

Status: 07/2021

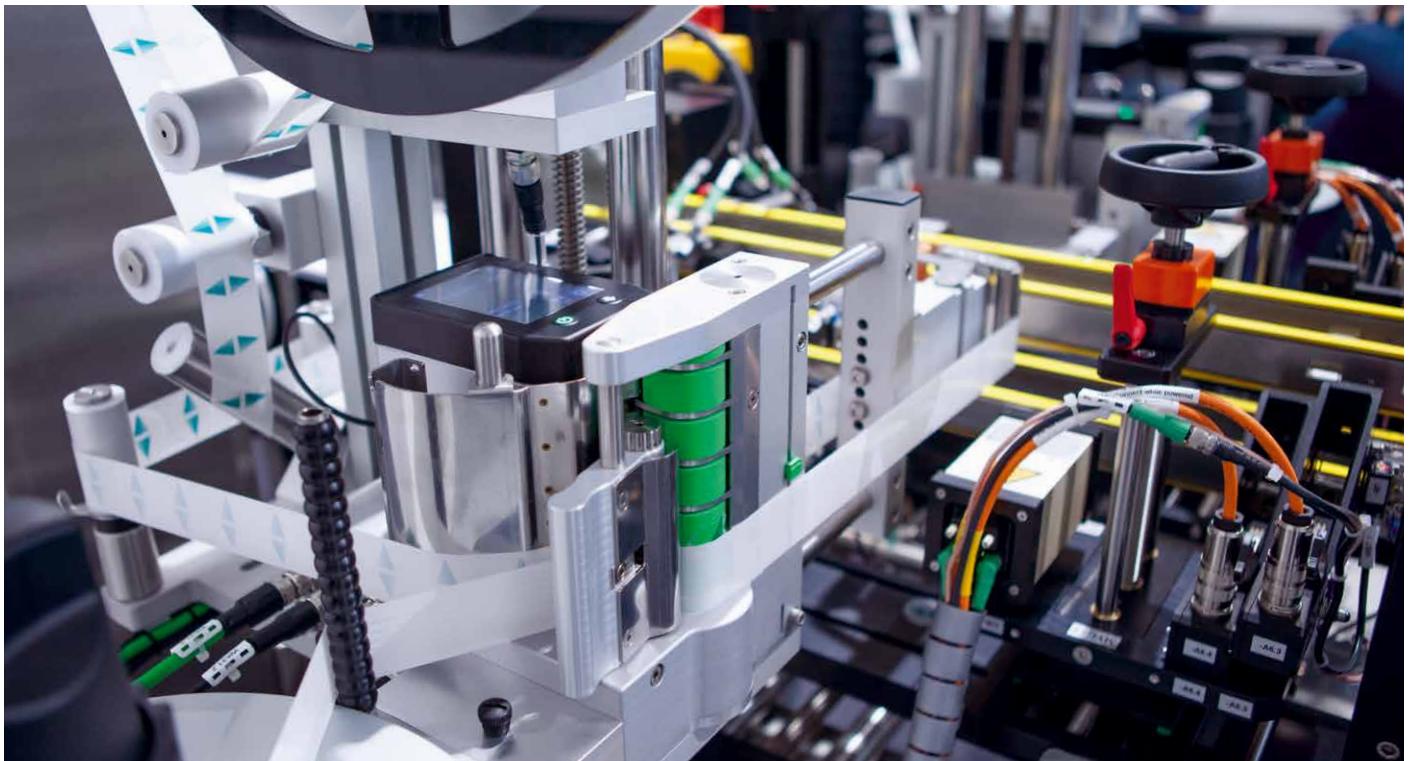


Products need labeling
Labeling heads



IXOR
Made in Germany

Smallest servo-driven labeling head in its performance class



A future-proof investment

In the matter of mechanics, the IXOR can be ideally integrated in fully automatic labeling machines with the help of a modular construction kit. It can also be assembled to the conveyor belt of a production line by means of accessorial stands. Pre-printed labels are applied on products or packaging fast and precisely.

The device has the control unit integrated, a separate control cabinet is not required. The base unit can be selected from four structural widths in right-hand and left-hand designs. Unwinders pick up label rolls with 410 mm maximum outside diameter.

Zero downtime is possible through a redundant system.

The labeling head is a key component for smart production. The LAN and WLAN interfaces enable the device to be connected to the superior control units of machines.

MQTT, Modbus and OPC UA ensure cross-platform and future-proof communication. Protocols are kept simple and lean, machine and plant data can be submitted event-driven. If data values change, updates are possible in real time.

Remote IXOR operation with a smartphone, a tablet or a PC is possible at any time. The intuitive web interface allows backup, restore and updates.



Scopes of delivery, design and technical specifications correspond to the date of the printing. Subject to change. The data provided in the catalog do not represent any warranty or guarantee.



Information is also available on the Internet:
www.cab.de/en/ixor



Examples of construction

Construction L - left-hand
Assembly V - vertical



Pictured:

- 1.1 Labeling head 124 L
- 2.1 Unwinder D310 V 124 L
Outside diameter D: 310 mm

Construction R - right-hand
Assembly V - vertical



Pictured:

- 1.1 Labeling head 124 R
- 2.2 Unwinder D410 V 124 R
Outside diameter D: 410 mm

Construction R - right-hand
Assembly V - vertical



Pictured:

- 1.1 Labeling head 124 R
- 2.1 Unwinder D410 V 124 R motor-driven
Outside diameter D: 410 mm

Construction L - left-hand
Assembly H - horizontal



Pictured:

- 1.2 Labeling head 186 L
- 2.2 Unwinder D410 H 186 L
Outside diameter D: 410 mm



For more examples of construction
see delivery program starting on page 19.

Operation panel



Home screen

Status bar

Speed, label winding, current label roll diameter, label length, WLAN signal, status of start and stop signal

Operational and warning messages

in alternation with the cab logo

Counter and diagnostics indication

Application-specific configuration

Quick menu

for comfortable editing of values
Quick adjustment with a slider,
precise adjustment with the help of a button

 **Speed**

Press briefly
Labeling speed adjustment

Press for 3 or more sec.
Masterencoder test

 **Start delay**

Press briefly
Change the label position on the product

Press for 3 or more sec.
Start sensor compensation wizard

 **Stop delay**

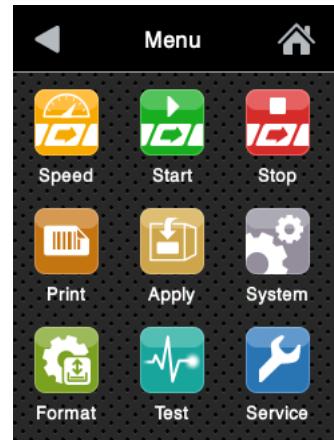
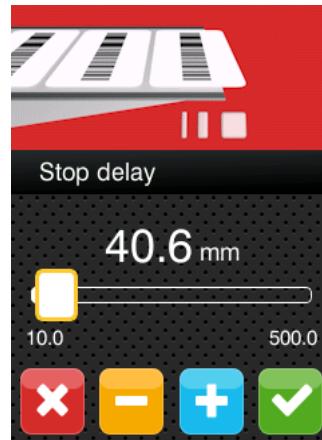
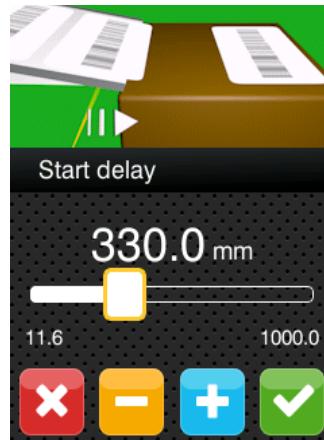
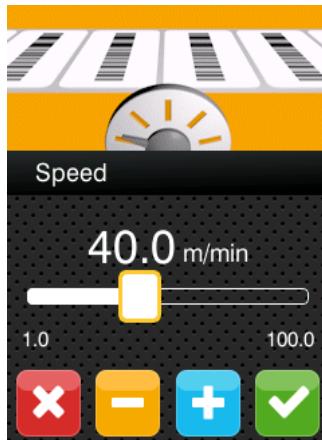
Press briefly
Adjustment of label stop on the peel-off plate

Press for 3 or more sec.
Label sensor
AutoTeach feature

 **Menu selection**

Press briefly
Jump to menu via icons

Press for 3 or more sec.
Password login



Software features

Menu icons one by one



Label speed

including synchronized product speed

SPEED



Label position on the product

including multi-labeling;
start condition

START



Label stop on the peel-off plate

including detection of labels missing on the liner tape;
stop condition

STOP



Print settings

for the control of optional printers;
printing while labels are in motion or not in motion

PRINT



Transfer settings

for the control of optional label transfer units
such as applicators, air-jet box, etc.

APPLY



System settings

Display, language
Metric / inch units
Pre-warning to end of label web



Application-specific configuration

a maximum of 100 formats;
backup and restore with the help of a PC



Simulation and testing

Display and setting of inputs and outputs
for service purposes



Service tools

Maintenance wizard
Lot counter
Video tutorials

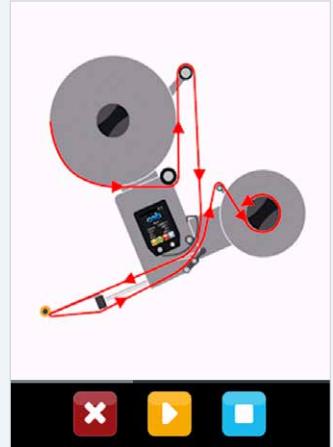
Sub menu and service features



Sub menu

with more than 150 features

Inputs	Outputs
FEED	BTN_FEED
	Button FEED press.
START	FEEDING
Start labeling	
LOCK	PRT
START is locked	Start print
STOP	READY
Stop label feeding	Ready to start
DIM_IN	DIM
Diminish. label reel	Diminishing label re
END_IN	END
End of label reel	End of label reel
ON	NO_LABEL
ON/OFF by input	Missing label
RESET	ERROR
Reset error	Stopped by error



I/O test

Status display of all inputs and outputs;
ideal with initial operation, especially
when the labeling head integrates
in external control units

Video tutorials

Watch feed path schemes on the
display. Scan QR code with a mobile
device to see more explanatory clips.

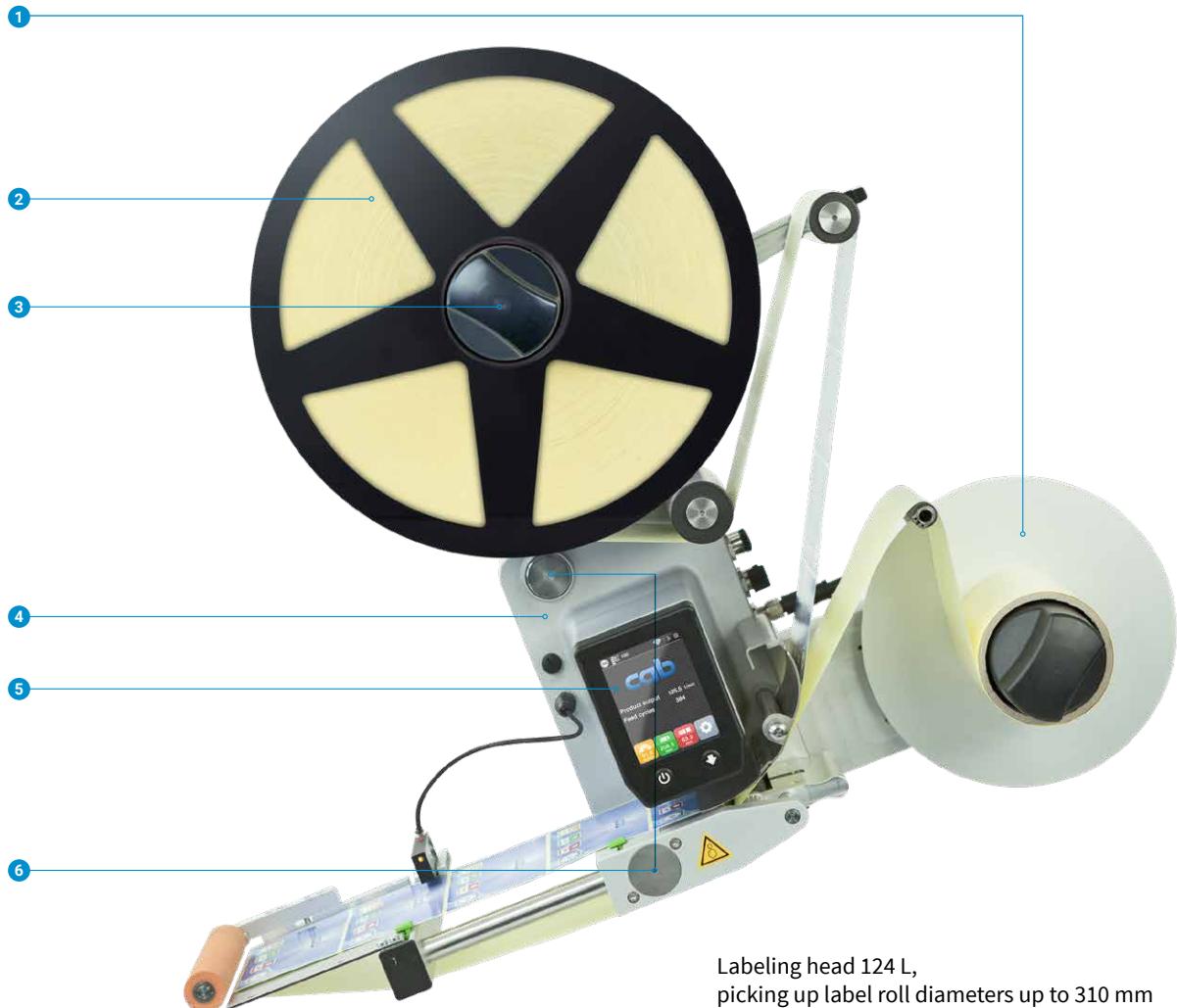
Details - standard labeling head

The subsequent illustration shows a very common IXOR version.

This configuration is characterized by an economic and compact construction.

The unwinder and the rewinder are mounted directly on the base unit and operate without a separate drive.

In contrast, the illustration on the right shows an IXOR with a motor-driven unwinder and a motor-driven rewinder, enabling to process large label rolls.



Labeling head 124 L,
picking up label roll diameters up to 310 mm

① Rewinder

When the labels have been peeled off, the liner tape is rewound. The swing lever and an integrated coupling enable the liner tape to be constantly tensed after passing the drive roller.

② Unwinder

picking up label rolls with 310 mm (optionally 410 mm) maximum outside diameter. The swing lever and an integrated brake mechanism enable constant tension of the label web.

③ (Label roll) core retainer

By turning the handle, the core of the label roll is tightened and released again.

④ Base unit

made of cast aluminum. Basis to assemble all the units. The chassis possesses protection class IP66, NEMA 250 type 12. Further included is the drive unit consisting of a highly dynamic and high-torque servo motor.

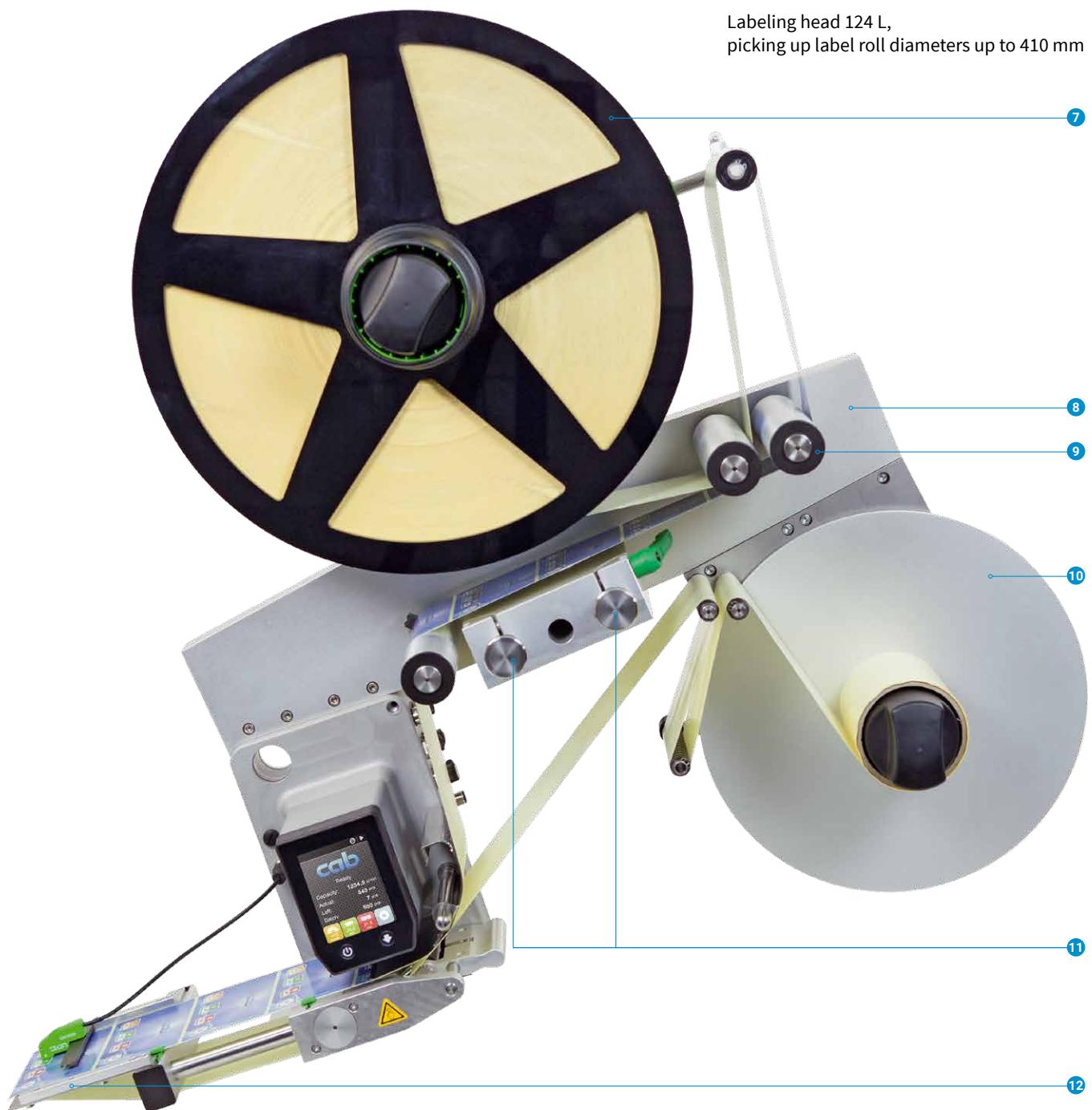
⑤ Operation panel

Colored 3.5“ LCD touch display. In case of overhead assembly, the display can be rotated by 180°.

⑥ Pick-up points

on bars with 30 mm diameter. By moving the system, the position of the label on the product can be adjusted transverse to its transport direction.

Details - labeling head with motor-driven winders



7 Motor-driven unwinder

picking up label rolls with 410 mm (optionally 510 mm) maximum outside diameter. An integrated, brushless torque motor rotates the label roll and unwinds the label web according to the swing lever position.

8 Fixing bar

to pick up all the units: base unit and motor-driven winders

9 Deflection rollers

to guide the label web from the motor-driven unwinder to the base unit. Diameter 38 mm as pictured above

10 Motor-driven rewinder

When the labels have been peeled off, the liner tape is rewound. The swing lever and an integrated, brushless torque motor enable the liner tape to be constantly tensed after passing the drive roller.

11 Pick-up points

see position 6

12 Peel-off plate

to be application-specifically configured with the help of a comprehensive construction kit.

Base unit

The base unit can be considered the heart of every labeling head. Included are the drive roller for label web transport, a brushless servo motor and the control unit containing the operation panel.



Interfaces:

① END/DIM

Inputs

End of label web
Pre-warning to end of label web

② LAN

③ START

Input

Labeling

④ Digital I/O interface

Analog inputs

Speed
Start delay
Stop delay

Digital inputs

Labeling head ON
Pre-dispense
Start labeling
Start labeling locked
Error reset
User-defined

Outputs

Labeling head ready
Pre-dispense
Stop label feed
Label feed running
Label missing on liner tape
End of label web
Pre-warning to end of label web
Error
User-defined

⑤ SYNC

Input

Synchronized label and product speed

⑥ APPLY

USB

Inputs

Transfer unit in initial position
Transfer unit in operating position
Printer busy

Outputs

Transfer unit
Label blow-off
Start printer

⑦ POWER

⑧ PRINT

Input

Printer busy

Outputs

Start printer
Start transfer unit

⑨ WLAN

⑩ STOP

Input

Label sensor stop signal

Output

Label sensor Teach signal



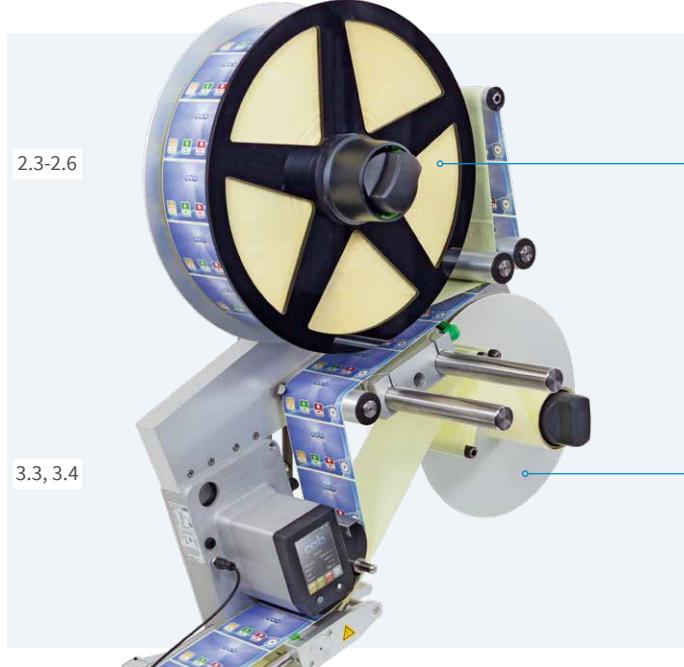
Technical data - labeling head

Labeling head	Structural width	124 mm (4.9")	186 mm (7.3")	248 mm (9.7")	310 mm (12.2")
Performance					
Web speed	up to m/min		25, 50, 100, 200 - depending from device model		
	up to ipm		1,000, 2,000, 4,000, 8,000 - depending from device model		
Material					
Labels on roll			Paper, plastics PET, PE, PP, PVC		
Thickness	mm		0.055 - 1		
Weight	g/m ²		60 - 700		
Width	Labels ¹⁾ up to mm	120	182	244	306
	Liner tape up to mm	124	186	248	310
Label length	mm		5 - 6,000		
Media roll	Outside diameter		310/410 mm (12"/16")		410 mm (16")
	Core diameter		76 mm (3")		
	Winding		outside or inside		
Weight	up to kg		15		
Labeling head sizes and weights					
Height with media roll	310 mm min. mm		600 x 600		-
x Width with media roll	410 mm min. mm		700 x 680		825 x 925
Depth	mm	266	328	390	452
Weight	min. kg	14	14.5	15	32
Device data					
Drive			AC servo motor		
Operation panel			QVGA-resoled LCD color display		
Masterencoder (option)			24 V HTL, track A + B		
Orientation of assembly			vertical / horizontal		
Label sensor					
Method			Transmitted light, inductive, capacitive ²⁾ , ultrasonic ²⁾		
Function			Detection of label margins and end of materials		
Interfaces					
Digital I/O interface			17 pin, 24 V PNP to communicate signals with a superior control unit (galvanically isolated)		
Analog			Inputs (0-10 V / 0-24 V) for speed, START , STOP parameters in conjunction with PLC supplied by the customer or potentiometer (galvanically isolated)		
LAN			MQTT, Modbus, OPC UA, Ethernet/IP ²⁾		
WLAN			WLAN 802.11 b/g/n, 150 MBit/s, 2.4 GHz		
Periphery (APPLY)			12 pin, to connect USB warning light and applicator (24 V PNP, galvanically isolated)		
End of web sensor			5 pin, 24 V PNP or end of web sensor by cab		
Start and stop sensor			5 pin each, 24 V PNP (galvanically isolated)		
Synchronized product speed			5 pin, 24 V PNP external synchronization signal or by masterencoder (galvanically isolated), masterencoder is an option		
Serial (option)			RS232/RS485		
Operating data					
Mains Protection class			primarily TN and TT grids Protection class I		
Power supply Power consumption			100 - 240 VAC, 50 - 60 Hz up to 4 A		
External fusing			120 V: at least 6 A slow, up to 20 A / 230 V: at least 3 A slow, up to 16 A		
Leakage current			EN 60950: 260 V / 60 Hz: 1.0 mA		
Type of protection			IEC 60529: IP 66, UL 50 type 12, NEMA 250 type 12		
Temperature / humidity	Operation		0 - 40 °C / 10 - 85 %, not condensing		
	Stock		0 - 60 °C / 20 - 80 %, not condensing		
	Transport		-25 - 60 °C / 20 - 80 %, not condensing		
Approvals			CE, FCC, IC, ICES-3, CB, cULus		
Operation panel					
LED buttons			ON, FEED		
LCD graphics display	Width x Height mm		54 x 70		
Settings			Language settings, device settings, interfaces, memory for 100 product formats		
On display			Operational and warning messages		
Monitoring / test routines					
Label web			Pre-warning to end of label web, end of label web, label web broken		
Drive			Torque, temperature, power supplies, currents		
Electrical outputs			Overload protection, short circuit, reverse polarity		
System			Diagnostics when device is switched on, I/O test menu integrated		

¹⁾The label size is further defined by the type of applicator. Limitations may apply to small labels, thin materials or strong adhesive.
Such applications need to be tested.

²⁾on request

Motor-driven winders



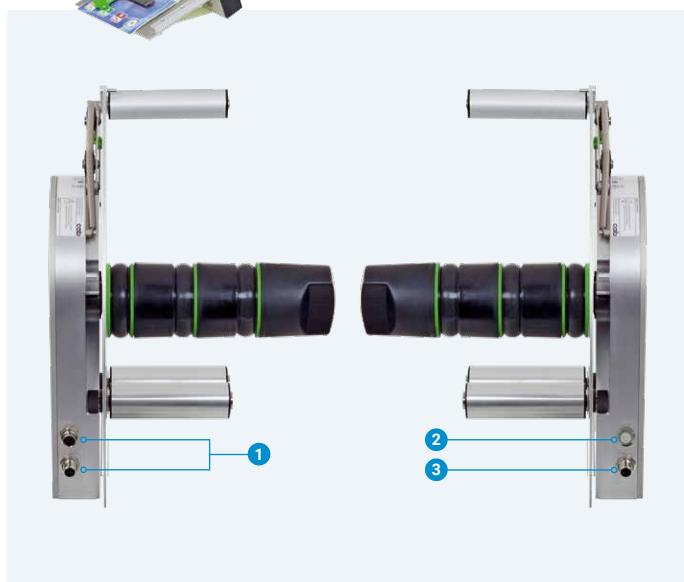
Use is in combination with the base unit.
They are operated via the operation panel of the labeling head.

1 Motor-driven unwinder

picking up the label roll and providing the label web;
fitting with large label roll diameters up to 410 / 510 mm
and high labeling performances

2 Motor-driven rewinder

picking up the liner tape;
available in diameters 310 and 410 mm;
ideally operated in conjunction with a motor-driven unwinder



Interfaces:

1 POWER

Power supply IN/OUT

cab BUS

Data interface to base unit

2 ON/OFF switch

2 Digital I/O interface (option)

Inputs

Winder ON

Error reset

User-defined

Outputs

Winder ready

End of label web

Pre-warning to end of label web

Error

User-defined

Technical data - motor-driven winders

Winder motor-driven	Structural width	124 mm (4.9")	186 mm (7.3")	248 mm (9.7")	310 mm (12.2")
Performance					
Web speed	up to m/min		125		
	up to ipm		5,000		
Material					
Labels on roll		Paper, plastics PET, PE, PP, PVC			
Thickness	mm		0.055 - 1		
Weight	g/m ²		60 - 700		
Width	Labels up to mm	120	182	244	306
	Liner tape up to mm	124	186	248	310
Label length	mm		5 - 6,000		
Media roll	Outside diameter		410 / 510 mm (16"/20")		
	Core diameter		76 mm (3")		
	Winding		outside or inside		
Weight	Unwinder up to kg		30		
	Rewinder up to kg		15		
Winder sizes and weights					
Height	with media roll 410 mm min. mm		430 x 490		
x Width	with media roll 510 mm min. mm		530 x 590		
Depth	mm	266	328	390	452
Weight	min. kg		7		
Device data					
Drive		brushless torque motor			
Orientation of assembly		vertical / horizontal			
Interface					
Digital I/O interface (option)		12 pin, 24 V PNP to communicate signals with a superior control unit (galvanically isolated)			
Operating data					
Mains	I Protection class	primarily TN and TT grids I Protection class I			
Power supply	I Power consumption	100 - 240 V~, 50 - 60 Hz I up to 2 A			
POWER IN	I POWER OUT	up to 12 A I up to 10 A			
External fusing		100 V: at least 3 A slow, up to 20 A / 230 V: at least 1.5 A slow, up to 16 A			
Leakage current		EN 60950: 260 V / 60 Hz: 0.5 mA			
Type of protection		IEC 60529: IP 66, UL 50 type 12, NEMA 250 type 12			
Temperature / humidity	Operation	0 - 40 °C / 10 - 85 %, not condensing			
	Stock	0 - 60 °C / 20 - 80 %, not condensing			
	Transport	-25 - 60 °C / 20 - 80 %, not condensing			
Approvals		CE, FCC, IC, ICES-3, CB, cULus			
Monitoring / test routines					
Label web		Pre-warning to end of label web, end of label web, label web broken			
Drive		Torque, temperature, power supplies, currents			
Electrical outputs		Overload protection, short circuit, reverse polarity			
System		Diagnostics when device is switched on			

Peel-off plates

4.1, 4.2



4.4, 4.5



4.6, 4.7



4.9



Peel-off plate standard

provided in lengths of 100 mm or 160 mm



pictured with a label sensor CEON and a wipe-down roller

Peel-off plate adjustable 0° to +75°

to be continuously adjusted at angles from 0° to +75° to the corresponding application field.



pictured with a label sensor CEON and a wipe-down roller

Peel-off plate pivoted 0° to -30°

swinging downwards by up to -30°. The pneumatic drive is controlled via the base unit (pictured are 124 mm). Structural widths of at least 186 mm provide drives on both sides. Uneven products can be labeled and labels be dispensed into pockets.



pictured with a label sensor CEON and a wipe-down roller

Peel-off plate 75° with a wipe-down roller

as a size-optimized unit with a fixed 75° label tape deflection angle. A spring-mounted wipe-down roller to be adjusted in rest position is included next to a retainer to fix the label sensor CEON.



pictured with a label sensor CEON

Accessories



Label sensor CEON

to detect and exactly position all conventional (even particularly thin, transparent or metallized) label materials at any mesh width:

- easy to assemble on the peel-off plate
- precise detection even at very high dispensing speeds up to 24,000 ipm
- high repeat accuracy
- comfortable AutoTeach sensor balance directly on the labeling head
- Operating voltage 15 to 30 VDC
- Push-pull amplifier output:
PNP, NPN, 40mA, short-circuit proof



I/O box

to extend the programmable inputs and outputs provided with the labeling head. The signals are mainly used for customer-specific label application system control:

- ① Connection to labeling head**
M12, 12 pin
- ② Connection to further participant**
M12, 12 pin
- ③ Digital inputs/outputs, analog inputs**
M8, 3 pin

A total of 12 inputs and outputs are available per box.



External operation panel 4.3"

providing the same functionality as on the labeling head;
landscape or portrait mode display

Users are free to choose whether to operate the labeling head on the external panel or on the one integrated in the device.

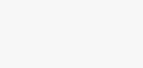
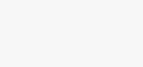
- ① LED:** Power ON
- ② USB slot** to connect a memory stick
in order to transfer configuration data or the firmware



A maximum of three participants can be connected to the base unit:
for example 2 x I/O box, 1 x external operation panel

Accessories

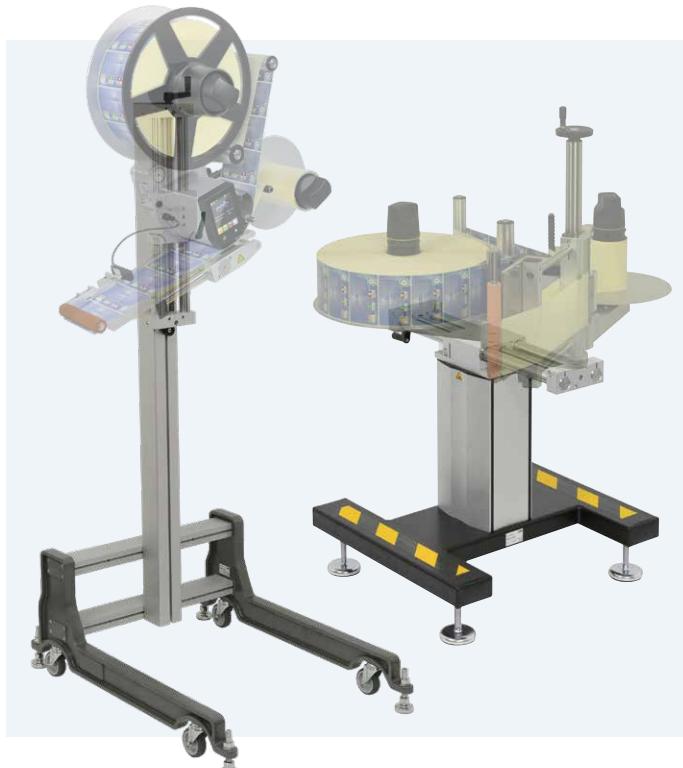
Label margin detection	
5.2	<p>Retainer bar to assemble the label sensor CEON on the peel-off plates</p>
5.3	<p>Forked light barrier to detect translucent labels with transparent or semi-transparent liner tapes; optical operation principle (transmitted light)</p>
5.4	<p>Retainer to assemble the forked light barrier on the assembly rods 7.1</p>
Software key	
6.1	<p>Speed key to define the maximum labeling speed for the base units 1.1 to 1.4</p>
Assembly rod	
7.1	<p>Rod, diameter 16 mm to assemble the peel-off plates 4.1 to 4.6 on the base units 1.1 to 1.4 Depending from the orientation of assembly, users can choose between different lengths. Distance peel-off plate to base unit 0 to 600 mm</p>
Product detection	
8.1	<p>Product sensor to trigger the labeling process as soon as the product has been detected. The maximum scanning range standard is 200 mm, with transparent products it is 80 mm.</p>
8.2	<p>Product sensor cable M12-M8, 4 pin, a-coded Length 2.5 m</p>
Masterencoder	
9.1	<p>Rotary encoder, incremental, diameter 50 mm with cable 2.5 m and plug M12, 5 pin, a-coded A and B tracked to automatically synchronize the labeling speed</p>
9.2	<p>Extender cable for rotary encoder M12, 5 pin, a-coded Lengths 2.5 m, 5 m, 10 m</p>
9.3	<p>Friction wheel for rotary encoder to drive the master encoder by means of friction; circumference 200 mm</p>
9.4	<p>Retainer for rotary encoder The friction wheel is pressed onto the conveyor belt in a spring-mounted manner.</p>

Power supply cable	
10.1	 <p>Power supply cable without a Schuko plug Lengths 2.5 m, 5 m, 10 m</p>
10.2	 <p>Power supply cable with Schuko plug Length 2.5 m</p>
Signal cable	
10.3	 <p>I/O interface cable Exchange of signals between the labeling head and a superior control unit; for signal description see page 8; lengths 2.5 m, 5 m, 10 m With circular connectors: 1) Cable plug M12, 17 pin, male 2) Cable jack M12, 17 pin, female</p>
10.4, 10.5	 <p>Signal cable Exchange of signals between the labeling head and label transfer units; for signal description see page 8; lengths 1 m, 2.5 m With circular connectors: 1) Cable plug M12, 12 pin, male 2) Cable jack M12, 12 pin, female</p>
LAN cable	
10.6	 <p>Ethernet cable M12, 4 pin, d-coded to RJ45 Lengths 2.5 m, 5 m, 10 m</p>
USB cable	
10.7	 <p>Cable to connect an external operation panel M12, 12 pin to USB-B Length 5 m</p>
10.8	 <p>USB adapter to connect a memory stick to IXOR APPLY for backup and restore Cable M12, 12 pin to USB-A Length 0.2 m</p>
Power cable	
10.9	 <p>Power cable to connect winders or winders with the base unit Lengths 0.3 m, 0.8 m, 2.5 m</p>
Counterholder	
12.1	 <p>Counterholder 310 mm to be used with a diameter 310 mm unwinder in vertically oriented labeling head assembly. It prevents the label web from accidentally sliding off the media roll.</p>
	 <p>Counterholder 410 mm to be used with a diameter 410 mm unwinder/motor-driven unwinder in vertically oriented labeling head assembly. It prevents the label web from accidentally sliding off the media roll.</p>
	 <p>Counterholder 510 mm to be used with a diameter 510 mm unwinder/motor-driven unwinder in vertically oriented labeling head assembly. It prevents the label web from accidentally sliding off the media roll.</p>

Accessories

Cover plate	
13.1	 <p>Plate to cover the mechanical port on which the rewinder connects to the base unit. It is needed if no mechanical rewinder is assembled directly on the base unit.</p>
Circular connector	
14.1	 <p>Cable plug M12, 5 pin, a-coded, male It allows to configure connecting cables yourself for the following interfaces: START END/DIM PRINT STOP For signal description see page 8</p> <p>Cable plug M12, 12 pin, male It allows to configure connecting cables yourself for the following interface: APPLY on the side next to the labeling head For signal description see page 8</p>
14.2	 <p>Cable jack M12, 5 pin, a-coded, female It allows to configure connecting cables yourself for the following interface: SYNC For signal description see page 8</p> <p>Cable jack M12, 12 pin, female It allows to configure connecting cables yourself for the following interface: APPLY on the side next to the label transfer unit For signal description see page 8</p>
Signal	
15.1	 <p>Warning light In addition to the display, it indicates the status of the device. Red Group error, e. g. end of label web, label web broken Yellow Pre-warning to end of label web Green Device ready It is assembled with the help of the stand included in delivery; length of cable is 2.5 m With 17 pin M12 circular connector to connect to the digital I/O interface</p>
Wipe-down system	
17.1	 <p>Wipe-down roller, wipe-down brush to tamp labels on products in motion</p>
Assembly aid	
18.1, 18.2	 <p>Fixing bars to assemble motor-driven winders and the base unit</p>
Deflection roller	
19.1	 <p>Deflection roller D30 AL, paper guide integrated</p>
	Deflection roller D38 AL, paper guide integrated
	Deflection roller D60 AL, paper guide integrated
Spacer	
20.1	 <p>Spacer for motor-driven unwindlers D510, rewinders D410</p>

Accessories

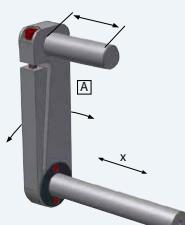


Assembly aids

to assemble the labeling head customer-specifically in production lines or integrate it in labeling machines. At this, a construction kit is provided, including

- **device retainers,**
- **column stands,**
- **floor stands.**

21.1



[A] Pivoted device retainer

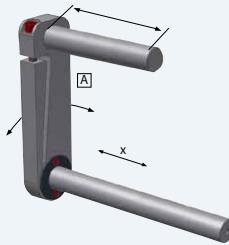
to adjust the inclination of the labeling head.
For example, the peel-off angle "label to product" can be set.
Labeling head assembly is possible in three methods.

Method 1: Device fixed

to vertically or horizontally assemble the labeling head

The labeling head cannot be adjusted in x-axis direction.

21.2



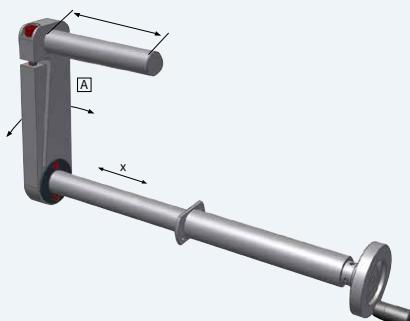
Method 2: Device moveable

to vertically assemble the labeling head

The labeling head can be adjusted in x-axis direction by 200 mm transverse the direction labels are peeled off.
In case of wipe-down labeling, the label position on the product may be varied transverse the transport direction of the product.

If no **[A] pivoted device retainer** is assembled,
the adjustable track increases by 26.5 mm.

21.3



Method 3: Device precisely adjustable

to vertically or horizontally assemble the labeling head

The labeling head can be precisely adjusted by 150 mm in x-axis direction transverse the direction labels are peeled off with the help of a hand crank. In case of wipe-down labeling, the label position on the product may be varied transverse the transport direction of the product.

Accessories

22.1



Column stand, one axis

to assemble the labeling head to a conveyor belt;
position is set with the help of a hand crank

Technical data	Column stand
Column length	mm 400 - 800
Adjustable track	mm column length in mm - 205 mm
Column diameter	mm 30

22.2



Column stand, two axes

to assemble the labeling head to a conveyor belt;
position is set with the help of a hand crank

Technical data	Column stand
Column length	mm 400 - 800
Adjustable track	mm column length in mm - 205 mm
Column diameter	mm 30

22.3



Floor stand 1632 vertical

primarily for labeling from the top on a product. It is moveable.
On site, locking and setting is possible with the help of leveling feet.
Preferred use is with applications in various production lines

Technical data	Floor stand 1632
Leveling feet, adjustability	mm ± 15
Load	up to kg 50
Load at protrusion 300 mm	up to kg 25
Distance from lower label margin to the floor	mm 880 - 1,200
Weight	approx. kg 40

22.4



Floor stand 1231 horizontal

primarily for labeling from the side on a product. It is adjustable
in height and can be locked and set with the help of leveling feet
on site. Preferred use is with applications in various production lines

Technical data	Floor stand 1231
Leveling feet, adjustability	mm ± 15
Load	up to kg 50
Load at protrusion 200 mm	up to kg 20
Distance from lower label margin to the floor	mm 664 - 904
Weight	approx. kg 40

Overview of accessories

typical on request

Delivery program

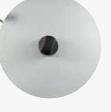
Left-hand construction

Pos.	Part no.	Base units
1.1		6121131 Base unit 124 L
1.2		6121133 Base unit 186 L
1.3		6121135 Base unit 248 L
1.4		6121137 Base unit 310 L
Pos.	Part no.	Unwinders
2.1		5983300 Unwinder D310 H 124 L 5983302 Unwinder D310 H 186 L 5983304 Unwinder D310 H 248 L 6122000 Unwinder D310 VH 62 L 5983312 Unwinder D310 V 124 L 5983314 Unwinder D310 V 186 L 5983316 Unwinder D310 V 248 L
2.2		5983306 Unwinder D410 H 124 L 5983308 Unwinder D410 H 186 L 5983310 Unwinder D410 H 248 L 6122002 Unwinder D410 VH 62 L 5983318 Unwinder D410 V 124 L 5983320 Unwinder D410 V 186 L 5983322 Unwinder D410 V 248 L
Pos.	Part no.	Unwinders motor-driven
2.3		5983501 Unwinder D410 H 124 L motor-driven 5983502 Unwinder D410 H 186 L motor-driven 5983503 Unwinder D410 H 248 L motor-driven 5983504 Unwinder D410 H 310 L motor-driven 5983505 Unwinder D410 V 124 L motor-driven 5983506 Unwinder D410 V 186 L motor-driven 5983507 Unwinder D410 V 248 L motor-driven 5983508 Unwinder D410 V 310 L motor-driven
2.4		5983509 Unwinder D510 H 124 L motor-driven 5983510 Unwinder D510 H 186 L motor-driven 5983511 Unwinder D510 H 248 L motor-driven 5983512 Unwinder D510 V 124 L motor-driven 5983513 Unwinder D510 V 186 L motor-driven 5983514 Unwinder D510 V 248 L motor-driven
Pos.	Part no.	Unwinders with a double pendulum
2.5		5983519 Unwinder D410 H 124 L DP motor-driven 5983520 Unwinder D410 H 186 L DP motor-driven 5983521 Unwinder D410 H 248 L DP motor-driven 5983522 Unwinder D410 V 124 L DP motor-driven 5983523 Unwinder D410 V 186 L DP motor-driven 5983524 Unwinder D410 V 248 L DP motor-driven
2.6		5983525 Unwinder D510 H 124 L DP motor-driven 5983526 Unwinder D510 H 186 L DP motor-driven 5983527 Unwinder D510 V 124 L DP motor-driven 5983528 Unwinder D510 V 186 L DP motor-driven

Type code: base unit

Labeling head		186	L
Label web width	62 mm		
	124 mm		
	186 mm		
	248 mm		
	310 mm		
Label application	to the left L to the right R		

Right-hand construction

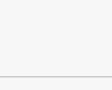
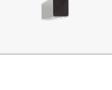
Pos.	Part no.	Base units
1.1		6121132 Base unit 124 R
1.2		6121134 Base unit 186 R
1.3		6121136 Base unit 248 R
1.4		6121138 Base unit 310 R
Pos.	Part no.	Unwinders
2.1		5983301 Unwinder D310 H 124 R 5983303 Unwinder D310 H 186 R 5983305 Unwinder D310 H 248 R 6122001 Unwinder D310 VH 62 R 5983313 Unwinder D310 V 124 R 5983315 Unwinder D310 V 186 R 5983317 Unwinder D310 V 248 R
2.2		5983307 Unwinder D410 H 124 R 5983309 Unwinder D410 H 186 R 5983311 Unwinder D410 H 248 R 6122003 Unwinder D410 VH 62 R 5983319 Unwinder D410 V 124 R 5983321 Unwinder D410 V 186 R 5983323 Unwinder D410 V 248 R
Pos.	Part no.	Unwinders motor-driven
2.3		5983540 Unwinder D410 H 124 R motor-driven 5983541 Unwinder D410 H 186 R motor-driven 5983542 Unwinder D410 H 248 R motor-driven 5983543 Unwinder D410 H 310 R motor-driven 5983544 Unwinder D410 V 124 R motor-driven 5983545 Unwinder D410 V 186 R motor-driven 5983546 Unwinder D410 V 248 R motor-driven 5983547 Unwinder D410 V 310 R motor-driven
2.4		5983548 Unwinder D510 H 124 R motor-driven 5983549 Unwinder D510 H 186 R motor-driven 5983550 Unwinder D510 H 248 R motor-driven 5983551 Unwinder D510 V 124 R motor-driven 5983552 Unwinder D510 V 186 R motor-driven 5983553 Unwinder D510 V 248 R motor-driven
Pos.	Part no.	Unwinders with a double pendulum
2.5		5983558 Unwinder D410 H 124 R DP motor-driven 5983559 Unwinder D410 H 186 R DP motor-driven 5983560 Unwinder D410 H 248 R DP motor-driven 5983561 Unwinder D410 V 124 R DP motor-driven 5983562 Unwinder D410 V 186 R DP motor-driven 5983563 Unwinder D410 V 248 R DP motor-driven
2.6		5983564 Unwinder D510 H 124 R DP motor-driven 5983565 Unwinder D510 H 186 R DP motor-driven 5983566 Unwinder D510 V 124 R DP motor-driven 5983567 Unwinder D510 V 186 R DP motor-driven

Type code: winders

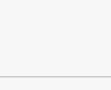
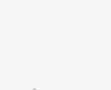
Unwinder, rewinder	D410	H	124	L	DP
Outside diameter	up to 210 mm				
	290 mm				
	310 mm				
	410 mm				
	510 mm				
	610 mm				
Orientation of assembly	vertical V				
	horizontal H				
Label web width	62 mm				
	124 mm				
	186 mm				
	248 mm				
	310 mm				
Label application	to the left L				
	to the right R				
Pendulum	double				

Delivery program

Left-hand construction

Pos.		Part no.	Rewinders
3.1		6122030	Rewinder D210 62 L
		6122034	Rewinder D210 124 L
		6122038	Rewinder D210 186 L
		6122042	Rewinder D210 248 L
3.2		6122032	Rewinder D290 62 L
		6122036	Rewinder D290 124 L
		6122040	Rewinder D290 186 L
		6122044	Rewinder D290 248 L
Pos.		Part no.	Rewinders motor-driven
3.3		5983531	Rewinder D310 124 L motor-driven
		5983532	Rewinder D310 186 L motor-driven
		5983533	Rewinder D310 248 L motor-driven
		5983534	Rewinder D310 310 L motor-driven
3.4		5983535	Rewinder D410 124 L motor-driven
		5983536	Rewinder D410 186 L motor-driven
		5983537	Rewinder D410 248 L motor-driven
Pos.		Part no.	Peel-off plates standard
4.1		6126000	Peel-off plate 100 mm 62 L
		6126001	Peel-off plate 100 mm 124 L
		6126002	Peel-off plate 100 mm 186 L
		6126003	Peel-off plate 100 mm 248 L
4.2		6126004	Peel-off plate 100 mm 310 L
		6126010	Peel-off plate 160 mm 62 L
		6126011	Peel-off plate 160 mm 124 L
		6126012	Peel-off plate 160 mm 186 L
4.3		6126013	Peel-off plate 160 mm 248 L
		6126014	Peel-off plate 160 mm 310 L
		6127475	Roller enabling smoother web run 62 L
		6127476	Roller enabling smoother web run 124 L
4.4		6127477	Roller enabling smoother web run 186 L
		6127478	Roller enabling smoother web run 248 L
		6127479	Roller enabling smoother web run 310 L
Pos.		Part no.	Peel-off plates adjustable 0° to +75°
4.5		6126020	Peel-off plate 100 mm 62 L adjustable
		6126021	Peel-off plate 100 mm 124 L adjustable
		6126022	Peel-off plate 100 mm 186 L adjustable
		6126023	Peel-off plate 100 mm 248 L adjustable
4.6		6126030	Peel-off plate 160 mm 62 L adjustable
		6126031	Peel-off plate 160 mm 124 L adjustable
		6126032	Peel-off plate 160 mm 186 L adjustable
		6126033	Peel-off plate 160 mm 248 L adjustable
Pos.		Part no.	Peel-off plates pivoted 0° to -30°
4.7		6126060	Peel-off plate 100 mm 62 L pivoted
		6126061	Peel-off plate 100 mm 124 L pivoted
		6126062	Peel-off plate 100 mm 186 L pivoted
		6126063	Peel-off plate 100 mm 248 L pivoted
4.8		6126070	Peel-off plate 160 mm 62 L pivoted
		6126071	Peel-off plate 160 mm 124 L pivoted
		6126072	Peel-off plate 160 mm 186 L pivoted
		6126073	Peel-off plate 160 mm 248 L pivoted
		5955735	Compressed air regulation unit L
Pos.		Part no.	Peel-off plates 75° with a wipe-down roller
4.9		6127800	Peel-off plate 75° L x W: 50 x 42 mm
		6127801	Peel-off plate 75° L x W: 50 x 62 mm
		6127802	Peel-off plate 75° L x W: 50 x 82 mm
		6127803	Peel-off plate 75° L x W: 100 x 82 mm
4.10		6120052	Installation profile for a plate 75° 124 L
		6120056	Installation profile for a plate 75° 186 L
		6120060	Installation profile for a plate 75° 248 L

Right-hand construction

Pos.		Part no.	Rewinders
3.1		6122031	Rewinder D210 62 R
		6122035	Rewinder D210 124 R
		6122039	Rewinder D210 186 R
		6122043	Rewinder D210 248 R
3.2		6122033	Rewinder D290 62 R
		6122037	Rewinder D290 124 R
		6122041	Rewinder D290 186 R
		6122045	Rewinder D290 248 R
Pos.		Part no.	Rewinders motor-driven
3.3		5983570	Rewinder D310 124 R motor-driven
		5983571	Rewinder D310 186 R motor-driven
		5983572	Rewinder D310 248 R motor-driven
		5983573	Rewinder D310 310 R motor-driven
3.4		5983574	Rewinder D410 124 R motor-driven
		5983575	Rewinder D410 186 R motor-driven
		5983576	Rewinder D410 248 R motor-driven
Pos.		Part no.	Peel-off plates standard
4.1		6126005	Peel-off plate 100 mm 62 R
		6126006	Peel-off plate 100 mm 124 R
		6126007	Peel-off plate 100 mm 186 R
		6126008	Peel-off plate 100 mm 248 R
4.2		6126009	Peel-off plate 100 mm 310 R
		6126015	Peel-off plate 160 mm 62 R
		6126016	Peel-off plate 160 mm 124 R
		6126017	Peel-off plate 160 mm 186 R
4.3		6126018	Peel-off plate 160 mm 248 R
		6126019	Peel-off plate 160 mm 310 R
		6127480	Roller enabling smoother web run 62 R
		6127481	Roller enabling smoother web run 124 R
Pos.		Part no.	Peel-off plates adjustable 0° to +75°
4.4		6127482	Roller enabling smoother web run 186 R
		6127483	Roller enabling smoother web run 248 R
		6127484	Roller enabling smoother web run 310 R
Pos.		Part no.	Peel-off plates adjustable 0° to +75°
4.5		6126025	Peel-off plate 100 mm 62 R adjustable
		6126026	Peel-off plate 100 mm 124 R adjustable
		6126027	Peel-off plate 100 mm 186 R adjustable
		6126028	Peel-off plate 100 mm 248 R adjustable
4.6		6126035	Peel-off plate 160 mm 62 R adjustable
		6126036	Peel-off plate 160 mm 124 R adjustable
		6126037	Peel-off plate 160 mm 186 R adjustable
		6126038	Peel-off plate 160 mm 248 R adjustable
Pos.		Part no.	Peel-off plates pivoted 0° to -30°
4.7		6126065	Peel-off plate 100 mm 62 R pivoted
		6126066	Peel-off plate 100 mm 124 R pivoted
		6126067	Peel-off plate 100 mm 186 R pivoted
		6126068	Peel-off plate 100 mm 248 R pivoted
4.8		6126075	Peel-off plate 160 mm 62 R pivoted
		6126076	Peel-off plate 160 mm 124 R pivoted
		6126077	Peel-off plate 160 mm 186 R pivoted
		6126078	Peel-off plate 160 mm 248 R pivoted
Pos.		Part no.	Peel-off plates 75° with a wipe-down roller
4.9		5955736	Compressed air regulation unit R
Pos.		Part no.	Peel-off plates 75° with a wipe-down roller
4.10		6127800	Peel-off plate 75° L x W: 50 x 42 mm
		6127801	Peel-off plate 75° L x W: 50 x 62 mm
		6127802	Peel-off plate 75° L x W: 50 x 82 mm
		6127803	Peel-off plate 75° L x W: 100 x 82 mm
4.10		6120054	Installation profile for a plate 75° 124 R
		6120058	Installation profile for a plate 75° 186 R
		6120062	Installation profile for a plate 75° 248 R

Delivery program

Pos.		Part no.	Label margin detection
5.1		5983588	Label sensor CEON
5.2		6127425	Retainer bar label sensor CEON on peel-off plate Label web width 62 mm
		6127426	Retainer bar label sensor CEON on peel-off plate Label web width 124 mm
5.3		5918670	Forked light barrier
5.4		5972608	Retainer to assemble forked light barrier
Pos.		Part no.	Software keys
6.1		5581001	Speed key 12 m/min
		5581002	Speed key 25 m/min
		5581003	Speed key 50 m/min
		5581028	Speed key 75 m/min
		5581004	Speed key 100 m/min
		5581005	Speed key 150 m/min
		5581006	Speed key 200 m/min
Pos.		Part no.	Rods to assemble a peel-off plate
7.1		5972443	Assembly rod, diameter 16 mm Distance to the device 0 mm
		5972418	Assembly rod, diameter 16 mm Distance to the device 100 mm
		5972703	Assembly rod, diameter 16 mm Distance to the device 150 mm
		5972419	Assembly rod, diameter 16 mm Distance to the device 200 mm
		5972420	Assembly rod, diameter 16 mm Distance to the device 300 mm
		6120067	Assembly rod, diameter 16 mm Distance to the device 400 mm
		5972421	Assembly rod, diameter 16 mm Distance to the device 600 mm
			In case of labeling head structural widths 124 / 186 → 2x 248 / 310 → 3x
Pos.		Part no.	Product detection
8.1		5918702	Product sensor, light switch up to 200 mm
		5918703	Product sensor, light switch with transparent products up to 80 mm
8.2		5918671	Product sensor cable M12-M8, 4 pin, a-coded, length 2.5 m
Pos.		Part no.	Masterencoder
9.1		5918979	Rotary encoder with cable 2.5 m
9.2		5918475	Extender cable for rotary encoder M12, 5 pin, a-coded, length 2.5 m
		5918942	Extender cable for rotary encoder M12, 5 pin, a-coded, length 10 m
		5918949	Rotary extender cable M12, 5 pin, a-coded, length 5 m
9.3		5918981	Friction wheel for rotary encoder
9.4		5918980	Retainer for rotary encoder

Pos.		Part no.	Power supply cables
10.1		5918758	Power supply cable without Schuko plug Length 2.5 m
		5918947	Power supply cable without Schuko plug Length 5 m
		5918943	Power supply cable without Schuko plug Length 10 m
10.2		5918531	Power supply cable with Schuko plug Length 2.5 m
Pos.		Part no.	Signal cables
10.3		5918421	I/O interface extender cable M12, 17 pin, length 2.5 m
		5918941	I/O interface extender cable M12, 17 pin, length 10 m
		5918948	I/O interface cable M12, 17 pin, length 5 m
10.4		5918940	Signal cable applicator, I/O box, winder I/O M12, 12 pin, length 1 m
		5918477	Signal cable applicator, I/O box, winder I/O M12, 12 pin, length 2.5 m
Pos.		Part no.	LAN cables
10.6		5918665	Ethernet cable M12, 4 pin d-coded to RJ45, length 2.5 m
		5918946	Ethernet cable M12, 4 pin d-coded to RJ45, length 5 m
		5918945	Ethernet cable M12, 4 pin d-coded to RJ45, length 10 m
Pos.		Part no.	USB cables
10.7		5918955	Cable to connect an external operation panel, M12, 12 pin to USB-B, length 5 m
10.8		5918936	USB adapter to connect a memory stick, cable M12, 12 pin to USB-A, length 0.2 m
Pos.		Part no.	Power cables to connect winders or winders with the base unit
10.9		5918944	Power cable, length 0.3 m
		5918879	Power cable, length 0.8 m
		5918426	Power cable, length 2.5 m
Pos.		Part no.	Interfaces
11.1		6121010	I/O box M12, 12 pin and 12 x M8, 3 pin to connect base unit
		6121030	Module IXOR-Powerbus to connect motor-driven winders
Pos.		Part no.	Counterholders
12.1		5983324	Counterholder 310 mm
		5983325	Counterholder 410 mm
		5983586	Counterholder 510 mm
Pos.		Part no.	Cover plate
13.1		5983429	Cover plate

Delivery program

Pos.		Part no.	Circular connectors
14.1		5918479	Cable plug M12, 5 pin, a-coded, male
		5918483	Cable plug M12, 12 pin, male
14.2		5918480	Cable jack M12, 5 pin, a-coded, female
		5918484	Cable jack M12, 12 pin, female
Pos.		Part no.	Signal
15.1		5971223	Warning light with cable length 2.5 m M12, 17 pin
Pos.		Part no.	External operation panel
16.1		6121020	External operation panel 4.3"
Pos.		Part no.	Wipe-down systems
17.1		Wipe-down rollers for peel-off plates standard, adjustable and pivoted	
		6126150	Wipe-down roller 62
		6126151	Wipe-down roller 124
		6126152	Wipe-down roller 186
		6126153	Wipe-down roller 248
		Wipe-down brushes for peel-off plates standard, adjustable and pivoted	
		6126160	Wipe-down brush 62
		6126161	Wipe-down brush 124
		6126162	Wipe-down brush 186
		6126163	Wipe-down brush 248
		6126164	Wipe-down brush 310
Pos.		Part no.	Assembly aids
18.1		6120016	Fixing bar compact to pick up motor-driven winders and base unit
18.2		6120015	Fixing bar universal to pick up motor-driven winders and base unit
Pos.		Part no.	Deflection rollers
19.1		6127290	Deflection roller 62 D30 AL
		6127291	Deflection roller 124 D30 AL
		6127292	Deflection roller 186 D30 AL
		6127293	Deflection roller 248 D30 AL
		6127294	Deflection roller 310 D30 AL
		6127295	Deflection roller 62 D38 AL
		6127296	Deflection roller 124 D38 AL
		6127297	Deflection roller 186 D38 AL
		6127298	Deflection roller 248 D38 AL
		6127299	Deflection roller 310 D38 AL
		6127311	Deflection roller 62 D60 AL
		6127312	Deflection roller 124 D60 AL
		6127313	Deflection roller 186 D60 AL
		6127314	Deflection roller 248 D60 AL
		6127315	Deflection roller 310 D60 AL
Pos.		Part no.	Spacer
20.1		6120018	Spacer for motor-driven winder

Pos.		Part no.	Device retainers
21.1		5983401	Device 124 fixed
		5983402	Device 186 fixed
		5983403	Device 248 fixed
		5983404	Device 310 fixed
		5983405	Device 124 fixed, pivoted
		5983406	Device 186 fixed, pivoted
		5983407	Device 248 fixed, pivoted
		5983408	Device 310 fixed, pivoted
21.2		5983409	Device 124 moveable
		5983410	Device 186 moveable
		5983411	Device 248 moveable
		5983412	Device 310 moveable
21.3		5983413	Device 124 precisely adjustable
		5983414	Device 186 precisely adjustable
		5983415	Device 248 precisely adjustable
		5983416	Device 310 precisely adjustable
Pos.		Part no.	Device retainers - special equipment
21.4		5971614	Pivoted retainer
21.5		5983431	Digital counter, vertical axis
		5983432	Digital counter, horizontal axis
21.6		5983428	Digital counter extender (for device retainers and stands)
Pos.		Part no.	Stands
22.1		5983420	Column stand diameter 30 mm, one axis, height 400 mm
		5983421	Column stand diameter 30 mm, one axis, height 600 mm
		5983422	Column stand diameter 30 mm, one axis, height 800 mm
22.2		5983423	Column stand diameter 30 mm, two axes, height 600 mm, width 400 mm
		5983424	Column stand diameter 30 mm, two axes, height 600 mm, width 600 mm
22.3		5983425	Floor stand 1632 vertical column stand included diameter 30 mm, height 800 mm
22.4		5983426	Floor stand 1231 horizontal column stand included diameter 30 mm, height 600 mm
Pos.		Part no.	Stands - special equipment
22.5		5983427	Angular gear
22.6		5983417	Digital counter, vertical axis
		5983418	Digital counter, horizontal axis
22.7		5972532	Adjusting disc

Overview of cab products

Label printers
MACH1, MACH2



Label printers
EOS 2



Label printers
EOS 5



Label printers
MACH 4S



Label printers
SQUIX 2



Label printers
SQUIX 4



Label printers
SQUIX 6.3



Label printers
SQUIX 8.3



Label printers
XD Q double-sided



Label printers
XC Q two-colored



Print and apply systems
HERMES Q



Print and apply systems
Hermes C two-colored



Tube labeling systems
AXON 1



Print modules
PX Q



Labels and ribbons



Label software
cablavel S3



Label dispensers
HS, VS



Labeling heads
IXOR



Marking lasers
XENO 4



Laser marking systems



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