

IRB 2400 Industrial Robot

Main Applications

Arc welding
Cutting/Deburring
Glueing/Sealing
Grinding/Polishing
Machine tending
Material handling



Most popular industrial robot

IRB 2400 is the world's most popular industrial robot in its class. It comprises a complete family of application optimized robots that maximize the efficiency of your arc welding, process and tending applications.

The IRB 2400 is a real hard worker. It can take additionally 35 kg load on axis 1 and up to 12 kg additional load on the upper arm - still keeping 100 % duty cycle.

The IRB 2400L model has 1.8 meters reach, 7 kg load capacity, large working range and slim arm and wrist. Other models offer handling capacity of up to 20 kg, excellent motion control, large load offset and unlimited motion in axis 6.

This means there's an IRB 2400 robot to give you excellent performance in your material handling, tending and process applications. 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.

IRB 2400

Main applications

Arc welding, cutting/deburring, glueing/sealing, grinding/polishing, machine tending, material handling

Specification

Variants	Reach	Payload	Protection
IRB 2400L	1.8 m	7 kg	Foundry
IRB 2400-10	1.55 m	12 kg	FoundryPlus
IRB 2400-16	1.55 m	20 kg	FoundryPlus

Number of axes	6
Mounting	Floor and inverted all versions. Wall IRB 2400-10

Supplementary load	IRB 2400L	IRB 2400-10	IRB 2400-16
Upper arm,			
-wrist end	1 kg	2 kg	2 kg
-rear end	10 kg	10 kg	10 kg
Base unit	35 kg	35 kg	35 kg

Physical

Dimensions	IRB 2400L	IRB 2400-10	IRB 2400-16
Total height	1731 mm	1564 mm	1564 mm
Robot base	723x600 mm	723x600 mm	723x600 mm
Robot weight	380 kg	380 kg	380 kg

Performance (according to ISO 9283)

Position repeatability (RP)	0.03 - 0.07 mm depending on variant
Path repeatability	0.11-0.15 mm depending on variant

Movements

Axis	IRB 2400L	IRB 2400-10	IRB 2400-16
Working range			
Axis 1	360°	360°*	360°
Axis 2	210°	210°	210°
Axis 3	125°	125°	125°
Axis 4	370°	400°	400°
Axis 4, Option	–	Unlimited	Unlimited
Axis 5	230°	240°	240°
Axis 6	800°	800°	800°
Axis 6, Option	Unlimited	Unlimited	Unlimited

Max. speed

Positioning	IRB 2400L	IRB 2400-10	IRB 2400-16
Axis 1	150°/s	150°/s	150°/s
		90° **	
Axis 2	150°/s	150°/s	150°/s
		90° **	
Axis 3	150°/s	150°/s	150°/s
		90° **	
Axis 4	360°/s	360°/s	360°/s
Axis 5	360°/s	360°/s	360°/s
Axis 6	450°/s	450°/s	450°/s

**) For wall mounted version

*) ± 30° for wall mounted robot

Electrical Connections

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

Environment

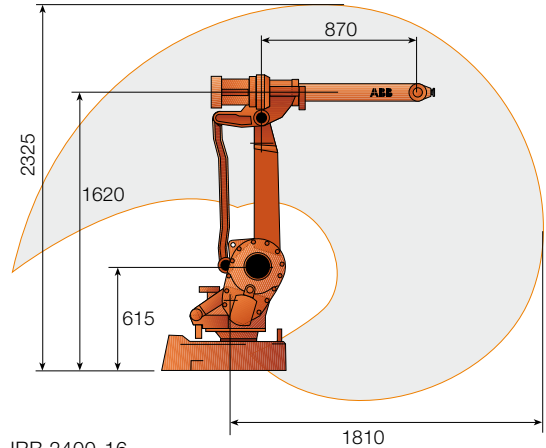
Ambient temperature for mechanical unit:	
During operation	+5°C (41°F) to + 45°C (113°F)
Relative humidity	Max. 95%

Degree of protection	IRB 2400L	IRB 2400-10	IRB 2400-16
Standard and Clean Room versions	IP54		IP54
Foundry or Foundry Plus versions		IP55/67	IP67IP67
Noise level	Max. 70 dB (A)		
Emission	EMC/EMI-shielded		

Data and dimensions may be changed without notice

Working range

IRB 2400L



IRB 2400-10, IRB 2400-16

