



FlexGripper Family

Grippers for palletizing – Clamp, Claw, Vacuum

Complete range of 3 palletizing grippers

Optimized for ABB Palletizing Robots

Claw for IRB 460/IRB 660



Vacuum for IRB 460/IRB 660



Clamp for IRB 460/IRB 660



Scope of supply

The FlexGripper is ready to plug-and-play on your chosen robot model

Items

- FlexGripper
- Dress Pack
- Graphical User Interface
- Product and user manual

Installation & commissioning

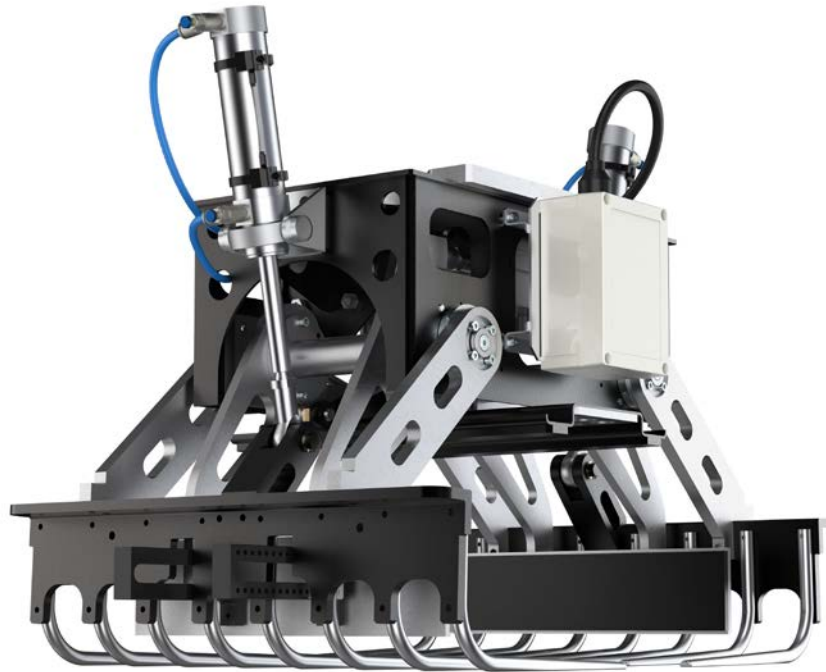
- 3 types of gripper open close test
- One click for gripper pick & place test
- Graphical user interface to tune robot

Programming

- Simple configuration of Inputs/Outputs
- RAPID module with gripper functions

Production

- Monitoring of all signal and production parameters



FlexGripper Claw

Gripper for palletizing

Product Management, ABB Robotics



FlexGripper Claw

Key Benefits

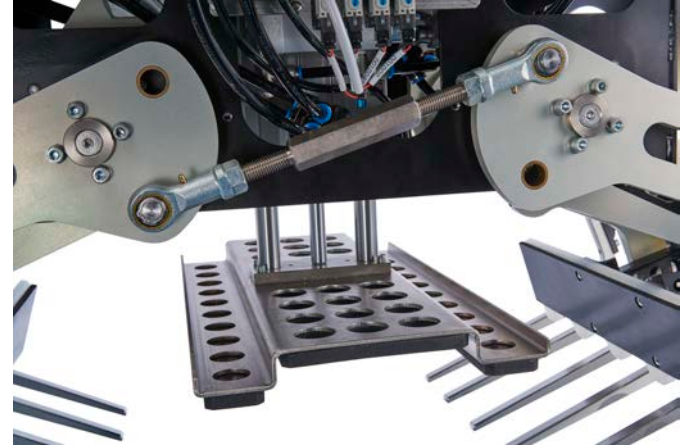
- For heavy duty bag palletizing up to 50 kg
- Varying bag shapes and contents
- Suitable for use in a wide range of industries
- Surface treatment for protection in extreme environments
- Product contacting parts made by stainless steel



FlexGripper Claw

Key Features

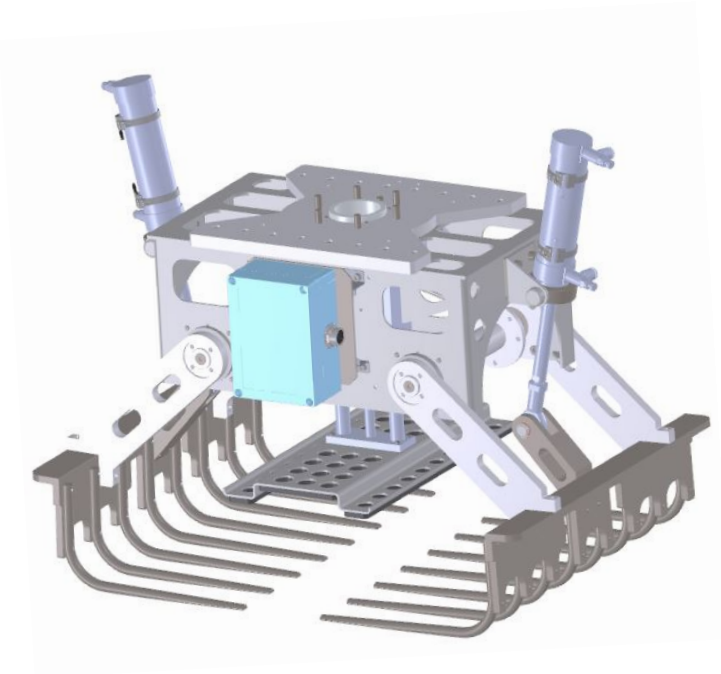
- Top press plate with 200 mm stroke for securing bag in position
- Pneumatically actuated side guide to centralize and secure position of bag
- Stroke of side guide is 100mm
- Stainless steel fingers replaceable



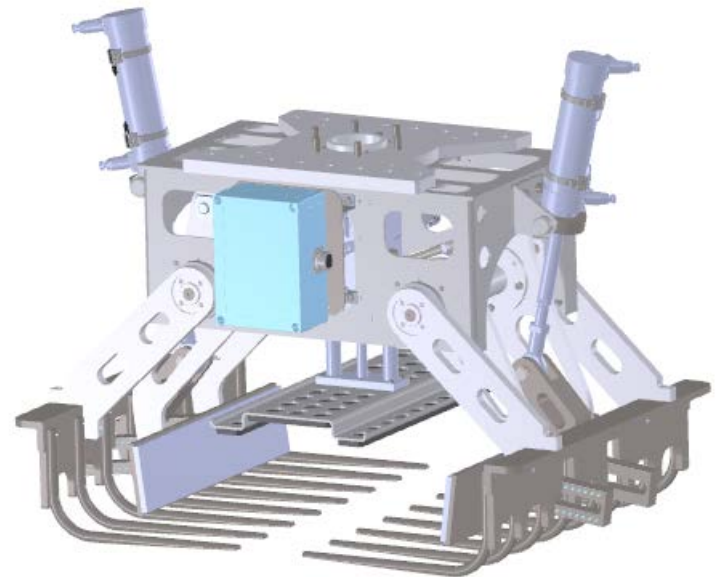
2 Configurations

Option: Side guide

Without Side Guide (Basic)



With Side Guide (add-on option)



FlexGripper Claw

Key specifications

Specification	Without Side Guide (Basic)	With Side Guide (Add-on option)
Handled product	1	
Max. weight/lift	50 kg	
Gripper weight	70 kg	
Finger interval	75 mm	
Bag height range	120 – 240 mm	
Bag length range	300 – 750 mm	
Bag width range	250 – 550 mm	250 – 450 mm
Cable rotation range	+/-180 °	
Air pressure (bar)	5-6 bar	



FlexGripper Vacuum

Gripper for palletizing

Product Management, ABB Robotics



FlexGripper Vacuum

Versatile gripper

Case



Picking of 1-10 cases

- 10 individual standalone suction cup zones for better box picking control
- Easy adjustable vacuum rails for different box sizes

Slip sheet



Detection and picking of slip sheet

- Search sensor
- Slip sheet module as an option for user preference.

Pallet



Detection and picking of pallet

- Search sensor
- Pallet gripper and Search cylinder as an option for user preference

FlexGripper Vacuum

Versatile gripper

Case

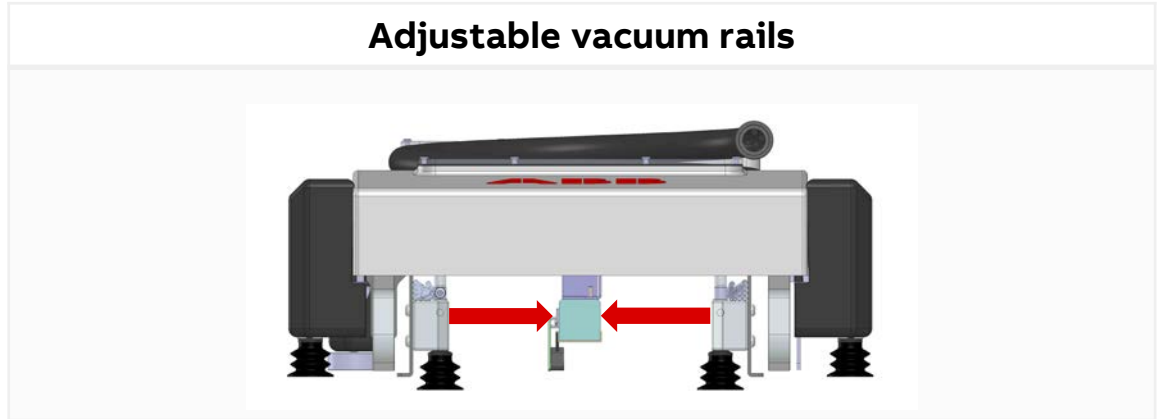


Picking of 1-10 cases

- 10 individual standalone suction cup zones for ease of box picking control
- Easy adjustable vacuum rails for different box sizes

Key Features: product size

Adjustable vacuum rails



- The width can be adjusted from 150 to 360 mm measured from the centre of the both rails
- Max. product size (LxWxH) 1200 x 500 x 300 mm
- Min. product size (LxWxH) 240 x 120 x 10 mm

FlexGripper Vacuum

Versatile gripper

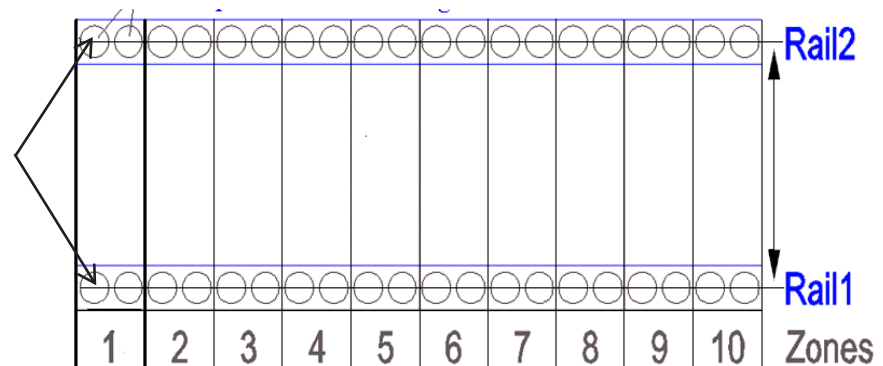
Case



Picking of 1-10 cases

- 10 individual standalone suction cup zones for ease of box picking control
- Easy adjustable vacuum rails for different box sizes

Key Features: number of products



- 10 separate, programmable zones
- Leakage in one zone will have no influence on other zones
- Effective on porous and uneven cardboard material

FlexGripper Vacuum

Versatile gripper

Case



Picking of 1-10 cases

- 10 individual standalone suction cup zones for ease of box picking control
- Easy adjustable vacuum rails for different box sizes

Key Features: product weight

Handling Capacity

- 40kg
- 5*8kg, or 4*10kg
- Run with full speed

Slim, simple, and light gripper design and weight for large payload capability

FlexGripper Vacuum

Versatile gripper

Pallet



Detection and picking of pallet

- Search sensor unit
- Pallet gripper and search cylinder as an option for user preference

Key Features: types of pallet

Handling pallets

- GMA pallet 1016 x 1219.2 x 139.7 mm (L*W*H)
- EUR pallet 1200 x 800 x 144 mm (L*W*H)
- AUS pallet 1165 x 1165 x 150 mm (L*W*H)
- ISO pallet 1200 x 1000 x 144 mm (L*W*H)

Search sensor / search cylinder unit

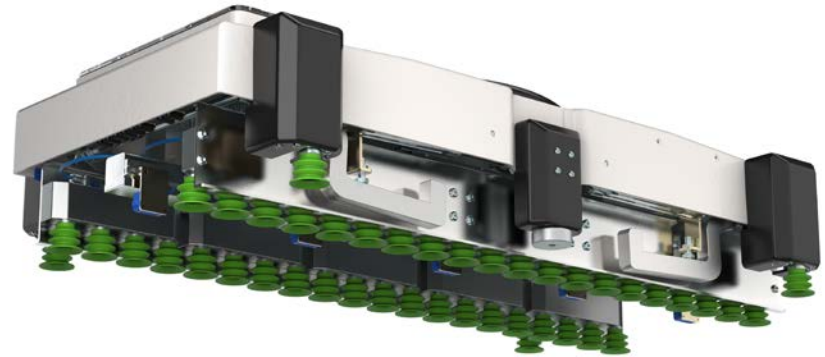
- To locate the top of pallet stack

FlexGripper Vacuum

Versatile gripper

Other Features

- Less wiring and tubing link across robot and gripper for quick installation time
- Visible component windows for easy troubleshooting.



4 Configurations

With basic component: with search sensor, without search cylinder (option)

Case only (Basic)



Case and Slip sheet



Case and Pallet



Case, Slip sheet, Pallet



2 Configurations

With add-on option: with search cylinder

Case and Pallet



Case, Pallet, and Slip sheet



FlexGripper Vacuum

Key specifications

Specification	Data
Handled product	1-10
Max. weight/lift	40 kg
Gripper weight	70 kg
Case height range	10 – 300 mm
Case length range	240 – 1200 mm
Case width range	120 – 500 mm
Cable rotation range	+180 °
Air pressure (bar)	5-6 bar

FlexGripper Vacuum

Key specifications of products handled with add-on gripper option

Specification

Data

Handled pallet types

GMA/AUS/EUR/ISO

Slip Sheet Size

1000 mm x 1200 mm



FlexGripper Clamp

Gripper for palletizing

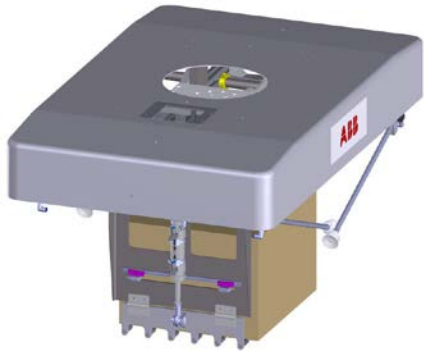
Product Management, ABB Robotics



FlexGripper Clamp

Versatile gripper

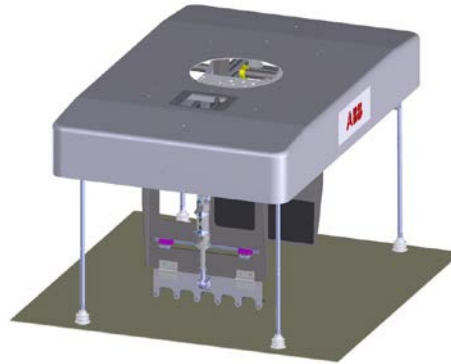
Case



Picking of cases

- Wide clamping stroke adapts to different case width
- Rubber pad to increase friction force
- Hook unit for high speed movements

Slip sheet



Detection and picking of slip sheet

- Search sensor
- Slip sheet module as an option for user preference.

Pallet



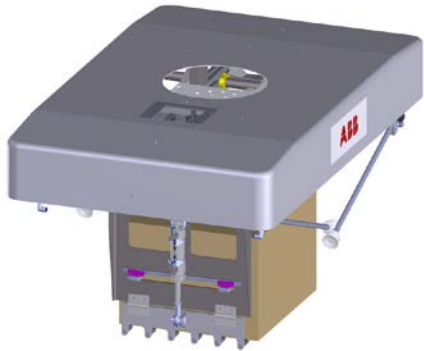
Detection and picking of pallet

- Search sensor
- Pallet gripper as an option for user preference

FlexGripper Clamp

Versatile gripper

Case

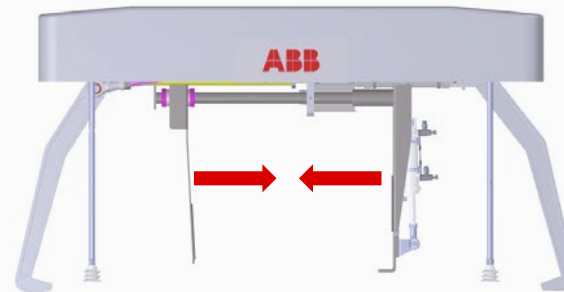


Picking of cases

- Wide clamping stroke adapts to different case width
- Rubber pad to increase friction force
- Hook unit for high speed movements

Key Features: product size

Adjustable stationary plate and pneumatic cylinder



- The width can be adjusted from 200 to 650 mm
- Max. product size (LxWxH) 650x 500 x 300 mm
- Min. product size (LxWxH) 200x 200 x 150 mm

FlexGripper Clamp

Versatile gripper

Pallet



Detection and picking of pallet

- Search sensor unit
- Pallet gripper as an option for user preference

Key Features: types of pallet

Handling pallets

- GMA pallet 1016 x 1219.2 x 139.7 mm (L*W*H)
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FlexGripper Clamp

Versatile gripper

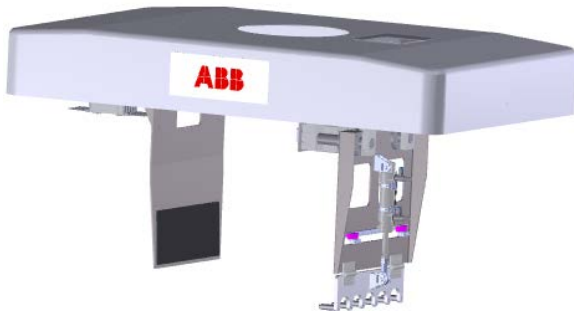
Other Features

- Less wiring and tubing link across robot and gripper for quick installation time

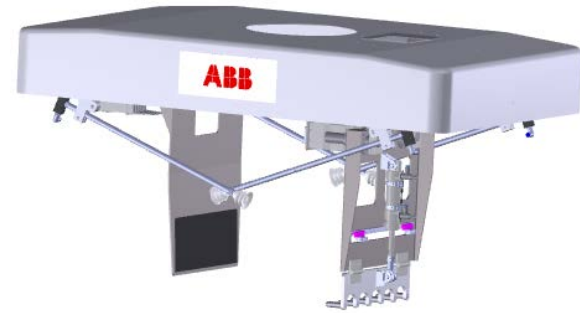


4 Configurations

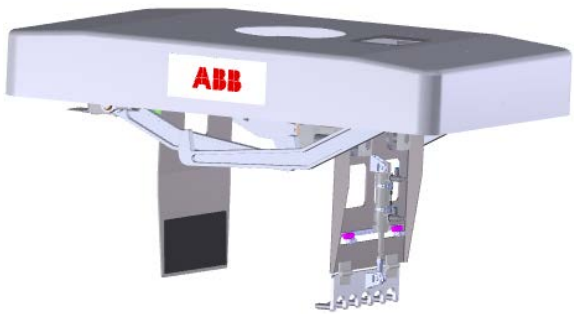
Case only (Basic)



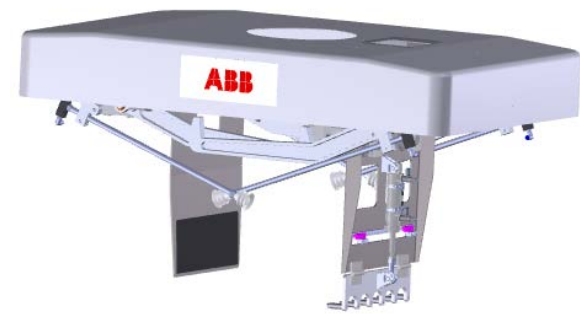
Case and Slip sheet



Case and Pallet



Case, Slip sheet, Pallet



FlaxGripper Clamp

Key specifications

Specification	IRB460	IRB660
Handled product	1	
Max. weight/lift	30 kg	70 kg
Gripper weight	80 kg	
Case height range	150 – 330 mm	
Case length range	200 – 650 mm	
Case width range	200 – 500 mm	
Cable rotation range	+180 °	
Air pressure (bar)	5-6 bar	

FlexGripper Clamp

Key specifications of products handled with add-on gripper option

Specification

Data

Handled pallet types

GMA/AUS/EUR/ISO

Slip dimension

1000 mm x 1200 mm

ABB