## **EPSON C4 Series**



### **6-Axis Articulated Robots**

#### **New, Unique SlimLine Design**

- Industry Leading Cycle Rates
- High Rigidity Arm = Ultra High Speed
- Arm Lengths from 600 900 mm
- Robust SlimLine Design for Increased Flexibility
- Low Vibration Arm for Smooth Motion
- Compact Wrist Design for Superior Agility
- ISO 3 Clean & ESD Compliant Models Available

The EPSON C4 and C4L robots are part of our new C4-Series of 6-axis robots. C4-Series robots lead the industry with best in class cycle time, precision and motion range. Whether you are looking for high speed, low vibration, higher payloads, longer reach or robots for special environment use, EPSON has the C4 model to fit your application requirements.

Unique to the C4-Series is EPSON's SlimLine design which features a slim body and compact wrist pitch axis design. This allows the robot to easily reach into confined and restricted work spaces from many angles with smooth motion not achievable with competitive models. The SlimLine body and compact wrist of the C4-Series enables greater motion range and less mechanical restrictions, making C4-Series robots the most flexible 6-axis robots

available in the market today.

EPSON C4-Series robots were created with maximum rigidity and performance in mind. Smooth, fast motion is achieved through the combination of high rigidity in the arms along with the superior servo control from our new RC700 high performance controller. Add to that the wide variety of integrated options such as vision guidance, conveyor tracking, etc. and chances are we have the tools required to save you time and money on your next robotic application.





# **EPSON C4-Series 6 Axis Robots**



### **New, Unique SlimLine Design**

The enhanced new slim body and compact wrist design of the C4-Series allows for greater motion range and less mechanical restrictions.

Designed for maximum performance, C4-Series robots have a good combination of high quality components for light weight

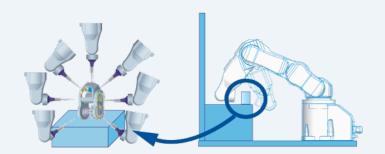
arms and high rigidity.

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### **Compact Wrist Design**



Compact design for easy load and unload

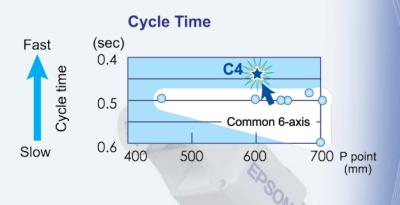


The unique compact wrist pitch axis design enables C4-Series robots to easily reach into confined and restricted work spaces from many angles with smooth motion. The increased motion range of the pitch axis allows superior flexibility for the end of arm tool to accomplish extremely complex applications.

### **Robust SlimLine Design**

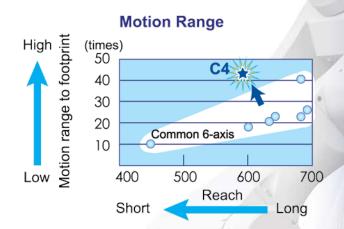
#### **Industry Leading Cycle Rates**

C4-Series robots are up to 43.9% faster than similar sized competitor models. With the ability to maximize part throughput for even the most demanding cycle time requirements C4-Series robots lead the industry with best in class cycle rates. This means more parts per minute and higher profits.



#### **Best in Class Motion Range**

The unique new SlimLine Design of the C4-Series allows for increased motion range. The slim body and compact wrist provide maximum work envelope usage with an extremely compact footprint.



### ISO 3 Clean & ESD Compliant Models Available

C4-Series robots are available in ISO 3 Clean and ESD compliant configurations. This makes the EPSON C4-Series ideal for those sensitive applications where electrostatic discharge can create defective parts such as in the Electronics Industry for applications like Hard Drive Assembly, Cell Phone Assembly, etc.



### **EPSON C4 Specifications**



EPSON ROBOT MODEL		C4-A60***	C4L-A90***
Configuration		Articulated 6 Axis	
Mounting Configurations		Table Top, Ceiling	
Payload		Rated 1 kg / Ma	ax. 4 kg (5 kg*1)
Repeatability		±0.02 mm	±0.03 mm
Axis Rotation	J1 (Turning)	±170	deg
	J2 (Lower Arm)	-160 ~ +65 deg	
	J3 (Upper Arm)	+225 ~ -51 deg	
	J4 (Wrist Roll)	±200 deg	
	J5 (Wrist Bed)	±135	deg
	J6 (Wrist Twist)	±360 deg	
Horizontal Reach	to mounting face	665	965
	to wrist center	600	900
Vertical Reach	to mounting face	885	1185
^	to wrist center	820	1120
Speed	J1	450 deg/sec	275 deg/sec
\	J2	450 deg/sec	275 deg/sec
	J3	514 deg/sec	289 deg/sec
	J4	555 deg/sec	
	J5	555 deg/sec	
(	J6	720 deg/sec	
Cycle Time	1 kg workload	0.37 sec	0.47 sec
Allowable Moment	J4	4.41 N*m	
	J5	4.41 N*m	
	J6	2.94 N*m	
Moment of Inertia	J4	0.15 kg*m²	
	J5	0.15 kg*m²	
	J6	0.1 kg*m²	
Motor Ratings	Axis 1	400 watts	
	Axis 2	400 watts	
	Axis 3	150 watts	
	Axis 4	50 watts	
	Axis 5	50 watts	
/	Axis 6	50 watts	
Environment	Temperature	0 ~ 40 deg C	
	Humidity	20 ~ 80% RH (no condensation)	
	Other:	Keep away from:	
		*Flammable/corrosive gases	
		*Flammable/corrosive solvents	
		*Water or oil and powder dust	
			electric noise
Weight		27 kg	29 kg
User Lines		9pin (D_sub) electric, 4 Pneumatic	
Brakes		All axes	
Safety Regulations		ANSI/RIA 15.06, CE, RoHS Directive, JIS B 8433-1	
		EN ISO 12100-1, EN ISO 12100-2, EN ISO 10218,	
Ontional Arm Configurations Class		EN 60204-1, EN ISO 13849-1, EN 55011, EN 61000-6-2	
Optional Arm Configurations Clean		ISO 3 Clean & ESD	
Available Controller		RC700 Controller	





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<sup>\*1</sup> Some limitations exist at payloads above 4kg. Contact EPSON Robots for details. Specifications are subject to change without notice.