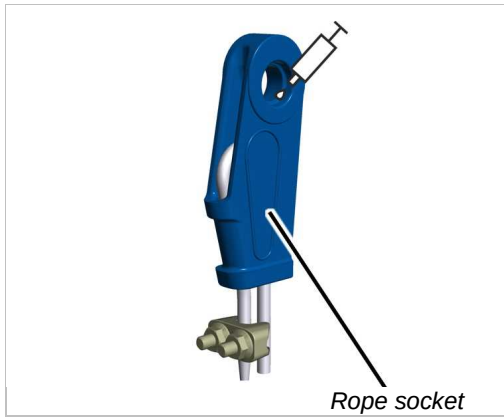
- ➔ Push the dead end rope grip onto the end of the wire rope.

The dead end rope grip must be mounted, depending on the size and rope thickness, with the dimension from the following table, under the rope socket:

Size	Rope thickness	Distance from rope socket approx.
GM 800	6.5 mm	6 mm to 13 mm
GM 1000	8 mm	8 mm to 16 mm
GM 2000	9 mm	9 mm to 18 mm
GM 3000	11 mm	11 mm to 22 mm
GM 5000	14 mm	14 mm to 28 mm
GM 6000	16.2 mm	16 mm to 32 mm

- ➔ Screw in rib nuts of the dead end rope grip.

Size	Rib nut	Tightening torque
GM 800	M6	5 Nm
GM 1000	M8	10 Nm
GM 2000	M8	10 Nm
GM 3000	M8	10 Nm
GM 5000	M12	33 Nm
GM 6000	M12	33 Nm

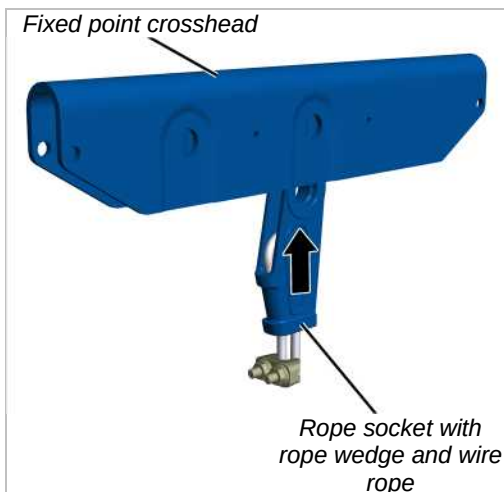


➡ Lubricate the rope socket.

Lubricant: "High temperature paste PBC 1574".
For details, see "Lubricants", page 57.

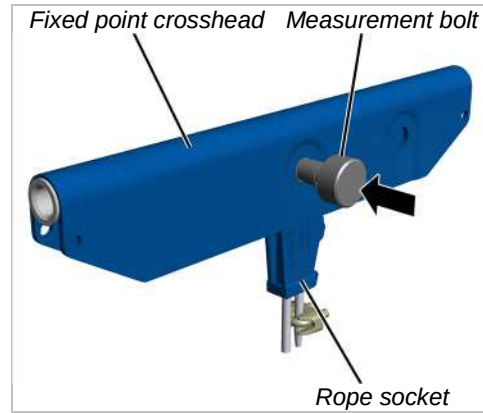
Do not lubricate the measurement bolt / collar bolt or the fixed point crosshead. No lubricant should contact the fixed point crosshead.

INSTALLING THE ROPE SOCKET



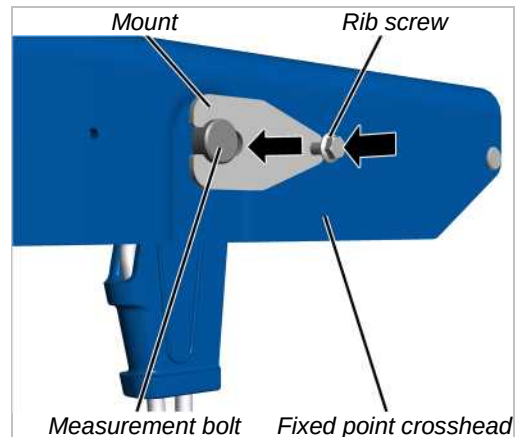
➡ Push the rope socket with rope wedge and wire rope into the fixed point crosshead.

Note the marking on the fixed point crosshead.



➡ Push the measurement bolt through the fixed point crosshead and the rope socket.

The arrow on the measurement bolt must point downward!



➡ Check the mount for deformations.

If the mount is deformed, it must be replaced.

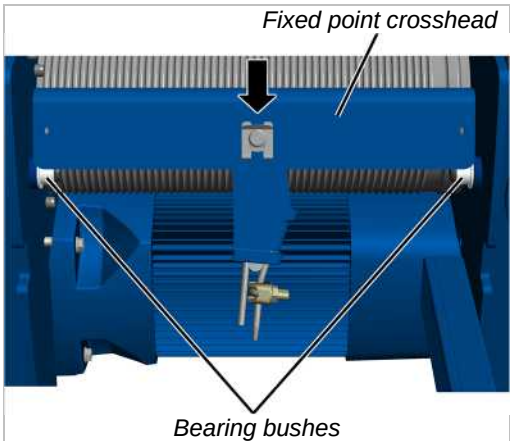
➡ Slide the mount onto the measurement bolt.

The mount must allow itself to be inserted into the groove of the measurement bolt without tension.

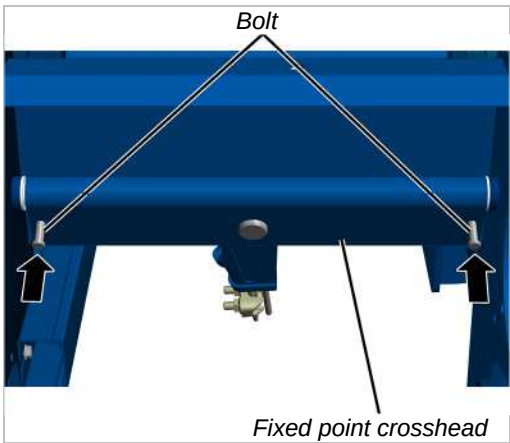
The measurement bolt should not have any pretension!

➡ Screw on the mount with the rib screw M6x12.
19 Nm.

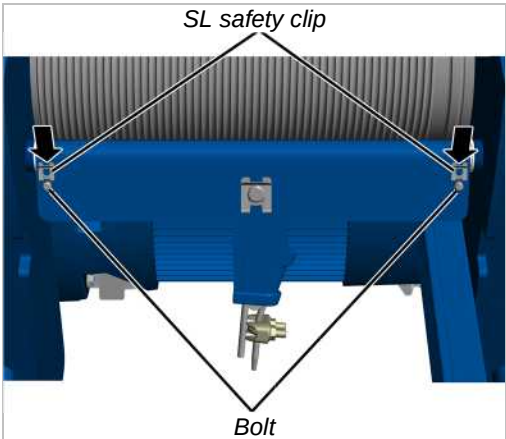
INSTALLING THE FIXED POINT CROSSHEAD



- ➡ Mount the fixed point crosshead on the bearing bushes.
- When doing this, ensure that the marking on the fixed point crosshead points in the direction of the hoist drive.



- ➡ Push the bolts (2x) into the fixed point crosshead.



- ➡ Push the SL safety clips (2x) onto the bolts.
- ➡ Referring to the following table, suspend the load from the load hooks, raise it and load the wire rope this way.

Size	Reeving 2/1	Reeving 4/1
GM 800	800 kg	1600 kg
GM 1000	1250 kg	2500 kg
GM 2000	1600 kg	3200 kg
GM 3000	2000 kg	4000 kg
GM 5000	4000 kg	8000 kg
GM 6000	6300 kg	12500 kg

The details provided in the table are guide values, which should be observed with a tolerance of $\pm 20\%$.

Note

Observe the maximum load capacity of the wire rope hoist and do not exceed it!

CHECKING THE ROPE WEDGE PROTRUSION



➡ Measure the rope wedge protrusion and check whether the dimensions specified in the table have been complied with.

Size	Maximum rope wedge protrusion	Minimum rope wedge protrusion
GM 800	19 mm	18 mm
GM 1000	4 mm	3 mm
GM 2000	2 mm	0 mm
GM 3000	18 mm	16 mm
GM 5000	22 mm	19 mm
GM 6000	31 mm	28 mm

EXCHANGING THE DEFLECTION ROLLER CROSSHEAD

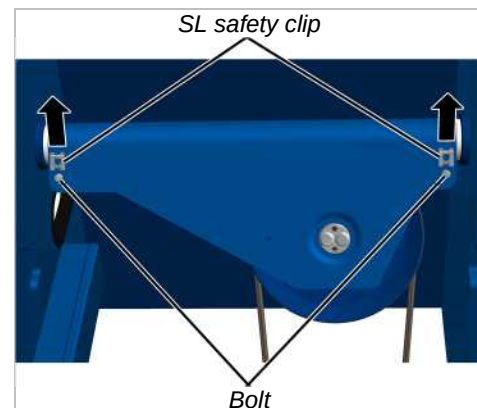
ONLY WITH REEVING 4/1

This section only applies for a wire rope hoist with a reeving of 4/1.

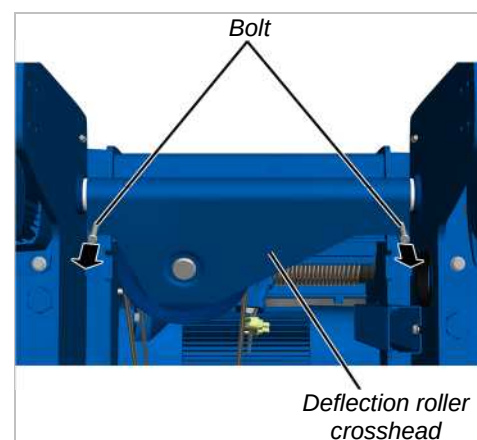
If the deflection roller crosshead or its component parts are damaged, these must be replaced.

DISASSEMBLING THE DEFLECTION ROLLER CROSSHEAD

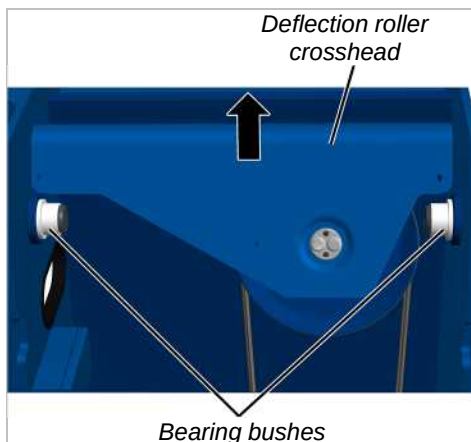
This section shows the disassembly process on a wire rope hoist with the GM 1000 hoist drive. The deflection roller crosshead looks slightly different on a wire rope hoist with a GM 5000 oder GM 6000 hoist drive. Disassembly, however, does not differ.



➡ Pull the SL safety clips from the bolts.

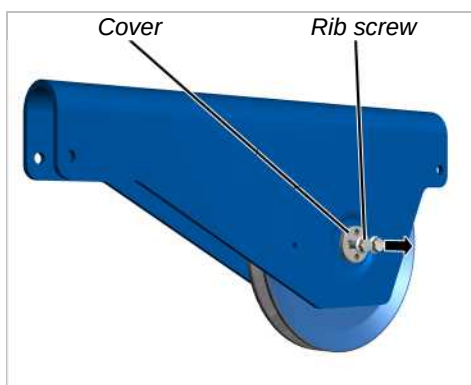


➡ Pull the bolts (2x) out of the deflection roller crosshead.

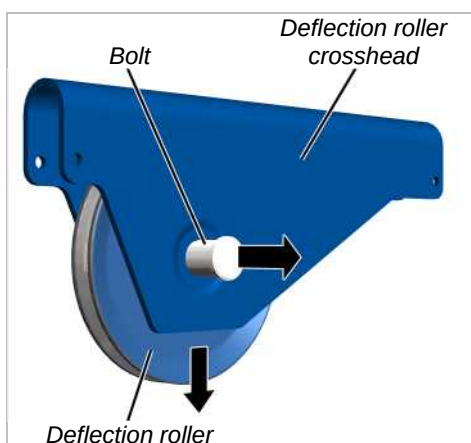


- ➡ Lift the deflection roller crosshead from the bearing bushes.

DISASSEMBLING THE DEFLECTION ROLLER

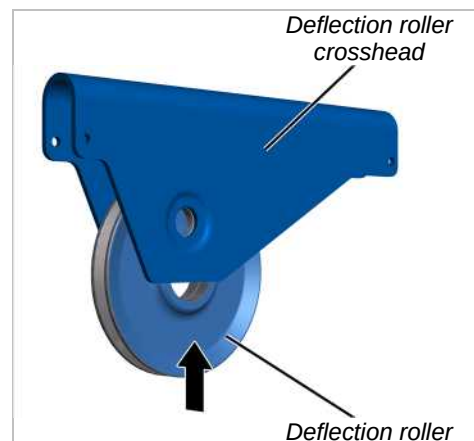


- ➡ Release the rib screws (2x) on the cover.
- ➡ Take the cover off the deflection roller crosshead.

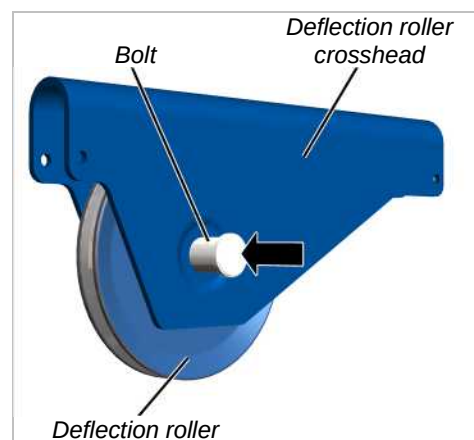


- ➡ Pull the bolt out of the deflection roller crosshead and deflection roller.
- ➡ Pull the deflection roller out of the deflection roller crosshead.

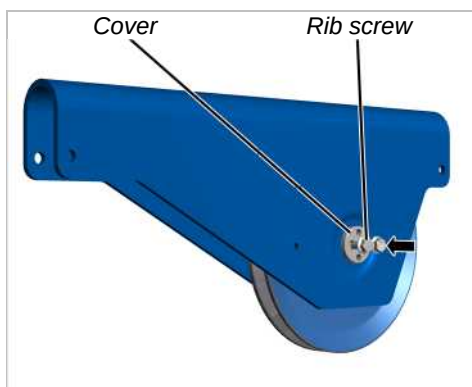
ASSEMBLING THE DEFLECTION ROLLER



- ➡ Push the deflection roller into the deflection roller crosshead.



- ➡ Push the bolt through the deflection roller crosshead and deflection roller.

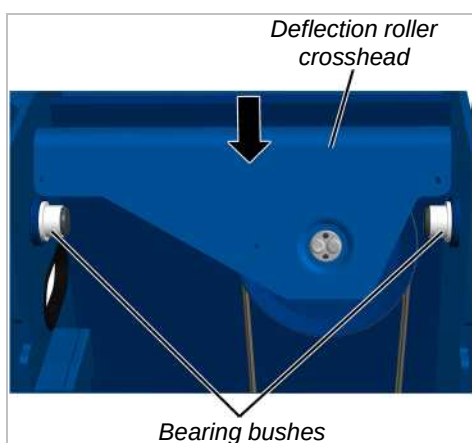


➔ Screw on the cover from the other side at the bolt with rib screws (2x).

Size	Rib screw	Tightening torque
GM 800	M6x12	19 Nm
GM 1000	M6x12	19 Nm
GM 2000	M8x16	42 Nm
GM 3000	M10x20	75 Nm
GM 5000	M10x20	75 Nm
GM 6000	M10x20	75 Nm

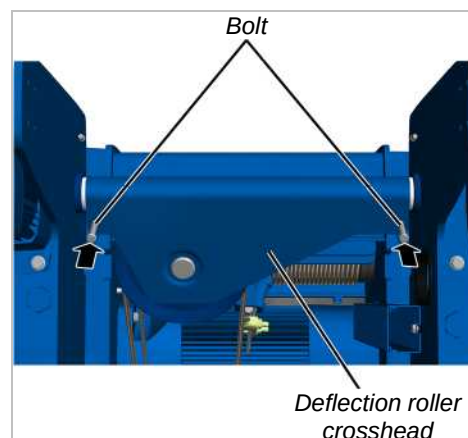
MOUNTING THE DEFLECTION ROLLER CROSSHEAD

This section shows the mounting process on a wire rope hoist with the GM 1000 hoist drive. The deflection roller crosshead looks slightly different on a wire rope hoist with a GM 5000 oder GM 6000 hoist drive. The mounting process, however, does not differ.

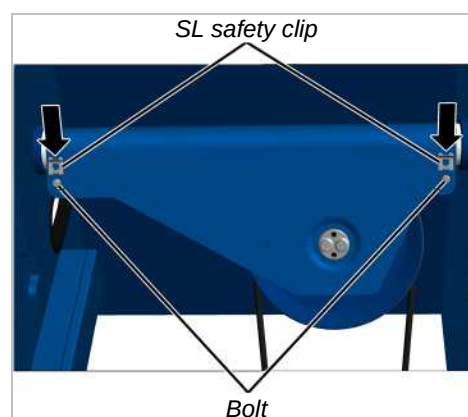


➔ Mount the deflection roller crosshead on the bearing bushes.

When doing this, ensure that the deflection roller points in the direction of the hoist drive.



➔ Push the bolts (2x) into the deflection roller crosshead.



➔ Push the SL safety clips (2x) onto the bolts.

DISASSEMBLING THE POWERED WHEEL

If the wheel is damaged or worn, it must be replaced by a new wheel.

Note

If there is too little space for the disassembly in the direction of the main girder, the self-locking nuts on the spreader bolt of the trolley frame must be released so that the wire rope hoist can be lowered below the lower flange and the wheels are freely accessible.

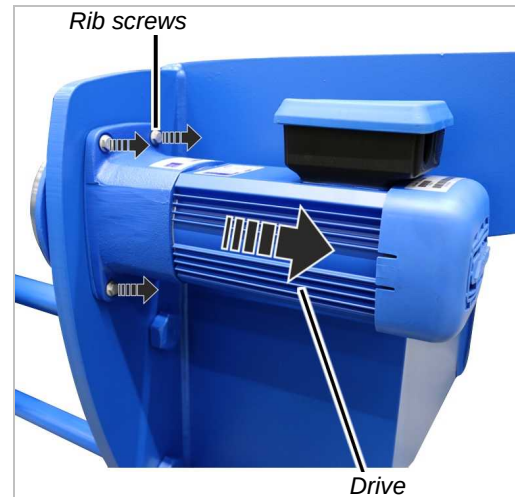
PREPARING THE WIRE ROPE HOIST

- ➔ Comply with occupational health and safety requirements.
- ➔ Relieve the load of the end carriage on the wire rope hoist near the wheel from below.

REMOVING THE DRIVE

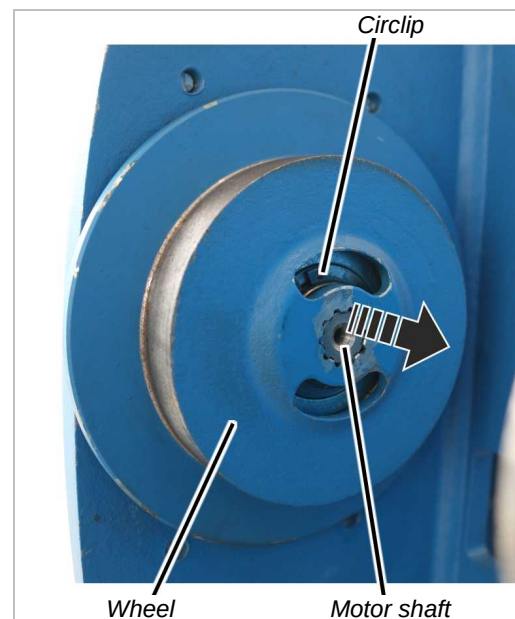


- ➔ Open the connector housing to the drive.
- ➔ Disconnect the connection cable from the coupler plug.
- ➔ Determine the weight of the drive. See the ABUS Drive product manual.
- ➔ Secure the drive so that the weight can be held safely and the output shaft will not be subject to load (e.g. insert in round sling).



- ➔ Release the rib screws (4x).
- ➔ Pull out the drive.

REMOVING THE WHEEL

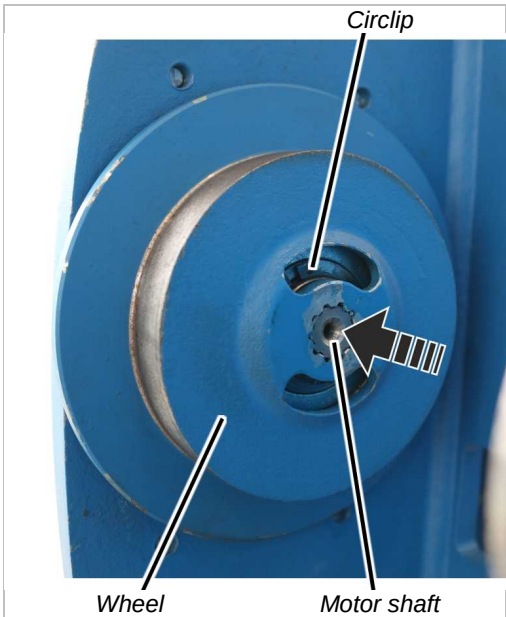


- ➔ Remove the circlip on the bolt.
- ➔ Pull the wheel off the bolt.

INSTALLING THE POWERED WHEEL

If the wheel is damaged or worn, it must be replaced by a new wheel.

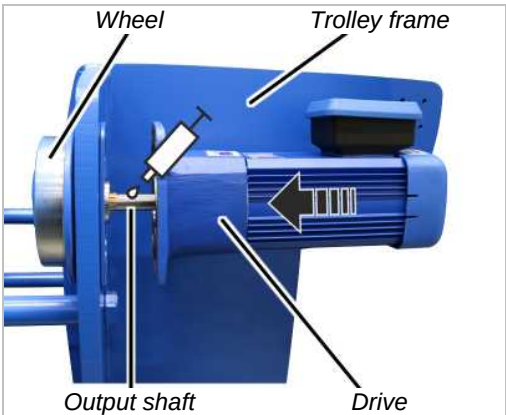
FITTING THE WHEEL



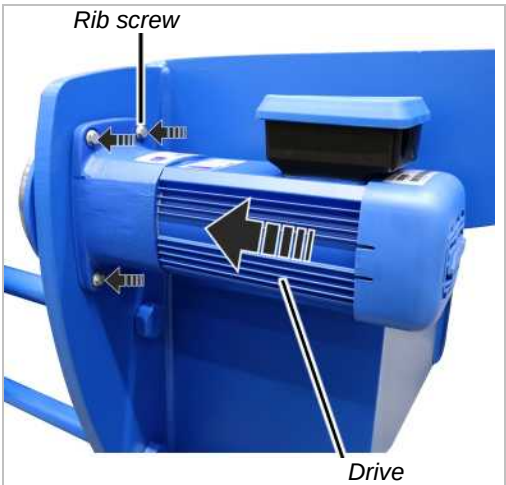
- ➔ Push the new wheel onto the bolt.
- ➔ Insert the circlip on the bolt.

INSTALLING THE DRIVE

- ➔ Determine the weight of the drive. See the ABUS Drive product manual.
- ➔ Secure the drive so that the weight can be held safely and the output shaft will not be subject to load (e.g. insert in round sling).



- ➔ Lubricate the gearing on the output shaft. Apply lubricant with brush to coat surface completely.
Lubricant: "High temperature paste PBC 1574". See the ABUS Drive product manual for details.

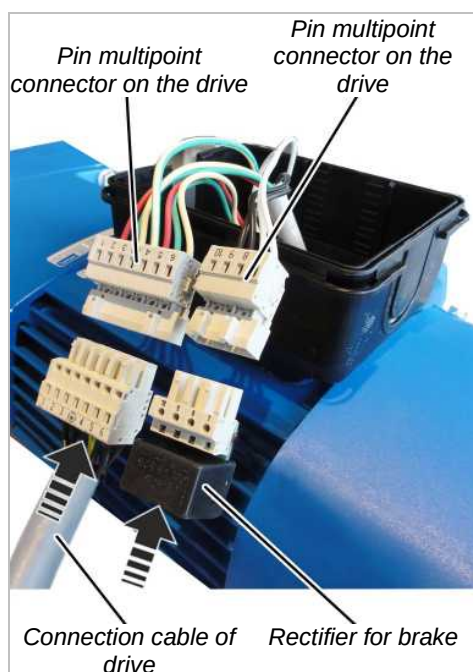


- ➔ Push the drive into the wheel.
- ➔ Bolt on the drive with the rib screws (4x).

Size	Type	Tightening torque
100	M8x20	35 Nm
130	M8x250	35 Nm
160	M8x250	35 Nm
200	M10x40	75 Nm

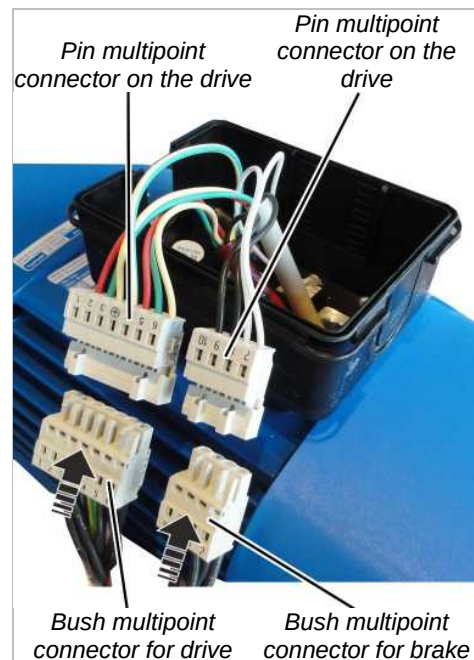
CONNECTING THE DRIVE

ONLY WITH CONTACTOR CONTROL

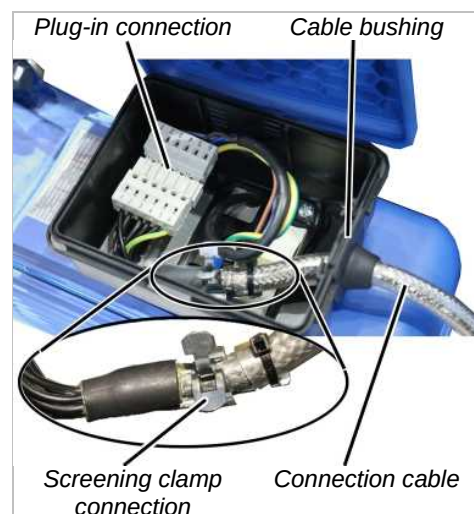


- ➔ Insert the connection cable for the drive in the pin multipoint connector on the drive.
- ➔ Insert the rectifier for the brake in the pin multipoint connector on the drive.
- ➔ Lay the plug-in connections and connection cable in the connector housing.

ONLY FOR FREQUENCY CONVERTER



- ➔ Insert the bush multipoint connector for the drive on the pin multipoint connector on the drive.
- ➔ Insert the bush multipoint connector for the brake on the pin multipoint connector on the drive.



- ➔ Push the front end of the connection cable (where the sheathing around the shield has been removed) into the screening clamp connection.
- ➔ Fasten the connection cable to the screening clamp connection using cable ties.
- ➔ Lay the plug-in connections and connection cable in the connector housing.
- ➔ Close the housing cover.

CHECKING THE WIRE ROPE HOIST

- ➔ Set the wire rope hoist down again.
- ➔ Put the wire rope hoist into operation.
- ➔ Check the function of the wheel.

DISASSEMBLING THE NON-POWERED WHEEL

If the wheel is damaged or worn, it must be replaced by a new wheel.

Note

If there is too little space for the disassembly in the direction of the main girder, the self-locking nuts on the spreader bolt of the trolley frame must be released so that the wire rope hoist can be lowered below the lower flange and the wheels are freely accessible.

PREPARING THE WIRE ROPE HOIST

- ➔ Comply with occupational health and safety requirements.
- ➔ Relieve the load of the end carriage on the wire rope hoist near the wheel from below.

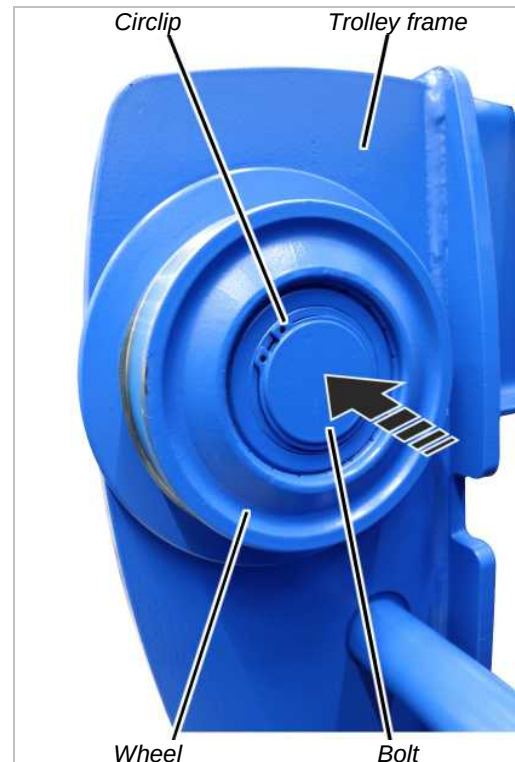


- ➔ Remove the circlip on the bolt.
- ➔ Pull the wheel off the bolt.

INSTALLING THE NON-POWERED WHEEL

If the wheel is damaged or worn, it must be replaced with a new wheel.

FITTING THE WHEEL



- ➔ Push the new wheel onto the bolt.
- ➔ Insert the circlip on the bolt.

CHECKING THE WIRE ROPE HOIST

- ➔ Set the wire rope hoist down again.
- ➔ Put the wire rope hoist into operation.
- ➔ Check the function of the wheel.

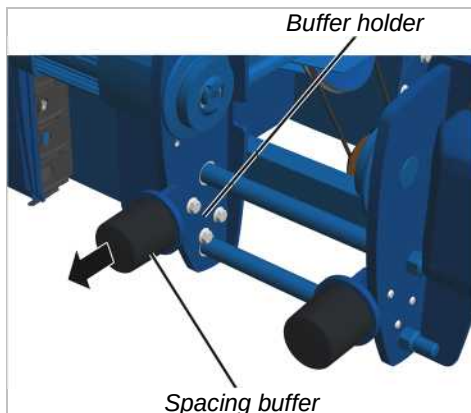
EXCHANGING THE SPACING BUFFERS

ONLY WITH WIRE ROPE HOISTS WITH SPACING BUFFERS

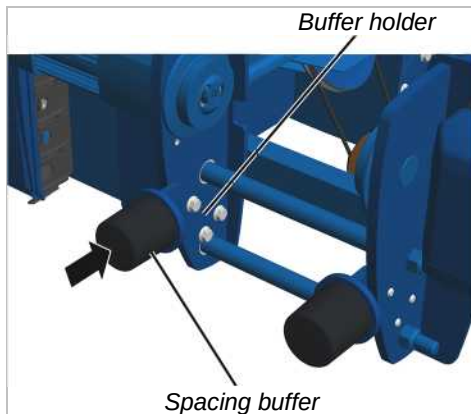
This section only applies if the wire rope hoist has spacing buffers. This is the case if two wire rope hoists are mounted on a crane.

If the spacing buffer is damaged, it must be replaced.

If spacing buffers are mounted:



- ➔ Unscrew the spacing buffer from the buffer holder.



- ➔ Screw the spacing buffer to the buffer holder. 3 Nm.

The spacing buffer must be in contact with the buffer holder and there must be no gap between them, otherwise the impact will be absorbed by the screw and not by the spacing buffer.

REPLACING THE CROSS-TYPE LIMIT SWITCH

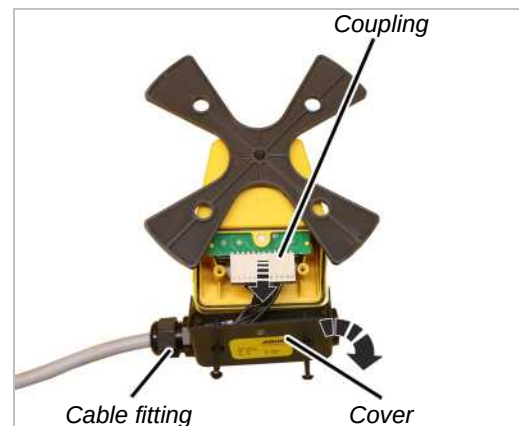
If the cross-type limit switch is damaged, it must be replaced. The plug-in connection allows you to carry out the replacement without any wiring work.



DANGER DUE TO MALFUNCTION!

If the cross-type limit switch is screwed on too tightly, the parts on the inside can become jammed and no longer function properly.

The tightening torque of 3 Nm must be strictly observed.

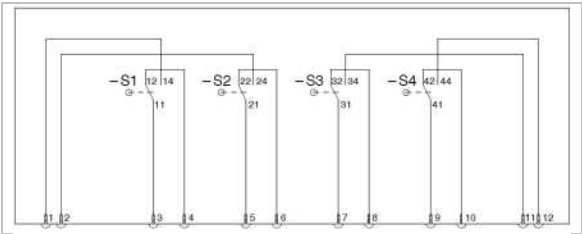


- ➔ Unscrew and remove the screws (2x) on the cover.
- ➔ Remove the cover.
- ➔ Disconnect the coupling of the connecting cable from the circuit board.

The cable fitting on the cover does not need to be unscrewed. The existing cover can be fitted with the attached connection cable to a new cross-type limit switch.

- ➔ Insert the coupling onto the new cross-type limit switch.
- ➔ Close the cover.
- ➔ Tighten screws (2x). 3 Nm.

WIRING DIAGRAM OF THE CROSS-TYPE LIMIT SWITCH



- The contact numbering shown on the wiring diagram starts on the left ascending from 1.
- The designation of the microswitches starts on the left of the installation position with S1.

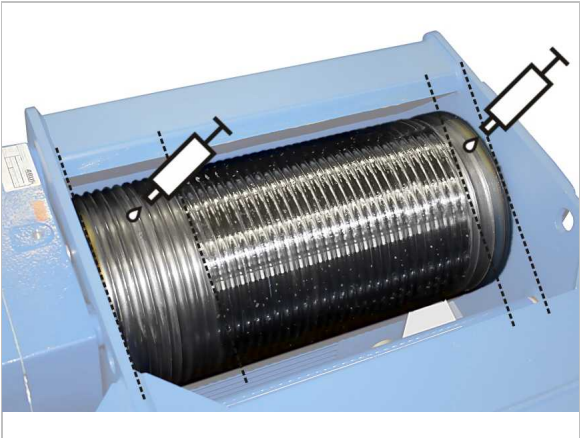
Position arrow	Switch position	S1 closed	S1 open	S2 closed	S2 open	S3 closed	S3 open	S4 closed	S4 open
0	0°	3.4		5.6		7.8		9.10	
1	90°	3.4		5.6			7.11	9.10	
2	180°	3.4		5.6			7.11		9.12
3	270°		3.1	5.6		7.8			9.12
4	360°		3.1		5.2	7.8		9.10	
5	450°	3.4			5.2	7.8		9.10	
0	540°	3.4		5.6		7.8		9.10	

LUBRICANTS

Note:

Synthetic lubricants must not be mixed with mineral-based lubricants!

CABLE DRUM IN THE EDGE AREAS



On-site lubrication with “Molykote PG-75”, ABUS item number 5168.

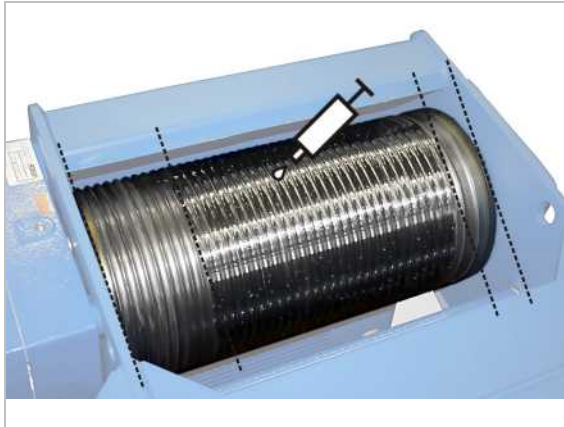
Lubrication ex works with “Molykote PG-75”, ABUS item number 411.

Lubricate the wire rope during:

- Wire rope change
- Cable guide change
- Regular inspection
- General overhaul

For details, see “Cleaning and lubricating the cable drum”, page 35.

WIRE ROPE AND CABLE DRUM IN THE CENTRE



On-site lubrication with “Chainlife S”, ABUS item number 2717

Lubrication ex works with “Chainlife S”, ABUS item number 2718.

Alternatives:

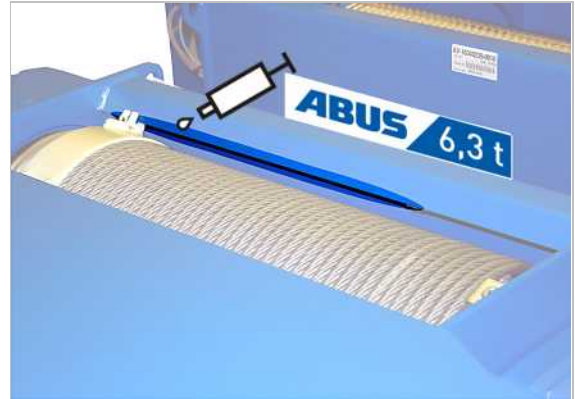
- Castrol “Viscogen KL 23”
- Klüber “Grafloscon CA 901 Ultra Spray”
- Optimol “KL 23”
- Shell “Malleus GL 95”

Lubricate the wire rope during:

- Wire rope change
- Regular inspection
- General overhaul

For details, see “Cleaning and lubricating the cable drum”, page 35.

ROPE GUIDE RUNNER ON THE CABLE GUIDE



On-site lubrication with “Molykote PG-75”, ABUS item number 5168.

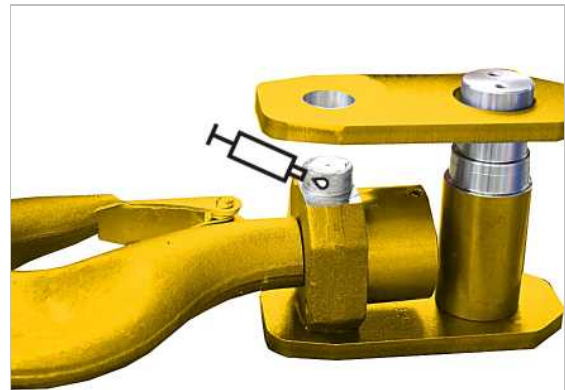
Lubrication ex works with “Molykote PG-75”, ABUS item number 411.

Lubricate the rope guide runner during:

- Wire rope change
- Cable guide change
- Regular inspection
- General overhaul

For details, see “Replacing the wire rope”, page 29.

LOAD HOOK CROSSHEAD ON THE BOTTOM BLOCK



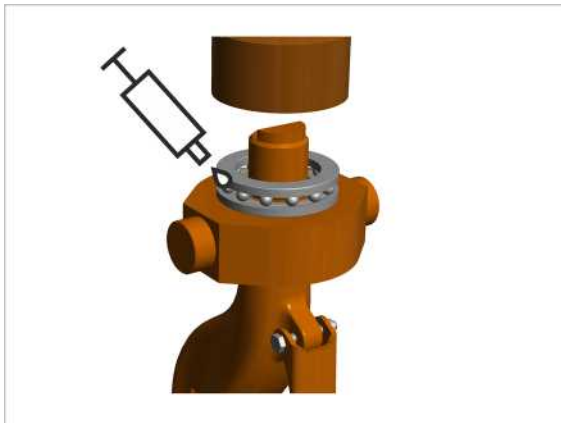
On-site lubrication with “High temperature paste PBC 1574”, ABUS item number 6758.

Lubrication ex works with “High-Lub LT1 EP”, ABUS item number 317880.

Lubricate the load hook crosshead during:

- Assembly and disassembly
- General overhaul

DEEP GROOVE BALL THRUST BEARING ON THE LOAD HOOK



On-site lubrication with “Molykote PG-75”, ABUS item number 5168.

Lubrication ex works with “High-Lub LT1 EP”, ABUS item number 317880.

Lubricate the deep groove ball thrust bearing during:

- Assembly and disassembly
- General overhaul

ROPE SOCKET



On-site lubrication with “High temperature paste PBC 1574”, ABUS item number 6758.

Lubrication ex works with “High-Lub LT1 EP”, ABUS item number 317880.

Lubricate the rope socket during:

- Wire rope change
- Regular inspection
- General overhaul

For details, see “Exchanging the fixed point crosshead with rope socket and rope wedge”, page 44.

CABLE GUIDE

ONLY WITH GM 800 TO GM 3000



On-site lubrication with “Molykote PG-75”, ABUS item number 5168.

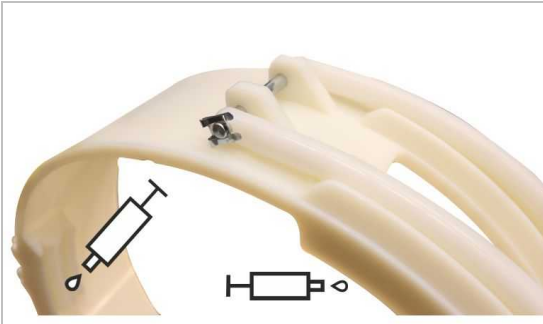
Lubrication ex works with “Molykote PG-75”, ABUS item number 411.

Lubricate the cable guide in case of:

- Wire rope change
- Cable guide change
- Regular inspection, at least once annually
- General overhaul

For details, see “Installing the cable guide”, page 36.

ONLY WITH GM 5000 AND GM 6000



On-site lubrication with “Molykote PG-75”, ABUS item number 5168.

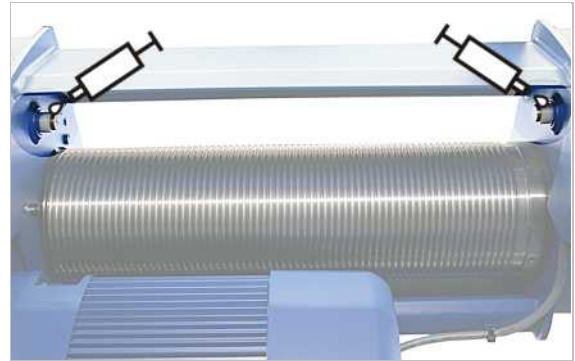
Lubrication ex works with “Molykote PG-75”, ABUS item number 411.

Lubricate the cable guide in case of:

- Wire rope change
- Cable guide change
- Regular inspection, at least once annually
- General overhaul

For details, see “Installing the cable guide”, page 36.

**BEARING BUSH (ON COLLAR BOLT)
ON THE DEFLECTION ROLLER
CROSSHEAD AND ON THE FIXED
POINT CROSSHEAD**



On-site lubrication with “High temperature paste PBC 1574”, ABUS item number 6758.

Lubrication ex works with “High-Lub LT1 EP”, ABUS item number 317880.

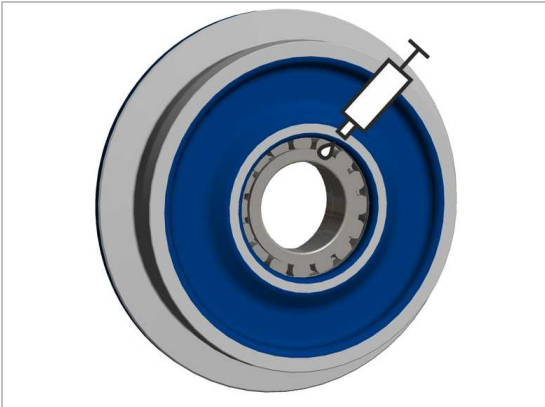
Lubricate bearing bush (on collar bolt) during:

- Assembly and disassembly of the deflection roller crosshead or fixed point crosshead
- General overhaul

For details, see “Exchanging the fixed point crosshead with rope socket and rope wedge” page 44 or “Exchanging the deflection roller crosshead” page 49.

ONLY WITH WHEEL SIZE 200

SELF-ALIGNING ROLLER BEARINGS IN WHEEL



On-site lubrication with “High-Lub LT1 EP”, ABUS item number 318490.

Lubrication ex works with “High-Lub LT1 EP”, ABUS item number 317880.

Lubricate the self-aligning roller bearing during:

- Assembly and disassembly of the wheel

For details, see “Disassembling the powered wheel”, page 52.

OVERVIEW OF TIGHTENING TORQUES

END CLAMP



Size	Fillister-head screw	Number	Tightening torque
GM 800	M6x16	2	10 Nm
GM 1000	M8x20	2	25 Nm
GM 2000	M8x20	2	25 Nm
GM 3000	M8x20	2	25 Nm
GM 5000	M16x35	3	210 Nm
GM 6000	M16x35	3	210 Nm

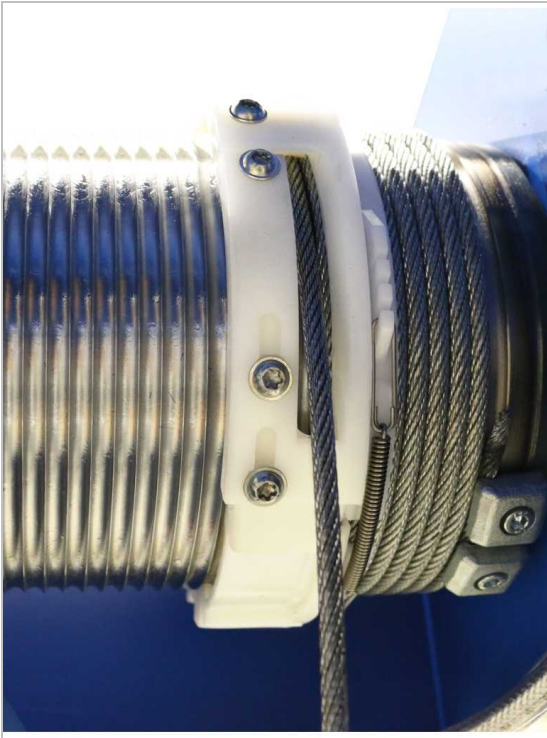
ROPE GUIDE RUNNER



Size	Screw	Tightening torque
GM 800	Self-tapping screw M6x16	5 Nm
GM 1000	Self-tapping screw M6x16	5 Nm
GM 2000	Self-tapping screw M6x16	5 Nm
GM 3000	Self-tapping screw M6x16	5 Nm
GM 5000	Self-tapping screw M6x16	5 Nm
GM 6000	Self-tapping screw M6x16	5 Nm

ONLY WITH GM 800, GM 1000,
GM 2000, AND GM 3000

JOINING ELEMENT



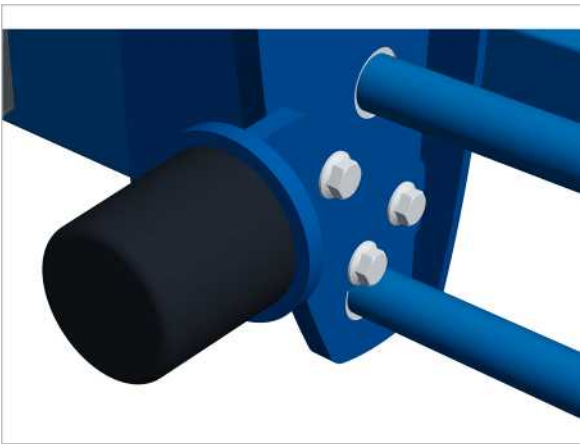
Size	Screw	Number	Tightening torque
GM 800	Self-tapping screw M6x16	4x	5 Nm
GM 1000	Self-tapping screw M6x16	4x	5 Nm
GM 2000	Self-tapping screw M6x16	4x	5 Nm
GM 3000	Self-tapping screw M6x16	4x	5 Nm

DEAD END ROPE GRIP



Size	Rib nut	Tightening torque
GM 800	M6	5 Nm
GM 1000	M8	10 Nm
GM 2000	M8	10 Nm
GM 3000	M8	10 Nm
GM 5000	M12	33 Nm
GM 6000	M12	33 Nm

BUFFER HOLDER



- Rib screw M12x30
- Tighten to 100 Nm.

ABUS SERVICE

ONLY IN GERMANY

- ➔ If available, have the product number, serial number and customer number handy.
- ➔ Call the ABUS Service Centre:
 - Phone: +49-2261-37-237
- ➔ If calling outside the usual business hours, leave a message on the answering machine.
 - ABUS Service will return your call promptly.
- ➔ If necessary, send a description of the problem by fax or e-mail:
 - Fax: +49-2261-37-265
 - E-mail: service@abus-kransysteme.de

ONLY OUTSIDE GERMANY

- ➔ Call the local ABUS branch or crane service partner.

Your local ABUS branch or crane service partner will provide details of contact data, contacts and availability.

ABUS Kransysteme GmbH
Sonnenweg 1
51647 Gummersbach Germany
Tel. 0049 – 2261 – 37-0
Fax. 0049 – 2261 – 37-247
info@abus-kransysteme.de

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AN 120287EN002
2025-11-25

The ABUS logo is displayed in a bold, white, sans-serif font against a solid blue background. The letters are thick and closely spaced, with a modern, industrial feel. The blue background is part of a larger graphic element that curves upwards from the bottom right corner of the page.