



E2S453SM
Standard Robot
(Multi-Mount Type)



E2S551C
Clean/ESD Robot
(Table Top Type)



E2S451S
Standard Robot
(Table Top Type)

A Wide Variety of Models to Choose From!

EPSON E2S Robots can be thought of as the core of our SCARA robot offerings. They come in 450, 550 and 650mm lengths and are perfect for many different applications requiring a medium sized robot with outstanding performance.

E2S Robots are available in Table Top, Wall Mount, Ceiling Mount, or Shelf Mount configurations to help maximize available workspace. Each of the E2S Robots is also available in a Class 10 cleanroom configuration. Plus all of the E2 cleanroom robots are also ESD compliant. This is ideal for those critical applications where static electricity can create defective parts.

As with all our E2 robots, the E2S robots are very fast with cycle times down to 0.40 seconds. Not only are our champion data speed times some of the fastest in the industry, our real world cycle times are second to none due to the high duty cycle performance capabilities of our E2 robots.

E2S robots come standard with 170mm of Z axis stroke length (150mm for the Class 10 cleanroom/ESD models). There is also a 320mm Z axis option for all E2S offerings (300mm Z axis option is available for the Class 10 cleanroom/ESD models).

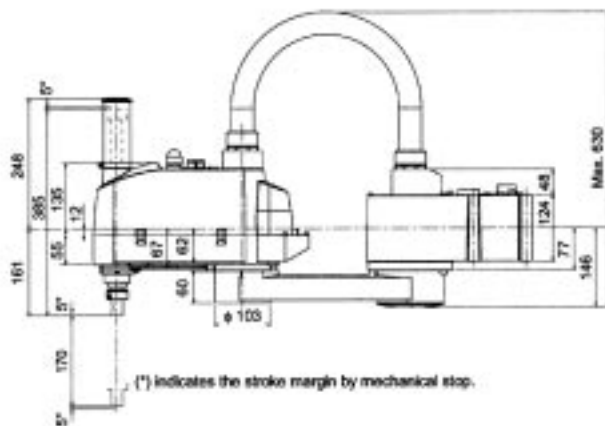
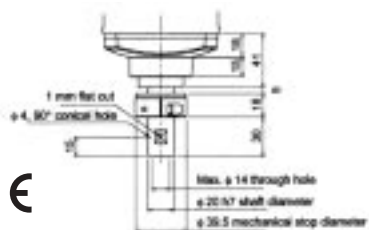
E2S Robots are ideal for applications in the Automotive, Appliance, Aerospace, Computer Components, Consumer Products, Electronics, Food, Medical Devices, Plastics, Semiconductor, and Telecommunications industries due to their multiple size and mounting configurations and powerful capabilities.

A Wide Variety of Models to Choose From!



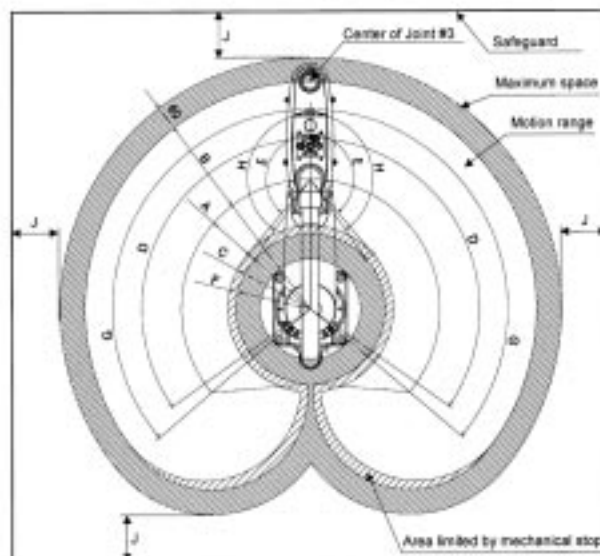
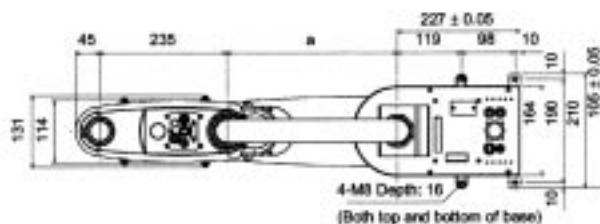
E2S45 E2S55 E2S65

		E2S45	E2S55	E2S65
Configuration		SCARA 4 Axis AC Servo		
Range	Axis 1 + Axis 2	450 mm	550 mm	650 mm
	Z Axis/Option	170/320 mm	170/320 mm	170/320 mm
	Z Axis Clean	150/300 mm	150/300 mm	150/300 mm
	U Axis	+/- 360 deg	+/- 360 deg	+/- 360 deg
Max Speed	Axis 1 + Axis 2 (combined)	5400 mm/sec	6000 mm/sec	6300 mm/sec
	Z Axis	1100 mm/sec	1100 mm/sec	1100 mm/sec
	U Axis	1870 deg/sec	1870 deg/sec	1870 deg/sec
	U Axis	1870 deg/sec	1870 deg/sec	1870 deg/sec
Repeatability	Axis 1 + Axis 2		+/- 0.015 mm	
	Z Axis		+/- 0.010 mm	
	U Axis		+/- 0.020 deg	
	U Axis		+/- 0.020 deg	
Payload	Rated / Max		2 kg / 5 kg	
	U Axis Rated		0.01 kg*m ²	
Moment of Inertia	U Axis Max		0.12 kg*m ²	
	U Axis Max		0.12 kg*m ²	
Cycle Time		0.409 secs	0.427 secs	0.477 secs
Motor Ratings	Axis 1		400 watt	
	Axis 2		150 watt	
	Axis 3		150 watt	
	Axis 4		150 watt	
Downward Force	Z Axis		150N (15.3kgf)	
	U Axis		15 electric	
User Lines	Electric		2 at 6 mm; 1 at 4 mm	
	Pneumatic		20 kg; 22 kg (multi mount)	
Weight			20 kg; 22 kg (multi mount)	
Clean Rating			Class 10 (0.13 μm particle size)	
Environmental Conditions	Temperature		5-40 deg C	
	Humidity		10-80% (no condensation)	

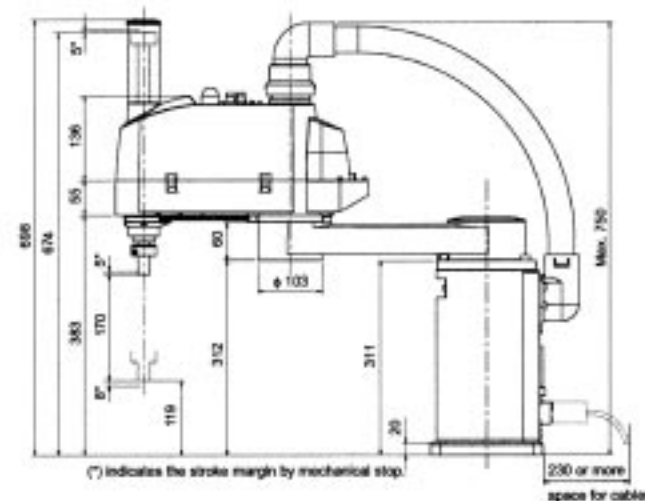


(*) indicates the stroke margin by mechanical stop.

	E2S45*SM	E2S55*SM	E2S65*SM
a	215	315	415

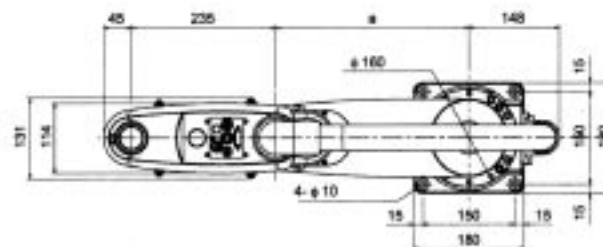


Note: The work envelope drawing above is for the E2S table top models only. For side mount work envelope drawings please refer to our web site.



(*) indicates the stroke margin by mechanical stop.

	E2S45*S	E2S55*S	E2S65*S
a	215	315	415



Standard Motion Range of Manipulator	E2S45*S/C	E2S55*S/C	E2S65*S/C
A (Length of Axis 1)	215 mm	315 mm	415 mm
B (Length of Axis 2)	235 mm	235 mm	235 mm
C	156 mm	203 mm	280 mm
D (Motion range of Joint 1)	125 degrees	125 degrees	125 degrees
E (Motion range of Joint 2)	140 degrees	140 degrees	140 degrees
F	136 mm	182 mm	260 mm
G (Range to the mechanical stop of Joint 1)	130 degrees	130 degrees	130 degrees
H (Range to the mechanical stop of Joint 2)	145 degrees	145 degrees	145 degrees
J (Range to the safeguard)	approx. 100 mm*		

* "J" shows the necessary distance (minimum) between the maximum space and safeguard.

Complete CAD drawing files are available at www.robots.epson.com