Status: 03/2025

Label dispensers

for industrial use

ROXI

Made in Germany

Professional at best price

ROXI label dispensers

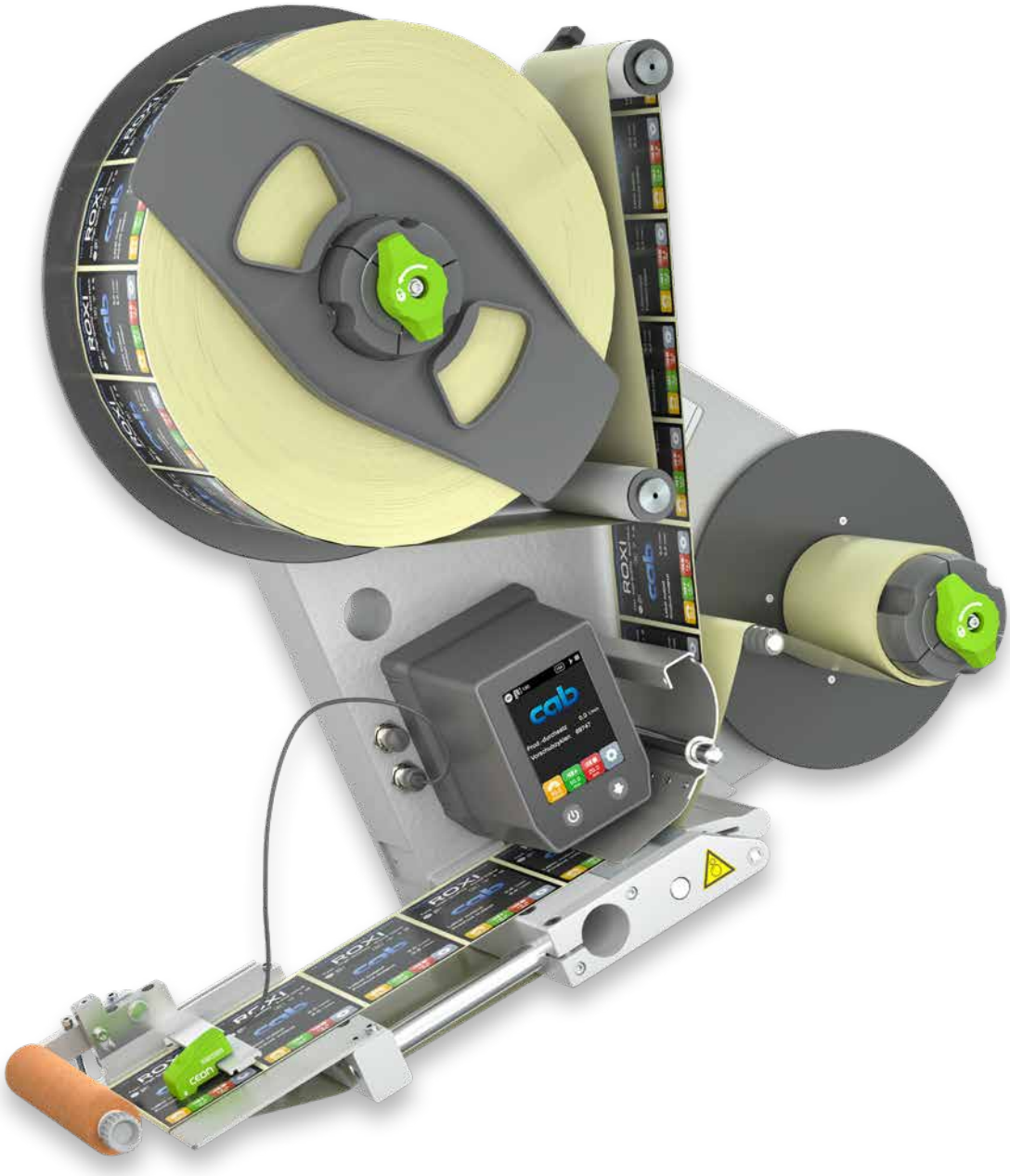
Precise insert labeling

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
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 self-explanatory symbols on the user interface

Status bar
Speed, label winding, length of a label, WLAN, start / stop signal

Operational and warning notes
Status and menu parameters

Counter and diagnostics
Configurable specified to an application

Quick menues
Extra-fast setting

Stop delay

Start delay

Label web speed

Menu options

ON / OFF

Pre-dispense

Label web speed
Synchronous with speed of items

SPEED

System settings
Display, language, label web ending, interfaces

SYSTEM

Label position on item
Multiple labeling enabled
Start condition

START

User configuration
Any number of formats
Backup and restore by a PC

FORMAT

Label web stopped on a demand module
Missing labels detected
Processing an external stop condition

STOP

Charge counter
Automatic stop subsequent to a specified number of items

CHARGE

Print settings
Control of an external printer or applicator

PRINT

Service tools
Maintenance assistance, video tutorials, input and control of digital I/O for service purposes

SERVICE

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
- Comprehensive release notes for each update

Compatible with IXOR highspeed labeling head

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

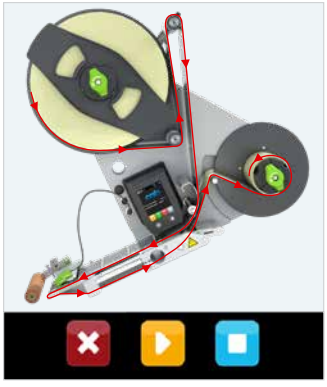
Maintenance and diagnostics

- 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	✓	✓	✓
Backup and restore	✓	✓	✓
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

1 Main switch

2 Cold appliance socket

3 2 USB hosts
for a warning light, an external operation panel, USB / WLAN stick

4 Ethernet
TCP/IP data transmission

5 START
By signal, e.g. a product sensor

6 SYNC
Label web is synchronized by a masterencoder (rotary or linear) to the speed of items on a conveyor.

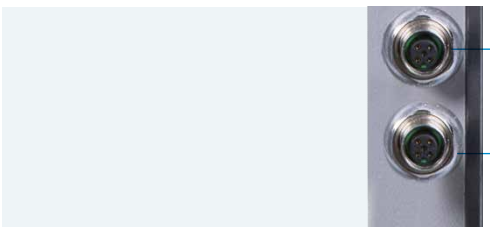
7 I/O
Compliant to IEC/EN 61131-2, type 1+3
All inputs and outputs protect from reverse polarity.
Outputs are also short-circuit proof.

Digital inputs	Digital PNP outputs
Unit ON	Unit ready
Pre-dispense	Pre-dispense button pressed
Start dispensing	Stop label feed
Start lock	Label feed ON
Error reset	Label missing on liner
Defined by user	End of label web
Analog inputs	Pre-warning to label web ending
Speed	Error
Start delay	Defined by user
Stop delay	

8 I/O status indication
Status display of all inputs and outputs

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

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



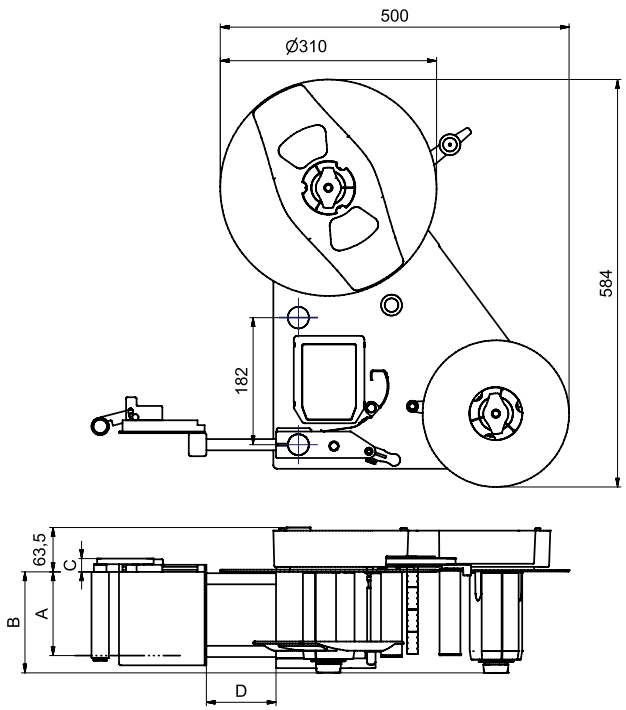
9 PRINT & APPLY
Peripheral interface; Plugging a printer or controlling an applicator with power supply 24VDC, 2A

10 STOP
Plugging a label sensor, optical or inductive detection

Technical data

Label dispenser	Type	ROXI 120	ROXI 180
Label web speed	m/min max.	30	20
Installation		vertical / horizontal	
Direction to which labels are dispensed		L = to the left, R = to the right	
Material[1]			
Label	on a roll	Paper, synthetics PET, PE, PP, PVC, booklets	
	Width mm	10 - 116	10 - 176
	Length mm	10 - 6,000	
	Gap mm at least	2	
	Thickness mm	0.055 - 1.0	
Liner	Width mm	15 - 120	15 - 180
Roll	Weight kg max.	12	
Unwinder	Outside diameter mm	300	
	Core diameter mm	76	
	Winding	outside or inside	
Rewinder	Outside diameter mm	210	
	Core diameter mm	76	
Label sensor			
	Detection of	label margins and materials ending	
Distance to locating edge	CEON mm	9 - 62	9 - 94
	GAB 500-1 mm	7.5 - 17.5	
	GAB 500-2 mm	8	
Operating data			
Voltage		100 - 240 V~, 50 - 60 Hz	
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 Class A, ICES-3	
	in preparation	cULus, CB	
Protection class		IP 40	
Operation panel			
	LED	ON / OFF	
LCD graphics display	Width x Height mm	54 x 70	
Control			
		Pre-warning to label web ending, broken liner torque, temperature, 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

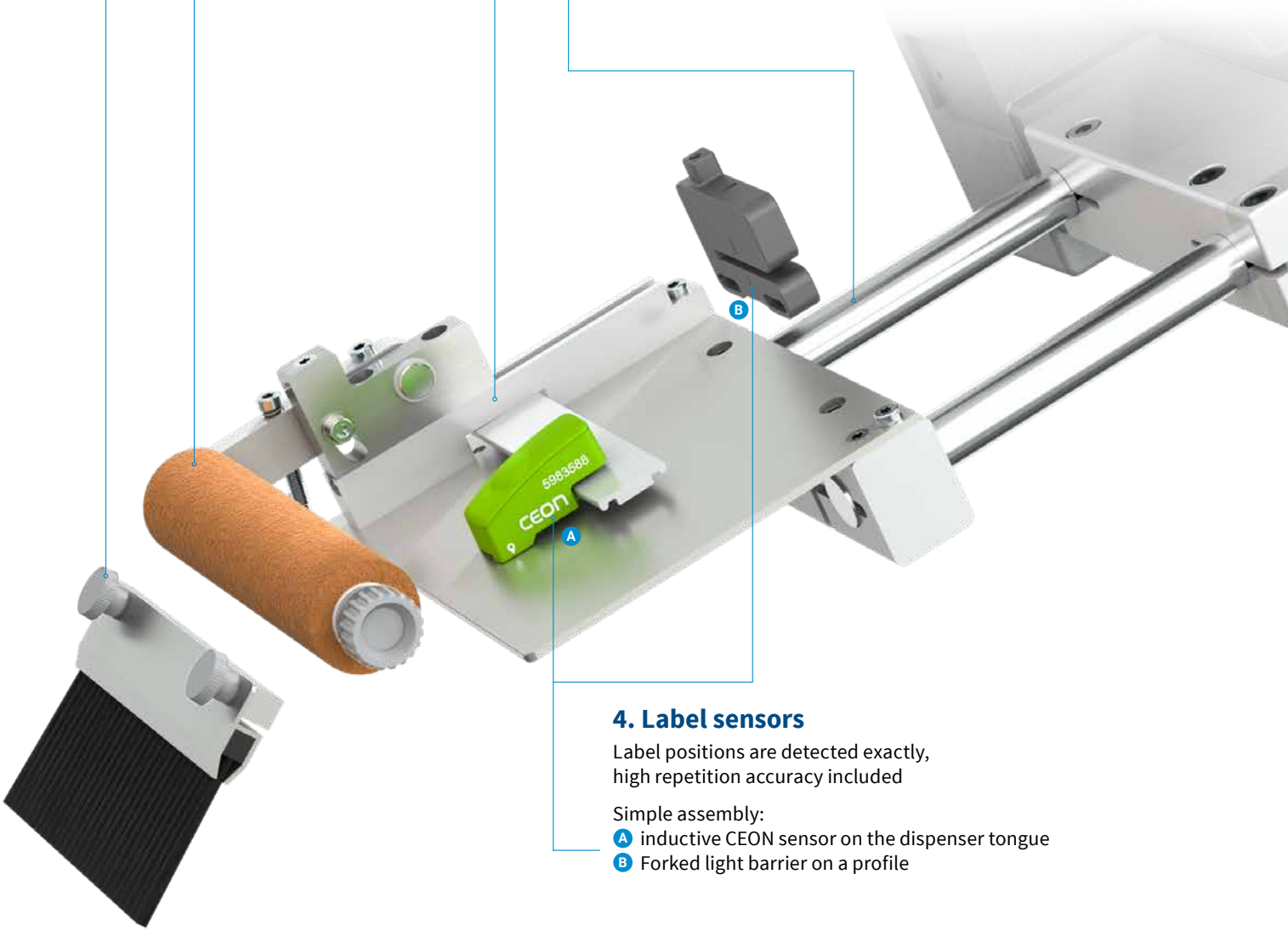
A label web can be inserted from the side.
Individual parts and componental assemblies go with units L or R.
This enables modules be configured as required.

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.



4. Label sensors

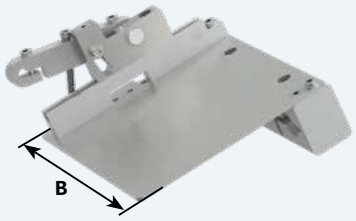
Label positions are detected exactly,
high repetition accuracy included

Simple assembly:
- A inductive CEON sensor on the dispenser tongue
- B Forked light barrier on a profile

Demand modules

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

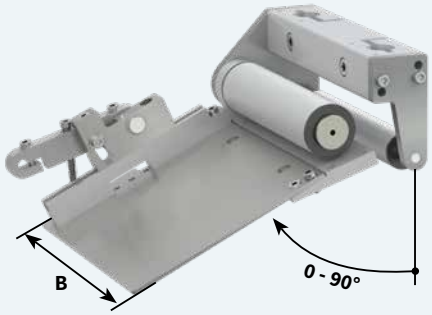
2.1



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.

	Dispenser tongue Dimension B mm	Direction to which labels are dispensed Type left	Type right
SP demand module	62	SP 62L	SP 62R
	124	SP 124L	SP 124R
	186	SP 186L	SP 186R

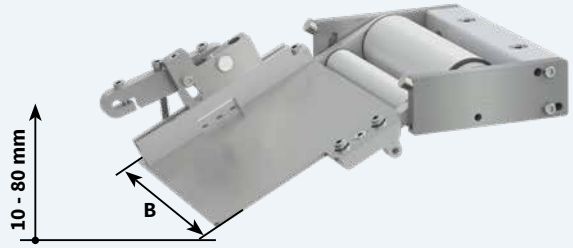
2.2



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°.

	Dispenser tongue Dimension B mm	Direction to which labels are dispensed Type left	Type right
SPE demand module	62	SPE 62L	SPE 62R
	124	SPE 124L	SPE 124R
	186	SPE 186L	SPE 186R

2.3



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

	Dispenser tongue Dimension B mm	Direction to which labels are dispensed Type left	Type right
SPFA demand module	62	SPFA 62L	SPFA 62R
	124	SPFA 124L	SPFA 124R
	186	SPFA 186L	SPFA 186R

2.4

in preparation

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

	Dispenser tongue Dimension B mm	Direction to which labels are dispensed Type left	Type right
SPEA demand module	62	SPEA 62L	SPEA 62R
	124	SPEA 124L	SPEA 124R
	186	SPEA 186L	SPEA 186R

2.5

in preparation

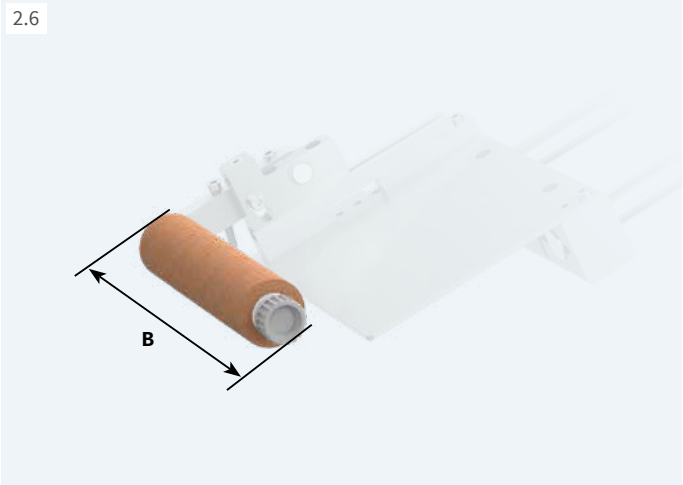
ARE wipe-down rollers electrically pivotable
A wipe-down roller can be pivoted electrically when dealing
with sensitive surfaces or when labeling onto cylindrical items
or into pockets. Pivotable as high as 10 mm

	Dispenser tongue Dimension B mm	Direction to which labels are dispensed Type left	Type right
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.

2.6

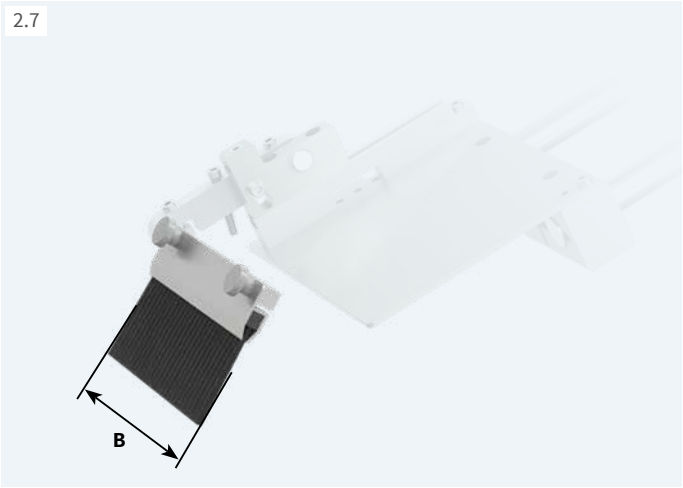


AR wipe-down rollers
Adjustments:

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

2.7



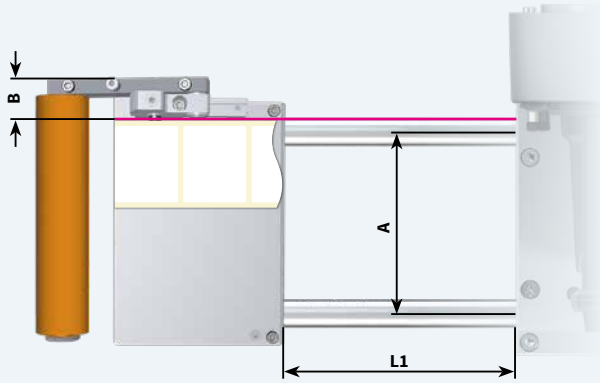
AB wipe-down brushes
Adjustments:

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	Type
AB wipe-down brush	62	AB 62
	124	AB 124
	186	AB 186

Mounting rods

2.8



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
MS mounting rod	25	MS 25
	100	MS 100
	200	MS 200
	300	MS 300
	400	MS 400

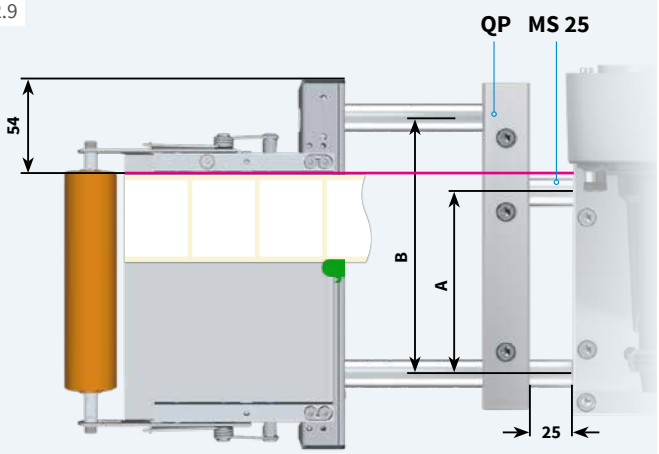
Further lengths upon request

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

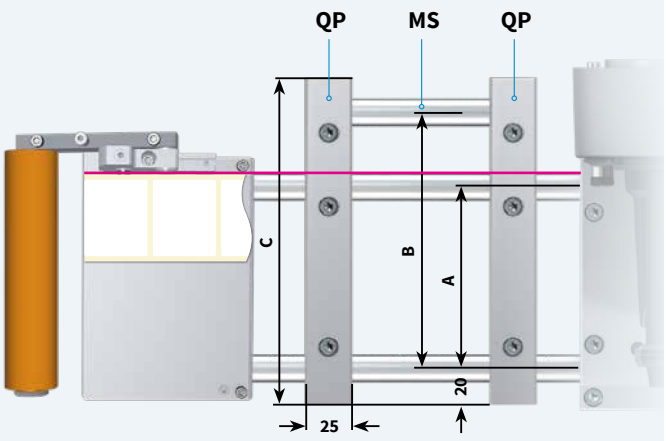
Cross-section profiles

2.9



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.

	Dimension A mm	Dimension B mm	Profile Type	Mounting rod 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.

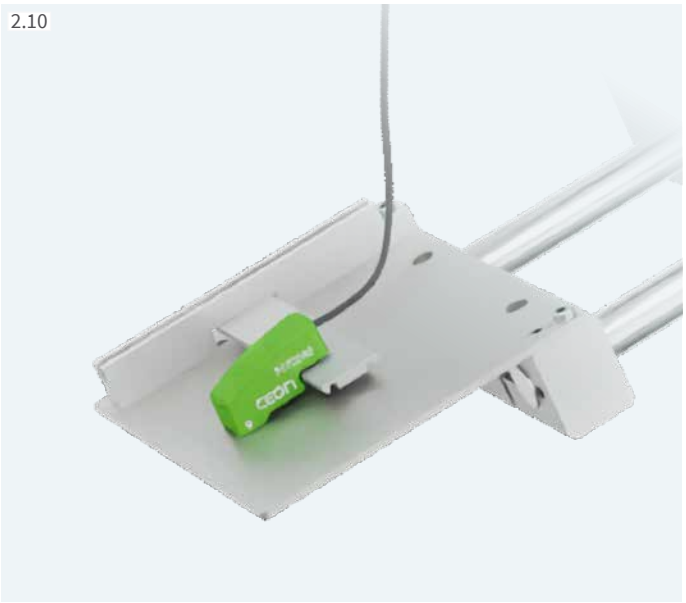
	Dimension A mm	Dimension B mm	Dimension C mm	Type
QP profile	104	146	186	QP 186
	186	208	248	QP 248

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.

2.10

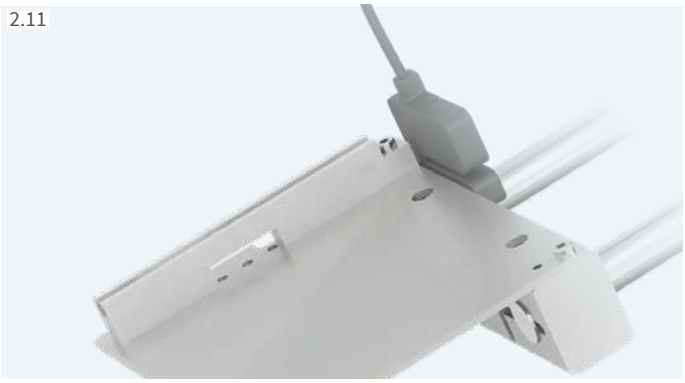


CEON label sensor, retainer bars included
A ceramic probe is used to inductively detect the difference in height from a liner to the top of a label.

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 method		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 adjustable distance to the locating edge	CEON 31 mm	9 - 31
	CEON 62 mm	9 - 62
	CEON 93 mm	9 - 94
Round label diameter	mm max.	180

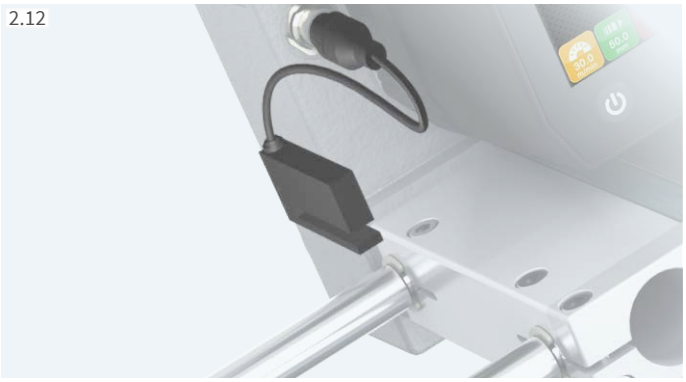
2.11



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
Range of adjustable distance to the locating edge	mm	7.5 - 17.5
Round label diameter	mm max.	35

2.12



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
Range of adjustable distance to the locating edge	mm	8.0
Round label diameter	mm max.	16

Accessories

3.1

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

3.2

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

3.3

Friction wheel
Circumference 200 mm, diameter 63.7 mm

3.4

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

3.5

I/O interface cable, wire-end-ferruled
M12, 17 pins, 5 m

3.6

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

3.7

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

3.8

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

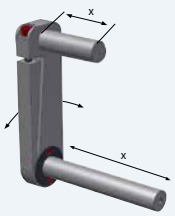
**Mounted on two columns,
a label dispenser may be installed
in vertical or horizontal direction.**

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

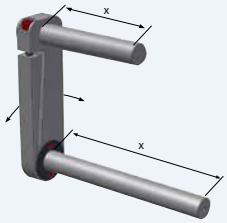
The upper column is attached to the tie rod, the lower one along with a bearing bush to a plate, a profile or a column stand. Swivel-mounted, the tie rod is fixed by a clamping screw.

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

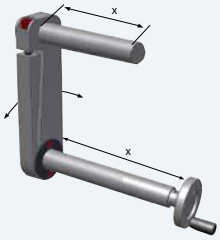
4.1



4.2



4.3



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

4.5

Floor stand 1632

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 of a label to the floor	mm	880 - 1,200
Column stand	mm	800
Adjustable track	mm	595
Weight	kg approx.	40

4.6

Delivery program

Label dispensers

Labels provided to the left

Pos.		Item no.	Designation
1.1		**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

Labels provided to the right

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

xxxxxxx.250 label dispenser, additional software unlocked

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		**5581022.xxx**	FQ MQTT
			FM ModBus
			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

See current data also on the Internet:
www.cab.de/en/roxi

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
2.1		**6130466.xxx**	SP 62L demand module
		6130296.xxx	SP 124L demand module
		6130297.xxx	SP 186L demand module
2.2		**6130467.xxx**	SPE 62L demand module
		6130484.xxx	SPE 124L demand module
		6130485.xxx	SPE 186L demand module
2.3		**6130468.xxx**	SPFA 62L demand module
		6130304.xxx	SPFA 124L demand module
		6130553.xxx	SPFA 186L demand module
2.4	in preparation	**6130478.xxx**	SPEA 62L demand module
		6130479.xxx	SPEA 124L demand module
		6130555.xxx	SPEA 186L demand module
2.5	in preparation	**6130531.xxx**	ARE 62L wipe-down roller
		6130532.xxx	ARE 124L wipe-down roller
		6130533.xxx	ARE 186L wipe-down roller

Labels provided to the right

Pos.		Item no.	Designation
2.1		**6130469.xxx**	SP 62R demand module
		6130306.xxx	SP 124R demand module
		6130307.xxx	SP 186R demand module
2.2		**6130476.xxx**	SPE 62R demand module
		6130486.xxx	SPE 124R demand module
		6130487.xxx	SPE 186R demand module
2.3		**6130477.xxx**	SPFA 62R demand module
		6130310.xxx	SPFA 124R demand module
		6130554.xxx	SPFA 186R demand module
2.4	in preparation	**6130481.xxx**	SPEA 62R demand module
		6130482.xxx	SPEA 124R demand module
		6130556.xxx	SPEA 186R demand module
2.5	in preparation	**6130536.xxx**	ARE 62R wipe-down roller
		6130537.xxx	ARE 124R wipe-down roller
		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
		6130462.xxx	AR 186 wipe-down roller
2.7		**6130463.xxx**	AB 62 wipe-down brush
		6130464.xxx	AB 124 wipe-down brush
		6130551.xxx	AB 186 wipe-down brush
2.8		**6120069.xxx**	MS 25 mounting rod
		5972418.xxx	MS 100 mounting rod
		5972419.xxx	MS 200 mounting rod
		5972420.xxx	MS 300 mounting rod
		6120067.xxx	MS 400 mounting rod
2.9		**6130520.xxx**	QP 186 cross-section profile
		6130521.xxx	QP 248 cross-section profile

2.10		**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		**6130560.001**	Wipe-down roller 62
		6130557.001	Wipe-down roller 124
		6130563.001	Wipe-down roller 186

Pos.		Item no.	Designation
2.14		**6130572.001**	Wipe-down brush 62
		6130580.001	Wipe-down brush 124
		6130573.001	Wipe-down brush 186
2.15		**5983437.001**	CEON probe

Delivery program

Accessories

Pos.		Item no.	Designation
3.1		**6130294**	Product sensor 200 mm maximum detectable track, connecting cable 2.5 m included
3.2		**5918979.850**	Rotary encoder, connecting cable 2.5 m included
3.3		**5918981.850**	Friction wheel
3.4		**5918980.850**	Retainer
3.5		**5918948.850**	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		**6010186**	External operation panel
3.8		**5907718.850**	Connecting USB cable, 1.8 m
		5907730.850	Connecting USB cable, 3 m
		5907750.850	Connecting USB cable, 5 m

Assembly assistance

Pos.		Item no.	Designation
4.1		**5983405.850**	Unit retainer 120 fixed
		5983406.850	Unit retainer 180 fixed
4.2		**5983409.850**	Unit retainer 120 moveable
		5983410.850	Unit retainer 180 moveable
4.3		**6130331.850**	Unit retainer 120 fine adjustable
		6130335.850	Unit retainer 180 fine adjustable
4.4		**5971614.850**	Tie rod
4.5		**5983421.850**	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

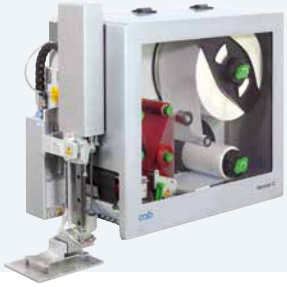
Label printers
SQUIX 8.3

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
IXOR

Marking lasers
XENO 4

Laser marking systems

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