Status: 01/2025





Label printers for printing on both sides of a material



XDQ label printers for printing on both sides of a material



Highlights

- 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



Types of printers



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



XD Q providing a CSQ 402 cutter

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

Label printer		XD Q4/300-C2	XD Q4.2/600-C2
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
Tray Materials as wide as mm		100	100



XD Q providing a PSQ 403 perforation cutter

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

Label printer		XD Q4/300-P3	XD Q4.2/600-P3
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
Tray Materials as	wide as mm	100	100



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

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** 150 100 mm/s max. Print width mm max. 105.7 54.1 Automated ribbon saving Materials1) 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 300 mm max. Core diameter 38.1 - 76 mm Winding outside or inside 10 - 110 Label Width mm Height 20 mm at least Thickness 0.1 mm max. Liner Width 14 - 114 mm Thickness 0.03 - 0.16 mm Continuous Width 4 - 114 mm 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 Ribbon²⁾ 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 248 x 395 x 594 / 21 Width x Height x Depth / Weight mm/kg Label sensors, position indicators labels, punch marks, materials ending, Transmissive sensor detecting print marks on translucent materials labels, materials ending, Reflective sensor from below or top detecting print marks on non-translucent materials Sensor distance centre to locating edge centered mm 0 - 55 Material passage mm max. **Electronics** Processor, 32 bit clock rate 800 MHz 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 LPD, RawIP printing, SOAP web service, OPC UA, WebDAV IPv4 and IPv6 DHCP, HTTP/HTTPS, FTP/FTPS, TIME, NTP, Zeroconf, SNMP, SMTP, VNC 2 USB hosts on the control panel, Service key, USB stick, USB WLAN stick, USB WLAN stick with a rod antenna, 2 USB hosts on the back of a unit 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

Operating data	1				
Voltage		100-240 VAC, 50/60 Hz, PFC			
Consumption o	fpower	<10 W in standby / 100 W in typical operation / max. 200W			
Temperature /	nperature / Operation		+5 - 40°C / 10 - 85 %, not condensing		
humidity	Stock	0 - 60°C / 20	0 - 60°C / 20 - 85 %, not condensing		
Transport		-25 - 60°C / 20	0 - 85 %, n	ot condensi	ng
Approvals		CE, UKCA, FC CCC, BIS, BSN			
Control panel					
Color LCD touch	screen	Diagona		"	4.3
Setup options		Resoluti	on Width:	x Height px	272 x 480
Print Label Ribbo Tear c Cut Interf Error		els on off faces		Region: - Language - Country - Keyboard - Time zone Time Display: - Brightness - Power saving mode - Orientation	
Status bar				Interpreter	
Status vai	Recor Warn SD m	ve data rd datastream ing to a ribbon emory card plu stick plugged		WLAN Ethernet USB slave Time	
Controls					
	- Wir - Prid - End	Ribbon 1/2 - Winding - Prior warning - End of ribbon Running out of material		Print head - Voltage - Tempera - open Peripheral	ture
Test routines	Kuiiii	ing out of mate	iiat	renpherat	error
System diagnos	tics upon	startup, detec	tion of pr	int head inc	luded
Information disp test printout, analysis	olay, Statu Fonts List o	Status printout Fonts list List of units WLAN status		Test grid Label profi List of ever Monitor mo	le its
Status reports	- Stat - Disp	tout of print durations, running hours, etc. us of a unit requested by software command play of errors related to a network, barcode eripheral device, as well as links missing			ommand arcode
Fonts					
Integral	12 x 1 16 x 1		fonts: Medium GB nvirate Conde gHeiLight ace 821 11 11 Bold		
For storing		ype fonts			
Sets of characte	DOS 4 EBCD ISO 8 WinO UTF-8 MacR DEC M	Windows-1250 to -1257 DOS 437, 737, 775, 850, 852, 857, 862, 864, 8 EBCDIC 500 ISO 8859-1 to -10 and -13 to -16 WinOEM 720 UTF-8 MacRoman DEC MCS KOI8-R		, 866, 869	
	Easte Chine	ern European ern European ese, simplified ese, traditional		Cyrillic Greek Latin Hebrew Arabian	

		■ standard	□ option		
Fonts					
Bitmap	1 mm to 3 mm wide and hi Zoom factors 2 to 10 0°, 90°, 180°, 270° orientati	_			
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 Graphics	proportional or monospac	ce			
Elements	lines, arrows, rectangles, c - filled or gradient	circles, ellipses			
Formats	PCX, IMG, BMP, TIF, MAC, G	IF, 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/s Ident and rout of Deutsche Po Codabar JAN 8, 13 MSI Plessey Postnet RSS 14 UPC A, E, E0	ing code		
2D codes, stacked codes	DataMatrix DataMatrix Rectangle Ext QR code Micro QR code GS1 QR code GS1 DataMatrix PDF 417 Micro PDF 417 UPS Maxicode GS1 DataBar Aztec Codablock F Dotcode RSS 14 truncated, limited, All codes may vary in heigh 0°, 90°, 180°, 270° orientat Feasibility of check digits and start/stop coding deper	, stacked, omni-di nt, modular width tions , plain text printo	and ratio. outs		
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 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 rele	ase			
Programming	JScript printer language abc Basic Compiler ZPL II (datastream be test				
Integration	SAP Database Connector				
Administration	Printer control Configuration on the Intra	anet and Internet			

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

Accessories / optional equipment

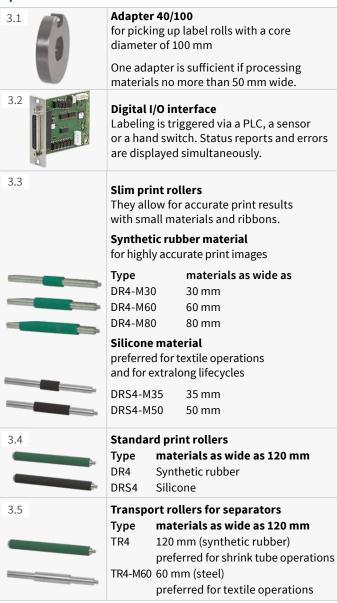
Accessorial products are plugged or screwed to a printer by a customer.

Options are parts or units to perform special functions. They are assembled to a printer in addition to or instead of standards. If order implies options be assembled ex factory, corresponding item numbers are added by .250. Options delivered separately are added by .001.

Zubehör

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, for connecting all control signals to the I/O interface

Optionen



Rewinding



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.	12	20
Roll diameter	mm max.	205	300
Tightening axle co	re diameter in mm	76	
Winding		outside	or inside
Voltage		100 - 240 \	/, 50/60 Hz
Adapter kit			

Cutting, perforating, stacking

2.8 CSQ 402



2.9 **PSQ 403**







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: mm max	c 1	14	114	85	
Passage height mm max		.0		.0	
Weight (cardboard) gr/m² max	c. 30	00	3	00	
Thickness mm max	ι. 1	.1	1	.1	
Perforation: Distance between off-cuts mr	n -	2.5	-	2.5	
Off-cut width mr	n -	0.4	-	0.5	
Number of off-cuts	-	6	-	48	
Cutting length mm at least	t 10	10	5	5	
Perforation length mm at least	it -	3	-	5	
Tray Materials as wide as mr	n 100	100	100	100	
Performance cuts/mi at use of material 1 mm high, no backfeed	n 20	200		00	
	r	no final cutter position			
Controls	cutter cove	er removed		-	

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 (cardbo) gr/m ²	60 - 300
	Thickness	mm	0.05 - 0.8
Cutting length		mm	20 - 150
Performar at use of m	nce naterial 1 mm high, no	cuts/min backfeed	100
Limit of collecting mm m			100
Controls: no final cutter position, stacker cover open, limi			





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.







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 With the service of the service

cab printers embed JScript language.

Download free manual on www.cab.de/en/programming

BC 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
1.0	6011502	XD Q4/300-C2 label printer with a CSQ 402 cutter
1.2	6011507	XD Q4.2/600-C2 label printer with a CSQ 402 cutter
1.3	6011501	XD Q4/300-P3 label printer with a PSQ 403 perforation cutter
1.3	6011506	XD Q4.2/600-P3 label printer with a PSQ 403 perforation cutter

xxx = UHF-RFID option provided

Pos	5.	Item no.	UHF-RFID (upon request)
1.4		xxxxxxx.406	UHF RFID OM module for XD Q4/300 XD Q4/300-C2 XD Q4/300-P3

Wear parts

Pos.		Item no.	Designation
		5987330.001	Print head 2/600
	A	5987089.001	Print head 4/300
		As for print rollers, see accessories	

Scope of delivery label printer XD Q

Label printer Type E+F power cable, 1,8 m Connecting USB cable, 1.8 m Instructions DE / EN

Provided online



https://setup.cab.de/en

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

Apple Mac OS X printer drivers DE / EN / FR Linux printer drivers DE / EN / FR cablabel S3 Lite software cablabel S3 Viewer **Database Connector**

Accessories

Accessorial products are plugged or screwed to a printer by a customer.



See further accessories on www.cab.de/en/xdq-accessories

Optional equipment

Options are parts or units to perform special functions. They are assembled to a printer in addition to or instead of standards. If order implies options be assembled ex factory, corresponding item numbers are added by .250. Options delivered separately are added by .001.

Accessories / optional equipment

Pos.		Item no.	Designation	
2.1		5977370	SD memory card	
2.2		5977730	USB stick	
2.3	2	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	

Ontional equipment

Optional equipment							
Pos.		Item no.	Designation				
3.1	6	5959622.xxx	Adapter 40/100				
3.2		5551447.xxx	Digital I/O interface				
3.3		5953700.001 5953701.001 5953702.001	DR4-M30 print roller DR4-M60 print roller DR4-M80 print roller				
		5977813.001 5977812.001	DRS4-M35 print roller DRS4-M50 print roller				
		5954180.001	DR4 print roller				
3.4		5954985.001	DRS4 print roller				
		6011614.001	TR4 transport roller				
3.5		6011615.001	TR4-M60 transport roller				
2.8		5984565	CSQ 402 cutter tray provided				
2.9		5984130	PSQ 403 perforation cutter tray provided				
2.10		5978900	CU400 cutter tray provided				
2.11		5978901	PCU400/2,5 perforation cutter tray provided				
2.12		5541599	ST400 M stacker providing a cutter				
	8	55xxxxx	Support table, label W x H Item no. specific to order				
2.13	CA.	5948100 5946090	External ER4/210 rewinder External ER4/300 rewinder				
2.14		6011757	X series adapter kit				

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

Delivery program

Label software

Pos.		Item no.	Designation
		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
11 7		5588152	cablabel S3 Pro 9 additional licences
11.7		5588002 5588105 5588106 5588155 5588156 5588157 in preparation	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

•	Instruc-	Control	Windows	Service	cablabel			
Language	tions	panel	driver	manual	S3			
European Union								
Bulgarian	Χ	Χ	Х		Χ			
Danish	Х	Χ	Х					
German	Χ	Χ	Χ	Χ	Χ			
Estonian	Χ	Χ	Х					
Finnish	Χ	Χ	Х					
French	Χ	Χ	Х		Χ			
Greek	Χ	Χ	Χ					
English	Χ	Χ	Χ	Χ	Χ			
Italian	Χ	Χ	Χ		Χ			
Croatian	Χ	Χ	Χ					
Latvian	Χ	Χ	Χ					
Lithuanian	Χ	Χ	Χ					
Dutch	Χ	Χ	Χ					
Polish	Χ	Χ	Χ		Χ			
Portuguese	Χ	Χ	Χ					
Romanian	Χ	Χ	Х					
Swedish	Χ	Χ	Χ					
Slovak	Χ	Χ	Χ					
Slowenian	Χ	Χ	Χ					
Spanish	Χ	Χ	Χ		Χ			
Czech	Χ	Χ	Χ		Χ			
Hungarian	Χ	Χ	Χ					
Europe (Nor	ı-EU)							
Macedonian	Х	Χ	Х					
Norwegian	Χ	Χ	Х					
Russian	Χ	Χ	Х		Χ			
Serbian	Χ	Χ	Χ					
Turkish	Χ	Χ	Х					
Asia								
Chinese	X	Х	Х		X			
(simplified)	^	^	^		^			
Chinese (traditional)	Х	Х	Х		Х			
Japanese	Х	Χ	Х					
Korean	Х	Х	Х		Х			
Thai	Х	Χ	Х					
Middle East								
Persian		Х						
Arabian		Χ						

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



Marking lasers



Laser marking systems



Germany

cab Produkttechnik GmbH & Co KG

Phone +49 721 6626 0 www.cab.de

France cab Technologies S.à.r.l.

Niedermodern Phone +33 388 722501 www.cab.de/fr

USA

cab Technology, Inc.

Chelmsford, MA

www.cab.de/us

Mexico cab Technology, Inc.

www.cab.de/es

Taiwan

cab Technology Co., Ltd.

www.cab.de/tw

China

cab (Shanghai) Trading Co., Ltd.

Shanghai Phone +86 (021) 6236 3161

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