Status: 03/2025

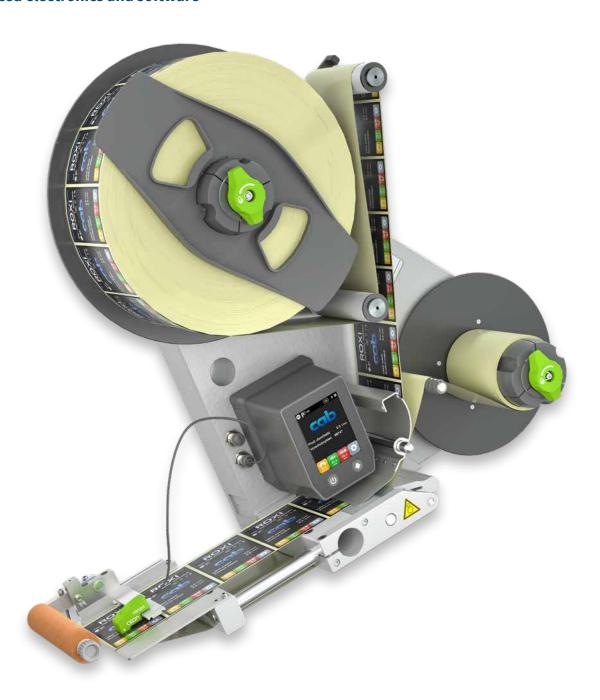




## ROXI label dispensers

Precise insert labeling
Solid construction, perfect in every way
Advanced electronics and software

Small price – great performance
A future-proof investment



## Compact and slim design

Easy to install into production lines

#### Any assembly

 $\label{thm:contal} \mbox{ Vertical, horizontal, inclined, dispensing labels to the left or right}$ 

## High quality and reliability

Tried and tested functional modules assembled Made in Germany

## Durable and easy to maintain

Designed for continuous industrial use Free firmware updates via Ethernet or USB interface

## **Dynamic speed control**

Label web is fed automatically by a masterencoder (rotary or linear) in accordance with the speed of items on a conveyor.

## Safety guaranteed

Certified by independently authorized testing labs

## **Short setup times**

Quick and simple material changeover

## **Useful accessories**

Columns, stands, connecting cables, and many others help with installation ready for use.

## Operation panel

Intuitive and easy to operate Rotatable in steps of 180°, depending on the installation

## Unit configuration with the help of selfexplanatory symbols on the user interface

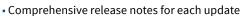


## **Firmware**

## **Embedded Linux operating system**



- Support 'out-of-the-box' of Open Source bundles and interfaces, such as FTP, SSL, Avahi/Zeroconf
- Regular updates for hotfixes and official CVE security patches



## Compatible with IXOR highspeed labeling head



- Same codebase as IXOR
- New IXOR features are automatically included in ROXI.
- Identical firmware file for both units

## Maintenance and diagnostics



- Web Interface
- Event log for tracking activities
- Diagnostics documents in standardized XML text format

## Interfaces and user-specific features

	USB stick	Web Interface	FTP software
Access to entire documentation of a unit	$\checkmark$	$\checkmark$	$\checkmark$
Backup and restore	$\checkmark$	$\checkmark$	✓
Configuration reading and import	✓	✓	✓
Firmware update	✓		✓



**VNC LAN / WLAN** Remote control by a PC, smartphone, tablet

## Feed path schemes On display

## **Upgrades**

 Protocols such as MQTT as well as features like the masterencoder can be unlocked by key (online purchase).

## Remote support

- Diagnostics by service staff, using an existing customer network
- Special software oscilloscope, maximum resolution 1 ms, for unlimited use during production

## **Integral Ethernet protocols for** higher-level machine control systems



- MQTT, ModBus TCP, OPC UA, Profinet are in preparation, available from quarter 4/2025
- Access via PLC and an industrial PC to parameters, I/O signals, error messages

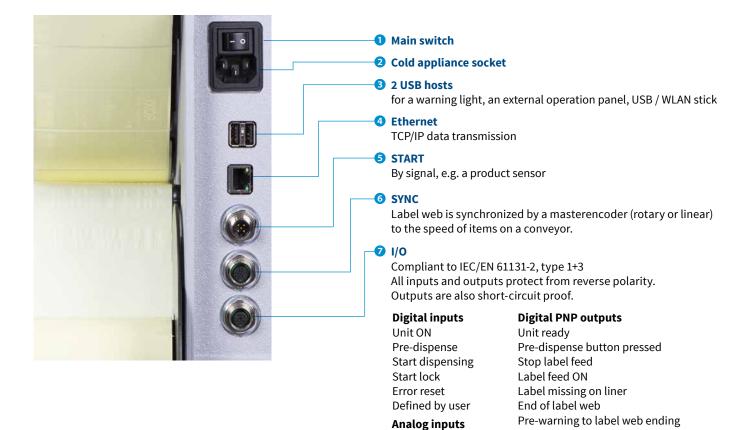
## Redundancy

- Any number of pairs of label dispensers can be operated redundantly in an Ethernet network.
- While one dispenser actively applies labels onto items, another unit is on standby. In cases of a malfunction on an active unit (e.g. label web ending), the second one takes over immediately.
- It is ensured all items located between the units are labeled.





## **Interfaces**





### I/O status indication

Speed

Start delay Stop delay

Status display of all inputs and outputs

Helpful with initial setup, especially when integrating a label dispenser int o external control systems

Error

Defined by user

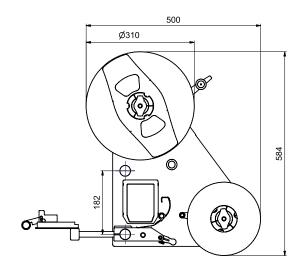
Inputs and outputs can be simulated or forced for testing purposes.



## Technical data

Label dispenser		Type	ROXI 120	ROXI 180
Label web speed	m/r	nin max.	30	20
Installation			vertical / h	orizontal
Direction to which lab	els are dispensed		L = to the left, R	! = to the right
Material				
Label		on a roll	Paper, synthetics PET, I	PE, PP, PVC, booklets
	Width	mm	10 - 116	10 - 176
	Length	mm	10 - 6,	,000
	Gap mm	n at least	2	
	Thickness	mm	0.055	- 1.0
Liner	Width	mm	15 - 120	15 - 180
Roll	Weight	kg max.	12	2
Unwinder	Outside diamete	r mm	300	0
	Core diameter	mm	76	5
	Winding		outside o	r inside
Rewinder	Outside diamete	r mm	210	0
	Core diameter	mm	76	5
Label sensor				
	Det	ection of	label margins and	materials ending
Distance to locating ed	ge CEON	mm	9 - 62	9 - 94
	GAB 500-1	mm	7.5 - 1	17.5
	GAB 500-2	mm	8	
Operating data				
Voltage			100 - 240 V~,	, 50 - 60 Hz
Temperature / humidi	ty O	peration	0 - 40°C / 10 - 85 %	, not condensing
		Stock	0 - 60°C / 20 - 80 %	, not condensing
	T	ransport	−25 - 60°C / 20 - 80 %, not condensing	
Approvals			CE, FCC Clas	s A, ICES-3
	in pre	paration	cULus	s, CB
Protection class			IP 4	40
Operation panel				
		LED	ON / C	OFF
LCD graphics	display Width x He	ight mm	mm 54 x 70	
Control				
			Pre-warning to label we	eb ending, broken liner
			torque, temper	rature, voltage

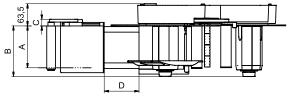
1) Limitations can occur when processing small labels, thin materials or materials using a strong adhesive. Such applications require testing.



Label dispenser	Dimension A mm	Dimension B mm	Weight kg
ROXI 120	124	145	12
ROXI 180	186	205	13

Demand module	Dimension C mm
SP	19
SPE	24
SPFA	19

Mounting rod	Dimension D mm
MS 25	25
MS 100	100
MS 200	200
MS 300	300
MS 400	400



Scopes of delivery, designs and technical data correspond to the date of this publication. They are subject to change. Catalogue data do not represent any warranty or guarantee.

## Demand units

## Modular adaptation in four steps

## 1. Demand module

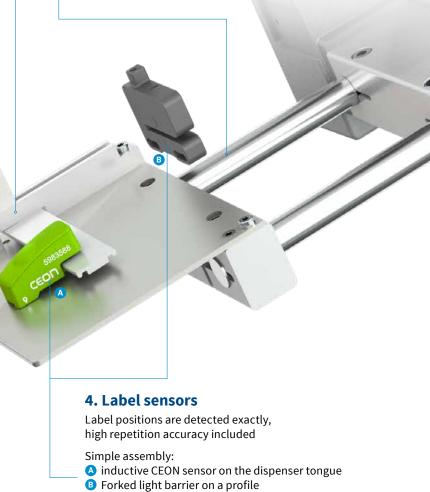
A label web can be inserted from the side. Individual parts and componental assemblies go with units L or R. This enables modules be configured as required.

## 2. Wipe-down roller or brush

Labels when attached insert are precisely applied onto items using a roller or a brush. These can be precisely tailored to an item for optimum labeling.

## 3. Mounting rods

They are inserted both into the profile of a demand module and the carrier profile of a label dispenser and fixed by screws.

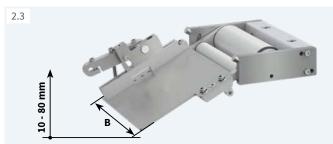


## Demand modules

Head units consist of a dispenser tongue, a guide and an adjustable carriage. They are the same for all all types.



# 2.2



2.4		
	in preparation	

2.5		
	in preparation	

#### SP demand modules

They are attached to the two mounting rods. The path of a label web can be aligned during labeling. Forked light barriers and CEON label sensors are fixed directly onto the demand module.

	<b>Dispenser tongue</b> Dimension B mm		which labels pensed Type right
SP demand module	62	SP 62L	SP 62R
	124	SP 124L	SP 124R
	186	SP 186L	SP 186R

#### SPE demand modules adjustable

For better operation or when installation space is limited, a label dispenser may be rotated in vertical direction using a demand module adjustable continuously from 0° to 90°.

	<b>Dispenser tongue</b> Dimension B mm	Direction to are dis	
		Type left	Type right
SPE demand module	62	SPE 62L	SPE 62R
	124	SPE 124L	SPE 124R
	186	SPE 186L	SPE 186R

#### SPFA demand modules spring-forced, pivotable

When labeling insert onto curved surfaces, demand modules may adapt to the surfaces and heights of items by spring force. Adjustable pivoting heights are 10 mm to 80 mm

	<b>Dispenser tongue</b> Dimension B mm	Direction to are dis	
		Type left	Type right
SPFA demand module	62	SPFA 62L	SPFA 62R
	124	SPFA 124L	SPFA 124R
	186	SPFA 186L	SPFA 186R

### **SPEA demand modules** electrically pivotable

A dispenser tongue can be pivoted electrically when dealing with sensitive surfaces or when labeling onto cylindrical items or into pockets. Pivotable heights are 10 mm to 80 mm

	<b>Dispenser tongue</b> Dimension B mm	Direction to are dis	
		Type left	Type right
SPEA demand module	62	SPEA 62L	SPEA 62R
	124	SPEA 124L	SPEA 124R
	186	SPEA 186L	SPEA 186R

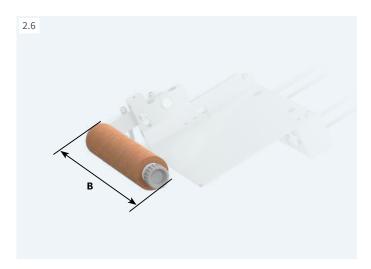
## ARE wipe-down rollers electrically pivotable

A wipe-down roller can be pivoted electrically when dealing with sensitive surfaces or when labeling onto cylindrical items or into pockets. Pivotable as high as 10 mm

	<b>Dispenser tongue</b> Dimension B mm	Direction to are dis Type left	
ARE wipe-down roller	62	ARE 62L	ARE 62R
	124	ARE 124L	ARE 124R
	186	ARE 186L	ARE 186R

# Wipe-down rollers and brushes

A roller and a brush can each be precisely tailored to an item during operation. They are attached by thumb screws and may be replaced without additional tools when worn.



## AR wipe-down rollers

Adjustments:

- 1. Distances of 8 mm to 30 mm to a peel-off plate
- 2. Lower end position to an item
- 3. Wipe-down force onto an item by spring preload
- 4. Roller positions screw-fixed on SPFA, SPEA demand modules

	Width B mm	Type
AR wipe-down roller	62	AR 62
	124	AR 124
	186	AR 186



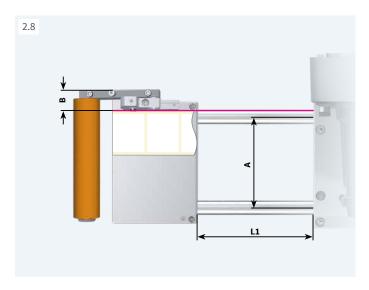
## AB wipe-down brushes

Adjustments:

- 1. Distances of 20 mm to 50 mm to a peel-off plate
- 2. Angles of 15° to 45° to a peel-off plate
- 3. Wipe-down force by vertical shift to an item

	Width B mm	Туре
	62	AB 62
AB wipe-down brush	124	AB 124
	186	AB 186

# Mounting rods



## MS mounting rods

Stainless steel, diameter 16 mm

They are inserted both into the profile of a demand module and the carrier profile of a label dispenser and fixed by screws.

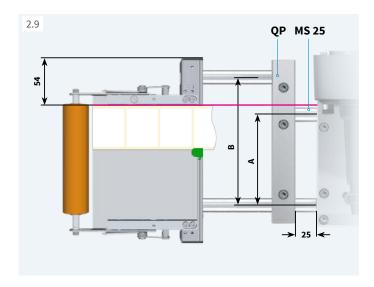
	Length L1 mm	Type
	25	MS 25
	100	MS 100
MS mounting rod	200	MS 200
	300	MS 300
	400	MS 400

Further lengths upon request

Demand module	Dimension B mm
SP	19
SPE	24
SPFA	19

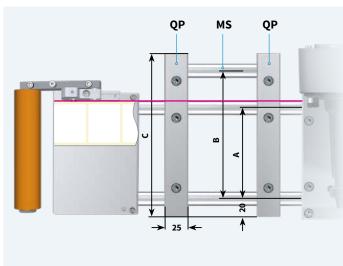
Distance A	Dimension A mm
SPxx 62 demand module	104
SPxx 124 demand module	104
SPxx 186 demand module	166

# Cross-section profiles



**Assembly** of IXOR peel-off plates and wipe-down rollers Dimension A is adjusted to B using a QP cross-section profile and MS 25 mounting rods.

	<b>Dimension A</b>	Dimension B	Profile	<b>Mounting rod</b>
	mm	mm	Type	Type
Peel-off plate 62	104	146	QP 186	MS 25
Peel-off plate 124	104	146	QP 186	MS 25
Peel-off plate 186	166	208	QP 248	MS 25



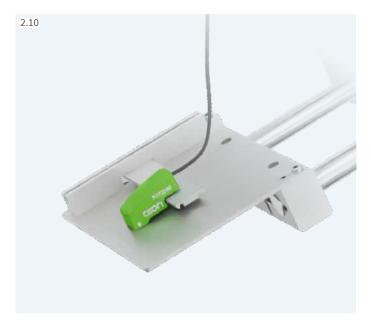
A third MS mounting rod and further QP cross-section profiles may be added for reinforcing long mounting rods or attaching accessories.

	Dimension A	Dimension B	Dimension C	Туре
	mm	mm	mm	
OD weefile	104	146	186	QP 186
QP profile	186	208	248	QP 248

Length of mounting rod as required

## Sensors

A GAB 500-1 forked light barrier and a CEON label sensor both link to a label dispenser via an intelligent communication interface. There is automatic teach on the operation panel. It takes no more than two labels to finish calibration.



## CEON label sensor, retainer bars included

A ceramic probe is used to inductively detect the difference in height from a liner to the top of a label.

For sensor accommodation, a retainer bar is attached in conjunction with a spacer precisely and torsion-proof to a dispenser tongue. Three lengths are included on delivery.

Technical data		CEON label sensor	
Functional metho	d	inductive, using a ceramic probe	
Material Label		Paper, synthetics, opaque or transparent	
Liner		opaque, transmissive or transparent	
Label thickness	mm	0.05 - 1.0	
Label gap	mm	>2	
Repetition accuracy mm		± 0.05	
Range of	CEON 31 mm	9 - 31	
adjustable distance to	CEON 62 mm	9 - 62	
locating edge	CEON 93 mm	9 - 94	
Round label diameter mm max.		180	



## GAB 500-1 forked light barrier in preparation

Attached directly to the head unit of a demand module

Technical data		GAB 500-1 forked light barrier
Functional method		optical, transmitter receiver
Material Label		Paper, synthetics, opaque
Liner		transmissive, transparent
Label thickness	mm	0.05 - 1.0
Label gap	mm	>2
Repetition accuracy	mm	± 0.05
Round label diameter	nm max.	35



## GAB 500-2 forked light barrier

Attached directly to a ROXI chassis

Technical data		GAB 500-2 forked light barrier
Functional method		optical, transmitter receiver
Material Label		Paper, synthetics, opaque
Liner		transmissive, transparent
Label thickness	mm	0.05 - 1.0
Label gap	mm	>2
Repetition accuracy	mm	± 0.05
Round label diameter r	nm max.	16

## Accessories



#### **Product sensor**

Applying a label is triggered as soon as an item has been detected. 200 mm maximum detectable track

Connecting cable M12-M8 included, 5 pins, a-coded, 2.5 m



#### **Rotary encoder**

Incremental, resolution 0.1 mm

Connecting cable M12, 5 pins, a-coded, 2,5 m, tracked A and B for automatically synchronizing the speed of labeling Unlocked by key

#### Friction wheel

Circumference 200 mm, diameter 63.7 mm

#### Retainer

It presses a friction wheel by spring force onto a conveyor. Assembly to a conveyor requires a mounting bracket.



#### I/O interface cable, wire-end-ferruled

M12, 17 pins, 5 m



## **Warning light**

Plug to a label dispenser

Red Collective error, e.g. end of label web, label web torn Yellow Pre-warning to label web ending

Green Unit ready

Connecting USB cable included, 1 m



## **External operation panel**

Same functionality as on a label dispenser

Users are free to decide whether to operate an external panel or the one integral to a dispenser unit.

**1 USB slot**, for configuration or firmware transfer

2 LED: Power ON

## **Connecting USB cable**

Lengths are 1.8 m, 3 m, 5 m (11m, 16 m upon request)

# Assembly assistance

Label dispensers may be installed user-specific into production lines or labeling systems. Retainers, a column stand and a floor stand make up a construction kit.



## Unit retainers

Mounted on two columns, a label dispenser may be installed in vertical or horizontal direction.

Dispensing angles are set by a tie rod. In addition, the spot of dispensing a label can be aligned on the columns.

The upper column is attached to the tie rod, the lower one along with a bearing bush to a plate, a profile or a column stand. Swivel-mounted, the tie rod is fixed by a clamping screw.

Both columns may also be attached directly to a plate or a profile. At this, the dispensing angle (inclination) is not adjustable.



Technical data		Unit retainer fixed	Unit retainer moveable	Unit retainer fine adjustable
Installation	vertical			
	horizontal		-	
On axis	moveable	-		-
	fine adjustable	-	-	
Range of adjustability	mm	-	200	135

## Stands

### Column stand 600

Assembly of a label dispenser to a base plate or a conveyor Position setting using a hand crank

Technical data		Column stand 600
Column length	mm	600
Adjustable track	mm	395
Column diameter	mm	30



Primarily suggested when applying labels from the top A mobile assistance, it can be locked and set on-site by leveling feet. Suitable when switching between production lines

Technical data		Floor stand 1632
Leveling feet	adjustable by mm	± 15
Load	kg max.	50
Load at offset 300 mm	kg max.	25
Distance from lower margin	880 - 1,200	
Column stand	mm	800
Adjustable track	mm	595
Weight	kg approx.	40





# Delivery program

## **Label dispensers**

## Labels provided to the left

Pos.		Item no.	Designation	
1.1	0.0	6130120	ROXI label dispenser	120 L
1.2		6130180	ROXI label dispenser	180 L

## xxxxxxx.250 label dispenser, additional software unlocked

Scope of delivery
ROXI label dispenser Knowledge Base

Label dispensers with demand units are delivered unassembled in one package.

## Provided online

Assembly instructions DE / EN / FR Configuration manuals DE / EN / FR Service manuals DE / EN Spare parts lists DE / EN Programming manual EN

https://setup.cab.de/en

## **Additional software**

## Labels provided to the left or right

If order implies additional software been unlocked ex-factory, item numbers are added by .250. In cases of separate delivery, .001 is added.

Pos.	Item no.	Designation
1.3		FQ MQTT
	FF01022 www	FM ModBus
	5581022.xxx	FP Profinet
		FO OPC UA Server
1.4	5581023.xxx	FR MQTT redundancy
1.5	5581020.xxx	ME Masterencoder

xxxxxxx.250 label dispenser, additional software unlocked





## Labels provided to the right

Pos.		Item no.	Designation	
1.1		6130125	ROXI label dispenser	120 R
1.2	20	6130185	ROXI label dispenser	180 R

xxxxxxx.250 label dispenser, additional software unlocked

# Delivery program

## **Demand units**

If order implies components of demand units been assembled ex-factory, item numbers are added by .250. In cases of separate delivery, .001 is added.

## Labels provided to the left

Pos.		Item no.	Designation		
-110.00	and all	6130466.xxx	SP 62L demand module		
2.1		6130296.xxx	SP 124L demand module		
		6130297.xxx	SP 186L demand module		
		6130467.xxx	SPE 62L demand module		
2.2	C. T. C.	6130484.xxx	SPE 124L demand module		
		6130485.xxx	SPE 186L demand module		
		6130468.xxx	SPFA 62L demand module		
2.3		6130304.xxx	SPFA 124L demand module		
		6130553.xxx	SPFA 186L demand module		
		6130478.xxx	SPEA 62L demand module		
2.4	in preparation	6130479.xxx	SPEA 124L demand module		
	preparation	6130555.xxx	SPEA 186L demand module		
	•	6130531.xxx	ARE 62L wipe-down roller		
2.5	in preparation	6130532.xxx	ARE 124L wipe-down roller		
		6130533.xxx	ARE 186L wipe-down roller		

## Labels provided to the right

	•			
Pos.		Item no.	Designation	
Alle Bree	All Area	6130469.xxx	SP 62R demand module	
2.1	1	6130306.xxx	SP 124R demand module	
		6130307.xxx	SP 186R demand module	
		6130476.xxx	SPE 62R demand module	
2.2	To the state of th	6130486.xxx	SPE 124R demand module	
		6130487.xxx	SPE 186R demand module	
		6130477.xxx	SPFA 62R demand module	
2.3	-	6130310.xxx	SPFA 124R demand module	
		6130554.xxx	SPFA 186R demand module	
		6130481.xxx	SPEA 62R demand module	
2.4	in preparation	6130482.xxx	SPEA 124R demand module	
prepara	preparation	6130556.xxx	SPEA 186R demand module	
2.5 pre		6130536.xxx	ARE 62R wipe-down roller	
	in	6130537.xxx	ARE 124R wipe-down roller	
	preparation	6130538.xxx	ARE 186R wipe-down roller	

## Labels provided to the left or right

2.6	6130460.xxx	AR 62 wipe-down roller
	6130461.xxx	AR 124 wipe-down roller
0	6130462.xxx	AR 186 wipe-down roller
	6130463.xxx	AB 62 wipe-down brush
2.7	6130464.xxx	AB 124 wipe-down brush
	6130551.xxx	AB 186 wipe-down brush
_	6120069.xxx	MS 25 mounting rod
	5972418.xxx	MS 100 mounting rod
2.8	5972419.xxx	MS 200 mounting rod
	5972420.xxx	MS 300 mounting rod
	6120067.xxx	MS 400 mounting rod
2.0	6130520.xxx	QP 186 cross-section profile
2.9	6130521.xxx	QP 248 cross-section profile

	_		
2.10	2	6130291.xxx	CEON label sensor, retainer bars included
2.11		6130452.xxx	GAB 500-1 forked light barrier
2.12		5918670.xxx	GAB 500-2 forked light barrier

xxxxxxx.250 demand module assembled .001 individually packed

## **Wear parts**

Pos.	Item no.	Designation
2.13	6127895.001	Wipe-down roller 62
	6127896.001	Wipe-down roller 124
	6127897.001	Wipe-down roller 186

Pos.	Item no.	Designation
	6010896.001	Wipe-down brush 62
2.14	5964286.001	Wipe-down brush 124
	5964370.001	Wipe-down brush 186
2.15	5983437.001	CEON probe

# Delivery program

## Accessories

Pos.		Item no.	Designation
3.1	O	6130294	Product sensor 200 mm maximum detectable track, connecting cable 2.5 m included
3.2	9	5918979	Rotary encoder, connecting cable 2.5 m included
3.3		5918981	Friction wheel
3.4		5918980	Retainer
3.5		5918948	I/O interface cable, wire-end-ferruled, M12, 17 pins, 5 m
	_		
3.6		6010560	Warning light, connecting USB cable 1 m included
3.7	CON THE PROPERTY OF THE PROPER	6010186	External operation panel
		5907718.850	Connecting USB cable, 1.8 m
3.8		5907730.850	Connecting USB cable, 3 m
		5907750.850	Connecting USB cable, 5 m

## **Assembly assistance**

Pos.		Item no.	Designation
4.1		5983405	Unit retainer 120 fixed
		5983406	Unit retainer 180 fixed
4.2		5983409	Unit retainer 120 moveable
		5983410	Unit retainer 180 moveable
4.3		5983413	Unit retainer 120 fine adjustable
		5983414	Unit retainer 180 fine adjustable
4.4	j	5971614	Tie rod
4.5		5983421	Column stand 600
4.6		5983425	Floor stand 1632, column stand included

# 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** 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 cablabel S3



Label dispensers HS, VS



Labeling heads



Marking lasers



Laser marking systems



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