

Assembly Instructions



Vacuum Belt Applicator

5426C

Family	Type
Vacuum Belt Applicator	5426C

Edition: 12/2019 - Part No. 9009959

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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 on 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 C 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 manual, including the manufacturer's maintenance recommendations and specifications.



Notice!

The complete documentation is included in the scope of delivery on DVD, and can also currently 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.



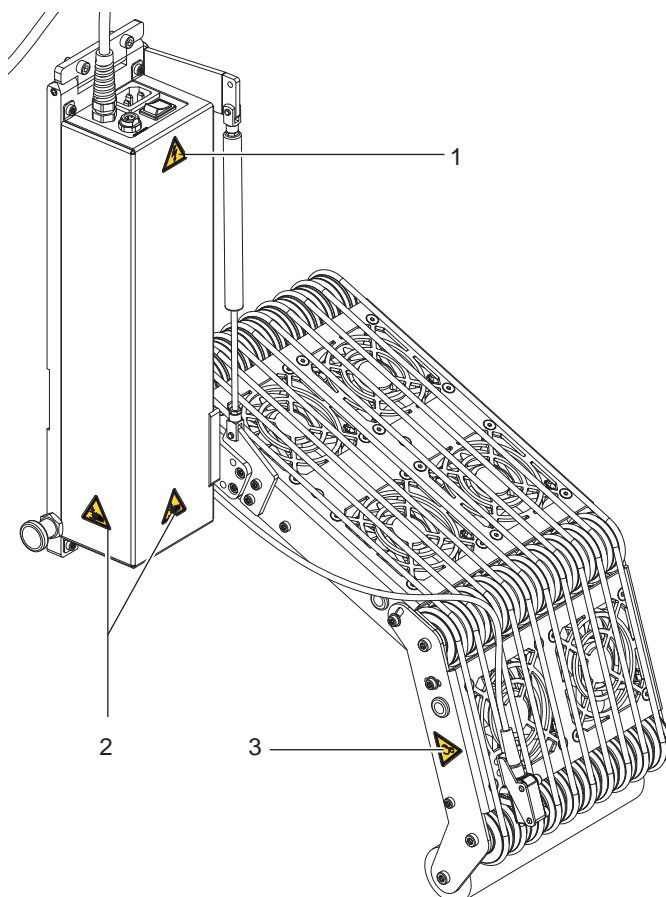
Warning!




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.

- The device is configured for voltages of 100 to 240 V AC. It only has to be plugged into a grounded socket.
- 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.

- 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.
- If the device is operated with the cover open, ensure that people's clothing, hair, jewelry etc. do not come into contact with the exposed rotating parts.
- The device or parts of it can become hot while printing. Do not touch during operation, and allow to cool down before changing material and before disassembly.
- Risk of crushing when closing the cover. Touch the cover at the outside only. Do not reach into the swivel range of the cover.
- 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.
- The maximum sound pressure level is less than 70 dB(A).

1.4 Safety Markings



- 1:  Danger of hazardous voltage!
- 2:  Danger of crushing hands and fingers by the moving pad!
- 3:  Danger of harm by rotating parts.



Attention!
Never remove or cover safety markings!
Replace them in case of damage!

Fig. 1 Safety markings

1.5 Environment



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

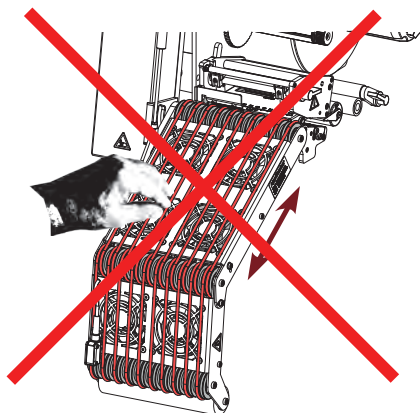
- Send to suitable collection points, separately from residual waste.

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

- Send the parts for recycling.

2.1 Important Features

- For operation in a system the I/O interface of the printer can be used.



Attention

Don't move the transport belt or - roller by hand or by an other outside power.
Danger of destruction of the electronic control.

2.2 Technical Data

Technical Data		Vacuum-Belt Applicator 5426C
Label width	mm	46 – 174
Label height	mm	40 – 356
Product during labeling	in motion	■
Labeling of the product	from above	■
	from below	■
	from the side	■
Conveyor speed	mm/s	100-300
¹⁾ Cycle time	labels/min.	30

¹⁾ Submitted at 100 mm label height / printing speed of 100 mm/s.

Table 1 Technical Data

2.3 Product Overview

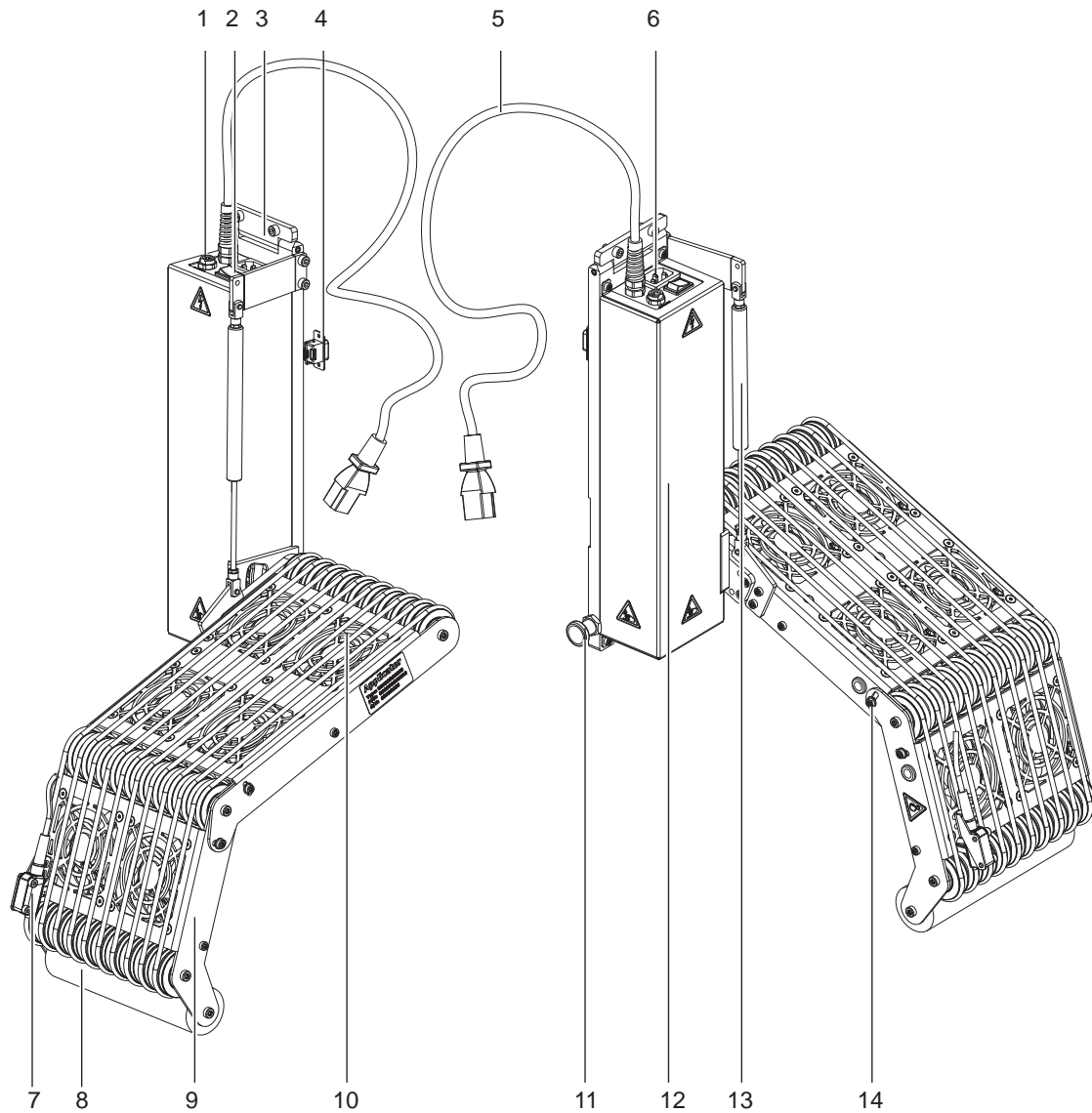


Fig. 2 Device overview

- 1 3 pin female connector - start sensor
- 2 Applicator main switch
- 3 Base plate for mounting the printer
- 4 SUB-D 15 for connecting the printer
- 5 Power cable to printer
- 6 Power connector
- 7 Sensor

- 8 Pressure roller
- 9 Angled transport unit
- 10 Fan 6x
- 11 Mounting plate with bolts
- 12 Control unit
- 13 Repositioning spring
- 14 Angle setting unit

2.4 Contents of Delivery

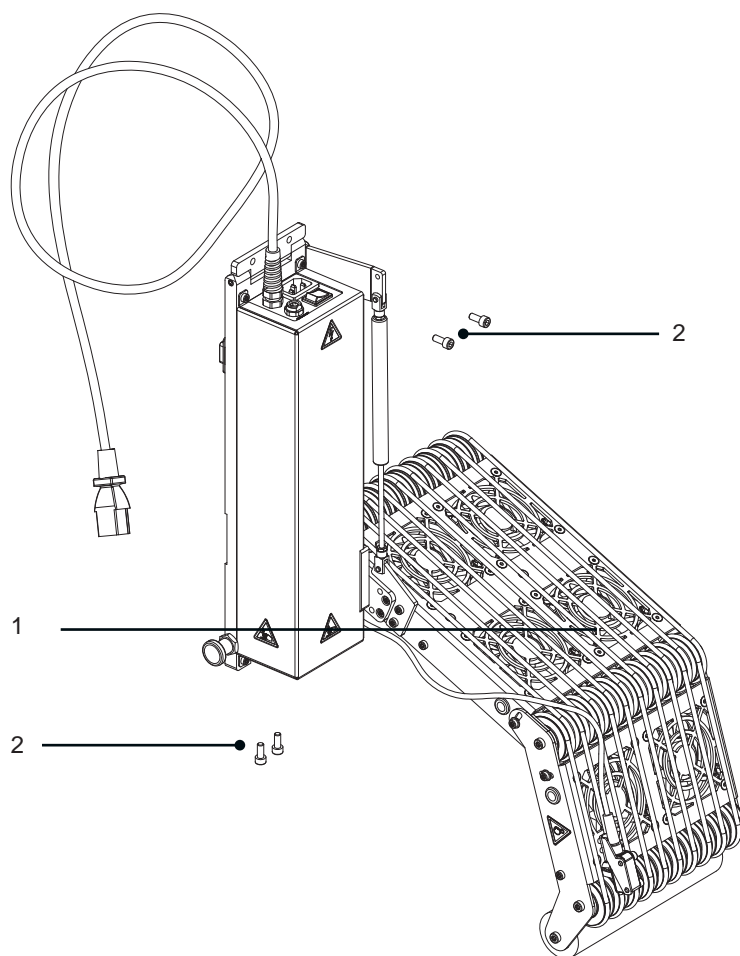


Fig. 3 Content of delivery

Note!

Please keep the original packaging in case the applicator must be returned.

**Attention!**

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

- Only set up the label printer with the Air-Jet Box in dry locations protected from moisture and water splashes.

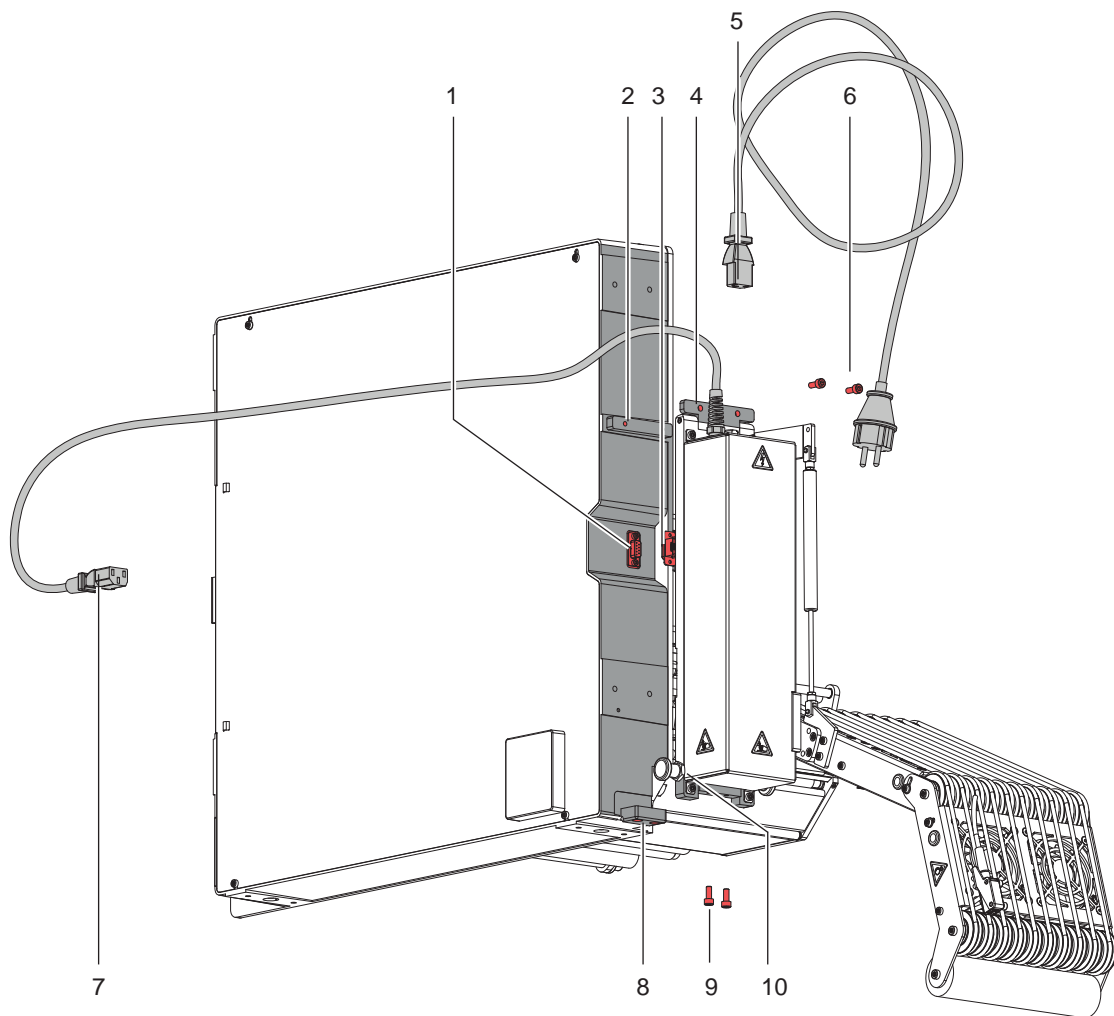


Fig. 4 Assembly

**Attention!**

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

▷ Service Manual Applicator

**Attention!**

▶ Disconnect the printer from the power supply before mounting the applicator!

▶ Ensure the printer is in a stable position!

To clean the applicator and printer it is sometimes necessary to turn away or even dismount the applicator from the printer.

Do not adjust the setting screws, throttle valves or other alignment elements. This will enable use of the applicator directly after cleaning.

Dismounting the applicator

1. Remove the power cable (7) from the printer and remove the power cable (5) from the applicator.
2. Loosen the screws (9) from the bottom plate.
3. Hold in place and loosen the screws (6).
4. Pull the applicator forward a bit and remove the SUB-D connector.
5. Lift the applicator off.

Mounting the applicator

6. Hold the applicator close enough to the printer to connect the SUB-D connector (3) into its counterpart (1).
7. Rest the applicator on the bracket (8) and move it forward to align the screw holes of (4) and (2).
8. Insert and tighten screws (6).
9. Insert and tighten screws (9).
10. Connect the power cables (7) and (5).

**Note!**

The alignment of the printer is predetermined by the manufacturer and may not be altered in order to ensure correct application of the labels. Only the angle to the printer and the pressure of the roller may be altered.

4.1 Distance of the Label to the Printer

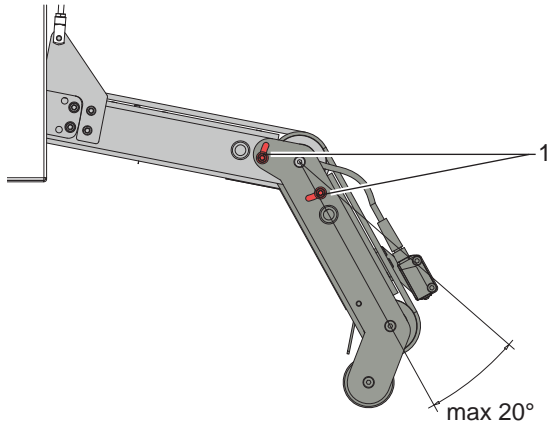


Fig. 5 Angle settings

**Warning!**

Take care when loosening the screws (1). The device folds down automatically due to its own weight.

- ▶ Loosen screw (1) to set the angle thus the depth of the applicator.
- ▶ Set up the angle or depth of the product and tighten the screw again.

4.2 Settings in the Setup Menu

The menu for editing the settings can be found by pressing the `Menu` button > `Setup` > `Local settings.nst.`

**Note!**

The speed can be adjusted by selecting the parameter `Support air OFF`. The value shown is "ms" and not the true value of "mm/s."

**Note!**

The values in the table need to be entered precisely as indicated otherwise that standard value of 100 will override the entry.

Parameters for controlling the speed of the transportation belt.

The following values are available.

100 ms :	100	mm/s transportation belt speed
150 ms :	150	mm/s transportation belt speed
220 ms :	220	mm/s transportation belt speed
300 ms :	300	mm/s transportation belt speed



> `Support air OFF`

Label positioning

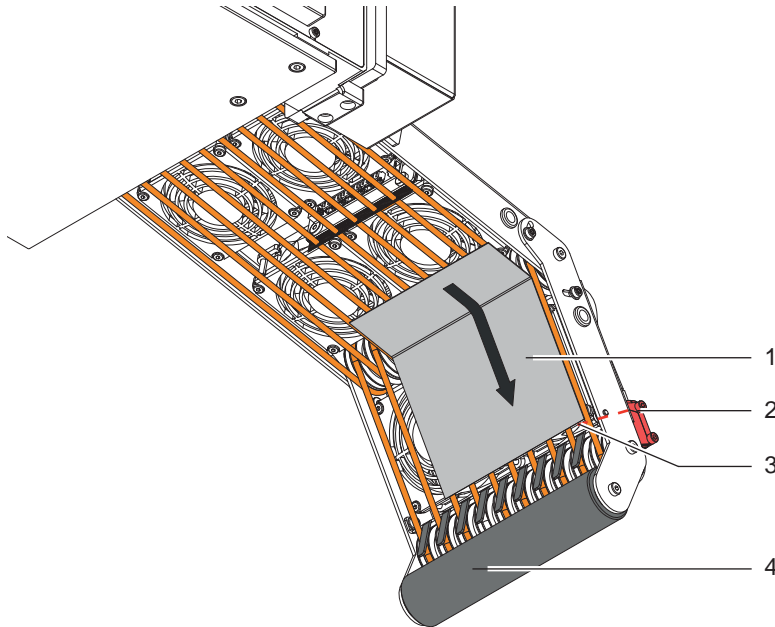


Fig. 6 Label transportation & reflex sensor

In the setup menu the option "blow" needs to be selected in order to get to the setting of "blow time." After reaching the reflex sensor (2) and its trigger point (3) the transport belt will continue carrying the label to the roller. The timing as well as the position of the label can be changed via the settings. The higher the value is here the further the label will be transported. 200 ms is about 10 mm.



> Blow time

Overrun of the label

After the label (1) has left the reflex sensor (3) the transportation belt will continue to push the label to ensure its placement on the product. The length of this step can be adjusted via the parameter:



> Support delay on

4.3 Signals

- With the signal **DREE** the print job will be started and the label will be transported to the roller.
- The signal **START** starts the advancement of the label to the reflex sensor area including a short follow-up.

When using the application mode "**Apply - Print**" the next print job will follow the current one automatically. In the application mode "**Print - Apply**" the print job will wait for the signal DREE before it starts.

Pin	Signal	Name	Description		Activation / Activated Mode
			without applicator	with applicator	
1		DREE	-	Print first label in modes "Apply - Print"	add +24V between pin 1 and pin 25
13		START	Start the print job provided the withdrawal of the previous label was confirmed with an ETE signal.	Start of the print/labeling job	add +24V between Pin 13 and Pin 25

Table 2 Pin-layout I/O-interface ▷ Interface description of the label printer Hermes C

5.1 Standard Operation

- ▶ Check all external connections before attempting to print.
- ▶ Ensure the applicator is connected. ▷ „5.2 Pivoting, Dismounting and Remounting the Applicator“
- ▶ Adding transfer foil and labels. ▷ Operator's Manual.
- ▶ Switch on the printer.
- ▶ Press the **feed** button on the printer.
This will start a synchronization process of the label transport system is initiated. The dispensed labels need to be removed manually. After a few seconds the printer will start a process to feed a label into the printing position.

Note!

The above mentioned process is also to be performed when a print job has been canceled.

This process does not need to be started if the print head was not opened in between to print jobs even if the printer was switched off.

- ▶ Start the printing job.
- ▶ Start the label operation over the I/O interface.
Errors that occur during printing jobs will be visible on the display of the device. ▷ Error Messages

5.2 Pivoting, Dismounting and Remounting the Applicator

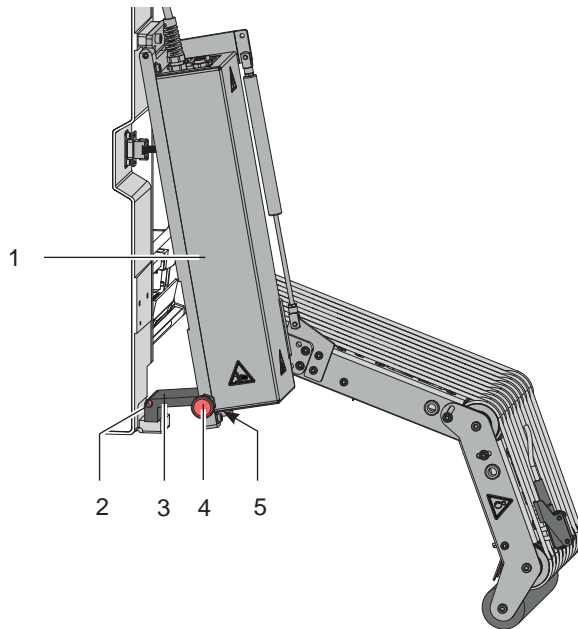


Fig. 7 Pivoting the applicator



Warning!

Potential hazard of crushing hands and fingers by the weight of the applicator.
When releasing the catches be cautious of unexpected pivoting of the applicator.

1. In order to remove the applicator (1) from the printer to clean or restock, the bolts (4) on either side must be pulled outward.
2. Lift the end of the applicator (1) with the bolts (4) raised out until they are able to snap into the holes provided (5) on the resting plate (3).
3. To reconnect the applicator (1) to the printer, pull out the bolts (4) again and guide the applicator (1) back down towards the printer until the bolts can snap into the provided holes (2) on the resting plate (3).

5.3 Cleaning

**Attention!**

► Never use solvent or abrasive.

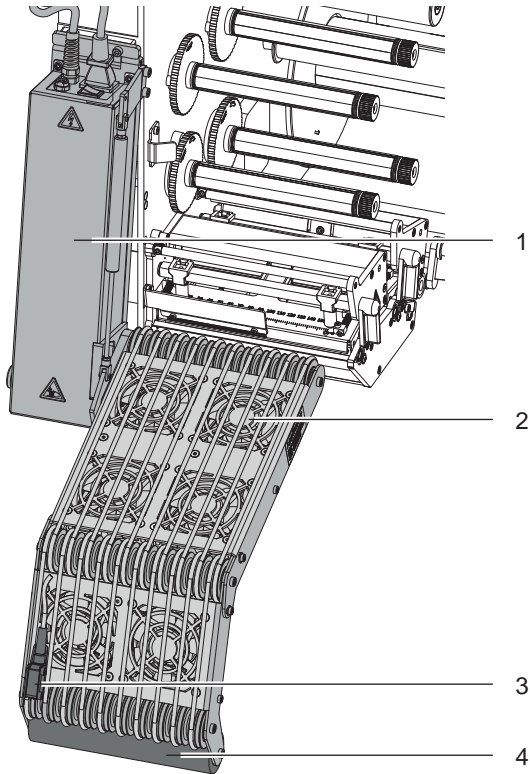


Fig. 8 Cleaning

- Remove the applicator to get to the items of interest. ▷ 5.2 Pivoting, dismounting and remounting the applicator
- Clean the outer surfaces (1) and transport belts with a general purpose cleaner.
- The fans (2) gather dust and are best cleaned with a vacuum cleaner or an upholstery cleaner.
- The reflex sensors (3) should be cleaned with glass cleaner.
- Remove any coarse debris before cleaning the roller (4) with either a general purpose cleaner or a special roller abrasive.
- Remount the applicator.

5.4 Power Supply of the Applicator and the Printer

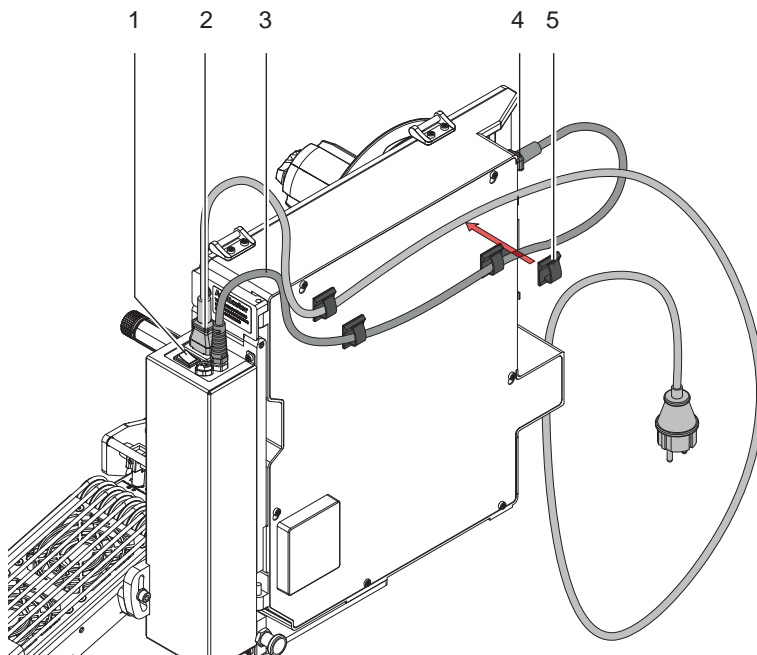


Fig. 9 Power supply of the applicator and the printer



Attention!

Plugged in power cables supply the full voltage to the printer.

The power switch of the applicator only affects the power supply of the applicator.

1. Connect the main power cable, delivered with the printer, into the connector of the applicator (2).
2. Use the power cable (3) to connect the applicator to the printer (4).
3. Switch on the applicator with the switch (1).
4. Switch on the printer.



Note!

If only the printer is switched on and not the applicator the error message: Air pressure error will be visible on the display.

5. To ensure that the cables do not hinder the applicator or the printer four self-sticking cable clamps (5) have been included in the delivery.

5.5 Starting Signal via External Sensors

The start signal for applying labels can be initiated by an external sensor that is connected to the 3-pin female connector (1) directly on the applicator.

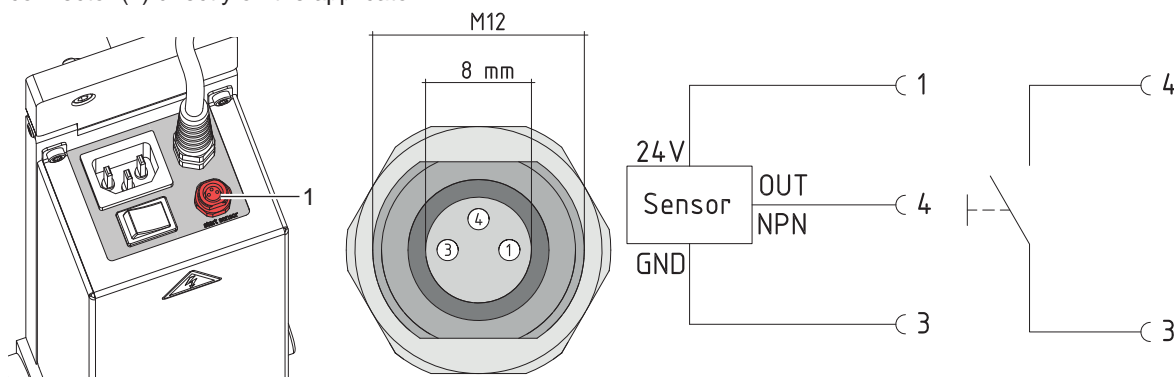


Fig. 10 Connector for the starting sensor on the applicator

The start of the printing order is still initiated via the I/O interface of the printer.

To configure the external sensor ▷ „4.3 Signals“

6.1 Error Messages of the Printer

For detailed information about printer errors (e.g. 'Paper out', 'Ribbon out', etc.) ▷ Operator's Manual of the printer.
Error treatment:

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

After error correction, the label that caused the error will be reprinted.

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 problems:

Error Message	Possible Cause
Lower position	Label has not reached the waiting position 5 seconds after being printed.
Vac. plate empty	Label was lost at the waiting position before the application roller.

Table 3 Error messages of the applicator

Error treatment:

- ▶ Clear the error results.
- ▶ Press the **pause** button to quit the error state.



Note!

In the case of errors check the **Service Manual for adjustments and settings**.

- ▶ After error correction, the printing of the label causing the error cannot be repeated without re-starting the print job except the error "Vac. plate empty". In this case, the last label will be printed again after resolution via the pause key and then pressing the ↵ key.
- ▶ In the "Apply/Print" mode the signal "Print first label" is sent to the printer. Alternatively you can press the ↵ key to send a printed label to the applicator.

7.1 Declaration of Incorporation




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Germany

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.

Device:	Vacuum Belt Applicator
Type:	5426C
Applied EU Regulations:	Applied Standards
Directive 2006/42/EC on machinery:	<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
Person authorised to compile the technical file:	Erwin Fascher Am Unterwege 18/20 99610 Sömmerda
Signed for, and on behalf of the Manufacturer:	Sömmerda, 08.07.2019
cab Produkttechnik Sömmerda Gesellschaft für Computer- und Automationsbausteine mbH 99610 Sömmerda	 Erwin Fascher Managing Director

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.


7.2 EU Declaration of Conformity



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Germany

EU Declaration of Conformity

We declare herewith that as a result of the manner in which the device designated below was designed, the type of construction and the devices which, as a result have been brought on to the general market comply 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:	Vacuum Belt Applicator
Type:	5426C
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
Commission delegated directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU of the European Parliament and of the Council as regards the list of restricted substances	
Signed for, and on behalf of the Manufacturer:	Sömmerda, 08.07.2019
cab Produkttechnik Sömmerda Gesellschaft für Computer- und Automationsbausteine mbH 99610 Sömmerda	 Erwin Fascher Managing Director