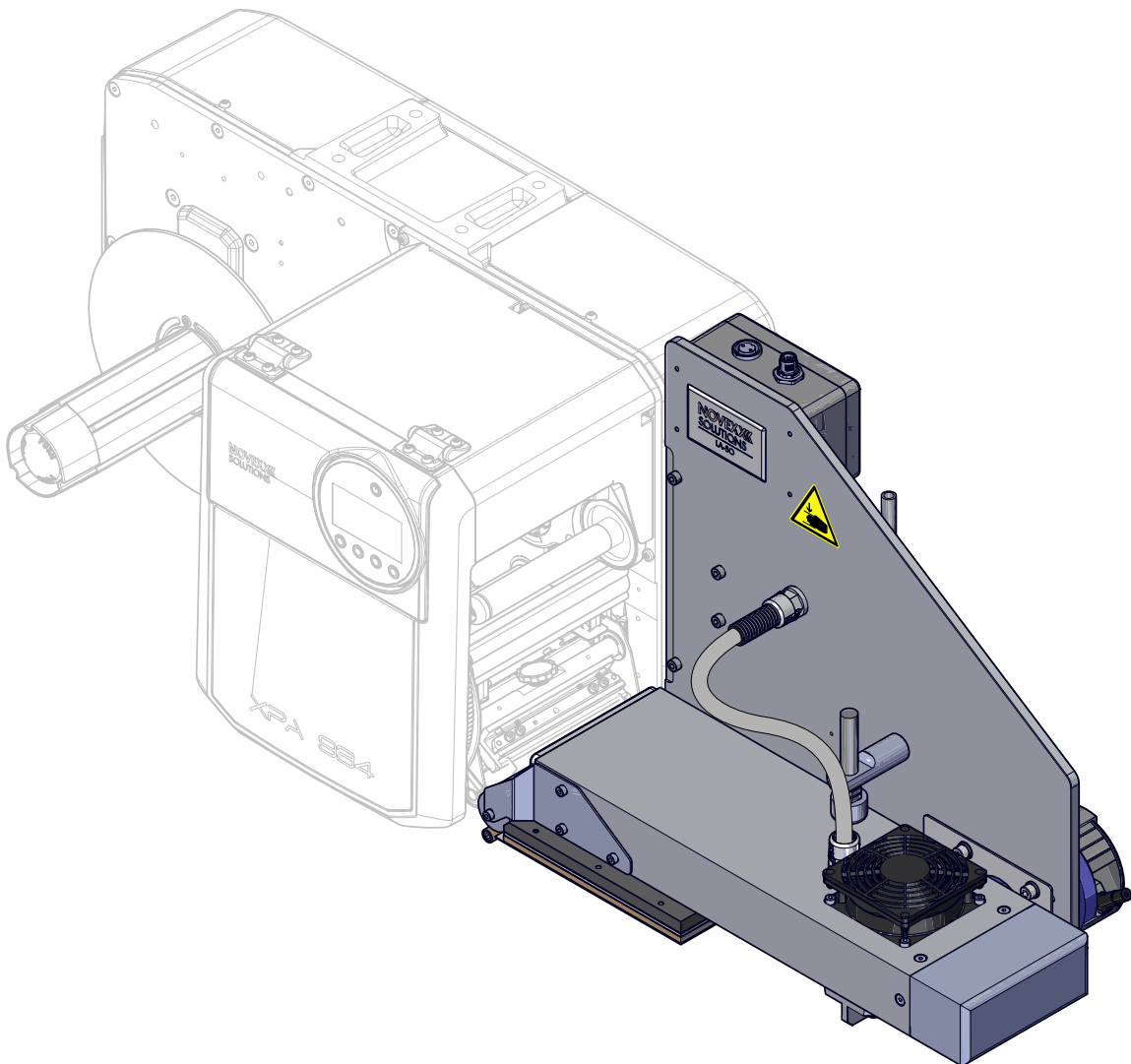


OPERATING MANUAL

LA-SO Applicator



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Please Note

GENERAL INFORMATION

Validity of this manual and required compliance

Contents

The following manuals are available for the applicator LA-SO:

Manual	Target group	Medium	Availability
Operating manual	Operating personnel Service personnel	PDF file	NOVEXX Solutions website www.novexx.com
Service manual	Service personnel		NOVEXX Solutions Partner Portal https://partner.novexx.com
Spare parts catalogue			

The present *operating manual* describes the installation and operation of the named applicator. For safe and proper operation of the print- & apply system with attached applicator, it is indispensable to consult the operating manual for the relevant print- & apply system too.

For technical questions not covered in this manual:

- ▶ Follow the instructions of the service manual for the applicator and for the applied print & apply system or
- ▶ Request a service technician from our sales partner.

NOVEXX Solutions customer service department is available especially for configuration settings and malfunctions.

Liability

NOVEXX Solutions reserves the right:

- To make changes in design and components, and to use equivalent other parts than those specified in line with technological progress.
- To change information in this manual.

Any obligation to extend these changes to machines previously delivered is excluded.

Copyright

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www.novexx.com

How information is represented

Explanation of symbols

To enhance readability and make information easier to find, different types of information are identified:

► Instruction with no order of tasks assigned

1. Numbered instructions introduced by preceding text
2. The specified order must be followed!

|| Note.

- Enumeration of features
- Other feature



The Experts symbol identifies activities that are reserved exclusively for qualified and specially trained personnel.

Warning Notes

Warning notes are specially highlighted:



WARNING!

Warning notes with the signal word **WARNING** refer to risks that can result in severe or fatal injuries! The note contains safety measures to protect affected persons.

- Instructions must be followed without exception.

CAUTION!

Warning notes with the signal word **CAUTION** refer to risks that can result in property damage or personal injury (minor injuries). The note contains instructions for preventing damage.

- Instructions must be followed without exception.

Illustrations

Illustrations appear in the text where required. References to the illustrations are shown in brackets, if necessary (see table).

Reference to illustration	Application
none	<ul style="list-style-type: none"> • Only one illustration • Reference to the illustration is obvious • No position number in the illustration
(A)	<ul style="list-style-type: none"> • Only one illustration • Reference to the illustration is obvious • Position number in the illustration
(see fig. above)	<ul style="list-style-type: none"> • Several illustrations • No position number in the illustration

Reference to illustration	Application
(see fig. above, pos. A)	<ul style="list-style-type: none">• Several illustrations• Position number(s) in the illustration

Table 1: Different references to illustrations.

Normally the machine is shown as the *left version*.

Parameters

Parameters in the parameter menu are represented in the format **Menu name > Parameter name** in grey type.

FOR YOUR SAFETY

Intended use

**WARNING!**

The device described here is „partly completed machinery“ as defined by machinery directive 2006/42/EC!

- ▶ Do not set the applicator in operation until it has been determined that the machine in which the applicator will be installed meets the requirements of directive 2006/42 EC, appendix IIA.

|| Although the applicator is “partly completed machinery” under the terms of the machinery directive, ||
for reasons of clarity it is called „machine“ or “applicator” in this manual. ||

The LA-SO is a device for automatic application of self-adhesive labels that are supplied by the print & apply system XPA 93x. The LA-SO is firmly attached to the print & apply system.

The advantage of the LA-SO is that it can be used to apply labels to the fronts of products, which is not possible using classic tamp-on applicators (e.g., LA-TO).

Furthermore, the LA-SO can also apply labels to the sides or tops of products moving at speeds faster than 20 m/min.

Any other type of or more extensive application will be considered non-intended use. NOVEXX Solutions shall assume no liability for damage resulting from non-intended use of the machine.

Information and qualification

Ensuring the necessary qualification

- Only fully trained and authorised personnel are permitted to operate, adjust and maintain the machine.
- Service work must only be performed by qualified and appropriately trained technical specialists (service technicians) or the customer service department.
- Areas of responsibilities for operating and servicing the machine must be clearly defined and consistently observed.

Qualification for operation

The instruction provided for the operating personnel must ensure:

- That the operating personnel can use the machine independently and without danger.
- That the operating personnel can rectify minor operating faults (for example a paper jam) independently.
- At least 2 persons should be instructed in operation.
- Have a sufficient quantity of label materials available for tests and instruction.

Making note of information

The device can only be operated safely and efficiently by complying with all of the requisite information!

- Carry out the installation, connection, programming, setting, and repairing of the machine exclusively in accordance with the specifications in this manual.
- Before beginning operation, read this operating manual and the user manual of the machine to which the applicator is attached and follow all of the instructions.
- Observe all additional safety and warning information given on the device.
- Only technically knowledgeable persons are permitted to operate the device and make settings on it.

Any product liability and warranty claims will not be valid unless the machine is operated according to the instructions in the operating manual.

Keep product information at hand

This operating manual

- must remain readily available for operating personnel at a location near to the machine.
- The safety and warning symbols and messages on the machine must be kept in a clean and legible state. Replace any signs that are damaged or missing.
- can be downloaded here: <https://www.novexx.com/service-and-support/user-manuals/>



Safety functions



WARNING!

Danger of personal injury and property damage!
Without operational safety functions and protective equipment the applicator may cause personal injury and property damage.

- ▶ Do not operate the machine without protective equipment.
- ▶ Do not operate the machine when the safety functions are deactivated.

Protective equipment

A separating protective device must be installed by the system integrator in compliance with the requirements of EN953. It could be a protective enclosure with a secured door, for example.

The separating protective equipment is not included in the scope of delivery of the machine.

Connecting an interlocking guard

- ▶ Connect the interlock switch of the safeguarding device to the connector (small fig. below) delivered with the applicator.
- ▶ Plug the connector to the switch box (fig. below, B).

|| Operation of the applicator without the described safeguarding device shall be regarded as abnormal use. NOVEXX Solutions assumes no liability for damage due to abnormal use of the printer. ||

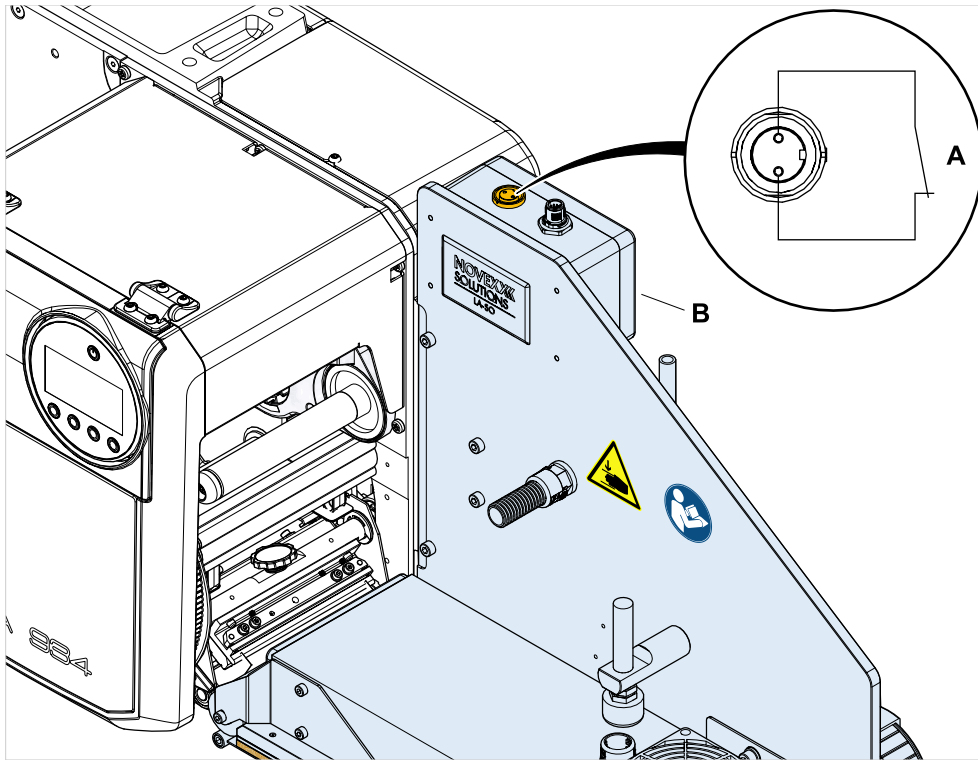


Fig. 1: Connecting the interlock switch (A) of the safeguarding device (or an emergency-stop switch) to a LA-SO.

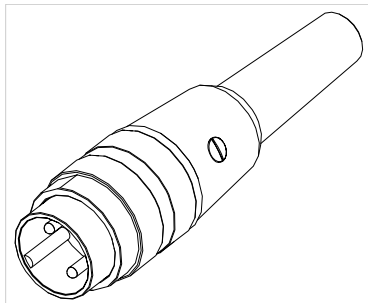


Fig. 2: Plug that comes with the applicator for connecting an interlock switch (article number: A102076).

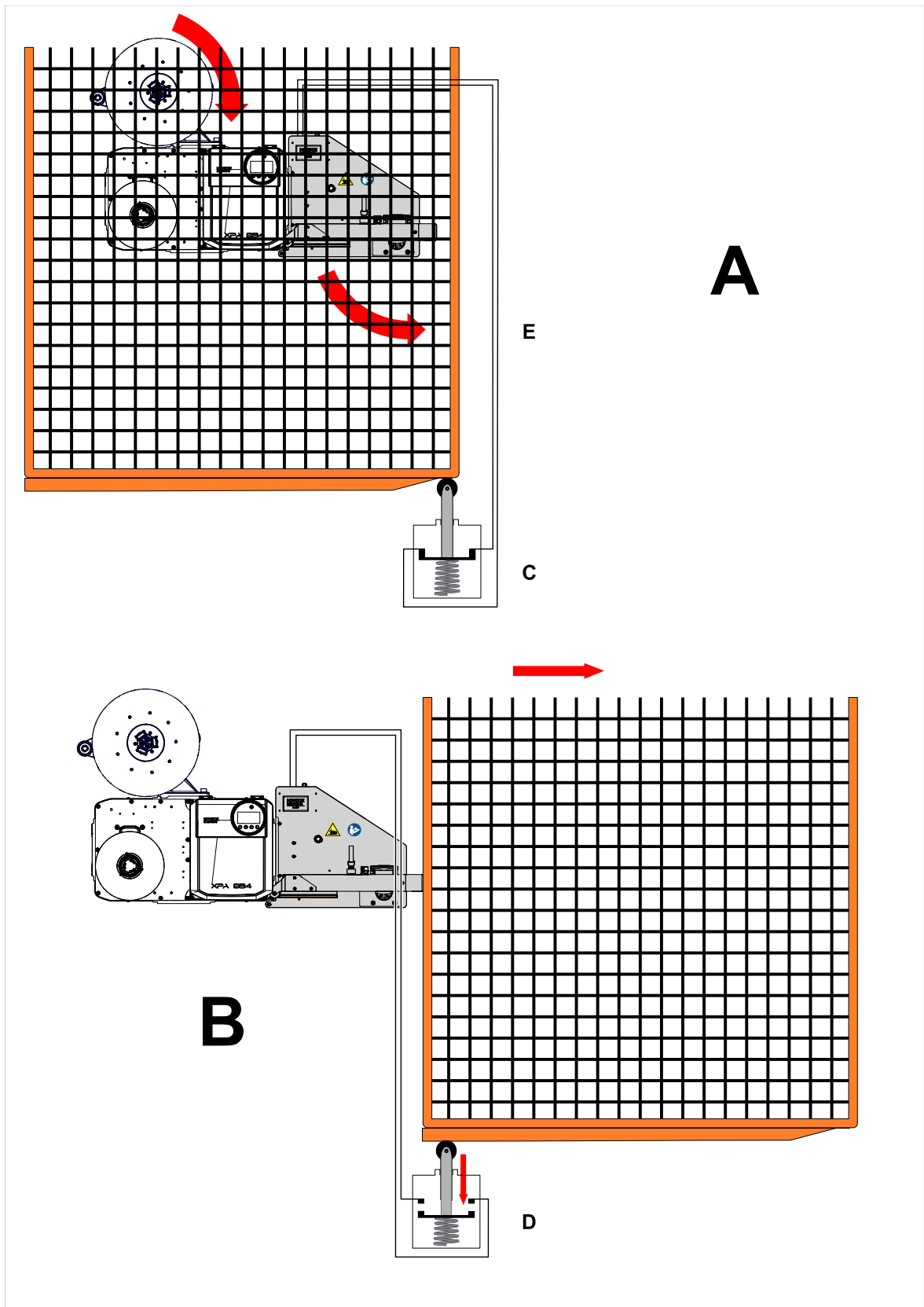


Fig. 3: Diagram of a movable interlocking guard (A: Protective guard closed. Interlock switch connected (C). Applicator is working; B: Protective guard open. Interlock switch not connected (D). Applicator stopped).

Emergency Stop

An external Emergency Stop device must be installed by the system integrator. It could be an Emergency Stop button located outside of the protective equipment, for example. The button must be pressed if a hazardous situation occurs or in the event of an emergency.

The external Emergency Stop device is not included in the scope of delivery of the machine.

Checking the safety functions

The following safety functions can be checked by the user or a service technician:

Safety function	Functional check
Emergency Stop	▶ Activate the Emergency Stop device (for example press the Emergency Stop button). The applicator must stop immediately.
Protective equipment	▶ Interrupt the safety switch circuit (for example open the safety door). The applicator must stop immediately.
Switching-on valve	▶ Switch on compressed air. The applicator swing arm moves from the end position slowly up to the home position. If the movement occurs abruptly, the switching-on valve must be adjusted by a service technician.

Table 2: Overview: Checking the safety functions

Operating safety of the machine

Installation, maintenance

**WARNING!**

Improper usage of the machine can lead to accidents, material damage and loss of production!

- ▶ When installing the machine, check for visible shipment damage. Immediately inform NOVEXX Solutions of any damage.
- ▶ When installing the machine, consider the admissible ambient conditions.
- ▶ When installing the machine, make sure that it can not tip over.
- ▶ When installing the machine, provide a supply disconnecting device and an emergency stop device.
- ▶ Install the supply disconnecting device and the emergency stop device in a way that they are easy reachable.
- ▶ Lay the connection cable and pneumatic hoses so that no one can trip over them.
- ▶ Check if all safety functions are functioning properly.
- ▶ Only put the machine into operation if it is in flawless condition.
- ▶ Only perform alterations or conversions to the machine with the consent of NOVEXX Solutions' customer service.
- ▶ Max. admissible operating air pressure: 6 bar
- ▶ Only link the applicator to devices that fulfil the ES1 circuit requirements specified in EN 62368-1.
- ▶ Fasten the pneumatic hoses in place to prevent them from whipping.
- ▶ Replace faulty pneumatic hoses immediately.
- ▶ Only put the machine into operation after at least one successful test run has been completed.
- ▶ Only use original replacement parts.

**WARNING!**

Danger of crushing between applicator and dispensing edge as well as between applicator and conveyor!

- ▶ Avoid access to the running machine by installing higher-level protective guards.

Warning of injuries due to electrical shock

**WARNING!**

The machine to which the applicator is attached works with mains voltage! Contacting electrically live components can cause lethal electrical shocks and burns.

- ▶ Switch the machine off before cleaning and servicing.
- ▶ Keep the machine dry.
- ▶ If a liquid gets into the machine, switch off the machine immediately. Notify a service technician.
- ▶ Only link the applicator to devices that fulfil the ES1 circuit requirements specified in EN 62368-1.
- ▶ In case of emergency switch off the machine.

Warning of injury hazards from mechanical components



WARNING!

Danger of crushing between the machine and conveyor equipment and between movable parts of the applicator!

- ▶ The machine may only be operated with higher-level protective equipment.
- ▶ Never remove or bypass the protective equipment that is designed to prevent reaching in while the machine is in operation.



WARNING!

Danger of injury due to moving and rapidly rotating parts!

- ▶ Maintain a safety clearance from the machine when it is in operation.
- ▶ Never reach into a machine that is running.
- ▶ Switch off the machine before making any mechanical adjustments.
- ▶ Keep clear of the area around moving parts even when the machine is stopped if there is any possibility of the machine starting up.



WARNING!

Entanglement hazard!

- ▶ When working in the vicinity of machines in operation, do not wear ties, loose clothing items, jewellery, wrist watches or similar objects on your body.
- ▶ Long hair must be kept in a hair net and must not be worn loose.



WARNING!

Tripping hazard!

- ▶ Lay the connection cable and pneumatic hoses (if fitted) so that no one can trip over them.

Warning notes on LA-SO

CAUTION!

Warning notes on the machine provide important information for the operating personnel.

- ▶ Do not remove warning notes.
- ▶ Replace missing or illegible warning notes.

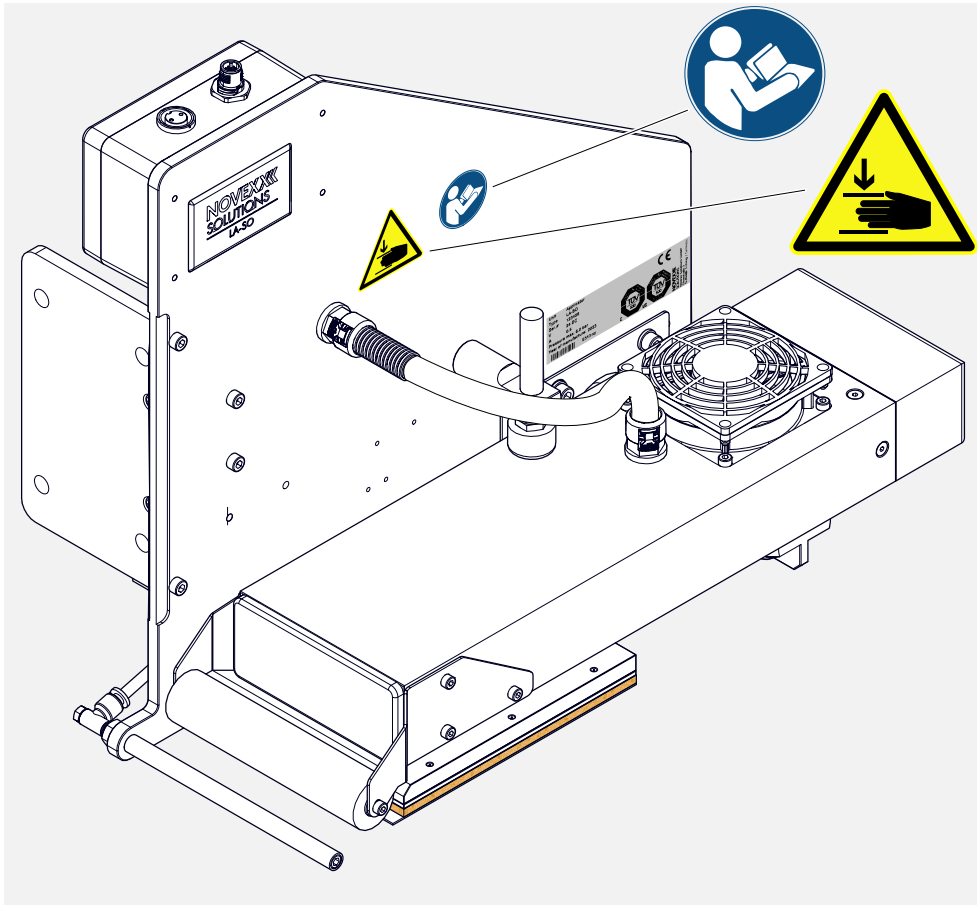




Fig. 4: Warning note on the LA-SO.

Warning note	Meaning	Article no.
	The warning symbol “Danger of crushing” warns of dangerous movements of the device that could lead to crushing. Switch off the device previously.	A103530
	The blue label “Read manual” demands that operators read the user manual.	A5331

Product description

TECHNICAL DATA

Label Material

Type	Self-adhesive (paper, plastic materials) ^[1]
Material width	80-150 mm
Material length	80-210 mm

Label Rate

Label on front	max. 20 labels/min
Label on top/side	max. 30 labels/min

|| Rate depends on: pressure speed, pressure rate, product distance, product speed, label size and label material. ||

Example:

With the application shown afterwards (tab. and fig. below), a rate of 18 labels/min is possible.

|| If one of the settings is changed, all other settings must be fit, what may also change the label rate. ||

Setting	Value
Distance LA-SO centre - Product	145 mm
Label length	152.4 mm
Apply time t_{Appl}	500 ms
Product length	400 mm
Product distance	min. 230 mm
Print speed	200 mm/s
Product speed	15 m/min

Table 3: Settings for example application

¹ As a result of static charge and friction effects, plastic materials may tend to crease during the dispensation step. Therefore, plastic materials must be tested under application conditions before being used in production.

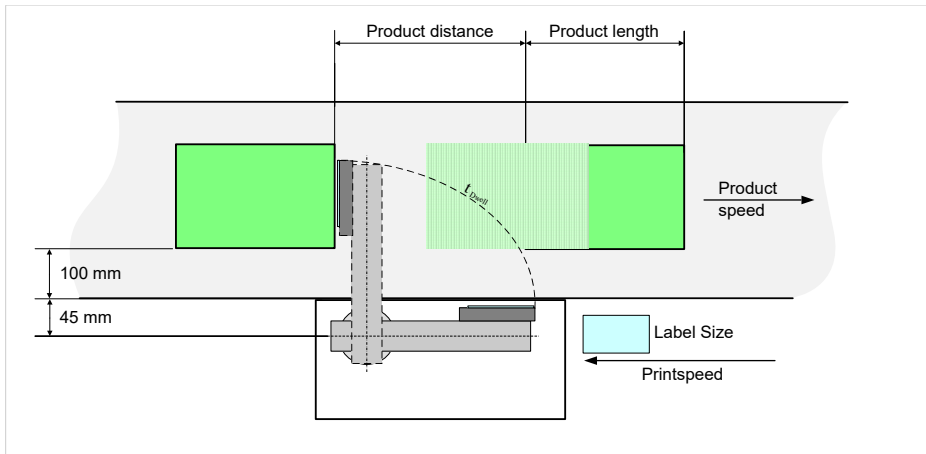


Fig. 5: LA-SO example application (schematic).

Application Process

Application distance ^[2]	Label on front: approx. 10 cm Label on top/front: approx. 20 cm
Application direction	Side labelling: label on front or side Top labelling: label on front or top
Tolerance of label position	±2 mm
Product speed during application	Label on front: max. 15 m/min Label on side/top: max. 30 m/min
Air stream	Blower

|| When labels are used that are smaller than the pressure plate, the exposed area of the pads can be added to the application distance. ||

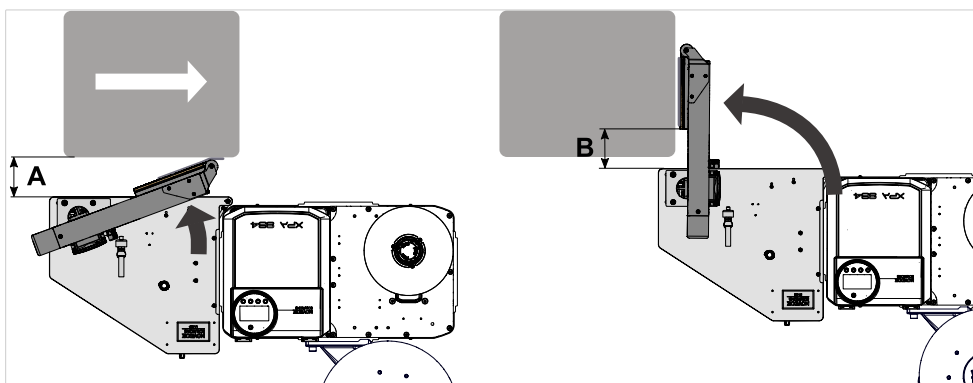


Fig. 6: Application distance. Left: label on side. Right: label on front.

² Distance between machine and label

Dimensions

W x H x D	240 x 355 x 500 mm
Weight	6.5 kg

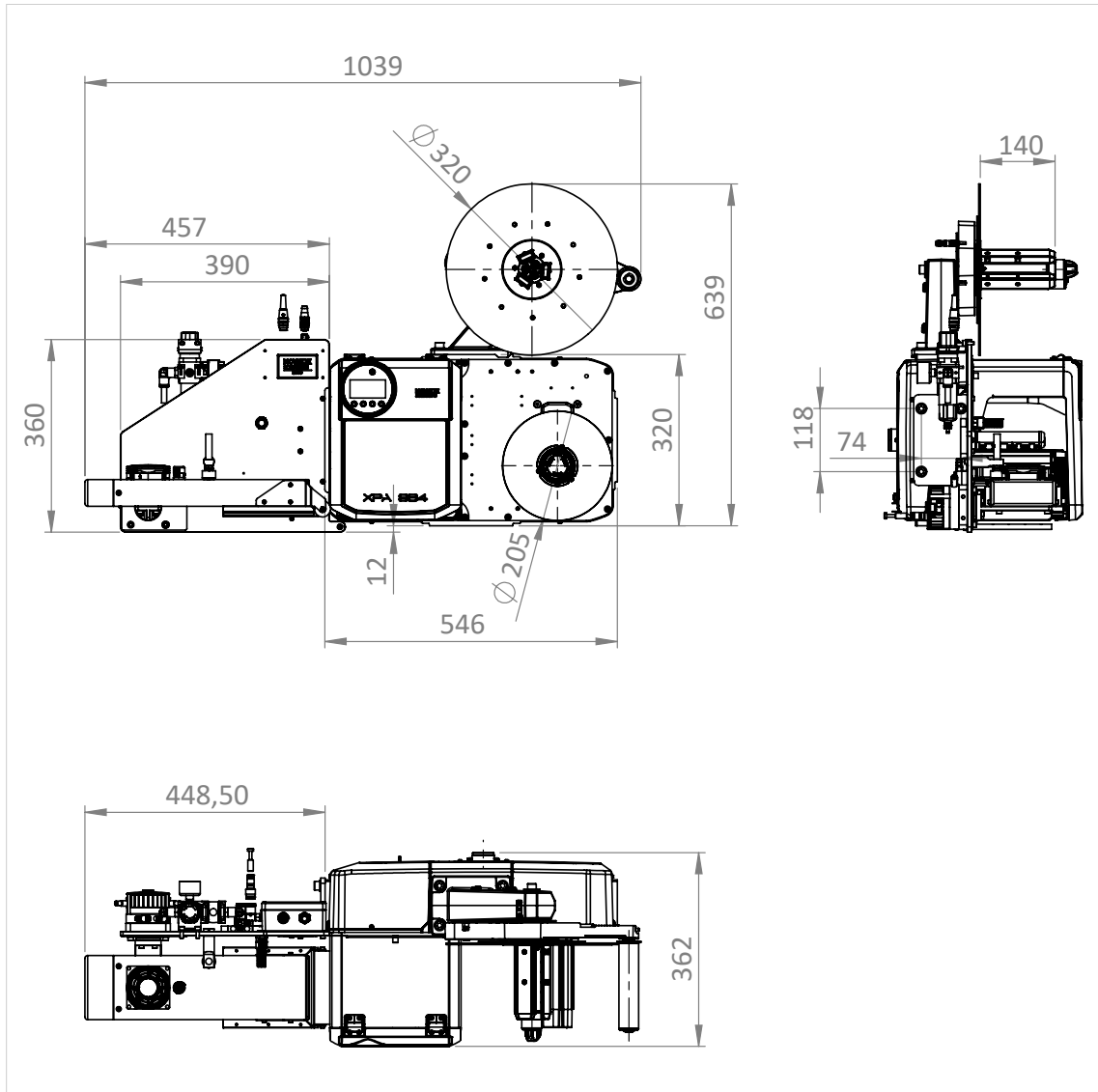


Fig. 7: Dimensions LA-SO at XPA 93x LH.

Connections

Power supply	Via 8IO board
Power consumption	15 VA
Supply air pressure	4-6 bar
Air consumption	approx. 0.3 l/stroke

Ambient Conditions

Operating temperature	5-35°C
Storage temperature	0-70°C
Air humidity	45-75% non-condensing
Noise emissions	<70 dB(A)
Protection rating	IP 21

OVERVIEW

Product Name

LA-SO is the abbreviation for "Label Applicator Swing-On". The abbreviation "SO" (swing on) distinguishes this applicator from other application techniques such as "blow on" or "tamp on".

Intended Use

The LA-SO is a device for the automatic application of self-adhesive labels fed from an XPA 93x print & apply system. The LA-SO is permanently connected to the print & apply system.

Designs

The LA-SO is available in both right-handed and left-handed versions.

System Requirements

- Compressed air
 - Compressed air connection must be available
 - Mounting surface for the service unit must be available
- XPA 93x
 - XPA 93x with standard dispensing edge and firmware version 1.01 or higher
 - || Displaying the firmware version: Info > System > Module FW. Vers. > System version ||
 - XPA 93x and LA-SO must be both RH or both LH
 - Installed 8IO board

Functionality

 Video: “Frontal application and on top application from above”.

 Video: “Frontal and lateral application from the side”.

|| The second video shows the LA-SO at an ALX 92x, but the working principle is the same as with a XPA 93x. ||

The LA-SO is a supplementary module for mounting at a print & apply system XPA 93x. It takes over labels from the dispensing edge of the XPA 93x and moves them in a curved movement to the product, where it presses the labels on (frontside) or rolls it on (side, top side).

The advantage of the LA-SO is that it can apply labels to the front side (fig. below, C) of a product, which is not possible with classic tamp-on applicators (e.g. LA-TO).

Furthermore, the LA-SO can label products that are moving with more than 20 m/min on the side or top side.

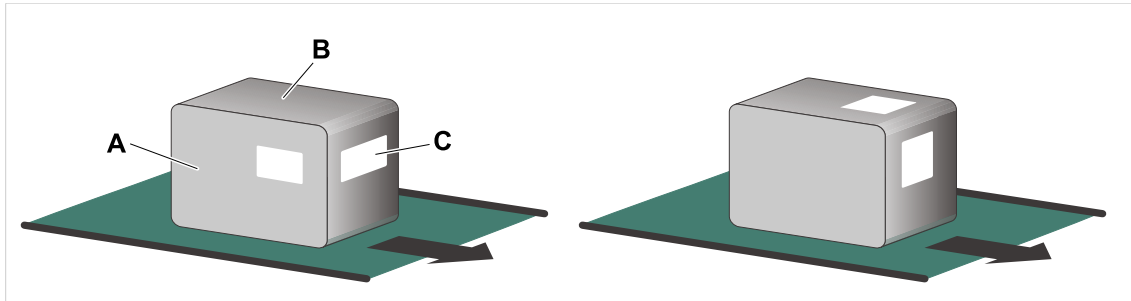


Fig. 8: Designations for the sides of the product (A: Side; B: Top; C: Front). Possible label positions for side labelling (left figure) and top labelling (right figure).

Initially, the LA-SO is in idle mode and the swivel arm is folded inwards.

As soon as a start signal is received from the product sensor, the XPA 93x prints and dispenses a label (B). The stream of compressed air emitted from the support air nozzle (A) presses the label against the pressure plate (C) of the LA-SO. The label is held in place there by a vacuum created by the fan on the swivel arm.

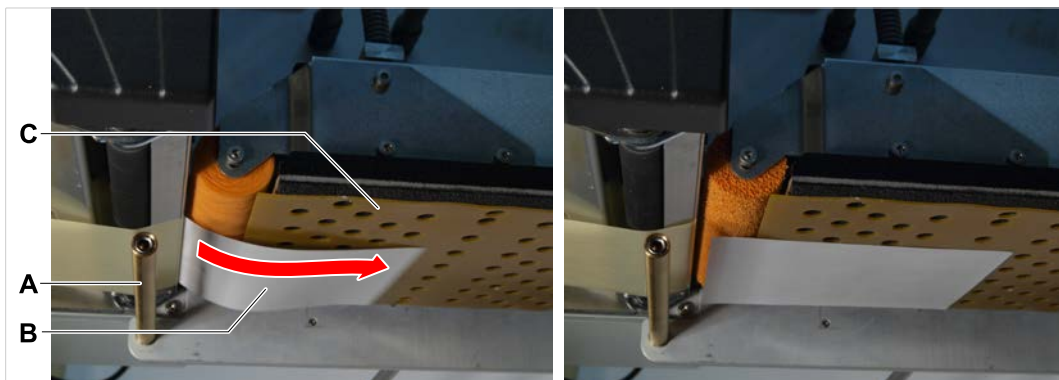


Fig. 9: Dispensing labels onto the pressure plate.

Once a label has been dispensed, a compressed air valve switches and causes the swivel arm to move. The swivel movement ends once the time limit set in the XPA 93x menu elapses. This time limit must be set so that the swivel arm reaches the product before the reverse movement begins. The backward movement ends in the home position, which is detected by a sensor.

—

Front Labelling:

When applying labels to the front of a product, the entire surface of the label is pressed against the pressure plate:

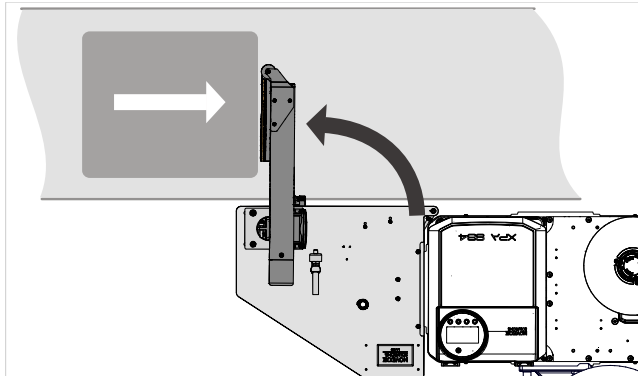


Fig. 10: Side labelling with LA-SO (RH) on product front.

Side Labelling:

When labelling the side of a product, the end of the label is first pressed against the pressure roller. As the product moves forwards, it pulls the label away from the pressure plate and the pressure roller presses the label against the product:

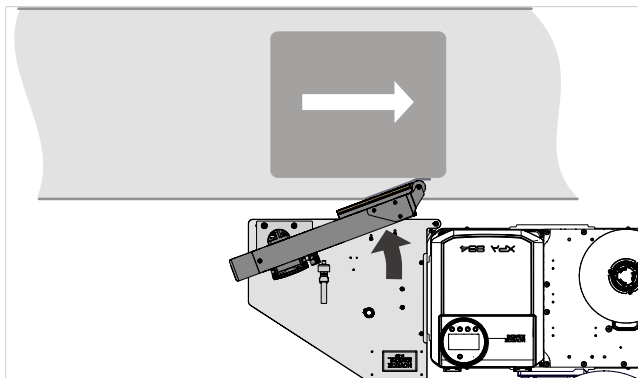


Fig. 11: Side labelling with LA-SO (RH) on product side.

Component overview

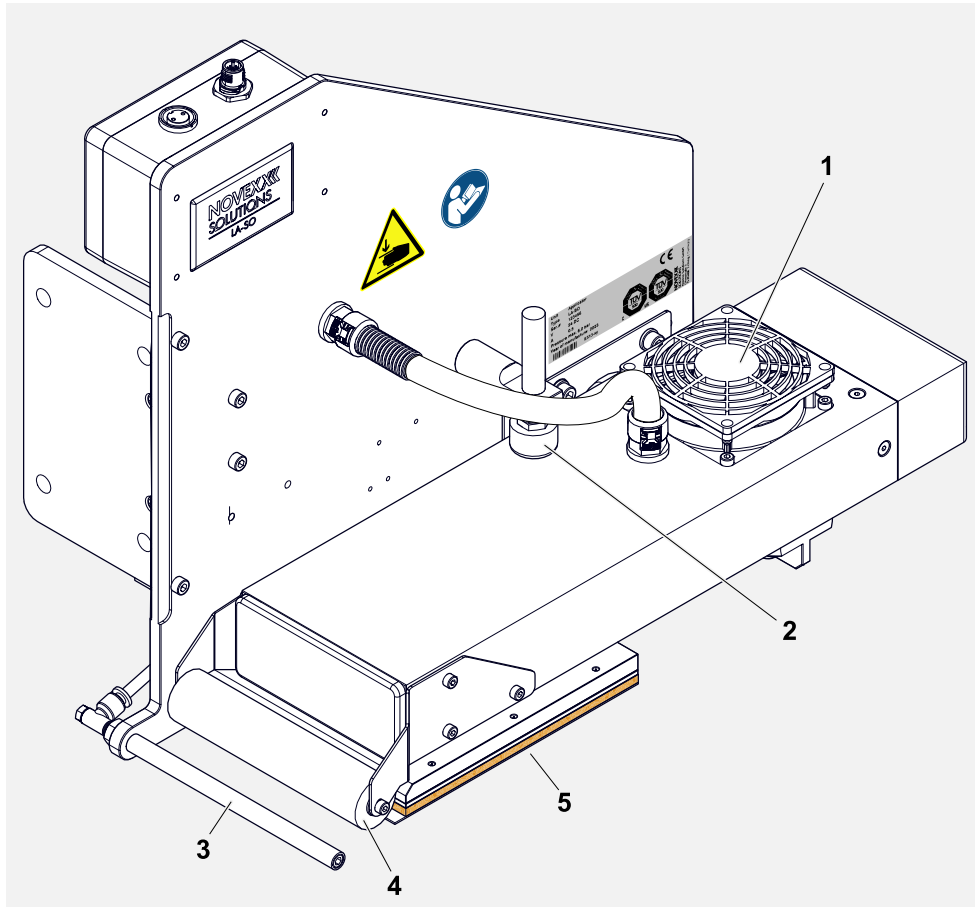


Fig. 12: LA-SO (RH), front view.

Pos.	Designation
1	Fan (creates vacuum along pressure plate)
2	Limit stop with damper
3	Support air nozzle
4	Pressure roller
5	Pressure plate

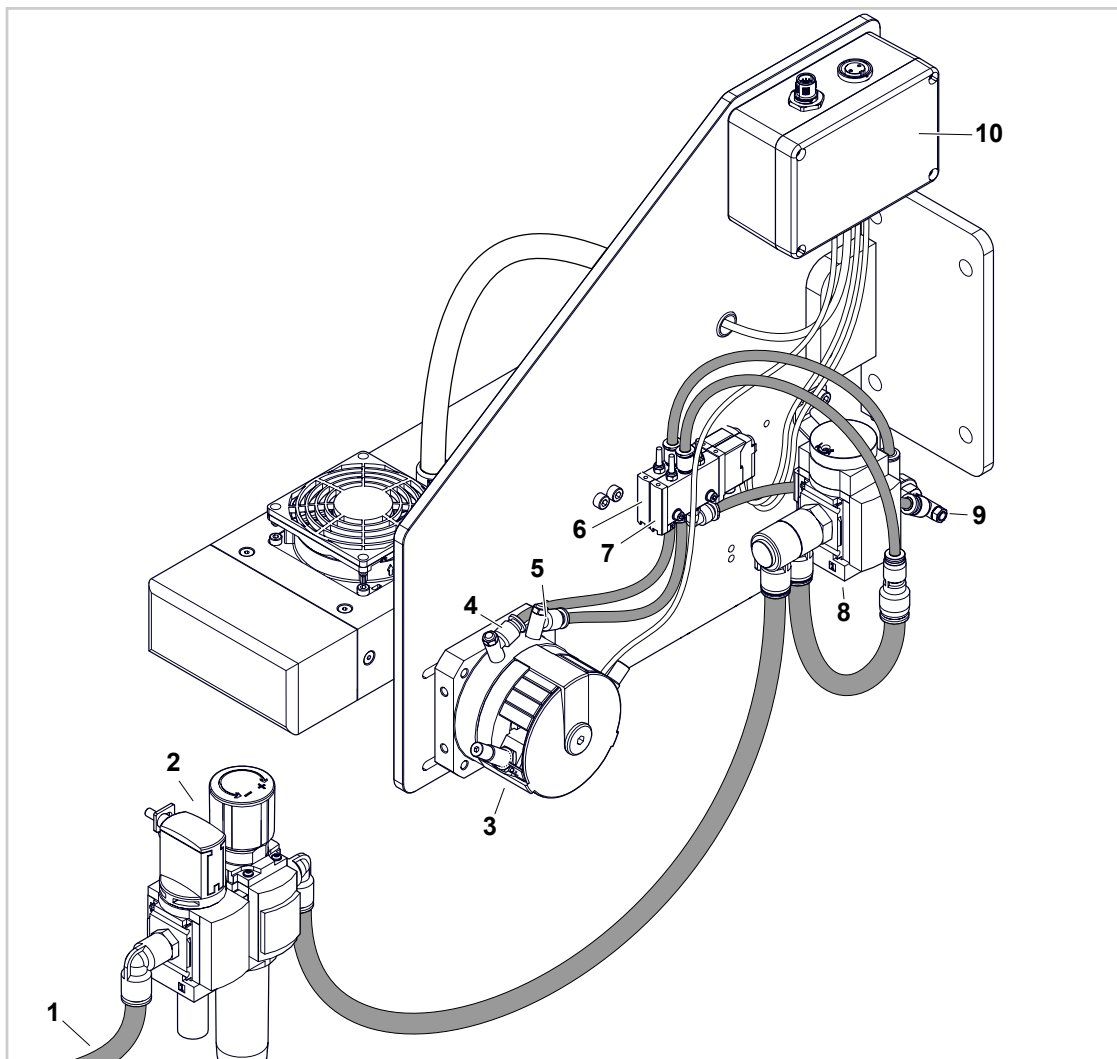


Fig. 13: LA-SO (RH), rear view.

Pos.	Designation
1	Compressed air connection (10 mm hose Ø)
2	Service unit (manual on-off valve, filter regulator, condensate drain)
3	Swivel module
4	Choker valve for forwards movement
5	Choker valve for reverse movement
6	Valve for swivel module
7	Support air valve
8	On-off valve
9	Connection and setting valve for support air nozzle
10	Connector box

PARAMETERS

Applicator parameters in the parameter Menu

The parameters for controlling the applicator appear in a separate submenu under **Options > 8IO 1 > LA-SO**. The prerequisite is that the optional 8IO board is present and that the applicator is activated (see below).

Activate LA-SO:

► **Options > Selection > 8IO 1 > Applicator > Applicator type = "LA-SO"**

The submenu for LA-SO then appears:

Options			
L	8IO 1		
	L	LA-SO	
			Apply mode
			Dwell time
			Position timeout
			Restart delay
			Apply comp. time
		L	Label pres. sensor

Table 4: Parameter Menu Structure

Parameter Reference (Applicators)

Apply mode

Setting range	Default setting	Step size	Easy Plug
After start sig., After print, After custom start sig.	After start sig.	--	#PC3102

Defines, if the application process starts with applying ("After start sig.") or with printing ("After print"). Requirements: Printjob transferred, machine is ready for operation.

- *After start sig.*: The start signal triggers the application of an already printed and dispensed label. After applying the label, the next one is immediately printed and dispensed.
- *After print*: The start signal triggers the retraction under the print head, printing, dispensing and application of a label.
- *After custom start sig.*: Enables the application process to be controlled via XApps.

Dwell time

Setting range	Default setting	Step size	Easy Plug
[1..99999] ms	200 ms (LA-SO)	1 ms	#PC3106

Determines the time period, during which the applicator is extended.

Is required for time-controlled applicators that are not limited by a touch-down signal.

Position timeout

Setting range	Default setting	Step size	Easy Plug
Off, (500...99999) ms	2000 ms	1 ms	#PC3109

- *Off*: The timeout function is switched off. Compressed air is applied to the applicator until the home or end position signal is received. If no signal is received, the applicator continues to try to reach the respective end position. No error message is displayed.
- *xxxx ms*: Determines the length of time after which an applicator position error is displayed as an error. A position error is considered to have occurred if the applicator has failed to reach the home or the end position within the set timeframe.

Corresponding error messages:

```
Status num: 5200
Home position
```

```
Status num: 5201
End position
```

Restart delay

Setting range	Default setting	Step size	Easy Plug
[0...99999] ms	0 ms	1 ms	#PC3108

Determines the length of time after application for which no start signals will be accepted.

Apply comp. time

Setting range	Default setting	Step size	Easy Plug
[0...99999] ms	0 ms	1 ms	#PC3111

Compensation time for applicator stroke time; required for variable conveyor speed operation.

Most applicators have a constant stroke time. If the labeller or the print & apply system is driven with variable speed, this leads to different label positions on the product. With a slow conveyor speed, the touch down comes too early, with a high conveyor speed, it is too late. With the stroke time entered in the *Apply comp. time* parameter, the system corrects this effect, and therefore improves the labelling precision.

Setting instruction:

- ▶ Setup the (print-)dispense-apply-process with a slow conveyor speed.
- ▶ Turn the conveyor speed high.
- ▶ Adjust the labelling position by increasing the *Apply comp. time* step by step, until the labelling position is correct.

Label pres. sensor

Setting range	Default setting	Step size	Easy Plug
Off, On	Off	--	#PC3119

Activates the “label-present sensor” if the applicator has one. The sensor checks whether a label is present on the applicator. Depending on the design, this can be done before or after application. Depending on the design, it is evaluated as an error if no label is present before application, or if a label is still present on the applicator after application:

```
Status num: 5215  
Label on appl
```

```
Status num: 5216  
No label on appl
```

Startup

ASSEMBLY

Preparing the connection cable for the interlock circuit

The LA-SO comes with a plug that is intended for connecting an interlocking guard.

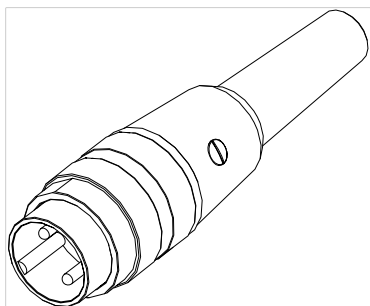
Before you begin

Tool

- Small screwdriver (0.6x3.5 mm)

Procedure

Connect the plug (fig. below) to the interlock switch, which is part of the interlock circuit. See chapter [Connecting an interlocking guard](#) on page 7.



Mounting on XPA 93x

Before you begin

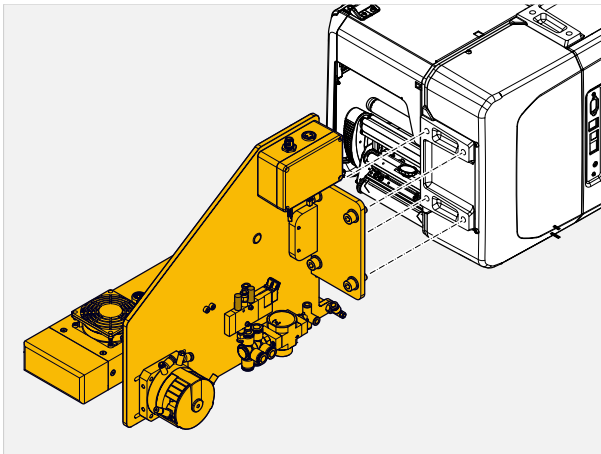
Tool

- Hex screwdriver 8 mm

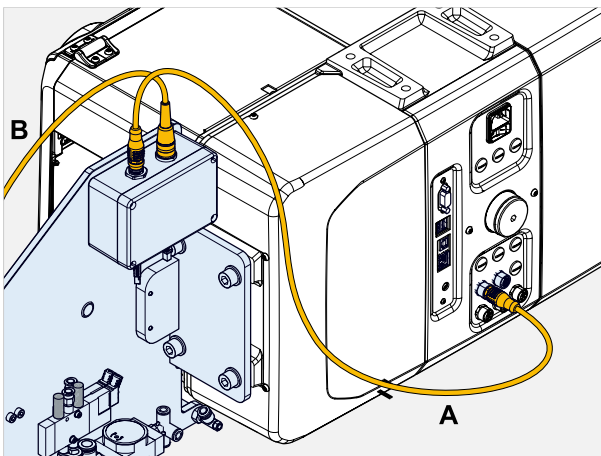
Procedure

1. Switch-off the XPA 93x.

2. Screw the LA-SO to the flange of the XPA 93x with the 4 enclosed screws:



3. Connect the supplied connection cable (A) to LA-SO and XPA 93x (article no. N101573):



4. Connect the interlock circuit of the protective guard to the LA-SO (fig. above, B).
See chapter [Connecting an interlocking guard](#).
Connecting an interlock circuit is mandatory. The LA-SO must not and cannot be operated without.
5. Install the service unit.
See chapter [Installing the service unit](#) on page 27.
6. Connect the compressed air supply.
See chapter [Connecting the compressed air](#) on page 28.
7. Switch-on the XPA 93x.
8. Make setting in the parameter menu.
See chapter [Activating the applicator](#) on page 30.
9. Adjust the LA-SO.
See chapter [Settings](#) on page 30.

Installing the service unit

The service unit comes with the applicator. It consists of the following parts:

- Manual on-off valve (A)
- Filter regulator (B) with pressure gauge (C)
- Condensate drain (D)

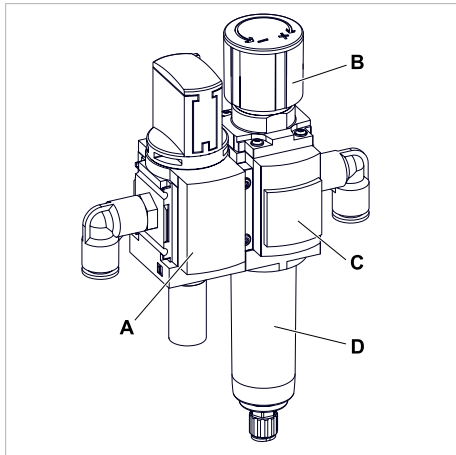


Fig. 14: Components of the maintenance unit.

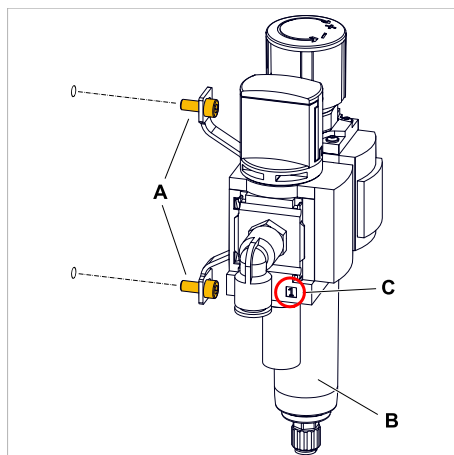
Before you begin

Tool: 4 mm hex screwdriver

Procedure

1. Screw on the maintenance unit with the enclosed screws (M5x12).

|| The condensate drain (B) must point downwards. ||



2. Fasten the pressure tubes so that the air flows through the pressure regulator in the direction from mark "1" (image above, C) to mark "2".

The connector marked "2" is the compressed air outlet. This must be connected to the applicator.

Mind the instruction sheet of the manufacturer, which comes with the service unit.

Connecting the compressed air

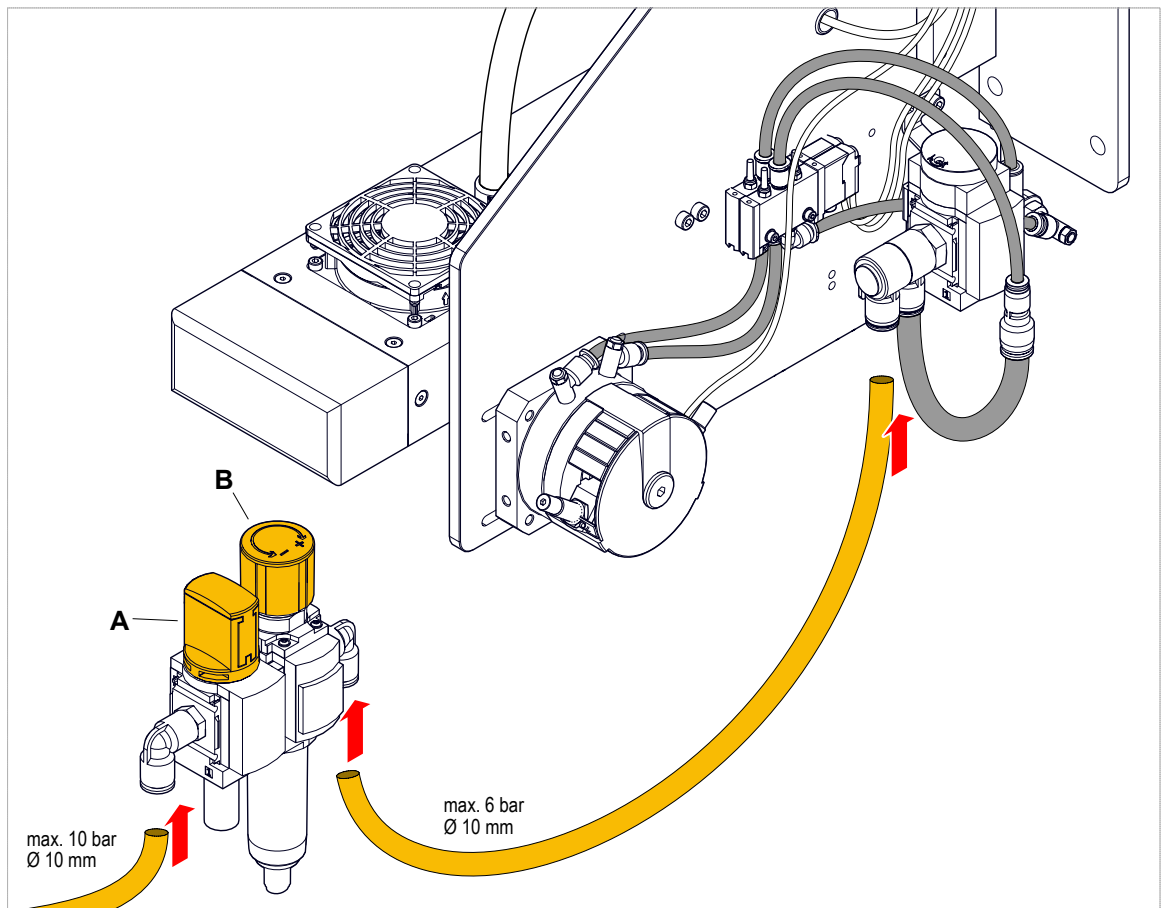
Before you begin

Prerequisites

- Hose diameter: 10 mm
- Max. admissible compressed air pressure at the *entrance* of the service unit: 10 bar
- Max. admissible compressed air pressure at the *exit* of the service unit: 6 bar

Procedure

1. Switch off the on-off valve. To do this, turn the rotary knob (A) clockwise as far as it will go:



2. Reduce the outlet pressure completely. To do this, turn the control valve knob (fig. above, B) all the way to "-".
3. Connect the compressed air line to the connections as shown (fig. above).

4. Switch on the compressed air.
5. Switch on the on-off valve. To do this, turn the rotary knob (fig. above, A) counterclockwise as far as it will go.
6. Set the outlet pressure. To do this, slowly turn the control valve knob (fig. above, B) in the “+” direction until the pressure gauge indicates the desired outlet pressure.

|| Mind the instruction sheet of the manufacturer that comes with the service unit. ||

SETTINGS



WARNING!

Pinch and shear hazard

- ▶ Keep a sufficient distance to the applicator.
- ▶ Don't touch the applicator.

Hazardous areas are:

- Between swivel arm and dispensing edge
- Between swivel arm and conveyor belt, if any

Activating the applicator

- ▶ Options > Selection > 8IO 1 > Applicator > Applicator type = "LA-SO"

After activating the applicator, the submenu Options > 8IO 1 > LA-SO appears. The parameters available there are used to set the applicator to the respective application situation.

For details refer to chapter Parameter Reference.

Setting the choker valves

The swivel unit is equipped with two choker valves: one for forwards and one for reverse movement. The valves limit the air flow whereby the following applies: the higher the flow rate, the faster the swivel arm will move. The required speed depends on the product speed and the product separation.

Tools

Small screwdriver (0.6x4 mm)

Setting

Increase flow rate (speed):

- ▶ Turn the setting screw out.

Reduce the flow rate (speed):

- ▶ Turn the setting screw in.

Factory setting

Choker valve for...	Setting depth ^[3]
Forwards movement (A)	2.0 mm
Reverse movement (B)	1.4 mm

³ Depth of setting screw as measured with callipers.

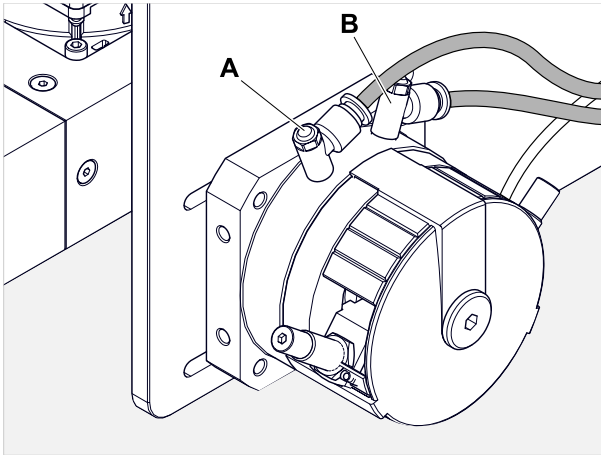


Fig. 15: Swivel module of LA-SO (RH). **A:** Choker valve for forward movement; **B:** Choker valve for reverse movement

Operation

ACTIVATING/DEACTIVATING THE APPLICATOR

Activating

In *normal operation* mode, the applicator is supplied with compressed air by the plant in which it is integrated.

1. (If the rotary knob of the on-off valve is secured with a padlock) Open the lock and remove it.
2. Turn the rotary knob of the on-off valve on the service unit counterclockwise as far as it will go (90°):

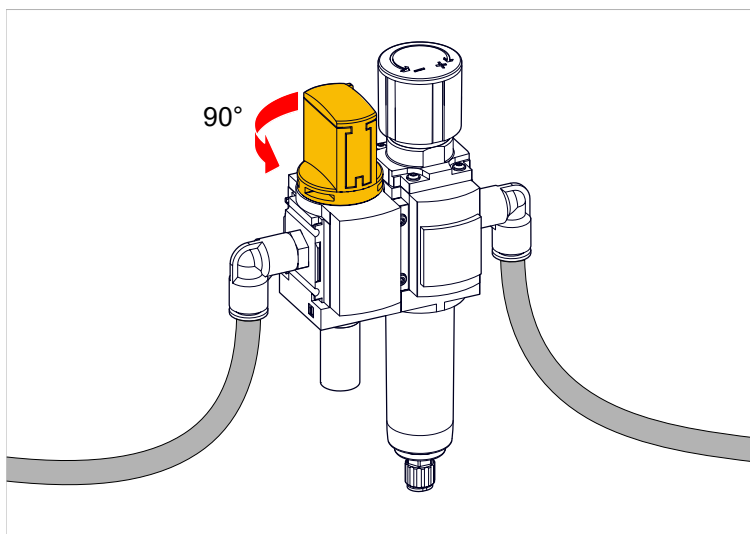


Fig. 16: Opening the on-off valve at the service unit (fig. shows closed valve).

After switching on the compressed air supply, the swivel arm starts moving to the top into home position. The apply-cycle starts as soon as the following conditions are fulfilled:

- Swivel arm is in home position
- Control signals are active (machine is online)
- Interlock circuit is closed (protection door is closed)

Deactivating

CAUTION!

After switching off the compressed air supply, the swivel arm of the applicator moves down into end position. Hazard of damage to the applicator by products passing by.

- ▶ Stop the conveyor or
- ▶ Make sure that no products pass by or
- ▶ Fix the applicator swivel arm in home position

1. Stop the machine, to which the applicator is attached.

2. Switch off the compressed air supply (using an appropriate switch at the plant or the manual on-off valve at the service unit).

After switching off the compressed air supply, the swivel arm of the applicator moves down into end position.

CLEANING

Safety



WARNING!

Dangerous situations may arise during maintenance and cleaning work. Accidents may occur due to mechanical or electrical effects if the relevant safety instructions are not observed!

- ▶ Switch off the machine before cleaning or maintenance and completely disconnect it from the main power supply. Depending on the machine type, it may be necessary to pull out the mains power connecting line (refer to the user manual of the machine)!
- ▶ Never allow liquid to get into the machine!
- ▶ Do not spray the machine with spray bottles or sprays! Use a cloth wetted with cleaning agent!
- ▶ Repairs to the machine must only be made by trained service technicians!

Cleaning interval

- ▶ Clean the machine regularly.

The frequency depends on the following factors:

- Operating conditions
- Daily operating duration

Cleaning instructions



WARNING!

Using sharp cleaning materials may cause damage.

- ▶ Do not use any cleaning agents or materials that could damage or destroy the paint finish, labelling, type plates, electrical component, etc.
- ▶ Do not use any scouring cleaning agents or any cleaning agents that could dissolve plastic.
- ▶ Do not use acid or alkaline solutions.

Cleaning agents:

- Compressed air, vacuum cleaner (if available)
- White spirit (ethanol) or isopropyl alcohol

Proceeding:

- ▶ Blow away or suck off any dust and abrasive particles with compressed air or a vacuum cleaner (if any of the two is available)
- ▶ Moisten a cloth with white spirit and wipe the machine with it.

Service unit

When the condensate level has reached the “Max.” mark:

- ▶ Drain condensate.

At low flow rate despite unchanged pressure setting:

- ▶ Change filter cartridge.

|| For instructions on how to do this, see the enclosed operating instructions for the service unit. ||

FAULT CORRECTION

Compressed air shutdown in the event of a malfunction

In the event of a malfunction at the applicator, e.g. paper jam between the labeler and applicator, the applicator can be depressurized using the manual switch-on valve (fig. below) of the maintenance unit. In this way, the malfunction can be rectified safely, independently of the system compressed air supply.

CAUTION!

After switching off the compressed air supply, the swivel arm of the applicator moves down into end position. Hazard of damage to the applicator by products passing by.

- ▶ Stop the conveyor or
- ▶ Make sure that no products pass by or
- ▶ Fix the applicator swivel arm in home position

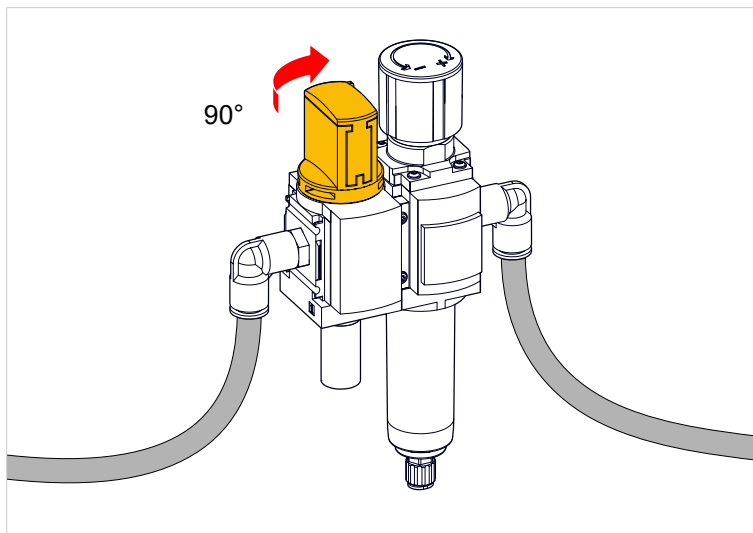


Fig. 17: Close the manual on-off valve (turn clockwise as far as it will go; the figure shows the closed valve).

Status

In the event of faults occurring on the machine, evaluate the status reports of the applied print & apply machine before doing anything.

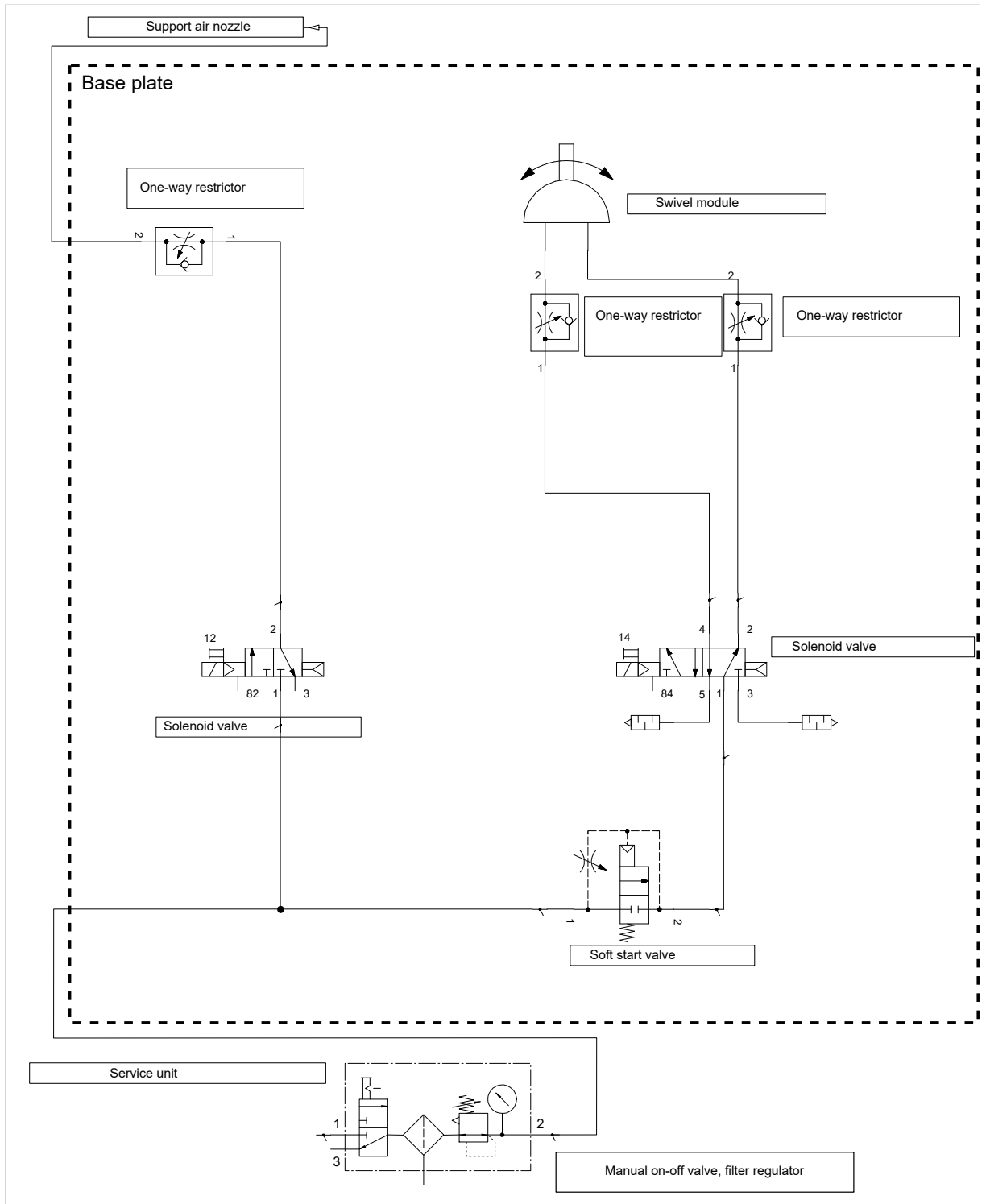
Refer to the service manual of the applied print & apply machine, chapter “Index of parameter names and error messages” > “Numerics”. Search there for the status number of the status message that has occurred.

Call service

If you are not authorised to carry out diagnosis and fault correction work, call your technician or the authorised service. The appropriate documentation and spare parts are available to the service personnel in order to carry out repair work of a sufficient quality.

Appendix

PNEUMATIC PLAN



EU DECLARATION OF INCORPORATION

(Translation of original version)

We, Novexx Solutions GmbH
Ohmstraße 3
D-85386 Eching
Germany

hereby declare that the partly completed machine designated below has been designed and built in such a way as to be in conformity with the safety and health protection requirements of directive 2006/42/EC, annex I, which are marked „fulfilled“ in the following table „Appendix regarding the Declaration of Incorporation“.

The special technical documents in accordance with appendix VII part B of directive 2006/42/EC have been created. We undertake to forward the special technical documentation in respect of the partly completed machine to national authorities at their request. We shall submit them by means of electronic data carrier.

The partly completed machine designated herein is furthermore in compliance with the provisions of directive 2014/30/EU (EMC) and directive 2011/65/EU(RoHS, in the currently valid version).

The designated partly completed machine must not be placed in operation until it has been determined that the machine in which the partly completed machine has been installed is in compliance with the provisions of directive 2006/42/EG.

Models	LA-TO / LA-TO XL LA-TO touch down / LA-TO XL touch down LA-TO BO / LA-TO BO XL LTP / LTPV LA-SO LTSI / LTSA / LTMA
General designation	Applicator
Applicable EU directive	2006/42/EG (Maschinery) 2014/30/EU (EMC) 2011/65/EU (RoHS)
Applied harmonized standards, especially	EN ISO 12100 : 2010 EN ISO 4414 : 2010 EN 62638-1:2024/A11:2017
The person authorized to compile technical documents	Novexx Solutions GmbH (for address see above)

Eching, 3.11.2023

Alfredo Sansone
Head of Supply Chain and Operations and Compliance

Appendix regarding the Declaration of Incorporation

List of the essential health and safety requirements applied and fulfilled for the product named in the declaration of incorporation, relating to the design and construction of machinery.

Number Annex I	Designation	Not applicable	Fulfilled	Remark
1.1	General remarks			
1.1.2.	Principles of safety integration		X	
1.1.3.	Materials and products		X	
1.1.4.	Lighting	X		
1.1.5.	Design of machinery to facilitate its handling		X	
1.1.6.	Ergonomics	X		
1.1.7.	Operating positions	X		
1.1.8.	Seating	X		
1.2.	Control systems			
1.2.1.	Safety and reliability of control systems	X		
1.2.2.	Control devices	X		
1.2.3.	Starting	X		
1.2.4.	Stopping			
1.2.4.1.	Normal stop	X		
1.2.4.2.	Operational stop	X		
1.2.4.3.	Emergency stop	X		
1.2.4.4.	Assembly of machinery	X		
1.2.5.	Selection of control or operating modes	X		
1.2.6.	Failure of the power supply		X	
1.3.	Protection against mechanical hazards			
1.3.1.	Risk of loss of stability	X		
1.3.2.	Risk of break-up during operation		X	
1.3.3.	Risks due to falling or ejected objects	X		
1.3.4.	Risks due to surfaces, edges or angles		X	
1.3.5.	Risks related to combined machinery	X		
1.3.6.	Risks related to variations in operating conditions	X		
1.3.7.	Risks related to moving parts			Requires protective device [4]

⁴ Installation by the system integrator

Number Annex I	Designation	Not applicable	Fulfilled	Remark
1.3.8.	Choice of protection against risks arising from moving parts			
1.3.8.1.	Moving transmission parts	X		
1.3.8.2.	Moving parts involved in the process			Requires protective device ^a
1.3.9.	Risks of uncontrolled movements	X		
1.4.	Required characteristics of guards and protective devices			
1.4.1.	General requirements			a
1.4.2.	Special requirements for guards			
1.4.2.1.	Fixed guards	X		
1.4.2.2.	Interlocking movable guards			a
1.4.2.3.	Adjustable guards restricting access	X		
1.4.3.	Special requirements for protective devices	X		
1.5.	Risks due to other hazards			
1.5.1.	Electricity supply		X	
1.5.2.	Static electricity		X	
1.5.3.	Energy supply other than electricity		X	
1.5.4.	Errors of fitting		X	
1.5.5.	Extreme temperatures		X	
1.5.6.	Fire		X	
1.5.7.	Explosion	X		
1.5.8.	Noise		X	
1.5.9.	Vibrations	X		
1.5.10.	Radiation		X	
1.5.11.	External radiation		X	
1.5.12.	Laser radiation	X		
1.5.13.	Emissions of hazardous materials and substances	X		
1.5.14.	Risk of being trapped in a machine	X		
1.5.15.	Risk of slipping, tripping or falling	X		
1.5.16.	Lightning	X		
1.6.	Maintenance			
1.6.1.	Machinery maintenance		X	
1.6.2.	Access to operating positions and servicing points		X	

Number Annex I	Designation	Not applicable	Fulfilled	Remark
1.6.3.	Isolation of energy sources		X	
1.6.4.	Operator intervention		X	
1.6.5.	Cleaning of internal parts	X		
1.7.	Information			
1.7.1.	Information and warnings on the machinery		X	
1.7.1.1.	Information and information devices	X		
1.7.1.2.	Warning devices	X		
1.7.2.	Warning or residual risks		X	
1.7.3.	Marking of machinery		X	
1.7.4.	Instructions		X	
1.7.4.1.	General principles for the drafting of instructions		X	
1.7.4.2.	Contents of the instructions		X	
1.7.4.3.	Sales literature		X	

Index of parameter names and error messages

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Apply comp. time [23](#)

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Dwell time [22](#)

L

Label pres. sensor [24](#)

P

Position Timeout [23](#)

R

Restart delay [23](#)

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