

# WIPE-ON APPLICATORS

Operating Manual



Copyright by Carl Valentin GmbH / 7997315.1023

Information on the scope of delivery, appearance, performance, dimensions, and weight reflect our knowledge at the time of printing.

We reserve the rights to make modifications.

All rights, including those regarding the translation, are reserved.

No part of this document may be reproduced in any form (print, photocopy, or any other method) or edited, copied, or distributed electronically without written permission from Carl Valentin GmbH.

Due to the constant further development of our devices discrepancies between manual and device can occur.

Please check [www.carl-valentin.de](http://www.carl-valentin.de) for the latest update.

Due to the constant further development of our devices discrepancies between manual and device can occur.

Please check [www.carl-valentin.de](http://www.carl-valentin.de) for the latest update.

#### Trademarks

All named brands or trademarks are registered brands or registered trademarks of their respective owners and may not be separately labelled. It must not be concluded from the missing labelling that it is not a registered brand or a registered trademark.

The following products are covered in this manual

WMX 5001	right side, spring mounted	ILX 5X, right version
WMX 5101	left side, spring mounted	ILX 5X, left version
WMX 5201	right side, spring mounted	ILX 8X, right version
WMX 5301	left side, spring mounted	ILX 8X, left version



Carl Valentin GmbH

Postfach 3744

78026 Villingen-Schwenningen

Neckarstraße 78 – 86 u. 94

78056 Villingen-Schwenningen

Phone +49 7720 9712-0

Fax +49 7720 9712-9901

E-Mail [info@carl-valentin.de](mailto:info@carl-valentin.de)

Internet [www.carl-valentin.de](http://www.carl-valentin.de)

## Table of Contents

<b>1</b>	<b>Introduction.....</b>	<b>5</b>
1.1	General Instructions .....	5
1.2	Intended Use .....	6
1.3	Safety Instructions .....	6
<b>2</b>	<b>Product Description .....</b>	<b>9</b>
2.1	Product Designation .....	9
2.2	Function .....	9
2.3	Overview.....	10
<b>3</b>	<b>Technical Data .....</b>	<b>11</b>
<b>4</b>	<b>Installation.....</b>	<b>13</b>
4.1	Unpack the Wipe-On Applicator .....	13
4.2	Scope of Delivery .....	13
4.3	Connect the Transducer to Printing System .....	13
4.4	Connect the Wipe-On Applicator.....	14
4.5	Install the Pressure Roller (Optional) .....	15
4.6	Install the Pressure Brush (Optional) .....	15
4.7	Insert the Label Material.....	16
4.8	Adjust the Displacement Unit .....	17
<b>5</b>	<b>Adjustments.....</b>	<b>19</b>
5.1	Adjust the Dispensing Angle .....	19
5.2	Adjust the Pressure Roller (Optional).....	21
5.3	Adjust the Pressure Brush (Optional).....	22
5.4	Adjust the Labelling Position .....	23
<b>6</b>	<b>Options .....</b>	<b>25</b>
6.1	Product Sensor.....	25
<b>7</b>	<b>Environmentally-Friendly Disposal .....</b>	<b>27</b>
<b>8</b>	<b>Index .....</b>	<b>29</b>



# 1 Introduction

## 1.1 General Instructions

Important information and instructions in this document are designated as follows:



**DANGER** identifies an extraordinarily great and immediate danger which could lead to serious injury or even death.



**WARNING** identifies a possible danger could lead to serious bodily injury or even death if sufficient precautions are not taken.



**WARNING** of cutting injuries. Pay attention that cutting injuries caused by blades, cutting devices or sharp-edged parts are avoided.



**WARNING** of hand injuries. Pay attention that hand injuries caused by closing mechanical parts of a machine/equipment are avoided.



**WARNING** of hot surfaces. Pay attention so as not to come into contact with hot surfaces.



**CAUTION** indicates a potentially dangerous situation which could lead to moderate or light bodily injury or damage to property.



**NOTICE** gives you tips. They make a working sequence easier or draw attention to important working processes.



Gives you tips on protecting the environment.



Handling instruction



Optional accessories, special fittings

Time

Information in the display

## 1.2 Intended Use

The device is a state-of-the-art device which complies with the recognized safety-related rules and regulations. Despite this, a danger to life and limb of the user or third parties could arise and the device or other property could be damaged while operating the device.

The device may only be used while in proper working order and for the intended purpose. Users must be safe, aware of potential dangers and must comply with the operating instructions. Faults, in particular those which affect safety, must be remedied immediately.

The device is intended exclusively as a peripheral unit for the printing systems of ILX series to apply suitable materials that have been approved by the manufacturer. Any other or additional use is not intended. The manufacturer/supplier is not liable for damage resulting from misuse. Any misuse is at your own risk.

Intended used includes heeding the operating manual, including the maintenance recommendations/regulations specified by the manufacturer.

## 1.3 Safety Instructions

Couple the applicator to devices using extra low voltage only.

Before making or undoing connections, switch off all devices involved (computer, printer, accessories etc.).

Operate the applicator in a dry environment only and do not get it wet (sprayed water, mist etc.).

Do not operate the applicator in explosive atmosphere and not in proximity of high voltage power lines.

Do not operate the applicator in explosive atmosphere and not in proximity of high voltage power lines.

Maintenance and servicing work can only be carried out by trained personnel.

Operating personnel must be trained by the operator on the basis of the operating manual.



### **WARNING!**

Danger of injury from rotating parts!

⇒ During operation, the rotating parts are freely accessible. When working on the device wear tightly fitting clothes and tie up long hair. Loosely hanging pieces or long hair can get caught in parts of the device.

Never use highly inflammable consumables.

Carry out only the actions described in these operating instructions. Any work beyond this may only be performed by the manufacturer or upon agreement with the manufacturer.

Unauthorized interference with electronic modules or their software can cause malfunctions.

Other unauthorized work or modifications to the device can endanger operational safety.

Always have service work done in a qualified workshop, where the personnel have the technical knowledge and tools required to do the necessary work.

There are warning stickers on the device that draw your attention to dangers. Therefore the warning stickers are not to be removed as then you and others cannot be aware of dangers and may be injured.



## 2 Product Description

### 2.1 Product Designation

Designation	Specification	Device Type
WMX 5001	right side, spring mounted	ILX 56/8, ILX 54/12, right side
WMX 5101	left side, spring mounted	ILX 56/8, ILX 54/12, left side
WMX 5201	right side, spring mounted	ILX 80/8, ILX 81/12, right version
WMX 5301	left side, spring mounted	ILX 80/8, ILX 81/12, left version

### 2.2 Function

The described wipe-on applicators are additional modules for the printing systems of ILX series and serve the automatic application of printed labels onto a product. The application of labels is made with the so-called wipe-on procedure. Here the printed label is removed from the backing paper and taken from the dispenser of the wipe-on applicator, then rolled on the product with the pressure roller or applied on the product with the pressure brush.

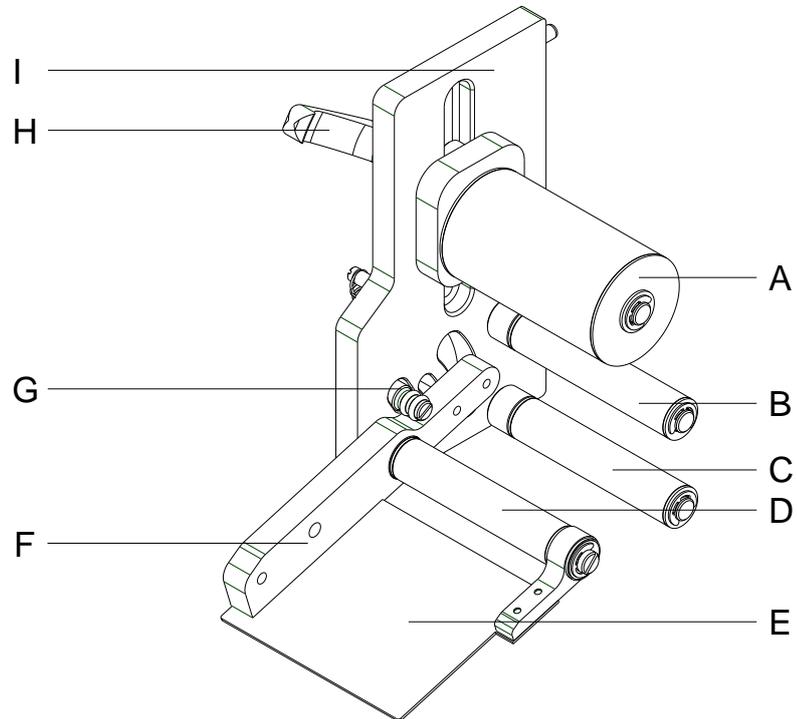
The operation of printing system with wipe-on applicator requires the use of an external start signal (see chapter 6.1, page 25).

## 2.3 Overview



### NOTICE!

The figure of overview applies to wipe-on applicators  
WMX 5001 / 5101 / 5201 / 5301 - right version.



**Figure 1**

- A = Return pulley
- B = Return pulley
- C = Return pulley
- D = Return pulley
- E = Dispensing edge
- F = Rocker lever
- G = Stop bolt
- H = Clamping lever for return pulley
- I = Base plate

### 3 Technical Data

Wipe-on applicator	<b>WMX 5001 / 5101</b>	<b>WMX 5201 / 5301</b>
Print module	ILX 56/8 and ILX 54/12	ILX 80/8 and 81/12
Passage width	60 mm	90 mm
Min label width	20 mm	20 mm
Min label height	15 mm	15 mm
Max label height	130 mm	130 mm
Buffer length from printhead to dispensing edge	296.0 mm - 389.0 mm	296.0 mm - 389.0 mm
Distance bottom edge printing system to labelling level	14.9 mm <sup>1</sup> - 38.5 mm <sup>2</sup>	14.9 mm <sup>1</sup> - 38.5 mm <sup>2</sup>
Weith	0.8 kg <sup>2</sup>	1.0 kg <sup>2</sup>

<sup>1</sup> The indication refers to the minimum dispensing angle

<sup>2</sup> The indication refers to the maximum dispensing angle



## 4 Installation

### 4.1 Unpack the Wipe-On Applicator

- ⇒ Lift the wipe-on applicator out of the box.
- ⇒ Check the wipe-on applicator for transport damages.
- ⇒ Check delivery for completeness.

### 4.2 Scope of Delivery

- Wipe-on applicator
- 2x holding shaft (length 300 mm).
- 1x mounting angle
- 4x cylinder screw M5x12
- 4x washer
- Documentation

**NOTICE!**

Retain original packaging for subsequent transport.

### 4.3 Connect the Transducer to Printing System

The use of the printing system with wipe-on applicator requires the utilization of an external start signal.

E.g. the optionally available product sensor for the external start signal can be attached to the printing system

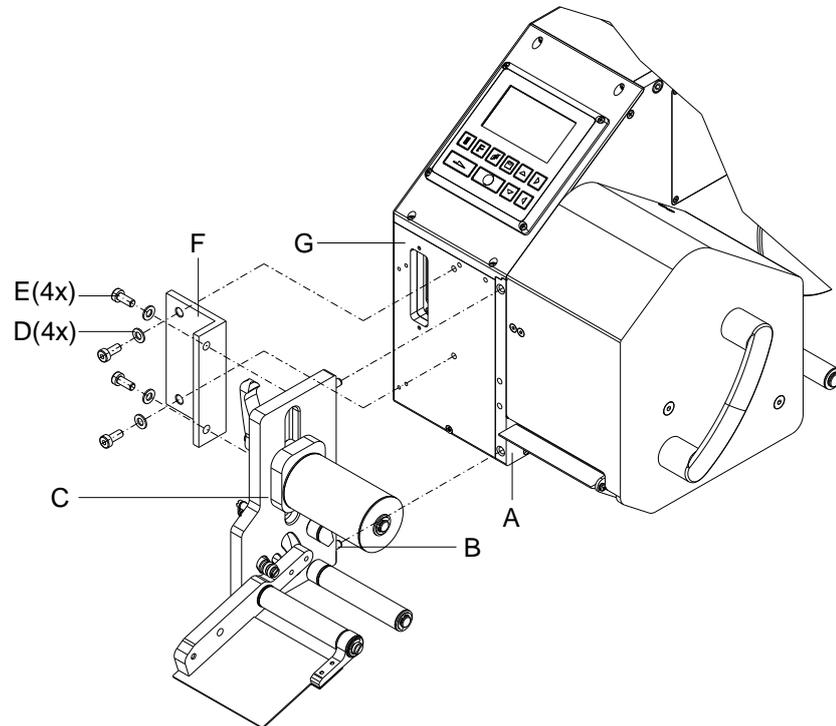
For detailed information refer to chapter 6.1, page 25).

## 4.4 Connect the Wipe-On Applicator



### NOTICE!

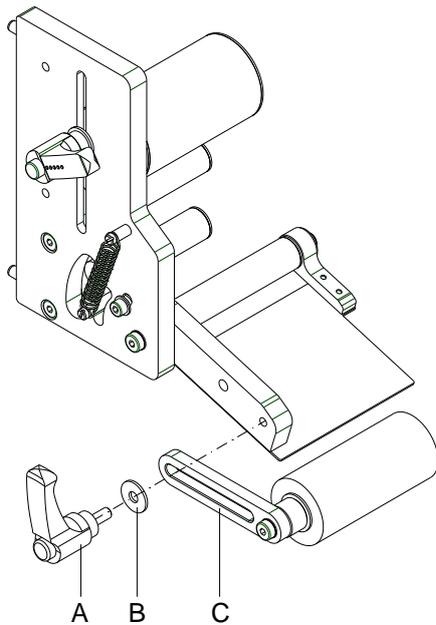
The figure of overview applies to wipe-on applicators *WMX 5001 / 5101 / 5201 / 5301*.



**Figure 2**

1. Insert the cylinder pins (B) on the wipe-on applicator into the intended drillings of the carrier plate (A) of the printing system.
2. Attach the mounting angle (F) with the washers (D) and screws (E) to the front plate (G) of the printing system and the base plate (C) of the wipe-on applicator.

#### 4.5 Install the Pressure Roller (Optional)

**NOTICE!**

The figure of overview applies to wipe-on applicators WMX 5001 / 5101 / 5201 / 5301

Fix the pressure roller (C) with the washer (B) and clamping lever (A) to the wipe-on applicator.

Figure 3

#### 4.6 Install the Pressur Brush (Optional)

**NOTICE!**

The figure of overview applies to wipe-on applicators WMX 5001 / 5101 / 52001 / 5301.

Fix the pressure brush (B) with the washer (B) and clamping lever (A) to the wipe-on applicator.

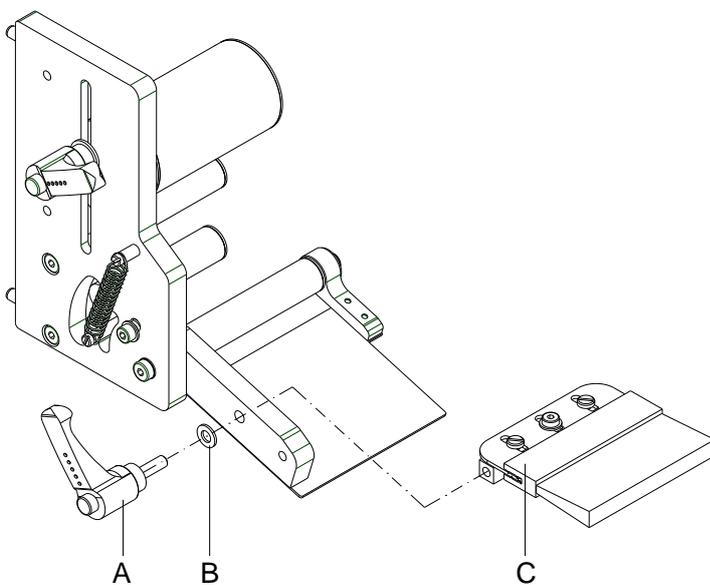


Figure 4

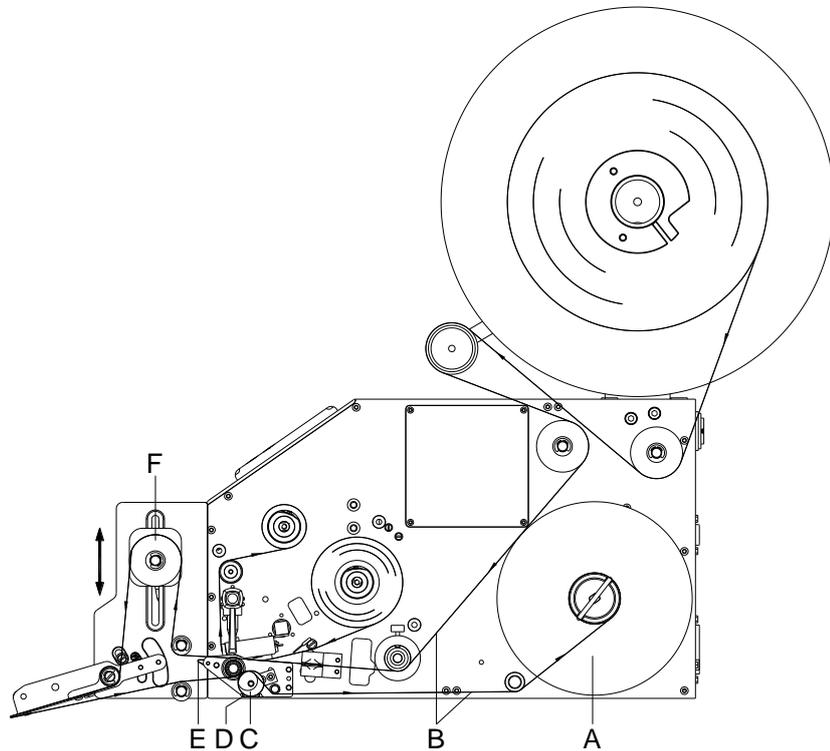
## 4.7 Insert the Label Material



### NOTICE!

The figure of overview applies to wipe-on applicators *WMX 5001 / 5101 / 5201 / 5301*.

**Label run - Printing system and wipe-on applicator**



**Figure 5**

1. Insert the label material (B) according to the label run up to the dispensing edge (E) of the printing system.



### NOTICE!

For a detailed description for inserting material into the printing system please refer to the chapter *Inserting Material* in the operating manual of the printing system.

2. Move the return pulley (F) of the displacement unit upwards against the stop for a better positioning of the label material (see chapter 4.8, page 17).
3. Pull out the label material as long as it reaches to the backing paper rewriter (A).
4. Remove all labels from the pulled out label material.
5. Insert the backing paper in arrow direction into the wipe-on applicator. Guide the backing paper according to the operating manual of the printing system to the rewriter (A).

## 4.8 Adjust the Displacement Unit



### NOTICE!

When changing the label height it is necessary to move the return pulley of displacement unit (F) in order to bring the beginning of the label material into a suitable apply position.

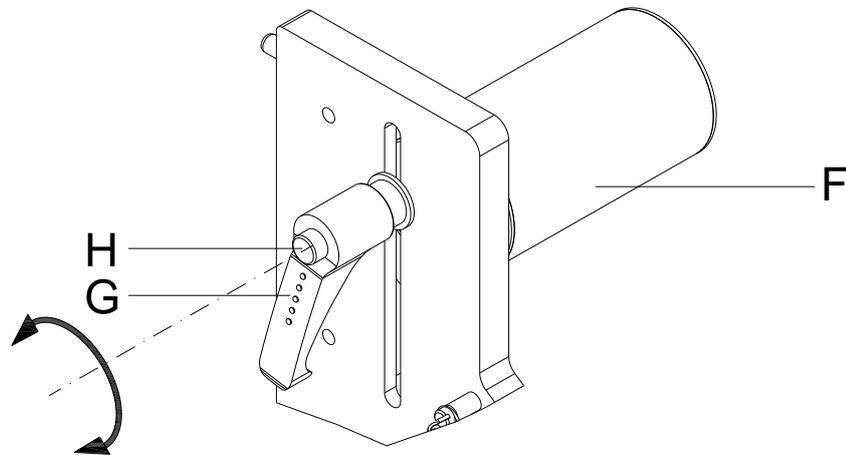


Figure 6



### NOTICE!

The angle position of clamping lever (G) can be changed by pressing the disengaging knob (H).

1. Turn the clamping lever (G) against clockwise direction in order to loosen the return pulley of the displacement unit (F).
2. Push the displacement unit into the desired position.
3. Turn the clamping lever (G) in clockwise direction to tighten the return pulley of the registration unit (F).



## 5 Adjustments

### 5.1 Adjust the Dispensing Angle



#### NOTICE!

The figure of overview applies to wipe-on applicators WMX 5001 / 5101 / 5201 / 5301.

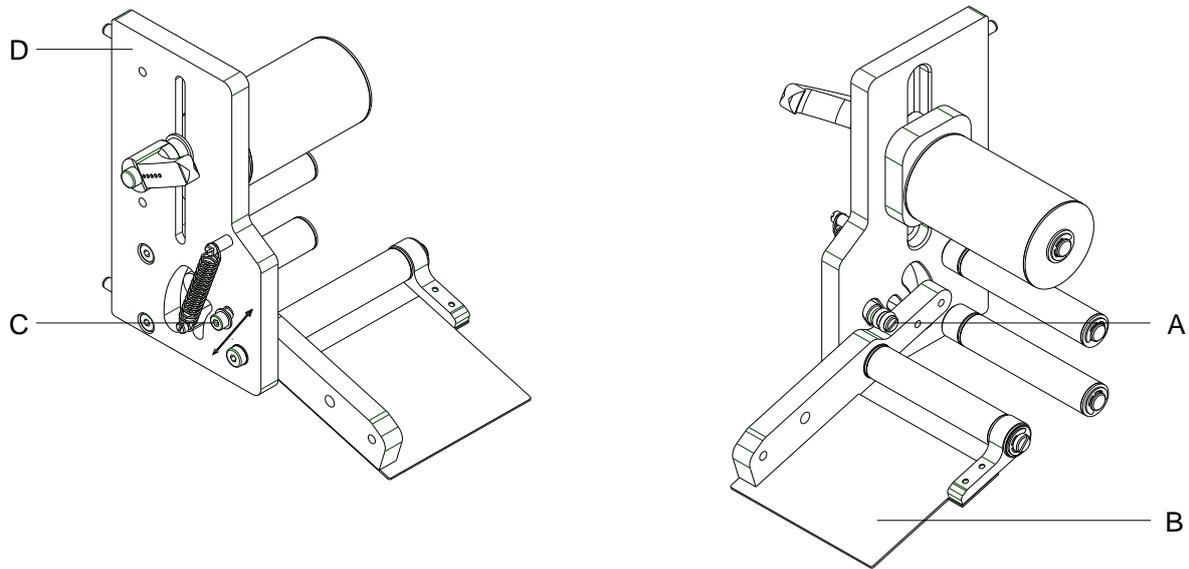


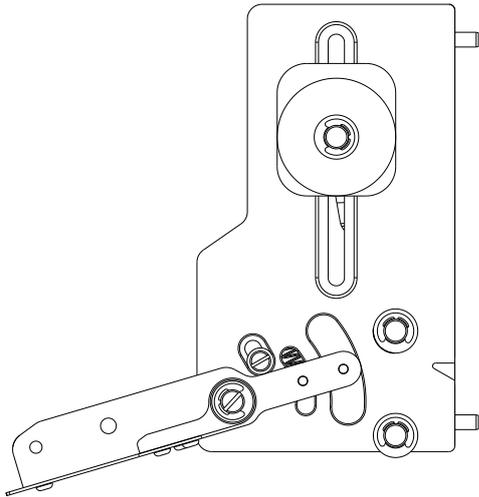
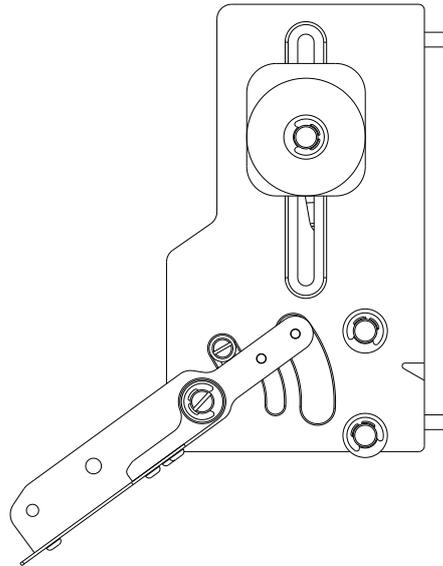
Figure 7

1. Move the dispensing rocker (D, Figure 5) forwards/upwards by pulling out the knurled knob (C, Figure 5).
2. Loosen the screw (C).
3. Change the angle position of dispensing edge (B) as required. For this shift the stop bolt (A) along the elongated hole in the base plate (D). Shift upward increases the dispensing angle and shift downward reduces the dispensing angle.
4. Fix the position of stop bolt by tightening the screw (C). If necessary insert a slotted screwdriver in the slot of the stop bolt (A) to facilitate the tightening of screw (C).



#### NOTICE!

With the stop bolt (A) the angle position of dispensing edge can be set between approx. 16 degrees and 36 degrees.

**Minimum angle adjustment (16 degrees)****Maximum angle adjustment (36 degrees)****Figure 8**

5. Turn the internal rewriter (A, Figure 5) of the printing module as long as the backing paper is again tensioned.
6. Press the dispensing rocker (D, Figure 5) again upwards and engage.

## 5.2 Adjust the Pressur Roller (Optional)



### NOTICE!

The figure of overview applies to wipe-on applicators *WMX 5001 / 5101 / 5201 / 5301*.

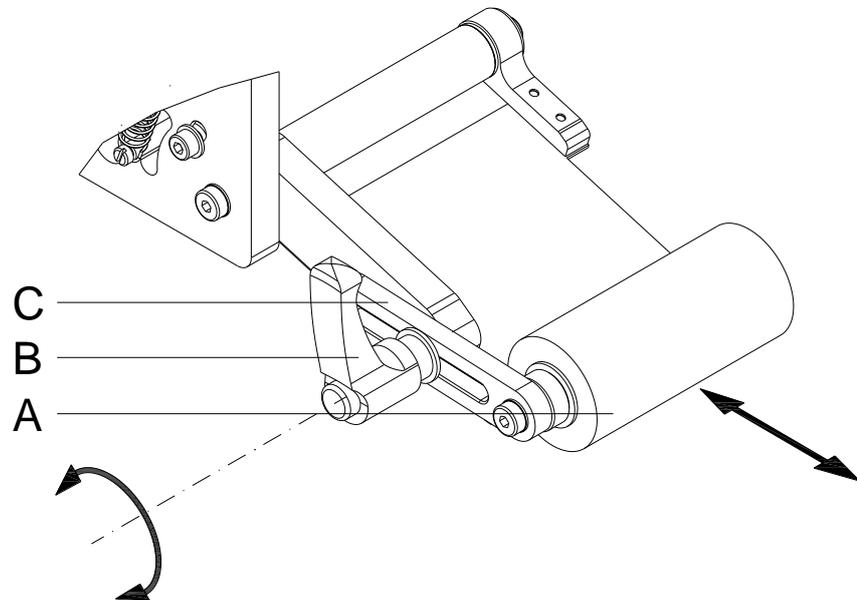


Figure 9



### NOTICE!

The adjustments take place in depending on the label material and the product surface.

1. Loosen the clamping lever (B) to change the position of pressure roller (A).
2. Displace the pressure roller (A) along the oblong hole in the lever (C).
3. If necessary, change the angle position of the pressure roller (A) in the centre of rotation of the clamping lever (B).

### 5.3 Adjust the Pressure Brush (Optional)



#### NOTICE!

The figure of overview applies to wipe-on applicators *WMX 5001 / 5101 / 5201 / 5301*.

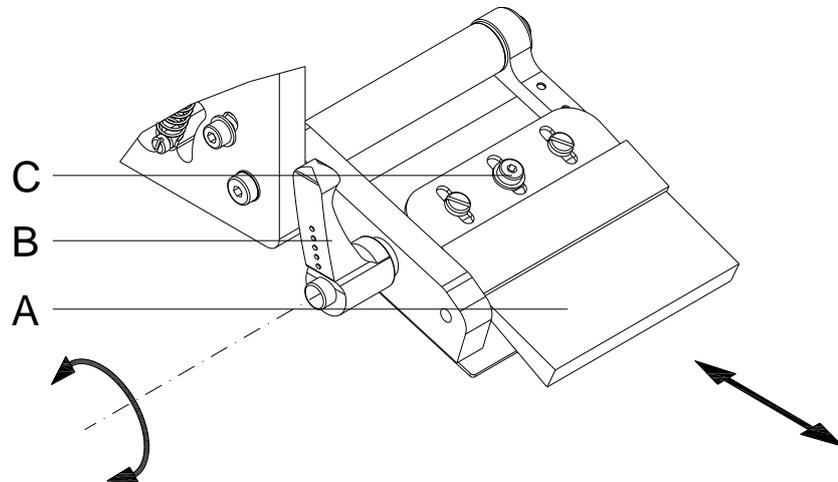


Figure 10



#### NOTICE!

The adjustments take place in depending on the label material and the product surface.

1. Loosen the screw (C) to change the position of pressure brush (A).
2. Move the pressure brush (A) along the elongated holes. Displacement in dispensing direction increases the pressure. Displacement against the dispensing direction decreases the pressure.
3. Tighten the screw (C).
4. If necessary change the angle position of pressure brush (A) in the pivot axis of the clamping lever (B).

## 5.4 Adjust the Labelling Position



### NOTICE!

The figure of overview applies to wipe-on applicators *WMX 5001 / 5101 / 5201 / 5301*.



### NOTICE!

In order to operate the printing system with the wipe-on applicator in the dispenser mode, the dispenser offset must be set to 0.

For a detailed description for adjusting the dispenser offset, please refer to the chapter *Dispenser I/O* in the operating manual of the printing system.

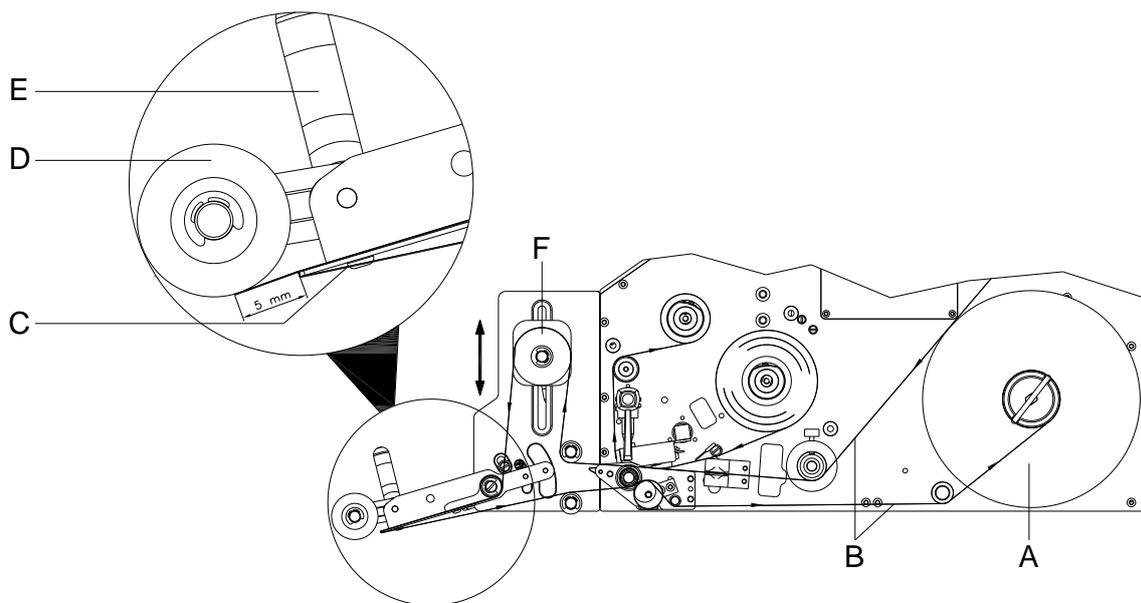


Figure 11

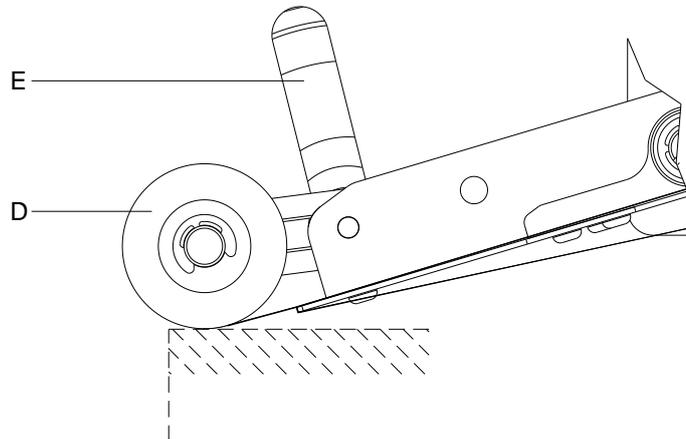
1. After correct inserting the label material, press the key  to activate a test print or start a measuring procedure to determine the exact position of the label beginning. Confirm the test print as long as a label is over the dispensing edge (C) of the wipe-on applicator.
2. Adjust the dispensing position in such a way that the regular remove of the label from the backing paper (B) is ensured.
3. Loosen the return pulley by turning the clamping lever (G, Figure 6) against clockwise direction and then shift it slowly downwards.
4. At the same time, turn the internal rewriter (A) to stretch again the backing paper (B).  
Repeat this procedure as long as the label which is to be applied is removed from the backing paper (C) and exceeds the dispensing edge (C) approx. 5 mm.

**NOTICE!**

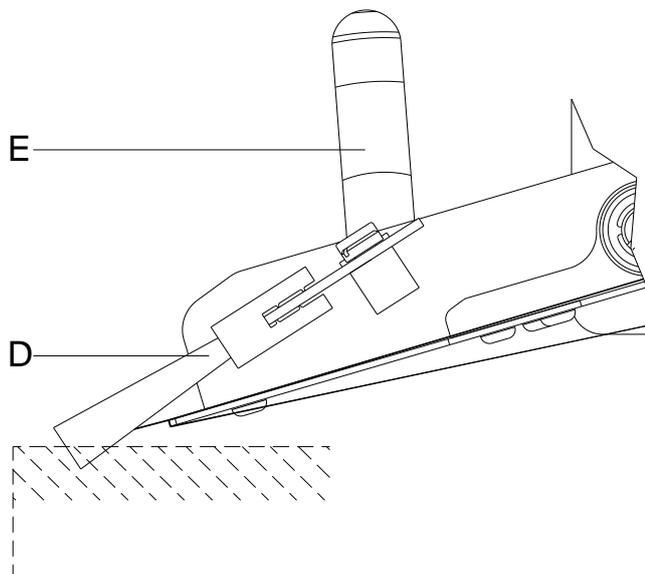
In order to stretch the backing paper (B) on the internal rewriter (A), before the dispenser rocker (D, Figure 5) must be moved forwards/upwards by pulling out the knurled knob (C, Figure 5).

**When using the pressure roller**

- Adjust the position of pressure roller (D) with the clamping lever (E) in such a way that the roller and the label touch themselves lightly. In this way the transfer of label to the product to be labelled is supported.

**Figure 12****When using the pressure brush**

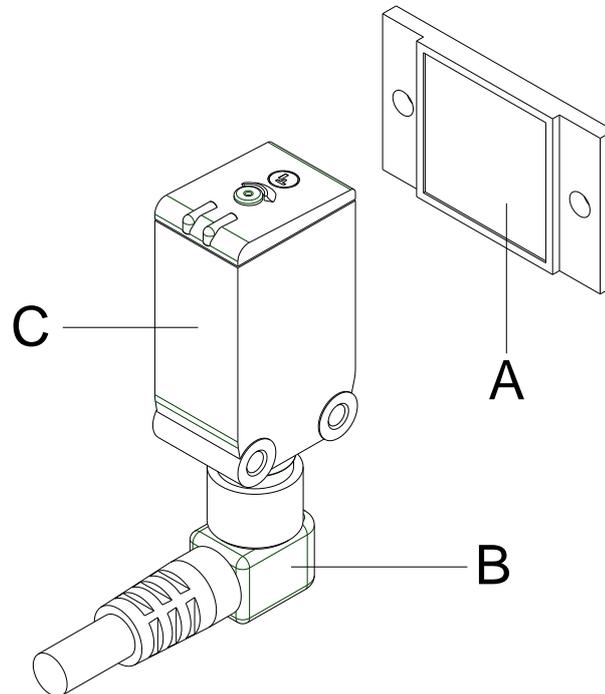
- The pressure brush (D) is to be installed at a position at which the label and the product touch each other.

**Figure 13**

## 6 Options

### 6.1 Product Sensor

The 'product sensor' option is used for optical, contact-free registration of products in order to obtain input signals for the printing system.



**Figure 14**

A = Reflector

B = Connecting line

C = Reflexion photocell



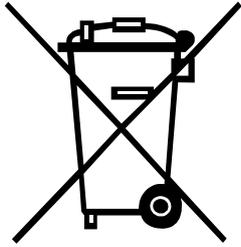
**NOTICE!**

When using reflection photocells, please observe that other light (e.g. working lamp) on the photocell is prevented.

1. Connect the connecting line (B) of the reflection photocell (C) to the I/O 24 interface.
2. Attach the reflector (A) at right angles with the reflection photocell (C).



## 7 Environmentally-Friendly Disposal



Manufacturers of B2B equipment are obliged to take back and dispose of old equipment that was manufactured after 13 August 2005. As a principle, this old equipment may not be delivered to communal collecting points. It may only be organised, used and disposed of by the manufacturer. Valentin products accordingly labelled can therefore be returned to Carl Valentin GmbH.

This way, you can be sure your old equipment will be disposed of correctly.

Carl Valentin GmbH thereby fulfils all obligations regarding timely disposal of old equipment and facilitates the smooth reselling of these products. Please understand that we can only take back equipment that is sent free of carriage charges.

The electronics board of the printing system is equipped with a battery. This must only be discarded in battery collection containers or by public waste management authorities.

Further information on the WEEE directive is available on our website [www.carl-valentin.de](http://www.carl-valentin.de).



## 8 Index

### A

#### adjustments

- dispensing angle WMX 5001 / 5101 / 5201 / 5301 ..... 19, 20
- labelling position ..... 23, 24
- pressure roller *WMX 5001 / 5101 / 5201 / 5301* ..... 21
- pressure brush WMX 5001 / 5101 / 5201 / 5301 ..... 22

### D

- dispensing angle, adjusting WMX 5001 / 5101 / 5201 / 5301 ..... 19, 20
- displacement unit, adjusting ..... 17

### E

- environmentally-friendly disposal ..... 27

### F

- function ..... 9

### I

#### installation

- connecting wipe-on applicator. WMX 5001 / 5101 / 5201 / 5301 ... 14
- displacement unit, adjusting ..... 17
- label material, inserting WMX 5001 / 5101 / 5201 / 5301 ..... 16
- pressure brush ..... 15
- pressure roller ..... 15
- scope of delivery ..... 13
- transducer, connecting ..... 13
- unpacking ..... 13
- instructions ..... 5
- intended use ..... 6

### L

- label material, inserting WMX 5001 / 5101 / 5201 / 5301 ..... 16

### O

- options, product sensor ..... 25
- overview, WMX 5001 / 5101 / 5201 / 5301 ..... 10

### P

#### pressure brush

- adjusting WMX 5001 / 5101 / 5201 / 5301 ..... 22
- installation ..... 15

#### pressure roller

- adjusting *WMX 5001 / 5101 / 5201 / 5301* ..... 21
- installation ..... 15

- product designation ..... 9

### S

- safety instructions ..... 6, 7
- scope of delivery ..... 13

### T

- technical data ..... 11
- transducer, connecting ..... 13

**U**

unpacking ..... 13

**W**

wipe-on applicator, connecting..... 14





---

Carl Valentin GmbH  
Neckarstraße 78 – 86 u. 94 . 78056 Villingen-Schwenningen  
Phone +49 7720 9712-0 . Fax +49 7720 9712-9901  
info@carl-valentin.de . www.carl-valentin.de