

ROBOTICS

IRB 2400

Industrial Robot



IRB 2400 comprises a complete family of application optimized robots that maximize the efficiency of your arc welding, process and tending applications.

IRB 2400 is a dedicated high performance robot for process applications where the required accuracies are very demanding.

All models offer you inverted mounting capability. The compact design of the IRB 2400 ensures ease of installation.

The robust construction and use of minimum parts contribute to high reliability and long intervals between maintenance.

The Foundry Plus version is washable with high pressure steam and it's supplied with increased environment protection meeting IP 67 standard.

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

- Arc Welding
- Cutting/Deburring
- Grinding/Polishing

Specification

| Robot version | Reach (m) | Payload (kg) |
|----------------|--|--------------|
| IRB 2400/10 | 1.55 | 10 |
| IRB 2400/16 | 1.55 | 16 |
| Number of axes | 6 | |
| Protection | FoundryPlus IP67, IP54 | |
| Mounting | Floor mounted and inverted mounted for all versions. Wall mounted for IRB 2400/10. | |
| Controller | IRC5 Single Cabinet/ IRC5 PMC Panel Mounted | |

Performance (according to ISO 9283)

| | Position repeatability | Path repeatability |
|-------------|------------------------|--------------------|
| IRB 2400/10 | 0.03 mm | 0.11 mm |
| IRB 2400/16 | 0.03 mm | 0.15 mm |

Technical information

Electrical Connections

| | |
|-------------------|-------------------------------|
| Supply voltage | 200-600 V, 50/60 Hz |
| Power consumption | ISO-Cube at max speed 0.67 kW |

Physical

| | |
|--------------|--------------|
| Robot base | 723 x 600 mm |
| Robot height | 1564 mm |
| Robot weight | 380 kg |

Environment

| | |
|---|------------------------------|
| Ambient temperature for mechanical unit | |
| During operation | +5°C (41°F) to +45°C (113°F) |
| Relative humidity | Max. 95 % |
| Noise level | Max. 70 dB (A) |
| Emission | EMC/EMI-shielded |

Data and dimensions may be changed without notice.

Movement*

| Axis movement | Working range | Axis max. speed |
|-----------------|---|-----------------|
| Axis 1 rotation | + 180° to - 180° | 150°/s |
| Axis 2 arm | + 110° to - 100° | 150°/s |
| Axis 3 arm | + 65° to - 60° | 150°/s |
| Axis 4 rotation | + 200° to - 200° Optional: Unlimited | 360°/s |
| Axis 5 bend | + 120° to - 120° | 360°/s |
| Axis 6 turn | + 400° to - 400° Max. rev: +250 to -250 | 450°/s |

*The working area is the same for both floor and inverted mounting. For wall mounted 10 kg version axis 1 is limited to ±30°.

Working range

