

# Bin Picking Vision Function Package

## Intelligent object gripping



The Bin Picking Vision Function Package simplifies the robot-assisted gripping of objects thanks to integrated artificial intelligence.

With the included software, the gripping points can be simulated offline using preset CAD data. As a result, the system is quickly ready for use and requires hardly any on-site programming after installation. The function package combines a camera, gripping technology and an ABB robot into a holistic system. It consists of a RobotWare add-in for the OmniCore robot controller, licenses for the image processing software, two cameras, a PC and the required high-end cables. The solution is compatible with all ABB robots.

### Key features and benefits

- Flexible picking solution for any type of parts
- Optimized separation of bulk material
- Precise positioning of picked parts through exact recognition of the depositing position
- Designed specifically for frequently changing part geometries / product variants
- Reduction of planning effort for setup and system configuration
- Simplification of programming
- Reduction of commissioning time

### Hardware components

- 2 cameras with specifically customized lenses
- Standard or industrial PC
- High-end cable set
- Mounting adapter for the robot

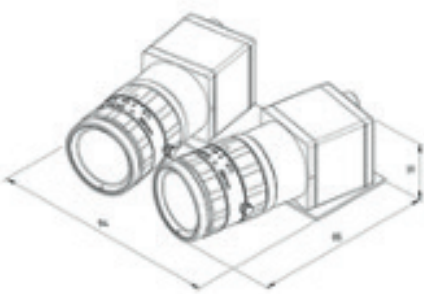
### Hardware options

- Various suction cups depending on the component geometry
- Alternating stations and quick-change systems for different component geometries

### Software components

- Prepared interface to the robot
- Licenses for image processing software
- Special RAPID instructions for controlling the robot

Technical Data



Cameras	
Available applications:	Pick / place / insert / locate
Prediction Time:	200 ms
Minimum part size:	1 mm x 1 mm x 1 mm
Light:	No structured light needed
Dimensions camera:	119 mm x 79 mm x 37 mm
Average picking cycle time w/ collaborative robot:	5 s
Average picking cycle time w/ industrial robot:	2,5 s



- Equipment
- Cables
  - Calibrated cameras
  - Computer
  - Mounting plate

**ABB AG**  
**Division Robotics**  
Grüner Weg 6  
61169 Friedberg  
Phone: +49 60 31 85-0  
E-Mail: [robotervertrieb@de.abb.com](mailto:robotervertrieb@de.abb.com)

[www.abb.de/robotics](http://www.abb.de/robotics)

**Note:**  
We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB AG does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.  
We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB AG.  
Copyright© 2023 ABB, all rights reserved.