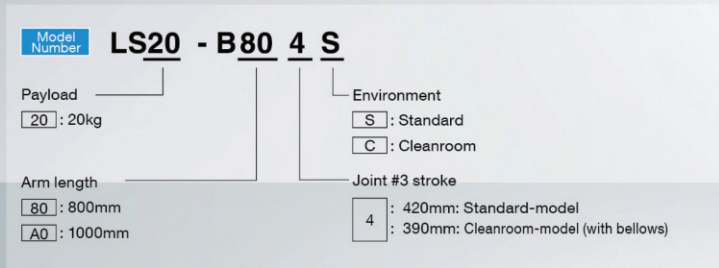


LS20 NEW

LS series reliability and performance with improved operating ease

- Higher allowable moment of inertia for improved performance when using large end effectors to perform multi-item pick-and-place operations
- Built-in Ethernet port on arm for easy camera connectivity
- Batteryless motor unit for reduced maintenance
- Improved duct design for low vibration during operation and easy cable installation



Specifications

Model name		LS20	
Model number		LS20-B804S/C	LS20-BA04S/C
Arm length	Arm #1, #2	800 mm	1000 mm
Payload ^{*1}	Rated	10 kg	
	Maximum	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
Max. 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·m ²	
	Maximum	1.00 kg·m ²	
Joint #3 down force		250 N	
Installation environment		Standard or Clean ^{*4}	
Mounting type		Table Top Mounting	
Weight(cables not included)		48 kg	51 kg
Applicable Controller		RC90-B	
Installed wire for customer use		D-sub 15 pin x1 , D-sub 9 pin x1 , RJ45 8 pin (CAT 5e) x1	
Installed pneumatic tube for customer use		Φ8 mm × 2 , Φ6 mm × 2 : 0.59 MPa (6 kgf / cm ²)	
Power		AC200-240 V Single phase	
Power Consumption ^{*5}		2.4 kVA	
Cable length		3 m/ 5 m/ 10 m	
Safety standard		CE, KC	

*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.

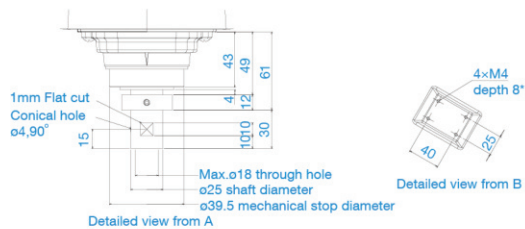
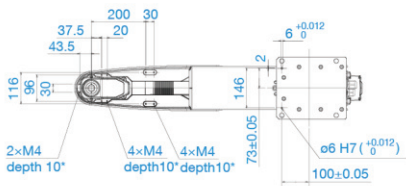
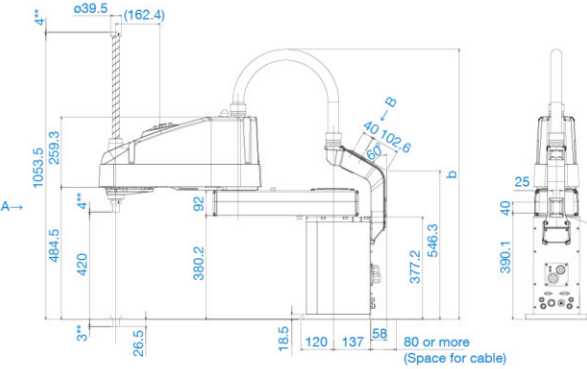
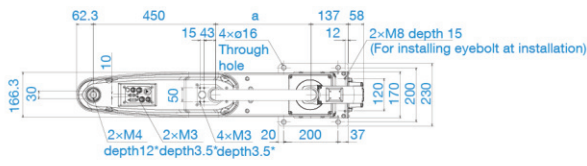
*4 : Complies with ISO Class 4 cleanroom standards.

*5 : It depends on operating environment and operation program.

Outer Dimensions (Table Top Mounting)

[Unit: mm]

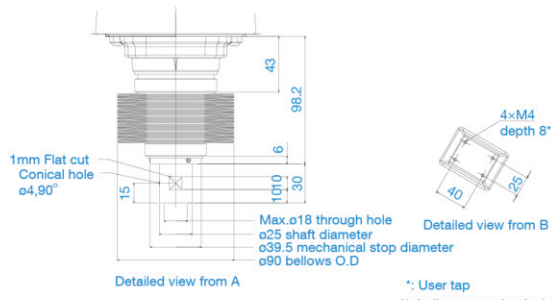
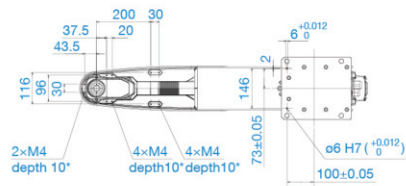
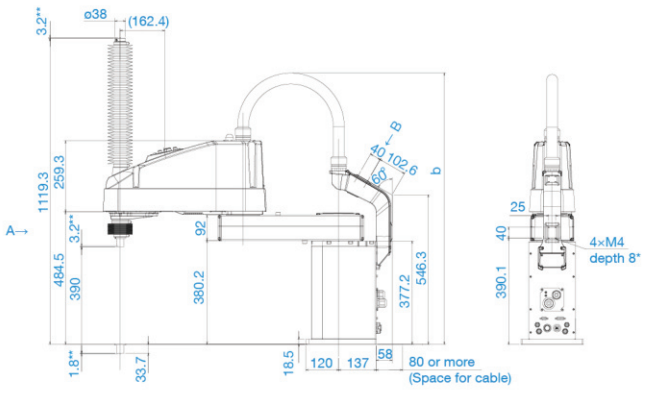
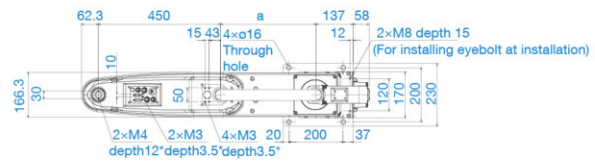
Standard-model



*: User tap
**: Indicates mechanical stop position

	LS20-B804S	LS20-BA04S
a	350	550
b	Max.1000	Max.1100

Cleanroom-model

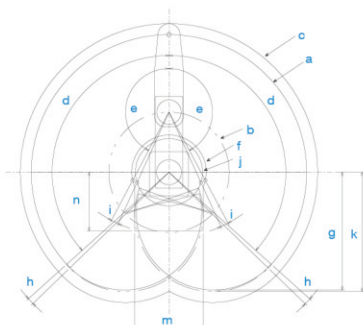


*: User tap
**: Indicates mechanical stop position

	LS20-B804C	LS20-BA04C
a	350	550
b	Max.1000	Max.1100

Motion Range (Table Top Mounting)

Standard-model / Cleanroom-model



Model	Standard		Cleanroom	
	LS20-B804S	LS20-A04S	LS20-B804C	LS20-A04C
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