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ALF14-40 Model:

49220 Order Number:

Data sheet version:

1.1 - 08.06.2015

Firmware Version: 14.01.07

Description:

AMS Label Feeders separate labels of different material from liner material and provide them in precisely defined positions to machines for an automated pick up. Typically label feeders are used as central part of traceability solutions: Integrated to machines placing components to assemblies e.g. in electronic manufacturing they allow a robust process applying uniquely serialized labels to products for traceability purposes, specifically where machine-readable bar code labels are used.

Label support:

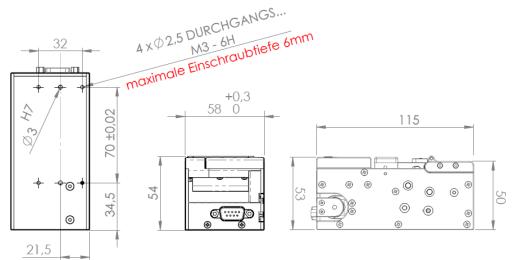
Most labels min. 5x5mm to max. 23x40mm, liner width min. 8mm to max. 40mm. Label material e.g. paper and polyimide. Different nontransparent, semitransparent, full transparent label material successfully tested.

Product Picture:



Product dimensions:

(Measurements in cm)



x-direction (transportation direction): 0.8mm Label positioning accuracy:

y-direction (transverse to transportation direction): depends on manual guiding block adjustment

Weight: 700 gr / 1,54 lb





Conformity:



Min / max ratings: Voltage 24V, power consumption max. 24W, current cons. max. 1A (avg)

Storage temperature range: 0° - 40°

Operating conditions: Recommended 5°C-30°C

Package & delivery sizes: If ordered with machine adapter, the label feeder ships readily mounted in a paperboard container:

Standard package size: $85 \times 30 \times 9 \text{ cm} / 33.46 \times 11.81 \times 3 \text{ inch.}$ Weight: 600 gr / 1.32 lb

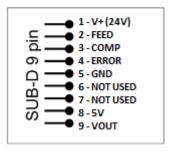
If ordered without machine adapter, the label feeder ships in a paperboard container:

Standard package size: 30 x 20 x 9 cm / 11.81 x 7.87 x 3 inch. Weight: 1500gr / 3.31 lb

Application recommendations:

For safe and reliable operation it is important to always use the label feeder base product ALF14 with AMS integration solution (e.g. machine adapters)

Connector Pinout: Connector: 9pin SUB-D male



Firmware Description

Label feeder firmware allows to adjust following operation parameters:

- Transportation speed: 10 200 mm/s. Default 80mm/s
- Label pick position: 2.0 to 25.0mm offset relative to label sensor in transportation direction
- Delay time: 1 999 ms after pick of label until next transportation cycle is triggered
- Gap: 5.0 99.9mm max. transportation distance where labels are missing on empty liner. Default:
 50mm
- Feed: 3 30mm transportation distance at manual trigger with FEED button. Default 5mm
- Transportation acceleration (Ramp) 0.1 2.0 m/s². Default 0.8 m/s²
- Transportation deceleration (Hold) (-1) (-100) m/s².

ALF14 series firmware provides a signal interface with 5 alternative operation modes:

- 0 Autonomous operation mode with signal interface disabled
- Signal interface output lines in high-impedance state
- FEED signal not monitored, no feeding triggered from external
- ${\bf 1}$ External FEED mode with COMP signal
- No autonomous operation: removing labels does not trigger feeding process (like mode 4)
- Label feed must be triggered from outside using the FEED command
- 2 Autonomous mode with external FEED enabled
- This mode operates the feeder unit autonomously
- Allows triggering label feeding using the external FEED line "overwriting" autonomous mode
- 3 Autonomous operation mode with signal interface enabled
- FEED signal not monitored, no feeding triggered from external
- Due to the autonomous mode, the "COMP" signal is not required but turned into a "READY" signal for monitoring the unit from external
- 4 External FEED mode with READY signal
- No autonomous operation: removing labels does not trigger feeding process (like mode 1)
- Label feed must be triggered from outside using the FEED command (like mode 1)
- No COMP signal but READY (compare mode 1 and 4)
- READY signal monitors label position status: high if label positioned, low if label not positioned (unlike mode 1)

Disclaimer:

To the best of our knowledge, the technical data contained herein is true and accurate at the date of issuance and is subject to change without prior notice. User must contact AMS to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied.