Status: 05/2025

Label printers
for industrial operation

SQUIX
Made in Germany

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

SQUIX 4 MP peel-off printer providing an internal rewinder

Differences to label printers guiding materials aligned to the left

1 Ribbon retainer
A ruler helps ribbons be set.

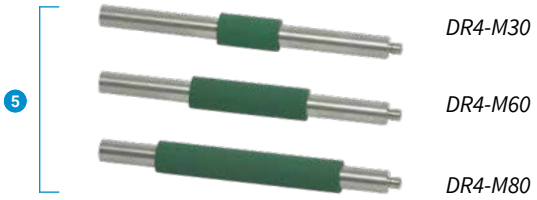
2 Plungers
Both have been assembled firmly for all widths of material. There is no need of aligning the print head.

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



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

		1.3, 1.4				1.5, 1.6		1.7, 1.8	1.11, 1.12			
RFID label printer	**Type**	**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 HS 8 module		–	–	–	–	–	–	☐	–	–	–	–

*in planning

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

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

identytag
SmartLabel
100 mm x 150 mm

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

identytag
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.

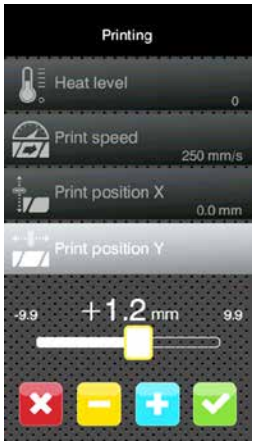
1. **LED:** Power ON
2. **Status bar:** receive data, record data stream, prior warning to a ribbon ending, SD memory card / USB stick plugged, WLAN, Ethernet, USB slave, time
3. **Printer status:** ready, pause, number of labels printed in a print job, label peeled off, awaiting external start signal
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 rewinder	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

2.1

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

2.2, 2.5

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	**PNP, NPN outputs**
Start printing / applying label	Unit ready
Print first label	Print data available
Reprint	Initial / upper end position
Delete print job	Paper feed ON
Label removed	Label peeled off
Stop printing /applying label	Label apply / lower end position
Pause	Ribbon ending
Reset	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				–		□		□		□		□
Material[1]												
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 - 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
	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.	300		300				300		
Shrink tube	Width ready for use		mm max.	–		120				–		–
	continuous, pressed		mm	24 - 67		24 - 85				–		–
	Thickness		mm max.	1.1		1.1				–		–
Ribbon[3]	Color layer			outside or inside								
	Roll diameter		mm max.	80								
	Core diameter		mm	25.4								
	Length		m max.	600								360
	Width		mm	25 - 67		25 - 114				50 - 170		220
Internal rewinder provided on peel-off units												
Outside diameter			mm max.	142								
Core diameter			mm	40								
Winding				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								
Reflective sensor	from below or top		detecting	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		5 - 60
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 IPv4 and IPv6				LPD, RawIP-Printing, SOAP-Webservice, OPC UA, WebDAV DHCP, HTTP/HTTPS, FTP/FTPS, TIME, NTP, Zeroconf, SNMP, SMTP, VNC								
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								
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								
Power consumption				<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. → BIS, KC-Mark not provided for SQUIX 8.3								
Control panel												
Color LCD touchscreen		Diagonal	"	4.3								
		Resolution Width x Height	px	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	300 600
Print speed		mm/s max.	300	300	300	150	300	300 150
Print width		mm max.	104	108.4	105.7	105.7	108.4	105.7 105.7
Print length		mm max.	13,500	6,000	6,000	1,500	6,000	6,000 1,500
Initial print	Distance to locating edge	mm	centered					
UHF-RFID								
UHF-RFID Modul			□		□		–	–
Material[1]								
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				–	
	Thickness	mm	0.03 - 0.6					
Liner	Width	mm	9 - 114				9 - 114	
	Thickness	mm	0.03 - 0.16					
Continuous	Width	mm	9 - 114				9 - 114	
	Thickness	mm	0.03 - 0.5				0.03 - 0.5	
	Weight (cardboard)	g/m² max.	300				300	
Shrink tube	Width ready for use	mm max.	114				114	
	continuous, pressed	mm	4 - 85				4 - 85	
	Thickness	mm max.	1.1				1.1	
Hose	continuous, round or oval	max. height mm	5				–	
Ribbon[3]	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	0 - 55					
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 IPv4 and IPv6			LPD, RawIP printing, SOAP web service, OPC UA, WebDAV DHCP, HTTP/HTTPS, FTP/FTPS, TIME, NTP, Zeroconf, SNMP, SMTP, VNC					
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	"	4.3					
	Resolution Width x Height	px	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 Ribbon Tear off Peal off Cut Apply Interfaces Error	Region: - Language - Country - Keyboard - Time zone Time Display: - Brightness - Power saving mode - Orientation Interpreter

Status bar		
	Receive data Record data stream Prior warning to a ribbon ending SD memory card plugged USB stick plugged	WLAN Ethernet USB slave Time

Controls		
	Ribbon winding Prior warning to a ribbon ending Ribbon ending Running out of material	Print head voltage Print head temperature Print head open 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	Cyrillic Greek Latin Hebrew Arabian
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 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 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/opcua

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

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[1] 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.

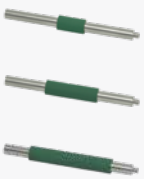
Overview of accessories / options

● typical ○ possible ■ standard ☐ option

Pos.		Basic unit	Peel-off unit	1.1, 1.2 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-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

2.6		**DR4-M30 print roller** 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** Liner and continuous materials as wide as 80 mm Synthetic rubber coating enables highly accurate print images.
2.7		**DRS4 print roller** Materials as wide as 120 mm Silicone coating enables extra long life cycles, accepting higher tolerances in print image accuracy.
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 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 cab provides specified **USB cables** for power supply. Lengths are 1.8 m to 16 m.
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
2.10		**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.
2.11		**Antistatic brush** It dissipates electrostatic charge after printing, in particular if synthetic materials are in use.
2.12		**Adapter 100** if operating label rolls with a core diameter of 100 mm and outside diameter succeeds 180 mm
2.13		**SD memory card**
2.14		**USB stick**
2.15		**USB WLAN stick** 2.4 GHz 802.11b/g/n Hotspot mode or infrastructure mode
2.16		**USB WLAN stick with a rod antenna** to extend the range of operation 2.4 GHz 802.11b/g/n + 5 GHz 802.11a/n/ac Hotspot mode or infrastructure mode

2.18		**PS800 present sensor** for use with materials guided aligned to the left Labels are detected in peel-off position. As soon as a label has been removed, the next one is automatically printed. The minimum width of a label in use is 16 mm, its minimum height 6 mm. Distant 7 mm to the locating edge
2.19		**PS900 present sensor** for use with materials guided aligned to the left or in centered position The moveable sensor qualifies for small or customized labels. As soon as a label has been removed, the next one is automatically printed. 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		**PS1000 MP present sensor** for use with materials guided in centered position Labels are detected in peel-off position. As soon as a label has been removed, the next one is automatically printed. The minimum width of a label in use is 4 mm, its minimum height 6 mm. Centered position
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.
2.22		**Reflective product sensor** Detecting products automatically on a conveyor
3.1		**Digital I/O interface** Labeling is triggered via a PLC, a sensor or a hand switch. Status reports and errors are displayed.
3.2		**I/O interface plug,** SUB-D, 25 pins All control signals connect to the I/O interface using clamping screws.
3.3		**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.
3.4		**TR2 hand switch** For plugging to a digital I/O interface
3.5		**Foot switch** For plugging to a digital I/O interface
4.1		**RS232-C cable** 9/9 pins, 3 m

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**	
Perforation cutter					**PSQ 403**
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	120	114
	Weight (cardboard)	gr/m² max.	200	300	300
	Thickness	mm	0.7	1.1	1.5
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

5.4

PCU perforation 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.

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		180	232
	Weight (cardboard)	gr/m²	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	20 - 100
	Weight (cardboard)	gr/m²	60 - 300
	Thickness	mm	0.05 - 0.8
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**

6.1

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		

6.2

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		

6.3

6.5

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.	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		☐	☐

6.4

6.5

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		☐		☐

Tube labeling

7.1

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	10 - 22
	Length, closure cap included	mm	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
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

7.2

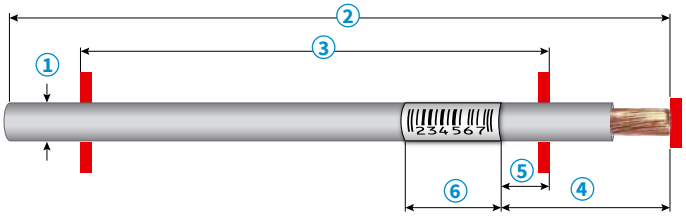
WICON wrap-around applicator

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	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		

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

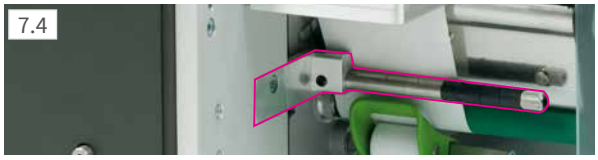
Applicator firmware can be updated on the printer control panel or the printer‘s web server. New features and specific solutions can therefore be tested right away and distributed in the field.

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

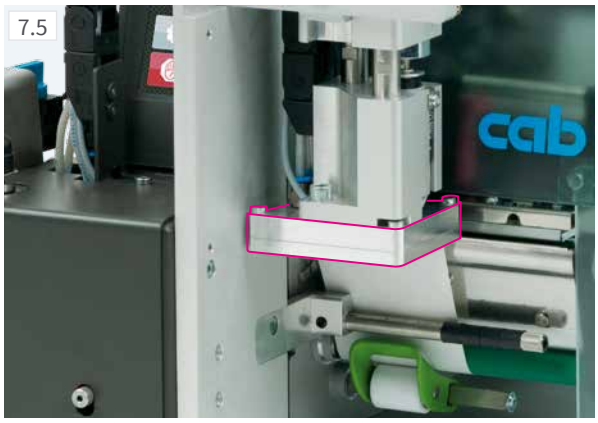
SQ 1000 applicator accessories



Blow tube

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

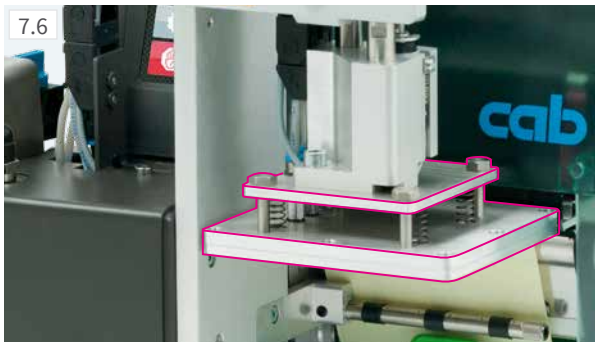
Provided for 2“, 4“ or 6“ label operations



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.

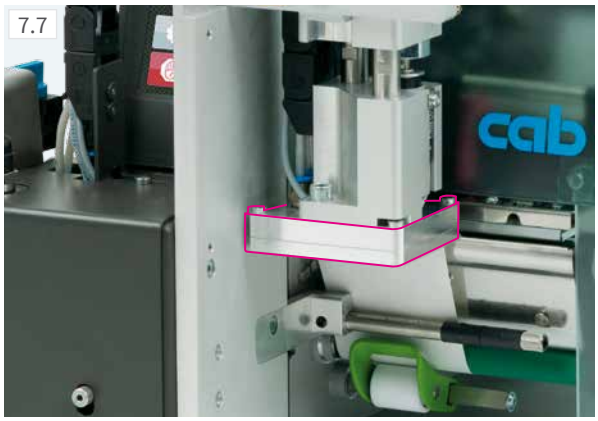
Tamp-on pad		A1021		
Type		universal 70 x 60	universal 90 x 90	custom-made
Label width mm	SQUIX 2	25 - 63	-	25 - 63
	SQUIX 4 / 4.3	25 - 70	25 - 90	25 - 116
	SQUIX 6.3	-	-	50 - 176
Label height mm	SQUIX 2	25- 60	-	25 - 200
	SQUIX 4 / 4.3		25 - 90	
	SQUIX 6.3	-	-	
Surface of an item		flat		
Height of an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



Tamp-on pads, spring-mounted

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

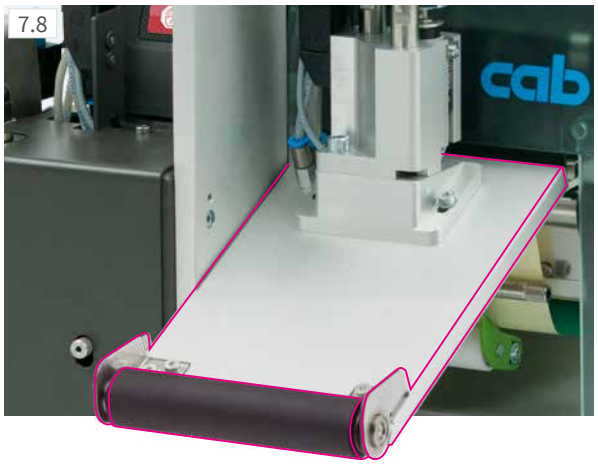
Tamp-on pad, spring-mounted		A1321		
Type		universal 116 x 102	universal 116 x 152	custom-made
Label width mm	SQUIX 4 / 4.3	25 - 116		25 - 116
	SQUIX 6.3	-	-	50 - 176
Label height mm	SQUIX 4 / 4.3	25 - 102	25 - 152	25 - 200
	SQUIX 6.3	-	-	
Surface of an item		flat		
Height of an item		flexible		
State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

7.9

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 mm max. of a pad immersing	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

7.12

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.

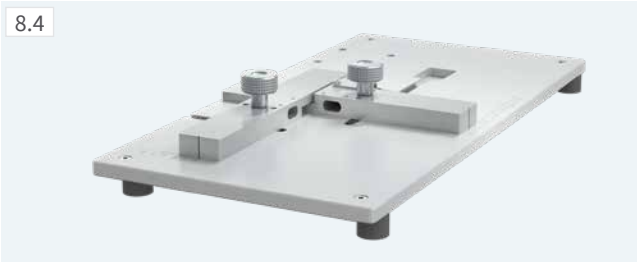
Demand module	S5104	S5104 M	S5106
Operated with	SQUIX 4.3 P SQUIX 4 P	SQUIX 4.3 MP SQUIX 4 MP	SQUIX 6.3 P
Label width mm	25 - 116	4 - 110	50 - 176
Label height mm	25 - 210	10 - 210	25 - 210
Distance of initial print line mm to the peel-off plate	336 - 518		
Surface of an item	flat		
Height of an item	fixed		
State of an item at the moment a label is applied	in motion (speed adapted to printing)		
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.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 HS 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

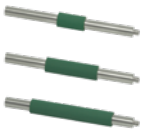
Wear parts

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
		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
		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** **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

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** **5954985.001** **5954979.001**	DRS2 print roller DRS4 print roller 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** **6010841** **6010842**	Print head pressing system 2L Print head pressing system 4L Print head pressing system 6L
2.11		**5977797** **5977339**	Antistatic brush 2" 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** **5977538**	PS 2/900 present sensor PS 4/900 present sensor
2.20		**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		**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** **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		**5978902**	ST400 M stacker providing a cutter and a base frame
		**xxxxxxx**	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.		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 Profile80 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 **5588001** **5588100** **5588101** **5588150** **5588151** **5588152** **5588002** **5588105** **5588106** **5588155** **5588156** **5588157** in preparation	cablabel S3 Lite (download on cab.de/en) cablabel S3 Pro 1 WS cablabel S3 Pro 5 WS cablabel S3 Pro 10 WS cablabel S3 Pro 1 additional licence cablabel S3 Pro 4 additional licences cablabel S3 Pro 9 additional licences 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 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

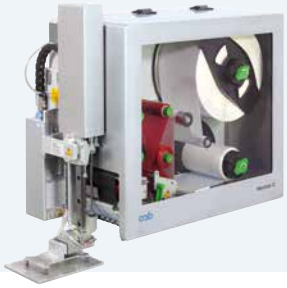
Label printers
SQUIX 8.3

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

See product information on **www.cab.de/en**

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