

LEGI-AIR 4050E

Energy-efficient all-rounder for high-speed applications in logistics and manufacturing

- + Reduced compressed air consumption and low wear
- + Large selection of applicators, tamps and print modules
- + Also ideal for cartons of different heights on the conveyor belt
- + Dispensing cycle rate up to 240 labels/min
- + Achieves print speeds of up to 400 mm/s
- + Label size min. 12.5 x 7 mm, max. 160 x 210 mm

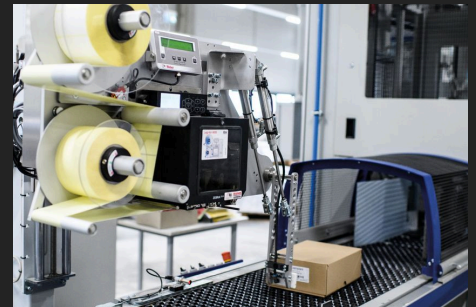


1,500 APPLICATOR VARIANTS FOR ALL POSITIONS AND FORMATS

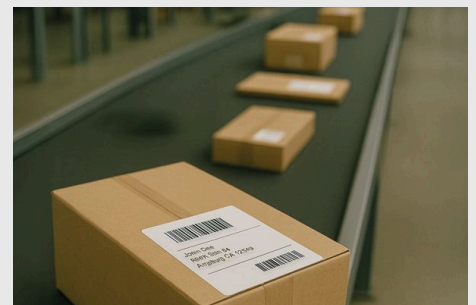
The Legi-Air 4050E is a rugged, compact print-apply labeling system with a wide range of options. Thanks to a consistently modular design and more than 1,500 applicator variants, the system can be tailored to your specific application. The many available and very robust applicators support any labeling position and speed. Print engines from all leading manufacturers are available for printing the labels.

The industrial labeling system is designed with no scheduled-wear maintenance parts. Components are replaced only as needed. Only the installed print engine must be serviced in accordance with the respective manufacturer's specifications.

Legi-Air 4050E comes with an optional n-controller that is OPC UA-compatible (Open Platform Communications United Architecture). This industry 4.0 interface enables advanced connectivity with other devices and the exchange of information that goes beyond simple signals. If required, a bad-tag reject arm is available, which automatically ejects faulty labels and removes them from the conveyor line.

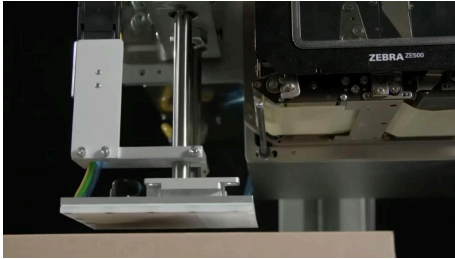


APPLICATIONS



LEGI-AIR 4050E

SPECIAL FEATURES



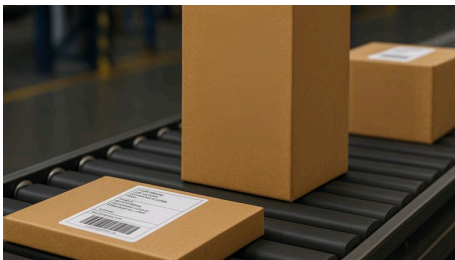
REDUCED COMPRESSED AIR CONSUMPTION AND LOW WEAR

The modulated vacuum reduces compressed air consumption by up to 80 % and integrated sensors permanently measure the pressure. If necessary, the valve technology adjusts. The pneumatics are easily accessible outside the system and the two compressed air circuits are colour-coded for better differentiation. The motorised operation of the winder and unwinder means that the integrated print module wears less, while at the same time the prints are extremely precise.



OVER 1500 APPLICATORS FOR EVERY LABEL SIZE AND POSITION

Whether single-sided, double-sided or corner wrap application - a wide range of applicators and tamps are available for applying labels to products, packaging and pallets. Single-sided pallet labeling with an extra-long dispensing stroke or the labeling of uneven product surfaces is also possible. The Quick Change option is available for a very quick change to a different label size.



LABELING BOXES OF VARYING HEIGHTS ON THE CONVEYOR BELT

In combination with our SL applicator—an intrinsically safe servo linear applicator with a consistently lightweight design—Legi-Air 4050E is ideal for high-speed labeling with varying product heights and shapes in logistics. It uses a high-precision distance sensor that determines the distance to the product without contact and then automatically adjusts the applicator's extension path so that the label is always applied at the optimum distance.



CONVENIENT HANDLING VIA TOUCH DISPLAY

The Legi-Air 4050E is easy to operate via the multilingual 7" LCD touch display. Fault diagnostics, productivity, maintenance status and events can also be viewed.



MODULAR PRINT MODULE CONCEPT INCLUDING RFID

The print & apply labeling system can be combined in all variants with a wide range of print modules from well-known manufacturers. Replacing one print module with another is possible at any time without difficulty. For programming and printing smart labels, an RFID print module is available. This supports all current RFID standards (UHF).

LEGI-AIR 4050E

TECHNICAL SPECIFICATIONS

APPLICATION DATA

Label position	Side; Top; Front; reverse side
Labeling mode	in stop mode; throughfeed ¹
Label application rate max.	240 1/min ²
Positioning accuracy (+/-)	0.8 mm ³
Label size min. (WxL)	12.5 x 7 mm ⁴
Label size max. (WxL)	160 x 210 mm ⁵
Label roll diameter max.	350 mm ⁶
Label roll core diameter (optional)	100 mm; 152 mm

¹ Depending on the selected applicator ² depending on label size, text change, dispense stroke ³ 0.5 mm precision applicator ⁴ Smaller labels possible with special stamp
⁵ Larger labels possible with special stamp ⁶ Up to 600 linear meters

FEATURES

Technology	Pneumatic
Mounting orientation independence	yes
Label unwinding	Stepper motor
Label rewinding	Stepper motor
Label shortage warning	yes
Web break detection	optional

HMI

HMI version	Touch display
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PHYSICAL ASPECTS

System dimensions (HxWxL)	682 x 701 x 836 mm
Weight	75 kg ¹
IP ingress protection	IP 20
Approvals	CE
Rel. humidity non-condensing	15 - 95 %
Ambient temperature	2 - 35°C
Noise level	72 dB ²

¹ depending on the version ² A-weighted sound pressure level

CONNECTIONS

Supply voltage	92 - 263 V
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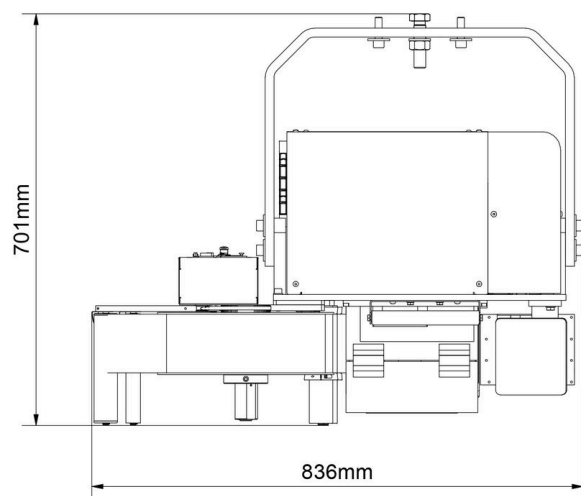
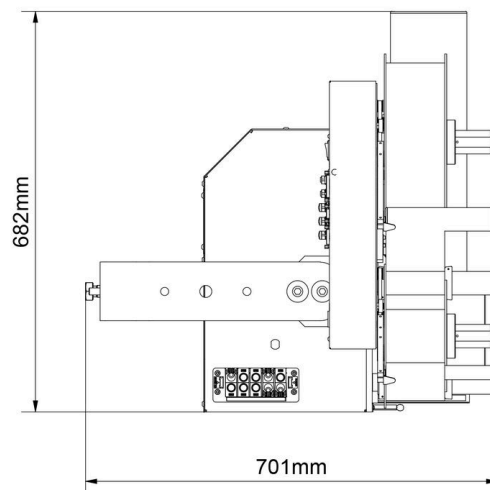
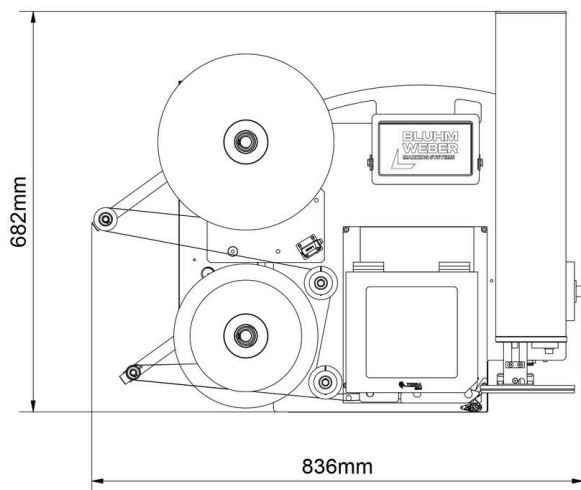
CONNECTIONS

Mains frequency	50 - 60 Hz
Current	5 A
Compressed air connection	6 bar ^❶
Interfaces	USB; RS232; Applicator port; Ethernet IPv4

^❶ in accordance with DIN ISO 8573-1

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TECHNICAL DRAWINGS



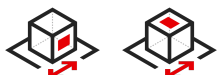
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APPLICATOR OPTIONS



LK APPLICATOR

Particularly robust, universal linear applicator



Function	Tamp-Blow, Tamp-On, Wipe-On
Drive concept applicator	Pneumatic
Dispensing stroke length	100 mm - 600 mm



RO APPLICATOR

Universal rotary applicator for industrial applications



Function	Tamp-Blow
Drive concept applicator	Pneumatic
Rotation arm length	250 mm - 420 mm



SL APPLICATOR

Electric high-speed linear applicator for precise labeling



Function	Tamp-Blow
Drive concept applicator	Servo motor
Dispensing stroke length	50 mm - 600 mm



LN APPLICATOR

Robust linear applicator with proven pneumatic technology



Function	Tamp-Blow, Tamp-On, Wipe-On
Drive concept applicator	Pneumatic
Dispensing stroke length	100 mm - 600 mm



SR APPLICATOR

Highly dynamic rotary applicator with precise servo drive



Function	Tamp-Blow
Drive concept applicator	Servo motor
Rotation arm length	500 mm



EL APPLICATOR

Purely electric linear applicator for fast labeling



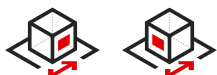
Function	Tamp-Blow, Tamp-On, Wipe-On
Drive concept applicator	Stepper motor
Dispensing stroke length	250 mm - 450 mm

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ES APPLICATOR

Compact rotary applicator with electric drive

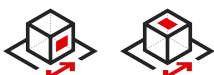


Function	Tamp-Blow
Drive concept applicator	Stepper motor
Rotation arm length	250 mm - 400 mm



KR APPLICATOR

Compact, precise linear applicator for tight installation spaces



Function	Tamp-On, Tamp-Blow
Drive concept applicator	Pneumatic
Dispensing stroke length	100 mm - 400 mm



ENL APPLICATOR

Extra-long linear applicator for large labeling ranges



Function	Tamp-Blow, Tamp-On, Wipe-On
Drive concept applicator	Pneumatic
Dispensing stroke length	820 mm - 1200 mm



SW APPLICATOR

Swing applicator at a 90° angle to the base plate



Function	Tamp-Blow
Drive concept applicator	Pneumatic
Dispensing stroke length	312 mm

LEGI-AIR 4050E

PRINTER OPTIONS



ZEBRA ZE511

Highest printing performance for industrial applications

Print width up to	104 mm
Print speed up to	457 mm/sec
Printhead resolution	203 dpi, 305 dpi, 609 dpi
Printing process	Thermal transfer, Thermal direct, RFID



ZEBRA ZE521

Highest printing performance for industrial applications

Print width up to	168 mm
Print speed up to	356 mm/sec
Printhead resolution	203 dpi, 305 dpi
Printing process	Thermal transfer, Thermal direct, RFID



SATO S84NX

Precise, fast and reliable industrial printing

Print width up to	104 mm
Print speed up to	406 mm/sec
Printhead resolution	203 dpi, 305 dpi, 609 dpi
Printing process	Thermal transfer, Thermal direct, RFID



SATO S86NX

Precise, fast and reliable industrial printing

Print width up to	167.5 mm
Print speed up to	355.6 mm/sec
Printhead resolution	203 dpi, 305 dpi
Printing process	Thermal transfer, Thermal direct, RFID



CAB PX Q4

High-precision print module for automated labeling in industry and logistics

Print width up to	108.4 mm
Print speed up to	300 mm/sec
Printhead resolution	203 dpi, 305 dpi, 609 dpi
Printing process	Thermal transfer, Thermal direct



CAB PX Q6

High-precision print module for automated labeling in industry and logistics

Print width up to	168 mm
Print speed up to	250 mm/sec
Printhead resolution	203 dpi, 305 dpi
Printing process	Thermal transfer, Thermal direct

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NOVEXX XDM 944

Maximum speed for industrial labeling

Print width up to	106 mm
Print speed up to	400 mm/sec
Printhead resolution	300 dpi
Printing process	Thermal transfer, Thermal direct



NOVEXX XDM 945

Maximum speed for industrial labeling

Print width up to	128 mm
Print speed up to	350 mm/sec
Printhead resolution	305 dpi
Printing process	Thermal transfer, Thermal direct



NOVEXX XDM 946

Maximum speed for industrial labeling

Print width up to	160 mm
Print speed up to	300 mm/sec
Printhead resolution	305 dpi
Printing process	Thermal transfer, Thermal direct



LDM 180

Efficient dispensing module for use without printing

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ACCESSORIES



THREE-COLOR STACK LIGHT

Standard three-color stack light for quick, unambiguous indication of device status. No blind spots thanks to 360° emission. This ensures that the current operating status is clearly visible at all times, even from a greater distance.



PRODUCT SENSOR KIT WITH RETRO-REFLECTIVE SENSOR

The product sensor kit with retro-reflective sensor enables reliable product detection and automatic triggering of the labeling cycle. Ideal for easy integration into production and conveyor systems.



KIT INSTALLATION BARS

The installation bar kit simplifies anchoring stands 80 and 120 with base plates to the floor. The installation bars are bolted to the base plate and stabilize the stand, including the marking system, during positioning at the installation site. This protects the stand and marking system from tipping over during installation and supports safe floor anchoring.



K-STAND 120 RUBBER FEET & FLOOR MOUNTING BRACKETS

K-stand with vertical bar without spindle adjustment, rubber feet, and floor mounting brackets for securing the stand position. Recommended for permanently installed marking systems where position retention is required.



K-STAND 120 SWIVEL CASTERS

Mobile K-stand with vertical bar without spindle adjustment and smooth-running swivel casters. Designed for short-term repositioning of marking systems during service or setup operations.



K-STAND 120 LEVELING CASTERS

K-stand with vertical bar without spindle adjustment and integrated leveling casters. Combines flexible mobility with secure stability during the marking process.



K-STAND 120 RUBBER FEET (SHORT)

Robust K-stand with vertical bar without spindle adjustment in a shortened version and rubber feet. Suitable for stationary applications at low marking heights where additional stability through floor anchoring is not required.



K-STAND 120 SWIVEL CASTERS (SHORT)

Mobile K-stand with vertical bar without spindle adjustment in a shortened version and smooth-running swivel casters. Enables flexible use and easy repositioning of marking systems low marking heights.



K-STAND 120 SPINDLE RUBBER FEET

K-stand with vertical bar including spindle adjustment and rubber feet. Ideal for stationary applications requiring manual height adjustment. The spindle adjustment allows for easy and precise adjustment of the working height.



K-STAND 120 SPINDLE RUBBER FEET & FLOOR MOUNTING BRACKETS

K-stand with vertical bar including spindle adjustment, rubber feet, and additional floor mounting brackets for securing the stand position. Provides stability while allowing precise height adjustment.



K-STAND 120 SPINDLE SWIVEL CASTERS

Mobile K-stand with vertical bar including spindle adjustment and swivel casters. Suitable for applications requiring frequent changes in the position and height of the marking system during service or setup operations.



K-STAND 120 SPINDLE LEVELING CASTERS

K-stand with vertical bar including spindle adjustment and integrated leveling casters. Enables flexible location and height adjustments while ensuring secure stability during the marking process.

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K-STAND 120 SPINDLE RUBBER FEET (SHORT)

K-stand with vertical bar, shortened spindle adjustment, and rubber feet. Ideal for stationary applications requiring manual height adjustment at low marking heights where additional stability through floor anchoring is not required.



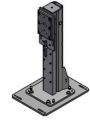
K-STAND 120 SPINDLE SWIVEL CASTERS (SHORT)

Mobile K-stand with vertical bar, shortened spindle adjustment, and casters. Suitable for applications requiring frequent position and height changes of the marking system at low marking heights during service or setup operations.



STAND 120 BASE PLATE BASIC

Stable vertical bar without spindle adjustment, featuring a heavy-duty base plate for the fixed installation of marking systems. Suitable for applications with a defined, non-adjustable mounting height and high stability.



STAND 120 BASE PLATE BASIC (SHORT)

Stable vertical bar without spindle adjustment in a shortened version with a solid base plate for the permanent installation of marking systems. Suitable for applications with a defined, fixed mounting height and high stability at low marking heights.



STAND 120 SPINDLE BASE PLATE

Robust vertical bar including spindle adjustment and a heavy-duty base plate for the permanent installation of marking systems. Combines high stability with the ability to manually adjust the height.



STAND 120 SPINDLE BASE PLATE (SHORT)

Stable vertical bar with shortened spindle adjustment and a solid base plate for the permanent installation of marking systems. Combines high stability with the option of manual height adjustment at low marking heights.



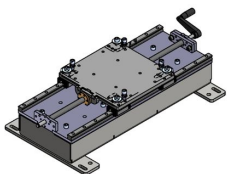
STAND 120 WITH H-BASE AND DEPTH ADJUSTMENT

The H-base with integrated depth adjustment expands the Stand 120 with a stable yet flexibly adjustable support solution. The vertical bar is mounted directly onto the adjustment unit. The adjustment range of 380 mm enables precise positioning to suit different installation situations.



ROTARY PLATFORM FOR STAND 120

The manually adjustable rotary platform allows marking systems to be rotated by 90° into a service position outside the hazard area for maintenance and service work. The rotary platform is only permitted on Size 80 and Size 120 stands with a base plate that is properly anchored to the floor in accordance with applicable standards.



HORIZONTAL ADJUSTMENT UNIT 380 MM FOR VERTICAL BAR 80/120

The base plate with horizontal adjustment unit enables precise fine positioning of marking systems over an adjustment range of 380 mm directly at the point of use.



KIT U-ARM ANGLE ADJUSTMENT FOR EBL1/4

The angle adjustment unit extends the adjustment range of the U-arm and enables additional tilt adjustment beyond the integrated $\pm 10^\circ$. It is mounted between the U-arm and the application unit. The angle adjustment unit is intended for upright installation positions.



KIT HVEASY POSITIONING DRIVE

The HVEasy electric height adjustment is optionally available for stand sizes 80 and 120. It enables precise motorized height adjustment, supports ergonomic workflows, and allows fast changeovers for varying product formats.



POSITION DISPLAY

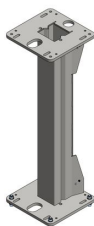
The mechanical-digital position display enables precise and repeatable height positioning of the vertical bar. Changes to the mounting height can be read and adjusted accurately, reducing setup times and improving repeatability during format changes.

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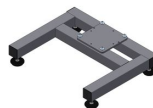
PEDESTAL 500

An optional base module (pedestal) with a height of 500 mm is available for stand sizes 80 and 120 to achieve higher mounting positions. Use is only permitted in combination with a K-stand with rubber feet and floor mounting brackets or with a base plate.



PEDESTAL 1000

An optional base module (pedestal) with a height of 1000 mm is available for stand sizes 80 and 120 to achieve higher mounting positions. Use is only permitted in combination with a K-stand with rubber feet and floor mounting brackets or with a base plate.



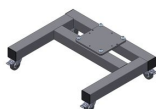
U-BASE WITH RUBBER FEET

The U-base is an optional alternative to the standard K-base and is bolted directly to the vertical bar. In the version with rubber feet, it is suitable for stationary applications. Recommended for fixed installation locations where increased stability through floor anchoring is not required.



U-BASE WITH RUBBER FEET & FLOOR MOUNTING BRACKETS

The U-base is an optional alternative to the standard K-base and is bolted directly to the vertical bar. The version with rubber feet and additional floor mounting brackets is used to secure the stand position.



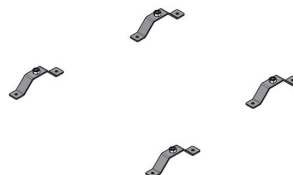
U-BASE WITH SWIVEL CASTERS

The U-base is an optional alternative to the standard K-base and is bolted directly to the vertical bar. The version with swivel casters is designed for short-term repositioning of marking systems during service or setup operations within the immediate work area; not suitable as a transport solution for longer distances.



U-BASE WITH LEVELING CASTERS

The U-base is an optional alternative to the standard K-base and is bolted directly to the vertical bar. The version with leveling casters combines flexible mobility during service and setup operations with secure stability during the marking process.



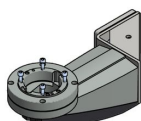
KIT FLOOR MOUNTING BRACKETS STAND 80/120

The floor mounting bracket kit (4 pieces) is intended as an addition to rubber feet and is used to secure the stand position to the floor. Bolting the brackets prevents unintended movement of the stand but does not constitute floor anchoring for increased stability requirements.



MOUNTING KIT ACCESSORIES

The accessory mounting kit enables the secure and flexible installation of accessory components on stands of sizes 80 and 120. It provides a stable interface for integrating additional modules and functional units directly onto the stand, such as service units, terminal blocks, and alarm lamps. Stainless steel version.



MOUNTING KIT LEGI-BOX FOR STAND 120

The mounting kit enables the safe and ergonomic installation of the Legi-Box on a size 120 stand. The integrated swivel joint allows the Legi-Box to be flexibly positioned, ensuring that operation and accessibility can be optimally adapted to the specific application.



MOUNTING KIT ALARM LAMP

The alarm lamp mounting kit enables the secure and flexible installation of two alarm lamps on stands of sizes 80 and 120. It provides a stable interface between the alarm lamps and the stand. Stainless steel version.



MOUNTING KIT ELECTRICAL CABINET 300

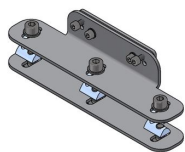
The mounting kit enables the secure and space-saving installation of electrical cabinets on stands of sizes 80 and 120. It is designed for electrical cabinets with a width of 300 mm and provides a stable, form-fitting connection to the stand structure.



MOUNTING KIT ELECTRICAL CABINET 400

The mounting kit enables the secure and space-saving installation of electrical cabinets on stands of sizes 80 and 120. It is designed for electrical cabinets with a width of 380–400 mm and provides a stable, form-fitting connection to the stand structure.

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MOUNTING KIT ALUMINUM PROFILE

The mounting kit enables the secure and stable installation of aluminum profiles on stands of sizes 80 and 120. It provides a reliable connection between the stand and the profile structure and allows the flexible integration of additional components or superstructures.

LEGI-AIR 4050E



YOUR RELIABLE PARTNER

+ PERSONAL POINT OF CONTACT

Your personal point of contact from our team will listen to you and explain the options.

+ MADE IN GERMANY

With our Made in Germany production, we guarantee quality and availability.

+ APPROPRIATE SOLUTION

We develop the optimal solution for your requirements, independently of technology.

+ SEAMLESS SERVICE

Our comprehensive service network is always on hand to help.

+ REGIONALLY ROOTED, GLOBALLY CONNECTED

As a family-owned company with branches worldwide, customer relations are always our top priority.

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