



Palletizing Made Easy

Lightweight Layer Grippers ZLW

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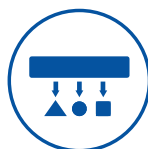
The Lightweight Layer Gripper ZLW is the ideal solution for palletizing with smaller robots and cobots. Thanks to individually adapted size and performance, you can design palletizing and depalletizing processes sustainably and efficiently. The flexible sealing elements grip a wide variety of workpieces – regardless of shape, dimensions and surface finish.

Highlights



Low gripper weight

Increased process efficiency and reduced initial costs through the use of robots with lower payload



Variable suction area

Optimally adapted to the workpiece position and equipped with flexible sealing elements



High energy efficiency

Minimized vacuum generation power due to suction grid design optimized for the particular workpieces



Complete solution from a single source

Optimally coordinated gripping system incl. vacuum generation and controllable valves

Lightweight Layer Grippers ZLW

More Flexibility Thanks to Modularity



Lightweight Layer Gripper ZLW when handling cardboard boxes

Applications

- Layer gripping system for automated EOL palletizing processes with lightweight robots
- Feeding workpiece layers into production
- Pick-and-place in the production process
- Pick-and-pack packaging processes
- Handling of various workpieces such as packages, packaging, pouches, jars, cans and buckets



Open round workpieces
Glasses
Cardboard containers
Buckets



Closed round workpieces
Cans
Perfume containers



Rectangular workpieces
Cardboard boxes
Bags
Intermediate layers



Design

- Rigid flange (1) for connection to common robots and portals
- Optional: Spring mounted flange to compensate for height differences in the workpiece layer (2)
- Venting valve (3) to protect the gripper from overpressure
- Workpiece layer based design of the gripper with sealing element made of sealing foam (4) or plug-in suction cups (5)

Design Lightweight Layer Grippers ZLW

Performance optimized vacuum generation



Basic ejectors SBPL

- Suction rate up to 1.140 l/min
- Max. vacuum: 61 or 90 %



Vacuum blowers SB

- Suction rate up to 1.250 m³/h
- Max. vacuum: 40 %



Vacuum pumps EVE-TR

- Suction rate up to 244 m³/h
- Max. vacuum: 92 %



Vacuum filters

- Nominal flow rate up to 480 m³/h

Configuration and Technical Data

Designation Code Lightweight Layer Grippers ZLW



1 – Abbreviated designation

Code	Type
ZLW	Lightweight layer gripper

2 – Flange

Code	Type
RD	Rigid
FL	Spring mounted

3 – Dimensions

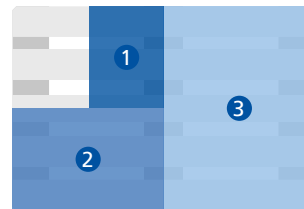
Code	LxW in mm
450x350	450x350 1
650x450	650x450 2
850x650	850x650 3

4 – Sealing element

Code	Height / Diameter in mm
O10KS	Sealing foam (H = 10)*
O20KS	Sealing foam (H = 20)*
O10ZS	Sealing foam (H = 10)**
O20ZS	Sealing foam (H = 20)**
SPB2 40 SI	Suction cups (Ø = 40)***

5 – Raster

Code	Hole spacing in mm
20T	20
40T	40
50T	50
55T	55



*Cone shaped universal standard sealing foam

**Cylindrical universal standard sealing foam

***Plug-in bellows suction cups made of silicone

Technical Data Lightweight Layer Grippers ZLW

Gripper dimensions	850 x 650 mm		650 x 450 mm		450 x 350 mm	
	Sealing foam	Suction cups	Sealing foam	Suction cups	Sealing foam	Suction cups
Reference size	1/2 Euro pallet		1/4 Euro pallet		1/8 Euro pallet	
Sealing element	Sealing foam	Suction cups	Sealing foam	Suction cups	Sealing foam	Suction cups
Gripper weight [kg]	9,0	11,2	5,1	6,5	3,0	3,9

The Lightweight Layer Gripper ZLW can be configured individually. We will be happy to offer you further gripper dimensions on request. Contact us for an individual system design, regarding the technical feasibility of your specific application as well as for carrying out tests with your original workpieces:

Request product

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Book live demo

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