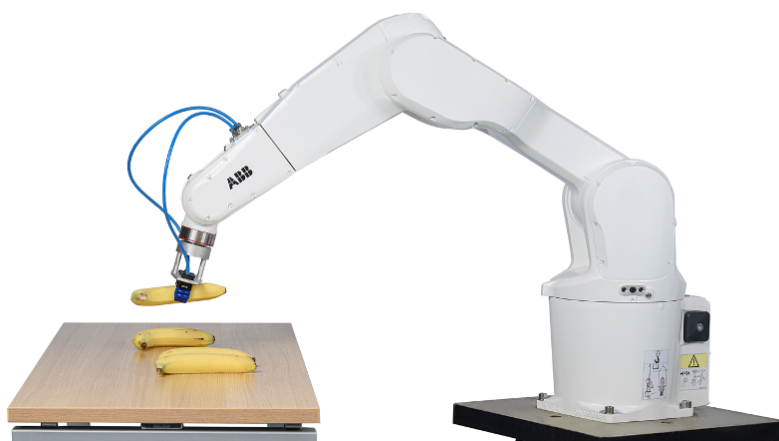


## IRB 1200 Hygienic

6 axes robot with hygienic features promoting food safety



IRB 1200 Hygienic robot option features wipe down and wash down cleaning (with a protection cover), safeguarding food safety and opening new application fields in food processing and food service.

### Hygienic design

The IRB 1200 Hygienic robot offers two types of cleaning: wipe down cleaning for use in low care food packaging environments and wash down cleaning, where the is fitted with a protection cover, for use in high care food processing and packing environments. For the Food & Beverage sector these new hygienic features promote food safety for primary packaging and hygienic food processing of products such as meat, fish, fruits, vegetables, and dairy produce and for the Food Service sector the new hygienic features promote food safety in food handling and assembly applications for quick service restaurants, kiosks and high-volume central kitchens.

### Easy to clean

#### Low Care Applications

The IRB 1200 Hygienic robot is easy to clean, it can be wiped down with a specified wipe down detergent and a lint free cloth.

#### High Care Applications

A cover can be fitted to the robot body and the IP69K (Max.30bar) stainless steel axis 6 flange can be cleaned using a defined cleaning regime and specified washdown detergents and sanitizers.

### Hygienic protection

The IRB 1200 Hygienic robot is equipped with special sealings and FDA compliant coatings,

the axes 6 tool flange is stainless steel. IP67-rated full body and IP69K (Max.30bar) rated on axis 6 flange prevent water, liquids, and solids ingress into the robot, ensuring stable production. NSF H1 Food Grade Oil throughout is designed to meet the constraints of the Food & Beverage and Food Service sectors.

### PickMaster® Twin

#### – from conception to operation and beyond

PickMaster Twin is the market leading robotic software for vision-guided random flow picking and packing applications. PickMaster Twin features digital twin technology, which increases productivity by dramatically shortening commissioning times from days to hours and changeover times from hours to minutes.

### Powered by OmniCore controllers

OmniCore C30 controller is a small footprint robot controller, the 19" rack and vertical mounting kits and reduced volume maximize ease of use and re-release control panel real-estate.

### Key features:

- FDA compliant paint
- Robot body protection class – IP67 throughout
- Axis 6 protection class - IP69K Max.30bar
- Axis 6 - stainless steel for hygienic protection
- NSF H1 Food Grade Lubrication
- Cable entry from the base bottom

# Hygienic robot

## Specification

| Robot version                      | Reach (m)                                                                                   | Payload (kg) | Armload (kg) |
|------------------------------------|---------------------------------------------------------------------------------------------|--------------|--------------|
| IRB 1200-7/0.7                     | 0.7                                                                                         | 7            | 0.3          |
| IRB 1200-5/0.9                     | 0.9                                                                                         | 5            | 0.3          |
| Number of axes                     | 6                                                                                           |              |              |
| Protection                         | Wipe down, wash down with cover Ax6 P69K, max. 30bar water pressure, max. 80°C temperature. |              |              |
| Mounting                           | Any angle                                                                                   |              |              |
| Controller                         | OmniCore                                                                                    |              |              |
|                                    | IRC5 Compact/IRC5 Single Cabinet                                                            |              |              |
| Integrated signal and power supply | 10 signals on wrist                                                                         |              |              |
| Integrated air supply              | 4 air on wrist (5 Bar)                                                                      |              |              |
| Integrated ethernet                | One 100/10 Base-TX ethernet port                                                            |              |              |

## Performance (according to ISO 9283)

|                           | IRB 1200-7/0.7     | IRB 1200-5/0.9     |
|---------------------------|--------------------|--------------------|
| 1 kg picking cycle        |                    |                    |
| 25 x 300 x 25 mm          | 0.41s <sup>1</sup> | 0.42s <sup>1</sup> |
| Max. TCP Acceleration     | 35 m/s*s           | 36 m/s*s           |
| Acceleration time 0-1 m/s | 0.06 s             | 0.06 s             |
| Position repeatability    | 0.02 mm            | 0.025 mm           |

<sup>1</sup> based on OmniCore C30 and E10

## Technical information

### Electrical Connections

|                                |                     |
|--------------------------------|---------------------|
| Supply voltage                 | 200-600 V, 50-60 Hz |
| Rated power transformer rating | 4.5 kVA             |
| Power consumption              | 0.39 kW             |

### Physical

|                |              |
|----------------|--------------|
| Robot base     | 210 x 210 mm |
| Robot height   |              |
| IRB 1200-7/0.7 | 869 mm       |
| IRB 1200-5/0.9 | 967 mm       |
| Robot weight   |              |
| IRB 1200-7/0.7 | 52 kg        |
| IRB 1200-5/0.9 | 54 kg        |

### Environment

|                                                  |                                                                    |
|--------------------------------------------------|--------------------------------------------------------------------|
| Ambient temperature for robot manipulator        |                                                                    |
| Hygienic during operation                        | + 5°C (41°F) to + 35°C (95°F)<br>If > 35°C (95°F), pls contact ABB |
| Complete robot during transportation and storage | - 25°C (-13°F) to + 55°C (131°F)                                   |
| During short periods (max. 24 hours)             | up to + 70°C (158°F)                                               |
| Relative humidity                                | Max. 95%                                                           |
| Noise level                                      | < 70 dB                                                            |

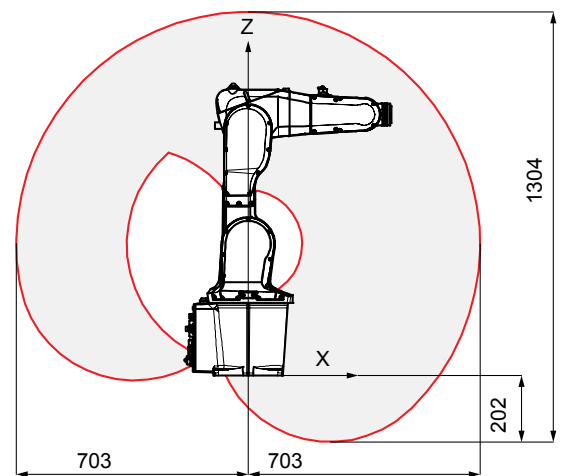
Data and dimensions may be changed without notice.

## Movement

| Axis movement   | Working range                             | Axis max. speed |
|-----------------|-------------------------------------------|-----------------|
| Axis 1 rotation | +170° to -170°                            | 280°            |
| Axis 2 arm      | +135° to -100° <sup>2</sup>               | 230°            |
| Axis 3 arm      | +70° to -200°                             | 290°            |
| Axis 4 wrist    | +270° to -270°                            | 380°            |
| Axis 5 bend     | +128° to -128°                            | 380°            |
| Axis 6 turn     | Default: +400° to -400°<br>Max. rev: ±242 | 600°            |

<sup>2</sup> Axis 2 for IRB 1200-5/0.9 is +130° to -100°

### Working range, IRB 1200 7/0.7



### Working range, IRB 1200 5/0.9

