



Label Printer

# EOS2 / EOS5

Family	Type
EOS	EOS2/200
	EOS2/300
	EOS5/200
	EOS5/300

**Edition:** 07/2022 - **Part No.** 9003246

#### Copyright

This documentation as well as translation hereof are property of cab Produkttechnik GmbH & 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.

#### Trademark

Windows is a registered trademark of the Microsoft Corporation.

cab uses Free and Open Source Software within its products.

For more information see [www.cab.de/opensource](http://www.cab.de/opensource).

#### Editor

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

#### Topicality

Due to the constant further development of our products discrepancies between documentation and product can occur.

Please check [www.cab.de](http://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](http://www.cab.de)

USA  
**cab Technology, Inc.**  
Chelmsford, MA  
Phone +1 978 250 8321  
[www.cab.de/us](http://www.cab.de/us)

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

Singapore  
**cab Singapore Pte. Ltd.**  
Singapore  
Phone +65 6931 9099  
[www.cab.de/en](http://www.cab.de/en)

France  
**cab Technologies S.à.r.l.**  
Niedermodern  
Phone +33 388 722501  
[www.cab.de/fr](http://www.cab.de/fr)

Mexico  
**cab Technology, Inc.**  
Juárez  
Phone +52 656 682 4301  
[www.cab.de/es](http://www.cab.de/es)

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

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

<b>1</b>	<b>Introduction .....</b>	<b>4</b>
1.1	Instructions.....	4
1.2	Intended Use.....	4
1.3	Safety Instructions.....	5
1.4	Environment.....	5
<b>2</b>	<b>Installation .....</b>	<b>6</b>
2.1	Device Overview .....	6
2.2	Unpacking and Setting-up the Printer .....	8
2.3	Connecting the Device .....	8
2.3.1	Connecting to the Power Supply .....	8
2.3.2	Connecting to a Computer or Computer Network .....	8
2.4	Switching on the Device.....	8
<b>3</b>	<b>Touchscreen-Display .....</b>	<b>9</b>
3.1	Start Screen .....	9
3.2	Navigation in the Menu .....	11
<b>4</b>	<b>Loading Material.....</b>	<b>12</b>
4.1	Loading Media from Roll .....	12
4.2	Adjusting the Label Sensor .....	13
4.3	Loading Transfer Ribbon.....	14
4.4	Setting the Feed Path of the Transfer Ribbon.....	15
<b>5</b>	<b>Printing Operation.....</b>	<b>16</b>
5.1	Printing in Tear-off Mode .....	16
5.2	Printing in Cutting Mode.....	16
<b>6</b>	<b>Cleaning .....</b>	<b>17</b>
6.1	Cleaning Information .....	17
6.2	Cleaning the Print Roller .....	17
6.3	Cleaning the Printhead.....	18
<b>7</b>	<b>Fault Correction .....</b>	<b>19</b>
7.1	Error Display .....	19
7.2	Error Messages and Fault Correction .....	19
7.3	Problem Solution.....	21
<b>8</b>	<b>Media .....</b>	<b>22</b>
8.1	Media Dimensions.....	22
8.2	Device Dimensions .....	23
8.3	Reflex Mark Dimensions .....	24
8.4	Cut-out Mark Dimensions.....	25
<b>9</b>	<b>Licenses.....</b>	<b>26</b>
9.1	Reference to the EU Declaration of Conformity .....	26
9.2	FCC.....	26
<b>10</b>	<b>Index.....</b>	<b>27</b>

## 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!**

Advices 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 the 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 is intended exclusively for printing suitable materials. 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.

### 1.3 Safety Instructions

- 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.
- Warning stickers must 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).

**Danger!**

**Danger to life and limb from power supply.**

- ▶ Do not open the device casing.

**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.**

### 1.4 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.

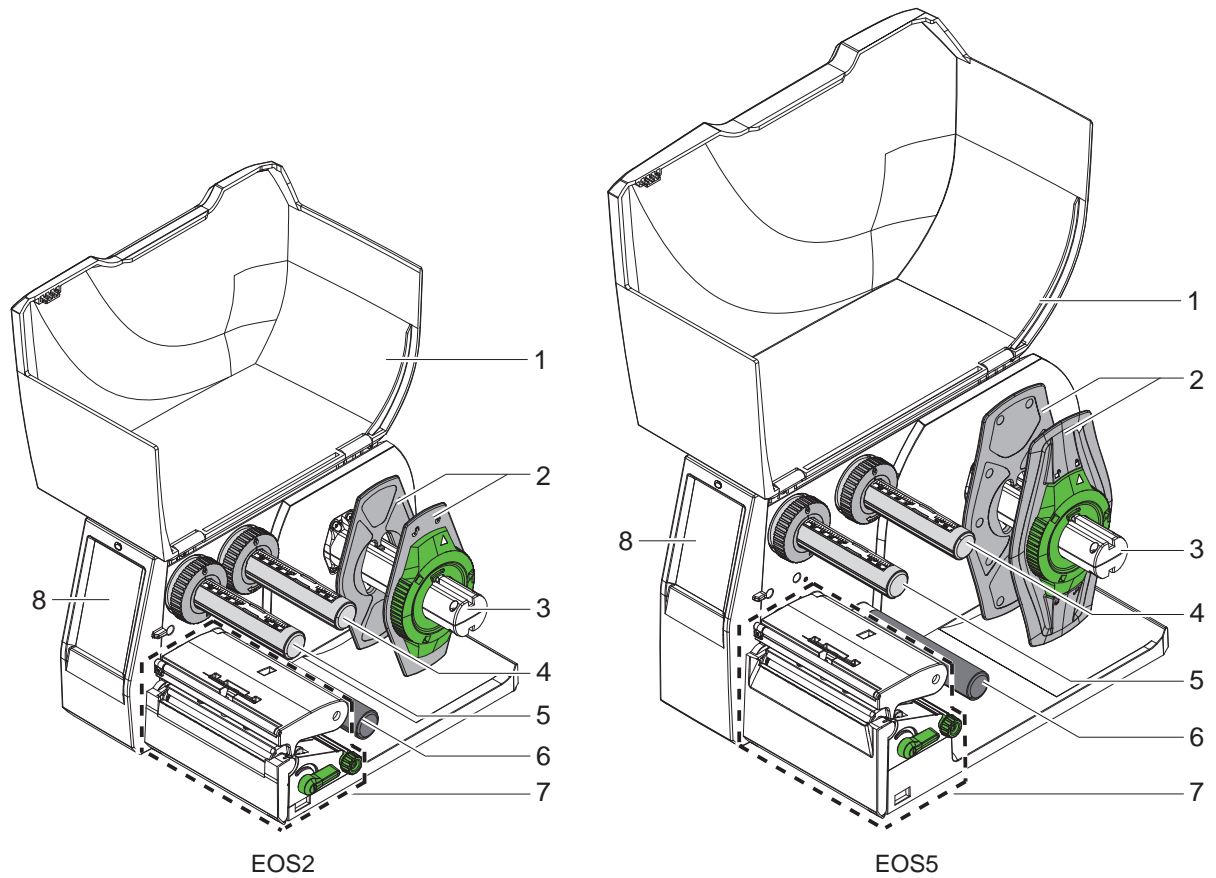
- ▶ Send the parts for recycling.



The electronic circuit board of the device is equipped with a lithium battery.

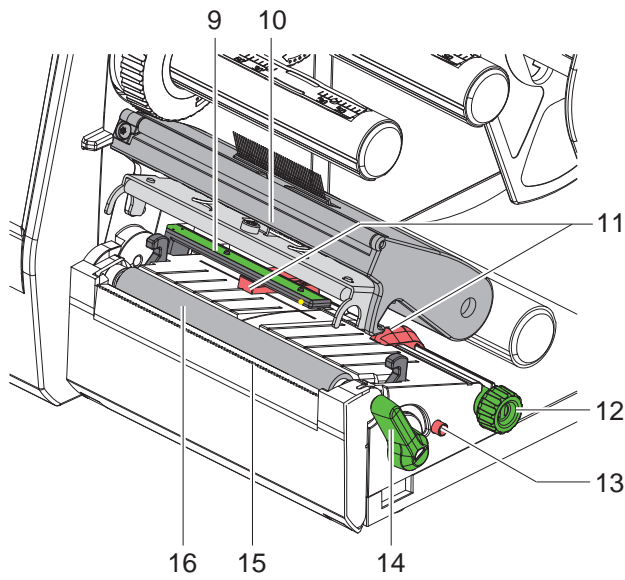
- ▶ Take old batteries to collection boxes in shops or public waste disposal centers.

## 2.1 Device Overview



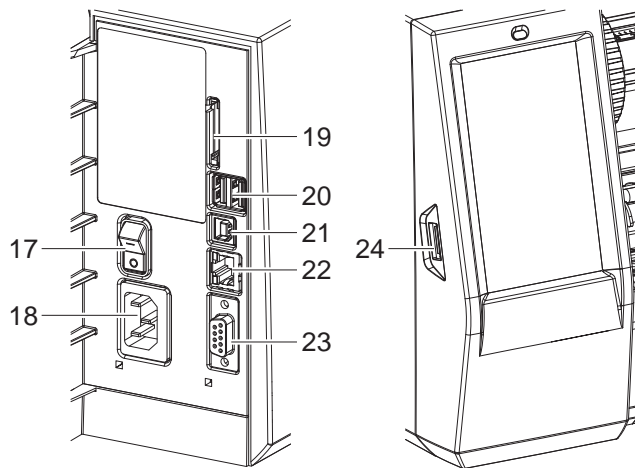
- 1 Cover
- 2 Margin stop
- 3 Roll retainer
- 4 Ribbon supply hub
- 5 Ribbon take-up hub
- 6 Roller
- 7 Print unit
- 8 Touchscreen-Display

Figure 1 Overview



- 9 Label sensor
- 10 Printhead retainer with printhead
- 11 Margin stop
- 12 Knob for adjusting the guides
- 13 Knob for adjusting the label sensor
- 14 Lever for locking the printhead
- 15 Tear-off plate
- 16 Print roller

Figure 2 Print unit



- 17 Power switch
- 18 Power connection jack
- 19 Slot for SD card
- 20 2 USB master ports for keyboard, scanner, USB memory stick, Bluetooth adapter, service key or WiFi stick
- 21 USB full-speed slave port
- 22 Ethernet 10/100 Base-T
- 23 Serial RS-232 port
- 24 USB master port for keyboard, scanner, USB memory stick, Bluetooth adapter, service key or WiFi stick

Figure 3 Connections

## 2.2 Unpacking and Setting-up the Printer

- ▶ Lift the label printer out of the box.
- ▶ Check label printer for damage which may have occurred during transport.
- ▶ Set up printer on a level surface.
- ▶ Remove foam transportation safeguards near the printhead.
- ▶ Check delivery for completeness.

Contents of delivery:

- Label printer
- Power cable
- USB cable
- Operator's Manual



### Note!

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



### Attention!

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

- ▶ Set up label printers only in dry locations protected from splash water.

## 2.3 Connecting the Device

The standard available interfaces and connectors are shown in Figure 3.

### 2.3.1 Connecting to the Power Supply

The printer is equipped with a wide area power unit. The device can be operated with a supply voltage of 230 V~/50 Hz or 115 V~/60 Hz without adjustment.

1. Check that the device is switched off.
2. Plug the power cable into the power connection socket (18/Figure 3).
3. Plug the power cable into a grounded socket.

### 2.3.2 Connecting to a Computer or Computer Network



#### Attention!

Inadequate or no grounding can cause malfunctions during operations.

Ensure that all computers and cables connected to the label printer are grounded.

- ▶ Connect the label printer to a computer or network by a suitable cable.

For details of the configuration of the individual interfaces ▷ Configuration Manual.

## 2.4 Switching on the Device

When all connections have been made:

- ▶ Switch the printer on at the power switch (17/Figure 3).  
The printer performs a system test, and then shows the system status *Ready* in the display.



The user can control the operation of the printer with the control panel, for example:

- Issuing, interrupting, continuing and canceling print jobs,
- Setting printing parameters, e.g. heat level of the printhead, print speed, interface configuration, language and time of day (▷ Configuration Manual),
- Control stand-alone operation with a memory module (▷ Configuration Manual),
- Update the firmware (▷ Configuration Manual).

Many functions and settings can also be controlled by software applications or by direct programming with a computer using the printer's own commands. ▷ Programming Manual for details.

Settings made on the touchscreen display make the basic settings of the label printer.



**Note!**

It is advantageous, whenever possible, to make adaptations to various print jobs in the software.

3.1 Start Screen

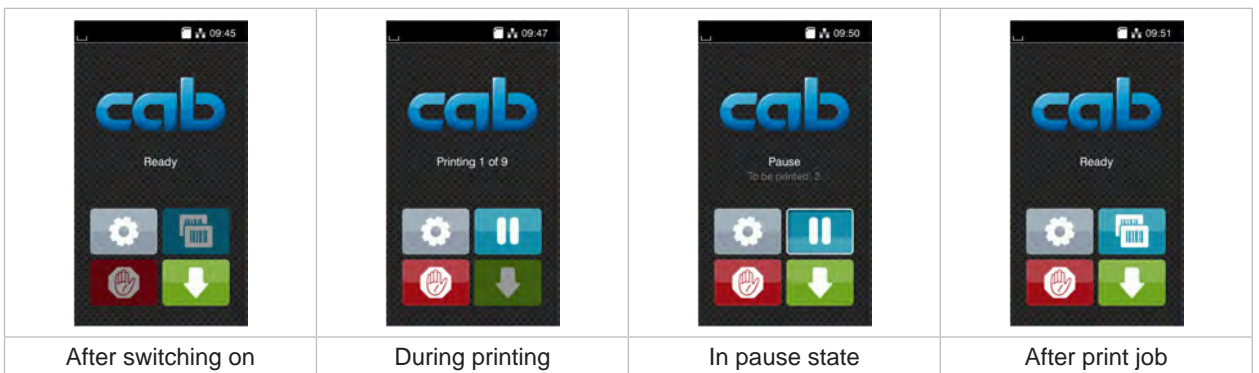


Figure 4 Start screen

The touchscreen display is operated directly by touch:

- To open a menu or select a menu item lightly touch the corresponding symbol.
- To scroll in lists slide finger up or down on the display.

	Open the menu		Repeat the last printed label
	Interrupt the print job		Short touch: Cancel the current print job Long touch: Cancel all print jobs
	Continue the print job		Feed a blank label

Table 1 Symbols on the start screen



**Note!**

Inactive symbols are shaded.

With special software or hardware configurations additional symbols appear on the start screen:

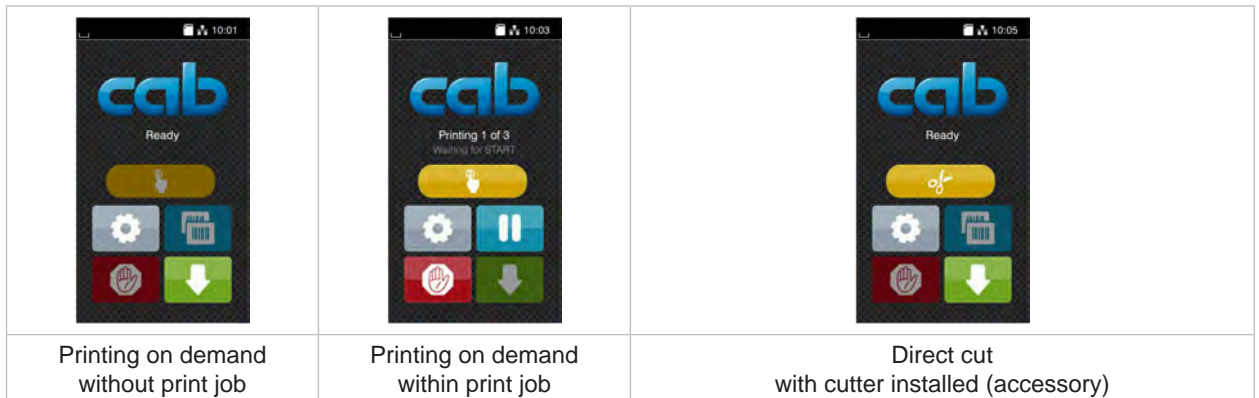


Figure 5 Optional symbols on the start screen

	Release printing of a single label within a print job including cutting...		Release a direct cut without media feed
--	--	--	---

Table 2 Optional symbols on the start screen

In the headline several information are displayed as widgets depending on the configuration:



Figure 6 Widgets in the start screen

	Displays the current data transfer in the form of a falling drop.
	The <i>Save data stream</i> function is active ▷ Configuration manual All received data are stored in a .lbl file.
	Warning ribbon end ▷ Configuration manual The remaining diameter of the ribbon supply roll undershoots the set value.
	SD card installed
	USB memory installed
	gray: Bluetooth adapter installed, white: Bluetooth connection active
	WiFi connection active The WiFi strength is displayed by the number of white arcs.
	Ethernet connection active
	USB connection active
	abc program active
	Clock time

Table 3 Widgets in the start screen

3.2 Navigation in the Menu

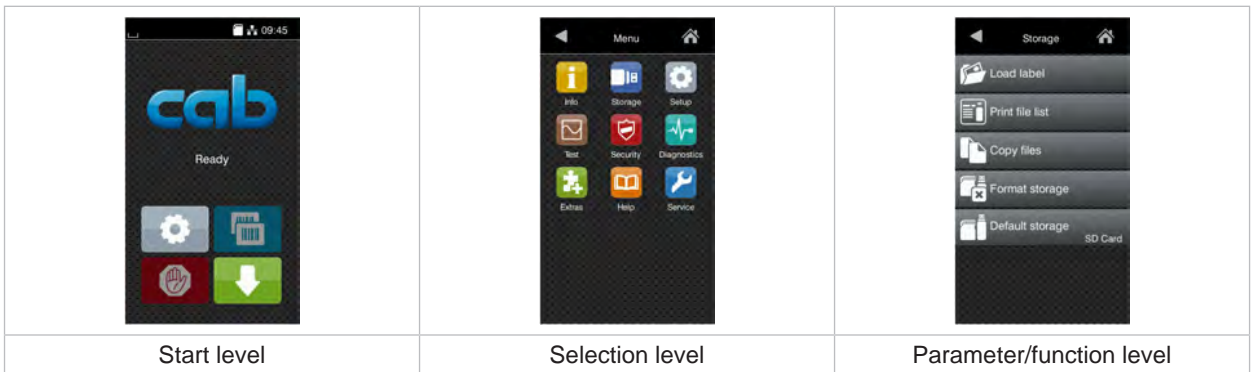





Figure 7 Menu levels

- ▶ To open the menu select  on the start screen.
- ▶ Select a theme in the selection level.  
Several themes have substructures again with selection levels.  
To return from the current level to the upper one select . To leave the menu select .
- ▶ Continue the selection until the parameter/function level is reached.
- ▶ Start a function. The will carry out the function possibly after a preparing dialogue.  
- or -  
Select a parameter to set. The setup possibilities are depending from the parameter type.

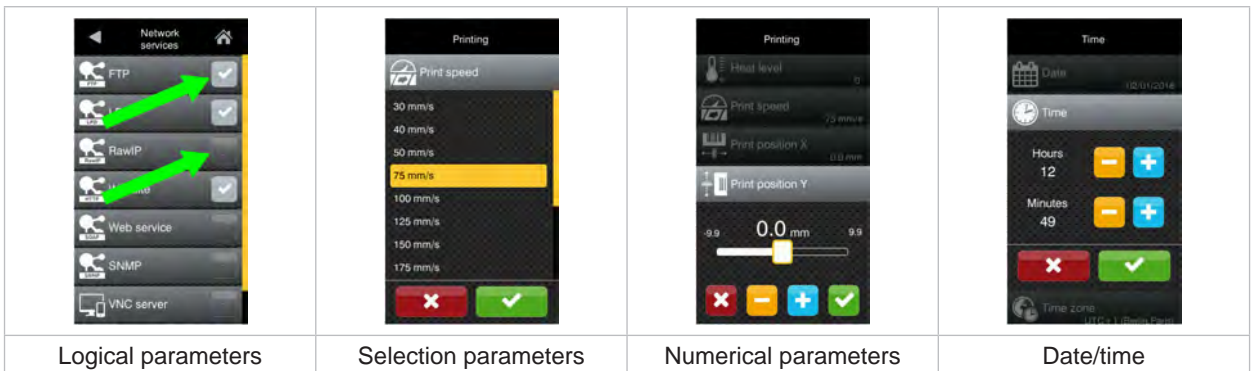


Figure 8 Samples for parameter setting








	Scroll bar for rough value setting
	Decreasing the value step-by-step
	Increasing the value step-by-step
	Return without saving the setting
	Return with saving the setting
	Parameter is disabled, touching enables the parameter
	Parameter is enabled, touching disables the parameter

Table 4 Buttons for parameter setting

## 4.1 Loading Media from Roll

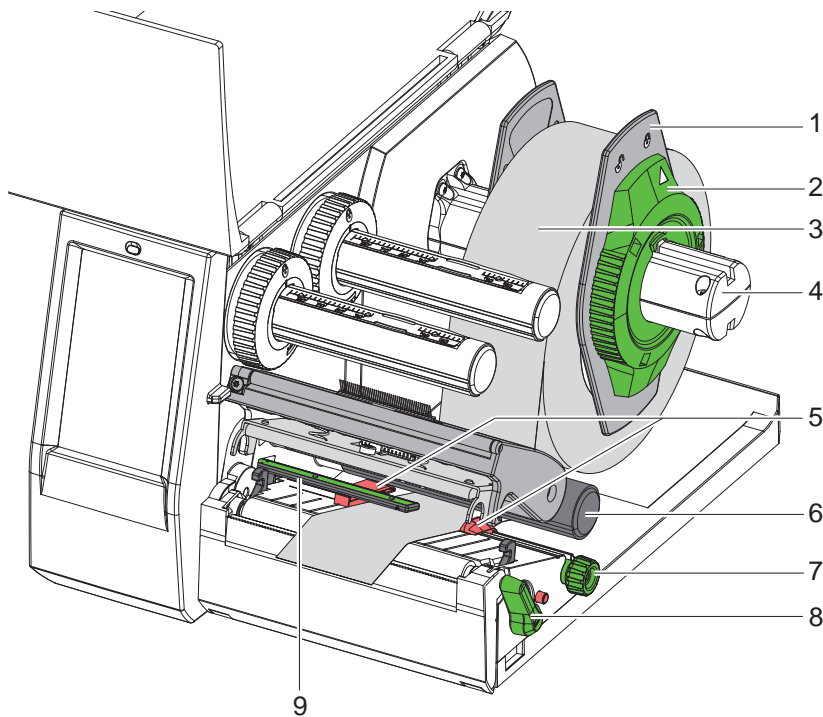




Figure 9 Loading media from roll

1. Turn ring (2) at the margin stop (1) counterclockwise, so that the arrow points to the symbol , and thus release the margin stop.
2. Remove the margin stop (1) from the roll retainer (4).
3. Load label roll (3) on the roll retainer (4) in such a way that the labels can be inserted into the printhead in the right position. The printing side of the labels must be visible from above.
4. Re-mount the margin stop (1) onto the roll retainer (4). Push the margin stop (1) to the roll (3) until the roll touches both margin stops and a clear resistance is encountered.
5. Turn ring (2) clockwise, so that the arrow (10) points to the symbol , and thus fix the margin stop (1) on the roll retainer (4).
6. Turn lever (8) counterclockwise to open printhead.
7. Position guides (5) by turning the knob (7) so that they are several millimeters wider than the material.
8. Position material below the roller (6) and guide it through the print unit.

**Attention!**

- ▶ Guide material through the print unit below the label sensor (9).

9. Move guides (5) closely to the edges of the material without clamping the material.
10. Adjust label sensor (▷ 4.2 on page 13).
11. Press printhead retainer down and turn lever (8) clockwise to lock the printhead.

## 4.2 Adjusting the Label Sensor

**Note!**

When the printer is delivered the label sensor is positioned in the middle of the paper feed. Thus, the label sensor must only be adjusted if materials with the following characteristics are used:

- Material with reflex or cut-out marks, which are not in the middle.
- Multi-strip material with an even number of strips.
- Material with irregularly shaped labels.

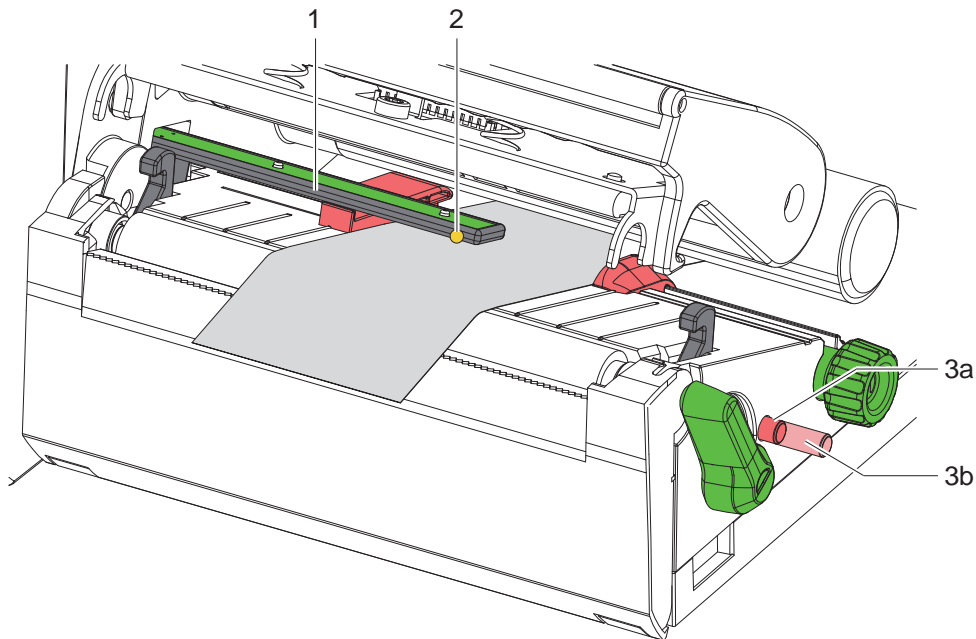


Figure 10 Adjusting the label sensor

The sensor position (3) is marked with a yellow LED in the sensor retainer.

1. Open the printhead.
2. Bring knob (3) by pressing it into the setting position (3b).
3. Position the sensor holder (1) by turning the knob (3) so that the sensor (2) can detect the front edge of the label in the direction of paper flow or the reflex or cut-out mark.
4. Bring knob (3) by pressing it into the basic position (3a).

### 4.3 Loading Transfer Ribbon



**Note!**

With direct thermal printing, do not load a transfer ribbon; if one has already been loaded, remove it.

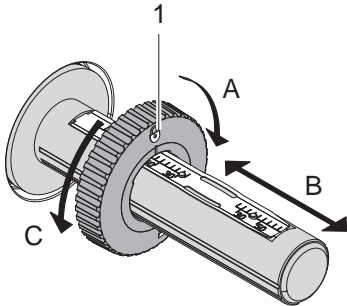


Figure 11 Guide Adjustment

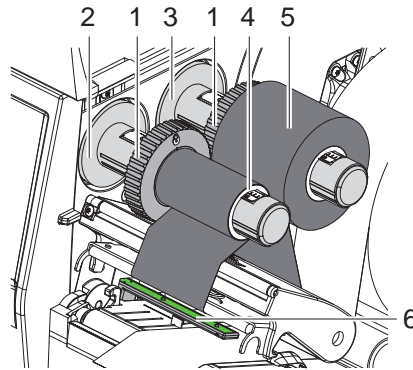


Figure 12 Loading Transfer Ribbon

1. Clean the printhead before loading the transfer ribbon (▷ 6.3 on page 18).
2. Open the printhead.
3. Set guide (1) on the ribbon supply hub to the correct transfer ribbon width (Figure 11):
  - Hold the hub and unlock the guide (1) by turning it in direction A.
  - Slide the guide in direction B and adjust the guide to the ribbon width using the scale.
  - Hold the hub and lock the guide by turning it in direction C.
4. Slide transfer ribbon roll (5) onto the ribbon supply hub (3) until it reaches the guide (1) so that the color coating of the ribbon faces downward when being unwound.



**Note!**

To rewind the ribbon a ribbon core (4) is needed that must be at least equal in width to the supply ribbon.

► When changing the transfer ribbon use the empty supply ribbon core for winding the next ribbon.

5. Adjust the position of the guide on the take-up hub to the width of the ribbon core (4) and push ribbon core on the take-up hub (2).
6. Guide the transfer ribbon through the printing unit as shown in Figure 13.



**Attention!**

► Guide transfer ribbon over the label sensor (6).

7. Secure starting end of transfer ribbon to the transfer ribbon core (4) with adhesive tape. Regard counterclockwise rotation direction of the transfer ribbon take-up hub here.
8. Turn transfer ribbon take-up hub (2) counterclockwise to smooth out the feed path of the transfer ribbon.
9. Close the printhead.

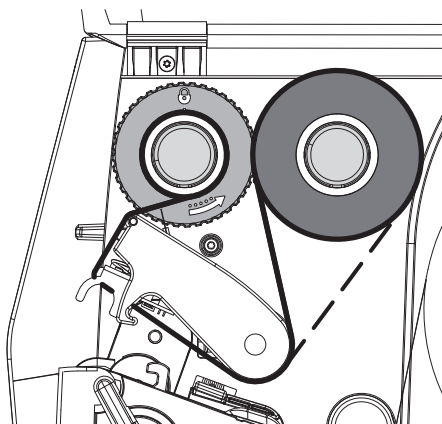


Figure 13 Transfer Ribbon Feed Path

#### 4.4 Setting the Feed Path of the Transfer Ribbon

Transfer ribbon wrinkling can lead to print image errors. The transfer ribbon deflection (2) can be adjusted so as to prevent wrinkles.

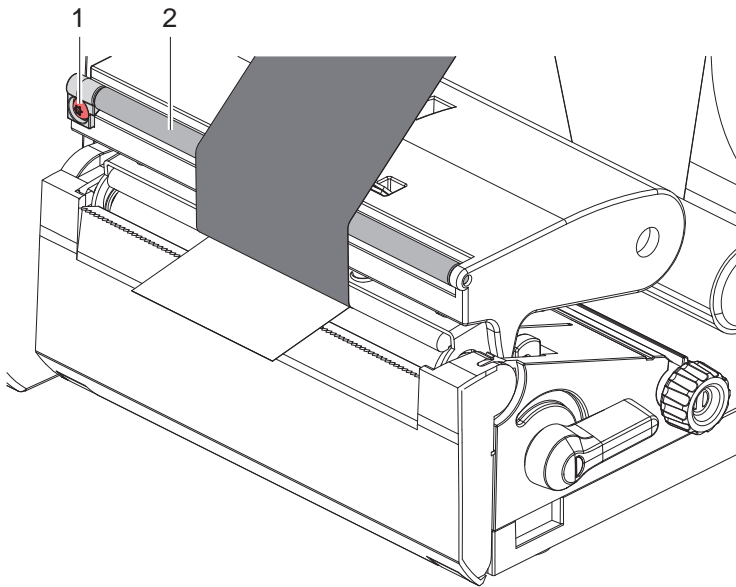


Figure 14 Setting the feed path of the transfer ribbon



**Note!**

**The adjustment is best carried out during printing.**

- ▶ Turn screw (1) with torx wrench TX10 and observe the behavior of the ribbon.
- By turning it clockwise the outer edge of the transfer ribbon is tightened.
- By turning it counterclockwise the inner edge of the transfer ribbon is tightened.

**Attention!**

**Printhead damage caused by improper handling!**

- ▶ Do not touch the underside of the printhead with the fingers or sharp objects.
- ▶ Ensure that the labels are clean.
- ▶ Ensure that the label surfaces are smooth. Rough labels act like emery paper and reduce the service life of the printhead.
- ▶ Print with the lowest possible printhead temperature.

The printer is ready for operation when all connections have been made and labels and, if applicable, the transfer ribbon have been loaded.

### 5.1 Printing in Tear-off Mode

After printing the label is torn-off manually. For this the printer is equipped with a tear-off plate.

### 5.2 Printing in Cutting Mode

- \* For EOS2 and EOS5 cutters are available as accessory. With the cutter installed labels and endless material can be cut-off automatically after printing.



## 6.1 Cleaning Information

**Danger!**

Risk of death via electric shock!

- ▶ Disconnect the printer from the power supply before performing any maintenance work.

The label printer requires very little maintenance.

It is important to clean the thermal printhead regularly. This guarantees a consistently good printed image and plays a major part in preventing premature wear of the printhead.

Otherwise, the maintenance is limited to monthly cleaning of the device.

**Attention!**

The printer can be damaged by aggressive cleansers.

Do not use abrasive cleaners or solvents for cleaning the external surfaces or modules.

**Recommended Cleaners**

Print an rewind guide roller	Roller cleaner W1 (Part No. 9200051)
Printhead an label sensor	Isopropanol > 99,9%
Other surfaces	Isopropanol 70-100%

Table 5 Recommended cleaners

- ▶ Remove dust and paper fluff from the print area with a soft brush or vacuum cleaner.

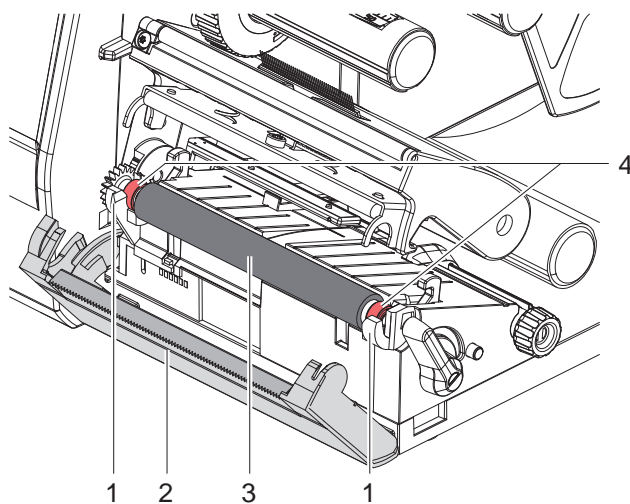
## 6.2 Cleaning the Print Roller

Accumulations of dirt on the print roller may impair the media transport and the print quality.

**Attention!**

Damage of the print roller.

- ▶ Do not use sharp objects (knives, screwdrivers, etc.) to clean the print roller.



- ▶ Open the printhead.
- ▶ Remove material and transfer ribbon from the printer.
- ▶ Fold down the tear-off plate (2).
- ▶ Lift the print roller (3) from its retainers (1).
- ▶ Remove deposits with roller cleaner W1 and a soft cloth.
- ▶ Wait 2–3 minutes before commissioning the printer.
- ▶ If the roller appears damaged, replace it.
- ▶ Push roller with bearings (4) into the retainers (1) until they click into place.
- ▶ Fold up the tear-off plate (2).

Figure 15 Print roller

### 6.3 Cleaning the Printhead

Cleaning intervals:      direct thermal printing      - every media roll change  
    thermal transfer printing      - every ribbon roll change

Substances may accumulate on the printhead during printing and adversely affect printing, e.g. differences in contrast or vertical stripes.



#### Attention!

**Printhead can be damaged!**

**Do not use sharp or hard objects to clean the printhead.**

**Do not touch protective glass layer of the printhead.**



#### Caution!

**Risk of injury from the hot printhead.**

► **Ensure that the printhead has cooled down before starting cleaning.**

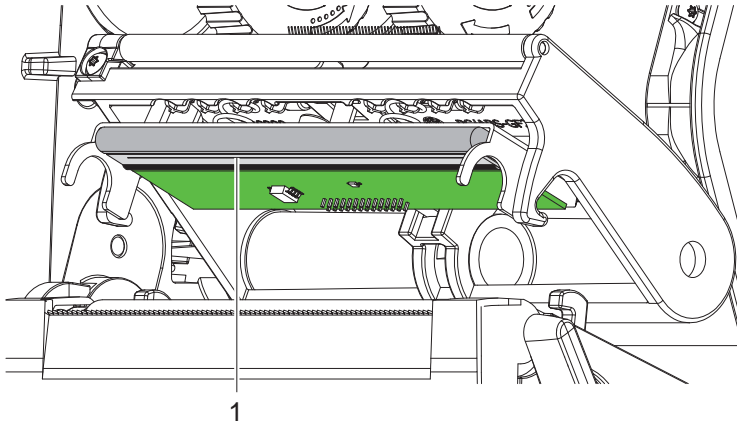


Figure 16 Heating line of the printhead

- Open the printhead.
- Remove material and transfer ribbon from the printer.
- Clean printhead surface with a cotton swab or a soft cloth soaked in >99% isopropanol.
- Allow printhead to dry for 2–3 minutes before commencing printing.

## 7.1 Error Display

The appearance of an error will be shown on the display:

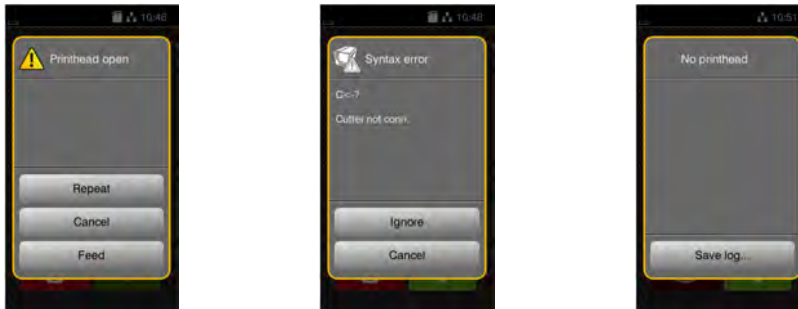


Figure 17 Error display

The error treatment is pending on the error type ▷ 7.2 on page 19.

The display offers the following possibilities to continue after an error occurred:

<i>Repeat</i>	The print job will be continued after clearing the error cause.
<i>Cancel</i>	The print job will be cancelled.
<i>Feed</i>	The paper feed will be synchronized. Following the print job can be continued.
<i>Ignore</i>	The error message will be ignored. The print job will be continued possibly with limited performance.
<i>Save log</i>	The error does not allow print operation. For detailed analysis several system files can be saved on an external memory.

Table 6 Button in the error display

## 7.2 Error Messages and Fault Correction

Error message	Cause	Remedy
<i>Barcode error</i>	Invalid barcode content, e.g. alphanumeric characters in a numerical barcode	Correct the barcode content.
<i>Barcode too big</i>	The barcode is too big for the allocated area of the label	Reduce the size of the barcode or move it.
<i>Buffer overflow</i>	The input buffer memory is full and the computer is still transmitting data.	Use data transmission via protocol (preferably RTS/CTS).
<i>Cutter blocked</i>	Cutter cannot return into its home position and stays in an undefined position	Switch off the printer. Remove material. Switch on the printer. Restart print job. Change material
	No cutter function	Switch the printer off and then on. If error recurs call service.
<i>Cutter jammed</i>	The cutter is unable to cut the labels but is able to return into its home position	Press <i>Cancel</i> Change material.
<i>Device not conn.</i>	Programming addresses a non-existent device	Either connect this device or correct the programming.
<i>File not found</i>	Requested file is not on the card	Check the contents of the card.
<i>Font not found</i>	Error with the selected download font	Cancel current print job, change font.
<i>Memory overflow</i>	Current print job contains too much information, e.g. selected font, large graphics	Cancel current print job. Reduce amount of data to be printed.
<i>Name exists</i>	Duplicate usage of field name in the direct programming	Correct programming

Error message	Cause	Remedy
<i>No label found</i>	There are labels missing on the label material	Press <i>Repeat</i> repeatedly until printer recognizes the next label on the material.
	The label format as set in the software does not correspond with the real label format	Cancel current print job. Change the label format set in the software. Restart print job.
	Printer is loaded with continuous paper, but the software is set on labels	Cancel current print job. Change the label format set in the software. Restart the print job.
<i>No label size</i>	The size of the label is not defined in the programming.	Check programming.
<i>Out of paper</i>	Out of label roll	Load labels.
	Error in the paper feed	Check paper feed.
<i>Out of ribbon</i>	Out of transfer ribbon	Insert new transfer ribbon.
	Transfer ribbon melted during printing	Cancel current print job. Change the heat level via software. Clean the printhead ▷ 6.3 on page 18 Load transfer ribbon. Restart print job.
	The printer is loaded with thermal labels, but the software is set to transfer printing	Cancel current print job. Set software to direct thermal printing. Restart print job.
<i>Printhead open</i>	Printhead not locked	Lock printhead.
<i>Printhead too hot</i>	Printhead is overheated	After pausing the print job will be continued automatically. If the fault recurs repeatedly, reduce the heat level or the print speed via software.
<i>Read error</i>	Read error when reading from the memory card	Check data of the card. Backup data, reformat card.
<i>Remove ribbon</i>	Transfer ribbon is loaded although the printer is set to direct thermal printing	for direct thermal printing remove ribbon
		for thermal transfer printing set the printer in the configuration or in the software to transfer printing
<i>Syntax error</i>	Printer has received an unknown or invalid command from the computer.	Press <i>Ignore</i> to skip the command or press <i>Cancel</i> to cancel the print job.
<i>Unknown card</i>	Card not formatted, Type of card not supported	Format card, use different type of card.
<i>Voltage error</i>	Hardware error	Switch the printer off and then on. If error recurs call service. It is shown which voltage has failed. Please note.
<i>Write error</i>	Hardware error	Repeat the write process, reformat card.

Table 7 Error Messages and Fault Correction

## 7.3 Problem Solution

Problem	Cause	Remedy
Transfer ribbon creases	Transfer ribbon deflection not adjusted	Adjust the transfer ribbon deflection. ▷ 4.4 on page 15
	Transfer ribbon too wide	Use a transfer ribbon slightly wider than the width of label.
Print image has smears or voids	Printhead is dirty	Clean the printhead. ▷ 6.3 on page 18
	Temperature too high	Decrease temperature via software.
	Unsuitable combination of labels and transfer ribbon	Use different type of ribbon.
Printer does not stop after transfer ribbon runs out	Thermal printing is chosen in the software	Change to thermal transfer printing.
Printer prints a sequence of characters instead of the label format	Printer is in <i>ASCII dump mode</i>	Cancel the <i>ASCII dump mode</i> .
Printer transports label media, but transfer ribbon does not move	Transfer ribbon incorrectly inserted.	Check and, if necessary, correct the transfer ribbon web and the orientation of the label side.
	Unsuitable combination of labels and transfer ribbon	Use different type of ribbon.
Printer only prints each second label	Setting of the size in the software is too large.	Change the size in the software.
Vertical white lines in the print image	Printhead is dirty	Clean the printhead. ▷ 6.3 on page 18
	Printhead is defective (failure of heat elements)	Change the printhead. ▷ Service Manual.
Horizontal white lines in the print image	Printer is used with the <i>backfeed &gt; smart</i> in the cut or peel-off mode	Set the <i>backfeed &gt; always</i> in the setup. ▷ Configuration Manual.
Print image is irregular, one side is lighter	Printhead is dirty	Clean the printhead. ▷ 6.3 on page 18

Table 8 Problem solution

## 8.1 Media Dimensions

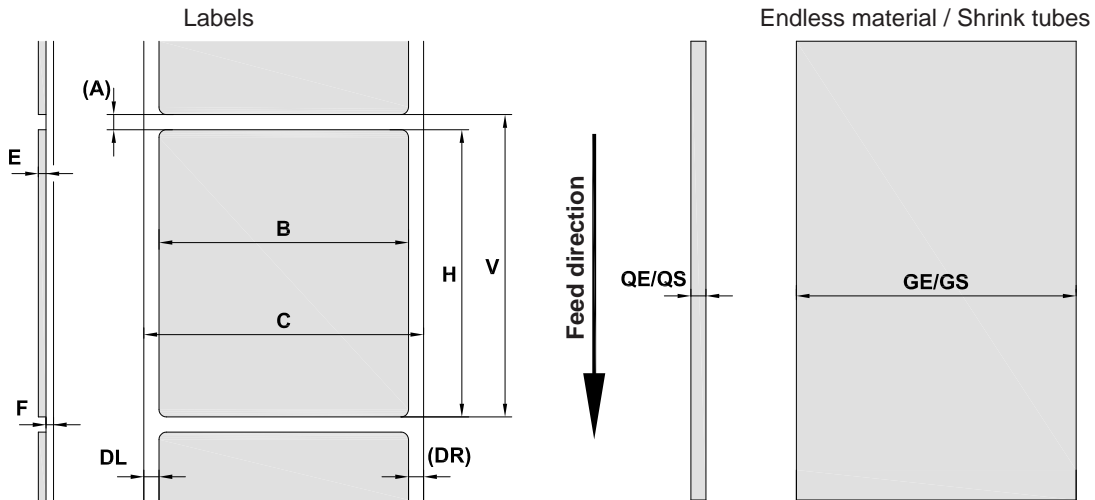


Figure 18 Media dimensions

Dim.	Designation	Dim. in mm
B	Label width with multi-lane labels	10 - 116 5 - 57
H	Label height	5 - 1000
-	Tear-off length	> 30
-	Cut length	> 5
A	Label distance	> 2
C	Width of liner	9 - 120
GE	Width of endless material	9 - 120
GS	Width of shrink tubes	5 - 85
DL	Left margin	$\geq 0$
DR	Right margin	$\geq 0$
E	Label thickness	0,03 - 0,60
F	Liner thickness	0,03 - 0,16
QE	Thickness of endless material	0,05 - 0,50
QS	Thickness of shrink tubes	$\leq 1,1$
V	Label feed	> 7

- Small label sizes, thin materials or strong glue can lead to limitations. Critical applications need to be tested and cleared.
- Note the bending stiffness ! Material must be flexible to follow the radius of the print roller !

Table 9 Media dimensions

8.2 Device Dimensions

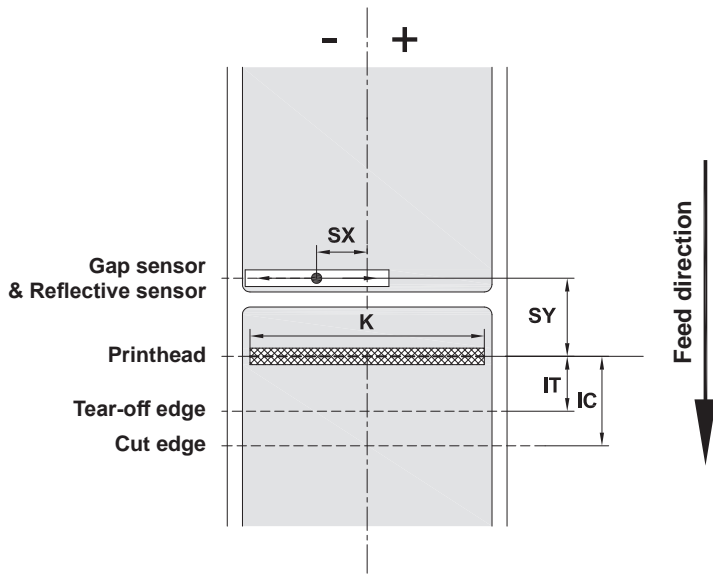


Figure 19 Device dimensions

Dim.	Designation	Dim. in mm
IT	Distance printhead - tear-off edge	13,7
IC	Distance printhead - cut edge	20,3
K	Print width	203 dpi
		300 dpi
SX	Distance gap/reflective sensor - middle of paper track i.e. permissible distance of reflex or cut-out marks from the middle of the material	-58 - 0
SY	Distance gap/reflective sensor - printhead	44,9

Table 10 Device dimensions

### 8.3 Reflex Mark Dimensions

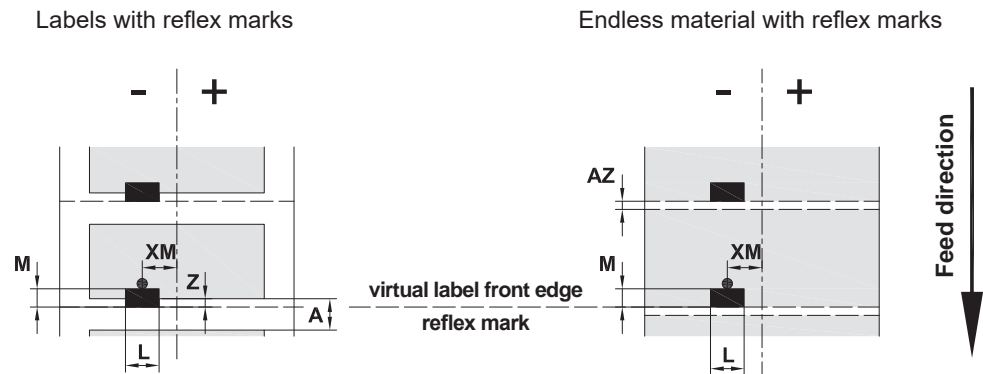


Figure 20 Reflex mark dimensions

Dim.	Designation	Dim. in mm
A	Label distance	> 2
AZ	Distance between print zones	> 2
L	Width of reflex mark	> 5
M	Height of reflex mark	3 - 10
XM	Distance mark - middle of paper track	-58 - 0
Z	Distance virtual label front edge - actual label front edge ▶ Adjust software settings	0 up to A / recommended : 0
	<ul style="list-style-type: none"> <li>• Reflex marks must be on the back side of the material (liner).</li> <li>• Label sensor for reflex marks on the top side on request.</li> <li>• Specification is valid for black marks.</li> <li>• Recognition of colored marks may fail. ▶ Preliminary tests are needed.</li> </ul>	

Table 11 Reflex mark dimensions



#### Note!

In case of translucent label material, reflex marks can be detected not only by the reflective sensor but also by the gap sensor.



8.4 Cut-out Mark Dimensions

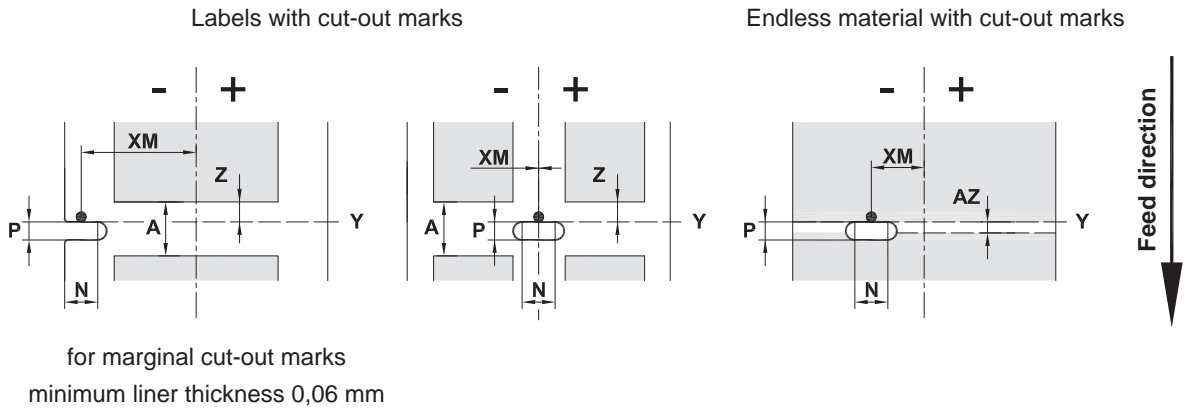


Figure 21 Cut-out mark dimensions

Dim.	Designation	Dim. in mm
A	Label distance	> 2
AZ	Distance between print zones	> 2
N	Width of cut-out mark for marginal cut-out	> 5 > 8
P	Height of cut-out mark	2 - 10
XM	Distance mark - middle of paper track	-58 - 0
Y	Sensor recognized virtual label front edge with gap sensor recognition	Rear edge cut-out
Z	Distance recognized front edge - actual label front edge ▶ Adjust software settings	0 up to A-P

Table 12 Cut-out mark dimensions

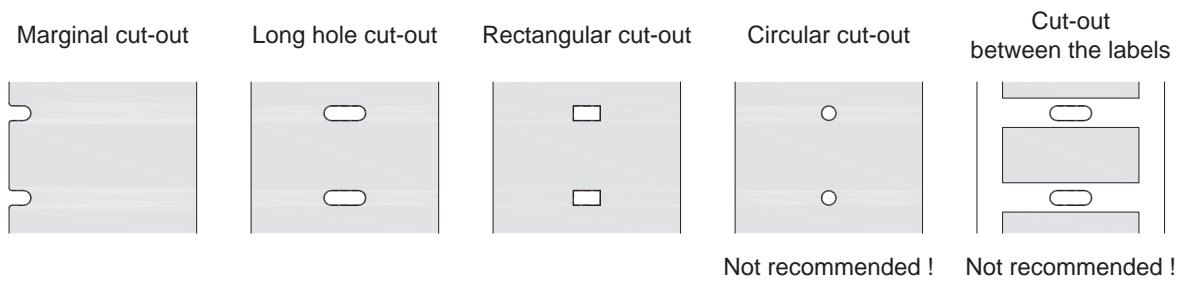


Figure 22 Samples for cut-out marks

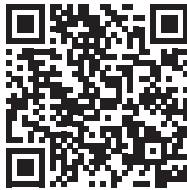
## 9.1 Reference to the EU Declaration of Conformity

The printers EOS2 and EOS5 comply with the relevant fundamental regulations of the EU Rules for Safety and Health:

- Directive 2014/35/EU relating to electrical equipment designed for use within certain voltage limits
- Directive 2014/30/EU relating to electromagnetic compatibility
- Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment

### EU Declaration of Conformity

▷ <https://www.cab.de/media/pushfile.cfm?file=3309> 



## 9.2 FCC

**NOTE :** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. The equipment generates, uses, and can radiate radio frequency and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user may be required to correct the interference at his own expense.

**C**

Cleaning	
information .....	17
printhead .....	18
print roller .....	17
Connecting .....	8
Contents of delivery .....	8
Cut-out marks .....	25

**D**

Device dimensions .....	23
Device overview .....	6

**E**

Endless material .....	22
Environment .....	5
Errors	
correction .....	19
messages .....	19
types .....	19

**I**

Important information.....	4
Intended use.....	4

**L**

Lithium battery .....	5
Loading labels .....	12
Loading labels from roll .....	12
Loading transfer ribbon.....	14

**M**

Margin stop.....	6
Media dimensions.....	22

**P**

Power supply .....	5
Printhead	
cleaning .....	18
damage.....	16
Print roller, cleaning.....	17
Problem solution.....	21

**R**

Reflex marks.....	24
-------------------	----

**S**

Safety instructions .....	5
Service work .....	5
Setting the ribbon feed path .....	14
Setting-up .....	8
Supply voltage .....	8
Switching on .....	8

**T**

Tear-off mode .....	16
---------------------	----

**U**

Unpacking.....	8
----------------	---

**V**

Voltage.....	5
--------------	---

This page was left blank intentionally.