

Transfer Printer **Hermes**

Hermes 4N / Hermes 5N
Hermes 4F / Hermes 5F
Hermes 4R / Hermes 5R

Operator's Manual





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Hermes

Thermal Transfer Printer Operator's Manual



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EC-Conformity Declaration

A General Guide to the Documentation

Operator's Manual

The present manual contains information on the characteristics, features, functions, and use of the printers of the **Hermes** line.

The manual covers general information which is necessary for operating the printer as well as information about accessibility to different components of the printer and on optional accessories.

Furthermore the loading of media and ribbon, the self test of the printer, and the configuration in setup will be explained.

In the appendices, you will find useful additional information, such as internal character sets of the printer, cabling specifications, comments on possible error messages and printer maintenance.

Note the directions for use on recommended material and comments on maintenance in order to avoid damage and premature failure of your **Hermes**. Every effort has been made in the creation of this manual to provide as much information as possible in an understandable manner.

We welcome your comments and suggestions regarding additions or corrections to improve future editions of this manual. Please, let us know if you have any questions.

Further Documentation

For detailed technical information on programming of the **Hermes** printers a separate "Programming Manual" for cab Transfer Printers is available on request.

Detailed information about service and maintenance are included in the "Service Manual" of the **Hermes** (e.g. replacement of components, adjustment instructions, circuit diagrams, spare parts lists, etc.).

Compliances

Hermes complies with the following safety regulations :

CE : **Hermes** complies with the following safety requirements:

- EC Low Voltage Directive (73/23/EEC)
- EC Machinery Directive (98/37/EEC)
- EC Electromagnetic Compatibility Directive (89/336/EEC)

FCC : **Hermes** complies with the requirements of the FCC regulations part 15 for class A computers. Under disadvantageous circumstances, the operation of these devices may cause interference with radio or TV reception, which has to be eliminated by the operator.

Trademarks

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Characteristics of the Thermal Printhead

Dear Customer,

The thermal printhead is the most sensitive part of your printer.
Pay special attention to the following guidelines :

- 1) The glass cover on the printhead must not be touched with the hand.
Do not use any sharp items, such as knives or screwdrivers, to clean the printhead.
- 2) During printing, always take care that there is no dirt or foreign objects on the labels in order to avoid impurification of the printhead.
This way, the printhead might be damaged.
- 3) Use proper label material with a smooth surface only.
A rough surface will affect the printhead and may cause damage and reduce its operating life.
- 4) Clean the printhead regularly with a special printhead cleaning pen, or an isopropyl alcohol soaked cotton swab.
- 5) Print with the lowest possible printhead temperature.

Careful use will allow you to print approximately between 18 to 30 miles (30 to 50 km) of print media before the printhead needs replacing.

Improper usage can cause damage to the printhead.

1. Product Description

General Information

The Thermal Transfer Printers of the **Hermes** family are especially developed for fully automatic labelling. Therefore the print mechanism is totally aligned to dispense labels. The printhead is arranged low within the devices to minimize the way of the labels from the peel-off position to labelling position on the product and to increase the labelling rate.

After removing the dispensed label the label strip can be fed back. So the printing of the next label may start at the front label edge.

Hermes has two separate label transport systems for forward and backward feed. These systems guarantee a high precision in printing and applying labels independent from the size of the label supply roll.

The **Hermes** is an innovative label printer which may be used in either direct thermal or thermal transfer mode. The programming of the **Hermes** is completely compatible to the **Apollo** printers.

With the high-class printheads (305 dpi near edge printhead at **Hermes 4N/5N** or 300 dpi flat printhead at **Hermes 4F/5F/4R/5R**) it is possible to print bar codes and graphics quick, brilliant and tidy .

The double lined LCD display keeps the operator constantly informed about the current status of the printer. The setup menu allows easy configuration changes whenever desired.

The options PCMCIA-memory-card and keyboard adapter, which are offered in the **Apollo**-program, may also be used for **Hermes**.

Important Information about Applying with Hermes

The print mode of the **Hermes** is designed for fully automatic labelling.

Therefore after the start of a print job **Hermes** needs two additional signals for the processing of every single label :

- a start signal that releases printing and dispensing of the label
- a signal that shows the removing of the label from the peel position.



NOTICE !

If you operate Hermes with a non-cab-applicator make sure that the applicator or the control system can generate these two signal.

A simple print mode without the "start" and the "removed" signals is not available.

All cab applicators provide the needed signals.

The printing without applicator is possible for assistance of the pre-dispense key (see chapter 10).

1. Product Description

Overview of the Hermes Types

The present documentation contains the description of four different **Hermes** types :

Part.-No.	Description
5537500	Hermes 4N
5537501	Hermes 5N
5537503	Hermes 4F
5537506	Hermes 5F
5942600	Hermes 4R
5942604	Hermes 5R

The most important differences between **Hermes** types are :

- the type of the printhead
- the maximum diameter of the label supply roll
- the direction of dispensing

	7.9" (200 mm)		11.8" (300 mm)	
	left	right	left	right
Near-edge printhead (305dpi)	4N	-	5N	-
Flat printhead (300dpi)	4F	4R	5F	5R

Further the devices only will be called as **Hermes**, where are no differences between the types.

Overview of the Optional Features

For the devices of the **Hermes** familiy the following optional features are available.

Part.-No.	Description
5537742	Warning Sensor Label End Hermes 4N/F
5537743	Warning Sensor Ribbon End Hermes 4N/F
5537744	Warning Sensor Label End Hermes 5N/F
5537745	Warning Sensor Ribbon End Hermes 5N/F
5942692	Warning Sensor Label End Hermes 4R
5942693	Warning Sensor Ribbon End Hermes 4R
5942734	Warning Sensor Label End Hermes 5R
5949605	Warning Sensor Ribbon End Hermes 5R
5537747	Warning Light
5942471	Bracket Hermes 4
5942472	Bracket Hermes 5
5533900	PC Keyboard Adapter
5560406	PC Card, 2 MB
5560405	PC Card, 4 MB
5942716	Present Sensor

Technical Specifications

Type :	Direct thermal / Thermal transfer printer
Printhead :	Hermes 4N/5N : Thin film transfer printhead in near edge technology Hermes 4F/5F : Thin film transfer printhead in flat head technology Hermes 4R/5R : Thin film transfer printhead in flat head technology
Resolution:	Hermes 4N/5N : 305 dpi = 12 dots / mm Hermes 4F/5F/4R/5R : 300 dpi = 11.8 dots / mm
Number of dots/ line :	1280
Print width :	Hermes 4N/5N : 4.2 in (106.6 mm) Hermes 4F/5F/4R/5R : 4.3 in (108 mm)
Print speed :	Hermes 4N/5N : 4, 5, 6, 7, 8 ips (100, 125, 150, 175, 200 mm/s) Hermes 4F/5F/4R/5R : 2.6, 4, 5.2, 6.5, 8 ips (66, 100, 133, 166, 200 mm/s)
Available fonts :	5 Bitmap fonts incl. OCR-A and OCR-B 3 scaleable fonts (Speedo™) - internally Speedo™ and TrueType™ fonts - to load externally
Character sets :	Windows 1252/1250, IBM Codepage 850/852, ISO 8859-1, ISO 8859-8, EBCDIC, Macintosh, Supports all Western and Eastern European Latin characters
Character size :	For scaleable fonts : width and height .035 to 5 in (0,9 - 128mm) are individually changeable For Bitmap fonts : width and height .04 to .12 in (1 - 3 mm) the size is selectable up to a factor of 10
Font style :	bold, italic, underlined, mirror-inverted, outlined, revers, grey
Font rotation :	Bitmap fonts/Bar codes : 0°, 90°, 180°, 270° Scaleable fonts : optional, texts in circular format
Graphic elements :	Line, box, circle, ellipse, fill-in segment, arrow
Graphic file type:	.PCX, .IMG, .BMP, .TIF, .GIF und .MAC files
Bar codes :	Lineal codes for industry, logistics, medicine : Code 39, Code 93, Code 128 A,B,C, Codabar,FIM, HIBC, Interleaved 2/5, Ident-/Leitcode der Deutschen Post AG, MSI, Plessey, Postnet, Lineal codes for the trade : EAN-8, EAN-13, EAN-128, EAN/UCC 128, EAN/UPC App 2, EAN/UPC App 5, JAN-8, JAN-13, UPC-A, UPC-E Area codes : Data Matrix, PDF417, UPS-Maxicode Bar code height, modul with, and ratio are variable, with/without check digit, human readable character, start/stop character

1. Product Description

Processor :	32 Bit, Motorola
Memory :	Internal memory 2 MB
PCMCIA connector :	for PC Card 512 KByte, 2 MByte, 4 MByte
Interface :	Serial : RS-232, RS-422, RS-485 1200-57600 Baud Parallel : Centronics
Peripheral ports :	- Interface for the connection of non-cab-applicators and for the signals of the warning sensors label/ribbon end - SPI-Interface for the connection of cab-applicators
Ribbon saver :	The printhead only will be pressed against the print roller if the printer has to print information. At the other time the printhead will be lifted and the transport of the transfer ribbon will be stopped.
Backfeed :	In order to start the print of a label always from the front edge the label strip may fed back after the completion of the previous label print. To avoid an abrasion of the transfer ribbon at the label the printhead will be lifted during the backward transport.
Test features :	System test when switching on Self test with printout of firmware data and system parameters
Label material :	Thermal paper, normal paper, plastic foil, PE, PP, PVC, Polyamide Adhesive labels : 60-160 g/sqm Material width : 4.7 in (120 mm) Label width : .5 to 4.5 in (12-116 mm) Label length : .16 to 21.5 in (4-546 mm) Core diameter : 3 in (76 mm) Supply roll diameter : Hermes 4N/4F/4R : up to 7.9 in (200 mm) Hermes 5N/5F/5R : up to 11.8 in (300 mm) Labels may be wound face-in or face-out on the supply roll
Internal rewinder :	To rewind the backing paper Core diameter : 1.6" (40 mm) Max. rewinding diameter : Hermes 4N/4F/4R : 5.7 in (145 mm) Hermes 5N/5F/5R : 8.3 in (210 mm)
Material recognition :	- Gap sensor ("see through") - Bottom reflective sensor - Top reflective adjustable from .08 to 1.85 in (2 to 47 mm)

1. Product Description

Transfer ribbon :	Type :	Hermes 4N/5N :	preferably ribbons designed for the use with near edge printheads
		Hermes 4F/5F/4R/5R :	standard ribbons
	Length :		1476' in (450 m)
			1968' in (600 m) on inquiry
	Width :		max. 4.3 in (110 mm)
	Core diameter :		1 in (25 mm)
	Max. roll diameter :		3.6 in (92 mm)
	Color :		inside or outside
Control panel :	4 Function keys with LED display		
	Backlit LCD with 2 lines of text, 16 characters per line		
	LCD can be set to display in 8 different languages		
Control features :	Print stop and error message at the LCD display at		
	- Paper out		
	- Ribbon out		
	- Printhead / Transport system open		
	Information via peripheral interface and warning light at		
	- passing the adjusted minimum diameter of the supply roll of labels or transfer ribbon (if the warning sensors are installed)		
Dimensions :	Hermes 4N/4F/4R : Height : 15.4 in (390 mm), Width : 10.9 in (277 mm), Depth : 16.5 in (420 mm)		
	Hermes 5N/5F/5R : Height : 21.3 in (542 mm), Width : 10.9 in (277 mm), Depth : 21.3 in (542 mm)		
Weight :	Hermes 4N/4F/4R : 46.3 lb. (21 kg)		
	Hermes 5N/5F/5R : 55.2 lb. (25 kg)		
Operating voltage :	Switchable between 230 V A.C/ 50 Hz or 115 V A.C/ 60 Hz		
Maximum power input :	1,5 A (at 230 V) / 3 A (at 115 V)		
Circuit protection :	T 4 A (at 230 V) / T 6.3 A (at 115 V)		
Environment :	Operation at 50° to 95°F (10° to 35°C) at a humidity of 30 to 85%		
	Transport at -13° to 158°F (-25° to +70°C) at a max. humidity of 95% non-condensing		
	Storage at 41° to 104°F (5° to 40°C) at a humidity of 5 bis 85%		

1. Product Description

Print Media

Hermes can be operated in direct thermal as well as thermal transfer mode.

For direct thermal mode, only use print material with a thermal-reactive coating. The print image is transferred by heating the material at the printhead, causing a reaction on the surface of the paper and, consequently, darkening the material.

In thermal transfer mode, not only standard paper labels are needed but also the thermal transfer ribbon with a color surface. The printout is created by heating the transfer ribbon, causing a transfer of color particles onto the label.

Hermes allows to regulate the heat level and also the print speed. Thus, the **Hermes** offers a wide range of opportunities for usage.

Hermes 4N, **Hermes 4F** and **Hermes 4R** are able to print on labels with a maximum supply roll diameter of 8 in (200 mm) and a core diameter of 3 in (76 mm). **Hermes 5N**, **Hermes 5F** and **Hermes 5R** can use labels with a maximum supply roll diameter of 12 in (300 mm) and a core diameter of 3 in (76 mm).

The ability of label edge recognition, which guarantees the precise position of the printer output, is accomplished by a moveable photocell. This sensor is controlled by the processor of the **Hermes** and ensures recognition for different sorts of material. There is no need for additional electronic adjustment.

On the following pages, you will find detailed information and specifications concerning suitable materials.

If in doubt, we will perform test prints with your label material to find the best suitable transfer ribbon.

Print Media for Direct Thermal Printing

The print material must correspond to several important specifications, in order to ensure high quality printing, and to avoid damage to the printhead or early wear.

Using labels which we have tested and which we recommend to our customers, will guarantee a gentle treatment of the printhead. If you want to use material by another supplier, please note the following requirements regarding the condition of thermal printer paper :

1. To avoid damage to the printhead, the surface coating must cover the thermal-reactive layer. If the coating is too thin, this may cause a 'pitting' effect on the printhead, i.e. very small explosions during the chemical reaction of the thermal coating quickly resulting in damage to the printhead.
2. The surface of the labels should be very smooth to avoid a 'sandpaper' effect on the printhead.
3. Always choose material which can be printed on with the lowest possible heat level. The greater the heat level, the shorter the life of the printhead. Moreover, with highest heat levels the phases of heating up and cooling down extend. This may have a negative effect on the print quality, especially if a high print speed is required.

Print Media for Thermal Transfer Printing

In thermal transfer mode, a wide range of different label materials may be used (e.g. normal paper, tag stock, a variety of synthetic material such as polyester foil, etc.).



NOTICE !

The print quality greatly depends on the right combination of label material and transfer ribbon.

The surface of the labels determines which ribbon material may be used. Unsuitable ribbons may cause an extremely poor print image.

1. Product Description

Label / Tag Media Specifications

Label and tag media to be used for the **Hermes** can be found in the table below. Note this information before ordering your labels.

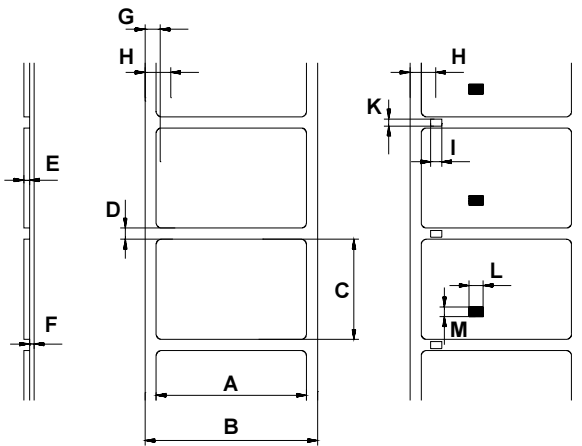


Fig. 1 Label formats

Item		MIN.	MAX.
A	Label width	.5(12)	4.6(116)
B	Width of the silicon liner	1(25)	4.7(120)
C	Label length	.16(4)	21.5(546)
D	Gap between labels	.08(2)	21.5(546)
E	Label thickness	.0024(.06)	.01(.25)
F	Thickness of silicon liner	.002(.05)	.004(.1)
G	Distance of the first printing point from the edge of silicon liner	0	
H	Distance of the label sensor from the edge of silicon liner	.08(2)	1.85(47)
I	Width of punch hole	.2(5)	-
K	Height of punch hole	.08(2)	.2(5)
L	Width of reflective mark	.2(5)	-
M	Height of reflective mark	.08(2)	.2(5)

Table 1 Label formats in inches (figures in brackets are in mm)

Transfer Ribbon

The choice of a suitable transfer ribbon is important for the print quality of your printer as well as the useful life of the printhead.



NOTICE !

Hermes 4N and Hermes 4F are equipped with a near edge printhead. For that reason choose transfer ribbons which are especially designed for the use with near edge printheads. By using other ribbons only a poor print quality is reachable. The printouts have no brilliance, the surfaces are dull.

For Hermes 4F, 4R, 5F and 5R standard transfer ribbons are usable.



CAUTION !

Transfer ribbons of inferior quality may cause premature deterioration of the printhead !

The material must be extremely resistant to high temperatures to avoid melting the ribbon with the printhead.

The heat which arises during printing must be carried off by the label and by the transfer ribbon itself. Transfer ribbons of inferior quality are often poor heat conductors. This may cause overheating of the printhead in spite of electronic protection.

Poor transfer ribbons also tend to lose parts of the coating which leads to accumulating dirt on the printhead and the sensors. With some ribbons the color rubs off and soils the printhead. All of these effects contribute to poor print quality.

We have carried out numerous tests with many different ribbons and we recommend you use transfer ribbons made by well-known / brand manufacturers only. Depending on the label material, several transfer ribbons may be suitable.

The quality of print is determined by the right combination of these materials.

The recognition of the transfer ribbon is sensed by the rotation control of the transfer ribbon unwinder, rather than by photocell sensors. As a result, ribbons with a thinner coating or those with a colored coating can be used safely. To be able to print all labels up to the exact end of the transfer ribbon, the length of the uncoated trailer is limited.



NOTICE !

When buying transfer ribbons, make sure that

- the trailer of the ribbon has a maximum length of 4 in (100 mm).
- the trailer is made of nonconductive material or is coated with a nonconductive film.
- the trailer easily can come loose from the cardboard core ($F < 3N$).

1. Product Description

Software

There are several methods to create formats and to send them to the printer. Below, a short explanation of the most common methods is given.

Direct Programming

The printer is equipped with an internal command set. The command set is designed to program all functions of the printer. To create a label format, use any ASCII editor to combine the necessary commands. Save the commands to a file, then copy the file to the printer using the connected interface and HyperTerminal or the DOS COPY command.

Direct programming requires a minimum knowledge of programming logic. The printer commands are designed logically and structured clearly. However it is necessary to carry out several test prints when creating a label using the command set since no image of the label is displayed on the monitor. The complete description of the command set and sample programs is available in the "Apollo Programming Guide".

Windows Printer Driver

For the different Windows versions printer drivers are available. You can get these drivers from your distributor or from the web. The printer can be operated from any Windows Application that supports Windows Printer Drivers using the Windows Printer Driver. The graphical user interface allows for easier creation of label formats. However, the functionality depends on the chosen application and how each product supports Windows Printer Drivers. There could be restrictions depending on the application you are using. A help file is included with the drivers to explain the usage and limitations when using certain Windows Applications.

Label Software

There are several Windows Applications that are designed to create labels. These programs are more suited to the requirements of label printing than standard Windows Applications. In some cases these programs use the Windows Printer Driver.

Some applications have integrated internal drivers to operate the printers of the Hermes series. These applications offer the best solution for creating and printing labels.

2. General Safety Instructions



CAUTION !

- The printers of the **Hermes** series are built exclusively to print labels.
- Connect the printer only to an outlet with the correct voltage !
The printer is configured for either 230V or 115V power supply, which can be switched using the input voltage selector at the back of the printer. Connect only to a power outlet with a **grounded** contact.
- The printer must only be connected to devices which have extra low voltage.
- Power must be OFF before plugging in any accessory or connecting the printer to a computer, etc. Also switch power off on all appliances before disconnecting.
- Do not expose the printer to any moisture, or use in damp or wet areas.
- The printer will operate with the cover open if necessary. This is not recommended, as moving or rotating parts become accessible. Keep long hair, jewelry, loose clothes away from the moving parts.
- During the print process the printhead will become hot. Use extra caution when touching the printhead.

3. Delivery Contents

Inspect the **Hermes** packaging and contents immediately after receipt for possible damage caused by shipping.

The supplied equipment of the **Hermes** depends on the requested options. Compare the delivered accessories with your order.



NOTICE !

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

4. Printer Component Location

4. Printer Component Location

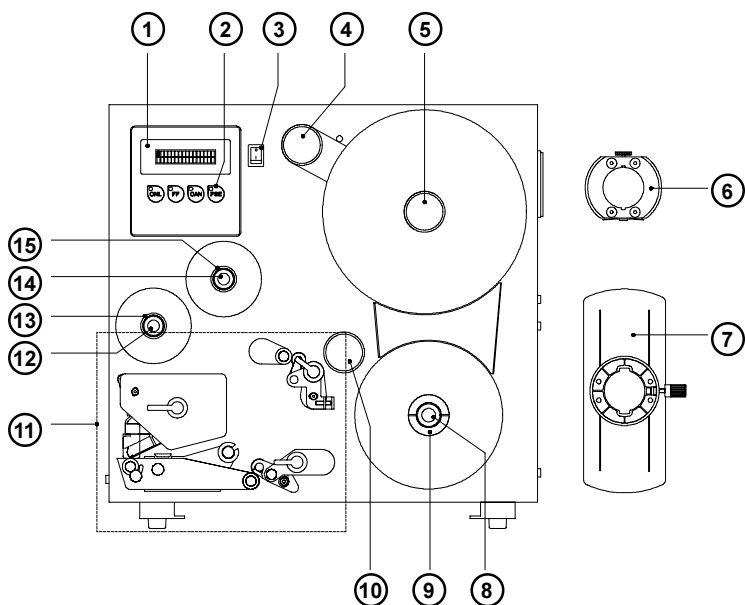
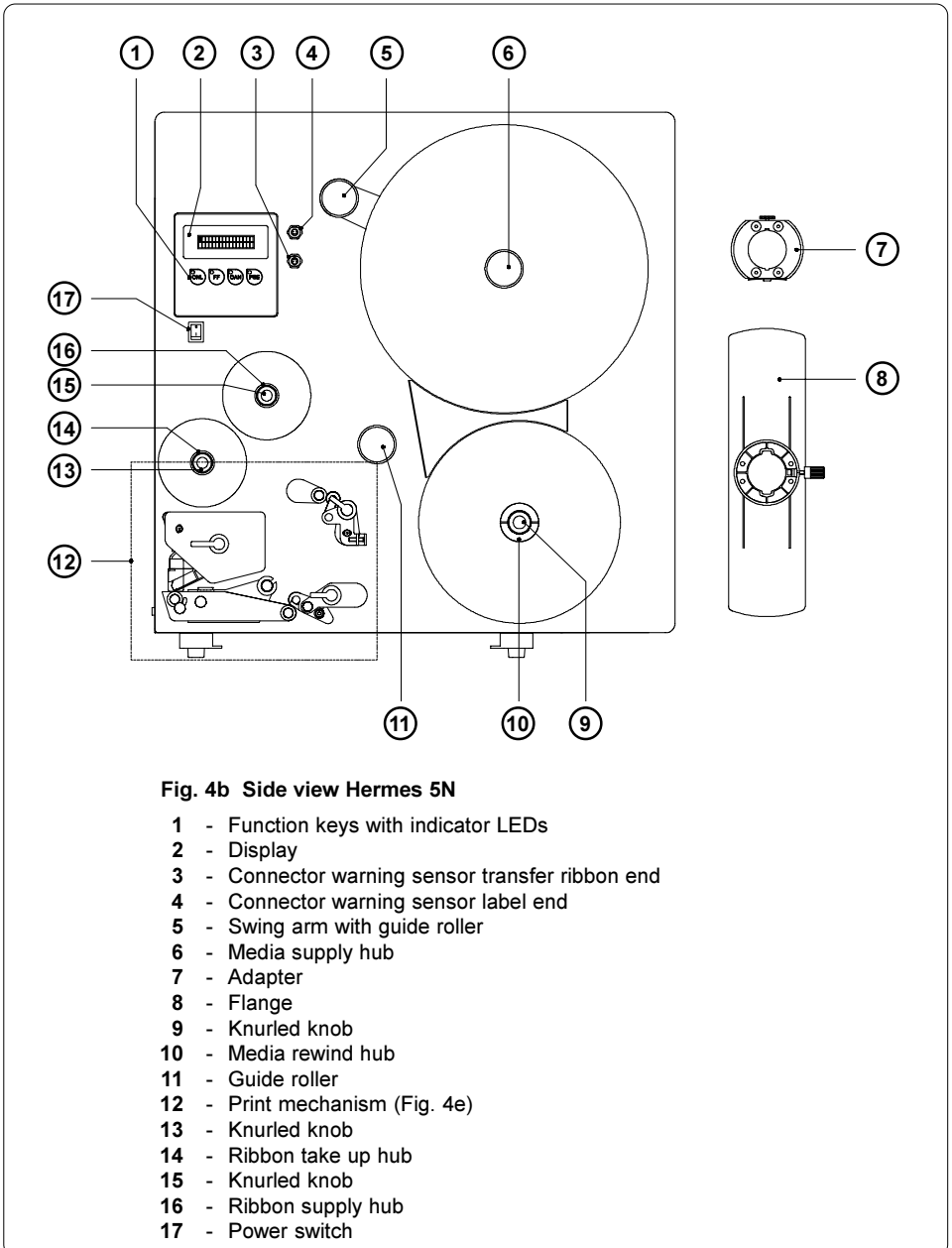


Fig. 4a Side view Hermes 4N

- 1 - Display
- 2 - Function keys with indicator LEDs
- 3 - Power switch
- 4 - Swing arm with guide roller
- 5 - Media supply hub
- 6 - Adapter
- 7 - Flange
- 8 - Knurled knob
- 9 - Media rewind hub
- 10 - Guide roller
- 11 - Print mechanism (Fig. 4e)
- 12 - Knurled knob
- 13 - Ribbon take up hub
- 14 - Knurled knob
- 15 - Ribbon supply hub

4. Printer Component Location



4. Printer Component Location

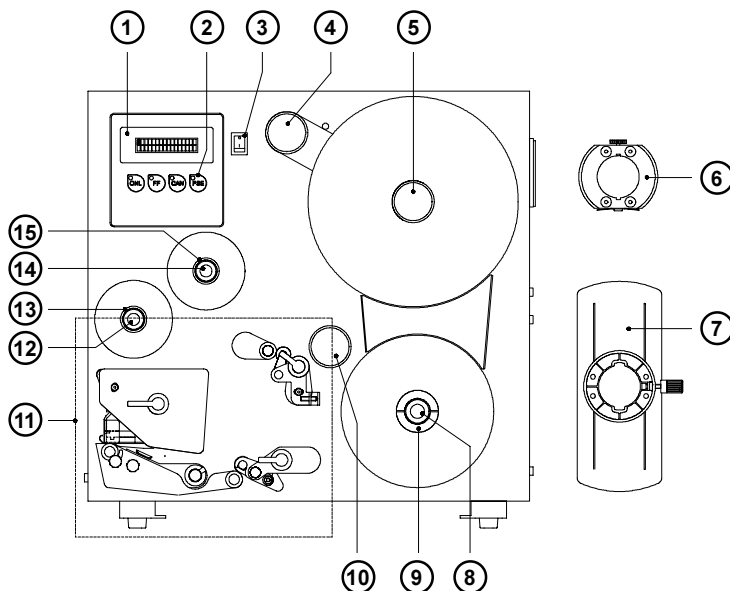


Fig. 4c Side view Hermes 4F/4R

- 1 - Display
- 2 - Function keys with indicator LEDs
- 3 - Power switch
- 4 - Swing arm with guide roller
- 5 - Media supply hub
- 6 - Adapter
- 7 - Flange
- 8 - Knurled knob
- 9 - Media rewind hub
- 10 - Guide roller
- 11 - Print mechanism (Fig. 4f)
- 12 - Knurled knob
- 13 - Ribbon take up hub
- 14 - Knurled knob
- 15 - Ribbon supply hub

4. Printer Component Location

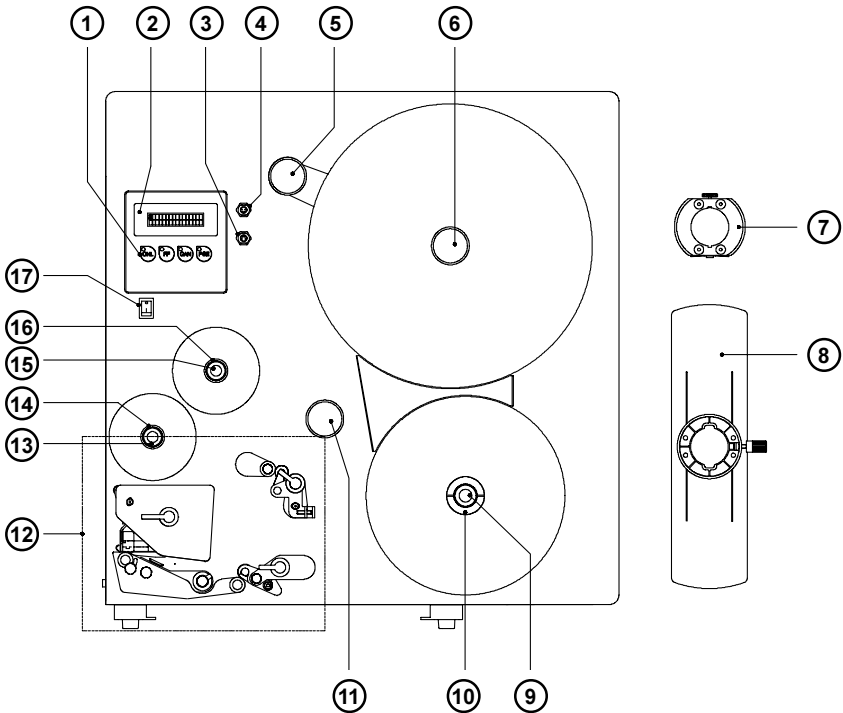


Fig. 4d Side view Hermes 5F/5R

- 1 - Function keys with indicator LEDs
- 2 - Display
- 3 - Connector warning sensor transfer ribbon end
- 4 - Connector warning sensor label end
- 5 - Swing arm with guide roller
- 6 - Media supply hub
- 7 - Adapter
- 8 - Flange
- 9 - Knurled knob
- 10 - Media rewind hub
- 11 - Guide roller
- 12 - Print mechanism (Fig. 4f)
- 13 - Knurled knob
- 14 - Ribbon take up hub
- 15 - Knurled knob
- 16 - Ribbon supply hub
- 17 - Power switch

4. Printer Component Location

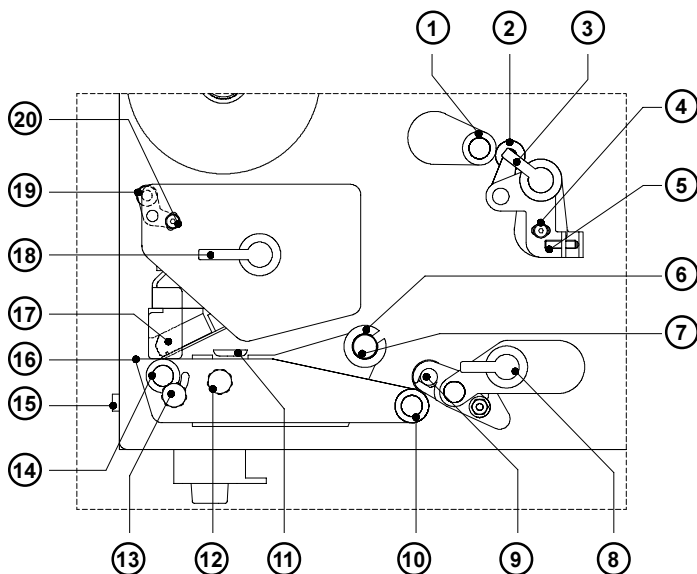


Fig. 4e Detailed view of the print mechanism Hermes 4N/5N

- 1 - Backfeed roller
- 2 - Backfeed system locking unit
- 3 - Backfeed system locking lever
- 4 - Locking screw for label track adjustment
- 5 - Set screw for label track adjustment
- 6 - Media guide
- 7 - Media guide axle
- 8 - Transport system locking lever
- 9 - Transport system locking unit
- 10 - Transport roller
- 11 - Label edge sensor
- 12 - Knurled knob to adjust the label edge sensor
- 13 - Printhead levelling adjustment screw
- 14 - Print roller
- 15 - Socket of the peripheral port for cab-applicators
- 16 - Peel-off edge
- 17 - Thermal printhead
- 18 - Printhead locking lever
- 19 - Adjustable axle for ribbon track adjustment
- 20 - Locking screw for ribbon track adjustment

4. Printer Component Location

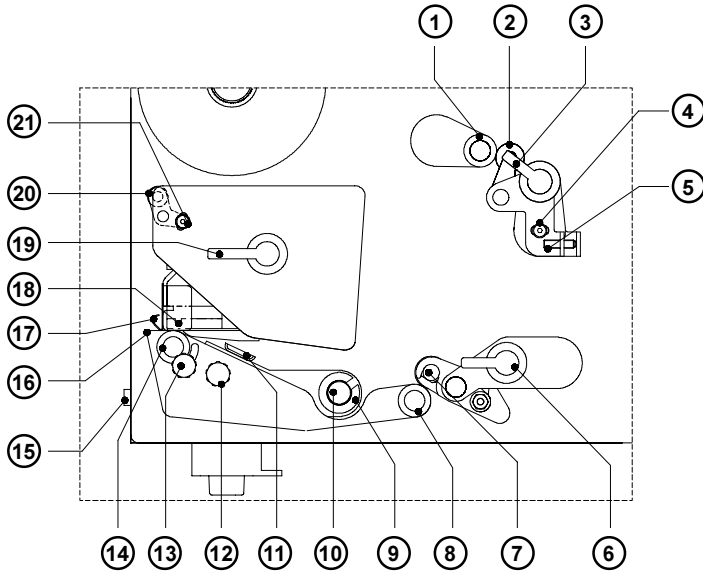


Fig. 4f Detailed view of the print mechanism Hermes 4F/5F/4R/5R

- 1 - Backfeed roller
- 2 - Backfeed system locking unit
- 3 - Backfeed system locking lever
- 4 - Locking screw for label track adjustment
- 5 - Set screw for label track adjustment
- 6 - Transport system locking lever
- 7 - Transport system locking unit
- 8 - Transport roller
- 9 - Media guide
- 10 - Media guide axle
- 11 - Label edge sensor
- 12 - Knurled knob to adjust the label edge sensor
- 13 - Printhead levelling adjustment screw
- 14 - Print roller
- 15 - Socket of the peripheral port for cab-applicators
- 16 - Peel-off edge
- 17 - Ribbon shield
- 18 - Thermal printhead
- 19 - Printhead locking lever
- 20 - Adjustable axle for ribbon track adjustment
- 21 - Locking screw for ribbon track adjustment

4. Printer Component Location

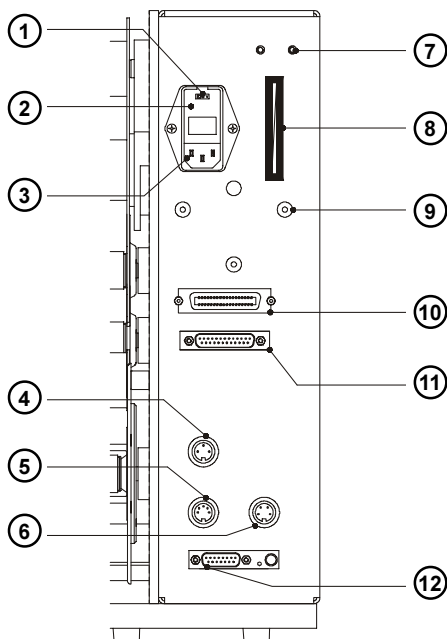


Fig. 4g Rear view

- 1 - Input voltage selector / Fuse holder
- 2 - Input voltage selector cover
- 3 - Power supply connector
- 4 - Connector warning sensor transfer ribbon end (**Hermes 4N/4F/4R** only)
- 5 - Connector warning sensor label end (**Hermes 4N/4F/4R** only)
- 6 - Connector warning light
- 7 - Drillings for mounting a compressed air service unit (option)
- 8 - Memory card module slot
- 9 - Drillings for mounting a bracket (option)
- 10 - Parallel interface port
- 11 - Serial interface port
- 12 - Plug of the peripheral port for non-cab-applicators

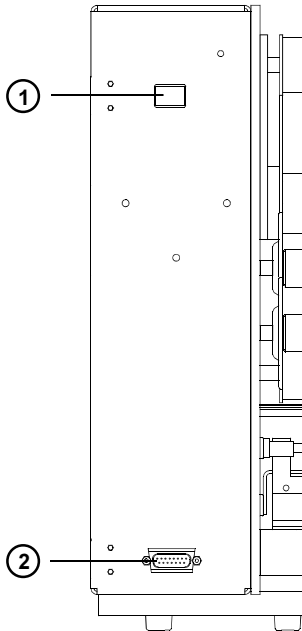


Fig. 4h Front view

- 1 - Pre-dispense key
- 2 - Plug of the peripheral port for cab-applicators

5. Connecting the Printer

5. Connecting the Printer

Connection to Power Supply

The **Hermes** is designed for use with 230V A.C/50 Hz (standard) or 115V A.C/ 60 Hz.



CAUTION !
Before connecting the printer to the power supply, make sure that the voltage selected on the power supply module of the printer is the same as your main power supply ! Pay attention that the power switch (4/5) is in position "O" (OFF).

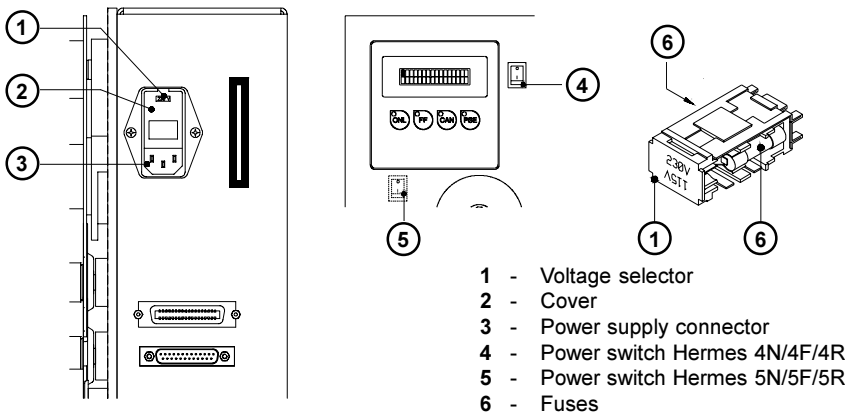


Fig. 5a Power supply module / power switch

To change the voltage setting, open the cover (2) and remove the voltage selector (1) from the power unit.



CAUTION !
If you have changed the operating voltage of your printer the fuses (6) need replacing as stated below !

230V - 2 x T 4A

115V - 2 x T 6,3A

When delivered, the correct fuses for the pre-selected operative voltage are installed. You will find the necessary fuses for the other voltage in the accessories package. Slide the voltage selector back into the power supply module so that the correct voltage is visible in the lid window of the cover (2). Connect the printer to a **grounded** outlet using the power cable supplied in the accessories package.

Connection to a Computer

Hermes is equipped with three serial interfaces, these are RS-232, RS-422, and RS-485, all of them using the 25 pin interface connector (2) at the back. In most cases, you can use the RS-232 interface for the connection to the computer. If your computer is located more than 50 ft (15 m) away from the printer you should use the RS-422 interface.

The RS-485 interface is provided for using the **Hermes** as part of a networked system.

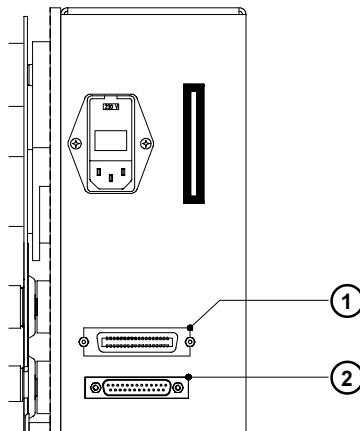
In addition to the serial port, the **Hermes** also provides a parallel (Centronics) interface which offers a faster transfer of data than the serial interfaces. Therefore, we recommend you use the parallel interface for those applications where a large number of loadable fonts or complex graphics have to be printed. For the Centronics interface use the 36 pin interface connector (1).

Select the required interface settings using the Setup procedure and connect the printer to the computer by a suitable interface cable.



CAUTION !

Make sure that all connected computers and their connecting cables are correctly grounded.



- 1 - Parallel interface port
- 2 - Serial interface port

Fig. 5b Interface ports (rear view of the printer)

5. Connecting the Printer

Switch on the Printer

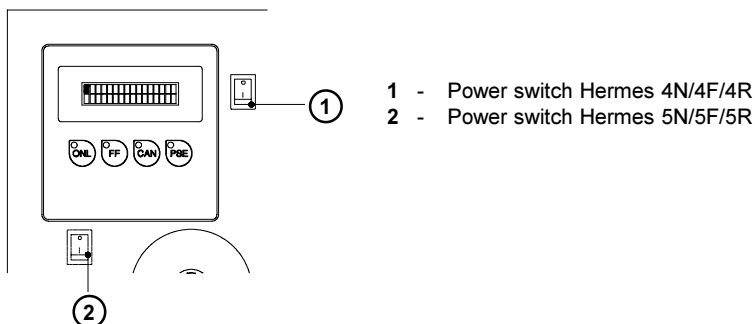


Fig. 5c Switch on the printer

After making all connections switch on the printer at the power switch (1/2).

The printer carries out a short system test and following the display is shown the system mode "ONLINE".

If a hardware failure occurs during the system test the type of the failure will be shown. In this case the printer should be switched off and on again. If the failure occurs again call for service.

If the display is not showing anything after switching on the printer, please check the following, whether:

- the connection of the power switch is correct
- the setting of the voltage selector corresponds with the power supply voltage
- the fuses in the voltage selector are not defective

If all these conditions are true and the device nevertheless cannot be switched on call for service, please.



CAUTION !

If the fuses in the voltage selector are defective do not use the fuses of the delivery contents as spare parts.

These fuses are only for using at the other operation voltage.

By using the fuses of the delivery contents without changing the setting of the voltage selector, the printer may be damaged.

6. Media Loading

Preparation of the Label Supply Hub

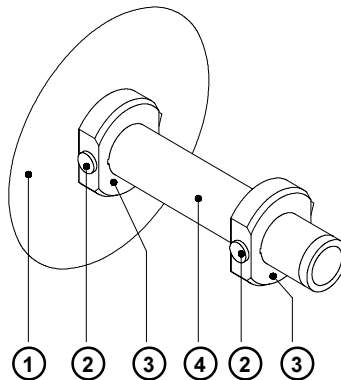


Fig. 6a Preparation of the label supply hub

Hermes is equipped with a rotating label supply hub, which is able to take up rolls with a core diameter of 3 in (76 mm).

To take up these label rolls it is necessary to mount two adapters (3) onto the supply hub :

1. Put the first adapter (3) onto the supply hub (4) and slide it to the wind plate (1) until it blocks. Tighten the knurled screw (2).
2. Put the second adapter onto the supply hub (4) and slide it against the wind plate until the distance between the outer edge of the adapter and the wind plate (1) is a little less than the width of the label roll.
Tighten the knurled screw.

6. Media Loading

Loading Labels

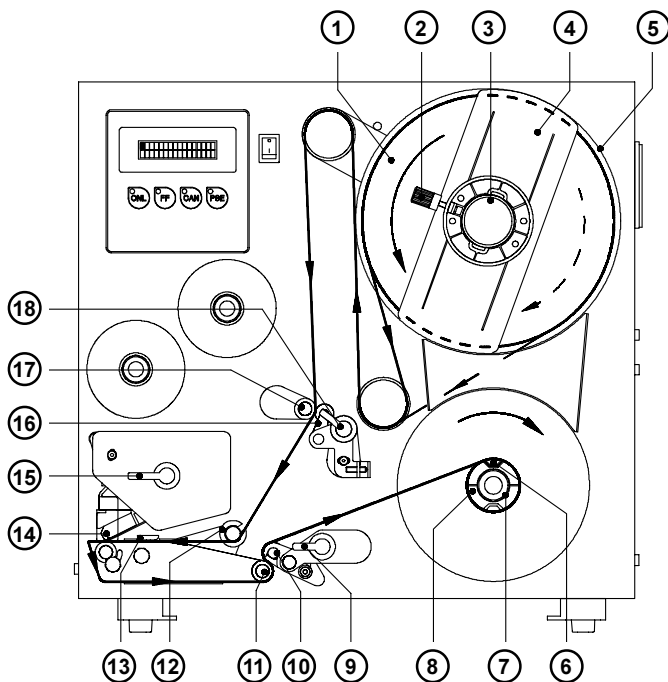


Fig. 6b Media loading Hermes 4N/5N

1. Place the label roll (1) onto the prepared media hub (3) and slide it against the wind plate (5). The solid line represents the feed path of outside-rolled labels, the broken line of inside-rolled labels.
2. Put the flange (4) on the supply hub (3), slide it against the label roll (1) and fix it at the supply hub by tightening the knurled knob (2).
3. Swing the three levers (9, 18 and 15) clockwise until they stop and open this way the transport system (10, 11) and the backfeed system (16, 17). The printhead (14) also will be unlocked from the print roller.
4. Slide the media guide (12) into its outermost position.

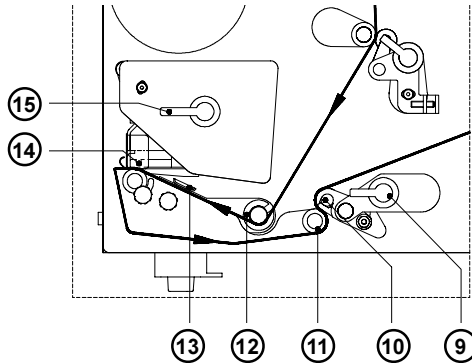


Fig. 6c Media loading Hermes 4F/5F/4R/5R

5. Unroll a length of label stock from the media roll and feed it first to the printhead (14) as shown in figure 6b.



NOTICE !

It is particularly important to ensure that the media strip slides properly between the fittings of the adjustable photocell assembly (13).

6. Feed the label stock out of the front side of the printer until there is enough material to reach the internal rewinder. Take all labels off the outstanding liner, and feed the liner as shown in figure 6b to the internal rewinder (8).
7. Slide the media strip under the rewinder clamps (6) to the wind plate. Hold the rewinder and turn the knurled knob (7) clockwise. That way the label strip will be fixed at the rewinder.
8. Turn the rewinder (8) clockwise for tightening the label strip.
9. Slide the guide (12) against the outer edge of the label strip.
10. Swing all levers (9, 18 and 15) counterclockwise until they block. In this way the transport system (10, 11) and the backfeed system (16, 17) will be closed and the printhead (14) will be locked.



NOTICE !

If you do not use the printer for an extended period of time, lift the printhead to avoid possible flattening of the print roller.

6. Media Loading

Loading Transfer Ribbon

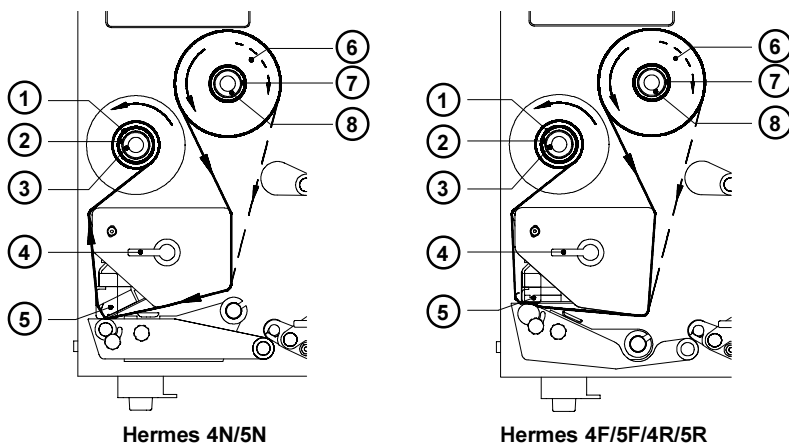


Fig. 6d Loading thermal transfer ribbon

1. To lift the printhead (5), turn the printhead lever (4) clockwise until it stops.
2. Slide the roll of transfer ribbon (6) onto the ribbon supply hub (7) as far as possible.

NOTICE !

Pay attention to the side of the ribbon material which is coated with ink ! The inked side is generally the dull side. When the ribbon is inserted, the inked side must face the opposite side of the printhead !

In Figure 6d, the solid line shows the path of inside wound ribbon, and the broken line represents the path of outside wound ribbon.

3. Hold tight the ribbon supply hub (7) and rotate the knurled knob (8) clockwise until it stops. That way the transfer ribbon roll (6) will be attached to the ribbon supply hub (7).
4. Slide an empty cardboard core (1) onto the ribbon take up hub (2) and fix it by clockwise turning the knurled knob (3).
5. From the side, feed the transfer ribbon along the path as shown in Figure 6d, then attach it to the core (1) using adhesive tape or a label.
6. Turn take up hub (2) counterclockwise in order to smooth and stretch the ribbon.
7. To lock the printhead (5), turn the lever (4) counterclockwise until it stops.



7. Adjustments Concerning the Labels

Adjustment of the Label Edge Sensor

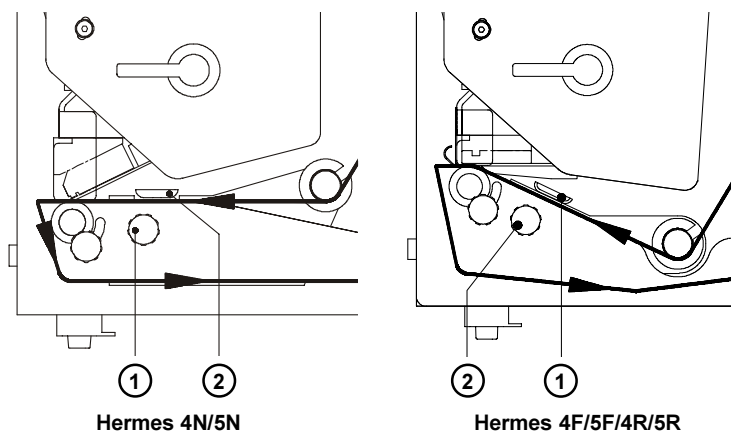


Fig. 7a Adjustment of the label edge sensor

To accommodate a variety of print jobs, the position of the label edge sensor (2) can be adjusted cross to the path of the paper feed. This setting is particularly useful if the required labels are either narrow, or have punch holes or reflective markings, or deviate from the square or rectangular shape.

It is important to ensure that the sensor is positioned in a way that the gaps between the labels or the markings can be recognized by the photocell. (The position of the sensor is marked by a notch in the sensor holder.) If using labels with an unconventional shape (i.e. round or curved) the sensor should be positioned at the front edge of the label.

Adjust the sensor position using the knurled knob (1). By turning the knob clockwise the sensor moves outward, and by rotating the knob anticlockwise it moves inwards.

7. Adjustments Concerning the Labels

Adjustment of the Printhead Support

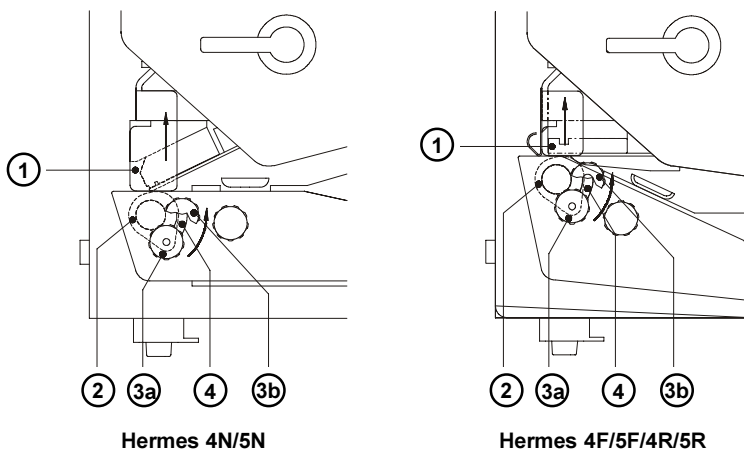


Fig. 7b Adjustment of the printhead support

When printing narrow labels (label width less than the half of the maximum print width), it is possible that the printhead will come into direct contact with the drive roller. This will lead to premature wear on the printhead. In addition, the printhead will be at a slight angle to the label, thus, the uneven pressure may result in an inconsistent image density from one edge of the label to the other.

To correct this problem, the printhead support (2) may be adjusted.

Adjust printhead support as follows :

1. Loosen the knurled screw (3).
2. Move the knurled screw (3) as required within the adjustment slot (4). This will cause the cam shaped printhead support (2) to rotate, in effect, providing a higher or lower base on which the printhead mounting (1) rests.
3. It is convenient to use the position 3a to print large labels. In this case the printhead support (2) is totally inactiv.
4. By using small labels it is necessary to adjust the printhead support. In this case insert a second strip of the label at the front side of the print roller. Now slide the knurled knob (3) as far as possible to position 3b in the adjustment slot (4), until the printhead support (2) touches the printhead mounting (1). Take away the second label strip.
5. Tighten the knurled screw (3).

Adjustment of the Label Tracking

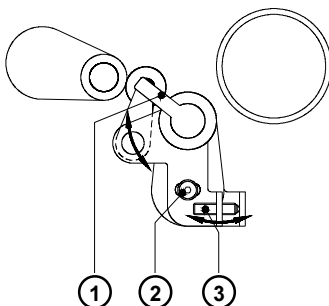


Fig. 7c Adjustment of the label tracking (backfeed system)

It is necessary to adjust the label tracking, if the label strip sideward leaves the normal path.

Such a drift may cause :

- a sideward displacement of the printed images at the label.
- a sideward displacement of the peel position.
- a paper jam or a damage of the label strip.

To correct this problem, the backfeed system may be adjusted as follows :

1. Loosen the locking screw (2) at the backfeed system.
2. Adjust the label tracking by turning the set screw (3).

If the labels drift inwards ⇒ Turn the set screw clockwise.

If the labels drift outwards ⇒ Turn the set screw counterclockwise.

Repeat the adjustment as long as necessary. After every adjustment step open and close the backfeed system by turning the lever (1).

3. Tighten the locking screw (2).

7. Adjustments Concerning the Labels

Adjustment of the Transfer Ribbon

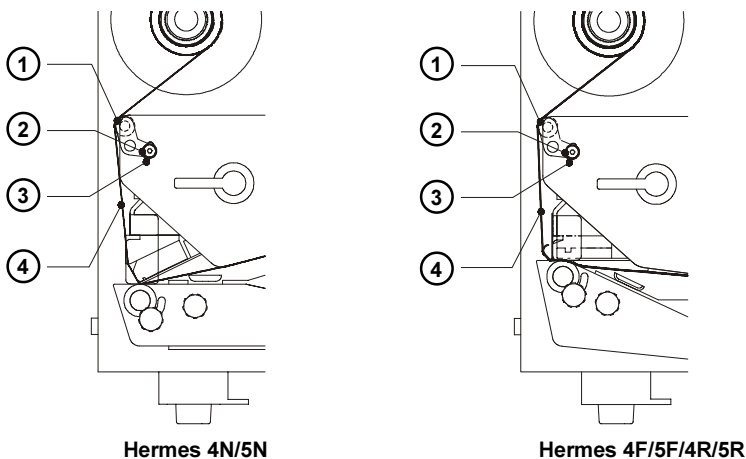


Fig. 7d Adjustment of the transfer ribbon

If creases, lines or black patches appear in the print image resulting in a poor print quality, this may be caused by wrinkles in the transfer ribbon (4). To remove the wrinkles, the tension of the ribbon should be made even from the left to the right by slanting the axle (1).

1. Loosen the locking screw (2).
2. The axle may be slanted by moving the locking screw (2) as required inside the adjustment slot (3). Moving it to the bottom will tighten the ribbon on the inner edge. In the other case it will be done on the outer side of the transfer ribbon.
To reduce the formation of wrinkles the ribbon must be tightened at this side where the wrinkles will be built
3. After completing the adjustment, tighten the locking screw (2).

8. Control Panel

The front control panel of the **Hermes** is fitted with 4 function keys with indicator LEDs, and a 2x16 character digital LCD display.

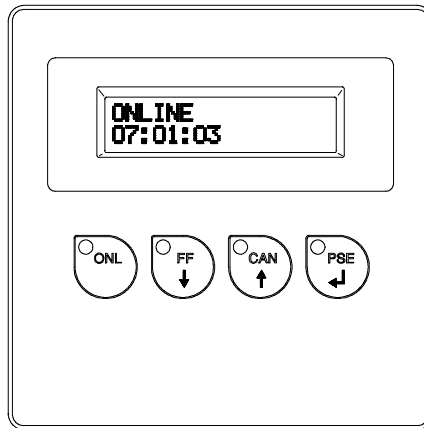


Fig. 8 Control Panel

The control panel display constantly provides the operator with the actual information concerning the current printer mode and label processing. The indicator LEDs support the information shown in the display by indicating which keys have to be pressed (e.g. in the event of a fault).

On the following pages, you will find descriptions of the system modes of the **Hermes**, the related indications by the LCD display and the LEDs as well as a description of the function keys under differing conditions.

8. Control Panel

System Mode SYSTEM TEST

When switched on, the printer automatically performs an internal self test. If the test is completed successfully, the **Hermes** proceeds to the ONLINE mode.

If a hardware fault occurs the type of the fault is shown. In this case the printer is switched off and on again. If the error recurs call for service, please.

Display

The top line of the display shows the version of the printer :

***** HERMES *****

The bottom line of the display shows the numbers "123456" one after the other dependent on the progress of the several test steps.

LED Display

All LEDs flash during initialization once briefly.

Function Keys





	ONL key	By pressing this key until the end of the system test switch into the system mode TEST PRINT.
	FF key	By pressing this key until the end of the system test switch into the system mode MONITOR MODE.
 	ONL key + CAN key	By pressing both keys at the same time until the end of the system test switch into the system mode SETUP.

Table 8a Function keys in the system mode SYSTEM TEST

System Mode ONLINE

The printer is switched ON and ready to receive data.

Display

The top line of the display shows "ONLINE".

The bottom line of the display shows the time of day.

During the transfer of data a rotating symbol " | " appears in the right hand corner of the bottom line of the display.

When saving data on the PC card the symbol "■" appears in the right hand corner of the bottom line of the display.

LED Display

LED ONL on.

Function Keys







	ONL key	Switch into OFFLINE mode (LED ONL off)
	FF key	Provides label feed. The leading edge of the next label to be printed is in print position.
	CAN key	Deletes data of the previous print job in internal memory. Following that, "Pause reprint" is not available (see PSE key)
	PSE key	Repeats the print of the last label, after the previous print job has been completed. (Only when setup parameter "Pause reprint" is on.)
 	ONL key + CAN key	Pressing both keys together for at least 5 seconds will switch into the SETUP mode (LED ONL off)

Table 8b Function keys in the system mode ONLINE

8. Control Panel

System Mode OFFLINE

The printer is not ready to print or to receive data.
The status of the printer may be requested.

Display

The top line of the display shows "OFFLINE".
By repeatedly pressing the PSE key, the status of the printer will be shown
(see also chapter 12).

LED Display

The display is blank.

Function Keys





	ONL key	Switch into ONLINE mode (LED ONL on)
	FF key	Provides label feed. The leading edge of the next label to be printed is in print position.
	CAN key	Switch into LABEL FROM CARD mode (only if memory card is installed and formats are stored on it)
	PSE key	Display shows current printer mode ("Printer info"/ see also chapter 12)

Table 8c Function keys in the system mode OFFLINE

System Mode PRINT

The printer is in operation.

In this mode, the transfer of data is possible. New print jobs will be carried out immediately following the completion of the previous job.

Display

The top line of the display shows the message "Printing label".

The bottom line displays the current number of printed labels.

During the transfer of data, a rotating symbol " | " appears in the right hand corner of the lower display line.

LED Display

LED ONL on.

Function Keys



	CAN key	<p>short press less than one second :</p> <p>Cancels the current print job Switch to the next job, which is available in the input buffer</p> <p>longer press greater than one second :</p> <p>Cancels the current print job Clears the input buffer (LED CAN blinks) Switch into ONLINE mode (LED ONL on)</p>
	PSE key	<p>Interrupts the current print job Switch into PAUSE mode (LED PSE on)</p>

Table 8d Function keys in the system mode PRINT

8. Control Panel

System Mode PAUSE

The printing process is temporarily interrupted by the operator.

Display

The top line of the display shows "PAUSE".

LED Display

LED ONL on, LED PSE on.

Function Keys




	FF key	Provides label feed. The leading edge of the next label to be printed is in print position.	
	CAN key	short press less than one second :	Cancels the current print job Switch to the next job, which is available in the input buffer
		longer press greater than one second :	Cancels the current print job Clears the input buffer (LED CAN blinks) Switch into ONLINE mode (LED ONL on)
	PSE key	Continues the current print job Switch into PRINT mode (LED PSE off)	

Table 8e Function keys in the system mode PAUSE

System Mode FAULT-CORRECTABLE

The printer has encountered a fault during printing which is easily correctable by the operator (e.g. "Out of paper"), following which the printing process may be continued.

Display

The type of fault and the total of the remaining labels is shown alternately.

LED Display

LED CAN on, LED PSE is flashing.

Function Keys




	FF key	Only if an applicator is installed : Provides a label feed in order to synchronize the paper feed for the next print run.	
	CAN key	short press less than one second :	Cancels the current print job Switch to the next job, which is available in the input buffer
		longer press greater than one second :	Cancels the current print job Clears the input buffer (LED CAN blinks) Switch into ONLINE mode (LED ONL on)
	PSE key	Continues current print job after error correction Switch into PRINT mode (LED ONL on, LED CAN off, LED PSE off)	

Table 8f Function keys in the system mode FAULT-CORRECTABLE

8. Control Panel

System Mode **FAULT-IRRECOVERABLE**

During printing, a fault has occurred which cannot be cleared by the operator without cancelling the current print run.

Display

The display shows the type of the fault.

LED Display

LED CAN is flashing.

Function Keys






	CAN key	<p>Cancels the current print job Switch into ONLINE mode (LED ONL on, LED CAN off, LED PSE off) If ONLINE mode cannot be entered, switch the printer on and off</p> <p>If the fault remains call for service.</p>
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Table 8g Function keys in the system mode FAULT-IRRECOVERABLE

System Mode SETUP

To enter the SETUP mode, use either one of the procedures described below :

either : press both keys the  key and the  key simultaneously when switching on the printer, and keep them pressing down, until the system test is completed,

or : in ONLINE mode, press both keys the  key and the  key simultaneously for at least 5 seconds.

In SETUP mode, various printer parameters can be specified to suit the current print requirements (for details see chapter 9).

Display

Following the completion of the system test, the display briefly shows "SETUP", followed by "Land" or "Country". Depending on the selection, all of the setup parameters and their settings will be shown.

LED Display

All LEDs off.

Function Keys






	ONL key	Stores the chosen settings of the setup parameters and completes the SETUP mode (i.e. switch into ONLINE mode/ LED ONL on)
	FF key	Skips to next setup parameter Reduces numerical setup values
	CAN key	Skips to previous setup parameter Increases numerical setup values
	PSE key	Confirms selected settings for parameters

Table 8h Function keys in the system mode SETUP

8. Control Panel

System Mode TEST PRINT

The TEST PRINT mode is entered by pressing the  key when switching on the printer, and keeping it pressed down until the system test is completed. Following, an internal test sample will be printed (for details see chapter 11). Then, the system test will be repeated.

Display

Following the completion of the system test, the display shows "Test print".

LED Display


LED ONL on.

Function Keys

	CAN key	Cancels the test print Switch into SYSTEMTEST mode
---	---------	---

Table 8i Function keys in the system mode TEST PRINT

System Mode MONITOR MODE / ASCII Dump Mode

The monitor mode / ASCII Dump mode is entered by pressing the  key when switching on the printer, and keeping it pressed down until the system test is completed.

In this mode, the control codes received by the printer are directly printed as text corresponding to the set font, rather than being interpreted as defined by the programming (see chapter 13).

Display

After the completion of the system test, the display shows "ASCII Dump Mode".

LED Display

LED ONL on.

Function Keys




	ONL key	Switch into ONLINE mode
	FF key	Initiates a paper feed of about .8 in (21 mm)

Table 8k Function keys in the system mode MONITOR MODE / ASCII Dump Mode

8. Control Panel

System Mode LABEL FROM CARD

Provided that a memory card is installed and a label format is present, in OFFLINE mode, press the  key to enter the LABEL FROM CARD mode. In this mode, the labels stored on the card can be selected to print. For files with a variable number of labels the quantity of labels to be printed can be set.

Display

The top line of the display shows "Label from card". The bottom line of the display shows the file name of the first label file in the list stored on the card. After the requested label has been selected, for files without a fixed number of labels the display shows "No. of labels" in the top line and "00001" in the bottom line.

LED Display

All LEDs off.

Function Keys





	ONL key	Switch into OFFLINE mode
	FF key	For scrolling down within the file list stored on the card Reduces the quantity of labels to be printed
	CAN key	For scrolling up within the file list of the card Increases the quantity of labels to be printed
	PSE key	Confirms file selection Moves the cursor to the right when setting the quantity of labels to print Switch into PRINT mode

Table 8| Function keys in the system mode LABEL FROM CARD

System Mode ENTER DATA

This system mode is entered when it is necessary to input data during a print job. It is possible to input the data via control panel of the **Hermes** as described earlier. But it is easier to enter the data by using an external keyboard connected by the keyboard adapter.

More information on this subject can be found in chapter 14.

Display

In the first line appears the name of the input field. The second line is provided to enter the value which is necessary. A cursor is flashing at the current position.

LED Display

All LEDs off.

Function Keys




	FF key	Altering the character at the cursor position to lower ASCII values
	CAN key	Altering the character at the cursor position to higher ASCII values
	PSE key	Pressing the PSE key moves the cursor to the right. Upon completing the input fields with fixed length the printer switches to the PRINT mode. When entering data into input fields with variable length, press the PSE key twice to switch to the PRINT mode.

Table 8m Function keys in the system mode ENTER DATA

9. Setup

Using the setup mode, the configuration of the **Hermes** may be customized to suit specific requirements. Initial setup should be performed when operating the printer for the first time. Changes which become necessary to process different print jobs, e.g. when different materials are used, can mostly be accomplished by changing the software settings.

Start of Setup Mode

This mode is initiated by **either** simultaneously pressing the  key and the




key when switching on the printer and keep them pressed down until the system test is completed, **or** in ONLINE mode, press the same two keys down for at least 5 seconds. Starting the setup mode, the display shows "SETUP" for about one second, followed by "Land" or "Country" which represents the first of the parameters to select from.

Setting of the Parameters

Depending on the selection, the setup parameters and their settings will be shown. The list of parameters is brought up in a row and may be run through repeatedly. Each time a parameter setting has been changed, there will be a request for confirmation. There will not be a general request before leaving the setup mode.


Leaving the Setup Mode



The setup mode can be left at any point by pressing the  key. The

confirmed parameters will be saved.

If an already confirmed setting is not desired any more, switch off the printer during the setup mode to cancel changes.

Restore the Default Setup

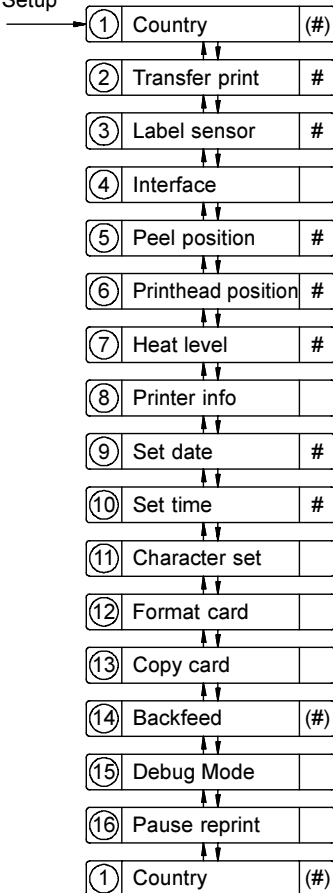
To return to the original factory default settings, press all three keys, the 

key, the  key, and the  key simultaneously and keep them pressed down until the display shows "--- RESTORE ---". Note, that in some cases the printer may initially be set to certain parameters which may differ from the default settings (e.g. "Country").

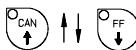
On the following pages, you will find details to change the setting of the parameters.

Overview of the Setup Parameters

Starting Setup



Scrolling up/down parameters :



Definition of the list items :

①	No	Para	#
---	----	------	---

- No Item number
 Para Name of the parameter
 # Parameter may be altered via software
 (#) Parameter is limited changeable via software

Fig. 9a Setup parameters

Country/Land

The parameter "Country" (or "Land") allows the LCD display language to be set, which also dictates the format of date and time used for the printer display as well as for printing. In the setting "USA" the measuring unit for all length values in the programming is "inch", in all other settings "mm".

The formats of date and time used for the printout can be altered via software. The language that the prompts on the LCD are displayed in cannot be altered through software, only with the front panel.

Default Setting : USA

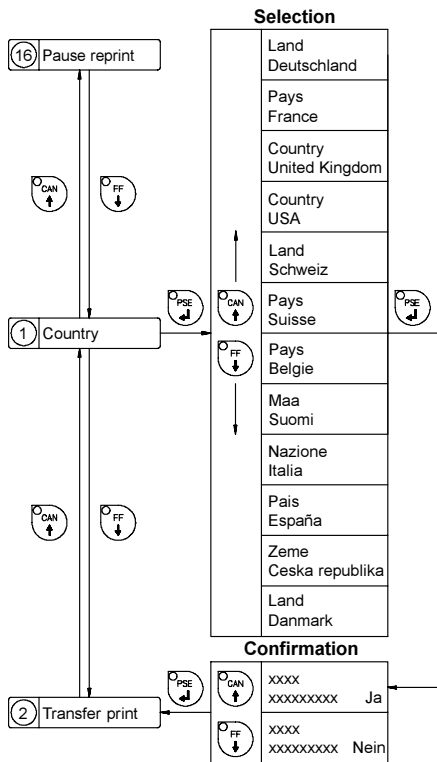


Fig. 9b Set "Country" parameter

The following table shows the specific settings for the date format and the time format of all countries available.

	Date	Time
Land Deutschland	15.07.2003	10:15:09
Pays France	15.07.2003	10:15:09
Country United Kingdom	15/07/2003	10:15:09
Country USA	07-15-2003	10:15:09 am
Land Schweiz	15.07.2003	10,15,09
Pays Suisse	15.07.2003	10,15,09
Pays Belgie	15/07/2003	10:15:09
Maa Suomi	15.07.2003	10:15:09
Nazione Italia	15-07-2003	10:15:09
Pais España	15-07-2003	10:15:09
Zeme Česká republika	15.07.2003	10:15:09
Land Danmark	15/07/2003	10:15:09

Table 9 Specific format settings for date and time

Transfer Print

The parameter "Transfer print" is used to set the **Hermes** to the print mode, either direct thermal printing or thermal transfer printing. This setting has an influence on two factors. On one hand, in thermal transfer mode the printer works at a lower heat level compared to the direct thermal printing mode. On the other hand, the ribbon sensor is only active in thermal transfer printing mode.



NOTICE !
This parameters can also be changed via software. For different print jobs it is recommended that you carry out all changes in the software.

Default Setting : Transfer print ON

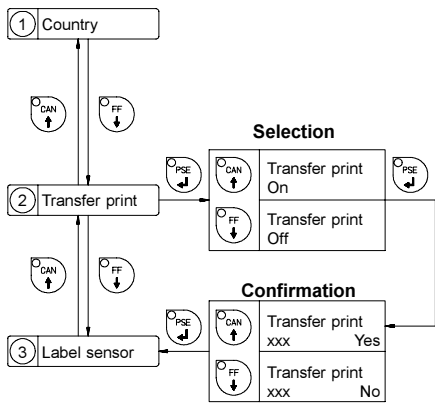


Fig. 9c Set "Transfer print" parameter

Label Sensor

The printers of the **Hermes** serie offer three different methods for recognizing the front edge of the label.

In most cases, the label edge sensor photocell can be used in the see-through mode ("Gap sensor" mode), where the different transparency of the material is used to distinguish between the labels and the gaps.

In certain cases, for instance when pre-printed continuous paper is used, the label edge can also be recognized through reflective marks on the bottom or on the top of the material.



NOTICE !

This parameter can also be changed via software. For different print jobs it is recommended that you do the changes in the software.

Default Setting : Gap sensor

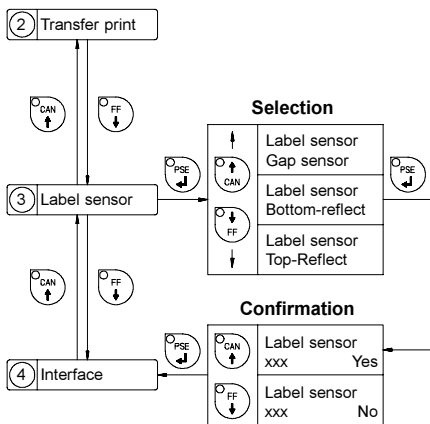


Fig. 9d Set "Label sensor" parameter

Interface

Therefore, the type of interface and, if necessary, the baud rate, and the protocol or network address can be specified.

The parameter setting cannot be changed via software.

Default Setting : Interface RS-232, baud rate 9600, protocol RTS/CTS
(network address A)

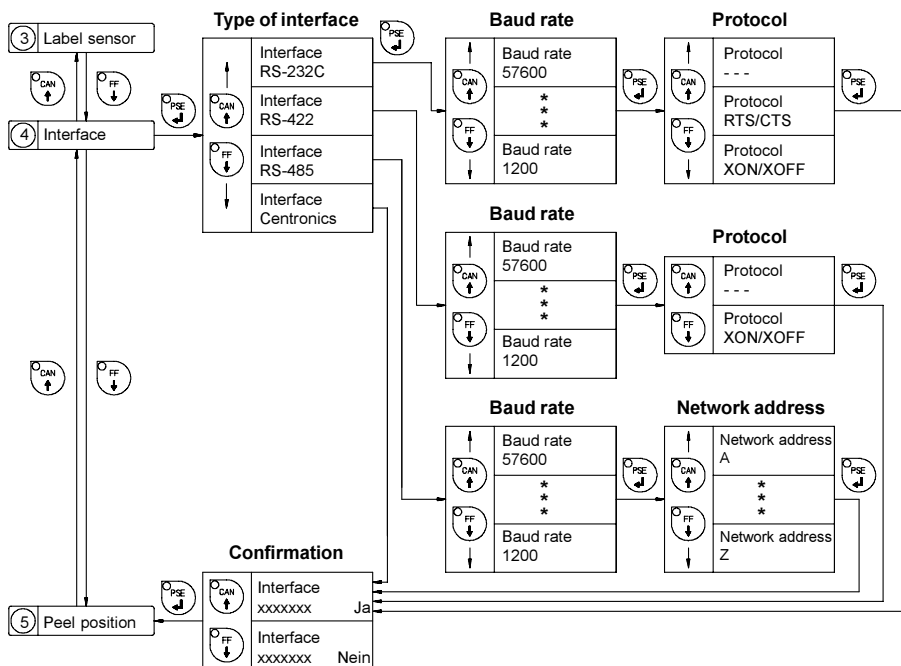


Fig. 9e Set "Interface" parameter

Peel Position

The "Peel position" parameter allows you to alter the position of the dispensed label relative to the dispense edge.

Normally, with the initial offset value of "0" the label is removed from the silicon liner until only a .08 in or 2 mm wide part of the label still sticks to the liner.

Adjustments have to be carried out only once when a present sensor is being installed (range from -.33 to +.33 in or -8.3 mm to +8.3 mm).

If the peel position value is positive, the label will be removed further leaving a smaller portion sticking on the liner.



NOTICE !

It is recommended that you alter the parameter for single print jobs via software (e.g. if an applicator is used and, therefore, the labels have to be removed completely). The software provides a second value for individual adjustments.

Any front panel value and software command value are totaled together for printing.

The current field to be changed is flashing in the display.

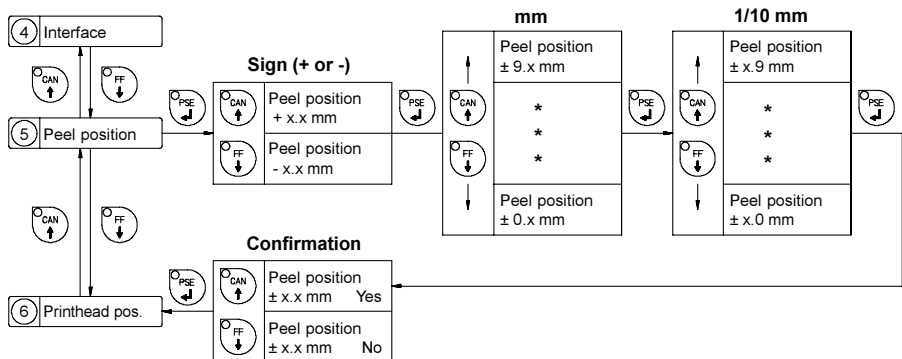


Fig. 9f Set "Peel position" parameter

9. Setup

Printhead Position

The "Printhead position" parameter defines the location of the print image on the label in x- and y-direction. The parameter should only be altered if you are using the same label formats on several printers, and you find the print image located differently on the labels when they were printed on another printer.

X-Offset

With this parameter the location of the print image can be shifted across to the label path. It is possible to set a shifting until .33 in (8.3 mm) outward in the Setup.



NOTICE !

The difference between the width of the printhead and the width of the label set in the software may not be smaller than the X-offset value set in the setup. In this case the shifting is only applied for the difference value. This limitation is necessary to guarantee the printing of the whole label.

The setting of a negative X-offset value (shifting the print image inward) is not possible.

Y-Offset

With this parameter the location of the print image can be shifted in the direction of the label path (range from -.33 to +.33 or -8.3 mm to +8.3 mm). When the offset values are positive the printing in the direction of the label path starts later.



NOTICE !

A change of the printhead position value influences the peel position. For that reason alter the value of the parameter "Peel position" by the same amount as the "Printhead position" but in the opposite direction.

Adjustments for various print jobs may also be carried out via software which provides an additional offset value. There are additional offset values in x- and y-direction.

Any front panel value and software command value are totaled together for printing.

The current field to be changed is flashing.

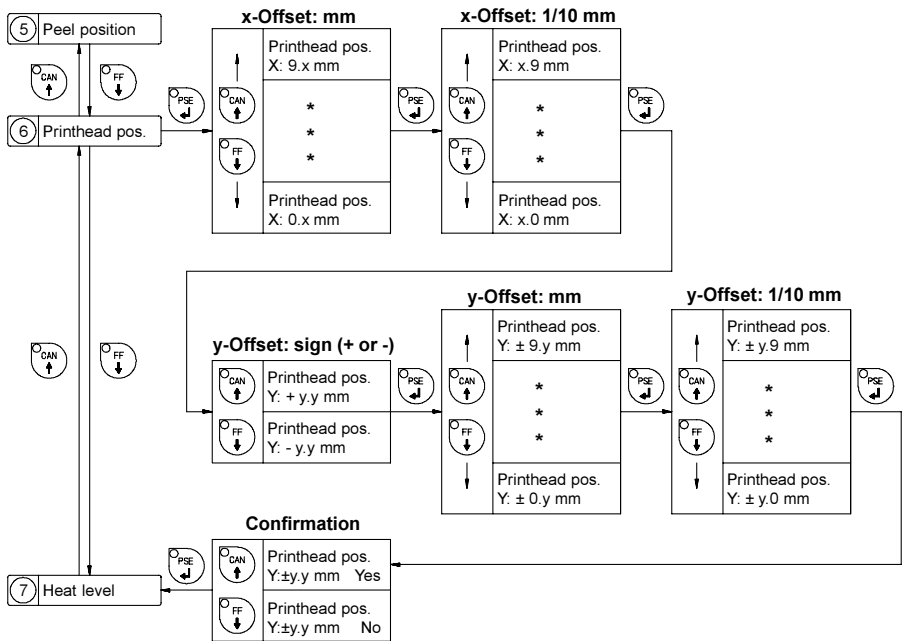


Fig. 9g Set "Printhead position" parameter

Heat Level

The parameter "Heat level" enables the printer to adapt to possible differences in the thermal properties of different printheads.

The parameter scale is from -9 to +9.

A previous adjustment has already been carried out in the factory.

In the event of replacing the printhead, the setting possibly has to be adjusted.



NOTICE !

To adjust the printer to current print jobs, it is recommended that you alter the heat level parameter via software (e.g. for different material and speed).

Any front panel value and software command value are totaled together for printing.

The current field to be changed is flashing in the display.

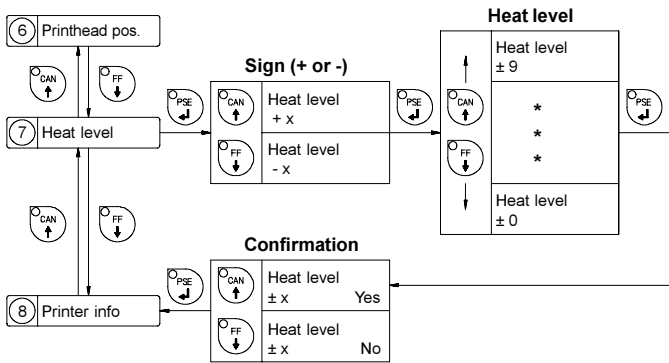


Fig. 9h Set "Heat level" parameter

Printer Info

The "Printer info" parameter provides information about the firmware. Furthermore, information about the cumulative length of printed media as well as the number of operating hours are shown.

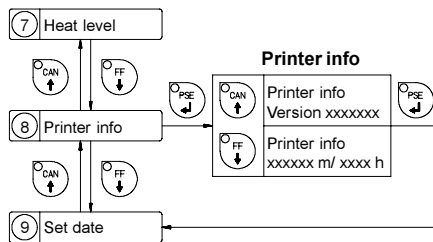


Fig. 9i Printer info display


9. Setup

Set Date

The "Set date" parameter allows you to change the system date of the **Hermes**.
The date format shown depends on the selected "Country" parameter.
Regardless of the format, the order of data to be changed (day - month - year) always follows the same routine as shown below (figure 9 k).

The date range available is from January 1, 1970, to December 31, 2069.

If an invalid date entry is made, the display shows "Invalid input!"

After pressing the  key the parameter may be set again.

Date changes in the software will only influence the date on the printout but not affect the system date as stored in the setup.

The current field to be changed is flashing in the display.

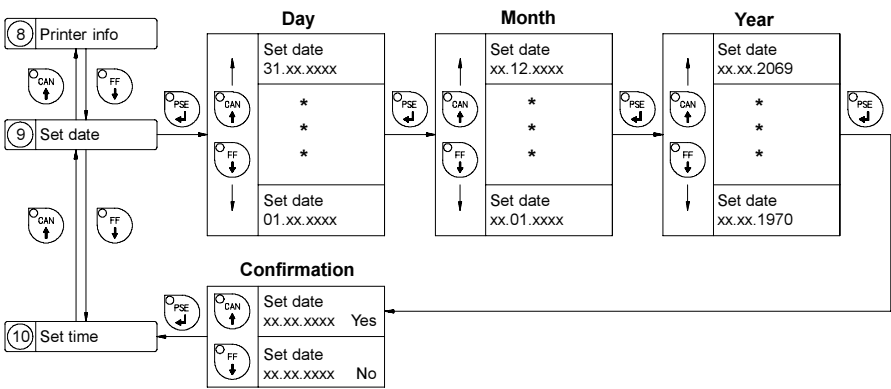


Fig. 9k Set system date

Set Time

The "Set time" parameter allows you to change the system time of the **Hermes**.
The time format shown in the display depends on the selected "Country" parameter.

Time changes in the software will only influence the printout but not affect the system time of the printer. The changed time will neither be shown in the display nor be stored in the printer setup.

The current field to be changed is flashing in the display.

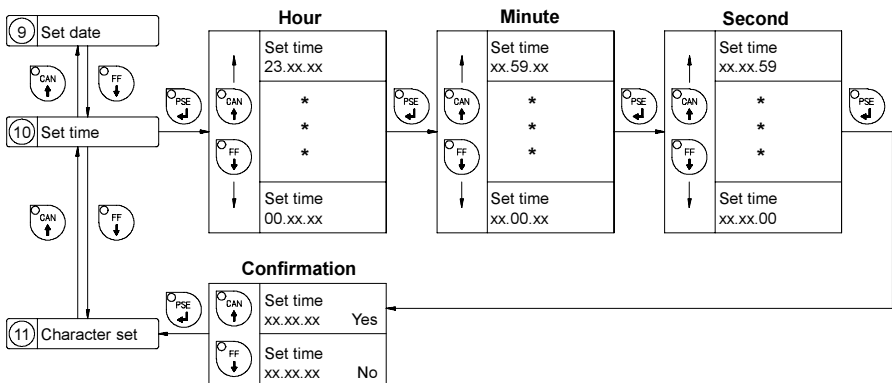


Fig. 9I Set system time

Character Set

Before starting to operate the **Hermes**, the "Character set" of the printer should be adapted to the character set of the computer.

Adjustment via software is not possible, however, for characters which are not included in the selected fonts the Unicode character table can be used.

The character set tables are included in Appendix A.

Default Setting : Windows 1252

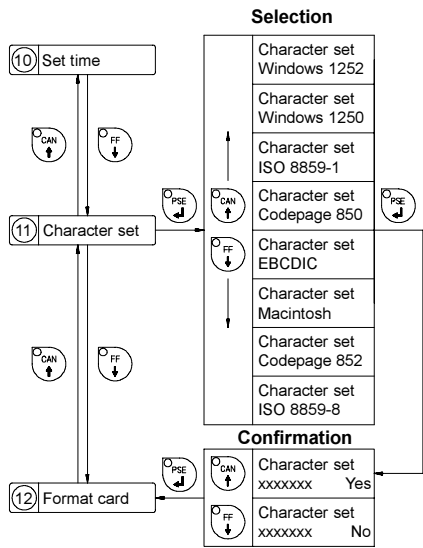


Fig. 9m Set "Character set" parameter

Format Card

The "Format card" facility may be used to delete all stored data from a memory card, for instance PC card, PCMCIA card, etc. (optional). The delete process will format the card. Therefore, this option may also be used to prepare new memory cards for operation.

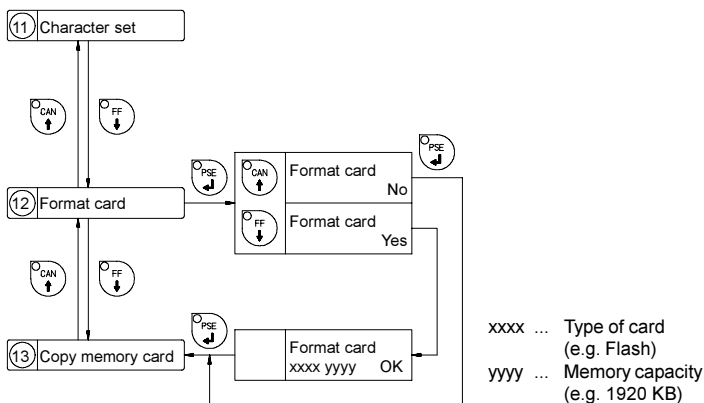


Fig. 9n Delete / format a memory card

It will take several seconds to delete files and format a high capacity memory card.

If the procedure has been started without having a card installed the display will show "No card".

Pressing the  key will skip to the following parameter.

9. Setup

Copy Memory Card

The "Copy memory card" facility may be used to copy information from one memory card, for instance PC card, PCMCIA card, etc., onto another one.



NOTICE !
Before starting the duplication, the source card has to be installed.

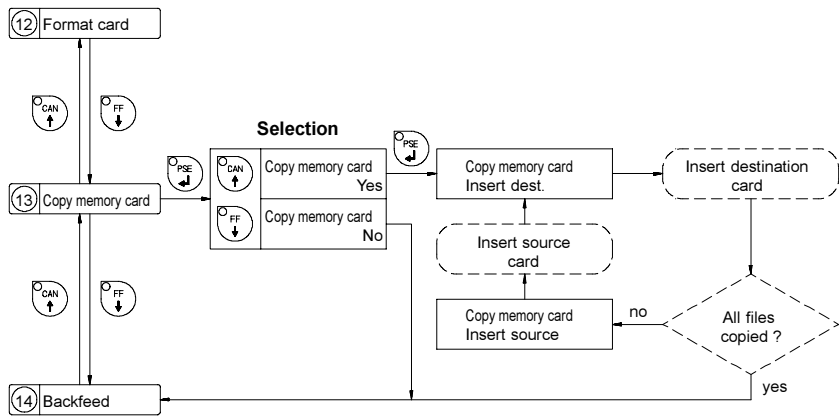


Fig. 9o Copy memory card

The duplication is carried out file by file. This allows the usage of memory cards with different capacities.

When the duplicate card cannot store any more information the display shows "Card full".

If data with a capacity of more than 1Megabyte has to be copied, the duplication process will be divided into several cycles. Alternately, the printer display will ask to insert either the source card or the destination card.

Backfeed

In the peel-off mode, the material will be stopped in a position where the front edge of the following label has already been forwarded over the print line. The **Hermes** will carry out a backfeed of the label material from its peel position to the print line. Thus, the next label can be printed all at once.

The backfeed will be performed independent of the label design if the parameter is set on "always". If the setting is on "smart", the backfeed will only be performed if the front label is in its peel position and the **Hermes** has not yet received all of the data for printing the following label. Otherwise, the print of the second label will be started, but only completed after the first one has been picked up.

Besides, **Hermes 4F/5F/4R/5R** offer to select from two backfeed modes, either "head lift-off" or "head down". By selecting Head lift-off the printhead is raised with each backfeed of material. This prevents smudging of the label material by the ribbon. If the printhead is turned down the accuracy of positioning is more precise. At **Hermes 4N/5N** the printhead always has to be raised with each backfeed because of the printhead geometry.



NOTICE !

Smart backfeed can cause flaws in the printed image at the position where the print was stopped. If there are important information at this position it is recommended to choose the setting "always".

Default Setting : Hermes 4N/5N (head lift-off), always
 Hermes 4F/5F/4R/5R head down, always

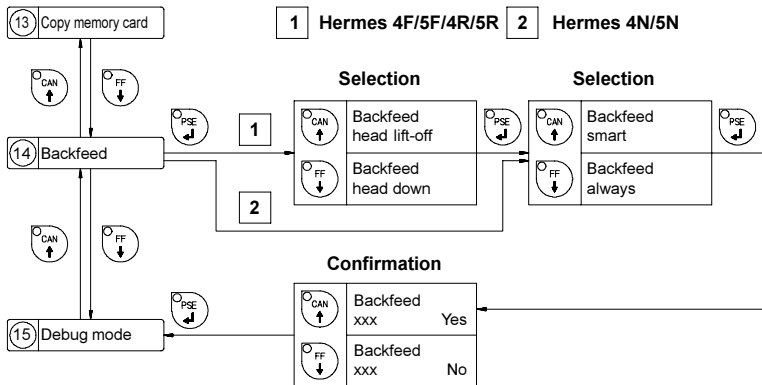


Fig. 9p Set "Backfeed" parameter

Debug Mode

The "Debug mode" represents a tool for the firmware programmer. It will help to recognize faults and their possible sources beyond standard error messages.

For standard use of the printer, the parameter should always be switched OFF.

Default Setting : Debug mode OFF

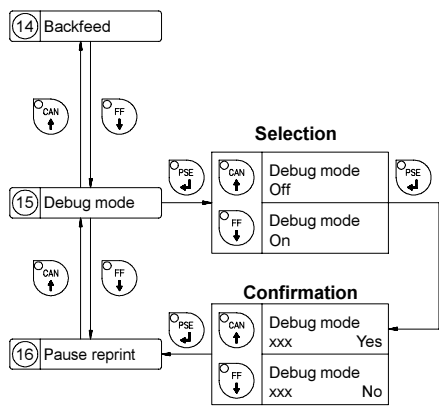



Fig. 9q Set "Debug mode"

Pause Reprint

After completion of a print job, the print of the last label may be repeated by pressing the  key.

This function may be switched ON or OFF in the "Pause reprint" parameter of the setup mode.

Default Setting : Pause Reprint ON

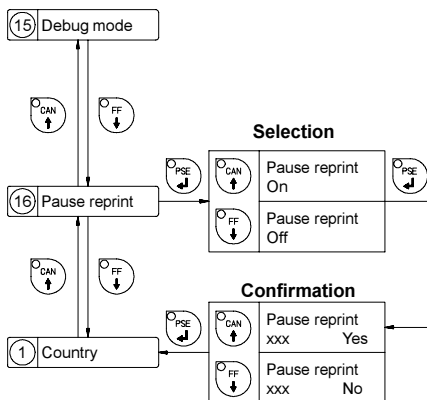


Fig. 9r Set "Pause reprint" parameter

10. Test Operation

Hermes offers the possibility to carry out test printouts without installed applicator to optimize the quality of the print image and to set the peel position. The basic setting of the peel position should be done without print job only by

pressing the  key. Then the software settings can be made on this basis.

Load media (labels, transfer ribbon) corresponding to the instructions in chapter 6.

Test Operation without Print Job

- Switch on the printer.

- Press the  key.

An empty label is pushed in the peel position. This can be removed manually. After approx. 1.5 s a paper backfeed is carried out automatically.

- Check the position of the following label **before paper backfeed**.



NOTICE !

The front edge of the following label should still be approx. .02 in (0.5 mm) away from the dispense edge.

Otherwise, the peel position must be adjusted in the Setup (see chapter 9/ Peel Position).

Test Operation with Print Job



NOTICE !

Activate the Peel-off Mode in the software.

For direct programming use the P-command (see Programming Manual).

- Start the print job.
 - Press the pre-dispense key (1).
- A label is printed and pushed in the peel position.

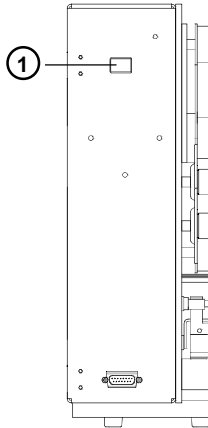


Fig. 10a Pre-dispense key

- Check the position of the following label.



NOTICE !

The front edge of the following label should still be approx. .02 in (0.5 mm) away from the dispense edge.

Otherwise, the peel position must be adjusted in the software.

- Press the pre-dispense key (1) again.
- The printer carries out a paper backfeed. The following label is printed and pushed in the peel position.

During the test operation with print job adjustments to optimize the quality of the print image which are necessary can be carried out (see chapter 7).

To cancel the test operation press the  key.

10. Test Operation

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11. Self Test / Test Print

Start of Test Print

To prepare a test print, load media (labels or continuous paper) which extends over the entire print width of the **Hermes**.


If you want to perform the test print in thermal transfer mode, also use transfer ribbon of the maximum width.

When loading labels for the test print feed the labels from the media hub to the peel edge only. Let the labels with the liner come out of the front side of the printer.



NOTICE !

During test print, the Hermes will not sense any label gaps. The length of the printout will be about 9 in (230 mm). Endless paper would suit best for test prints, otherwise, a normal sheet of A4 paper which is cut to a width of 4.5 in (115 mm) can be used in thermal transfer mode.


To initiate a self test printout, press the  key when switching on the printer and keep it pressed down until the system test is completed.

The display shows "Test print", and the **Hermes** will print an internal test sample which contains a variety of information about the configuration of the printer as well as the results of the internal test.

The test printout can also include a range of hardware errors which have occurred previously, even if they have disappeared again. This information is important for service purposes and can only be deleted by Technical Support.

The information in the printout is also useful for checking the print quality, such as differences in the blackness left/right, missing ink dots, etc. It is recommended you carry out a print test immediately after receiving the printer.

After completing the test print, the **Hermes** will run the system test once again. Then, the printer proceeds to ONLINE mode.

To cancel the test print press the  key.

11. Self Test

Explanation of the Self Test Printout

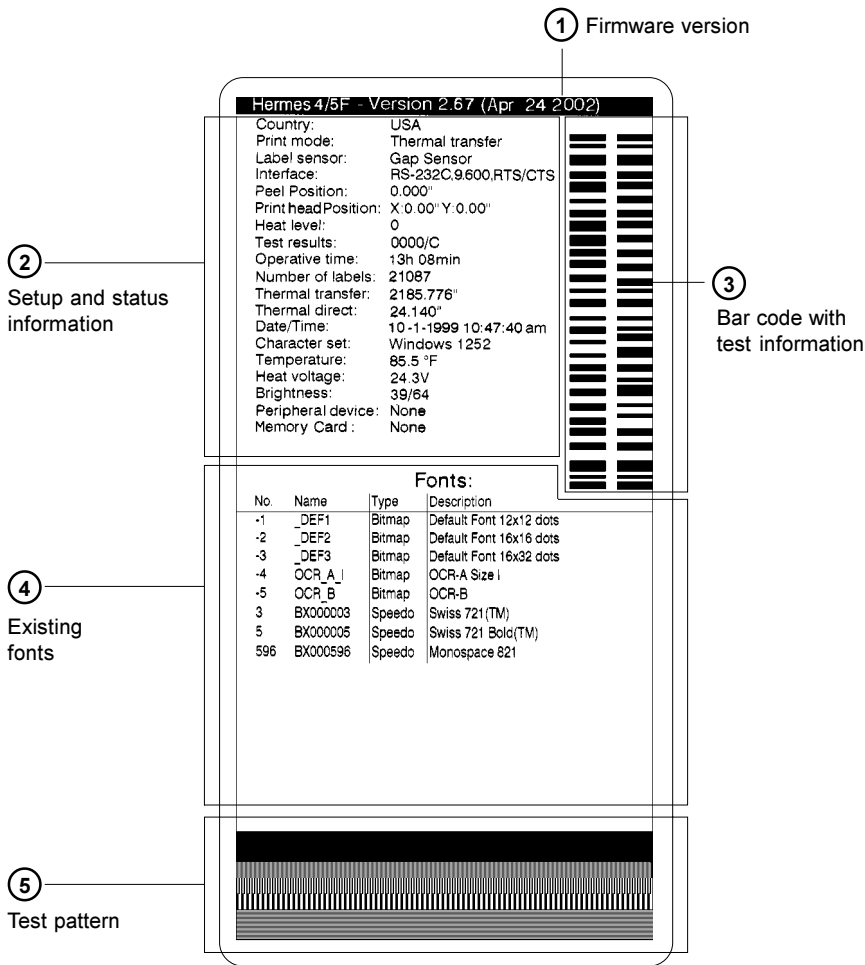


Fig. 11 Self test printout

On the following pages you will find detailed information about the contents of the test printout.

① Firmware Version

Type of device, part number, and date of the firmware version.

② Setup and Status Information

Country	: Setting of the "Country" parameter
Print mode	: Setting of the "Transfer print" parameter
Label sensor	: Setting of the "Label sensor" parameter
Interface	: Setting of the "Interface" parameter
Peel Position	: Setting of the "Peel position" parameter
Printhead Pos.	: Setting of the "Printhead position" parameter
Heat level	: Setting of the "Heat level" parameter
Test result	: Result of the system test. Any errors will be shown coded as four digit hexadecimal numbers. (see Table 11) (for fault correction see Appendix C) /C shows when the setup has been altered from the defaults.
Operative time	: Cumulative operating time of the printer
Number of labels	: Cumulative amount of printed labels
Thermal transfer	: Cumulative length of printed material in thermal transfer mode
Thermal direct	: Cumulative length of printed material in direct thermal mode
Date/Time	: Setting of system date and system time
Character set	: Setting of the "Character set" parameter
Temperature	: Printhead temperature
Heat voltage	: Current value of heat voltage (approx. 24V)
Brightness	: Service information on brightness used at gap sensor
Peripheral device	: Type of device connected to peripheral port
Memory card	: Type and capacity of memory card (PCMCIA/PC card)

11. Self Test

Error code		Type of error
HEX	DEC	
0001	1	dRAM fault
0002	2	dRAM multiplexer fault
0004	4	A/D converter fault
0008	8	Ribbon saver fault
0010	16	sRAM fault
0020	32	LCD damaged
0040	64	
0080	128	ROM fault
0100	256	
0200	512	
0400	1024	
0800	2048	
1000	4096	
2000	8192	
4000	16384	
8000	32768	Setup invalid

For the test result, the codes of occurred errors are added up to a four-digit hexadecimal number to determine the final test result.

For example : Ribbon saver fault + LCD damaged : Test result = 0028

Table 11 Self test - Test result error codes

③ Bar Code with Test Information

This special bar code is designed for use by Technical Service. It contains compressed information about the current configuration of the **Hermes** as well as previously occurred faults.

④ Existing Character Sets

No.	:	Identification No. of the font for programming (command T)
Name	:	Name of font used for internal storing Name of command (query sequence) q...CR
Type	:	Method of generating the characters (see programming of command T)
Description	:	Font description (size, type)




⑤ Test Pattern

The test pattern field contains seven areas with different stroke patterns. With these patterns a range of print faults can be analyzed. The printout shows errors such as varying print intensity which indicates the printhead being misadjusted or dirty, or missing ink dots causing vertical white lines.

12. Printer Info Display

Viewing the Printer Info Display

Hermes offers a convenient option for retrieving and viewing information about the printer configuration and occurred hardware problems without using setup mode or test print mode.

After switching on, or completing the system test or print jobs, the printer is in ONLINE mode. Pressing the  key will switch into OFFLINE mode where the display shows the status information on five different pages which are accessible by repeatedly pressing the  key. The printer info display can be exited by pressing the  key (back into ONLINE mode).

Definition of the Printer Info Display

Printer info
1: RS 232 / RTS/CTS

Fig. 12 a Printer info display 1

On the first page, the selected interface (RS-232, RS-422, RS-485, Centronics) and, in case of a serial interface, the handshake or protocol (RTS/ CTS, XON/ XOFF or - -) will be shown.

Printer info
2: 9.600

Fig. 12 b Printer info display 2

The second page contains information about the fixed baud rate of the serial interface. When the parallel interface has been selected (Centronics), the second page of the display is not applicable and shows three dashes.

Printer info
3: 2.67 / Apr 24 02

Fig. 12 c Printer info display 3

On the third page, the version and the date of the firmware are shown. The example as shown in Figure 12c represents the firmware version No. 2.67 as at April 24, 2002.


```
Printer info
4: 0000 / 3 / 5 / C
```

Fig. 12 d Printer info display 4

The fourth page of the info display contains coded information on the configuration of the printer and the internal test results in the format "xxxx / y / z / C".

- xxxx Result of the system test
 The four-digit hexadecimal number contains (coded) hardware faults.
 The figure is the same as in the printout of the self test.
 For fault encoding see code Table 11 in chapter 11 "Self Test".
 The example, as shown in Figure 12d, displays "0000" indicating that there have been no hardware faults.
- y Type of peripheral device
 2 : Applicator
 3 : None fitted
 For example, Figure 12d : "3" - No peripheral device connected.
- z Configuration setting Transfer print / Label sensor
 The value of z results from adding the code numbers for selected settings.
- | | | | | |
|----------------|---|---|---|----------------|
| Transfer print | : | 1 | = | ON |
| | | 0 | = | OFF |
| Label sensor | : | 8 | = | Bottom-Reflect |
| | | 4 | = | Gap sensor |
| | | 0 | = | Top-Reflect |
- For example, Figure 12d : "5" - Transfer print ON (1) + Gap sensor (4).
- C Indicates that the setup configuration has been altered from the defaults

```
Printer info
5: Windows 1252
```

Fig. 12 e Printer info display 5

The last of the info pages shows the name of the character set as selected in setup.


13. Monitor Mode/ ASCII Dump Mode


If programming directly, the monitor mode provides a method to print control sequences which were received at the interface. The commands will be printed in text format depending on the selected character set. Error messages will be printed directly behind the fault, e.g. for unknown commands. In monitor mode, the **Hermes** will not recognize gaps between labels nor control the ribbon feed.




NOTICE !
When loading labels for the ASCII dump mode feed the labels from the media hub to the peel edge only. Let the labels with the liner come out of the front side of the printer.
For questions or future reference, print and retain one copy of the label format for each label printed.

Start of Monitor Mode / ASCII Dump Mode

To start the monitor mode, press the  key while switching on the printer, and keep it pressed down until the system test is completed. The display shows "ASCII Dump Mode".

To cancel ASCII Dump mode, press the  key.

In monitor mode, the print of data will be started after every four lines of data received. Therefore, in some cases, the last lines of the label have to be retrieved by pressing the  key.

Representation of the Control Characters

The control characters (ASCII Code 00 ... 31) as shown in monitor mode printouts are as follows.

Code DEC HEX	Printout	Code DEC HEX	Printout	Code DEC HEX	Printout	Code DEC HEX	Printout
00 00	N _L	08 08	B _S	16 10	D _L E	24 18	C _A N
01 01	S _O H	09 09	H _T	17 11	D _C 1	25 19	E _M
02 02	S _T X	10 0A	L _F	18 12	D _C 2	26 1A	S _U B
03 03	E _T X	11 0B	V _T	19 13	D _C 3	27 1B	E _S C
04 04	E _O T	12 0C	F _F	20 14	D _C 4	28 1C	F _S
05 05	E _N Q	13 0D	C _R	21 15	N _A K	29 1D	G _S
06 06	A _C K	14 0E	S _O	22 16	S _Y N	30 1E	R _S
07 07	B _E L	15 0F	S _I	23 17	E _T B	31 1F	U _S

Table 13 Representation of the control characters in monitor mode

Example of ASCII Dump Mode

The following figures show the "normal" appearance of a printed label, and the appearance of the same label when its commands are printed in ASCII Dump mode.

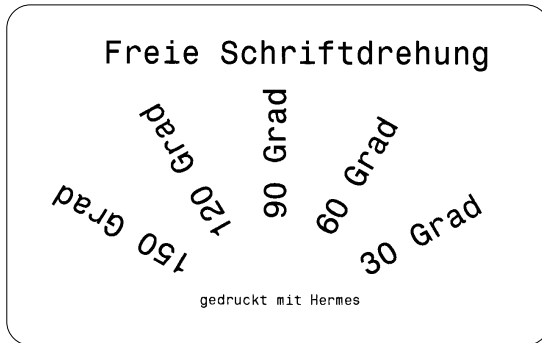


Fig. 13a "Normal" label

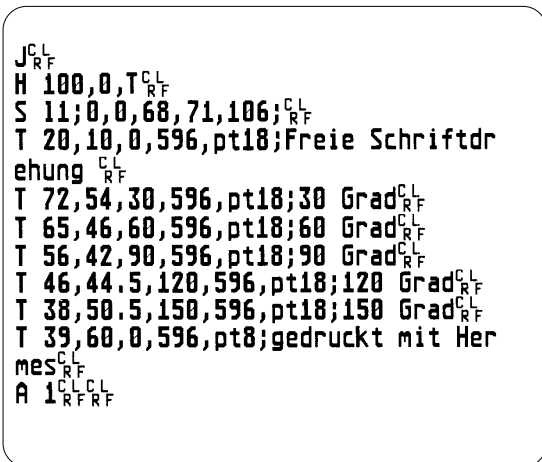


Fig. 13b The same label as above printed in ASCII Dump mode

14. Options

Bracket

The delivery program of the **Hermes** series includes brackets for **Hermes 4** and **Hermes 5**. These mounting elements allow to hang in the printer in to a production line. For that the bracket first must be mounted onto a profile. After that the printer can be hung in into the bracket and fixed by screws.

The delivery contents of the bracket (1) include a clamp (2) for mounting the bracket (1) at a profile with a cross-section of 50mmx50mm. The clamp is made of three parts assembled by screws (3).

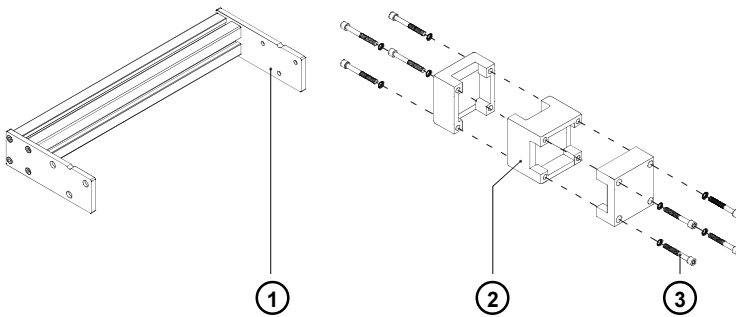


Fig. 14a Bracket with clamp

The clamp allows to mount the bracket onto a vertical profile. Besides the bracket can be moved sideward inside the clamp. This way the bracket can be adjusted to different centers of gravity when different applicators are used at the **Hermes**.

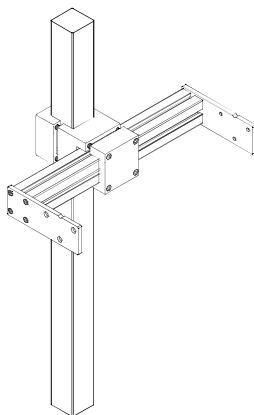


Fig. 14b Sample of the bracket mounting

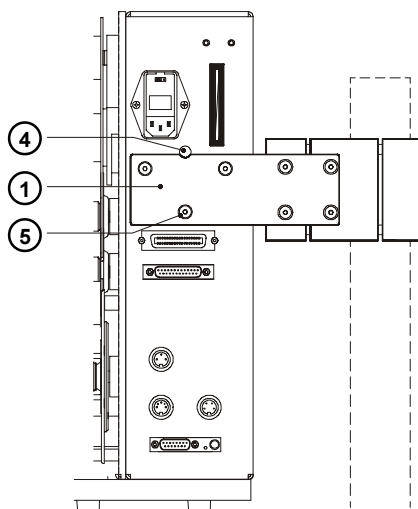


Fig. 14c Mounting the printer at the bracket

Hermes has one each bolt (4) at the front and the rear side. Using these bolts the printer is hung in into the grooves of the bracket (1). After that the printer is fixed at the bracket with six screws (5).

14. Options

Present Sensor

The present sensor is an optional equipment to operate the Hermes in dispense mode without an installed applicator.

The information exchange between the present sensor and the printer is made by the peripheral interface for non-cab-applicator at the back of the Hermes.

The presence of a label in dispense position is registered by a reflective sensor and the print is interrupted until the label is removed.

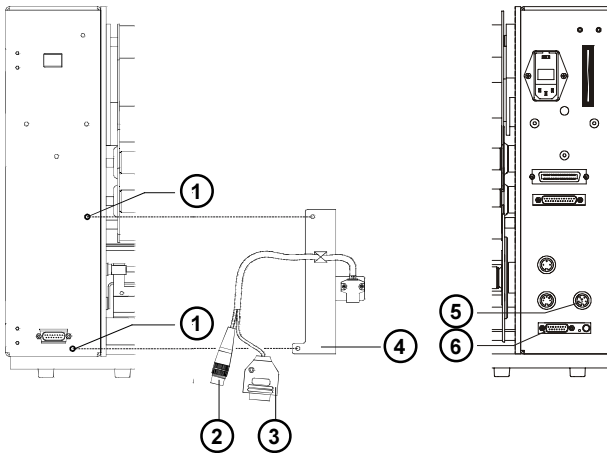


Fig. 14d Connecting the present sensor

1. Fasten the present sensor (4) at the front side of the Hermes (1) using two screws.
2. Contact the connection cable with the 4-pin plug (2) at the 4-pin socket (5) on the rear side of the Hermes.
3. Connect the 15-pin socket (3) with the peripheral interface for non-cab-applicator (6) on the rear side of the Hermes.

The printer is ready for operation if all connections have been made and all materials are loaded correctly.



NOTICE !

To operate the present sensor the peel-off mode must be activated in the software !

For direct programming use the P-command (see Programming Manual) !

Warning Light

By using the warning light it is possible to recognize the state of the printer with one view.

For mounting the warning light it is recommended to use the option "Bracket".

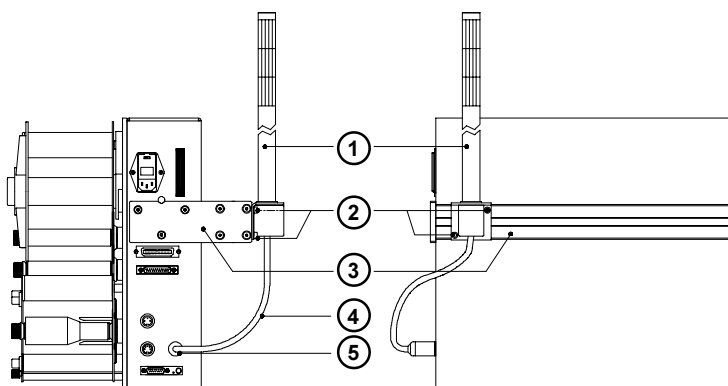


Fig 14e Connection of the warning light

1. Fix the warning light (1) at the bracket (3). Use the two screws (2) which are included in the delivery contents of the light.
2. Contact the connection cable (4) of the warning light at the socket (5).

During the operation the lamps have following functions :

green	Device is switched on, voltage is available.
yellow	Warning : labels respectively transfer ribbon have passed the preset minimum quantity. Function is only available when the warning sensor label end is mounted.
red	Printer/Applicator error Further information about the kind of error is shown at the display.

14. Options

Warning Sensors

The sensors recognize, when the diameter of the label supply roll respectively the transfer ribbon roll decreases below a preset threshold value.



NOTICE !

The messages of the sensors are only intended to inform the operator. They do not influence the operation of the Hermes, i.e. the operation is not interrupted.

The messages will be shown by switching on the yellow lamp of the warning light (option). The signals also can be sent to a control system by using the peripheral interface.

Warning Sensor Label End

Mounting

1. Switch off the printer
2. Slide the sensor holder (1) with the warning sensor label end (2) behind the wind plate (6) of the media supply hub.
3. Attach the sensor holder with the slotted head screw (7) and the hexagon socket head screw (3) to the mounting plate. The hexagon socket head screw (3) must be used at this side, where the elongated hole is located in the sensor holder.
4. Plug the cable (4). For that **Hermes 4** has a 5-pin connector at the rear side of the frame. The connector (10) at **Hermes 5** is beside the control panel.

Adjustment

With this setting the threshold diameter (3.3 to 4.3 in / 84 to 110mm) for the warning message can be adjusted.

1. Slide a label roll (9) with the intended threshold diameter onto the media supply hub.
2. Switch on the printer. The sensor (2) sends out a beam (5). If the label roll does not interrupt the path of the beam, the beam is mirrored at the reflective foil (8) and detected again by the sensor. In that case the LED at the sensor is on.
3. Loosen the hexagon socket head screw (3) and swing the sensor holder against the axle of the media supply hub as near as possible. The LED at the sensor is off.
4. Slowly swing the sensor holder away from the axle until the LED at the sensor goes on.
5. Tighten the hexagon socket head screw (3).

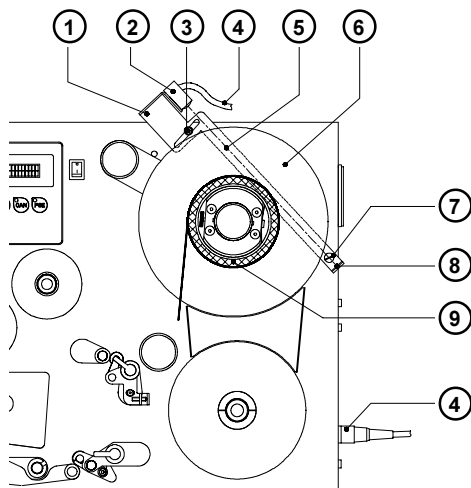


Fig. 14f Warning sensor label end Hermes 4

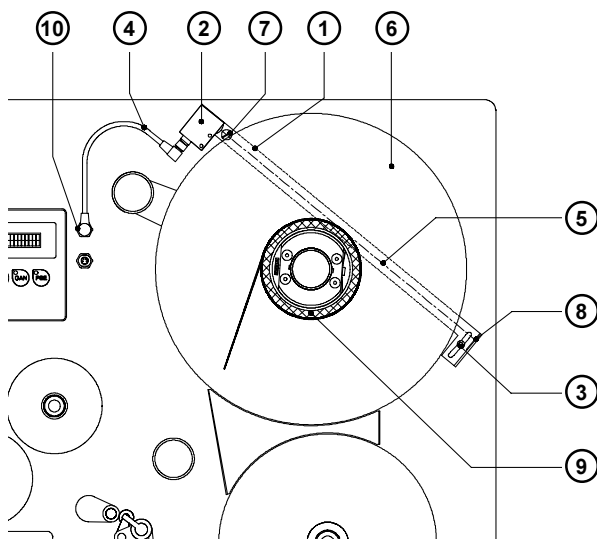


Fig. 14g Warning sensor label end Hermes 5

14. Options

Warning Sensor Ribbon End



NOTICE !

The warning sensor ribbon end is analyzed by the printer electronics only if the warning sensor label end is installed too.

Mounting

1. Switch off the printer
2. Attach the sensor holder (7) with the warning sensor ribbon end (8) using the screws (6) to the mounting plate.
3. Plug the cable (9). For that **Hermes 4** has a 3-pin connector at the rear side of the frame. The connector (10) at **Hermes 5** is beside the control panel.
4. The contents of delivery include a reflective foil (2). Remove the covering foil from the glued surface and stick the reflective foil (2) onto the bracket (3) below the ribbon hubs as shown in fig.14h. Make sure that the distance between the reflective foil and the mounting plate (1) is about 0.6in (15mm).

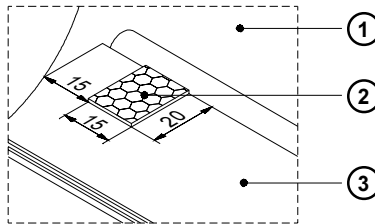


Fig. 14h Placing the reflective foil

Adjustment

With this setting the threshold diameter (1.4 to 1.6in / 34 to 41mm) for the warning message can be adjusted.

1. Slide a transfer ribbon roll (4) with the intended threshold diameter onto the media supply hub.
2. Switch on the printer. The sensor (8) sends out a beam (5). If the ribbon roll does not interrupt the path of the beam, the beam is mirrored at the reflective foil (2) and detected again by the sensor. In that case the LED at the sensor is on.
3. Loosen the screws (6) and move the sensor holder to the right as far as possible. The LED at the sensor is off.
4. Slowly move back the sensor holder to the left until the LED at the sensor goes on.
5. Tighten the screws (6).

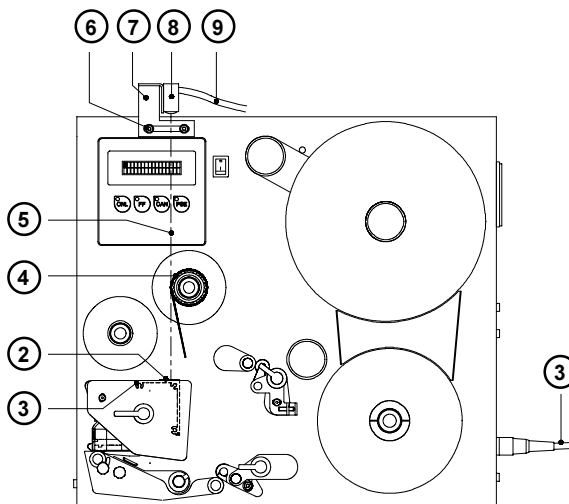


Fig. 14i Warning sensor ribbon end Hermes 4

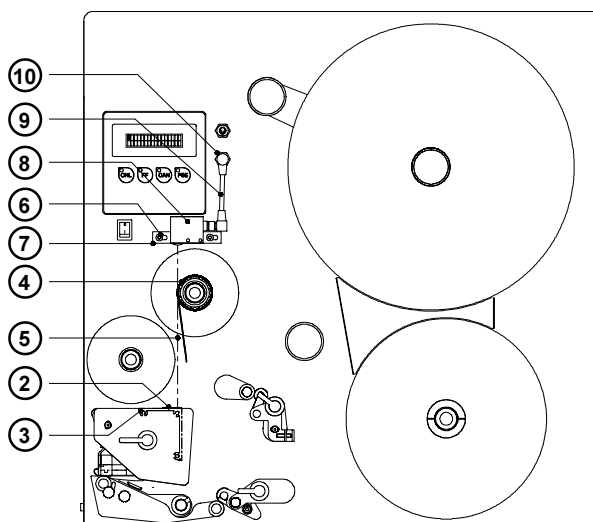


Fig. 14j Warning sensor ribbon end Hermes 5

14. Options

Applicators

Non-cab-Applicators

The Thermal Transfer Printers of the **Hermes** family are especially developed for fully automatic labelling. Therefore all types of **Hermes** have a peripheral port with a 15-pin plug at the rear side of the device. By using this interface **Hermes** only needs minimum configuration of signals. That way it is possible to operate many different non-cab-applicators at the **Hermes**.

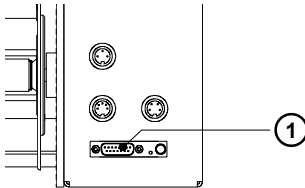


Fig. 14k Plug of the peripheral port for non-cab-applicators

For the use of **Hermes** with a non-cab-applicator two input signals are needed :

1. "Print start"
Since the label will be dispensed from the liner directly after printing, it is necessary to make sure, that the applicator is ready to take the label when sending the signal "Print start".
2. "Label was taken"
This signal is needed to start the backfeed of the label material. After the backfeed the print of the next label can be started from the front edge. It is also necessary to activate this signal, if the parameter "Backfeed" in the setup is set to "smart". Otherwise the next "Print start" signal will not be accepted.

Beside the described input signals it is possible to get some status information via the peripheral port.

The complete interface description is included in appendix B.

cab-Applicators

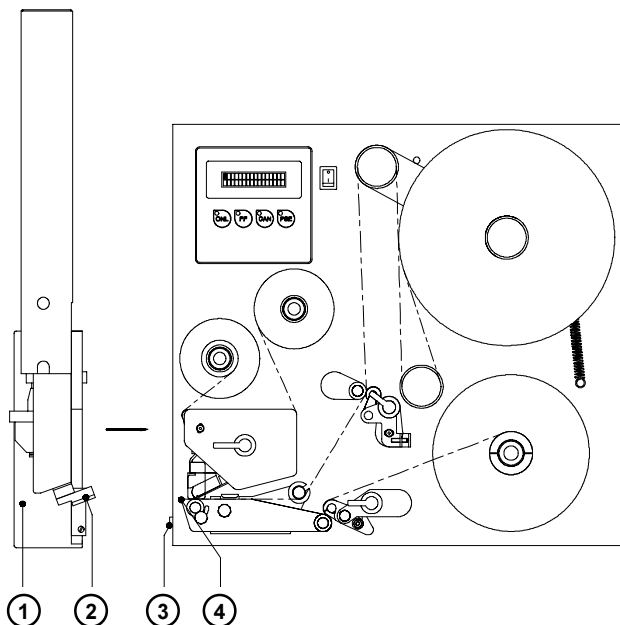


Fig. 14I cab-Applicators for Hermes

cab offers a own line of applicators (1) for the printers of the **Hermes** family. To connect these applicators the **Hermes** printers have a second peripheral port with a 15-pin socket (3) at the front side.

Typically for the cab-applicators, the dispensed label will be taken by a vacuum plate (2). After that different pneumatic cylinders move the plate to the labelling position where the label will be pressed or blown onto the product.

The size of the vacuum plate is specified for the label size.

14. Options

The following table shows some standard versions of cab-applicators :

Applicator type	Labelling destination	Orientation	Labelling type
Tamp Applicator with Lift Cylinder	downwards parallel to the print line	left right	press on
Tamp Blow Applicator with Lift Cylinder	downwards parallel to the print line	left right	blow on
Tamp Applicator with Swing-/ Lift Cylinder	sidewards parallel to the print line	left	press on
Blow Applicator with Swing Cylinder	sidewards/ upwards parallel to the print line	left	blow on
Tamp Applicator with Lift-/ Turn Cylinder	downwards parallel to the print line across to the print line (90°)	left	press on

Table 14 cab-applicator types

For use in a networked system all cab-applicators are equipped with a PLC interface with potential free inputs and outputs.

For the detailed description of the **cab**-applicators several Operator's Manuals are available.

Memory Cards

The printers of the **Hermes** series provide an option for using memory cards to permanently save graphics, fonts, complete label formats, or database information. Data transfer may be performed via interface.

It is recommended that you make backup copies in case of malfunction of the original cards.

The **Hermes** is able to read from PCMCIA version 2.1 compatible sRAM cards or Flash-EPROM cards. The maximum memory capacity is 4 MegaByte.

Preparing the Memory Card

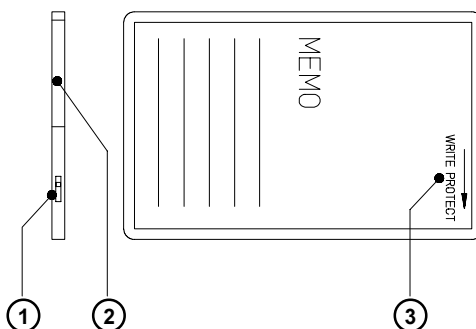


Fig. 14m Write protection / Inserting the battery

The write protection of the card may be activated or deactivated by shifting the switch (1) located at the front side of the card. The interpretation of the setting may be read from an imprint (3) on the back of the card.

If you want to format the card or write on it, switch off the write protection.

For replacing or inserting the battery in sRAM cards refer to the instructions of the manufacturer. In case the battery has to be replaced, it is usually found in a slot (2) above the switch (1).

14. Options

Installation of the Memory Card

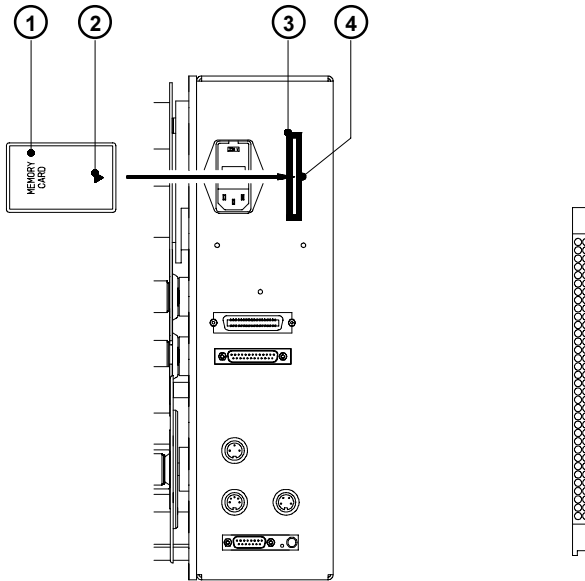


Fig. 14n Installation of the memory card

The front side of the memory card (1) is usually marked by the inscription "MEMORY CARD", and an arrow (2) representing the direction of inserting the card into the drive. There is also an arrow (4) impressed into the frame of the memory card slot of the **Hermes**. Insert the card (1) into the slot (3) so that the front of the card faces the arrow (4).

At the connecting side of the card there are different guides on the top and the bottom which make it impossible to insert the card incorrectly.

Formatting the Memory Card

For operation, the memory card first has to be structured internally in a certain way. Normally, memory cards are already pre-formatted in a suitable manner. If the card you are using is not formatted at all, the **Hermes** will bring up one of the messages "Unknown card" or "Structural err." Then, you may format the card using one of the following methods :

1. Formatting the card using the **Hermes** setup command "Format card" (see chapter 9).
2. Formatting the card using the **Hermes** interface and the printer command "Mf;name CR".

Writing on the Memory Card

There are also different methods to write onto a memory card.

The easiest way is to write on the card using the card drive of the **Hermes** and transfer the data via interface.

For saving a label, you need to put the label design commands into "brackets" consisting of "Ms"-commands :

Ms LBL;ABC	Command to save a file called "ABC"
J	
H 100,0,T	
S l1;0,0,68,71,106	Contents of the file "ABC"
T 10,10,0,3,pt15;Memory card	
A 1[NOPRINT]	
Ms LBL	End of Save File command

After completing the commands the file "ABC" is stored on the card with all commands from "J" to "A" which describe the label format. The parameter [NOPRINT] used within the command A line will suppress the print of the label while saving the file. Whenever the file "ABC" is called up, exactly one label will be printed. If you want to print the label in a variable quantity do not use the A command within the label description.

14. Options










Printing from a Memory Card



NOTICE !

Using a memory card provides the opportunity to print without a connection of the Hermes to a computer.

Follow the instructions below, after the card has been installed and the printer has been switched ON :

1. Switch printer into OFFLINE mode by pressing the  key.
2. After pressing the  key, the file name of the first label saved on the card will be shown.
3. Using the  key and the  key, you may scroll up and down the contents of the card. Confirm the selection by pressing the  key.
4. If you have chosen a label with a set number of labels to print, the **Hermes** will instantly start printing.
5. For labels with a variable number of labels, the top line of the display shows "Number of labels", the bottom line shows "00001" with the first figure flashing (cursor).
Using the  key and the  key, the figure at the position of the cursor may be altered. By pressing the  key the cursor can be moved on to the next figure. After confirming of the last figure, the **Hermes** starts to print.
6. To pause the selection of a label or the input of the number of labels you may press the  key.

The data saved on the card is also accessible via interface and computer.

Keyboard Adapter

The **keyboard adapter** option offers to connect the **Hermes** to a standard PC keyboard or any other compatible input device (e.g. a bar code scanner) via its serial interface. Using the keyboard, print jobs of an internal PC card may be loaded and variable data may be altered. Input data requests as well as data received from the keyboard will be shown in the display of the **Hermes**.

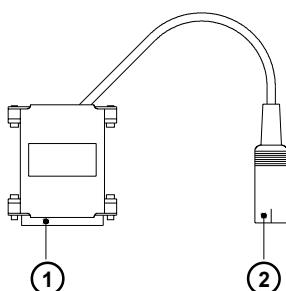
The keyboard adapter is designed for use with all keyboards which fulfill the following requirements : MF-2 compatible, having a 5pin DIN plug, supporting code set 3, and also operating with a maximum of 15 kBaud.



CAUTION !

The current consumption of the connected keyboard or scanner must not exceed 100 mA.

Installation of the Keyboard Adapter



- 1 - 25-pin-SUB-D plug
- 2 - 5-pin-DIN connector

Fig. 14o Keyboard adapter

1. Change the interface setting to "RS232C, 9600 Baud, RTS/CTS" and confirm.
2. **Switch the printer OFF !**
Connect the 25-pin plug (1) of the keyboard adapter to the serial interface connector at the rear of the printer.
3. Connect the keyboard to the 5-pin-DIN connector (2) of the keyboard adapter.

14. Options

Key Assignment

The **Hermes** can easily be adjusted to the keyboard configuration of the particular country by using the setup parameter "Country". For each of the available settings the **Hermes** has a different table of key assignment, which, generally, complies with the assignment under Microsoft DOS.

The [ALTGR] key has no function. Therefore, all signs which are located on the right hand side of the key opposite of the normal characters (e.g. { } [] \) can be generated by pressing the [ALT] key.

A few of the other special signs (e.g. " × +) may also be generated the same way (see Appendix A Table A-3a).

Other special characters (e.g. ñ ç œ) can be generated by inserting two characters one after the other, where the second input is a combination with the [ALT] key (see Appendix A Table A-3b).

Some of the special characters cannot be shown in the display of the printer. In that case, the **Hermes** will use a character which looks similar to the required character.



NOTICE !

When using a scanner, the character set of the scanner has to be the same as used by the Hermes.

Special Key Functions

[F1]	To enter the list of labels stored on the memory card.
[↑],[↓]	To scroll up/down the list of labels on the memory card.
[ENTER] or [RETURN]	Without a current print job : to switch between ONLINE and OFFLINE; While processing a print job : to confirm the data input.
[Shift]+[Del]	To delete the input line.
[ESC]	To cancel the data input. (while printing same effect as CANCEL)
[SPACE]	While printing same effect as PAUSE.
[F2]	To repeat the print of the last label (as command A 1 CR).
[F3]	To repeat the print of the last label including a new enquiry for variable data.
[Shift]+[F6]	To start the self test printout.
[F7]	Printer Info Display
[F8]	Form feed

Appendix A - Character Tables

Setup Selectable Character Tables

	0..	1..	2..	3..	4..	5..	6..	7..	8..	9..	A..	B..	C..	D..	E..	F..
..0	□	□		0	@	P	`	p	€	□		°	À	Đ	à	đ
..1	□	□	!	1	A	Q	a	q	□	‘	ı	±	Â	Ñ	á	ñ
..2	□	□	"	2	B	R	b	r	,	’	ç	²	Ã	Ò	â	ò
..3	□	□	#	3	C	S	c	s	f	“	£	³	Ä	Ó	ã	ó
..4	□	□	\$	4	D	T	d	t	”	”	¤	´	Å	Ô	ä	ô
..5	□	□	%	5	E	U	e	u	...	•	¥	µ	Ä	Õ	å	õ
..6	□	□	&	6	F	V	f	v	†	—	ı	¶	Æ	Ö	æ	ö
..7	□	□	'	7	G	W	g	w	‡	—	§	·	Ç	×	ç	÷
..8	□	□	(8	H	X	h	x	^	~	¨	˘	È	Ø	è	ø
..9	□	□)	9	I	Y	i	y	‰	™	©	¹	É	Ù	é	ù
..A	□	□	*	:	J	Z	j	z	Š	š	ˆ	ª	Ê	Ú	ê	ú
..B	□	□	+	;	K	[k	{	<	>	«	»	Ë	Û	ë	û
..C	□	□	,	<	L	\	l		œ	œ	¬	¼	Ì	Ü	ì	ü
..D	□	□	-	=	M]	m	}	□	□	-	½	Í	Ý	í	ý
..E	□	□	.	>	N	^	n	~	□	□	®	¾	Î	Þ	î	þ
..F	□	□	/	?	O	_	o	△	□	Ÿ	ˉ	¿	Ï	ß	ï	ÿ

Table A-1 a Character Set "Windows 1252"

	0..	1..	2..	3..	4..	5..	6..	7..	8..	9..	A..	B..	C..	D..	E..	F..
..0	□	□		0	@	P	`	p	€	□		°			Đ	đ
..1	□	□	!	1	A	Q	a	q	□	‘	˘	±	Á	Ñ	á	ñ
..2	□	□	"	2	B	R	b	r	,	’	˘	˘	Â	Ñ	â	ñ
..3	□	□	#	3	C	S	c	s	□	“	Ł	ł	Ã	Ó	ã	ó
..4	□	□	\$	4	D	T	d	t	”	”	”	´	Ä	Ö	ä	ö
..5	□	□	%	5	E	U	e	u	...	•	Å	µ	Ł	Ő	Í	ő
..6	□	□	&	6	F	V	f	v	†	—	ı	¶	Č	Ö	č	ö
..7	□	□	'	7	G	W	g	w	‡	—	§	·	Ç	×	ç	÷
..8	□	□	(8	H	X	h	x	□	□	”	˘	Č	Ř	č	ř
..9	□	□)	9	I	Y	i	y	‰	™	©	ª	Ā	Ū	ē	ū
..A	□	□	*	:	J	Z	j	z	Š	š	Š	š	Ē	Ū	ē	ū
..B	□	□	+	;	K	[k	{	<	>	«	»	Ē	Ū	ē	ū
..C	□	□	,	<	L	\	l		Š	š	¬	˘	Ē	Ū	ē	ū
..D	□	□	-	=	M]	m	}	T	t	-	˘	Í	Ý	í	ý
..E	□	□	.	>	N	^	n	~	Ž	ž	®	˘	Ī	Ţ	î	ţ
..F	□	□	/	?	O	_	o	△	Ž	ž	Ž	ž	Đ	ß	đ	˘

Table A-1 b Character Set "Windows 1250"

Appendix A - Character Tables

	0..	1..	2..	3..	4..	5..	6..	7..	8..	9..	A..	B..	C..	D..	E..	F..
..0	□	□		0	@	P	`	p	□	□		°	À	Ð	à	ð
..1	□	□	!	1	A	Q	a	q	□	□	ı	±	Á	Ñ	á	ñ
..2	□	□	"	2	B	R	b	r	□	□	¢	²	Â	Ò	â	ò
..3	□	□	#	3	C	S	c	s	□	□	£	³	Ã	Ó	ã	ó
..4	□	□	\$	4	D	T	d	t	□	□	¤	´	Ä	Ö	ä	ö
..5	□	□	%	5	E	U	e	u	□	□	¥	µ	Å	Õ	å	õ
..6	□	□	&	6	F	V	f	v	□	□	¦	¶	Æ	Ö	æ	ö
..7	□	□	'	7	G	W	g	w	□	□	\$	·	Ç	×	ç	÷
..8	□	□	(8	H	X	h	x	□	□	¨	¸	È	Ø	è	ø
..9	□	□)	9	I	Y	i	y	□	□	©	ı	É	Ù	é	ù
..A	□	□	*	:	J	Z	j	z	□	□	ª	º	Ê	Ú	ê	ú
..B	□	□	+	;	K	[k	{	□	□	«	»	Ë	Û	ë	û
..C	□	□	,	<	L	\	l		□	□	¬	¼	Ì	Ü	ì	ü
..D	□	□	-	=	M]	m	}	□	□	-	½	Í	Ý	í	ý
..E	□	□	.	>	N	^	n	~	□	□	®	¾	Î	Þ	î	þ
..F	□	□	/	?	O	_	o	△	□	□	˜	¿	Ï	ß	ï	ÿ

Table A-1 c Character Set "ISO 8859-1"

	0..	1..	2..	3..	4..	5..	6..	7..	8..	9..	A..	B..	C..	D..	E..	F..
..0	□	□		0	@	P	`	p	Ç	É	á	■	Ł	ø	Ó	-
..1	□	□	!	1	A	Q	a	q	ü	æ	í	■	ł	Ð	β	±
..2	□	□	"	2	B	R	b	r	é	Æ	ó	■	Ł	Ê	Ô	=
..3	□	□	#	3	C	S	c	s	â	ô	ú	ı	ı	Ë	Ö	¾
..4	□	□	\$	4	D	T	d	t	ä	ö	ñ	ı	ı	È	õ	¶
..5	□	□	%	5	E	U	e	u	à	ò	Ñ	À	ı	ı	İ	§
..6	□	□	&	6	F	V	f	v	â	û	ª	Â	ã	Í	µ	÷
..7	□	□	'	7	G	W	g	w	ç	ù	º	Ã	Ä	Î	þ	¸
..8	□	□	(8	H	X	h	x	ê	ÿ	¿	©	Ł	ı	Þ	°
..9	□	□)	9	I	Y	i	y	ë	Ö	®	Ł	ı	ı	ı	˚
..A	□	□	*	:	J	Z	j	z	è	Ü	¬	ı	ı	ı	ı	·
..B	□	□	+	;	K	[k	{	ï	ø	½	ı	ı	ı	ı	¹
..C	□	□	,	<	L	\	l		î	£	¼	ı	ı	ı	ı	³
..D	□	□	-	=	M]	m	}	ì	Ø	ı	¢	ı	ı	ı	²
..E	□	□	.	>	N	^	n	~	Ä	×	«	¥	ı	ı	ı	■
..F	□	□	/	?	O	_	o	△	Å	f	»	ı	ı	ı	ı	

Table A-1 d Character Set "Codepage 850"

	0..	1..	2..	3..	4..	5..	6..	7..	8..	9..	A..	B..	C..	D..	E..	F..
..0	□	□	□	□	□	&	-	□	□	□	□	□	{	}	\	0
..1	□	□	□	□	□	□	/	□	a	j	~	□	A	J	□	1
..2	□	□	□	□	□	□	□	□	b	k	s	□	B	K	S	2
..3	□	□	□	□	□	□	□	□	c	l	t	□	C	L	T	3
..4	□	□	□	□	□	□	□	□	d	m	u	□	D	M	U	4
..5	□	□	□	□	□	□	□	□	e	n	v	□	E	N	V	5
..6	□	□	□	□	□	□	□	□	f	o	w	□	F	O	W	6
..7	□	□	□	□	□	□	□	□	g	p	x	□	G	P	X	7
..8	□	□	□	□	□	□	□	□	h	q	y	□	H	Q	Y	8
..9	□	□	□	□	□	□	□	□	i	r	z	□	I	R	Z	9
..A	□	□	□	□	□	¢	!	□	:	□	□	□	□	□	□	□
..B	□	□	□	□	□	.	\$,	#	□	□	□	□	□	□	□
..C	□	□	□	□	□	<	*	%	@	□	□	□	□	□	□	□
..D	□	□	□	□	□	()	□	'	□	□	□	□	□	□	□
..E	□	□	□	□	□	+	;	>	=	□	□	□	□	□	□	□
..F	□	□	□	□	□		~	?	"	□	□	□	□	□	□	□

Table A-1 e Character Set "EBCDIC"

	0..	1..	2..	3..	4..	5..	6..	7..	8..	9..	A..	B..	C..	D..	E..	F..
..0	□	□	□	0	@	P	`	p	Ä	ê	†	∞	¿	-	‡	˘
..1	□	□	□	!	1	A	Q	a	q	Å	ë	°	±	ı	—	·
..2	□	□	□	"	2	B	R	b	r	Ç	í	¢	≤	¬	“	,
..3	□	□	□	#	3	C	S	c	s	É	ì	£	≥	√	”	„
..4	□	□	□	\$	4	D	T	d	t	Ê	î	\$	¥	f	‘	‰
..5	□	□	□	%	5	E	U	e	u	Ë	ï	•	μ	≈	’	‰
..6	□	□	□	&	6	F	V	f	v	Ü	ñ	¶	Δ	÷	Ê	˘
..7	□	□	□	'	7	G	W	g	w	Á	ó	β	Σ	«	Á	˘
..8	□	□	□	(8	H	X	h	x	À	ò	®	»	ÿ	Ë	˘
..9	□	□	□)	9	I	Y	i	y	Â	ô	©	π	...	ÿ	˘
..A	□	□	□	*	:	J	Z	j	z	Ä	ö	™	/	í	·	
..B	□	□	□	+	;	K	[k	{	Å	ø	'	a	Á	æ	˘
..C	□	□	□	,	<	L	\	l		À	ú	"	°	Á	<	ı
..D	□	□	□	-	=	M]	m	}	Ç	ù	≠	Ω	Ö	ı	˘
..E	□	□	□	.	>	N	^	n	~	É	û	Æ	æ	œ	fi	Ó
..F	□	□	□	/	?	O	_	o	△	è	ü	Ø	ø	œ	fl	Ö

Table A-1 f Character Set "Macintosh"

Appendix A - Character Tables

	0..	1..	2..	3..	4..	5..	6..	7..	8..	9..	A..	B..	C..	D..	E..	F..
..0			0	@	P	`	p	Ç	É	á			Ł	đ	Ó	-
..1			!	1	A	Q	a	q	Û	í			±	Đ	ß	"
..2			"	2	B	R	b	r	é	í	ó		±	Đ	Ö	ˆ
..3			#	3	C	S	c	s	â	ô	ú		±	Ě	Ň	ˇ
..4			\$	4	D	T	d	t	ä	ö	Ä	±	—	d'	ň	˘
..5			%	5	E	U	e	u	Û	ä	ä	±	±	Ň	ň	\$
..6			&	6	F	V	f	v	ó	í	Ž	±	±	Ě	í	Š
..7			'	7	G	W	g	w	ç	š	ž	±	±	Ě	š	÷
..8			(8	H	X	h	x	í	š	Ě	±	±	Ł	ě	°
..9)	9	I	Y	i	y	ë	Ö	ę	±	±	Ł	ú	"
..A			*	:	J	Z	j	z	Ö	Ü	±	±	±	Ł	·	
..B			+	;	K	[k	{	ő	T	ž	±	±	Ł	Ű	ű
..C			,	<	L	\	l		î	t'	Č	±	±	Ł	ý	Ř
..D			-	=	M]	m	}	ž	Ł	š	±	±	Ł	Ý	ř
..E			.	>	N	^	n	~	À	x	«	±	±	Ł	Ű	■
..F			/	?	O	_	o	△	Č	»	»	±	±	Ł	'	

Table A-1 g Character Set "Codepage 852"

	0..	1..	2..	3..	4..	5..	6..	7..	8..	9..	A..	B..	C..	D..	E..	F..
..0			0	@	P	`	p					°			Š	Ů
..1			!	1	A	Q	a	q				±			Š	Đ
..2			"	2	B	R	b	r			¢	²			Ů	Ů
..3			#	3	C	S	c	s			£	³			Ů	Ů
..4			\$	4	D	T	d	t			¤	´			Ů	Ů
..5			%	5	E	U	e	u			¥	µ			Ů	Ů
..6			&	6	F	V	f	v			¦	¶			Ů	Ů
..7			'	7	G	W	g	w			§	·			Ů	Ů
..8			(8	H	X	h	x			"	¸			Ů	Ů
..9)	9	I	Y	i	y			©	¹			Ů	Ů
..A			*	:	J	Z	j	z			×	÷			Ů	Ů
..B			+	;	K	[k	{			«	»			Ů	Ů
..C			,	<	L	\	l				¬	¼			Ů	Ů
..D			-	=	M]	m	}			-	½			Ů	Ů
..E			.	>	N	^	n	~			®	¾			Ů	Ů
..F			/	?	O	_	o	△			-				Ů	Ů

Table A-1 h Character Set "ISO 8859-8"

Unicode-Tables

	Control		ASCII						Control		Latin1					
	000	001	002	003	004	005	006	007	008	009	00A	00B	00C	00D	00E	00F
0	NUL	DLE		0	@	P	`	p	CTRL	CTRL		°	À	Ð	à	ð
1	SOH	DC1	!	1	A	Q	a	q	CTRL	CTRL	¡	±	Á	Ñ	á	ñ
2	STX	DC2	"	2	B	R	b	r	CTRL	CTRL	¢	²	Â	Ò	â	ò
3	ETX	DC3	#	3	C	S	c	s	CTRL	CTRL	£	³	Ã	Ó	ã	ó
4	EOF	DC4	\$	4	D	T	d	t	CTRL	CTRL	¤	´	Ä	Ô	ä	ô
5	ENQ	NAK	%	5	E	U	e	u	CTRL	CTRL	¥	µ	Å	Ö	å	ö
6	ACK	SYN	&	6	F	V	f	v	CTRL	CTRL	¦	¶	Æ	Ø	æ	ø
7	BEL	ETB	'	7	G	W	g	w	CTRL	CTRL	§	·	Ç	×	ç	÷
8	BS	CAN	(8	H	X	h	x	CTRL	CTRL	¨	¸	È	Ø	è	ø
9	HT	EM)	9	I	Y	i	y	CTRL	CTRL	©	¹	É	Ù	é	ù
A	LF	SUB	*	:	J	Z	j	z	CTRL	CTRL	ª	º	Ê	Ú	ê	ú
B	VT	ESC	+	;	K	[k	{	CTRL	CTRL	«	»	Ë	Û	ë	û
C	FF	FS	,	<	L	\	l		CTRL	CTRL	¬	¼	Ì	Ü	ì	ü
D	CR	GS	—	=	M]	m	}	CTRL	CTRL	—	½	Í	Ý	í	ý
E	SD	RS	.	>	N	^	n	~	CTRL	CTRL	®	¾	Î	Þ	î	þ
F	SI	US	/	?	O	_	o	DEL	CTRL	CTRL	—	¿	Ï	ß	ï	ÿ

Table A-2 a "Unicode" (0000 - 00FF)

Appendix A - Character Tables

European Latin									Extended Latin							
	010	011	012	013	014	015	016	017	018	019	01A	01B	01C	01D	01E	01F
0	Ā	Ð	Ġ	İ	ı	Õ	Š	Ů	Ɓ	Ɛ	Ɔ	ƣ	/	ı	Ä	Ĵ
1	ā	đ	ġ	ı	Ł	ō	š	ů	Ɓ	Ƒ	σ	Ʈ	/	Ǿ	ǻ	
2	Ă	Ė	Ģ	Ĳ	ł	œ	Ŧ	Ů	Ɛ	ƒ	Ɔ	Ʈ	≠	ǿ	Æ	
3	ă	ė	ģ	ķ	Ń	œ	ŧ	ů	Ɛ	ƒ	ɱ	Ƴ	!	ǚ	æ	
4	Ą	Ė	Ĥ	Ĵ	ń	Ŕ	Ŧ	Ű	Ɓ	Ƴ	Ʋ	ƴ	DŽ	ű	Ğ	
5	ą	ė	ĥ	ĵ	Ń	ŕ	ŧ	ű	Ɓ	ħ	Ƴ	Ƴ	Dž	ű	ğ	
6	Ć	Ė	Ĥ	Ĳ	ŋ	Ŗ	Ʀ	Ŷ	Ɔ	ł	Ŕ	z	dž	ű	Ġ	
7	ć	ė	ĥ	ķ	Ń	ŕ	ŧ	ŷ	Ɔ	ı	Ŕ	z	LJ	Ú	ġ	
8	Ĉ	Ɖ	İ	κ	ň	Ř	Ů	Ÿ	Ɔ	Ƒ	z	Ɖ	Lj	ú	Ř	
9	ĉ	ƒ	ı	Ľ	h	ř	ů	Ž	Ɖ	Ƒ	Σ	Ɖ	lj	Ž	ķ	
A	Č	Ė	İ	ı	Ń	Š	Ů	ž	Ɖ	ı	ı	z	NJ	ű	Q	
B	č	ė	ı	Ł	ŋ	ś	ů	Ž	Ɖ	λ	ı	z	Nj	ű	q	
C	Č	Ġ	İ	ı	Ō	Ŝ	Ů	ž	Ɖ	Ƴ	Ʋ	Ƴ	nj	ű	Ų	
D	č	ġ	ı	Ų	ó	ś	ů	Ž	Ƒ	Ƒ	Ƴ	Ƴ	Ǻ	ə	Ų	
E	Đ	Ġ	İ	ı	Ō	Ŧ	Ů	ž	Ɖ	ŋ	Ʋ	ı	ǻ	Ǻ	ž	
F	đ	ġ	ı	Ł	ó	ŧ	ů		Ɖ	Ƴ	Ʋ	Ƴ	Ǻ	Ǻ	ž	

Table A-2 b "Unicode" (0100 - 01FF)


























General Punctuation								Sups & Subs			Currency			Diacritics		
	200	201	202	203	204	205	206	207	208	209	20A	20B	20C	20D	20E	20F
0			†	‰	˘			⁰	₀		₣			◊̇	◊̈	
1		—	‡	‱	˙				₁		₤			◊̇	◊̈	
2			•	′	* **				₂		₥			◊̇		
3		—	►	″	—				₃		₦			◊̇		
4		—	•	″	/			⁴	₄		₧			◊̇		
5		—	•	′				⁵	₅		₨			◊̇		
6			•••	″				⁶	₆		₪			◊̇		
7		==	•	″				⁷	₇		₹			◊̇		
8		‘		^				⁸	₈		₺			◊̇		
9		’		ˆ				⁹	₉		₹			◊̇		
A		‚		˜				⁺	₊		₹			◊̇		
B		‘		×				—	—		₹			◊̇		
C		“						=	=		₹			◊̇		
D		”		‡				((◊̇		
E		”		—))					◊̇		
F		”						n						◊̇		

Table A-2 c "Unicode" (2000 - 20FF)

Appendix A - Character Tables

	Letterlike Symbols					Number Forms				Arrows						
	210	211	212	213	214	215	216	217	218	219	21A	21B	21C	21D	21E	21F
0	‰	ℳ	℠	℡			I	i	Ⓘ	↵	↗	↖	→	⇐	↙	
1	‱	ℴ	Ⅎ	ℳ			II	ii	ⓓ	↑	↓	↱	→	↑	↕	
2	℥	℧	™	℟			III	iii	Ⓢ	→	↵	↱	↓	⇒	↗	
3	°C	ℓ	℥	℡		⅓	IV	iv		↓	↗	↱	↓	⇓	↕	
4	℥	ℴ	ℤ	ℴ		⅔	V	v		↔	↵	↱	↗	↔	↙	
5	‰	ℕ	ℤ	℥		⅕	VI	vi		↕	↑	↱	↗	⇕	→	
6	‰	ℕ	Ω	ℤ		⅔	VII	vii		↖	→	↱	↗	↖	↙	
7	℥	ℴ	ℴ	ℤ		⅔	VIII	viii		↖	↓	↱	↗	↖	↙	
8	ℴ	ℴ	ℤ	ℤ		⅔	IX	ix		↖	↕	↱	↗	↖	↙	
9	ℴ	ℴ	ℤ	ℤ		⅔	X	x		↖	↕	↱	↗	↖	↙	
A	ℴ	ℴ	ℤ			⅔	XI	xi		↖	↕	↱	↗	↖	↙	
B	ℴ	ℴ	ℤ			⅔	XII	xii		↖	↕	↱	↗	↖	↙	
C	ℴ	ℴ	ℤ			⅔	L	l		↖	↕	↱	↗	↖	↙	
D	ℴ	ℴ	ℤ			⅔	C	c		↖	↕	↱	↗	↖	↙	
E	ℴ	ℴ	ℤ			⅔	D	d		↖	↕	↱	↗	↖	↙	
F	ℴ	ℴ	ℤ			⅔	M	m		↖	↕	↱	↗	↖	↙	

Table A-2 d "Unicode" (2100 - 21FF)

Special Characters - Keyboard adapter

Character	[ALT] + Key ...													Character	[ALT] + Key
€	E	E	E	E	E	E	E	E	E	E	E	E	E		
{	7	'			ä	à	ç	7	8	'	7	B		č	
}	0	=			\$	\$	à	0	9	ç	0	N		ž	
[8	(ü	è	^	8	è	`	8	F		á	
]	9)			"	"	\$	9	+	+	9	G		é	
\	ß	_			<	<	<	+		°	<	Q		í	
	<	-	`		1	1	&	<		1	'	W		ú	
'										\	0)	
´			'	`	'	'	ù							đ	S
`		è					μ		'					Đ	D
^		ç					§							ł	K
˘	^	^	6	6	\$	\$	²	\$	ì	<	½	;		Ł	L
"	ß	\$
~	+	é			^	^	=	"	ù	4	"	+		&	C
°			0	0				'	0	0				<	,
²	2								2					>	.
³	3								3					*	-
#		"			3	3	"		à	3		X			CZ
\$								4			4	ů			
¢					8	8									
£								3			3				
¤		\$													
@	q	à			2	2	é	2	ò	2	2	V			
μ	m								m	m	m				
¬					6	6					6				
÷	/	/	/	/	/	/	/	/	/	/	/	/	/		
×	*	*	*	*	*	*	*	*	*	*	*	*	*		
	GR	FR	UK	US	SG	SF	BE	SU	IT	SP	DK	CZ			

Table A-3 a Special characters as used by the keyboard adapter and an external keyboard with reference to different country settings
Use with the [ALT] key

| / |, | * | ... Keys of the numeric keyboard

GR :	Deutschland	BE :	Belgie
FR :	France	SU :	Suomi
UK :	United Kingdom	IT :	Italia
US :	USA	SP :	España
SG :	Schweiz	DK :	Danmark
SF :	Suisse	CZ :	Ceska republika

Appendix A - Character Tables

ZZ	Z1	Z2	ZZ	Z1	Z2	ZZ	Z1	Z2	ZZ	Z1	Z2
À	`	A	Ò	`	O	å	°	a	ò	`	o
Á	'	A	Ó	'	O	æ		e	ó	'	o
Â	^	A	Ô	^	O	a	—	a	ô	^	o
Ã	~	A	Õ	~	O	ç	,	c	õ	~	o
Ä	"	A	Ö	"	O	ç		c	ö	"	o
Å	°	A	Ø	/	O	č	ˇ	c	ø	/	o
Æ	A	E	Œ	O	E	d'	'	d	œ	o	e
Ç	,	C	Ř	ˇ	R	è	`	e	°	—	o
Ĉ	ˇ	C	Š	ˇ	S	é	'	e	í	'	r
D'	'	D	Ù	`	U	ê	^	e	ř	ˇ	r
È	`	E	Ú	'	U	ë	"	e	š	ˇ	s
É	'	E	Û	^	U	ě	ˇ	e	ß	s	s
Ê	^	E	Ü	"	U	ì	`	i	t'	'	t
Ë	"	E	Ý	'	Y	í	'	i	ù	`	u
Ĭ	`	I	Ÿ	-	Y	î	^	i	ú	'	u
Í	'	I	Ž	ˇ	Z	ï	"	i	û	^	u
Î	^	I	à	`	a	ij	i	j	ü	"	u
Ī	"	I	á	'	a	I'	'	l	û	°	u
J	I	J	â	^	a	Í	'	l	ý	'	y
£	-	L	ã	~	a	ñ	~	n	ÿ	"	y
Ñ	~	N	ä	"	a	ň	ˇ	n	ž	ˇ	z

Table A-3b Special characters as used by the keyboard adapter and an external keyboard, which may be generated by inserting two characters one after the other

To generate the character **ZZ** : 1st character **[Z1]** - 2nd character **[ALT-Z2]**

For example : For "ñ" : 1st character **[~]** - 2nd character **[ALT-n]**



NOTICE !
For inserting the Z1 character use the information as in Table A-3a.

Appendix B - Pin Assignment of the Interface Connectors

Pin Assignment of the Serial Interface Connectors

Hermes provides a 25-pin-SUB-D connector for the serial interfaces which are internally available, i.e. RS-232, RS-422 and RS-485.

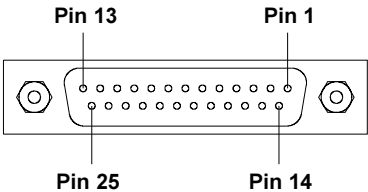


Fig. B-1 Connector of the serial interface (rear of the printer)

Pin	Signal	Function
1	CG	Protective Ground
2	TxD	Transmit Data (RS-232)
3	RxD	Receive Data (RS-232)
4	RTS	Request to send
5	CTS	Clear to send
7	GND	Logic Ground
9	TDATA+	Transmit Data (RS-422, RS-485)
10	TDATA-	Transmit Data (RS-422, RS-485)
18	RDATA+	Receive Data (RS-422, RS-485)
19	RDATA-	Receive Data (RS-422, RS-485)
20	DTR	Data Terminal Ready

Table B-1 Signals of the serial interface connector

Interface Cable for RS-232

The following chapter shows some typical RS-232 interface cable configurations. Note, that the pin assignment may vary for different computers. If you have any problems with the connections, contact the manufacturer of your computer on the pin assignment of the interface. Use the pin assignment of the printer as shown in Table B-1 to obtain a suitable cable.

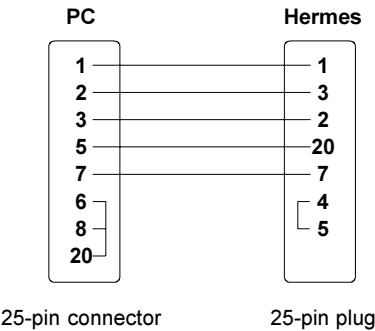


Fig. B-2 Interface cable with 25-pin computer connector for RS-232 with protocol " ---" or "XON/XOFF"

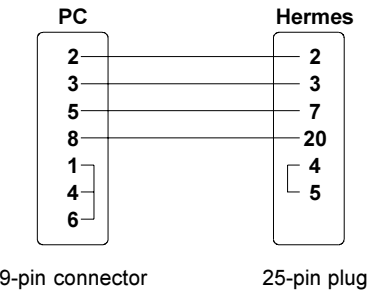


Fig. B-3 Interface cable with 9-pin computer connector for RS-232 with protocol " ---" or "XON/XOFF"

Appendix B - Pin Assignment of the Interface Connectors

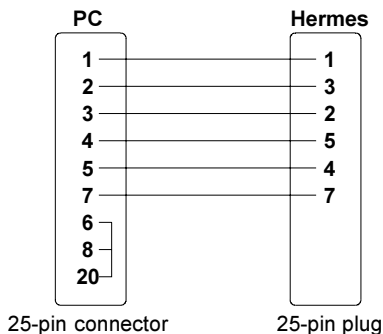


Fig. B-4 Interface cable with 25-pin computer connector for RS-232 with protocol "RTS/CTS" or "XON/XOFF"

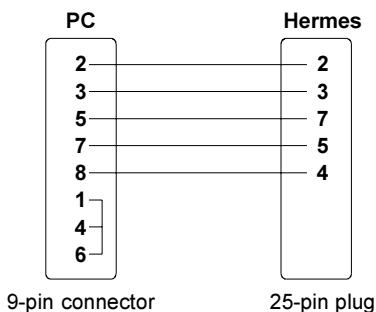


Fig. B-5 Interface cable with 9-pin computer connector for RS-232 with protocol "RTS/CTS" or "XON/XOFF"

Interface Cable for RS-422 / RS-485

To control the **Hermes** by RS-422 / RS-485 interface, only the signals TDATA+, TDATA-, RDATA+, and RDATA- are necessary.

Check the pin assignment for the interface of your computer, and use the pin assignment of the printer as shown in table B-1 to obtain a suitable cable. The connectors of TDATA+ and RDATA+ as well as TDATA- and RDATA- at the plug-in-connection of the cable must be united. If there is a very large transfer distance a termination of the cables is recommended.

Pin Assignment of the Parallel Interface Connector

Hermes provides a 36-pin connector for the parallel Centronics interface.

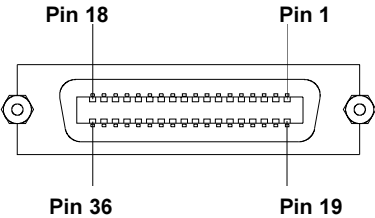


Fig. B-6 Centronics interface connector (rear of the printer)

Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	/STROBE	10	/ACKNLG	19	GND	28	GND
2	DATA 1	11	BUSY	20	GND	29	GND
3	DATA 2	12	PE	21	GND	30	GND
4	DATA 3	13	SLCT	22	GND	31	nc
5	DATA 4	14	nc	23	GND	32	nc
6	DATA 5	15	nc	24	GND	33	nc
7	DATA 6	16	GND	25	GND	34	nc
8	DATA 7	17	nc	26	GND	35	nc
9	DATA 8	18	nc	27	GND	36	nc

Table B-2 Signals of the Centronics interface

Centronics Interface Cable

The cables used for Centronics interface connectors are standard cables, so that normally there are no problems with the external control of the **Hermes**.

In the event of any difficulties, consult the manufacturer of your computer on the pin assignment of the computer's interface. Use the pin assignment of the printer as shown in table B-2 to obtain a suitable cable.

Pin Assignment of the Peripheral Connector for Non-cab-Applicators

Hermes has a 15-pin-SUB-D plug at the rear side. The signal set of this interface includes on the one hand the signals needed to couple a non-cab-applicator and on the other hand status signals of the warning sensors "label end" and "ribbon end". All inputs and output are potential-free.



CAUTION !
This interface is not designated to couple a cab-applicator.
For the use of cab-applicators the Hermes printers have an additional interface with a 15-pin-SUB-D socket at the front side.

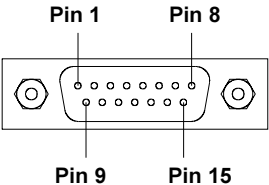


Fig. B-7 Plug of the Peripheral Connector

Pin	Direction	Description
1	output	printer not ready
2	output	label is printed
3	output	printer error
4	output	print job available
5	output	green (device is switched on)
6	input	external error
7	input	label was taken
8	input	print start
9	output	warning transfer ribbon end
10	(output)	reverse line (for all output signals)
11	output	warning label end
12	output	label in present position
13	(input)	external error (reverse line)
14	(input)	label was taken (reverse line)
15	(input)	print start (reverse line)

Table B-3 Pin-Assignment of the Peripheral Connector Plug

Appendix B - Pin Assignment of the Interface Connectors

Circuit Diagram of Inputs and Outputs

The **inputs** are optocouplers with a current limiting resistor of 2.4kΩ in the input circuit.

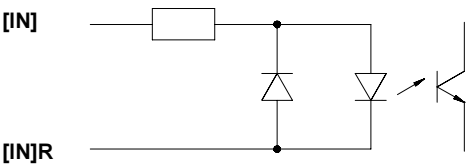


Fig. B-8 Circuit of the inputs

For each signal [IN] there is a separate reverse line [IN]R via the plug connector. From that the following pairs of signals result :

[IN]	Pin [IN]	Pin [IN]R
Print start	8	15
Label was taken	7	14
External error	6	13

Table B-4 Pairs of input signals

All **outputs** are realized through solid state relays which all have one common reverse line (PIN 10 of the the plug).



Fig. B-9 Circuit of the outputs

Electrical requirements : $U_{max} = 42\text{ V}$
 $I_{max} = 100\text{ mA}$

Comments to the signals

Printer not ready

There is an error by operating of the **Hermes** or the printer is OFFLINE.
The print of a label requires the readiness of the printer.
If the signal is active, the contact between PIN 1 and PIN 10 is closed.

Label is printed

At this time **Hermes** prints a label.
If the signal is active, the contact between PIN 2 and PIN 10 is closed.

Printer error

There is an error in the operation of the **Hermes**.
The details and type of error can be learnt from the printer display. ('Ribbon out'; 'Paper out'; 'No label')
If the signal is active, the contact between PIN 3 and PIN 10 is closed.
After error correction, the print of the last label will be repeated.
The error activates the signal 'Printer not ready', too.

Print job is available

Hermes has a print job (requirement to print a new label).
If the signal is active, the contact between PIN 4 and PIN 10 is opened.

Green

The voltage at the **Hermes** is switched on.
If the signal is active, the contact between PIN 5 and PIN 10 is closed.
The green lamp of the warning light is compatible to the signal 'Green'.

External error

There is an error at the connected applicator or in the whole process.
The print job will be broken and at the display of the printer the error message 'Host stop / error' will be shown.
After removing the error the last label will be printed again.
The error activates the signal 'Printer not ready', too.
The signal is active when a current flows between PIN 6 and PIN 13.

Appendix B - Pin Assignment of the Interface Connectors

Label was taken

The printer gets the information that the connected applicator has taken the printed label from the peel position (a new label may be printed).

This signal is active when a current flows between PIN 7 and PIN 14.

Print start

This releases the start of the print if :

- there is no label in the peel position
- a print job was sent to the printer
- the printer is ready

The signal is active when a current flows between PIN 8 and PIN 15.

Warning transfer ribbon end

Message of the warning sensor transfer ribbon end.

The diameter of the ribbon supply roll has decreased below the adjusted minimum value.

If the signal is active, the contact between PIN 9 and PIN 10 is closed.

Warning label end

Message of the warning sensor label end.

The diameter of the label supply roll has decreased below the adjusted minimum value.

If the signal is active, the contact between PIN 11 and PIN 10 is closed.

Label in present position

A printed label is in the present position.

Message for the connected applicator to start the labelling process.

If the signal is active, the contact between PIN 12 and PIN 10 is closed.

Appendix C - Error Messages / Problem Solution

Error Messages

The **Hermes** is equipped with a comprehensive self diagnostic system which will indicate errors in the display of the printer. Also, the operator will be informed by the LEDs whether the fault is correctable and will, therefore, allow to continue the current print job after corrections (e.g. "Out of paper"), or the fault may require you to cancel the current print job.



NOTICE !

Information about error messages in the operation with cab-applicators are included in the Operator's Manuals of the applicators.

Correctable Errors

While processing a print job, an error has occurred which may be corrected by the operator, and also allows you to continue the print job after fault correction.

Display

The display shows alternately the type of fault and the total of the remaining labels of the current print job.

LED Display

LED CAN on, LED PSE is flashing.

Function Keys



	CAN key	<p>short press less than one second :</p> <p>longer press greater than one second :</p>	<p>Cancels the current print job. Switch to the next job, which is available in the input buffer</p> <p>Cancels the current print job. Clears the input buffer (LED CAN blinks), Switch into ONLINE mode (LED ONL on)</p>
	PSE key	<p>Continues current print job after error correction. Switch into PRINT mode. (LED ONL on, LED CAN off, LED PSE off)</p>	

Table C-1 Function keys in mode FAULT-CORRECTABE

Appendix C - Error Mesages / Problem Solution

Irrecoverable Errors

During printing, a fault has ocurred which cannot be cleared by the operator without cancelling the current print run (e.g. hardware fault).

Display

The type of fault is shown in the display.

LED Display

LED CAN is flashing.

Function Keys


	CAN key	Cancels the current print job. Switch into ONLINE mode. (LED ONL on, LED CAN off, LED PSE off) If ONLINE mode cannot be entered, switch printer on and off again. If the fault remains again, call for Service
---	---------	--

Table C-2 Function keys in mode FAULT-IRRECOVERABLE

Error during System Test

When switched on the printer automatically performs an internal self test. If the test is completed succesfully, the **Hermes** proceeds into the ONLINE mode.
If a hardware-fault occurs, the type of error is shown. In this case switch printer off and on again.
If the fault remains again, call for Service.

List of Error Messages

The following table contains an overview of possible error messages, their possible causes as well as solutions to the problems.

Correctable faults as defined above are marked with a " * ".

If the suggested solutions turn out unsuccessful, call for Service.

Error message	Possible cause	Solution
ADC malfunction	Hardware error	Switch printer off and then on If error recurs → contact Service
Battery low	PC card error	Replace battery inside the PC card
Buffer overflow	The data receive buffer is full but the computer is still transmitting data	Use the protocol (preferably RTS / CTS) for data transmission
Card full	Refers to the optional memory card; No more data can be stored on the card	Replace card
dRAM malfunction	Hardware error	Switch printer off and then on If error recurs → contact Service
File not found	Requested file is not on the card	Check the contents of the card
FPGA malfunction	Hardware error	Switch printer off and then on If error recurs → contact Service
Head open *	Printhead and/or transport systems are not correct locked	Lock the printhead and/or the transport systems
Head too hot *	Printhead is overheated due to labels containing a lot of graphics, text, bar codes, etc.	After pausing to cool down the printhead, the print job will be continued automatically. If the fault recurs repeatedly, reduce the heat level or the print speed via the software.
Host stop/ error *	Operation has been interrupted by a stop signal of an external control	Release the stop signal

Table C-3 Error messages

Appendix C - Error Messages / Problem Solution


Error message	Possible cause	Solution
Invalid data	Fault while downloading graphic data	Cancel current print job Check data
Invalid outline	Error with the selected font (download font)	Cancel current print job Change font
Invalid setup	Setup is invalid	Use RESTORE function to reset all settings back to factory settings Configure setup (see chapter 9) If error recurs → contact Service
LCD malfunction	Hardware error	Switch printer off and then on If error recurs → contact Service
Memory overflow	Current print job contains too much information (selected fonts, large graphics)	Cancel current print job Reduce amount of information
No label found *	There are labels missing on the label material	Press  key 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 either software setting or print media; Restart print job
No label size	Definition of the label size is missing at the label description	Check programming
No record found	Refers to the optional memory card; database access error	Check programming and card contents

Table C-3 Error messages (continuation)

Appendix C - Error Mesages / Problem Solution



Error message	Possible cause	Solution
Out of paper *	Out of label material	Insert new supply roll
	Label has not properly been loaded in the label sensor fittings	Check paper feed
	Brake for the media supply hub is not adjusted correctly Swing arm is in the upper end position	Adjust the brake ; If error recurs → contact Service
Out of ribbon *	Out of transfer ribbon	Load new supply roll of transfer ribbon.
	Ribbon melted during printing	Cancel the current print job. Change the heat level via software, clean the printhead , load transfer ribbon, restart print job.
	The printer is loaded with thermal labels for direct thermal mode (without transfer ribbon); but the software is set for transfer printing.	Cancel current print job Set software to direct thermal mode Restart print job
	The supply roll of transfer ribbon is turning on the supply hub.	Tighten the supply roll of transfer ribbon by turning the knurled knob at the supply hub.
Protocol error (*)	The interfaces of computer and printer are set differently.	Switch printer off Correct the interface setting in the printer setup (see chapter 9)
	Printer has received an unknown or invalid command (display shows command abbreviated)	Depending on the type of fault, the command can be skipped by pressing the  key or the print job has to be cancelled by pressing the  key.

Table C-3 Error messages (continuation)

Appendix C - Error Messages / Problem Solution

Error message	Possible cause	Solution
Read error	Refers to the optional memory card; Read error when reading from the card	There is no solution. Check the battery. Reformat card. Copy backup files onto the card
ROM malfunction	Hardware error	Switch printer off and then on If error recurs → contact Service
Structural err.	Refers to the optional memory card; Fault in file list	Data access is uncertain Format card
Unknown card	Refers to the optional memory card; Card not formatted, or Card not supported by printer	Format card Use different type of card
Voltage error	Hardware error	Switch printer off and then on If error recurs → contact Service
Write error	Refers to the optional memory card; Hardware error	Repeat the write process or format the card.
Write protected	Refers to the optional memory card; Write protection is activated	Deactivate write protection

Table C-3 Error messages (continuation)

Problem Solution


Problem	Cause and Solution
Thermal transfer ribbon creases	Guide axle of the transfer ribbon is not correctly adjusted. Make the adjustment according to chapter 7.
	Printhead support is not correctly adjusted. Make the adjustment according to chapter 7.
	Transfer ribbon too wide. Use transfer ribbon which is max. 10% wider than the label media.
Print image has smears or voids	Printhead is dirty, Clean printhead (appendix D)
	Temperature too high; Decrease heat level via software
	Unsuitable combination of ribbon and label media; Choose different type of ribbon
Printer does not stop after transfer ribbon runs out	Direct thermal printing is chosen in the software Change to thermal transfer printing
Printer does not print error message: "Paper out"	Label is not inserted in the label edge sensor Correct the label path (chapter 6)
	Label edge sensor is dirty → Clean it
Printer prints a sequence of characters instead of the label format	Printer is in Monitor Mode (ASCII Dump Mode) Press the  key to cancel this mode.
Printer transports label media, but the ribbon does not move	Transfer ribbon is wrong inserted. Check, if the inked side faces the label (see chapter 6)
	The combination of ribbon and media is unsuitable Choose different type of ribbon
Printer only prints each second label	Setting of the size in the software is too large. Correct the setting

Table C-4 Problem solution

Appendix C - Error Messages / Problem Solution

Problem	Cause and Solution
Vertical white lines in the print image	Printhead is dirty, Clean printhead (appendix D)
	Printhead is defective (failure of heat elements), Replace printhead (service)
Horizontal white lines in the print image	Printer is used with the backfeed "smart" setting in the cut or dispense mode (see chapter 9), Set the backfeed in the setup on "always"
Print image is irregular, one side is lighter	Printhead is dirty, Clean printhead (appendix D)
	Printhead is not correct adjusted, Adjust printhead (appendix D)
	Faulty adjustment of the printhead support, Adjust printhead support (see chapter 7)
Error message "Ribbon out", though ribbon is loaded	Transfer ribbon is not locked at the supply hub, Supply hub does not turn, Tighten the ribbon (see chapter 6)

Table C-4 Problem solution (continuation)

Appendix D - Maintenance / Cleaning / Adjustment of the Printhead

The printer **Hermes** only requires a minimum of maintenance.

It is most important to clean the printhead on a regular basis. This will guarantee a permanent high quality of the print image. Moreover, it helps to prevent an early wear of the printhead.

Apart from that, the servicing only requires you to clean the outside of the printer occasionally.



WARNING !

Before starting any maintenance, switch the printer OFF and disconnect it from the power supply !

General Cleaning

While operating, dust accumulates especially within the printer mechanism. Remove dirt and dust regularly using a soft brush or a vacuum.

The cover of the **Hermes** may be cleaned using standard cleanser.



CAUTION !

Do not use abrasive cleaning powders or solvents !

Cleaning the Media Feed Rollers

Accumulations of dirt on the media feed rollers or the guides may impair the media transport and the print quality.

Clean the rollers as follows :

1. Lift the printhead.
2. Remove the label stock and transfer ribbon from the printer.
3. Remove all accumulations of dirt and dust with a roller cleanser and a soft cloth.

Cleaning the Printhead

While operating, dirt such as paper dust or particles of ink or back coating from the ribbon may accumulate on the thermal printhead.

This can cause a deterioration of the print quality (e.g. different contrasts on the label, appearance of light horizontal lines, etc.).

In that case, the printhead needs cleaning.

Recommended cleaning intervals :

Direct Thermal Printing : each time you change the media roll

Thermal Transfer Printing : each time you change the ribbon



CAUTION !

Do not use any sharp objects for cleaning the printhead !

Do not touch the protective glass layer of the printhead !

Clean the printhead as follows :

1. Turn the lever (2) from the position a to the position b. Press the lever against the mounting plate (1) and turn it further to the position c. That way the printhead assembly (3) becomes wide open for easy printhead cleaning.
2. Remove label material and transfer ribbon from the printer.
3. Clean the printhead surface with a special cleaning pen, or use a cotton swab soaked with isopropyl alcohol.
4. Allow it to dry for about 2 to 3 minutes before restarting the printer.

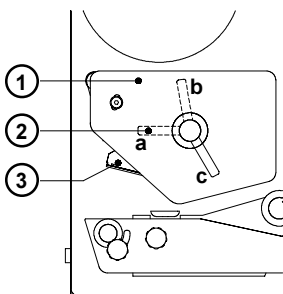


Fig. D-1 Cleaning the printhead

Adjustment of the Printhead

For optimum print quality, the line of heating elements on the printhead must be parallel and aligned correctly to the print roller. This alignment has already been performed in the factory. Nevertheless, it may become necessary to adjust it.

A misaligned printhead causes a poor print quality which appears as described below :

- the print image looks generally light, spotted, and irregular; or
- the print image appears uneven from one side to the other.

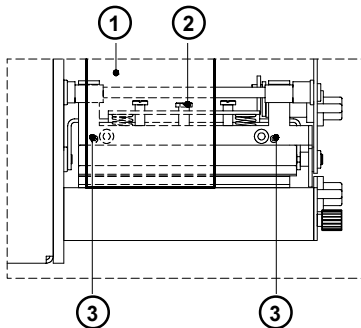


Fig. D-2 Adjustment of the printhead

Adjust the printhead as follows :

1. You may leave the transfer ribbon (1) inside the printer, and simply poke through it with your hex wrench.
2. Loosen the locking screw (2) on the printhead by half a turn. This will allow for the required horizontal adjustment of the printhead.
3. By turning the two screws underneath (3) you may shift the printhead as follows :
 - By turning the screws clockwise, the printhead will be shifted backwards. (about .02 in or .5 mm per turn)
 - Adjust in small steps ! (quarter turns only)
 - First, turn both screws constantly until at least one side of the print image is optimum.

Following, adjust the screw which is located at the side of the label where the quality is still poor.

Appendix D - Maintenance / Cleaning / Adjustment of the Printhead

4. Note, that the printhead must be closed after every single adjustment step to make the change effective.
5. Tighten the locking screw (2).
6. Perform a test print, for instance a wide black line over the whole width of the label, and review the results.
7. Repeat steps 2 to 6 as necessary to complete the adjustment.

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EC - Conformity Declaration



Gesellschaft für Computer-
und Automations-
Bausteine mbH & Co. KG
Wilhelm-Schickard-Str. 14
D-76131 Karlsruhe

EU - Conformity Declaration

We declare herewith that as a result of the manner in which the machine designated below was designed, the type of construction and the machines 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 machine as designated below, this statement shall thereby be made invalid.

Description:

Thermal Transfer Printer

Type:

Hermes

Applied EU Regulations and Norms:

- | | |
|--|---|
| - EC Machinery Regulations | 98/37/EU |
| - Machine Safety | EN 292-2:1991+A1:1995 |
| - EC Low Voltage Regulations | 73/23/EEC |
| - Data and Office Machine Safety | EN 60950:1992+A1:1993
EN 60950/A2:1993+A3:1995
+A4:1997 |
| - EC Electromagnetic Compatibility Regulations | 89/336/EEC |
| - Threshold values for the Interference
of Data Machines | EN 55022:1998 |
| - Limits for harmonic current emission | EN 61000-3-2:1995+A1:1998
+A2:1998+A14:2000 |
| - Limits of voltage fluctuation and flicker | EN 61000-3-3:1995 |
| - Immunity characteristics-
Limits and methods of measurement | EN 55024:1998 |

Signed for, and on behalf of, the Manufacturer :

cab Produkttechnik Sömmerda
Gesellschaft für Computer-
und Automationsbausteine mbH
99610 Sömmerda

Sömmerda, 10.07.02

A handwritten signature in black ink, appearing to read 'Erwin Fascher', is written over a horizontal line.

Erwin Fascher
Managing Director