LS4

NEW PRODUCT

GYROPLUS Technology

Achieve higher productivity and heavier payloads - with proven reliability

- Successor to Epson's best-selling LS series, delivering enhanced productivity and payload while maintaining trusted reliability
- Cycle time improved for greater throughput and efficiency
- Supports heavier payloads for higher-load applications
- Compatible with the RC800-A controller for advanced functions and flexible system integration
- Battery-less encoder for reduced maintenance

Model Number LS4 - C 40 1 S

Payload
4 : 4kg

Arm length
40 : 400mm

Joint #3 stroke
1 : 150mm: Standard-model
: 120mm: Cleanroom-model (with bellows)

Installation environment
S : Standard
C : Cleanroom & ESD

These labels are affixed to the RC800-A, RC700-E, and their compatible manipulators that comply with applicable safety standards (ISO/NRTL certified).

Specifications

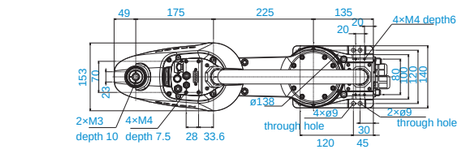
Model number		LS4-C401S	LS4-C401C
Arm length	Arm #1+#2	400 mm	
	Arm #3	150 mm	120 mm
Payload *1	Rated	2.0 kg	
	Max.	4.0 kg	
Repeatability	Joints #1+#2	±0.01 mm	
	Joint #3	±0.01 mm	
	Joint #4	±0.01 deg	
Standard cycle time *2		0.336 sec	
Maximum operating speed	Joints #1+#2	7200 mm/sec	
	Joint #3	1100 mm/sec	
	Joint #4	2600 deg/sec	
Joint #4 allowable moment of inertia *3	Rated	0.005 kg·m²	
	Max.	0.05 kg·m²	
Joint #3 press force		100 N	
Installation environment		Standard	Cleanroom *4 & ESD *5
Mounting method		Tabletop mounting	
Weight (not include the weight of cables)		14 kg	
Installed wire for customer use		D-sub (15 pin x 1, Current capacity 1 A(Rated)), RJ45 (8 pin x 1)	
Installed pneumatic tube for customer use		ø4 mm x 1, ø6 mm x 2 (Allowable pressure: 0.59 Mpa [6 kgf/cm²: 86 psi])	
Compatible controller		RC800-A	
Power supply		AC200-240 V Single phase	
Maximum rated capacity*6		1.2 kVA	
Cable length		Standard: 3 / 5 / 10 / 15 / 20 m Flexible: 5 / 10 / 15 / 20 m	
Safety standard		CE, KCs, NRTL	

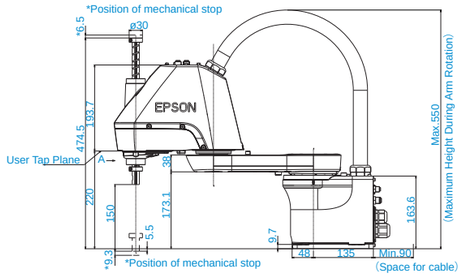
*1 : Do not apply the load exceeding the maximum payload. *2 : Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) at payload setting 2kg, path coordinates optimized for maximum speed.
*3 : Set the parameters by the Inertia command according to the load and end effector status (refer to the manual for the parameter calculation method). *4 : Complies with ISO Class 4 (ISO14644-1).
*5 : Main resin parts of the ESD model use conductive materials or apply plate processing. For the tip of the Manipulator (tool mounting part), we have confirmed that it is +/- 5 V or less even immediately after operating the measurement under our standard.
*6 : Varies according to operating environment and program.
The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

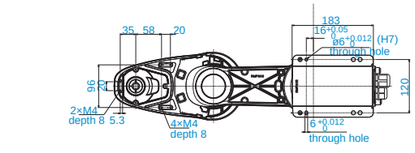
Outer Dimensions

[Unit: mm]

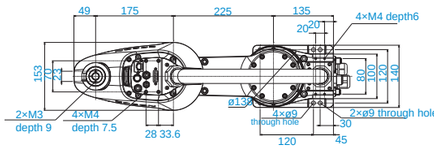
Standard-model

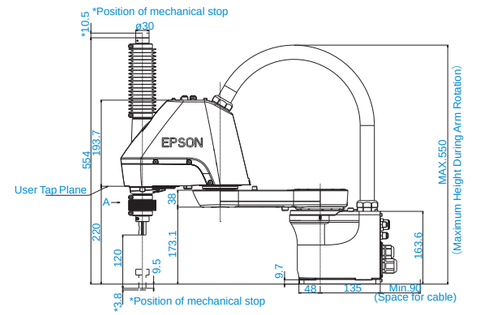


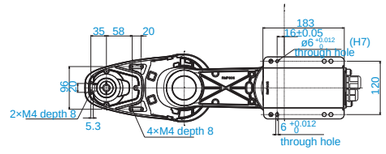


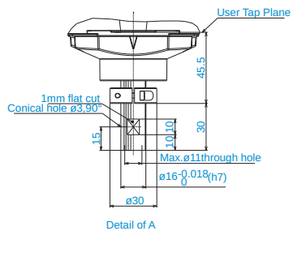


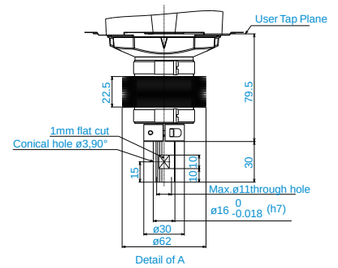
Cleanroom-model





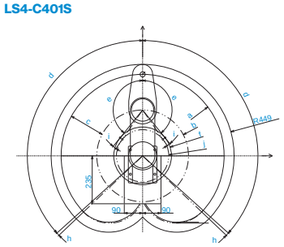




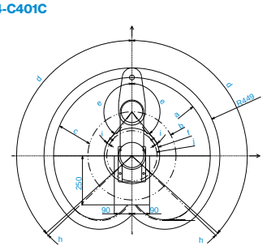


Motion Range

LS4-C401S



LS4-C401C



Model	LS4-C401□	
	Standard-model	Cleanroom-model
a Arm #1+Arm #2 (mm)	400	
b Arm #1 length (mm)	225	
c Arm #2 length (mm)	175	
d Joint #1 motion angle (°)	132	
e Joint #2 motion angle (°)	141	
f Motion range (mm)	141.6	
h Angle to the mechanical stop of Joint #1 (°)	1.5	
i Angle to the mechanical stop of Joint #2 (°)	4.3	
j Mechanical stop area (mm)	128.5	