

# **Lightweight Grippers SLG**

Configuration examples



**Grippers for special applications** with separate suction zones, minimal overall height and combinations of vacuum and magnetic grippers



**Examples of automateddetection** of interfering contours on the workpiece side that are recognized and taken into account in automatic



Individual grippers for complex components and customized positioning of the individual suction cups on the workpiece



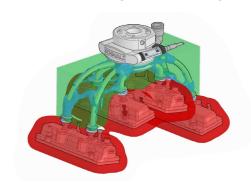
Variable-area grippers up to 350 x 350 mm



Lightweight gripper SLG with eccentric flange



### Generative design of the SLG gripper



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The topology optimization optimally adapts the gripper's support structure to the loads of the workpieces, resulting in a stiffer, bionically optimized design.

The lightweight gripper SLG is therefore suitable for demanding gripping scenarios. Thanks to innovative configuration solutions, time-consuming try-and-error processes are no longer necessary and topology-optimized grippers can be transferred directly from the configurator to production.







3D-printed for high-speed pick and place applications

# **Lightweight Grippers SLG**

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# **Lightweight Grippers SLG**

Individually configured, automatically designed, additively manufactured

The lightweight grippers SLG are ideal for use on lightweight, Delta or SCARA robots for the automated handling of different workpieces. Thanks to 3D printing, robots with low payloads can be used. Thanks to the automated design, short procurement times can be achieved.



#### **Applications**

- Individually configured, additively manufactured lightweight gripper for automated handling of different workpieces
- Ideal for use on lightweight robots and cobots
- Handling of cardboard boxes, bags and other free-form
- For use in the packaging, logistics and electronics industries, EOLP (end of line palletizing) and pick-and-place applications

## **Product Highlights**



## Automatic design

Short procurement times thanks to intelligent, software-supported gripper design.



**Additive** manufacturing

Higher payload of the robot due to low gripper weight and minimized interfering contours due to integrated air guidance.



Max. load 10 kg



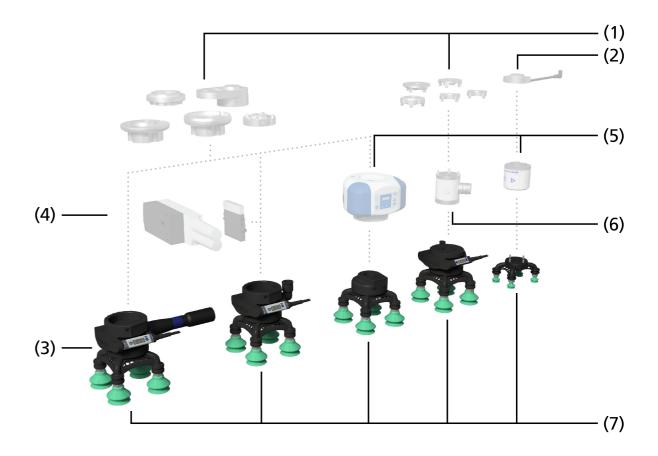
Dimensions L x W x H max. 350 x 350 mm x 250 mm



## Plug & Work

Quick start of operations thanks to suitable interfaces for common robot types.

#### Design



- Flange (1) or flange of the quick-change system MATCH (2) for connector to the robot
- Vacuum generator integrated in the gripper (3)
- External vacuum generation pneumatic (4) or electrical (5)
- Rotary union (6)
- Lightweight gripper SLG with various connection heads, depending on the vacuum generation used (7)

#### **Types of Vacuum Generation**



Customer-specific vacuum generation Use of a decentralized vacuum generator (vacuum blower, vacuum pump, ejector) from the extensive Schmalz program.



Connection for CobotPumps The electric vacuum generators ECBPi and ECBPMi provide a suction capacity of up to 12 l/min and are particularly suitable for handling workpieces with a low weight, such as sheet metal.



Integrated vacuum generation The integrated pneumatic vacuum generation by one or two ejector modules SEP supplies a suction capacity of up to 350 l/min and is particularly suitable for porous workpieces such as cardboard boxes.