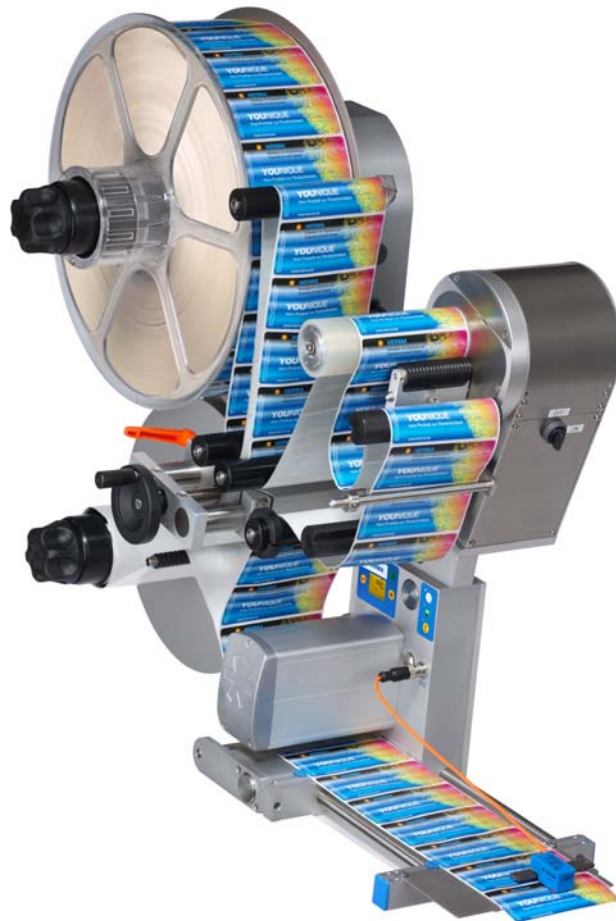


Label Applicator HERMA 400



[Facts & Data]

Constructional variant



Right-hand or left-hand version, always flexible to use



Power supply / Line voltage	Wide range input 100V AC ... 240V AC $\pm 10\%$, 50 Hz ... 60 Hz
Max. power consumption	400 W + n times 100W (n=number of motorized winder units)
Leakage current, according to EN 60335-1	110VAC: <0.35 mA 150VAC: <0.5 mA 230VAC: <0.7 mA
Fuse protection in the applicator	2x T 3.15 A type TR5
Recommended external fuse protection („H400“ = applicator only „Winder“ = H400 + up to 3 winder units)	220VAC, H400: Delay 5A 220VAC, Winder: Delay 10A 110VAC, H400: Delay 10A 110VAC, Winder: Delay 16A
Operating temperature range	+0°C ... +40°C (+32°F ... 104°F)
Storage and transport temperature	-20°C ... +80°C (-4°F ... 176°F)
Maximum installation elevation with nominal data	2.500 m above mean sea level
Maximum permissible relative humidity	35% ... 85%, free of condensation
Sound pressure level in operation at working place according to DIN 45635	max. 75dB(A)
Type of protection	IP66
Output capability	250 mA (nominal), short circuit-proof, = maximum load over all outputs
Safety class	I; Class 2 peripherals may be connected
Diameter label reel	Standard: 300 mm (12") Maximum: 400 mm (16", optional)
Core diameter	Standard: 76 mm (3") Adapter: for 152 mm (6")
Constructional variants	For right-hand and left-hand operation
Dimensions	Customer-specific; for examples see page 16
Weight	Customer-specific; for examples see page 16

Find more information on options and parameters on page 15.

Built-in control comfort



Everything under control

The clear operating display enables parameters to be set especially comfortable and simple for individually configuring your applicator. A standard feature in all applicator types.

Applicators HERMA 400 are operated via the keys of the key pad and the display. The display allows entry and adjustment of applicator parameters. Basic values, such as e.g. the start delay of the applicator, may be set here or alternatively via optional potentiometers.

Standard unwinding and rewinding



Standard reel holder

- With pendulum
- For label reels with diameters of 12"/16" (300 / 400 mm)
- Web widths 3", 6", 9" (80 mm, 160 mm, 240 mm)
- Reel core 3"/6" (76/152 mm)
- Maximum labelling speed 1,500"/min (40 m/min)



Regulated backing paper take-up unit

- With pendulum
- Maximum labelling speed 1,500"/min (40 m/min)



Perfect reel performance

The special unwinding fixture ensures the web is always evenly tensioned and thus avoids tolerance problems. Both winding spools are almost identical in construction and offer the same reliability. Inserting and tensioning the web is especially user-friendly.

Motorized winder system



Each controlled independently!

Same basic unit for all components

Optional CAN connection between H400 and all winder units

Motorized unwinder



- For label reels with diameters of up to 16" (400 mm)
- Web widths 3", 6", 9", and 12" (80 mm, 160 mm, 240 mm, and 320 mm)
- Standard reel core 3" (76 mm); also 6" (152 mm)
- Maximum labelling speed 3,000"/min (80 m/min)

Motorized loop-type unwinder



- Increasing the maximum labelling speed to 7,100"/min! (180 m/min!)
- Semi-automatic threading mode
- Loop channel with antistatic properties

Motorized rewinder



- Suitable for large reels

Possibility for automatic speed synchronization

Options for the winder system



Fastening system „Diamond“

- Required for:
 - Unwinder with diameter 16" and 20" (400 mm / 500 mm),
 - Rewinder with diameter 12" and 16" (300 mm / 400 mm),
 - Loop-type unwinder
- Also serves as cable conduit



Unwinder plate made of carbon fibre

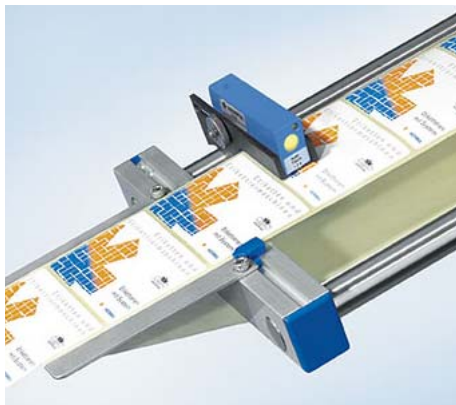
- Inertia decreased substantially
- For label rolls as of diameter 20" (500 mm)
- One third lighter than conventional aluminium plates
- Reaches the required high speeds in a very short time

Label sensors



FS03

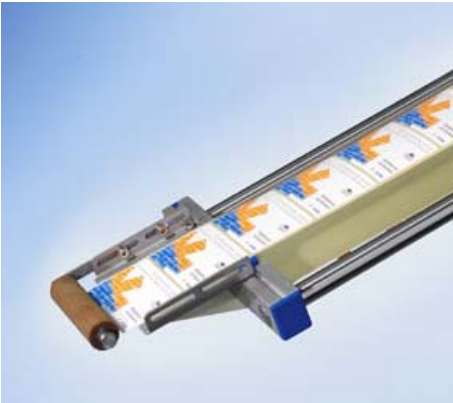
- Patented sensor
- Can be set to the current label material in a flash
- One single set button for all functions
- All previous variants combined in a single sensor version
- Especially suitable for use with **transparent** labels
- Also perfectly suitable for paper labels and metallized labels, very simple switching-over



Optoelectronic sensing unit

- Non-contact sensor
- Quickly and easily adapts to various light transmitting properties
- Incl. **Autoteach** function for very rapidly adjusting the sensor to the current label

Special solutions
possible



Rigid beak with application roller

- For linear labelling, where the sprung-loaded application roller applies the labels onto the product



Rigid beak with brush

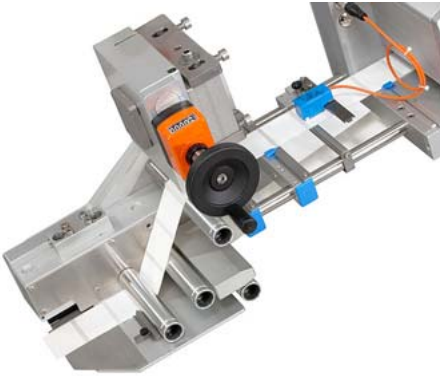
- For linear labelling, where the brush applies the labels onto the product



Pivot beak with application roller

- For linear labelling of objects with varying heights or uneven shapes

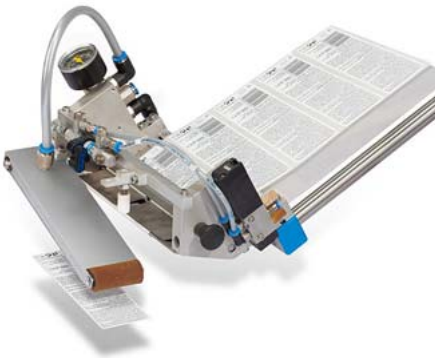
Special solutions possible, including pick-and-place labelling



Moving beak

- Transferring labels to the vacuum pad with the least possible tolerance, up to 0.2 mm (0.008")
- The solution for precisely transferring shapeless labels
- Ideally suitable for pick-and-place labelling in conjunction with a transfer unit
- Patented system

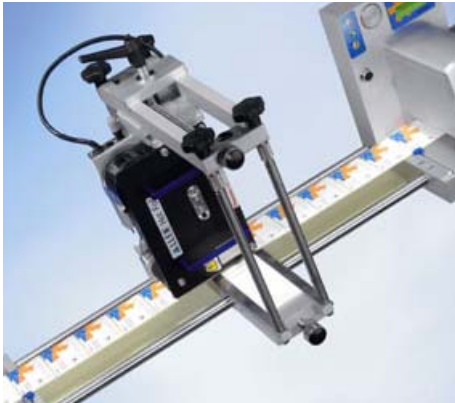
Highest precision
Shapeless labels



Transverse transfer unit

- Transferring and applying very long and slim labels safely
- Transferring labels that are placed on the web at an angle of 90°
- Independent from speed

Printers



Hot-foil printer

- Ideal solution for high-quality foils
- Prints in a wide range of colours

All usual printers in the market



Thermal transfer printer

- Versatile printing system
- Printing variable label information such as text, bar codes, symbols
- Speeds of up to 20"/sec (500 mm/sec)

Special solutions possible, including e.g. laser print



Added functionality



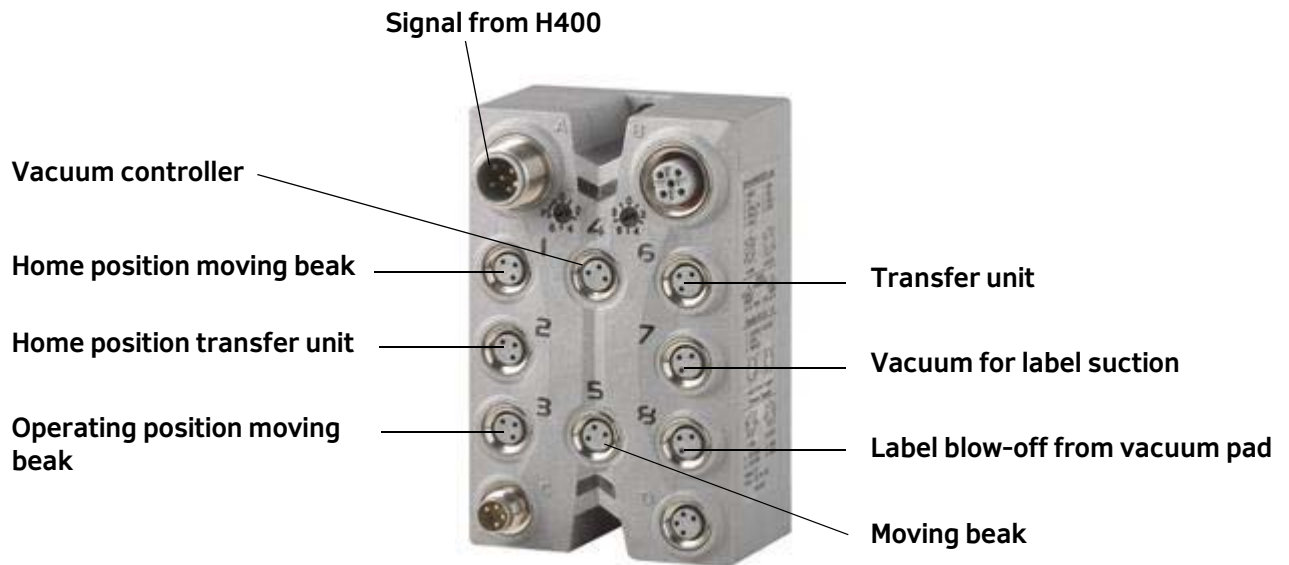
Outputs at basic unit (X17)

- X17.2: Take-up cylinder (or stopper)
- X17.4: Printer (or centering unit)

I/O distributor (all H400 Premium with display)

Inputs

Outputs



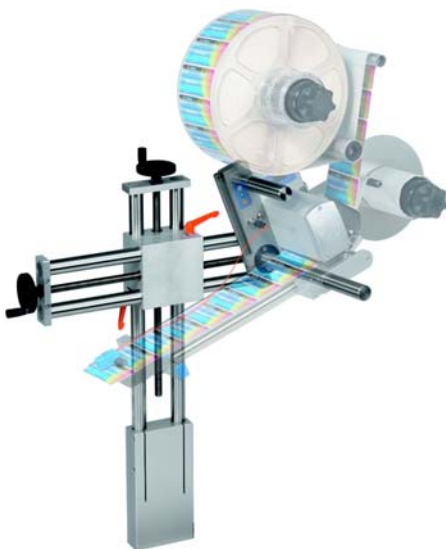
PLC / control box
not required!

Pedestals



Universal pedestal

- Convenient mounting for top, side, or bottom labelling
- Wheels are an option
- Light variant available for „light“ applicators



Mounting pedestals

- Can be easily adjusted in all planes
- Plus simple adjustment of the angle of application

Highlights

Servo driven

Speed of up to 7,100"/min (180 m/min)

Automatic speed synchronization possible

Easy PLC connection

Special unwind unit giving consistent web tension

Labelling tolerance of down to 0.01" (0.3 mm)

Constructional widths 3", 6", 9", 12" (80 mm, 160 mm, 240 mm, 320 mm)

100 VAC ... 240 VAC \pm 10% / 50 Hz ... 60 Hz

Fully integrated control

Clearly laid out operating display

Configurable stop signals (e.g. via sensor mark, for annulus labels, among others)

No separate control box required!

Easy to integrate into customers' production lines

Easy to expand

Model variants



V

H400 Vario

The standard applicator

VM

H400 Vario M

Standard applicator with
master encoder A¹

P

H400 Premium

High speed +
master encoder AB²

Configuration software
Serial communication
Additional inputs/outputs

PP

H400 Premium Plus

High speed / High connectivity +
master encoder AB².

1. Speed synchronization before start signal (track A only)
2. Continuous speed synchronization (tracks A+B)

HERMA 400	V	VM	P	PP
Display (LCD)	•			
Programming interface	RS232			RS485
I/O interface	Digital inputs/outputs: 24V, PNP Analog inputs: 0–10V			
Speed (inch/min // m/min)	120–1,500//3–40 ^{1,2}	120–3,000//3–80 ^{1,3}	0–7,100 // 0–180 ^{1,4}	
Start delay (inch // mm)	0–32 // 0–800 ^{1,2}		0–32 // 0–800 ^{1,4}	
Stop delay (inch // mm)	0–16 // 0–400 ^{1,2}		0–16 // 0–400 ^{1,4}	
Max. label length (inch // mm)	32 // 800			
Trigger for start of labelling	Start sensor, PLC ¹ („Rising edge“, „Sensor mark“, „Start inhibit“, „Falling edge“)			
Trigger for labelling stop	Label sensor, PLC ¹ („Rising edge“, „Sensor mark“, „Stop inhibit“, „Hole inhibit“, „Var.label length“, „Falling edge“)			
Multi labelling	2–8 applications per start signal (free position of each label)			
Switching off in case of ...	•			
Web break, def. sensor	•			
Malfunction label sensor	•			
X missing labels in a row	3			
Master encoder synchronization;	–	• (track A)	• (track A+B)	
Electronic gear adjustable	–	–	• ¹	
Options ...				
End of reel, Diminishing reel	•		•	
Printer	X17.4 ¹		X17.4 ¹	
Pivot beak	X17.2 ¹		X17.2/CAN ¹	
Moving beak	X17.2 ¹		X17.2/CAN ¹	
Transverse transfer unit	X17.2 ¹		X17.2/CAN ¹	
Telescope	X17.2 ¹		X17.2/CAN ¹	
Blow box	X17.2 ¹		X17.2 ¹	
Roller (Type 211)	–		CAN ¹	
Inputs ...	•			
Label sensor	•			
Applicator ON/OFF	•			
Start of labelling	•			
Lock start of labelling	•			
Manual label feed	•			
Reset malfunction	•			
Speed (0–10V DC)	• 1, 2 (3)		• 1, 4	
Stop delay (0–10V DC)	• 1, 2		• 1, 4	
Start delay (0–10V DC)	• 1, 2		• 1, 4	
Outputs...	•			
Applicator ready	•			
Label transport running	•			
End of reel	•			
Diminishing reel	•			
Malfunction (incl. web break)	•			
Missing label on web	•			
Label sensor (stop signal)	•			
Button S2 „manual feed“	•			
Button S3 „function“	•			
LED S3	•			
External power supply	100 – 240 VAC ±10%, 50 – 60 Hz			

• Available

– Not available

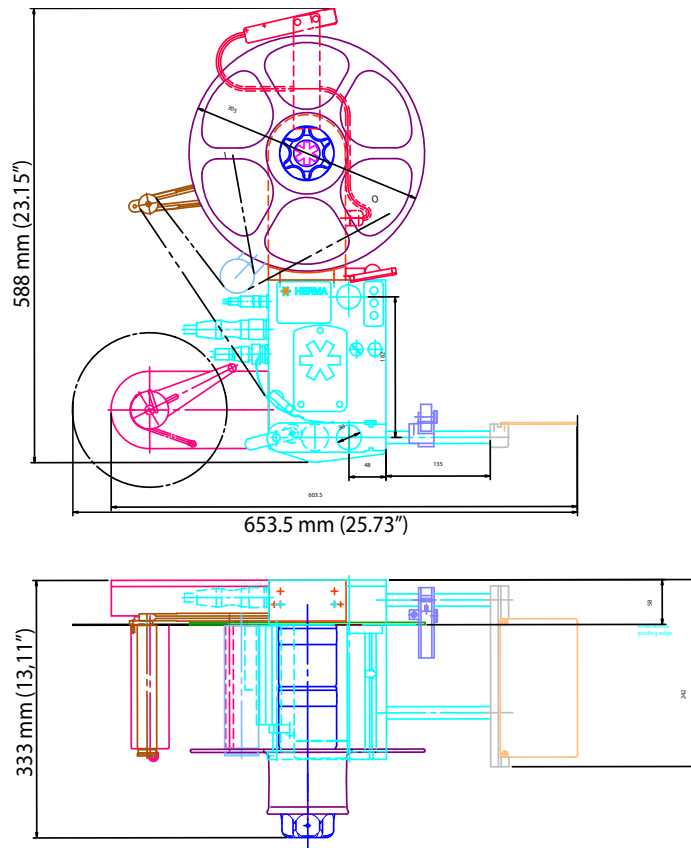
¹ Adjustable via RS232/485 (PC/PLC) as well as via display

² Adjustable via display or analog input (0.2–10V) – Automatic input detection!

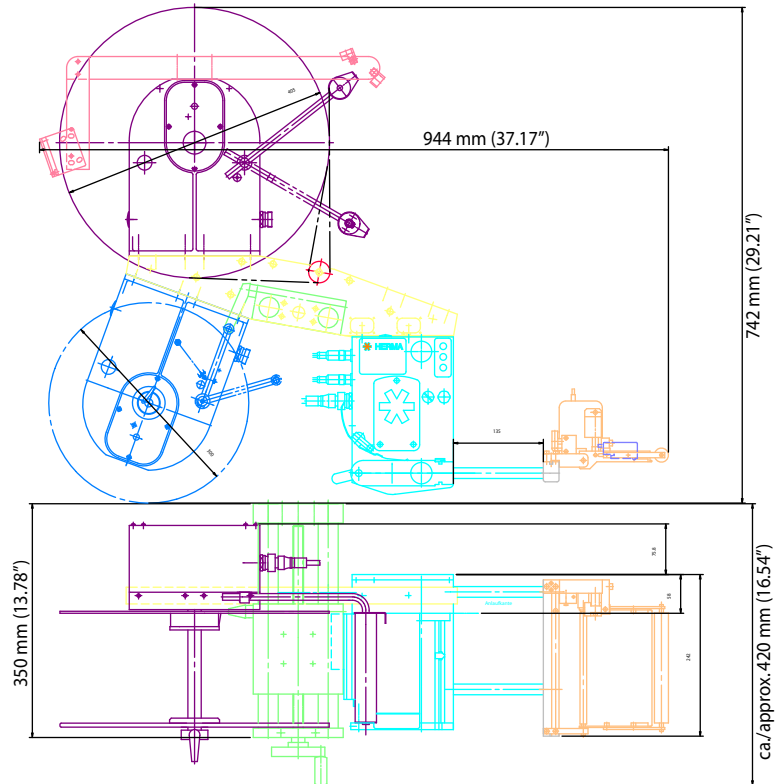
³ Adjustable via display, analog input (0.2–10V) or master encoder – Automatic input detection!

⁴ Adjustable via display, analog input (0–10V) or master encoder – Manual input selection required!

Dimensions / Weight

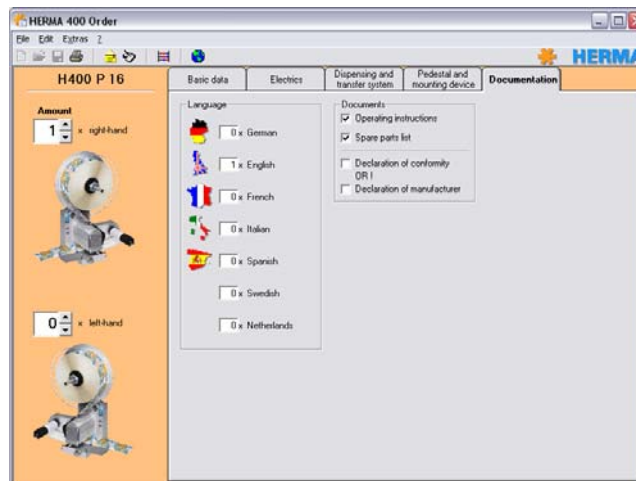
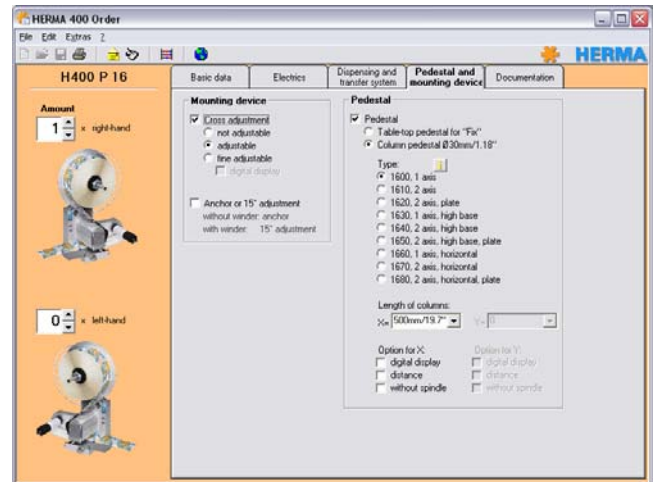
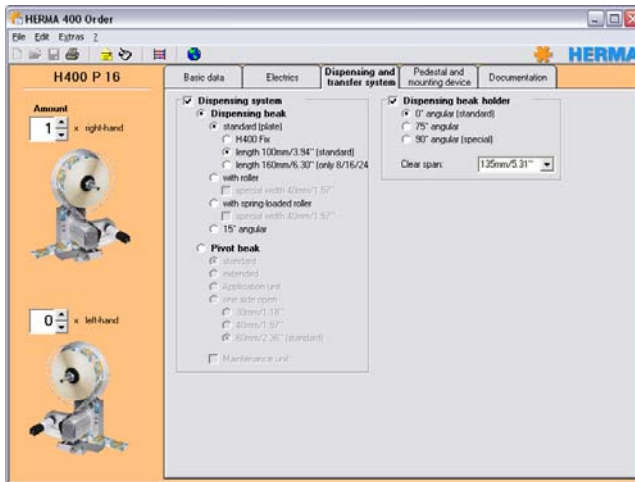
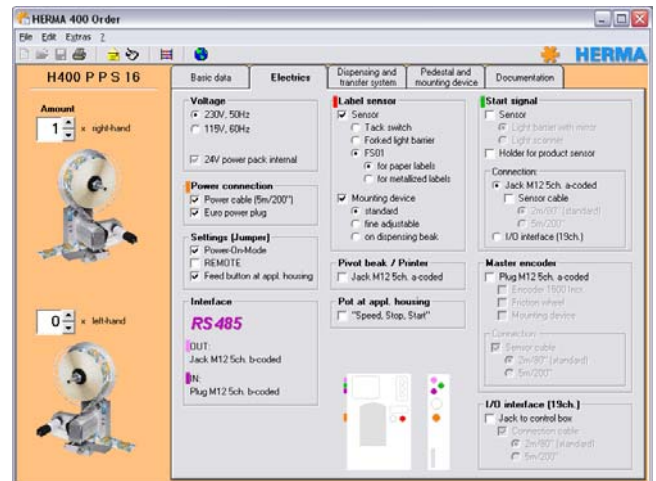
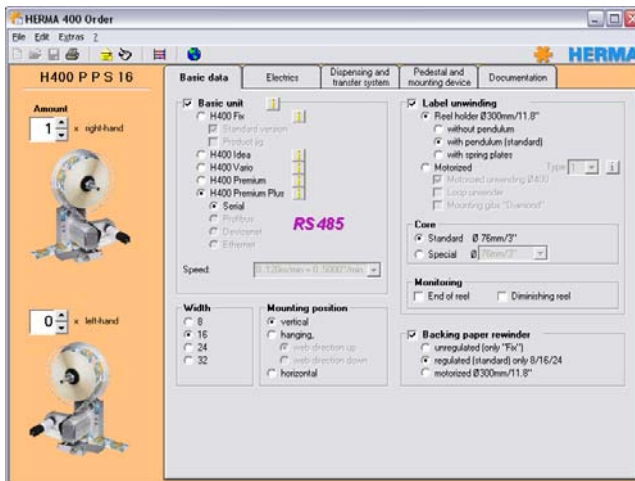


Weight: approx. 16 kg (35 lbs)



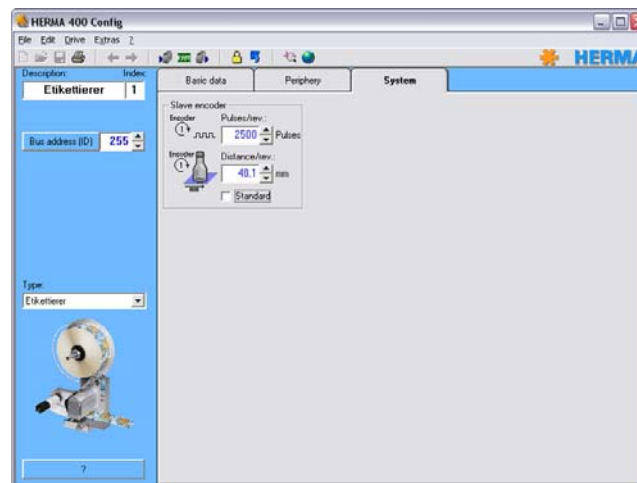
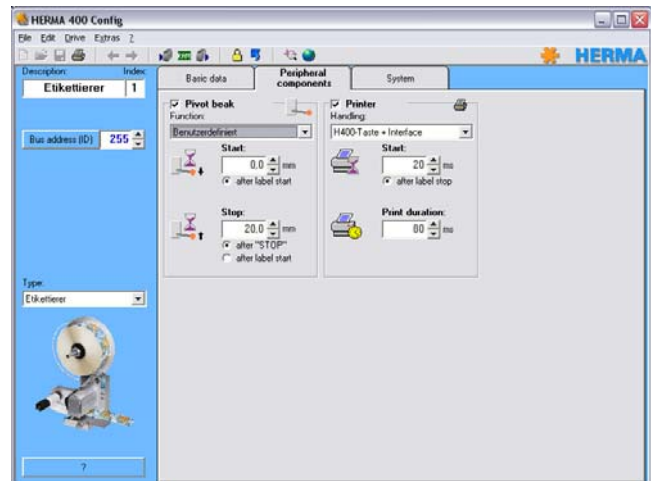
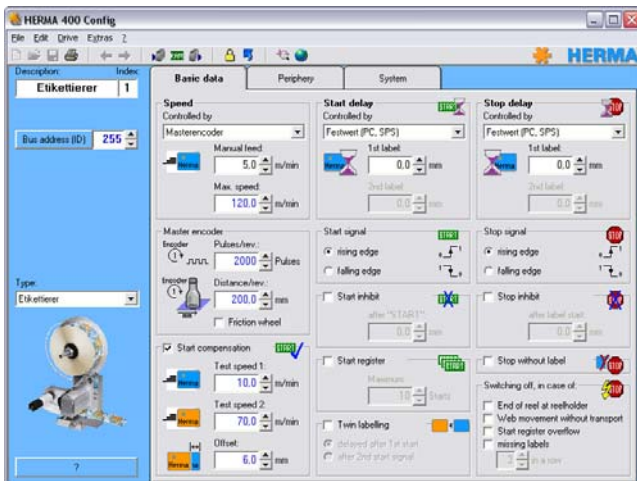
Weight: approx. 30 kg (66 lbs)

Order program



- ✓ Determine the variant desired
- ✓ Enter the types of connection
- ✓ Specify electric
- ✓ Define modules
- ✓ Order documentation
- ✓ Initiate the order

Configuration software



- ✓ Enter applicator parameters, e.g. speed
- ✓ Specify applicator handling, e.g. start inhibit, twin labelling
- ✓ Activate and parameterize peripheral components, e.g. printer and print time
- ✓ Serve several applicators from one source