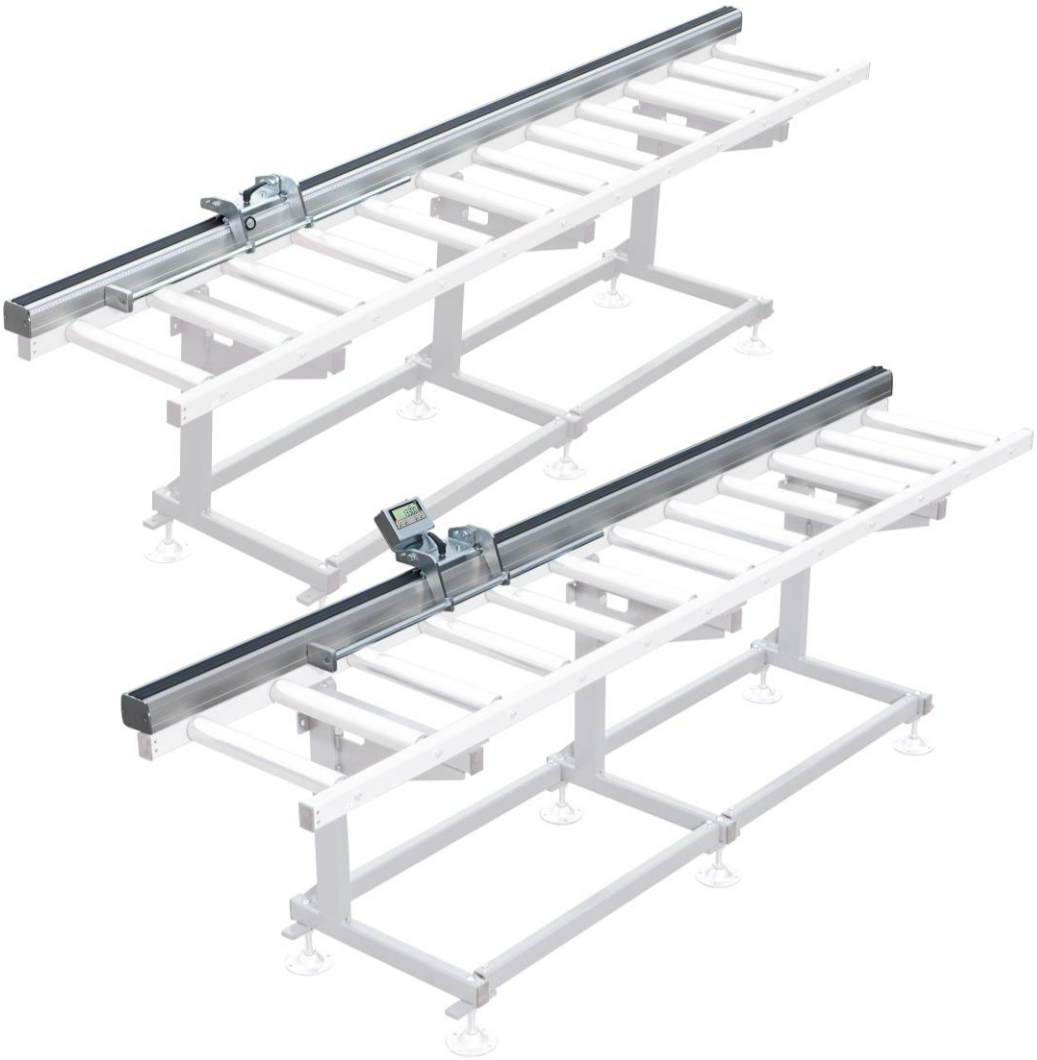
TRANSLATION OF THE ORIGINAL VERSION

CE

Operating Manual

Length stop systems for mounting on roller conveyors

EXAKT P/B and EXAKT P/E



EXAKT P/B:	**Length stop with millimetre scale and reading magnifier**
EXAKT P/E:	**Length stop with battery-operated measuring system**

Reinhold Beck Maschinenbau GmbH
Im Grund 23 | DE -72505 Krauchenwies
Tel.: +49 (0) 7576 / 962 978 - 0 | Fax: +49 (0) 7576 / 962 978 - 90
E-Mail: info@beck-maschinenbau.de | Web: https://www.beck-maschinenbau.de

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Revisions:

Revision	Autor	Modification	Date
001	AG	Original manual translated	12.09.2023

1 Introduction

The information in this operating manual enables safe, proper and economical operation of your roller conveyor. Please observe all the explanations, notes and regulations

- to avoid dangers and malfunctions,
- to reduce repair costs and downtimes
- and to increase reliability and service life

of your length stop system.

The operator must ensure that this operating manual is read by the persons entrusted with the operation, maintenance and repair of the stop system. This operating manual as well as any appendices and additional documents must be kept easily accessible at the place of use of the stop system.

Ignorance or non-observance of this operating manual may result in certain risks of accidents when handling the stop system. This operating manual and any appendices and additional documents must be read thoroughly before commissioning. The instructions, in particular the safety regulations, must be observed!

Handling the stop system in the sense of this operating manual includes:

- *the installation and commissioning,*
- *the operation and proper usage,*
- *the influence on operating conditions, as well as the maintenance, troubleshooting and repair.*

Apart from the operating manual and the legally binding accident prevention provisions applicable in the country and place of use, the recognized technical regulations for safe and proper work must also be observed.

1.1 Legal notice

1.2 Illustrations

All photos, figures and graphics contained in this document are for illustration and better understanding only and may differ from the current state of the product.

2 Symbols

2.1 General symbols

Symbol	*Meaning*
	Indicates passages within this operating manual that must be particularly observed in order to prevent malfunctions or damage to the stop system.
	Refers to chapters, sections, or figures within this document.
	Refers to an external document or a third-party source.

2.2 Symbols in safety instructions

Safety instructions are provided with corresponding danger symbols which have the following meanings:

Symbol	*Safety Instruction*
	Reading and applying the operating manual is mandatory for the operating personnel. *Failure to abide by the following precautions could lead to serious or possibly fatal injury.*
	General danger symbol, which requires the highest attention! *Failure to observe may result in damage to the equipment, serious injury or even death.*
	Reference to a prohibited zone under a lifted load! *Do not enter! There is an increased risk of injury or even death.*
	Reference to a prohibited zone on a platform! *Do not enter! There is an increased risk of injury or even death.*
	Reference to a possible crushing hazard! *Non-observance increases the risk of injury to hands and fingers!*
	Reference to a possible crushing hazard! *Non-observance increases the risk of injury to feet and toes!*
	Possible dangerous crushing hazard in the area of stationary objects! *Risk of personal injury and possibly additional equipment damage.*
	Reference to a possible hazard due to forklift traffic! *Non-observance can result in life-threatening injuries.*
	Reference to a possible danger under suspended loads! *Non-observance can result in life-threatening injuries.*
	Reference to possible tripping and slipping hazards on the floor! *Non-observance may result in minor or severe injuries.*
	Reference to possible environmental pollution! *Non-observance poses a risk of pollution of the environment and groundwater!*
	Reading and applying the operating manual is mandatory for the operating personnel. *Non-observance of the above precautions can lead to serious or possibly fatal injuries.*
	Note on the obligation to wear tight-fitting protective work clothing! *Non-observance may result in increased risk of injury or even death!*
	Reference to the obligation to wear safety shoes resp. protective gloves! *Non-observance may result in increased risk of injury to feet & toes or hands & fingers!*
	Note on the obligation to wear protective goggles/face protection resp. hearing protection! *Non-observance increases the risk of injury to eyes/face resp. ear canals.*
	Note on the obligation to wear a dust protection resp. respiratory mask! *Non-observance increases the risk of injury to the respiratory tract.*
	Note on the obligation to wear a safety helmet! *Non-observance may result in increased danger of head injuries or even death!*
	Fire hazard! Do not smoke and do not ignite open fire.
	Access for unauthorized persons prohibited! *Risk of personal injury and possibly additional equipment damage.*

3 General

	***The operating manual must be read carefully and understood before using the length stop system! In case of any uncertainties, please contact the manufacturer.***

The retrofittable length stop systems EXAKT P/B and EXAKT P/E each consist of a load-bearing aluminium profile with a ball-bearing sliding carriage and a stable flip stop that can be easily moved by hand and conveniently folded away upwards when required. The stop can be fixed in the desired position by means of a clamping lever. The complete length stop system is mounted on the existing roller conveyor or a table in just a few steps and is then immediately ready for use.

- The EXAKT P/B version has a measuring scale with mm graduation and a centrally mounted reading magnifier. This allows convenient and precise setting of the desired length position with a measuring accuracy of ± 0.5 mm per meter.
- The EXAKT P/E version is equipped with a magnetic tape measuring system and a battery-operated LCD position indicator with extensive programmable additional functions (e.g. switchable counting direction and units of measurement, incremental measurement function, 1 reference value as well as 3 storable offset measurements). The stop system including its digital length measuring device has a measuring accuracy of ± 0.2 mm per meter.

3.1 Features

- Quick and easy assembly on tables or roller conveyors
- Anodised and torsion-free aluminium guide profile
- Internally guided, ball bearing mounted stop carriage
- Special sealing lips for protection against dust and moisture
- Stable clamping device for fixing the carriage
- Stop arm can be folded back when not in use
- Modular segment system for individual lengths

3.2 Application

The stop system can be used for all work that corresponds to its intended use in section ⇨ 4.2. The stop system is pushed manually to a specific dimension and fixed in the desired position by means of a clamping lever. The intended workpieces are then placed against the material stop and then further processed by a machine (e.g. sawing machine, drilling machine, etc.). The stop system must not be used for pushing or pulling workpieces.

- The stop system must not be used for work that does not correspond to its intended use (see ⇨ 4.2).
- The stop system is intended exclusively for commercial use.

3.3 Target group and previous experience

This operating manual is intended for the operating and maintenance personnel of the stop system. The operating personnel is to be determined by the operator and must further meet the following requirements:

- Basic technical and mechanical knowledge as well as knowledge of the associated technical terms
- Reading and understanding these operating and maintenance instructions

In order to acquire the knowledge required to operate this stop system, the operator must ensure the following measures:

- Product training for every operator (also possible external personnel)
- Regular safety instruction

3.4 Requirements for the operators

- ⚠ The operator is responsible for the safe use of the stop system!
- ⚠ The stop system may only be operated by trained personnel who have also read this manual.
- ⚠ Inspection, maintenance, cleaning and repair may only be performed by technical specialists with product-specific training and mechanical and/or electrical training.
- ⚠ Specialists with product-specific training are to be commissioned and held responsible for planning and checking the work.
- ⚠ The national protective regulations for employees must be observed
- ⚠ The legal minimum age must be observed.

3.5 Accident prevention

To avoid accidents, carefully read and observe the operating manuals of the components used in connection with the stop system (roller conveyor, processing machine, etc.). Pay particular attention to the safety and accident prevention instructions contained therein.

3.6 General safety regulations

In general, the following safety regulations and obligations apply when handling the stop system:

- ⚠ The stop system may only be operated in perfect working order.
- ⚠ It is prohibited to modify or change the stop system without the written approval of the manufacturer / supplier.
- ⚠ Malfunctions or damage must be reported to the operator immediately. Proceed as follows in the event of malfunctions:
- ⚠ Take the stop system out of operation, eliminate the cause of the fault and rectify the fault.
- ⚠ Then check the stop system for safe condition and only then put it back into operation!
- ⚠ Repair and maintenance work on the electronic components of the EXAKT P/E version may only be carried out by authorised and trained specialist personnel.
- ⚠ Maintenance work must be carried out and documented in accordance with the maintenance instructions.
- ⚠ Only original spare parts from the manufacturer may be used for repairs.
- ⚠ Electronic additional components may only be obtained from the manufacturer of the stop system.
- ⚠ Only instructed, trained or qualified persons may work on and with the stop system who are also familiar with the operation and handling of the roller conveyor and the processing machine connected to it.
- ⚠ The respective national safety regulations for employees and the national safety and accident prevention regulations apply to the operation of the stop system.

4 Safety

4.1 Basic safety instructions

The stop system can cause hazards if used improperly. Therefore, observe the safety instructions listed in this chapter and the accident prevention regulations of your trade association!

	***The manufacturer accepts no liability for damage and malfunctions resulting from failure to observe these operating instructions.***

4.2 Application area and intended use

With their conformity to the Machinery Directive 2006/42/EC, the stop systems of the EXAKT P/B and EXAKT P/E series are suitable as technical aids for operational and commercial applications.

	***Improper use can endanger persons and lead to a defect or damage to the stop system. and to a defect or damage of the stop system.***

- ⚠ The stop system is primarily intended for operation in covered indoor areas.
- ⚠ The stop system is designed so that it can be manually brought into a specific position and fixed in order to machine workpieces to the desired dimension.
- ⚠ Work on the stop system may only be carried out in sufficiently lit working areas.
- ⚠ The stop system may only be operated and used in horizontal alignment.
- ⚠ The stop system is not intended for moving or transporting persons.
- ⚠ The stop system must not be operated in potentially explosive working areas.
- ⚠ Any other use is considered improper and is prohibited.

4.3 Improper use

Improper use is when the stop system is used for purposes other than those prescribed in this operating manual and in section ⇨ 4.2 , for example

- ⚠ Use and application for private resp. non-commercial purposes.
- ⚠ Use in disregard of the instructions in the operating manual
- ⚠ Use after unauthorised conversions or modifications
- ⚠ Pushing or pulling workpieces

In case of improper use of the stop system, any warranty, liability and other claims for damages of the operator against the manufacturer are excluded!

4.4 Consequences in case of disregard

If the stop system is not operated, maintained or repaired in accordance with the safety regulations, not as intended, improperly or in an abusive manner, the following will result:

- ⚠ Dangers to the health of the operating personnel
- ⚠ Dangers to the stop system as well as additional components and objects in the vicinity.
- ⚠ Impairment of the function in connection with the roller conveyor and processing machine.

In case of improper use of the stop system, any warranty, liability and other claims for damages of the operator against the manufacturer are excluded!

4.5 Modifications and alterations to the stop system

⚠ The stop system may only be used in its original condition, i.e. as delivered!
⚠ The components of the stop system must not be changed in their type and condition.
⚠ Only original spare parts and accessories from the manufacturer may be used.
⚠ Deviations are not permitted!

☝	***Unauthorized modifications or conversions by the operator, without the written consent of the manufacturer, are prohibited. This excludes any warranty, liability and other claims for damages by the operator against the manufacturer!***

4.6 Personal protective equipment

Depending on the activity and individual use of the stop system as well as on the respective environment, the wearing of personal protective equipment is required.

☝	***With regard to personal protective equipment, observe and follow the operating manuals of the roller conveyor, processing machine and, if applicable, other components used in connection with the length stop system.***

4.7 Residual risks

The stop system is built according to state-of-the-art technology and recognised safety rules. Nevertheless, its use may cause danger to life and limb of the user or third parties resp. impairment of the stop system and other material assets. Even when used as intended, the following residual risks may still occur due to the design determined by the intended use of the stop system, despite compliance with all relevant safety regulations:

	The operating personnel must read and apply the operating manual. Furthermore, the operating manuals of additional third-party components must be observed.
	Be alert to possible crushing hazards: a) during transport by forklift truck: between forks & pallet / stop system b) when picking up the component: between stop system / pallet and floor c) when setting down the component: between stop system and fixed devices Wear protective gloves and safety shoes.
	Forklift trucks with combustion engines produce toxic exhaust gases. Generally wear a respiratory protection mask in working environments with the above-mentioned exhaust gas development.
	Danger from falling objects during transport! Therefore wear safety shoes.
	Increased risk of injury or even death. Entering the danger zone under a suspended load during transport or installation by means of a forklift truck is prohibited! Generally wear a safety helmet in working environments with suspended loads.
	Increased risk of injury or even death. It is forbidden to enter the forklift platform during transport or installation!
	Be aware of possible tripping and slipping hazards on the floor. Prevent possible hazards by keeping the floor dry and clean and by using anti-slip floor coverings around the roller conveyor.
	When operating with a roller conveyor and additional machines, read the respective operating manuals beforehand and comply with the safety and accident prevention regulations contained therein.
	Be aware of the fire hazard during the processing of wood due to wood dust, in connection with flying sparks and/or open fire!

4.8 Observe the environmental protection regulations

During all work with the length stop system, the environmental protection regulations, obligations and laws for waste avoidance and proper recycling and/or disposal applicable at the place of use must be observed. This applies in particular to installation, repair and maintenance work involving substances that could pollute the groundwater (e.g. hydraulic oils and cleaning agents and liquids containing solvents). In any case, prevent them from seeping into the ground or entering the sewage system..

Store and transport the above-mentioned hazardous substances only in suitable containers. Avoid leakage of hazardous substances by using suitable collection containers. Ensure that the above-mentioned substances are disposed of by a qualified disposal company.

4.9 Organisational measures

- ⚠ Always keep this operating manual within easy reach and at the place of use of the roller conveyor.
- ⚠ In addition to the operating manual, observe and instruct on generally applicable legal and other binding regulations for accident prevention and environmental protection.
- ⚠ Supplement the operating manual with further instructions, including supervisory and reporting duties, to take account of special operational features (e.g. with regard to work organisation, work processes, personnel employed).
- ⚠ Before starting work on the roller conveyor, the person responsible for its operation must have read the operating instructions, especially the chapter “Safety”. This applies in particular to personnel who only occasionally work on the roller conveyor.
- ⚠ Check that work is carried out in a safety-conscious and hazard-conscious manner and in compliance with the operating manual.
- ⚠ When using additional machines on the roller conveyor, read the respective operating instructions and keep them handy. Pay particular attention to the respective safety and hazard information.
- ⚠ In case of safety-relevant changes to the roller conveyor or its operating behaviour, shut down the entire system immediately and report the fault to the responsible office/person.
- ⚠ Do not make any modifications, additional attachments or conversions to the stop system without the manufacturer's approval! This will compromise safety and invalidate the manufacturer's warranty and any liability claim.
- ⚠ Spare parts must meet the technical requirements specified by the manufacturer. The exclusive use of original spare parts ensures this. Therefore, only use original spare parts from the manufacturer.
- ⚠ Observe the fire alarm and firefighting possibilities. Make the location and operation of fire extinguishers (fire class ABC) known. Do not use water!

4.10 Personnel selection and qualification - basic duties

- ⚠ The operation of the stop system is equally designed for right- and left-handers.
- ⚠ The stop system is designed to be operated by a single person.
- ⚠ Work with the stop system may only be carried out by reliable personnel. Observe the legal minimum age!
- ⚠ Only use trained or instructed personnel, clearly define the responsibilities of the personnel for operating, setting up, maintaining, repairing!
- ⚠ Ensure that only authorised personnel work on the stop system!
- ⚠ Only allow personnel to be trained, instructed or undergoing general training to work on the stop system under the constant supervision of an experienced person.

5 Types and product description

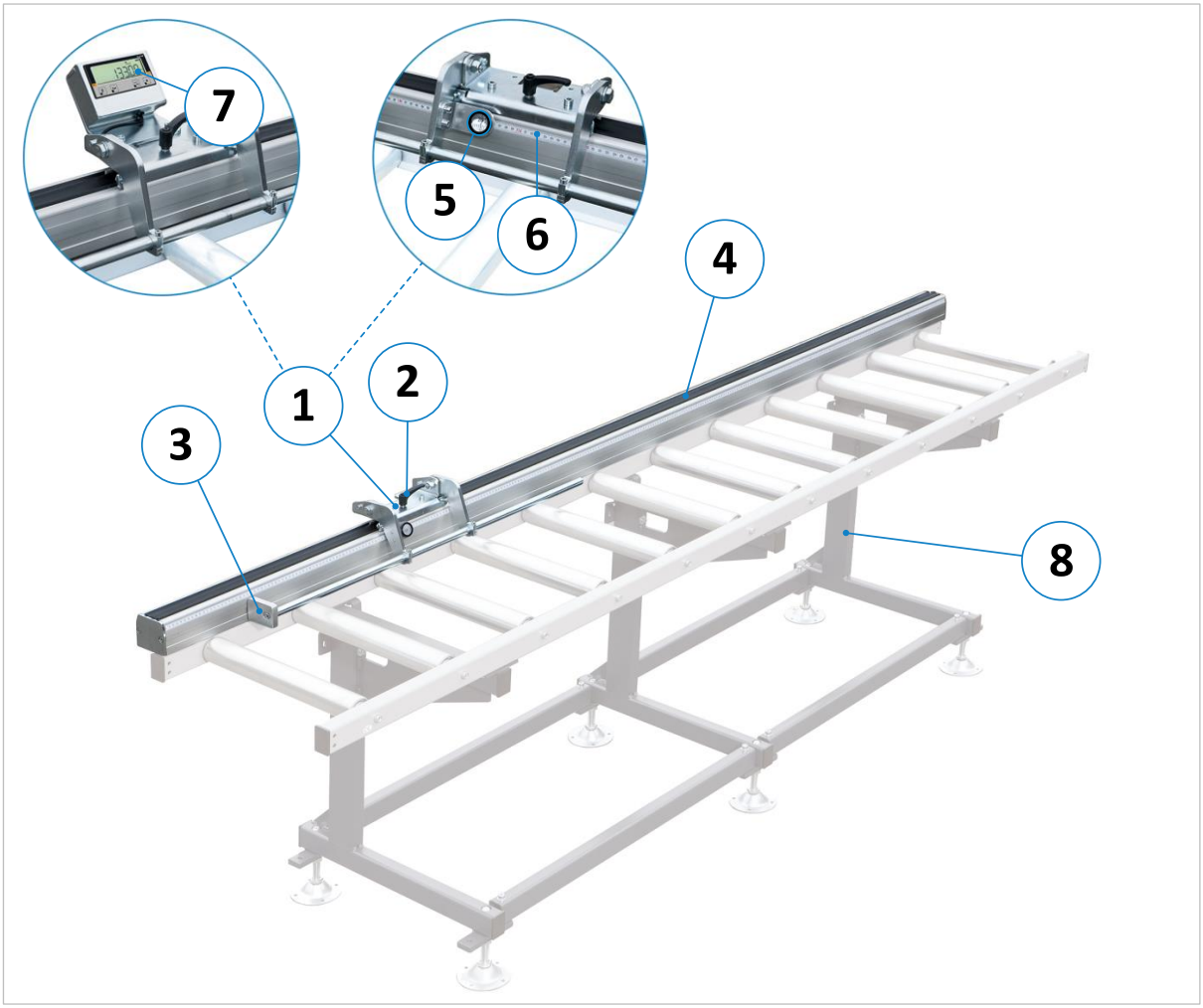

Figure 1: Length stop systems EXAKT P/B and EXAKT P/E

Pos.	*Description*	*Pos.*	*Description*
1	Sliding carriage	**5**	Reading magnifier (EXAKT P/B)
2	Clamping lever for fixing	**6**	Measuring tape with mm scale (EXAKT P/B)
3	Flip stop (can be folded away)	**7**	LCD position indicator IZ17E (EXAKT P/E)
4	Aluminium guide profile	**8**	Roller conveyor as base (customer-side)

Both versions have the same robust flip stop (**3**) with ball-bearing sliding carriage (**1**), which can be moved smoothly by hand, thus moving the stop to the desired position. The two versions differ only in the type of manual length measuring system.

Measuring system for EXAKT P/B	**Measuring system for EXAKT P/E**
• Length measuring system with millimetre scale (**6**) and reading magnifier (**5**) on the carriage (**1**) • Measuring accuracy see chapter ⇨ 6	• Magnetic tape, magnetic sensor and battery-powered LCD indicator (**7**) on the carriage (**1**) • Measuring accuracy see chapter ⇨ 6

6 Technical specifications

Mechanical data	
Material stop	robust flip stop with ball-bearing sliding carriage, smooth-running, manually adjustable and lockable
Guide profile	anodised aluminium profile (90 x 80 mm), torsion-free
Mounting	via 2 T-slots in the underside of the guide profile
Available lengths	2, 3, 4, 5 or 6 m (odd lengths on request)
Weight of guide profile	approx. 5.5 kg per meter
Weight of sliding carriage	approx. 7.5 kg

Measuring system EXAKT P/B	
Length measuring system	Manual measuring device with mm-scale and magnifying glass on the sliding carriage
Measurement accuracy	± 0.5 mm per meter

Measuring system EXAKT P/E	
Length measuring system	Manually movable and wear-free magnetic tape measuring system with battery-operated IZ17E LCD position indicator, mounted directly on the sliding carriage.
Measurement accuracy	± 0.2 mm per meter

6.1 Manufacturer

Reinhold Beck Maschinenbau GmbH
Im Grund 23
DE-72505 Krauchenwies (Germany)
Phone: +49 (0) 7576 / 962 978 - 0
Fax: +49 (0) 7576 / 962 978 - 90
Email: info@beck-maschinenbau.de

Note: Before using the unit in a way that deviates from the described suitability (see section ⇨ 4.2), it is essential to consult the manufacturer. Otherwise all warranty, liability and other claims for damages of the operator against the manufacturer will be voided!

7 Transport to the installation site

Only trained unloading personnel may be used for the work listed in this chapter!

Note: Depending on the length ordered, the stop system consists of a continuous guide profile or several guide profile segments (supplied divided), which are delivered together with the stop system on a freight pallet.

	***There is an increased risk of accidents when unloading as well as transporting the stop system! Due to its weight, the freight pallet can tip and fall down!***
	***Only use approved, tested lifting equipment with sufficient load-bearing capacity and only transport the freight pallet on level, firm ground!***
	***Wear protective gloves, safety shoes and safety helmet during transport!***
	***Warning: Increased risk of injury and death! Never stand under the load when lifting and setting it down! Instruct bystanders to leave the danger zone!***
	***Warning: Increased risk of injury and death! Do not enter or climb onto the forklift platform during transport!***

7.1 Unloading with a forklift truck

	***Danger to life when using a forklift truck! Keep a sufficient distance from the forklift truck and watch its speed. Vehicles with internal combustion engines also produce toxic exhaust gases. Wear a breathing mask if necessary.***

- Centre the appropriately adjusted forks of the forklift truck at the designated points on the freight pallet and lift it carefully.
- Now carefully lift the pallet from the truck and transport it to the place of use with a pallet truck or another suitable means of transport and observe the general safety regulations.

7.2 Check delivery condition

Check for completeness and transport damage. In case of transport damage or missing parts, document these immediately on the consignment note of the transport company → Inform the manufacturer of the situation.

7.3 Unpacking and placing

Unpack the stop system and remove the packaging material. Then remove the components from the pallet and mount them on the roller conveyor according to chapter ⇨ 8 “Installation and mounting”.

	***Fire hazard! Do not smoke or light an open fire.***
	***Dispose of the packaging material in an environmentally friendly manner!***

7.4 Temporary storage

If the stop system is not put into operation immediately after delivery, it must be stored carefully in a protected place. Carefully cover the entire roller conveyor so that neither dust nor moisture can penetrate.

7.4.1 Short term storage

- Dry environment
- Protect components at risk of corrosion
- Store the stop system at a suitable place

7.4.2 Long term storage

- Dry environment
- Protect components at risk of corrosion
- Protect the stop system from dust and dirt
- Store the stop system at a suitable place
- Dismantle into individual segments if required
- Remove the batteries from the position indicator (EXAKT P/E only)

8 Installation and mounting

	The installation and mounting of the stop system on the roller conveyor or similar must be carried out by a qualified person.

8.1 Fit guide profile(s) to **customer** roller conveyor

The following mounting material is required per 1 meter of guide profile:

- 1 x 90° mounting bracket (**W**), 4 x M8 slot nut (**T**) and 4 x M8 x 16 hexagon socket screw (**S**)
- If necessary, 1 x M10 hexagon socket screw of adequate length + M10 nut per mounting bracket
- I Allen key SW 6 (and if necessary SW 8) as well as open-end spanner SW 17 (if you are drilling yourself)

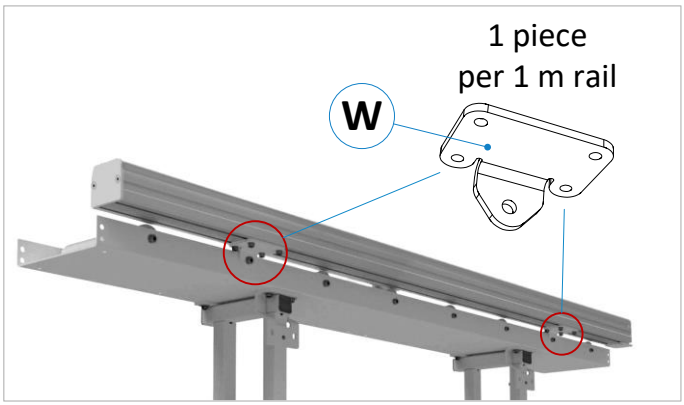

Figure 2: Mounting via 90° mounting bracket

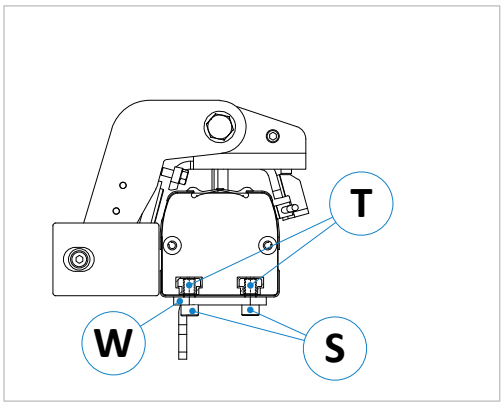

Figure 3: Side view of the mounted unit

1. The mounting brackets (**W**) for the guide profiles should each be mounted at a distance of 1 meter..
2. As mounting points, either existing roller screws can be used or own mounting holes (Ø = 10.5 mm) can be drilled between the rollers → Fasten the mounting brackets to the roller conveyor at a distance of 1 m via existing rollers or self-drilled 10.5 mm holes.
3. Provide each mounting bracket (**W**) with four M8 x 16 hexagon socket screws (**S**) and 4 slot nuts (**T**).
4. Now push the corresponding guide profile segment with the two T-slots on the underside onto the slot nuts (**T**) of the mounting brackets (**W**).
5. Move the profile into the correct position and tighten the 4 hexagon socket screws (**S**).
6. To connect several profile segments with each other, proceed as described in section ⇨ 8.3.

8.2 Fit guide profile(s) to "**Beck**" roller conveyor

Due to the design, the stop system is mounted on Beck roller conveyors in an inclined position via a 130° mounting angle. The following mounting material is required per 1 meter of guide profile:

- 1 x 130° mounting bracket (**W**), 4 x M8 slot nut (**T**) and 4 x M8 x 16 hexagon socket screw (**S**)
- Per mounting bracket (W) one 86 mm long spacer sleeve (D) + 1 hexagon socket screw M10 x 110 each
- 1 x Allen key SW 6 and 1 x Allen key SW 8

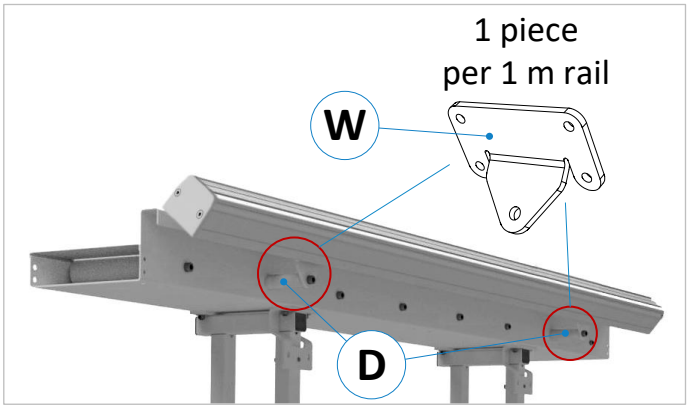

Figure 4: Mounting via 130° mounting bracket and spacer sleeve

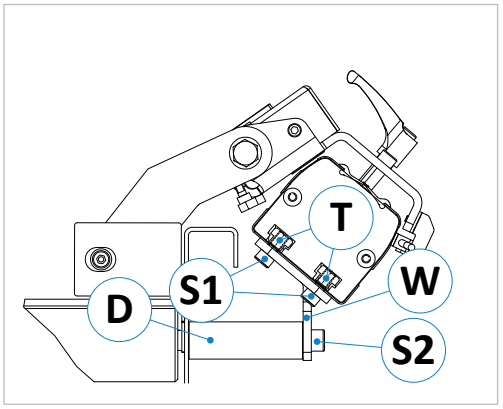

Figure 5: Side view of the mounted unit

1. The mounting brackets (**W**) for the guide profiles should each be mounted at a distance of 1 meter. As the roller spacing is 250 mm, a mounting bracket can be attached to every fifth roller.
2. Remove the existing roller fastening screws at the corresponding points on the roller conveyor → Insert the supplied M10 x 100 hexagon socket screw (**S2**) through the 10.5 mm hole in the mounting bracket (**W**) and fit the 86 mm long spacer sleeve (**D**) onto the screw.
3. Fix the bracket (W) with the screw (S2) in the respective roller hole (see ⇨ Figure 5).
4. Provide each mounting bracket (**W**) with four M8 x 16 hexagon socket screws (**S**) and 4 slot nuts (**T**).
5. Now push the corresponding guide profile segment with the two T-slots on the underside onto the sliding blocks (**T**) of the mounting brackets (**W**).
6. Move the profile into the correct position and tighten the 4 hexagon socket screws (**S1**).
7. To connect several profile segments with each other, proceed as described in section ⇨ 8.3.

8.3 Connecting guide profile segments together

The following mounting material is required to connect the individually supplied profile segments at the joints:

- Per joint 1 x connecting plate (**V**) , 4 x M8 slot nut and 4 x M8 x 16 hexagon socket screw
- 1 x Allen key SW 6

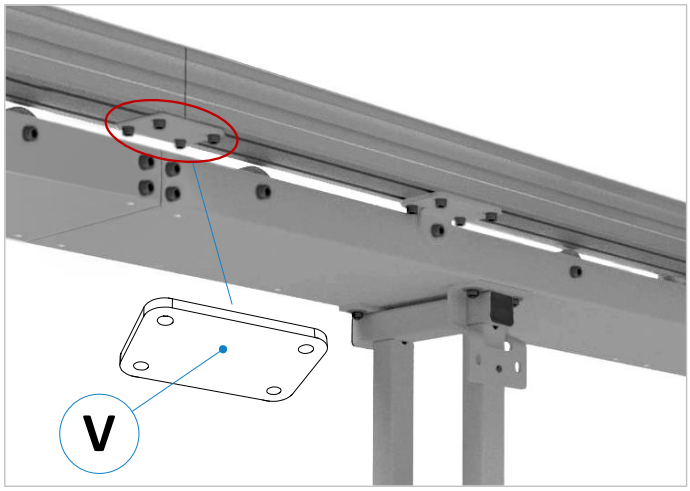

Figure 6: Connecting guide profile segments together

1. Before you push the two profile segments together, insert 2 slot nuts into the T-slots on the underside of the profiles at each of the two joints.
2. Line up the second profile segment with the first and position the 4 slot nuts so that the segments can be fastened with 2 screws each.
3. Mount the first profile segment over the connecting plate (**V**) with two M8 x 16 hexagon socket screws and tighten them only slightly at first.
4. Then line up the second profile and tighten the screws only lightly by hand.
5. Align the second profile segment exactly in line with the first one (see ⇨ Figure 6).
6. Then tighten all 4 screws on the two profile segments.

8.4 Attaching the measuring tape to version EXAKT P/B

With version EXAKT P/B, the supplied measuring tape with the millimetre scale must also be attached. The attachment is done by gluing it into the groove of the guide profile provided for this purpose (see ⇨ Figure 7).

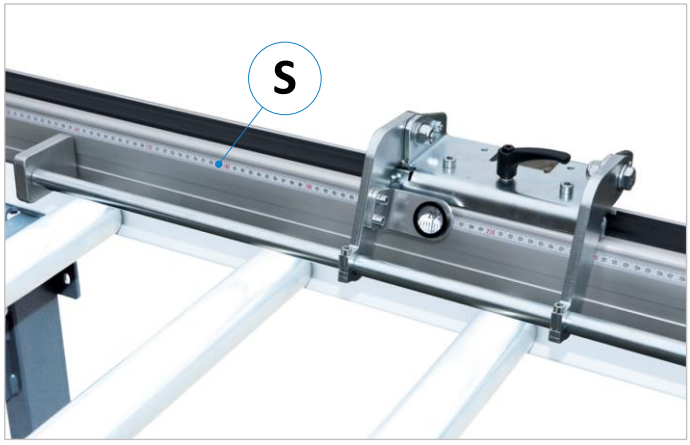

Figure 7: Attaching the measuring tape to version EXAKT P/B

1. First, fold the stop unit upwards and clean the groove in the gluing area with a grease-dissolving agent.
2. Determine the starting position of the scale so that it corresponds to your application and mark this position with a scriber or similar.
3. Cut the tape measure to the length of your desired measuring range.
4. Then align the measuring tape at the previously marked starting position, peel off the protective adhesive film, stick it into the groove and press on well.

8.5 Attaching the magnetic tape to version EXAKT P/E

Depending on the length of the stop system ordered, the magnetic tape supplied must be glued into the groove provided in the guide profile. The magnetic tape contains the incremental coding for detecting the position of the length stop system. In order to achieve the maximum accuracy of the measuring system, the magnetic tape may only be attached after the roller conveyor has been set up, aligned and anchored.

☝	***The magnetic tape must not be rolled up tightly or bent, otherwise it will be destroyed. The magnetic tape must not be exposed to direct contact from other magnetic fields (e.g. magnetic metal parts, electromagnets, holding magnets, etc.). The influence of foreign magnets will destroy the coding, falsify the measurement result and render the magnetic tape unusable.***

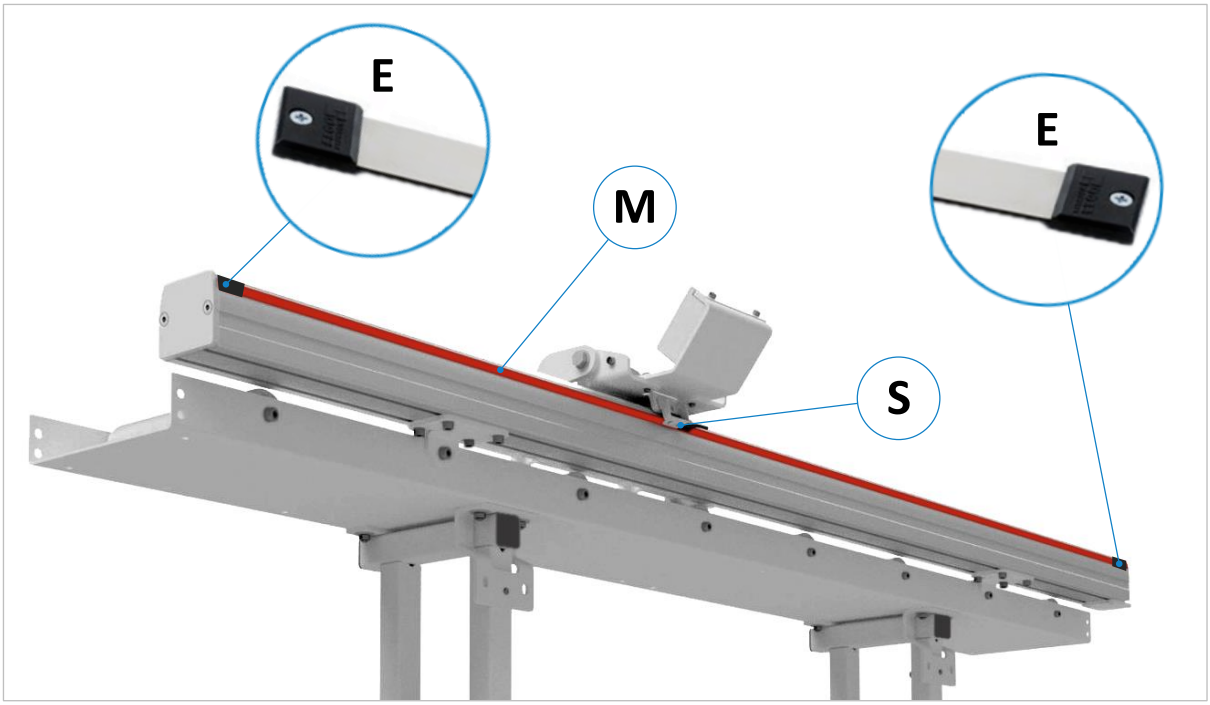

Figure 8: Attaching the magnetic tape to version EXAKT P/E

1. First remove the two plastic end caps (**E**) from the magnetic tape → These are required for mechanical protection of the magnetic tape surface and must be refitted later on.
2. On the back of the guide profile there is a suitable groove into which the magnetic tape - optimally aligned with the magnetic sensor (**S**) - can be glued. **Note:** For better illustration, the fully mounted magnetic tape (**M**) is shown in red in the figure above.

☝	***Important: The magnetic tape must be glued into the groove on the back of the guide profile, starting from the processing machine (see ⇨ Figure 8).***

3. Cean the groove in the gluing area with a grease-dissolving agent.
4. First slide the magnetic tape under the magnetic sensor (**S**).
5. Then peel off the protective adhesive film a little (slightly longer than the approximate width of the sliding carriage) and stick the magnetic tape only at this point for the time being.
6. Now move the sliding carriage to the position of the magnetic tape that has already been stuck on.
7. Remove the remaining protective adhesive film and stick the magnetic tape (M) into the groove over its entire length and press on well.
8. Afterwards, stick the supplied steel cover tape flush onto the magnetic tape so that it is protected from mechanical influences.
9. Now push the two plastic end caps (**E**) onto the two magnetic tape ends and fasten them with the screws supplied in the factory holes in the guide profile.
10. To enable exact position measurement, the position indicator with the stop system must still be referenced to the processing machine (for procedure see section ⇨ 9.2).

8.6 Fitting the rubber seals

Depending on the length of the stop system ordered, the two rubber sealing lips supplied for the sliding carriage must still be fitted.

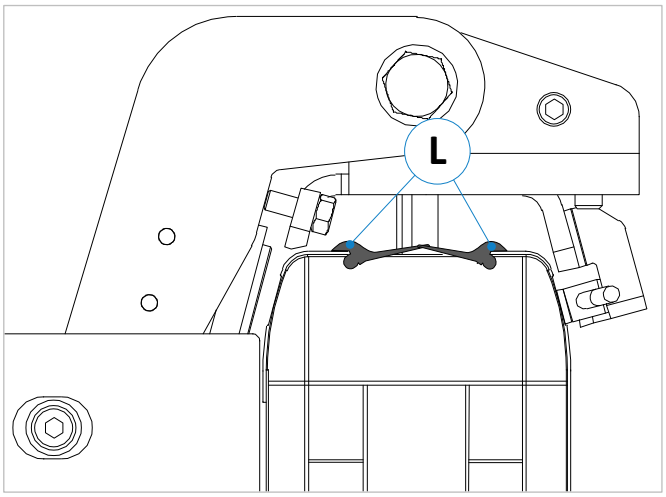

Figure 9: Fitting the rubber seals

1. Remove one of the two end plates (refer to ⇨ Figure 10) so that the profile cross-section is accessible and clean the guide edges of the profile over the entire length with a grease-dissolving agent.
2. Then slide on the two sealing lips (**L**) from the profile front side (see ⇨ Figure 9). **Note:** If it is difficult to move, wet the seal lips with a little silicone spray or washing-up liquid to make the seals a little more slidable. **Please note:** Never use oil, grease or aggressive agents for this purpose!
3. The seals must overlap over the entire length and fit neatly.

Important note: For optimum functionality, please also note the care instructions in chapter ⇨ 11.

8.7 Fitting the end plates

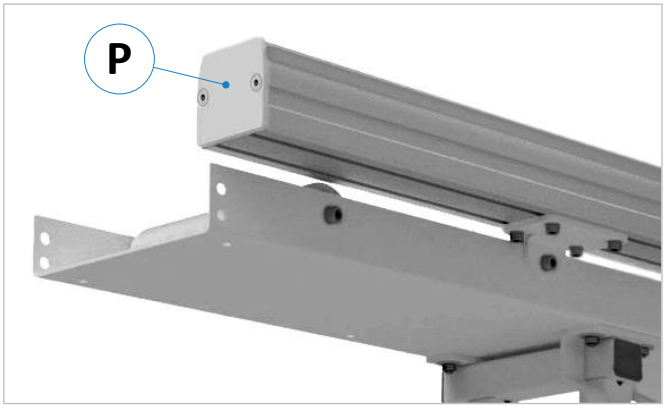

Figure 10: Fitting the end plates

After the complete length stop system has been properly mounted on the existing roller conveyor, the two end plates (**P**) at the beginning and end of the guide profile may still have to be fitted. To do this, use the supplied countersunk screws.

Important note: The end plates act as a supplement to the rubber seals described in section ⇨ 8.6. It is imperative that they are fitted, as otherwise dust, dirt, chips and moisture can get inside the guide profile.

9 Commissioning the stop system

9.1 Defining the zero point of the stop arm

Before using the material stop, the desired zero point must be defined and set:

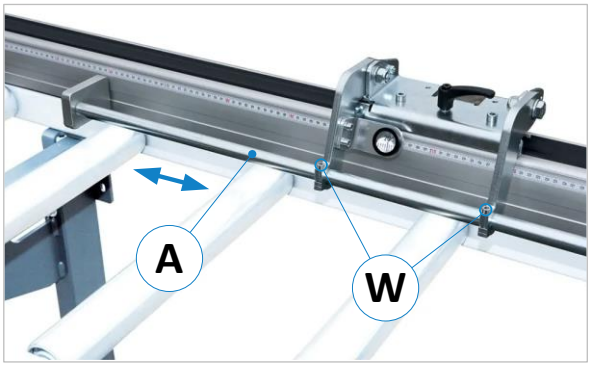

Figure 11: Setting the zero point of the stop arm EXAKT P/B

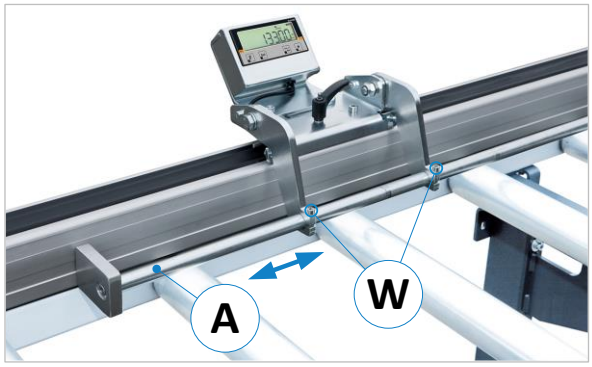

Figure 12: Setting the zero point of the stop arm EXAKT P/E

- Slightly loosen the hexagon socket screws (**W**) so that the stop arm (**A**) can be moved.
- Move the stop arm (**A**) so that the position corresponds to your desired zero point.
- Tighten the two hexagon socket screws (**W**) again.

9.2 Referencing the stop for version EXAKT P/E

After the stop system has been mounted on the roller conveyor, the digital position indicator IZ17E of the material stop must be referenced in relation to the processing machine (e.g. cross-cut saw) connected to it.

Procedure:

- Move the sliding carriage against the end stop and fix it with the clamping lever.
- Attach a test piece to the stop, cut it to length with the machine and then → measure.
- Now compare the measurement in the display of the position indicator with the measurement actually taken of the cut sample workpiece:
  → In case of a deviating result, the actually measured dimension must be stored as a reference value.
  → To do this, press the "**F**" key for 3 seconds to access the parameter level.
  → Then press the "**F**" key repeatedly until the parameter "**P09**" appears.
  → Select the desired digits with the "**Set**" key and change the corresponding values with "**Incr/Abs**".
  → Once the value has been set, press the "**F**" key to save and exit the parameter level.
- Finally, set the position indicator to the stored reference value (calibration):
  → Before doing so, make sure that the absolute mode is active ("ABS" must appear in the display).
  If "INC" is indicated, press the "**Incr/Abs**" key to switch to absolute measurement.
  → Now press the two buttons "**F**" and "**Set**" simultaneously.
  → The value entered as the reference value now appears as the actual value in the display.

Further details on the position indicator IZ17E can be found in the original operating manual, refer to
☞ https://www.elgo.de/fileadmin/user_upload/pdf/manual/indicators/IZ17E-000-SI-DE.pdf

9.3 Folding the stop away

The material stop can be folded away to the rear at any position. Due to its centre of gravity, it remains independently in this position.

	***Danger of crushing when folding down! Hold the fence firmly when folding down and do not let it fall. Keep hands out of the danger zone!***

10 Troubleshooting

⚠	***Repair work on electronic and mechanical components may only be carried out by authorised and trained specialist personnel***

Proceed systematically when searching for the cause of a malfunction. If you are unable to find the fault or remedy the malfunction, call our customer service on the telephone no. 0049 7576 / 962 978 - 0.

Before you call us, please follow these steps:

- Keep these operating instructions and any supplementary documents at hand.
- The more precisely you describe the fault to us, the better we can then remedy the situation.

EXAKT P/E only:

Fault	Possible Cause	Remedy
The LCD position indicator IZ17E remains dark	Position indicator is defective	→ Replace or have repaired
	Batteries empty or defective	→ Check/replace batteries (For details see section ⇨ 11.1)
The LCD position indicator IZ17E does not count (no measurement) or indicates incorrect measurement results	Magnetic sensor defective	→ Replace magnetic sensor
	Distance sensor/tape too high	→ Distance must not exceed 5 mm
	Position indicator defective	→ Replace or have repaired
	Magnetic tape defective	→ Replace magnetic tape (⇨ 8.5)
Actual value of the LCD position indicator IZ17E deviates from the cut dimension	Indicator must be referenced	→ Calibrate according to section ⇨ 9.2
LCD position indicator IZ17E cannot be referenced	Incremental mode (**INC**) is active	→ Switch to **ABS** with the **Incr/Abs** button

10.1 Supplementary documents

The short instructions for the battery-operated position indicator ELGO type IZ17E can be found under the following link: ☞ https://www.elgo.de/fileadmin/user_upload/pdf/manual/indicators/IZ17E-000-SI-DE.pdf

⚠	***Repair work on electronic components may only be carried out by qualified personnel.***

Please note: If necessary, purchase electronic spare parts exclusively from R. Beck Maschinenbau GmbH. This is the only way to ensure that the correct components are ordered and that compatibility with the roller conveyor is guaranteed.

R. Beck Maschinenbau GmbH excludes all liability and warranty for damage to property and personal injury caused by incorrect or incompatible components.

11 Maintenance

The two stop systems EXAK P/B and Exakt P/E are largely maintenance-free. Only the two rubber sealing lips described in section ⇨ 8.6 require a little care.

- Apply a little lubricant resp. silicone spray to the seal lips once a month. **Important note:** Never use oil, grease or aggressive agents for this purpose, as these agents attack the rubber surface.
- If there is any play in the sliding carriage or if it no longer runs smoothly, please contact our customer service on telephone no. 0049 7576 / 962 978 - 0.

11.1 Battery change for version EXAKT P/E

The service life of the batteries installed in the digital position indicator IZ17E is between 1 and 5 years (depending on use). As soon as the battery status indicator in the display indicates only one charging segment, the batteries should be replaced as soon as possible.

Figure 13: Battery change IZ17E - Open housing

Figure 14: Battery compartment on the rear

Procedure for changing the battery:

- Remove the two screws on the rear upper side of the metal housing (see ⇨ Figure 13).
- Carefully pull the display unit out towards the front so that the rear side becomes accessible.
- Open the battery compartment by pressing the latch (see arrow in ⇨ Figure 14).
- Remove the two used batteries and dispose of them in an environmentally friendly manner.

	***Fire, explosion and burn hazard! Never recharge batteries or expose them to temperatures above 85° C.***

	***Please dispose of used batteries in an environmentally friendly way.***

- Insert two new batteries type AA/LR06/Mignon. **Important:** Observe polarity!
- Then close the battery compartment and mount the display unit back into the metal housing.
- Since the last actual value indicated is lost when the battery is changed, the display must be referenced again afterwards (for details see section ⇨ 9.2).

12 Disassembly and scrapping

When dismantling and scrapping the stop system, the current EU regulations or the respective regulations and laws of the country of operation, which are prescribed for proper dismantling and disposal, must be observed. The aim is to dismantle the stop system and its various materials and components properly, to recycle all possible parts and to dispose of non-recyclable components in the most environmentally friendly way.

	***Please pay particular attention to*** • *the disassembly of the stop system from the roller conveyor* • *safe and proper removal of the stop system* • *the proper separation of all components and materials.*

When dismantling and disposing of the stop system, the laws and regulations in force at the place of use concerning health and environmental protection must be observed.

	***Remove all residues of oil, grease and other lubricants and have them disposed of properly by a qualified disposal company.***

Observe the environmental protection laws in force at the place of use with regard to the disposal of industrial solid waste, toxic and hazardous waste when separating, disposing of or recycling the materials of the stop system and its associated components.

	• ***Rubber and plastic parts as well as other components that are not made of metal must be dismantled and recycled or disposed of separately.*** • ***Electrical components such as cables, switches, connectors, devices etc. must be extended and (if possible) recycled or otherwise disposed of in a qualified manner.*** • ***Dismantle the stop system and all metal parts from the work surface and sort them according to material type. Metals can be melted down and recycled.***

In the event of improper disposal of lubricants, the following residual risks to the environment and health exist:

	***Pollution of the environment by seepage into groundwater or sewage system.***
	***Poisoning of the personnel contracted for the disposal.***

Note: The disposal of lubricants considered toxic and hazardous must be carried out in accordance with the regulations and laws in force at the respective place of use. Only qualified disposal companies that have the appropriate permits for the disposal of used oil and lubricants are to be commissioned with the disposal.

13 Spare parts

	***Only use original accessories and spare parts specified by the manufacturer. The use of other accessories or spare parts may cause injury to persons and damage to the stop system. In case of any use of non-prescribed accessories and spare parts or of additional components of third parties, the manufacturer does not assume any liability for resulting damages!***

13.1 Spare parts for EXAKT P/B

Artikel	Description	Art. No.
Special aluminium guide profile 1 meter extension	including corresponding measuring scale	P-B 02
Sliding carriage incl. flip stop	Aluminium special guide profile 90 x 80 mm with internally guided ball-bearing sliding carriage and special sealing lips, with battery-operated LCD position indicator.	P-B 03
Profile mounting bracket	Mounting bracket, galvanised, incl. 2 fixing nuts M8. Mounting recommendation: 1 mounting bracket per meter of special aluminium guide profile.	PBW 01

13.2 Spare parts for für EXAKT P/E

Article	Description	Art. No.
Special aluminium guide profile 1 meter extension	including magnetic tape	P-E 02
Sliding carriage incl. flip stop	Aluminium special guide pro 90 x 80 mm with internally guided ball bearing sliding carriage and special sealing lips, with millimetre scale and reading magnifier.	P-E 03
Profile mounting bracket	Mounting bracket, galvanised, incl. 2 fixing nuts M8. Mounting recommendation: 1 mounting bracket per meter of special aluminium guide profile.	PBW 01

Installation declaration for the component
(as an incomplete machine)

in accordance with the EU Machinery Directive 2006/42/EC Annex II A

The manufacturer,

Fa. Reinhold Beck
Maschinenbau GmbH
Im Grund 23
DE-72505 Krauchenwies (Germany)
Phone: 0049 - 7576 962 978 0
Fax: 0049 - 7576 962 978 90

hereby declares that the manufactured machine

Models:	**EXAKT P/B - EXAKT P/E**
Type designation:	Length stop systems for mounting on roller conveyors
Serial number(s):	
Year of manufacture:	

in the version provided complies with the EU Machinery Directive 2006/42/EC and the following further directives.

The following harmonised standards and instructions have been applied in manufacturing the machine:

EN ISO 12100:2010	Safety of machinery - General principles for design - Risk assessment and risk reduction

Important note: The supplied component (as an incomplete machine) must not be put into operation until the complete machine into which it is to be installed is in conformity with the Machinery Directive.

Name:	Beck
First name:	Reinhold
Position:	Managing Director

Krauchenwies, 12.09.2023

Place and date

Signature