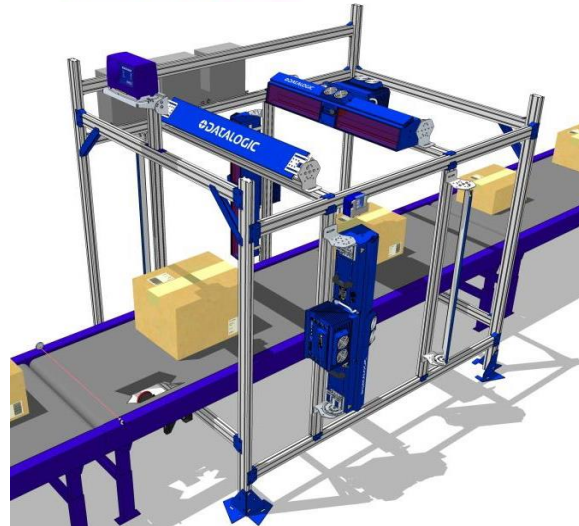


## DWS SYSTEM

- ✓ High throughput
- ✓ Conveyor Speed (Up to 3.1m/s)
- ✓ 99.9% Scanning accuracy base on grade A and B barcode quality
- ✓ Improve data traceability
- ✓ Automatic Reading of Barcodes (1D + 2D)
- ✓ Reading, Weighing, Measuring in ONE stop
- ✓ Legal for trade Applications (NTEP and OIML Certified)
- ✓ Hybrid system to cater irregular object barcode reading



**\*\*Cited from Datalogic AV7000 Reference Manual**

HIGHEST READRATE WITH QUALITY, RELIABLE, PROVEN PRODUCTS RESULT IN SHORTEST RETURN OF INVESTMENT PERIOD ON THE MARKET.

### Scanning - AV7000

- Excellent reading performance On high speed conveyors: 4.8m/s
- New Generation decode algorithm to read bad quality label
- High Quality Image for OCR and Video-coding



### Scanning - AV900

- 9MP 2D image-base reader
- Patent dynamic or adjustable focus system offering extended depth of field



### Dimensioning - DM3610

- Accuracy of  $\pm 5\text{mm}$  at transport speeds up to 3.1m/s
- 1-head for cuboidals
- 2-head for cuboidals and irregulars



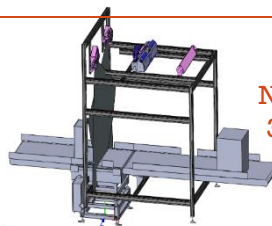
### Weighing

- Fast and exact weight determination at high speed up to 3.1m/s
- Weighing Range from 30g to 60kg.
- Numerous options adapts to individual needs



WITH THE GROWTH OF THE E-COMMERCE INDUSTRY ESCALATING AT A RAPID PACE, THE AVERAGE DAILY DELIVERY OF EXPRESS PARCELS ARE INCREASING.

**DYNAMIC DIMENSIONING-WEIGHING-SCANNING SYSTEM** PROVIDES SOLUTION TO DETERMINE THE VOLUME, WEIGHT AND IDENTITY OF THE PARCELS. THE COMPLETE SOLUTION PROVIDED BY SENSORHAUS IS USED BY COURIER, EXPRESS AND PACKAGE SERVICE PROVIDERS.



**SENSORHAUS PRIVATE LIMITED**  
NORTHLAND INDUSTRIAL BUILDING 2,  
3 WOODLANDS INDUSTRIAL PARK E1,  
#05-02 SINGAPORE 757726

O: +65 6269 0181

F: +65 6269 0185

[www.sensorhaus.com](http://www.sensorhaus.com)

# DIMENSIONER

The DM3610 is a compact, overhead dimensioning unit that automatically measures the length, width, and height of packages as they are transported on a conveyor. The self-contained dimensioner is designed for simple installation and enables a range of applications across multiple markets including parcel, warehousing & distribution. The DM3610 is certified in Legal-For-Trade applications and its highly accurate measurements make it the perfect solution for spatial management applications. In the 2-head configuration, the DM3610 can provide dimensions for irregular as well as cuboidal objects.

Used in conjunction with barcode scanners and scales, the DM3610 improves operations for systems such as AS/RS, trailer cubing, manifesting and revenue recovery.



## HIGHLIGHTS

### Accurate dimensioning at high speed:

- NTEP certified accuracy of  $\pm 0.2''$  for length and width and  $\pm 0.1''$  for height at belt speeds up to 620 fpm
- OIML certified accuracy  $\pm 5$  mm for length, width and height at belt speeds up to 3.1 m/s

### "Plug-and-Play" functionality:

- Simple parameter upload simplifies field replacement

### Reliability:

- IP65 rating
- $-10^{\circ}$ – $50^{\circ}$  C ( $14^{\circ}$ – $122^{\circ}$  F) operating temperature
- Industrial M12 connectors

## APPLICATIONS

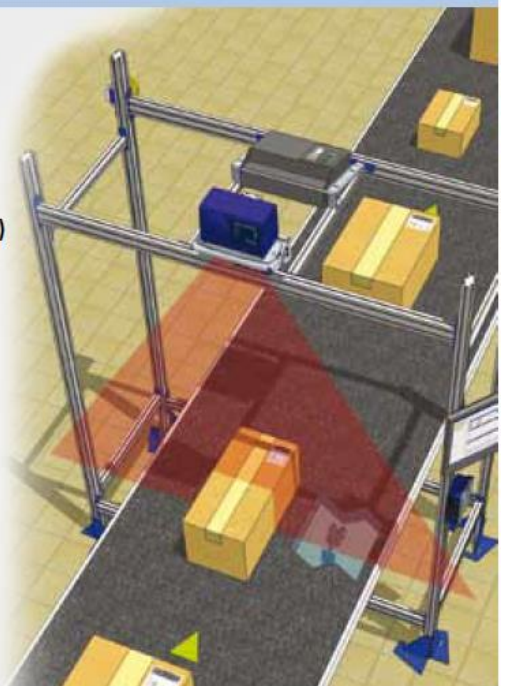
Typical DM3610 Dimensioning solutions address these industries and applications:

### Courier, Express & Parcel (CEP)

- Revenue recovery

### Warehousing & Distribution

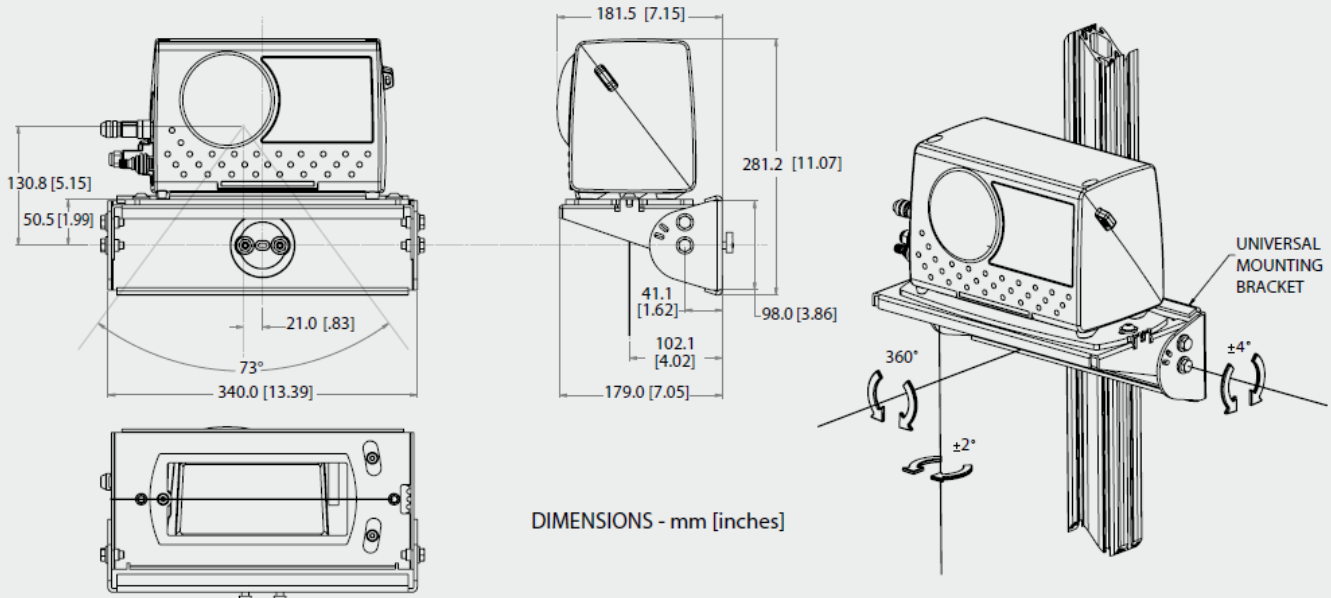
- AS/RS space allocation
- Trailer load planning
- Automated manifesting systems



**\*\*Cited from Datalogic DM3610 Reference Manual**

# DIMENSIONER

## MECHANICAL DRAWINGS



## SPECIFICATIONS

CONFIGURATION	DM3610 1-HEAD SOLUTION	DM3610 2-HEAD SOLUTION
Material flow	Singulated Cuboidal Gap ≥20mm [.08"]	Singulated Irregular Gap ≥25mm [1"]
Dimensioning Accuracy <ul style="list-style-type: none"><li>■ NTEP</li><li>■ OIML</li></ul>	±0.2" for length and width, ±0.1" for height ± 5 mm for length, width and height	
Conveyor Speeds	Up to 3.1 m/s [620 fpm]	
Box Size (maximum)	L 2500 mm x W 1200 mm x H 900 mm [98"x 48" x 36"]	
Box Size (minimum)	L 50 mm x W 50 mm x H 50 mm [2.4" x 2.4" x 2.4"]	
Laser Type	Visible laser diode (red) 660nm, CDRH Class II, IEC 60825-1 Class 3R	
Temperature	Operating: -10° to 50° C [14° to 122° F] Storage: -20° to +70° C [-4° to +158° F]	
Relative Humidity	10-90% non-condensing	
Power Requirement	24VDC +/- 10%	
Power Consumption	19 W Average (75 W Max) per Head	
Enclosure	IP 65, Aluminum	
Status Indicators	LEDs - STATUS, TRIGGER, TACH, READ, RX/TX, NETWORK, DIMENSION STATUS INDICATORS	
Communication Interfaces	Ethernet (TCP/IP), RS232/ RS422/RS485	
Inputs	(1) Tachometer, (1) Trigger, (2) SW programmable general purpose	
Programming	On board HTML web server interface	
Service Options	Installation services and on-site training	
Warranty	2-year limited, parts and labor	
Compliances	UL, cUL, FCC (Class A) CE	
Legal for Trade Certifications	OIML/MID, NCWM/NTEP*, Measurement Canada* *2-HD solution NTEP and MC certifications pending	

**\*\*Cited from Datalogic DM3610 Reference Manual**



# SCANNING OPTION - AV7000

AV7000 is the innovative linear camera setting a new paradigm in the T&L market.

AV7000 is characterized by superior optic performance, extended Auto-ID capabilities, advanced SW functions for image elaboration and data archiving, with excellent tools for operational analysis and process optimization.

Combining the benefits of a next generation CMOS sensor with 40% greater sensitivity and exclusive Datalogic patented technologies, the new AV7000 provides High Definition Images and software functionality that exceed customer expectations.

With a large Field of View (1400 mm -55 inch), the AV7000 is the perfect solution to collect High Definition images in a single picture on a large conveyor, instead of multiple partial pictures.

Thanks to Pulsed Lighting Systems – a Datalogic patented technology – a multi-sided AV7000 reading station now requires 50% less space than a non-pulsed lighting system for applications that demand a smaller footprint.

The AV7000 camera system is ideal for the most demanding applications in Parcel Sorting for Express Courier and Retail Distribution Company.



Pulsed  
Lighting  
System



Next generation  
high performance  
CMOS sensor



Digital  
Zoom



Single shot  
high definition  
image



Next generation  
autofocus system



Stop-N-Go  
reading  
conditions



Next generation  
decoding library



Web browser  
configuration tool



LINUX  
Operating  
System

## HIGHLIGHTS

- Next generation CMOS sensor with 40 % greater sensitivity
- Single view high quality picture for large conveyors (1400 mm/55 inch)
- Patented Autofocus System offering extended DoF
- Patented PLS technology technology, reducing the footprint of the reading station by 50%
- Patented Digital Zoom technology assuring constant DPI resolution
- Next generation decode algorithm for poor quality codes
- Multiple format image saving from full definition to highly compressed JPG
- Browser based interface compatible with any kind of OS and HW platform including PC and Tablet
- Redundant architecture with no single point of failure
- Software tools for image saving and data intelligence
- Linux operative system

## TARGET MARKETS AND APPLICATIONS

- Parcel sorting
- Dimension Weigh Scan System
- OCR and Videocoding
- Extended ID and image saving

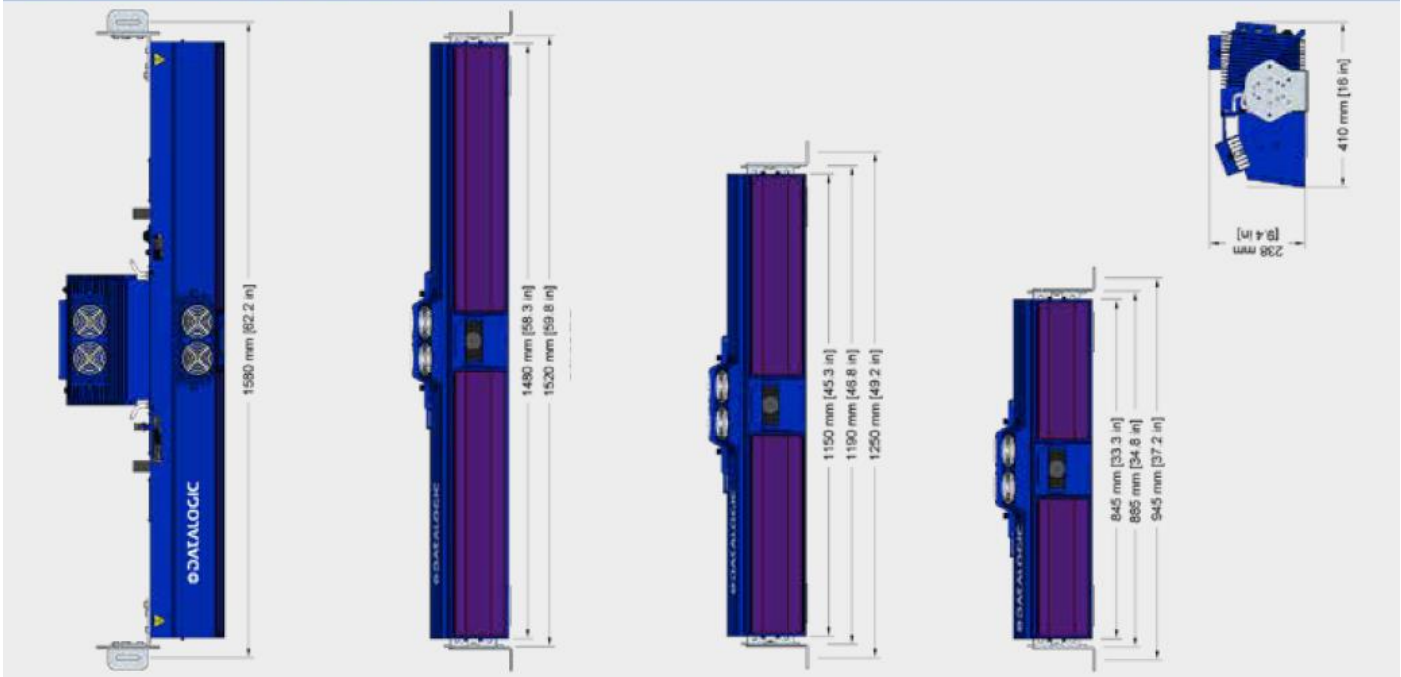
**\*\*Cited from Datalogic AV7000 Reference Manual**

# SCANNING OPTION - AV7000

## TECHNICAL SPECIFICATIONS

Field of View	up to 1400 mm (55.12 in)
Max Resolution	110 to 260 pixels/inch (DPI) *
Scan Rate	33,000 scans/s (33kHz)
Imager Sensor Features	High Speed CMOS Line Scan (8192 pixels)
Optical lens	90 mm, 110 mm and 140 mm *
Aperture Angle	15° to 45° *
Readable Barcodes	All Standard 1D and 2D Symbolologies
IP Rating	IP65
Dimensions (Typical Value)	with external fans and Short Illumination: 845x416x237 mm [33.3x16.4x9.3 in] with external fans and Medium Illumination: 1150x416x237 mm [45.3x16.4x9.3 in] with external fans and long Illumination: 1480x416x237 mm [58.3x16.4x9.3 in]
Weight	11 kg [24 lbs]
Temperature Range	Operating: 0° to 50° C [32° to 122° F] Storage: -20° to 70° C [-4° to 158° F]
Power Supply/Consumption	23-26VDC at illuminator connector
Case Material	Aluminum die-cast
Ethernet	1 Gigabit Ethernet for decoding data to Host (may also be used for setup) 1 Gigabit Ethernet for image file transfer to Host
Serial Ports	1 Main (COM) RS232/RS485FD opto-isolated serial port up to 115.2 Kbit/s 1 Aux RS232 opto-isolated serial port up to 115.2 Kbit/s
Internal Communication System	SyncNet Technology
Digital Inputs	3 x Inputs (2 + 1 x "Encoder"), optocoupled, NPN/PNP
Digital Outputs	2 x Outputs SW programmable, optocoupled, event driven, NPN

## MECHANICAL DRAWINGS



**\*\*Cited from Datalogic AV7000 Reference Manual**

# SCANNING OPTION - AV900



## AV900™ – HIGH PERFORMANCE 2D READER

The AV900 is the innovative 2D image-based reader setting a new paradigm for logistic applications with high speed transportation systems on all conveyor sizes, airport baggage handling systems, as well as static reading applications.

With the very high resolution 9 MP sensor, dynamic or adjustable focus, and multiple lens options, the AV900 reader creates a new optical standard for unattended data capture solutions. Continuous frame acquisition, no-flashing white or red integrated illumination, and colored spot indicators make AV900 reader the unprecedented solution for operator attended applications, as manual object presentation in overhead scanning mode or manual conveyor loading.

## ENHANCED SOFTWARE FEATURES

PackTrack™ capability allows the AV900 to minimize the gap between objects and increase the system productivity. FPGA hardware acceleration for real time image elaboration. Captured images are stored on-board and optionally transferred to external supports through the integrated Gigabit Ethernet connectivity.

## EASY INTEGRATION

Installation and configuration are made easy with multi-language, browser based, on board HTML web server interface e-GENIUS™ as well as X-Press™ setup interface and integrated aiming lasers. Fully compatible with WebSentinel™ PLUS for real time performance monitoring.

The AV900 reader interfaces directly to PROFINET or Ethernet IP enabled PLC's with two Ethernet TCP/IP and two serial communication interfaces. SyncNet™ Technology with Master/Slave allows enables a simplified way to network multiple devices in a solution with a single interface. A dedicated high-speed image saving port further enhances the integration in any data capture solution.

## RUGGED INSIDE AND OUT

Rugged metal enclosures with an IP65 rating. All metal integrated illumination housing that can withstand dialing cleaning with hash cleaners. Active cooling to maintain optimal processor performance with an operating temperature up to 50 °C, guarantees a long-life cycle in the harshest industrial environments.

## FEATURES

- 9 MP image sensor, up to 32 FPS
- Patented dynamic or adjustable focus system offering extended depth of field
- Continuous, no-flashing white or red illumination
- Region Of Interest Windowing for higher frame rate
- Next generation decode algorithm for outstanding decoding capability on 1D, 2D, Stacked, or Postal symbologies
- Gigabyte Ethernet and SyncNet high speed connectivity
- PackTrack capability for closer item spacing
- Multiple format image saving from full definition to a highly compressed .jpg
- Datalogic's patented 'Green Spot' technology for visual good-read feedback
- Dual laser aiming for ease of installation
- e-GENIUS browser based interface compatible with any kind of operating system and hardware platform including PC's and Tablet
- Extreme Industrial grade: IP65 for harsh environments with 0 to 50 °C / 32 to 122 °F operating temperatures

## INDUSTRY - APPLICATION

### Transportation & Logistics:

- Automated sorting
- Manual sorting
- Dimension Weigh Scan System
- Non conveyable Auto dimension systems
- Carton and tote traceability
- OCR and Videocoding
- Extended ID and image saving

### Distribution and Retail:

- Order fulfillment and verification
- Multimedia sorting
- Reverse Logistics process

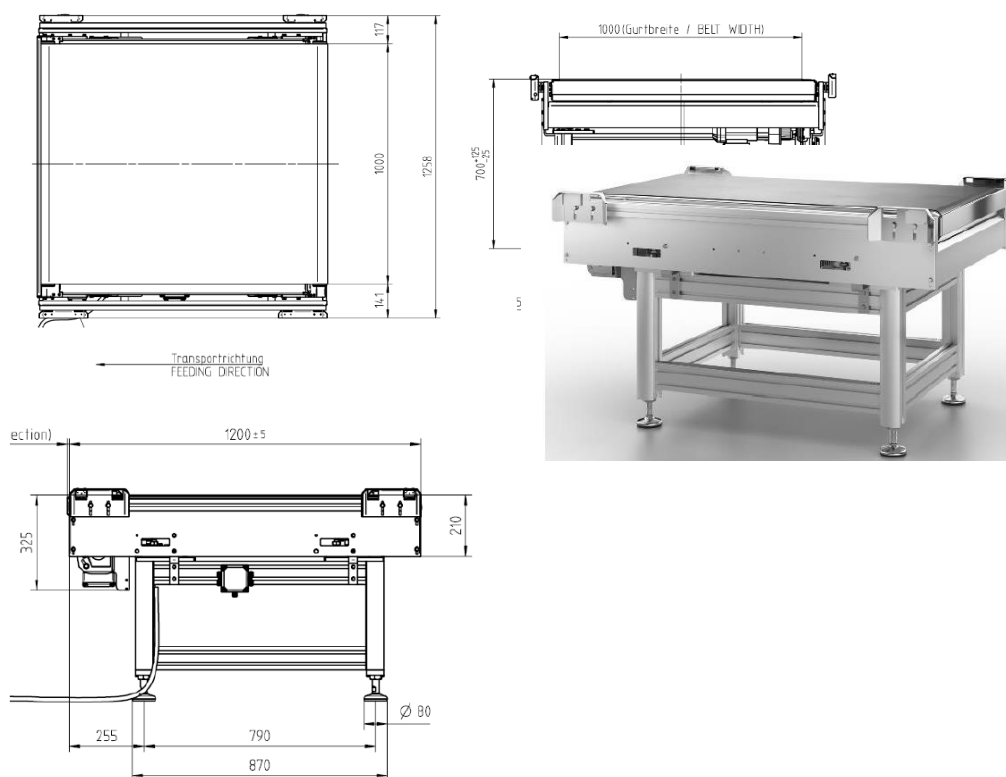
### Airports:

- Baggage handling systems
- Automated tag reading

**\*\*Cited from Datalogic AV900 Reference Manual**



# WEIGHING SCALE



*Drawing is for illustration purposes only and does not represent the proposed equipment.  
External display is not included.*

## Product description

The CWL-L can be easily integrated in your intralogistic conveyor system, e.g. sorting application infeed line or parcel shipping system. Efficiently configured and parameterized by means of the provided Bizerba software configuration tool it impresses as a catchweigher with its fast and exact weight determination – even at high speeds of up to 3.1 m/s.

It reliably checks fill quantity, piece weight, completeness and quality in weighing ranges from 15 to 60 kg.

Due to its modular concept and numerous options the CWL-L adapts to your individual needs. It can be flexibly combined with the Bizerba weighing terminals iS30 Logistics Weighing Terminal, iS50 Logistics Weighing Terminal and WM-3 Logistics Weighing Terminal and can be expanded to a system with Bizerba labelers, scanners and volume measuring devices.

**\*\*Cited from Bizerba CWL-L Reference Manual**

# WEIGHING SCALE



CWL-L with weighing module



Inclination of up to 20°

## Highlights

- High speeds of up to 3.1 m/s
- High resolution up to 6,000e
- Start-stop operation
- Broad spectrum of height and width dimensions
- Height adjustment of transport rollers with millimeter precision
- Modularly expandable with Bizerba labeler, scanner and volume measuring device
- Maintenance-friendly design: Easy belt and toothed belt change
- Numerous interface options and dialogs
- Configurable program processes: Completeness check and commissioning control
- Totaling and print release without external PLC control
- Metrologically certified: OIML, GUS, NTEP, more upon request

## Options

- |   |                     |
|---|---------------------|
| – Reverse operation                                     | – Universal bracket |
| – Potential-free inputs/outputs, optically or via relay | – Light curtain     |
| – Power supply unit 24 V DC, 1 A                        | – Starter kits      |
| – Frequency converter                                   | – Emergency stop    |
| – Motor version with AND8 plug-in connector             |                     |

**\*\*Cited from Bizerba CWL-L Reference Manual**