RS-Series SCARA Robots

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Industry Leading Workspace Design

- Arm Length 550 mm
- Superior Cycle Throughout
- Extremely Flexible for Cell or Line Assembly

Specifications

		RS4-551
Mounting type		Ceiling
Arm length	Arm #1, #2	550 mm
Max. operating speed	Joints #1, #2	7400 mm/s
	Joint #3	1100 mm/s
	Joint #4	2600 mm/s
Weight (cables not included)		19 kg
Repeatability	Joints #1, #2	±0.015 mm
	Joint #3	±0.01 mm
	Joint #4	±0.01 deg
Max. motion range	Joint #1	±225 deg
	Joint #2	±225 deg
	Joint #3 Std	130 mm
	Joint #3 Clean	100 mm
	Joint #4	±720 deg
Payload	Rated	1 kg
	Maximum	4 kg
Standard cycle time ¹		0.39 sec
Joint #4 allowable moment	Rated	0.005 kg∙m2
of inertia ²	Maximum	0.05 kg∙m2
Motor power consumption	Joint #1	400 W
	Joint #2	400 W
	Joint #3	150 W
	Joint #4	100 W
Joint #3 downward force		150 N
Electric lines		15Pin (D-Sub)
Pneumatic lines		Φ4mm×1, Φ6mm×2
Installation environment		Standard/Cleanroom ³ & ESD
Available controllers		RC180, RC620+, RC700A
Safety standards		CE, ANSI/RIA15.06-2012, UL 1740

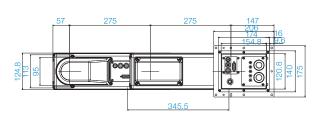
Cycle time based on round-trip arch motion (300mm horizontal, 25mm vertical) with 1kg payload (path coordinates optimized for maximum speed).
When payload center of gravity is aligned with Joint #4; if not aligned with Joint #4, set parameters using INERTIA command.
Complies with ISO Class 3 (ISO14644-1) and older Class 10 (less than 100.1 μm particles per 28,317cm³:1cft) cleanroom standards.

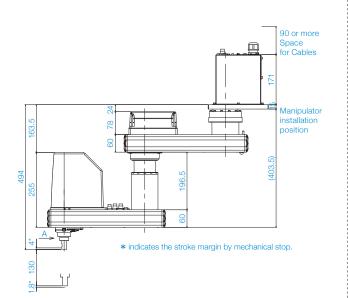


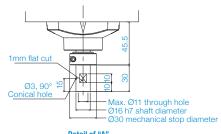


Outer Dimensions (Ceiling Mounting)

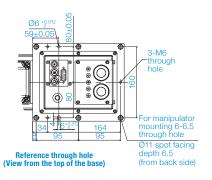
Standard-model



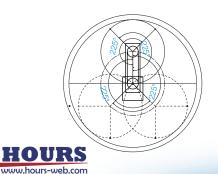




Detail of "A" (Calibration point position of Joints #3 and #4)



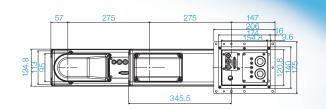
Motion Range (Ceiling Mounting)

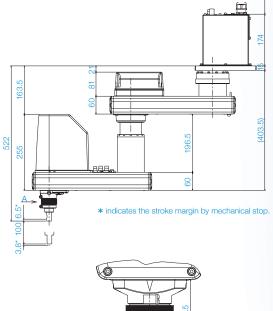


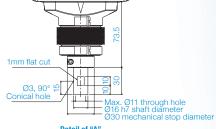
Model	R\$4-551	
Arm #1 Length (mm)	275	
Arm #2 Length (mm)	275	
Joint #1 Motion range (deg)	±225	
Joint #2 Motion range (deg)	±225	

Cleanroom-model

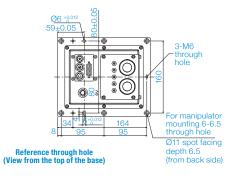
RS4-551







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[Units: mm]

Options