

Status: 03/2025

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Label printers
for industrial operation

SQUIX
Made in Germany

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.



See current data on
www.cab.de/en/squix

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

1.1, 1.2



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

1.3, 1.4



Universal ones

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

Label printers		SQUIX 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.

1.5, 1.6



Wide ones

for printing Odette, UCC and GS1 labels in logistics operations

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

1.7, 1.8



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



*SQUIX 4 P peel-off printer
providing an internal rewinder*

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

4 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.

9 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 ± 0.2 mm using slip correction.

Label printers guiding materials in centered position

1.11, 1.12



Basic unit



Peel-off 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		SQUIX 4.3 M SQUIX 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

1.14



Basic unit

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

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 4 MT label printer providing a separator built in

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

SQUIX

SQUIX 4 M label printer providing
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.

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.

● typical ○ possible □ option

RFID label printer	Type	1.3, 1.4		1.5, 1.6		1.7, 1.8		1.11, 1.12					
		SQUIX 4.3	SQUIX 4	SQUIX 6.3	SQUIX 8.3	SQUIX 4.3 M	SQUIX 4 M						
Guidance of materials		aligned to the left								centered			
Print method	Thermal transfer	●	●	●	●	●	●	●	●	●	●	●	
	Direct thermal	●	●	○	-	●	●	●	●	●	○	-	
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	
UHF RFID modules													
UHF RFID OM 4 module		□	□	□	□	-	-	-	□	□	□	□	
UHF RFID RS 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 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

identitytag

Wet Inlay
53 mm x 53 mm



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

identitytag

SmartLabel
100 mm x 150 mm



Tag antenna: Smartrac DogBone
Tag IC: Impinj Monza R6
Read / write antenna: cab RS

identitytag

Smart Label
54 mm x 25 mm



Tag antenna: On Metal
Tag IC: NXP UCODE 7XM
Read / write antenna: cab OM

Confidex

Automotive Carrier Pro
92 mm x 24 mm



Tag antenna: M4QT
Tag IC: Impinj Monza 4QT/4G
Read / write antenna: cab RS

Confidex

Casey
92 mm x 24 mm



Tag antenna: MR6-P
Tag IC: Impinj Monza R6-P
Read / write antenna: cab RS

Confidex

Automotive Kanban
80 mm x 208 mm



Tag antenna: M4E
Tag IC: Impinj Monza 4E
Read / write antenna: cab RS

Avery Dennison

BJ 269 WET WHITE
93 mm x 22 mm



Tag antenna: AD-663U7xm
Tag IC: NXP UCODE 7xm
Read / write antenna: cab RS

Avery Dennison

BR800 WET WHITE
93 mm x 22 mm



Tag antenna: AD-665u8
Tag IC: NXP UCODE 8
Read / write antenna: cab RS

Avery Dennison

BU117 WET WHITE
25 mm x 18 mm



Tag antenna: AD-151iM
Tag IC: NXP G2iM
Read / write antenna: cab HS

Omni-ID

IQ400 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



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

Omni-ID






IQ600 EU
94 mm x 24 mm








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
- 3 **Printer 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
- 5 **Operation**
 -  Cutter / perforation cutter cutting a material
 -  External rewriter label rolls wound outside or inside
 -  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
-  Reprint
-  Suspend and continue a print job
-  Stop and delete all print jobs
-  Label feed



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

6 **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

● typical ○ possible ■ standard □ option

		1.1, 1.2		1.3, 1.4				1.5, 1.6		1.7, 1.8
Type		SQUIX 2		SQUIX 4.3		SQUIX 4		SQUIX 6.3		SQUIX 8.3
Print method	Thermal transfer	●	●	●	●	●	●	●	●	●
	Direct thermal	○	-	●	●	○	-	●	●	●
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
Initial print	Distance to locating edge	mm		2	2.8	1.2	2	0.5	3.2	2
UHF-RFID										
UHF-RFID Modul		-		□		□		□		□
Material¹⁾										
Paper, cardboard, synthetics PET, PE, PP, PI, PVC, PU, acrylate, Tyvec		●		●		●		●		●
RFID labels according to separate specification		-		●		●		○		○
Shrink tube	ready for use	-		○		○		-		-
	continuous, pressed	○		○		○		-		-
Textile tape		○		○		○		-		-
Finishing	Roll, fanfold	●		●		●		●		●
	Roll diameter	mm max.		205		205		205		205
	Core diameter	mm		38.1 - 76		38.1 - 76		38.1 - 76		38.1 - 76
	Winding			outside or inside		outside or inside		outside or inside		outside or inside
Label	Width	mm		4 - 63		20 - 116		46 - 176		46 - 220
	Height no label backfeed ²⁾	mm at least		4		4		6		25
	label backfeed ²⁾	mm at least		4		6		12		25
	label backfeed, peel-off	mm at least		6		6		12		25
Liner	Thickness	mm		0.03 - 0.6		0.03 - 0.6		0.03 - 0.6		0.05 - 0.6
	Width	mm		24 - 67		24 - 120		50 - 180		50 - 235
Continuous	Thickness	mm		0.03 - 0.16		0.03 - 0.16		0.03 - 0.16		0.03 - 0.16
	Width	mm		24 - 67		24 - 120		50 - 180		50 - 235
	Thickness	mm		0.03 - 0.5		0.03 - 0.5		0.03 - 0.5		0.03 - 0.5
Shrink tube	Weight (cardboard)	g/m ² max.		300		300		300		300
	Width ready for use	mm max.		-		120		-		-
	continuous, pressed	mm		24 - 67		24 - 85		-		-
Ribbon ³⁾	Thickness	mm max.		1.1		1.1		-		-
	Color layer			outside or inside		outside or inside		outside or inside		outside or inside
	Roll diameter	mm max.		80		80		80		80
	Core diameter	mm		25.4		25.4		25.4		25.4
	Length	m max.		600		600		600		600
Width	mm		25 - 67		25 - 114		50 - 170		220	
Internal rewinder provided on peel-off units										
Outside diameter	mm max.		142		142		142		142	
Core diameter	mm		40		40		40		40	
Winding				outside		outside		outside		outside
Printer dimensions, weights										
Width x Height x Depth	mm		200 x 288 x 460		252 x 288 x 460		312 x 288 x 460		352 x 288 x 460	
Weight	kg		9		10		14		15	
Label sensors, position indicators										
Transmissive sensor	detecting		labels, punch marks, materials ending, print marks on translucent materials		labels, punch marks, materials ending, print marks on translucent materials		labels, punch marks, materials ending, print marks on translucent materials		labels, punch marks, materials ending, print marks on translucent materials	
Reflective sensor	from below or top detecting		labels, materials ending, print marks on non-translucent materials		labels, materials ending, print marks on non-translucent materials		labels, materials ending, print marks on non-translucent materials		labels, materials ending, print marks on non-translucent materials	
Sensor distance	to locating edge	aligned to the left	mm		5 - 26		5 - 60		5 - 60	
Material passage	mm max.		2 (5 are an option)		2 (5 are an option)		2 (5 are an option)		2 (5 are an option)	
Interfaces										
RS232-C 1,200 to 230,400 baud / 8 bit										■
USB 2.0 Hi-Speed device for plugging a PC										■
Ethernet 10/100 Mbit/s IPv4 and IPv6				LPD, RawIP-Printing, SOAP-Webservice, OPC UA, WebDAV		DHCP, HTTP/HTTPS, FTP/FTPS, TIME, NTP, Zeroconf, SNMP, SMTP, VNC		Service key, USB stick, USB WLAN stick, USB WLAN stick with a rod antenna, keyboard, barcode scanner, external control panel		
2 USB hosts on the control panel, 2 USB hosts on the back of a unit										■
USB host, 24 VDC, for peripheral plugging										■
Digital I/O interface providing 8 inputs and 8 outputs										□
Operating data										
Voltage				100 - 240 VAC, 50/60 Hz, PFC		100 - 240 VAC, 50/60 Hz, PFC		100 - 240 VAC, 50/60 Hz, PFC		100 - 240 VAC, 50/60 Hz, PFC
Power consumption				<10 W in standby / 100 W in typical operation / max. 200 W		<10 W in standby / 100 W in typical operation / max. 200 W		<10 W in standby / 100 W in typical operation / max. 200 W		<10 W in standby / 100 W in typical operation / max. 200 W
Temperature / humidity	Operation			+5 - 40°C / 10 - 85 %, not condensing		+5 - 40°C / 10 - 85 %, not condensing		+5 - 40°C / 10 - 85 %, not condensing		+5 - 40°C / 10 - 85 %, not condensing
	Stock			0 - 60°C / 20 - 85 %, not condensing		0 - 60°C / 20 - 85 %, not condensing		0 - 60°C / 20 - 85 %, not condensing		0 - 60°C / 20 - 85 %, not condensing
	Transport			-25 - 60°C / 20 - 85 %, not condensing		-25 - 60°C / 20 - 85 %, not condensing		-25 - 60°C / 20 - 85 %, not condensing		-25 - 60°C / 20 - 85 %, not condensing
Approvals				CE, UKCA, FCC Class A, ICES-3, cULus, CB, CCC, BIS, BSMI, KC-Mark, Mexico Reg. → BIS, KC-Mark not provided for SQUIX 8.3		CE, UKCA, FCC Class A, ICES-3, cULus, CB, CCC, BIS, BSMI, KC-Mark, Mexico Reg. → BIS, KC-Mark not provided for SQUIX 8.3		CE, UKCA, FCC Class A, ICES-3, cULus, CB, CCC, BIS, BSMI, KC-Mark, Mexico Reg. → BIS, KC-Mark not provided for SQUIX 8.3		CE, UKCA, FCC Class A, ICES-3, cULus, CB, CCC, BIS, BSMI, KC-Mark, Mexico Reg. → BIS, KC-Mark not provided for SQUIX 8.3
Control panel										
Color LCD touchscreen	Diagonal	"		4.3		4.3		4.3		4.3
	Resolution Width x Height	px		272 x 480		272 x 480		272 x 480		272 x 480

¹⁾ Specifications are standards. Operations including small, slim, thick or stiff materials need testing, so do strongly adhesive labels.

²⁾ if labels are torn off, cut, rewound

³⁾ A ribbon should be at least as wide as the liner material.

Technical data

Label printers guiding materials in centered position

● typical ○ possible ■ standard □ option

		1.11, 1.12				1.14							
Type		SQUIX 4.3 M		SQUIX 4 M		SQUIX4.3 MT		SQUIX4 MT					
Print method	Thermal transfer	●	●	●	●	●	●	●	●				
	Direct thermal	●	●	○	-	●	○	-	-				
Print resolution	dpi	203	300	300	600	300	300	300	600				
Print speed	mm/s max.	300	300	300	150	300	300	300	150				
Print width	mm max.	104	108.4	105.7	105.7	108.4	105.7	105.7	105.7				
Print length	mm max.	13,500	6,000	6,000	1,500	6,000	6,000	6,000	1,500				
Initial print	Distance to locating edge	centered											
UHF-RFID		□		□		-		-					
UHF-RFID Modul		□		□		-		-					
Material¹⁾													
Paper, cardboard, synthetics PET, PE, PP, PI, PVC, PU, acrylate, Tyvec				●				●					
RFID labels according to separate specification		●		●		-		-					
Shrink tube	ready for use			●				○					
	continuous, pressed			●				○					
Textile tape				○				●					
Finishing	Roll, fanfold			●				●					
	Roll diameter	mm max.	205										
	Core diameter	mm	38.1 - 76										
	Winding		outside or inside										
Label	Width	mm	4 - 110				4 - 110						
	Height no label backfeed ²⁾	mm at least	3				4						
	label backfeed ²⁾	mm at least	4				6						
	label backfeed, peel-off	mm at least	6				-						
Liner	Thickness	mm					0.03 - 0.6						
	Width	mm	9 - 114				9 - 114						
Continuous	Thickness	mm					0.03 - 0.16						
	Width	mm	9 - 114				9 - 114						
Shrink tube	Thickness	mm	0.03 - 0.5				0.03 - 0.5						
	Weight (cardboard)	g/m ² max.	300				300						
	Width ready for use	mm max.	114				114						
Hose	continuous, pressed	mm	4 - 85				4 - 85						
	Thickness	mm max.	1.1				1.1						
	max. height	mm	5				-						
Ribbon ³⁾	continuous, round or oval	mm					-						
	Color layer		outside or inside										
	Roll diameter	mm max.	80										
	Core diameter	mm	25.4										
	Length	m max.	600										
Width	mm	25 - 114											
Internal rewinder provided on peel-off units													
Outside diameter	mm max.	142				-							
Core diameter	mm	40				-							
Winding		außen				-							
Printer dimensions, weights													
Width x Height x Depth	mm	252 x 288 x 460				252 x 288 x 460							
Weight	kg	10				10							
Label sensors, position indicators													
Transmissive sensor	detecting	labels, punch marks, materials ending, print marks on translucent materials											
Reflective sensor	from below or top	detecting	labels, materials ending, print marks on non-translucent materials										
Sensor distance	to locating edge	centered position	mm										
Material passage	mm max.	2 (5 are an option)											
Interfaces													
RS232-C	1,200 to 230,400 baud / 8 bit	■											
USB	2.0 Hi-Speed device for plugging a PC	■											
Ethernet	10/100 Mbit/s	LPD, RawIP printing, SOAP web service, OPC UA, WebDAV											
IP	IPv4 and IPv6	DHCP, HTTP/HTTPS, FTP/FTPS, TIME, NTP, Zeroconf, SNMP, SMTP, VNC											
USB hosts	2 USB hosts on the control panel, 2 USB hosts on the back of a unit	Service key, USB stick, USB WLAN stick, USB WLAN stick with a rod antenna, keyboard, barcode scanner, external control panel (on back only)											
USB host	24 VDC, for peripheral plugging	■											
Digital I/O	interface providing 8 inputs and 8 outputs	□											
Operating data													
Voltage		100 - 240 VAC, 50/60 Hz, PFC											
Consumption of power		<10 W in standby / 100 W in typical operation / max. 200 W											
Temperature / humidity	Operation	+5 - 40°C / 10 - 85 %, not condensing											
	Stock	0 - 60°C / 20 - 85 %, not condensing											
	Transport	-25 - 60°C / 20 - 85 %, not condensing											
Approvals		CE, UKCA, FCC Class A, ICES-3, cULus, CB, CCC, BIS, BSMI, KC-Mark, Mexico Reg.											
Control panel													
Color LCD touchscreen	Diagonal	Resolution	Width x Height	px	4.3					272 x 480			

¹⁾ Specifications are standards. Operations including small, slim, thick or stiff materials need testing, so do strongly adhesive labels.

²⁾ if labels are torn off, cut, rewound

³⁾ A ribbon should be at least as wide as the liner material.

Technical data

■ standard □ option

Electronics		
Processor, 32 bit clock rate	MHz	800
RAM	MB	256
IFFS	MB	50
Port for plugging a SD memory card (SDHC, SDXC)	GB max.	512
Battery for indicating time and date, real-time clock		■
Data kept in memory (e.g. serial numbers) when power turns off		■
Setup options		
Print Labels	Region:	
Ribbon	- Language	
Tear off	- Country	
Peal off	- Keyboard	
Cut	- Time zone	
Apply	Time	
Interfaces	Display:	
Error	- Brightness	
	- Power saving mode	
	- Orientation	
	Interpreter	
Status bar		
Receive data	WLAN	
Record data stream	Ethernet	
Prior warning to a ribbon ending	USB slave	
SD memory card plugged	Time	
USB stick plugged		
Controls		
Ribbon winding	Print head voltage	
Prior warning to a ribbon ending	Print head temperature	
Ribbon ending	Print head open	
Running out of material	Pinch roller open (peel-off unit, separator)	
	Peripheral error	
Test routines		
System diagnostics	upon startup, detection of print head included	
Information display, test printout, analysis	Status printout	Test grid
	Fonts list	Label profile
	List of units	List of events
	WLAN status	Monitor mode
Status reports	- Printout of print durations, running hours, etc. - Status of a unit requested by software command - Display of errors related to a network, barcode or peripheral device, as well as links missing	
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 GB-Mono CG Triumvirate Cond. Bold Garuda HanWangHeiLight Monospace 821 Swiss 721 Swiss 721 Bold
For storing	TrueType fonts	
Sets of characters	Windows-1250 to -1257 DOS 437, 737, 775, 850, 852, 857, 862, 864, 866, 869 EBCDIC 500 ISO 8859-1 to -10 and -13 to -16 WinOEM 720 UTF-8 MacRoman DEC MCS KOI8-R Western European Eastern European Chinese, simplified Chinese, traditional Thai	
Bitmap	1 mm to 3 mm wide and high Zoom factors 2 to 10 0°, 90°, 180°, 270° orientations	
Vector / TrueType	0.9 mm to 128 mm wide and high Continuous zoom 360° orientation in steps of 1°	
Styles	bold, italic, underlined, outline, inverse - depending on the font type	
Character spacing	proportional or monospace	

Graphics		
Elements	lines, arrows, rectangles, circles, ellipses - filled and gradient	
Formats	PCX, IMG, BMP, TIF, MAC, GIF, PNG	
Codes		
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 Extension QR code Micro QR code rMQR code GS1 QR code GS1 DataMatrix GS1 Digital Link (QR and DataMatrix) PDF 417 Micro PDF 417 UPS MaxiCode GS1 DataBar Aztec Codablock F Dotcode RSS 14 truncated, limited, stacked, omni-directional	All codes may vary in height, modular width and ratio. 0°, 90°, 180°, 270° orientations Feasibility of check digits, plain text printouts and start/stop coding depends on the type of code.
Software		
Label software	cablabel S3 Lite cablabel S3 Viewer cablabel S3 Pro cablabel S3 Print	■ ■ □ □
Running also with	CODESOFT Software 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 release	
Linux printer drivers	CUPS 1.2 or any later release	
Programming	JScript printer language abc Basic Compiler ZPL II (Datastream be tested in advance)	■ ■ □
Integration	SAP Database Connector	■ ■
Administration	Printer control Configuration on the Intranet and Internet	■ ■

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.

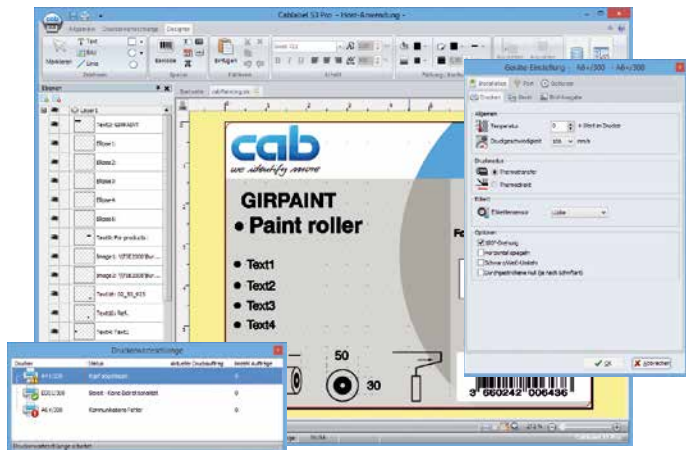


See further information on
www.cab.de/en/opcu

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.



See further information on www.cab.de/en/cablabel

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

JS

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 SAP¹⁾ 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.

¹⁾ SAP and associated logos are trademarks or registered trademarks of SAP SE.

Overview of accessories / options

● typical ○ possible ■ standard □ option

Pos.		Basic unit	Peel-off unit	1.1, 1.2	1.3, 1.4	1.5, 1.6	1.7, 1.8	1.11, 1.12	1.14	
				SQUIX 2	SQUIX 4.3 SQUIX 4	SQUIX 6.3	SQUIX 8.3	SQUIX 4.3 M SQUIX 4 M	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-RFID										
1.13	UHF RFID module	●	●	-	□	□	□	□	-	
Peeling off										
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	-	●	□	□	□	□	□	-	
Interfaces, 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	●	●	□	□	□	□	□	□	
Connecting cable										
4.1	RS232-C cable	●	●	□	□	□	□	□	□	
Cutting, perforating										
5.1	CSQ 401 / CSQ 402 cutters	●	○	-	■ or □	-	-	■ or □	-	
5.2	PSQ 403 perforation cutter	●	○	-	-	-	-	□	-	
5.3	CU200, CU400, CU600, CU800 cutters	●	○	□	□	□	□	□	□	
5.4	PCU400/2,5, PCU400/10 perforation cutters	●	○	-	□	-	-	□	□	
Stacking, verifying										
5.5	ST400 M stacker providing a cutter and a base frame	●	○	-	-	-	-	□	□	
5.6	CC200-SQ scanner	●	●	□	□	□	□	□	-	
Rewinding, unwinding										
6.1	RG200, RG400 guide plates	-	●	□	□	-	-	□	-	
6.2	External ER1/210, ER2/210 ¹⁾ , ER3/210 rewinders	●	○	-	□	□	□	○	-	
6.3	External ER4/300, ER6/300 rewinders	●	○	-	□	□	-	○	-	
6.4	External EU4/300, EU6/300 unwinders	●	○	-	□	□	-	□	□	
6.5	Kit to adapt a rewinder or an unwinder	●	○	-	□	□	□	□	□	
Tube labeling										
7.1	AXON 2 tube applicator	-	●	-	-	-	-	□	-	
Wrap-around labeling										
7.2	WICON wrap-around applicator	-	●	-	-	-	-	□	-	
Applicators, demand modules										
7.3	SQ 1000-220, -300, -400, -520 applicators	-	●	□	□	□	-	□	-	
7.9	SQ 3200 applicator	-	●	□	□	-	-	□	-	
7.12	S5104, S5104M, S5106 demand modules	-	●	-	□	□	-	□	-	
Assembly 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	-	●	□	□	□	□	□	-	
Special covers, protective chassis										
9.1	ESD surface	●	●	□	□	□	-	□	□	
9.2	Food applications	●	●	-	□	□	-	□	□	
9.3	Stainless steel chassis for food applications	●	●	-	□	□	-	□	-	

¹⁾ designed for the A+ printer series, adapted to SQUIX; supplied until external rewinders ER20x will be available

Accessories

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

Cutting, perforating

5.1



CSQ cutter

5.2



PSQ perforation cutter

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	PSQ 403
Perforation cutter				
Operated with		SQUIX 4.3, SQUIX 4 SQUIX 4.3 M, SQUIX 4 M		SQUIX 4.3 M, SQUIX 4 M
Perforation	Distance between off-cuts	mm	-	2.5
	Width of off-cuts	mm	-	0.4
	Quantity of off-cuts		-	6
Material	Width	mm max.	120	114
	Weight (cardboard)	gr/m ² max.	200	300
	Thickness	mm	0.7	1.1
Cutting length	mm at least	10		
Material passage	mm max.	2.0	2.0	2.0
Performance*	cuts/min	120	200	200
Controls		no final cutter position, cover off cutter		
Tray				
Label height	mm max.	100		

* at use of material 1 mm high, no backfeed

5.3



CU cutter

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.

5.4



PCU perforation cutter

Cutter		CU200	CU400	PCU400	CU600	CU800
Perforation cutter				2.5 10		
Operated with		SQUIX 2	SQUIX 4.3, SQUIX 4 SQUIX 4.3 M, SQUIX 4 M SQUIX 4.3 MT, SQUIX 4 MT		SQUIX 6.3	SQUIX 8.3
Perforation	Distance between off-cuts	mm	-	-	2.5	10
	Width of off-cuts	mm	-	-	0.5	-
Material	Width	mm max.	67	120	114	85
	Weight (cardboard)	gr/m ²	60 - 300			
	Thickness	mm	0.05 - 1.1		0.05 - 0.5	
Cutting length	mm at least	5				
Material passage	mm max.	2.5				
Performance*	cuts/min	100				
Printing stops if		no final cutter position				
Tray						
Label height	mm max.	-	100	-	-	-

* 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

5.5



ST400 M stacker providing a cutter

- 1 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		ST400 M
Operated with		SQUIX 4.3 M, SQUIX 4 M SQUIX 4.3 MT, SQUIX 4 MT
Material	Width	mm
	Weight (cardboard)	gr/m ²
	Thickness	mm
Cutting length	mm	20 - 150
Material passage	mm max.	1.2
Performance*	cuts/min	100
Printing stops if		no final cutter position, paper jam, cover open, limit of collecting
Limit of collecting	mm max.	100

* 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

5.6



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	°	-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



RG guide plates enable labels be rewound internally on peel-off units. A guide plate therefore replaces the peel-off plate.

Guide plate		RG200	RG400	
	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 provided for core diameters of	mm	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 rewriter		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 rewriter		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.	300	
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		<input type="checkbox"/>	<input type="checkbox"/>



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

External unwinder		EU4/300		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		<input type="checkbox"/>		<input type="checkbox"/>

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 applicator		AXON 2
Operated with		SQUIX 4.3 MP, SQUIX 4 MP
Tube	Diameter	mm
	Length, closure cap included	mm
	Conicity	% max.
Label	Materials	paper, synthetics such as PET, PP
	Width	mm
	Height	mm at least
Liner	Width	mm max.
	Controls	applicator pivoted, tube missing, incorrect tube diameter

For more information on AXON 2 see www.cab.de/en/axon2

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

Cable labeling



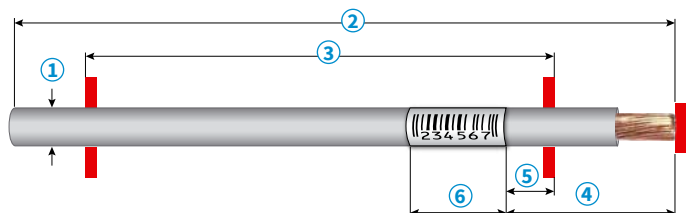
WICON wrap-around applicator

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-around applicator		WICON
Operated with		SQUIX 4 MP
① Item diameter	mm	2.0 - 16.0
② Item length	mm at least	134
③ Centering panel distant from left to right	mm	124
④ Item length label margin to stop	mm	25 - 120
⑤ Label margin distant to centering panel	mm	12.7
Deflection related to a length of 124 mm		mm max.
		1
⑥ Label	Width	mm
	Height	mm
Applicator	Cycle of printing and applying or applying and printing	s
	Number of wrap-arounds	
	Speed of wrapping around	u/sec
	Rolling on related to speed of wrapping around	%
Start	automatically, as soon as an item has been inserted by hand	
	or via data interface	
	or via I/O interface	

For more information on WICON and labels see www.cab.de/en/wicon

① 1.5 mm diameter after sampling and release



SQ 1000 applicator



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.

6 Supporting air (Blow tube not included in delivery)

It enables labels be blown onto a pad.

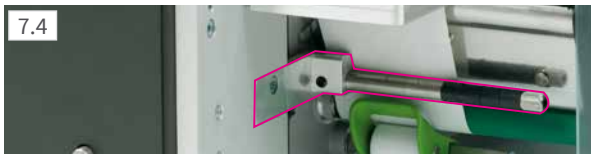
7 Pad

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

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 excluded	kg	4.5	5	5.5	6.0
Consumption of power	W max.	15			
Compressed air	bar	4.5			
Cycle rate	approx ¹⁾	25 labels/min.			

¹⁾ calculated at a stroke of 100 mm below a unit,
using labels 100 mm high and a print speed of 100 mm/s

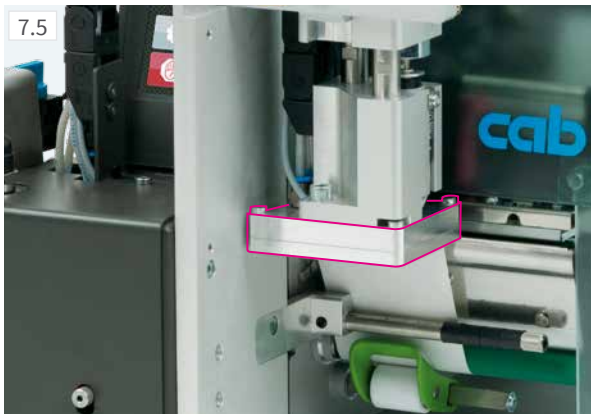
SQ 1000 applicator accessories



Blow tube

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

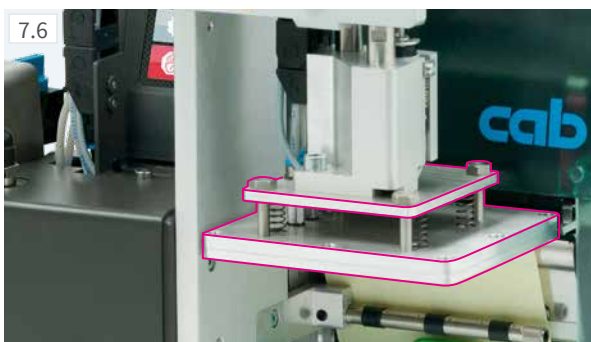
Provided for 2", 4" or 6" label operations



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.

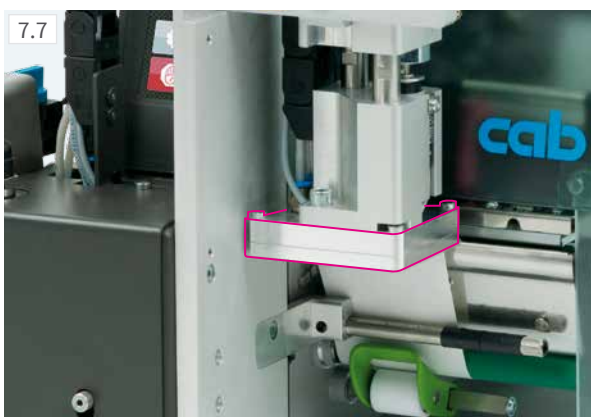
Tamp-on pad		A1021		
Type		universal 70 x 60	universal 90 x 90	custom-made
Label width mm	SQUIX 2	25 - 63	-	25 - 63
	SQUIX 4 / 4.3	25 - 70	25 - 90	25 - 116
	SQUIX 6.3	-	-	50 - 176
Label height mm	SQUIX 2	25 - 60	-	25 - 200
	SQUIX 4 / 4.3		25 - 90	
	SQUIX 6.3	-		
Surface of an item		flat		
Height of an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



Tamp-on pads, spring-mounted

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

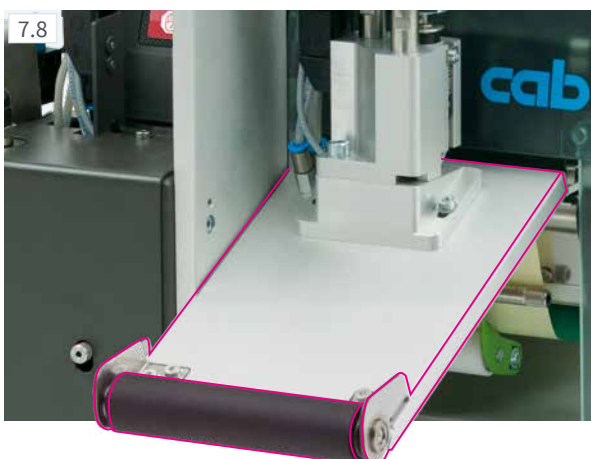
Tamp-on pad, spring-mounted		A1321		
Type		universal 116 x 102	universal 116 x 152	custom-made
Label width mm	SQUIX 4 / 4.3	25 - 116		25 - 116
	SQUIX 6.3	-	-	50 - 176
Label height mm	SQUIX 4 / 4.3	25 - 102	25 - 152	25 - 200
	SQUIX 6.3	-	-	
Surface of an item		flat		
Height of an item		flexible		
State 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	
Type		custom-made	
Label width mm	SQUIX 2	25 - 63	
	SQUIX 4 / 4.3	25 - 116	
	SQUIX 6.3	on request	
Label height mm	SQUIX 2	25 - 100	
	SQUIX 4 / 4.3	on request	
	SQUIX 6.3	on request	
Surface of an item		flat	
Height of an item		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 mm	SQUIX 4 / 4.3	25 - 116	
	SQUIX 6.3	50 - 176	
Label height mm	SQUIX 4 / 4.3	80 - 200	
	SQUIX 6.3		
Surface of an item		flat	
Height of an item		flexible	
State of an item		in motion	

SQ 3200 applicator



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 excluded	kg 4.5	
Consumption of power	W max. 15	
Compressed air	bar 4.5	
Cycle rate	approx. ¹⁾ 20 labels/min.	

¹⁾ 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	

Demand modules



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 4.3 MP 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 to the peel-off plate	mm 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)		
Weight packaging excluded	kg 2.5	2.5	3.5
Consumption of power	W max. not specified		
Cycle rate	approx. ¹⁾ 60 labels/min.		

¹⁾ calculated using labels 100 mm high and a print speed of 100 mm/s

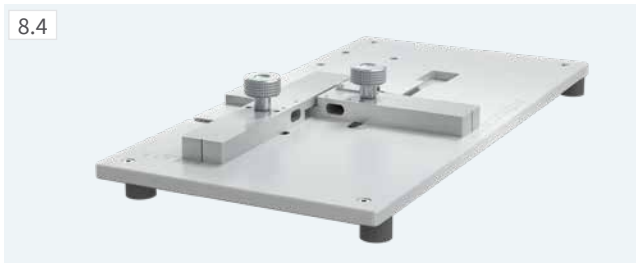
Assistants for assembling SQUIX label printers



Mount

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

- 1 **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	W x H x D mm	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

9.1



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.

9.2



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

9.3



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 xxxxxxx.648 xxxxxxx.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	 5977036 5977037	SQUIX 6.3/200P label printer SQUIX 6.3/300P label printer
1.7	 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 xxxxxxx.649 xxxxxxx.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.409 xxxxxxx.606 xxxxxxx.607 xxxxxxx.608 xxxxxxx.806 xxxxxxx.807	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 OM 6 module UHF RFID HS 6 module UHF RFID RS 8 module UHF RFID OM 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 WHQL for Windows 10 Server 2016 Windows 11 Server 2019 Server 2022 Apple Mac OS X printer drivers DE / EN / FR Linux printer drivers DE / EN / FR cablabel S3 Lite software cablabel S3 Viewer Database Connector

Wear parts








Pos.	Item no.	Designation
2.1	 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
2.2	 5977444.001 5977380.001	Print head 4/300 Print head 4/600
	 5977386.001 5977387.001	Print head 6.3/200 Print head 6.3/300
2.3	 5987351.001	Print head 8.3/300
2.4	 5954102.001 5954180.001 5954245.001 5954103.001	DR2 print roller DR4 print roller DR6 print roller DR8 print roller
	 5954985.001	DRS4 print roller
2.5	 5954104.001 5954183.001 5954246.001 5981495.001	RR2 deflection roller RR4 deflection roller RR6 deflection roller RR8 deflection roller
	 5987177.001 5987178.001 5987179.001 5987180.001 on request on request on request	OM operation, RFID antenna assembled 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



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

Delivery program

Accessories

Pos.	Item no.	Designation
2.6	 5953700.001	DR4-M30 print roller
	 5953701.001	DR4-M60 print roller
	 5953702.001	DR4-M80 print roller
2.7	 5954978.001	DRS2 print roller
	 5954985.001	DRS4 print roller
	 5954979.001	DRS6 print roller
2.8	 6010186	External control panel
	 5907718.850	USB cable, 1.8 m
	 5907730.850	USB cable, 3 m
	 5907750.850	USB cable, 5 m
	 5907760.850	USB cable, 11 m
 5907765.850	USB cable, 16 m	
2.9	 5977530.001	Label sensor 4,5
2.10	 6010840	Print head pressing system 2L
	 6010841	Print head pressing system 4L
	 6010842	Print head pressing system 6L
2.11	 5977797	Antistatic brush 2"
	 5977339	Antistatic brush 4" / 6"
2.12	 5959622	Adapter 100
2.13	 5977370	SD memory card
2.14	 5977730	USB stick
2.15	 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	PS 2/900 present sensor
	 5977538	PS 4/900 present sensor
2.20	 5977735	PS1000 MP present sensor
2.21	 5977798	Extended DP210 peel-off plate
	 5978908	Extended DP410 peel-off plate
	 5977799	Extended DP610 peel-off plate
2.22	 5978909	Reflective product sensor
Pos.	Item no.	Interfaces
3.1	 5977767	Digital I/O interface
3.2	 5917651	I/O interface plug, SUB-D, 25 pins
3.3	 5948205	Label selection - I/O box

Pos.	Item no.	Switches
3.4	 5955710	TR2 hand switch
3.5	 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	CSQ 401 cutter incl. a tray
	 5984565	CSQ 402 cutter incl. a tray
5.2	 5984130	PSQ 403 perforation cutter
5.3	 5979032	CU200 cutter
	 5978900	CU400 cutter incl. a tray
	 5979033	CU600 cutter
	 5984100	CU800 cutter
5.4	 5978901	PCU400/2,5 perforation cutter
	 5978920	PCU400/10 perforation cutter
Pos.	Item no.	Stacking, verifying
5.5	 5978902	ST400 M stacker providing a cutter and a base frame
	 xxxxxxxx	Support table, label W x H
5.6	 5977840	CC200-SQ scanner
Pos.	Item no.	Rewinding, unwinding
6.1	 5979031	RG200 guide plate
	 5978903	RG400 guide plate
6.2	 5948102.597	External ER1/210 rewinder
	 5943251.597	External ER2/210 rewinder
	 5945802.597	External ER3/210 rewinder
6.3	 5946090	External ER4/300 rewinder
	 5946420	External ER6/300 rewinder
6.4	 5946091	External EU4/300 unwinder
	 5946421	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.	Item no.	Designation
7.1	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	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
7.5	5949072	A1021 universal pad max. 70 x 60 (W x H)
	5949075	A1021 universal pad max. 90 x 90 (W x H)
	xxxxxxx	A1021 tamp-on pad W x H
7.6	5949076	A1321 universal pad max. 116 x 102 (W x H)
	5949077	A1321 universal pad max. 116 x 152 (W x H)
	xxxxxxx	A1321 tamp-on pad W x H
7.7	xxxxxxx	A2021 blow-on pad W x H
7.8	xxxxxxx	A1411 roll-on pad W x H
7.9	5987569	SQ 3200 applicator
7.10	xxxxxxx	A3200-1100 tamp-on pad W x H
7.11	xxxxxxx	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

x - part no. specific to order

Assembly assistants

Pos.	Item no.	Designation
8.1	5979036 5978910 5978923	Assembly plate SQUIX 2 Assembly plate SQUIX 4 Assembly plate SQUIX 6
8.2	5958365 5965929 5971721 5987701 5987702 5987703	Profile 40 Profile 80 Profile 120 Profile 160 Profile 200 Profile 300
8.3	5961203	Base plate 500 mm x 255 mm
8.4	5989277	Base plate with XY stop and product sensor
8.5	5947400	Floor stand 1600 mm
8.6	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	5977771.001 5977763.001 5977772.001	Hinged cover SQUIX 2-ESD Hinged cover SQUIX 4-ESD Hinged cover SQUIX 6-ESD
9.2	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	cablabel S3 Lite (download on cab.de/en)
	5588001	cablabel S3 Pro 1 WS
	5588100	cablabel S3 Pro 5 WS
	5588101	cablabel S3 Pro 10 WS
	5588150	cablabel S3 Pro 1 additional licence
	5588151	cablabel S3 Pro 4 additional licences
	5588152	cablabel S3 Pro 9 additional licences
	5588002	cablabel S3 Print 1 WS
	5588105	cablabel S3 Print 5 WS
	5588106	cablabel S3 Print 10 WS
	5588155 5588156 5588157	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
IXOR



Marking lasers
XENO 4



Laser marking systems



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