

OR-T 231-D1LF

Automatic strapping machine

Horizontal strapping



Customer benefits

Characteristics	Customer benefits
Teach-In programming via control panel	· Short set-up time, high flexibility
Adjustable, electronically controlled strap tension, floating head	 Maximum product securing during transportation thanks to balanced strap tension around the package
Safety system for vertical movement	· High operation safety
User-friendly control panel with push buttons and display	Easy operationSecure continuous duty
Robust and proven design with first class industrial components	High availabilityLow maintenance cost

OR-T 231-D1LF

Technical Data



Machine

Strapping cycle timeApprox. 9 s per strapArch dimensionsSee page 4

Vertical speedApprox. 200 mm/sStrap dispenserSeparate strap dispenser

Automatic stop of vertical with accumulator movement in case of

obstacle Strap end Automatic strap end

detection

Strap tension 200–2200 N
Adjustable by potentio- Colours Frame:

meter, electronically
controlled
Blue, RAL 5012
Movable parts:
Floating head ensures
Yellow, RAL 1023

equalised strap tension Control desk: around pack Grey, RAL 7035

Indexing head Horizontal stroke **Electrical supply** 400 VAC, 50 Hz, 3PE

Max. 400 mm Voltage tolerance +/-5% Approx. speed 100 mm/s Rated power 1,8 kW

Sealing method Heat weld sealing system **Compressed air** 5–6 bar

adjustment

From 90 mm above

for PP and PET, simple Consumption 16 NI/cycle

Machine weight Approx. 900 kg

transport height resp. | Packaging size/weight | Standard package for truck

from 250 mm above floor

Up to 1675 mm (H16) or

up to 2175 mm (H21)

Width 2300 mm

Length 4000 mm

Height 2200 mm

Gross weight

approx. 1100 kg

Conveyor

The conveying systems is not part of the OR-T 231-D1LF machine

Control system

Stand alone control desk

Min. strapping height

Max. strapping height

The Man Machine Interface consists of

- Main switch and Emergency push button
- Push button for various start functions
- Selector swiches for machine mode and program
- Potentiometer for strap tension selection
- Indicator lamps for machine on condition indication
- Numerical display for machine condition indication

Standard strapping programs

- Pass through
- 1–9 programs, selectable by selector switch on the desk or by 4 inputs with BCD-Code from external control
- Up to 6 strap positions per program, programmable by Teach-In function

PLC Simatic S7-300

Interface, signal exchange

All signals for exchange must be potential free

The strapping machine is able to receive the following signals

- Start of the selected strapping program
- Confirmation: Conveyor not in motion
- External strapping program selction by BCD-Code
- External Emergency-Stop is activated
- External safety clear (light barriers, access door etc.

The strapping machine sends the following signals

- Strapping program completed
- Enabled conveyor motion
- Activated emergency-Stop on the strapping machine

Detailed description "Signal Exchange" available

Strap

Polyester (PET) Width 9, 12, 16 mm Core size
Thickness 0,56–0,8 mm

Polypropylene (PP) Width 12–16 mm

Thickness 0.65–0.85 mm

Core size Ø 406 mm

Width 152 mm



Features



Simple operation

User friendly control panel Numerical display to indicate machine status



Maximum product securing during transportation

Adjustable strap tension, electronically controlled, floating head for balanced strap tension around the package



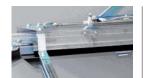
Long life cycle and low maintenance cost

First class industrial components, e.g. SEW motors, powered by frequency controller for fast movement and precise control

Options

Strap centering unit

For precise strap positioning, pneumatically powered.



Option package for glass bottle applications

- Strap centering unit with pushers at head side and at head opposite side
- Side pushers, adjustable, stroke 80 mm
- Two strap tensions, adjustable
- Sensor an additional signal, head at top position
- Additional signal "Pallet finished"



Photocell Teach-In start on top of pallet

Allows to store and work with the strapping programs in relation to the top of the pallet. Ensures proper strapping in case of variation of pack heights.



Max. strapping height

Upt to 2675 mm (H26) or up to 3175 mm (H31) See also page 4

Simatic-Touchpanel TP 177

User-friendly guidance with HMI touchpanel



Strap end pre-warning

To ensure short machine downtimes when changing coils



Upgrade for additional programs and strap positions

Teach-In system for

- 19 programs x1–6 strap positions
- 10 programs x1–19 strap positions



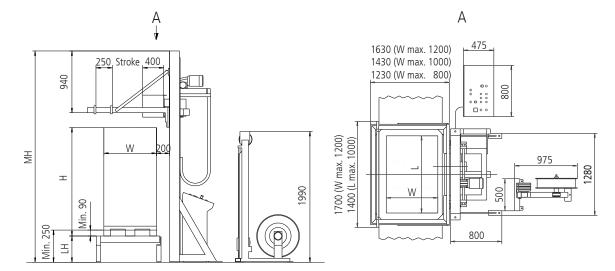
Flash light

General fault signal with red indicator lamp





Layout



Arch dimensions Working height OR-T 231-D1LF

Min. working	Max. working	Machine	
height*	height*	height	
	LH + H	МН	
Min. 250	1675	2710	Standard H16
resp.	2175	3210	Standard H21
min. 90 above LH	2675	3710	Special H26
	3175	4210	Special H31

^{*} Above floor

Arch dimensions	For package dimensions
WxL	WxL
900 x 1480	500- 800 x 400-1200
1100 x 1480	500-1000 x 400-1200
1300 x 1480	800-1200 x 400-1000
1300 x 1480	800-1200 x 400-1200

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