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EPSON
EXCEED YOUR VISION

SPECIFICATION SHEET

Robots

SCARA

LS20-B SCARA Robot



High performance and long reach for high-payload applications.

Powerful performance with minimal overshoot — powered by Epson's proprietary Residual Vibration Technology

Easy to use — intuitive Epson RC+® development software makes it easy to create high performance solutions

Outstanding acceleration/deceleration rates — smooth start/stop motion to optimize cycle times

High-speed cycle times — maximize parts throughput

Ideal for heavy payloads and high inertia applications — 800 and 1,000 mm reaches available, payload up to 20 kg, max. inertia up to 1.0 kg*m2

Integrated options — vision, designed specifically for robot guidance; plus, parts feeding, fieldbus interface solutions, RC+ 7.0 API software for open-platform functionality, teach pendants and customizable GUIs

ISO 4 Clean models available — for critical dust-free applications

Easy setup — built-in camera cable for optional vision system; top-of-arm electrical and pneumatic layout with screw holes to mount additional equipment

No battery required for encoder — minimizes downtime and eliminates the cost for battery replacement and installation

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Specifications

Model Number		LS20-B804x	LS20-BA04x
Mounting Type		Tabletop	
Arm Length	Joint #1 plus Joint #2	800 mm	1,000 mm
Repeatability	Joints #1 - 2	± 0.025 mm	
	Joint #3	± 0.01 mm	
	Joint #4	± 0.01 deg	
Payload	Rated	10 kg	
	Max.	20 kg	
Standard Cycle Time[1]		0.39 sec	0.43 sec
Max. Motion Range	Joint #1	± 132 deg	
	Joint #2	± 152 deg	
	Joint #3 Standard	420 mm	
	Joint #3 Clean	390 mm	
	Joint #4	± 360 deg	
Allowable Moment of Inertia	Rated	0.05 kg·m^2	
	Max.	1.0 kg·m^2	
User Electric Lines		15 pin (D-sub), 9 pin (D-sub), 8 pin (RJ45 Cat 5e)	
User Pneumatic Lines		ø8 mm x2, ø6 mm x2	
Brakes		Joint #3, Joint #4	
Power		AC 200 - 240 V Single Phase	
Power Consumption		2.4 kVa	
Power Cable Length		3 m/5 m/10 m	
Weight (cables not included)		48 kg: 105.8 lb	51 kg: 112.4 lb
Applicable Controller		RC90-B	
Installation Environment		Standard or Cleanroom (ISO 4)	
Safety Standards		CE Marking, EMC Directive, Machinery Directive KC Mark, KCs Mark ANSI/RIA R15.06-2012 NFPA79 (2007 Edition)	
What's in the Box		LS20-B robot and RC90-B controller Robot power and signal cables Epson® RC+ software E-Stop unit with cable LS20-B Robot System Safety & Installation Manual Connector set (I/O, hand I/O and safety circuit connectors)	

Options			
Vision Guide CV2	Available	External Control Point (ECP) Option	R12NZ920AF
Vision Guide PV1	Available	TP1 – Teach Pendant	R12NZ900L7
IntelliFlex™	Available	TP2 – Teach Pendant	R12NZ9005P
LS20-B Camera Mounting Bracket	R12NZ9003A	Ethernet/IP Fieldbus I/O (Slave)	R12NZ900A7
OCR (for use with Vision Guide)	R12NZ920H3	DeviceNet Fieldbus I/O (Slave)	R12NZ9004F
Epson RC+ 7.0 API	R12NZ920AE	EtherCAT Fieldbus I/O (Slave)	R12NZ900CL
GUI Builder 7.0	R12NZ920AH	Profibus Fieldbus I/O (Slave)	R12NZ9004H
Conveyor Tracking Kit	R12NZ900AA	PROFINET Fieldbus I/O (Slave)	R12NZ900A6
Euromap 67 Interface	R12NZ90104	CC Link Fieldbus I/O (Slave)	R12NZ9004J

1 Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) with 2 kg payload (path coordinates optimized for maximum speed). **2** SmartWay is an innovative partnership of the U.S. Environmental Protection Agency that reduces greenhouse gases and other air pollutants and improves fuel efficiency.

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