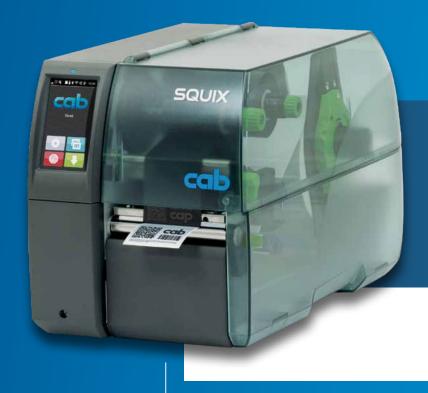
Status: 09/2025





Label printers for industrial operation





# Key features



**SQUIX** label printers for industrial operation

They find use in various areas of operation.

They have been developed with consistent focus on intuitive usability and highly reliable processing.

Print mechanics and chassis are made of high-quality materials and match perfectly in design and function.

A wide range of peripherals and software enable user-specific solutions.

The rugged printers stand up to any demand, whether operated stand-alone, with a PC or in a network.

Print jobs are performed quickly and labels are provided straight away thanks to a high-speed processor.

- Reliable and quick printing
- Accurate print images
- Easy to operate
- Compact design
- Maximum quality standards

# Sample applications

PCB Type plates Cardboard and pallets







# Label printers guiding materials aligned to the left

#### Optimum printing in matters of different widths and materials



#### Slim ones

for printing small labels

Label printer	SQUIX 2				
Print resolution	dpi	300	600		
Print speed	mm/s max.	250	150		
Print width	mm max.	56.9	54.1		



#### **Universal ones**

Best-selling industrial units, providing a wide range of accessories

Label printers	SQUI	IX 4.3 SQUIX 4			
Print resolution	dpi	203	300	300	600
Print speed	mm/s max.	300	300	300	150
Print width	mm max.	104	108.4	105.7	105.7

A cutter can be provided integral to a basic unit.



#### Wide ones

for printing Odette, UCC and GS1 labels in logistics operations

Label printer	SQUI	X 6.3	
Print resolution	dpi	203	300
Print speed	mm/s max.	250	250
Print width	mm max.	168	162.6



#### Extra wide ones

for printing pallet and drum labels

Label printer		SQUIX 8.3
Print resolution	dpi	300
Print speed	mm/s max.	150
Print width	mm max.	216



#### **Basic units**

provide a tear-off plate Printed labels or continuous materials, wound on a roll or fanfold, can be torn off on a jagged plate. Cutting a material is another option, so is external rewinding.



#### Peel-off units

provide an internal rewinder Dispense adds to the features of a basic unit. Printed labels are peeled off their liner and can be removed by hand or by an applicator.

# Label printers guiding materials aligned to the left



#### 1 Hinged cover

Material stock can be checked and printer processes be followed through a large panoramic window.

#### 2 Plungers

One is fixed next to the chassis inside. The other can be aligned to the outside margin of a label for optimum print images.

#### **3** Metal chassis

It is the base to assemble components. Made of cast aluminum

#### Print roller coating

Synthetic rubber is standard, enabling highly accurate print images. Silicone is an option if aiming for extra long life cycles.

#### **5** Label dispense

Labels are separated on a peel-off plate from their liner. A powered guide roller and a pinch roller enable highly accurate processes when printing and applying labels.

#### **6** Peripheral port

Additional modules can be plugged easily and quickly to a unit and fixed with a screw.

#### 7 Ribbon retainer

Replacing a ribbon is no big deal thanks to three-part clamping axles.

#### 8 Roll retainer

The spring-mounted margin stop provides a screw cap and enables constant tension while materials are fed.

#### Internal rewinder

Labels or liners with or without a cardboard core can be wound on peel-off units. Handling a material is simplified by a three-part clamping axle.

#### 10 Rocker

Spring mounting and guide rollers made of Teflon reduce traction and improve the accuracy of print images.

#### 11 Material guide

It is assembled to the rocker. By turning the rotary knob, the stop can be aligned to the margin of a label.

#### Print image accuracy

The smaller a label, the higher are the demands. Print offset can be reduced by  $\pm 0.2$  mm using slip correction.

# Label printers guiding materials in centered position

Peel-off unit

# 1.11, 1.12 Basic unit

#### The precise and flexible ones

All materials that are wound on rolls or reels can be printed, so can fanfold ones. Very small labels or slim continuous materials such as pressed tubes are typical applications.

A specified sensor allows round or oval hoses as high as 5 mm be labeled.

Label printer		_	( 4.3 M 4.3 MP	SQUIX 4 M SQUIX 4 MP			
Print resolution	dpi	203	300	300	600		
Print speed	mm/s max.	300	300	300	150		
Print width	mm max.	104	108.4	105.7	105.7		

# Differences to label printers guiding materials aligned to the left

#### 1 Ribbon retainer

A ruler helps ribbons be set.

#### 2 Plungers

Both have been assembled firmly for all widths of material. There is no need of aligning the print head.

#### 3 Roll retainer

By applying the margin stop, rolls are automatically centered.

#### 4 Material guide

Its position next to the print roller supports print images be accurate. Widths are set with the help of a spindle.

#### 5 Slim print rollers

If small materials and ribbons are in use, adapted print rollers are required to achieve accurate print results. They prevent rollers from wear, print heads from contamination and avoid errors while materials are fed.

Synthetic rubber coating



SQUIX 4 MP peel-off printer providing an internal rewinder



# Label printers guiding materials in centered position and providing a separator



#### For textile operations

If operations require high heating, a ribbon may stick with the textile tape after printing. A draw roller separates the ribbon reliably from a material.

Labels and continuous materials wound on rolls or reels may be as well printed.
Plungers do not have to be aligned for setting the width of a label.
Adapted print rollers are provided for slim materials.

Label printers		SQUIX 4.3 MT	SQUIX	( 4 MT
Print resolution	dpi	300	300	600
Print speed	mm/s max.	300	300	150
Print width	mm max.	108.4	105.7	105.7

# 

SQUIX 4 MT label printer providing a separator built in

# Differences to other label printers guiding materials in centered position

#### 1 Antistatic brush

It dissipates electrostatic charge after printing, in particular if synthetic materials are in use.

#### 2 Separator

If operations require high heating, a ribbon may stick with the textile tape after printing. A draw roller separates the ribbon reliably from a material.

# SQUIX UHF RFID label printers

#### Basic and peel-off units guiding materials aligned to the left or in centered position







See further information on www.cab.de/en/squix-rfid

an integral UHF RFID module

SQUIX cab label printers providing integral UHF RFID options offer highest industrial reliability in the writing and printing of RFID labels.

There are three UHF RFID modules to select from. Each has been optimized for a specific class of RFID labels: standard RFID tags, on metal RFID tags and mini RFID tags

UHF RFID options already qualify for a wide range of RFID labels. In addition, cab assists in customer-specific solutions.

Extensive peripherals and the excellent programmability of cab label printers with UHF RFID option enable practical solutions.

● typical ○ possible □ option

cab next to RFID technology also supports the latest communication interfaces such as OPC UA and WebDAV for integrating a printer to complex logistics systems.

			1.3	1.4		1.5	, 1.6	1.7, 1.8		1.11,	1.12	
RFID label printer Type		SQU	IX 4.3	squ	IIX 4	squi	X 6.3*	SQUIX 8.3*	SQUIX 4.3 M		SQUIX 4 M	
Guidance of mate	erials			al	igned to th	ne left				cent	ered	
Print method	Thermal transfer	•	•	•	•	•	•	•	•	•	•	•
	Direct thermal	•	•	0	_	•	•	•	•	•	0	_
Print resolution	dpi	203	300	300	600	203	300	300	203	300	300	600
Print speed	mm/s max.	300	300	300	150	250	250	150	300	300	300	150
Print width	mm max.	104	108.4	105.7	105.7	168	162.6	216	104	108.4	105.7	105.7
<b>UHF RFID modul</b>	es											
UHF RFID OM 4 m	odule					-	_	-				
UHF RFID RS 4 mo	odule					_	_	-				
UHF RFID HS 4 mg	odule					-	-	-				
UHF RFID OM / RS	4 module					-	-	-				
UHF RFID RS 6 mc	odule	_	-	_	_			-	-	-	-	_
UHF RFID HS 6 mg	odule	-	-	-	-			-	-	-	-	-
UHF RFID RS 8 mg	odule	-	-	_	_	-	-		-	-	-	-
UHF RFID HS 8 mg	odule	_	_	_	_	_	_		-	_	_	_

#### UHF RFID modules with read / write antennas

Modules are assembled inside a chassis, antennas directly to a print head or a feeding unit. Data of RFID tags are read or written just before the printing of a label. In the event of errors, labels are indicated invalid.

#### Read / write antennas

#### On a print head

1. OM - On Metal preferred if labels are applied onto metal surfaces

#### On a feeding unit

- 2. RS Regular Sensitivity is a standard with all common RFID labels
- 3. HS High Sensitivity if RFID labels have specific radiation characteristics

#### On a print head and on a feeding unit

**4. OM and RS -** Each antenna can read / write labels one by one.

#### RFID features

#### **RFID** tag calibration

Optimum read / write performance is identified for RFID tags. Characteristic curves can be printed using the status feature.

#### Tag data read on-the-fly

Memories (TID, EPC, User Memory) can be read on-the-fly on a printer and displayed by the GUI.

#### Technical data

#### **UHF RFID module:**

RFID standard: UHF EPC Class 1 Gen 2 Interface specification: ISO/IEC 18000-63

#### Read antenna frequencies:

ETSI & FCC

#### **Further features:**

**Statistics** 

Maximum number of read / write errors Label invalid (Void Label) Memory banks blocked

#### **Programming:**

**JScript** ZPL2

#### Label software:

cablabel S3

in preparation: Codesoft **Loftware Spectrum** Nicelabel Bartender



#### Antenna samples

identytag

Wet Inlay 53 mm x 53 mm



identytag SmartLabel 100 mm x 150 mm

Tag antenna: Smartrac DogBone

Read / write antenna: cab RS

Tag IC: Impinj Monza R6

identytag Smart Label 54 mm x 25 mm



Tag antenna: Smartrac FROG 3D Tag IC: Impinj Monza 4D Read / write antenna: cab RS

Confidex

**Automotive Carrier Pro** 92 mm x 24 mm



Confidex

Casev 92 mm x 24 mm



Confidex Automotive Kanban 80 mm x 208 mm

Tag antenna: M4E

Tag IC: Impini Monza 4E

Tag antenna: AD-151iM

Read / write antenna: cab HS

Read / write antenna: cab RS

Tag antenna: On Metal

Tag IC: NXP UCODE 7XM

Read / write antenna: cab OM



Tag antenna: M4QT Tag antenna: MR6-P Tag IC: Impini Monza 4QT/4G Tag IC: Impini Monza R6-P Read / write antenna: cab RS Read / write antenna: cab RS

**Avery Dennison** BJ 269 WET WHITE 93 mm x 22 mm



Avery Dennison **BR800 WET WHITE** 93 mm x 22 mm

Tag antenna: AD-665u8

Read / write antenna: cab RS

Tag IC: NXP UCODE 8



**Avery Dennison BU117 WET WHITE** 25 mm x 18 mm

Tag IC: NXP G2iM



Tag antenna: AD-663U7xm Tag IC: NXP UCODE 7xm

Read / write antenna: cab RS

**Omni-ID** 10400 P 94 mm x 24 mm

Tag antenna: Alien ALN-9610 Tag IC: Alien Higgs 3

Read / write antenna: cab RS

Omni-ID IQ150 EU 54 mm x 12 mm



Omni-ID IQ600 EU 94 mm x 24 mm



Tag IC: Impinj Monza R6 Read / write antenna: cab OM Tag IC: Impinj Monza R6 Read / write antenna: cab OM

# Control panel

Self-explanatory symbols simplify settings and enable printers be operated intuitive and easily.

- 1 LED: Power ON
- 2 Status bar: receive data, record data stream, prior warning to a ribbon ending, SD memory card / USB stick plugged, WLAN, Ethernet, USB slave, time
- Orinter status: ready, pause, number of labels printed in a print job, label peeled off, awaiting external start signal
- 4 USB port for plugging a service key or a memory stick, to transfer data to the IFFS memory

cutting a material

label rolls wound outside or inside

Operation

Cutter / perforation cutter
External rewinder
Applicator
Tear-off mode / peel-off mode

Applicator print and apply labels in individual steps
Tear-off mode peel-off mode print a label

Tear-off mode label backfeed

Jump to menu

Stop and delete

all print jobs

Reprint
Label feed

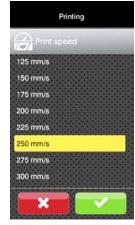
Suspend and continue a print job













Setup

**Print parameters** 

Print position Y

Print speed

Video tutorials

# External control panel

If the control panel of a printer cannot be accessed, an additional external one can be plugged.

Same functionality as on a printer

Landscape mode or portrait mode

Operability as targeted, either on an external panel or on a printer

USB 2.0 Hi-Speed device for plugging a printer

- 1 LED: Power ON
- 2 USB port for plugging a service key or a memory stick, to transfer data to the IFFS memory
- 3 cab provides specified **USB cables** for power supply. Lengths are 1.8 m to 16 m



#### Print heads



# A print head can be replaced by any other one, provided they are of equal width. They are detected by the CPU and calibrated.

Major data such as operational performances, maximum operational temperatures and heating are kept in memory by the print head. The data can be read at the premise.

#### Print heads provided for SQUIX 2, SQUIX 4 - 300, 600 dpi

sharp-edged print images small fonts, graphics on typeplates printing on materials that imply high energy needs

Print heads provided for SQUIX 4.3, SQUIX 6.3 - 203, 300 dpi Print heads provided for SQUIX 8.3 - 300 dpi

durable, printing in harsh environments, direct thermal printing

### Print rollers



#### Types of material:

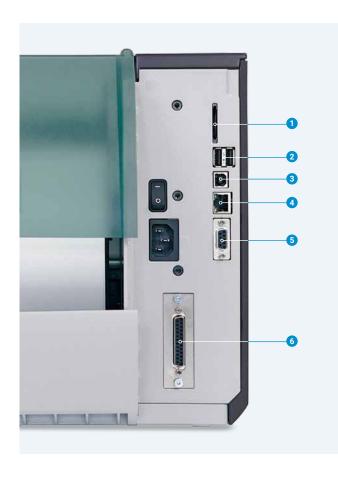
#### DR print rollers

Synthetic rubber coating highly accurate print images standard

#### **DRS print rollers**

Silicone coating extra long life cycles, accepting higher tolerances in print image accuracy

# **Interfaces**



- 1 Port for plugging a SD memory card
- 2 2 USB hosts for plugging a service key, an USB stick, a keyboard, barcode scanner, an USB WLAN stick, external control panel
- 3 USB 2.0 Hi-Speed device for plugging a PC
- 4 Ethernet 10/100 Mbit/s
- 5 RS232-C 1,200 to 230,400 baud / 8 bit

Option

#### **o** Digital I/O interface

Printing is triggered via a PLC, a sensor or a hand switch. Status reports and errors are displayed.

Compliant to IEC/EN 61131-2, type 1+3
The inputs and outputs are galvanically isolated and protect from reverse polarity.
The outputs are also short-circuit-proof.

#### **PNP** inputs

Start printing / applying label Print first label Reprint Delete print job Label removed Stop printing /applying label Pause Reset

#### **PNP, NPN outputs**

Unit ready
Print data available
Initial / upper end position
Paper feed ON
Label peeled off
Label apply / lower end position

Ribbon ending Collective error

# Technical data

#### Label printers guiding materials aligned to the left

		1.1,	1.2			1.5, 1.6 1.7, 1.8				
Туре		squ	IIX 2	SQUIX 4.3		squ	IIX 4	SQUIX 6.3		SQUIX 8.3
Print method	Thermal transfer	•	•	•	•	•	•	•	•	•
	Direct thermal	0	-	•	•	0	-	•	•	•
Print resolution	dpi	300	600	203	300	300	600	203	300	300
Print speed	mm/s max.	250	150	300	300	300	150	250	250	150
Print width	mm max.	56.9	54.1	104	108.4	105.7	105.7	168	162.6	216
Print length	mm max.	12,000	3,000	13,500	6,000	6,000	1,500	9,000	4,000	3,000
nitial print	Distance to locating edge mm	2	2	2.8	1.2	2	2	0.5	3.2	2
UHF-RFID										
UHF-RFID Modul		-	-							
Material <sup>1)</sup>										
Paper, cardboard,		4			4					•
•	PP, PI, PVC, PU, acrylate, Tyvec									
RFID labels accordin	ng to separate specification	-	-						)	0
Shrink tube	ready for use	-				)		-	-	-
	continuous, pressed							-	-	-
Textile tape			)			)		-	-	-
Finishing	Roll, fanfold									•
	Roll diameter mm max.						)5			
	Core diameter mm	38.1 - 76								
	Winding					outside	or inside			
Label	Width mm	4 -	63		20 -	116		46 -	176	46 - 220
	Height no label backfeed <sup>2)</sup> mm at least	4	1		4	1		(	5	25
	label backfeed <sup>2)</sup> mm at least	4	1		(	õ		1	2	25
	label backfeed, peel-off mm at least	6	5		6			1	2	25
	Thickness mm			0.03	- 0.6			0.03	- 0.6	0.05 - 0.6
Liner	Width mm	24 -	- 67		24 - 120			50 -	180	50 - 235
	Thickness mm					0.03	- 0.16			
Continuous	Width mm	24 -	- 67	24 - 120			50 -	180	50 - 235	
	Thickness mm	0.03	- 0.5		0.03	- 0.5			0.03	- 0.5
	Weight (cardboard) g/m² max.	30	00		30	00			30	00
Shrink tube	Width ready for use mm max.	-	-		12	20		-	-	-
	continuous, pressed mm	24 -	- 67		24	- 85		-	-	-
	Thickness mm max.	1.	.1		1	.1			-	-
Ribbon³)	Color layer					outside	or inside			
	Roll diameter mm max.					8	0			
	Core diameter mm					25	5.4			
	Length m max.				60	00				360
	Width mm	25 -	- 67		25 -	114		50 -	170	220
Internal rewinder	provided on peel-off units									
Outside diameter	mm max.					14	12			
Core diameter	mm					4	0			
Winding						out	side			
Printer dimension	s, weights									
Width x Height x De	pth mm	200 x 28	38 x 460		252 x 28	38 x 460		312 x 28	38 x 460	352 x 288 x 46
Weight	kg	9	)		1	0		1	4	15
Label sensors, pos	ition indicators									
Transmissive senso	r detecting		label	s, punch ma	arks, mater	ials ending	, print mar	ks on trans	lucent mat	erials
Reflective sensor	from below or top detecting			labels, mate	erials endir	ng, print ma	rks on non	-transluce	nt material:	S
Sensor distance	to locating edge aligned to the left mm	5 -	26		5 -	60		5 -	60	5 - 60
Material passage	mm max.					2 (5 are a	n option)			
Interfaces										
RS232-C 1,200 to 23	30,400 baud / 8 bit									
USB 2.0 Hi-Speed d	evice for plugging a PC									
Ethernet 10/100 Mb	it/s							, OPC UA, V		
Pv4 and IPv6				HCP, HTTP/F						
2 USB hosts on the			Serv	rice key, USE						enna,
2 USB hosts on the l				keyl	board, bar			l control pa	anel	
	or peripheral plugging						<u> </u>			
• •	providing 8 inputs and 8 outputs									
Operating data										
/oltage						) - 240 VAC,				
Power consumption				<10 W ir		-		ation / max	c. 200 W	
	Operation					°C / 10 - 85				
Temperature /	Stock					C / 20 - 85 %	-			
Temperature /					-25 - 60	°C / 20 - 85	%, not con-	densing		
Temperature / humidity	Transport									
Temperature / numidity			CE, UI	KCA, FCC Cla	ss A, ICES-3	3, cULus, CE		BSMI, KC-M	Mark, Mexico	o Reg.
Temperature / humidity  Approvals			CE, UI	KCA, FCC Cla	ss A, ICES-3			BSMI, KC-M	Mark, Mexico	o Reg.
Temperature /	Transport		CE, UI	KCA, FCC Cla	ss A, ICES-3	3, cULus, CE Mark not p		BSMI, KC-M	Mark, Mexico	o Reg.

<sup>&</sup>lt;sup>1)</sup> Specifications are standards. Operations including small, slim, thick or stiff materials need testing, so do strongly adhesive labels. <sup>2)</sup> if labels are torn off, cut, rewound <sup>3)</sup> A ribbon should be at least as wide as the liner material.

lacktriangle typical  $\bigcirc$  possible lacktriangle standard  $\square$  option

# Technical data

#### Label printers guiding materials in centered position

Print resolution Print speed Print width Print length Initial print UHF-RFID UHF-RFID WHF-RFID HOBER Paper, cardboard, synthetics PET, PE, PF RFID labels according in Shrink tube Textile tape Finishing	Thermal transfer Direct thermal  dpi mm/s max. mm max. mm max. Distance to locating edge  P, Pl, PVC, PU, acrylate, Tyvec to separate specification ready for use	SQUIX  203 300 104 13,500	300 300 108.4 6,000	SQUI  300 300 105.7 6,000	- 600 150	SQUIX4.3 MT	SQUI	X4 MT	
Print resolution Print speed Print width Print length Initial print UHF-RFID UHF-RFID Modul Material <sup>1)</sup> Paper, cardboard, synthetics PET, PE, PF RFID labels according in the second in	Direct thermal dpi mm/s max. mm max. mm max. Distance to locating edge mm	203 300 104 13,500	300 300 108.4 6,000	300 300 300 105.7	- 600 150	300	0		
Print resolution Print speed Print width Print length Initial print UHF-RFID UHF-RFID Modul Material' Paper, cardboard, synthetics PET, PE, PF RFID labels according of Shrink tube Textile tape Finishing	dpi mm/s max. mm max. mm max. Distance to locating edge mm  P, Pl, PVC, PU, acrylate, Tyvec to separate specification	203 300 104 13,500	300 300 108.4 6,000	300 300 105.7	600 150	300			
Print speed Print width Print length Initial print UHF-RFID UHF-RFID Modul Material Paper, cardboard, synthetics PET, PE, PF RFID labels according of the second of the se	mm/s max. mm max. mm max. Distance to locating edge mm  P, PI, PVC, PU, acrylate, Tyvec to separate specification	300 104 13,500	300 108.4 6,000	300 105.7	150		300	600	
Print width Print length Initial print UHF-RFID UHF-RFID Modul Material <sup>1)</sup> Paper, cardboard, synthetics PET, PE, PF RFID labels according in Shrink tube Textile tape Finishing	mm max. mm max. Distance to locating edge mm  P, PI, PVC, PU, acrylate, Tyvec to separate specification	104 13,500	108.4 6,000	105.7			300	150	
Print length Initial print UHF-RFID UHF-RFID Modul Material <sup>1)</sup> Paper, cardboard, synthetics PET, PE, PF RFID labels according i Shrink tube Textile tape Finishing	mm max.  Distance to locating edge mm  P, PI, PVC, PU, acrylate, Tyvec to separate specification	13,500	6,000		105.7	108.4	105.7	105.	
UHF-RFID UHF-RFID Modul Material <sup>1)</sup> Paper, cardboard, synthetics PET, PE, PF RFID labels according to Shrink tube Textile tape Finishing	P, PI, PVC, PU, acrylate, Tyvec to separate specification		]		1,500	6,000	6,000	1,50	
UHF-RFID Modul Material <sup>1)</sup> Paper, cardboard, synthetics PET, PE, PF RFID labels according i Shrink tube Textile tape Finishing	to separate specification		]		cent	·	,	,	
Material <sup>1)</sup> Paper, cardboard, synthetics PET, PE, PF RFID labels according i Shrink tube Textile tape Finishing	to separate specification		]						
Paper, cardboard, synthetics PET, PE, PF RFID labels according i Shrink tube Textile tape Finishing	to separate specification					-		-	
synthetics PET, PE, PF RFID labels according i Shrink tube Textile tape Finishing	to separate specification								
RFID labels according i Shrink tube Textile tape Finishing	to separate specification						•		
Shrink tube Textile tape Finishing		•							
Textile tape Finishing	ready for disc						0		
Textile tape Finishing	continuous, pressed			<u> </u>			0		
			(	)			•		
	Roll, fanfold						•		
	Roll diameter mm max.				20	15			
	Core diameter mm				38.1				
	Winding				outside				
	Width mm			110		4 -	110		
	Height no label backfeed <sup>2)</sup> mm at least			3			4		
	label backfeed <sup>2)</sup> mm at least			<del>1</del>			6		
	label backfeed, peel-off mm at least Thickness mm			0	0.02	- 3 - 0.6			
	Width mm		Q _	114	0.03		114		
	Thickness mm		<i>y</i> -	-41	0.03				
			9 -	114	9 - 114				
	Thickness mm		0.03	- 0.5		0.0	3 - 0.5		
	Weight (cardboard) g/m² max.		3	00		3	300		
Shrink tube	Width ready for use mm max.		1	14		1	14		
	continuous, pressed mm			85			- 85		
	Thickness mm max.			.1			1.1		
	continuous, round or oval max. height mm			5			_		
	Color layer		or inside						
	Roll diameter mm max.				0				
	Core diameter mm Length m max.	25.4 600							
	Width mm				25 -				
	ovided on peel-off units								
Outside diameter	mm max.		14	42			_		
Core diameter	mm		4	.0			_		
Winding			aul	3en			-		
Printer dimensions,									
Width x Height x Dept				38 x 460			288 x 460		
Weight	kg		1	.0			10		
Label sensors, positi Transmissive sensor	detecting		labole =:	ch marks ==	torials or div	print marks on translate	nt matariala		
	from below or top detecting detecting			-		, print marks on transluce rks on non-translucent m			
	to locating edge centered position mm		ianeis	, materials ell	unig, print ma - 0		ucciidl3		
Material passage	mm max.				2 (5 are a				
Interfaces					, , , , , , ,	, ,			
RS232-C 1,200 to 230,	400 baud / 8 bit					1			
USB 2.0 Hi-Speed dev	ice for plugging a PC								
Ethernet 10/100 Mbit/	's					eb service, OPC UA, WebD			
IPv4 and IPv6						E, NTP, Zeroconf, SNMP, S			
2 USB hosts on the co 2 USB hosts on the ba						k, USB WLAN stick with a r rnal control panel (on bac			
USB host, 24 VDC, for			KeyD	oara, parcode	scanner, exte		K OHRY)		
	roviding 8 inputs and 8 outputs					=			
Operating data									
Voltage					100 - 240 VAC.	50/60 Hz, PFC			
Consumption of powe	er		<			pical operation / max. 200	) W		
	Operation					%, not condensing			
	Stock				•	%, not condensing			
•	Transport					%, not condensing			
Approvals			CE, UKCA, F	CC Class A, ICE	S-3, cULus, CE	, CCC, BIS, BSMI, KC-Mark,	Mexico Reg.		
Control panel									
Color LCD touchscree	n Diagonal "  Resolution Width x Height px				4	3			

<sup>&</sup>lt;sup>1)</sup> Specifications are standards. Operations including small, slim, thick or stiff materials need testing, so do strongly adhesive labels.
<sup>2)</sup> if labels are torn off, cut, rewound
<sup>3)</sup> A ribbon should be at least as wide as the liner material.

# Technical data

Electronics			
Processor, 32 bit clock RAM	rate	MHz MB	800 256
IFFS		MB	50
	memory card (SDHC, SDXC)	GB max.	512
	ime and date, real-time clock		<b>I</b>
, ,	e.g. serial numbers) when pov		
Setup options	, ,		
	Print Labels Ribbon Tear off Peal off Cut Apply Interfaces Error	Region: - Language - Country - Keyboard - Time zone Time Display: - Brightness - Power saving r - Orientation Interpreter	node
Status bar	l		
	Receive data Record data stream Prior waming to a ribbon ending SD memory card plugged USB stick plugged	WLAN Ethernet SUSB slave Time	
Controls			
	Ribbon winding Prior waming to a ribbon ending Ribbon ending Running out of material	Print head volta Print head temp Print head open Pinch roller open (peel-off unit, se	erature n
		Peripheral error	,
Test routines			
System diagnostics	upon startup, detection of pr	rint head include	d
Information display,	Status printout Fonts list	Test grid	
test printout, analysis	List of units	Label profile List of events	
	WLAN status	Monitor mode	
Status reports	<ul> <li>Printout of print durations,</li> <li>Status of a unit requested b</li> <li>Display of errors related to or peripheral device, as we</li> </ul>	y software comm a network, barco	nand de
Fonts			
Integral	5 bitmap fonts: 12 x 12 dots 16 x 16 dots 16 x 32 dots OCR-A OCR-B	7 vector fonts: AR Heiti Medium CG Triumvirate ( Garuda HanWangHeiLig Monospace 821 Swiss 721 Swiss 721 Bold	Cond. Bold
For storing	TrueType fonts		
Sets of characters	Windows-1250 to -1257 DOS 437, 737, 775, 850, 852, EBCDIC 500 ISO 8859-1 to -10 and -13 to - WinOEM 720 UTF-8 MacRoman DEC MCS KOI8-R		5, 869
	Western European Eastern European Chinese, simplified Chinese, traditional Thai	Cyrillic Greek Latin Hebrew Arabian	
Bitmap	1 mm to 3 mm wide and high Zoom factors 2 to 10 0°, 90°, 180°, 270° orientation		
Vector / TrueType	0.9 mm to 128 mm wide and Continuous zoom 360° orientation in steps of 1	J	
Styles	bold, italic, underlined, outli - depending on the font type		

Graphics			
Elements	lines, arrows, rectangles, cir	cles, ellipses	
-	- filled and gradient	- 5116	
Formats	PCX, IMG, BMP, TIF, MAC, GIF	-, PNG	
Codes	C-4-20 C-4-02	Interior and 2/F	
1D barcodes (linear)	Code 39, Code 93 Code 39 Full ASCII Code 128 A, B, C EAN 8, 13 EAN/UCC 128 / GS1-128 EAN/UPC Appendix 2 EAN/UPC Appendix 5 FIM HIBC	Interleaved 2/5 Ident and routing code of Deutsche Post Codabar JAN 8, 13 MSI Plessey Postnet RSS 14 UPC A, E, E0	
2D codes, stacked codes	DataMatrix DataMatrix Rectangle Exten QR code Micro QR code rMQR code GS1 QR code GS1 DataMatrix GS1 Digital Link (QR and Da PDF 417 Micro PDF 417 UPS MaxiCode GS1 DataBar Aztec Codablock F Dotcode RSS 14 truncated, limited, s' All codes may vary in height 0°, 90°, 180°, 270° orientatio Feasibility of check digits, p and start/stop coding deper	taMatrix)  tacked, omni-directional  ., modular width and ratio. ns lain text printouts	
Software			
Label software	cablabel S3 Lite cablabel S3 Viewer cablabel S3 Pro cablabel S3 Print	ı	
Running also with	CODESOFT Loftware Spectrum NiceLabel BarTender		
Stand-alone operation			
Windows printer drivers certified WHQL for	Windows 10 Windows 11	Server 2016 Server 2019 Server 2022	
Apple printer drivers	Mac OS X 10.6 or any later r	elease I	
Linux printer drivers	CUPS 1.2 or any later releas	se I	
Programming	JScript printer language abc Basic Compiler ZPL II (Datastream be tested	d in advance)	
Integration	SAP Database Connector		
Administration	Printer control Configuration on the Intrar		

 $\blacksquare$  standard  $\Box$  option

Free and Open Source software in cab products: www.cab.de/opensource

# OPC UA

All the latest cab printers have been designed ready for interacting with machines and components of different manufacturers in industrial plants. An OPC UA server is part of the firmware.





#### cablabel S3 software

#### Design, print, administrate

cablabel S3 opens up the full potential of cab devices. Defining a label is first. Modular design adapts cablabel S3 to requirements step by step. Plug-ins are embedded. Native JScript programming, for example, is supported by the JScript Viewer. The designer user interface and JScript codes synchronize in real time. Optional features can be integrated. such as the Database Connector or barcode verifiers.







# Stand-alone operation

This operating mode enables a printer select and print labels while not connected to a host system. Labels can be designed using software such as cablabel S3 or a text editor on a PC. Label formats, texts, graphics and data of a database can be stored on a memory card, a USB stick or a printer's IFFS memory. Only variable data are sent by a keyboard, a barcode scanner, a scale or any other host system to a printer, or be recalled by the Database Connector from a host and printed.



#### Printer control

#### **Drivers**



cab provides drivers to control a printer with software other than cablabel S3.



Free download on www.cab.de/en/support



#### **Programming**



#### **JScript**

cab printers embed JScript language. Download free manual on www.cab.de/en/programming

abc Basic Compiler

Integral to the firmware, abc in addition to JScript enables advanced programming before data are edited for printout. For example, external printer languages can be replaced without intervening in a print job in progress. Data may be imported as well from other systems such as scales, barcode scanners or PLC.

#### Connecting to SAP®

Labels can be printed from SAP<sup>1)</sup> on cab devices and systems. There are various methods:

- Printing with SAPscript
- **Printing with SmartForms**
- Printing with Adobe Interactive Forms

See instructions in detail on www.cab.de/en/sap

#### Printer administration



#### Configuration in the Intranet and Internet

Integral HTTP / FTP servers enable a printer be controlled or configured, firmware be updated and memory cards be administrated using standard applications such as a web browser or a FTP client. Administrators and operators on behalf of SNMP / SMTP are notified of states, alerts and errors by email or SNMP diagrams. Time and date are synchronized by a time server.



#### **Database Connector**

Printers in a network may access data from a ODBC / OLEDB database and print it on labels. Data can be rewritten to a database while print jobs are in progress.

<sup>1)</sup> SAP and associated logos are trademarks or registered trademarks of SAP SE.

# Overview of accessories / options

							● typical ○	oossible <b>s</b> tar	ndard 🗆 option
Pos.		Basic unit	Peel-off unit	1.1, 1.2 SQUIX 2	1.3, 1.4 SQUIX 4.3 SQUIX 4	1.5, 1.6 SQUIX 6.3	1.7, 1.8 SQUIX 8.3	1.11, 1.12 SQUIX 4.3 M SQUIX 4 M	1.14 SQUIX 4.3 MT SQUIX 4 MT
2.6	DR4-M30, -M60, -M80 print rollers	•	•	-	-	-	-		
2.7	DRS print roller	•	•						
2.8	External control panel, USB cable	•	•						
2.9	Label sensor 4.5	•	-						
2.10	Downscale print head pressing system	•	•						
2.11	Antistatic brush	•	•						
2.12	Adapter 100	•	•						
2.13	SD memory card	•	•						
2.14	USB stick	•	•						
2.15	USB WLAN stick	•	•						
2.16	USB WLAN stick with a rod antenna	•	•						
UHF-I	RFID					'	'		
1.13	UHF RFID module	•	•	-					_
Peelii	ng off								1
2.18	PS800 present sensor	_	•					_	_
2.19	PS900 present sensor	_	•						_
2.20	PS1000 MP present sensor	_			-	_	-		_
2.21	Extended DP210, DP410, DP610 peel-off plates	_	•				_		_
2.22	Reflective product sensor	_							_
	aces, switches								
3.1	Digital I/O interface	•							
3.2	I/O interface plug, SUB-D, 25 pins	•							
3.3	Label selection - I/O box								
3.4	TR2 hand switch	-							
3.5	Foot switch								
				Ш					
	ecting cable	•	•						
4.1	RS232-C cable	•							
	ng, perforating								
5.1	CSQ 401 / CSQ 402 cutters	•	0	-	■ or □	_	_	■ or □	_
5.2	PSQ 403 perforation cutter	•	0	-	-	-	-		-
5.3	CU200, CU400, CU600, CU800 cutters	•	0						
5.4	PCU400/2,5, PCU400/10 perforation cutters	•	0	-		-	-		
Stack	ing, verifying								
5.5	ST400 M stacker providing a cutter and a base frame	•	0	-	-	-	_		
5.6	CC200-SQ scanner	•							_
	nding, unwinding								
6.1	RG200, RG400 guide plates	_				_	_		_
6.2	External ER1/210, ER2/210 <sup>1</sup> , ER3/210 rewinders	_	0					0	_
6.3	External ER4/300, ER6/300 rewinders		0				_	0	
6.4	External EU4/300, EV6/300 unwinders	÷	0				_		
			0						
6.5	Kit to adapt a rewinder or an unwinder		U	-		Ш		Ш	
	AVON 3 tube applicator		•	_					
7.1	AXON 2 tube applicator				-	_	_	Ш	-
	around labeling								
7.2	WICON wrap-around applicator	-		-	-	-	-		-
	cators, demand modules				_			_	
7.3	SQ 1000-220, -300, -400, -520 applicators	-					-		-
7.9	SQ 3200 applicator	-	•			-	-		-
7.12	S5104, S5104M, S5106 demand modules	-		-			-		-
	nbly assistants								
8.1	Assembly plate	-	•				-		_
8.2	Profiles 40 mm, 80 mm, 120 mm	-	•				-		-
8.3	Base plate 500 mm x 255 mm	-	•				-		-
8.4	Base plate with XY stop and product sensor	-	•				-		-
8.5	Floor stand	-	•				-		-
8.6	Jig for retaining a printer unit	-	•				-		_
Speci	al covers, protective chassis								
9.1	ESD surface	•	•				_		
9.2	Food applications	•	•	-			-		
9.3	Stainless steel chassis	•		_			_		_
5.5	for food applications								

 $<sup>^{1)}</sup>$  designed for the A+ printer series, adapted to SQUIX; supplied until external rewinders ER20x will be available

# Accessories

2.6	DR4-M30 print roller	2.18	<b>PS800 present sensor</b> for use with materials guided aligned to the left
	Liner and continuous materials as wide as 30 mm DR4-M60 print roller Liner and continuous materials as wide as 60 mm DR4-M80 print roller		Labels are detected in peel-off position. As soon as a label has been removed, the next one is automatically printed.
	Liner and continuous materials as wide as 80 mm		The minimum width of a label in use is 16 mm, its minimum height 6 mm.
	Synthetic rubber coating enables highly accurate print images.		Distant 7 mm to the locating edge
		2.19	PS900 present sensor
2.7	DRS4 print roller Materials as wide as 120 mm		for use with materials guided aligned to the left or in centered position
	Silicone coating enables extra long life cycles, accepting higher tolerances in print image accuracy.		The moveable sensor qualifies for small or customized labels. As soon as a label has been removed, the next one is automatically printed.
2.8	External control panel If the control panel of a printer cannot be accessed, an additional external one can be plugged. Same functionality as on a printer		The minimum width of a label in use is 4 mm, its minimum height 6 mm. If materials are in use aligned to the left, they must be 12 cm to 60 mm distant to the locating edge. Materials in centered position: ibid
	·	2.20	
	Landscape mode or portrait mode Operability as targeted, either on		<b>PS1000 MP present sensor</b> for use with materials guided in centered position
	an external panel or on a printer  USB 2.0 Hi-Speed device for plugging a printer		Labels are detected in peel-off position. As soon as a label has been removed, the next one is automatically printed.
	cab provides specified <b>USB cables</b> for		The minimum width of a label in use is 4 mm, its minimum height 6 mm. Centered position
	power supply. Lengths are 1.8 m to 16 m.		ne minimum neight o minimum center eu position
2.9	Label sensor 4.5 Only for operation on a SQUIX 4/4.3 M printer guiding materials in centered position. Maximum material passage 5 mm	2.21	Extended DP210, DP410, DP610 peel-off plates for use with labels that hardly separate due to strong adhesive or thick liner material. Use only if printing has been triggered by the touch of a button on the display or by a control signal. A present sensor cannot be used.
2.10	Downscale print head pressing system Direct thermal printing requires less pressure exterted to a print head, resulting in a longer life cycle of the latter.	2.22	Reflective product sensor Detecting products automatically on a conveyor
2.11	Antistatic brush It dissipates electrostatic charge after printing, in particular if synthetic materials are in use.	3.1	<b>Digital I/O interface</b> Labeling is triggered via a PLC, a sensor or a hand switch. Status reports and errors are displayed.
2.12	Adapter 100 if operating label rolls with a core diameter of	3.2	I/O interface plug, SUB-D, 25 pins All control signals connect to the I/O interface using clamping screws.
	100 mm and outside diameter succeeds 180 mm	3.3	Label selection - I/O box A maximum of 16 labels per box
2.13	SD memory card		can be selected from a memory card by a superior control unit, such as a PLC. Two boxes may be plugged. Making use of an I/O box, four inputs and four outputs suffice for implementing
2.14	USB stick	3.4	PLC processes via abc programming.
2.15	<b>USB WLAN stick</b> 2.4 GHz 802.11b/g/n		<b>TR2 hand switch</b> For plugging to a digital I/O interface
<b>4</b>	Hotspot mode or infrastructure mode	3.5	Foot switch
2.16	USB WLAN stick with a rod antenna		For plugging to a digital I/O interface
	to extend the range of operation	4.1	
<b>9</b>	2.4 GHz 802.11b/g/n + 5 GHz 802.11a/n/ac Hotspot mode or infrastructure mode		<b>RS232-C cable</b> 9/9 pins, 3 m

# Cutting, perforating



**CSQ 401 / CSQ 402 cutters** are provided assembled to a printer ex factory or accessorial on delivery for all SQUIX 4 units.

Paper labels and self-adhesive labels, cardboard and synthetic materials can be cut, so can shrink tubes. By pivoting the cutter, materials can be accessed for removal.

The CSQ 402 provides a more powerful engine and titanium-coating, enabling highly performant cutting even with thick materials such as cardboard and shrink tubes, as well as with self-adhesive materials. The number of cuts performed are kept in memory, allowing wear control.

**PSQ 403 perforation cutters** are provided for all SQUIX 4M units Continuous materials such as shrink tubes can be perforated, to simplify separation by hand at a later stage.

The design and technical data correspond to the CSQ 402.

Cutter			CSQ 401	CSQ 402		
Perforation cutter					PSQ 403	
Operated	with		SQUIX 4.3 SQUIX 4.3 M	s, SQUIX 4 I, SQUIX 4 M	SQUIX 4.3 M, SQUIX 4 M	
Perforation	n Distance between of	f-cuts mm	-	-	2.5	
	Width of off-cuts	mm	-	-	0.4	
	Quantity of off-cuts		-	-	6	
Material	Width	mm max.	120	120	114	
	Weight (cardboard)	gr/m²max.	200	300	300	
	Thickness	mm	0.7	1.1	1.5	
Cutting le	ength	mm at least	10			
Material p	oassage	mm max.	2.0	2.0	2.0	
Performance* cuts/mir		cuts/min	120	200	200	
Controls		no final cutter position, cover off cutter				
Tray						
Label hei	ght	mm max.	100			

<sup>\*</sup> at use of material 1 mm high, no backfeed



#### **CU** cutters

Paper labels and self-adhesive labels, cardboard, textile and synthetic materials can be cut, so can shrink tubes.

Tray for collecting a maximum of approximately 50 labels

#### **PCU400** perforation cutter

Continuous materials such as textiles or shrink tubes can be perforated, to simplify separation by hand at a later stage.
Cutting a material is as well possible.

Cutter			CU200	CU	400	PCL	J400	CU600	CU800	
Perforat	Perforation cutter					2.5	10			
Operated v	vith		SQUIX 2	squi	UIX 4.3 X 4.3 M (4.3 MT,	, squ	X 4 M	SQUIX 6.3	SQUIX 8.3	
Perforation	Distance between of	f-cuts mm	-	-	-	2.5	10	-	-	
	Width of off-cuts	mm	-	-	-	0	.5	-	-	
Material	Width	mm max.	67	120	114	8	15	180	232	
	Weight (cardboard)	gr/m²		60 - 300						
	Thickness	mm	0.05 - 1.1					0.05 - 0.5		
Cutting len	gth	mm at least	5							
Material pa	issage	mm max.				2.	5			
Performance* cuts/min		100								
Printing stops if			no final cutter position							
Tray										
Label heigh	nt	mm max.	-	1	00		-	-	-	

<sup>\*</sup> at use of material 1 mm high, no backfeed

The CU400 will be replaced by the CSQ cutter series, the PCU400 by the PSQ403 perforation cutter.

# Stacking



#### ST400 M stacker providing a cutter

- Printed materials can be cut and then collected. Print jobs stop if the maximum number of labels have been collected. Limitations may occur with stiff or curved materials. cab recommends to have such operations tested.
- 2 A unit can be set anywhere on a table with the help of a base frame.

Stacker providing a cutter		a cutter	ST400 M
Operated with			SQUIX 4.3 M, SQUIX 4 M SQUIX 4.3 MT, SQUIX 4 MT
Material	Width	mm	20 - 100
	Weight (cardbo	ard) gr/m²	60 - 300
	Thickness	mm	0.05 - 0.8
Cutting le	ength	mm	20 - 150
Material ¡	oassage	mm max.	1.2
Performa	nce*	cuts/min	100
Printing s	stops if		no final cutter position, paper jam, cover open, limit of collecting
Limit of c	ollecting	mm max.	100

 $<sup>^{\</sup>star}$  at use of material 1 mm high, no backfeed



#### Support table - label W x H

The table and the protective cover are adapted to the size of a label. Please request individually.

# Verifying



**CC200-SQ scanner** for detecting linear 1D barcodes, 2D and stacked codes A camera checks a code printed on a label in horizontal or vertical direction in terms of legibility or content. In the case of a bad coding, printing stops and the label can be removed by hand. Retracting such labels after stopping and blackening them is another printer option.

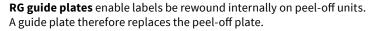
The scanner can be operated in tear-off mode and in peel-off mode.

Scanner		CC200-SQ
Operated with		all SQUIX units
Scan distance	mm	45 - 150
Scan angle	٥	-15 to +15
Number of codes on a label		1
Controls	GOODBAD	check of legibility
	VERIFY	check of legibility and results compared with initial data

See www.cab.de/en/cc200 for more information.

# Rewinding, unwinding with or without the use of a cardboard core





Guide plate		RG200	RG	400		
	Operated with		SQUIX 2 P	SQUIX 4.3 P SQUIX 4 P	SQUIX 4.3 MP SQUIX 4 MP	
	Material width	mm max.	67	120	114	
-	Roll diameter	mm max.	142			
	Clamping axle pro	vided for mm	n 38.1 - 40			
	Winding		outside			



**External ER1, ER2, ER3 rewinders** for printer assembly using screws Label webs wound outside or inside are wound consistently and tight by electronic control, with the help of a pendulum arm.

External rewinder		ER1/210	ER2/210	ER3/210		
Operated with		SQUIX 2 SQUIX 4.3, SQUIX 4 SQUIX 4.3 M, SQUIX 4 M	SQUIX 6.3	SQUIX 8.3		
Material width	mm max.	120	180	235		
Roll diameter	mm max.	205				
Core diameter	mm	40 if a winder axle or a cardboard core are in use 76 if a cardboard core is in use with an adapter				
Winding		outside or inside				



#### External ER4, ER6 rewinders, power supply built in

Label webs wound outside or inside are wound consistently and tight by electronic control, with the help of a pendulum arm. They operate also with printers other than cab.

External rewinder		ER4/300	ER6/300	
Operated with		SQUIX 2 SQUIX 4.3, SQUIX 4 SQUIX 4.3 M, SQUIX 4 M	SQUIX 6.3	
Material width	mm max.	120	180	
Roll diameter	mm max.	30	00	
Core diameter	mm	40 if a winder axle or a cardboard core are in use 76 if a cardboard core is in use with an adapter		
Winding		outside or inside		
Adapter kit				



#### **External EU unwinders**

Even heavy rolls are fed consistently. Label webs wound outside or inside can be operated.

External un	winder	EU4	EU6/300	
Operated with		SQUIX 4.3 SQUIX 4	SQUIX 4.3 M SQUIX 4 M SQUIX 4.3 MT SQUIX 4 MT	SQUIX 6.3
Material width	mm max.	120	114	180
Roll diameter	mm max.		300	
Core diameter	mm		38.1	
	mm if an adapter is in use	76		
Winding		outside or inside		
Adapter kit				

# Tube labeling



#### **AXON 2 tube applicator**

Tubes and vials of diameters 10 mm to 22 mm can be labeled (7 mm to 16 mm if options are provided). See AXON catalogue The tubes and vials can be inserted and removed by hand or automated by a handling system. They may be ejected also to a tray.

Tube	Tube applicator		AXON 2
Operate	ed with		SQUIX 4.3 MP, SQUIX 4 MP
Tube	ube Diameter mm  Length, closure cap included mm		10 - 22
			25 - 120
	Conicity	% max.	0.8
Label	Materials		paper, synthetics such as PET, PP
	Width	mm	5 - 56
	Height	mm at least	12
Liner	Width	mm max.	60
Control	S		applicator pivoted, tube missing, incorrect tube diameter







For more information on AXON 1 see www.cab.de/en/axon1

# Cable labeling



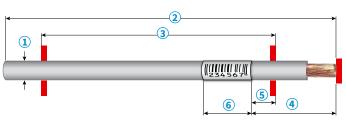


#### WICON wrap-around applicator

Cylindric items, such as single wires, strands, cables, hoses, tubes or round rods, can be labeled. Transparent laminate covers data blocks and protects them persistently from dust and wear.

Wrap-ar	ound applicator		WICON		
Operated w	vith		SQUIX 4 MP		
1 Item dia	meter	mm	2.0 - 16.0		
2 Item length mm at least		mm at least	134		
3 Centerii	ng panel distant from left to right	mm	124		
4 Item len	gth label margin to stop	mm	25 - 120		
5 Label m	argin distant to centering panel	mm	12.7		
Deflecti	on related to a length of 124 mm	mm max.	1		
6 Label	Width	mm	12.7 - 50.8		
	Height	mm	19.1 - 70.0		
Applicator	Cycle of printing and applying or applying and printing	S	1.8 - 6		
	Number of wrap-arounds		2 - 10		
	Speed of wrapping around	u/sec	3.0		
	Rolling on related to speed of wrapping around	%	10 - 100		
Start	automatically, as soon as an item has been inserted by hand				
	or via data interface				
	or via I/O interface				

#### 1.5 mm diameter after sampling and release



# SQ 1000 applicator



Applicator		SQ 1000 - 220	SQ 1000 - 300	SQ 1000 - 400	SQ 1000 - 520
Operated with	SQUIX 2 P, SQUIX 4.3 P, SQUIX 4 P SQUIX 4.3 MP, SQUIX 4 MP, SQUIX 6.3 P				
Cylinder stroke	mm	220	300	400	520
Stroke of a pad as calculated below a unit	mm	64	144	244	364
Weight packaging exc	luded kg	4.5	5	5.5	6.0
Consumption of power	15				
Compressed air bar		4.5			
Cycle rate	approx1)		25 labe	ls/min.	

<sup>&</sup>lt;sup>1)</sup> calculated at a stroke of 100 mm below a unit, using labels 100 mm high and a print speed of 100 mm/s

#### **Automatic labeling**

SQ 1000 is a further development of the proven S1000 applicator, fully compatible, adding extra functions. Existing applications can continue without limitations. In conjunction with a SQUIX printer, the SQ 1000 is a cost-effective solution for semi-automatic labeling tasks. Labels are applied onto items by means of a stroke cylinder.

#### Easy to configure

The applicator can be fully set on the printer control panel, configurations be stored and called up. Automatic calibration features speed up the setup.

#### **Process control**

Detailed statistical values are provided, so are sophisticated error messages. Constant control enables response right away in events of errors.

#### **Updates**

Applicator firmware can be updated on the printer control panel or the printer's web server. New features and specific solutions can therefore be tested right away and distributed in the field.

#### 1 Long life cycles

The ball bearing guide bars are low wear.

#### 2 Different levels of application

By providing different lengths of stroke for the cylinder, labels can be applied on various heights to an item.

#### 3 Compressed air regulation

Micro filters prevent from contamination. Decompression keeps the quality of label applications consistently high.

#### 4 Reliable processes

Supporting air, intake air and stroke speeds can all be set. The pressing force can be reduced to less than 10N (1kg) in sensitive operations. Purging the intake ducts subsequent to every label application prevents from contamination.

#### 5 A wide range of sizes

Labels 25 mm to 176 mm wide and 25 mm to 200 mm high can be applied.

Supporting air (Blow tube not included in delivery) It enables labels be blown onto a pad.

#### Pac

Labels are transferred onto a pad and held there by vacuum. A stroke cylinder moves the pad with the labels to an item.

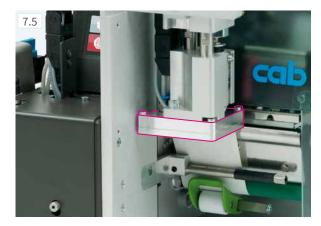
# SQ 1000 applicator accessories



#### Blow tube

It supplies supporting air. Labels are blown from below onto a pad, assisting the label transfer.

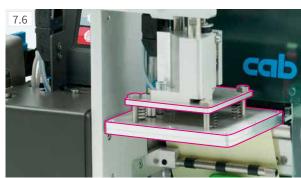
Provided for 2", 4" or 6" label operations



#### Tamp-on pads

The intake boreholes of universal tamp-on pads can be adapted to different sizes of labels. Pads may be manufactured custom-made as well.

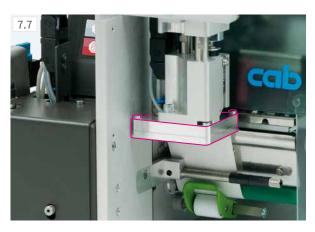
Tamp-on pad		A1021			
Type		universal 70 x 60	universal 90 x 90	custom-made	
1.45.41.2405	SQUIX 2	25 - 63	-	25 - 63	
Label width	SQUIX 4 / 4.3	25 - 70	25 - 90	25 - 116	
mm	SQUIX 6.3	-	-	50 - 176	
	SQUIX 2	25-60	-	25 - 200	
Label height	SQUIX 4 / 4.3		25 - 90		
mm	SQUIX 6.3	-	-		
Surface of an item		flat			
Height of an item		flexible			
State of an item		at rest			



#### Tamp-on pads, spring-mounted

Pitch of spring enables labels be applied even to inclined surfaces.

Tamp-on pad, spring-mounted		A1321			
Туре		universal 116 x 102	universal 116 x 152	custom-made	
Label width	SQUIX 4 / 4.3	25 - 116		25 - 116	
mm	SQUIX 6.3	-	-	50 - 176	
Label height	SQUIX 4 / 4.3	25 - 102	25 - 152	25 - 200	
mm	SQUIX 6.3	-	-	25 - 200	
Surface of an item	า	flat			
Height of an item		flexible			
State of an item		at rest			



#### Blow-on pads

They suit for blowing labels onto items sensitive to pressure. Custom-made blow-on pads therefore move to a fixed spot about 10 mm above an item.

Blow-on pad		A2021 custom-made	
Type			
ملطانين المامان	SQUIX 2	25 - 63	
Label width mm	SQUIX 4 / 4.3	25 - 116	
	SQUIX 6.3	on request	
Labatha Cala	SQUIX 2	25 - 100	
Label height mm	SQUIX 4 / 4.3	25 - 100	
111111	SQUIX 6.3	on request	
Surface of an item		flat	
Height of an item fixed		fixed	
State of an item		at rest or in motion	



#### Roll-on pads

Labels are fed to below a roller subsequent to printing. The pad moves onto an item.

Labels are carried along by the item and rolled on.

Roll-on pad		A1411
Type		custom-made
Label width	Label width <b>SQUIX 4 / 4.3</b> 25 - 116	
mm	SQUIX 6.3	50 - 176
Label height	SQUIX 4 / 4.3	20. 200
mm	SQUIX 6.3	80-200
Surface of an item		flat
Height of an item		flexible
State of an item		in motion

# SQ 3200 applicator



# Demand modules



#### Labels applied in real time

SQ 3200 attached to a SQUIX peel-off printer is economic, whether operated semi-automated or integrated to a manufacture plant.

Printed labels are set 45° to 95° to the horizontal by a rotary cylinder and applied automatically to an item by a short stroke cylinder.

Life cycles, pre-dispense, compressed air regulation, reliable processes and supporting air (blow tube for supporting air not included in delivery) correspond to SQ 1000 (see page 22).

Applicator		SQ 3200	
Operated with		SQUIX 2 P, SQUIX 4.3 P, SQUIX 4 P SQUIX 4.3 MP, SQUIX 4 MP	
Rotary cylinder		45° - 95°	
Stroke cylinder	mm max.	30	
Depth F of a pad immersing	mm max.	5	
Weight packaging exc	luded kg	4.5	
Consumption of power	W max.	15	
Compressed air	bar	4.5	
Cycle rate	approx.1)	20 labels/min.	

 $<sup>^{1)}</sup>$  calculated using labels 40 mm high and a print speed of 100 mm/s

#### Tamp-on pads, blow-on pads

They are manufactured according to the size of a label.

Tamp-on pad		A3200-1100		
Operated with		SQUIX 2 P	SQUIX 4.3 P, SQUIX 4 P SQUIX 4.3 MP, SQUIX 4 MP	
Label width	mm	4 - 63	10 - 116	
Label height mm			6 - 80	
Surface of an item			flat	
State of an item at the moment a label is applied		at rest		
Blow-on pad		A3200-2100		
Operated with		SQUIX 2	SQUIX 4.3, 4	
Label width	mm	10 - 63	10 - 116	
Label height	mm	10 - 80		
Surface of an item		flat		
State of an item at the moment a label is applied		at rest or in motion		

#### S5104, S5104 M, S5106 demand modules

Items can be labeled in motion on a conveyor.

A product sensor detects the target position of a label.

While a label is peeled off, the next one is printed.

The speed of transport has to match with the speed of printing.

A reflective sensor monitors positioning.

A label sensor can be included or not.

Demand module		S5104	S5104 M	S5106
Operated with		SQUIX 4.3 P SQUIX 4 P SQUIX 4 MP		SQUIX 6.3 P
Label width	mm	25 - 116	4 - 110	50 - 176
Label height	mm	25 - 210	10 - 210	25 - 210
Distance of initial print line mm to the peel-off plate		336 - 518		
Surface of an item		flat		
Height of an item		fixed		
State of an item at the moment a label is applied		in motion (speed adapted to printing)		nting)
Weight packaging exc	luded kg	2.5	2.5	3.5
Consumption of power W max.		not specified		
Cycle rate approx.1)		60 labels/min.		

 $<sup>^{\</sup>mbox{\tiny 1)}}$  calculated using labels 100 mm high and a print speed of 100 mm/s

# Assistants for assembling SQUIX label printers



#### Mount

A label printer system and a jig for retaining an item can be assembled.

Assembly plate

to assemble a label printer system

2 Profile, aluminum square 40, 80, 120, 160, 200, 300 mm

**3** Base plate

to assemble a jig for retaining an item Standard size 500 mm x 255 mm



#### Base plate with XY stop and product sensor

Standard size 500 mm x 255 mm



#### Floor stand

It enables a printer system be ready quickly and flexibly in any manufacture plant. Target positions (i.e. heights, widths) to apply a label can be set in few steps. Four guide rollers provide mobility. At the place of operation, the floor stand can be aligned with the help of feet to adjust.

Floor stand		1600
Total height	mm	1600
Height to apply a label	mm max.	1400
Offset to the centre of a label	mm	230 - 500
Carriage	WxHxDmm	600 x 140 x 860



#### Jig to retain a printer unit

A printer can be fixed to the assembly plate and quick-locked.

# Label printers to feature a special cover or a protective chassis



#### **Conductive ESD surface**

provided for SQUIX 2, SQUIX 4, SQUIX 6

Manufactured according to DIN EN 61340-5-1:2016 to protect from electrostatic charge

The hinged cover, top plate included, is also a spare part.



#### Food application design

provided for SQUIX 4, SQUIX 6

By means of a magnetic cover, splints can be detected by metal detectors or x-ray inspection systems.

Blue color optically differentiates from food.

The entire casing can be manufactured detectable upon request.

Materials comply with food directives such as EU Nr. 10/2011 and FDA CFR 21 177.2600



#### Stainless steel chassis for food applications

provided for SQUIX 4, SQUIX 6

Labels are removed through an aperture on the front.

The front cover must be opened and the printer pulled out on telescopic rails for material replacement. Steam jet cleaning only if the entire unit is closed.

Protection class IP69K according to EN 60529

# Maintenance



#### **Label sensors**

They can be unlocked by touch and pulled out for cleaning.



#### **Print heads**

They are easy to replace in few steps. In general, no adjustments are required.



#### **Print rollers**

They are quick and easy to loosen for cleaning or removal using a screw.

#### All-purpose tool

It is provided close at hand on a unit for replacing components and assembling periphery.



# Service

Trained cab technicians support worldwide in maintenance and repair.

Send your unit to a cab service point or a selected service partner. Check and repair require just few workdays.

Loan units are provided to bridge gaps.

You prefer performance in your company? Then contact our Service Department: phone +49 721 6626 300, email service.de@cab.de

# **Trainings**

Refresh your know-how of cab devices with regard to efficient operation, service and repair.

In Karlsruhe, training sessions deal with how to operate a unit, design a label, make use of software or printer drivers, program, access a database and integrate in a network or a superior ERP system. Just ask for our current timetable.

We offer trainings adapted to individual demands, either in Karlsruhe or on site in your company.



# Delivery program

#### **Label printers**

Pos		Item no.	Materials aligned to the left
1.1		5977030 5977031	SQUIX 2/300 label printer SQUIX 2/600 label printer
1.2		5977032 5977033	SQUIX 2/300P label printer SQUIX 2/600P label printer
1.3		5977014 5977015 5977001 5977002 xxxxxxxx.648 xxxxxxxx.649	SQUIX 4.3/200 label printer SQUIX 4.3/300 label printer SQUIX 4/300 label printer SQUIX 4/600 label printer incl. CSQ401 cutter incl. CSQ402 cutter
1.4		5977016 5977017 5977004 5977005	SQUIX 4.3/200P label printer SQUIX 4.3/300P label printer SQUIX 4/300P label printer SQUIX 4/600P label printer
1.5		5977034 5977035	SQUIX 6.3/200 label printer SQUIX 6.3/300 label printer
1.6	2 500	5977036 5977037	SQUIX 6.3/200P label printer SQUIX 6.3/300P label printer
1.7	TO LO AND A STATE OF THE STATE	5977067	SQUIX 8.3/300 label printer
1.8		5977068	SQUIX 8.3/300P label printer
Pos	•	Item no.	Materials in centered position
1.11		5977018 5977019 5977010 5977011 xxxxxxx.648 xxxxxxxx.649 xxxxxxxx.659	SQUIX 4.3/200M label printer SQUIX 4.3/300M label printer SQUIX 4/300M label printer SQUIX 4/600M label printer incl. CSQ401 cutter incl. CSQ402 cutter incl. PSQ403 perforation cutter
1.12		5977022 5977023 5977007 5977008	SQUIX 4.3/200MP label printer SQUIX 4.3/300MP label printer SQUIX 4/300MP label printer SQUIX 4/600MP label printer
Pos	•	Item no.	Separator provided (textiles)
1.14		5977024 5977012 5977025	SQUIX 4.3/300MT label printer SQUIX 4/300MT label printer SQUIX 4/600MT label printer

Pos.	Item no.	UHF RFID module provided
1.13	XXXXXXX.406 XXXXXXX.407 XXXXXXX.408 XXXXXXX.606 XXXXXXX.608 XXXXXXX.806 XXXXXXX.808	UHF RFID RS 4 module UHF RFID OM 4 module UHF RFID HS 4 module UHF RFID OM / RS 4 module UHF RFID RS 6 module UHF RFID HS 6 module UHF RFID RS 8 module UHF RFID RS 8 module
Pos.	Item no.	Options provided
1.15	xxxxxxx.124 xxxxxxx.124 xxxxxxx.124	ESD surface  Label printer SQUIX 2/xxx-ESD  Label printer SQUIX 4/xxx-ESD  Label printer SQUIX 6/xxx-ESD
1.16	XXXXXXX.122 XXXXXXX.122	Food applications Label printer SQUIX 4/xxx-FOOD Label printer SQUIX 6/xxx-FOOD

	Scope of delivery	
	Label printer Type E+F power cable, 1.8 m Connecting USB cable, 1.8 m Instructions DE / EN	
	Available online	
https://setup.cab.de/en	Instructions in 30 languages Configuration manuals DE / EN / FR Service manuals DE / EN Spare parts lists DE / EN Programming manual EN Windows printer drivers certified W Windows 10 Windows 11  Apple Mac OS X printer drivers DE / Linux printer drivers DE / EN / FR cablabel S3 Lite software cablabel S3 Viewer Database Connector	/HQL for Server 2016 Server 2019 Server 2022

#### **Wear parts**

Pos.	Item no.	Designation
	5977384.001 5977385.001	Print head 2/300 Print head 2/600
	5977382.001 5977383.001	Print head 4.3/200 Print head 4.3/300
2.1	5977444.001 5987070.001	Print head 4/300 Print head 4/600
	5977386.001 5977387.001	Print head 6.3/200 Print head 6.3/300
	5987351.001	Print head 8.3/300
2.2	5954102.001 5954180.001 5954245.001 5954103.001	DR2 print roller DR4 print roller DR6 print roller DR8 print roller
2.3	5954985.001	DRS4 print roller
2.4	5954104.001 5954183.001 5954246.001 5981495.001	RR2 deflection roller RR4 deflection roller RR6 deflection roller RR8 deflection roller
Pos.	Item no.	OM operation, RFID antenna assembled
2.5	5987177.001 5987178.001 5987179.001 5987180.001 on request on request	Print head 4.3/200 Print head 4.3/300 Print head 4/300 Print head 4/600 Print head 6.3/200 Print head 6.3/300 Print head 8.3/300





# Delivery program

#### **Accessories**

Pos.		Item no.	Designation
		5953700.001	DR4-M30 print roller
2.6		5953701.001	DR4-M60 print roller
		5953702.001	DR4-M80 print roller
2.7		5954978.001 5954985.001 5954979.001	DRS2 print roller DRS4 print roller DRS6 print roller
	006	6010186	External control panel
2.8		5907718.850	USB cable, 1.8 m
		5907730.850	USB cable, 3 m
		5907750.850	USB cable, 5 m
	4 3	5907760.850	USB cable, 11 m
		5907765.850	USB cable, 16 m
2.9	-	5977530.001	Label sensor 4,5
2.10	1	6010840 6010841 6010842	Print head pressing system 2L Print head pressing system 4L Print head pressing system 6L
2.11	in the same of the	5977797 5977339	Antistatic brush 2" Antistatic brush 4" / 6"
2.12	0	5959622	Adapter 100
2.13		5977370	SD memory card
2.14		5977730	USB stick
2.15	2	5978912.001	USB WLAN stick 2.4 GHz 802.11b/g/n
2.16		5977731	USB WLAN stick with a rod antenna 2.4 GHz 802.11b/g/n + 5 GHz a/n/ac
Pos		Item no.	Peeling off
2.18		5977585	PS800 present sensor
2.19		5984482 5977538	PS 2/900 present sensor PS 4/900 present sensor
2.20	F	5977735	PS1000 MP present sensor
2,21		5977798 5978908 5977799	Extended DP210 peel-off plate Extended DP410 peel-off plate Extended DP610 peel-off plate
2.22		5964300	Reflective product sensor, 25 pins
Pos	i.	Item no.	Interfaces
3.1		5977767	Digital I/O interface
3.2		5917651	I/O interface plug, SUB-D, 25 pins
3.3	9	5948205	Label selection - I/O box

Dee		Itom no	Switches
Pos	•	Item no.	Switches
3.4		5955710	TR2 hand switch
3.5	P	5955711	Foot switch
Pos	•	Item no.	Connecting cable
4.1		5550818	RS232-C cable 9/9 pins, 3 m
Pos	•	Item no.	Cutting, perforating
5.1		5984550 5984565	CSQ 401 cutter incl. a tray CSQ 402 cutter incl. a tray
5.2		5984130	PSQ 403 perforation cutter
5.3		5979032 5978900 5979033 5984100	CU200 cutter CU400 cutter incl. a tray CU600 cutter CU800 cutter
5.4		5978901 5978920	PCU400/2,5 perforation cutter PCU400/10 perforation cutter
Pos	•	Item no.	Stacking, verifying
5.5	H-	5978902	ST400 M stacker providing a cutter and a base frame
0.0		хххххх	Support table, label W x H
5.6		5977840	CC200-SQ scanner
Pos	•	Item no.	Rewinding, unwinding
6.1		5979031 5978903	RG200 guide plate RG400 guide plate
6.2		5948102.597 5943251.597 5945802.597	External ER1/210 rewinder External ER2/210 rewinder External ER3/210 rewinder
6.3		5946090 5946420	External ER4/300 rewinder External ER6/300 rewinder
6.4		5946091 5946421	External EU4/300 unwinder External EU6/300 unwinder
6.5		5978943	Kit to adapt ER4, ER6 and EU4, EU6

**x** - part no. specific to order

# Delivery program

# Applicators, demand modules

Pos	<b>5.</b>	Item no.	Designation
7.1	Axana	5987150.xxx	AXON 2 tube applicator providing a type 56.1 peel-off plate (Ø 14 mm), a TRV 14 transport roller, a tray
7.2	Propr	5988000	WICON wrap-around applicator Included in the accessory pack are - DR4-M30, DR4-M60 print rollers - WICON peel-off plate
7.3		5987566 5987567 5987568 5987560	SQ 1000-220 applicator SQ 1000-300 applicator SQ 1000-400 applicator SQ 1000-520 applicator
7.4		5949496 5987690 5987691	Blow tube 2" SQ with retainer Blow tube 4" SQ with retainer Blow tube 6" SQ with retainer
		5949072	A1021 universal pad max. 70 x 60 (W x H)
7.5	A Later	5949075	A1021 universal pad max. 90 x 90 (W x H)
		хххххх	A1021 tamp-on pad W x H
		5949076	A1321 universal pad max. 116 x 102 (W x H)
7.6		5949077	A1321 universal pad max. 116 x 152 (W x H)
		хххххх	A1321 tamp-on pad W x H
7.7	di	ххххххх	A2021 blow-on pad W x H
7.8		ххххххх	A1411 roll-on pad W x H
7.9		5987569	SQ 3200 applicator
7.10		хххххх	A3200-1100 tamp-on pad W x H
7.11	Air	хххххх	A3200-2100 blow-on pad W x H
7.12		5976083 5976083.242 5987120 5979035 5979035.242	S5104 demand module incl. label sensor S5104 demand module, no label sensor S5104 M demand module S5106 demand module incl. label sensor S5106 demand module, no label sensor

 $<sup>\</sup>boldsymbol{x}$  - part no. specific to order

#### **Assembly assistants**

Pos.		Item no.	Designation
8.1	19	5979036 5978910 5978923	Assembly plate SQUIX 2 Assembly plate SQUIX 4 Assembly plate SQUIX 6
8.2		5958365 5965929 5971136 5987701 5987702 5987703	Profile 40 Profile80 Profile 120 Profile 160 Profile 200 Profile 300
8.3		5961203	Base plate 500 mm x 255 mm
8.4	300	5989277	Base plate with XY stop and product sensor
8.5		5947400	Floor stand 1600 mm
8.6	1	5979037 5978922 5979038	Jig for retaining a SQUIX 2 printer unit Jig for retaining a SQUIX 4 printer unit Jig for retaining a SQUIX 6 printer unit

#### **Special covers**

Pos.		Item no.	Designation
9.1	© shirt	5977771.001 5977763.001 5977772.001	Hinged cover SQUIX 2-ESD Hinged cover SQUIX 4-ESD Hinged cover SQUIX 6-ESD
9.2	Allen COLD	5977764.001 5977774.001	Hinged cover SQUIX 4-FOOD Hinged cover SQUIX 6-FOOD

#### **Protective chassis**

Pos.	Item no.	Designation
9.3	5979071 5979305	Stainless steel chassis SQUIX 4 Stainless steel chassis SQUIX 6

#### Label software

Pos		Item no.	Designation
11.7		Bundle 5588001 5588100	cablabel S3 Lite (download on cab.de/en) cablabel S3 Pro 1 WS cablabel S3 Pro 5 WS
		5588101 5588150 5588151 5588152	cablabel S3 Pro 10 WS cablabel S3 Pro 1 additional licence cablabel S3 Pro 4 additional licences cablabel S3 Pro 9 additional licences
		5588002 5588105 5588106 5588155 5588156 5588157	cablabel S3 Print 1 WS cablabel S3 Print 5 WS cablabel S3 Print 10 WS cablabel S3 Print 1 additional licence cablabel S3 Print 4 additional licences cablabel S3 Print 9 additional licences
		in preparation	cablabel S3 Print Server
11.10		9009950	Programming manual EN, printed copy

# 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 cablabel S3



Label dispensers HS, VS



Labeling heads



Marking lasers



Laser marking systems



