

# **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 15 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.



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## **TECHNICAL DATA, IRB 2400 INDUSTRIAL ROBOT**

SPECIFICATION	IS					
Robot version Hand				ch Protection		
IRB 2400L 7 k		,	1.8 m		Foundry, Clean room	
IRB 2400-10	12 kg	i	1.5 m		FoundryPlus, Clean room	
IRB 2400-16	20 kg	9	1.5 m		FoundryPlu	us, Clean room
Mounting	Floor a	ınd inve	erted al	l ver	sions. Wall	IRB 2400-10
Supplementary lo Upper arm,	ad I	RB 240	OOL I	RB 2	400-10	IRB 2400-16
-wrist end		1 kg		2	kg	2 kg
-rear end		10 kg		10 kg		10 kg
Base unit		35 kg		35 kg		35 kg
Number of axes Robot manipu External device		6 6				
Integrated signal	supply		les, 50 les, 250			
Integrated air sup	ply	Max. 8	3 bar			
PERFORMANCE	Ξ					
Positional repeata	itional repeatability 0.06 mm (average result from ISO test)			n ISO test)		
Axis movements Working range Positioning	)	IRB 24	100L	IRE	3 2400-10	IRB 2400-16
Axis 1, Rot	ation	360°		360	O°	360°
Axis 2, Arm		200°		20	O°	200°
Axis 3, Arm		125°		12	5°	125°
Re-orientation	n					
Axis 4, Wris		370°		400	-	400°
Axis 4, Opt		-			limited	Unlimited
Axis 5, Bend		240°		24		240°
Axis 6, Rot		800°		80		800°
Axis 6, Option		Unlimi	ted	Un	limited	Unlimited

 is movements ix. speed	IRB 2400L	IRB 2400-10	IRB 2400-16
Positioning			
Axis 1, Rotation	150°/s	150°/s 90° *	150°/s
Axis 2, Arm	150°/s	150°/s 90° *	150°/s
Axis 3, Arm	150°/s	150°/s 90° *	150°/s
Re-orientation			
Axis 4. Wrist	360°/s	360°/s	360°/s
Axis 5, Bend	360°/s	360°/s	360°/s
Axis 6, Rotation	450°/s	450°/s	450°/s

\*) For wall mounted version

### ELECTRICAL CONNECTIONS

Supply voltage	200-600 V, 50/60 Hz
Rated power,	
supply transformer	4 kVA/7.8 kVA with external axes

#### PHYSICAL

	IRB 2400L	IRB 2400-10	IRB 2400-16
Dimensions			
Total height	1,731 mm	1,564 mm	1,564 mm
Manipulator bases 7	723x600 mm	723x600 mm	723x600 mm
Weight			
Robot	380 kg	380 kg	380 kg
ENVIRONMENT			
Ambient temperature			
Basic manipulator			
in operation	5°C - 45°C		
Relative humidity	Max. 95%		
Degree of protection	IRB 2400L	IRB 2400-10	IRB 2400-16
Standard and			
Clean Room versions	IP54	IP54	IP54
Foundry or			
Foundry Plus versions	IP55/67	IP67	IP67
Clean Room	US Federal Standard 209, class 100		
Noise level	Max 70 dB (A)		

EMC/EMI-shielded

DATA AND DIMENSIONS MAY BE CHANGED WITHOUT NOTICE.

## WORKING RANGE AND LOAD DIAGRAM







