Installation and Operating Instructions
Interroll 24-V Belt Transfer
RM 8731
Manufacturer's address

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Introduction

Notes about working with the installation and operating instructions

The 24-V Belt Transfer RM 8731 is generally referred to as "module" in this document.

These installation and operating instructions contain important notes and information about the various operating phases of the module:

- Transport, assembly and startup
- Safe operation, required maintenance tasks, removal of any faults
- Spare parts, supplementary accessories

The installation and operating instructions describe the module at the time of its initial delivery after manufacturing.

In addition to this manual, special contractual agreements and technical documents apply to special versions of the module and its additional equipment.

- To ensure trouble-free and safe operation as well as the settlement of possible warranty claims, always read these installation and operating instructions first and observe all the information contained herein.
- Keep the installation and operating instructions close to the module.
- Pass the installation and operating instructions on to any subsequent operator or occupant. Interroll does not accept any liability for faults or defects due to non-observance of these installation and operating instructions.

If you have any questions after reading the installation and operating instructions, please contact the Interroll customer service. Contact persons close to you can be found on the Internet under: www.interroll.com/contacts.
Warning notices in this document
The warning notices refer to risks which may arise while using the module. They are available in four danger levels identified by the signal word:

<table>
<thead>
<tr>
<th>Signal word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANGER</td>
<td>Identifies a danger with high risk that can lead to death or serious injury if it is not avoided.</td>
</tr>
<tr>
<td>WARNING</td>
<td>Identifies a danger with medium risk that can lead to death or serious injury if it is not avoided.</td>
</tr>
<tr>
<td>CAUTION</td>
<td>Identifies a danger with low risk that can lead to minor or medium injury if it is not avoided.</td>
</tr>
<tr>
<td>NOTICE</td>
<td>Identifies a danger that can lead to property damages.</td>
</tr>
</tbody>
</table>

Symbols

This symbol marks useful and important information.

Requirement:
- ☑ This symbol represents a prerequisite to be met prior to assembly and maintenance work.
- ▶ This symbol marks the steps to be carried out.
Safety

State of the art
The module has been built to comply with the state of the art. Nevertheless, users may encounter hazards during its use.

Disregarding the notices in this manual may lead to serious injury.
▪ Carefully read the manual and follow its content.

Intended use
The module may only be used for industrial applications and in an industrial environment to convey sortable goods such as small packages, cartons or boxes.
The module is an incomplete machine and must be integrated into a complete system prior to operation.

Field of use
The module is dimensioned only for a certain field of use (see Technical Data) and may not be operated outside of these specific limits.
Any other use is considered inappropriate. Deviating operating conditions require additional clarifications, a special release of the module and new contractual agreements.

Changes to the module
Any modifications that affect the safety are not permitted.

Personnel qualification
Unqualified personnel cannot recognize risks and, as a result, is subject to greater dangers.
▪ Authorize only qualified personnel with the activities described in these installation and operating instructions.
▪ The operating company must ensure that the personnel follows locally applicable regulations and rules during their work with regard to safety and dangers.
The following target groups are addressed in these installation and operating instructions:

Operators
Operators have been instructed in the operation and cleaning of the module and follow the safety guidelines.

Service personnel
The service personnel features a technical training and performs the maintenance and repair tasks.

Electricians
Persons working on electrical installations must have the pertinent technical training.
Safety

Dangers

The following list informs you about the various types of danger or damage that may occur while working with the module.

Safety devices
- Perform any maintenance and repair work on the module only in de-energized state and ensure that it cannot be started accidentally.
- In the passage area of persons or if persons can reach between transported materials, additional protective measures may apply.
- Do not remove protective covers or housing.
- Regularly check the safety devices.

Electricity
- Reach into the module only if the module is de-energized.

Rotating parts
- Never wear loose clothing.
- Never wear jewelry, such as necklaces or bracelets.
- If you have long hair, always wear a hair net.

Lowering blade
- Do not reach into the area between lowering blade and adjacently running rollers during operation.

Parts lying around or falling off
- Remove equipment or material which is not required from the workspace.
- Wear safety shoes.
- Specify and monitor careful placement of the goods on the conveyor.

Risk of injury due to faults during operation
- Regularly check the module for visible damage.
- Immediately shut down the module and ensure that it cannot be started accidentally in case of:
  - fire vapors, unusual, noise, blocked or defective conveyor belt, defective supports, side guides or accessory devices, unauthorized removal of safety covers and with a defective suspension.
- Immediately determine the cause of the fault by qualified personnel.
- Immediately remove any escaping gear oil.
- Do not step on the module during operation.

Maintenance intervals
- Regularly perform maintenance and inspection work.
- Use only OEM spare parts.
Interfaces to other devices

Pictograph and safety plates at 24-V belt transfer

1  Safety plate  2  Pictograph  3  Finger guard

New hazardous positions may occur while integrating the module into a complete system. These points are located, among other things,

• between the side face of the blade and the adjacent rollers. A structural solution for removing the pinching point is not possible. A pictograph on the module points to the hazard location.

• between blade and side frame with finger guards. A safety plate covers the hazard location so that fingers can no longer be pinched. This plate must be installed prior to installing the diverter.

Nevertheless, additional hazard locations may still have to be analyzed.

- When combining the module with other modules or machinery, check for new hazards before startup. In particular, observe the infeed point at the deflection shaft.
- Additional constructive measures may be required.
Safety

Operating modes

Normal mode

The module is installed at the customer in a complete system and operated as part of the system.

Special mode

Special operation refers to all operating modes which are required to guarantee and maintain regular operation.

<table>
<thead>
<tr>
<th>Special operating mode</th>
<th>Explanation</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport/Storage</td>
<td>Loading and unloading, transport and storage</td>
<td>-</td>
</tr>
<tr>
<td>Assembly/Initial start-up</td>
<td>Installation at the end customer and performing the test run</td>
<td>-</td>
</tr>
<tr>
<td>Cleaning</td>
<td>External cleaning without removing protective devices</td>
<td>When de-energized</td>
</tr>
<tr>
<td>Maintenance/Repairs</td>
<td>Maintenance and inspection tasks</td>
<td>When de-energized</td>
</tr>
<tr>
<td>Troubleshooting</td>
<td>Troubleshooting in the event of a fault</td>
<td>-</td>
</tr>
<tr>
<td>Fault elimination</td>
<td>Eliminating the fault</td>
<td>When de-energized</td>
</tr>
<tr>
<td>Shutdown</td>
<td>Removing from the complete system</td>
<td>When de-energized</td>
</tr>
<tr>
<td>Disposal</td>
<td>Removing from the complete system and disassembly</td>
<td>When de-energized</td>
</tr>
</tbody>
</table>
Product identification

Components

24-V Belt Transfer RM 8731

1  Side connectors
2  Finger guards
3  Blades
4  Blade belt
5  Lifting roller
6  Toothed belt
7  Lifting frame roller
8  Drive roller
9  Lifting frame
Property

The 24-V belt transfer RM 8731 is used for diverting or merging suitable material from or onto a roller track at a 90° angle. In the process, the unit load changes direction and its orientation, i.e. the side of the product will now be the leading edge after the transfer.

The transfer is a substructure that can be used with horizontal roller conveyors. It can be installed at any position of the conveyor path. A subsequent installation is possible, just like a shift in the grid of profiles.

Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>RM 8731</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. load capacity</td>
<td>50 kg</td>
</tr>
<tr>
<td>Belt speed</td>
<td>1.0 m/s</td>
</tr>
<tr>
<td>Lifting time</td>
<td>0.3 s</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>+5 to +40 °C</td>
</tr>
<tr>
<td>Overall height</td>
<td>251.5 mm (to T.O.R.)</td>
</tr>
<tr>
<td>Material base frame</td>
<td>Steel (base frame and blades)</td>
</tr>
<tr>
<td>Rated voltage</td>
<td>24 V (drive motor and lift motor)</td>
</tr>
<tr>
<td>Drive medium</td>
<td>Transfer belt (16.38 mm)</td>
</tr>
<tr>
<td>Control variants</td>
<td>MultiControl</td>
</tr>
<tr>
<td>Incline/decline</td>
<td>Not suitable</td>
</tr>
<tr>
<td>Between frames</td>
<td>420 to 840 mm</td>
</tr>
<tr>
<td>Length</td>
<td>680 mm (base frame)</td>
</tr>
<tr>
<td>Roller pitch (P)</td>
<td>60 mm and multiple (standard pitch of blades)</td>
</tr>
<tr>
<td>Noise level</td>
<td>Leq ≤ 70 dB(A)</td>
</tr>
</tbody>
</table>
**Scope of supply**

The 24-V belt transfer is completely assembled and wired in its delivery state. The scope of delivery includes:

- Bracket set
- Side guide kit
- Control card
- For use in zone conveyors: Sensor kit and cable set

The scope of delivery does not include:

- Roller conveyors

**Nameplate**

![Nameplate Diagram]

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Arrow in transport direction</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Type designation</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Machine no.</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>Layout item no.</td>
<td>8</td>
</tr>
</tbody>
</table>

The information on the nameplate is used to identify the conveyor. The type designation is required to use the conveyor according to its intended use.

The nameplate is located at the front of the base box at the bottom right on the toothed belt side.
Transport and storage

Transport

⚠️ WARNING
Risk of injury during transport

- Fix the module securely and slip-proof for the transport.
- Ensure that the lifting device (crane, fork lift, etc.) is rated for the weight of the module.
- Ensure that no persons are located under the suspended load while lifting and moving the module.

Additional information about the transport are located on an information sheet that accompanies the motor.

- Data about weight and requirements for loading capacity and lifting tackle are located on the information sheet.
- Remove any persons from the danger zone.
- Wear safety shoes.
- Check the correct fastening for the transport.

The load lifting points are marked on the conveyor.

Identification of load lifting points

After the delivery

- Inspect module for transport damages.
- Immediately notify the carrier and manufacturer in case of damages to avoid losing any claims for compensation.
Storage

⚠️ WARNING

Risk of injury due to improper storage

- Do not stack modules. Do not place any other objects on the module.
- Check module for stability.

- If the module is not immediately placed in operation, store it at a location protected against humidity and dust.
Installation

⚠️ WARNING

Risk of injury due to improper assembly

- Mechanical assembly tasks should be performed only by service personnel. Observe the safety information.
- Electrical assembly tasks should be performed only by authorized electricians. Observe the safety information.
- Carefully install all terminals and connections, such as cables, hoses and pipework, and check for correct fit.

The module is delivered to the location site as a pre-assembled unit and must be installed, connected and integrated into a roller conveyor on site. See "Installing the module at the conveyor", page 19 and See "Integrating the module in the overall system", page 30.

To be observed during installation

<table>
<thead>
<tr>
<th>Torque</th>
<th>When tightening screws and nuts, always observe the standard tightening torque, unless specifically indicated otherwise. Standard screw lockers should be replaced as needed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grounding</td>
<td>During the installation of the module, its grounding must be observed. Among other things, the profile connectors are used for this purpose. If no profile connector is used for connecting the modules, alternate measures must be taken.</td>
</tr>
</tbody>
</table>
| Orientation    |  ▶ Align the module at the height-adjustable feet of the support. The decisive item for aligning the modules is the roller top edge (for roller conveyors) or the belt top edge (for belt conveyors).  
  ▶ Secure the adjusted height. Use suitable tools for the alignment (spirit level or rotation laser).  
  ▶ During the alignment of the module, ensure that no moving parts are touching. |
| Anchoring      |  ▶ Anchor or fasten the module torsion-free, e.g. to the floor or adjacent components. |
| Integration into complete system |  ▶ When integrating the module into the complete system, consider possible danger spots, particularly infeed locations and interfaces. |
Installing protective plates

The installation of the diverter in a roller conveyor creates a hazard location between diverter blade and finger guards of the roller conveyor. As a result, a safety plate must be inserted into the finger guards at the roller conveyor before installing the diverter. The safety plate can also be installed at a later time. However, the blades will then have to be removed first.

Operating the 24-V belt diverter without safety plate is not allowed!

In addition, an !-label is attached in the vicinity of every blade to indicate the danger that is created by the movement of the blade.

![Diagram of protective plates installation](image.png)

Installation of protective plates at 24-V belt diverter

1. Safety plate
2. Finger guard
3. Pictograph
Installing the module at the conveyor

24-V belt transfer RM 8731 in a roller conveyor

1 Serrated flange bolts
2 Side cover of roller conveyor
3 Carrying idler (roller conveyor)

The first step of the assembly is to fasten the module to the underside of the roller conveyor. No function has been connected at this point.
⚠️ CAUTION

Risk of crushing

- Before any assembly and maintenance work, the respective devices must be decommissioned and disconnected from the voltage supply.
- Secure the respective devices against accidental activation.
- When integrating the module into a complete system, consider possible danger spots, particularly infeed locations and interfaces.

Requirement:

- The entire roller conveyor is out of operation.
- Remove side covers (2) on both sides of the roller conveyor.
- Determine the position for assembling the module in the roller conveyor.
- If necessary, adjust the width of the module to the width of the conveyor, See "Adjusting the side connectors", page 21.
- Move the module from below to the assembly position in the roller conveyor and fasten it with four ribbed screws (1) and nuts on both sides to the side frames of the roller conveyor.
Adjusting the side connectors

1. Side connectors
2. Lifting frame
3. Fastening screws for the lifting frame
4. Tool openings in the base frame
5. Nut
6. Fastening screws for the side connector
Unscrew the four fastening screws (3) for the lifting frame. For this purpose, insert the tool (hollow hexagon wrench) through the tool openings (4) in the base frame.

Lift the lifting frame (2) out of the base frame of the 24-V belt transfer.

Loosen the two fastening screws (6) and nuts (5) each for both side connectors, completely unscrew them if necessary.

Adjust the side connectors (1) to the width of the roller conveyor and tighten the fastening screws and nuts.

Insert the lifting frame into the base frame of the 24-V belt transfer and fasten it with the four screws.
Installing the blades (additional blades)

The 24-V belt transfer requires at least two blades. With the help of the blades, the transport materials are moved out of the roller conveyors at an angle of 90°.

- Uninstall the carrying idlers of the roller conveyor located above the 24-V belt transfer. See the operating manual of the roller conveyor for this purpose.
- Fasten the blades (1) at the desired positions on the lifting frame (3) of the 24-V belt transfer using four screws (2) each.
- Install the carrying idlers above the 24-V belt transfer in the roller conveyor. In the process, ensure that the position of the carrying idlers shifted because of the blades. It may be necessary to use longer drive belts.
- **NOTICE!** If the shift in carrying idlers should result in a gap in the roller distribution, it must be closed using a compensation profile, see the following chapter.
- Attach the side covers of the roller conveyor.

Blades of the 24-V belt transfer between the carrying idlers of the roller conveyor

1 Blades  
2 Fastening screws for the blades  
3 Lifting frame
Installing a compensation profile

The compensation profile for the 24-V belt transfer closes possible gaps between the carrying idlers of the roller conveyor.

- Attach the two brackets (3, 6) with screw and slot pin (4) at the compensation profile (5).
- Insert the compensation profile with brackets from the top into the gap between the rollers.
- Fasten the short bracket with two screws (2) on the side cover (1) and the long bracket with one screw (7) on the base frame (8) of the 24-V belt transfer.
Adjusting the belt tension (toothed belt)

Drive belt and setscrew on the 24-V belt transfer RM 8731

1. Toothed belt
2. Fastener for motor bracket
3. Motor bracket for lift motor
4. Adjusting nut
5. Setscrew

The tension of the toothed belt is set via a setscrew on the base frame of the 24-V belt transfer.

- At the underside of the 24-V belt transfer, loosen the two fastening screws (2) for the motor bracket (3) of the lift motor - do not unscrew them.
- Turn the setscrew (5) at the side of the base frame clockwise to increase the toothed belt tension, and counterclockwise to reduce the toothed belt tension.

The toothed belt should not be tensioned more than necessary. An overtensioning leads to stiffness and unnecessary load of the toothed belt and the bearings. The setscrew is optimally tightened with a torque of 1.0 Nm.

- Tighten the lower fastening screws of the motor bracket again.
Adjusting the belt tension (blade belt)

The blade belt is driven by the drive roller inside the 24-V belt transfer. The tensioning device for the blade belt tension is located inside the blade.

- Push the blade belt (3) to the side at the position of the tensioning device (setscrew).
- Loosen the locknut (1) on the setscrew with a wrench.
- Turn the setscrew (2) clockwise with a hollow hexagon wrench to increase the blade belt tension. Turn it counterclockwise to reduce the blade belt tension.

The blade belt should not be tensioned more than necessary. An overtensioning leads to stiffness and unnecessary load of the blade belt and the bearings. The blade belt tension is optimally set if the belt can barely be pulled via the drive roller of the 24-V belt transfer.

- Tighten the locknut.
Installing the finger guards

Finger guards at the belt transfer RM 8731

1 Fastening screws for finger guard  3 Inner side plate
2 Finger guard

A finger guard must be attached under every carrying idler that lies above the 24-V belt transfer.

Requirement:
- The carrying idlers above the 24-V belt transfer have been removed.
- The blades and, if necessary, the compensation profile have already been installed.
- For every carrying idler of the roller conveyor, install one finger guard each (2) at the inner side plate (3): Fasten the finger guard with two screws (1) in each case.
Using the diverter connection kit

When using a diverter to guide materials out of a conveyor belt within a conveyor system, height differences of up to 12 mm are possible. These differences can be compensated using a diverter connection kit.

- Install the diverter connection kit on the outgoing conveyor belt.
- Adjust the diverter connection kit either to the roller height (+0 mm) or to the height of the diverter belt (+12 mm).
Disassembling and shifting the module

⚠️ CAUTION

Risk of crushing

- Before any assembly and maintenance work, the respective devices must be decommissioned and disconnected from the voltage supply.
- Secure the respective devices against accidental activation.
- When integrating the module into a complete system, consider possible danger spots, particularly infeed locations and interfaces.

⚠️ CAUTION

Risk of injury when lifting heavy loads

- During the installation and replacement of conveyor modules or heavy spare parts, work in pairs or use a suitable carriage.

To uninstall the 24-V belt transfer and reinstall it at a different position, the following steps are required:

Requirement:

- The entire roller conveyor is out of operation.
- Remove the carrying idlers above the 24-V belt transfer from the roller conveyor. See the operating manual of the roller conveyor for this purpose.
- Remove the side cover.
- Disconnect the motor connecting cable from the power supply/control system.
- Unscrew the four ribbed screws and nuts with which the 24-V belt transfer is fastened to the side frames of the roller conveyor.
- Remove the entire 24-V belt transfer, including blades and compensation profile, from the roller conveyor from the bottom.
- Install the 24-V belt transfer at the new position in the roller conveyor. See "Installing the module at the conveyor", page 19.
- Install the carrying idlers in the roller conveyor. See the operating manual of the roller conveyor for this purpose.
Integrating the module in the overall system

The voltage supply of the motors of the 24-V belt transfer is provided directly from the voltage source (at the installation site, if necessary). Control signals and signaling of the motors (belt drive/lift drive) of the 24-V belt transfer is done via the control system of the roller conveyor.
Initial startup and operation

Initial startup

⚠️ WARNING
Risk of injuries due to incorrect handling
- Check electrical connections and protective devices.
- Remove the goods from the module.
- Remove unauthorized persons from the danger zone.
- Wear safety shoes and work clothing.

The module has been checked at the factory.
The following control measure is still required:
- Before the initial startup, check the module for the distance to the side frames and, if necessary, to the rollers of the conveyor with which it was connected.

Operation

Before every operation start
- Check the module for visible damage. In particular, observe belt, guides and supports.
- Ensure that all safety devices operate flawlessly.
- Ensure that only authorized personnel is in the operating area of the module.
- Ensure that it is running freely and that no parts are jammed.
- Remove material or equipment which is not required from the workspace.
- Guide and monitor correct placement of the materials on the conveyor.

During operation

⚠️ WARNING
Danger from rotating parts
Crushing and serious injuries from parts of the body and clothing being pulled into the module!
- Do not remove the protective covers.
- Wear close-fitting clothing, avoid jewelry and bands/ribbons.
- If you have long hair, always wear a hair net.
- If materials are jammed between side guides, switch off the module and ensure that it cannot be started accidentally, then remove the fault.
Procedure in case of accident or fault

- Stop the module and ensure that it cannot be started accidentally.
- In case of an accident: Render first aid and make an emergency call if necessary.
- Inform qualified personnel.
- Have the fault removed by qualified personnel.
- Restart the module only after this has been approved by qualified personnel.
Cleaning

⚠️ WARNING

Risk of injuries due to incorrect handling

- Only perform cleaning work on the module after you have switched off the power.
  Switch off the voltage supply and ensure that it cannot be started accidentally.
- Do not remove protective devices.
- Wear safety shoes and close-fitting work clothing.

- Clean belts only dry.
- For the remaining parts of the module, use only suitable cleaning agents (water-soluble, free of phosphate, silicone and potassium, non-acidic). Observe the manufacturer’s instructions.
Maintenance and repair

Observe the following for maintenance and repair

⚠️ DANGER

Danger - electrical voltage!

- Switch off the power supply system, ensure that it cannot be switched on accidentally and that it is de-energized.

⚠️ WARNING

Risk of crushing and injuries

- Ensure that the personnel involved in maintenance and repair have secure footing and sufficient room to move.
- Mechanical maintenance and repair work may only be performed by service personnel. Observe the safety information.
- Electrical maintenance and repair work should be performed only by authorized electricians. Observe the safety information.
- Ensure the weight of the module (see nameplate); if necessary work in pairs.
- Use suitable loading and lifting equipment. Secure the module against falling or tipping.

When tightening screws and nuts, always observe the standard tightening torque, unless specifically indicated otherwise. Standard screw lockers should be replaced as needed.

- Always have work on electrical equipment carried out by authorized electricians.
- Set up warning signs that indicate maintenance and repair work.
- Block off the area around the module.
- Inform persons who have to enter the blocked-off area about the risks.
Replacing the sensor

Sensor in the belt transfer RM 8731

1  Maintenance flap  
2  Fastening screws for maintenance flap  
3  Switching cam  
4  Nut on proximity switch  
5  Proximity switch (sensor)

⚠️ CAUTION
Risk of crushing

- Before any assembly and maintenance work, the respective devices must be decommissioned and disconnected from the voltage supply.
- Secure the respective devices against accidental activation.
- When integrating the module into a complete system, consider possible danger spots, particularly infeed locations and interfaces.

Requirement:
- The entire roller conveyor is out of operation.
- Loosen the two screws (2) at the maintenance flap (1), do not unscrew them.
- Disengage the maintenance flap (1) first on one side, then on the other side.
Maintenance and repair

- Remove the maintenance flap.
- Disconnect the plug from the sensor (proximity switch).
- Unscrew and remove the front nut (4) on the proximity switch (5).
- Pull the proximity switch to the back and out of the holder and also unscrew the rear nut.
- Screw the rear nut onto the new proximity switch.
- Insert the new proximity switch into the bracket and fix it with the front screw.
- Adjust the proximity switch.

**NOTICE! The distance between the switching cam (3) and the proximity switch may measure only 2 to 3 mm.**

- Connect the plug with the sensor.
- Engage the maintenance flap and fasten the two screws at the maintenance flap.
Replacing the blade

 Blades of the 24-V belt transfer RM 8731 between the carrying idlers of the roller conveyor

1  Blades  
2  Fastening screws for the blades  
3  Lifting frame of the 24-V belt transfer

⚠️ CAUTION

Risk of crushing

- Before any assembly and maintenance work, the respective devices must be decommissioned and disconnected from the voltage supply.
- Secure the respective devices against accidental activation.
- When integrating the module into a complete system, consider possible danger spots, particularly infeed locations and interfaces.

Requirement:
- The entire roller conveyor is out of operation.
- Uninstall the carrying idlers of the roller conveyor located above the 24-V belt transfer. See the operating manual of the roller conveyor for this purpose.
Unscrew the four fastening screws (2) of the respective blade and remove the blade (1) from the lifting frame (3).

Place the new blade on the lifting frame and fasten it to the lifting frame with the four screws. Retension the blade belt as necessary. See "Adjusting the belt tension (blade belt)", page 26.

Install the carrying idlers above the 24-V belt transfer in the roller conveyor. See the operating manual of the roller conveyor for this purpose.
Replacing the blade belt

Blades, blade belts and blade rollers of the 24-V belt transfer RM 8731

1 Lifting frame
2 Open blade ends
3 Blades
4 Blade belt
5 Suspended blade rollers
6 Fastening screws for the blades
7 Drive roller
⚠️ CAUTION

Risk of crushing

- Before any assembly and maintenance work, the respective devices must be decommissioned and disconnected from the voltage supply.
- Secure the respective devices against accidental activation.
- When integrating the module into a complete system, consider possible danger spots, particularly infeed locations and interfaces.

Requirement:

- The module is out of operation.
- Uninstall the carrying idlers of the roller conveyor located above the 24-V belt transfer. See the operating manual of the roller conveyor for this purpose.
- Unscrew the fastening screws (6) of the blade and remove the blade (3) from the lifting frame (1).
- Reduce the tension of the blade belt. See "Adjusting the belt tension (blade belt)", page 26.
- Unhook the lower three suspended blade rollers (5) and remove them.
- Pull the blade belt over the two open blade ends (2) out of the blade.
- Pull the new blade belt onto the blade.
- Hook the lower three blade rollers back into the blade.
- Place the blade onto the drive roller (7) and fasten it to the lifting frame (1) using four screws (6).
- Tension the blade belt. See "Adjusting the belt tension (blade belt)", page 26.
- Install the missing carrying idlers above the 24-V belt transfer in the roller conveyor. See the operating manual of the roller conveyor for this purpose.
Replacing the drive motor

Base frame, lifting frame and blades in the 24-V belt transfer RM 8731

1. Blades  5. Base frame
2. Fastening screws for lifting frame  6. Tool openings
3. Lifting frame  7. Rear cover
4. Front cover

The drive motor of the 24-V belt transfer is fastened to the lifting frame with two brackets.

⚠️ CAUTION

Risk of crushing and electric shock

- Before any assembly and maintenance work, the respective devices must be decommissioned and disconnected from the voltage supply.
- Secure the respective devices against accidental activation.
- When integrating the module into a complete system, consider possible danger spots, particularly infeed locations and interfaces.
Maintenance and repair

Requirement:
- The entire roller conveyor is out of operation.
- Perform the following steps in the order listed to replace the drive motor:

**Step 1: Uninstalling the carrying idlers**
- Uninstall the carrying idlers of the roller conveyor located above the 24-V belt transfer.
  See the operating manual of the roller conveyor for this purpose.

**Step 2: Opening the belt transfer**
- Disassemble the compensation profile as necessary. See "Installing a compensation profile", page 24.
- Remove the front (4) and rear (7) cover of the 24-V belt transfer.

**Step 3: Disconnecting the motor cable**
- Open the maintenance flap under the belt transfer and disconnect the motor connecting cable of the drive motor from the extension.
- Unscrew the grounding cable.

**Step 4: Uninstalling the lifting frame**
- Unscrew the four fastening screws (2) for the lifting frame (3). For this purpose, insert the tool (hollow hexagon wrench) through the tool openings (6) in the base frame (5).
- Lift the lifting frame (3) with the two blades out of the base frame (5) of the 24-V belt transfer.
Step 5: Replacing the motor

- Unscrew the fastening screws (9) for the motor bracket and remove motor bracket (10) including drive motor (14) and pulley (15). Pull the drive belt (16) off of the pulley (15) of the drive motor in the process.
- Pull the pulley (15) off of the journal (12) of the drive motor.
- Unscrew the four fastening screws (13) for the drive motor and detach the drive motor (14) from the motor bracket (10).
- Place the new drive motor onto the motor bracket (10) fasten it with four screws (13).
- Place the pulley (15) onto the journal (12) of the new drive motor.
- Attach motor bracket (10) with drive motor on the lifting frame (3). Pull the open loop of the drive belt (16) onto the pulley (15) of the drive motor in the process and push the pulley into the bearing.
Maintenance and repair

Step 6: Installing the lifting frame
- Place the lifting frame with drive motor and the two blades on the base frame (5) of the 24-V belt transfer and fasten it. For this purpose, insert the tool through the tool openings (6) in the base frame.

Step 7: Connecting the motor cable
- Connect the motor connecting cable of the drive motor with the extension cable through the maintenance flap.
- Screw on the grounding cable.
- Close the maintenance flap under the belt transfer.

Step 8: Assembling the belt transfer
- Install the front (4) and rear (7) cover of the 24-V belt transfer.
- Install the compensation profile as necessary, See "Installing a compensation profile", page 24.

Step 9: Installing the carrying idlers
- Install the missing carrying idlers above the 24-V belt transfer in the roller conveyor. See the operating manual of the roller conveyor for this purpose.
Replacing the lift motor

Base frame, mounting frame and covers in the 24-V belt transfer RM 8731

1 Fastening screws for lifting frame 4 Tool openings
2 Lifting frame 5 Base frame
3 Front cover 6 Rear cover

⚠️ CAUTION

Risk of crushing and electric shock

- Before any assembly and maintenance work, the respective devices must be decommissioned and disconnected from the voltage supply.
- Secure the respective devices against accidental activation.
- When integrating the module into a complete system, consider possible danger spots, particularly infeed locations and interfaces.
Requirement:
☑ The entire roller conveyor is out of operation.
▷ Perform the following steps in the order listed to replace the lift motor:

**Step 1: Uninstalling the carrying idlers**
▷ Uninstall the carrying idlers of the roller conveyor located above the 24-V belt transfer.
  See the operating manual of the roller conveyor for this purpose.

**Step 2: Opening the belt transfer**
▷ Disassemble the compensation profile as necessary. See "Installing a compensation profile", page 24.
▷ Remove the front (3) and rear (6) cover of the 24-V belt transfer.

**Step 3: Disconnecting the motor cable**
▷ Open the maintenance flap under the belt transfer and disconnect the motor connecting cable from the extension.
▷ Unscrew the grounding cable.

**Step 4: Uninstalling the lifting frame**
▷ Unscrew the fastening screws (1) for the lifting frame (2). For this purpose, insert the tool (hollow hexagon wrench) through the tool openings (4) in the base frame.
▷ Lift the lifting frame (2) with the two blades out of the base frame (5) of the 24-V belt transfer.
Lift motor and toothed belt in the 24-V belt transfer

- Lift motor (7)
- Toothed belt (8)
- Pulley (9)
- Fastening screws for lift motor (10)
- Outer bracket for lift motor (11)
- Setscrew (12)
- Inner bracket (13)
- Bushing (14)
- Fastening screws for two-part motor bracket (15)
- Fastening screws for the two brackets (16)
- Lifting roller (17)
Step 5: Replacing the motor

- Unscrew the setscrew (12).
- Unscrew the fastening screws (15) for the two-part motor bracket (11, 13) and remove the motor bracket including lift motor (7) and bushing (14).
- When removing the motor bracket and lift motor, remove the toothed belt (8) from the pulley (9) of the lifting roller (17).
- Unscrew the two screws (16) in the motor bracket and separate the two brackets (11, 13) from each other. Pull the adapter with the pulley (9) out of the bearing in the process.
- Pull the pulley (9) with adapter off of the journal of the lift motor.
- Unscrew the four fastening screws (10) for the lift motor and detach the lift motor (7) from the outer bracket (11).
- Fasten the new lift motor to the outer bracket (11).
- Insert the toothed belt (8) and push the adapter with the pulley (9) onto the journal.
- Assemble the two brackets (11, 13) of the motor bracket.
- Place the toothed belt over the pulley of the lifting roller (17).
- Fasten the motor bracket including lift motor with two screws on the base frame (5).
- Screw in the setscrew (12) and tension the toothed belt (8).

Step 6: Installing the lifting frame

- Place the lifting frame (2) with the two blades on the base frame (5) of the 24-V belt transfer and fasten it with four screws (1). For this purpose, insert the tool through the tool openings (4) in the base frame.

Step 7: Connecting the motor cable

- Connect the motor connecting cables with the extension cable through the maintenance flap.
- Screw on the grounding cable.
- Close the maintenance flap under the belt transfer.

Step 8: Assembling the belt transfer

- Install the front (3) and rear (6) cover of the 24-V belt transfer.
- Install the compensation profile as necessary.

Step 9: Installing the carrying idlers

- Install the missing carrying idlers above the 24-V belt transfer in the roller conveyor.
  See the operating manual of the roller conveyor for this purpose.
Replace the drive roller

![Diagram of Drive Roller and Drive Belt in 24-V Belt Transfer RM 8731]

Drive roller and drive belt in the 24-V belt transfer RM 8731

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Blades</td>
<td>5</td>
<td>Fastening screws for drive roller</td>
</tr>
<tr>
<td>2</td>
<td>Drive roller</td>
<td>6</td>
<td>Front cover</td>
</tr>
<tr>
<td>3</td>
<td>Drive belt</td>
<td>7</td>
<td>Lifting frame</td>
</tr>
<tr>
<td>4</td>
<td>Pulley</td>
<td>8</td>
<td>Rear cover</td>
</tr>
</tbody>
</table>

⚠️ CAUTION

Risk of crushing and electric shock

- Before any assembly and maintenance work, the respective devices must be decommissioned and disconnected from the voltage supply.
- Secure the respective devices against accidental activation.
- When integrating the module into a complete system, consider possible danger spots, particularly infeed locations and interfaces.
Maintenance and repair

Requirement:
- The entire roller conveyor is out of operation.
- Perform the following steps in the order listed to replace the drive roller:

Step 1: Uninstalling the carrying idlers
- Uninstall the carrying idlers of the roller conveyor located above the 24-V belt transfer. See the operating manual of the roller conveyor for this purpose.

Step 2: Opening the belt transfer
- Disassemble the compensation profile as necessary, See "Installing a compensation profile", page 24.
- Uninstall the two blades (1), See "Replacing the blade", page 37.
- Remove the front (6) and rear (8) cover of the 24-V belt transfer.

Step 3: Replace the drive roller
- Unscrew the two fastening screws (5) for the drive roller and take the drive roller (2) out of the lifting frame (7). Pull the drive belt (3) off of the pulley (4) of the drive roller in the process.
- Place the new drive roller into the lifting frame (7) and fasten it with two screws (5). Pull the drive belt (3) around the pulley (4) of the drive roller in the process.

Step 4: Assembling the belt transfer
- Install the front (6) and rear (8) cover.
- Install the two blades (1), See "Replacing the blade", page 37.
- Install the compensation profile as necessary, See "Installing a compensation profile", page 24.

Step 5: Installing the carrying idlers
- Install the missing carrying idlers above the 24-V belt transfer in the roller conveyor. See the operating manual of the roller conveyor for this purpose.
Replacing the lifting roller

1. Fastening screws for lifting frame
2. Fastening screws for lifting roller
3. Lifting roller
4. Lifting frame
5. Front cover
6. Toothed belt
7. Tool openings
8. Rear cover

⚠️ CAUTION

Risk of crushing and electric shock

- Before any assembly and maintenance work, the respective devices must be decommissioned and disconnected from the voltage supply.
- Secure the respective devices against accidental activation.
- When integrating the module into a complete system, consider possible danger spots, particularly infeed locations and interfaces.
Maintenance and repair

Requirement:
- The entire roller conveyor is out of operation.
- Perform the following steps in the order listed to replace the lifting roller:

Step 1: Uninstalling the carrying idlers
- Uninstall the carrying idlers located above the 24-V belt transfer. See the operating manual of the roller conveyor for this purpose.

Step 2: Opening the belt transfer
- Disassemble the compensation profile as necessary. See "Installing a compensation profile", page 24.
- Remove the front (5) and rear (8) cover of the 24-V belt transfer.

Step 3: Disconnecting the motor cable
- Open the maintenance flap under the belt transfer and disconnect the motor connecting cable of the drive motor from the extension.
- Unscrew the grounding cable.

Step 4: Uninstalling the lifting frame
- Unscrew the four fastening screws (1) for the lifting frame (4). For this purpose, insert the tool (hollow hexagon wrench) through the tool openings (7) in the base frame.
- Lift the lifting frame (4) with the two blades out of the base frame of the 24-V belt transfer.

Step 5: Uninstall the old lifting roller
- Unscrew the two fastening screws (2) for the lifting roller and remove the lifting roller (3). Pull the toothed belt (6) off of the pulley of the lifting roller in the process.
Step 6: Placing eccentric rings and switching cam on the new lifting roller

- Place the old and new lifting roller next to each other. Mark the positions on the new roller where the eccentric rings (1) and the switching cam (2) have to be installed.
- Loosen the screws at the eccentric rings (1) and remove the eccentric rings from the old lifting roller.
- Loosen the screws (4) from the switching cam (2) and remove the switching cam from the old lifting roller.
- Place the switching cam at the marked position on the new lifting roller and fasten it.
- If necessary, adjust the exact position of the switching cam in the assembled state, See "Adjusting the lifting position", page 63.
- Place the eccentric rings at the marked position on the new lifting roller and fasten them. Ensure that the eccentric rings are evenly aligned.

Step 7: Installing the new lifting roller

- Place the new lifting roller into the lifting frame and fasten it with two screws.

Step 8: Installing the lifting frame

- Place the lifting frame with the two blades in the base frame and fasten it with four screws.
Step 9: Connecting the motor cable
- Connect the motor connecting cable of the drive motor with the extension cable through the maintenance flap.
- Screw on the grounding cable.
- Close the maintenance flap under the belt transfer.

Step 10: Assembling the belt transfer
- Install the front and rear cover of the 24-V belt transfer.
- Install the compensation profile as necessary, See "Installing a compensation profile", page 24.

Step 11: Installing the carrying idlers
- Install the missing carrying idlers above the 24-V belt transfer in the roller conveyor.
  See the operating manual of the roller conveyor for this purpose.
Replacing the drive belt (PolyVee)

Blades, lifting frame and base frame in the 24-V belt transfer RM 8731

1 Blades
2 Fastening screws for lifting frame
3 Lifting frame
4 Base frame
5 Tool opening

⚠️ CAUTION

Risk of crushing and electric shock

- Before any assembly and maintenance work, the respective devices must be decommissioned and disconnected from the voltage supply.
- Secure the respective devices against accidental activation.
- When integrating the module into a complete system, consider possible danger spots, particularly infeed locations and interfaces.
Maintenance and repair

Requirement:
- The entire roller conveyor is out of operation.
- Perform the following steps in the order listed to replace the drive belt:

**Step 1: Uninstalling the carrying idlers**
- Uninstall the carrying idlers of the roller conveyor located above the 24-V belt transfer. See the operating manual of the roller conveyor for this purpose.

**Step 2: Opening the belt transfer**
- Disassemble the compensation profile as necessary. See "Installing a compensation profile", page 24.
- Uninstall the front and rear cover of the 24-V belt transfer.

**Step 3: Disconnecting the motor cable**
- Open the maintenance flap under the belt transfer and disconnect the motor connecting cable of the drive motor from the extension.
- Unscrew the grounding cable.

**Step 4: Uninstalling the lifting frame**
- Unscrew the four fastening screws (2) for the lifting frame (3). For this purpose, insert the tool (hollow hexagon wrench) through the tool openings (5) in the base frame (4).
- Lift the lifting frame (3) with the two blades out of the base frame (4) of the 24-V belt transfer.
Drive motor and drive belt in the 24-V belt transfer

6 Drive motor
7 Bushing
8 Fastening screw for entire motor bracket
9 Brackets for drive motor
10 Outer bracket
11 Fastening screw for the two motor brackets
12 Journal
13 Fastening screws for drive motor
14 Pulley of drive motor
15 Drive belt
16 Drive roller
17 Fastening screw for drive roller

Step 5: Uninstalling the drive motor
- Unscrew the fastening screws (8 and 11) for the motor bracket and remove motor bracket (9) including drive motor (6) and pulley (14). Pull the drive belt (15) off of the pulley (14) of the drive motor in the process.
Step 6: Replacing the drive belt
- Unscrew the fastening screws (17) for the drive roller and remove the drive roller (16).
  Pull the drive belt (15) off of the pulley of the drive roller in the process.
- Properly dispose of the old drive belt (15) and place the new drive belt around the pulley of the drive roller (16).
- Insert the drive roller (16) with the new drive belt into the lifting frame (3) and fasten it with screws.

Step 7: Installing the drive motor
- Install the motor bracket (9) including drive motor (6) on the lifting frame (3). Pull the open loop of the drive belt (15) onto the pulley (14) of the drive motor in the process and push the pulley into the bearing.

Step 8: Installing the lifting frame
- Place the lifting frame with drive motor and the two blades on the base frame (4) of the 24-V belt transfer and fasten it. For this purpose, insert the tool through the tool openings in the base frame.

Step 9: Connecting the motor cable
- Connect the motor connecting cable of the drive motor with the extension cable through the maintenance flap.
- Screw on the grounding cable.
- Close the maintenance flap under the belt transfer.

Step 10: Assembling the belt transfer
- Install the front and rear cover of the 24-V belt transfer.
- Install the compensation profile as necessary, See "Installing a compensation profile", page 24.

Step 11: Installing the carrying idlers
- Install the missing carrying idlers above the 24-V belt transfer in the roller conveyor. See the operating manual of the roller conveyor for this purpose.
Replacing the toothed belt (lift)

Lifting frame in the base frame of the 24-V belt transfer

1 Fastening screws for lifting frame
2 Lifting frame
3 Front cover
4 Base frame
5 Tool opening
6 Rear cover

⚠️ CAUTION

Risk of crushing and electric shock

- Before any assembly and maintenance work, the respective devices must be decommissioned and disconnected from the voltage supply.
- Secure the respective devices against accidental activation.
- When integrating the module into a complete system, consider possible danger spots, particularly infeed locations and interfaces.
Maintenance and repair

Requirement:
☐ The entire roller conveyor is out of operation.
☐ Perform the following steps in the order listed to safely replace the toothed belt:

**Step 1: Uninstalling the carrying idlers**
☐ Uninstall the carrying idlers of the roller conveyor located above the 24-V belt transfer.
   See the operating manual of the roller conveyor for this purpose.

**Step 2: Opening the belt transfer**
☐ Disassemble the compensation profile as necessary, See "Installing a compensation profile", page 24.
☐ Remove the front (3) and rear (6) cover of the 24-V belt transfer.

**Step 3: Disconnecting the motor cable**
☐ Open the maintenance flap under the belt transfer and disconnect the motor connecting cable from the extension.
☐ Unscrew the grounding cable.

**Step 4: Uninstalling the lifting frame**
☐ Unscrew the four fastening screws (1) for the lifting frame (2). For this purpose, insert the tool (hollow hexagon wrench) through the tool openings (5) in the base frame.
☐ Lift the lifting frame (2) with the two blades incl. the drive roller and drive motor out of the base frame (4) of the 24-V belt transfer.
Lift motor and toothed belt in the 24-V belt transfer

7  Lift motor
8  Fastening screws for lift motor
9  Outer bracket
10 Fastening screw and nut for bracket
11 Bracket for lift motor
12 Setscrew
13 Pulley incl. adapter on the lift motor
14 Fastening screws for two-part motor bracket
15 Base frame
16 Toothed belt
17 Pulley on lifting roller
18 Lifting roller

Step 5: Disassembling the motor bracket

- Unscrew the setscrew (12).
- Unscrew the two fastening screws (14) for the two-part motor bracket (9 and 11) at the base frame (15) and remove the motor bracket incl. lift motor (7).
When removing the motor bracket and lift motor, remove the toothed belt (16) from the pulley (17) of the lifting roller (18). 

Unscrew the two screws (10) in the motor bracket and separate the two brackets (9 and 11) from each other. Pull the adapter with the pulley (13) out of the bearing in the process.

**Step 6: Replacing the toothed belt**

- Remove the old toothed belt (16) from the pulley (13) of the lift motor and properly dispose of it.
- Place the new toothed belt around the pulley of the lift motor.

**Step 7: Installing the motor bracket**

- Assemble the two brackets (9 and 11) of the motor bracket. Push the adapter with the pulley into the bearing in the process.
- Place the toothed belt (16) over the pulley (17) of the lifting roller.
- Fasten the motor bracket incl. lift motor with two screws on the base frame (15).
- Screw in the setscrew (12) and tension the toothed belt (16).

**Step 8: Installing the lifting frame**

- Place the lifting frame (2) incl. drive roller and drive motor in the base frame (15) of the 24-V belt transfer and fasten it with four screws (1). For this purpose, insert the tool through the tool openings (5) in the base frame.

**Step 9: Connecting the motor cable**

- Connect the motor connecting cables with the extension cable through the maintenance flap.
- Screw on the grounding cable.
- Close the maintenance flap under the belt transfer.

**Step 10: Assembling the belt transfer**

- Install the front (3) and rear (6) cover of the 24-V belt transfer.
- Install the compensation profile as necessary. See "Installing a compensation profile", page 24.

**Step 11: Installing the carrying idlers**

- Install the missing carrying idlers above the 24-V belt transfer in the roller conveyor.
  See the operating manual of the roller conveyor for this purpose.
Adjusting the lifting position

The entire roller conveyor is out of operation.

- Loosen the two screws at the maintenance flap, do not unscrew them. See "Replacing the sensor", page 35.
- Disengage the maintenance flap first on one side, then on the other side.
- Remove the maintenance flap.
- Loosen the two screws at the switching cam (4), do not unscrew them.
Maintenance and repair

- Align the switching cam to the proximity switch (2).
  NOTICE! The switching cam (4) and the eccentric rings (3) are properly aligned with each other if both eccentrics are located in the lowest position when the proximity switch (sensor) is tripped.
  NOTICE! The distance between the switching cam (3) and the proximity switch (2) may measure only 2 to 3 mm.
- Tighten the two screws at the switching cam.
- Engage the maintenance flap and fasten the two screws at the maintenance flap.
Maintenance and repair

Maintenance intervals

If maintenance is not performed according to schedule, it may lead to damages and failures. If maintenance intervals are not followed, the warranty will be void.

Information about lubrication intervals and maintenance tasks on motors are located in the manufacturer's information. They can be downloaded from the Internet site of the manufacturer.

All bearings of the module feature a life-time lubrication and are maintenance-free within the operating parameters.

Maintenance and inspection list

<table>
<thead>
<tr>
<th>Component</th>
<th>Interval</th>
<th>Tasks / check</th>
<th>Work to be performed</th>
<th>Performed by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete</td>
<td>Weekly</td>
<td>General visual and acoustic</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>remote check.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Annually</td>
<td>Check screw connections.</td>
<td>Retighten acc. to DIN</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>standard, if necessary</td>
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</tr>
<tr>
<td></td>
<td>Every 6 months</td>
<td>Check for cleanliness.</td>
<td>Clean as required</td>
<td></td>
</tr>
<tr>
<td>Motors</td>
<td>Every 6 months</td>
<td>Check temperature.</td>
<td>Replace as required</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check for noise.</td>
<td>Replace as required</td>
<td></td>
</tr>
<tr>
<td>Rollers</td>
<td>Every 6 months</td>
<td>Check for damage and wear.</td>
<td>Replace as required</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check for noise.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belt</td>
<td>Every 6 months</td>
<td>Check for damage and wear.</td>
<td>Replace as required</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check belt tension</td>
<td>Adjust as required</td>
<td></td>
</tr>
<tr>
<td>Sensor</td>
<td>Every 6 months</td>
<td>Check for cleanliness</td>
<td>Clean as required</td>
<td></td>
</tr>
</tbody>
</table>

* For permissible temperatures: see the operating manual of the motor
Troubleshooting

In case of a fault

⚠️ DANGER

Danger - electrocution

- Only perform maintenance and repair work after you have switched off the power.
- Faults on electrical equipment may be removed only by a trained electrician!

Requirement:
- The danger spots on the module are covered by protective plates and other protective devices.
- Immediately de-energize the complete conveyor system and ensure that it cannot be started accidentally.
- Remove material and blocking objects.
- Before switching it on again, ensure that no persons are at risk.
- Professionally dispose of any gear oil that as leaked out. Have the motor replaced by qualified personnel if necessary.

Troubleshooting

<table>
<thead>
<tr>
<th>Fault</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport process cannot be</td>
<td>Main switch and/or control system switched off.</td>
<td>Check switch position. Switch on main switch and/or key switch of the control system as required.</td>
</tr>
<tr>
<td>started.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply line is damaged.</td>
<td></td>
<td>Check supply line.</td>
</tr>
<tr>
<td>Drive/lift motor is defective.</td>
<td></td>
<td>Check motor, replace as required, See &quot;Replacing the drive motor&quot;, page 41.</td>
</tr>
<tr>
<td>Drive/lift motor is overheating.</td>
<td></td>
<td>Check for blocking, remove as required.</td>
</tr>
</tbody>
</table>
### Troubleshooting

<table>
<thead>
<tr>
<th>Fault</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer is not lifting out.</td>
<td>Lift motor is defective.</td>
<td>Check motor, replace as required, See &quot;Replacing the lift motor&quot;, page 45.</td>
</tr>
<tr>
<td>Toothed belt is defective.</td>
<td>Check toothed belt, replace as required, See &quot;Replacing the toothed belt (lift)&quot;, page 59.</td>
<td></td>
</tr>
<tr>
<td>Proximity switch (sensor) is set incorrectly.</td>
<td>Correct setting, See &quot;Replacing the sensor&quot;, page 35 and See &quot;Adjusting the lifting position&quot;, page 63.</td>
<td></td>
</tr>
<tr>
<td>Noise development, squeaking, whistling</td>
<td>Bearings in rollers are defective.</td>
<td>Replace drive roller, lifting roller or blades: See &quot;Replace the drive roller&quot;, page 49, See &quot;Replacing the lifting roller&quot;, page 51 and See &quot;Replacing the blade&quot;, page 37.</td>
</tr>
<tr>
<td>Blade belt is stopped, but drive motor is running.</td>
<td>Blade belt is not sufficiently tensioned.</td>
<td>Tension the blade belt, See &quot;Adjusting the belt tension (blade belt)&quot;, page 26.</td>
</tr>
<tr>
<td></td>
<td>Blade belt is worn.</td>
<td>Replace the blade belt, See &quot;Replacing the blade belt&quot;, page 39.</td>
</tr>
</tbody>
</table>
Spare and wear parts

All spare and wear parts are available from Interroll. Maintenance and repair work may be performed only by qualified personnel. Interroll offers training sessions about required maintenance and repair tasks upon request.

Ordering information

Ordering spare and wear parts requires the exact identification of the module, nameplate.

The following information is required for an order:
• Machine number
• Type
• Item number of spare parts list
• Designation
• Comment

For additional information about the spare parts portfolio, please contact your supplier.
Spare part designation

24-V Belt Transfer RM 8731
## Spare parts list

<table>
<thead>
<tr>
<th>Item no.</th>
<th>Designation</th>
<th>Comment</th>
<th>S/W/T*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Blade belt (transfer belt)</td>
<td>Ribbed V-belt</td>
<td>W</td>
</tr>
<tr>
<td>2</td>
<td>Blade roller (suspended flange roller with bolt)</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>3</td>
<td>Blade</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>4</td>
<td>Drive motor</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>5</td>
<td>PolyVee pulley (drive)</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>6</td>
<td>Not shown: Ball bearing (of PolyVee pulley)</td>
<td>6004</td>
<td>S</td>
</tr>
<tr>
<td>7</td>
<td>Drive belt</td>
<td></td>
<td>W</td>
</tr>
<tr>
<td>8</td>
<td>Drive roller</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>9</td>
<td>Lift motor</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>10</td>
<td>Pulley (lift)</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>11</td>
<td>Toothed belt (lift)</td>
<td></td>
<td>W</td>
</tr>
<tr>
<td>12</td>
<td>Lifting roller</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>13</td>
<td>Proximity switch (sensor)</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>14</td>
<td>Not shown: Control card</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>15</td>
<td>Roller</td>
<td>Blue</td>
<td>S</td>
</tr>
<tr>
<td>16</td>
<td>Slide bearing</td>
<td>GFM-1012-06</td>
<td>S</td>
</tr>
<tr>
<td>17</td>
<td>Slide bearing</td>
<td>GFM-1820-06</td>
<td>S</td>
</tr>
</tbody>
</table>

* S = spare part, W = wear part, T = tool
Decommissioning and disposal

- When disposing the motor oil, observe the disposal documents of the motor manufacturer.
- The packaging must be recycled to provide environmental relief.

Environmental protection regulations

For all work on and with the module, the legal regulations concerning waste avoidance and proper disposal and recycling must be followed.

NOTICE

Substances with a water hazard class, such as greases and oils, hydraulic oils, coolants or cleaning agents with solvents may not be allowed to come into contact with the ground or reach the sewer system!

- Store, transport, catch and dispose these substances in suitable containers!
- Observe the notices on the supply containers.
- Observe any additional national regulations.
Installation declaration

in accordance with the EC Machinery Directive 2006/42/EC, Appendix II 1 B

The manufacturer:
Interroll Automation GmbH
Dietmar-Hopp-Straße 3
D-74889 Sinsheim, Germany

herewith declares that the conveyor module described below is an incomplete machine in accordance with the EU Machinery Directive:

• Interroll 24-V Belt Transfer RM 8731

Important Note! The incomplete machine may only be put into operation if it has been determined that the overall machine/system, into which the incomplete machine is to be installed, meets the requirements of this directive.

The following safety requirements as stated in Appendix I have been applied:

• 1.1.2, 1.1.3, 1.1.5, 1.1.6, 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.3.7, 1.3.8, 1.4.1, 1.5.4, 1.5.8, 1.5.9, 1.6.1, 1.6.4, 1.7.4

The special technical documents mentioned in Appendix VII B have been prepared and will be sent to the responsible authority if necessary. The transmission is done electronically.

Responsible for EC documentation: Interroll Automation GmbH, Dietmar-Hopp-Straße 3, D-74889 Sinsheim, Germany

Applicable EC Directives:
• Machinery Directive 2006/42/EC
• EMC Directive 2014/30/EU

Applicable harmonized standards:
• EN ISO 12100:2011-03 "Safety of machinery - Basic concepts - risk assessment and reduction"
• EN ISO 13857:2008-06 "Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs"
• EN 349:2008-09 "Safety of machinery - Minimum gaps to avoid crushing of parts of the human body"
• EN 60204-1:2007-06 "Safety of machinery - Electrical equipment of machines - Part 1: General requirements"

Sinsheim, dated

Robert Lugauer
(Manager)