

# RS4

A unique rotating arm mechanism for unparalleled freedom of movement

- Outstanding productivity in limited space
- Ceiling mount and rotating arm enable workpiece to be accessed from any direction

### RS4 specifications

Arm length	550 mm	
Payload	Rated 1 kg / Max 4 kg	
Standard cycle time	0.39 sec	
Repeatability	Joint #1,#2	±0.015 mm
	Joint #4	±0.01°



### Specifications

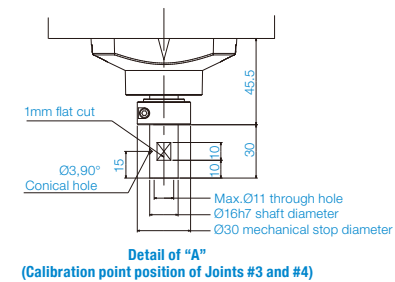
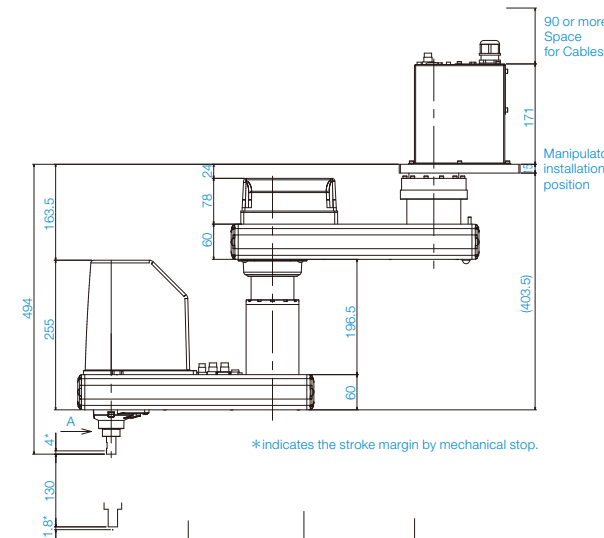
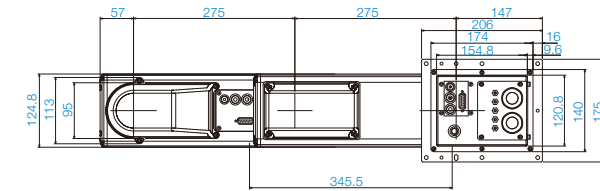
		RS4-551*
Mounting type		Ceiling
Arm length	Arm #1, #2	550 mm
Max. operating speed	Joints #1, #2	7400 mm/s
	Joint #3	1100 mm/s
	Joint #4	2600 deg/s
Weight(cables not included)		19 kg
Repeatability	Joints #1, #2	±0.015 mm
	Joint #3	±0.01 mm
	Joint #4	±0.01 deg
	Joint #1	±225 deg
Max. motion range	Joint #2	±225 deg
	Joint #3 (Cleanroom model)	130 mm (100 mm)
	Joint #4	±720 deg
	Joint #1	±720 deg
Payload	Rated	1 kg
	Maximum	4 kg
Standard cycle time <sup>1</sup>		0.39 sec
Joint #4 allowable moment of inertia <sup>2</sup>	Rated	0.005 kg·m <sup>2</sup>
	Maximum	0.05 kg·m <sup>2</sup>
Motor power consumption	Joint #1	400 W
	Joint #2	400 W
	Joint #3	150 W
	Joint #4	100 W
Joint #3 down force		150 N
Home		Home-return-less
Installed wire for customer use		15Pin (D-Sub)
Installed pneumatic tube for customer use		Φ4mm×1 Φ6mm×2
Installation environment		Standard/Cleanroom <sup>3</sup> &ESD
Applicable Controller		RC180, RC620
Safety standard		CE compliant, ANSI/RIA15.06-1999

\*1: Cycle time based on round-trip arch motion (300mm horizontal, 25mm vertical) with 1kg payload (path coordinates optimized for maximum speed).  
 \*2: When payload center of gravity is aligned with Joint #4; if not aligned with Joint #4, set parameters using INERTIA command.  
 \*3: Complies with ISO Class 3 (ISO14644-1) and older Class 10 (less than 10 0.1µm particles per 28,317cm<sup>3</sup>1cft) cleanroom standards.

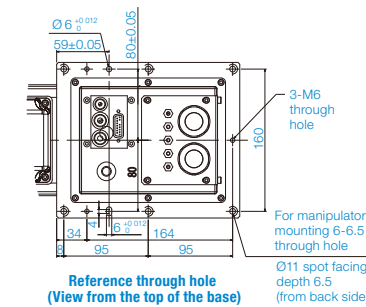
[Unit: mm]

### Outer Dimensions (Ceiling Mounting)

#### Standard-model

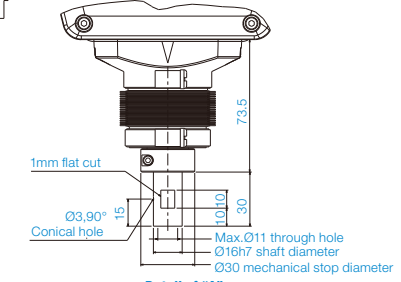
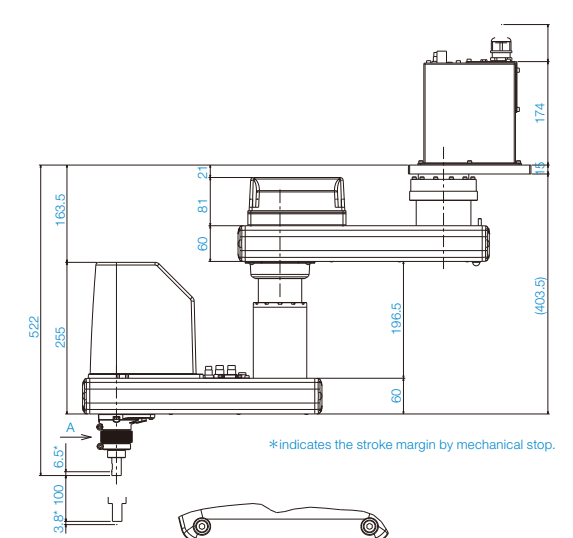
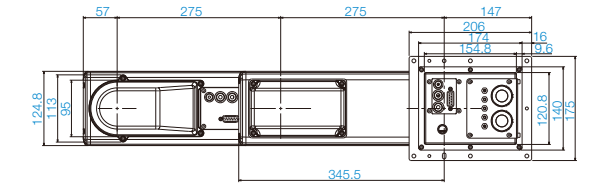


Detail "A"  
(Calibration point position of Joints #3 and #4)

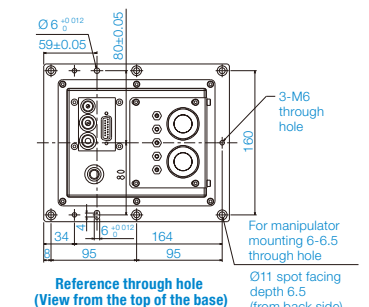


Reference through hole  
(View from the top of the base)

#### Cleanroom-model

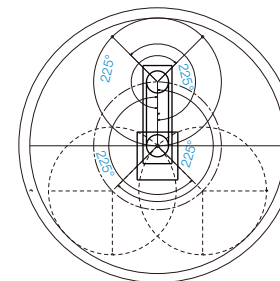


Detail "A"  
(Calibration point position of Joints #3 and #4)



Reference through hole  
(View from the top of the base)

### Motion Range (Ceiling Mounting)



Model	RS4-551*
Arm #1 Length(mm)	275
Arm #2 Length(mm)	275
Joint #1 Motion range(degree)	±225
Joint #2 Motion range(degree)	±225