

C8LB/C8XLB 6-Axis Robot



Innovative Features. Remarkable Flexibility.

Ultra high performance and flexibility — high throughput with heavy payloads and multiple arm configurations to accomplish many of the most demanding tasks with leading-edge precision

SlimLine design — compact wrist pitch enables access to hard-to-reach areas in confined spaces; tabletop, wall and ceiling mounting options and 900 and 1,400 mm reaches available

Fast cycle times — high acceleration, smooth motion and fast settling times help maximize throughput with proprietary GYROPLUS® vibration reduction system, plus no ringing or overshoot¹

Ultimate ease of use — intuitive and feature-packed Epson RC+® development software helps create powerful solutions with a simple user interface, integrated debugger and advanced 3D simulator

Low total cost of ownership — includes battery-less encoders and Epson RC+ software with no recurring license fee; rich suite of safety features included with RC700E controller; robots are TUV-certified to meet ISO 10218-1 and UL1740 safety standards

SafeSense™ technology — standard and advanced safety features allow for increased productivity and worker protection while potentially minimizing machine footprint due to the reduction of physical barriers with a proper risk assessment

Industrial collaborative workcell tools — combine SafeSense technology and no-code Epson RC+ Express software to easily develop industrial collaborative solutions with remarkable speed and repeatability

Built for demanding environments — Standard, Cleanroom (ISO 3/4⁺)/ESD and Protected IP67 models available

Advanced integrated options — Vision Guidance, Parts Feeding, Force Guidance, Conveyor Tracking and Fieldbus

Industry 4.0 ready — advanced OPC UA for robotics connectivity provides next-level integration and monitoring



Product specifications subject to change without notice up until first product shipment.

C8LB/C8XLB 6-Axis Robot

Model Name		C8LB 6-Axis Robot	C8XLB 6-Axis Robot
Mounting Type		Tabletop, Ceiling, Wall	
Arm Length	P Point: Joints #1 - 5 Center	901 mm	1,400 mm
	P Point: Joints #1 - 6 Flange Surface	981 mm	1,480 mm
Repeatability	Joints #1 - 6	± 0.03 mm	± 0.05 mm
Payload	Rated	3 kg	
	Max.	8 kg	
Standard Cycle Time³		0.35 sec	0.52 sec
Max. Motion Range	Joint #1	± 240 deg	
	Joint #2	-158 deg ~ +65 deg	-135 deg ~ +55 deg
	Joint #3	-61 deg ~ +202 deg	
	Joint #4	± 200 deg	
	Joint #5	± 135 deg	
	Joint #6	± 360 deg	
Allowable Moment of Inertia	Joint #4	0.47 kg-m ²	
	Joint #5	0.47 kg-m ²	
	Joint #6	0.15 kg-m ²	
User Electric Lines	15-Pin (D-Sub), 8-Pin (RJ45 Cat5e), 6-Pin (Force Sensor)		
User Pneumatic Lines	ø6 mm x 2		
Brakes	All Axes		
Power	AC 200 V - 240 V Single Phase		
Power Consumption	2.5 kVA		
Power Cable Length	3 m/5 m/10 m		
Weight (Cables Not Included)	53 kg (IP: 57 kg)		63 kg (IP: 66 kg)
Applicable Controller	RC700E		
Installation Environment	Standard/Cleanroom (ISO 3 ⁺) ESD/Protected (IP67)	Standard/Cleanroom (ISO 4 ⁺) ESD/Protected (IP67)	
Safety Standards	TUV-certified to meet ISO 10218-1, UL 1740, CSA Z434, ISO 13849		
What's Included	C8LB robot and RC700E controller with safety board. Robot power and signal cables. Connector set (I/O, hand I/O and safety circuit connectors).		C8XLB robot and RC700E controller with safety board. Robot power and signal cables. Connector set (I/O, hand I/O and safety circuit connectors).
Options			
Vision Guide CV2	Available		
IntelliFlex™ Feeders	Available		
Force Guidance	Available		
Conveyor Tracking	R12NZ900AA		
Epson RC+ 7.0 API	R12NZ920AE		
GUI Builder 7.0	R12NZ920AH		
Add-On Instructions	Available		
Fieldbus Master	Available		
Fieldbus Slave (EtherNet/IP, EtherCat®, PROFINET, PROFIBUS, CC-Link, DeviceNet®)	Available		
External Control Point (ECP) Option	R12NZ920AF		
Teach Pendant	Available		
Epson OPC UA for Robots	R19NZ901CE		
Vision Guide Camera Mount	R12NZ9003F		
Tool Mounting Plate	R12NZ900LQ		



Air-Oil Systems, Inc.

AUTOMATION SOLUTIONS

753 WAMBOLD ROAD SOUDERTON, PA 18964-2715

215.721.9595 800.333.5520 FAX 215.721.7666

www.airoil.com