Checkweigher
CWPmaxx

Operating instructions

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BIZERBA

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1 About these instructions

Read these instructions before switching on the device. These instructions include basic information on how to operate the device and how to avoid dangers.

These instructions do not distinguish between standard equipment and options. Please contact your Bizerba specialist for information on available variants.

Bizerba products undergo continuous further development and are subject to different country-specific regulations. Examples of pictures and graphics included in these instructions may vary from the version you have received.

1.1 Content

These instructions describe the basic principles of operation of checkweigher CWPmaxx (Checkweigher Protected, in the following referred to as device).

1.2 Safe-keeping

This technical document is an essential component of the device. It must be stored close to the device and easily accessible for everybody. When reselling this device, the technical documentation of the device must be attached in its entirety.

1.3 Target group

The device may only be operated by trained personnel. The operator must be familiar with the contents of these instructions. Providing no alternative agreement has been made, installation, maintenance and repair works must be performed by Bizerba authorized specialists only.

1.4 Further applicable documents

The device is delivered with the following documentation:

– Operating instructions CWPmaxx
– Instruction manual CWPmaxx
– Operating instructions GT-SoftControl
– Circuit diagrams in the control cabinet

1.5 Symbols used

The following symbols can be found in the manual:

- Requirements are displayed with a gray background.

⇨	Text with arrow prompts you to carry out an action.
①	Item number in figure.
<OK>	Text within <...> refers to a key or softkey.
"Display"	Text within "..." indicates the display text.
`I?GV05|LX02`	Interface commands, program code.

1.5.1 Explanation of instructions and information

Instructions and information are illustrated as follows:

	These instructions must be strictly observed.
	This information is intended for better understanding.

1.5.2 Explanation of warnings

The signal word above the symbol indicates the risk level.

	**⚠ DANGER** **Source of danger with high risk of imminent danger to persons!** **This may lead to life threatening injuries or serious health damage.** – Measurements for prevention of danger are specified.
	**⚠ WARNING** **Source of danger with medium risk of possible danger to persons!** **This may lead to serious injuries, health damage or serious damage to property.** – Measurements for prevention of danger are specified.
	**⚠ CAUTION** **Source of danger with low risk of possible danger to persons!** **This may lead to injuries or damage to property.** – Measurements for prevention of danger are specified.
	NOTICE **Source of danger, improper use!** **Damage to property can result.** – Measurements for prevention of danger are specified.

1.5.3 Viewing of menu call-up

In order to present the menu navigation clearly and concisely, this manual makes use of the following abbreviations (example):

➪ <Configuration> / <Languages> / <Language configuration>

The complete path from the main menu to the target is specified. In this example, you have to press the following softkeys:

➪ <Configuration>

➪ <Languages>

➪ <Language configuration>

2 About the device

The device consists of the following components:

Conveying unit

- Conveying unit with one conveyor belt via several platforms
- Retraction belt (option) to eject packages
- Light sensor for package detection
- Quick-change system for simple removing of conveying belt
- Conveying direction depending on device design

Weighing system

- Integrated load receptor under a platform

Control cabinet

- Display and operating unit with touch screen
- On/off switch (outside of control cabinet)
- EMERGENCY STOP pushbutton
- Splash guard for display and operating unit (optional)
- Control and power electronics
- I/O interface
- FRL unit (option)
- Air drying unit to prevent condensation (optional)
- Signal tower light (optional)

2.1 Device view

The device is available in many different versions. The figure shows an example.

① EMERGENCY STOP button

② Display and operating unit

③ Control cabinet

④ Conveyor belt

⑤ Front plate

⑥ Light sensor



Fig. 1: Device view

2.2 Device description

The checkweigher weighs packed and unpacked goods of any kind. A conveyor belt transportrs the packages over several platforms. The first platform is the package infeed. The scale is integrated under a platform. The packages are weighed during conveying. The last platform can retract in scale direction and reject packages (option retraction belt). A light barrier at the conveying unit identifies the packages.

The integrated tendency regulation (option) automatically regulates the customer-sided control system subject to the calculated average values.

The device is easy to clean and has a solid construction. It meets the construction principles for food machines.

2.2.1 Display and operating unit with touch screen

The display and operating unit are operated via a SVGA touch screen that displays the keys depending on the function. Only those keys are displayed which work with the called up function or which are necessary.

The software of the display and operating unit enables the configuration of the display and operating unit as well as the settings for a connection to other devices, see GT-SoftControl operating instructions.

2.2.2 Pneumatic maintenance unit with air dryer (option)

The pressure reducer reduces the input pressure on the working pressure on the device. The filters filter dust and large water particles from the compressed air. The final drying is done in the cartouche of the air dryer.

The air dryer works with a permeable membrane. The remaining humidity is lowered in the membrane. The regeneration air is taken from inside and blown out at the membrane on the side with the remaining humidity.

The correct settings for the compressed air supplied and the counter-pressure at the choke is important for optimum function.

2.2.3 Retraction unit for package ejection (option)

The retraction belt consists of a fixed and a movable section. Both parts intermesh. For package rejection, the movable section is retracted causing a gap into which the product falls.

The gap remains opened as long as over- or underweight products are rejected. When a product with permissible weight arrives, the movable section of the retraction unit extends at belt speed in order to close the gap.



Fig. 2: Retraction unit without conveyor belt: left closed, right retracted

2.2.4 Paddle sorter (optional)

The swivel arm sorter ① consists of a pneumatically moved swivel arm. When not in motion, the swivel arm rests sideways at the conveying unit. For rejection of products, the swivel arm swings over the conveying unit and pushes the product to be rejected into reject bin. Afterwards, the swivel arm sorter returns to normal position.

The swivel arm sorter can reject products towards operator side or control cabinet side.

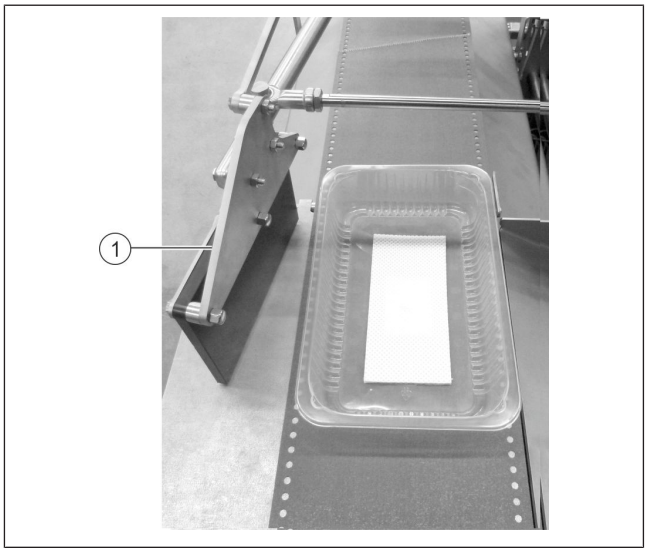


Fig. 3: Swivel arm sorter (example)

2.3 Intended use

The device is designed for commercial and industrial use in multi-shift operations.

- The device may only be used for checking the weight of packaged or unpacked foodstuffs or goods.
- The device may only be used in industrial or commercial fields.
- This device must not be used on seagoing vessel or movable offshore facilities.
- It is not permissible and possible to print weight-dependent data via connected devices. Such data is invalid.
- The device is not approved for verifiable use.
- The device is in contact with unpacked foodstuffs. Please observe the valid local hygienic requirements of the foodstuffs industry.
- The goods may only be fed to the scale using the device conveyor belts.
- The packages need to be fed continuously to the device with regular intervals between the packages. Packages have to be fed in such a way that there will not be any package jam on the conveying unit of the device.
- The packages must be positioned in the middle of the belt when passing the scale. Use appropriate package guides.
- The device must only be transported using appropriate means of transportation and if it was secured accordingly.
- The device may not be used in hazardous areas.
- The device must not transport explosive or highly flammable hazardous substances.
- No unauthorized constructional modifications must be applied to the device.
- Do not climb on to the device or use to store things on.
- Always operate the device with conveyor belts. Without the conveyor belts, dangerous areas are accessible.
- Only one conveying direction is permissible.

2.4 Identification plate

The identification plate is affixed to the control cabinet. The identification plate may differ in design depending on device and country of installation.

① Manufacturer, type designation

② Serial number

③ Scale data

④ Maximum belt speed

⑤ Software identification

⑥ Permissible pressure

⑦ Permissible ambient temperature

⑧ Electrical connection values

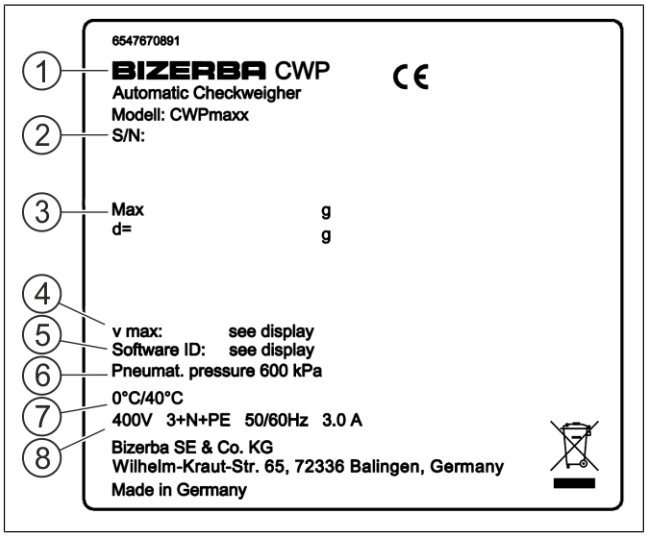


Fig. 4: Identification plate (example)

2.5 Standards and directives

See EU declaration of conformity enclosed in the operating instructions.

2.6 Operating conditions

Please contact Bizerba or the responsible customer service departments if you have any doubts concerning the practical application of these conditions.

Protection type, temperature and air humidity

For permissible values and protection type, please refer to the technical data.

Vibration-free installation area

Vibrations can affect measurements made by the scale. During production, avoid any vibrations (e.g. fork-lift truck activities) near the device.

Aligning horizontally

To ensure the scale's accuracy, it is absolutely necessary that the device is aligned horizontally.

Draft

Air drafts can affect the measurements made by the scale.

Air convection

In order to prevent unacceptable heating, there must be free air convection around the device.

Electrical connection values

The permitted values can be found on the device identification plate and in the Technical data.

Grounding (potential equalization)

Grounding must be done via short lines, if possible, to a shared star point of the entire system.

Electrical charge

Packages may not be charged electrically when being fed onto the conveyor belts.

Written permission for changes

Modifications to the devices require prior written consent of Bizerba.

2.6.1 Connecting lines to external devices

All connecting lines must be shielded. Laying cables in parallel to high-voltage power lines is not permitted. If this is unavoidable, a minimum distance of 0.5 m must be kept.

2.6.2 On-site mains power supply

The installation of the power supply for the connection of our equipment must be carried out in accordance with the international rules and the regulations derived therefrom. In case of a strongly contaminated network interference suppressing measures need to be taken, e. g:

- Provide separate power line to Bizerba devices.
- Include a capacitive decoupled isolation transformer or some other interference suppressing device into the feeding lines before Bizerba devices.

2.7 Warranty

Warranty for defects shall not exist in particular if and insofar as the defects occurred to the delivered goods or to assets of the ordering party are attributable to the following reasons:

- Non-observance of operating conditions
- Non-adherence to the technical documentation
- Unauthorized installation
- Defective electrical installation by the customer
- Structural modifications to the equipment
- Incorrect programming and operation
- Missing backup
- Natural wear and tear
- Wrong cleaning agent

The warranty will lapse if defects/damage that occur are caused by persons not authorized by Bizerba. The warranty will lapse if any spare parts or operating material other than original Bizerba ones are used. If you have any questions on warranty, spare parts or operating material, please contact your Bizerba consultant.



Check that the Bizerba products are handled correctly and repeat training if necessary.



If you reset or program devices, check the new setting with a test run and test printout. This helps to avoid incorrect results.

2.8 Disposal of battery packs/batteries

The legal disposal/environmental protection terms of the respective countries apply.

Only valid for Germany!

Batteries are fitted in this device which are subject to the Battery Ordinance on the return and disposal of used batteries and accumulators.

This ordinance requires you, as the end user, to return the device to the manufacturer or dealer, at the end of its proper use, for the purposes of recycling and correct disposal.

If your device contains a rechargeable battery, you are required by the Battery Ordinance to return the used battery to the dealer or to a public return point provided for this purpose.

2.9 Disposal of the device

This device is an electronic device as per definition of the WEEE Directive.

To ensure that the device is recycled environmentally friendly, return device to the manufacturer or the dealer after intended use has expired. Of course, Bizerba and its distributors will take back devices which are no longer in operation free of charge. Please contact your specialist in this case.



The application of these disposal regulations are based upon legal regulations of the respective country.

3 Safety instructions

3.1 Requirements for operating personnel

This device must be operated by trained personnel only. The operating personnel must be familiar with the safety features of the device and must have read and understood the safety instructions included in these operating instructions.



Only qualified trade personnel or Bizerba service technicians may open the device components.

Even though this equipment includes all required safety devices, disregard the safety instructions could result in injuries to the operating personnel or damage to property.

The minimum age of the operating personnel by German law is 14. Different requirements may apply in your country.

3.2 Protective and safety equipment

Only start the equipment after all protection and safety devices are operational. The protection and safety devices of the equipment must not be changed or bypassed.

3.2.1 Supply circuit disconnect

Mains supply with power plugs

When the device is supplied with power plugs, the power plugs are the supply circuit disconnect. Note the following requirements:

- To de-energize the device, you must disconnect the mains plug.
- Customer provided power sockets must be easily accessible.
- The distance between the mains power sockets and the device must be shorter than 3.6 m (12 ft).

Mains supply without power plugs

The user of the system is responsible for the safety relevant execution of the mains supply and the supply circuit disconnect in accordance with national regulations.

3.2.2 Protective conductor

This device has protection class 1. The device must be connected to the protective conductor.



⚠ DANGER

Operation without protective conductor!

Danger to life from electric shock when touching the device.

- Only switch device on if protective conductor is connected to the ground.

3.2.3 EMERGENCY STOP

The EMERGENCY STOP has the following effect:

- The device is stopped, but not separated from mains.
- Pusher and pneumatic cylinder are switched at zero pressure.
- An error message appears on the screen.



Fig. 5: EMERGENCY STOP button

In addition, enclosures, doors and maintenance openings of the device are equipped with safety switches. The safety switches prevent that the device starts running if the device parts are open.

If in case of an EMERG-STOP a non-weighed package remains on the weighing conveyor, this package is rejected.

Whether the conveying unit has to be cleared after an EMERG-STOP depends on the device configuration.

Follow instructions on screen.

To put the device into operation again after an EMERGENCY STOP or an activated security switch, please proceed as follows:

⇨ Follow instructions on screen.

⇨ Unlock EMERGENCY STOP pushbutton.

or

⇨ Close open device parts.

⇨ Press <START>.

The device is ready for operation.

3.3 Plates on the device

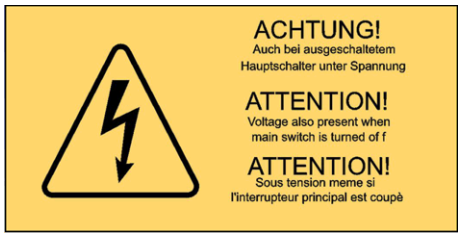
The warning symbols listed in this chapter identify hazards which may occur during operation.

Hazardous voltage



Beware of hazardous electric charge.

Dangerous electrical voltage in control cabinet although ON/OFF switch is switched off



Before carrying out any work in the switch cabinet, unplug the mains switch.

Unplug the power plug



Disconnect the mains plug before starting cleaning or opening the control cabinet.

Risk of crushing fingers and hands



During operation, keep fingers and hands clear from moving parts of the device.

Warning of automatic starting



During operation, keep fingers and hands clear from moving parts of the device. Do not operate with loose clothes and wear a hairnet. Do not wear jewelry, ties etc.

Observe documentation



The operator must be familiar with the contents of these instructions.

Keep instructions for later use.

3.4 System-related sources of hazards

During operation, different operator hazards and/or damage to machine may occur.

3.4.1 Automatically starting components

During operation, components may automatically switch on or off.



⚠ WARNING

Automatically starting components!

During automatic operation, components can switch on and off automatically. Risk of severe injuries and damage to property.

– Wear tight-fitting clothing and hairnet.
– Do not wear necklaces, ties etc.
– Keep fingers and hands away from moving parts.
– Prior to any cleaning and maintenance work, switch off device.
– Devices with EMERG-STOP: Press EMERGENCY STOP button.



⚠ WARNING

Risk of entanglement by rotating parts!

During automatic operation there is a risk of entanglement in the conveyor belt area. Risk of severe injuries and damage to property.

– Wear tight-fitting clothing and hairnet.
– Do not wear necklaces, ties etc.
– Keep fingers and hands away from movable parts.

3.4.2 Conveying unit

Only resume operation of the device when device is completely assembled.



⚠ WARNING

Operation with incompletely mounted conveying unit!

Dangerous areas are freely accessible. Risk of injury.

– Always operate the device with conveyor belts.



⚠ CAUTION

Sharp-edged sides of conveyor belt!

Risk of cutting injuries from the edges of the conveyor belt.

– Wear protective gloves when working at the conveyor belt.
– Never touch the conveyor belt if it is switched on.

The conveyor belts can be damaged if incorrectly used.

NOTICE

Objects on conveyor belts!

Possible damage to property due to objects on conveyor belt.

– Do not place any objects on conveyor belts. Do not use conveyor belts for storage.

Entanglement points between conveyor belts

Depending on the safety concept the device control unit or any mechanical cover ensures that the changeovers between the conveyor belts are safe.

Belt-to-belt transfer point to customer-provided conveying unit

There is a risk of entanglement at the transfer points between the customer's conveying system and the conveyor of the device. Before start-up, make sure that no one can get injured at the belt-to-belt transfer points. If a mechanical cover is necessary, it must always be mounted correctly before switching on the device.

3.4.3 Retraction unit for package ejection (option)

The retraction unit is pneumatically operated. If compressed air pressure is too high hazards for the operator could occur.



⚠ CAUTION

Pressure of compressed air of the retraction unit too high!

Risk of injuries due to high force on intermeshing sections of retraction unit.

– Check permissible pressure of compressed air. The permissible pressure is indicated on a plate at the pressure reducing valve.



The max. permissible force on the intermeshing sections of the retraction unit is 120 N.

3.4.4 Swivel arm sorter

During operation, operator may be exposed to hazards.



⚠ WARNING

Automatic movements of paddle sorter!

During automatic operation, the paddle sorter can move automatically. Risk of crushing and risk of impact injuries.

– Do not reach into working area with device switched on.

– Ensure that gap between swivel arm sorter and conveyor belt is not more than 4 mm.

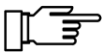


⚠ CAUTION

Pressure of compressed air of swivel arm sorter too high!

Risk of injuries due to too much force on swivel arm sorter.

– Check permissible pressure of compressed air. The permissible pressure is indicated on a plate at the pressure reducing valve.



Max. permissible force of swivel arm sorter is 75 N.

When mounting the swivel arm sorter the following must be observed:

– Swivel arm sorter must always remain above belt body.

– Gap between swivel arm sorter and conveyor belt must not exceed 4 mm.

– Rejected products must be collected in a suitable reject bin.

3.4.5 Scales are sensitive measuring instruments

Applying more than the maximum load to a scale can damage the scale. In systems the scale can be invisibly installed under a conveyor belt.

NOTICE

A weight load higher than the permissible maximum load can damage the scale!

The scale provides no or incorrect measured values and may have to be replaced.

– Observe maximum load of scale, see data plate on device.

– Do not climb on scale.

3.4.6 Medical information for persons with active implants

Active implants are, e. g. pacemakers or defibrillators. If a safety distance of 30 cm is maintained between field source and implant, it might be very unlikely that active implants are affected in any way.

Non-ionizing radiance is not generated intentionally, but is a technical effect caused through electrical equipment: e.g. electric motors, high-voltage cables or magnetic coils. Furthermore, the device is not equipped with strong permanent magnets.

4 Installation

The initial installation and commissioning as well as instructing in operation, cleaning, care and maintenance will be carried out by the responsible Bizerba Customer Service or the Bizerba specialist.

Install the device so that it is easily accessible for operation, maintenance and cleaning.

⚠ CAUTION

Tripping hazard due to improper cable wiring!

Risk of injuries due to improper cable wiring.

– Secure cables laying on the floor with suitable cable bridges.

– As an alternative introduce cables from the top.

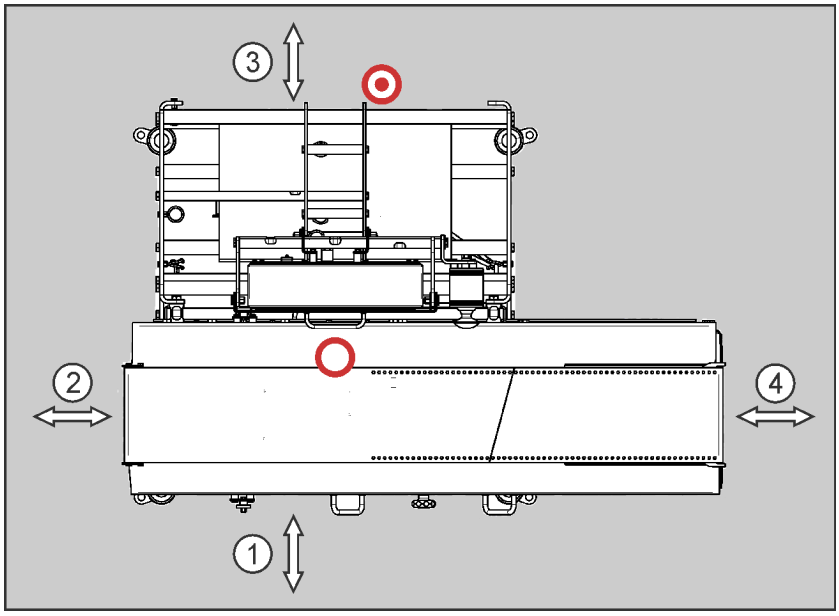


Fig. 6: Example of required space

- ON/OFF switch
- Display and operating unit
- ① Front: Working area for user. This area needs to be completely free!
- ② Feeding of packages on a customer-provided transport unit.
- ③ Back: Leave space to be able to open control cabinet.
- ④ Further transport of packages on a customer-provided transport unit.

4.1 On-site mains power socket

The customer-provided mains power socket must meet the following requirements:

– Distance to the device shorter than 3.6 m (12 ft)

– Mains power socket is protected at a maximum as follows: 3/N/PE 400 V, 50 Hz, 16 A or 3/N/PE 208 V, 60 Hz, 20 A
– The mains power socket is easily accessible. It must be possible to unplug the mains plug to de-energize the device.

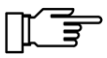
4.2 Fixed connection

A fixed connection must meet the following requirements:

– A supply circuit disconnect must be available fin order to disconnect the device from power.
– The distance between supply circuit disconnect and device is less than 3.6 m (12 ft).
– The supply circuit disconnect is easily accessible.
– The supply circuit disconnect can be protected against unintentional switch-on, e.g. by using a padlock.
– The permanent connection is sufficiently protected, see type plate on the device.

4.3 Mounting mains cable on device

The device will be delivered to defined countries without mains cable.



USA and Canada: Mount a supply circuit disconnect for your permanent connection.

- A mains cable that meets national standards is available.
- The mains cable is designed for 230 V/16 A or 120 V/20 A.
- The cable has a maximum length of 3.6 m (12 ft).

➪ USA and Canada: In accordance with national regulations an empty conduit made of metal towards the bottom of the control cabinet must be installed.

Preparing cable ends



⚠ DANGER

Live mains cable!

Danger to life from electric shock.

– Before carrying out works on mains cable, make sure that cable is de-energized.
– Any work in the control cabinet must be carried out by qualified personnel or Bizerba service technicians only.

- ➪ Dismantle cable ends, see figure.
- ➪ Run cable through control cabinet cable gland. Use suitable cable gland with strain relief.

or

- ➪ USA and Canada: Run cable through empty conduit into control cabinet.

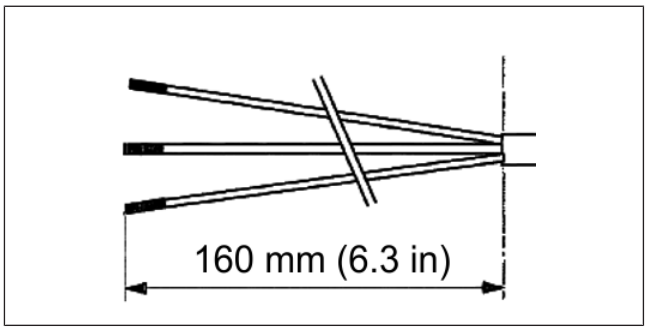


Fig. 7: Cable ends (example)

Electrical connections in control cabinet

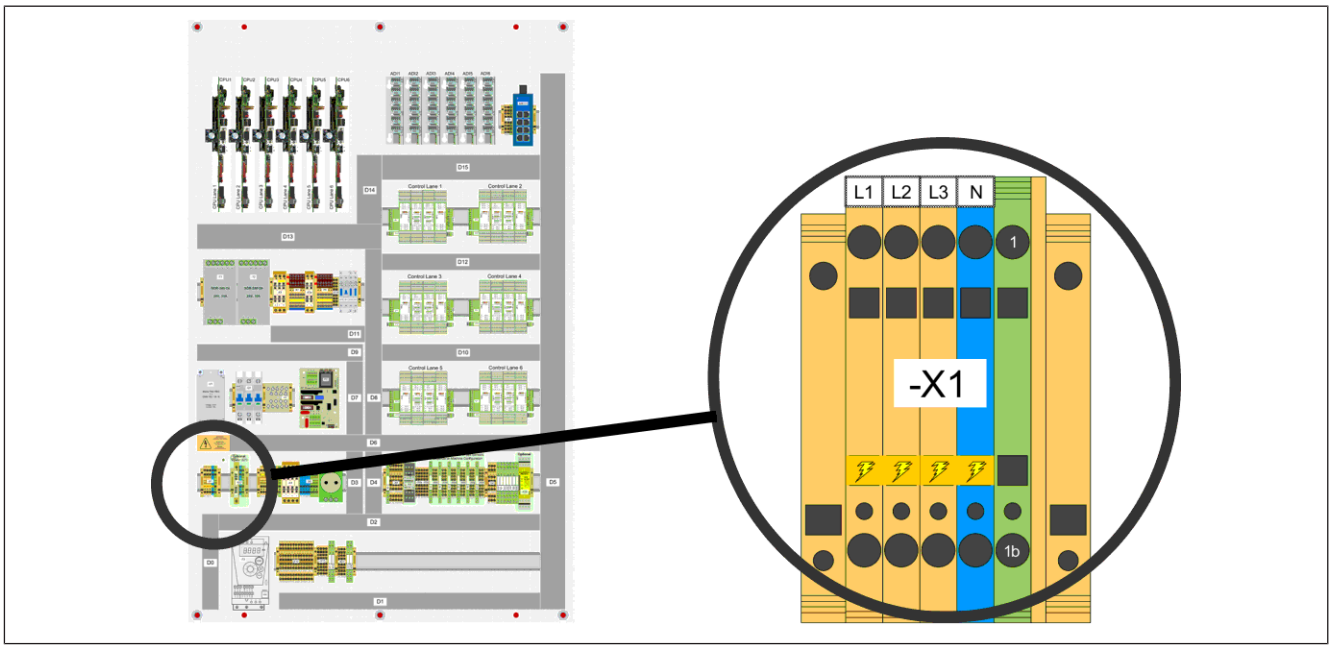


Fig. 8: Electrical connection

- ➪ Connect wires, see figure.
  - – "L1", "L2", "L3": Power supply
  - – "N": Neutral conductor
  - – Green connection: Protective conductor
- ➪ Route cable to customer-provided mains power socket according to national standards.

4.4 Retrofit swivel arm sorter for wide products

Ex factory the normal position of the swivel arm sorter is set in a way that it remains close beside the conveyor belt. If products are wider than the conveyor belt, the distance to the conveyor belt must be increased. The following must be retrofitted:

- – Exchange short sleeves ③ with long sleeves.
- – Disassemble belt guide plate ① to prevent products from pushing against it.

① Belt guide plate

② Swivel arm sorter

③ Short sleeves

④ Conveyor belt

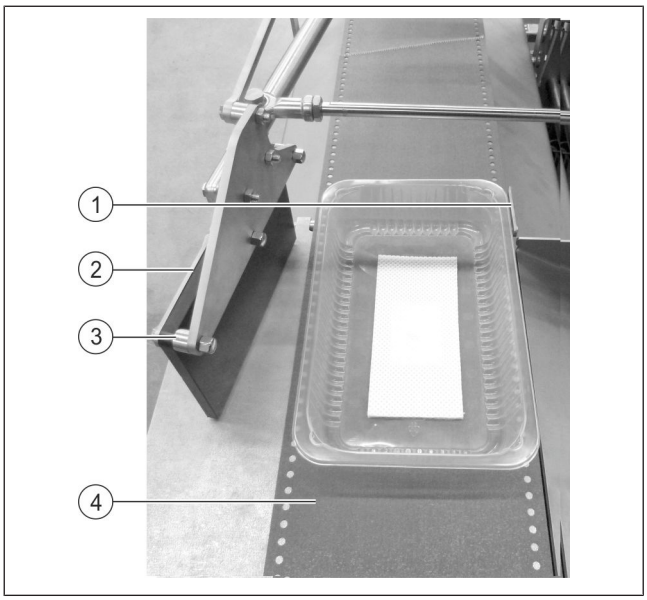


Fig. 9: Swivel arm sorter

- Only qualified personnel or Bizerba service technicians may carry out works on the device.

➪ Switch off device at on/off switch.

➪ Switch off compressed air and ventilate pneumatic system.

➪ Unscrew belt guide plate ①.

Keep belt guide plate in safe place for later use.

Change sleeves

➪ Loosen three screws and replace short sleeves ③ with long sleeves.

Keep removed sleeves in safe place for later use.

➪ If necessary, settings for delay time and duty cycle of ejector must be adjusted in the software.

➪ If necessary, adjust air valve of pneumatic and end position damping of cylinder.

➪ Test new settings with test run.

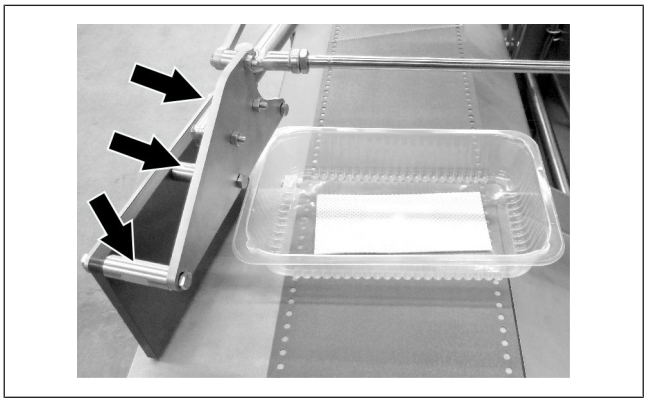


Fig. 10: Swivel arm sorter with long sleeves

5 Operating elements

5.1 ON/OFF switch

The ON/OFF switch is located at the back of the device on the control cabinet. The ON/OFF switch can be protected against unintentional restart by using a padlock.

"1" = on

"0" = off



Fig. 11: ON/OFF switch

Switch off device with on/off switch for cleaning and maintenance work outside the control cabinet. Afterwards, disconnect the mains connection.



⚠ DANGER

Electrical voltage in the control cabinet although the main switch is switched off!

Danger to life from electric shock.

- Prior to any work in the switch cabinet, unplug the mains switch.
- Work in the switch cabinet may only be carried out by qualified personnel or Bizerba service technicians.

Secure on/off switch against unintentional restart

⇨ Put a padlock through on/off switch and lock it.

5.2 Display and operating unit

The device comes standard with touch screen.

The displayed softkeys depend on the active authorization level. From authorization level 1 to authorization level 5 there are always more softkeys. [▸ 45]

5.3 Display and operating unit with touch screen

5.3.1 Screen structure

The screen configuration can be customized using the GT-SoftControl program. GT-SoftControl allows to differently arrange and individually activate or deactivate display elements. The screen on your device may differ from this description due to customized configuration.

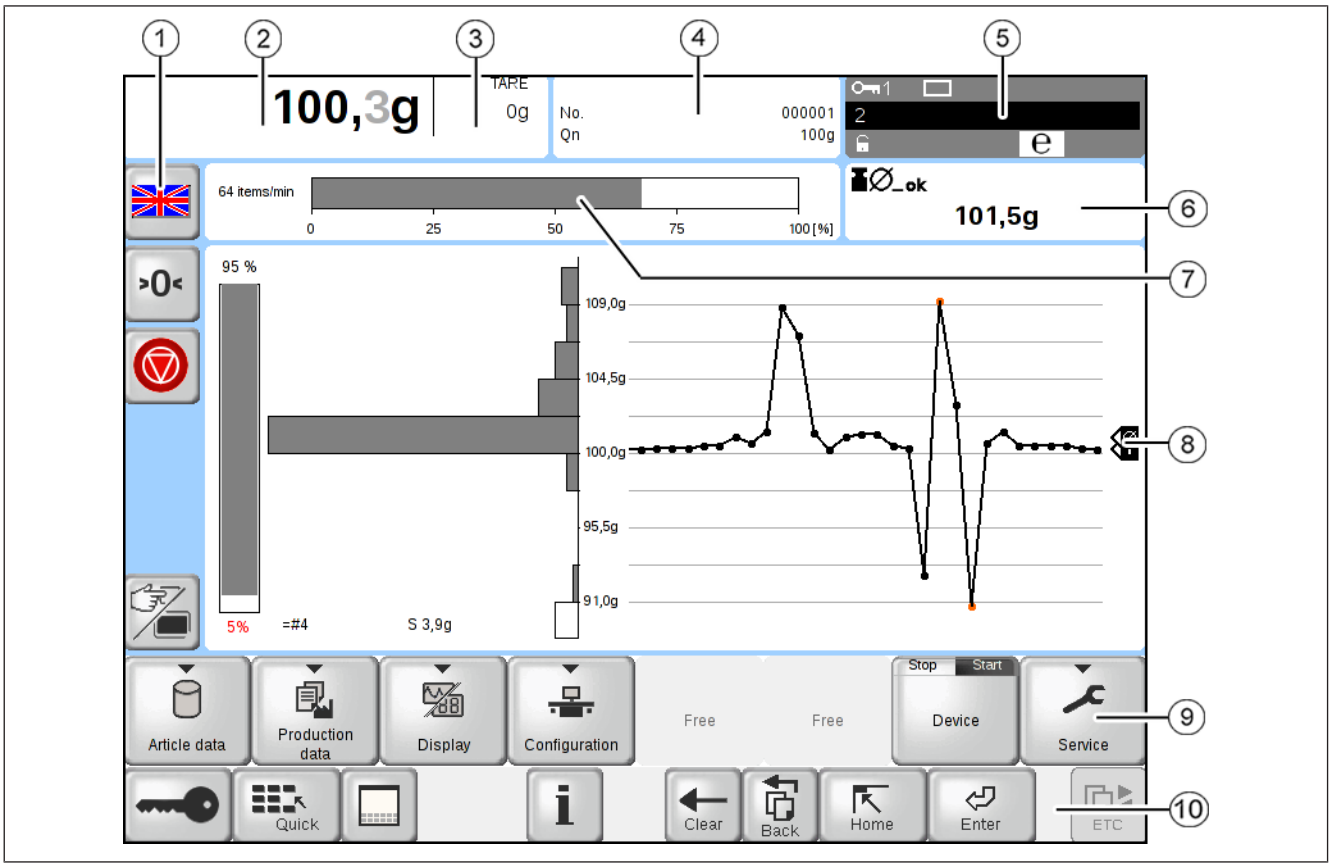


Fig. 12: Touchscreen

① Keypad on the left

② Weight

③ Tare

④ Article data

⑤ Status display consisting of:

- Selective criteria for weight class labeling (example) or tendency control symbol
- Device State
- System bus address and device name

⑥ Statistics function icon

⑦ Real throughput in relation to theoretical maximum throughput at optimum feeding

⑧ Weight flow of the last 25 checked packages (at a high belt rate multiple packages are combined)

⑨ Softkeys

⑩ Keys below (here: single line display)

5.3.2 Keys and softkeys



< >0< >

Set scale to zero. The zero setting is possible within a range of a maximum of +/2% of the maximum weight.

Devices with several lanes: All scales are set to zero.



<Operator language>

Change language setting of the device.



<Start>

Start processing.



<Stop>

Stop processing.



<Shift>

Show or hide softkeys and quick keyboard if necessary. Show display and operating elements arranged behind the softkeys.



<Code>

Select authorization level. [▷ 45]



Open the quick keyboard.



<More keys>

Show additional keys.



<Less keys>

Hide additional keys.



<Information>

Display information:

- "Software ID": Display software information
- "Log software update": Show logbook of software updates
- "Teach history": Display logbook of teaching processes. This function is only required for devices that are used as control scales.
- "Maximum belt speed": Display max. belt speed
- "Operating hours": Display operating hours
- "History of messages": Display history of messages
- "Maintenance intervals": For maintenance, display relevant operating time and quantities
- "Search softkey": Search for a softkey [▷ 35]

Softkeys in the Info menu:

- <Manuals>: This function is used to display the manuals related to your device.
- <License Conditions>: Display license conditions.
- <Third Party>: The license conditions related to integrated third-party standard software are displayed.

<Clear>

- View error messages.
- Deactivate a function in a table.
- For entries, delete text.

<Home>

Change to main menu.

<Enter>

Confirm input. If the screen shows a menu below the main menu: switch to next higher menu level.

<Back>

Move back up a menu tree or backwards through a table. Go back if you clicked a link softkey.

After switching on the device or after a change of the authorization level <Back> is without function.

<Etc>

Scroll forward or backward in multi-side menus.

2 GLMI Master

<ID>

- Displaying system bus address of device and device name, if necessary, shown with device color. [▶ 36]
- When editing lines the system bus addresses of all concerned devices are shown with a black background.
- Click field to access the GT-SoftControl level.

See also operating instructions GT-SoftControl.

After pressing <More keys> visible

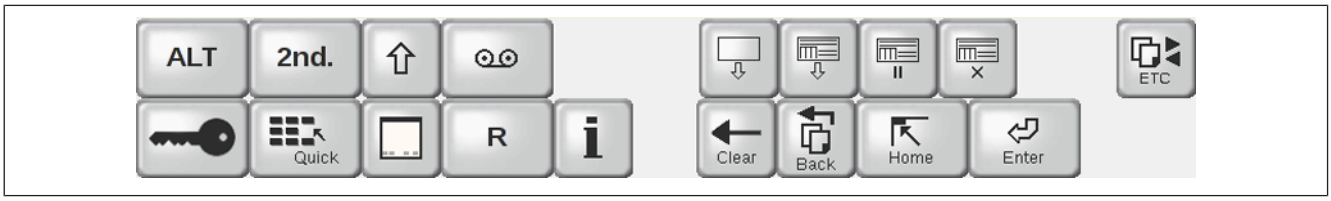


Fig. 13: Additional keys

ALT

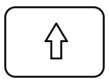
<Previously>

For key combinations. Activate or deactivate by clicking.

2nd.

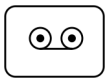
<2nd.>

For key combinations. Activate or deactivate by clicking.



<Shift>

Switch between upper/lower case. Activate or deactivate by clicking.



<Record>

Call up saved macro. [▷ 49]



<R>

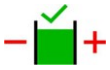
For key combination <Shift> <ALT> <R>. Resets all device-related settings.

5.4 Symbols in the header

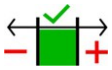
Statistics functions



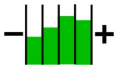
"Weight determination"



"Checking contents"



"Sliding contents control"



"Weight classification"



"FPV Europe"



"USA - Non USDA standardized"



"USA - USDA standardized"



"USA - USDA only liquid mater."



"Free selection"

More symbols



The tendency control (option) regulates a higher infeed.



The tendency control (option) regulates a lower supply.

5.5 Icons in the status bar

Authorization level



Authorization level (in example authorization level = 5).

Upper and lower case



Upper case is activated permanently with key <Caps>.

Connection information



There is an e-Service connection.

Information on device status



Processing has been blocked on one of the devices entered in the device connections ("Lock").



Alarm at one of the devices entered in the device connections.



The scale has run an automatic zerosetting.



Softkey is copied.



Update or background distribution is running.



Statistics data are transmitted.



Line backup or loading process is running.



Pause was pressed.



Quick key was successfully executed.

Macro recorder icons



The macro recorder is not active.



Record.



Record pause.



Play.



Play pause.

A exclamation mark "!" beside the symbol means that the macro function is temporarily deactivated to enable troubleshooting.

Licence icons



No license available.



No licence authorized.



One or more licenses are authorized.



Demo license authorized.



Test license with information on remaining time duration in hours (in example 720 hours).

5.6 Softkeys

The screen shows up to eight softkeys simultaneously. Selection and number of softkeys depend on the called-up menu and the mode level. If a second line includes further softkeys, a symbol on the right edge of the displayed softkey line indicates it.

Reference to more softkeys



Further softkeys available in second line.



Further softkeys available in first line.

– Softkeys, which are not authorized to be used, are replaced by a placeholder that says <Free>.
– Softkeys for which an authorization exists, but which cannot be used as the prerequisites do not exist, are grayed-out.



In authorization level 9 softkeys can be placed as needed by the customers. All authorizations levels permit renaming of certain softkeys.

Symbols on softkeys

The softkeys do have different functions depending on the type:



Call up menu.



Execute function immediately: e. g. Release total with <Total 1>.



Call up function that requires an input value and that is executed as soon as input has been made.



Create or edit text in text editor.



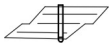
Call up table.



Call up selection list.



Reference to a function in another branch of the menu tree (link).



Call up text editor.



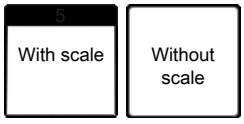
Call up search.



An indication of value above the softkey names shows the active setting.



A field separated into two above the softkey name shows that two settings are possible. The black field identifies the active setting.



A black field in one of several softkeys marks the active softkey in a group of softkeys, of which only one can be activated.



A black field with description marks a softkey in order to call up a selection list. The description shows the currently selected setting.



Authorization level 9: The "#" character identifies that the softkey is protected by a password.

Navigating through the menu structure

To move within the menu structure, the following keys can be used:

Softkey with symbol ▼	Show softkeys of subordinated level.
<Ok> or <Enter>	Show softkeys of superordinated level.
<Back>	Undo last action.
<Etc>	Within the level switch between the first eight softkeys and more softkeys, if they exist.
<Home>	**Devices with touch screen:** Return to the main menu.

5.6.1 Finding softkeys

With function "Search softkey" you can call up the softkeys directly and without knowing the access path. The search function accesses all softkeys which are released in the current authorization level.



The search function does not distinguish between upper and lower case letters.

As a search result you see the beginning of the result list. The text passage found are highlighted. With the navigation elements you may move a different section of the result list into the display area.

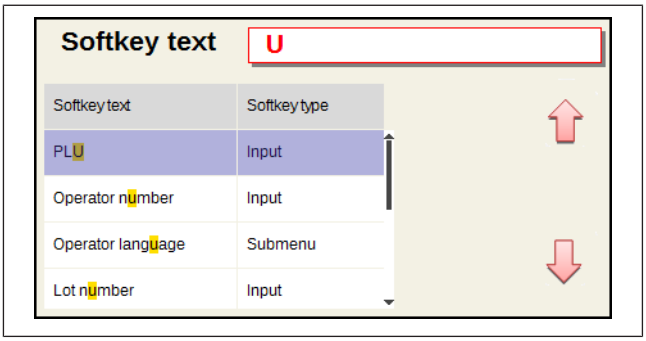


Fig. 14: Search softkey (example)

- Not authorization level 9

➪ <Info>

➪ Select "Search softkey" function and confirm.

➪ Enter part of softkey name.

All the softkeys in or under the authorization level, whose name contain the search text, are listed.

➪ Select required softkey from the result list and confirm.

5.6.2 Display softkey info

This function enables you to display information on a softkey. If softkeys are grayed out, you can call up the reasons why they have been disabled.

- Authorization level selected in which the softkey is located.

➪ **Devices with touch screen:** Show second key bank. [▷ 29]

➪ Press <Alt> and <Record>.

➪ Select function "Display softkey information (GxNet, ..)".

➪ If the menu level with the softkey is visible, confirm function selection with <OK> and tap softkey.

or

➪ Search softkey with function <Soft key> and confirm. [▷ 35]

A window with the softkey data appears. If softkeys are grayed out, the reasons are displayed why they have been disabled.

5.7 Colored device display

In case of multi-lane devices each lane is assigned a display color via GT-SoftControl, see GT-SoftControl operating instructions. The screen highlights number and name of the currently displayed lane as well as markings in device functions with associated display color. If an input effects several lanes or if there is only one lane, the display uses black as a standard color.

Functions such as the "History of messages" access the different lanes of a multi-lane device. When accessing another lane the display changes to the associated color.

5.8 Collecting data

5.8.1 Recording text

Simple texts are directly entered via the connected keyboard or a keyboard shown below the text field.

5.8.2 Recording a numerical value

The expected format of the numerical value is preset in the input mask. If the presetting contains a comma, it remains unchanged during input. You do not need to enter the comma.

Devices with touch screen: A keyboard is shown next to the input mask.

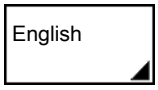
To enter numerical values the following keys are available in addition to the numerical keys:

<+/->	Change signs in front of input. Only released for functions that permit a negative input.
<Clear> or <C>	Clear entry.
<✓>, <OK> or <Enter>	Confirm input.
<X> or <Esc>	Cancel input.

5.8.3 Selecting a value from a list



Softkeys by means of which you open a selection list show the current setting on the upper edge.



List fields in tables are marked by a black triangle in the lower right corner.

- **Devices with touchscreen:** To open the selection list tap softkey or list field.
- Mark the selected value in the selection list with the cursor keys, by entering the first letter or by tapping it.
- <OK>

or

- <Enter>

5.9 Working with tables

5.9.1 Navigate in table

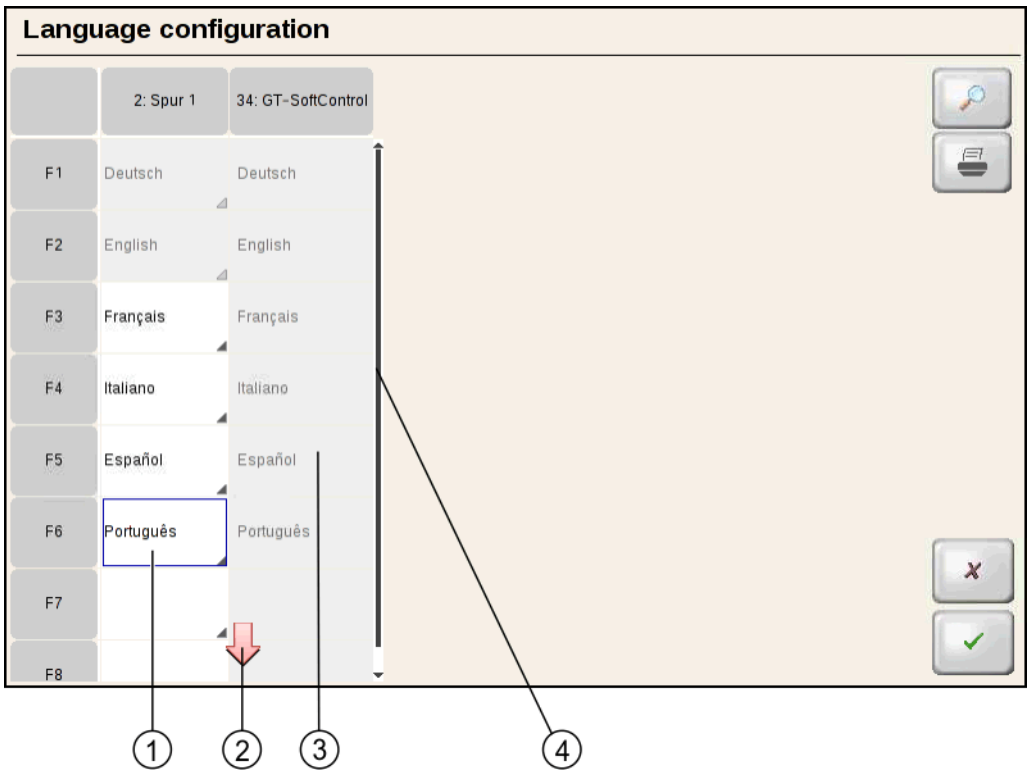


Fig. 15: Cell marking and navigation elements (touchscreen)

① Active cell, editable

② Navigation element: Scroll in direction of arrow (touch screen or connected mouse only)

③ Non-editable cell

④ Scroll bar

Marking of cells

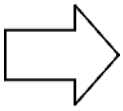
Frame in device color:	Select current cell.
white background:	Cell is editable.
gray background:	Cell cannot be edited.
Background in device color:	The entire table row or column is marked.

Select cell

⇨ **Devices with touch screen:** To select a cell tap desired cell.

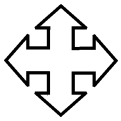
Change visible table section

Devices with touchscreen: There are the following navigation elements to change the visible table section in large tables:



Navigation element for scrolling

Tap arrow to scroll in direction of arrow. These navigation elements appear on all pages of the table where page forwarding is possible.



Navigation element for moving

For scrolling, press and hold navigation element (single arrow). The navigation element for moving appears. It allows to move the visible section into all directions. Move displayed table section in desired direction by applying slight pressure.

As soon as the finger has no longer contact with the navigation element the navigation element disappears.



The scroll bars on the table edge are for orientation purposes. They show where the visible table section is within the table. With a connected mouse the scroll bars can also be used for navigation.

5.9.2 Editing table

The table fields include text and value inputs, selection lists, checkboxes and buttons. After tapping a table field you can edit the content. [▸ 37]

Keys in tables



<OK>

Save and escape table.



<Cancel>

Close table without saving.



<Memory options>

Show memory options.

Devices with touch screen



<Find>

Search in table.



<Help>

Open help text.



<Print>

Print table.



<Filters>

Only display in tables the settings which were made, no empty table rows.

Edit table values for lines, columns or complete tables

In some tables you have the possibility to make settings for complete lines, complete columns or complete table with only one entry.

Devices with touch screen

➪ To edit the setting in all cells of column in the same way, touch head of column.

or

➪ To edit the setting in all cells of line in the same way, touch head of column.

or

➪ To change the setting in all cells of a table in the same way, touch field in the top left corner of the table.

If the complete column, line or table can be edited, a respective inquiry appears.

➪ Press softkey with respective respond.

➪ If necessary, make settings for all cells of the column, line or table.

Using the search function in tables

In numerous tables there is a search function that allows you to search for table entries.

The following search modes are available:

"Fragment":	Search for table entries that **contain** the specified search text.
"Beginn. of word":	Search for table entries that **begin** with the specified search text.

The search function does **not** distinguish between upper and lower case letters.

Devices with touch screen: You need the following key:



<Find>

Start search function.

- A table is open.

➪ Mark the table column to be searched through. If you want the search to start in a specific table cell, mark this cell.



If there is no hit in the marked column, search continues in the title column and in the first column.

➪ **Devices with touch screen:** Press the <Find> key in the table.

A search window opens.

➪ Select the search mode.

- ➪ Depending on the search mode, enter the beginning or part of the table entry to be searched for in the "Search" field.
- ➪ <Continue search>

  In the "found" field, the first table entry that corresponds to your search criteria will be displayed.
- ➪ If necessary, press <Continue search> again until the table entry to be searched for appears in the "found" field.
- ➪ Close search window with <✔> or <OK>.

The table entry you searched for is highlighted.

5.10 Operating data

This function enables you to print the operating data. Which type of operating data will be available depends on type and equipment of the device.

- Authorization level: 1

➪ <Service> / <Operating data> / <Print operating data>

The output happens according to the setting of <Deviating print service print>.

6 Setting up display and keyboard layout

6.1 Setting language and characters

The following language-related settings can be made on the device, largely independent from each other:

– Set operating language [▷ 42]

– Set list language [▷ 42]

6.1.1 Setting operator language

The display and menu texts of the user interface as well as standard inscriptions of the soft-keys are shown in the set operator language. The following languages are always installed:

– "Deutsch"

– "English"

Additional languages are available and can be loaded in the device. For additional information, please contact Bizerba Service.

⇨ <Configuration> / <Device configuration> / <Languages & characters> / <Operator language>

or

⇨ <Service> / <Language>

or

⇨ Press key with flag.

⇨ Select and confirm operator language.

The screen texts appear in the selected language.

6.1.2 Setting list language

If a list printer is connected to the device, you can set the language used for the add. texts used in the lists. The following settings are possible with the standard version:

– "Deutsch"
– "English"
– "Français"
– "Italiano"
– "Português"
– "Español"

Additional languages are available and can be loaded in the device. For additional information, please contact Bizerba Service.

- Authorization level: 3

⇨ <Configuration> / <Device configuration> / <Languages & characters> / <List language>

⇨ Select language.

6.2 Switching on or off menu path display

The menu path display lists the superordinate softkeys to the current softkey display. If the menu path display is activated, you can see the menu path in a window above the softkeys.

Possible settings:

– "With"

– "W/o"

- Authorization level: 5

➪ <Configuration> / <Display configuration> / <Status display> / <Menu path display>

➪ Set and confirm the checkbox.

➪ Tap the softkey until the required setting is highlighted.

6.3 Selecting display format

The display format defines which contents are shown on the screen. Possible settings:

<Large diagram display>:	In the middle of the screen, statistics is displayed graphically.
<Large weight display>:	In the middle of the screen, the size selected via the <Enlarged viewLarge weight display> function is shown. Usually, this is the weight. In addition to the large view in the middle of the screen, a selected size is shown in the small weight field.
<Small diagram display>:	In the middle of the screen the statistics is displayed graphically on the left and lists statistics data on the right.
<Favorites display>:	This display is reduced to the essential. The screen shows the weight and a product picture.

Devices with touch screen: To switch fast between the <Large diagram display> and <Small diagram display> displays tap twice on the graphic display.

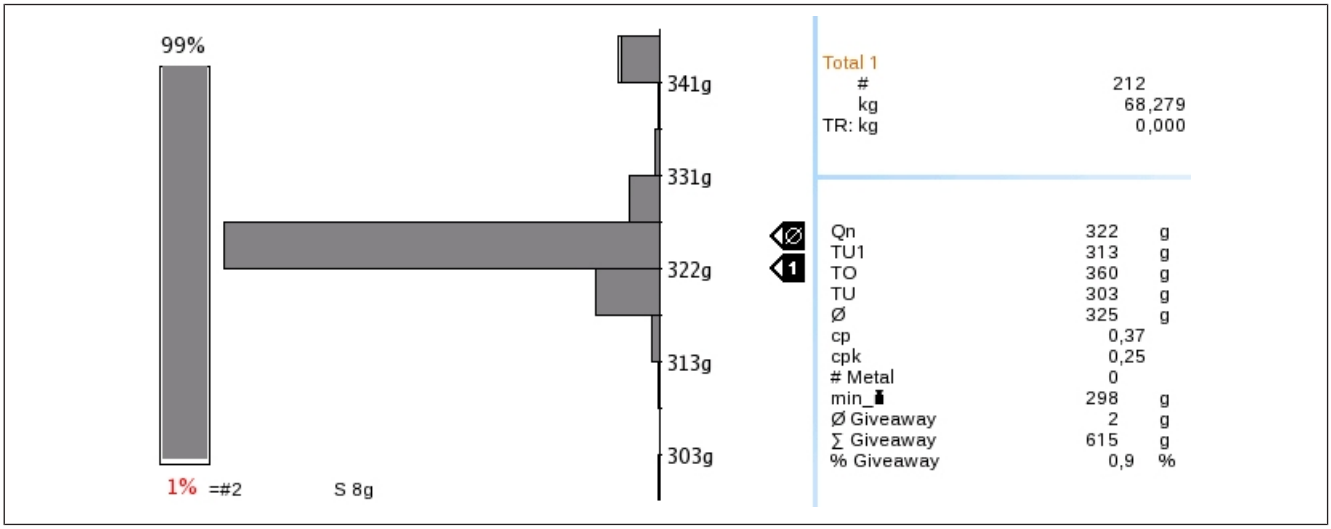


Fig. 16: Example: <Small diagram display>

- Authorization level: 1

⇨ <Display>

⇨ Press softkey with respective setting.

7 Permission concept

7.1 Authorization levels and passwords

The access to the functions of the device is regulated through so-called authorization levels. Passwords allow to protect the authorization levels against unauthorized access. The first authorization level contains only a few basic operation functions. Additional functions are available with each higher authorization level.

"0: Standby"	Clean display, lock system.
"1 Check settings"	Check settings, but do not change.
"2 Article change"	Select existing articles, use pre-defined forms.
"3 Create and maintain article"	Create and maintain article data, change specific settings in the <Production data> and <Service> menu.
"4 Service / Configuration"	Configure and service system.
"5 BIZERBA"	Use functions for the Bizerba Service.
"9 Customer-spec. operat. level"	Use customer-specific combination of functions.

Authorization level 9 differs from the others. This authorization level can be set according to customer requirements independently from the other authorization levels. The user has access to exactly the functions his work requires.

The display indicates the number of the active authorization level with a key symbol, e.g 5 for authorization level 5.

7.2 Changing authorization level

If you use module BRAIN2 Device_Access and your device is operated with user logon there is no password prompt during the authorization level change. The logged on user only sees the authorization levels he is permitted to access. [▶ 46]

➪ Press .

A list of available authorization levels appears.

➪ Enter the number of the authorization level.

or

➪ Select authorization level and confirm.

When changing to superior, password-protected authorization level a password inquiry appears.

➪ Enter password and confirm with <OK>.

When changing from standby to a non-password protected authorization level you are asked to enter the number `183`. Follow the on-screen instructions.

The selected authorization level is active.

7.3 Device access during activated operator management

7.3.1 Operator management with BRAIN2 Device_Access

- You require license BRAIN2 Device_Access.
- as from GT-SoftControl 4.20

BRAIN2 Device_Access allows a personalized allocation of access rights for the device operation. The activation of the user management in GT-SoftControl via BRAIN2 Device_Access fundamentally changes the access to the operating functions of devices. The most important differences are:

– Mandatory user logon on the display and control unit
– Access rights to device functions depending on the logged on user
– Personalized logging of operating steps
– No password prompts during authorization level change on the device
– In connection with an RFID scanner possibility of logon via RFID identification

For the device access BRAIN2 Device_Access can save the following data on operators or operator groups:

– RFID identification for automatic logon
– Highest authorization level which is accessible for the operator
– Authorization level which is active after logon of the user on the device
– Authorization for the establishment of an eService connection (yes/no)
– Mode for use of the quick keyboard

For configuration and handling of BRAIN2 Device_Access, please see the BRAIN2 operating instructions.

7.3.2 Changed device access during activated user management

Operators must log on before operating the device and log off after operating the device. A logged on user can use all authorization levels assigned to him without further password prompt.

User log-in

With the first operating attempt the user is asked to log on. The logon can be done with operator name and possibly password or alternatively by reading the RFID identification of the operator.

Operator log-off

After finishing work on the device the operator has to log off. Function <Log out operator> is in the connection dialog of GT-SoftControl and available during authorization level change on the device. During log-off the device changes to authorization level 1 or 9 depending on which of these authorization levels was active last.

Additional measures to prevent unauthorized device access

The activation of the user management via BRAIN2 Device_Access refers to the display and operating unit, not to the operated device. If a display and operating unit does not have the user management activated or with old software it is possible to operate the device without user logon. For access the passwords of the authorization levels or the service password are needed in this case.

NOTICE

Access to all data and functions!

Misuse by unauthorized persons is possible.

– Assign a password to each user.

– Change all passwords of the authorization levels on the device in such a way that they are unknown to all users.

– Deactivate the service password.

7.3.3 eService with activated operator management

To establish an eService connection with the operator management activated an operator name and the related password have to be entered instead of the eService password. Whether an eService connection can be established depends on the access rights of the operator who logs on.

Establishing an eService connection is not automatically connected with a operator login on the target device. If on the target device another operator is already logged on, his rights for the device operation via eService apply.

7.4 Screen lock

- as from GT-SoftControl 4.20

If the device is not operated for some time, function "Screen lock" locks the user interface in password protected authorization levels of the device. To continue operation an authentication is required again.

If the operator management is activated the screen is only locked if an operator is logged on.

To activate or deactivate the screen lock, please refer to the GT-SoftControl operating instructions.

7.4.1 Unlocking the screen lock without activated user management

- The screen is locked.

➪ Enter and confirm password of active authorization level.



You can also unlock the screen lock with the service password if activated.

7.4.2 Unlocking the screen lock with activated user management

- The screen is locked.

⇨ Enter and confirm user name and password.

or

⇨ If the user has no password assigned: Enter and confirm password of active authorization level.

or

⇨ Read RFID identification.

8 Customer-specific functions

As a machine operator you usually use the customer-specific authorization level 9. This authorization level can be set up especially for your intended use. so that it only contains the functions that are required for daily work. For recurring entries and settings, customer-specific macros and forms can be assigned to softkeys.

Devices with touch screen: With the respective configuration the articles to be labeled can be accessed directly via the quick keyboard.

8.1 Macros

8.1.1 Starting macro

The following describes the start of a macro per key. As an alternative you can start the macro also via function "List macros".

- ➪ Press <Record>.
- ➪ Press key assigned to macro.
- ➪ If the macro is protected by a password: Enter password and confirm.
  The operating procedure saved by the macro is started. The following symbol appears on the screen during running: ▶.
- ➪ If the macro pauses for character input: enter character and press <OK>.

After running the macro, the macro icon disappears from the display.

8.1.2 Cancelling macro

A running macro can be cancelled at any time.

- ➪ Press <Shift> and <Record>.
- ➪ Select "Abort macro" function and confirm.

8.2 Calling up and using form

The following options are available for calling up a form:

- – Call up forms 1, 2 and 3 via keys <P1>, <P2> and <P3>
- – Call up of forms 1 to 6 via <Article data> / <Templates> / <Template 1> to <Template 6> (or softkey with form name)
- – Access a form assigned to a current article via <Article data> /<Templates> / <Template from article> (only if the article database has been configured accordingly)
- – Access a form via form number using <Article data> /<Templates> / <More templates> / <Fill in template>, then select form
- – If the form is assigned to a macro: Call-up via <Record> and the key assigned to the macro.

- Form available
- Authorization level: 3
- Forms 1 to 6 can be accessed directly also in authorization level 1.

- ➪ Call-up form in the above mentioned ways.

Devices with touch screen

➪ Tip the form lines one after the other and register value or setting.

➪ Close template using <✔>.

➪ To save data reply to security query with <yes>.

8.3 Setting up and using the quick keyboard

The quick keyboard is a keyboard tailored specially to the customers' requirements to access functions directly. It offers the following advantages:

– quicker and easier access to functions
– illustration of quick keys
– Reduction of control options to what the operator really needs

The following functions can be assigned to quick keys:

– Article call-ups
– Article selection
– Copied softkeys
– GxNet commands for all types of settings and operation queries
– Commands for different labelers
– Template cells (individual input options, e.g. with defined limits and selection lists)
– Function keys (e. g. <Print>)
– Sublevels
– HTML pages in intranet (e.g. a page of the operating instructions)
– Copy process data



See also operating instructions GT-SoftControl.

Use the quick keyboard

- Devices with touchscreen.

➪ <Quick>

The quick keyboard appears.

➪ Select quick page, if needed.

➪ Press the required quick key.

The respective article is called up or the function that is assigned to the key is run.



A quick keyboard that occurs during switching off the device, occurs again during next switching on.

8.3.1 Standard assignment of quick keyboard

The quick keyboard has been pre-assigned as follows:



Fig. 17: Standard assignment of quick keyboard

The following functions are available in the standard quick keyboard:

<Article>:	Opens article call-up.
<Data>:	Opens a sub-menu with the following functions: – <Batch number> – <Operator number>
<Display>:	Opens a sub-menu for switching between different displays: – <Small diagram display> – <Large weight display> – <Large diagram display> – <Favorites display> – <Value> (if necessary, metal detector display)

9 Article data

- Create article. [▶ 52]
- Copy article. [▶ 55]
- Delete article. [▶ 55]
- Call up article. [▶ 60]
- Read current article data. [▶ 61]
- Change article data. [▶ 61]

9.1 Create article

- Authorization level: 3

⇨ <Article data> / <Article maintenance>

The following softkeys are displayed:

<Article number>	Find article number (PLU number).
<Next availb. no.>	Inserts the next available article number into the input field.
<Article text>	Find article name.
<Cancel>	Cancel function.
<ok>	Open table with article data.

⇨ <Next availb. no.>

The next unassigned article number appears in the input field.

⇨ <ok>

An empty table appears.

The input fields have been assigned on the following pages:

- "General" [▶ 53]
- "Package selection" [▶ 54]
- "Tendency control" [▶ 54]
- "Other" (only if additional attributes have been activated in database) [▶ 55]

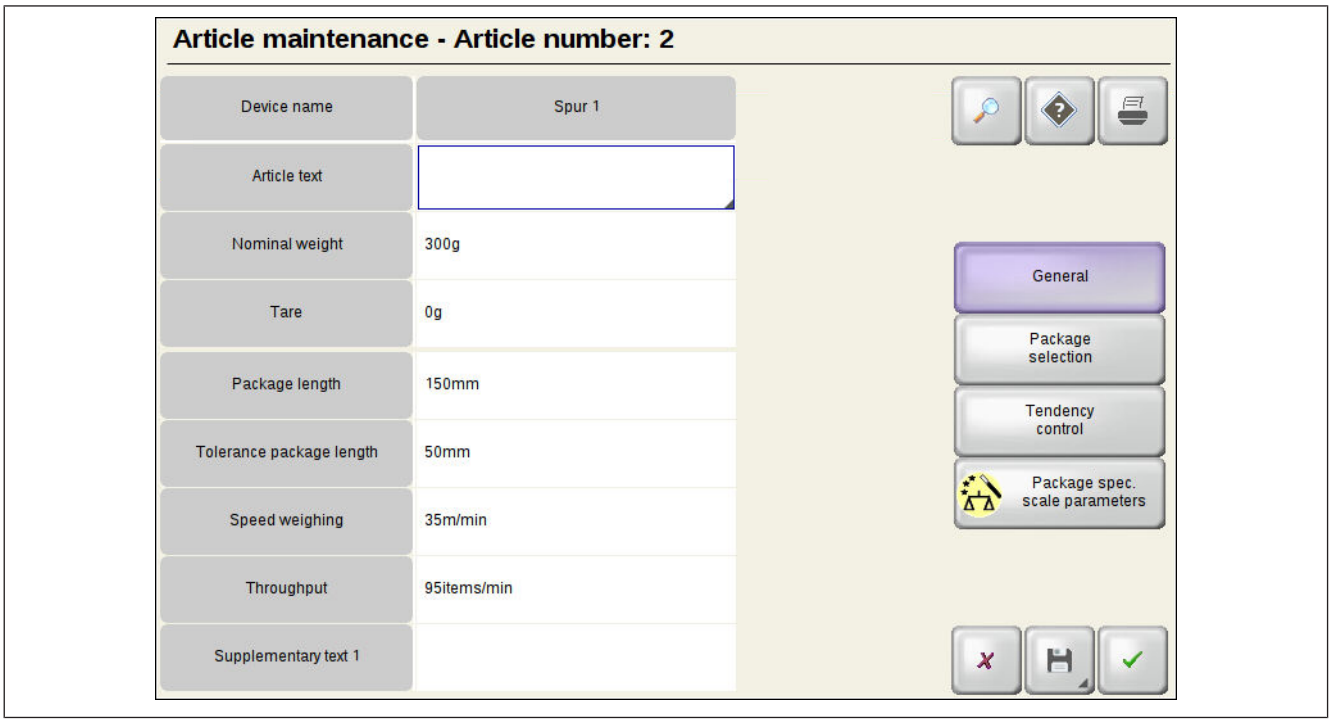


Fig. 18: PLU maintenance (example)

- Open the pages of article data management successively and enter all article data needed. [▶ 53]
- Save article after entered data.

Option to save and end the function:

✓	Save article and end PLU maintenance.
	Show other functions for saving: <Save>: Save without closing. <Save as>: Save under another number. Enter article number in window "Save article" and confirm. <Save and end>: Save article and end PLU maintenance.
✗	Exit PLU maintenance without saving.

9.1.1 Page <General>

Enter general article data on this page.

"Article text":	Designation of article
"Nominal weight":	Weight of article.
"Tare":	Tare weight of the article.
"Package length":	Length of article in conveying direction. The smaller the package length, the greater the maximum performance of the device. The device works with the total of "Package length" and "Tolerance package length".

"Tolerance package length":	Slippage on the conveyor belts can lead to a difference between the actual package length and the package length measured by the device. A further reason for measuring tolerance is when packages on the conveyor belt are warped. If the tolerance range that is selected is too small, the device might measure impermissible package lengths and register an error. If the tolerance range that is selected is too big, the maximum performance of the device is reduced.
"Speed weighing":	Speed of weighing belt. The following information appears in the upper left corner during the input: – Permissible input range for the speed – Speed as from which teaching of the article is necessary (teach limit)
"Throughput":	E. g. The package performance of a preset packaging machine in items/min. After entering all the article data, the device checks to see if the desired throughput is possible.
"Extra text":	Any extra text.

Compulsory fields that need to be filled out are as follows: "Nominal weight", "Package length" and "Tolerance package length".

9.1.2 Page <Package selection>

On this page of the article data management you assign a statistics type to the article and make the settings accordingly.

"Selection criteria":	Select the type of statistic evaluation.

The other input fields vary based upon the statistics type set. Please see the description of the statistics types.



The description of the statistics types can be found in the instruction manual of the device.

9.1.3 Page <Tendency control>

- The tendency control function requires the "TENDENCY CONTROL" license.

On this page of the article data management you activate the tendency control and make the settings accordingly.

"Tendency control":	Activate tendency control if an external controlling or filling unit is to be controlled. [▷ 56]
"Target weight":	The package weight that should be attained with the help of the tendency control. Depending on the filling system, the target weight may be greater or smaller than the nominal weight.

"Control interval":	Number of packages whose weight is used to calculate the mean value for regulating the control device. The control interval does not comprise the packages of the start delay ("Start delay") and the neutral distance ("Neutral path").
"Upper limit", "Lower limit":	Packages not within the specified upper and lower limit are not used to calculate the mean value (outliers).
"Tolerance +", "Tolerance -":	**Long-term regulation is not active:** If the mean value of the package weights is within this tolerance range, the tendency control is not applied. **Long-term regulation is active:** These tolerance limits have no function. The tendency control comes into action any time there is a deviation from the target weight.
"Neutral path":	Number of packages that are not used to calculate the mean value according to a regulation.

9.1.4 Page <Other>

If attributes above standard have been activated in your article database, they can be maintained via the additional page <Other>.

9.2 Copy article

This procedure is very similar to "Create article" . The differences are:

- Authorization level: 3

➪ At the beginning, do not immediately start to search for the next available number, but enter an existing article number.

➪ Edit article data.

➪ Finally, enter a new article number in order to save the article data.

9.3 Print article data

With this function you can send article data of the current article to the configured printer.

- Authorization level: 2

➪ <Article data> / <Print of all parameters>

9.4 Deleting articles

Delete a selected article with this function.

- Authorization level: 3

➪ <Article data> / <Delete article>

In a system network with distributed databases: A query appears. Only global, local or any other article data can be deleted.

➪ Enter article number and confirm.

The selected article was deleted.

9.5 Deleting article number range

With this function you delete several articles with consecutive PLU numbers.

- Authorization level: 4

⇨ <Article data> / <ETC> / <Delete article range>

⇨ Enter the first PLU number to be deleted in field "from PLU number".

⇨ Enter the last PLU number to be deleted in field "to PLU number".

⇨ <ok>

⇨ In order to finally delete all articles of the defined article number range, reply to security query with<yes>.

9.6 Tendency control

- The tendency control function requires the "TENDENCY CONTROL" license.

The tendency control is used to control a customer-side dosing, transporting or slicing device in relation to the statistical mean value of the weighed packages. Any deviations to the mean value can be corrected directly via outputs. Enter the required specifications in the article data.

9.6.1 Principle of the tendency control

With the number of packages "Control interval" average values can be calculated continuously. If the calculated average value exceeds the "Tolerance +" or is below the "Tolerance -" a control value is determined and provided.

After sending the control value the number of packages entered under "Neutral path" is ignored. Afterwards, a mean value is formed from the following packages. After starting the dosing device, a mean value is calculated once the number of packages has been entered under "Start delay".

The average value of the long-term regulation affects the nominal value of the tendency control. The long-term regulation improves the result of the tendency control if the dosing unit provides an average value that is slowly changing.

Re-initialization of the tendency control

The following parameter modifications re-initialize the tendency control:

– Switch on the tendency control

– PLU change (article change) if the tendency control parameters are activated.

– Re-activate same tendency control parameters. Therefore, a re-initialization becomes mandatory.

– Changing target weight ("Target weight")

– Changing control interval ("Control interval")

– Activating long-term regulation

If other parameters of the tendency control are changed, there will be no re-initialization. In these cases the tendency control continues with the changed parameters.

Re-initialization of long-term regulation

A change in the number of packages "Nmb. of packages long-term regul." re-initializes the long-term regulation.

9.6.2 Attribute of tendency control

The article-related attributes of the tendency control can be managed on page "Tendency control" of the article data management. [54]

Permanent tendency control parameters are set regardless the article. This includes parameter "Nmb. of packages long-term regul.". Call-up function:

➪ <Configuration> / <Device configuration> / <Automat> / <Tendency control> / <Fixed Tendency control param.>



The permanent tendency control parameters are not included in this documentation. For additional information, please contact Bizerba Service.

10 Processing

10.1 Entering production numbers

You can choose from the following production numbers:

– Shift number [▸ 58]
– Operator number [▸ 58]
– Batch number [▸ 58]
– Lot number [▸ 58]

10.1.1 Entering shift number

- Authorization level: 2

⇨ <Production data> / <Production numbers> / <Shift number>
⇨ Enter and confirm layer number.

10.1.2 Entering operator number

- Authorization level: 2

⇨ <Production data> / <Production numbers> / <Operator number>
⇨ Enter and confirm operator number.

10.1.3 Entering batch number

The value entered here is printed as the batch number on suitable customer labels.

- Authorization level: 2

⇨ <Production data> / <Production numbers> / <Batch number>
⇨ Enter and confirm batch numbers.

10.1.4 Entering lot number

You can allocate different articles to a lot (e. g. customer, container) via the lot number printed on the labels. This function allows you to set the value of the lot number.

- Authorization level: 2
- The following requirement applies when printing the lot number: No device number exists.

⇨ <Production data> / <Production numbers> / <Lot number>
⇨ Enter and confirm lot number.

11 Operation

11.1 Switching device on

Switch on the device at least 20 minutes before starting production. The scale needs this time to reach the its operating temperature. If production is started earlier, the precision of the weighing process might be affected.

When switching off device briefly, wait at least 10 seconds before switching it on again to make sure that the device had been switched off completely.

- The device has been installed properly and connected.
- The operating conditions are fulfilled.
- The weighing belt is empty.
- Devices with EMERG-STOP: The EMERG-STOP button is unlocked .

➪ Turn ON/OFF switch clockwise.
The main menu appears after a few seconds.
➪ Wait 20 minutes before starting production.

11.2 Switching the device off

from being switched on again

Frequent interruptions during which the device is switched off can affect the precision of the weighing process. Leave the device switched on during short production stops. Only switch off the device at production end.

➪ Press <Stop>.
➪ Turn on/off switch counterclockwise.

11.3 Operation of another device

- Devices with several lanes.

Each lane is internally managed like a separate device. Switch to another "device" to operate another "lane". Many functions apply to all lanes, e.g. <Start>, <Stop> or < >0< >.

➪ Tap the field containing the device ID on the top right of the screen.
An image of the system will be displayed. Each device has a softkey.
➪ Press the required softkey.
The relevant device will be marked by a point.



Fig. 19: "Device ID" and "Device name"

⇨ To establish connection tap <Connect>.

The selected device connection is active.

11.4 Calling up an article

The article must be saved with the necessary data under an article number in the system. Depending on the configuration of your device or database the article is called up in different ways:

– manually via article number [▷ 60]
– **Devices with touchscreen:** manually via quick keyboard [▷ 50]
– automatically via EDP or scanner

When calling up an article for which a teach process or a verification error limits test is required the relevant request appears automatically.

If you call up the article manually via the article number, if available, you may use the article text to search for the article if configured accordingly. [▷ 60]

11.4.1 Call up article via article number

- Authorization level: 2

⇨ <Article data> / <Article number> / <Article number>
⇨ Enter article number.
⇨ <OK>

The number of the article appears on the <Article number> softkey. The article is active.

11.4.2 Finding articles via article text

The article to be called up can be found via the article text.

- Authorization level: 2
- The article data table contains the "Article text" attribute.
- An article text is administered for each article.

⇨ <Article data> / <Article number>
⇨ Press <Article text>.

A list of al available article texts with the assigned article number and customer number, if available, occurs.

⇨ Enter one or several initial letters of the article text to be searched for.

The list shows the article texts with the entered initial letters.

⇨ Select and confirm the article text of the required article.
⇨ <OK>

The number of the article appears on the <Article number> softkey. The article is active.

11.5 Reading current article data

With this function the current article data can be viewed.

- Authorization level: 1

➪ <Article data> / <Read current article>

The article data management shows the currently effective article data.

11.6 Editing article data

With this function you can edit the data of the current article. The modifications are stored in the database.

- Authorization level: 3

➪ <Article data> / <Change current article>

➪ Edit article data.

➪ Save and close article data editor.

11.7 Zero Setting of Scale

The device automatically switches to "0" during switch-on and in regular time intervals. If the displayed weight is not equal to "0" although there is no package on the scale, it can be manually set to zero. Manual zero-setting is possible within a range of ±2 % of the max.weight.

Devices with several lanes: All scales are set to zero.

In automatic weighing instruments, a zero point adjustment of the scales is required after a specific period of time or number of packages. Then the device stops for a short period of time.

➪ Clear and clean weighing platform.

➪ Press < >0< >.

The weight display is set to "0".

11.8 Enter tare

Usually, the weight of the packaging of a PLU is saved as the tare value in the PLU data. With relevant configuration, call-up is done automatically with the article. This is where you can enter the tare weight for the current production. With proper database configuration you can additionally save your changes to the database.

- Authorization level: 4

➪ <Article data> / <Tare>

➪ Enter and confirm tare.

11.9 Establish and enter weight correction value

Due to the "Dragging principle" the conveyor belt or conveyor chain generates a force shunt. This force shunt has an impact on the measured package weight. The manual weight correction compensates this force shunt. The weight correction must be performed for each article.



Devices with several lanes: You must individually establish and enter the weight correction value for each article and for each lane. Only by doing so you will obtain best possible weighing results.

The weight correction value is saved in the database and loaded again if article is called up again. The weight correction values are part of a data backup.



For additional information, please contact Bizerba Service.

Measure static weight value

You can measure the static weight value with any scale which weighs precise enough. If you want to measure the static weight value using the checkweigher, you must remove the conveyor belt or conveyor chain.

⇨ Measure and write down static weight value.

Measure dynamic weight value with checkweigher

⇨ Use statically weighed package to weigh it dynamically several times. Write down weight values.

⇨ Establish weight difference between static weight and mean value from dynamic weighings.

Example:

– Static weight value: 100 g

– Mean value from dynamic weighings: 102.5 g

⇒ Weight correction value: -2.5 g

Enter weight correction value for current article

- Authorization level: 4

⇨ <Article data> / <ETC> / <Weight correction current article>

⇨ Devices with several lanes: <Scope>

Possible settings:



"Current device": Entry only applies to the lane currently operated.



"Line": Entry applies to all lanes of the device.



"Table": Entry is done in a table for the individual lanes of the device.

⇨ Devices with several lanes: Select and confirm scope.

⇨ Enter value and confirm input.

or

⇨ Devices with multiple lanes, scope "Table": Enter value per lane and confirm input.

Check weight correction value

➪ Use statically weighed package to weigh it dynamically several times.

The dynamic weight value must equal the static weight value.

11.10 Start and stop device

- The device is configured according to the production environment.
- The article data are complete.
- The device has been switched on for at least 20 minutes.
- The scale has been set to zero.

Starting the device

➪ Press <Start>.

The conveyor belts start.

Device carries out an initialization. Message on operating device: "Initialization will be started, do not feed packages".

If no weight correction value was saved for the current article, the following message appears: "Attention: weight correction not yet performed for this article.". Establish weight correction value. [▷ 61]

If no packages are fed to the device for a specific period of time, the conveyor belts stop automatically. As soon as packages are fed again, the conveyor belts start automatically.

Stopping device

➪ Press <Stop>.

11.11 Triggering of totals

The different totals can be displayed, printed or sent to the EDP system when the total preselection is reached or when the end of order, batch or shift is reached. The procedure is described based on an example with Total 1. Printing of the following totals takes place in the same manner:

– Total 2
– Total 3
– Article total
– Product group total
– Daily total
– Tare total

Print total 1

- Authorization level: 2

➪ <Production data> / <Release total> / <Total 1>

➪ Acknowledge release of the total by pressing the <Enter> key.

To release the product group total you also have to enter and confirm the product group number.

Once the daily total has been released, all totals are deleted. Via a query you decide whether the totals are deleted immediately or with the next package.

11.12 Initiating statistics reports manually

Usually, statistics reports are automatically initiated according to a defined initiation criteria. Depending on the configuration, they are transmitted to a printer, a storage medium or the EDP.

The following functions are used to initiate the statistics reports manually:

<Report main stat.>:	Initiate and delete the main statistics report.
<Report marg. stat.>:	Initiate and delete the marginal statistics report.
<Report free stat.1>:	Initiate and delete the report on free statistics 1.
<Report free stat.2>:	Initiate and delete the report on free statistics 2.

After initiating, statistics data are deleted.

- Authorization level: 2

⇨ <Production data> / <Activate stat. report>

⇨ Press softkey of required report.

The statistics are initiated and deleted.

Only after successful initialization, the report is deleted and the device can continue operation.

12 Troubleshooting

If you cannot correct an error by yourself, you should contact the Bizerba service. When contacting the Bizerba service, please, provide the following information:

– Device type (see identification plate)
– Device number (see identification plate)
– Software version
– Fault description

This will make service so much easier.

12.1 Maximum fail safety (Fail Safe, Option)

To ensure maximum fail safety, the device can be fitted with optional control functions:

– Rejection controls at all rejection systems
– Container fill level check for collecting bin
– Package flow control
– Compressed air monitoring

For maximum fail safety activate settings "Disable package reset" and "Ack. errors using password" .

With relevant configuration the following lock messages can only be acknowledged with a password:

– "No air pressure"
– "Bin door open"
– "Error ejecting system"
– "Ejecting system blocked"
– "Container full"
– "Package flow monitoring: Unexpected package!"
– "Package flow monitoring: Package missing!"
– "The package to be rejected has already passed the divider."
– "Emerg.stop"
– "Zero point correction: Clear labeler from product and set to zero"
– "Audit check failed"
– "Audit check time out!"

12.2 Troubleshooting through Reset

A lot of product disturbances can be resolved by executing a reset.

12.2.1 Executing a package reset

With a package reset you delete all current package data and all interface dialogs started.

- The automatic machine has stopped.
- Package reset not locked.

➪ Empty the conveyor belts of the device.

Devices with touch screen

➪  Show second key bank.

➪ Press <Shift>, <ALT> and <R> at the same time.

12.3 Emergency conveyor function

If the electronic control components fail, the device can be set to emergency conveyor function. During emergency function the conveyor belts are switched on and production can be continued without checkweighing.

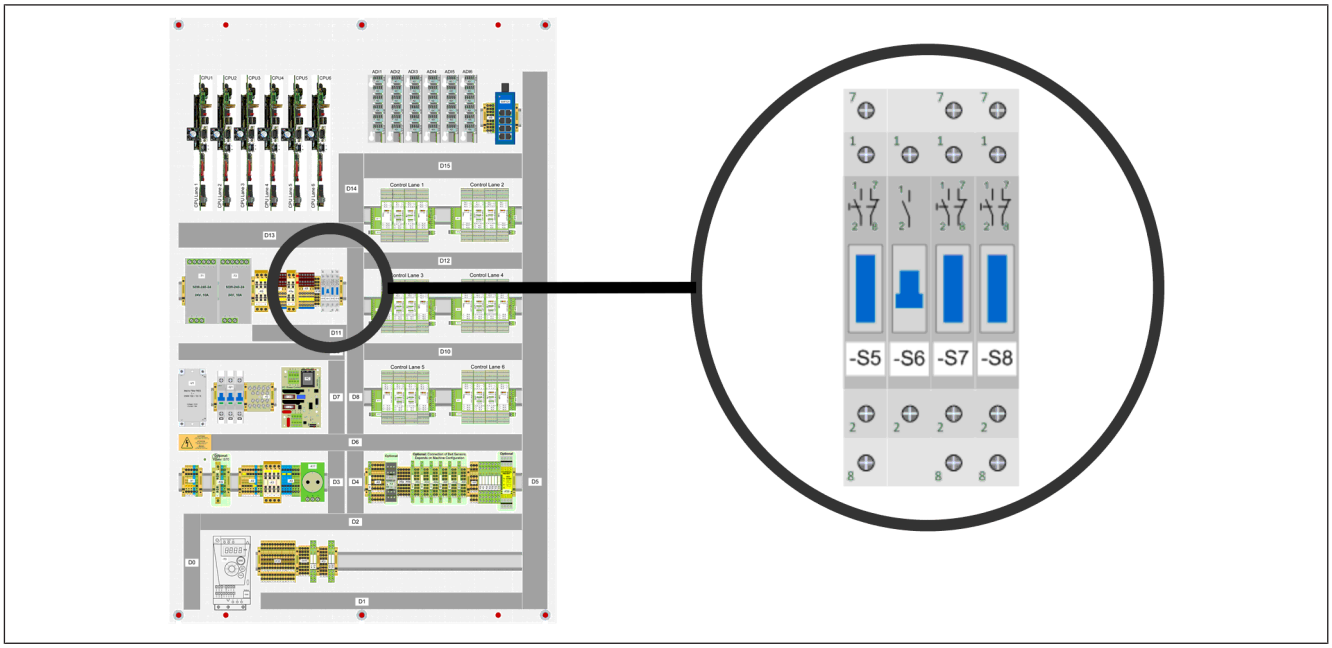


Fig. 20: Emergency conveyor in control cabinet

"S5" Acknowledging messages

"S6" Switch emergency function on and off

"S7" Increase speed of conveyor belts

"S8" Reduce speed of conveyor belts

12.3.1 Switch on emergency conveyor function



During emergency conveyor function it is not possible to operate the display and operating unit. The protection and safety units stay in function.

- Both power packs and the frequency converter are functional.

➪ Switch off device at on/off switch.



⚠ DANGER

Electrical voltage in the switch cabinet!
Danger to life from electric shock.
– Any work in the control cabinet must be carried out by qualified personnel or Bizerba service technicians only.

➪ Open control cabinet. Use the special switch cabinet key.
➪ In order to activate emergency conveyor function switch "S6".
➪ Switch on device at on/off switch.
The emergency conveyor function starts. The conveyor belts start running.
➪ To acknowledge malfunctions press "S5".
Messages can be acknowledged from the following controlling units:
– EMERGENCY STOP pushbutton
– Front plate
➪ If needed, change conveyor speed with "S7" or "S8".
According to the preset, the conveyor belts run with the speed set last.

NOTICE

Humidity getting into the switch cabinet!
Failure of electronical components through humidity.
– Close and lock the switch cabinet.

➪ Close and lock the switch cabinet.

12.3.2 Return to standard mode

- The device has been repaired.
- The emergency conveyor function is switched on.

➪ Switch off device at on/off switch.



⚠ DANGER

Electrical voltage in the switch cabinet!
Danger to life from electric shock.
– Any work in the control cabinet must be carried out by qualified personnel or Bizerba service technicians only.

➪ Open control cabinet.
➪ Reset "S6".
The emergency conveyor function is switched off.

	NOTICE
	Humidity getting into the switch cabinet! **Failure of electronical components through humidity.** – Close and lock the switch cabinet.

⇨ Close and lock the switch cabinet.

⇨ Switch on device at on/off switch.

The device is ready for production mode.

12.4 Messages



For a description of the messages, see the Instruction manual.

12.4.1 Acknowledging messages

The following softkeys are displayed on the device together with the error messages:

<Cancel>:	Close display. Processing remains locked (lock).
<Accept>:	Close display and approve processing (end lock).
<Accept all>:	All error messages whose causes can be eliminated by means of a package reset, disappear. The device executes a package reset. Empty the conveyor belts of the device.
<Close window>:	Close display. Processing remains locked (lock).
<Next message>:	Call the next error message.
<Details [ETC]>:	Call up information on the error message.
<Solve problem [ETC]>:	Have suggestions as to how to solve the problem displayed.
<Error list>:	Call up error list.

12.4.2 Redisplaying lock messages

Lock messages are messages that lock the processing. The following symbol marks lock messages: . If a lock has been set you can have the lock message being displayed.

⇨ Press <Clear>.

12.5 Air processing for switch cabinet

The air dryer works with a permeable membrane. The correct settings for the compressed air supplied and the counter-pressure at the choke are important for the optimum function.

Malfunction	Cause	Elimination
Condenser water in switch cabinet.	The air is too humid. The choke is closed too much.	Open choke.
Condenser water in switch cabinet.	The air quantity of dry air is too low. The choke is closed too much.	Open choke.
Condenser water in switch cabinet.	The pressure ofdry air in switch cabinet is too low. The switch cabinet is not completely flooded. The pressure reducer is closed too much.	Open pressure reducer of air dryer more. Position 3 in pneumatic plan.
Condenser water in switch cabinet.	The cartouche of the air dryer has been consumed.	Check color of indicator of dew-point. Replace dryer cartouche.
After closing the switch cabinet the side walls deform. Crack noises can be heard.	The pressure inside the switch cabinet is too high. The extract air pipe is blocked or is being squeezed or the air pressure set at the pressure reducer is too high.	Check extract air pipe. Check air pressure at pressure reducer of air dryer. Position 3 in pneumatic plan.

13 Maintenance

13.1 General

Only if maintenance and service are run regularly the device and its functions are secure. It is absolutely important that the maintenance cycles are maintained. The cleaning and maintenance plans enable an overview of all cleaning measures and planable maintenance activities.

If any questions or problems with cleaning and/or maintenance work arise, please contact the Bizerba service.

13.2 Safety measures

Maintenance works require knowledge of machine and safety technology as well as mechanics and/or electronics. Therefore, the maintenance works must only be carried out be authorized and specialized personnel. This applies especially for all electrical works.



Switch off On/Off switch and pull power plug before carrying out any cleaning and maintenance work. Switch off compressed air supply.



⚠ DANGER

Electrical voltage in the control cabinet although the main switch is switched off!

Danger to life from electric shock.

- Prior to any work in the switch cabinet, unplug the mains switch.
- Work in the switch cabinet may only be carried out by qualified personnel or Bizerba service technicians.



⚠ WARNING

Automatically starting components!

During automatic operation, components can switch on and off automatically. Risk of severe injuries and damage to property.

- Wear tight-fitting clothing and hairnet.
- Do not wear necklaces, ties etc.
- Keep fingers and hands away from moving parts.
- Prior to any cleaning and maintenance work, switch off device.
- Devices with EMERG-STOP: Press EMERGENCY STOP button.



⚠ WARNING

Risk of entanglement by rotating parts!

During automatic operation there is a risk of entanglement in the conveyor belt area. Risk of severe injuries and damage to property.

– Wear tight-fitting clothing and hairnet.
– Do not wear necklaces, ties etc.
– Keep fingers and hands away from movable parts.



⚠ CAUTION

Sharp-edged sides of conveyor belt!

Risk of cutting injuries from the edges of the conveyor belt.

– Wear protective gloves when working at the conveyor belt.
– Never touch the conveyor belt if it is switched on.

NOTICE

Objects on conveyor belts!

Possible damage to property due to objects on conveyor belt.

– Do not place any objects on conveyor belts. Do not use conveyor belts for storage.

13.3 Cleaning

13.3.1 Cleaning information for conveying belts of the conveyor belts

These cleaning instructions apply to the conveying belts. The platforms over which the conveying belts slide, remain on the device during cleaning.

For the conveyor belts use the cleaning and disinfectants as per cleaning plan.

– Please ensure that there is sufficient ventilation and comply with the fire-protection precautions.
– Clean conveyor belts on a regular basis using permissible cleaning agents according to cleaning recommendations of manufacturer.
– After disassembly, carefully clean conveyor belts using a brush, sponge or cloth depending on soiling. Do not use a high-pressure cleaner.
– Do not immerse conveyor belts in cleaning agent. Clean soiled surface using solvent-friendly cloth.
– After cleaning disinfect conveyor belts.
– Let conveyor belts dry thoroughly.

  The easiest way is to alternately use two conveyor belts. With this method, one conveyor belt can dry while the second belt is mounted.

– Before reinstalling check if conveyor belts are damaged (e. g. cracks, grooves). Replace if necessary.

13.3.2 Cleaning plan

Bizerba recommends to clean the device as follows if used in 3-shift operation:

Alcalic cleaning: Every day, excl. Wednesday

Acid cleaning: Wednesday

Work steps	Cleaning agents	Procedure	Cleaning devices	Notes
Preparatory measures		Switch off machine. Remove the AC power plug. Cover the display and operating unit.		
Disassemble all removable parts		according to instruction manual		
Rough cleaning		Remove product residues	Water jet, brush	Start immediately after production has finished, if necessary, begin with the dismantled parts
Cleaning	1% P3-steril Application time is approx. 15 min.	After thorough prerinsing with water	Manual sprayer	all disassembled and permanent parts of machine * see comment
Foam cleaning (alternative to cleaning)	TOPAZ LD1	Foam without pressure	Manual sprayer	Wear protective glasses with side protection * see comment
Acid cleaning Additional measure	squirt some Renolit Surf in the pail application time is max. 15 min.	Manually, mechanically	Brush for removing lime residue	only if required for lime residue rinse immediately after cleaning
Acid foam cleaning (alternative to acid cleaning) Additional measure	TOPAZ AC5	Foam without pressure	Manual sprayer	Wear protective glasses with side protection * see comment
Rinse		Rinse with drinking water	Water hose, manual sprayer	Machine and removed parts Water pressure < 6 bar
Checking		Visually check for optical cleanliness		
Drying		Blow off device with compressed air. Thoroughly air-jet the area on and under the weighing platform and at the overload stops.		Leave removed parts apart from one another to allow drying

Work steps	Cleaning agents	Procedure	Cleaning devices	Notes
Disinfection Additional measure	Use P3-alcodes in concentrated form Application time according to product data sheet	spray	Manual sprayer	* see comment Add. safety: distance to surface when spraying, 0.30 m
Care Additional measure	Bizerba machine oil Synthetic lubricant after foam cleaning	apply	Disposable cloth	Rinse device parts that get in contact with the product before starting
Mounting		In the opposite order to dismantling parts		Personnel must have clean and disinfected hands.
Precautionary measures	Cover machine when surroundings are cleaned with spray and/or pressurized water			

☞ In order to achieve correct weight values, a dry conveying unit before starting production is important. Humid platforms, conveyor belts or scale modify the measured weight value!

Thoroughly air-jet the entire conveying unit after cleaning with compressed air:

- Conveyor belts
- Platforms
- Overload blocks and load cells under weighing platform

☞ * Comment: Appropriate precautionary measures have to be taken to ensure that no damage is done to the environment!

☞ All warranty claims lapse if the cleaning agents approved by the manufacturer are not used.

☞ The safety sheets and product sheets supplied with the cleaning and disinfectants must be read.

https://safetydata.ecolab.eu/

☞ Depending on the product, there could still be a risk from viruses and bacteria which cannot be completely eliminated despite regular cleaning.

Cleaning agents

The following cleaning agents can be acquired from the Bizerba customer service:

Designation	Order no.	Packaging unit
P3-steril	50003250000	5 liters

Designation	Order no.	Packaging unit
TOPAZ LD1	94008908090	5 liters
Renolit Surf	94008963000	1 liters
TOPAZ AC5	94008908091	5 liters
P3-alcodes	50003260000	5 liters
Machine oil	94008900022	400 ml
Synthetic grease	94008908075	25 ml

13.3.3 Stainless steel surfaces

Devices made of stainless steel are extremely weather resistant and therefore suitable for most environmental conditions. However, stainless steel can corrode as well (rust). If rust appears on the surface, this is surface rust and does not come from the material itself. This rust is a result e.g. of contact corrosion for example.

Maintenance information for stainless steel

Bizerba only uses high-quality stainless steels. To avoid the formation of rust on high-quality steel parts the device should not be treated to substances containing chloride (e. g. cleaning agents or disinfectants) and should not be exposed to a chloride atmosphere. If this cannot be avoided, rub the steel parts with cleaning oil immediately. This is absolutely necessary to prevent rust formation.

Cleaning oil: e.g. Bizerba machine oil (order no. 94008900022). The cleaning oil complies with the German Food and Commodities Act (LBMG, §5, para. 1, sentence 1), fulfils the requirements of the "guidelines of sec. 21 CFR 178.3570 of FDA regulations" and has an H1 approval according to USDA.

Cleaning agents for stainless steel surfaces

- Any stainless steel cleaner is permitted. Make sure to read the instructions for use before using the device.
- Halogen-free (i.e. without chloride and fluoride ions), hydrochloric and hydrofluoric acid-free cleaning agents are also permitted.
- Completely remove cleaning agent after cleaning.

Type of stain	Cleaning agent to use
Lime-scale	Acidic cleaners, e. g. phosphoric acid, nitric acid. Wear protective gloves.
Surface rust	Acidic cleaners, e. g. phosphoric acid, nitric acid. Wear protective gloves.
Grease and oil stains	Alkaline cleaners. Wear protective gloves.
Spray paint	Solvent cleaner or organic solvent,e.g. turpentine, nitro dilution. Observe accident prevention.

Type of stain	Cleaning agent to use
Lime-scale or sprays of cement mortar	Rubber scrapers, wooden spatulas. No metal scrapers or knives.

Do not use the following cleaning agents:

- Materials and agents made of unalloyed steel
- Nonwoven fabrics containing abrasives
- Cleaning agents that contain salt or hydrofluoric acid
- Chrome-, silver-, and brass cleaning agents

13.3.4 Prepare cleaning

In order to remove the conveyor belt ①, deflector ② and guide roller ④ need to be dismantled.

① Conveyor belt

② Deflector

③ Motor

④ Guide roller

⑤ Locking unit of guide roller

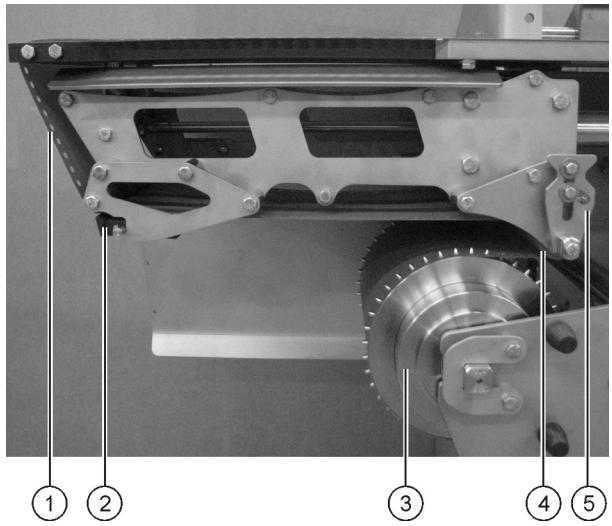


Fig. 21: Retraction unit

- The production has ended.

➪ Switch off device: Turn ON/OFF switch counterclockwise.

Protect display and operating unit

➪ Position the splash guard in front of display and operating unit.

Dismantle conveying belt

➪ Remove hood above conveyor belts.

➪ Turn tommy screw at the front plate anti-clockwise and remove front plate.

➪ Remove deflector from retaining unit.

- ➪ Pull up locking unit ② of guide roller ① and turn it.
- ➪ Pull shaft ③ out of guide roller.

  The guide roller falls out of the retaining unit.
- ➪ Take out guide roller.
- ➪ Carefully unthread conveying belt and take it out of device.

The device is ready for cleaning.

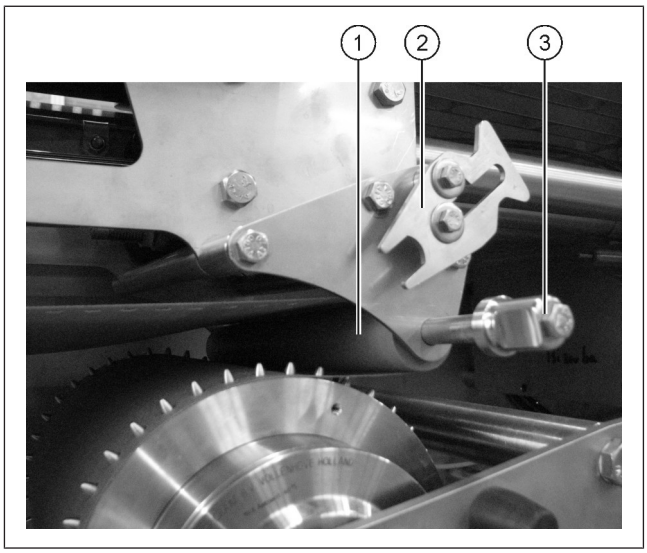


Fig. 22: Remove guide roller

13.3.5 Clean and disinfect device

For cleaning we recommend the low- pressure foam systems (≤ 25 bar). Low pressure also prevents the occurrence of aerosols and thus prevents recontamination of cleaned surfaces.

NOTICE

Humidity getting into the device!

Failure of electronical components through humidity.

– Close and lock the switch cabinet.

– Before cleaning, fold the splash guard in front of the display and operating unit.

NOTICE

Material damages caused through cleaning agents!

Wrong cleaning agents and agents with a high concentration cause damages to the device.

– Use cleaning agents as per cleaning plan.

– Use concentration of cleaning agents as per cleaning plan.

NOTICE

Material damages caused through high-pressure cleaners!

Failure of electronic components through humidity and cleaning agents.

– Use high-pressure cleaners only with a max. pressure of 25 bar.

– Keep min. distance to device of 0.3 m.

Cleaning device

- ➪ Remove product residues with brush or water jet.
- ➪ Apply cleaning detergent as per cleaning schedule. Foam device, bottom of device and if necessary walls near the device **from bottom to top**.

  All surfaces - also from bottom - are completely foamed.
- ➪ Leave the cleaning agent on for some minutes. Keep contact time as per cleaning plan.

  NOTICE! Cleaning agents cause damage to the device if they stay on too long.

Rinse device with drinking water

- ➪ Then rinse cleaning agent **from top to the bottom** thoroughly with drinking water. Work systematically in one direction to make sure that cleaned areas are not soiled again.

  NOTICE! Cleaning agents cause damage to the device if they stay on too long.
- ➪ Rinse device thoroughly until no cleaning agent is visible.
- ➪ Check cleaning result. Clean again if necessary.
- ➪ Dry the device.

Disinfect device

- ➪ Apply disinfectant as per cleaning plan.
- ➪ Disinfect from top to bottom. Ensure complete wetting. Remember the undersides.

13.3.6 Drying device

In order to achieve correct weight values, a dry conveying unit before starting production is important. Humid platforms, conveyor belts or scale modify the measured weight value!

Thoroughly air-jet the entire conveying unit after cleaning with compressed air:

- Conveyor belts
- Platforms
- Overload blocks and load cells under weighing platform

- The device is cleaned and disinfected.

- ➪ Blow off device with compressed air.

13.3.7 Prepare device for production

Assembly is carried out in reverse order to disassembly.

The easiest way is to alternately use two conveyor belts. With this method, one conveyor belt can dry while the second belt is mounted.

- The platforms and the conveyor belts of the conveying unit are dry.

- ➪ Carefully thread the conveyor belt. If it gets stuck, do not pull.
- ➪ Insert conveyor belt into the gear of motor. To do so, move the guide roller to the retaining unit of the guide roller.
- ➪ Hold guide roller between the retaining units and insert shaft of guide roller through both retaining units and guide roller.

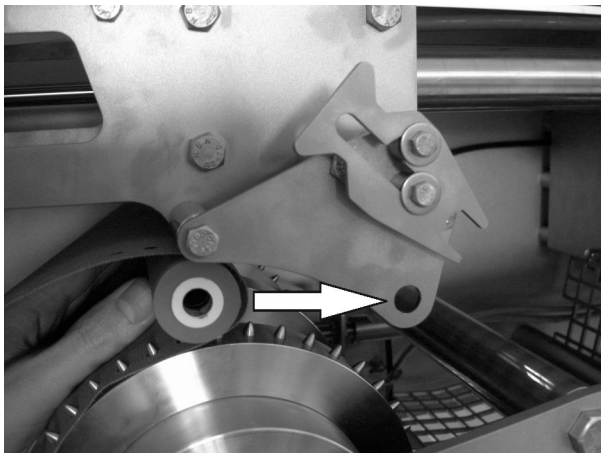


Fig. 23: Thread conveying belt

- ➪ Fold back locking unit ① on shaft ② of guide roller. If the locking unit of the guide roller does not engage, pull out shaft of guide roller and re-insert completely.

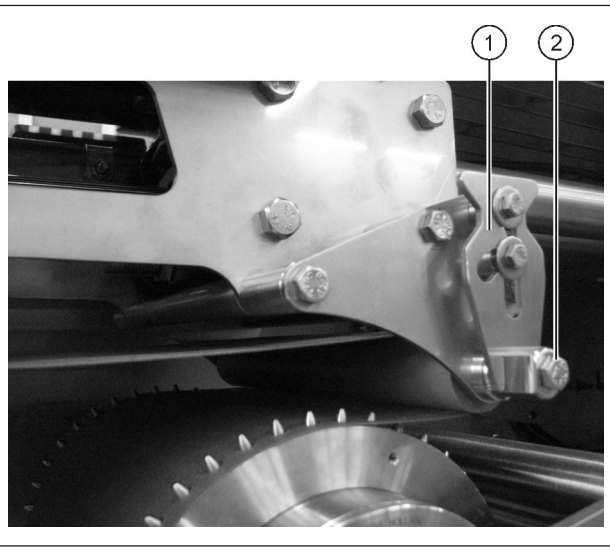


Fig. 24: Secure guide roller

- ➪ Suspend deflector. If it does not fit, turn deflector.

  The deflector can only be suspended in the right direction.
- ➪ Attach front plate and screw tight.
- ➪ Attach hood above conveying belts.
- ➪ Fold back the splash guard in front of display and operating unit.

The device can be switched on again.

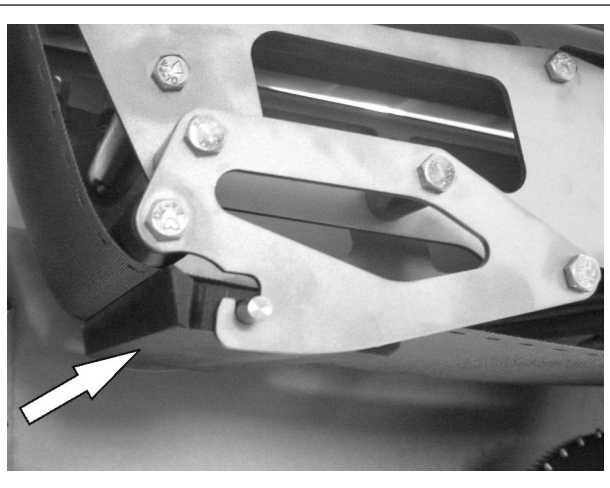


Fig. 25: Suspend deflector

14 Technical data

For complete technical data see the instruction manual.

14.1 Dimensions

The device is available in many different versions. The figures show an example.

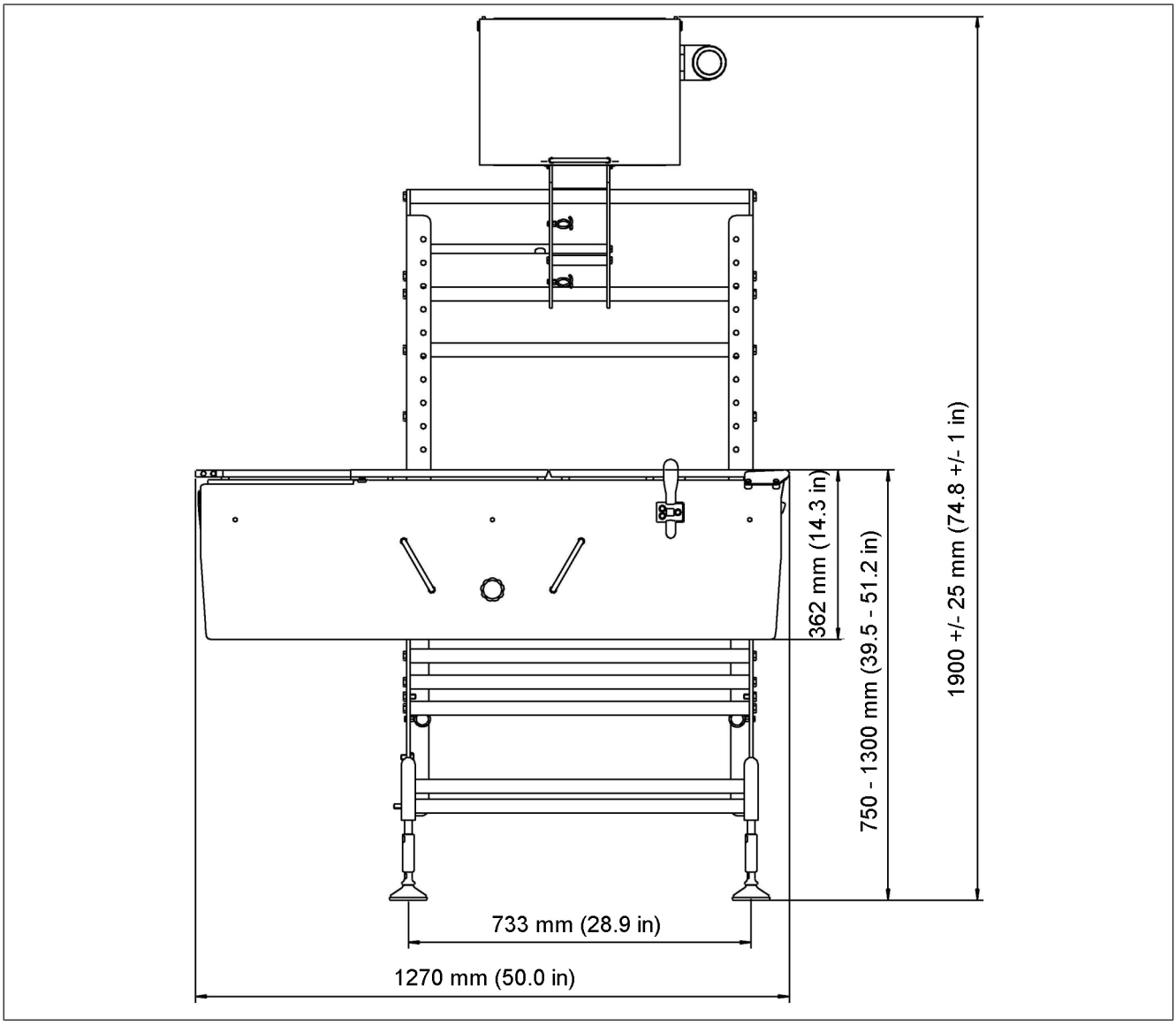


Fig. 26: Front view

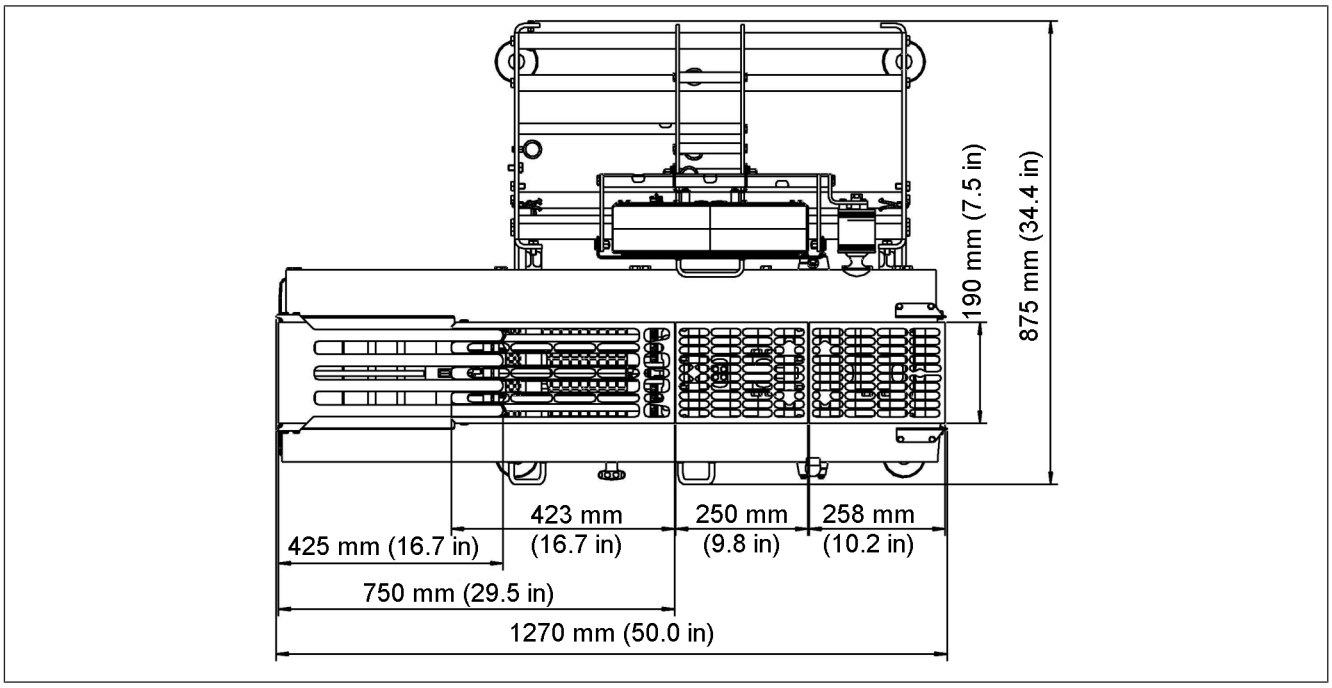


Fig. 27: Top view

14.2 Conveying unit

The conveying belt conveys the packages over three platforms.

	Dimension [mm (in)]
Width of conveyor belt	200 (7.9)
Width of platforms	190 (7.5)
Length of infeed platform	250 (9.8) / 400 (15.7)
Length of weighing platform	250 (9.8) / 400 (15.7)
Length of discharge platform	488 (19.2)
Length of retraction unit (option, replaces discharge platform)	750 (29.5)

14.3 Compressed air supply

Supply:	DIN/ISO 8573-1, class 3
Air pressure min.:	6 bar
Conditioning:	oil-free (filtered for devices without fine filter, 10 µm particle size)
Connector:	8 mm outer diameter, min. 5 mm inner diameter
Air consumption [m^3/h]:	1.5 - 3

14.4 Power supply

See type plate on the device.

Mains voltage:	3/N/PE 400 V, 50 Hz, 3.0 A 3/N/PE 208 V, 60 Hz, 5.0 A
Mains supply line:	Length approx. 2.5 m, connector must comply with country regulations

14.5 Ambient conditions

The device must only be installed and put into operation if the following operating conditions are met:

Ambient temperature:	0°C to +40°C
Relative humidity:	max. 90%, non-condensing

14.6 IP rating as per EN 60529

Conveying unit:	IP69
Control cabinet:	IP66
Motor:	IP65

14.7 Noise level according to Directive DIN EN 11202

Complete device:	< 80 dBA

14.8 Display and operating unit

GT-12C

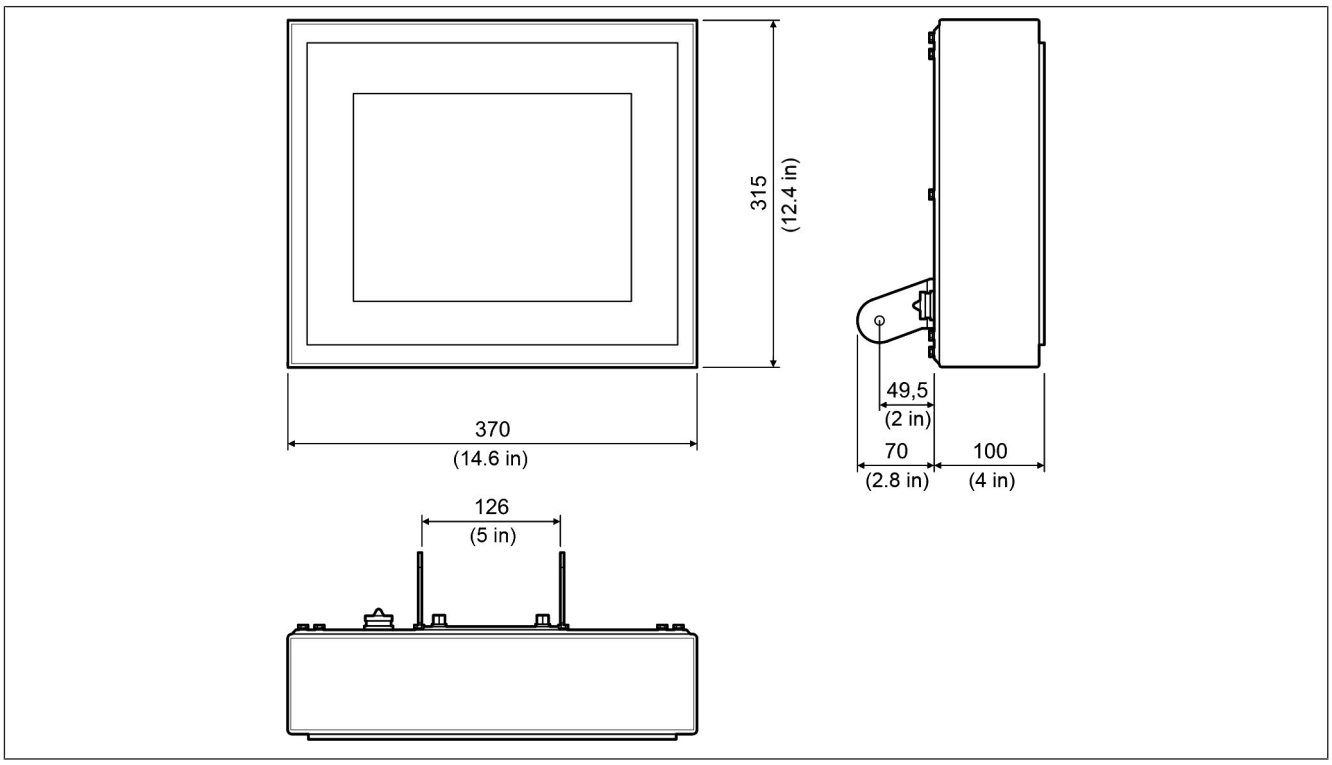


Fig. 28: Dimensions

Version:	TFT (SVGA) color display with touch screen
Screen size:	304 mm (12.1")
Resolution [px]:	800 x 600
Display size [mm]:	245 x 180
IP rating	IP65

Interfaces on GT-12C

EDP 1:	for software download, RS232, RS422, TTY.
Ethernet:	Connector: 10 base T, TCP/IP
2 x USB	

14.9 Scale data

The technical data depend on the scale installed and are displayed on the screen. Standard version:

Maximum load:	3 kg
Scale interval d:	1 g

14.10 Package dimensions

The minimum package height depends on the light barrier design at the conveyor belt.

	Length [mm]		Width [mm]		Height [mm]	
	min.	**max.**	**min.**	**max.**	**min.**	**max.**
Unpacked goods	30	150	30	170	10	80
Packed goods	30	150	30	200	10	80

14.11 Performance

Maximum performance of the device depends on weight, length, flat surface (swing effect) and regular feeding of packages.

Packages/min: max. 250
max. 120 with retraction unit
Devices with several lanes: This information is per lane.

15 Attachment

Bizerba SE & Co. KG
Wilhelm-Kraut-Straße 65
72336 Balingen, Germany

BIZERBA

CE

EU declaration of conformity

Device type:	Automatic checkweigher
Model:	CWPmaxx 3000
Manufacturer:	Bizerba SE & Co. KG, Wilhelm-Kraut-Str. 65, 72336 Balingen, Germany

This declaration of conformity is issued under the sole responsibility of the manufacturer.

The object of the declaration described above is in conformity with the relevant Union harmonization legislation:

Machines:	2006/42/EU; Official Journal of the EU issued on 6/9/2006 L157 pp. 24-86
EMC:	2014/30/EU; Official Journal of the EU issued on 3/29/2014 L96 pp. 79-106
RoHS:	2011/65/EU; Official Journal of the EU issued on 7/1/2011 L174 pp. 88-110

Applied relevant harmonized standards and technical specifications to which conformity is declared:

EMC:	EN 61000-6-2:2005 + CENELEC-Cor.:2005; EN 61000-6-4:2007 + A1:2011

Responsible for technical documentation: Bizerba SE & Co. KG, Balingen.

The basis for the declaration of conformity are the contract documents (Bizerba purchase order documents). Any modifications made to the above equipment without the prior permission of Bizerba will render this declaration invalid.

City: 72336 Balingen, Germany

Date: 9/17/2018

Signature of manufacturer:

p.p.

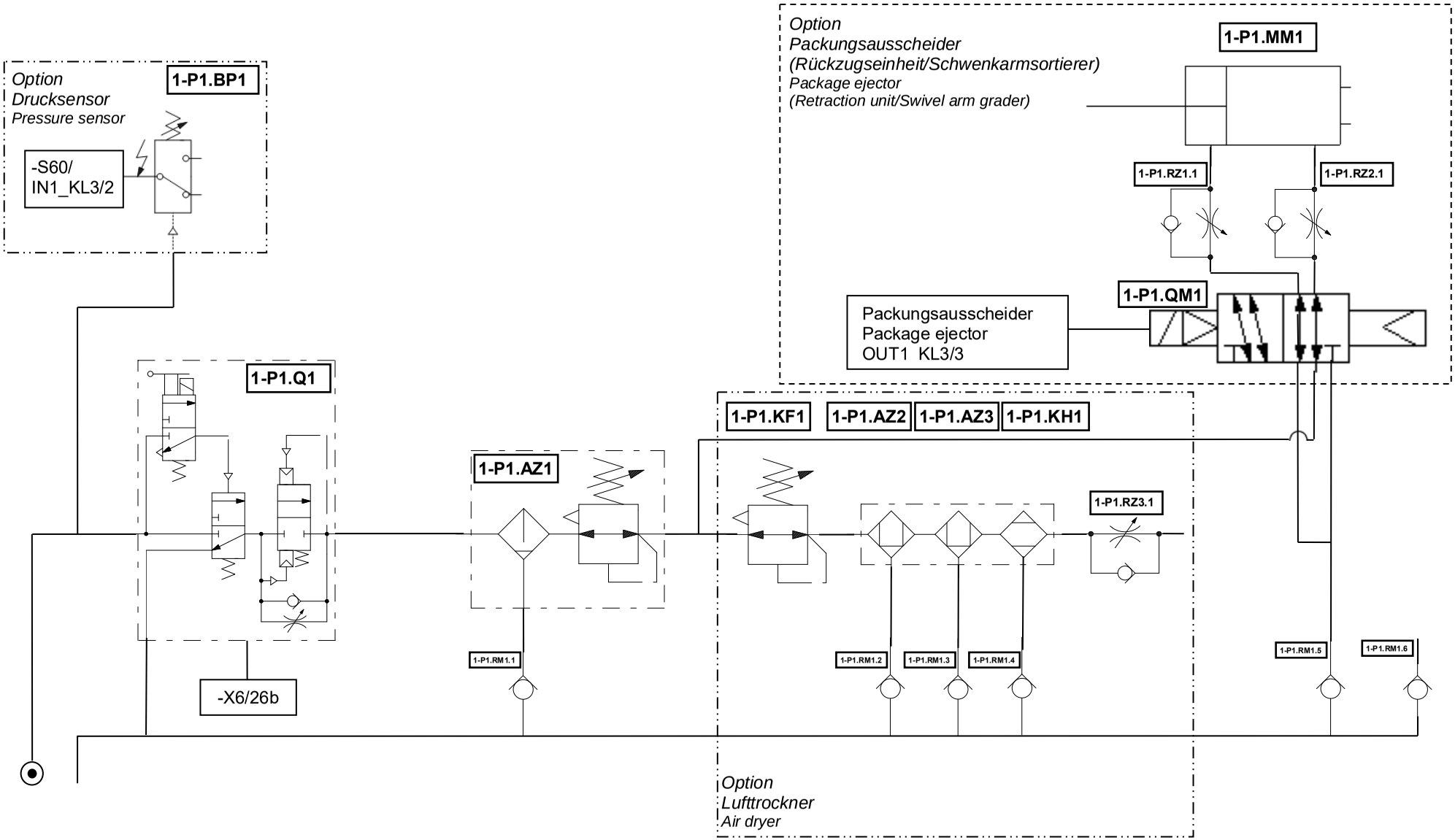
Title of signatory:
Thomas Schoen
Director Global Industry Products
Bizerba SE & Co. KG

15.2 Pneumatic plan

Also see about this

CWPmaxx pneumatic plan V3 [▷ 87]

CWPmaxx


Option
Drucksensor
Pressure sensor
1-P1.BP1
-S60/
IN1_KL3/2
Option
Packungsausscheider
(Rückzugseinheit/Schwenkarmsortierer)
Package ejector
(Retraction unit/Swivel arm grader)
1-P1.MM1
1-P1.RZ1.1
1-P1.RZ2.1
1-P1.QM1
Packungsausscheider
Package ejector
OUT1 KL3/3
1-P1.Q1
1-P1.AZ1
1-P1.KF1
1-P1.AZ2
1-P1.AZ3
1-P1.KH1
1-P1.RZ3.1
1-P1.RM1.1
1-P1.RM1.2
1-P1.RM1.3
1-P1.RM1.4
1-P1.RM1.5
1-P1.RM1.6
-X6/26b
Option
Lufttrockner
Air dryer

Pneumatikplan CWPmaxx

Pos.	Benennung	Hersteller	Typ	Hinweis
Basiskomponenten:				
1-P1.Q1	Softstartventil	SMC	EAV 2000 – F02 – 5YO – Q	sicherheitsrelevantes Bauteil, nur funktions- und typgleich tauschen, nach 3 Jahren Betriebsdauer tauschen
1-P1.AZ1	Filterregler	SMC	AW 20 – F02 – BCE	sicherheitsrelevantes Bauteil, nur funktions- und typgleich tauschen, nach 3 Jahren Betriebsdauer tauschen
1-P1.RM1.1…1.5	Rückschlagventil	SMC	AKH – 06 – 00	
Zusatzkomponenten bei Option Druckluftüberwachung:				
1-P1.BP1	Drucksensor	Festo	SDE5-D10-FP-Q6E-P-K	
Zusatzkomponenten bei Option Lufttrockner:				
1-P1.KF1	Regler	SMC	AR 20 – F02 – E1	
	Luftfiltereinheit	SMC	IDG 5H – 02 – P	
1-P1.AZ2	Mikrofilter	SMC	AFM 20 – 02C – C	
	Filterpatrone	SMC	AFM 20 P – 060 AS	nach zwei Jahren Betriebsdauer tauschen
1-P1.AZ3	Submikrofilter	SMC	AFD 20 – 02C – C	
	Filterpatrone	SMC	AFD 20 P – 060 AS	nach zwei Jahren Betriebsdauer tauschen
1-P1.KH1	Lufttrockner	SMC	IDG 5	
	Trocknerpatrone	SMC	IDG – EL5 H	nach zwei Jahren Betriebsdauer tauschen
	Taupunktindikator	SMC	IDG – DP01	nach zwei Jahren Betriebsdauer tauschen
1-P1.RZ3.1	In Line Drossel-/ Rückschlagventil	SMC	AS 2051 – F08	
1-P1.RM1.6	Rückschlagventil	SMC	AKH – 08 – 00	
Zusatzkomponenten bei Option Rückzugseinheit oder Schwenkarmsortierer:				
1-P1.QM1	5/2-Wege-Ventil	SMC	SY5120 – 5Y00 – C6F-Q	
1-P1.RZ1.1…2.1	In Line Drossel-/ Rückschlagventil	SMC	AS 2001 – F06	
1-P1.MM1	Zylinder	SMC	CDG 5E A25 TFSV – 250	

Pneumatic plan CWPmaxx

Pos.	Name	Manufacturer	Type	Note
Basic components:				
1-P1.Q1	Softstart-valve	SMC	EAV 2000 – F02 – 5YO – Q	safety-relevant component, swap only functionally identical and the same type, replace after 3 years of operation
1-P1.AZ1	Filter regulator	SMC	AW 20 – F02 – BCE	safety-relevant component, swap only functionally identical and the same type, replace after 3 years of operation
1-P1.RM1.1…1.5	Check valve	SMC	AKH – 06 – 00	
Additional components at option compressed air monitoring:				
1-P1.BP1	Pressure sensor	Festo	SDE5-D10-FP-Q6E-P-K	
Additional components at option air dryer:				
1-P1.KF1	Regulator	SMC	AR 20 – F02 – E1	
	Air filter unit	SMC	IDG 5H – 02 – P	
1-P1.AZ2	Microfilter	SMC	AFM 20 – 02C – C	
	Filter catridge	SMC	AFM 20 P – 060 AS	replace after 2 years of operation
1-P1.AZ3	Submicrofilter	SMC	AFD 20 – 02C – C	
	Filter catridge	SMC	AFD 20 P – 060 AS	replace after 2 years of operation
1-P1.KH1	Air dryer	SMC	IDG 5	
	Dryer catridge	SMC	IDG – EL5 H	replace after 2 years of operation
	Dew point indicator	SMC	IDG – DP01	replace after 2 years of operation
1-P1.RZ3.1	In line throttle-/check valve	SMC	AS 2051 – F08	
1-P1.RM1.6	Check valve	SMC	AKH – 08 – 00	
Additional components at option retraction unit or swivel-arm-grader:				
1-P1.QM1	5/2-way-valve	SMC	SY5120 – 5Y00 – C6F-Q	
1-P1.RZ1.1…2.1	In line throttle-/check valve	SMC	AS 2001 – F06	
1-P1.MM1	Cylinder	SMC	CDG 5E A25 TFSV – 250	