

Precision is not a matter of size



Expert in
small labels
from 4 mm
height



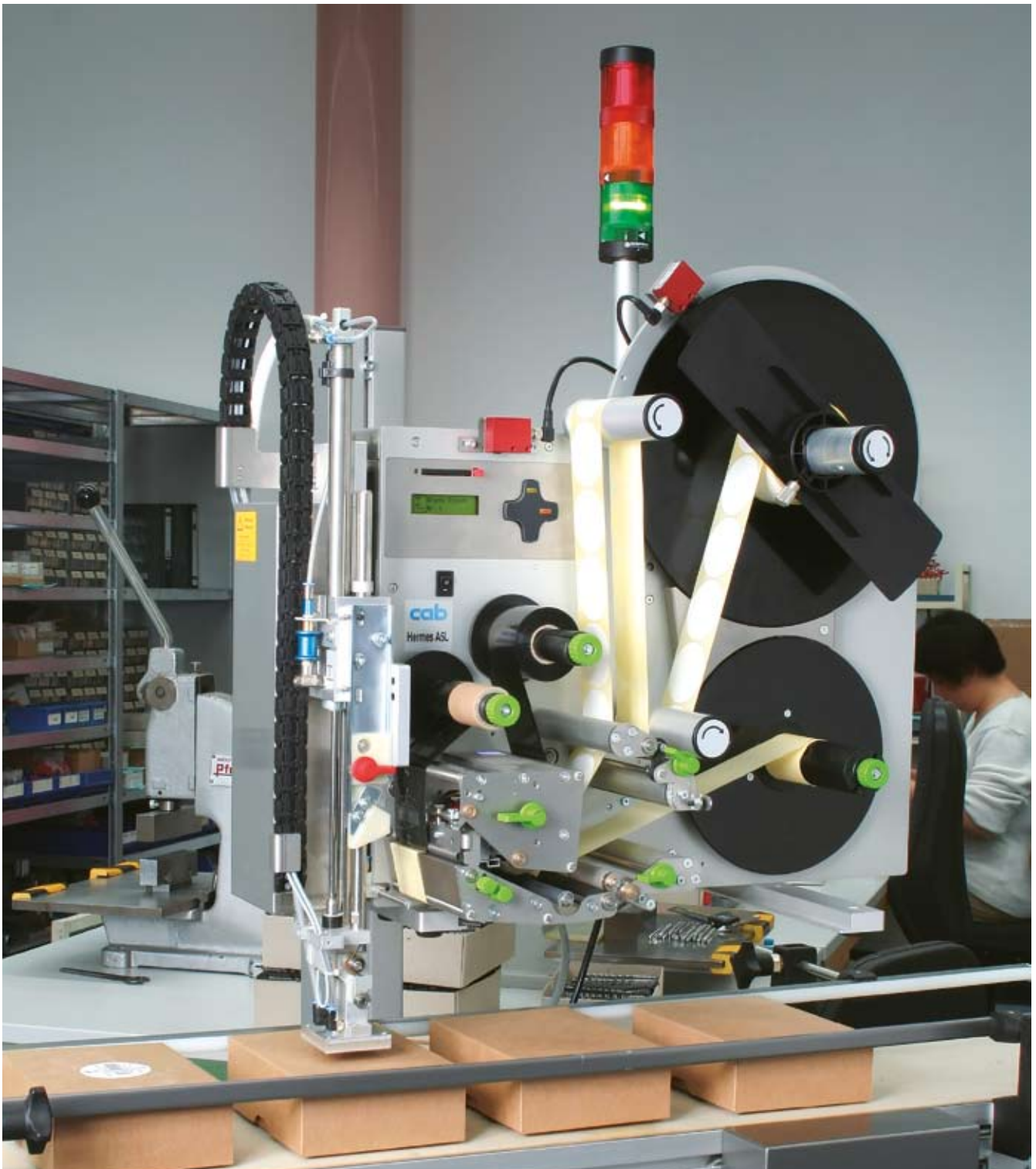
**Print and Apply
Hermes A**

Edition 3

Hermes A: The cab print and apply system

The Hermes A means the result of more than 30 years product development and technical know-how. The system is especially designed for the fully-automated print and apply process in production lines.

Precise label positioning and a robust design make the Hermes A distinguishing for the high level industrial use, round the clock.



Print and apply: Used in all kinds of industry

PCB Identification Label



Smallest label size of 4 x 4 mm, if there is only little space.

Type plates



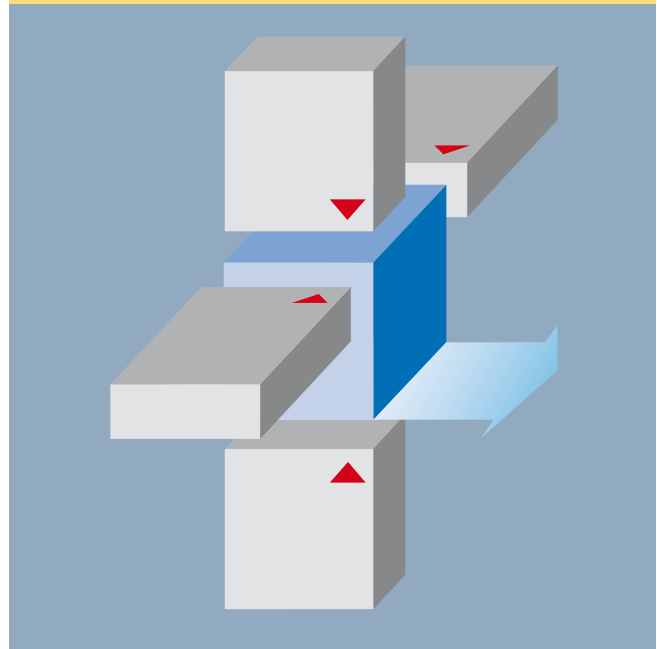
Precise print and apply up to $\pm 0,2$ mm. Smallest fonts with highest resolution with 600 dpi.

Packaging



Fast, faster, in second intervals: precise in every position and in real time.

No matter how you turn it



From bottom to top, top to bottom or from the side: The Hermes A prints and applies in any assembly position and may therefore be integrated in all kinds of production lines.

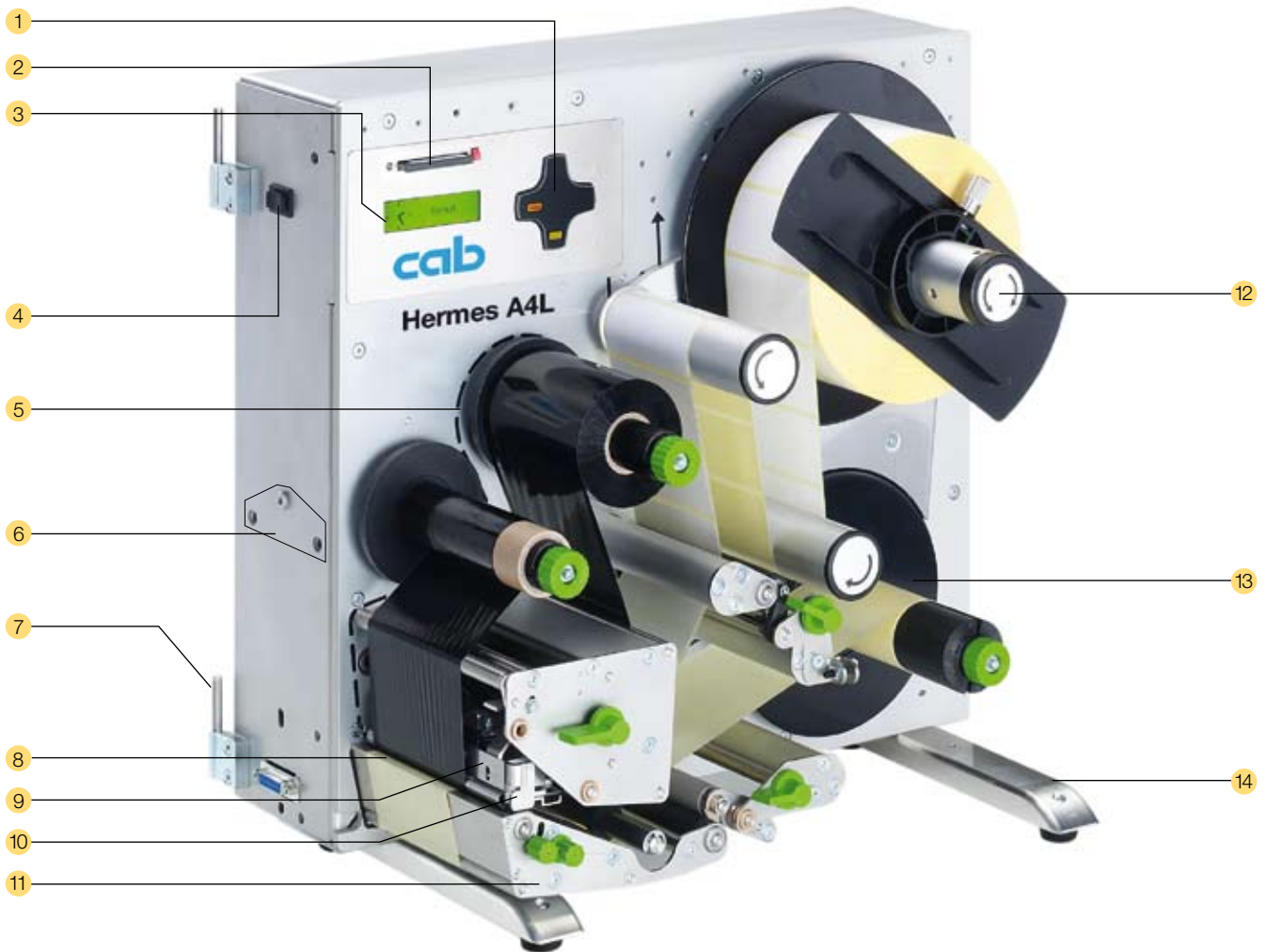
Host Connection or Stand-Alone Operation



For this, different software tools are available. Direct programming is possible by using the cab printer language J-Script. Label layout, graphics and special fonts can be downloaded to the CompactFlash Memory Card.

Transfer Printer Hermes A

Perfection in every detail



1. Navigator Pad

Simple, interactive menu control. Applicable functions are illuminated by day/night design. Menu handling is easily comprehensible.

2. Slot for CompactFlash Memory Card

The memory card enables to memorize label formats, fonts, texts, graphics, programs or data bases.

3. Graphic Display with 120 x 32 dots

Displays the active printing status as well as notes for the operator.

4. Release Button for Test Mode

Serves for the test mode. First push releases printing of the label and feeding forward to the peeling position. Second push causes a backfeed and printing of the next label.

5. Ribbon Re- and Unwinder

Tensioning axes enable fast and easy exchange of the ribbon.

6. Mounting Bracket

Taps to fix bracket at the printer for the overhanging assembly.

7. Mounting of Applicator

The applicator is mounted on the printer by the help of hinges and easily exchangeable in case of maintenance.

8. Printing Offset

After having changed the label roller the printing position is set up automatically after a few printed labels. Even when switching off the printer the position will be kept.

9. Printhead

The printhead can be easily exchanged with just a few turns. Therefore, adjustments and setups are not required.

10. Ribbon Saving by Printhead Lifting

To avoid smudgy printing when pulling back labels after the printing process. So ribbon is saved in case of printing large labels with a restricted printed area.

11. Transport System

The ball bearing transport rollers ensure to reach an accurate printing and a precise feeding process.

12. Label Unwinder

The inertial tensor arm and the integrated dynamic break make sure that the labels are unwinded with constant force.

13. Rewinder

The liner of a label roll is rewinded after the labels have been peeled off. The tensioning axes enable an easy exchange of the finished roll.

14. Hermes Feet

The Hermes feet are used for standard upright applications and are mounted at the printer chassis.

PC-Connections

1. Bi-directional Centronics interface in acc. with IEEE 1284
2. Serial RS232 C-interface up to 230.400 Baud
3. USB 2.0 Full Speed-slave interface

Network Connections

4. Ethernet 10/100 Base T interface with TCP/IP protocol
Printing with LPR/LPD or Raw IP-Printing
IP address can be send manually or obtained via DHCP
Status inquiry and settings via internet browser
FTP for firmware updates, control of CF card files
Messages can be send via e-mail or SNMP
Time and date is synchronized with a time server
5. WLAN with optional bridge for every operation system

Industrial Serial Interface

6. Serial RS422 interface for long distance communication
7. Serial RS485 for networking up to 26 printers

Periphery Interfaces

8. USB-master interface for connecting PC-keyboards or barcode scanner
9. Sensor end of labels
10. Sensor end of ribbon
11. Indicator light
12. Digital I/O interface for applicators of other manufacturers
13. Interface for cab applicators

Prints and applies to the right or to the left



Hermes A4R

For label rolls up to 210 mm Ø
Dispensing direction to the right



Hermes A4L

For label rolls up to 210 mm Ø
Dispensing direction to the left



Hermes A5R

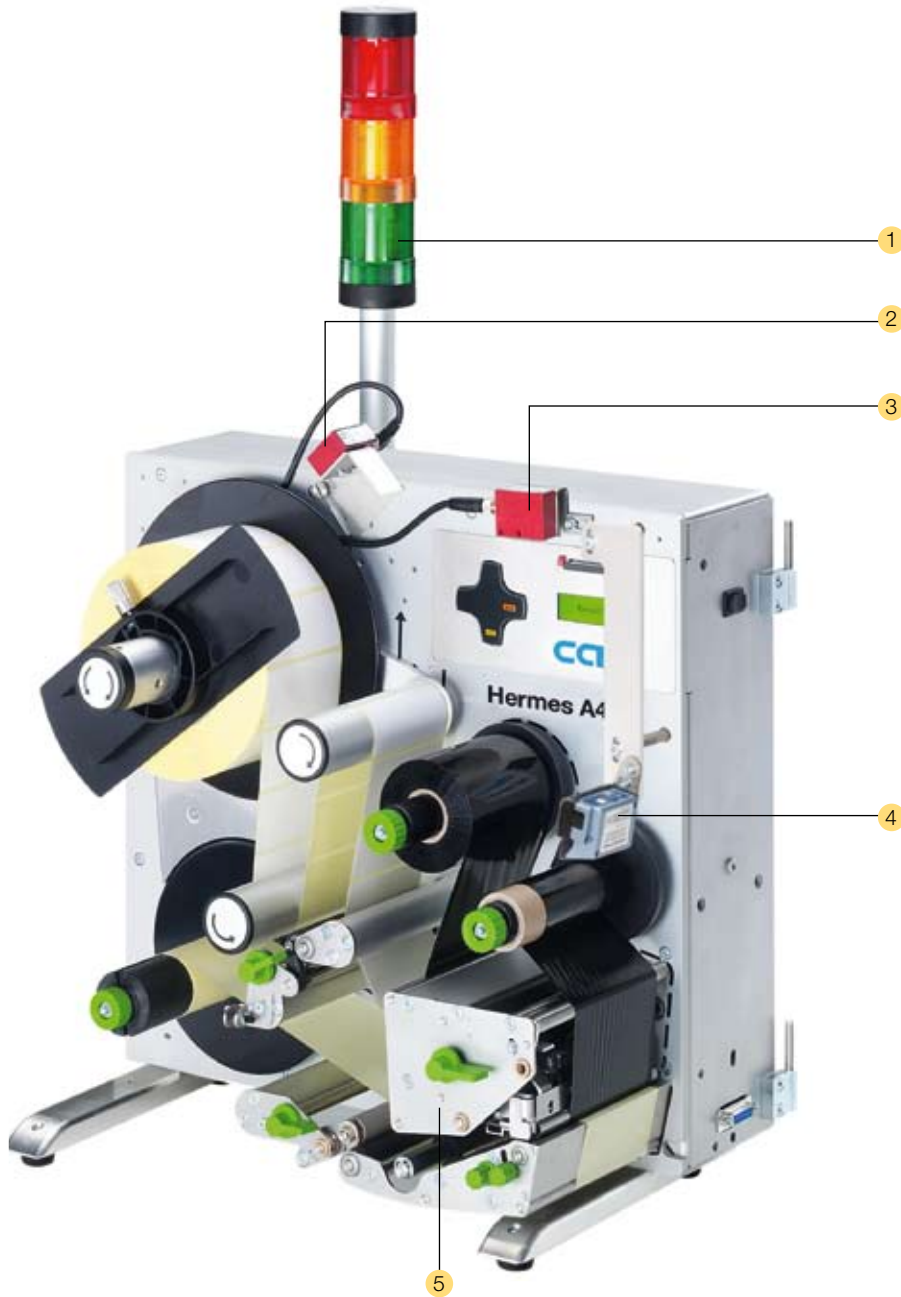
For label rolls up to 300 mm Ø
Dispensing direction to the right



Hermes A5L

For label rolls up to 300 mm Ø
Dispensing direction to the left

Accessories



1. Indicator Light

Indicates the printer's status and is installed directly at the printer, the mounting bracket or stand.

Red: error at the printer or applicator
 Yellow: labels or ribbon are running out
 Green: ready to operate

2. Pre-Warning Sensor Labels

Before the labels are running out, a warning message is indicated both at the indicator light and by means of the PLC interface whenever the minimum of labels exceeds the lower level. The minimum of labels can be adjusted.

3. Pre-Warning Sensor Ribbon

Before the ribbon is running out a warning message is indicated both at the indicator light and by means of the PLC interface whenever the minimum of ribbon exceeds the lower level. This level of ribbon can be adjusted.

4. Barcode Tester

Immediately after the printing process the barcode can be tested on its readability and contents. Type of scanner and further processing are defined to customer's specifications.

5. RFID Read/Write Unit

For reading and writing transponders in smart labels. Integration is made to customer's stipulations.



Adapter 100

For label rolls with a core diameter of 100 mm.

External Operation Panel

This is used for devices with difficult access. Connection by USB interface. Its function, including memory card, correlates with the operating panel at the printer.



Barcode-Scanner

Different scanners can be connected to the USB interface for input.



Memory Card up to 1 Gigabyte

The CompactFlash Card enables to download label formats, fonts, texts and graphics. Up- and downloads to the card can be effected at the printer or PC.



Numeric Keyboard USB

For numerical data input in the stand-alone operation mode.



Compact PC Keyboard USB

Direct input of variable data in the stand-alone operation mode.



PC Keyboard USB with integrated 4-Port Hub

Includes 4 additional integrated USB interfaces for further peripherals.



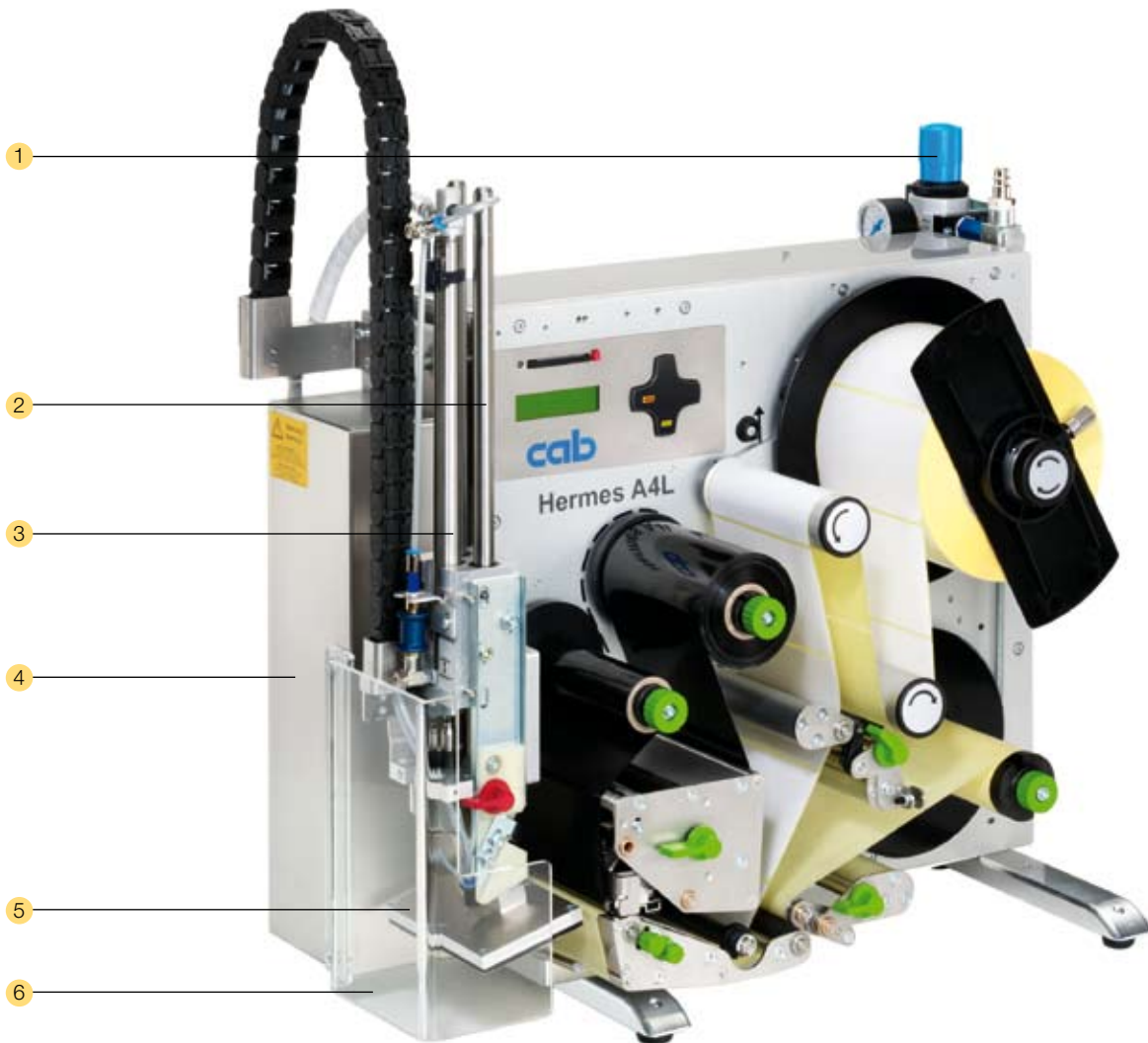
Technical Data		Hermes A		
Printing method				
Print head system:	Thin film	■	■	
	Thick film - on request	-	-	<input type="checkbox"/>
Print resolution	dpi	300	600	300
Print speed up to	mm/s	250	100	150
Print width up to	mm	105,6	105,6	108,4
Labels				
Material:	Thermal- a. Standard paper, plastic foil e.g.	PE, PP, PVC, PA, PI		
Material thickness ¹⁾	mm / Weight g/m ²	0,07 - 0,25 / 60 - 160		
Media roll:	Total diameter up to mm Hermes 4/5	210 / 300		
	Core diameter mm	76 (100)		
	Winding direction	inside or outside		
Width of liner ¹⁾	mm with a thickness of 0,07 - 0,35 mm	25 - 120		
	with a thickness of 0,25 - 0,35 mm	10 - 120		
Label width	mm	4 - 116		
Label height min.	mm	4		
Label height max.	mm	1000	250	1000
Ribbon				
Ink		inside or outside		
Roll diameter up to	mm	80		
Core diameter	mm	25		
Ribbon length variable up to	m	500		
Width up to	mm	114		
Internal rewriter				
Total diameter up to	mm Hermes 4/5	145 / 200		
Core diameter	mm	38,1		
Dimensions				
Hermes 4,	Height / Depth / Width mm	390 / 420 / 276		
Hermes 5,	Height / Depth / Width mm	542 / 527 / 276		
Weight kg	Hermes 4 / 5	18 / 20		
Label sensor				
See-through/Reflective sensor,	adjustable mm	4 - 57,5		
Electronics				
Processor	32 Bit ColdFire/CPU Speed MHz	144		
RAM	MB	16		
ROM	MB Flash	4		
Real time clock,	printout of time and date	■		
Operation panel				
Navigator pad:	keys/illuminated	4 / 8		
LCD-graphic display	Width x height in dots	120 x 32		
	lines/characters	2 / ca. 20		
Slot for memory card:	CompactFlash Type I	■		
Interfaces				
Paralled Centronics bi-directional acc. to IEEE		■		
Serial RS 232 C	1.200 up to 230.400 baud/8 bit	■		
USB 2.0 Full Speed-slave for PC connection		<input type="checkbox"/>		
Ethernet 10/100 Base T, LPD, RawIP-Printing, DHCP, HTTP, FTP, SMTP, SNMP, Time client		<input type="checkbox"/>		
RS 422, RS 485	1.200 up to 230.400 baud/8 bit	<input type="checkbox"/>		
Peripheral connection		■		
Wireless bridge	802.11b	<input type="checkbox"/>		
USB Master for keyboard and scanner		■		
Sensor end of labels		■		
Sensor end of ribbon		■		
Indicator light		■		
Digital I/O interface for applicators of other manufactur.		■		
Interface for cab applicators		■		
Twinax/Coax-Converter		<input type="checkbox"/>		
Accessories				
Indicator light		<input type="checkbox"/>		
Sensor end of labels		<input type="checkbox"/>		
Sensor end of ribbon		<input type="checkbox"/>		
Barcode reading tester		<input type="checkbox"/>		
RFID read/write unit		<input type="checkbox"/>		
External operation panel		<input type="checkbox"/>		
PC-keyboard USB	4-port Hub	<input type="checkbox"/>		
Compact PC-keyboard USB		<input type="checkbox"/>		
Memory card				
CompactFlash Type I up to	1 GB	<input type="checkbox"/>		

¹⁾ Subject to restrictions depending on label size, material and adhesive. Critical materials or applications need to be tested and released.

Self diagnostics		Hermes A	
Stop printing if		Out of ribbon Out of labels	
Testing routines		System diagnosis of memory and print head when switched on Print-out of system data	
Status reports		Total print length Total operation hours	
Fonts			
Font types		5 Bitmap fonts incl. OCR-A, OCR-B and 3 Vector fonts Swiss 721, Swiss 721 Bold and Monospace 821 available internally, loadable TrueType fonts.	
Character sets		Windows 1250 up to 1257, DOS 437, 737, 775, 850, 852, 857, 862, 864, 866, 869, EBCDIC 500, ISO 8859-1 up to -10 and -13 up to -16, WinOEM 720, UTF-8, Macintosh Roman, DEC MCS, KOI8-R. All West and East European, Latin, Cyrillic, Greek, Hebrew and Arabic characters are supported.	
Bitmap fonts		Size of width and height 1 - 3 mm zoom 2-10 Orientation 0°, 90°, 180°, 270°	
Vector-/TrueType fonts		Size of width and height 0,9 - 128 mm variable zoom , Orientation 360° in steps of 1°,	
Font formats		Bold, italic, underlined, outline, negative, grey, vertical, depending on character fonts	
Font width		Variable	
Graphics			
Graphic elements		Line, arrow, box, circle, ellipse, filled, filled with fading	
Graphic formats		PCX, IMG, BMP, TIF, MAC, GIF, PNG	
Codes			
Linear barcodes		Code 39, Code 93 Code 39 Full ASCII Code 128 A, B, C Codabar EAN 8, 13 EAN/UCC 128 EAN/UPC Appendix 2 EAN/UPC Appendix 5 FIM HIBC	Interleaved 2/5 Ident and lead code of German Post JAN 8, 13 MSI Plessey Postnet RSS 14 UPC A, E, E0
2D Codes		Aztec, Codablock F, Data Matrix, PDF 417, Micro PDF 417, UPS Maxicode, QR-Code, RSS 14	
		All codes variable in height, module width and ratio. Orientation 0°, 90°, 180°, 270°. Optionally with check digit, printed characters and Start/Stop code, depending on code type.	
Software			
Programming		J-Script Direct programming abc-Basic Compiler Database Connector	■ ■ <input type="checkbox"/>
System diagnostics/ Administration		cab-printer monitoring cab Network Manager cab-Card Manager	■ <input type="checkbox"/> <input type="checkbox"/>
cab label software		cablabel Lite cablabel Professional,	■ <input type="checkbox"/>
Further label software		Easylab, Codesoft, Nicelabel, Bartender, Label Matrix, Labelview	<input type="checkbox"/>
Windows driver		98, ME, 2000, 2003, XP Windows NT from version 4.0	■ ■
Mac driver		OS X printer driver from version 10.3	■
Linux driver		Testet with Suse 9.0, CUPS based	■
Power supply		100 - 240 V ~ 50/60 Hz, PFC	
Energy consumption max.		max. 250 W	
Operating temperature		10 - 35°C	
Humidity not condensing		30 - 85%	
Safety regulations		CE, FCC class A	

■ Standard Option

You require? We offer: Applicators



1. Compressed Air Supply Unit

Assembly is made at the printer, frame or stand.
The micro filter avoids contamination, the pressure regulator ensures the print and apply quality.

2. Long Service Life

The guides have ball bearings and are therefore resistant to wear.

3. Variable Product Heights

By means of the pneumatic cylinder it is possible to print and apply at different heights. The cylinder is available in different lengths.

4. High Process Reliability

Supporting air jet streaming, vacuum as well as the speed of the cylinder are adjustable. Control is made by sensors.

5. Real Time Print and Apply

Applicators for small and big label enabling to apply labels with a height of 4-250 mm and a width of 4-116 mm.

6. Protective Cover

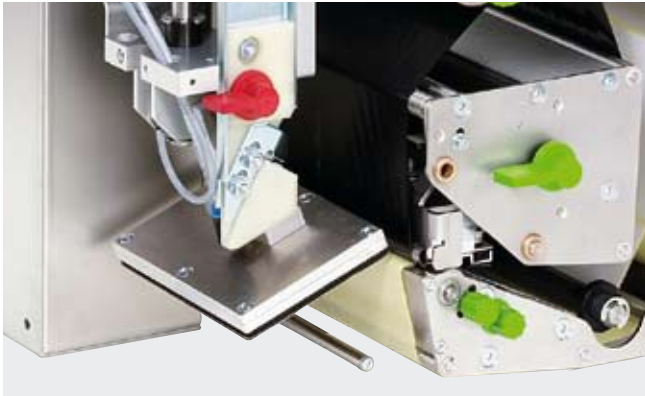
Used in the semi-automatic operation mode
Standard size 1 for labels W x H up to 70 x 80 mm
Size 2 for labels W x H up to 116 x 80 mm
Further sizes on demand.

7. Applicator with part to be turned away

Easy and fast access to the printers mechanics for material change or for maintenance work is possible.



Tamp Pad



The tamp pads are manufactured according to the label size. Depending on size and application the tamp may be hard, damped or spring mounted. The product is in fixed position during the print and apply process.

Blow Pad



The print and apply process passes optionally with the product in fixed position or in linear movement. The blow pad moves to a pre-adjusted position while the product is in proper distance thereunder.

Roll on



The label is pushed as far as underneath the roll. Now, the tamp pad moves on top of the product. The label is then rolled on and applied by the movement of the product

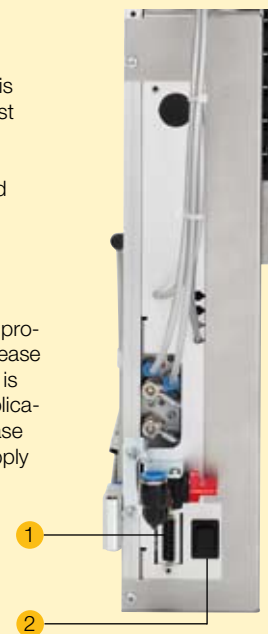
Applicator Interface

1. Digitale I/O-Interface

The print and apply process is started and stopped by a host control interface. At the same time, status and error messages are displayed

2. Release Button

is testing the print and apply process. When actuating the release button the first time the label is printed and taken by the applicator. When actuating the release button again the print and apply process is executed.



Accessories

Interface Plug

Sub-D Plug 15 pole
Easily connected by using clip screws.



Release Switch / Foot Switch

Print and apply in the semi-automatic operation mode is released by means of a release- or a foot switch. Connection is possible at the digital I/O Interface.



Light Barrier

The automatic print and apply process on a conveyor belt is released by a light barrier. Connection is possible at the digital I/O interface.



Applicators for applications in real time

The applicators enable labels to be applied downwards, upwards as well as sideways on the product.

The labels are taken directly from the printer to the tamp pad. The size of the tamp pad is customized to any label dimension.

Typ 1100	Typ 1300	Typ 1400	Typ 1500
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Tamp

For applying small labels on flat surfaces. The express changing system is recommended for different label sizes or for maintenance.

Tamp

For applying larger-sized labels, even on inclined surfaces, with spring-mounted support to compensate inclined surfaces.

Roll on

Real time incline applicator with lifting cylinder and pinch roller.

Tamp around the corner

For applying larger-sized labels around the corner, e.g. sealing labels.

Label transfer method	Tamp	Tamp	Roll on	Tamp
Label width mm	8 -116	75 -116	50 - 116	40 - 116
Label height mm	5 - 80	80 - 200	100 - 250	40 - 200
Stroke of tamp mm	100 - 400	100 - 400	100 - 400	100 - 400
Compressed air supply bar	5 - 6	5 - 6	5 - 6	5 - 6
Requirements on product surface	flat	flat	flat/cylindrical	flat/right angle
for transfer printer				
A4L - label outlet left	■	■	■	■
A4R - label outlet right	■	■	■	■
A4L - label outlet left	■	■	■	■
A4R - label outlet right	■	■	■	■
Product height				
variable	■	■	■	■
fixed	-	-	-	-
Product				
fixed	■	■	-	■
in motion	-	-	■	-
in rotation	-	-	■	-
Cycle time				
Number of cycles/min	30	20	35	12

Dispensing Module

Typ 2100	Typ 3100/3200	Typ 4200	Typ 5100
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Tamp/Blow

Labels are tamped or blown contactless on the product.
The express changing system is recommended for different label sizes or for maintenance.

Tamp/Blow

Vertical swinging by 90° or 180°

Labels are tamped or blown on the product, e.g. sideways.

Tamp

horizontal rotating by 90° or 180°

For applying smallest labels with additional rotation to the printing direction.

Roll on

Mechanical dispensing module / printed labels are in the dispense buffer.

Label transfer method	Blow	Tamp	Blow	Tamp	Tamp	Roll on
Label width mm	10 - 116	8 - 116	10 - 116	8 - 116	4 - 116	25 - 116
Label height mm	10 - 80	5 - 80	10 - 80	5 - 80	4 - 20	20 - 200
Stroke of tamp mm	100 - 400	100 - 400	-	10	100 - 400	-
Compressed air supply bar	5 - 6		5 - 6		5 - 6	-
Requirements on product surface	flat		flat		flat	flat
for transfer printer						
A4L - label outlet left		■		■	■	■
A4R - label outlet right		■		-	■	■
A5L - label outlet left		■		■	■	■
A5R - label outlet left		■		-	■	■
Product height						
variable	-	■		-	■	-
fixed	■	-		■	-	■
Product						
fixed	■	■	■	■	■	-
in motion	■	-	■	-	-	■
in rotation	-	■	-	-	-	-
Cycle time						
Number of cycles/min	30		30		12	60

The Hermes Assembly aids



Print and Apply System upright



Base Plate



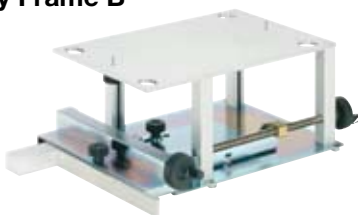
Designed for integrating the printer within a production line. The printer is fixed by two centering bolts and mounted by means of a knurled screw from the bottom at the cover plate.

Assembly Frame A



Additional feet are mounted at the base plate. Height can be customized from 60 – 400 mm.

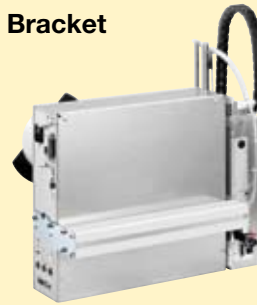
Assembly Frame B



To enable the positioning of products which are different in size an adjustable XY stopper is mounted. The adjusting range of the stopper in X and Y direction is 75 mm. As soon as the product is correctly aligned, the print and apply process can be released by a switch.

Print and Apply System hanging

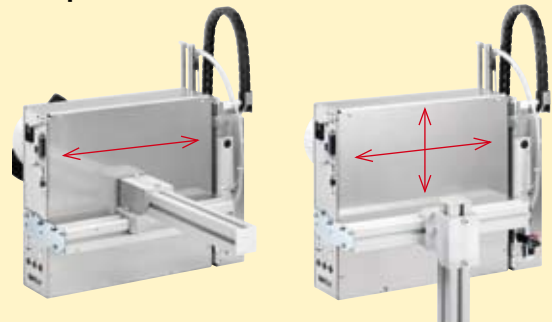
Bracket



Profile dimension: 50 x 50 mm
Supplier: Rose+Krieger
Article-No.: 4.08.5000

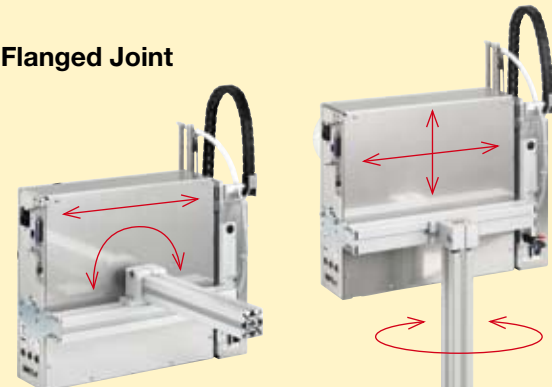
The bracket enables to mount the printer in hanging position.

Clamped Joint



The clamped joint enables to mount the printer vertically, horizontally and turned by 90°. By moving the profiles in the cardan joint the label can be positioned on the product.

Flanged Joint



The flanged joint enables to turn the printer additionally around the profile axis. Tolerances in angles are compensated, too.

The Hermes Stand



The Hermes stand enables to use the printer in a fast and flexible manner at any kind of production line. The print and apply position is adjustable to the product in height and width with just a few turns. Four guide rolls at the chassis ensure mobility. On site, the stand is adjusted by mounting footrests. Maximum labeling height is about 1400 mm.



With bracket and clamp joint

The printer is adjustable in right-angled in three directions.



With bracket and flange joint

The printer can additionally be turned around the support beam.



The Hermes stand for a flexible printer installation

Example: Print and apply in transport direction



Example: Print and apply crosswise to the transport direction

