**IRB 4400**

Fast, compact and versatile industrial robot

IRB 4400 is an extremely fast, compact robot for medium to heavy handling. It has exceptional all-round capabilities which makes it suitable for a variety of manufacturing applications. The load capacity of 60 kg at very high speeds usually permits handling of two parts at a time.

**Fast, compact and versatile industrial robot**

IRB 4400 is a rigid, well-balanced design and patented TrueMove™ function provide smooth and fast movement throughout the entire working range. This ensures very high quality in applications such as cutting. Rapid maneuverability makes the IRB 4400 perfectly matched for applications where speed and flexibility are important. The compact design and protected versions enables use in situations where conventional robots cannot work, such as foundry and spraying applications. The Foundry Plus 2 version is IP 67 protected and can be washed with high pressure steam, which makes it ideal for use in harsh environments.

**Reliability and economy**

The robust, rigid construction means long intervals between routine maintenance. Well-balanced steel arms with double bearing joints, a torque-strut on axis 2 and use of maintenance-free gearboxes and cabling also contribute to the very high levels of reliability. The drive train is optimised to give high torque with the lowest power consumption for economic operation.

**Extensive communication for easy integration**

The extensive communication capabilities include serial links, network interfaces, PLC, remote I/O and field bus interfaces. This makes for easy integration in small manufacturing stations as well as large scale factory automation systems.

**Global service and support**

For worry-free operation, ABB also offers Remote-Service, which gives remote access to equipment for monitoring and support. Moreover, ABB customers can take advantage of the company’s service organization; with more than 35 years of experience in the arc welding sector, ABB provides service support in over 100 locations in 53 countries.

**Main Applications**

- Cutting/Deburring
- Die Spraying
- Dispensing
- Grinding/Polishing
- Measuring
### Specification

<table>
<thead>
<tr>
<th>Robot version</th>
<th>Reach (m)</th>
<th>Handling capacity (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRB 4400/60</td>
<td>1.96</td>
<td>60</td>
</tr>
<tr>
<td>IRB 4400/L10</td>
<td>2.53</td>
<td>10</td>
</tr>
</tbody>
</table>

**Supplementary load**
- on axis 2: 35 kg
- on axis 3: 15 kg
- on axis 4: 0-5 kg

- Number of axes: 6
- Protection: Standard version IP 54, Foundry Plus 2 IP 67 and high pressure steam washable

**Mounting**
- Floor

**Controller**
- IRC5 Single Cabinet

**Integrated signal supply**
- 23 signals and 10 power on upper arm

**Integrated air supply**
- Max. 8 bar on upper arm

### Performance (according to ISO 9283)

<table>
<thead>
<tr>
<th>Robot version</th>
<th>Position repeatability</th>
<th>Path repeatability*</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRB 4400/60</td>
<td>0.06 mm</td>
<td>0.09 mm</td>
</tr>
<tr>
<td>IRB 4400/L10</td>
<td>0.05 mm</td>
<td>0.16 mm</td>
</tr>
</tbody>
</table>

*At 1.6 m/s.

### Technical Information

#### Electrical Connections

**Supply voltage**
- 200-600 V, 50/60 Hz

**Rated power transformer rating**
- 7.8 kVA

#### Physical

**Robot base**
- 920 x 640 mm

**Robot weight**
- 1040 kg

#### Environment

**Ambient temperature for mechanical unit**
- During operation: +15° C (41° F) to + 45°C (113°F)

**Relative humidity**
- Max. 95%

**Noise level**
- Max. 70 dB (A)

**Safety**
- Double circuits with supervision, emergency stops and safety functions, 3-position enable device

**Emission**
- EMC/EMI-shielded

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