Status: 03/2026

Label printers

for printing on both sides of a material

XD Q

Made in Germany

Label printers

for printing on both sides of a material

1.1

XD Q providing a tear-off plate

All materials wound on a roll or a reel can be printed, so can fanfold ones.

Label printer		XD Q4/300	XD Q4.2/600
Print resolution	dpi	300	600
Print speed	mm/s max.	150	100
Print width	mm max.	105.7	54.1
Width of a material	mm max.	114	114

1.2

XD Q providing an UHF RFID module with read / write antennas

The module is installed into the chassis, the antenna directly on the print head. RFID tags are read and written just before the labels are printed. In the event of errors, labels are indicated invalid.

provided upon request

In detail

- **300 dpi** if printing as wide as 105.7 mm

  600 dpi if printing no more than 54.1 mm wide, using a DR4-M60 print roller

  Print heads designed for 300 dpi and such for 600 dpi are not interchangeable on the unit.
- **Heating** can be assigned separately to each print head.
- If **printing only on the top of a material** using print head 2, print head 1 is automatically lifted and the ribbon is stopped by an electromechanical brake.
- **Guiding materials in centered position** results in precise print images in particular with slim continuous materials are in use. The width of a material is set with the help of a spindle.
- **Automated ribbon saving** is provided on print head 1 when printing on the bottom of a material. The print head is lifted and the ribbon is stopped during material feed.
- **Continuous print images** when cutting or perforating labels at no backfeed.
- **Optimized printing,** so that multiple print jobs can be printed seamless and without loss of labels.
- **CSQ cutters** and **PSQ perforation cutters**
- **A separator** is part of the chassis.
  It separates continuous material reliably from a ribbon and improves the accuracy of feeding.
  Type of transport roller:
  Steel is a standard if printing on textile materials.
  Rubber is an option with shrink tubes.

  A transport roller can be pivoted for material changeover.
- **Find documentation** on the Internet.
  DVDs are no longer part of delivery.

Textile tapes
Cardboard labels
Identification strips

Cable marking
Shrink tubes continuous
or ready for use

Labels
Printing only on the top of a material
using print head 2

Technical data

● typical ■ standard □ option

Label printer			XD Q4/300	XD Q4.2/600
Guidance of materials			centered	centered
Print method	Thermal transfer		●	●
Print resolution		dpi	300	600
Print speed		mm/s max.	150	100
Print width		mm max.	105.7	54.1
Print length		mm max.	3,000	1,500
Automated ribbon saving			●	●
Materials[1]				
Paper, cardboard, synthetics PET, PE, PP, PI, PVC, PU, acrylate, Tyvec			●	
Shrink tube	ready for use		●	
	continuous, pressed		●	
Textile tape			●	
Finishing	Roll, fanfold		●	
	Roll diameter	mm max.	300	
	Core diameter	mm	38.1 - 76	
	Winding		outside or inside	
Label	Width	mm	10 - 110	
	Height	mm at least	20	
	Thickness	mm max.	0.1	
Liner	Width	mm	14 - 114	
	Thickness	mm	0.03 - 0.16	
Continuous	Width	mm	4 - 114	
	Thickness	mm	0.03 - 0.5	
	Weight (cardboard)	g/m² max.	300	
Shrink tube	Width	ready for use mm max.	114	
		continuous, pressed mm	4 - 85	
	Thickness	mm max.	1.1	
Ribbon[2]	Color side		outside or inside	
	Roll diameter	mm max.	80	
	Core diameter	mm	25.4	
	Length	m max.	450	
	Width	mm max.	114	
Printer dimensions, weight				
Width x Height x Depth / Weight		mm/kg	248 x 395 x 594 / 21	
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	centre to locating edge	centered mm	0 - 55	
Material passage		mm max.	2	
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			■	
Interfaces				
RS232-C 1,200 to 230,400 baud / 8 bit			■	
USB 2.0 Hi-Speed device to plug 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	
USB host, 24 VDC, for peripheral plugging			■	
Digital I/O interface			□	

[1] Specifications are standards. Operations including small, slim, thick or stiff materials need testing, so do strongly adhesive labels.
[2] A ribbon should be at least as wide as the liner material.

Technical data

■ standard □ option

Operating data		
Voltage		100-240 VAC, 50/60 Hz, PFC
Consumption of power		<10 W in standby / 100 W in typical operation / max. 200W
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

Setup options		
	Print Labels Ribbon Tear off Cut Interfaces Error	Region: - Language - Country - Keyboard - Time zone Time Display: - Brightness - Power saving mode - Orientation Interpreter

Status bar		
	Receive data Record datastream Warning to a ribbon ending SD memory card plugged USB stick plugged	WLAN Ethernet USB slave Time

Controls		
	Ribbon 1/2 - Winding - Prior warning - End of ribbon Running out of material	Print head 1/2 - Voltage - Temperature - open Peripheral error

Test routines		
System diagnostics	upon startup, detection of print head included	
Information display, test printout, analysis	Status printout Fonts list List of units WLAN status	Test grid Label profile List of events 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 Condensed 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

Fonts	
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 or 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 Server 2025	■
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

Accessories

Products are plugged or screwed to a printer by a customer.

2.1		**SD memory card**
2.2		**USB stick**
2.3		**USB WLAN stick** 2.4 GHz 802.11b/g/n Hotspot mode or infrastructure mode
2.4		**USB WLAN stick with a rod antenna for extended range of operation** 2.4 GHz 802.11b/g/n + 5 GHz 802.11a/n/ac Hotspot mode or infrastructure mode
2.6		**I/O interface plug** SUB-D, 25 pins All control signals connect to the I/O interface using clamping screws.

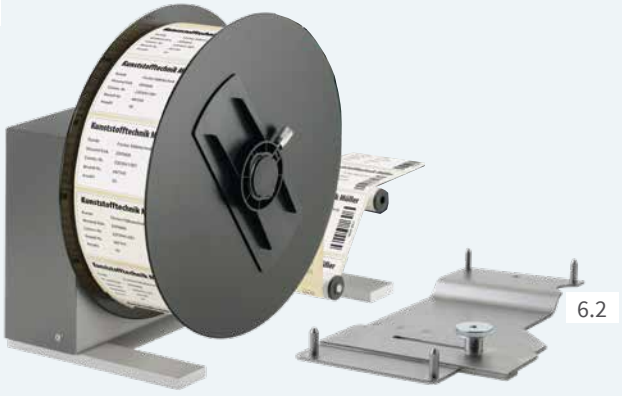
Options

Parts or units to perform special functions are assembled to a printer in addition to or instead of standards. If order implies options be assembled ex factory, the part numbers of such printers and options are added by .250. Options delivered separately are added by .001.

2.7		**Digital I/O interface** Labeling is triggered via a PLC, a sensor or a hand switch. Status reports and errors are displayed simultaneously.
2.9		**Adapter 40/100** for picking up label rolls with a core diameter of 100 mm One adapter is sufficient if processing materials no more than 50 mm wide.
2.10		**Slim print rollers** They allow for accurate print results with small materials and ribbons. **Synthetic rubber** for highly accurate print images **Type** — **materials as wide as** DR4-M30 — 30 mm DR4-M60 — 60 mm DR4-M80 — 80 mm **Silicone** preferred for textile operations and for extralong lifecycles DRS4-M35 — 35 mm DRS4-M50 — 50 mm
2.11		**Standard print rollers** **Type** — **materials as wide as 120 mm** DR4 — Synthetic rubber DRS4 — Silicone
2.12		**Transport rollers for separators** **Type** — **materials as wide as 120 mm** TR4 — 120 mm (synthetic rubber) preferred for shrink tube operations TR4-M60 — 60 mm preferred for textile operations

Rewinding

6.1



6.2

External ER4 rewinder, power supply built in

Label webs may be wound outside or inside. They are wound consistently and tight by electronic control, with a pendulum arm.

External rewinder		**ER4/210**	**ER4/300**
Width of a metarial	mm max.	120	
Roll diameter	mm max.	205	300
Tightening axle	core diameter in mm	76	
Winding		outside or inside	
Voltage		100 - 240 V, 50/60 Hz	
Adapter kit		☐	☐

Cutting, perforating, stacking

3.1
CSQ 402

3.2
PSQ 403

5.1
CU400

5.2
PCU400

Cutters and perforation cutters
Paper, cardboard, textile and synthetic materials can be cut resp. perforated, so can shrink tubes, continuous or ready for use.

Differences between CSQ and CU resp. PSQ and PCU cutters:

- CSQ / PSQ can be pivoted to simplify material changeover.
- CSQ / PSQ are cutting twice as fast as CU /PCU cutters.
- CU / PCU cutters are still recommended with textile operations.

If perforating with a PSQ, six off-cuts remain at the center, each at a distance of 2.5 mm. At the left and right of a perforation, the material is entirely cut. If perforating with a PCU, there is off-cutting along the entire width.

Cutter	**CSQ 402**		**CU400**	
Perforation cutter		**PSQ 403**		**PCU400**
Material: Width mm max.	114		114	85
Passage height mm max.	2.0		2.0	
Weight (cardboard) gr/m² max.	300		300	
Thickness mm max.	1.1		1.1	
Perforation: Distance between off-cuts mm	-	2.5	-	2.5
Off-cut width mm	-	0.4	-	0.5
Number of off-cuts	-	6	-	48
Cutting length mm at least	10	10	5	5
Perforation length mm at least	-	3	-	5
Tray Materials as wide as mm	100	100	100	100
Performance cuts/min at use of material 1 mm high, no backfeed	200		100	
Controls	no final cutter position			
	cutter cover removed		-	

5.3
ST400 M

ST400 M stacker providing a cutter
Printed materials can be cut and then collected.
Print jobs stop if the maximum number of labels have been collected. Limitations may occur with stiff or curved materials. cab recommends to have such operations tested.

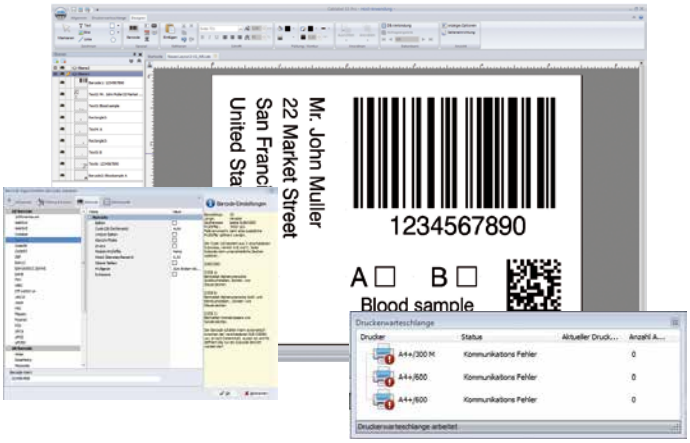
Stacker providing a cutter		**ST400 M**
Material	Passage width mm	20 - 100
	Passage height mm max.	1.2
	Weight (cardboard) gr/m²	60 - 300
	Thickness mm	0.05 - 0.8
Cutting length mm		20 - 150
Performance cuts/min at use of material 1 mm high, no backfeed		100
Limit of collecting mm max.		100
Controls:	no final cutter position, paper jam, stacker cover open, limit of collecting	

Support table - label W x H
The table and the protective cover are adapted to the size of a label. Please request individually.

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**

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.

Printer administration

Configuration on the Intranet und 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 datagrams. Time and date are synchronized by a time server.

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**

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

Delivery program

Label printers

Pos.		Item no.	Designation
1.1		6011500 6011505	XD Q4/300 label printer XD Q4.2/600 label printer

xxxxxxx.250 if XD Q provides options

Pos.		Item no.	UHF RFID (upon request)
1.2		xxxxxxx.407	UHF RFID OM module for - XD Q4/300 - XD Q4/300 with a CSQ 402 cutter, tray included - XD Q4/300 with a PSQ 403 perforation cutter, tray included

Scope of delivery
Label printer Type E+F power cable, 1.8 m Connecting USB cable, 1.8 m Instructions DE / EN

Provided online
Instructions 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 Server 2025 Apple Mac OS X printer drivers DE / EN / FR Linux printer drivers DE / EN / FR cablabel S3 Lite software cablabel S3 Viewer Database Connector

https://setup.cab.de/en

Wear parts

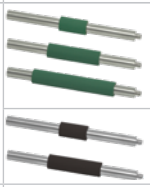
Pos.		Item no.	Designation
		5987330.001 5987089.001	Print head 2/600 Print head 4/300
		See 'options' for print and transport rollers	

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

Accessories

Pos.		Item no.	Designation
2.1		5977370	SD memory card
2.2		5977730	USB stick
2.3		5978912	USB WLAN stick 2.4 GHz 802.11b/g/n
2.4		5977731	USB WLAN stick with a rod antenna 2.4 GHz 802.11b/g/n + 5 GHz a/n/ac
2.6		5917651	I/O interface plug SUB-D, 25 pins

Options

Pos.		Item no.	Designation
2.9		5959622.xxx	Adapter 40/100
2.7		5551447.xxx	Digital I/O interface
2.10		5953700.001 5953701.001 5953702.001 5977813.001 5977812.001	DR4-M30 print roller DR4-M60 print roller DR4-M80 print roller DRS4-M35 print roller DRS4-M50 print roller
2.11		5954180.001 5954985.001	DR4 print roller DRS4 print roller
2.12		6011614.001 6011615.001	TR4 transport roller TR4-M60 transport roller

.xxx - .250 assembled to a printer
.001 separate delivery
resp. spare part

Cutting, perforating, stacking, rewinding

3.1		5984565.xxx	CSQ 402 cutter, tray included
3.2		5984130.xxx	PSQ 403 perforation cutter, tray included
5.1		5978900	CU400 cutter, tray included
5.2		5978901	PCU400/2,5 perforation cutter, tray included
5.3		5541599	ST400 M stacker, cutter included
		55xxxxx	Support table, label W x H order-specific item no.
6.1		5948100 5946090	External ER4/210 rewinder External ER4/300 rewinder
6.2		6011757	X series adapter kit

.xxx - .250 assembled to a printer

Delivery program

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		9008486	Programming manual EN, printed copy

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

User languages

Language	Instruc-tions	Control panel	Windows driver	Service manual	cablabel S3
European Union					
Bulgarian	X	X	X		X
Danish	X	X	X		
German	X	X	X	X	X
Estonian	X	X	X		
Finnish	X	X	X		
French	X	X	X		X
Greek	X	X	X		
English	X	X	X	X	X
Italian	X	X	X		X
Croatian	X	X	X		
Latvian	X	X	X		
Lithuanian	X	X	X		
Dutch	X	X	X		
Polish	X	X	X		X
Portuguese	X	X	X		
Romanian	X	X	X		
Swedish	X	X	X		
Slovak	X	X	X		
Slowenian	X	X	X		
Spanish	X	X	X		X
Czech	X	X	X		X
Hungarian	X	X	X		
Europe (Non-EU)					
Macedonian	X	X	X		
Norwegian	X	X	X		
Russian	X	X	X		X
Serbian	X	X	X		
Turkish	X	X	X		
Asia					
Chinese (simplified)	X	X	X		X
Chinese (traditional)	X	X	X		X
Japanese	X	X	X		
Korean	X	X	X		X
Thai	X	X	X		
Middle East					
Persian		X			
Arabian		X			

Overview of cab products

Label printers
MACH1, MACH2

Label printers
EOS 2

Label printers
EOS 5

Label printers
MACH 4S

Label printers
SQUIX 2

Label printers
SQUIX 4

Label printers
SQUIX 6.3

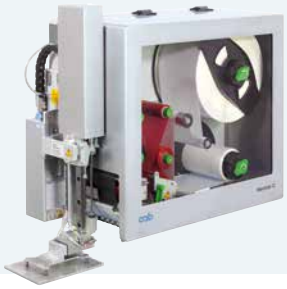
Label printers
SQUIX 8.3

Label printers
XD Q double-sided

Label printers
XC two-colored

Print and apply systems
HERMES Q

Print and apply systems
Hermes C two-colored



Tube labeling systems
AXON 1

Print modules
PX Q

Labels and ribbons

Label software
cablabel S3

Label dispensers
HS, VS

Labeling heads
IXOR

Marking lasers
XENO 4

Laser marking systems

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

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