Fast and flexible

The IRB 340 FlexPicker™, your ideal solution in applications where objects need to be moved quickly and precisely, one at a time, from one location to another. The IRB 340’s outstanding feature is the speed at which it operates, handling more than 150 picks per minute.

The IRB 340SA wash-down features special paint finish, corrosion resistant material, sealed components, and a specially designed axis 4 with slide bearings, for easy cleaning using detergent and water at low pressure. The IRB 340 wash-down version is especially suited for use in packaging applications with open food, such as meat, dairy products, ready-made meals. To meet the most stringent demands, a stainless wash-down version is available.

The reliable, market leading IRC5 controller is an integral part of the FlexPicker robot. The IRC5 with TrueMove and QuickMove ensures the highest speed and path-following accuracy. It also enables the robot to track fast moving conveyor belts with high accuracy.
TECHNICAL DATA, IRB 340 INDUSTRIAL ROBOT

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Robot versions</th>
<th>Handling capacity</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRB 340</td>
<td>1 kg</td>
<td>Standard</td>
</tr>
<tr>
<td>IRB 340SA</td>
<td>1 kg</td>
<td>Wash-down version</td>
</tr>
<tr>
<td>IRB 340SAS</td>
<td>1 kg</td>
<td>Stainless Wash-down</td>
</tr>
<tr>
<td>IRB 340/2</td>
<td>2 kg</td>
<td>Standard</td>
</tr>
<tr>
<td>IRB 340SA/2</td>
<td>2 kg</td>
<td>Wash-down</td>
</tr>
<tr>
<td>IRB 340SAS/2</td>
<td>2 kg</td>
<td>Stainless Wash-down</td>
</tr>
</tbody>
</table>

Supplementary load
- on upper arm: 350 gram
- on lower arm: 350 gram

Number of axis: 4
Integrated signal supply: 12 poles, 50V, 250mA
Integrated vacuum supply: Max. 6 bar / max. vacuum -0.9 bar

PERFORMANCE

Position repeatability: 0.1 mm
Angular repeatability
- IRB 340: 0.4 °
- IRB 340SA: 1.5 °

Working range
- Diameter: 1130 mm (967 mm)
- Height: 250 mm (300 mm)
- Rotation: Unlimited

Max speed: 10 m/s
Max acceleration (approx.)
- 1 kg version: 100 m/s²
- 2 kg version: 60 m/s²
Max torque axis 4: 1 Nm (angular acceleration depending on moment of inertia)

Typical robot cycle times (robot only) 1 kg version

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Payload [kg]</th>
<th>Cycle time [s]</th>
</tr>
</thead>
<tbody>
<tr>
<td>25/305/25</td>
<td>0.1</td>
<td>0.33</td>
</tr>
<tr>
<td>25/305/25</td>
<td>1.0</td>
<td>0.38</td>
</tr>
<tr>
<td>25/700/25</td>
<td>0.1</td>
<td>0.44</td>
</tr>
<tr>
<td>25/700/25</td>
<td>1.0</td>
<td>0.55</td>
</tr>
</tbody>
</table>

Typical robot cycle times (robot only) 2 kg version

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Payload [kg]</th>
<th>Cycle time [s]</th>
</tr>
</thead>
<tbody>
<tr>
<td>25/305/25</td>
<td>2</td>
<td>0.65</td>
</tr>
<tr>
<td>25/700/25</td>
<td>2</td>
<td>0.83</td>
</tr>
</tbody>
</table>

For optimum process performance, see PickMaster datasheet.

WORKING RANGE

Conveyor tracking
Max conveyor tracking speed: 350 mm/s
Conveyor speed [mm/s] Payload [kg] Repeatability [mm]
- 250: 0.1 1.0 2.0
- 250: 0.1 2.0
Note: Higher conveyor tracking speeds (up to 750 mm/s) must be verified for each installation.
For optimum conveyor tracking performance, see PickMaster datasheet.

ELECTRICAL CONNECTIONS

Supply voltage: 200-600 V, 50/60 Hz
Rated power
Transformer rating: 7.2 kVA

PHYSICAL

Robot mounting: Inverted
Dimensions
- Robot incl. upper arms: 950 x 1050 mm
- Weight
  - IRB 340 manipulator: 140 kg
  - IRB 340 manipulator stainless: 165 kg

ENVIRONMENT

Degree of protection
- IRB 340 manipulator: IP55
- IRB 340SA and SAS manipulator: IP67
Ambient temperature
- IRB 340 manipulator: ±0°C to +52°C
- Max. 95 %
Noise level: < 70 dB(A)
Clean room: IRB 340 are classified for cleanroom class 10
Safety
- Double circuits with supervision, emergency stops and safety functions, 3-position enabling device

Emission: EMC/EMI shielded

Data and dimensions may be changed without notice.

www.abb.com/robotics
ABB reserves the right to change specifications without notice.