

CLS Compact Labeling System

Printing and applying in one step.



CL5 Compact Labeling System – an ideal combination for all sectors.

With CL5, our key competences are combined with one another in a unique fashion: print module (ILX) and applicator unit (APX) or wipe-on applicator (WMX) in one system. The printing and applying of labels can thus occur in one step. This guarantees product labeling based on actual requirements in real time – quick and direct.

From company logos via text and bar codes to finest graphics: all possible content can be optimally put on a label with the Compact Labeling System. You can even put it directly on your product. Equipped with all current interfaces, the CL5 fits smoothly into your packaging system infrastructure. The robust, aluminium construction ensures the maximum process reliability and guarantees the best print results at all times, even in challenging work environments.

> Printing and applying in one step

Simple, quick and flexible - In this way, you benefit from the combination of our competences in label printing. CL5 stands for product labeling based on actual demands in real time. Almost all customer demands can thus be addressed individually.

> Different installation positions are possible

The CL5 system can be integrated into practically every packaging system. As a result, the respective products can be labelled classically from above, but also from the side or even overhead – an almost limitless variety of application options.

Machines/Automation



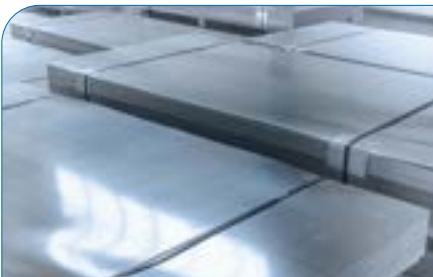
Chemical industry



Wood industry



Industrial manufacturing



Food industry



Transport and logistics





CLS COMPACT LABELING SYSTEM

innovative . versatile . precise

- > Printing and applying in one step
- > Various mounting positions - even at the side and overhead
- > Just in time and demand-oriented product labeling in real time
- > Labeling onto packaging or product
- > Signal lamp for indication of device status
- > 'Quick-Apply' function (APX)
- > Wipe-on procedure (WMX)
- > Label sizes up to 116 x 200 mm
- > Label unwinding unit up to Ø 300 mm

Flexible integration, highly variable



ILX 5X, 8X and 10X

- > Right and left version
- > Robust construction in aluminium and stainless steel
- > Multilingual operating and display unit, rotatable and displaceable (dependent on installation position)
- > Integrated transfer ribbon rewinder
- > External inputs/outputs for simple integration in packaging machines



APX 7000

- > Right and left version
- > Variable product heights
- > Label transfer: stamp on, blow on, roll on
- > Labeling from top, bottom and from side
- > Service unit
- > Swing-type applicator



WMX 5015, 5115, 5215, 5315, 5415 and 5515

- > Right and left version
- > 90 degrees version
- > Dispensing angle infinitely variable
- > Holding shafts cut to length as needed
- > Labeling from top, bottom and from the side
- > Label transfer: with roll or brush



WMX 5010, 5110, 5210, 5310, 5410 and 5510

- > Right and left version
- > Dispensing angle infinitely variable
- > Holding shafts cut to length as needed
- > Labeling from top, bottom and from the side
- > Label transfer: with roll or brush



WMX 5001, 5101, 5201, 5301, 5401 and 5501

- > Right and left version
- > Dispensing angle adjustable
- > Labeling from top, bottom and from the side
- > Label transfer: with roll or brush

ILX options



Signal lamp

The optional signal lamp indicates in addition the device display the printer status:
 Red = Malfunctions at the printer/labeller
 Yellow = Advance warning end of ribbon
 Green = Ready

Mounting is performed directly at the optional carrier plate extension of ILX or in any place in the environment dependent on the length of connecting cable.



Label prewarning

With the optional label prewarning, the early end of material will be displayed. Hereby the process of the print order is not immediately interrupted. The moment of prewarning can be set mechanically.

Mounting is performed directly at the optional label unwinder of ILX.



Carrier plate extension

At the optional carrier plate extension different components can be attached e.g. signal lamp, distribution box and the service unit of a pneumatic applicator (APX 7000).

Mounting is performed directly at the back side of the ILX carrier plate.



Distribution box

The optional distribution box offers the possibility to connect simultaneously up to two completely assembled Valentin components e.g. signal lamp and product sensor with the inputs/outputs of the printing system.

Mounting is performed directly at the optional carrier plate extension of ILX or in any place in the environment dependent on the length of connecting cable.



Fixing flanges

The different optional flange versions offer the possibility to integrate the ILX hanging-mounted in a production line. The fixing flanges are available with 30 mm or 40 mm diameter.

Mounting is performed directly on the cover board of ILX.



External unwinders

The optional external unwinders are applicable both for internal and external wound labels up to an outside diameter of 300 mm. A regular label supply of large label rolls can be regulated with the integrated brake.

	ILX 56/8	ILX 80/8	ILX 54/12	ILX 81/12
Printing				
Print resolution	200 dpi	200 dpi	300 dpi	300 dpi
Print speed	max 300 mm/s	max 300 mm/s	max 300 mm/s	max 300 mm/s
Print width	max 56 mm	max 80 mm	max 54 mm	max 81 mm
Passage width	max 60 mm	max 90 mm	max 60 mm	max 90 mm
Printhead	Flat Type	Flat Type	Flat Type	Flat Type
Labels				
Adhesive labels, continuous labels	paper, cardboard, textile, synthetics			
Material weight	max 220 g/m ² (larger on demand)			
Label width	min 20 mm			
Label height	min 15 mm			
Label height	max 3000 mm			
Roll diameter internal rewinder external unwinder	max 150 mm max 300 mm (option)			
Core diameter	40 mm / 76 mm			
Winding	outside or inside			
Label sensor	transmission			
Transfer Ribbons				
Ink	outside or inside			
Core diameter	25.4 mm / 1"			
Roll diameter	max Ø 80 mm			
Length	max 450 m			
Width	max 55 mm	max 85 mm	max 55 mm	max 85 mm
Fonts				
Font types	6 bitmap fonts 8 vector fonts/TrueType fonts 6 proportional fonts more fonts on demand			
Bar Codes				
1D bar codes	2/5 Industrial, Codabar, Code 128, Code 128A, Code 128B, Code 2/5 interleaved, Code 39, Code 39 extended, Code 93, EAN 13, EAN 8, EAN Add-on, GS1-128, Identcode, ITF 14, Leitcode, Pharmacode, PLANET (Postal Alpha Numeric Encoding Technique), PostNet, PZN 7, PZN 8, UPC-A, UPC-E, USPS Intelligent Mail			
2D bar codes	Aztec Code, CODABLOCK F, DataMatrix, GS1 DataMatrix, MAXICODE, PDF 417, QR Code			
GS1 bar codes	GS1 DataBar Expanded, GS1 DataBar Limited, GS1 DataBar Omnidirectional, GS1 DataBar Stacked, GS1 DataBar Stacked Omnidirectional, GS1 DataBar Truncated			
Dimensions				
width x height x depth	201 x 241 x 375 mm	226 x 241 x 375 mm	201 x 241 x 375 mm	226 x 241 x 375 mm
Weight				
Weight	8.7 kg	9.6 kg	8.7 kg	9.6 kg
Interfaces				
Serial	RS-232C (max 115,200 baud)			
Parallel	SPP			
USB	2.0 High Speed Slave			
Ethernet	10/100 Base T, LPD, RawIP-Printing, DHCP, HTTP, FTP			
2 x USB Master	connection for external USB keyboard and memory stick			
Operation Data				
Nominal voltage	110 ... 230 V AC / 50-60 Hz			
Nominal current	2.5 A			
Fuse values	2x T5A 250 V			
Operating temperature	5 ... 40 °C			
Max. humidity	80% (non-condensing)			

	ILX 103/8	ILX 104/8	ILX 106/12	ILX 106/24	ILX 108/12
Printing					
Print resolution	203 dpi	203 dpi	300 dpi	600 dpi	300 dpi
Print speed	max 300 mm/s	max 300 mm/s	max 300 mm/s	max 100 mm/s	max 300 mm/s
Print width	max 104 mm	max 104 mm	max 105.7 mm	max 105.7 mm	max 108.4 mm
Passage width	max 116 mm	max 116 mm	max 116 mm	max 116 mm	max 116 mm
Printhead	Flat Type	Flat Type	Flat Type	Flat Type	Flat Type
Labels					
Adhesive labels, continuous labels	paper, cardboard, textile, synthetics				
Material weight	max 220 g/m ² (larger on demand)				
Label width	min 25 mm				
Label height	min 15 mm				
Label height	max 3000 mm				
Roll diameter internal rewinder external unwinder	max 150 mm max 300 mm (option)				
Core diameter	40 mm / 76 mm				
Winding	outside or inside				
Label sensor	transmission				
Transfer Ribbons					
Ink	outside or inside				
Core diameter	25.4 mm / 1"				
Roll diameter	max Ø 80 mm				
Length	max 450 m				
Width	max 110 mm				
Fonts					
Font types	6 bitmap fonts 8 vector fonts/TrueType fonts 6 proportional fonts more fonts on demand				
Bar Codes					
1D bar codes	2/5 Industrial, Codabar, Code 128, Code 128A, Code 128B, Code 2/5 interleaved, Code 39, Code 39 extended, Code 93, EAN 13, EAN 8, EAN Add-on, GS1-128, Identcode, ITF 14, Leitcode, Pharmacode, PLANET (Postal Alpha Numeric Encoding Technique), PostNet, PZN 7, PZN 8, UPC-A, UPC-E, USPS Intelligent Mail				
2D bar codes	Aztec Code, CODABLOCK F, DataMatrix, GS1 DataMatrix, MAXICODE, PDF 417, QR Code				
GS1 bar codes	GS1 DataBar Expanded, GS1 DataBar Limited, GS1 DataBar Omnidirectional, GS1 DataBar Stacked, GS1 DataBar Stacked Omnidirectional, GS1 DataBar Truncated				
Dimensions					
width x height x depth	261 x 281 x 375 mm				
Weight					
Weight	10.5 kg				
Interfaces					
Serial	RS-232C (max 115,200 baud)				
Parallel	SPP				
USB	2.0 High Speed Slave				
Ethernet	10/100 Base T, LPD, RawIP-Printing, DHCP, HTTP, FTP				
2 x USB Master	connection for external USB keyboard and memory stick				
Operation Data					
Nominal voltage	110 ... 230 V AC – 50/60 Hz				
Nominal current	2.5 A				
Fuse values	2x T5A 250 V				
Operating temperature	5 ... 40 °C				
Max. humidity	80% (non-condensing)				

APX 7000

Label transfer/operating modes	Stamp on	Blow on	Roll on
Label width			
ILX 5X	20 ... 56 mm	20 ... 56 mm	20 ... 56 mm
ILX 8X	20 ... 86 mm	20 ... 86 mm	20 ... 86 mm
ILX 10X	20 ... 112 mm	20 ... 112 mm	20 ... 112 mm
Label height universal pad	15 ... 210 mm	15 ... 100 mm	70 ... 210 mm
Utilizable cylinder stroke			
200 mm cylinder	170 mm	170 mm	200 mm
300 mm cylinder	270 mm	270 mm	300 mm
400 mm cylinder	370 mm	370 mm	400 mm
500 mm cylinder	470 mm	470 mm	500 mm
Compressed air pressure	5 bar	5 bar	5 bar
Product surface	flat	flat	flat
Product height variable	●	–	●
Product height fixed	●	●	●
Product fixed	●	●	–
Product linear movement	–	●	●
Labeling from top	●	●	●
Labeling from bottom	●	●	●
Labeling from the side	●	●	●
Retraction depth	25 mm	–	–
Direction	right and left version		
Compressed air control/vacuum control	available		
Service unit	filter regulation with manometer and block valve		
Voltage supply/current supply	by label printing systems		
Dimensions APX (W x H x D)	APX 7020: 237 x 423 x 126 mm APX 7030: 237 x 523 x 126 mm APX 7040: 237 x 623 x 126 mm APX 7050: 237 x 723 x 126 mm		
Weight APX	5 kg (APX 7020)		

The applicator APX 7000 is an additional module for the print systems of ILX series and serves the automatic application of printed labels onto a product. The direct and automatic label application is done using a stamp with suction and applies the label using vacuum technology. The process is automatically monitored and controlled by sensors.



Wipe-On Applicator	WMX 5015	WMX 5115	WMX 5215	WMX 5315	WMX 5415	WMX 5515
Print module	ILX 5X (right)	ILX 5X (left)	ILX 8X (right)	ILX 8X (left)	ILX 10X (right)	ILX 10X (left)
Passage width	60 mm	60 mm	90 mm	90 mm	116 mm	116 mm
Label width	min 20 mm	min 20 mm	min 20 mm	min 20 mm	min 25 mm	min 25 mm
Label height	min 15 mm, max 200 mm The maximum label height depends on the length of holding shafts as well as on the installation position of print module and wipe-on applicator.					
Buffer length	The buffer length from printhead to dispensing edge depends on the length of holding shafts as well as on the installation position of print module.					
Distance	The distance from bottom edge print module to labeling level is variable.					
Weight	1.5 kg ¹⁾	1.5 kg ¹⁾	1.8 kg ¹⁾	1.8 kg ¹⁾	2.1 kg ¹⁾	2.1 kg ¹⁾

¹⁾The weight refers to holding shafts with a length of 300 mm

Wipe-On Applicator	WMX 5010	WMX 5110	WMX 5210	WMX 5310	WMX 5410	WMX 5510
Print module	ILX 5X (right)	ILX 5X (left)	ILX 8X (right)	ILX 8X (left)	ILX 10X (right)	ILX 10X (left)
Passage width	60 mm	60 mm	90 mm	90 mm	116 mm	116 mm
Label width	min 20 mm	min 20 mm	min 20 mm	min 20 mm	min 25 mm	min 25 mm
Label height	min 15 mm, max 200 mm The maximum label height depends on the length of holding shafts as well as on the installation position of print module and wipe-on applicator.					
Buffer length	The buffer length from printhead to dispensing edge depends on the length of holding shafts as well as on the installation position of print module.					
Distance	The distance from bottom edge print module to labeling level is variable.					
Weight	1.5 kg ¹⁾	1.5 kg ¹⁾	1.8 kg ¹⁾	1.8 kg ¹⁾	2.1 kg ¹⁾	2.1 kg ¹⁾

¹⁾The weight refers to holding shafts with a length of 300 mm

Wipe-On Applicator	WMX 5001	WMX 5101	WMX 5201	WMX 5301	WMX 5401	WMX 5501
Print module	ILX 5X (right)	ILX 5X (left)	ILX 8X (right)	ILX 8X (left)	ILX 10X (right)	ILX 10X (left)
Passage width	60 mm	60 mm	90 mm	90 mm	116 mm	116 mm
Label width	min 20 mm	min 20 mm	min 20 mm	min 20 mm	min 25 mm	min 25 mm
Label height	min 15 mm max 130 mm	min 15 mm max 130 mm	min 15 mm max 130 mm	min 15 mm max 130 mm	min 15 mm max 200 mm	min 15 mm max 200 mm
Buffer length	296 mm – 389 mm (printhead to dispensing edge)				296 mm – 477 mm (printhead to dispensing edge)	
Distance	14.9 mm ¹⁾ – 38.5 mm ²⁾					
Weight	0.8 kg	0.8 kg	1.0 kg	1.0 kg	1.2 kg	1.2 kg

¹⁾The first value refers to the minimum dispensing angle · ²⁾The second value refers to the maximum dispensing angle



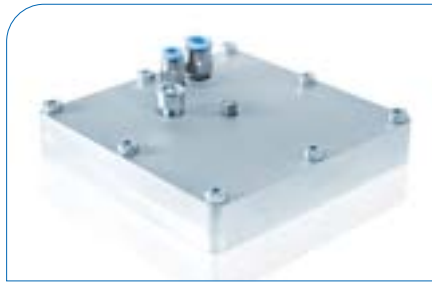
APPLICATION – Accessories for applying printed labels

- > For applying the printed label onto the product
- > For print module ILX 5X, ILX 8X and ILX 10X
- > Adapted for left and right device versions



Tamp pad

During the print and apply cycle the product remain fixed. The universal tamp is covered by a foil. According to the size of the label the holes can be pierced. The tamp pads are customized to the dimensions of the label sizes on request.



Blow pad

For non-applying pressure to sensitive products, the label can be blown onto the product with the supporting air jet stream. The print and apply cycle performs in a fixed position or in a linear movement of the product. The blow pad moves to a preadjusted position approx. 10 mm away from the product.



Roll-on pad

In the starting position the label is forwarded until touching the roller of the roll-on pad. At the labeling position the roller is pressed onto the product. Then the label is applied and rolled on by the movement of the products.



Pressure roller

The printed label is removed from backing paper at the dispensing edge of wipe-on applicator and then applied to the product with the pressure roller.



Pressure brush

The printed label is removed from backing paper at the dispensing edge of wipe-on applicator and then applied to the product with the pressure brush.

The pressure brush is used if the label is to be applied onto an uneven surface.

LABELS – the maximum number of possibilities.



What applies to our printing systems also applies to our labels: almost unlimited choice and individual solutions for all industries. We supply plastic, paper or cardboard labels on a roll in a wide range of formats: pre-printed or blank, removable or permanent, exactly to your requirements. We thus bring any labeling to your product!



TRANSFER RIBBONS – for a perfect transfer.



Our transfer ribbons are optimally adapted for use with our printing systems and labels. They are available in standard (wax), premium (wax/resin) and special (resin) versions. Whether on paper or plastic, scratch and smudge proof, high-resolution – we offer you the ideal solution for any requirement.





Local retailer

Branches:

Sales office Bavaria

Marienplatz 8a . 83043 Bad Aibling
Phone +49 8061 3498888 . rstreck@carl-valentin.de

Sales office Spain

Calle historiador Vedia 14 5ºB . 15004 La Coruña
Phone +34 881 103163 . Mobile +34 609 022 241 . mlano@carl-valentin.es

Sales office Switzerland

Swiss Business Haus . Moosackerstraße 75 . 8105 Regensdorf
Phone +41 61 9739641 . Mobile +41 79 7448436 . info@carl-valentin.ch



Carl Valentin GmbH
Neckarstraße 78–86 u. 94
78056 Villingen-Schwenningen
Phone +49 7720 9712-0
info@carl-valentin.de . www.carl-valentin.de

