

LS series SCARA robot

LS10

A versatile new addition to the proven reliability and performance of the LS series

- 10kg payload for applications requiring high inertia or the use of complex toolheads
- A choice of three arm lengths and two ball screw lengths for high configurability to suit a variety of application requirements
- Batteryless motor unit for reduced maintenance
- Built-in Ethernet port for easy camera connectivity



40th Anniversary

Model Number	LS10 - B		
Payload	[10]: 10kg	Environment	[S]: Standard [C]: Cleanroom
Arm length	[60]: 600mm [70]: 700mm [80]: 800mm	Joint #3 stroke	[2]: 200 mm: Standard-model 170 mm: Cleanroom-model (with bellows) [3]: 300 mm: Standard-model 270 mm: Cleanroom-model (with bellows)

Specifications

Model name		LS10		
Model number		LS10-B60□S/C	LS10-B70□S/C	LS10-B80□S/C
Arm length	Arm #1, #2	600 mm	700 mm	800 mm
Payload*1	Rated	5 kg		
	Maximum	10 kg		
Repeatability	Joints #1, #2	±0.02 mm	±0.02 mm	±0.025 mm
	Joint #3	±0.01 mm		
	Joint #4	±0.01°		
Standard cycle time*2		0.39 sec	0.41 sec	0.44 sec
Max. operating speed	Joints #1, #2	9100 mm/s	9800 mm/s	10500 mm/s
	Joint #3	1100 mm/s		
	Joint #4	2700 °/s		
Joint #4 allowable moment of inertia*3	Rated	0.02 kg·m2		
	Maximum	0.3 kg·m2		
Joint #3 down force		200 N		
Installation environment		Standard or Clean*4		
Mounting type		Table Top		
Weight(cables not included)		22 kg	22 kg	23 kg
Applicable Controller		RC90-B		
Installed wire for customer use		D-sub 15 pin x1, RJ45 8 pin (Cat 5e equivalent) x1		
Installed pneumatic tube for customer use		Φ6 mm x 2, Φ4 mm x 1		
Power		AC200-240 V Single phase		
Power Consumption*5		1.8kVA		
Cable length		3 m/5 m/10 m		

*1: Do not apply the load exceeding the maximum payload.

*2: Cycle time based on round-trip arch motion (300mm horizontal, 25mm 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.

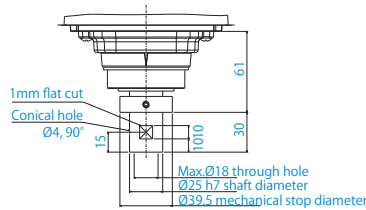
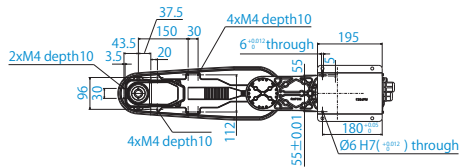
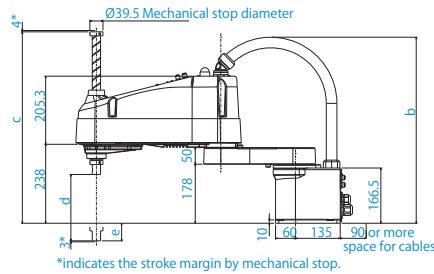
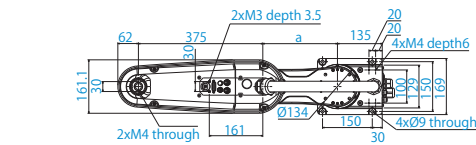
*4: Complies with ISO Class 4 cleanroom standards.

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

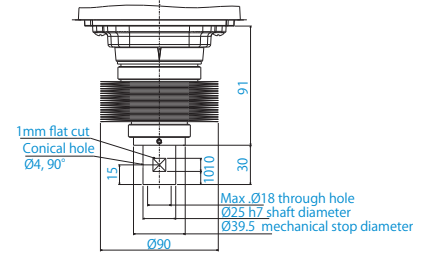
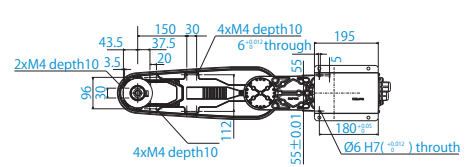
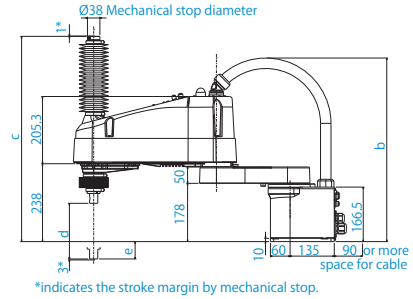
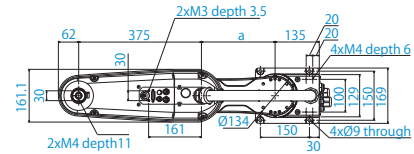
Outer Dimensions (Table Top Mounting)

[Unit: mm]

Standard-model



Cleanroom-model

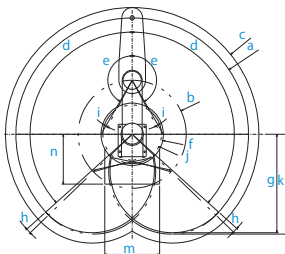


	LS10-B602S	LS10-B603S	LS10-B702S	LS10-B703S	LS10-B802S	LS10-B803S
a	225	225	325	325	425	425
b	Max.565	Max.565	Max.580	Max.580	Max.580	Max.580
c	577	677	577	677	577	677
d	200	300	200	300	200	300
e	53	153	53	153	53	153

	LS10-B602C	LS10-B603C	LS10-B702C	LS10-B703C	LS10-B802C	LS10-B803C
a	225	225	325	325	425	425
b	Max.565	Max.565	Max.580	Max.580	Max.580	Max.580
c	627	727	627	727	627	727
d	170	270	170	270	170	270
e	53	153	53	153	53	153

Motion Range (Table Top Mounting)

Standard-model / Cleanroom-model



Model	Standard			Cleanroom		
	LS10-B602S/B603S	LS10-B702S/B703S	LS10-B802S/B803S	LS10-B602C/B603C	LS10-B702C/B703C	LS10-B802C/B803C
a Length of Arm #1+Arm #2 (mm)	600	700	800	600	700	800
b Length of Arm #1 (mm)	225	325	425	225	325	425
c Max. motion range (mm)	663	763	863	663	763	863
d Motion range of Joint #1 (°)	132			132		
e Motion range of Joint #2 (°)	150			150		
f Motion range (mm)	212	188	213	212	188	213
g Motion range at the rear (mm)	526	592	659	526	592	659
h Joint #1 angle to hit mechanical stop (°)	2			2		
i Joint #2 angle to hit mechanical stop (°)	2			2		
j Mechanical stop area (mm)	206	176	200	206	176	200
k Mechanical stop area at the rear (mm)	531	601	670	531	601	670
m Motion range (mm)	420	300	320	420	400	480
n Motion range (mm)	300			320		

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