

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



RS3 specifications

| | | |
|---------------------|-----------------------|----------|
| Arm length | 350 mm | |
| Payload | Rated 1 kg / Max 3 kg | |
| Standard cycle time | 0.34 sec | |
| Repeatability | Joint #1, #2 | ±0.01 mm |
| | Joint #4 | ±0.01° |

Specifications

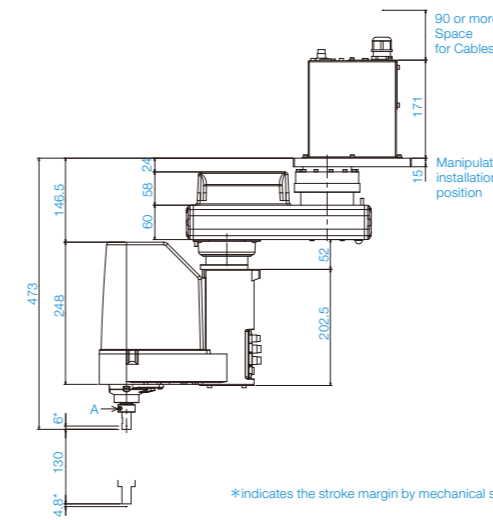
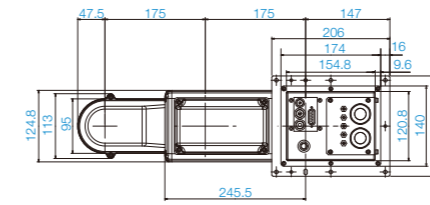
| | | RS3-351* |
|---|----------------------------|--------------------------------------|
| Mounting type | | Ceiling |
| Arm length | Arm #1, #2 | 350 mm |
| Max. operating speed | Joints #1, #2 | 6237 mm/s |
| | Joint #3 | 1100 mm/s |
| | Joint #4 | 2600 deg/s |
| Weight(cables not included) | | 17 kg |
| Repeatability | Joints #1, #2 | ±0.01 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 | 3 kg |
| Standard cycle time ¹ | | 0.34 sec |
| Joint #4 allowable moment of inertia ² | Rated | 0.005 kg·m ² |
| | Maximum | 0.05 kg·m ² |
| Motor power consumption | Joint #1 | 400 W |
| | Joint #2 | 200 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 ³ &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 28,317cm³ of air) cleanroom standards.

[Unit: mm]

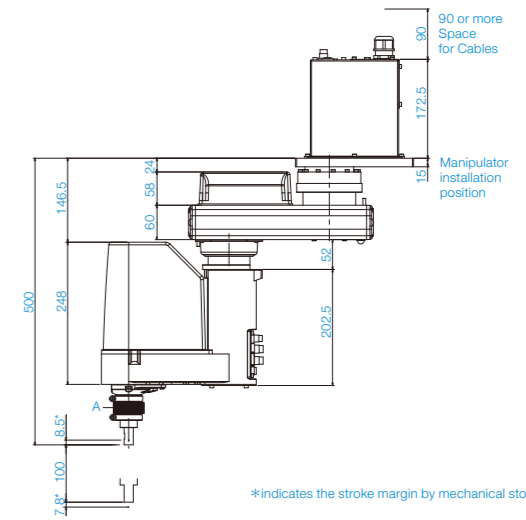
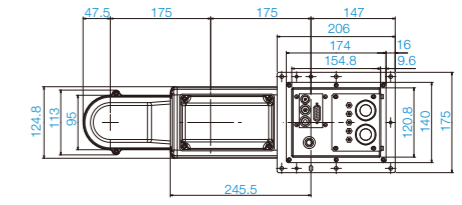
Outer Dimensions (Ceiling Mounting)

Standard-model

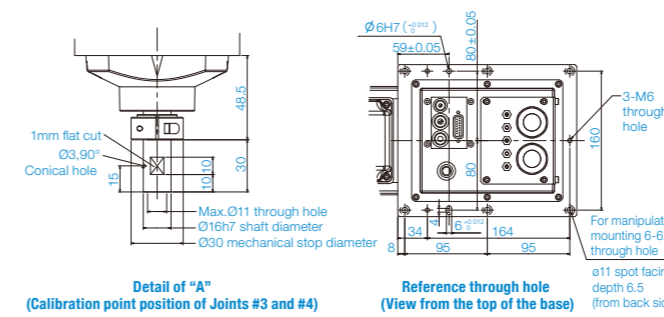


*indicates the stroke margin by mechanical stop.

Cleanroom-model

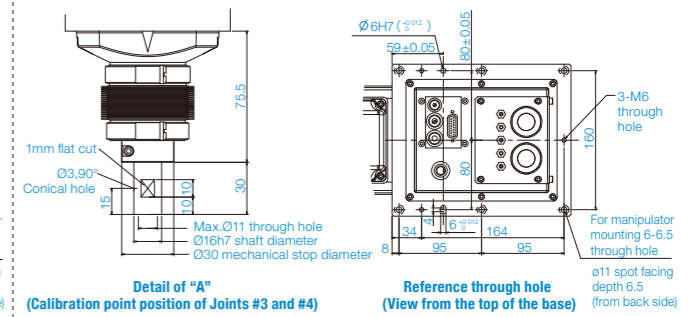


*indicates the stroke margin by mechanical stop.



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

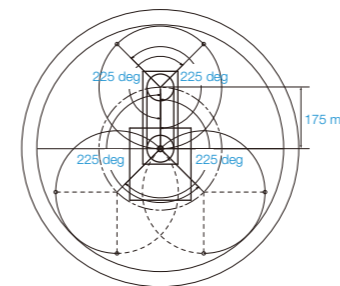
Reference through hole (View from the top of the base)



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 | RS3-351* |
|-------------------------------|----------|
| Arm #1 Length(mm) | 175 |
| Arm #2 Length(mm) | 175 |
| Joint #1 Motion range(degree) | ±225 |
| Joint #2 Motion range(degree) | ±225 |