# **Operator's Manual**





# **Label Printer**



Made in Germany

## Operator's Manual - Translation of the Original Version for the following products

Family	Туре	
Hermes+L	Hermes+ 2L	
	Hermes+ 4L	
	Hermes+ 4.3L	
	Hermes+ 6L	
Hermes+R	Hermes+ 2R	
	Hermes+ 4R	
	Hermes+ 4.3R	
	Hermes+ 6R	

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1	Introduction
1.1	Instructions
	Important information and instructions in this documentation are designated as follows:
4	Danger! Draws your attention to an exceptionally grave, impending danger to your health or life.
<u>.</u>	Warning! Indicates a hazardous situation that could lead to injuries or material damage.
!	Attention! Draws attention to possible dangers, material damage or loss of quality.
1	Notice! Gives you tips. They make a working sequence easier or draw attention to important working processes.
B	Environment! Gives you tips on protecting the environment.
►	Handling instruction
$\triangleright$	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 printer is designed for the integration into a production line. It is intended exclusively for printing suitable materials that have been approved by the manufacturer and for coupling a cab or non-cab applicator which transfers labels from the printer to a product. 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.

## Notice!

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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

- 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, especially the printhead 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.

### 1 Introduction

- 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 LpA 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 Safety Marking

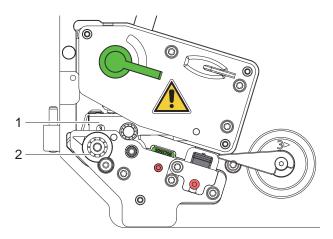


Fig. 1 Safety marking



- Risk of burning on the hot printhead assembly (1).
- Do not touch the printhead during operation, and allow to cool down before changing material and before disassembly.
- Entanglement hazard by turning roller (2).
- Ensure that people's clothing, hair, jewelry etc. do not come into contact with the exposed rotating parts.

## 1.5 Environment

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

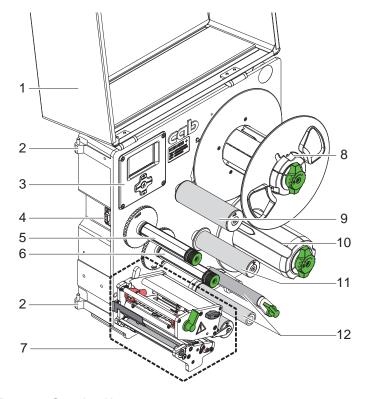
▶ Send to suitable collection points, separately from residual waste.

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

- Send the parts for recycling.
- 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.

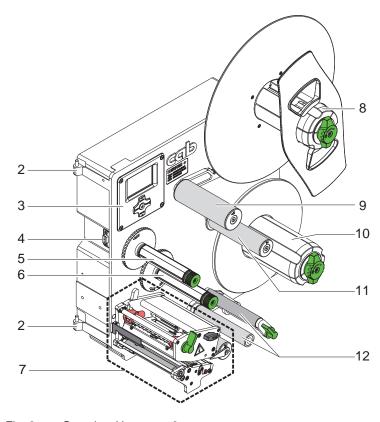
#### 6 2 Installation

2.1 **Device Overview** 



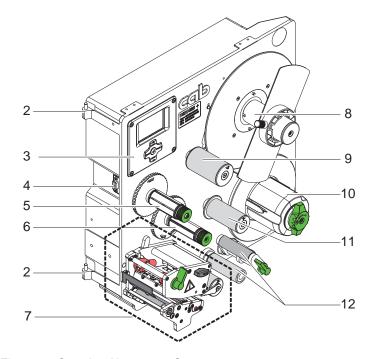
- Cover (Option) 1
- 2 Hinges for cab-applicators
- 3 Control panel
- Interface for cab-applicators Ribbon take-up hub 4
- 5
- Ribbon supply hub 6
- 7 Print mechanism
- 8 Roll retainer
- 9 Pivot arm with guide roller
- 10 Internal rewinder
- 11 Guide roller
- 12 Transport system

Fig. 2 Overview Hermes+ -2



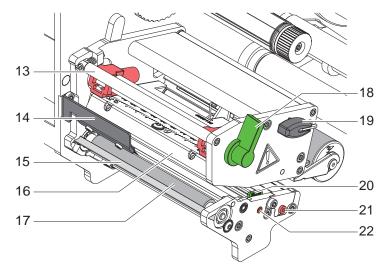
- 2 Hinges for cab-applicators
- Control panel 3
- Interface for cab-applicators Ribbon take-up hub 4
- 5
- Ribbon supply hub 6
- Print mechanism 7
- 8 Roll retainer
- 9 Pivot arm with guide roller
- 10 Internal rewinder
- 11 Guide roller
- 12 Transport system

Fig. 3 Overview Hermes+ -3



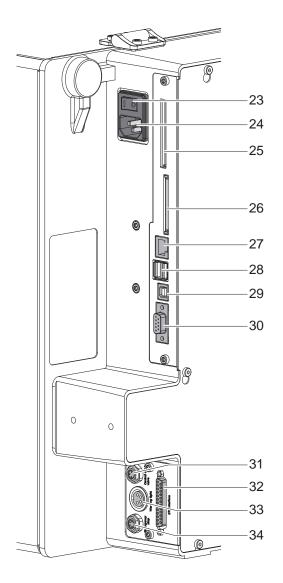
- 2 Hinges for cab-applicators
- 3 Control panel
- Interface for cab-applicators Ribbon take-up hub Ribbon supply hub 4
- 5
- 6
- Print mechanism 7
- 8 Roll retainer
- 9 Pivot arm with guide roller
- 10 Internal rewinder
- 11 Guide roller
- 12 Transport system

Fig. 4 **Overview Hermes+ -2S** 



- 13 Ribbon deflection
- 14 Antistatic brush (Option)
- 15 Peel-off edge
- 16 Printhead retainer with printhead
- 17 Print roller
- 18 Printhead locking lever
- 19 Allen key
- 20 Media guide
- 21 Spindle for label sensor adjustment
- 22 Spindle for media guide adjustment

Fig. 5 Print mechanism



- 23 Power switch
- 24 Power connection jack

  - 25 Slot for PC Card Type II or WLAN card 26 Slot for CompactFlash memory card
- 27 Ethernet 10/100 Base-T
- 28 2 USB master ports for keyboard, scanner or service key
  29 USB high-speed slave port
- 30 Serial RS-232 C port
  - 31 Connector central compressed air valve
  - 32 I/O interface
- 33 Connector warning light
- 34 Connector emergency stop

Fig. 6 Connections

## 2 Installation

## 2.2 Unpacking and Setting-up the Printer

- Lift the printer out of the box.
- Check printer for damage which may have occurred during transport.
- Remove foam transportation safeguards near the printhead.

Check delivery for completeness.

Contents of delivery:

- Printer
- Power cable
- USB cable
- Operator's Manual
- DVD with label software, Windows driver and documentation

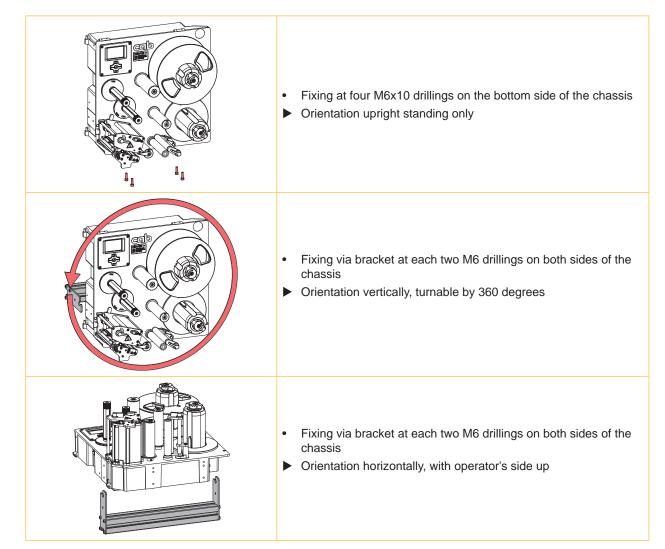
## Notice!

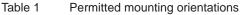
Please keep the original packaging in case the printer must be returned.

## Attention!

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

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





## 10 2 Installation

## 2.3 Connecting the Device

The standard available interfaces and connectors are shown in Fig. 6 on page 8.

### 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 $\sim$ /50 Hz or 115 V $\sim$ /60 Hz without adjustment.

- 1. Check that the device is switched off.
- 2. Plug the power cable into the power connection socket (24 / Fig. 6).
- 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 printer are grounded.

• Connect the printer to a computer or network by a suitable cable.

For details of the I/O interface, the connector emergency stop and the connector central valve  $\triangleright$  Interface Description.

For details of the configuration of the other interfaces  $\triangleright$  Configuration Manual.

## 2.4 Switching on the Device

When all connections have been made:

Switch the printer on at the power switch (23 / Fig. 6). The printer performs a system test, and then shows the system status Ready in the display.

If an error occurs during the system test, the symbol  $\mathfrak{F}$  and type of error are displayed.

## 3 Control Panel

## 3.1 Structure of the Control Panel

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),
- Start the test functions (▷ Configuration Manual),
- Control stand-alone operation with a memory module (> Configuration Manual),
- Update the firmware (> Configuration Manual).

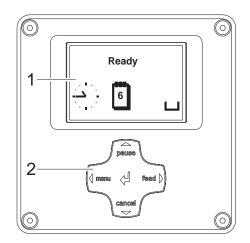
Many functions and settings can also be controlled by software applications or by direct programming with a computer using the printer's own commands.  $\triangleright$  Programming Manual for details.

Settings made on the control panel make the basic settings of the printer.

#### Notice!

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



The control panel consists of a graphic display (1) and the navigator pad (2) with five integrated keys.

The graphic display indicates the current status of the printer and the print job, indicates faults and shows the printer settings in the menu.

Fig. 7 Control Panel

## 3.2 Symbol Displays

The symbols shown in the following table may appear in the status line of the display, depending on the printer configuration. They enable the current printer status to be seen quickly. For the configuration of the status line  $\triangleright$  the Configuration Manual.

Symbol	Description	Symbol	Description	Symbol	Description
	Clock	9	Ribbon supply	Ĵ	Temperature of the printhead
1	Date sheet	-   -	Wi-Fi signal strength	!	Access to memory card
DIE 29.01. 10:58	Date/time digital	<> FDX 100	Ethernet link status	•	Printer is receiving data



Symbol displays

## 12 3 Control Panel

## 3.3 Printer States

State	Display	Description
Ready	Ready and configured symbol displays, such as time $\rightarrow$ and date $\boxed{1}$	The printer is in the ready state and can receive data.
Printing label	Printing label and the number of the printed label in the print job.	The printer is currently processing an active print job. Data can be transmitted for a new print job. The new print job will start when the previous one has finished.
Pause	Pause and the symbol 🗒	The printing process has been interrupted by the operator.
Correctable error	and the type of error and the number of labels still to be printed.	An error has occurred that can be rectified by the operator without interrupting the print job. The print job can be continued after the error has been rectified.
Irrecoverable error	and the type of error and the number of labels still to be printed.	An error has occurred that cannot be rectified without interrupting the print job.
Critical error	and the type of error	<ul> <li>An error occurs during the system test.</li> <li>Switch the printer off and then on again at the power switch or</li> <li>Press cancel key.</li> <li>Call Service if the fault occurs persistently.</li> </ul>
Power Save Mode	and the key lighting is switched off	<ul> <li>If the printer is not used for a lengthy period, it automatically switches to power save mode.</li> <li>To exit power save mode: Press any key on the navigator pad.</li> </ul>

Table 3 Printer states

## 3 Control Panel

## 3.4 Key Functions

The key functions depend on the current printer state:

- Active functions: Labels and symbols on the navigator pad keys light up.
- Active functions light up white in print mode (e. g. menu or feed).
- Active functions light up orange in the offline menu (arrows, key ←).

Key		Display	State	Function	
menu	lights	Ready	Ready	To the offline menu	
feed	lights	Ready	Ready	Feeds a blank label	
pause	lights	Ready	Ready	After the end of a print job, reprint the last label	
		Printing label	Printing label	Interrupt print job, printer goes into "Pause" state	
	Par	Pause	Pause	Continue the print job, printer goes into "Printing label" state	
	flashes	STOP	Correctable error	Continue the print job after rectifying the error, printer goes into "Printing label" state	
cancel	el lights	Ready	Ready	Delete internal memory, the last label can no longer be reprinted.	
		Printing label	Printing label	Short press → cancels the current print job	
		Pause	Pause	Longer press $\rightarrow$ cancels the current print job	
		STOP	Correctable error	and deletes all print jobs	
	flashes	5TOP	Irrecoverable error		
Ч	lights	STOP	Error	Call Help - Concise information for rectifying th fault will be displayed	

Table 4

Key functions in the print mode

Key	Menu	Parameter setting		
		Parameter choice	Numeric value	
Î	Return from a submenu	-	Increase of the number at the cursor position	
Ļ	Jump into a submenu	-	Decrease of the number at the cursor position	
←	Menu option to the left	Sheets to the left	Cursor shift to the left	
$\rightarrow$	Menu option to the right	Sheets to the right	Cursor shift to the right	
Ļ	Start of a selected menu option	Confirmation of the selected value		
	Pressing 2 s: Leaving the offline menu	Pressing 2 s: Abort without changing the value		

Table 5 Key functions in the offline menu

## 14 4 Loading Material

## 6

Notice! For adjustments and simple installation work, use the accompanying Allen key located in the upper section of the print unit. No other tools are required for the work described here.

## 4.1 Loading Labels

## 4.1.1 Positioning the Media Roll on the Roll Retainer

## Hermes+ -2 and Hermes+ -3

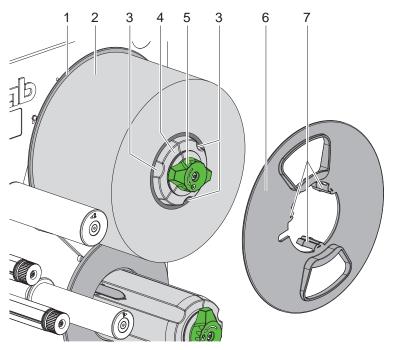


Fig. 8 Loading label roll

- 1. Turn knob (5) clockwise to release the roll retainer (4).
- 2. Remove the margin stop (6) from the roll retainer.
- 3. Load label roll (2) on the roll retainer (4) in such a way, that the labels are visible from above after unrolling.
- 4. Slide the roll against the wall plate (1).
- 5. Guide the latches (7) of the margin stop (6) into the grooves (3) of the roll retainer (4) and push the roll retainer against the label roll (2).
- 6. Turn knob (5) counterclockwise to tighten the label roll and the margin stop on the roll retainer.

## 4 Loading Material



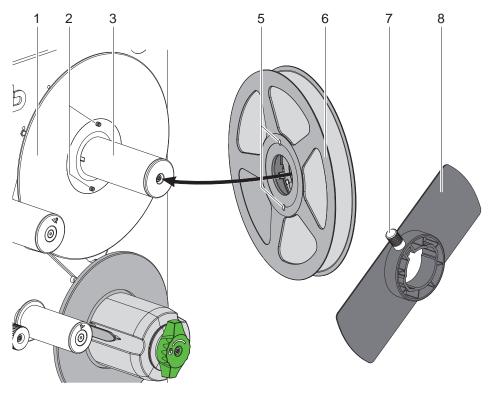


Fig. 9 Loading label roll

- 1. Loosen knurled screw (7) and remove flange (8) from the roll retainer (3).
- 2. Load label roll (6) on the roll retainer (3) in such a way, that the labels are visible from above after unrolling.
- 3. Push the label roll against the wall spacer (1) and turn it in such a position, that the bolts (2) grasp the holes (5).
- 4. Push the flange (8) onto the roll retainer (3) until it stops an tighten the knurled screw (7).

### 16 4 Loading Material

## 4.1.2 Inserting the Labels into the Print Mechanism

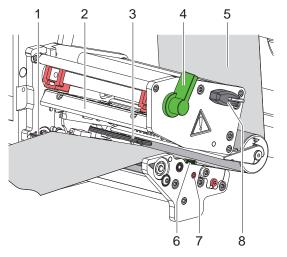


Fig. 10 Inserting the labels into the print mechanism

Fig. 11 Label feed path

- 1. Turn lever (4) counterclockwise to lift the printhead (2).
- 2. Move the guide (6) to the outermost position by turning the spindle (7) with the Allen key (8).
- 3. Supply a longer label strip of approx. 100 cm.
- 4. Guide label strip (5) to the print unit as shown in Fig. 11. The broken line shows the path for inside wound labels.
- 5. Guide label strip through the label sensor (3) to the peel-off edge.
- 6. Move the guide (6) against the label strip by turning the spindle (7).
- 7. Forward the label strip over the peel-off edge (1), that the strip reaches back internal rewinder. Remove the labels from the overhanging strip.

## 4.1.3 Setting the Label Sensor

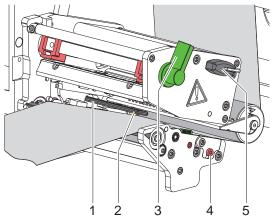


Fig. 12 Setting the Label Sensor

The label sensor (1) can be shifted perpendicular to the direction of paper flow for adaptation to the label medium. The sensor unit of the label sensor is visible from the front through the print unit. When the printer is switched on, a yellow LED illuminates the sensor position (2).

- Position label sensor by turning the spindle (4) with the Allen key (5) in such a way that the sensor can detect the label gap or a reflex or cut-out mark.
- or, if the labels deviate from a rectangular shape, -
- Align label sensor with the front edge of the label in the direction of paper flow.
- ▶ Turn lever (3) clockwise to lock the printhead.

## 4 Loading Material

## 4.1.4 Guiding the Liner to the Internal Rewinder

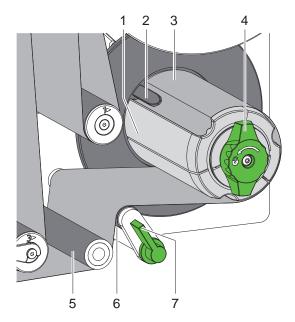


Fig. 13 Guiding the liner to the internal rewinder

- 1. Turn lever (7) clockwise to lift the locking system (6) from the transport roller (5).
- 2. Hold rewinder (1) firmly and turn knob (4) clockwise until it stops.
- 3. Guide liner coming from the peel-off edge around the transport roller (5) and the locking system (6) to the internal rewinder (1).
- 4. Push liner under a bracket (2) of the rewinder (1) and turn knob (4) counterclockwise until it stops. The rewinder is fully spread, thus gripping the liner firmly.
- 5. Turn rewinder (1) counterclockwise to tighten the liner.
- 6. Turn lever (7) counterclockwise to lock the transport system (5,6).

## 18 4 Loading Material

## 4.2 Setting the Head Locking System

The printhead is pushed on via two plungers. The location of the outer plunger (2) must be set to the width of the label medium used so as to

- · achieve even print quality across the entire label width
- prevent wrinkles in the feed path of the transfer ribbon
- prevent premature wearing of the print roller and printhead.

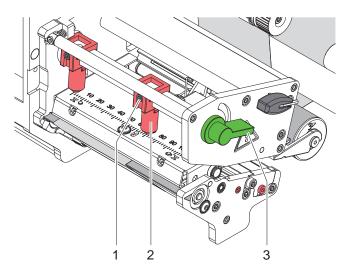


Fig. 14 Setting the head locking system

- 1. Turn lever (3) clockwise to lock the printhead.
- 2. Loosen threaded pin (1) at outer plunger (2) with Allen key.
- 3. Align outer plunger (2) to the outer label edge and tighten threaded pin (1).

## 4 Loading Material

## 4.3 Loading Transfer Ribbon

Notice!

## A

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

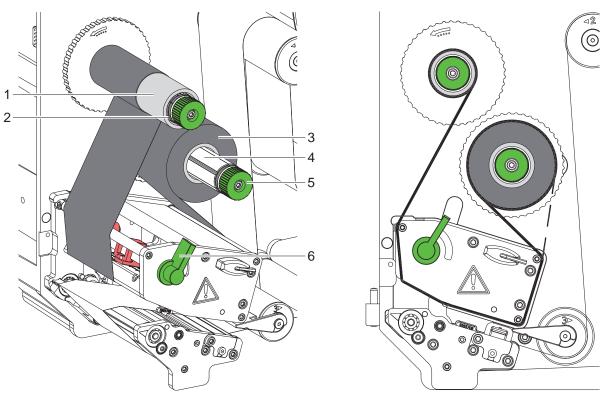


Fig. 15 Loading transfer ribbon



- 1. Clean printhead before loading the transfer ribbon ( $\triangleright$  6.3 on page 22).
- 2. Turn lever (6) counterclockwise to open the printhead.
- 3. Slide transfer ribbon roll (3) onto the ribbon supply hub (4) until it stops and so that the color coating of the ribbon faces away from the printhead after loading.
- 4. Hold ribbon supply hub (4) firmly and turn knob (5) counterclockwise until the transfer ribbon roll is secured.
- 5. Slide suitable ribbon core (1) onto the transfer ribbon take-up hub (2) and secure it in the same way.
- 6. Guide transfer ribbon through the print unit as shown in the Fig. 16.
- 7. Secure starting end of transfer ribbon to the transfer ribbon core (1) with adhesive tape. Ensure 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. Turn lever (6) clockwise to close the printhead.

## 20 4 Loading Material

## 4.4 Setting the Feed Path of the Transfer Ribbon

Transfer ribbon wrinkling can lead to print image errors. Transfer ribbon deflection can be adjusted so as to prevent wrinkles.

#### Notice!

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A maladjustment of the head locking system may also cause ribbon wrinkling

► Check first the setting of the head locking system (▷ 4.2 on page 18).

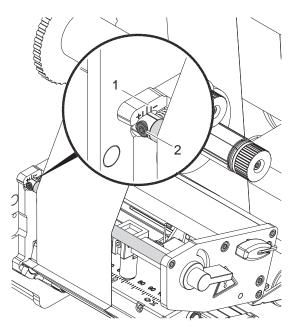


Fig. 17 Setting the feed path of the transfer ribbon

## A

#### Notice! The adjustment is best carried out during printing.

- 1. Read current setting on the scale (1) and record if necessary.
- Turn screw (2) with Allen key and observe the behavior of the ribbon. In the + direction, the inner edge of the transfer ribbon is tightened, and the outer edge is tightened in the - direction.

## 5 Printing Operation

## 5.1 Printhead Protection



## Attention!

Printhead damage caused by improper handling!

- **b** 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.

## 5.2 Synchronization of the Paper Feed

After the label stock has been inserted, for peel-off mode a synchronization of the paper feed is required. That way the first label, which is detected by the label sensor, will be transported to the print position and all labels in front will be fed out of the printer. So the synchronization avoids, that blank labels are peeled-off together with the first printed label. This can cause useless first label.

- Press the **feed** key to start the synchronization.
- Remove the blank labels peeled-off during the synchronization.

## Notice!

The synchronization will not be lost by switching off the printer as long as the printhead and the transport system are kept close.

## 5.3 Peel-off Mode

In Peel-off mode, the labels are automatically peeled off the liner after printing and presented for removal.



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#### Attention!

Activate the peel-off mode in the software.

This is done with the "P command" in the direct programming,  $\triangleright$  Programming Manual.

#### Notice!

The print of a label must be started by the external START or WDR signal ( $\triangleright$  Interface Description). When operating Hermes+ without cab applicator the removal of the label must be confirmed by the ETE signal ( $\triangleright$  Interface Description).

When a cab applicator is connected the ETE signal will be generated automatically.

## 5.4 Ribbon Saving

If there is no information to print during a longer label feed, the printhead will be lifted, and the transfer ribbon will be paused from feeding. This will reduce the ribbon consumption. The minimum length for ribbon saving is defined in the firmware and depends on the print speed.

The ribbon saver can permanently be activated in the printer configuration ( $\triangleright$  Configuration Manual) or job-oriented by the software ( $\triangleright$  Programming Manual).

## 6 Cleaning

## 6.1 Cleaning Information



## Danger!

Risk of death via electric shock!

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

The 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.

Y

## **Attention!**

- The printer can be damaged by aggressive cleansers.
- > Do not use abrasive cleaners or solvents for cleaning the external surfaces or modules.
- Remove dust and paper fluff from the print area with a soft brush or vacuum cleaner.
- ▶ The cover of the printer can be cleaned with a standard cleanser.

## 6.2 Cleaning the Print Roller

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

- Lift the printhead.
- Remove labels and transfer ribbon from the printer.
- Remove deposits with roller cleaner and a soft cloth.
- ▶ If the roller appears damaged, replace it ▷ Service Manual.

## 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!

l l

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Printhead can be damaged!

- Do not use sharp or hard objects to clean the printhead.
- **b** Do not touch protective glass layer of the printhead with fingers.

#### **Attention!**

Risk of injury from the hot printhead.

- Ensure that the printhead has cooled down before starting cleaning.
- Lift the printhead.
- Remove labels and transfer ribbon from the printer.
- Clean printhead surface with a cotton swab dipped in pure alcohol.
- ▶ Allow printhead to dry for 2–3 minutes before commissioning the printer.

## 7 Fault Correction

## 7.1 Types of Errors

The diagnostic system indicates on the screen if an error has occurred. The printer is set into one of the three possible error states according to the type of error.

State	Display	Кеу	Remark
Correctable error	STOP	pause flashes	▷ 3.4 on page 13
		cancel lights	
Irrecoverable error	STOP	cancel flashes	
Critical fault	X	-	

Table 6 Error states

## 7.2 **Problem Solution**

Problem	Cause	Remedy
Transfer ribbon creases	Head locking system not adjusted	Adjust the head locking system. $\triangleright$ 4.2 on page 18
	Transfer ribbon deflection not adjusted	Adjust the transfer ribbon deflection. $\triangleright$ 4.4 on page 20
	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 22
	Temperature too high	Decrease temperature via software.
	Unsuitable combination of labels and transfer ribbon	Use different type of ribbon.
Printer prints a sequence of characters instead of the label format	Printer is in ASCII dump mode	Cancel the ASCII dump mode.
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. if necessary clean the printhead. $\geq 6.3$ on page 22
	Unsuitable combination of labels and transfer ribbon	Use different type of ribbon.
Printer only prints each second label	Setting of the label height in the software is too large.	Change the label height in the software.
Vertical white lines in the print image	Printhead is dirty	Clean the printhead ▷ 6.3 on page 22
	Printhead is defective (failure of heat elements)	Change the printhead. ▷ Service Manual.
Horizontal white lines in the print image	Printer is used with the backfeed > smart in the cut or peel-off mode	Set the backfeed > always in the setup. ▷ Configuration Manual.
Print image is irregular, one side is lighter	Printhead is dirty	Clean the printhead ▷ 6.3 on page 22
	Head locking system not adjusted	Adjust the head locking system. $\triangleright$ 4.2 on page 18

Table 7 Problem solution

## 24 7 Fault Correction

## 7.3 Error Messages and Fault Correction

Error message	Cause	Remedy		
ADC malfunction	Hardware error	Switch the printer off and then on. If error recurs call service.		
Barcode error	Invalid barcode content, e.g. alphanumeric characters in a numerical barcode	Correct the barcode content.		
Barcode too big	The barcode is too big for the allocated area of the label	Reduce the size of the barcode or move it.		
Battery low	Battery of the PC card is flat	Replace battery in the PC card.		
Buffer overflow	The input buffer memory is full and the computer is still transmitting data.	Use data transmission via protocol (preferably RTS/CTS).		
Card full	No more data can be stored on the memory card	Replace card.		
Cutter blocked	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.		
Cutter jammed	The cutter is unable to cut the labels but is able to return into its home position	Press the <b>cancel</b> key. Change material.		
Device not conn.	Programming addresses a non-existent device	Either connect this device or correct the programming.		
File not found	Requested file is not on the card	Check the contents of the card.		
Font not found	Error with the selected download font	Cancel current print job, change font.		
FPGA malfunction	Hardware error	Switch the printer off and then on. If error recurs call service.		
Head error	Hardware error	Switch the printer off and then on. If error recurs replace printhead.		
Head open	Printhead not locked	Lock printhead.		
Head too hot	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.		
Invalid setup	Error in the configuration memory	Re-configure printer. If error recurs call service.		
Memory overflow	Current print job contains too much infor- mation, e.g. selected font, large graphics	Cancel current print job. Reduce amount of data to be printed.		
Name exists	Duplicate usage of field name in the direct programming	Correct programming		
No DHCP server	The printer is configured for DHCP, but there is no DHCP server, or the DHCP server is not currently available.	Switch off DHCP in the configuration, and assign a fixed IP address. Please contact your network administrator.		
No label found	There are labels missing on the label material	Press <b>pause</b> key repeatedly until printer recognizes the next label on the material.		
The label format as set in the software doe not correspond with the real label format		Cancel current print job. Change the label format set in the software. Restart print job.		
No label size	The size of the label is not defined in the programming.	Check programming.		
No Link	No network link	Check network cable and connector. Please contact your network administrator.		
		For operation without network connection set parameter "Network error" to Off ▷ Configuration Manual.		

## 7 Fault Correction

Error message	Cause	Remedy	
No record found	Refers to the optional memory card; database access error	Check programming and card contents.	
No SMTP server	The printer is configured for SMTP, but there is no SMTP server, or the SMTP server is not currently available.	Switch off SMTP in the configuration. <b>Caution!</b> Then a warning cannot be sent by e-mail (EAlert). Please contact your network administrator.	
No Timeserver	Timeserver is selected in the configu- ration, but there is no Timeserver, or the Timeserver is not currently available.	Switch off Timeserver in the configuration. Please contact your network administrator.	
Out of paper	Out of label roll	Load labels.	
	Error in the paper feed	Check paper feed.	
Out of ribbon	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 $\triangleright$ 6.3 on page 22 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	
Protocol error	Printer has received an unknown or invalid command from the computer.	Press the <b>pause</b> key to skip the command o press the <b>cancel</b> key to cancel the print job.	
Read error	Read error when reading from the memory card	Check data of the card. Backup data, reformat card.	
Remove ribbon	Transfer ribbon is loaded although the	for direct thermal printing remove ribbon	
	printer is set to direct thermal printing	for thermal transfer printing set the printer in the configuration or in the software to transfer printing	
Structural err.	Error in the file list of the memory card, data access is uncertain.	Format memory card.	
Unknown card	Card not formatted, Type of card not supported	Format card, use different type of card.	
USB error Device stalled	A USB device has been detected, but it is not working.	Do not use the USB device.	
USB error Too much current	The USB device consumes too much current.	Do not use the USB device.	
USB error Unknown device	Failure to detect USB device	Do not use the USB device.	
		Switch the printer off and then on. If error recurs call service. It is shown which voltage has failed. Please note.	
Write error	Hardware error	Repeat the write process, reformat card.	
Write protected	PC card write protection is activated.	Deactivate the write protection.	
Wrong revision	Error when updating the firmware. Firmware not compatible with the hardware version	Load the compatible firmware.	

 Table 8
 Error Messages and Fault Correction

## 26 8 Labels

## 8.1 Label Dimensions

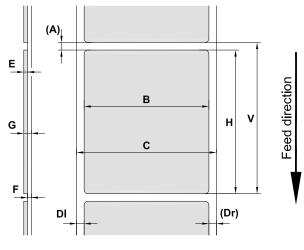


Fig. 18 Label dimensions

Dim.	Designation	Dim. in mm				
		Hermes+ 2	Hermes+ 4	Hermes+ 4.3	Hermes+ 6	
В	Label width	4 - 58	10 -	114	50 - 174	
Н	Label height	4 - 200	8 -	320	25 -320	
А	Label distance		>	2		
С	Width of liner	24 - 62 24 - 118 54 - 178				
DI	Left margin		≥	0		
Dr	Right margin	≥ 0				
Е	Label thickness		0,025	- 0,25		
F	Liner thickness		0,03	- 0,1		
G	Thickness label with liner		0,055	- 0,35		
V	Label feed	> 6 > 10 > 27				
	<ul> <li>Small label sizes, thin materials or strong glue can lead to limitations. Critical applications need to be tested and cleared.</li> </ul>					

Table 9 Label dimensions

## 8 Labels

## 8.2 Device Dimensions

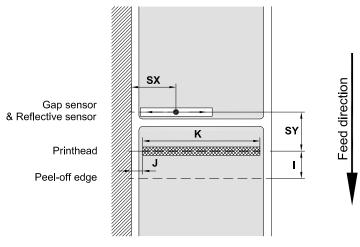


Fig. 19 Device dimensions

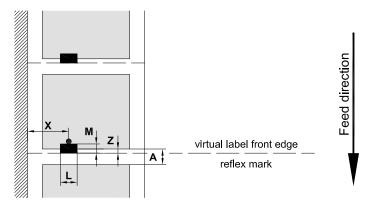
Dim.	Designation		Dim. in mm						
		Herm	es+ 2	Herm	es+ 4	Herme	es+ 4.3	Herm	es+ 6
		L	R	L	R	L	R	L	R
I	Distance printhead - peel-off edge				1	5			
J	Distance 1st heating point - material edge 203 dpi 300 dpi 600 dpi	- 1,0 1,0	- 3,7 1,0	1,0 1,0 1,0	2,8 1,0 1,1	1,0 1,0 -	2,7 -1,7 -	-0,6 2,1 -	-0,6 2,1 -
K	Print width 203 dpi 300 dpi 600 dpi	- 54,2 57,0	- 54,2 57,0	104,0 105,6 105,6	104,0 105,6 105,6	104,0 108,4 -	104,0 106,7 -	168,0 162,6 -	168,0 162,6 -
SX	Distance gap/reflective sensor - material edge i.e. permissible distance of reflex or cut-out marks to the material edge	2 -	26			2 -	47		
SY	Distance gap/reflective sensor - printhead			1	6	5			

Table 10 Device dimensions

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## 28 8 Labels

## 8.3 Reflex Mark Dimensions



### Fig. 20 Reflex mark dimensions

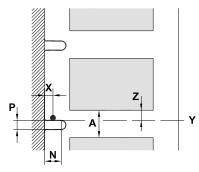
Dim.	Designation	Dim. in mm		
		Hermes+ 2	Hermes+ 4 / 4.3 / 6	
А	Label distance		> 2	
L	Width of reflex mark		> 5	
М	Height of reflex mark	:	3 - 10	
Х	Distance mark - material edge	2 - 26 2 - 47		
Z	Distance virtual label front edge - actual label front edge 0 up to A / recomm. : 0		/ recomm.:0	
	Adjust software settings			
	• Reflex marks must be on the back side of the material (liner).			
	Label sensor for reflex marks on the top side on request.			
	Specification is valid for black marks.			
	<ul> <li>Recognition of colored marks may fail. ▶ Preliminary tests are</li> </ul>	needed.		

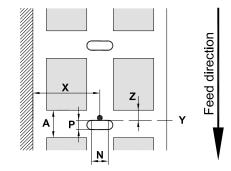
Table 11 Reflex mark dimensions

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#### 8 Labels

#### **Cut-out Mark Dimensions** 8.4





for marginal cut-out marks minimum liner thickness 0,06 mm

Fig. 21 Cut-out mark dimensions

Dim.	Designation	Dim. in mm	
		Hermes+ 2	Hermes+ 4 / 4.3 / 6
А	Label distance	> 2	
Ν	N Width of cut-out mark > 5		> 5
	for marginal cut-out	> 8	
Р	Height of cut-out mark		2 - 10
Х	Distance mark - material edge	2 - 26 2 - 47	
Y	Sensor recognized virtual label front edge with gap sensor recognition	Rear edge cut-out	
Z	<ul><li>Distance recognized front edge - actual label front edge</li><li>Adjust software settings</li></ul>	0 u	p to A-P

Table 12 Cut-out mark dimensions

Marginal cut-out

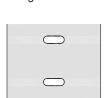
Long hole cut-out

### Rectangular cut-out

Circular cut-out

Cut-out between the labels









Not recommended !



Not recommended !

Fig. 22 Samples for cut-out marks

#### 30 9 Licences

#### 9.1 **Declaration of Incorporation**



cab Produkttechnik GmbH & Co KG Wilhelm-Schickard-Str. 14 D-76131 Karlsruhe 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, 1.2.4.1, 1.3.2, 1.5.1, 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:	Label Printer	
Туре:	Hermes+	
Applied EU Regulations:	Applied Standards:	
Directive 2006/42/EC on machinery	• EN ISO 12100:2010	
	• EN ISO 13849-1:2015	
	<ul> <li>EN 60950-1:2006</li> <li>+A11:2009+A12:2011+A1:2010+A2:2013</li> </ul>	
Other Relevant Directives:		

- 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

Person authorised to compile the technical file :	Erwin Fascher Am Unterwege 18/20 99610 Sömmerda
Signed for, and on behalf of the Manufacturer :	Sömmerda, 04.10.2017
cab Produkttechnik Sömmerda Gesellschaft für Computer-	Cream and
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.

### 9 Licences

## 9.2 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:	Label Printer
Туре:	Hermes+
Applied EU Regulations:	Applied Standards:
Directive 2014/30/EU relating to electromagnetic compatibility	• EN 55024:2010
	• EN 55032:2012
	• EN 61000-6-2-2005
Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment	• EN 50581:2012
Signed for, and on behalf of the Manufacturer :	Sömmerda, 04.10.2017
cab Produkttechnik Sömmerda Gesellschaft für Computer- und Automationsbausteine mbH 99610 Sömmerda	Bledun

## 9.3 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.

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