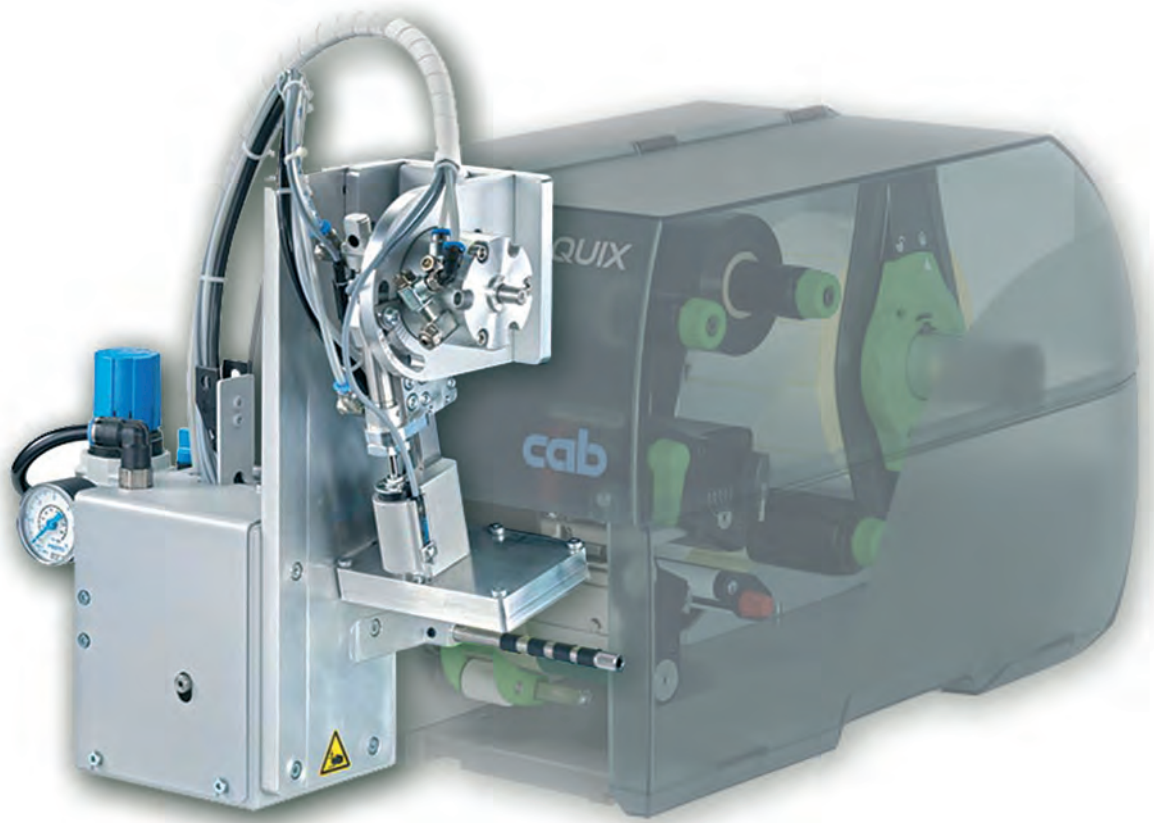


Operator's Manual



Applicator

S3200

Family
S3200

Edition: 04/2019 - Part No. 9003050

Copyright

This documentation as well as translation hereof are property of cab Produkttechnik GmbH and Co. KG.

The replication, conversion, duplication or divulgement of the whole manual or parts of it for other intentions than its original intended purpose demand the previous written authorization by cab.

Editor

Regarding questions or comments please contact cab Produkttechnik GmbH and Co. KG.

Topicality

Due to the constant further development of our products discrepancies between documentation and products can occur. Please check www.cab.de for the latest update.

Terms and conditions

Deliveries and performances are effected under the General conditions of sale of cab.

Germany
cab Produkttechnik GmbH & Co KG
Karlsruhe
Phone +49 721 6626 0
www.cab.de

USA
cab Technology, Inc.
Chelmsford, MA
Phone +1 978 250 8321
www.cab.de/us

Taiwan
cab Technology Co., Ltd.
Taipei
Phone +886 (02) 8227 3966
www.cab.de/tw

China
cab (Shanghai) Trading Co., Ltd.
Guangzhou
Phone +86 (020) 2831 7358
www.cab.de/cn

France
cab Technologies S.à.r.l.
Niedermodern
Phone +33 388 722501
www.cab.de/fr

Mexico
cab Technology, Inc.
Juárez
Phone +52 656 682 4301
www.cab.de/es

China
cab (Shanghai) Trading Co., Ltd.
Shanghai
Phone +86 (021) 6236 3161
www.cab.de/cn

South Africa
cab Technology (Pty) Ltd.
Randburg
Phone +27 11 886 3580
www.cab.de/za

1	Introduction	4
1.1	Instructions.....	4
1.2	Intended Use.....	4
1.3	Safety Instructions.....	4
1.4	Safety Markings	5
1.5	Environment.....	5
2	Product Description.....	6
2.1	Important Features.....	6
2.2	Technical Data.....	6
2.3	Device Overview	7
2.4	Contents of Delivery.....	8
2.5	Transportation Protection S3200.....	9
3	Configuration.....	10
4	Adjustments	12
4.1	Setting up the Labeling Position of the Pad	12
4.2	Sensors	13
4.3	Stopper for Mode"Blow-on"	15
5	Operation	16
5.1	Inserting Materials.....	16
5.2	Activating Peel-off Mode	16
5.3	Adjusting the Peel-off Position	16
5.4	Test Mode without a Print Job.....	17
5.5	Test Mode with a Print Job.....	17
5.6	Standard Operation.....	18
5.7	Cleaning.....	18
6	Error Messages	19
6.1	Error Messages of the Printer	19
6.2	Error Messages of the Applicator	19
7	External Control via the I/O Interface of the Printer.....	20
7.1	Pin Configuration	20
7.2	Circuit Diagram of Inputs and Outputs.....	22
8	Licences.....	23
8.1	Declaration of Incorporation	23
8.2	EU Declaration of Conformity.....	24

1.1 Instructions

Important information and instructions in this documentation are designated as follows:



Danger!

Draws attention to an exceptionally great, imminent danger to your health or life due to hazardous voltages.



Danger!

Draws attention to a danger with high risk which, if not avoided, may result in death or serious injury.



Warning!

Draws attention to a danger with medium risk which, if not avoided, may result in death or serious injury.



Caution!

Draws attention to a danger with low risk which, if not avoided, may result in minor or moderate injury.



Attention!

Draws attention to potential risks of property damage or loss of quality.



Note!

Advice to make work routine easier or on important steps to be carried out.



Environment!

Gives you tips on protecting the environment.



Handling instruction



Reference to section, position, illustration number or document.



Option (accessories, peripheral equipment, special fittings).

Time

Information in the display.

1.2 Intended Use

- The device is manufactured in accordance with the current technological status and the recognized safety rules. However, danger to life and limb of the user or third parties and/or damage to the device and other tangible assets can arise during use.
- The device may only be used for its intended purpose and if it is in perfect working order, and it must be used with regard to safety and dangers as stated in the operating manual.
- The device applicator mounted on a cab printer of the Hermes+ series is intended exclusively for applying suitable materials that have been approved by the manufacturer. Any other use or use going beyond this shall be regarded as improper use. The manufacturer/supplier shall not be liable for damage resulting from unauthorized use; the user shall bear the risk alone.
- Usage for the intended purpose also includes complying with the operating manual, including the manufacturer's maintenance recommendations and specifications.



Note!

The complete and current version of the documentation can be found in the Internet.

1.3 Safety Instructions



Attention!

Initiation, adjustments and changing of parts are to be performed by qualified service personnel only.



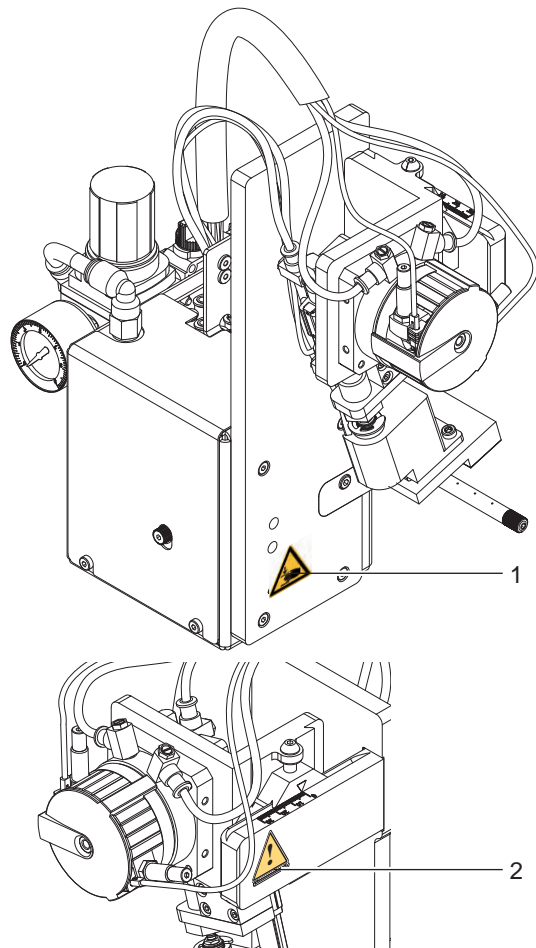
Warning!

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

- Before mounting the delivered components disconnect the printer from the power supply and close the shutoff valve of the applicator.
- Only connect the device to other devices which have a protective low voltage.
- Switch off all affected devices (computer, printer, accessories) before connecting or disconnecting.

- In operation, moving parts are easily accessible. This applies especially for the zone, where the pad is moved between the starting and the labelling position. During operation do not reach into that zone and keep long hair, loose clothes, and jewelry distant. Before any manipulations in those areas, close the shutoff valve.
- The device may only be used in a dry environment, do not expose it to moisture (sprays of water, mists, etc.).
- Do not use the device in an explosive atmosphere.
- Do not use the device close to high-voltage power lines.
- Perform only those actions described in this operating manual. Work going beyond this may only be performed by trained personnel or service technicians.
- Unauthorized interference with electronic modules or their software can cause malfunctions.
- Other unauthorized work on or modifications to the device can also endanger operational safety.
- Always have service work done in a qualified workshop, where the personnel have the technical knowledge and tools required to do the necessary work.
- There are various warning stickers on the device. They draw your attention to dangers. Warning stickers must therefore not be removed, as then you and other people cannot be aware of dangers and may be injured.

1.4 Safety Markings



Danger of injury to hands and fingers by the moving pad!



The cylinder is under pressure even if the printer is switched off. Possibility of residual energy!



Attention!

Never remove, cover or otherwise make illegible the safety markings on the printer and/or applicator.

Replace if damaged.

Fig. 1 Safety Markings

1.5 Environment



Obsolete devices contain valuable recyclable materials that should be sent for recycling.

- ▶ Send to suitable collection points, separately from residual waste.

The modular construction of the applicator enables it to be easily disassembled into its component parts.

- ▶ Send the parts for recycling.

2.1 Important Features

- The supporting air and the vacuum as well as the speed of the cylinder are adjustable. That way the applicator can be adapted to different label materials and sizes.
- To avoid contamination within the vacuum channels they are cleaned by air pressure pulses at the end of each application.
- For operation within a system the I/O interface of the printer can be used.

2.2 Technical Data

Applicator		S3200
Rotary cylinder		45° - 95°
Stroke cylinder	up to mm	30
Compressed air	bar	4.5

Tamp pads or blow pads are manufactured according to the label size.

	Tamp pad		Blow pad	
	A3200-1100	M3200-1100	A3200-2100	M3200-2100
Material guide	Left aligned	Centered	Left aligned	Centered
Tamp surface W x H min. mm	72 x 60		72 x 60	
Label width mm	20 - 116		20 - 116	
Label height mm	5 - 80		10 - 80	
Product surface	Flat			
Product during labeling	Not moving		Not moving or in motion	

Table 1 Technical data

2.3 Device Overview

Front view

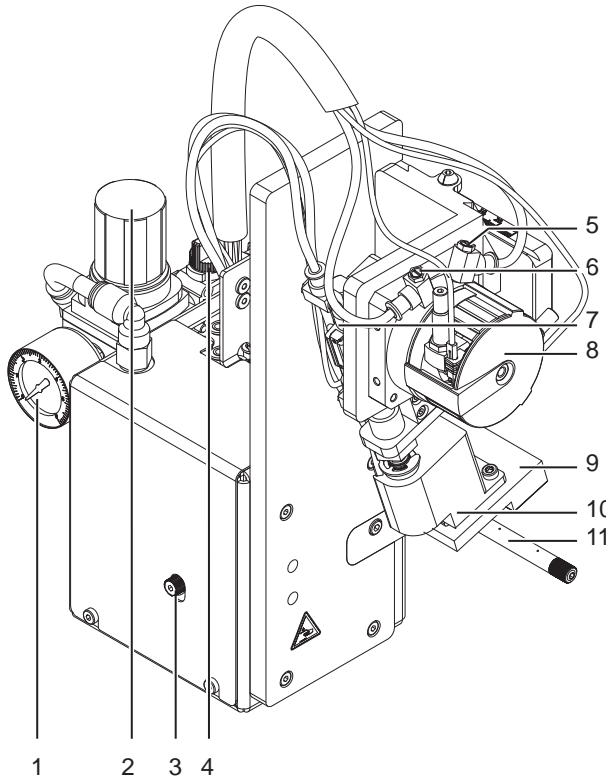


Fig. 2 Device overview - front view

- 1 Manometer on the compressed air maintenance unit
- 2 Setting valve on the compressed air maintenance unit
- 3 Knurled screw for mounting the applicator to the printer
- 4 Compressed air valve
- 5 Throttle valve turning cylinder inward motion
- 6 Throttle valve turning cylinder outward motion
- 7 Lifting cylinder
- 8 Turning cylinder
- 9 Pad - client specified
- 10 Pad holder
- 11 Blowtube for supporting air

Rear view

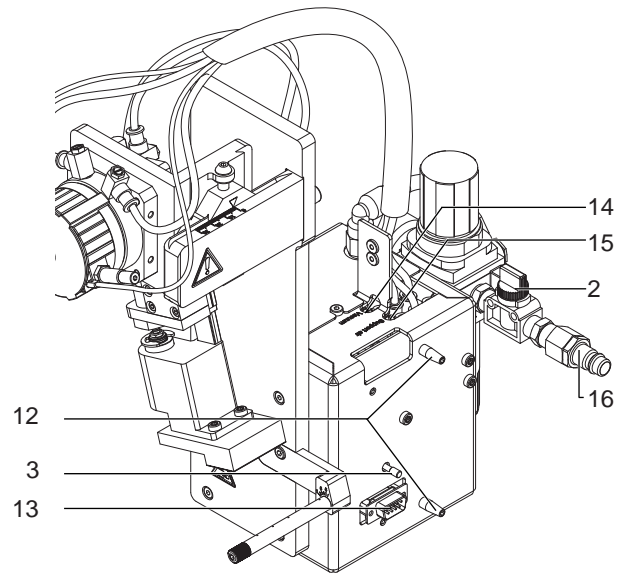
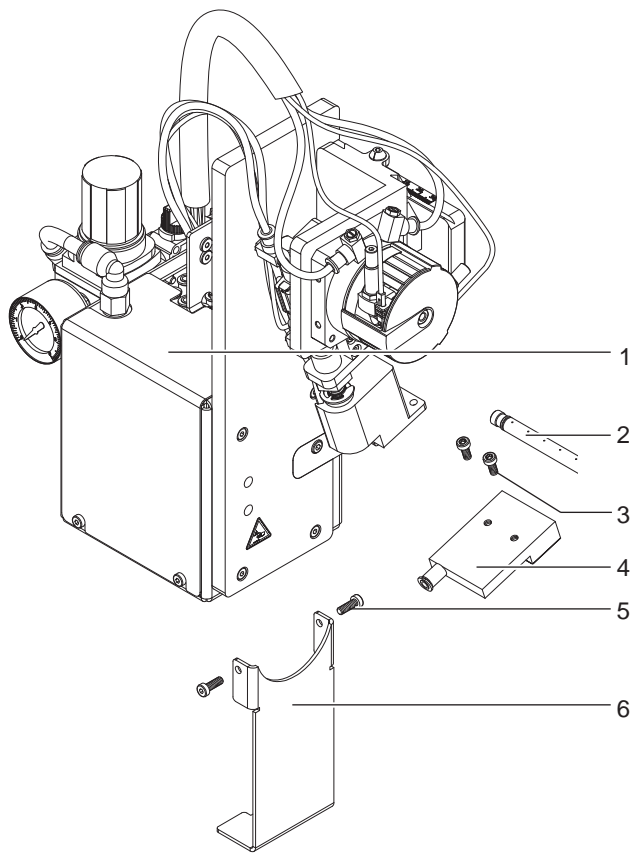


Fig. 3 Device overview rear view

- 12 Alignment pins
- 13 SUB-D 9 connection to the printer
- 14 Throttle valve vacuum
- 15 Throttle valve supporting air
- 16 compressed air connection

2.4 Contents of Delivery



- 1 Applicator
- 2 Blowtube (as ordered)
- 3 Cylinder screws
(within the scope of the delivery)
- 4 Pad (as ordered)
- 5 Cylinder screws for fastening the transport
safety
- 6 Transport safety
- 7 Documentation

Fig. 4 Contents of delivery

**Note!**

Keep the original packaging for future transport or incase the unit needs to be returned.

**Attention!**

The device and printing materials will be damaged by moisture and wetness.

► Set up label printer with applicator only in dry locations protected from moisture and splashes.

2.5 Transportation Protection S3200

The transportation protection of the applicator S3200 fixes the movable parts in place to avoid potential harm to any persons and damage to the system and its surroundings.

**Warning!**

Before mounting, dismounting, servicing or adjusting disconnect the printer and applicator from any power and compressed air source to prevent any harm or damage by uncontrolled movement of parts of the applicator.

**Warning!**

Potential harm and damage to and from the applicator by improper use! The applicator may only be used if it is set up in a secure stable position connected to a SQUIX Series printer.

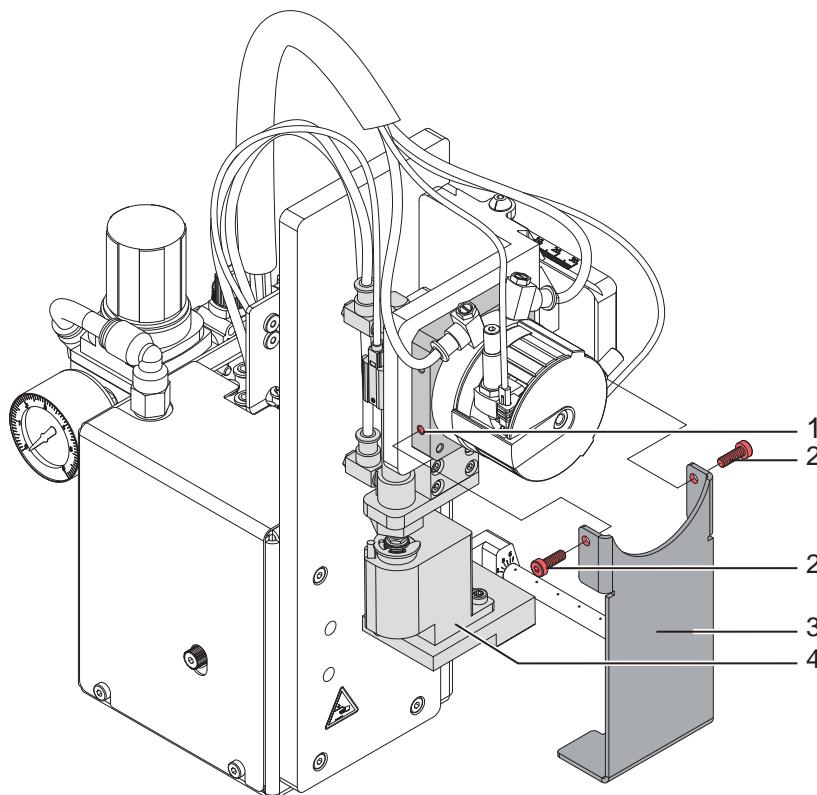


Fig. 5 Transportation protection

Removing the transportation protection

1. Loosen screw (2) from the transportation protection.
2. Remove the transportation protection (3).

**Attention!**

If the device needs to be transported always apply the transportation protection.
Store the transportation protection and screws while the device is not being moved.

Implementing the transportation protection

- 3 Move the pivot arm (4) so that the pad retainer fits into gap of the transportation protection (3). This is almost vertically downward.
- 4 Place the transportation protection (3) so that the holes of the transportation protection (3) are over the threaded hole (1) on both sides of the turning cylinder socket.
- 5 Insert and fasten screw (2).

The applicator can be set up to use different a modes and different settings within these modes. The most important choice is the selection of the mode: "Stamp on", "roll on" or "blow on". Additionally the device can use different sequences within a labeling cycle in each mode.

	Stamp on	Roll on	Blow on
Print/Apply	x	x	x
Apply/print Waiting position top	x	x	x
Apply/pring Waiting position bottom	-	-	x

Table 2 Application modes

The application modes can be further adjusted by setting up the delay times of various elements.



Note!

For further information on the printer configuration and functionality of the operation buttons see ▷ "Configuration Manual" and/or the ▷ "Operators Manual" of the printer

Method for changing the Configuration

1. Push the **menu** button.
2. Menu selection



Setup >



Labeling >

3. Set the desired parameters.
4. Return to the status "ready."












Parameter	Meaning	Default
 <i>Transfer mode</i>	Selecting the operation mode <i>Stamp on, Roll on, Blow on</i>	<i>Stamp on</i>
 <i>Cycle sequence</i>	Setting the application mode <i>Print-Apply / Apply-Print</i> <i>Print-Apply:</i> An external start signal causes the printing of a label and its application. After the cycle is complete, the pad waits in the start position without a label. <i>Apply-Print:</i> An extra signal causes the first label to be printed and transferred to the pad. The external start signal has that label applied followed by the printing of the next label. At the end of the cycle a printed label is on the pad.	<i>Print-Apply</i>
 <i>Waiting position</i>	<i>top:</i> Pad waits in the starting position for the start signal <i>bottom:</i> Pad waits in the labeling position for the start signal Only for <i>Transfer mode = Blow on</i> and <i>Cycle sequence = Apply-Print</i>	<i>up</i>
 <i>Blow time</i>	The duration (max. 2.5 s) the supporting air is active for the label transfer. Only for <i>Transfer mode = Blow on</i>	<i>1000 ms</i>
 <i>Roll-on time</i>	The time (max. 5 s) the pad waits in the in labeling position. Only for <i>Transfer mode = Roll on</i>	<i>1000 ms</i>
 <i>Support delay on</i>	This setting adjusts the activation delay (max. 2.5 s) of supporting air. By default the supporting air starts with the printing of a label. A delay prevents turbulence at the front end of the label and thus improves the label transfer process from the printer to the pad.	<i>0 ms</i>
 <i>Support delay off</i>	The duration (Max 2.5 s) the supporting air stays active once the label has been transported to the pad. The settings assists in the separation of the rear end of the label from the backing and improves label positioning accuracy on the pad.	<i>0 ms</i>
 <i>Start delay</i>	Delay (max. 2.5 s) between start signal and the start of the next labeling cycle. This is useful when using product sensors and conveyors.	<i>0 ms</i>
 <i>Vacuum delay</i>	<i>On</i> - The vacuum will be switched on after the label feed is completed. <i>Off</i> - The vacuum will be switched on when the label feed starts.	<i>Off</i>
 <i>Vacuum control</i>	Control of the label take up procedure via the vacuum sensor.	<i>On</i>
 <i>Peel-off position</i>	Shift the position of the dispensed label relative to the dispensing edge. The setting can also be adjusted by the software. The values of the configuration and the software are added together.	<i>0.0 mm</i>

Table 3 Parameters of the *Setup > Labelling* menu

4.1 Setting up the Labeling Position of the Pad

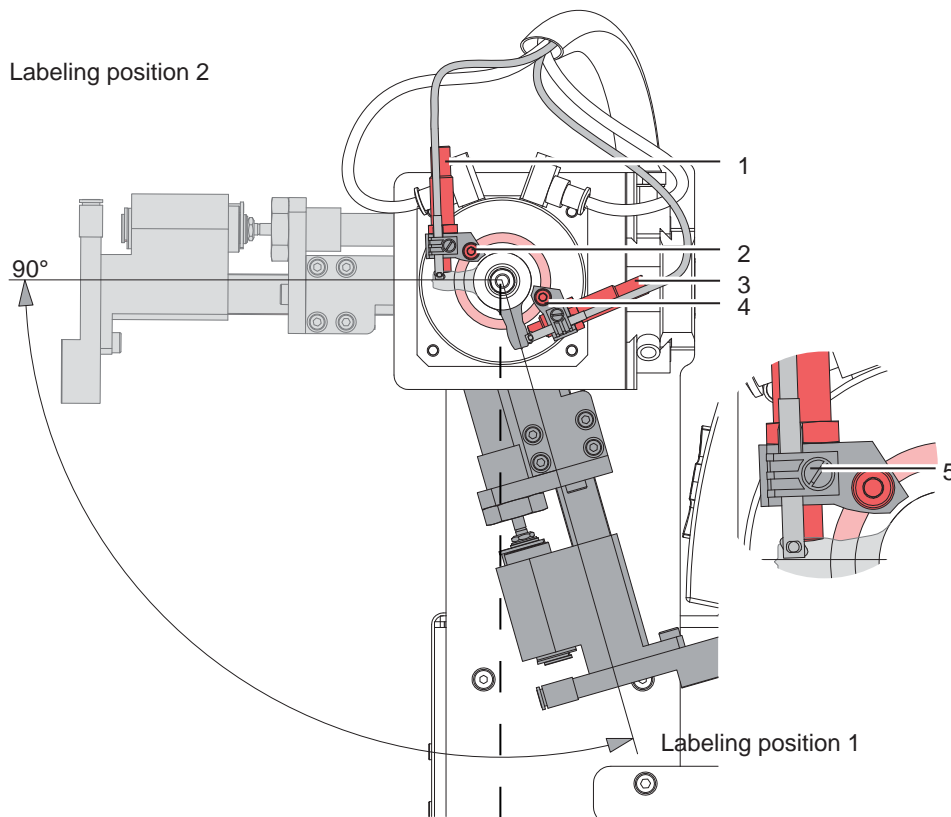


Fig. 6 Setting up the Angle of the Labeling Position

1. Loosen screw (2). The stopper (3) fastened with the screw (4) defines the angle and the distance of the pad to the dispensing plate of the printer and may not be adjusted after it has been set up.
2. Set the labeling position by sliding the stopper (1) along the guiding rail of the turning cylinder.
3. Tighten screw (2).
4. Fine-tune by turning the stopper (1).
 - In order to turn the stopper (1) the counter-nut of the stopper must be loosened with a 10mm spanner. Remove the sensor with its holder by undoing the screw (5) to prevent damage to it before loosening the counter-nut.
 - Upon successful adjustments fasten the counter-nut and reconnect the sensor.

When setting up the SQUIX printer with an applicator S3200 a distance of 260-280mm between the front edge of the printer base plate and the product intended for labeling should be maintained.

4.2 Sensors

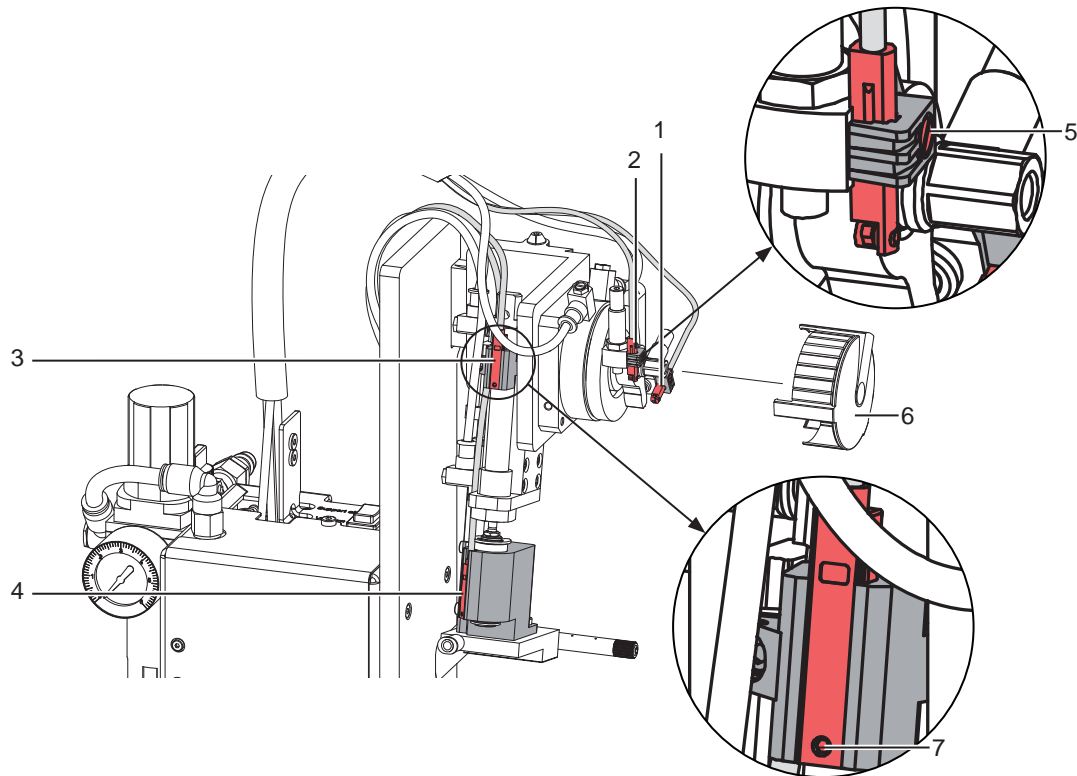


Fig. 7 Sensors

All sensors are calibrated by factory default and do not need to be adjusted.
All sensors have an LED that lights up when the sensor element is triggered.

- Sensor 1 - Start position of the turning cylinder
- Sensor 2 - End position of the turning cylinder
- Sensor 3 - Start position of the lifting cylinder
- Sensor 4 - End position of the lifting cylinder

**Note!**

The sensors must trigger securely in the triggering positions. When triggered the LED of the sensor is illuminated; when the sensor leaves the position the LED must switch off.

To adjust or replace the sensors (3 and 4) loosen the screw (7) on the sensors and for sensors (1 and 2) loosen the screws of the sensor retainer.

- Sensor 1 and 3 indicate the starting position of both cylinders. The pad is above the dispense plate taking up the label.
- Sensor 2 triggers when it reaches the stopper which defines the pivoting angle. To adjust the sensors (1 and 2) remove the protection cap (5)
- Sensor 4 "notices" the actual labeling procedure in the labeling position by triggering through pressure of the product or hitting the stopper. Amongst other things the lifting movement is stopped. By adjusting this sensor the triggering point of the sensor can be altered.
- ▶ After loosening screw (7) adjust sensor (4):
 - toward the pad > less sensitivity
 - away from the pad > more sensitivity (faster triggering)
- ▶ Once adjustments are completed refasten screw (7).

**Note!**

Set up sensor 4 in such a way that it triggers securely from the pressure of reaching the product or the stopper. A setting that is too sensitive may cause unwanted triggering by vibrations or other mechanical interference.

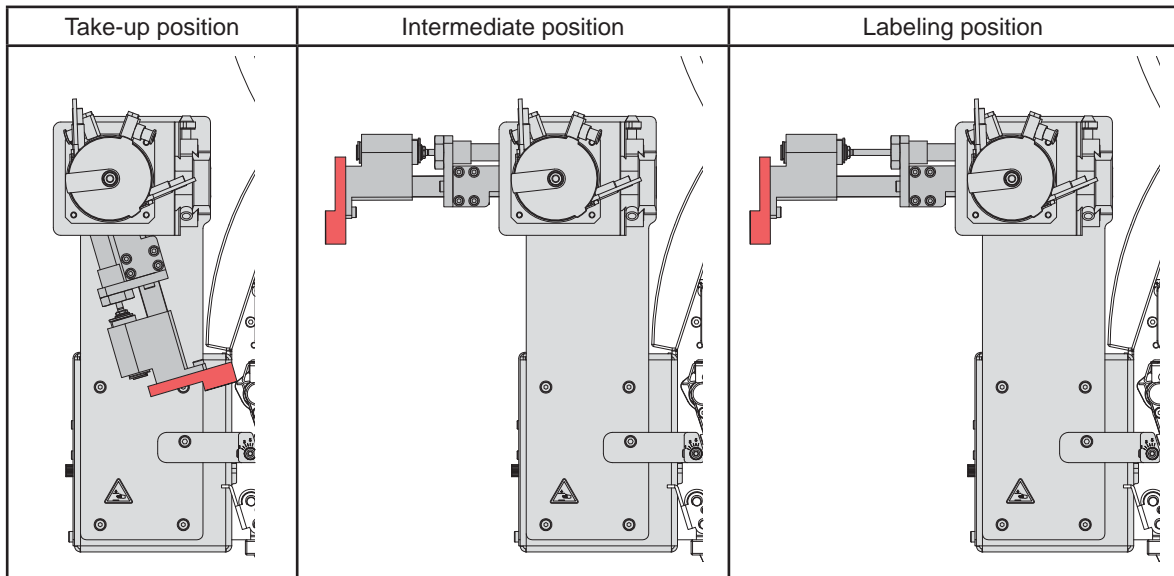


Fig. 8 Pad and related cylinder positions

Initiation of the sensors in relation to: pad and cylinder positions	Take-up position	Intermediate position	Labeling position
Sensor 1 Start position turning cylinder	X	—	—
Sensor 2 End position turning cylinder	—	X	X
Sensor 3 Start position lifting cylinder	X	X	—
Sensor 4 End position lifting cylinder	—	—	X

Table 4 Triggering points of the sensors according to cylinder positioning

4.3 Stopper for Mode "Blow-on"

In order to label a product without impacting it the "blow-on" mode. The stopper (1) limits the lifting cylinder:

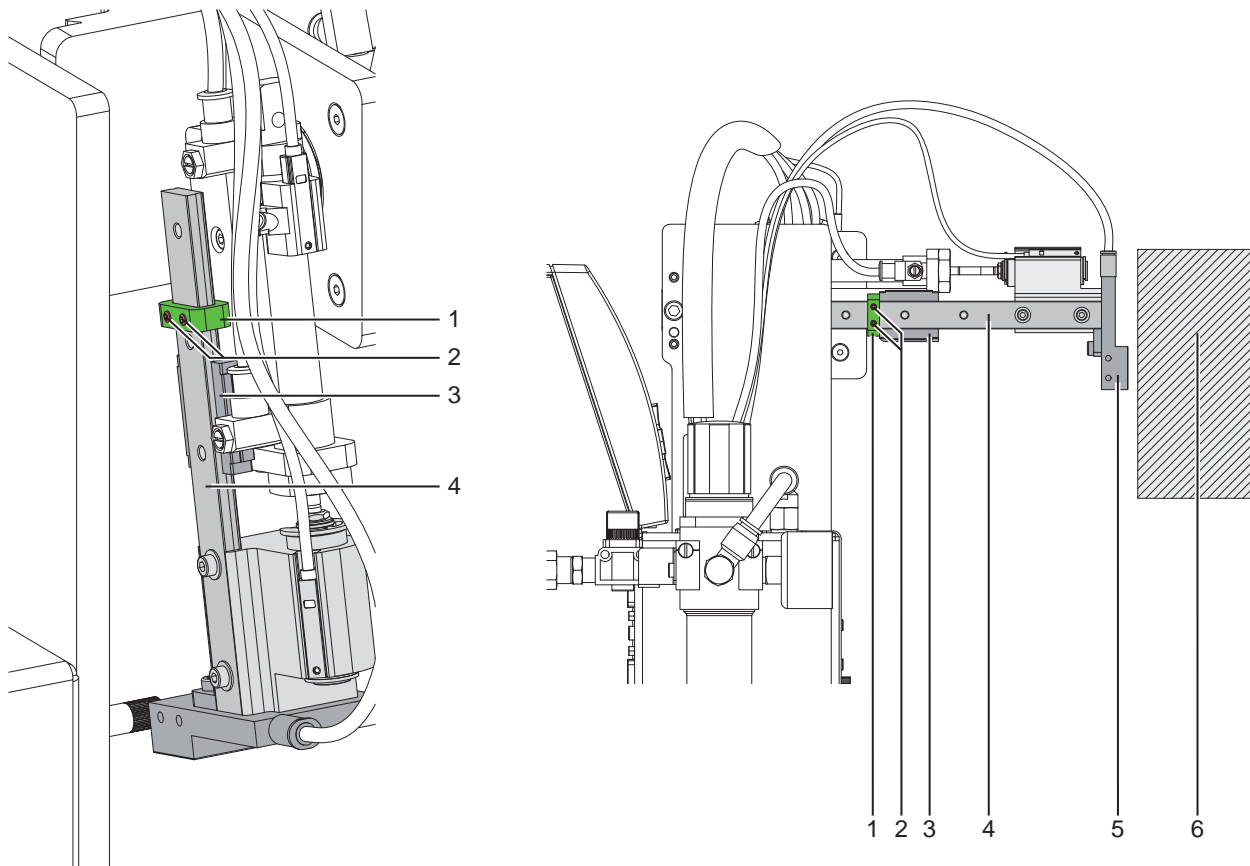


Fig. 9 Setting the stopper for mode "blow-on"

1. Lock the compressed air valve.
2. Pull off the tubes of the throttle valve of the turning cylinder (outward motion) and the throttle valve lifting cylinder (outward motion).
3. Loosen the screw (2) of stopper (1).
4. Position the product (6) in the intended labeling position.
5. Manually move the pivot arm to the product up to the stopper of the turning cylinder.
6. Move the pad assembly group (5) to the product so the distance between the pad (5) and the product (6) is less than 10 mm.
7. Move stopper (1) along the guide rail (4) until the slide (3) is reached. Fasten screw (2).
8. Reattach tubes of the throttle valve of the turning cylinder (outward motion) and the throttle valve lifting cylinder (outward motion).

5.1 Inserting Materials

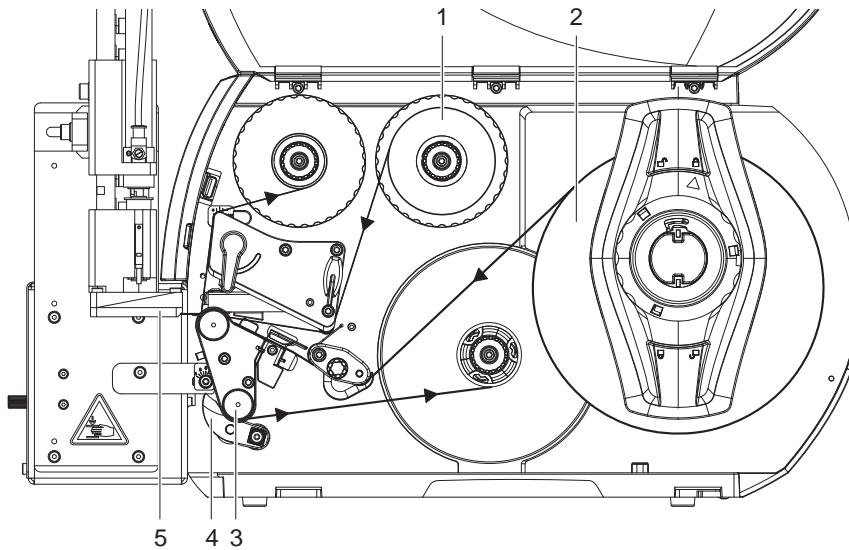


Fig. 10 Inserting material

- ▶ Load the ribbon (1) into the printer.
- ▶ Insert the label material (2) into the printer. The labels are used in the dispensing mode. For detailed information on material implementation ▷ Operators manual.

Attention!

- ▶ Ensure that the locking system (4) is raised to the roller (3) otherwise a collision between pad (5) and locking system (4) will occur.

5.2 Activating Peel-off Mode



Note!

- ▶ For labeling activate the peel-off mode in the software.

When programming directly this is achieved with the P-command ▷ Programming manual

5.3 Adjusting the Peel-off Position

For optimization of the label take-up from the printer there are two separate possibilities for adjustment.





Attention!


- ▶ First, optimize the peel-off position offset in the configuration.
- ▶ Then, adjust the peel-off offset via the software.

This method is particularly important for a problem-free start after material has been inserted or when dealing with errors.

Peel-off Offset in the Printer Configuration

- ▶ Check the standard settings of the dispensing offset of the printer. Test the labeling cycles by alternating between buttons  and . ▷ „6.4 Test Mode without a Print Job“.
- ▶ In the submenu labeling peel-off offset in printer configuration ensure the settings allow for a complete detachment of the labels from the liner ▷ "Configuration Parameters of the Printer".

Peel-off Offset in the Software

- ▶ Test the settings of the peel-off offset in the software. Check the labeling cycles by repeatedly pushing button  ▷ „6.5 Test Mode with a Print Job“.
- ▶ Set the peel-off offset in the Software so that the printed labels are detached from the liner reliably ▷ "Programming Manual" respectively "Software Documentation".
- ▶

5.4 Test Mode without a Print Job

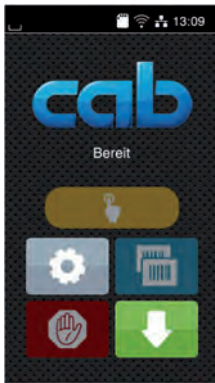






Fig. 11 Display

By alternating between buttons  and  on the display it is possible to simulate the labeling process without an active printing job.

- ▶ Push button .

This causes the feed of an empty label. Simultaneously the vacuum of the pad as well as the supporting air are activated. As soon as the label has securely arrived at the pad the supporting air is switched off.
- ▶ Push button .


When pushing this button the cylinder Z is extended into the labeling position. Reaching the labeling position is signaled by the triggering of the impact sensor. With that signal the vacuum is stopped and the label is applied to the product. With the application of the label the cylinder is contracted back into the starting position.



Note!

- ▶ Use the printer configuration to find the best peel-off offset for the initiation.

5.5 Test Mode with a Print Job

This method allows testing of the labeling process with actual printing data by using the  button.

- ▶ Send a print job.

The test mode is executed in two half cycles:

- ▶ Push the  button.


Half cycle 1

A label is printed. The vacuum of the pad as well as the supporting air (blow tube) are switched on. When the label has been picked up by the pad, the supporting air is switched off.

- ▶ Push the  button.

Half cycle 2

The pad is moved to the labelling position. The triggered impact sensor signals when the labelling position is reached. The vacuum is switched off as soon as the label is placed onto the product. Then, the pad is moved back into the starting position.

If the label is removed by hand after **half cycle 1** has been completed and the  button is pressed, **half cycle 1** will be repeated with the next label in the printing line.



Note!

- ▶ Use the software to find the best peel-off offset for the initiation.

5.6 Standard Operation

- ▶ Before starting the labeling process ensure that all connections are securely established.
- ▶ Load printing and labeling material. Ensure that the locking system is closed. ▷ „6.1 Inserting Materials“.
- ▶ Open the compressed air shut-off valve.



Attention!

- ▶ Before switching on the printer ensure that the pad is not blocked by a label as this may cause the vacuum sensor to be configured incorrectly.


- ▶ Switch on the printer.



Note!

If the pad is not in the starting position when the printer is switched on an error message will appear on the display.

Press the pause button on the printer to cancel the error state. The applicator will move into the start position and is ready for work.

- ▶ Push button  in the printer menu.
A synchronization feed is initiated. The processed labels have to be removed manually. After a few seconds the printer carries out a short backfeed to position the front edge of the next label at the printing line.



Note!

This synchronization also has to be carried out when the print job has been interrupted with the cancel  button.

Synchronizing is not necessary when the print head was not lifted between print jobs. This also applies if the printer was powered down between print jobs.

- ▶ Start a print job.
- ▶ Start the labelling process via PLC interface.

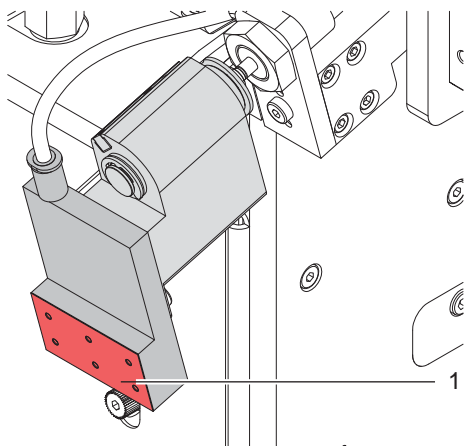
Error messages during labelling process are shown in the display of the printer. ▷ "Error Messages"

5.7 Cleaning



Attention!

Never use solvent or abrasive.




- ▶ Clean the outside surfaces with multi purpose cleaner.
- ▶ Remove dust particles and leftover label pieces with a soft brush and/or vacuum cleaner.
- ▶ The slide foil (1) requires regular cleaning as the most dirt is deposited here.

Fig. 12 Reinigung des Stempels

6.1 Error Messages of the Printer

For detailed information about printer errors (e.g. 'Paper out', 'Ribbon out', etc.) ▷ Check the operator's manual of the printer.

Error treatment:

- ▶ Clearing the error results.
- ▶ Press the **feed**  key to synchronize the label feed, remove the left over labels manually.
- ▶ Press the **pause** key to quit the error state.

After error correction, the label causing the error will be reprinted.

<i>Continue</i>	After rectification of the cause of the error the print job commences with the next label of the printing job.
<i>Repeat</i>	After rectification of the cause of the error the print job commences with the last label of the printing job.
<i>Cancel</i>	The current print job will be canceled.

6.2 Error Messages of the Applicator

The following table contains an overview of applicator specific error messages and their possible causes. It also suggests methods to resolve the error states:

Error Message	Possible Cause	Possible Solution
<i>Air pressure ins.</i>	Compressed air is switched off	Check the compressed air switch.
<i>Label not depos.</i>	Label has not been placed onto the product; while the pad is moving back the label is still sticking to the pad.	Manually label the product.
<i>Upper position</i>	Pad is not in the starting position when the printer was switched on; Pad has not reached the labelling position within 2 s after the movement of the pad was started; pad has left the printing position without authorization.	Check the air pressure configuration (particularly the upper throttle valve). Manually label the product.
<i>Ext. I/O error</i>	Labeling process was interrupted by the PLC interface with a STOP signal.	If necessary label the product by hand.
<i>Sensor error</i>	The sensor for the labeling position was not triggered from the start of the labeling process until reaching the labeling position.	Check the sensor (Service).
<i>Vac. plate empty</i>	Label has not been picked up properly by the pad; label fell off the pad before it could be placed onto the product.	If possible place the "lost" label onto the product manually. Otherwise cancel the print job and restart it with edited parameters (e.g. Numbers). If this error is repeated check the alignment of the pad as well as settings for vacuum and supporting air as well as peel-off offsets.
<i>Lower position</i>	Pad has not reached the starting position within 2 s after the pad has left the labelling position; or pad has left the starting position without authorization.	Check the compressed air settings (especially the bottom throttle valve). Verify that the mechanics of the applicator are in order. Ensure the impact sensor is working correctly. Label the product by hand.

Table 5 Error messages of the applicator

Error Treatment:

- ▶ Clear the error state.
- ▶ In order to clear the error state press **continue**, **repeat** or **cancel**.
Continue with the next label in the printing queue.
Repeat the print of the label causing the error. Only applicable with error *Vac. plate empty*.
Cancel the current print job.




Warning!

After the error has been resolved the pad will immediately move back to the starting position!

Danger of injury to hands and fingers by the moving pad!

- ▶ **Do not reach into the area of the moving pad and keep long hair, loose clothes, and jewelry away.**

Reprinting a label, interrupted by an error, is not possible without a new printing job.

- ▶ In the mode "apply/print" before the standard cyclic operation can commence the signal "print first label" must be sent or push the  key to send a printed label to the pad.

7 External Control via the I/O Interface of the Printer

The I/O Interface serves as an integration opportunity for the printer into system.

7.1 Pin Configuration

The interface has a 25-pole SUB-D connector

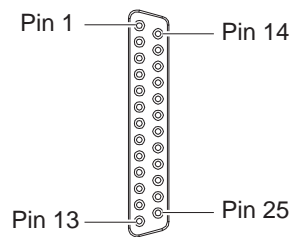


Fig. 13 I/O-Interface



Note!

The function of the outputs on the pins 4, 9 10 and 21 can be re-defined temporarily by direct programming e.g. to control external devices with the user bits 0 to 3 ▶ Programming Manual.

















Pin	Signal	Name	Description	Activation/active status
1		FSTLBL	Print first label only for <i>Cycle sequence = Apply-Print</i>	+24 V between Pin 1 and Pin 25
2	-	-	Do not use	
3		ENDPOS	Applicator is in the position of transferring the label onto the product.	+24 V on Pin 3
4		FEEDON	Media transport ON Labels are fed by the printer	+24 V on Pin 4
		Bit 0	User Bit 0 is set	
5		HOMEPOS	Applicator is in the position where the label is taken up from the printer.	+24 V on Pin 5
6		GND_INT	Ground (0 V) for sensors or trigger switches	
7	-	-	Do not use	
8	-	-	Do not use	
9		JOBRDY	Print job ready Print jobs are stored in the print module.	+24 V on Pin 9
		Bit 1	User bit 1 is set	
10		READY	Printer is ready	+24 V on Pin 10
		Bit 2	User Bit 2 is set	
11	-	-	Do not use	
12		REPRINT	The last printed label will be repeated.	+24 V between Pin 12 and Pin 25
13		START	Print start signal only for <i>Print on demand = On</i>	+24 V between Pin 13 and Pin 25
14		PAUSE	Pause ON/OFF	Pause ON when +24 V between Pin 14 and Pin 25
15		RIBWARN	Warning end of ribbon The ribbon supply roll diameter has undershot a predefined level	0 V on Pin 15
16		LBLREM	Label removed For peel-off mode only. Confirmation of the superior control that the label has been taken from the peel-off position. Required for the validity of a new start signal.	Switch on +24 V between Pin 16 and Pin 25
17		JOBDEL	Cancel print job The current print job is canceled and deleted from the print buffer.	Switch on +24 V between Pin 17 and Pin 25
18		RSTERR	Reset Error state of the printer will be reset.	Switch on +24 V between Pin 18 and Pin 25
19		P24_INT	Internal operating voltage +24 V, Si T 100mA for external consumers e.g. sensors, trigger switches	
20		P24_EXT	External operating voltage +24 V	
21		PEELPOS	Label in peel-off position For peel-off mode only. A label is in peel-off position.	+24 V on Pin 21
		Bit 3	User Bit 3 is set	
22		ERROR	General error message The operation will be stopped and the error type will be displayed.	0 V on Pin 22
23		STOP	Stop signal to interrupt the operation	Switch on +24 V between Pin 23 and Pin 25
24	-	-	Do not use	
25		GND_EXT	Ground of the external 24 V	

Table 6 Pin assignment of the I/O interface

7.2 Circuit Diagram of Inputs and Outputs

Digital Inputs

- conform to IEC/EN 61131-2 (Type 3)
- Operating voltage: 24 V DC (9,6..35 V)
- Switching logic: PNP switching
- Low level „0“: < 7 V DC
- High level „1“: > 11 V DC
- Input current per channel: 1,5..2,5 mA (at 24 V DC)
- Reverse polarity protection: yes
- ESD protection: conform to IEC/EN 6100-4-4

Digital Outputs

- conform to IEC/EN 61131-2
- Operating voltage: 24 V DC (11..35 V)
- Switching logic: PNP switching
- Output current per channel: 625 mA (overload protection)
- Short-circuit protection: yes
- Reverse polarity protection: yes
- ESD protection: conform to IEC/EN 6100-4-4

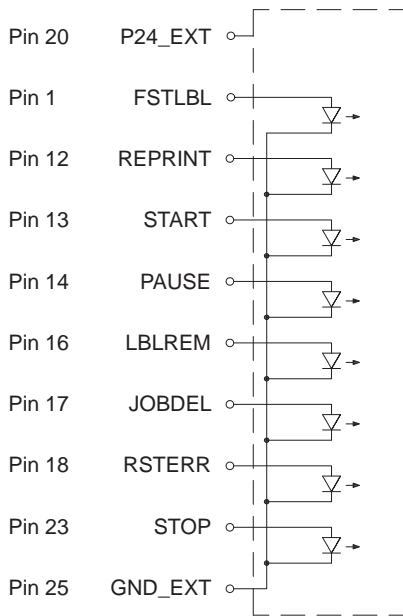


Fig. 14 Connecting inputs

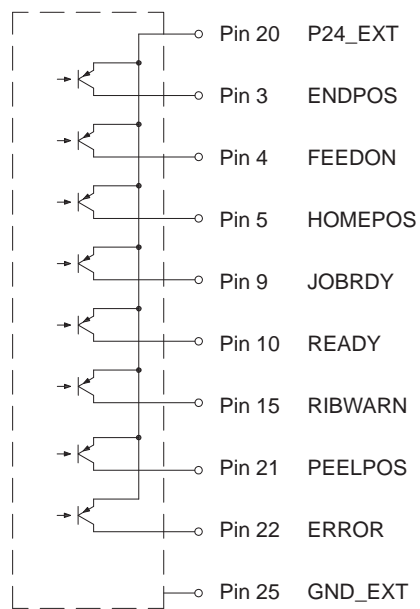


Fig. 15 Connecting outputs

8.1 Declaration of Incorporation




cab Produkttechnik
 GmbH and Co KG
 Wilhelm-Schickard-Str. 14
 D-76131 Karlsruhe
 Deutschland

Declaration of Incorporation

We declare herewith that the following „partly completed machinery“ as a result of design, construction and the version put in circulation complies with the essential requirements of the **Directive 2006/42/EC on machinery**:

Annex I, Article 1.1.2, 1.1.3, 1.1.5, 1.1.6, 1.2.1, 1.3.2, 1.5.2, 1.5.8, 1.6.3, 1.7

In the event of any alteration which has not been approved by us being made to any device as designated below, this statement shall thereby be made invalid.

Gerät:	Applikator
Typ:	S3200
Angewandte EU-Richtlinien und Normen	
Richtlinie 2006/42/EG über Maschinen	<ul style="list-style-type: none"> • EN ISO 12100:2010 • EN ISO 13849-1:2015 • EN 60950-1:2006 +A11:2009+A12:2011+A1:2010+A2:2013
Bevollmächtigter für die technischen Unterlagen :	Erwin Fascher Am Unterwege 18/20 99610 Sömmerda
Für den Hersteller zeichnet :	Sömmerda, 06.04.2019
cab Produkttechnik Sömmerda Gesellschaft für Computer- und Automationsbausteine mbH 99610 Sömmerda	 Erwin Fascher Geschäftsführer

The product must not be put into service until the final machinery into which it is to be incorporated has been declared in conformity with the provisions of the Directive on machinery.

The documents according annex VII part B from the incomplete machinery are created and will commit to state agencies on request in electronic kinds.


8.2 EU Declaration of Conformity



cab Produkttechnik
GmbH & Co KG
Wilhelm-Schickard-Str. 14
D-76131 Karlsruhe
Germany

EU Declaration of Conformity

We declare herewith that the following device as a result of design, construction and the version put in circulation complies with the relevant fundamental regulations of the EU Rules for Safety and Health. In the event of any alteration which has not been approved by us being made to any device as designated below, this statement shall thereby be made invalid.

Device:	Applicator
Type:	S3200
Applied EU Regulations:	Applied Standards:
Directive 2014/30/EU relating to electromagnetic compatibility:	<ul style="list-style-type: none"> • EN 55032:2012 • EN 55024:2010 • EN 61000-6-2:2005
Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment:	<ul style="list-style-type: none"> • EN 50581:2012
Signed for, and on behalf of the Manufacturer:	Sömmerda, 06.04.2019
cab Produkttechnik Sömmerda Gesellschaft für Computer- und Automationsbausteine mbH 99610 Sömmerda	 Erwin Fascher Managing Director