

# Automatic Label Feeder

## ALF14 series



### *Operating Instructions*

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*Translation of the original operating instructions*

Version 0.2

## **ALF14 series**

ALF14-25

ALF14-40

ALF14-55

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# 1 About these operating instructions

## 1.1 General information about these operating instructions

These operating instructions contain important information about the Automatic Label Feeder of the ALF14 series (hereinafter referred to as Label Feeder) and its handling. They are aimed at the operating company and persons who work with or at the Label Feeder.

These operating instructions are part of the Label Feeder and must be kept in the immediate vicinity of the Label Feeder. Personnel must at all times have access to them.


Please read these operating instructions carefully. Only this way a safe usage and long service life of the Label Feeder is ensured. The [Glossary](#)<sup>8)</sup> explains the technical terms used in these operating instructions. The [List of abbreviations](#)<sup>7)</sup> lists the abbreviations used in these operating instructions. Before starting to work with the Label Feeder please read the chapter [Safety first](#)<sup>9)</sup>!

Please contact us if there should be any further questions after reading these operating instructions:

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Your comments and suggestions regarding these operating instructions are always welcome. Please send them to this e-mail address: [info@amsde.com](mailto:info@amsde.com).

## 1.2 Design of the operating instructions

Style	Meaning
<ul style="list-style-type: none"> <li>• Text</li> <li>• Text</li> <li>• Text</li> </ul>	Unsorted list
<ul style="list-style-type: none"> <li>▷ Text</li> <li>▷ Text</li> <li>▷ Text</li> </ul>	Handling instructions
<ul style="list-style-type: none"> <li>▶ Text</li> <li>▶ Text</li> <li>▶ Text</li> </ul>	Result of a handling instruction or an event.
<ol style="list-style-type: none"> <li>1 Text</li> <li>2 Text</li> <li>3 Text</li> </ol>	Legend
<a href="#">Safety first</a> 	Linking to another chapter or section in these operating instructions.
<b>Bold type</b>	Emphasizing single terms in the text.
<i>Italic type</i>	Emphasizing menu levels or menu entries in the text.
→	Menu navigation.

### 1.3 List of abbreviations

Abbreviation	Term
ALF	Automatic Label Feeder
SIO	Serial Input Output
SMT	Surface-mount technology

## 1.4 Glossary

Term	Definition
Automatic Label Feeder	Device for the precise label transportation to the pick up position in a SMT system.
Feed	Parameter in the submenu which defines the length of the manual liner feed when the pull key is pressed briefly.
Gap	Parameter in the submenu which defines the maximum liner feed in case a label is missing on the liner.
Hold	Parameter in the submenu which defines the deceleration of the label transportation.
Ramp	Parameter in the submenu which defines the acceleration of the label transportation.
Serial Input Output	A method of communicating data between devices, typically a computer and its peripherals, the individual data bits being sent sequentially.
Surface-mount technology	Surface-mount technology is a method for producing electronic circuits in which the components are mounted or placed directly onto the surface of printed circuit boards.
Time	Parameter in the submenu which defines the idle time after a label pick up until the next label will be transported.

## 2 Safety first

### 2.1 Safe product

The Label Feeder is a modern industrial device designed and manufactured according to EN 12198-2, EN ISO 12100-1 und EN ISO 13849-1 as well as the machinery directive 2014/35/EC. It corresponds to the state of the art as well as the safety requirements.

### 2.2 Intended use

The Label Feeder is designed for the label transportation to the pick up position in an SMT system.

Any other usage beyond the intended use is considered as not intended.

### 2.3 Responsibility of the operating company

The operating company is responsible for the following measures:

- ▷ Make sure the local safety regulations, accident prevention provisions, environmental rules and other relevant standards are applied.
- ▷ Provide sufficient personnel training.
- ▷ Ensure that prior to starting work the operating instructions are read and understood by the personnel. We recommend to have the [Letter of acknowledgment](#)<sup>71</sup> signed by personnel assigned to work on or with the Label Feeder.

## 2.4 Illustration of warning notes and other hints

### *Action-oriented warning notes*

Warning notes are placed before handling instructions and warn about potential damages to persons.

#### **CAUTION**

Type and source of danger.

Not observing this warning note **may lead to minor or moderate injury!**

▷ Measure to avoid the damage.

### *Warning of property damage*

Next to warning notes also notices which warn about potential property damages are used.

#### **NOTICE**

Type and source of danger.

Not observing this warning note **may lead to property damage!**

▷ Measure to avoid the damage.

### General hints

Furthermore general hints which contain important information are used.

<i>HINT</i>	
<ul style="list-style-type: none"><li>● This hint contains important information.</li></ul>	

<i>Tools or equipment</i>	
<ul style="list-style-type: none"><li>● Tool or equipment</li></ul>	

## 2.5 Personnel requirements

The operating instructions are aimed at the operating company and all persons assigned with works on or with the Label Feeder.

The assembly of the Label Feeder onto the machine adapter has to be carried out by maintenance personnel.

After a short briefing the operating and setting of the Label Feeder can be carried out by even unpracticed users.

Apart from the steps shown in this manual, no maintenance work is necessary. However, should a breakdown occur our service team guarantees quick support.

### CAUTION

Danger due to employment of insufficiently instructed or unauthorized personnel.

Missing personnel qualification **may lead to minor or moderate injury and property damage!**

- ▷ Only work on and with the Label Feeder when you are assigned by the operating company and instructed for the work.
- ▷ Make sure that you are trained for the handling and operation of the corresponding SMT system when you equip the SMT system with the Label Feeder.

As a rule only personnel who can be expected to work reliably may be employed. The ability to react must not be impaired due to drugs, alcohol, or medications. The charged personnel must have read the operating instructions.



## 2.6 General safety notes

### *HINT*

- Not observing the general safety notes may lead to damages to persons and property!
- Furthermore not observing the general safety notes will lead to exclusion of any liability and to expiration of warranty claims!

- ▷ Read the operating instructions and make sure that you have understood them.
- ▷ Use the Label Feeder exclusively corresponding to the intended use.
- ▷ Observe the handling instructions and warning notes in the corresponding chapters.
- ▷ Adhere to the [Site requirements](#)<sup>29</sup>.
- ▷ Provide for a power supply according to the specifications in the [Technical data](#)<sup>60</sup>.
- ▷ Use the tools stated at the beginning of the corresponding chapter for repair works and maintenance works
- ▷ Only work on and with the Label Feeder when you have been authorized by the operating company and are appropriately qualified for the relevant works.
- ▷ Only operate the Label Feeder when it is in proper and fully functioning state.
- ▷ Do not make any technical changes at the Label Feeder (changes authorized by us are excepted).

### 3 The Label Feeder at a glance

#### 3.1 Scope of supply

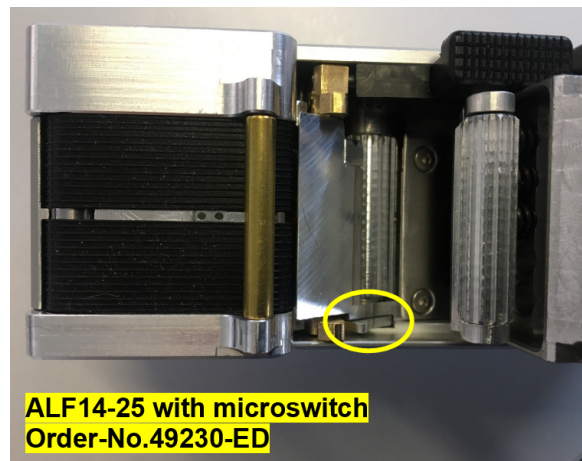
##### *Standard scope of supply*

- 1 Label Feeder of the ALF14 series.
- 1 Wall power supply (24V, 1A) with 3 connector plugs (US, UK, EU).
- 1 Power supply US or UK plug.
- 1 Original operating instructions (German).
- 1 Translation of the original operating instructions.

##### *Accessories (as an option)*

- Machine adapter.
- Power supply cable for the direct connection of the Label Feeder to the SMT system (availability depending on the corresponding SMT system).
- Adapter for device control and monitoring as well as importing parameters via USB port.
- Power supply cable with signal Supply cable for connecting the microswitch to the assembly machine (only for -ED version of the Label Feeder)

Photo: ALF14-25 -ED with microswitch



- Signal adapter cable for connecting the signal supply cable (from the optional Power supply cable with signal line) to the signal output (optical and / or acoustic) of the placement machine.  
Available for Yamaha pick and place machines.  
Other Machine- / manufacturer specific signal-adapter cables on request.

## 3.2 Brief device description

### *Label Feeder*

The Label Feeder is employed in the automatic mounting. Circuit boards are labeled for traceability purposes.

The Label Feeder automatically separates labels from the liner and provides them at a precisely predefined position for the automatic pick up by the SMT system. The automatic pick up is carried out after the sensor between the label transport conveyors has signaled the readiness for pick up.

The firmware enables different modes which can be set at the control panel of the Label Feeder. For further information regarding to different modes or the control panel refer to section [Menu structure and settings](#)<sup>[23]</sup> or [The control panel](#)<sup>[22]</sup>.

The ALF14 series comprises the models **ALF14-25**, **ALF14-40**, and **ALF14-55**. While providing the same functionality the three models support labels of different maximum sizes.

The ALF14 series includes three models: **ALF14-25**, **ALF14-40**, and **ALF14-55**. The same functionality supports the three models different labels maximum size.

Available in the versions:

**ALF14-25**: 49230 to 49230-ED;

**ALF14-40** and **ALF14-55**: 49230-49230-DD;

**ALF14-40** as -ED version on request.

### *Firmware*

The firmware of the Label Feeder enables the setting of various parameters.

The standard settings of the parameters are designed for labels in the range of a length of 5 to 7 mm in transportation direction. By changing the parameters the flexible use of labels of others length is made possible.

Furthermore the setting of parameters allows the adjustment of occurring difficulties when labels which are not designed for automatic transportation are used.

For further information refer to section [Setting examples](#)<sup>[45]</sup>

### *Machine adapter (as an option)*

Using different machine adapters all our Label Feeders can be mounted precisely on or removed from various SMT systems or special-purpose machines.

Machine adapters consider the specific mechanical dimensions of the various SMT systems and include electronic assemblies for the communication with the SMT system if required. Furthermore, they dispose of an active pull-out for the empty liners (partly with active liner rolling-up for simple removal) and a deflection roller for the liner supply or a label roll hanger respectively.

Machine adapters can be ordered separately for all standard SMT systems. Currently available machine adapters are listed in section [Table machine adapters](#) <sup>[64]</sup>.

#### *HINT*

- Machine adapters vary depending on the corresponding use case. If requested we offer to support you in developing them or carry out the manufacturing. Customer specific versions of machine adapters for the models ALF14-40 and ALF14-55 are available on request.

### *Labels*

The Label Feeders of the ALF14 series transport labels of the size 4 x 4 mm to 55 x 55 mm. The labels can be made of various materials as e. g. paper or polyimide. They can be made from nontransparent, semitransparent, full transparent label material.

### *Power supply cable with signal supply line (optional)*

The label feeders of the ALF14-25 (ALF14-40 on request) series have the -ED version a microswitch under the flap around an open one flap (Cover-Open) in operation via the signal output (optical and / or acoustically) to report the placement machine.

Such a message can help avoid a possible Head-Crash of the machine.

The signal supply line of the power supply cable is about a Machine / manufacturer specific signal adapter cable to the

Signal output (optical and / or acoustic) of the placement machine connected.

A signal adapter cable (Yamaha power cable) is for [Yamaha assembly line machinery](#) <sup>[67]</sup> available.

Other machine / manufacturer specific signal adapter cables on request.

### 3.3 Views

#### 3.3.1 Label Feeder

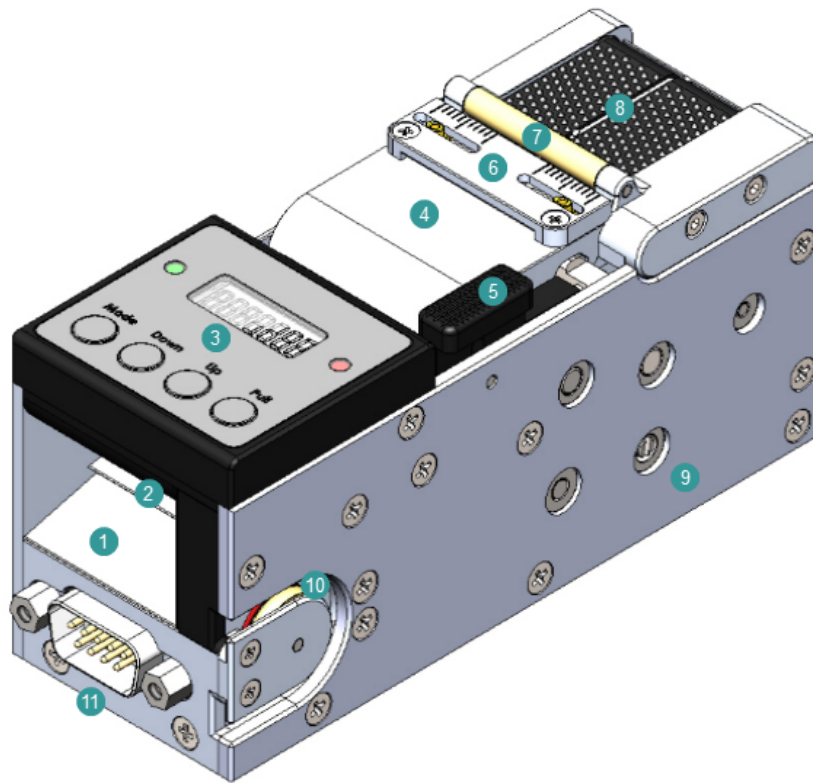


Fig. 1 Control elements and components of the Label Feeder

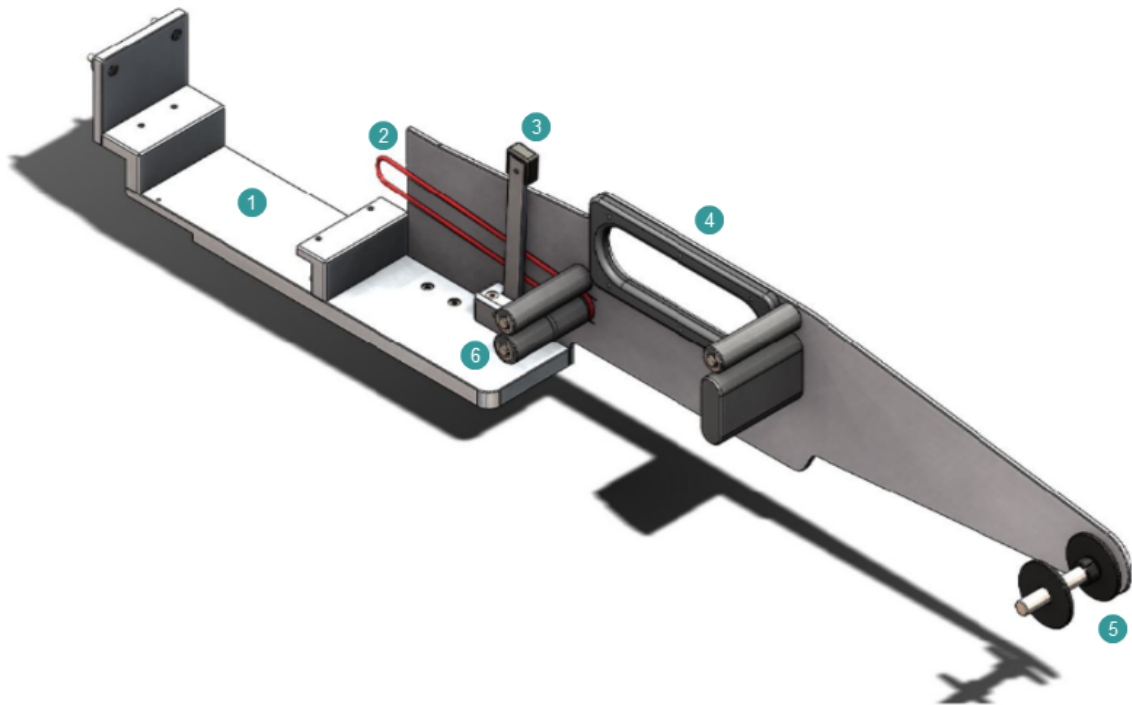
- |                  |   |
|------------------|---|
| 1 Output opening | 7 Liner pressure roller                   |
| 2 Input opening  | 8 Label transport conveyors               |
| 3 Control panel  | 9 Screw for manual liner transportation   |
| 4 Closing flap   | 10 Driving wheel for adapter driving belt |
| 5 Release button | 11 Connector Interface / Power supply     |
| 6 Liner feed     |   |

*Function of the control elements and components*

Control element Component	Function
Input opening / output opening	Input or output of the liner.
Control panel	Input unit for setting or programming the Label Feeder. For further information refer to the section <a href="#">The control panel</a> <sup>22</sup> .
Release button	Button for releasing the locking mechanism of the closing flap.
Liner feed (stepless)	Mechanism for directing the liner.
Liner pressure roller	Mechanism for pressing the labels onto the label transport conveyors.
Label transport conveyors	Mechanism for transporting the labels to the pick up position.
Screw for manual liner transportation	Mechanism for manually transporting the liner in case of a paper jam.
Belt drive external transport support	Mechanism for supporting the transportation of the liner using the machine adapter.
Connector interface / Power supply	For connecting the power supply cable or the optional power- / signal cable for -ED models

### 3.3.2 Machine adapter

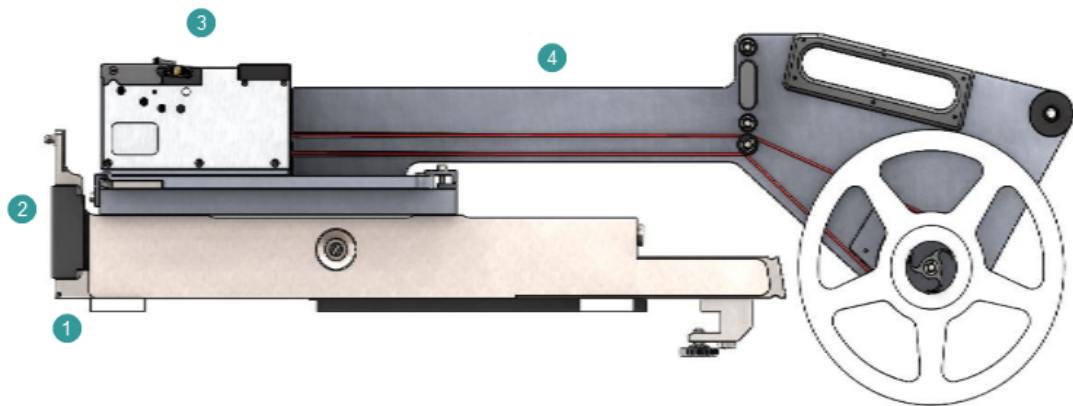
*Example: Juki machine adapter*



*Fig. 2 Juki machine adapter*

- 1 Adapter ground plate with two assembly supports for height adjustment
- 2 Adapter driving belt
- 3 Label Feeder release handle
- 4 Handhold
- 5 Deflection roller / label roll hanger
- 6 Active liner pull out

*Special case: Siplace machine adapter of the Siplace X-series*



*Fig. 3 Machine adapter for Siplace X-series*

- 1 Siplace feeder adapter
- 2 AMS X-series Clipport adapter
- 3 AMS Label Feeder ALF14-25
- 4 ASM Siplace machine adapter



*Function of the control elements and components*

Control element Component	Function
Adapter ground plate with two assembly supports	
Adapter driving belt	
Label Feeder release handle	
Handhold	
Deflection roller	
Label roll hanger	
Active liner pull out	
Siplace feeder adapter	
Clipport adapter	

### 3.4 The control panel

#### *Viewcontrol panel*

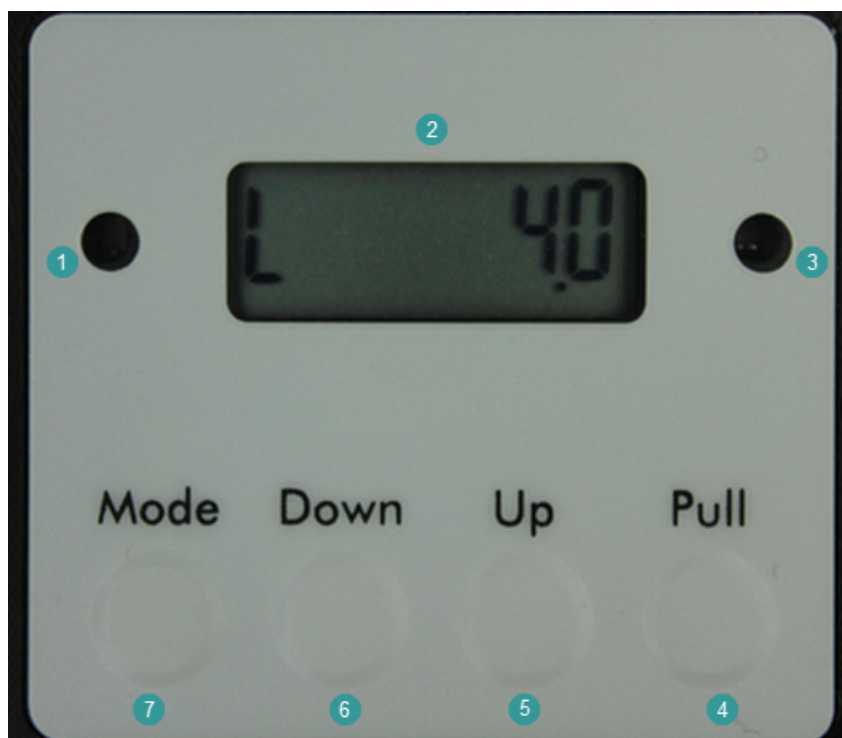


Fig. 4 Control panel

- 1 Green status LED
- 2 Display
- 3 Red status LED
- 4 Pull key
- 5 Up key
- 6 Down key
- 7 Mode key

The control panel consists of a **7-character LCD display**, a **green status LED**, a **red status LED** and four keys (**mode key**, **down key**, **up key** and **pull key**). By means of these keys you can navigate within the menu structure.

#### *Representation of the operating statuses in the label mode*

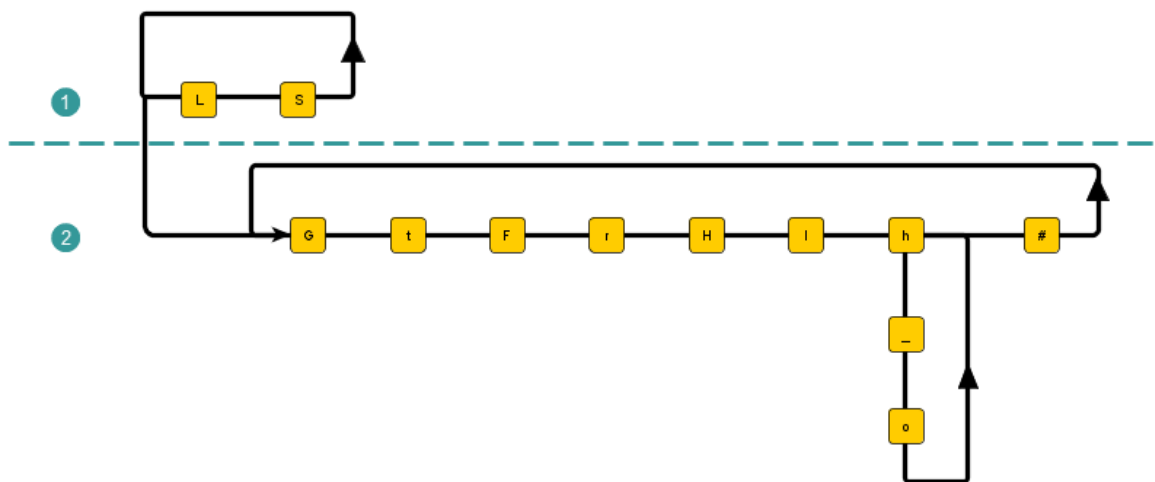
Operating status	Green status LED	Red status LED
A label has been transported to the pick up position on the label transport conveyors.	-	The red status LED lights up.
An external FEED signal is active.	The green status LED lights up.	-

### 3.5 Menu structure and settings

*Hint*

- The following description refers to firmware versions as of 14.02.05.

#### *Menu structure*



*Fig. 5 Menu structure*

- ① *Main menu*
- ② *Submenu*

### Navigating within the menu structure

Menu level	Key	Action	Result
Main menu	Mode key	Press briefly.	Rotating within the main menu. (L → S → L)
Main menu	Mode key	Press longer than 2 s.	Changing from the main menu to the submenu.
Submenu	Mode key	Press briefly.	Rotating within the main menu. (G → t → F → r → H → l → h → # → G)
Submenu, parameter h	Up key / down key	Press briefly.	Changing within the parameter h. (h → _ → 0), (0 → _ → h)
Submenu	Pull key	Press briefly.	Changing from the submenu to the main menu. (S → L)

After switching on the Label Feeder the *label mode L* is activated automatically.

The mode or parameter is indicated on the left side in the 7-character display at the first position, the related value is displayed in the right side of the display.

For special cases of settings refer to section [Setting examples](#) <sup>45</sup>.

*Main Menu*

Symbol	Mode	Description of the mode	Range of value
L	Label mode	The label transportation is triggered as soon as the positioned label has been picked up by the SMT system. The adjustable value defines the feed after the leading edge of the label has been recognized by the sensor.	2.0 - 25.0 mm Factory setting: 4 mm
S	Speed mode	The label transportation is not triggered as soon as the positioned label has been picked up by the SMT system.. The transportation speed is adjustable. The max. speed depends - amongst others - on the liner material as well as the size and the weight of the label roll.	10 - 120 mm/s Factory setting: 80 mm/s

*Submenu*

Symbol	Parameter	Description of the parameter	Range of value
G	Gap	Max. liner feed in case of a label is missing on the liner. This parameter avoids that the liner is pulled in completely.	0.5 - 99.9 mm Factory setting: 50 mm
t	Time	Idle time after a label pick up until the next label will be transported.	1 - 999 ms Factory setting: 100 ms
F	Feed	Length of the manual liner feed when the pull key is briefly pressed.  When the pull key is pressed for a longer time (> 1 s) the liner feed lasts until the pull key is no longer pressed.	3 - 30 mm Factory setting: 5 mm
r	Ramp	Acceleration of the label transportation until the transportation speed set with parameter S is reached.	0.1 - 2.0 m/s <sup>2</sup> Factory setting: 0,8 m/s <sup>2</sup>
H	Hold	Deceleration of the label transportation from the transportation speed set with the parameter S until standstill.  von der mit dem Parameter S eingestellten Fördergeschwindigkeit bis zum Stillstand  The difference between the minimum and maximum setting is not recognizable during the operation, however in some cases the setting is technically reasonable.	1 - 100 m/s <sup>2</sup> Factory setting: 100 m/s <sup>2</sup>
I	Interface	Selection of a signal interface or the operation mode. In general all models of the ALF14-series support an autonomous mode in the below described modes 0, 2, 4 and 6 (without external control) as well as an external control in the modes 1, 3 and 5 (e. g. triggering the label transportation by a FEED signal provided by the SMT machine). For further details please refer to the firmware documentation.	Factory setting: Mode 4
		Autonomous operation, signal interface switched off, no monitoring signals.	Mode 0
		FUJI NXT compatible mode, exclusively	Mode 1

Symbol	Parameter	Description of the parameter	Range of value
		external control.	
		FUJI NXT compatible mode, autonomous and external control.	Mode 2
		Monitoring via READY and ERROR signals, exclusively external control.	Mode 3
		Monitoring via READY and ERROR signals, autonomous and external control.	Mode 4
		Panasonic compatible mode, exclusively external control.	Mode 5
		Panasonic compatible mode, autonomous and external control.	Mode 6
h	Counter operating hours	Sum of all operating hours of the Label Feeder in switched on condition.  The counter can not be reset.	-
-	Counter label transportations	Number of all label transportations completely performed.  The counter can not be reset.	-
0	Counter transportation distance	Total transportation distance in km.  The counter can not be reset.	-
#	Programming mode	# = represents an 7-digit number or an instruction code to be entered.  When the programming mode is active various programmings can be performed. firmware update and changing the parameter is performed using a numerical code provided by us. In case of firmware updates external firmware files are loaded from a PC via a USB port.	

### Storing changed values

#### HINT

- As of firmware version 14.02.xx changed values are stored automatically.

In case of older firmware versions you have to store changed values manually by changing the mode.

Menu	Action
Main menu	Press the mode key.
Sub menu	Press the pull key.

### Resetting parameters

Action	Result	Red status LED
Press the down key and the up key simultaneously.	The current parameter will be reset to the factory setting.	-
Press the mode key and the pull key simultaneously.	All parameters will be reset to the factory setting.  The Label Feeder is in the <i>label mode L</i> .  The interface mode remains unchanged as set before the reset.	The red status LED is slowly flashing (2 s).



## 4 Preparing the Label Feeder for the operation

### 4.1 Site requirements

- The Label Feeder is exclusively designed for indoor use.
- The maximum admissible ambient temperature for optimum operation is 30 °C.
- The maximum admissible relative air humidity for optimum operation is 60 %.

## 4.2 Unpacking the Label Feeder

<i>Tools or equipment</i>	
● Cutter	
● Scissors	

### NOTICE

Damage of the packaging due to improper transport.

Improper transport **may lead to damages at the packaging and subsequently at the Label Feeder!**

- ▷ Prior to unpacking check the whole packaging for possible transport damages. Start unpacking only if the packaging is undamaged.
- ▷ Please contact us and the forwarding agent in case you notice any damages at the packaging.

- ▷ Take the Label Feeder and other accessories out of the packaging.

### HINT

- We recommend to keep the original packaging in its original condition for possible future transport.

### NOTICE

Incomplete delivery.

The Label Feeder is only fully functional with all its components. Operating an incomplete Label Feeder **may lead to impaired functionality!**

- ▷ Check the delivery for completeness.
- ▷ Please contact us immediately in case the delivery is incomplete.

- ▶ The Label Feeder is unpacked and ready for assembly.

## 4.3 Power supply

The power supply is established via three alternative ways:

*Wall power supply 100 V - 240 V (within scope of supply or available spare part)*

Power supply units dispose of connector plugs for EN, UK and US connection.


*Power cable for Juki, Siplace and Yamaha systems (as an option)*

The power cable connects the Label Feeder directly with the internal power supply of the SMT system.

*Direct connection for FUJI and Yamaha iPulse systems*

The **FUJI machine adapter** is directly connected with the SMT system via the integrated plug contacts. In case of machine adapters for **Yamaha iPulse systems** a power cable which connects the Label Feeder with the SMT system is permanently mounted.

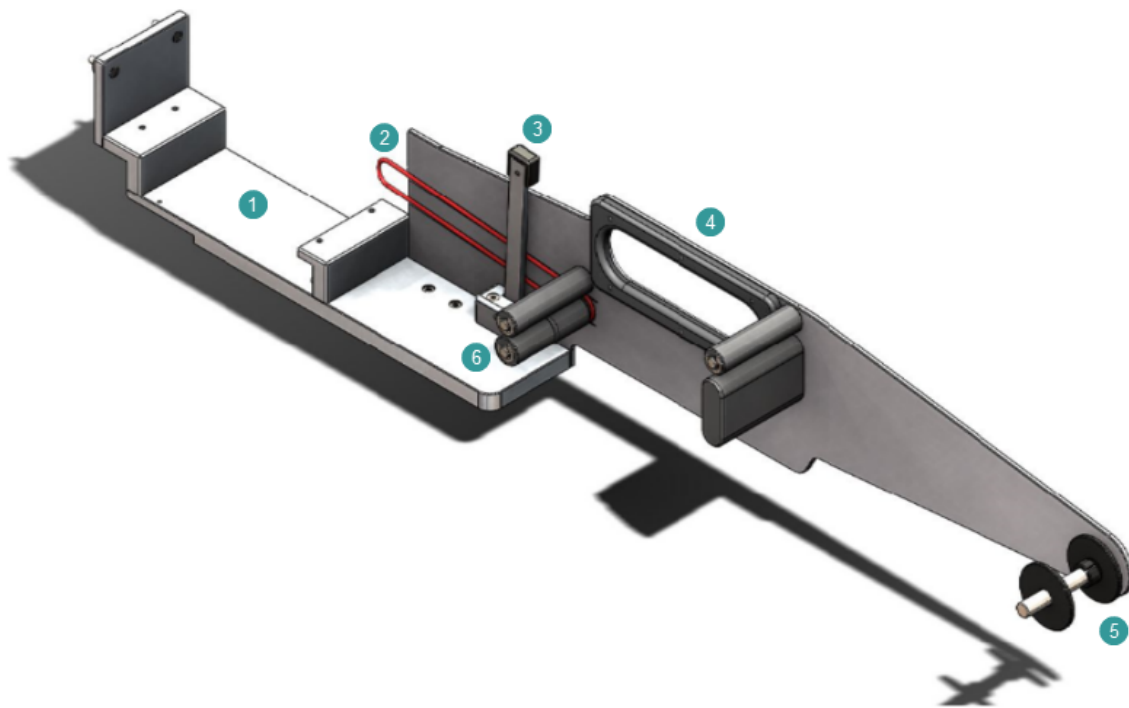
## 4.4 Assembling the Label Feeder on the machine adapter

Tools or equipment	
<ul style="list-style-type: none"> <li>● Allen key 2.5 mm, with ball ends or short arm max. 15 mm (for fixing the Label Feeder on the machine adapter).</li> </ul>	 <p data-bbox="754 645 1070 674"><i>Fig. 6 Allen key with ball end</i></p>
<ul style="list-style-type: none"> <li>● Possibly Allen key 2 mm (for fixing the assembly supports of the Label Feeder on the machine adapter as well as fixing the compartments of the electronic interface cards).</li> </ul>	

*HINT*

- The Label Feeders of the ALF14 series are compatible with various SMT systems of different manufacturers. To find out which Label Feeder is compatible with which SMT system refer to section [Table machine adapter](#) <sup>64</sup>.

*Example: Juki machine adapter*



*Fig. 7 Juki machine adapter*

- 1 Adapter ground plate with two assembly supports for height adjustment
- 2 Adapter driving belt
- 3 Label Feeder release handle
- 4 Handhold
- 5 Deflection roller / label roll hanger
- 6 Active liner pull out

*HINT*

- The assembling may vary depending on the manufacturer. The following handling instructions apply to all machine adapters.
- The provided screws for attaching the Label Feeder may vary in length. Also the design of the assembly supports for the height adjustment of the Label Feeder which are mounted between the adapter base plate and the Label Feeder may vary.

- ▷ Screw the two assembly supports (if applicable) onto the adapter base plate using the provided screw material.
- ▷ Put the adapter driving belt around the driving wheel for adapter driving belt which is integrated at the right side of the Label Feeder.
- ▷ Take the Label Feeder and position it in a way that the four outer drills in the adapter base plate are exactly above the four drills of the two assembly supports for height adjustment.
- ▷ Insert the screws and tighten them using the screwdriver until you feel a slight resistance.
- ▶ The Label Feeder is assembled on the machine adapter.
- ▷ Insert the machine adapter with the assembled Label Feeder into the magazine or into the SMT system like you do with other component feeders.

*HINT*

- Depending on the model of the employed SMT system the Label Feeder is connected to the power supply in different ways.

SMT system	Power supply
SMT system without internal power supply	▷ Connect the Label Feeder with the 110V / 240V grid using the provided wall power supply.
SMT system with internal power supply <ul style="list-style-type: none"> <li>● For many SMT systems with internal power supply a power cable can be purchased as an accessory.</li> </ul>	▷ Connect the Label Feeder with the designated power supply plug of the SMT system using the power cable.
SMT system (and machine adapters) with electrical feeder contacts.	▶ The electrical feeder contacts connect automatically when the machine adapter is set into the SMT system. This way the power supply is established.

▶ The assembled Label Feeder is ready for the threading of the liner.

### *Special case FUJI machine adapter*

#### *HINT*

- In case of the **FUJI machine adapter** the Label Feeder is mounted on a closed compartment for the FUJI communication interface. For mounting the Label Feeder on the FUJI machine adapter the closed compartment has to be opened.

- ▷ Remove the narrow side of the interface compartment from the machine adapter and screw it onto the Label Feeder.
- ▷ Continue with the assembly of the Label Feeder as described above.

### Special case Siplace machine adapter of the X series


#### HINT

- Assembling a **Siplace machine adapter** of the x series differs from the assembling of other machine adapters since it disposes of an active liner rolling-up. The belt drive of the ALF14 provides the required rotation of the empty roll.
- You can order the required **Clipport adapter** from us or from the machine manufacturer ASM. For the item number refer to section [Table Siplace machine adapter X-series](#)<sup>[70]</sup>.
- The required **Siplace feeder adapter** can not be ordered from us. You have to order it e. g. from the machine manufacturer ASM. For the item number refer to section [Table Siplace machine adapter X-series](#)<sup>[70]</sup>.

- ▷ Mount the **Siplace machine adapter** onto a **Clipport adapter**.
- ▷ Set the **Clipport adapter** onto the **Siplace feeder adapter**.
- ▷ Place an empty roll (diameter: 76 mm ) on the coil core.
- ▷ Continue with the assembly of the Label Feeder as described above.



## 4.5 Threading the liner

Tools or equipment	
<ul style="list-style-type: none"><li>● Stamp tweezers</li></ul>	 <p data-bbox="751 645 1002 674"><i>Fig. 8 Stamp tweezers</i></p>

### NOTICE

Damage of the Label Feeder due to unsuitable tools.

If you use tools with pointed or sharp edges when manually removing labels from the liner or out of the Label Feeder **the label transport conveyors may be damaged!**

▷ Always use stamp tweezers when manually removing labels.

### NOTICE

Paper jam due to incompletely threaded liner.

If you thread the liner incompletely **a paper jam may occur!**

▷ Always pull the liner completely through the Label Feeder.

### HINT

- After the power supply has been established the Label Feeder automatically is in the *label mode L*. In order to be able to thread the liner the automatic label transportation of the Label Feeder must be switched off. The Label Feeder has to be in the *speed mode S*.

- ▷ Put the label roll on the label roll hanger or insert the label roll in a designated magazine of the SMT system. In this case the label roll hanger serves as a deflection roller.
- ▷ Press the **mode key** once in order to change to the *speed mode S*.
- ▶ The Label Feeder is in the *speed mode S* and you can start threading the liner.
- ▷ Slide the locating blocks to the outer edge of the guiding slots using a pointed tool.

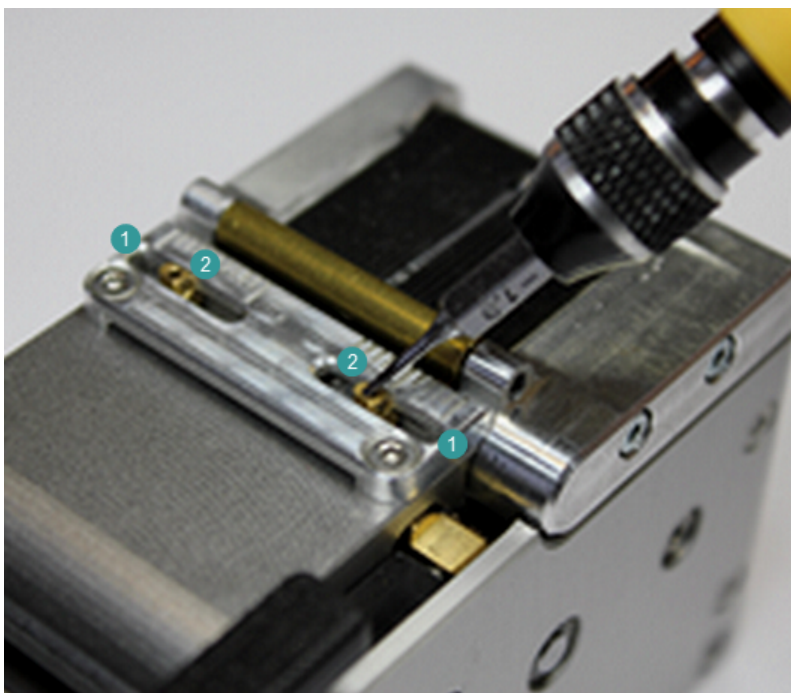


Fig. 9 Sliding the locating blocks

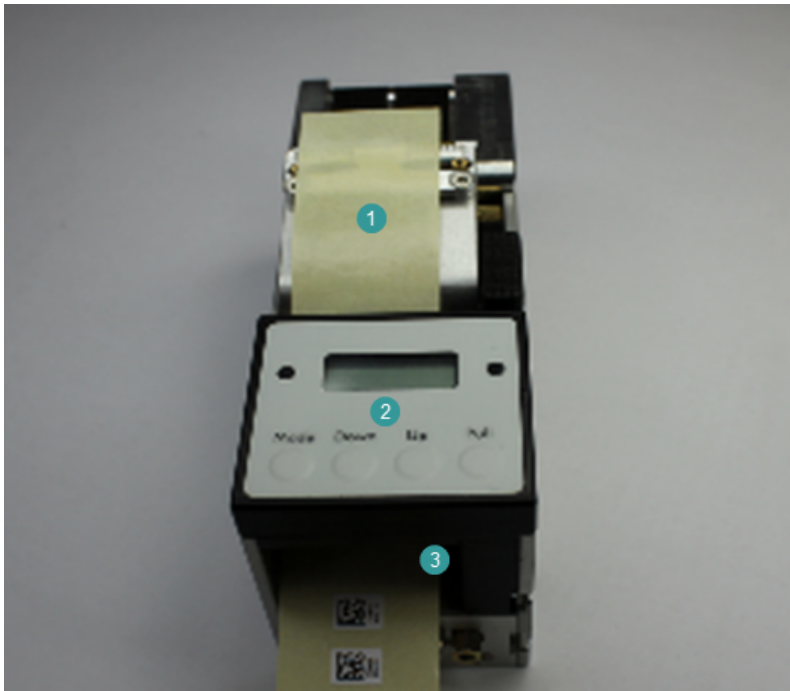
- 1 Guiding slot (outer edge)
- 2 Locating block

**NOTICE**

Impairment of the Label Feeder due to detaching labels.

If labels get into the inside of the Label Feeder during the threading of the liner **detached labels may stick to the transportation mechanics and cause failures.**

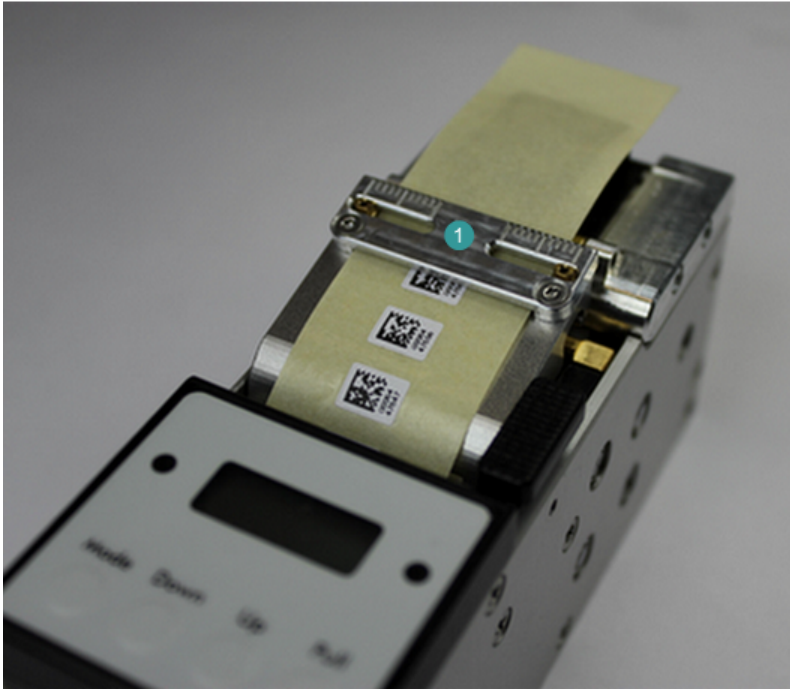
- ▷ Before threading the liner remove the labels on the first 10 cm of the liner.
  - ▷ As an alternative you can glue a piece of empty liner of the same length to the label roll.
  - ▷ Special case **Siplace machine adapter of the x series: Siplace machine adapters** are equipped with a liner rolling-up for the empty liner. Make sure that empty liners are fixed at the liner rolling-up as designated as soon as the liner has been led out of the Label Feeder for approximately 80 cm. Note the hint on additional handling instructions when using a **Siplace machine adapter of the x series** in the text below.
- 
- ▷ Take the end of the liner and insert it in the input opening.
  - ▷ Push the liner further into the Label Feeder until it exits at the top behind the control panel.
  - ▷ Pull the liner approx. 10 cm further out of the Label Feeder.



*Fig. 10 Inserting the liner*

- 1 Liner
- 2 Control panel
- 3 Input opening

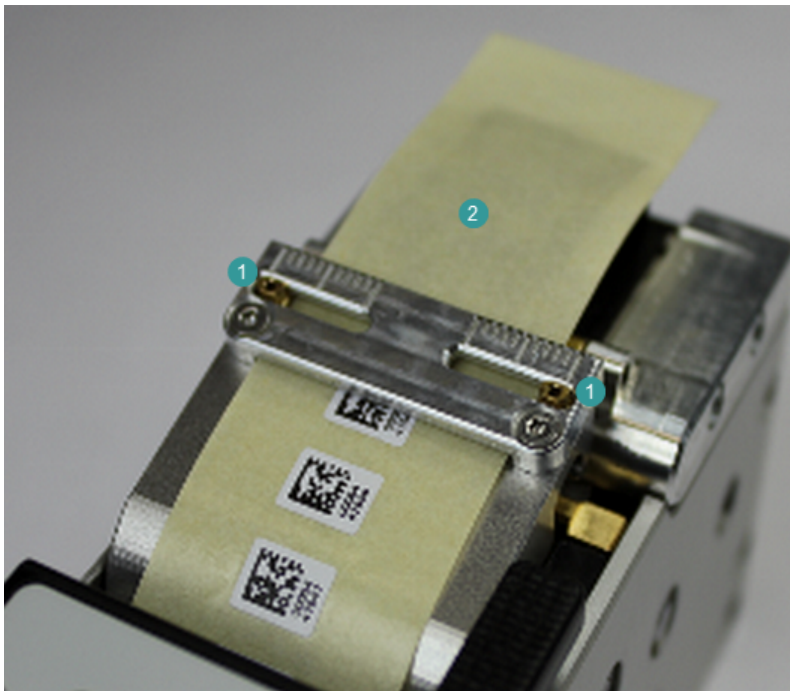
- ▷ Slightly lift the closing flap while pressing the release button at the same time.
- ▷ Push the liner approx. 10 cm through the liner feed.



*Fig. 11 Inserting the liner into the liner feed*

① Liner feed

- ▷ Center the liner in the liner feed.
- ▷ Carefully slide the locating blocks to the edges of the liner using a pointed tool.



*Fig. 12 Centering the liner*

- ① Locating block
- ② Liner

- ▷ Further lift the closing flap until you can see the transport rolls (toothed shafts) inside the Label Feeder.
- ▷ Push the end of the liner into the output guide between the two transport rolls.

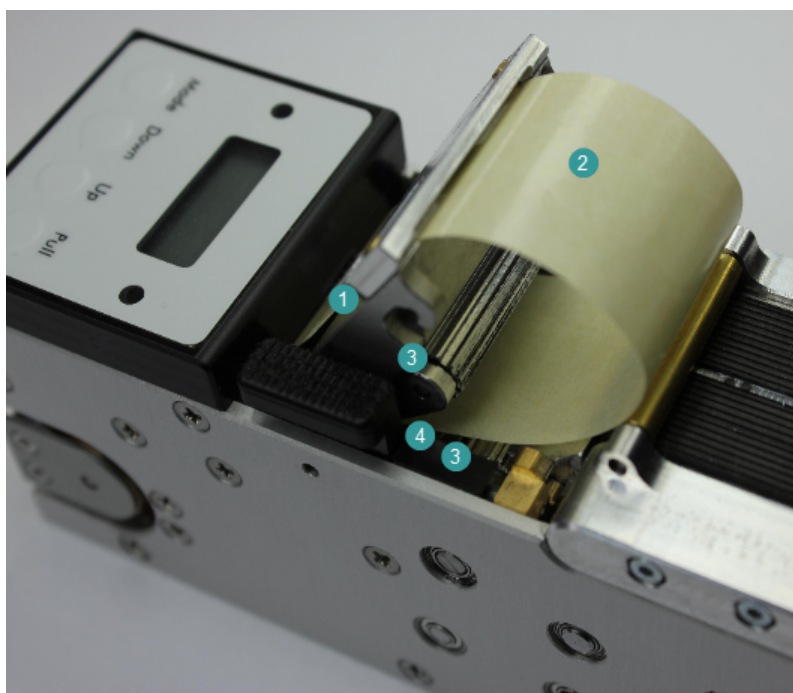


Fig. 13 Liner return

- 1 Lifted closing flap
- 2 Liner
- 3 Transport roll (toothed shaft)
- 4 Output guide

▷ Push the liner into the output guide until you can see the end of the liner in the output opening.

#### HINT

- Additional handling instructions when using a **Siplace machine adapter of the x series:**
  - ▷ Pull the liner through the Label Feeder until the end of the liner reaches the empty roll.
  - ▷ Fix the end of the liner at the empty roll.
  - ▷ Continue with the below mentioned handling instructions.

**NOTICE**

Damages due to improper closing of the closing flap.

If you do not press the release button when opening the closing flap **the snap-fit may break.**

- ▷ Completely press the release button and keep it pressed while you close the closing flap.
- ▷ Release the release button so that the snap-fit can lock.

- ▷ Press the **pull key** until the first label lies on the label conveyor belts.



Fig. 14 Locked closing flap

- 1 Closing flap
- 2 Release button

- ▶ The liner has been inserted completely into the Label Feeder.
- ▷ Press the **mode key** once to shift to the *label mode L*.
- ▶ The Label Feeder is in the *label mode L* and ready for setting or programming.



## 4.6 Setting examples

### *Special case: Label 4 mm (or shorter), label mode 4.0*

The factory setting  $L$  4.0 may cause problems if labels are not longer than 4 mm in transportation direction.

In case of factory setting  $L$  4.0 labels with a length of 4 mm (or shorter) will be transported 4 mm until their rear edge is positioned beyond the center of the sensor. Possibly the label will not be recognized at the pick up position or picked up so that another label will be transported.

In order to avoid this problem we recommend to set a shorter feed in transportation direction (e. g. 3 mm) after the pick up position has been reached.

- ▶ You are in the *label mode*  $L$ . The current setting of  $L$  is shown in the display (factory setting 4.0 or customer setting) .
- ▷ Press the **down key** until the display issues the value 3.0.
- ▶ The parameter  $L$  has been changed from 4 mm to 3 mm. After the leading edge of the label which has been transported across the sensor is recognized the label will be transported 3 mm further and then positioned. That way 1 mm of its rear area is positioned above the center of the sensor and the recognition and picking up of the label is guaranteed.

### *Special case: Label significantly longer than 7 mm, label mode 4.0*

The factory setting  $L$  4.0 may cause problems if labels are significantly longer than 7 mm in transportation direction.

In case of factory setting  $L$  4.0 labels significantly longer than 7 mm will not be completely transported underneath the liner pressure roller of the Label feeder. Possibly the label will not be recognized at the pick up position or picked up so thereby the transportation of a subsequent label will be blocked.

In order to avoid this problem e. g. for a label with a length of 15 mm we recommend to set a feed in transportation direction after the pick up position has been reached of minimum 12.0 mm / maximum 14.5 mm.

- ▶ You are in the *label mode*  $L$ . The current setting (factory setting 4.0 or customer setting) is shown in the display.
- ▷ Press the **up key** until the display issues the value 12.0 / 14.5.
- ▶ The parameter  $L$  has been changed from 4 mm to 12.0 mm / 14.5 mm. After the leading edge of the label which has been transported across the sensor is recognized the label will be transported 12 mm / 14.5 further and then positioned. That way the label with its rear edge has been completely transported underneath the liner pressure roller and the recognition and picking up of the label is guaranteed.

### Implementation of higher clock cycles or higher pick up rates

In order to implement a high pick up cycle for SMT systems with a high pick up rate (e. g. when turret heads are employed) a number of specific parameters can be set:

- The parameter *t* defines the idle time after a label pick up of until the transportation of the next label. Reducing this parameter results in shorter idle times.
  - ▶ You are in the *label mode L*. The current setting of *L* is displayed (factory setting 4.0 or customer setting).
  - ▷ Press the **mode key** for at least 2 s.
  - ▶ You are in the *submenu parameter G*. The current setting of *G* is displayed (factory setting 50 or customer setting).
  - ▷ Press the **mode key** once.
  - ▶ You are in the *submenu parameter t*. The current setting of *t* is displayed (factory setting 100 or customer setting).
  - ▷ Repeatedly press the **down key**, until the value 1 is shown in the display.
  - ▶ The parameter *t* has been changed from 100 ms to 1 ms. The idle time after a label pick up until the transportation of the next label is reduced by 1/10 s.
  - ▷ Press the **pull key** in order to return to the *label mode L*.
  
- The parameter *S* defines the transportation speed after a label pick up. Increasing this parameter results in higher transportation speed.
  - ▶ You are in the *label mode L*. The current setting of *L* is displayed (factory setting 4.0 or customer setting).
  - ▷ Briefly press the **mode key**.
  - ▶ You are in the *speed mode S*. The current setting of *S* is displayed (factory setting 80 or customer setting).
  - ▷ Repeatedly press the **up key**, until the value 200 is shown in the display.
  - ▶ The parameter *S* has been changed from 80 mm/s to 200 mm/s. The transportation speed increases from 80 mm/s to 200 mm/s.
  - ▷ Press the **mode key** in order to return to the *label mode L*.

**HINT**

- A manually set acceleration or deceleration of the label transportation is automatically overwritten if it cannot be implemented. This is the case if e. g. the parameter  $L$  defines a short transportation distance after the leading edge of the label has been recognized while at the same time the transportation speed  $S$  is set high and the parameter  $H$  calculates a slow deceleration. If the transportation speed and the transportation distance require a faster deceleration as defined by  $H$  this is automatically set and the required stopping point is met. Therefore a manual setting may not have an effect and an impact can not be recognized by the user.
  - A label transportation set too high may lead to problems when detaching the labels. If the adhesion on the liner is too strong the speed has to be decreased. It cannot be defined in advance for which liner material this applies and has to be experimentally obtained. The Label Feeder firmware offers effective possibilities to respond to such difficulties and guarantees a safe transportation process.
- 
- The parameter  $r$  defines the acceleration of the label transportation until the speed set with parameter  $S$  is reached.
    - ▶ You are in the *label mode L*. The current setting of **L** is displayed (factory setting 4.0 or customer setting).
    - ▷ Press the **mode key** for at least 2 s.
    - ▶ You are in the *submenu parameter G*. The current setting of **G** is displayed (factory setting 50 or customer setting).
    - ▷ Press the **mode key** three times.
    - ▶ You are in the *submenu parameter r*. The current setting of **r** is displayed (factory setting 0.80 or customer setting).
    - ▷ Repeatedly press the **up key**, until the value 2 is shown in the display.
    - ▶ The parameter  $r$  has been changed from 0.80 m/s<sup>2</sup> to 2.00 m/s<sup>2</sup>. The acceleration of the label transportation increases to 2 m/s<sup>2</sup>.
    - ▷ Press the **pull key** in order to return to the *label mode L*.

- The parameter *H* defines the deceleration of the label transportation from the speed set with parameter *S* until standstill is reached.
  - ▶ You are in the *label mode L*. The current setting of **L** is displayed (factory setting 4.0 or customer setting).
  - ▷ Press the **mode key** for at least 2 s.
  - ▶ You are in the *submenu* parameter *G*. The current setting of *G* is displayed (factory setting 50 or customer setting).
  - ▷ Press the **mode key** four times.
  - ▶ You are in the *submenu* parameter *H*. The current setting of *H* is displayed (factory setting 100 or customer setting).
  - ▷ Repeatedly press the **down key** until the value 50 is shown in the display.
- ▶ The parameter *H* has been changed from 100 m/s<sup>2</sup> to 50 m/s<sup>2</sup>. The deceleration of the label transportation decreases to 50 m/s<sup>2</sup>.
  - ▷ Press the **pull key** in order to return to the *label mode L*.

## 5 The Label Feeder during operation




Fig. 15 The Label Feeder during operation

- 1 SMT system
- 2 Label Feeder
- 3 Machine adapter

**NOTICE**

Impairment of the functionality of the Label Feeder due to non-observance of the required operating conditions.

If you operate the Label Feeder under wrong operating conditions **the functionality of the Label Feeder may be impaired and damages at the Label Feeder may occur!**

- ▷ Always ensure a precise centered feeding of the liner into the Label Feeder.
- ▷ When starting the SMT machine always note the correct function of the Label Feeder. With every transportation step empty liner should exit the output opening.
- ▷ Observe the requirements regarding ambient temperature and air humidity during operation so that labels and liners will not detach or deform.
- ▷ Prevent labels from getting into the Label Feeder in order to avoid paper jams.
- ▷ Make sure that there are no obstacles when the empty liner exits the output opening.
- ▷ Regularly carry out visual inspections during operation.
- ▷ Make sure that the closing flap is always closed during operation, to avoid a possible Head-Crash of the assembly machine.  
Always close the cover properly ([warning against damage to property](#) ) !

## 5.1 Importing parameters via USB port

### HINT

- The following description refers to firmware versions as of 14.02.07.

As of firmware version 14.02.07 the Label Feeders of the ALF14 series support the setting and importing of parameters as well as the controlling and monitoring of the label transportation via a USB port.

This functionality can be used simultaneously with the controlling via the lines FEED, COMP/READY and ERROR. Thus importing and changing of parameters during the running operation of the Label Feeder is possible.

### HINT

- For using the USB functionality the provided optional adapter is required. For the item number refer to section [Table adapter](#) 70.



### SIO commands

Eingabe	Ausgabe	Funktion
FEED	OK/ERROR	Transporting a label if none is present.
Lxxx	Lxxx	Setting Label.
Sxxx	Sxxx	Setting Speed.
Gxxx	Gxxx	Setting Gap.
Txxx	Txxx	Setting Time.
Fxxx	Fxxx	Setting Feed.
Rxxx	Rxxx	Setting Ramp.
Hxxx	Hxxx	Setting Hold.
lxxx	lxxx	Setting IO Mode.
PL?	Lxxx	Querying Label.

Eingabe	Ausgabe	Funktion
PS?	Sxxx	Querying Speed.
PG?	Gxxx	Querying Gap.
PT?	Txxx	Querying Time.
PF?	Fxxx	Querying Feed.
PR?	Rxxx	Querying Ramp.
PH?	Hxxx	Querying Hold.
PI?	Ixxx	Querying IO Mode
CH?	xxxh	Querying operating hours.
CL?	xxxL	Querying transported labels.
CM?	xxxm	Querying total feed.
ID?	xxxxxxx	Querying ID.
ST?	OK/ERROR	Querying status.
CLR	OK	Resetting parameters.



## 5.2 Eliminating errors

Tools or equipment	
<ul style="list-style-type: none"> <li>● Screw driver 3 mm</li> </ul>	 <p data-bbox="754 645 975 674"><i>Fig. 16 Screw driver</i></p>
<ul style="list-style-type: none"> <li>● Stamp tweezers</li> </ul>	 <p data-bbox="754 947 1015 976"><i>Fig. 17 Stamp tweezers</i></p>

### Paper jam

#### NOTICE

Damage of the Label Feeder due to unsuitable tools.

If you use tools with pointed or sharp edges when manually removing labels from the liner or out of the Label Feeder **the label transport conveyors may be damaged!**

▷ Always use stamp tweezers when manually removing labels.

In case of a paper jam the Label Feeder automatically stops the label transportation. Clear the paper jam as follows:

- ▷ Remove the Label Feeder from the SMT system.
- ▷ Slightly lift the closing flap while pressing the release button at the same time.
- ▷ Turn the screw for manual liner transportation clockwise using the screwdriver and at the same time carefully pull the liner through the input opening.

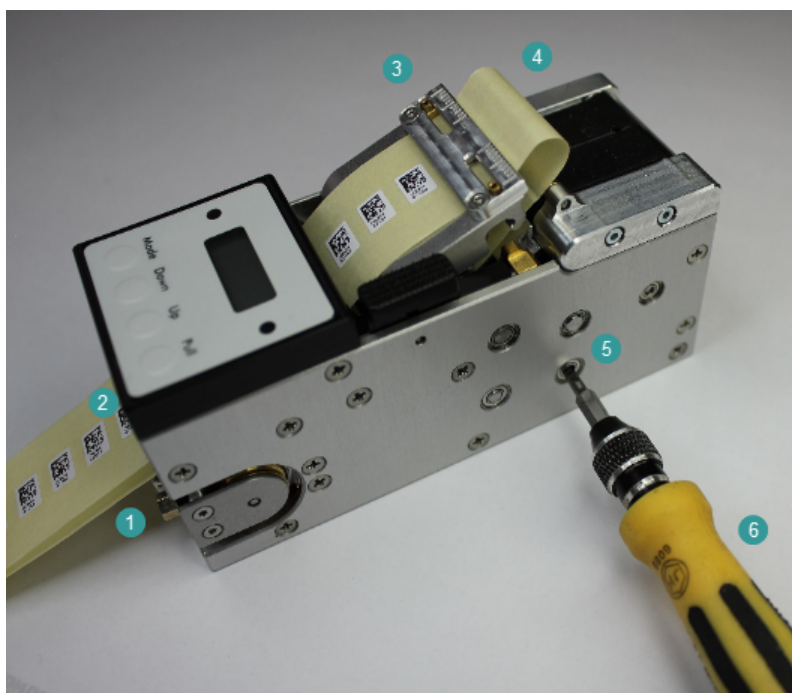


Fig. 18 Manually transporting the liner

- 1 Output opening
- 2 Input opening
- 3 Lifted closing flap
- 4 Rewind liner
- 5 Screw for manual liner transportation
- 6 Screwdriver

### *Incorrect label positioning on the label transport conveyors*

The Label Feeder provides precise liner feed. Possible inaccurate positioning of the labels will be compensated automatically.

In case this should not be the case proceed as follows:

- ▷ Check whether all components which are in contact with the liner or the labels are perfectly clean. Pay attention e. g. for glue or paper residues.
- ▷ Check whether the liner is centered precisely. Refer to section [Threading the liner](#) <sup>37</sup>.
- ▷ Check the setting of the parameters. Refer to section [Menu structure and settings](#) <sup>23</sup>.

### *Labels are not picked up*

Possibly the parameters have to be changed. For the special case factory setting **L 4.0**, **labels 4 mm (or less)** refer to section [Setting examples](#) <sup>[45]</sup>.

### *Labels deform or detach from the liner*


#### *HINT*

- We recommend to only use labels which have been approved by us.

Deforming or detaching labels may indicate that ambient temperature or air humidity is too high.

- ▷ Make sure that the site requirements are observed. For details regarding ambient temperature and air humidity refer to section [Site requirements](#) <sup>[29]</sup>.

## 6 Maintaining the Label Feeder

<i>Tools or equipment</i>	
<ul style="list-style-type: none"> <li>● Stamp tweezers</li> </ul>	 <p><i>Fig. 19 Stamp tweezers</i></p>

### CAUTION

Injury due to moving parts.

If you press the pull key while the closing flap is opened **your fingers may get between the transport rolls and get injured!**

- ▷ Press the **pull key** only when the closing flap is closed.
- ▷ If in case of maintenance works it is necessary to press the **pull key** while the closing flap is opened take care of your fingers and keep them away from the transport rolls.

### NOTICE

Damage of the Label Feeder due to unsuitable tools.

If you use tools with pointed or sharp edges when manually removing labels from the liner or out of the Label Feeder **the label transport conveyors may be damaged!**

- ▷ Always use stamp tweezers when manually removing labels.

## 7 Packing the Label Feeder

### *HINT*

- We recommend to use the original packaging. If it should no longer be available you can order suitable packaging material from us.

### *Packaging material provided by the customer*

- ▷ Make sure the Label Feeder and the accessories can not shift inside the packaging.
- ▷ Provide for sufficient stuffing.

## 8 Proper disposal

### *Disposal of the packaging*

The packaging of the Label Feeder consists of recyclable materials.

- ▷ Dispose of the packaging corresponding to the local environmental regulations.

### *Disposal of the Label Feeder*

The Label Feeder consists of recyclable materials. It has to be disposed of properly or the raw materials have to be recycled at the end of the service life.


- ▷ Return the Label Feeder or its components to recycling at the end of the service life.
- ▷ While doing so adhere to the valid environmental regulations.

#### *HINT*

- Please contact us if there are any questions regarding the proper disposal.

## 9 Appendix

### 9.1 Declaration of conformity



**DECLARATION OF CONFORMITY**

We,

**AMS Software & Elektronik GmbH**  
**Lise-Meitner-Strasse 9**  
**24941 Flensburg**  
**Germany**

declare under our sole responsibility that the product

**Category Name** : Label Feeder  
**Model Name** : ALF14  
**Serial Number** : The serial number will be inserted at the time of placing on the market


To which this declaration relates is in conformity with the following standard(s) or other normative documents(s)

**EN 12198-2:2002 + A1:2008, EN 60204-1:2006 + A1:2009,**  
**EN ISO 12100-1:2003 + A1:2009, EN ISO 12100-2:2003 + A1:2009,**  
**EN ISO 13849-1:2008, EN ISO 13857:2008, EN ISO 14121-1:2007**

Following the provisions of 2006/42/EC, Machinery directive(s).

The undersigned is authorized to compile the technical file.

Germany, Flensburg, September 5, 2013



Ivan Bajic  
General Manager

## 9.2 Technical data

Label Feeder	Unit	ALF14-25	ALF14-40	ALF14-55
Dimensions (W / D / H)	mm	115 x 43 x 54	115 x 58 x 54	145 x 73 x 54
Weight	gr	460	700	775
Power supply	V DC / A	24 / 1		
Ambient temperature	° C	15 - 30		
Height of pick up position	mm	50		
Transportation speed < 0.30 s / label (6.35 x 6.35 mm)	mm / s	10 - 200		

Liners and labels	Unit	ALF14-25	ALF14-40	ALF14-55
Liner width (min./max)	mm	8 / 26	8 / 40	8 / 55
Max. strength of liner	g / m <sup>2</sup>	140		
Label width (min./max)	mm	4 / 23	4 / 40	4 / 55
Label height (min./max)	mm	4 / 23	4 / 23	4 / 55

Accuracy of the label positioning	Value
In transportation direction	0.8 mm
Transverse to transportation direction	Depending on the manual setting of the locating blocks



### Mechanical dimensions

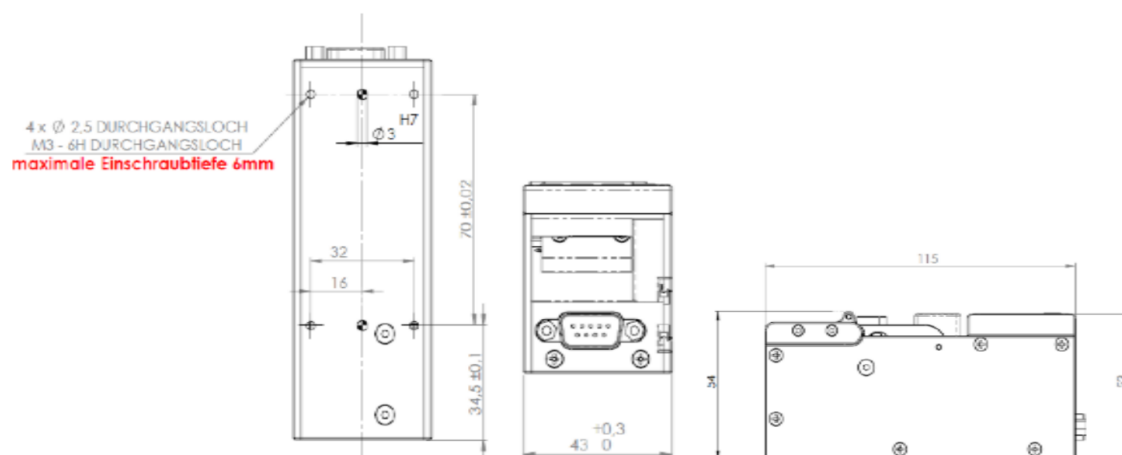


Fig. 20 Mechanical dimensions ALF14-25

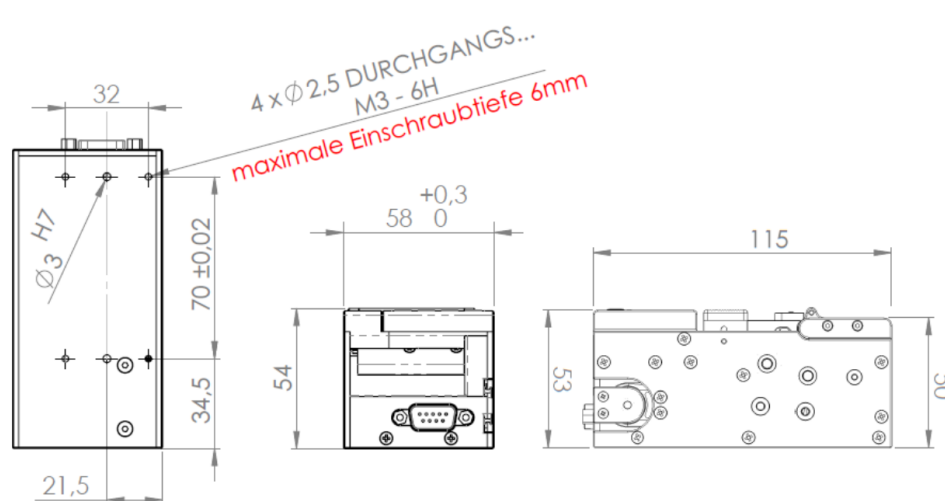


Fig. 21 Mechanical dimensions ALF14-40

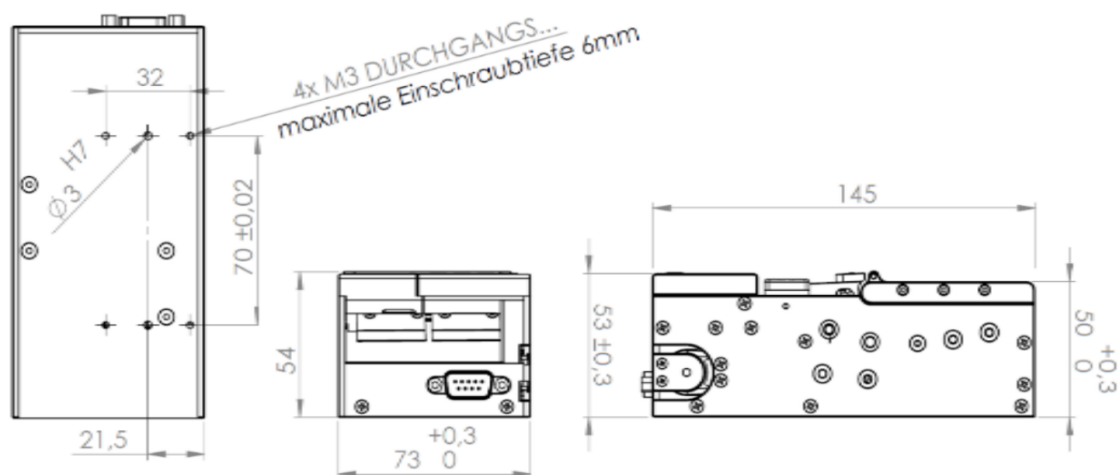


Fig. 22 Mechanical dimensions ALF14-55

### 9.3 Spare parts list

Spare parts list on request.

In case spare parts are required please call **+49 461 903 980** or send your request to the following e-mail address: [revoox@amsde.com](mailto:revoox@amsde.com).

## 9.4 Accessories

### 9.4.1 Table machine adapters

Manufacturer SMT system	Series / Type	Item number machine adapter			Required machine firmware
		ALF14-25	ALF14-40	ALF14-55	
Assembleon	Emerald	19710165	19710254	19710255	-
Assembleon	Emerald-X	19710165	19710254	19710255	-
Assembleon	MC-1	19710132	19710252	19710253	-
Assembleon	MC-12	19710132	19710252	19710253	-
Assembleon	MC-24	19710132	19710252	19710253	-
Assembleon	MC-24X	19710132	19710252	19710253	-
Assembleon	MC-5	19710132	19710252	19710253	-
Assembleon	MC-5 with ATS or MTF	19710132	19710252	19710253	-
Assembleon	MC-5X	19710132	19710252	19710253	-
Assembleon	MC-8	19710132	19710252	19710253	-
Assembleon	MG-1	19710165	19710254	19710255	-
Assembleon	MG-1R	19710165	19710254	19710255	-
Assembleon	MG-2	19710165	19710254	19710255	-
Assembleon	MG-3	19710165	19710254	19710255	-
Assembleon	MG-5	19710165	19710254	19710255	-
Assembleon	MG-8	19710165	19710254	19710255	-
Assembleon	MG-8R	19710165	19710254	19710255	-
Assembleon	Opal-XII	19710165	19710254	19710255	-
Assembleon	Sapphire	19710165	19710254	19710255	-

Manufacturer SMT system	Series / Type	Item number machine adapter			Required machine firmware
		ALF14-25	ALF14-40	ALF14-55	
Assembleon	Sapphire-X	19710165	19710254	19710255	-
Assembleon	Sapphire-XII	19710165	19710254	19710255	-
Assembleon	Topaz	19710165	19710254	19710255	-
Assembleon	Topaz-X	19710165	19710254	19710255	-
Assembleon	Topaz-XI	19710165	19710254	19710255	-
Assembleon	Topaz-XII	19710165	19710254	19710255	-
Essemtec	Cobra	19710210	19710238	19710239	-
Essemtec	Paraquda	19710210	19710238	19710239	-
FUJI	AIMEX	19710126-BA	19710240-BA	19710241-BA	-
FUJI	AIMEX 2	19710126-BA	19710240-BA	19710241-BA	-
FUJI	AIMEX 2S	19710126-BA	19710240-BA	19710241-BA	-
FUJI	NXT 1	19710126-BA	19710240-BA	19710241-BA	-
FUJI	NXT 2	19710126-BA	19710240-BA	19710241-BA	-
FUJI	NXT 3	19710126-BA	19710240-BA	19710241-BA	-
Heeb	-	19710127	19710242	19710243	-
Juki	FX-3 Speed Placer	19710116	19710244	19710245	-
Juki	FX-3R / FX-3RA	19710116	19710244	19710245	-
Juki	JM-10 Multitask Platform	19710116	19710244	19710245	-
Juki	JM-20 Multitask Platform	19710116	19710244	19710245	-
Juki	JX-100LED Compact placer	19710116	19710244	19710245	-

Manufacturer SMT system	Series / Type	Item number machine adapter			Required machine firmware
		ALF14-25	ALF14-40	ALF14-55	
Juki	JX-300LED Compact Placer	19710116	19710244	19710245	-
Juki	KE-2070 Speed Placer	19710116	19710244	19710245	-
Juki	KE-2080 Flex Placer	19710116	19710244	19710245	-
Juki	KE-3010 Speed Placer	19710116	19710244	19710245	-
Juki	KE-3020 Flex Placer	19710116	19710244	19710245	-
MyData / Mycronic	DX	19710133	19710246	19710247	-
MyData / Mycronic	MY100	19710133	19710246	19710247	-
MyData / Mycronic	MY12	19710133	19710246	19710247	-
MyData / Mycronic	MY15	19710133	19710246	19710247	-
MyData / Mycronic	MY200	19710133	19710246	19710247	-
MyData / Mycronic	MY9	19710133	19710246	19710247	-
Samsung	DECAN	19710131	19710250	19710251	-
Samsung	DECAN F2	19710131	19710250	19710251	-
Samsung	SM411	19710131	19710250	19710251	-
Samsung	SM421	19710131	19710250	19710251	-
Samsung	SM451	19710131	19710250	19710251	-
Samsung	SM471	19710131	19710250	19710251	-

Manufacturer SMT system	Series / Type	Item number machine adapter			Required machine firmware
		ALF14-25	ALF14-40	ALF14-55	
Samsung	SM481	19710131	19710250	19710251	-
Samsung	SM482	19710131	19710250	19710251	-
Siplace ASM	D	19710144-AX	19710234-AX	19710235-AX	-
Siplace ASM	F	19710144-AX	19710234-AX	19710235-AX	-
Siplace ASM	HF	19710144-AX	19710234-AX	19710235-AX	-
Siplace ASM	S	19710144-AX	19710234-AX	19710235-AX	-
Siplace ASM	SX	19710152	19710236	19710237	-
Siplace ASM	X	19710152	19710236	19710237	-
Siplace ASM	D1i	19710152	19710236	19710237	-
Yamaha	24	19710132	19710252	19710253	-
Yamaha	88	19710132	19710252	19710253	-
Yamaha	100	19710132	19710252	19710253	-
Yamaha	YS12	19710132	19710252	19710253	-
Yamaha	12F	19710132	19710252	19710253	-
Yamaha	24X	19710132	19710252	19710253	-
Yamaha	iPulse M1 (F2 feeder)	19710198	19710256	19710257	Version 3.796
Yamaha	iPulse M2 (F2 feeder)	19710198	19710256	19710257	Version 3.796
Yamaha	iPulse M4e (F2 feeder)	19710198	19710256	19710257	Version 3.796
Yamaha	iPulse M6 (F2 feeder)	19710198	19710256	19710257	Version 3.796
Yamaha	iPulse M7	19710198	19710256	19710257	Version 3.796

Manufacturer SMT system	Series / Type	Item number machine adapter			Required machine firmware
		ALF14-25	ALF14-40	ALF14-55	
	(F2 feeder)				
Yamaha	iPulse M10 mit F2 feeder	19710198	19710256	19710257	-
Yamaha	iPulse M20 mit F2 feeder	19710198	19710256	19710257	-
Yamaha	iPulse M10 with F3 feeder	19710199	19710258	19710259	-
Yamaha	iPulse M20 with F3 feeder	19710199	19710258	19710259	-
Yamaha	YG100	19710165	19710254	19710255	-
Yamaha	YG100R	19710165	19710254	19710255	-
Yamaha	YG12F	19710165	19710254	19710255	-
Yamaha	YG200	19710165	19710254	19710255	-
Yamaha	YG200L	19710165	19710254	19710255	-
Yamaha	YG300	19710165	19710254	19710255	-
Yamaha	YG88	19710165	19710254	19710255	-
Yamaha	YG88R	19710165	19710254	19710255	-
Yamaha	YS100	19710132	19710252	19710253	-
Yamaha	YS12	19710132	19710252	19710253	-
Yamaha	YS12F	19710132	19710252	19710253	-
Yamaha	YS12P	19710132	19710252	19710253	-
Yamaha	YS24	19710132	19710252	19710253	-
Yamaha	YS24X	19710132	19710252	19710253	-
Yamaha	YS88	19710132	19710252	19710253	-



Manufacturer SMT system	Series / Type	Item number machine adapter			Required machine firmware
		ALF14-25	ALF14-40	ALF14-55	
Yamaha	YSM20 (Z:LEX)	19710132	19710252	19710253	-
Yamaha	YSM40 (Z:TA)	19710132	19710252	19710253	-
Yamaha	YV100-II	19710165	19710254	19710255	-
Yamaha	YV100X	19710165	19710254	19710255	-
Yamaha	YV100Xe	19710165	19710254	19710255	-
Yamaha	YV100Xg	19710165	19710254	19710255	-
Yamaha	YV100XgC	19710165	19710254	19710255	-
Yamaha	YV100XgP	19710165	19710254	19710255	-
Yamaha	YV100XT	19710165	19710254	19710255	-
Yamaha	YV100XTg	19710165	19710254	19710255	-
Yamaha	YV112-III	19710165	19710254	19710255	-
Yamaha	YV180X	19710165	19710254	19710255	-
Yamaha	YV180Xg	19710165	19710254	19710255	-
Yamaha	YV88X	19710165	19710254	19710255	-
Yamaha	YV88Xg	19710165	19710254	19710255	-
Yamaha	YVL88-II	19710165	19710254	19710255	-

#### 9.4.2 Table Siplace machine adapter X-series

Ordered part	Item number
AMS X-Series Clipport adapter	19710167
ASM Siplace feeder adapter	00141305

#### 9.4.3 Table power cable

Ordered part	Item number
Power cable with plug for direct connection of the Label Feeder to the power supply.	Not available for all machine adapters. Item number on request.
Power supply cable with signal supply line - to connect the label feeder to the power supply and the Signal line of the placement machine (only for -ED version)	47087 (-AX)

#### 9.4.4 Table adapter

Ordered part	Item number
Adapter	35082
Signal adapter Yamaha (Yamaha power cable)	xxxxx
Signal adapter other manufacturers	on request

## 9.5 Letter of acknowledgment

The operating instructions contain important information about the Label Feeders of the ALF14 series and their handling.

I herewith confirm that I read all chapters of the operating instructions and that I am aware of all safety notes and warning notes.

Name, First name	Position within the company	Date and Signature

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