

FlexGripper - Vacuum Palletizing gripper

The FlexGripper - Vacuum is a simple plug-and-play extension to the ABB IRB 460 or IRB 660 palletizing robots. For maximum palletizing efficiency, the gripper can handle 40 kilograms and up to five products at the same time.



Wide-ranging flexibility

The IRB 660 and the compact IRB 460 palletizing robots can be made even more effective for end-of-line palletizing applications with the addition of the FlexGripper - Vacuum handling 40 kilograms and up to five products at the same time.

Easy to integrate, easy to use

The FlexGrippers are easy to install and program. The robot HMI, FlexPendant, comes pre-configured with FlexGripper input/output signals which greatly reduces both set up and programming time. And the graphical user interface simplifies the testing of palletizing routines. For example a FlexGripper pick-and-place test can be carried out with just a single click.

Faster, more accurate programming

ABB's range of palletizing robots and FlexGrippers are also fully supported by the RobotStudio Palletizing PowerPac. This user-friendly, PC based software, comes pre-configured with all ABB robots and gripper models. It allows users who have

little or no robot programming experience to create programs and simulations, and design complete palletizing installations. This enables a palletizing system to be configured rather than programmed, and saves up to 80 percent in commissioning time.

Speed and precision

The FlexGripper - Vacuum uses sensors to verify the presence of cases in 10 separate, programmable zones. The vacuum rails are adjustable for different case sizes, and the gripper includes a built-in pallet gripper as an option. The gripper comes complete with all air hoses and signal cables and is ready to plug-and play on your chosen robot model.

Unrivalled experience and global support

With more than 25 years of experience in the palletizing sector, ABB has a sales and service organization in 53 countries and over 100 locations.

FlexGripper - Vacuum

Highlighted features

- 10 separated controlled vacuum zones.
- Sensors to verify presence / absence of cases.
- Adjustable vacuum rails for different case sizes.
- Handles up to 5 products at one time.
- Built-in pallet gripper as an option.
- Robot mounting plate for IRB 460 and IRB 660 included.
- Completely assembled with hoses and cables and ready to plug and play.
- Graphical User Interface (GUI) provided on robot FlexPendant for easy gripper setup, tuning, and production monitoring.

Main applications

Case palletizing

Specification

Handled products 1-5

Max. weight per lift 40 kg

Gripper weight 75 kg

Maximum product size (LxWxH) 1200 x 500 x 300 mm

Minimum product size (LxWxH) 240 x 240 x 100 mm

Number of zones 10

Cable rotation range +- 180°

Air pressure 4-6 bar

Handled pallet types GMA/AUS/EUR/ISO

Remarks

1. The products to be lifted with the vacuum gripper must have a dense and smooth surface, and a rigid structure (e.g. cardboard case) on which the vacuum cups can grip.
2. Due to variations in size, weight, design, surface, rigidity, porosity and centre of gravity, an example of the type of product to be palletized should always be sent to LPG Robots and Applications in order to secure functionality.

