

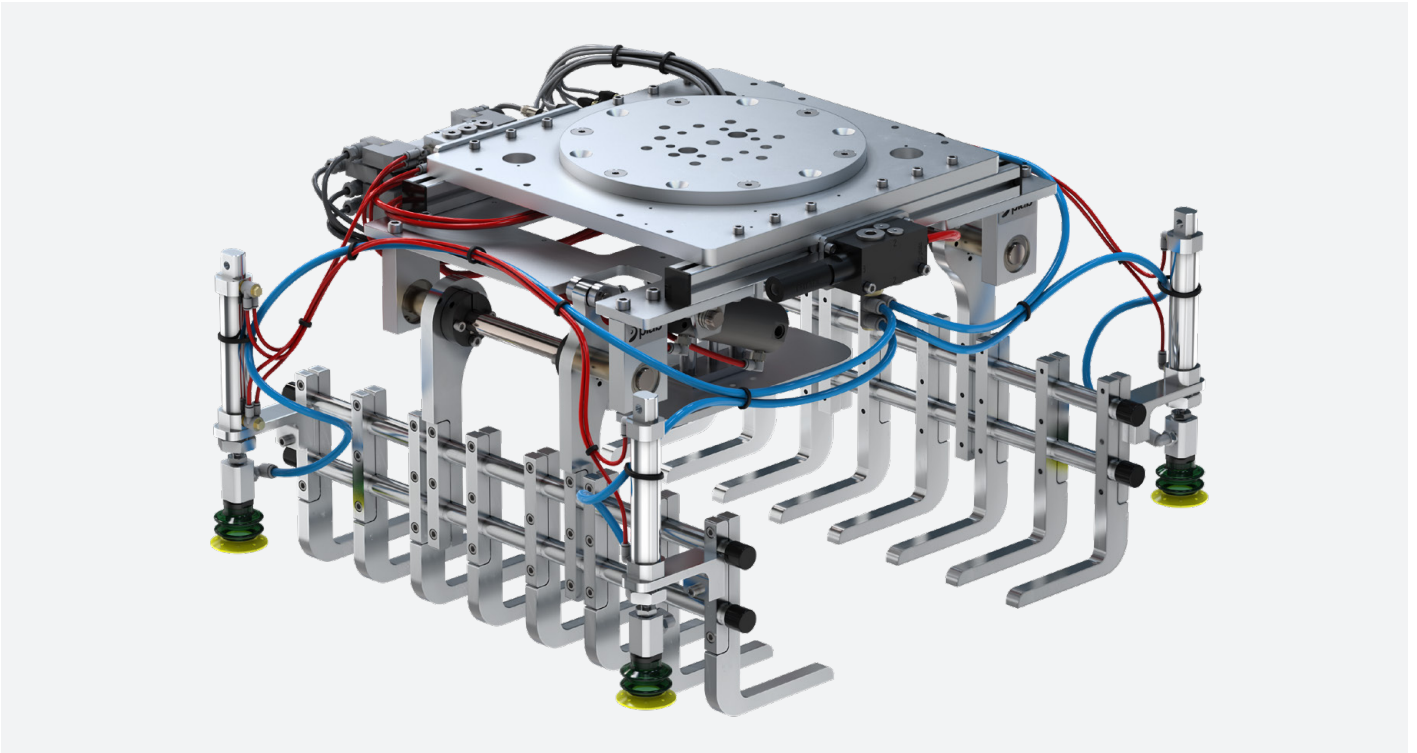


LBG-50

Bag lifting made easy

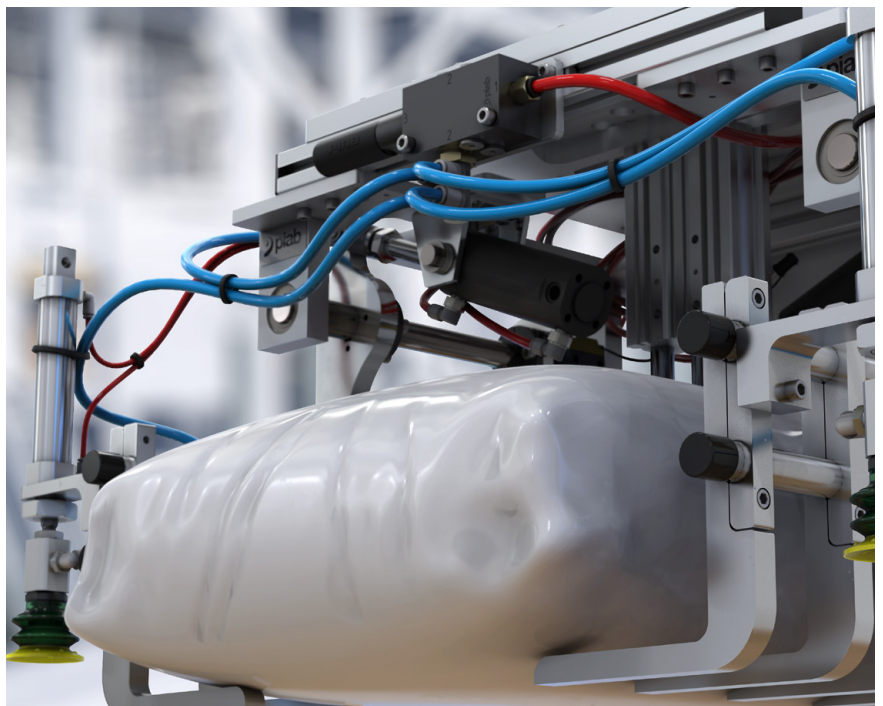
LBG-50

Lightweight bag gripper



LBG-50 is a multi-functional gripping tool that easily lifts sacks and bags with weights of up to 50 kg.

Handling sacks may pose a challenge as they are heavy and flexible, yet with a surface that is sensitive to pinching and puncture. The solution is spelled LBG-50, a lightweight bag gripper that securely handles sacks with weights of up to 50 kg. Slip sheet handling is performed just as gently with the aid of our vacuum-based upgrade option. LBG-50 is pre-engineered and therefore easy to install, finetune and maintain.



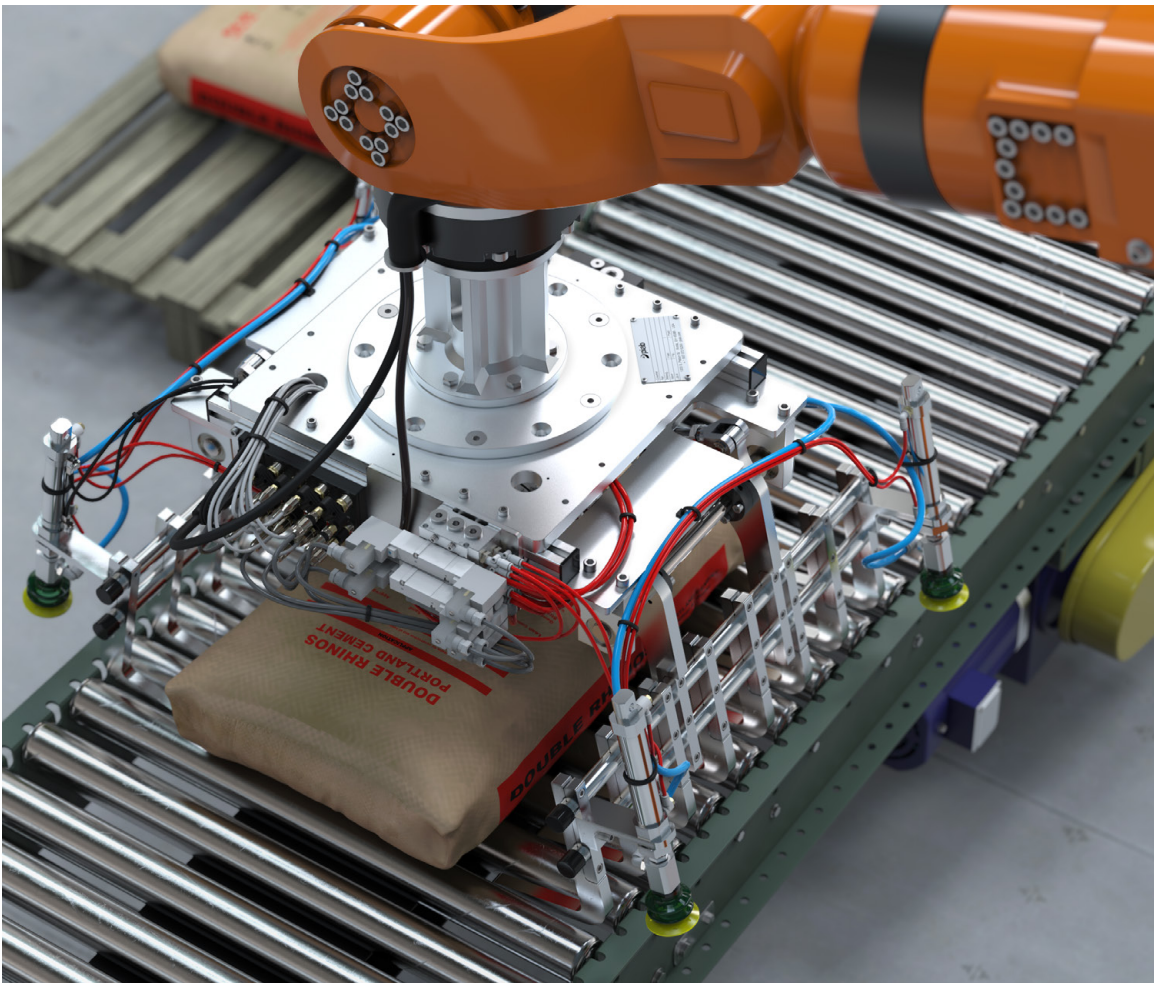


“LBG-50 is the result of our long experience from developing custom palletizing End-of-Arm-Tooling.”

Madeleine Sheikh, Product Manager, Piab Vacuum Automation Division

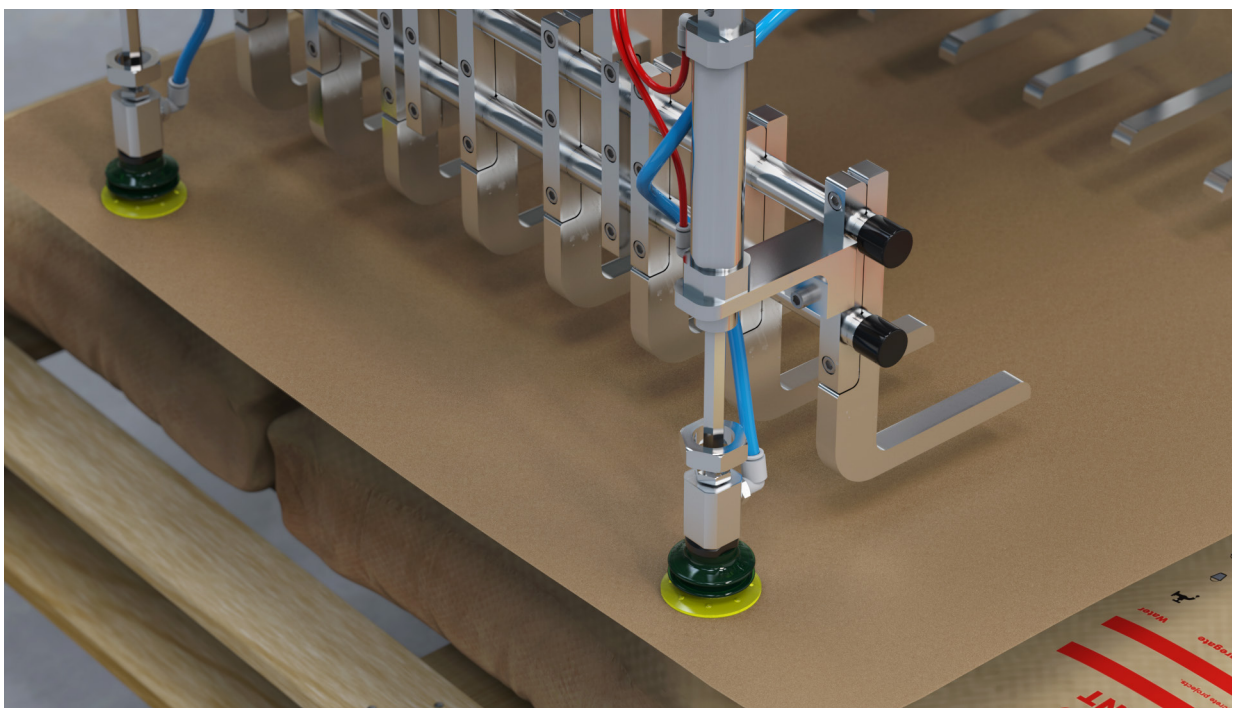


Read more:
go.piab.com/lbg50



LBG-50 combines the precision of carefully designed gripper fingers, that ensures a safe lift, with a built-in top clamp plate to limit bag movement during operation.

Slip sheet handling is enabled with our vacuum-driven tool supplement based on COAX® technology and Duraflex® suction cups.



Features

LBG-50 comes with a multitude of smart features based on our long-term research and cutting-edge technology. It is fully adjustable which guarantees an adaptive fit from every angle. This spares the sacks and prevents unwanted object movement which in turn maximizes the cycle speed. LBG-50 can effectively handle flaccid objects of virtually any soft cover material and dimension:

- Bags and sacks of paper, plastic, non-woven and cloth.
- Dimensions up to 495 x 650 x 215 mm with ≤50 kg weight.



Adjustable finger spacing allows easy fitting to any roller conveyor



Pre-engineered design saves valuable development hours



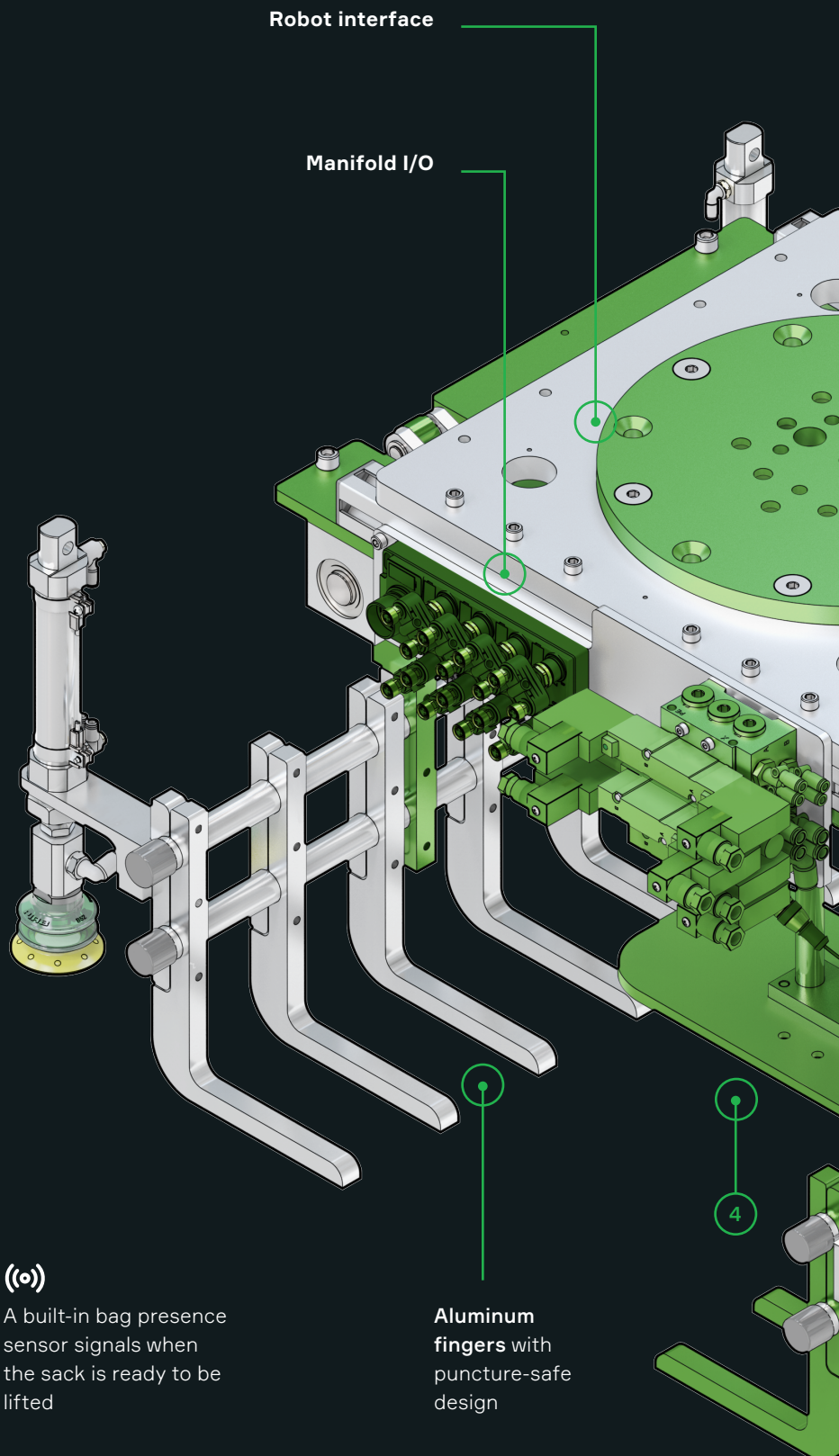
Vacuum-driven slip sheet handling upgrade offered



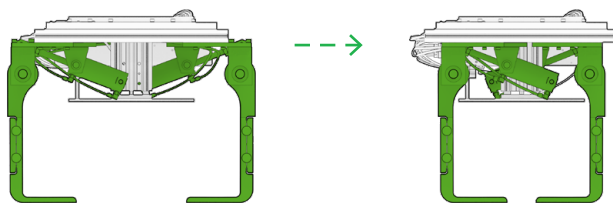
Lightweight tool design in aluminum maximizes the robot's payload



A built-in bag presence sensor signals when the sack is ready to be lifted



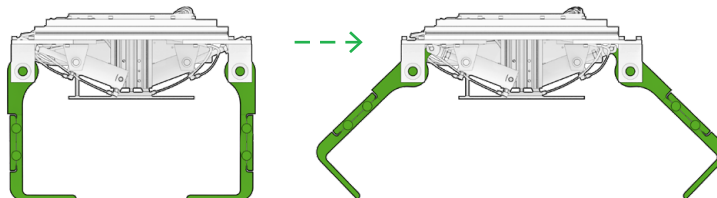
COAX® ejector & vacuum sensor



1

Adjustable width

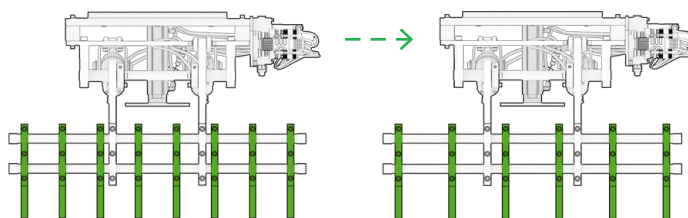
Easily adjusted grip to fit 295-495 mm bag widths.



2

Aligned jaws

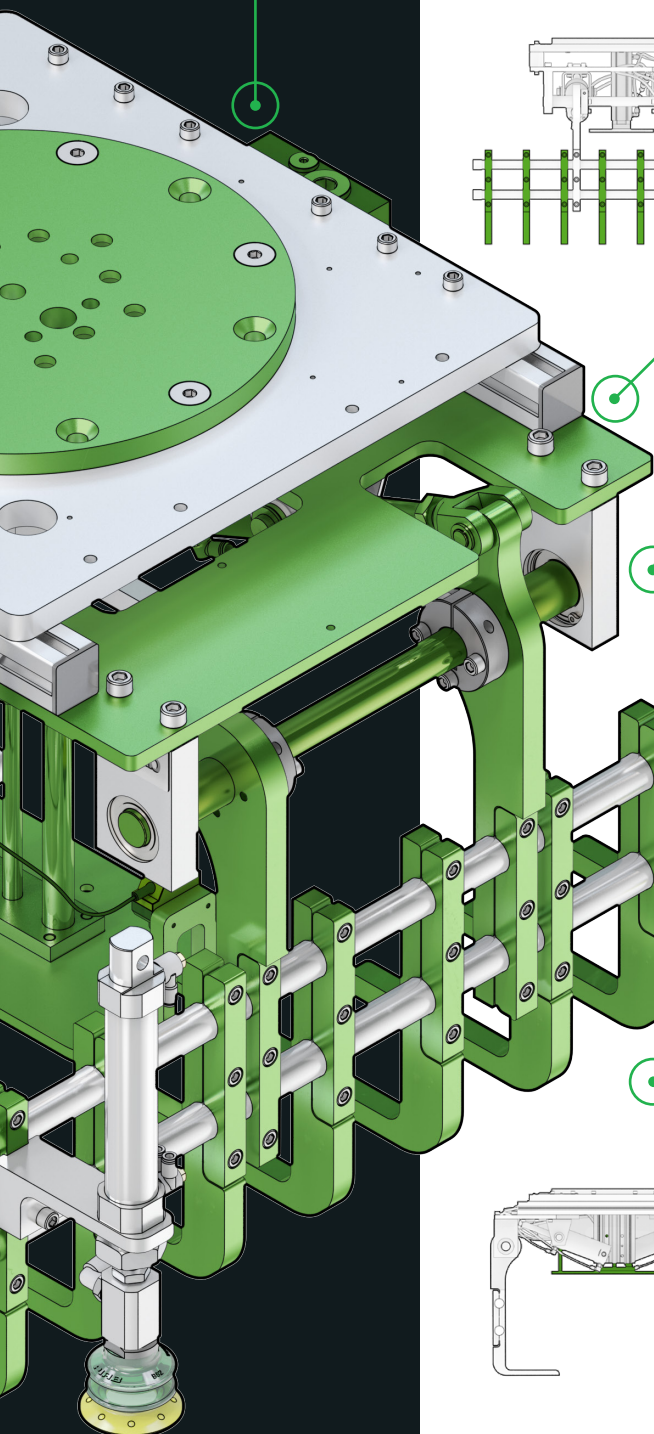
Simultaneous opening and closing for reliable grip, lift and release.



3

Tunable finger pitch

LBG-50 comes with pre-configured finger pitch for perfect adaptation to the roller conveyor. Fine-tuning or changes may be done in-situ.



1

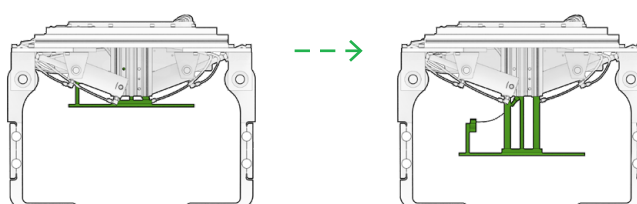
2

3

The slip sheet handling supplement consists of four lightweight units placed in the corners of the gripper. The main parts of each unit being:

Lightweight cylinder with pneumatically driven piston to enable vertical movement of the suction cup.

Duraflex® suction cup, optimized for secure slip sheet handling.



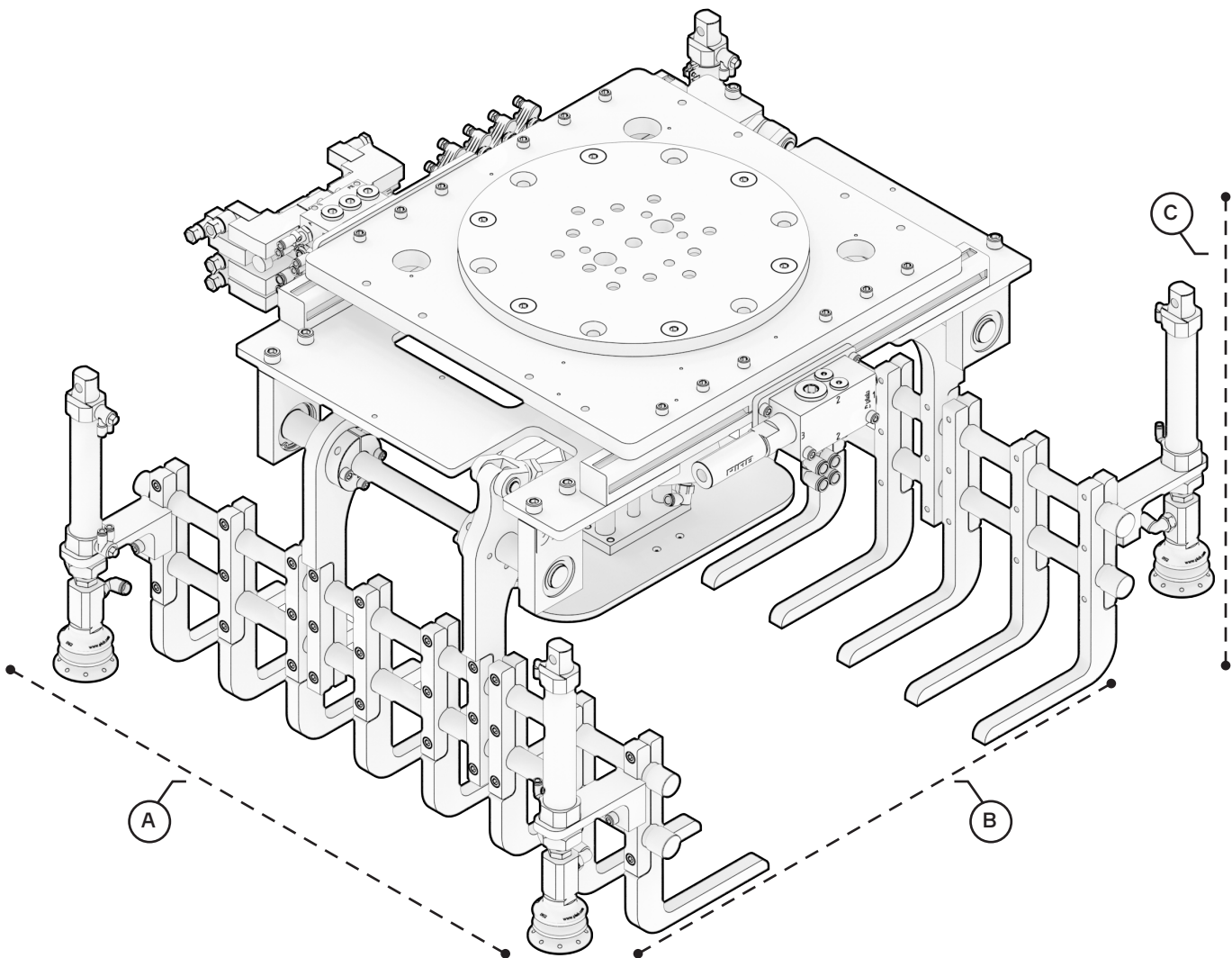
4

Active top clamp plate

Secure vertical grip during robot motion facilitates maximized cycle speed.

Technical information

Specifications



Gripper data

| | |
|------------|---------------------------|
| Material | Aluminum, Stainless steel |
| Weight | ~24-33 kg |
| Length (A) | 612-712 mm |
| Width (B) | 384-766 mm |
| Height (C) | 510 mm |

Bag data

| | |
|-------------|------------|
| Max. length | 650 mm |
| Width | 295-495 mm |
| Height | 15-215 mm |
| Max. weight | 50 kg |

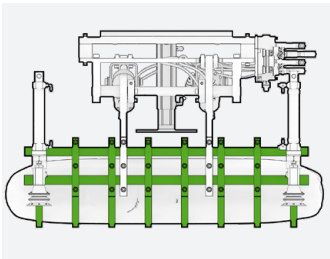
Manifold I/O

| |
|--------------|
| EtherNet/IP |
| PROFINET |
| Discrete I/O |

Slip sheet system data

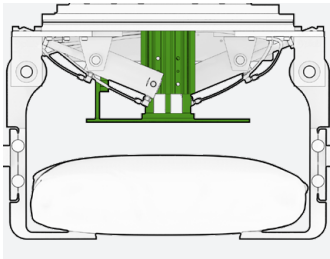
| | |
|----------------|----------------------|
| Suction cups | BX52P |
| Vacuum ejector | Vacuplus MIDI Si32-2 |

Configurator code



Length fingers*

| Code | Options |
|------|---------|
| 600 | 600 mm |
| 700 | 700 mm |



Bag clamp stroke*

| Code | Options | Bag height |
|------|---------|------------|
| 100 | 100 mm | 115-215 mm |
| 125 | 125 mm | 65-190 mm |
| 150 | 150 mm | 15-165 mm |

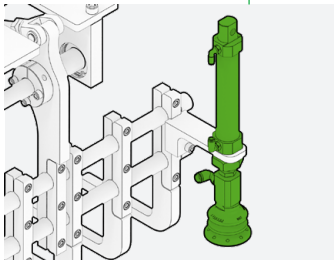
LBG50 . 600 . 75M . 150 . A . SS . ENN . EN

Finger pitch*

| Code | Options |
|------|---------|
| 3I | 3" |
| 35I | 3 1/2" |
| 75M | 75 mm |
| 90M | 90 mm |

Robot fixing interface

| Code | Options |
|------|----------------------|
| A | ISO 9401-1-80-6-M8 |
| B | ISO 9401-1-100-6-M8 |
| C | ISO 9401-1-125-6-M10 |
| X | Blank |



Slip sheet option*

| Code | Options |
|------|------------------------|
| SS | With slip sheet option |
| X | None |

Manifold I/O*

| Code | Options |
|------|---------------------------|
| EN | Serial Wiring EtherNet/IP |
| PR | Serial Wiring PROFINET |
| DIO | Discrete Input and output |
| X | None |
| Code | Options |
| N | NPN |
| P | PNP |

Manual language

Finger pitch

The preset center-center distance between the fingers. If a different spacing for the conveyor rollers are used, fingers may be adjusted accordingly.

Bag clamp stroke

The bag clamp facilitates the fixation of a bag on the fingers to secure best possible grip.

Slip sheet option

Enables slip sheet handling for palletizing purposes. Includes a COAX® driven vacuum generator and Duraflex® suction cups.

Manifold I/O

Ethernet, Profinet or Discrete I/O manifold blocks by SMC are Piab standard options. Alternatively, order without manifold to allow I/O solution from other vendors.

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