LS20

NEW PRODUCT

GYROPLUS Technology

Proven LS performance - now enhanced with RC800-A functionality

- Maintains the high productivity and reliability of the LS20 series
- Compatible with the RC800-A controller for advanced functions and flexible system integration
- Battery-less encoder for reduced maintenance

Model Number LS20 - C80 4 S

Payload
- 20 : 20kg

Arm length
- 80 : 800mm
- A0 : 1000mm

Installation environment
- S : Standard
- C : Cleanroom

Joint #3 stroke
- 4 : 420mm : Standard-model
- : 390mm : Cleanroom-model (with bellows)

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

Specifications

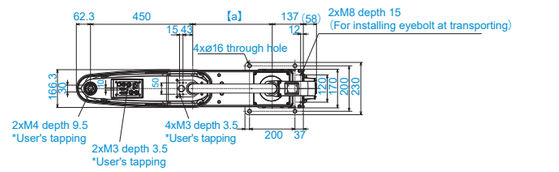
Model number		LS20-C804□	LS20-CA04□
Arm length	Arm #1+#2	800 mm	1000 mm
	Arm #3	4 : 420 mm : LS20-C□4S 390 mm : LS20-C□4C	
Payload *1	Rated	10 kg	
	Max.	20 kg	
Repeatability	Joints #1+#2	±0.025 mm	
	Joint #3	±0.01 mm	
	Joint #4	±0.01 deg	
Standard cycle time *2		0.39 sec	0.43 sec
Maximum operating speed	Joints #1+#2	9940 mm/sec	11250 mm/sec
	Joint #3	2300 mm/sec	
	Joint #4	1400 deg/sec	
Joint #4 allowable moment of inertia *3	Rated	0.05 kg•m²	
	Max.	1.00 kg•m²	
Joint #3 press force		250 N	
Installation environment		Standard / Cleanroom *4	
Mounting method		Tabletop mounting	
Weight (not include the weight of cables)		48 kg	51 kg
Installed wire for customer use		D-sub (15 pin x 1, Current capacity 1 A (Rated)), D-sub (9 pin x 1, Current capacity 1 A (Rated)), RJ45 (8 pin x 1)	
Installed pneumatic tube for customer use		ø6 mm x 2, ø8 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 *5		2.4 kVA	
Cable length		3 / 5 / 10 m	
Safety standard		CE, KCs, NRTL	

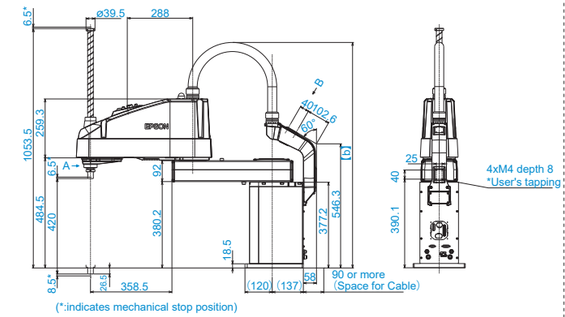
*1 : Do not apply the load exceeding the maximum payload. *2 : Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) with Accel 120% and 2 kg payload (path coordinates optimized for maximum speed).
*3 : If the center of gravity is at the center of each arm. If the center of gravity is not at the center of each arm, set the eccentric quantity using INERTIA command.
*4 : Complies with ISO Class 4 cleanroom standards. *5 : It depends on operating enviroment and operation program.
*These information is based on the LS20-C series; for information on the LS20-B series, Please contact sales representative.
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

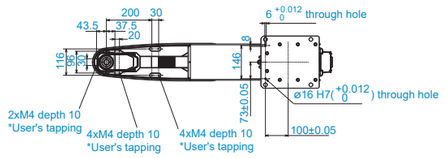
[Unit: mm]

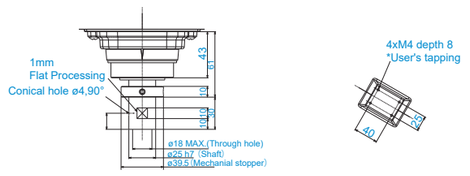
Standard-model





(*:indicates mechanical stop position)

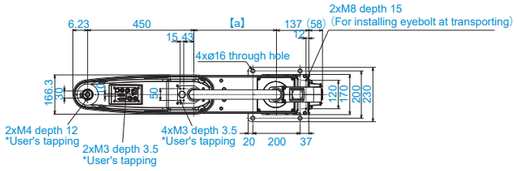


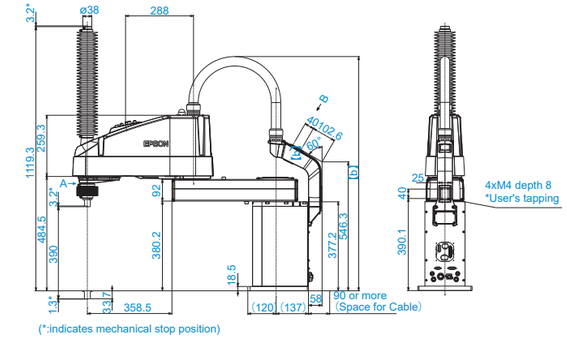


Detail of View A　　Detail of View B

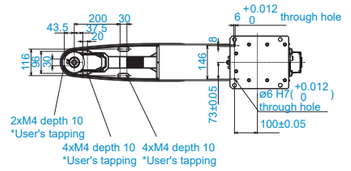
	LS20-C804S	LS20-CA04S
a	350	550
b	Max.1000	Max.1100

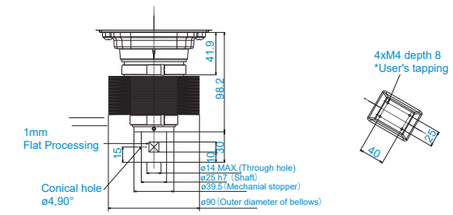
Cleanroom-model





(*:indicates mechanical stop position)



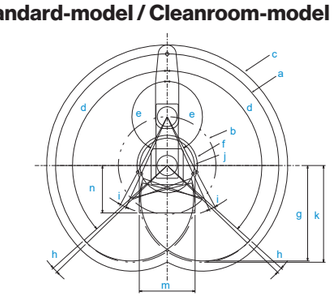


Detail of View A　　Detail of View B

	LS20-C804C	LS20-CA04C
a	350	550
b	Max.1000	Max.1100

Motion Range

Standard-model / Cleanroom-model



Model	Standard		Cleanroom	
	LS20-C804S	LS20-CA04S	LS20-C804C	LS20-CA04C
a Length of Arm #1+Arm #2 (mm)	800	1000	800	1000
b Length of Arm #1 (mm)	350	550	350	550
c Length of Arm #2 (mm)	864	1064	864	1064
d Motion range of Joint #1 (°)	132			
e Motion range of Joint #2 (°)	152			
f Motion range (mm)	216.5	260.7	216.5	260.7
g Motion range at the rear (mm)	684.2	818	684.2	818
h Joint #1 angle to hit mechanical stop (°)	2			
i Joint #2 angle to hit mechanical stop (°)	3.6			
j Mechanical stop area (mm)	195.3	232.8	195.3	232.8
k Mechanical stop area at the rear (mm)	693.1	832.1	693.1	832.1
m Motion range (mm)	400	290	400	330
n Motion range (mm)	340	265	340	265