



Technical Data

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Device Types, Application

AP 7.t

- Intended purpose: Monotone printing of textile labelling materials for thermal and thermotransfer processes
- Processing roll material
- Resolution: the AP 7.t is *optionally* available with 203 or 300 dpi resolution
- Print speed up to 200 mm/sec (8"/s) with the AP 7.t (203dpi) or up to 150 mm/s (6"/s) with the AP 7.t (300dpi).
- Print width up to 104 mm with the AP 7.t (203dpi) or 105 mm with the AP 7.t (300dpi).
- Interfaces: RS -232, USBCentronics, Ethernet

Options

Internal Options

...should be factory-fitted or installed by a service engineer:

- *Reflex Sensor Kit*: Light barrier fitting that apart from the transmission sensor, also contains a reflex sensor.
- *I/O board*: RS- 422/485 interface, signal interface

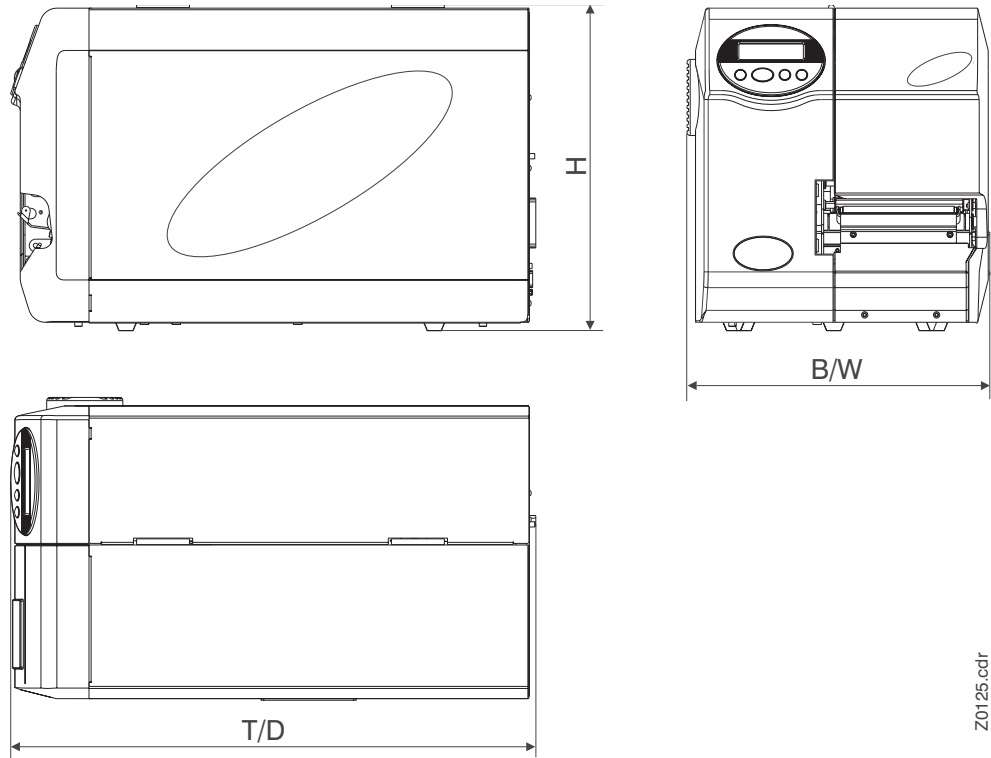
External Options

...do not require any special alterations to the printer:

- *Cutter*
- TCS (Textile Cutter-Stacker)
- *(External) rewinder* for material rolls with 38 mm (1.5"), 75 mm (3") or 100 mm (4") cores
- *Keyboard* for standalone operation

Technical Specifications

Dimensions



Z0125.cdr

[1] Overall dimensions of the AP 7.t (H=Hight, W=Width, D=Depth).

H: 313 mm
 W: 325 mm
 D: 492 mm

Weight 21 kg

Performance Data

Print Technology Thermodirect and thermotransfer printing

- Printer Head Type**
- “Flat Head” type (ceramic thin film flat head)
 - 8.0 dot/mm (203 dpi): Kyocera KPA 104
 - 11.8 dot/mm (300 dpi): Kyocera KPA 106

Printhead characteristics

	AP 7.t (203 dpi)	AP 7.t (300 dpi)
Resolution (dot/mm)	8.0	11.8
Print speed. (mm/s)	50-200	50-150
Print speed (Inch/s)	2-8	2-6
Max. print width (mm)	104	105

[Tab. 1] Important printhead characteristics.

Punch sensor

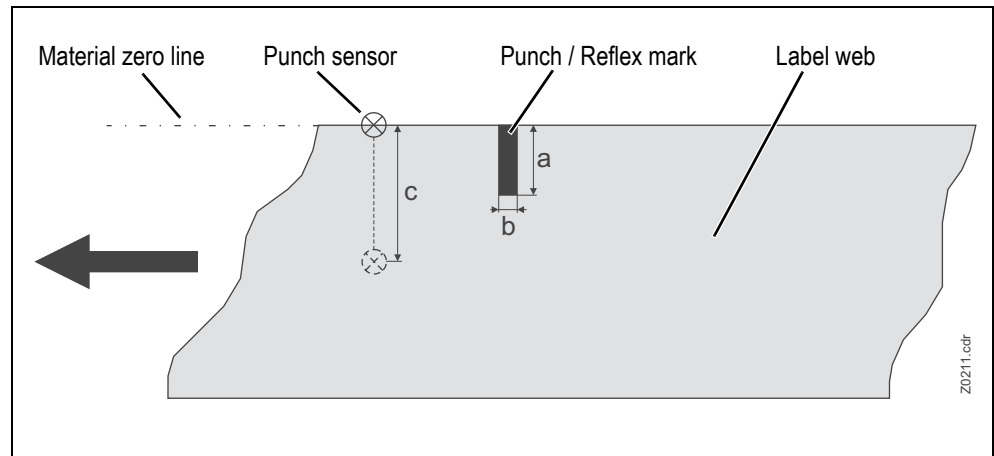
Transmission sensor, detects punches or gaps in the label material; adjustable from the left side about half of the material width (Tab. 2).

		Transmission	Reflex
Setting range	c	Material zero line up to 60 mm	(Material zero line + 6 mm) up to 66 mm
Punch length	b	0.8–14 mm	4 mm (recommended)
Punch width	a	min. 4 mm	12 mm (recommended)

[Tab. 2] Recommended punch dimensions.

Reflex sensor

- Optional available
- Detects reflex marks on the label material (normally dark marks on light background)
- Adjustable from the left side about half of the material width.



[2] Measures and setting range of the punch / reflex mark (c = setting range, b = punch length, a = punch width).

Fonts

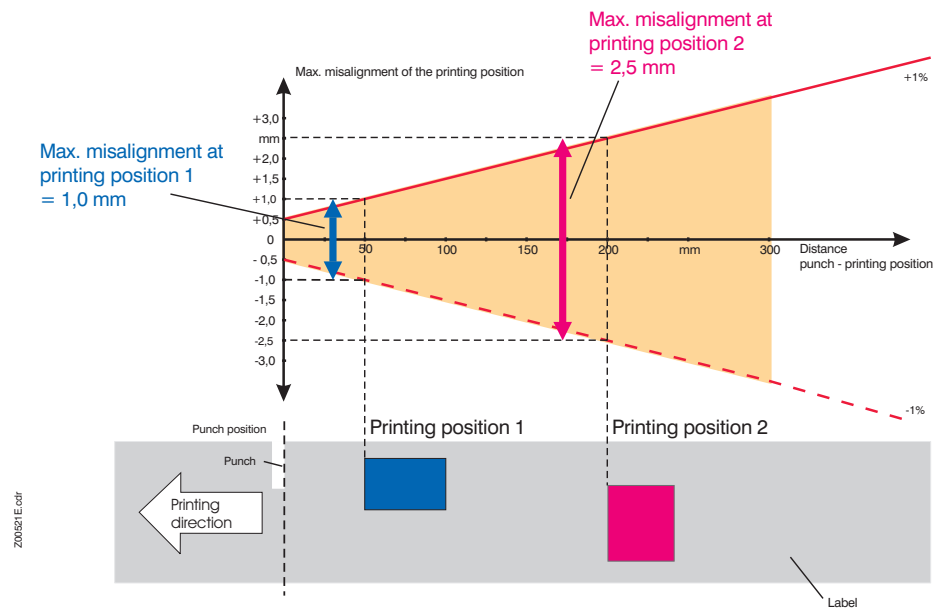
- 19 Fixsize fonts , including OCR-A and OCR-B, including 2 fonts with textile symbols
- 3 scalable fonts (Speedo fonts)
- Truetype fonts are supported
- Optionally can Truetype, Speedo and Fixsize fonts be stored on a CF-card

Modifying Fonts

- Up to factor 8 scaling in x/y direction
- Rotation by 0, 90, 180 and 270 degrees

AP 7.t

Impression accuracy



[3] The impression accuracy depends on the print position on the label: the further away the printing is from the punch, the less accurate is the impression.

Image formats

BMP, PCX, JPEG, TIFF, GIF, Easy Plug logos

Bar codes

Bar codes	
Codabar	Code EAN 128
Code 128	Code ITF
Code 2/5	Code MSI
Code 2/5 1	EAN 13 mit Add-On 2
Code 2/5 5	EAN 13 mit Add-On 5
Code 2/5 Interleaved Ratio 1:3	EAN 8
Code 2/5 Matrix Ratio 1:2,5	Postcode (guide and identity code)
Code 2/5 Matrix Ratio 1:3	UPC-A
Code 39	UPC-E
Code 39 Ratio 2,5:1	UPS-Code 128
Code 39 Ratio 3:1	

[Tab. 3] Machine internal bar codes

All bar codes scalable in 30 different width and in the height.

2-dimensional bar codes

Data Matrix Code (code according to ECC200)
Maxi Code
PDF 417
Codablock F
Code 49

[Tab. 4] Machine internal 2-dimensional bar codes

RSS & CC bar codes

Reduced Space Symbology (RSS) und Composite Component (CC) bar codes:

	RSS, CC bar codes
RSS-14	UPC-A + CC-A/CC-B
RSS-14 truncated	UPC-E + CC-A/CC-B
RSS-14 stacked	EAN 13 + CC-A/CC-B
RSS-14 stacked omnidirectional	EAN 8 + CC-A/CC-B
RSS limited	UCC/EAN 128 + CC-A/CC-B
RSS expanded	UCC/EAN 128 + CC-C

[Tab. 5] Machine internal RSS & CC bar codes

Printer emulation

Easy-Plug

Labelling Material**Material type**

Textile ribbons, suitable for printing with the thermal or thermotransfer process (e.g. Avery Dennison 6860, 9505, 6880, 9660).

Label roll

Winding direction: Printable side facing inward or outward.

Label width

	Textile
Max. external Ø	250 mm
Core (inside) Ø	38.1/50.8/76.2/ 101.6 mm
Materialbreite	12 ^a /15 ^a /19/25/30/ 35/38/50/102 mm

[Tab. 6] Label roll specification.

a) Preceding tests are strongly recommended.

Label length

12 up to „max. print length“, where „max. print length“ depends on the memory assignment of the printer - 1000 mm count as standard.

Thermotransfer Ribbon

Ribbon Roll

- *Winding Direction:* Colour-side facing inward or outward.
- *Roll dimensions:*

Core Ø	max. 80 mm
Width	25.4 mm (1")
Length ^a	25 -105 mm
	max. 540 m

[Tab. 7] *Dimensions of the ribbon roll.*

a) *The indicated foil length is a typical value; given this length, most of the common foil rolls stay below the max. admissible outer diameter.*

- *Recommended foil types:* Avery Dennison 2670 and 8909.

Connections, Interfaces

Mains Voltage

100-240 V (AC)

Mains Freq.

50-60 Hz

Power

- Max. 250 W

Consumption

- In standby mode depending on the equipment 30-40 W

Current Cons.

max. 3.2 A

Interfaces

- Host interface:
 - *RS-232:* Baud: 1200-115200 / 8 bit; suitable connection cord: 1:1 D-Sub 9 extension lead (connector-jack)
 - *Centronics:* Bi-directional; conforms with IEEE 1284; nibble mode; connector at the printer: type C
 - *USB slave V1.1:* Transmission rate 12 MBit/s. If the printer is connected to a host running under Windows, the hosts OS will search for a matching printer driver.
 - *Ethernet:* 10/100 Base T with TCP/IP, LPD, RawIP printing, DHCP, HTTPD, FTPD, SMTP, NTP
- Standalone mode:
 - CompactFlash card
 - PS/2 keyboard
- Peripheral devices. D-Sub 15 jack at the front side of the printer - can be used for:
 - Cutter
 - TCS (Textile Cutter-Stacker)
 - External Rewinder
- I/O-board (optional)
 - D-Sub 9 jack for RS-232/422/485; Baud: 1200-115200 / 8 bit; galvanic separated
 - D-Sub 15 jack providing I/O signals similar to the USI

- For information about pin-assignments of the interfaces, refer to the Service Manual, topic section [Service Electronics](#) paragraph “CPU Boards”, “Plug Connectors”.

Electronic Configuration

	Details
Processor	32-bit IDT with 32-bit data bus
SDRAM	16 MB
ROM	4 MB Flash
Plug-in Cards	Slot for CompactFlash cards of type T1 with up to 64 MB storage capacity
Real-time Clock	Present; printout of date and time possible
Control Panel	4 buttons; LCD graphics display with 122x32 pixels; typically used to display two text lines with 16 characters each.

[Tab. 8] *Electronic Configuration*

Environmental Conditions

Operating temp.	4 to 38°C
Storage Temp.	-4 to 60°C
Relative Humidity	30- to 85% (non-condensing)
Noise	< 70dB(A) (also with TCS)
Protection Class	IP 41 (Protected against solid objects over 1.0 mm; Protection against vertically falling drops of water).

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