



| | |
|---------------------------------|-----------|
| Articulated robots | YA |
| Linear conveyor modules | LCM |
| Single-axis robots | CX |
| Motor-less single axis actuator | Robomity |
| Compact single-axis robots | TRANSERVO |
| Single-axis robots | FLIP-X |
| Linear motor single-axis robots | PHASER |
| Cartesian robots | XY-X |
| SCARA robots | YK-X |
| Pick & place robots | YP-X |
| CLEAN | |
| CONTROLLER | |
| INFORMATION | |
| Single-axis | |
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| SCARA | |

CLEAN ROBOTS

CLEAN

TYPE

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SINGLE-AXIS

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CARTESIAN XY-XC

● 2 axes

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CLEAN ROBOTS SPECIFICATION SHEET

Clean single-axis robots

●TRANSERVO

- Degree of cleanliness CLASS 10
- Intake air 15 to 80Nℓ/min

| Model | Lead (mm) | Payload (kg) | | Stroke (mm) and maximum speed (mm/sec) | | | | | | | | | | | | | | | | Detailed info page | | |
|--------|-----------|--------------|----------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------------------|--|-------|
| | | Horizontal | Vertical | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | | | |
| SSC04 | 12 | 2 | 1 | 600 | | | | | | | | | | | | | | | | | | P.565 |
| | 6 | 4 | 2 | 300 | | | | | | | | | | | | | | | | | | |
| | 2 | 6 | 4 | 100 | | | | | | | | | | | | | | | | | | |
| SSC05 | 20 | 4 | – | 1000 | | | | | | 933 | 833 | 733 | 633 | | | | | | | P.566 | | |
| | 12 | 6 | 1 | 600 | | | | | | 560 | 500 | 440 | 380 | | | | | | | | | |
| | 6 | 10 | 2 | 300 | | | | | | 280 | 250 | 220 | 190 | | | | | | | | | |
| SSC05H | 20 | 6 | – | 1000 | | | | | | 933 | 833 | 733 | 633 | | | | | | | P.567 | | |
| | | 8 | – | 600 | | | | | | 560 | 500 | 440 | 380 | | | | | | | | | |
| | – | 2 | 500 | | | | | | | | | | 440 | 380 | | | | | | | | |
| | 12 | – | 300 | | | | | | 280 | 250 | 220 | 190 | | | | | | | | | | |
| | 6 | – | 4 | 250 | | | | | | | | | | 220 | 190 | | | | | | | |

●FLIP-XC

- Degree of cleanliness C4L/C4LH/C5L/C5LH/C6L ISO CLASS 3 (ISO14644-1) ^{Note}
Models other than those shown above CLASS 10
Note. Class 10 (0.1µm) equivalent to FED-STD-209D

- Intake air 20 to 90Nℓ/min

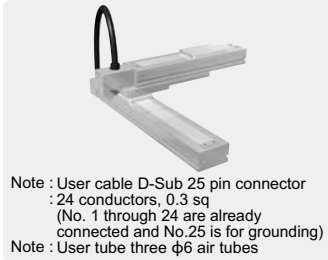
| Model | AC servo motor output (W) | Repeatability (mm) | Lead (mm) | Payload (kg) | | Stroke (mm) and maximum speed (mm/sec) | | | | | | | | | | | | | | | | | | | | |
|------------|---------------------------|--------------------|-----------|--------------|----------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| | | | | Horizontal | Vertical | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | | |
| C4L / C4LH | 30 | +/-0.02 | 12 | 4.5 | 1.2 | 720 | | | | | | | | | | | | | | | | | | | | |
| | | | 6 | 6 | 2.4 | 360 | | | | | | | | | | | | | | | | | | | | |
| | | | 2 | 6 | 7.2 | 120 | | | | | | | | | | | | | | | | | | | | |
| C5L / C5LH | 30 | +/-0.02 | 20 | 3 | – | 1000 | | | | | | | | | | | | | | | | | | | | |
| | | | 12 | 5 | 1.2 | 800 | | | | | | | | | | | | | | | | | | | | |
| | | | 6 | 9 | 2.4 | 400 | | | | | | | | | | | | | | | | | | | | |
| C6L | 60 | +/-0.02 | 20 | 10 | – | 1000 | | | | | | | | | | | | | | | | | | | | |
| | | | 12 | 12 | 4 | 800 | | | | | | | | | | | | | | | | | | | | |
| | | | 6 | 30 | 8 | 400 | | | | | | | | | | | | | | | | | | | | |
| C8 | 100 | +/-0.02 | 20 | 12 | – | 1000 | | | | | | 900 | 800 | 700 | 650 | | | | | | | | | | | |
| | | | 12 | 20 | 4 | 720 | | | | | | 648 | 540 | 468 | 432 | 360 | | | | | | | | | | |
| | | | 6 | 40 | 8 | 360 | | | | | | 324 | 270 | 234 | 216 | 180 | | | | | | | | | | |
| C8L | 100 | +/-0.01 | 20 | 20 | 4 | 1000 | | | | | | | | | | 900 | 800 | 700 | 650 | 600 | | | | | | |
| | | | 10 | 40 | 8 | 600 | | | | | | | | | | 510 | 450 | 390 | 360 | 330 | 300 | | | | | |
| | | | 5 | 50 | 16 | 300 | | | | | | | | | | 255 | 225 | 195 | 180 | 165 | 150 | | | | | |
| C8LH | 100 | +/-0.01 | 20 | 30 | – | 1000 | | | | | | | | | | 900 | 800 | 700 | 650 | 600 | 550 | | | | | |
| | | | 10 | 60 | – | 600 | | | | | | | | | | 510 | 450 | 390 | 360 | 330 | 300 | 270 | | | | |
| | | | 5 | 80 | – | 300 | | | | | | | | | | 255 | 225 | 195 | 180 | 165 | 150 | 135 | | | | |
| C10 | 100 | +/-0.01 | 20 | 20 | 4 | 1000 | | | | | | | | | | 950 | 750 | 600 | | | | | | | | |
| | | | 10 | 40 | 10 | 500 | | | | | | | | | | 475 | 375 | 300 | | | | | | | | |
| | | | 5 | 60 | 20 | 250 | | | | | | | | | | 237 | 187 | 150 | | | | | | | | |
| C14 | 100 | +/-0.01 | 20 | 30 | 4 | 1000 | | | | | | | | | | 950 | 750 | 600 | | | | | | | | |
| | | | 10 | 55 | 10 | 500 | | | | | | | | | | 475 | 375 | 300 | | | | | | | | |
| | | | 5 | 80 | 20 | 250 | | | | | | | | | | 237 | 187 | 150 | | | | | | | | |
| C14H | 200 | +/-0.01 | 20 | 40 | 8 | 1000 | | | | | | | | | | 950 | 750 | 600 | | | | | | | | |
| | | | 10 | 80 | 20 | 500 | | | | | | | | | | 475 | 375 | 300 | | | | | | | | |
| | | | 5 | 100 | 30 | 250 | | | | | | | | | | 237 | 187 | 150 | | | | | | | | |
| C17 | 400 | +/-0.01 | 20 | 80 | 15 | 1000 | | | | | | | | | | 800 | | | | | | | | | | |
| | | | 10 | 120 | 35 | 500 | | | | | | | | | | 400 | | | | | | | | | | |
| C17L | 600 | +/-0.02 | 50 | 50 | 10 | | | | | | | | | | | | | | | | | | | | | |
| C20 | 600 | +/-0.01 | 20 | 120 | 25 | 1000 | | | | | | | | | | 800 | | | | | | | | | | |
| | | | 10 | – | 45 | 500 | | | | | | | | | | 400 | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | Detailed info page | | | |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------------------|-----|---|---|
| | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 | 1300 | 1350 | 1400 | 1450 | 1500 | 1550 | 1600 | 1650 | 1700 | 1750 | 1800 | 1850 | 1900 | 1950 | 2000 | 2050 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | C4L : P.568 C4LH : P.569 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | C5L : P.570 C5LH : P.571 |
| | | | | | | | | | | | | | | | | | | | | | | | | | P.572 |
| | | | | | | | | | | | | | | | | | | | | | | | | | P.573 |
| | 550 | 500 | | | | | | | | | | | | | | | | | | | | | | | P.574 |
| | 270 | 240 | | | | | | | | | | | | | | | | | | | | | | | P.575 |
| | 135 | 120 | | | | | | | | | | | | | | | | | | | | | | | P.576 |
| | 500 | 450 | | | | | | | | | | | | | | | | | | | | | | | P.577 |
| | 240 | 210 | | | | | | | | | | | | | | | | | | | | | | | P.578 |
| | 120 | 105 | | | | | | | | | | | | | | | | | | | | | | | P.579 |
| | 600 | 500 | | | | | | | | | | | | | | | | | | | | | | | P.580 |
| | 300 | 250 | | | | | | | | | | | | | | | | | | | | | | | P.581 |
| | 150 | 125 | | | | | | | | | | | | | | | | | | | | | | | |
| | 600 | 500 | | | | | | | | | | | | | | | | | | | | | | | |
| | 300 | 250 | | | | | | | | | | | | | | | | | | | | | | | |
| | 150 | 125 | | | | | | | | | | | | | | | | | | | | | | | |
| | 600 | 500 | | | | | | | | | | | | | | | | | | | | | | | |
| | 300 | 250 | | | | | | | | | | | | | | | | | | | | | | | |
| | 150 | 125 | | | | | | | | | | | | | | | | | | | | | | | |
| | 800 | 700 | 600 | 500 | | | | | | | | | | | | | | | | | | | | | |
| | 400 | 350 | 300 | 250 | | | | | | | | | | | | | | | | | | | | | |
| | | | | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 900 | 800 | 800 | 800 | 800 | 800 | 800 | | |
| | 800 | 700 | 600 | 500 | | | | | | | | | | | | | | | | | | | | | |
| | 400 | 350 | 300 | 250 | | | | | | | | | | | | | | | | | | | | | |

Clean cartesian robots

● XY-XC

- Degree of cleanliness CLASS 10
- Intake air 60 to 90Nℓ/min
- Aperture designed to minimal dimensions by use of stainless steel sheet
- Installed clean robot dedicated cable duct

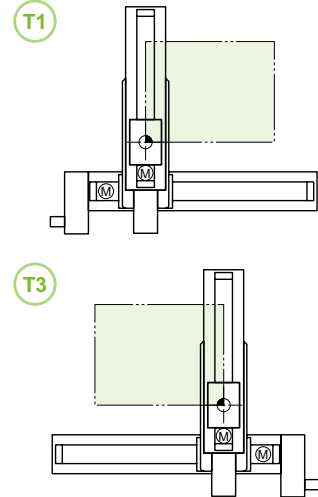


| Type | Model | Axis | Moving range | Maximum speed (mm/sec) | Maximum payload (kg) | Detailed info page |
|--------|----------------|------|---------------|------------------------|----------------------|--------------------|
| 2 axes | SXYXC | X | 150 to 1050mm | 1000 | 20 | P.582 |
| | | Y | 150 to 650mm | 1000 | | |
| 3 axes | SXYXC (ZSC12) | X | 150 to 1050mm | 1000 | 3 | P.584 |
| | | Y | 150 to 650mm | 1000 | | |
| | | Z | 150mm | 1000 | | |
| | SXYXC (ZSC6) | X | 150 to 1050mm | 1000 | 5 | P.584 |
| | | Y | 150 to 650mm | 1000 | | |
| | | Z | 150mm | 500 | | |
| 4 axes | SXYXC (ZRSC12) | X | 150 to 1050mm | 1000 | 3 | P.586 |
| | | Y | 150 to 650mm | 1000 | | |
| | | Z | 150mm | 1000 | | |
| | | R | 360° | 1020°/sec | | |
| | SXYXC (ZRSC6) | X | 150 to 1050mm | 1000 | 5 | P.586 |
| | | Y | 150 to 650mm | 1000 | | |
| | | Z | 150mm | 500 | | |
| | | R | 360° | 1020°/sec | | |

Arm variations



Special model for clean rooms with moving Y-axis carriage installed upward.



Clean SCARA robots

● YK-XC/YK-XGC/YK-XGLC

- Degree of cleanliness YK-XC CLASS 10
YK-XGC/YK-XGLC... ISO CLASS 3 (ISO14644-1) ^{Note}
Note. Class 10 (0.1μm) equivalent to FED-STD-209D

- Intake air 30 to 60Nℓ/min
- Harness placed completely on inside

- Bellows cover fitted in axial tip



Passed 20 million stroke durability test

| Type | Model | Arm length (mm) and XY axis combined maximum speed (m/s) | | | | | | | | | | | | | | Standard cycle time (sec) | Maximum payload (kg) | R axis tolerable moment of inertia (kgm ²) | Detailed info page | | |
|------------------|-----------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|---------------------------|----------------------|--|--------------------|-------|-------|
| | | 120 | 150 | 180 | 220 | 250 | 300 | 350 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | | | | | 1200 | |
| Extra small type | YK180XC | 3.3m/s | | | | | | | | | | | | | | | 0.42 | 1.0 | 0.01 | P.588 | |
| | YK220XC | 3.4m/s | | | | | | | | | | | | | | | | 0.45 | 1.0 | 0.01 | P.589 |
| Small type | YK250XGC | 4.5m/s | | | | | | | | | | | | | | | | 0.50 | 4.0 | 0.05 | P.590 |
| | YK350XGC | 5.6m/s | | | | | | | | | | | | | | | | 0.52 | 4.0 | 0.05 | P.592 |
| | YK400XGC | 6.1m/s | | | | | | | | | | | | | | | 0.50 | 4.0 | 0.05 | P.594 | |
| | YK500XGLC | 5.1m/s | | | | | | | | | | | | | | | 0.66 | 4.0 | 0.05 | P.596 | |
| Medium type | YK500XC | 4.9m/s | | | | | | | | | | | | | | | 0.53 | 10.0 | 0.12 | P.598 | |
| | YK600XGLC | 4.9m/s | | | | | | | | | | | | | | | 0.71 | 4.0 | 0.05 | P.599 | |
| | YK600XC | 5.6m/s | | | | | | | | | | | | | | 0.56 | 10.0 | 0.12 | P.601 | | |
| Large type | YK700XC | 6.7m/s | | | | | | | | | | | | | | | 0.57 | 20.0 | 0.32 | P.602 | |
| | YK800XC | 7.3m/s | | | | | | | | | | | | | | | 0.57 | 20.0 | 0.32 | P.603 | |
| | YK1000XC | 8.0m/s | | | | | | | | | | | | | | 0.60 | 20.0 | 0.32 | P.604 | | |

SSC04

Slider type



- CE compliance
- Origin on the non-motor side is selectable

Ordering method

| | | | | | | | | |
|--------------|------------------------------|-------------|-----------------------------------|--|--|---------------------------|--|--|
| SSC04 | | S | | | | | | |
| Model | Lead | Type | Brake | Direction of air coupler installation | Origin position | Stroke | Cable length ^{Note 2} | |
| | 12: 12mm 6: 6mm 2: 2mm | S: Straight | N: With no brake B: With brake | RJ: Right (Standard) LJ: Left | N: Standard ^{Note 1} Z: Non-motor side | 50 to 400 (50mm pitch) | 1L: 1m 3L: 3m 5L: 5m 10L: 10m | |

| | | |
|------------------|-----------------------------|---|
| S2 | S2 | I/O |
| Robot positioner | S2: TS-S2 ^{Note 3} | NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board ^{Note 4} |
| SH | SH | Battery |
| Robot positioner | SH: TS-SH | B: With battery (Absolute) N: None (Incremental) |
| SD | SD | 1 |
| Robot driver | SD: TS-SD | I/O cable 1: 1m |

Note 1. If changing from the origin position at the time of purchase, the machine reference amount must be reset. For details, refer to the manual.
 Note 2. The robot cable is flexible and resists bending.
 Note 3. See P.634 for DIN rail mounting bracket.
 Note 4. Select this selection when using the gateway function. For details, see P.96.

Basic specifications

| | |
|---|--|
| Motor | 42 □ Step motor |
| Repeatability ^{Note 1} (mm) | +/-0.02 |
| Deceleration mechanism | Ball screw φ8 |
| Maximum motor torque (N·m) | 0.27 |
| Ball screw lead (mm) | 12 6 2 |
| Maximum speed (mm/sec) | 600 300 100 |
| Maximum payload (kg) | Horizontal: 2 4 6 Vertical: 1 2 4 |
| Max. pressing force (N) | 45 90 150 |
| Stroke (mm) | 50 to 400 (50mm pitch) |
| Overall length (mm) | Horizontal: Stroke+216 Vertical: Stroke+261 |
| Maximum outside dimension of body cross-section (mm) | W49 × H59 |
| Cable length (m) | Standard: 1 / Option: 3, 5, 10 |
| Degree of cleanliness | CLASS 10 ^{Note 2} |
| Intake air (Nl/min) | Lead 12: 50 Lead 6: 30 Lead 2: 15 |

Note 1. Positioning repeatability in one direction.
 Note 2. Per 1cf (0.1µm base), when suction blower is used.

Allowable overhang

| Horizontal installation (Unit: mm) | | | | Wall installation (Unit: mm) | | | | Vertical installation (Unit: mm) | | | | | |
|------------------------------------|-----|-----|-----|------------------------------|---------|-----|-----|----------------------------------|-----|---------|-------|-----|-----|
| | A | B | C | | A | B | C | | A | C | | | |
| Lead 12 | 1kg | 807 | 218 | 292 | Lead 12 | 1kg | 274 | 204 | 776 | Lead 12 | 0.5kg | 407 | 408 |
| | 2kg | 667 | 107 | 152 | | 2kg | 133 | 93 | 611 | | 1kg | 204 | 204 |
| Lead 6 | 2kg | 687 | 116 | 169 | Lead 6 | 2kg | 149 | 102 | 656 | Lead 6 | 1kg | 223 | 223 |
| | 3kg | 556 | 76 | 112 | | 3kg | 92 | 62 | 516 | | 2kg | 107 | 107 |
| | 4kg | 567 | 56 | 84 | Lead 4 | 4kg | 63 | 43 | 507 | Lead 4 | 2kg | 118 | 118 |
| Lead 2 | 4kg | 869 | 61 | 92 | Lead 2 | 4kg | 72 | 48 | 829 | Lead 2 | 4kg | 53 | 53 |
| | 6kg | 863 | 40 | 60 | Lead 2 | 6kg | 39 | 29 | 789 | | | | |

Note. Distance from center of slider upper surface to conveyor center-of-gravity at a guide service life of 10,000 km (Service life is calculated for 400mm stroke models).

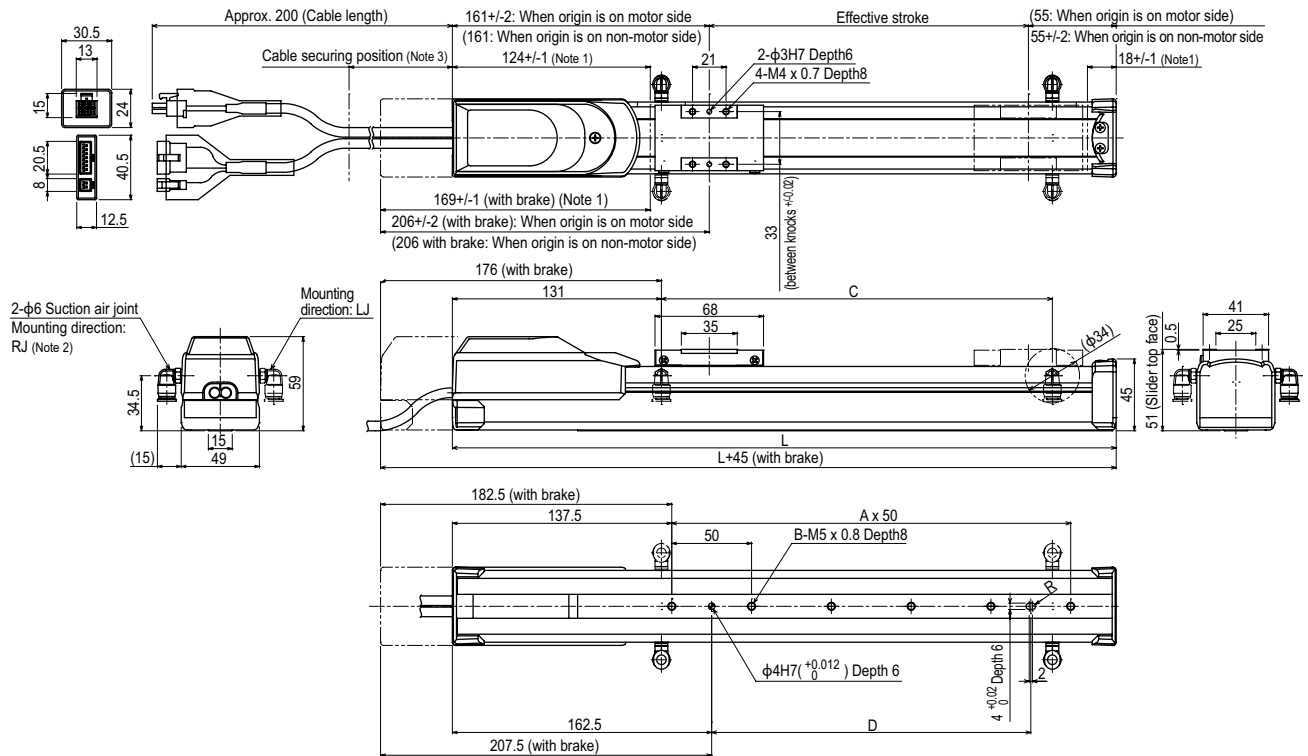
Static loading moment

| (Unit: N·m) | | |
|-------------|----|----|
| MY | MP | MR |
| 16 | 19 | 17 |

Controller

| Controller | Operation method |
|------------|----------------------------------|
| TS-S2 | I/O point trace / Remote command |
| TS-SH | Remote command |
| TS-SD | Pulse train control |

SSC04



| Effective stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 |
|--------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| L | 266 | 316 | 366 | 416 | 466 | 516 | 566 | 616 |
| A | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| B | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| C | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 |
| Weight (kg) ^{Note 5} | 1.5 | 1.6 | 1.7 | 1.8 | 2.0 | 2.1 | 2.2 | 2.3 |

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. Either right or left can be selected for the suction air joint mounting direction. This drawing shows the RJ (standard) direction.
 Note 3. Secure the cable with a tie-band 100mm or less from unit's end face to prevent the cable from being subjected to excessive loads.
 Note 4. The cable's minimum bend radius is R30.
 Note 5. These are the weights without a brake. The weights are 0.2kg heavier when equipped with a brake.

SSC05

Slider type



- High lead: Lead 20
- CE compliance
- Origin on the non-motor side is selectable

Ordering method

| SSC05 | S | | | | | | |
|--------------|--------------------------------|-------------|-----------------------------------|---------------------------------------|----------------------------------|---------------------------|--|
| Model | Lead | Type | Brake | Direction of air coupler installation | Origin position | Stroke | Cable length |
| | 20: 20mm 12: 12mm 6: 6mm | S: Straight | N: With no brake B: With brake | RJ: Right (Standard) LJ: Left | N: Standard Z: Non-motor side | 50 to 800 (50mm pitch) | 1L: 1m 3L: 3m 5L: 5m 10L: 10m |

| S2 | | |
|------------------|---|---|
| Robot positioner | I/O | |
| S2: TS-S2 | NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board | |
| SH | | |
| Robot positioner | I/O | Battery |
| SH: TS-SH | NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board | B: With battery (Absolute) N: None (Incremental) |
| SD | | |
| Robot driver | I/O cable | |
| SD: TS-SD | t: 1m | |

Note 1. Only the model with a lead of 12mm or 6mm can select specifications with brake.
 Note 2. If changing from the origin position at the time of purchase, the machine reference amount must be reset. For details, refer to the manual.
 Note 3. The robot cable is flexible and resists bending.
 Note 4. See P.634 for DIN rail mounting bracket.
 Note 5. Select this selection when using the gateway function. For details, see P.96.

Basic specifications

| | | | |
|---|--------------------------------|------------|--------|
| Motor | 42 □ Step motor | | |
| Repeatability (mm) | ±0.02 | | |
| Deceleration mechanism | Ball screw φ12 | | |
| Maximum motor torque (N·m) | 0.27 | | |
| Ball screw lead (mm) | 20 | 12 | 6 |
| Maximum speed (mm/sec) | 1000 | 600 | 300 |
| Maximum payload (kg) | Horizontal | 4 | 6 |
| | Vertical | 1 | 2 |
| Max. pressing force (N) | – | 45 | 90 |
| Stroke (mm) | 50 to 800 (50mm pitch) | | |
| Overall length (mm) | Horizontal | Stroke+230 | |
| | Vertical | Stroke+270 | |
| Maximum outside dimension of body cross-section (mm) | W55 × H56 | | |
| Cable length (m) | Standard: 1 / Option: 3, 5, 10 | | |
| Degree of cleanliness | CLASS 10 | | |
| Intake air (Nl/min) | Lead 20 | Lead 12 | Lead 6 |
| | 80 | 50 | 30 |

Note 1. Positioning repeatability in one direction.
 Note 2. When the stroke is longer than 650mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.
 Note 3. Per 1cf (0.1µm base), when suction blower is used.

Allowable overhang

| Horizontal installation (Unit: mm) | | | | Wall installation (Unit: mm) | | | | |
|------------------------------------|------|-----|-----|------------------------------|-----|-----|-----|-----|
| | A | B | C | | A | B | C | |
| Lead 20 | 2kg | 413 | 139 | 218 | 2kg | 192 | 123 | 372 |
| Lead 12 | 4kg | 334 | 67 | 120 | 4kg | 92 | 51 | 265 |
| Lead 6 | 4kg | 347 | 72 | 139 | 4kg | 109 | 57 | 300 |
| Lead 20 | 6kg | 335 | 47 | 95 | 6kg | 63 | 31 | 263 |
| Lead 12 | 4kg | 503 | 78 | 165 | 4kg | 134 | 63 | 496 |
| Lead 6 | 8kg | 332 | 37 | 79 | 6kg | 76 | 35 | 377 |
| Lead 20 | 10kg | 344 | 29 | 62 | 8kg | 47 | 22 | 355 |

Static loading moment

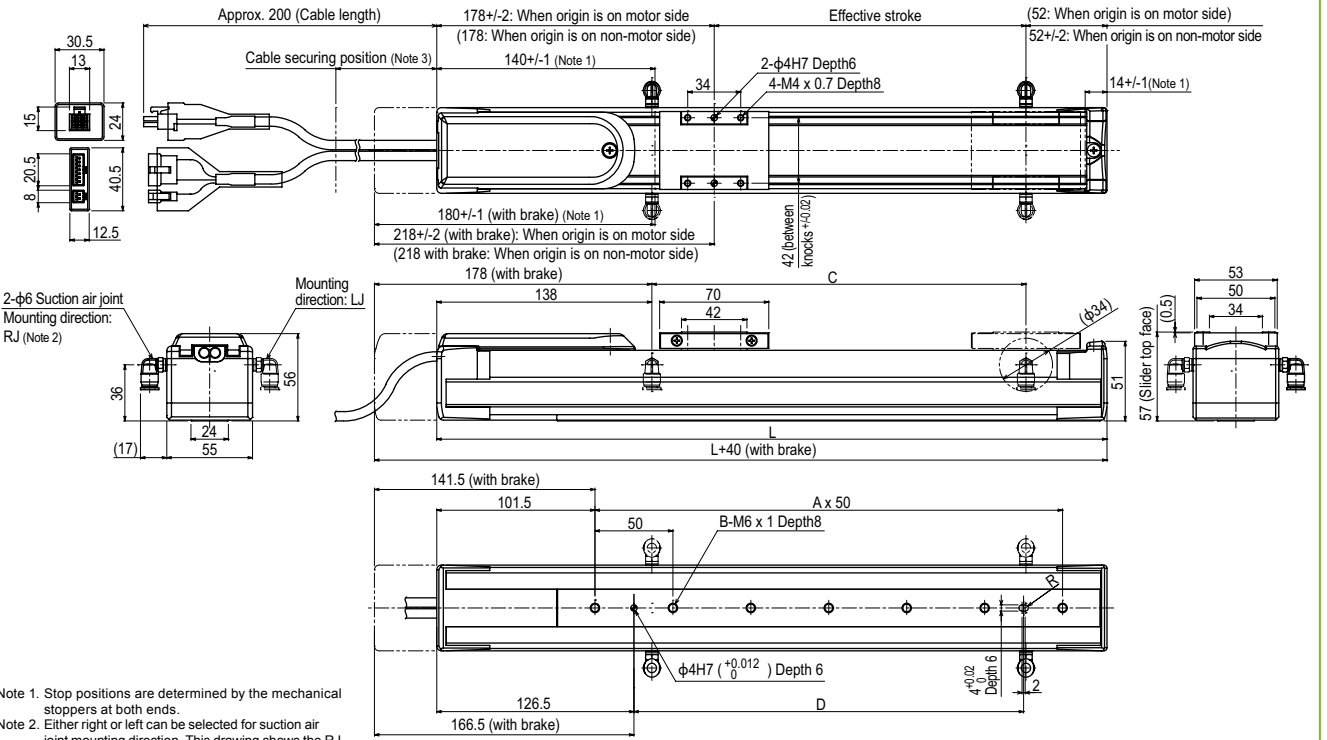
| Static loading moment (Unit: N·m) | | |
|-----------------------------------|----|----|
| MY | MP | MR |
| 25 | 33 | 30 |

Controller

| Controller | Operation method |
|------------|----------------------------------|
| TS-S2 | I/O point trace / Remote command |
| TS-SH | Remote command |
| TS-SD | Pulse train control |

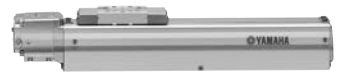
Note. Distance from center of slider upper surface to conveyor center-of-gravity at a guide service life of 10,000 km (Service life is calculated for 600mm stroke models).

SSC05



Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. Either right or left can be selected for suction air joint mounting direction. This drawing shows the RJ (standard) direction.
 Note 3. Secure the cable with a tie-band 100mm or less from unit's end face to prevent the cable from being subjected to excessive loads.
 Note 4. The cable's minimum bend radius is R30.
 Note 5. These are the weights without a brake. The weights are 0.2kg heavier when equipped with a brake.
 Note 6. When the stroke is longer than 650mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.

| Effective stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 |
|---|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| L | 280 | 330 | 380 | 430 | 480 | 530 | 580 | 630 | 680 | 730 | 780 | 830 | 880 | 930 | 980 | 1030 |
| A | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| B | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| C | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 |
| Weight (kg) | 2.1 | 2.3 | 2.5 | 2.7 | 2.8 | 3.0 | 3.2 | 3.4 | 3.6 | 3.8 | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 |
| Maximum speed for each stroke (mm/sec) | 1000 | | | | | | | | | | | | | | | |
| Lead 20 | 933 | | | | | | | | | | | | | | | |
| Lead 12 | 600 | | | | | | | | | | | | | | | |
| Lead 6 | 300 | | | | | | | | | | | | | | | |
| | 280 | 250 | 220 | 190 | | | | | | | | | | | | |



C5L

- High lead: Lead 20
- Origin on the non-motor side is selectable

Ordering method

| | | | | | | | | |
|--------------|---|---|--|--|--|---|-------------------|--|
| C5L | | | | | | | ERCD | |
| Model | Lead designation 20: 20mm 12: 12mm 6: 6mm | Brake ^{Note 1} No entry: With no brake BK: With brake | Direction of air coupler installation L: Left (Standard) R: Right | Origin position change None: Standard Z: Non-motor side | Stroke 50 to 800 (50mm pitch) | Cable length ^{Note 2} 1K: 1m 3K: 3.5m 5K: 5m 10K: 10m | Controller | I/O connector specification CN1: I/O flat cable 1m (Standard) CN2: Twisted-pair cable 2m (pulse train function) |

Note 1. The model with a lead of 20mm cannot select specifications with brake (vertical specifications).
 Note 2. The robot cable is flexible and resists bending. See P.732 for details on robot cable.

Basic specifications

| | |
|--|--|
| AC servo motor output (W) | 30 |
| Repeatability ^{Note 1} (mm) | +/-0.02 |
| Deceleration mechanism | Ball screw ϕ 12 |
| Ball screw lead (mm) | 20 12 6 |
| Maximum speed (mm/sec) | 1000 800 400 |
| Maximum payload (kg) | Horizontal: 3, 5, 9 Vertical: -, 1.2, 2.4 |
| Rated thrust (N) | 19 32 64 |
| Stroke (mm) | 50 to 800 (50mm pitch) |
| Overall length (mm) | Horizontal: Stroke+201.5 Vertical: Stroke+239.5 |
| Maximum outside dimension of body cross-section (mm) | W55×H65 |
| Cable length (m) | Standard: 3.5 / Option: 1.5, 10 |
| Degree of cleanliness | ISO CLASS 3 (ISO14644-1) ^{Note 2} |
| Intake air (N ℓ /min) ^{Note 3} | 80 50 30 |

Note 1. Positioning repeatability in one direction.
 Note 2. CLASS 10 (0.1 μ m) FED-STD-209D or equivalent when a suction blower is used.
 Note 3. The necessary intake amount varies depending on the use conditions and environment.

Allowable overhang ^{Note}

| Lead | Horizontal installation (Unit: mm) | | | Wall installation (Unit: mm) | | | Vertical installation (Unit: mm) | |
|---------|------------------------------------|-----|-----|------------------------------|-----|------|----------------------------------|------------|
| | A | B | C | A | B | C | A | C |
| Lead 20 | 1584 | 324 | 745 | 679 | 303 | 1505 | - | - |
| Lead 12 | 699 | 104 | 251 | 215 | 87 | 605 | 1.2kg | 246 245 |
| Lead 6 | 1166 | 159 | 406 | 364 | 126 | 1073 | 2.4kg | 110 110 |
| Lead 20 | 551 | 59 | 155 | 123 | 28 | 438 | - | - |
| Lead 12 | 1194 | 104 | 294 | 3kg | 259 | 72 | 354 | - |
| Lead 6 | 624 | 31 | 89 | 9kg | 50 | 0 | 154 | - |

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.
 Note. Service life is calculated for 600mm stroke models.

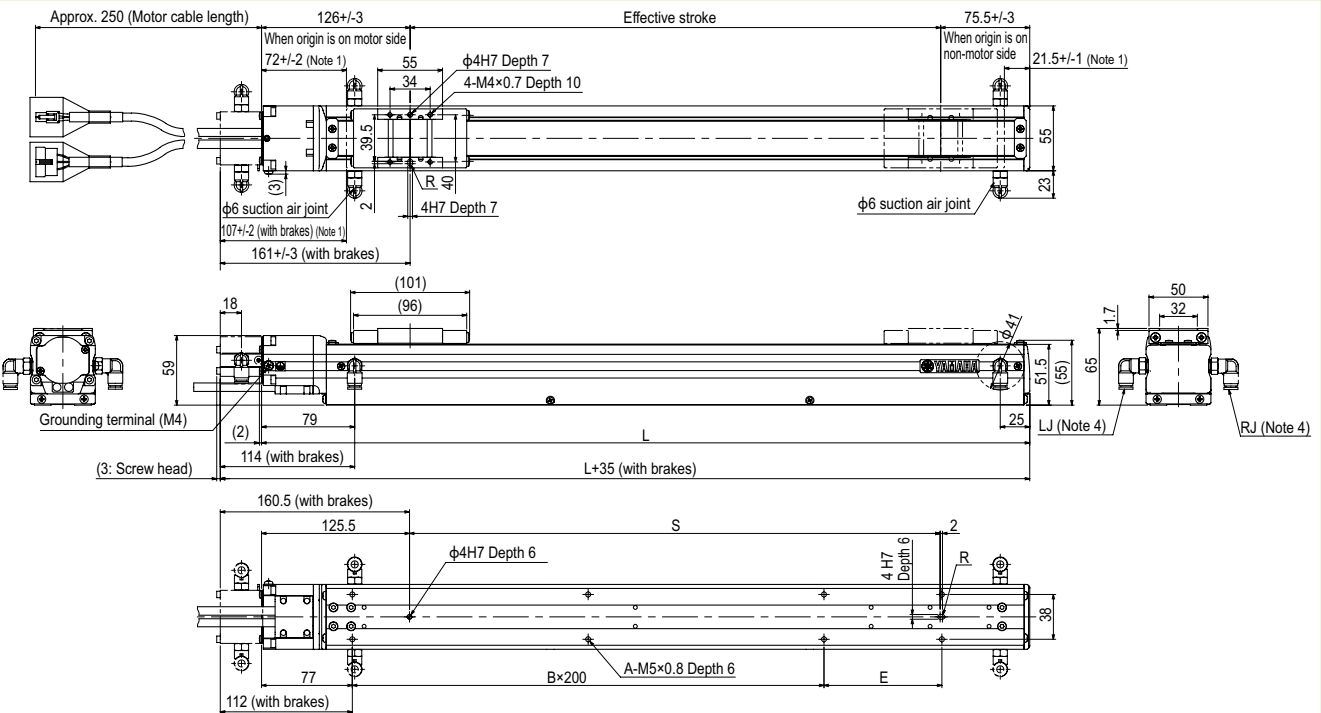
Static loading moment

| (Unit: N·m) | | |
|-------------|----|----|
| MY | MP | MR |
| 30 | 34 | 40 |

Controller

| Controller | Operation method |
|------------|--|
| ERCD | Pulse train control / Programming / I/O point trace / Remote command / Operation using RS-232C communication |

C5L



| Effective stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| L | 251.5 | 301.5 | 351.5 | 401.5 | 451.5 | 501.5 | 551.5 | 601.5 | 651.5 | 701.5 | 751.5 | 801.5 | 851.5 | 901.5 | 951.5 | 1001.5 |
| A | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12 |
| B | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 |
| E | 100 | 200 | 200 | 100 | 100 | 200 | 200 | 100 | 100 | 200 | 200 | 100 | 100 | 200 | 200 | 100 |
| S | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 |
| Weight (kg) ^{Note 3} | 1.7 | 2.0 | 2.2 | 2.5 | 2.7 | 3.0 | 3.2 | 3.4 | 3.7 | 3.9 | 4.2 | 4.4 | 4.7 | 4.9 | 5.1 | 5.4 |
| Maximum speed for each stroke (mm/sec) ^{Note 5} | 1000 | | | | | | | | | | | | | | | |
| Lead 20 | 90% | | | | | | | | | | | | | | | |
| Lead 12 | 80% | | | | | | | | | | | | | | | |
| Lead 6 | 70% | | | | | | | | | | | | | | | |
| Speed setting | - | | | | | | | | | | | | | | | |
| Lead 20 | 800 | | | | | | | | | | | | | | | |
| Lead 12 | 640 | | | | | | | | | | | | | | | |
| Lead 6 | 400 | | | | | | | | | | | | | | | |
| Speed setting | - | | | | | | | | | | | | | | | |

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. Minimum bend radius of motor cable is R30.
 Note 3. Weight of models with no brake. The weight of brake-attached models is 0.2 kg heavier than the models with no brake shown in the table.
 Note 4. Either right or left can be selected for the installation direction for the ϕ 6 intake air joint. (The left side is the standard.)
 Note 5. When the stroke is longer than 600mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.
 Note 6. External view of C5LH is identical to C5L.

C5LH

- High lead: Lead 20
- Origin on the non-motor side is selectable



Ordering method

| | | | | | | | | | | | | | |
|-------------|--------------|---|--|--|--|--|---|-------------------|---|--|---|--|---|
| C5LH | Model | Lead designation 20: 20mm 12: 12mm 6: 6mm | Brake Note 1 No entry: With no brake BK: With brake | Direction of air coupler installation L: Left (Standard) R: Right | Origin position change None: Standard Z: Non-motor side | Stroke 50 to 800 (50mm pitch) | Cable length Note 2 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) | TSX | Positioner Note 3 TS-X | Driver: Power supply voltage / Power capacity 105: 100V/100W or less 205: 200V/100W or less | LCD monitor No entry: None L: With LCD | I/O selection NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board Note 4 | Battery B: With battery (Absolute) N: None (Incremental) |
| | SR1-X | 05 | | | | | | Controller | Driver: Power capacity 05: 100W or less | Usable for CE No entry: Standard E: CE marking | I/O selection N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS | Battery B: With battery (Absolute) N: None (Incremental) | |
| | RDV-X | 2 | | | | | | Driver | Power supply voltage 2: AC200V | | 05 | Driver: Power capacity 05: 100W or less | |

Note 1. The model with a lead of 20mm cannot select specifications with brake (vertical specifications).
 Note 2. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.732 for details on robot cable.
 Note 3. See P.634 for DIN rail mounting bracket.
 Note 4. Select this selection when using the gateway function. For details, see P.96.

Basic specifications

| | |
|--|--|
| AC servo motor output (W) | 30 |
| Repeatability Note 1 (mm) | +/-0.02 |
| Deceleration mechanism | Ball screw ϕ 12 |
| Ball screw lead (mm) | 20 12 6 |
| Maximum speed (mm/sec) | 1000 800 400 |
| Maximum payload (kg) | Horizontal 3 5 9 Vertical - 1.2 2.4 |
| Rated thrust (N) | 19 32 64 |
| Stroke (mm) | 50 to 800 (50mm pitch) |
| Overall length (mm) | Horizontal Stroke+201.5 Vertical Stroke+239.5 |
| Maximum outside dimension of body cross-section (mm) | W55×H65 |
| Cable length (m) | Standard: 3.5 / Option: 5, 10 |
| Degree of cleanliness | ISO CLASS 3 (ISO14644-1) Note 2 |
| Intake air (N ℓ /min) Note 3 | 80 50 30 |

Note 1. Positioning repeatability in one direction.
 Note 2. CLASS 10 (0.1 μ m) FED-STD-209D or equivalent when a suction blower is used.
 Note 3. The necessary intake amount varies depending on the use conditions and environment.

Allowable overhang

| Horizontal installation (Unit: mm) | Wall installation (Unit: mm) | | | Vertical installation (Unit: mm) | |
|------------------------------------|------------------------------|-----|-----|----------------------------------|---------|
| | A | B | C | A | C |
| Lead 20 | 1099 | 324 | 645 | 1kg 602 | 303 950 |
| 3kg | 488 | 104 | 241 | 2kg 347 | 141 800 |
| 2kg | 916 | 159 | 398 | 5kg 119 | 44 355 |
| 5kg | 436 | 60 | 152 | 3kg 259 | 87 950 |
| 3kg | 1194 | 105 | 294 | 9kg 50 | 15 385 |
| 9kg | 624 | 31 | 89 | | |

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.
 Note. Service life is calculated for 600mm stroke models.

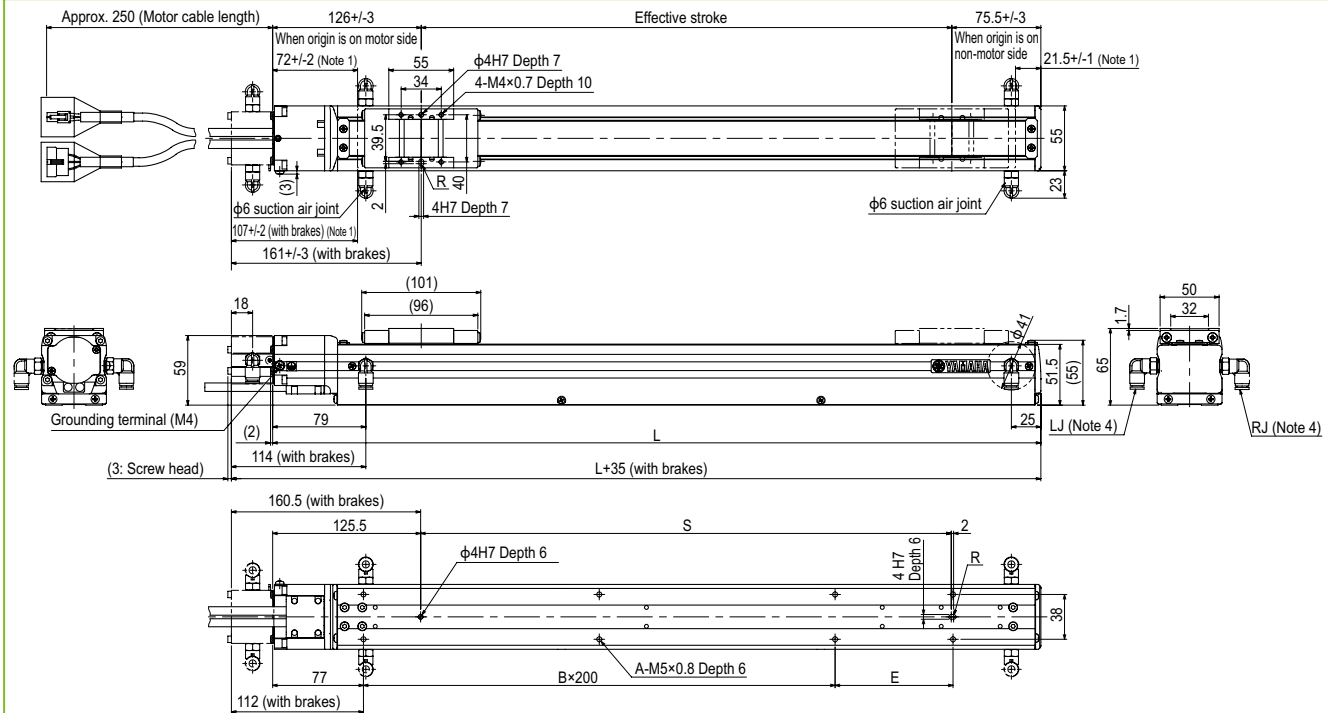
Static loading moment

| (Unit: N·m) | | |
|-------------|----|----|
| MY | MP | MR |
| 30 | 34 | 40 |

Controller

| Controller | Operation method |
|---|--|
| SR1-X05 RCX320 RCX221/222 RCX340 | Programming / I/O point trace / Remote command / Operation using RS-232C communication |
| TS-X105 | I/O point trace / Remote command |
| TS-X205 | |
| RDV-X205 | Pulse train control |

C5LH

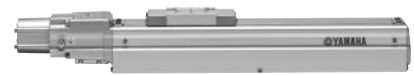


| Effective stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| L | 251.5 | 301.5 | 351.5 | 401.5 | 451.5 | 501.5 | 551.5 | 601.5 | 651.5 | 701.5 | 751.5 | 801.5 | 851.5 | 901.5 | 951.5 | 1001.5 |
| A | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12 |
| B | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 |
| E | 100 | 200 | 200 | 100 | 100 | 200 | 200 | 100 | 100 | 200 | 200 | 100 | 100 | 200 | 200 | 100 |
| S | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 |
| Weight (kg) Note 3 | 1.7 | 2.0 | 2.2 | 2.5 | 2.7 | 3.0 | 3.2 | 3.4 | 3.7 | 3.9 | 4.2 | 4.4 | 4.7 | 4.9 | 5.1 | 5.4 |
| Maximum speed for each stroke (mm/sec) | 1000 | | | | | | | | | | | | | | | |
| Lead 20 Speed setting | 90% | | | | | | | | | | | | | | | |
| Lead 12 Speed setting | 80% | | | | | | | | | | | | | | | |
| Lead 6 Speed setting | 70% | | | | | | | | | | | | | | | |

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. Minimum bend radius of motor cable is R30.
 Note 3. Weight of models with no brake. The weight of brake-attached models is 0.2 kg heavier than the models with no brake shown in the table.
 Note 4. Either right or left can be selected for the installation direction for the ϕ 6 intake air joint. (The left side is the standard.)
 Note 5. When the stroke is longer than 600mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.
 Note 6. External view of C5LH is identical to C5L.

C6L

- High lead: Lead 20
- Origin on the non-motor side is selectable



Ordering method

C6L

| Model | Lead designation | Brake | Direction of air coupler installation | Origin position change | Stroke | Cable length |
|-------|--------------------------------|---|---------------------------------------|-------------------------------------|---------------------------|---|
| | 20: 20mm 12: 12mm 6: 6mm | No entry: With no brake BK: With brake | L: Left (Standard) R: Right | None: Standard Z: Non-motor side | 50 to 800 (50mm pitch) | 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) |

TSX

| Positioner | Driver: Power supply voltage / Power capacity | LCD monitor | I/O selection | Battery |
|------------|--|-------------------------------|---|---|
| TS-X | 105: 100V/100W or less 205: 200V/100W or less | No entry: None L: With LCD | NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board | 3: With battery (Absolute) N: None (Incremental) |

SR1-X

| Controller | Driver: Power capacity | Usable for CE | I/O selection | Battery |
|------------|------------------------|-------------------------------------|---|---|
| 05 | 05: 100W or less | No entry: Standard E: CE marking | N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS | 3: With battery (Absolute) N: None (Incremental) |

RDV-X

| Driver | Power supply voltage | Driver: Power capacity | Regenerative unit |
|--------|----------------------|------------------------|-------------------|
| 2 | 2: AC200V | 05: 100W or less | RBR1 |

- Note 1. The model with a lead of 20mm cannot select specifications with brake (vertical specifications).
 Note 2. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.732 for details on robot cable.
 Note 3. See P.634 for DIN rail mounting bracket.
 Note 4. Select this selection when using the gateway function. For details, see P.96.

Basic specifications

| | |
|--|--|
| AC servo motor output (W) | 60 |
| Repeatability (mm) | +/-0.02 |
| Deceleration mechanism | Ball screw ϕ 12 |
| Ball screw lead (mm) | 20 12 6 |
| Maximum speed (mm/sec) | 1000 800 400 |
| Maximum payload (kg) | Horizontal 10 12 30 Vertical - 4 8 |
| Rated thrust (N) | 51 85 170 |
| Stroke (mm) | 50 to 800 (50mm pitch) |
| Overall length (mm) | Horizontal Stroke+247.5 Vertical Stroke+285.5 |
| Maximum outside dimension of body cross-section (mm) | W65×H65 |
| Cable length (m) | Standard: 3.5 / Option: 5, 10 |
| Degree of cleanliness | ISO CLASS 3 (ISO14644-1) |
| Intake air (N ℓ /min) | 80 50 30 |

- Note 1. Positioning repeatability in one direction.
 Note 2. CLASS 10 (0.1 μ m) FED-STD-209D or equivalent when a suction blower is used.
 Note 3. The necessary intake amount varies depending on the use conditions and environment.

Allowable overhang

| Lead | Horizontal installation (Unit: mm) | | | Wall installation (Unit: mm) | | | Vertical installation (Unit: mm) | | |
|---------|------------------------------------|-----|-----|------------------------------|-----|-----|----------------------------------|-----|--|
| | A | B | C | A | B | C | A | C | |
| Lead 20 | 2kg 433 | 192 | 295 | 2kg 300 | 174 | 365 | 1kg 353 | 351 | |
| 6kg | 145 | 59 | 104 | 6kg 83 | 44 | 105 | 2kg 163 | 164 | |
| 10kg | 110 | 33 | 75 | 10kg 43 | 18 | 71 | 4kg 68 | 70 | |
| Lead 12 | 3kg 622 | 125 | 336 | 3kg 291 | 96 | 317 | 2kg 169 | 170 | |
| 8kg | 271 | 41 | 121 | 8kg 87 | 13 | 110 | 4kg 71 | 73 | |
| 12kg | 214 | 24 | 76 | 12kg 41 | 0 | 126 | 8kg 21 | 24 | |
| Lead 6 | 5kg 692 | 73 | 236 | 5kg 202 | 45 | 237 | | | |
| 10kg | 372 | 33 | 109 | 10kg 70 | 5 | 97 | | | |
| 30kg | 157 | 0 | 25 | 30kg 0 | 0 | 0 | | | |

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.

Note. Service life is calculated for 600mm stroke models.

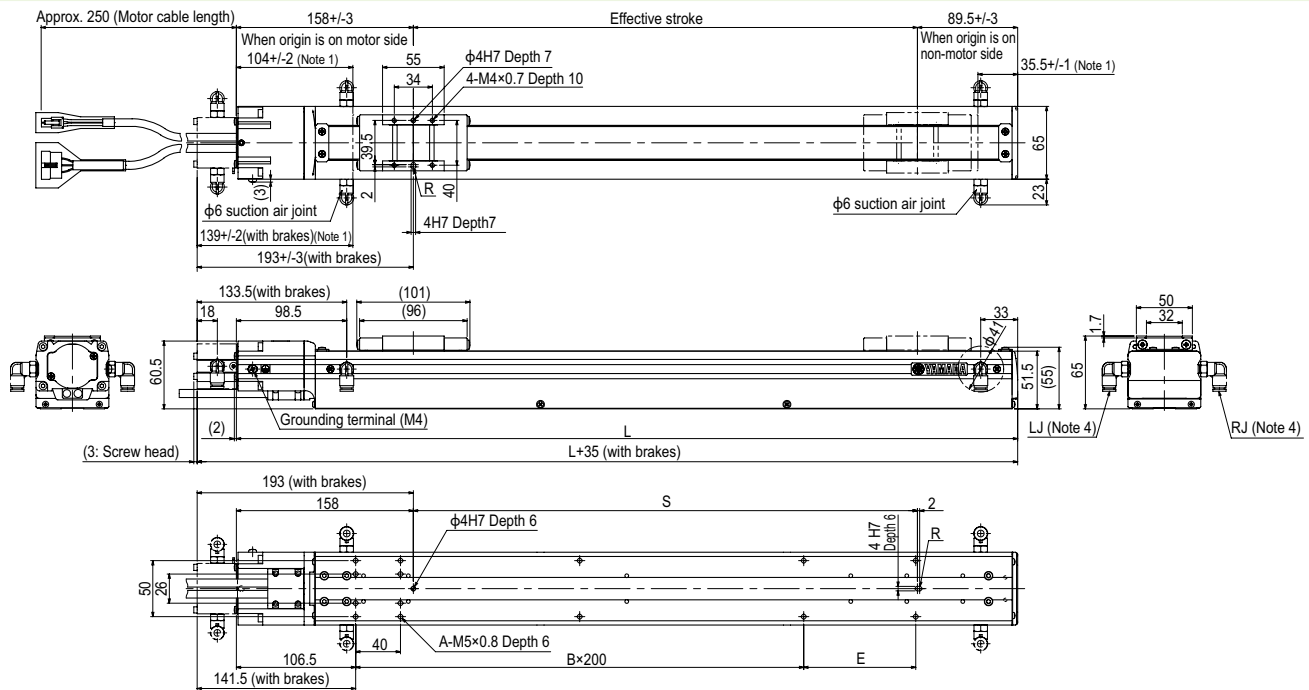
Static loading moment

| (Unit: N·m) | | |
|-------------|----|----|
| MY | MP | MR |
| 35 | 40 | 50 |

Controller

| Controller | Operation method |
|---|--|
| SR1-X05 RCX320 RCX221/222 RCX340 | Programming / I/O point trace / Remote command / Operation using RS-232C communication |
| TS-X105 | I/O point trace / Remote command |
| TS-X205 | Remote command |
| RDV-X205-RBR1 | Pulse train control |

C6L



| Effective stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 |
|--|---------------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| L | 297.5 | 347.5 | 397.5 | 447.5 | 497.5 | 547.5 | 597.5 | 647.5 | 697.5 | 747.5 | 797.5 | 847.5 | 897.5 | 947.5 | 997.5 | 1047.5 |
| A | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 14 | 14 | 14 | 14 | 16 | 16 | 16 | 16 | 18 |
| B | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 |
| E | 150 | 200 | 200 | 100 | 100 | 200 | 200 | 100 | 100 | 200 | 200 | 100 | 100 | 200 | 200 | 100 |
| S | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 |
| Weight (kg) | 2.6 | 2.9 | 3.1 | 3.4 | 3.7 | 4.0 | 4.3 | 4.6 | 4.9 | 5.2 | 5.4 | 5.7 | 6.0 | 6.3 | 6.6 | 6.8 |
| Maximum speed for each stroke (mm/sec) | Lead 20 | 1000 | | | | | | | | | | | | | | |
| | Speed setting | - | | | | | | | | | | | | | | |
| | Lead 12 | 800 | | | | | | | | | | | | | | |
| | Speed setting | 90% 80% 70% | | | | | | | | | | | | | | |
| Lead 6 | Lead 6 | 400 | | | | | | | | | | | | | | |
| | Speed setting | 680 600 520 480 | | | | | | | | | | | | | | |
| | Speed setting | 340 300 260 240 | | | | | | | | | | | | | | |
| Speed setting | Lead 6 | 85% 75% 65% 60% | | | | | | | | | | | | | | |
| | Speed setting | - | | | | | | | | | | | | | | |

- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. Minimum bend radius of motor cable is R30.
 Note 3. Weight of models with no brake. The weight of brake-attached models is 0.2 kg heavier than the models with no brake shown in the table.
 Note 4. Either right or left can be selected for the installation direction for the ϕ 6 intake air joint. (The left side is the standard.)
 Note 5. When the stroke is longer than 600mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.

C8

- High lead: Lead 20
- Origin on the non-motor side is selectable



Ordering method

C8

| Model | Lead | Brake ^{Note 1} | Option | Stroke | Cable length ^{Note 2} |
|-------|--------------------------------|---|---|----------------------------|---|
| | 20: 20mm 12: 12mm 6: 6mm | No entry: With no brake BK: With brake | Origin position None: Standard Z: Non-change motor side | 150 to 800 (50mm pitch) | 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) |

| TSX | SR1-X | RDV-X |
|--|--|--|
| Positioner ^{Note 3} TS-X | Controller | Driver |
| Driver: Power-supply voltage / Power capacity 105: 100V/100W or less 205: 200V/100W or less | Driver: Power capacity 05: 100W or less | Power-supply voltage 2: AC200V |
| LCD monitor No entry: None L: With LCD | Usable for CE No entry: Standard E: CE marking | Driver: Power capacity 05: 100W or less |
| I/O selection NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board ^{Note 4} | I/O selection N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS | Regenerative unit RBR1 |
| Battery B: With battery (Absolute) N: None (Incremental) | Battery B: With battery (Absolute) N: None (Incremental) | |

Note 1. The model with a lead of 20mm cannot select specifications with brake (vertical specifications).
 Note 2. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.732 for details on robot cable.
 Note 3. See P.634 for DIN rail mounting bracket.
 Note 4. Select this selection when using the gateway function. For details, see P.96.

Basic specifications

| | |
|--|--|
| AC servo motor output (W) | 100 |
| Repeatability ^{Note 1} (mm) | +/-0.02 |
| Deceleration mechanism | Ball screw ϕ 12 |
| Ball screw lead (mm) | 20 12 6 |
| Maximum speed (mm/sec) | 1000 720 360 |
| Maximum payload (kg) | Horizontal 12 20 40 Vertical - 4 8 |
| Rated thrust (N) | 84 141 283 |
| Stroke (mm) | 150 to 800 (50mm pitch) |
| Overall length (mm) | Horizontal Stroke+320 Vertical Stroke+355 |
| Maximum outside dimension of body cross-section (mm) | W80 x H75 |
| Cable length (m) | Standard: 3.5 / Option: 5, 10 |
| Degree of cleanliness | CLASS 10 ^{Note 3} |
| Intake air (Nl/min) | 30 to 90 ^{Note 4} |

Note 1. Positioning repeatability in one direction.
 Note 2. When the stroke is longer than 600mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.
 Note 3. Per 1cf (0.1um base), when suction blower is used.
 Note 4. The necessary intake amount varies depending on the use conditions and environment.

Allowable overhang ^{Note}

| Horizontal installation (Unit: mm) | | | | Wall installation (Unit: mm) | | | | Vertical installation (Unit: mm) | | | | |
|------------------------------------|--------|-----|----|------------------------------|--------|-----|----|----------------------------------|---------|-----|-----|-----|
| Lead | Weight | A | B | Lead | Weight | A | B | Lead | Weight | C | | |
| Lead 20 | 5kg | 245 | 85 | 146 | 5kg | 121 | 71 | 211 | Lead 12 | 1kg | 440 | 442 |
| | 10kg | 131 | 39 | 69 | 10kg | 42 | 24 | 88 | | 2kg | 207 | 209 |
| | 12kg | 115 | 31 | 57 | 12kg | 29 | 16 | 66 | | 3kg | 130 | 132 |
| Lead 12 | 5kg | 364 | 92 | 192 | 5kg | 164 | 78 | 328 | Lead 6 | 4kg | 91 | 92 |
| | 10kg | 207 | 43 | 92 | 10kg | 62 | 29 | 158 | | 2kg | 237 | 238 |
| | 15kg | 144 | 26 | 41 | 15kg | 26 | 12 | 83 | | 4kg | 106 | 96 |
| Lead 6 | 20kg | 112 | 18 | 40 | 20kg | 7 | 4 | 32 | Lead 6 | 6kg | 62 | 62 |
| | 10kg | 406 | 47 | 124 | 10kg | 87 | 33 | 353 | | 8kg | 34 | 40 |
| | 20kg | 225 | 20 | 54 | 20kg | 18 | 6 | 127 | | | | |
| Lead 6 | 30kg | 162 | 11 | 31 | 30kg | 0 | 0 | 0 | | | | |
| | 40kg | 168 | 7 | 20 | 40kg | 0 | 0 | 0 | | | | |

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.

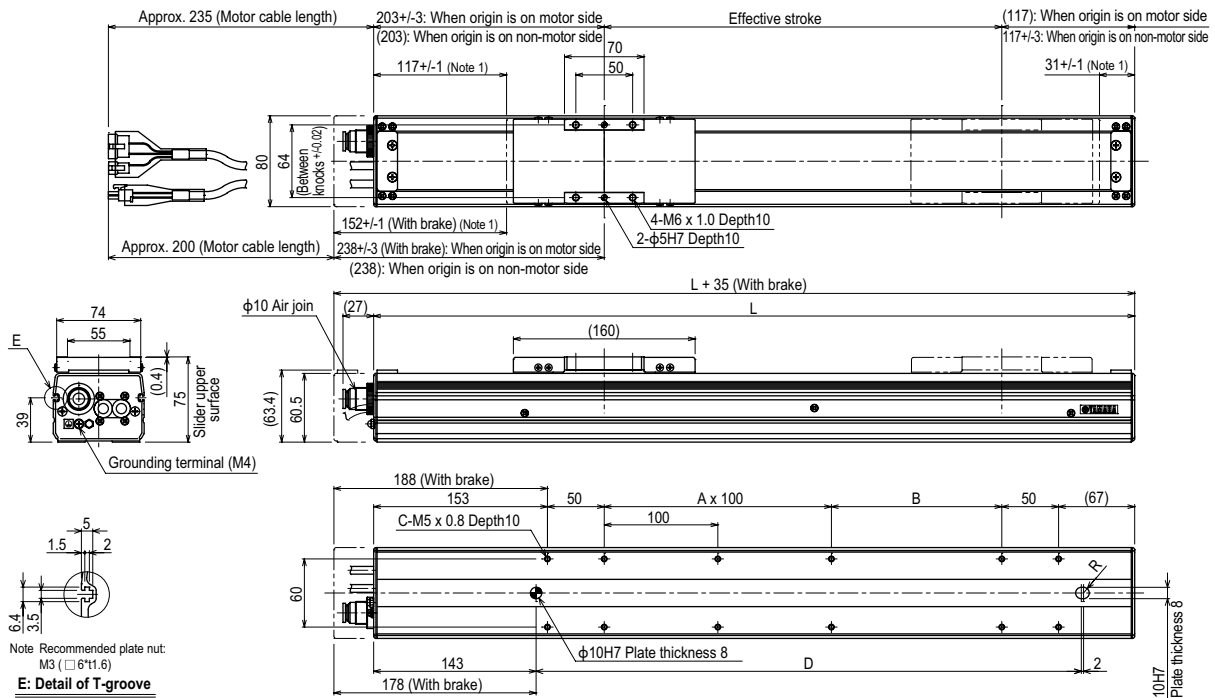
Static loading moment

| (Unit: N·m) | | |
|-------------|----|-----|
| MY | MP | MR |
| 70 | 95 | 110 |

Controller

| Controller | Operation method |
|---|--|
| SR1-X05 RCX320 RCX221/222 RCX340 | Programming / I/O point trace / Remote command / Operation using RS-232C communication |
| TS-X105 | I/O point trace / Remote command |
| TS-X205 | |
| RDV-X205-RBR1 | Pulse train control |

C8



| Effective stroke | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | | |
|--|---------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|-----|-----|
| L | 470 | 520 | 570 | 620 | 670 | 720 | 770 | 820 | 870 | 920 | 970 | 1020 | 1070 | 1120 | | |
| A | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | | |
| B | 150 | 100 | 150 | 100 | 150 | 100 | 150 | 100 | 150 | 100 | 150 | 100 | 150 | 100 | | |
| C | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 | 18 | 18 | 20 | 20 | 22 | | |
| D | 280 | 330 | 380 | 430 | 480 | 530 | 580 | 630 | 680 | 730 | 780 | 830 | 880 | 930 | | |
| Weight (kg) ^{Note 3} | 3.6 | 3.9 | 4.1 | 4.4 | 4.7 | 5.0 | 5.3 | 5.6 | 5.9 | 6.2 | 6.4 | 6.7 | 7.0 | 7.3 | | |
| Maximum speed ^{Note 4} (mm/sec) | Lead 20 | 1000 | | | | | | | | | | 950 | 800 | 700 | 650 | |
| | Speed setting | - | | | | | | | | | | 95% | 80% | 70% | 65% | |
| | Lead 12 | 720 | | | | | | | | | | 648 | 540 | 468 | 432 | 360 |
| | Lead 6 | 360 | | | | | | | | | | 324 | 270 | 234 | 216 | 180 |
| Speed setting | - | | | | | | | | | | 90% | 75% | 65% | 60% | 50% | |

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. Minimum bend radius of motor cable is R50.
 Note 3. Weight of models with no brake. The weight of brake-attached models is 0.3 kg heavier than the models with no brake shown in the table.
 Note 4. When the stroke is longer than 600mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.

C8L

Origin on the non-motor side is selectable

Ordering method

| Model | Lead | Brake | Option | Stroke | Cable length ^{Note 1} |
|-------|--------------------------------|---|---|-----------------------------|---|
| | 20: 20mm 10: 10mm 5: 5mm | No entry: With no brake BK: With brake | Origin position change None: Standard Z: Non-motor side | 150 to 1050 (50mm pitch) | 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) |

| Positioner ^{Note 2} | Driver: Power-supply voltage / Power capacity | LCD monitor | I/O selection | Battery |
|------------------------------|--|-------------------------------|---|---|
| TS-X | 105: 100V/100W or less 205: 200V/100W or less | No entry: None L: With LCD | NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board ^{Note 3} | B: With battery (Absolute) N: None (Incremental) |

| Controller | Driver: Power capacity | Usable for CE | I/O selection | Battery |
|------------|------------------------|-------------------------------------|---|---|
| SR1-X | 05: 100W or less | No entry: Standard E: CE marking | N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS | B: With battery (Absolute) N: None (Incremental) |

| Driver | Power-supply voltage | Driver: Power capacity | Regenerative unit |
|--------|----------------------|------------------------|-------------------|
| RDV-X | 2: AC200V | 05: 100W or less | RBR1 |

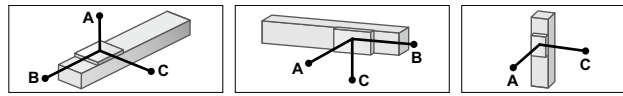
Note 1. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.732 for details on robot cable.
 Note 2. See P.634 for DIN rail mounting bracket.
 Note 3. Select this selection when using the gateway function. For details, see P.96.

Basic specifications

| | |
|--|--|
| AC servo motor output (W) | 100 |
| Repeatability ^{Note 1} (mm) | +/-0.01 |
| Deceleration mechanism | Ball screw ϕ 15 |
| Ball screw lead (mm) | 20 10 5 |
| Maximum speed (mm/sec) | 1000 600 300 |
| Maximum payload (kg) | Horizontal 20 40 50 Vertical 4 8 16 |
| Rated thrust (N) | 84 169 339 |
| Stroke (mm) | 150 to 1050 (50mm pitch) |
| Overall length (mm) | Horizontal Stroke+325 Vertical Stroke+360 |
| Maximum outside dimension of body cross-section (mm) | W80 x H75 |
| Cable length (m) | Standard: 3.5 / Option: 5, 10 |
| Degree of cleanliness | CLASS 10 ^{Note 3} |
| Intake air (Nl/min) | 30 to 90 ^{Note 4} |

Note 1. Positioning repeatability in one direction.
 Note 2. When the stroke is longer than 700mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.
 Note 3. Per 1cf (0.1um base), when suction blower is used.
 Note 4. The necessary intake amount varies depending on the use conditions and environment.

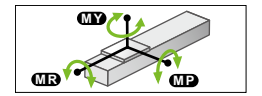
Allowable overhang ^{Note}



| Horizontal installation (Unit: mm) | Wall installation (Unit: mm) | | | Vertical installation (Unit: mm) | | | | |
|------------------------------------|------------------------------|-----|-----|----------------------------------|------|-----|-----|-----|
| | A | B | C | A | B | C | | |
| Lead 20 | 5kg | 259 | 122 | 179 | 5kg | 147 | 100 | 220 |
| | 10kg | 149 | 55 | 89 | 10kg | 53 | 32 | 97 |
| | 15kg | 100 | 33 | 56 | 15kg | 17 | 10 | 39 |
| | 20kg | 95 | 22 | 41 | 20kg | 0 | 0 | 0 |
| Lead 10 | 10kg | 251 | 61 | 130 | 10kg | 87 | 41 | 197 |
| | 20kg | 127 | 25 | 55 | 20kg | 10 | 4 | 37 |
| | 30kg | 90 | 14 | 31 | 30kg | 0 | 0 | 0 |
| | 40kg | 69 | 8 | 18 | 40kg | 0 | 0 | 0 |
| Lead 5 | 20kg | 256 | 29 | 76 | 20kg | 24 | 9 | 152 |
| | 30kg | 188 | 16 | 43 | 30kg | 0 | 0 | 0 |
| | 40kg | 96 | 10 | 28 | 40kg | 0 | 0 | 0 |
| | 50kg | 33 | 6 | 18 | 50kg | 0 | 0 | 0 |

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.

Static loading moment

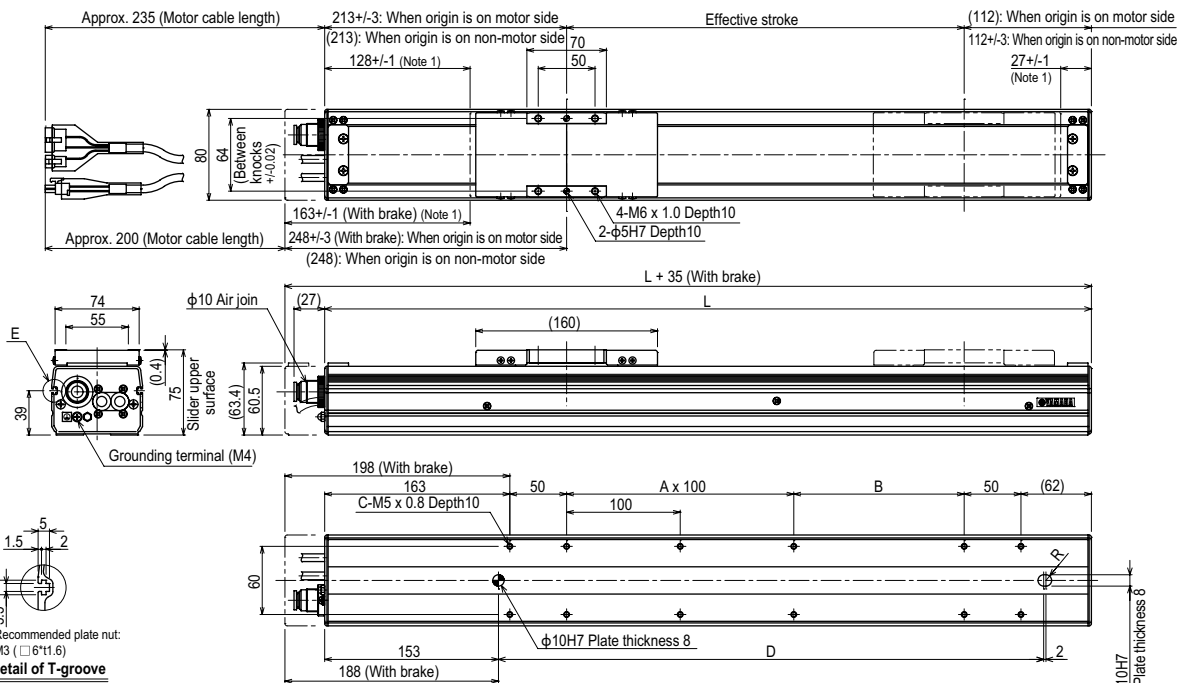


| (Unit: N·m) | | |
|-------------|----|-----|
| MY | MP | MR |
| 70 | 95 | 110 |

Controller

| Controller | Operation method |
|---|--|
| SR1-X05 RCX320 RCX221/222 RCX340 | Programming / I/O point trace / Remote command / Operation using RS-232C communication |
| TS-X105 | I/O point trace / Remote command |
| TS-X205 | Remote command |
| RDV-X205-RBR1 | Pulse train control |

C8L



| Effective stroke | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | |
|--|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|--|
| L | 475 | 525 | 575 | 625 | 675 | 725 | 775 | 825 | 875 | 925 | 975 | 1025 | 1075 | 1125 | 1175 | 1225 | 1275 | 1325 | 1375 | |
| A | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | |
| B | 150 | 100 | 150 | 100 | 150 | 100 | 150 | 100 | 150 | 100 | 150 | 100 | 150 | 100 | 150 | 100 | 150 | 100 | 150 | |
| C | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 | 18 | 18 | 20 | 20 | 22 | 22 | 24 | 24 | 26 | 26 | |
| D | 280 | 330 | 380 | 430 | 480 | 530 | 580 | 630 | 680 | 730 | 780 | 830 | 880 | 930 | 980 | 1030 | 1080 | 1130 | 1180 | |
| Weight (kg) ^{Note 3} | 3.9 | 4.2 | 4.5 | 4.8 | 5.1 | 5.4 | 5.7 | 6.0 | 6.4 | 6.7 | 7.0 | 7.3 | 7.6 | 7.9 | 8.2 | 8.5 | 8.8 | 9.2 | 9.5 | |
| Maximum speed ^{Note 4} (mm/sec) | 1000 | | | | | | | | | | | | | | | | | | | |
| | Lead 20 | - | | | | | | | | | | | | | | | | | | |
| | Lead 10 | 600 | | | | | | | | | | | | | | | | | | |
| | Lead 5 | 300 | | | | | | | | | | | | | | | | | | |
| Speed setting | - | | | | | | | | | | | | | | | | | | | |
| | 85% 75% 65% 60% 55% 50% 45% 40% | | | | | | | | | | | | | | | | | | | |

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. Minimum bend radius of motor cable is R50.
 Note 3. Weight of models with no brake. The weight of brake-attached models is 0.3 kg heavier than the models with no brake shown in the table.
 Note 4. When the stroke is longer than 700mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.

C8LH

Origin on the non-motor side is selectable

Ordering method

C8LH

| Model | Lead | Option | Stroke | Cable length ^{Note 1} | TSX | SR1-X | RDV-X | Battery |
|-------|--------------------------------|---|--------------------------|--|---|--|--|---|
| | 20: 20mm 10: 10mm 5: 5mm | Origin position change None: Standard Z: Non-motor side | 150 to 1050 (50mm pitch) | 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) | Positioner ^{Note 2} TS-X Driver: Power supply voltage / Power capacity 105: 100V/100W or less 205: 200V/100W or less LCD monitor No entry: None L: With LCD | Controller 05 Driver: Power capacity 05: 100W or less Usable for CE No entry: Standard E: CE marking | Driver 2 Power supply voltage 2: AC200V 05: 100W or less | I/O selection NPN: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board ^{Note 3} Battery B: With battery (Absolute) N: None (Incremental) |

Note 1. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.732 for details on robot cable.
 Note 2. See P.634 for DIN rail mounting bracket.
 Note 3. Select this selection when using the gateway function. For details, see P.96.

Basic specifications

| | |
|--|-------------------------------|
| AC servo motor output (W) | 100 |
| Repeatability ^{Note 1} (mm) | +/-0.01 |
| Deceleration mechanism | Ball screw $\phi 15$ |
| Ball screw lead (mm) | 20 10 5 |
| Maximum speed ^{Note 2} (mm/sec) | 1000 600 300 |
| Maximum payload (kg) | Horizontal 30 60 80 |
| Rated thrust (N) | 84 169 339 |
| Stroke (mm) | 150 to 1050 (50mm pitch) |
| Overall length (mm) | Stroke+389 |
| Maximum outside dimension of body cross-section (mm) | W80 x H75 |
| Cable length (m) | Standard: 3.5 / Option: 5, 10 |
| Degree of cleanliness | CLASS 10 ^{Note 3} |
| Intake air (N ₂ /min) | 30 to 90 ^{Note 4} |

Note 1. Positioning repeatability in one direction.
 Note 2. When the stroke is longer than 650mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.
 Note 3. Per 1cf (0.1um base), when suction blower is used.
 Note 4. The necessary intake amount varies depending on the use conditions and environment.

Allowable overhang ^{Note}

| Lead | Horizontal installation (Unit: mm) | | | Wall installation (Unit: mm) | | | |
|---------|------------------------------------|------|-----|------------------------------|------|-----|-----|
| | A | B | C | A | B | C | |
| Lead 20 | 10kg | 687 | 274 | 200 | 163 | 225 | |
| | 20kg | 401 | 125 | 92 | 56 | 76 | |
| | 30kg | 338 | 76 | 57 | 20 | 27 | |
| Lead 10 | 20kg | 622 | 137 | 111 | 74 | 90 | |
| | 40kg | 472 | 57 | 47 | 40kg | 8 | 11 |
| | 60kg | 375 | 30 | 25 | 60kg | - | - |
| Lead 5 | 20kg | 1087 | 148 | 127 | 20kg | 89 | 104 |
| | 40kg | 844 | 63 | 54 | 40kg | 15 | 18 |
| | 60kg | 707 | 34 | 29 | 60kg | - | - |
| | 80kg | 594 | 20 | 17 | 80kg | - | - |

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.

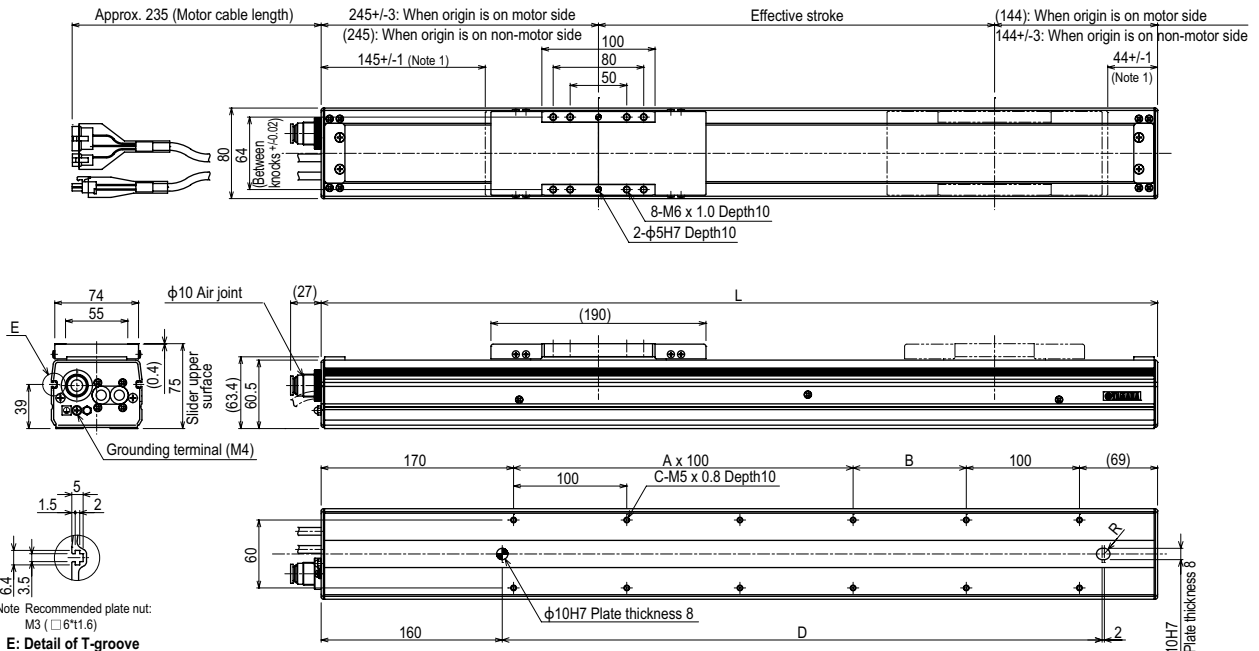
Static loading moment

| (Unit: N·m) | | |
|-------------|-----|-----|
| MY | MP | MR |
| 128 | 163 | 143 |

Controller

| Controller | Operation method |
|---|--|
| SR1-X05 RCX320 RCX221/222 RCX340 | Programming / I/O point trace / Remote command / Operation using RS-232C communication |
| TS-X105 | I/O point trace / Remote command |
| TS-X205 | |
| RDV-X205-RBR1 | Pulse train control |

C8LH



| Effective stroke | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | |
|--|---------------|------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|-----|
| L | 539 | 589 | 639 | 689 | 739 | 789 | 839 | 889 | 939 | 989 | 1039 | 1089 | 1139 | 1189 | 1239 | 1289 | 1339 | 1389 | 1439 | |
| A | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 10 | |
| B | 100 | 150 | 100 | 150 | 100 | 150 | 100 | 150 | 100 | 150 | 100 | 150 | 100 | 150 | 100 | 150 | 100 | 150 | 100 | |
| C | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 | 18 | 18 | 20 | 20 | 22 | 22 | 24 | 24 | 26 | |
| D | 330 | 380 | 430 | 480 | 530 | 580 | 630 | 680 | 730 | 780 | 830 | 880 | 930 | 980 | 1030 | 1080 | 1130 | 1180 | 1230 | |
| Weight (kg) | 4.7 | 5.0 | 5.3 | 5.6 | 5.9 | 6.2 | 6.6 | 6.9 | 7.2 | 7.5 | 7.8 | 8.1 | 8.4 | 8.7 | 9.0 | 9.3 | 9.7 | 10.0 | 10.3 | |
| Maximum speed ^{Note 3} (mm/sec) | Lead 20 | 1000 | | | | | | | | | | | | | | | | | | |
| | Speed setting | - | | | | | | | | | | | | | | | | | | |
| | Lead 10 | 600 | | | | | | | | | | | | | | | | | | |
| | Lead 5 | 300 | | | | | | | | | | | | | | | | | | |
| Speed setting | | | | | | | | | | | | 85% | 75% | 65% | 60% | 55% | 50% | 45% | 40% | 35% |

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. Minimum bend radius of motor cable is R50.
 Note 3. When the stroke is longer than 650mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.

C10

Origin on the non-motor side is selectable: Lead 20 • 10



Ordering method

C10

| Model | Lead | Brake | Option | Stroke | Cable length ^{Note 2} |
|-------|--------------------------------|---|---|-----------------------------|---|
| | 20: 20mm 10: 10mm 5: 5mm | No entry: With no brake BK: With brake | Origin position change None: Standard Z: Non-motor side ^{Note 1} | 150 to 1050 (50mm pitch) | 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) |

TSX

| Positioner ^{Note 3} | Driver: Power supply voltage / Power capacity | Regenerative unit | LCD monitor | I/O selection | Battery |
|------------------------------|--|-------------------------------|-------------------------------|---|---|
| TS-X | 105: 100V/100W or less 205: 200V/100W or less | No entry: None R: With RGT | No entry: None L: With LCD | NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board ^{Note 4} | B: With battery (Absolute) N: None (Incremental) |

SR1-X

| Controller | Driver: Power capacity | Usable for CE | Regenerative unit | I/O selection | Battery |
|------------|------------------------|-------------------------------------|-------------------------------|---|---|
| SR1-X | 05: 100W or less | No entry: Standard E: CE marking | No entry: None R: With RGT | N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS | B: With battery (Absolute) N: None (Incremental) |

RDV-X

| Driver | Power supply voltage | Driver: Power capacity | Regenerative unit |
|--------|----------------------|------------------------|-------------------|
| RDV-X | 2: AC200V | 05: 100W or less | RBR1 |

- Note 1. If selecting 5mm lead specifications then the origin point cannot be changed to the non-motor side.
 Note 2. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.732 for details on robot cable.
 Note 3. See P.634 for DIN rail mounting bracket.
 Note 4. Select this selection when using the gateway function. For details, see P.96.

Basic specifications

| | |
|--|--|
| AC servo motor output (W) | 100 |
| Repeatability ^{Note 1} (mm) | +/-0.01 |
| Deceleration mechanism | Ball screw φ15 |
| Ball screw lead (mm) | 20 10 5 |
| Maximum speed (mm/sec) | 1000 500 250 |
| Maximum payload (kg) | Horizontal 20 40 60 Vertical 4 10 20 |
| Rated thrust (N) | 84 169 339 |
| Stroke (mm) | 150 to 1050 (50mm pitch) |
| Overall length (mm) | Horizontal Stroke+283 Vertical Stroke+313 |
| Maximum outside dimension of body cross-section (mm) | W104 × H85 |
| Cable length (m) | Standard: 3.5 / Option: 5, 10 |
| Degree of cleanliness | CLASS 10 ^{Note 3} |
| Intake air (Nl/min) | 30 to 90 ^{Note 4} |

- Note 1. Positioning repeatability in one direction.
 Note 2. When the stroke is longer than 750mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.
 Note 3. Per 1cf (0.1um base), when suction blower is used.
 Note 4. The necessary intake amount varies depending on the use conditions and environment.

Allowable overhang^{Note}

| Horizontal installation (Unit: mm) | | | | Wall installation (Unit: mm) | | | | Vertical installation (Unit: mm) | | | |
|------------------------------------|------|------|-----|------------------------------|------|-----|-----|----------------------------------|------|------|------|
| | A | B | C | | A | B | C | | A | C | |
| Lead 20 | 5kg | 1875 | 530 | 510 | 5kg | 496 | 451 | 1826 | 1kg | 2461 | 2492 |
| | 10kg | 1079 | 247 | 242 | 10kg | 218 | 168 | 1002 | 2kg | 1213 | 1244 |
| | 20kg | 628 | 106 | 107 | 20kg | 78 | 27 | 497 | 4kg | 585 | 617 |
| Lead 10 | 15kg | 765 | 156 | 164 | 10kg | 230 | 170 | 1036 | 8kg | 627 | 658 |
| | 30kg | 425 | 62 | 66 | 20kg | 80 | 29 | 506 | 10kg | 210 | 242 |
| | 40kg | 350 | 38 | 42 | 30kg | 30 | 0 | 311 | 15kg | 119 | 151 |
| Lead 5 | 30kg | 960 | 63 | 68 | 10kg | 234 | 170 | 2716 | 20kg | 72 | 104 |
| | 50kg | 565 | 25 | 28 | 20kg | 82 | 29 | 1206 | | | |
| | 60kg | 470 | 16 | 17 | 30kg | 31 | 0 | 711 | | | |

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.

Static loading moment

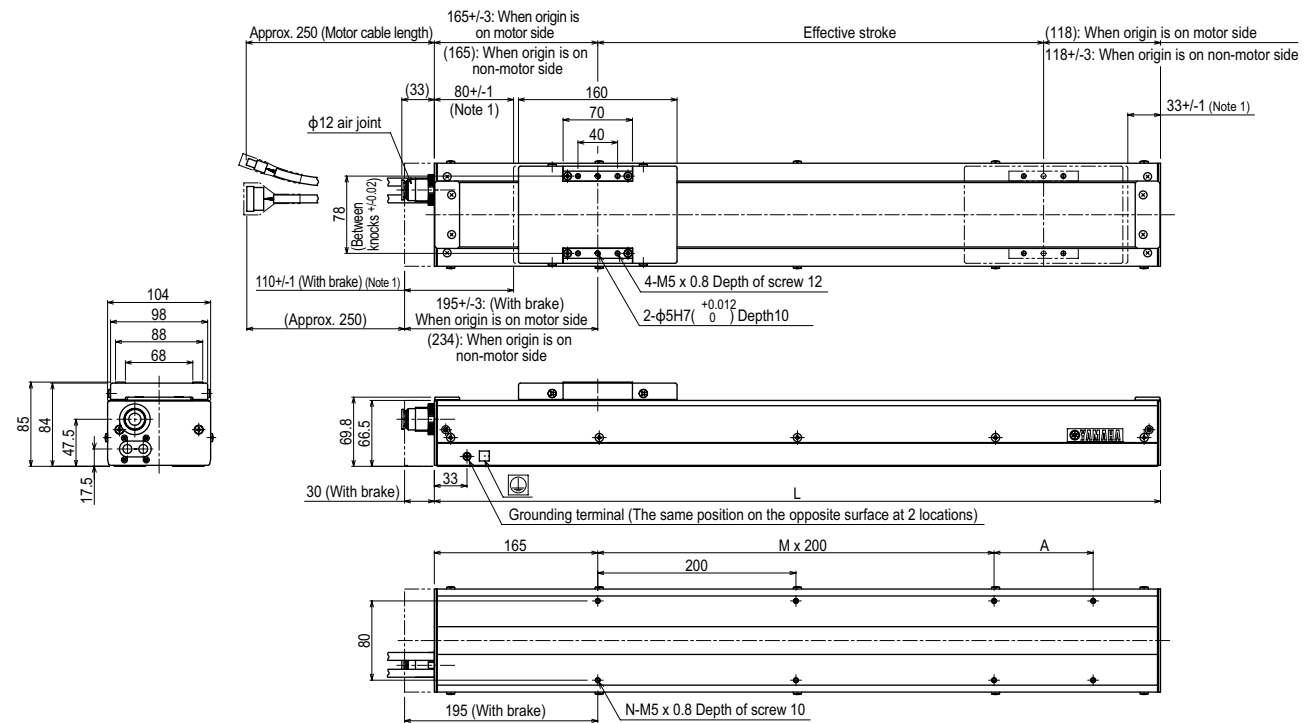
| (Unit: N·m) | | |
|-------------|-----|-----|
| MY | MP | MR |
| 119 | 119 | 105 |

Controller

| Controller | Operation method |
|-------------------------|--|
| SR1-X05 ^{Note} | Programming / I/O point trace / Remote command / Operation using RS-232C communication |
| RCX320 | |
| RCX221/222 | |
| RCX340 | |
| TS-X105 ^{Note} | I/O point trace / Remote command |
| TS-X205 ^{Note} | |
| RDV-X205-RBR1 | Pulse train control |

Note. Regenerative unit is required when the models used vertically and with 700mm or larger stroke.

C10



| Effective stroke | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | |
|--|---------------|------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|--|
| L | 433 | 483 | 533 | 583 | 633 | 683 | 733 | 783 | 833 | 883 | 933 | 983 | 1033 | 1083 | 1133 | 1183 | 1233 | 1283 | 1333 | |
| A | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | |
| M | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | |
| N | 4 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 14 | 14 | |
| Weight (kg) ^{Note 3} | 4.4 | 5.0 | 5.5 | 6.1 | 6.7 | 7.3 | 7.8 | 8.4 | 9.0 | 9.6 | 10.1 | 10.7 | 11.3 | 11.9 | 12.4 | 13.0 | 13.6 | 14.2 | 14.7 | |
| Maximum speed (mm/sec) ^{Note 4} | Lead 20 | 1000 | | | | | | | | | | | | | | | | | | |
| | Lead 10 | 500 | | | | | | | | | | | | | | | | | | |
| | Lead 5 | 250 | | | | | | | | | | | | | | | | | | |
| | Speed setting | 95% | 95% | 75% | 75% | 60% | 60% | 50% | | | | | | | | | | | | |

- Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. Minimum bend radius of motor cable is R50.
 Note 3. Weight of models with no brake. The weight of brake-attached models is 0.4 kg heavier than the models with no brake shown in the table.
 Note 4. When the stroke is longer than 750mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.

C14

Origin on the non-motor side is selectable



Ordering method

| | | | | | | | | | | | | |
|------------|--------------------------------|---|---|--------------------------|--|---------------------------|---|---|---|--|---|--------------------------|
| C14 | Model | Lead | Brake | Option | Stroke | Cable length | TSX | SR1-X | RDV-X | 05 | 05 | RBR1 |
| | 20: 20mm 10: 10mm 5: 5mm | No entry: With no brake BK: With brake | Origin position change None: Standard Z: Non-motor side | 150 to 1050 (50mm pitch) | 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) | Positioner TS-X | Driver: Power-supply voltage / Power capacity 105: 100V/100W or less 205: 200V/100W or less | Controller 05 | Driver: Power capacity 05: 100W or less | Power-supply voltage 2: AC200V | Driver: Power capacity 05: 100W or less | Regenerative unit |
| | | | | | | | Regenerative unit No entry: None R: With RGT | Usable for CE No entry: Standard E: CE marking | Usable for CE No entry: Standard E: CE marking | | | |
| | | | | | | | LCD monitor No entry: None L: With LCD | Regenerative unit No entry: None R: With RG1 | Regenerative unit No entry: None R: With RG1 | | | |
| | | | | | | | I/O selection NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board | I/O selection N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS | I/O selection N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS | | | |
| | | | | | | | Battery B: With battery (Absolute) N: None (Incremental) | Battery B: With battery (Absolute) N: None (Incremental) | Battery B: With battery (Absolute) N: None (Incremental) | | | |

Note 1. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.732 for details on robot cable.
Note 2. See P.634 for DIN rail mounting bracket.
Note 3. Select this selection when using the gateway function. For details, see P.96.

Basic specifications

| | |
|--|--|
| AC servo motor output (W) | 100 |
| Repeatability (mm) | +/-0.01 |
| Deceleration mechanism | Ball screw φ15 |
| Ball screw lead (mm) | 20 10 5 |
| Maximum speed (mm/sec) | 1000 500 250 |
| Maximum payload (kg) | Horizontal 30 55 80 Vertical 4 10 20 |
| Rated thrust (N) | 84 169 339 |
| Stroke (mm) | 150 to 1050 (50mm pitch) |
| Overall length (mm) | Horizontal Stroke+285 Vertical Stroke+315 |
| Maximum outside dimension of body cross-section (mm) | W136 × H96 |
| Cable length (m) | Standard: 3.5 / Option: 5, 10 |
| Degree of cleanliness | CLASS 10 |
| Intake air (Nl/min) | 30 to 90 |

Note 1. Positioning repeatability in one direction.
Note 2. When the stroke is longer than 750mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.
Note 3. Per 1cf (0.1um base), when suction blower is used.
Note 4. The necessary intake amount varies depending on the use conditions and environment.

Allowable overhang

| | Horizontal installation (Unit: mm) | | | Wall installation (Unit: mm) | | | Vertical installation (Unit: mm) | | |
|---------|------------------------------------|-----------|-----------|------------------------------|----------|----------|----------------------------------|----------|--|
| | A | B | C | A | B | C | A | C | |
| Lead 20 | 5kg 2127 | 15kg 1177 | 30kg 1247 | 5kg 1047 | 15kg 387 | 30kg 206 | 1kg 600 | 2kg 1200 | |
| Lead 10 | 5kg 1384 | 15kg 459 | 30kg 242 | 5kg 968 | 15kg 264 | 30kg 97 | 4kg 1141 | 8kg 885 | |
| Lead 5 | 5kg 968 | 15kg 323 | 30kg 182 | 5kg 658 | 15kg 180 | 30kg 127 | 10kg 1216 | 20kg 943 | |
| Lead 20 | 5kg 157 | 15kg 51 | 30kg 29 | 5kg 1553 | 15kg 748 | 30kg 633 | 4kg 621 | 8kg 482 | |
| Lead 10 | 5kg 215 | 15kg 71 | 30kg 43 | 5kg 296 | 15kg 166 | 30kg 127 | 10kg 503 | 20kg 390 | |
| Lead 5 | 5kg 157 | 15kg 51 | 30kg 29 | 5kg 296 | 15kg 166 | 30kg 127 | 10kg 574 | 20kg 445 | |
| Lead 20 | 5kg 157 | 15kg 51 | 30kg 29 | 5kg 296 | 15kg 166 | 30kg 127 | 10kg 370 | 20kg 287 | |
| Lead 10 | 5kg 157 | 15kg 51 | 30kg 29 | 5kg 296 | 15kg 166 | 30kg 127 | 10kg 268 | 20kg 208 | |
| Lead 5 | 5kg 157 | 15kg 51 | 30kg 29 | 5kg 296 | 15kg 166 | 30kg 127 | 10kg 268 | 20kg 208 | |

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.

Static loading moment

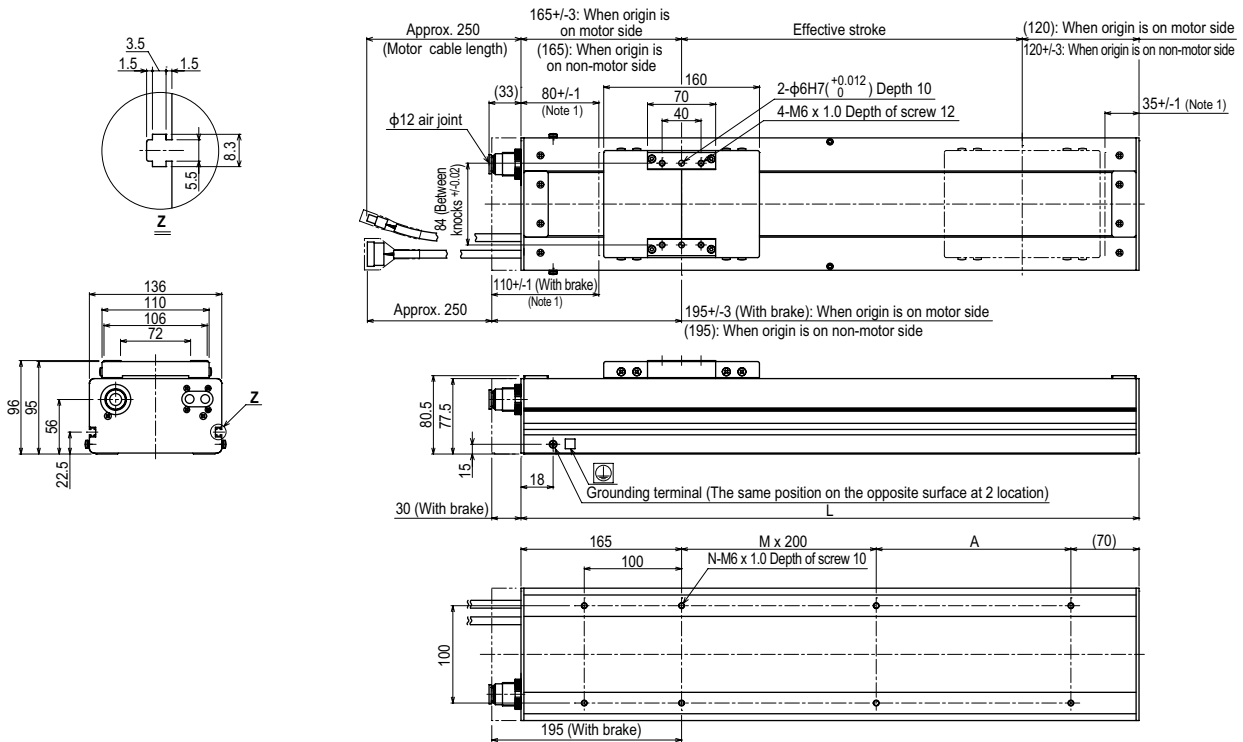
| | MY | MP | MR |
|-------------|-----|-----|-----|
| (Unit: N·m) | 232 | 233 | 204 |

Controller

| Controller | Operation method |
|---------------|--|
| SR1-X-05 | Programming / I/O point trace / Remote command / Operation using RS-232C communication |
| RDX-X205-RBR1 | Pulse train control |

Note. Regenerative unit is required when the models used vertically and with 700mm or larger stroke.

C14



| Effective stroke | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 |
|------------------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| L | 435 | 485 | 535 | 585 | 635 | 685 | 735 | 785 | 835 | 885 | 935 | 985 | 1035 | 1085 | 1135 | 1185 | 1235 | 1285 | 1335 |
| A | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 |
| M | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 |
| N | 6 | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 14 | 14 | 14 | 14 | 16 | 16 |
| Weight (kg) | 9.2 | 9.9 | 10.5 | 11.2 | 11.7 | 12.4 | 13.0 | 13.7 | 14.3 | 15.0 | 15.5 | 16.2 | 16.8 | 17.5 | 18.1 | 18.8 | 19.3 | 20.0 | 20.6 |
| Maximum speed (mm/sec) | - | | | | | | | | | | | | | | | | | | |
| Speed setting | - | | | | | | | | | | | | | | | | | | |

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Minimum bend radius of motor cable is R50.
Note 3. Weight of models with no brake. The weight of brake-attached models is 0.4 kg heavier than the models with no brake shown in the table.

Controller

SR1-X ▶ 652 TS-X ▶ 626 RDV-X ▶ 640

C14H

Origin on the non-motor side is selectable: Lead 20 • 10



Ordering method

C14H

| Model | Lead | Brake | Option | Stroke | Cable length | TSX | SR1-X | RDV-X | Battery |
|-------|--------------------------------|---|---|--------------------------|--|---|--|--|--|
| | 20: 20mm 10: 10mm 5: 5mm | No entry: With no brake BK: With brake | Origin position change None: Standard Z: Non-motor side | 150 to 1050 (50mm pitch) | 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) | Positioner TS-X Driver: Power-supply voltage / Power capacity 110: 100V/200W 210: 200V/200W Regenerative unit No entry: None R: With RGT LCD monitor No entry: None L: With LCD | Controller 10 Driver: Power capacity 10: 200W Usable for CE No entry: Standard E: CE marking Regenerative unit No entry: None R: With RG1 | Driver 2 10 Power-supply voltage 2: AC200V Driver: Power capacity 10: 200W or less | I/O selection N: NPN P: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board Battery B: With battery (Absolute) N: None (Incremental) |

SR1-X 10

| Controller | Driver: Power capacity | Usable for CE | Regenerative unit | I/O selection | Battery |
|------------|------------------------|-------------------------------------|-------------------------------|---|---|
| | 10: 200W | No entry: Standard E: CE marking | No entry: None R: With RG1 | N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS | B: With battery (Absolute) N: None (Incremental) |

RDV-X 2 10

| Driver | Power-supply voltage | Driver: Power capacity | Regenerative unit |
|--------|----------------------|------------------------|-------------------|
| | 2: AC200V | 10: 200W or less | RBR1 |

RBR1

| Regenerative unit |
|-------------------|
| |

Note 1. If selecting 5mm lead specifications then the origin point cannot be changed to the non-motor side.
 Note 2. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.732 for details on robot cable.
 Note 3. See P.634 for DIN rail mounting bracket.
 Note 4. Select this selection when using the gateway function. For details, see P.96.

Basic specifications

| | |
|--|--|
| AC servo motor output (W) | 200 |
| Repeatability (mm) | +/-0.01 |
| Deceleration mechanism | Ball screw φ15 |
| Ball screw lead (mm) | 20 10 5 |
| Maximum speed (mm/sec) | 1000 500 250 |
| Maximum payload (kg) | Horizontal: 40, 80, 100 Vertical: 8, 20, 30 |
| Rated thrust (N) | 170 341 683 |
| Stroke (mm) | 150 to 1050 (50mm pitch) |
| Overall length (mm) | Horizontal: Stroke+349 Vertical: Stroke+379 |
| Maximum outside dimension of body cross-section (mm) | W136 × H96 |
| Cable length (m) | Standard: 3.5 / Option: 5, 10 |
| Degree of cleanliness | CLASS 10 |
| Intake air (Nl/min) | 30 to 90 |

Note 1. Positioning repeatability in one direction.
 Note 2. When the stroke is longer than 750mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.
 Note 3. Per 1cf (0.1um base), when suction blower is used.
 Note 4. The necessary intake amount varies depending on the use conditions and environment.

Allowable overhang

| Installation | Horizontal installation (Unit: mm) | | | Wall installation (Unit: mm) | | | Vertical installation (Unit: mm) | | |
|--------------|------------------------------------|------|------|------------------------------|------|------|----------------------------------|------|------|
| | A | B | C | A | B | C | Lead 20 | A | C |
| Lead 20 | 10kg | 2247 | 1675 | 987 | 1210 | 1678 | 4kg | 2400 | 2008 |
| | 20kg | 1397 | 855 | 497 | 548 | 958 | 6kg | 1687 | 1358 |
| | 40kg | 1037 | 445 | 247 | 217 | 598 | 8kg | 1287 | 1033 |
| | 30kg | 1937 | 583 | 402 | 328 | 1238 | 10kg | 1347 | 1088 |
| Lead 10 | 50kg | 1637 | 364 | 227 | 152 | 878 | 15kg | 887 | 718 |
| | 80kg | 1717 | 242 | 119 | 74 | 678 | 20kg | 657 | 538 |
| | 60kg | 2443 | 311 | 197 | 108 | 1308 | 20kg | 747 | 608 |
| | 80kg | 2193 | 242 | 127 | 53 | 1008 | 25kg | 663 | 484 |
| Lead 5 | 100kg | 2000 | 202 | 85 | 20 | 788 | 30kg | 491 | 396 |

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.

Static loading moment

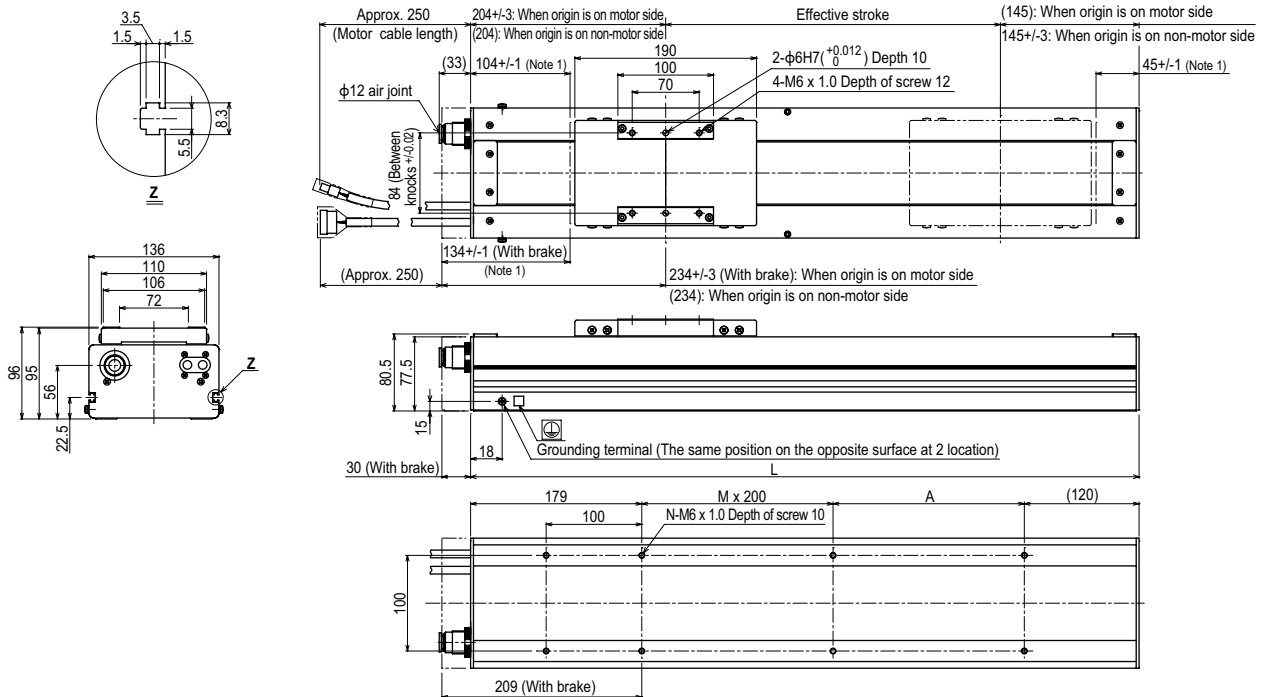
| (Unit: N·m) | | |
|-------------|-----|-----|
| MY | MP | MR |
| 293 | 294 | 258 |

Controller

| Controller | Operation method |
|---------------|--|
| SR1-X10 Note | Programming / I/O point trace / Remote command / Operation using RS-232C communication |
| RCX320 | |
| RCX221/222 | |
| RCX340 | |
| TS-X110 Note | I/O point trace / Remote command |
| TS-X210 Note | |
| RDV-X210-RBR1 | Pulse train control |

Note. Regenerative unit is required when used vertically.

C14H



| Effective stroke | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 |
|-------------------------------|---------------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | L | 499 | 549 | 599 | 649 | 699 | 749 | 799 | 849 | 899 | 949 | 999 | 1049 | 1099 | 1149 | 1199 | 1249 | 1299 | 1349 |
| A | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 |
| M | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 |
| N | 6 | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 14 | 14 | 14 | 14 | 16 | 16 |
| Weight (kg) Note 3 | 10.7 | 11.4 | 12.0 | 12.7 | 13.2 | 13.9 | 14.5 | 15.2 | 15.8 | 16.5 | 17.0 | 17.7 | 18.3 | 19.0 | 19.6 | 20.3 | 20.8 | 21.5 | 22.1 |
| Maximum speed (mm/sec) Note 4 | Lead 20 | 1000 | | | | | | | | | | | | | | | | | |
| | Lead 10 | 500 | | | | | | | | | | | | | | | | | |
| | Lead 5 | 250 | | | | | | | | | | | | | | | | | |
| | Speed setting | 95% 95% 75% 75% 60% 60% 50% | | | | | | | | | | | | | | | | | |

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. Minimum bend radius of motor cable is R50.
 Note 3. Weight of models with no brake. The weight of brake-attached models is 0.4 kg heavier than the models with no brake shown in the table.
 Note 4. When the stroke is longer than 750mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.

C17

Origin on the non-motor side is selectable



Ordering method

| | | | | | | | | | | | | | | | |
|------------|--------------|----------------------|---|---|-----------------------------|---|---------------------------|---|---|---|---|---|--|--|--|
| C17 | Model | Lead | Brake | Option | Stroke | Cable length | TSX | 220 | | | | | | | |
| | | 20: 20mm 10: 10mm | No entry: With no brake BK: With brake | Origin position change None: Standard Z: Non-motor side | 200 to 1250 (50mm pitch) | 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) | Positioner TS-X | Driver: Power supply voltage / Power capacity 220: 200V/400 to 600W | Regenerative unit No entry: None R: With RGT | LCD monitor No entry: None L: With LCD | I/O selection N: NPN P: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board | Battery B: With battery (Absolute) N: None (Incremental) | | | |
| | SR1-X | 20 | | | | | Controller | Driver: Power capacity 20: 400 to 600W | Usable for CE No entry: Standard E: CE marking | Regenerative unit No entry: None R: With RG1 | I/O selection N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS | Battery B: With battery (Absolute) N: None (Incremental) | | | |
| | RDV-X | 2 | 20 | | | | Driver | Power supply voltage 2: AC200V | | Driver: Power capacity 20: 400W or less | Regenerative unit RBR1 (Horizontal) RBR2 (Vertical) | | | | |

Note 1. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.732 for details on robot cable.
 Note 2. See P.634 for DIN rail mounting bracket.
 Note 3. Select this selection when using the gateway function. For details, see P.96.

Basic specifications

| | |
|---|--|
| AC servo motor output (W) | 400 |
| Repeatability (mm) | +/-0.01 |
| Deceleration mechanism | Ball screw φ20 |
| Ball screw lead (mm) | 20 10 |
| Maximum speed (mm/sec) | 1000 600 |
| Maximum payload (kg) | Horizontal 80 120 Vertical 15 35 |
| Rated thrust (N) | 339 678 |
| Stroke (mm) | 200 to 1250 (50mm pitch) |
| Overall length (mm) | Horizontal Stroke+395 Vertical Stroke+425 |
| Maximum outside dimension of body cross-section (mm) | W168 × H114 |
| Cable length (m) | Standard: 3.5 / OP: 5, 10 |
| Degree of cleanliness | CLASS 10 |
| Intake air (Nl/min) | 30 to 90 |

Note 1. Positioning repeatability in one direction.
 Note 2. When the stroke is longer than 950mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.
 Note 3. Per 1cf (0.1um base), when suction blower is used.
 Note 4. The necessary intake amount varies depending on the use conditions and environment.

Allowable overhang

| Horizontal installation (Unit: mm) | | | | Wall installation (Unit: mm) | | | | Vertical installation (Unit: mm) | | | | |
|------------------------------------|--------|------|-----|------------------------------|-------|------|-----|----------------------------------|--------|------|------|------|
| Lead | Weight | A | B | Weight | A | B | C | Lead | Weight | A | | |
| 20 | 30kg | 2660 | 871 | 1040 | 30kg | 1017 | 789 | 2576 | 20 | 5kg | 3000 | 3000 |
| | 50kg | 1911 | 508 | 615 | 50kg | 583 | 426 | 1808 | | 10kg | 2443 | 2443 |
| | 80kg | 1541 | 303 | 377 | 80kg | 338 | 221 | 1380 | | 15kg | 1633 | 1633 |
| 10 | 60kg | 2443 | 418 | 580 | 60kg | 525 | 336 | 2443 | 10 | 15kg | 1728 | 1728 |
| | 100kg | 2000 | 237 | 330 | 100kg | 271 | 155 | 2000 | | 25kg | 1013 | 1013 |
| | 120kg | 1841 | 192 | 268 | 120kg | 207 | 109 | 1841 | | 35kg | 707 | 707 |

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.

Static loading moment

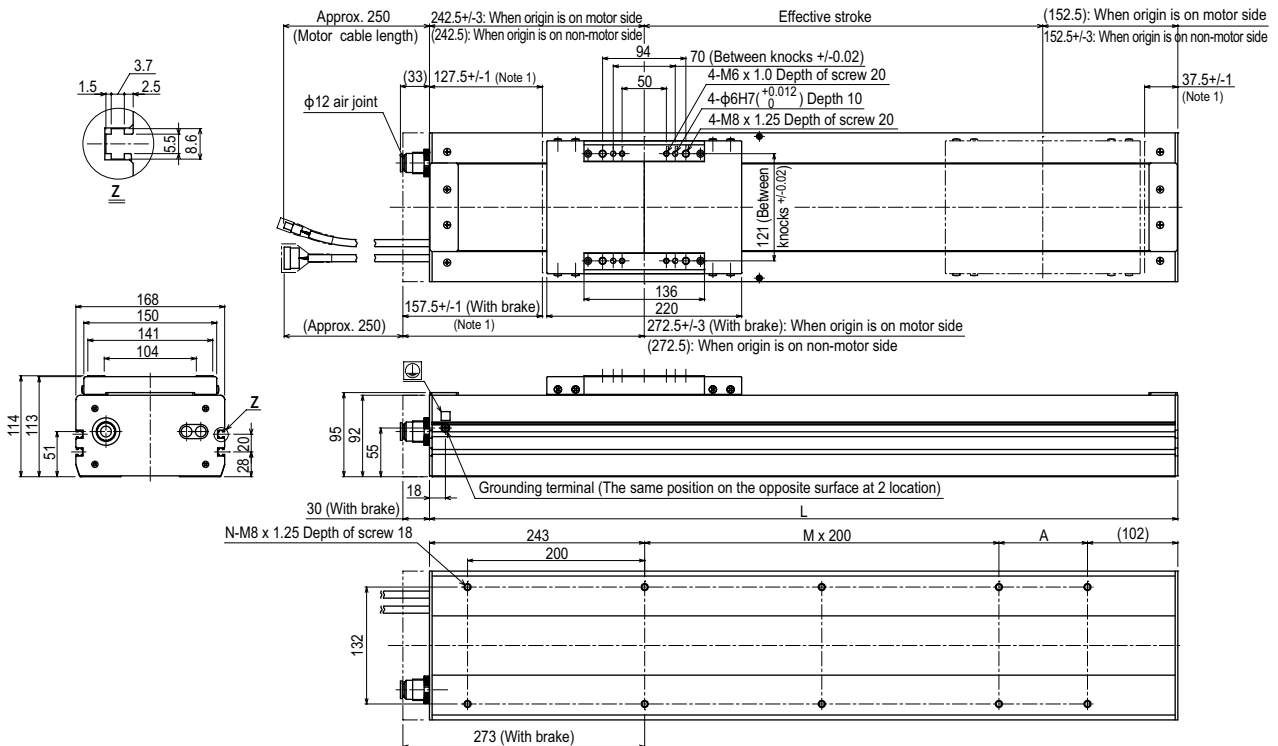
| (Unit: N·m) | | |
|-------------|------|-----|
| MY | MP | MR |
| 1032 | 1034 | 908 |

Controller

| Controller | Operation method |
|--|--|
| SR1-X20 RCX320, RCX221/222, RCX340 | Programming / I/O point trace / Remote command / Operation using RS-232C communication |
| TS-X220 | I/O point trace / Remote command |
| RDV-X220-RBR1 (Horizontal) RDV-X220-RBR2 (Vertical) | Pulse train control |

Note. [The following arrangements require a regeneration unit] • Using in the upright position.

C17



| Effective stroke | L | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 |
| L | 595 | 645 | 695 | 745 | 795 | 845 | 895 | 945 | 995 | 1045 | 1095 | 1145 | 1195 | 1245 | 1295 | 1345 | 1395 | 1445 | 1495 | 1545 | 1595 | 1645 |
| A | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 |
| M | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 |
| N | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 14 | 14 | 14 | 14 | 16 | 16 | 16 | 16 | 18 | 18 |
| Weight (kg) | 15.0 | 16.0 | 17.0 | 17.9 | 18.9 | 19.8 | 20.8 | 21.7 | 22.7 | 23.6 | 24.6 | 25.5 | 26.5 | 27.4 | 28.4 | 29.3 | 30.3 | 31.2 | 32.2 | 33.1 | 34.1 | 35.0 |
| Maximum speed (mm/sec) | Lead 20 | 1000 | | | | | | | | | | | | | | | | | | | | |
| | Lead 10 | 500 | | | | | | | | | | | | | | | | | | | | |
| Speed setting | Lead 20 | - | | | | | | | | | | | | | | | | | | | | |
| | Lead 10 | - | | | | | | | | | | | | | | | | | | | | |

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. Minimum bend radius of motor cable is R50.
 Note 3. Weight of models with no brake. The weight of brake-attached models is 1.5 kg heavier than the models with no brake shown in the table.

Note 4. When the stroke is longer than 950mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.

C17L

● Origin on the non-motor side is selectable

Note. Built-to-order product. Contact us for the delivery period.

Ordering method

C17L - 50

| Model | Lead | Brake | Option | Stroke | Cable length |
|-------|------|---|---|----------------------------|--|
| | | No entry: With no brake BK: With brake | Origin position change None: Standard Z: Non-motor side | 1150 to 2050 (100mm pitch) | 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) |

| Positioner | 220 | R | LCD monitor | I/O selection | Battery |
|------------|--|----------------------------------|-------------------------------|---|---|
| TS-X | Driver: Power-supply voltage / Power capacity 220: 200V/400 to 600W | Regenerative unit R: With RGT | No entry: None L: With LCD | N: NPN P: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board | B: With battery (Absolute) N: None (Incremental) |

| SR1-X | 20 | R | I/O selection | Battery |
|------------|---|--|---|---|
| Controller | Driver: Power capacity 20: 400 to 600W | Usable for CE No entry: Standard E: CE marking | N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS | B: With battery (Absolute) N: None (Incremental) |

| RDV-X | 2 | 20 | Regenerative unit |
|--------|-----------------------------------|--|--------------------------------------|
| Driver | Power-supply voltage 2: AC200V | Driver: Power capacity 20: 400W or less | RBR1 (Horizontal) RBR2 (Vertical) |

Note 1. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.732 for details on robot cable.
 Note 2. See P.634 for DIN rail mounting bracket.
 Note 3. Acceleration / deceleration is different depending the Positioner or Controller or Driver.
 Note 4. Select this selection when using the gateway function. For details, see P.96.

Basic specifications

| | |
|--|--|
| AC servo motor output (W) | 600 |
| Repeatability (mm) | +/-0.02 |
| Deceleration mechanism | Ball screw $\phi 25$ |
| Ball screw lead (mm) | 50 |
| Maximum speed (mm/sec) | 1000 |
| Maximum payload (kg) | Horizontal: 50 Vertical: 10 |
| Rated thrust (N) | 204 |
| Stroke (mm) | 1150 to 2050 (100 pitch) |
| Overall length (mm) | Horizontal: Stroke+485 Vertical: Stroke+515 |
| Maximum outside dimension of body cross-section (mm) | W168 x H114 |
| Cable length (m) | Standard: 3.5 / Option: 5, 10 |
| Degree of cleanliness | CLASS 10 |
| Intake air (Nl/min) | 30 to 90 |

Note 1. Positioning repeatability in one direction.
 Note 2. When the stroke is longer than 1850mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.
 Note 3. Per 1cf (0.1um base), when suction blower is used.
 Note 4. The necessary intake amount varies depending on the use conditions and environment.

Allowable overhang

| Lead 50 | Horizontal installation (Unit: mm) | | | Wall installation (Unit: mm) | | | Vertical installation (Unit: mm) | | | |
|---------|------------------------------------|------|------|------------------------------|------|------|----------------------------------|------|------|------|
| | A | B | C | A | B | C | A | C | | |
| 10kg | 4000 | 2687 | 3327 | 10kg | 3436 | 2605 | 4000 | 2kg | 1200 | 1200 |
| 30kg | 3045 | 872 | 929 | 30kg | 1169 | 790 | 3045 | 5kg | 3000 | 3000 |
| 50kg | 2602 | 509 | 714 | 50kg | 666 | 427 | 2602 | 10kg | 2579 | 2579 |

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.

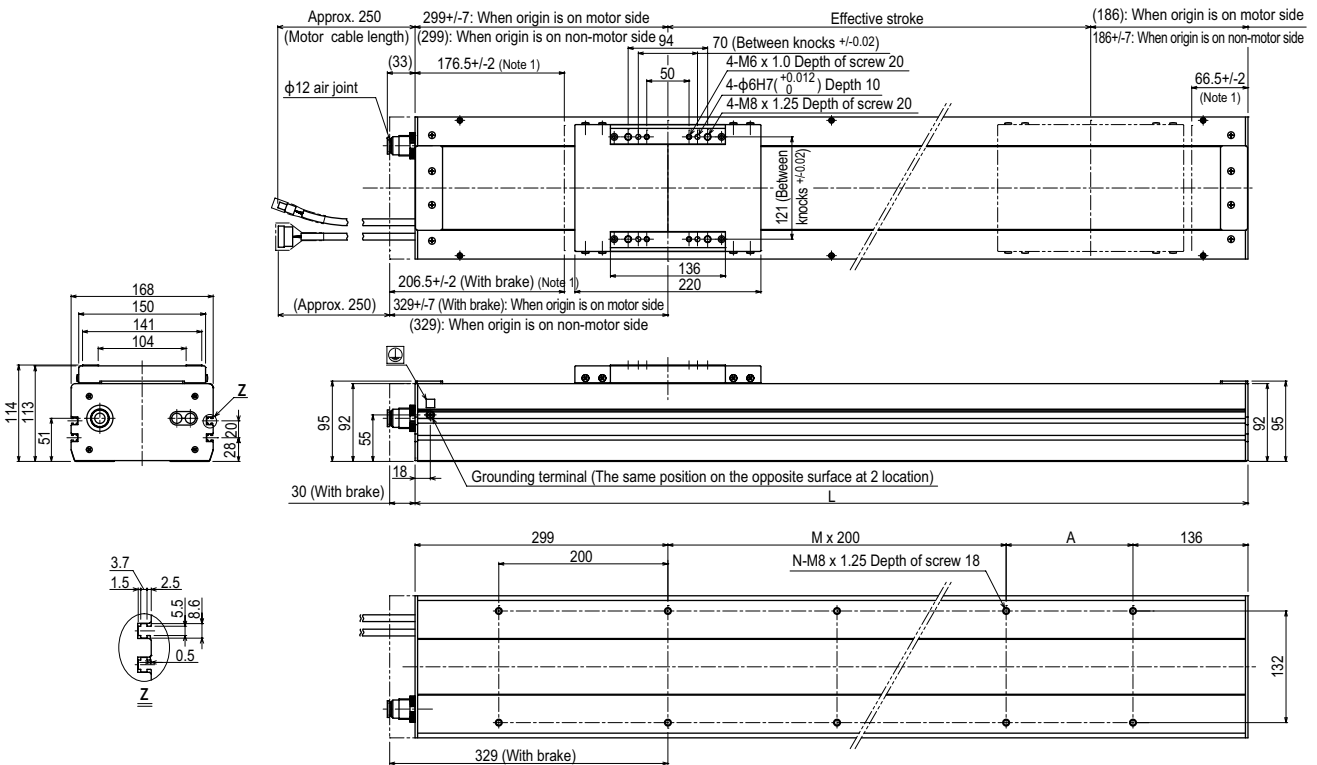
Static loading moment

| (Unit: N·m) | | |
|-------------|------|-----|
| MY | MP | MR |
| 1032 | 1034 | 908 |

Controller

| Controller | Operation method |
|--|--|
| SR1-X20-R RCX320 RCX221/222 RCX340 | Programming / I/O point trace / Remote command / Operation using RS-232C communication |
| TS-X220-R | I/O point trace / Remote command |
| RDV-X220-RBR1 (Horizontal) RDV-X220-RBR2 (Vertical) | Pulse train control |

C17L



| Effective stroke | 1150 | 1250 | 1350 | 1450 | 1550 | 1650 | 1750 | 1850 | 1950 | 2050 |
|-------------------------------|---------|------|------|------|------|------|------|------|------|------|
| L | 1635 | 1735 | 1835 | 1935 | 2035 | 2135 | 2235 | 2335 | 2435 | 2535 |
| A | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 |
| M | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 10 |
| N | 16 | 18 | 18 | 20 | 20 | 22 | 22 | 24 | 24 | 26 |
| Weight (kg) Note 3 | 39.1 | 41.2 | 43.2 | 45.2 | 47.3 | 49.3 | 51.3 | 53.4 | 55.4 | 57.4 |
| Maximum speed (mm/sec) Note 4 | Lead 50 | | | | | 1000 | | | | |
| Speed setting | | | | | | - | | | | |
| | | | | | | 90% | | | | |
| | | | | | | 80% | | | | |

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. Minimum bend radius of motor cable is R50.
 Note 3. Weight of models with no brake. The weight of brake-attached models is 1.5 kg heavier than the models with no brake shown in the table.
 Note 4. When the stroke is longer than 1850mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.

C20

● Origin on the non-motor side is selectable



Ordering method

| | | | | | | | | | | | | |
|------------|--------------|---|---|--|---|--|---|---|---|---|---|---|
| C20 | Model | Lead Note 1 20: 20mm 10: 10mm | Brake No entry: With no brake BK: With brake | Option Origin position change None: Standard Z: Non-motor side | Stroke 200 to 1250 (50mm pitch) | Cable length Note 2 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) | TSX | 220 | Regenerative unit No entry: None R: With RGT | LCD monitor No entry: None L: With LCD | I/O selection NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PT: PROFINET GW: No I/O board ^{Note 5} | Battery B: With battery (Absolute) N: None (Incremental) |
| | SR1-X | Controller | 20 | Driver: Power capacity ^{Note 4} 20: 400 to 600W | Usable for CE No entry: Standard E: CE marking | Regenerative unit No entry: None R: With RG1 | I/O selection N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS | Battery B: With battery (Absolute) N: None (Incremental) | | | | |
| | RDV-X | Driver | 2 | Power-supply voltage 2: AC200V | 20 | Driver: Power capacity ^{Note 4} 20: 400W or less | Regenerative unit RBR1 (Horizontal) RBR2 (Vertical) | | | | | |

Note 1. Only the model with specifications with brake (vertical specifications) can select a lead of 10mm.
 Note 2. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.732 for details on robot cable.
 Note 3. See P.634 for DIN rail mounting bracket.
 Note 4. Acceleration / deceleration is different depending the Positioner or Controller or Driver.
 Note 5. Select this selection when using the gateway function. For details, see P.96.

Basic specifications

| | |
|--|--|
| AC servo motor output (W) | 600 |
| Repeatability ^{Note 1} (mm) | +/-0.01 |
| Deceleration mechanism | Ball screw φ20 |
| Ball screw lead (mm) | 20 10 |
| Maximum speed (mm/sec) | 1000 500 |
| Maximum payload (kg) | Horizontal 120 Vertical 25 45 |
| Rated thrust (N) | 510 1020 |
| Stroke (mm) | 200 to 1250 (50mm pitch) |
| Overall length (mm) | Horizontal Stroke+441 Vertical Stroke+471 |
| Maximum outside dimension of body cross-section (mm) | W202 × H117 |
| Cable length (m) | Standard: 3.5 / Option: 5, 10 |
| Degree of cleanliness | CLASS 10 ^{Note 3} |
| Intake air (Nl/min) | 30 to 90 ^{Note 4} |

Note 1. Positioning repeatability in one direction.
 Note 2. When the stroke is longer than 950mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.
 Note 3. Per 1cf (0.1um base), when suction blower is used.
 Note 4. The necessary intake amount varies depending on the use conditions and environment.

Allowable overhang^{Note}

| Lead | Horizontal installation (Unit: mm) | | | | Wall installation (Unit: mm) | | | Vertical installation (Unit: mm) | |
|---------|------------------------------------|-----|------|-----------|------------------------------|------|-----------|----------------------------------|---|
| | A | B | C | C | A | B | C | A | C |
| Lead 20 | 50kg 2602 | 869 | 1145 | 50kg 1144 | 798 | 2602 | 15kg 2711 | 2711 | |
| | 80kg 2193 | 528 | 720 | 80kg 717 | 456 | 2193 | 20kg 2045 | 2045 | |
| | 120kg 1841 | 339 | 505 | 120kg 466 | 267 | 1841 | 25kg 1647 | 1647 | |
| Lead 10 | | | | | | | 20kg 2182 | 2182 | |
| | | | | | | | 30kg 1437 | 1437 | |
| | | | | | | | 45kg 939 | 939 | |

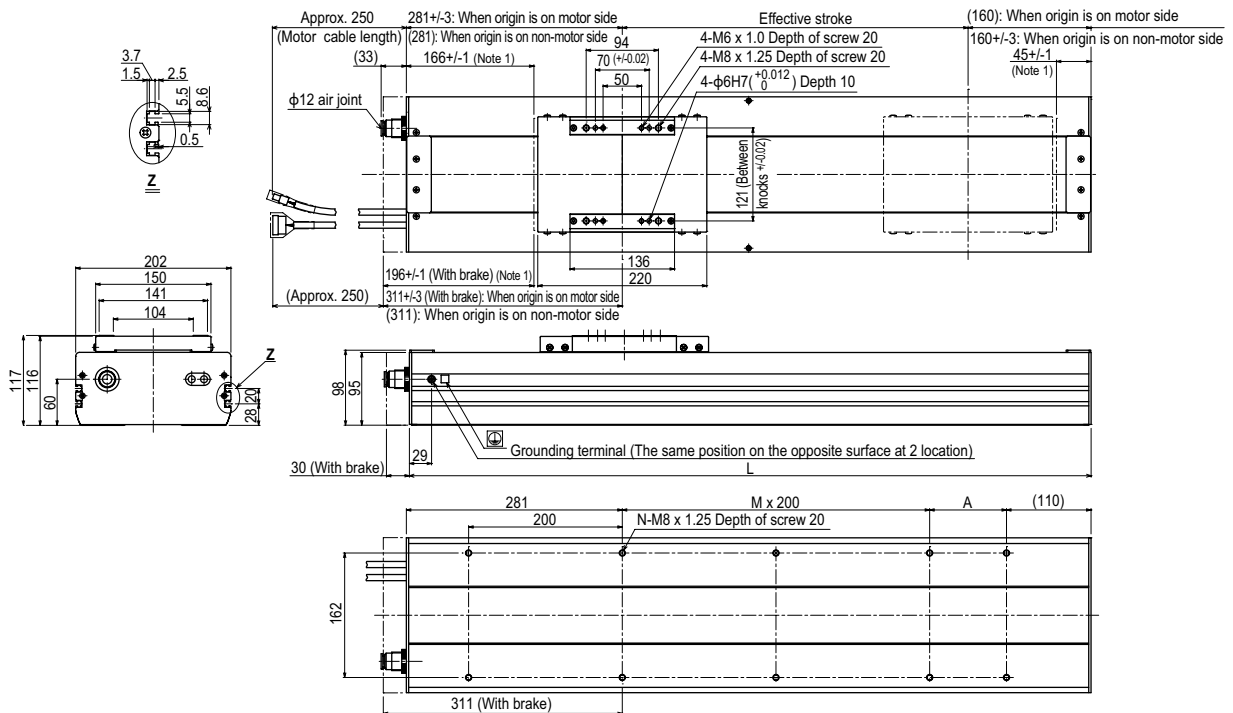
Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.

Controller

| Controller | Operation method |
|----------------------------|--|
| SR1-X20 ^{Note} | Programming / I/O point trace / Remote command / Operation using RS-232C communication |
| RCX320, RCX221/222, RCX340 | Operation using RS-232C communication |
| TS-X220 ^{Note} | I/O point trace / Remote command |
| RDV-X220-RBR1 (Horizontal) | Pulse train control |
| RDV-X220-RBR2 (Vertical) | Pulse train control |

Note. [The following arrangements require a regeneration unit.]
 • Using in the upright position.

C20



| Effective stroke | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 |
|--|--------------|------|------|------|------|------|------|------|------|------|------|------|-----------------------------|------|------|------|------|------|------|------|------|------|
| L | 641 | 691 | 741 | 791 | 841 | 891 | 941 | 991 | 1041 | 1091 | 1141 | 1191 | 1241 | 1291 | 1341 | 1391 | 1441 | 1491 | 1541 | 1591 | 1641 | 1691 |
| A | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 |
| M | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 |
| N | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 14 | 14 | 14 | 14 | 16 | 16 | 16 | 16 | 18 | 18 |
| Weight (kg) ^{Note 3} | 25.0 | 26.0 | 27.0 | 28.0 | 29.0 | 30.0 | 31.0 | 32.0 | 33.0 | 34.0 | 35.0 | 36.0 | 37.0 | 38.0 | 39.0 | 40.0 | 41.0 | 42.0 | 43.0 | 44.0 | 45.0 | 46.0 |
| Maximum speed ^{Note 4} (mm/sec) | Lead 20 1000 | | | | | | | | | | | | Lead 10 500 | | | | | | | | | |
| Speed setting | - | | | | | | | | | | | | 80% 80% 70% 70% 60% 60% 50% | | | | | | | | | |

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. Minimum bend radius of motor cable is R50.
 Note 3. Weight of models with no brake. The weight of brake-attached models is 2.0 kg heavier than the models with no brake shown in the table.
 Note 4. When the stroke is longer than 950mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.

Controller

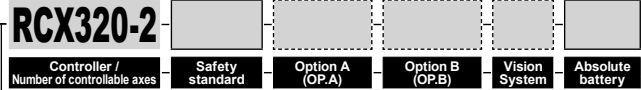
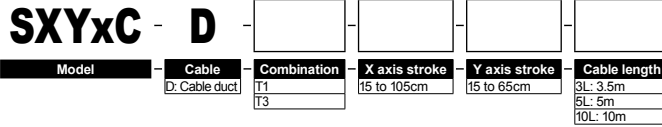
SR1-X ▶ 652 TS-X ▶ 626 RDV-X ▶ 640

SXYxC 2 axes

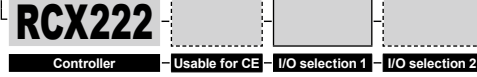
● Clean type ● Cable duct



Ordering method



Specify various controller setting items. RCX320 ▶ **P.660**



Specify various controller setting items. RCX222 ▶ **P.670**

Basic specifications

| | X axis | Y axis |
|--|--------------------------------|----------------|
| Axis construction <small>Note 1</small> | C14H | C14 |
| AC servo motor output (W) | 200 | 100 |
| Repeatability <small>Note 2</small> (mm) | +/-0.01 | +/-0.01 |
| Drive system | Ball screw φ15 | Ball screw φ15 |
| Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm) | 20 | 20 |
| Maximum speed <small>Note 4</small> (mm/sec) | 1000 | 1000 |
| Moving range (mm) | 150 to 1050 | 150 to 650 |
| Robot cable length (m) | Standard: 3.5 Option: 5, 10 | |
| Degree of cleanliness | CLASS 10 <small>Note 5</small> | |
| Intake air (Nℓ/min) | 60 <small>Note 6</small> | |

Note 1. Use caution that the frame machining (installation holes, tap holes) differs from single-axis robots.
 Note 2. Positioning repeatability in one direction.
 Note 3. Leads not listed in the catalog are also available. Contact us for details.
 Note 4. When the X-axis stroke is longer than 850mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.
 Note 5. Per 1cf (0.1μm base), when suction blower is used.
 Note 6. The necessary intake amount varies depending on the use conditions and environment.

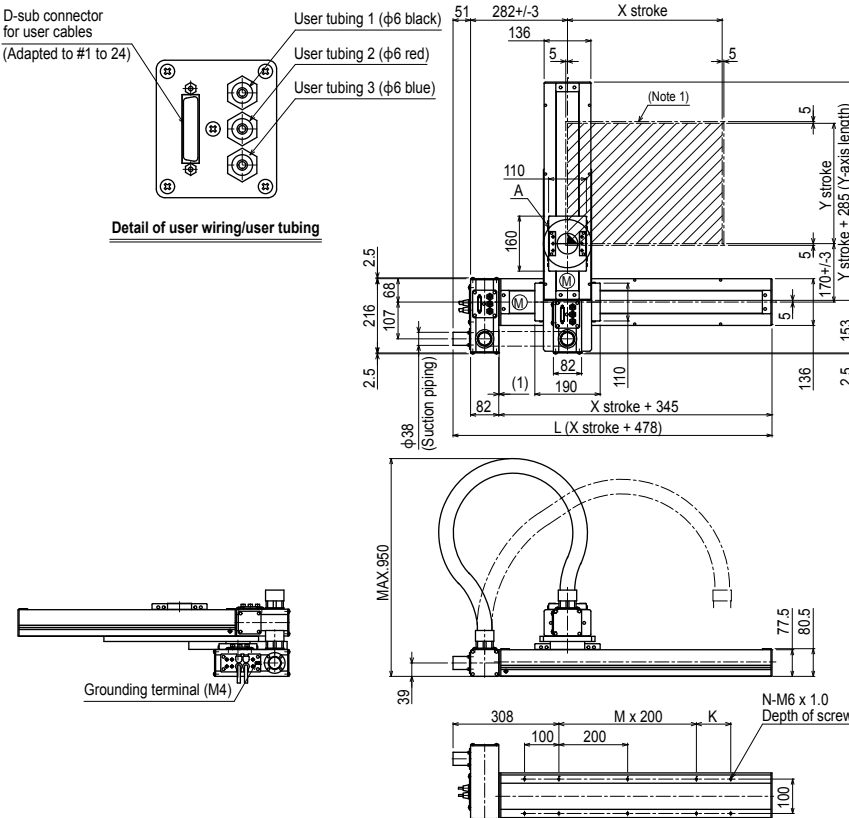
Maximum payload (kg)

| Y stroke (mm) | XY 2 axes |
|---------------|-----------|
| 150 | 20 |
| 250 | 17 |
| 350 | 15 |
| 450 | 13 |
| 550 | 11 |
| 650 | 9 |

Controller

| Controller | Operation method |
|------------|--|
| RCX320 | Programming / I/O point trace / Remote command / Operation using RS-232C communication |
| RCX222 | |

SXYxC 2 axes T1

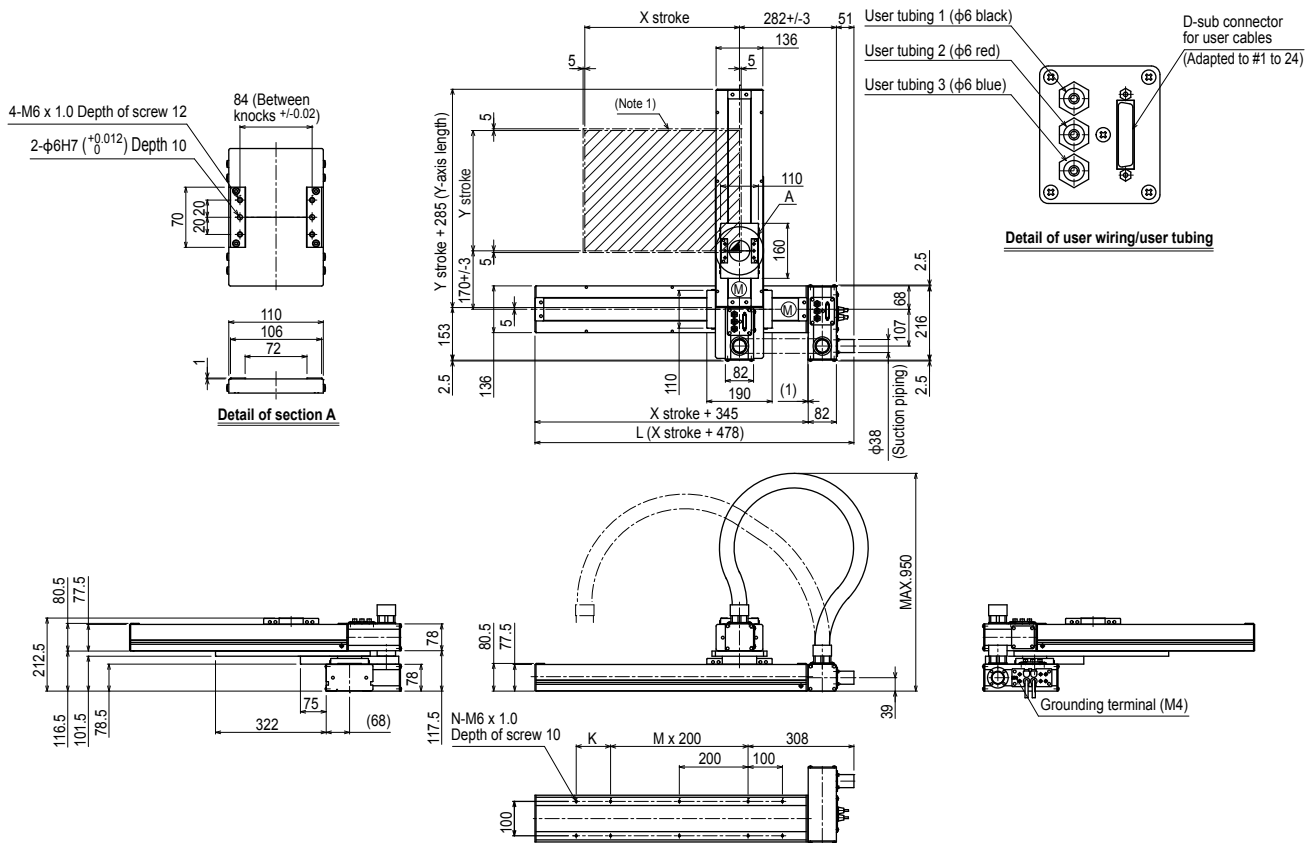


| X stroke | 150 | 250 | 350 | 450 | 550 | 650 | 750 | 850 | 950 | 1050 | |
|---|------|-----|-----|-----|-----|------|------|------|------|------|------|
| | L | 628 | 728 | 828 | 928 | 1028 | 1128 | 1228 | 1328 | 1428 | 1528 |
| K | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 | |
| M | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | |
| N | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | |
| Y stroke | 150 | 250 | 350 | 450 | 550 | 650 | | | | | |
| Maximum speed for each stroke (mm/sec) <small>Note 2</small> | 1000 | | | | | | 800 | 650 | 550 | | |
| Speed setting | - | | | | | | 80% | 65% | 55% | | |

Note 1. The moving range when returning to origin and the stop position when stopping by mechanical stopper.

Note 2. When the X-axis stroke is longer than 850mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.

SXYxC 2 axes T3

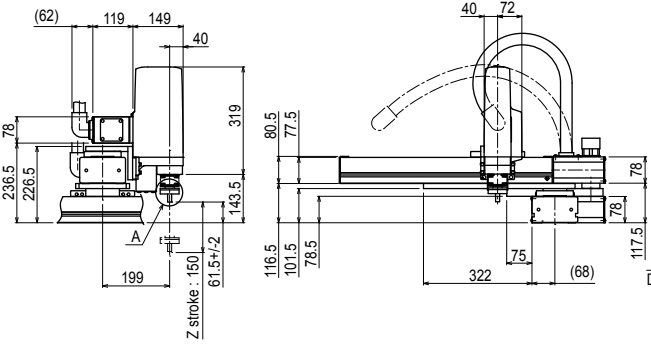
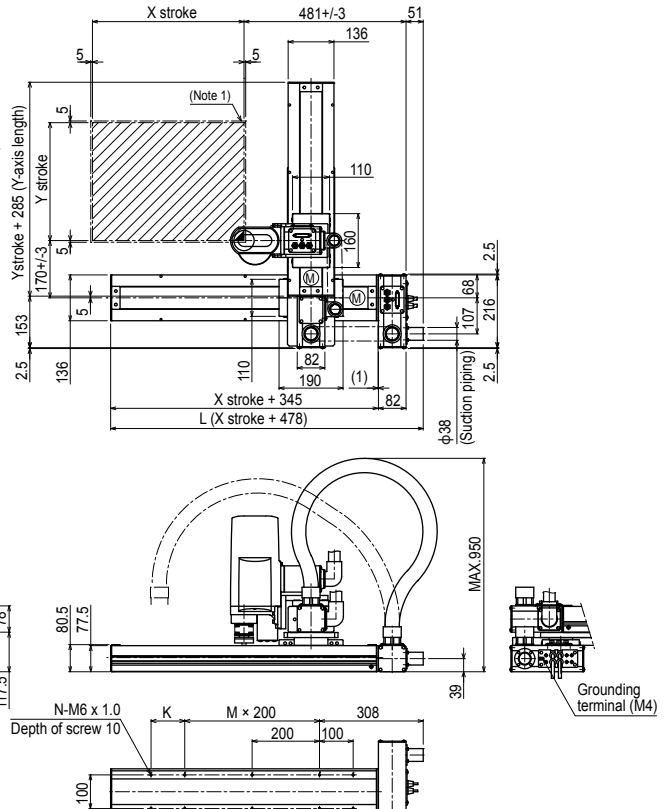
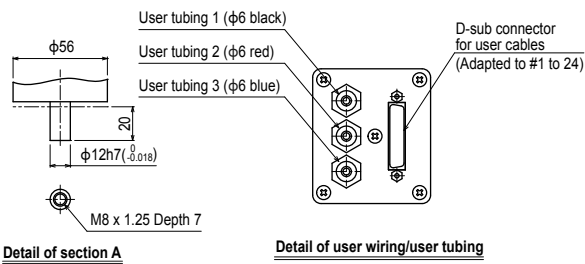


| X stroke | 150 | 250 | 350 | 450 | 550 | 650 | 750 | 850 | 950 | 1050 |
|--|--------|-----|-----|------|------|------|------|------|------|------|
| L | 628 | 728 | 828 | 928 | 1028 | 1128 | 1228 | 1328 | 1428 | 1528 |
| K | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 |
| M | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 |
| N | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 |
| Y stroke | 150 | 250 | 350 | 450 | 550 | 650 | | | | |
| Maximum speed for each stroke (mm/sec) ^{Note 2} | X axis | | | 1000 | | | 800 | 650 | 550 | |
| Speed setting | - | | | - | | | 80% | 65% | 55% | |

Note 1. The moving range when returning to origin and the stop position when stopping by mechanical stopper.

Note 2. When the X-axis stroke is longer than 850mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.

SXYxC 3 axes / ZSC T3

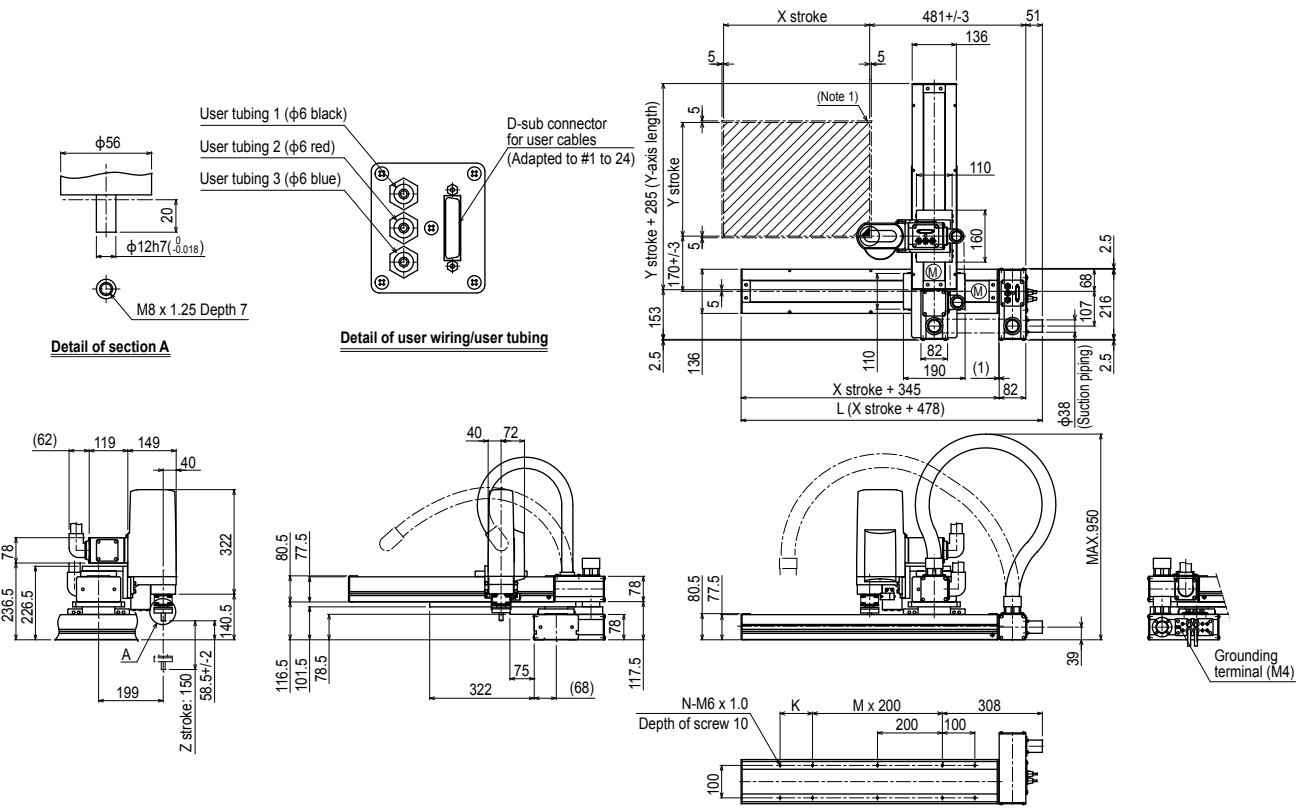


| X stroke | 150 | 250 | 350 | 450 | 550 | 650 | 750 | 850 | 950 | 1050 | |
|---|--------|-----|------|-----|------|------|------|------|------|------|--|
| L | 628 | 728 | 828 | 928 | 1028 | 1128 | 1228 | 1328 | 1428 | 1528 | |
| K | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 | |
| M | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | |
| N | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | |
| Y stroke | 150 | 250 | 350 | 450 | 550 | 650 | | | | | |
| Z stroke | 150 | | | | | | | | | | |
| Maximum speed for each stroke (mm/sec) Note 2 | X axis | | 1000 | | | | | 800 | 650 | 550 | |
| Speed setting | | | - | | | | | 80% | 65% | 55% | |

Note 1. The moving range when returning to origin and the stop position when stopping by mechanical stopper.

Note 2. When the X-axis stroke is longer than 850mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.

SXYxC 4 axes / ZRSC T3



| X stroke | 150 | 250 | 350 | 450 | 550 | 650 | 750 | 850 | 950 | 1050 |
|----------|-----|-----|-----|-----|------|------|------|------|------|------|
| L | 628 | 728 | 828 | 928 | 1028 | 1128 | 1228 | 1328 | 1428 | 1528 |
| K | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 |
| M | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 |
| N | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 |
| Y stroke | 150 | 250 | 350 | 450 | 550 | 650 | | | | |
| Z stroke | 150 | | | | | | | | | |

| Maximum speed for each stroke (mm/sec) | X axis | | | | | |
|--|---------------|--|------|-----|-----|-----|
| | Speed setting | | 1000 | 800 | 650 | 550 |
| | | | - | 80% | 65% | 55% |

Note 1. The moving range when returning to origin and the stop position when stopping by mechanical stopper.

Note 2. When the X-axis stroke is longer than 850mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.

YK180XC Clean type: Extra small type

Note. Built-to-order product. Contact us for the delivery period.

- Arm length 180mm
- Maximum payload 1kg

Ordering method

YK180XC - 100

RCX340-4

| | | | | | | | | | | |
|--------------|----------------------|--------------------------------|---|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|
| Model | Z axis stroke | Cable length | Controller / Number of controllable axes | Safety standard | Option A (OP.A) | Option B (OP.B) | Option C (OP.C) | Option D (OP.D) | Option E (OP.E) | Absolute battery |
| | 100: 100mm | 3L: 3.5m 5L: 5m 10L: 10m | | | | | | | | |

Specify various controller setting items. RCX340 ▶ P.678

Basic specifications

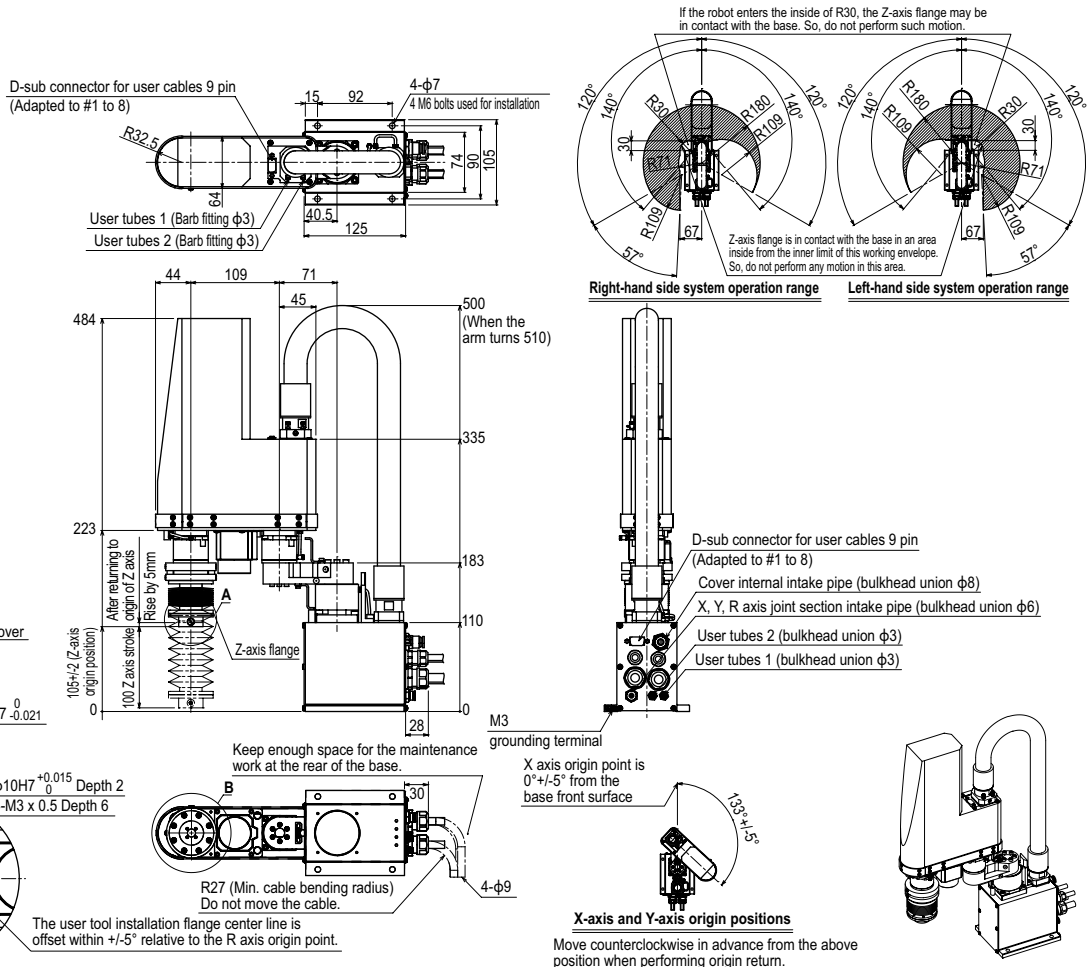
| | X axis | Y axis | Z axis | R axis |
|---|---|--------|---------|----------|
| Axis specifications | | | | |
| Arm length (mm) | 71 | 109 | 100 | - |
| Rotation angle (°) | +/-120 | +/-140 | - | +/-360 |
| AC servo motor output (W) | 50 | 30 | 30 | 30 |
| Repeatability ^{Note 1} (XYZ: mm) (R: °) | +/-0.01 | | +/-0.01 | +/-0.004 |
| Maximum speed (XYZ: m/sec) (R: °/sec) | 3.3 | | 0.7 | 1700 |
| Maximum payload (kg) | 1.0 | | | |
| Standard cycle time: with 0.1kg payload ^{Note 2} (sec) | 0.42 | | | |
| R-axis tolerable moment of inertia ^{Note 3} (kgm²) | 0.01 | | | |
| User wiring (sq × wires) | 0.1 × 8 | | | |
| User tubing (Outer diameter) | φ3 × 2 | | | |
| Travel limit | 1.Soft limit, 2.Mechanical limit (X, Y, Z axis) | | | |
| Robot cable length (m) | Standard: 3.5 Option: 5, 10 | | | |
| Weight (kg) (Excluding robot cable) ^{Note 4} | 6.5 | | | |
| Robot cable weight | 1.5kg (3.5m) 2.1kg (5m) 4.2kg (10m) | | | |
| Degree of cleanliness | CLASS 10 (0.1 μm base) | | | |
| Intake air (Nℓ/min) | 30 | | | |

Note 1. This is the value at a constant ambient temperature. (X,Y axes)
 Note 2. When moving 25mm in vertical direction and 100mm in horizontal direction reciprocally.
 Note 3. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.
 Note 4. The total robot weight is the sum of the robot body weight and the cable weight.

Controller

| Controller | Power capacity (VA) | Operation method |
|------------|---------------------|--|
| RCX340 | 500 | Programming / I/O point trace / Remote command / Operation using RS-232C communication |

YK180XC



YK220XC

Clean type: Extra small type

Note. Built-to-order product. Contact us for the delivery period.

- Arm length 220mm
- Maximum payload 1kg

Ordering method

YK220XC - 100 **RCX340-4**

| Model | Z axis stroke | Cable length | Controller / Number of controllable axes | Safety standard | Option A (OP.A) | Option B (OP.B) | Option C (OP.C) | Option D (OP.D) | Option E (OP.E) | Absolute battery |
|---------------|---------------|--------------------------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| YK220XC - 100 | 100: 100mm | 3L: 3.5m 5L: 5m 10L: 10m | RCX340-4 | | | | | | | |

Specify various controller setting items. RCX340 ▶ **P.678**

Basic specifications

| Axis specifications | Arm length (mm) | X axis | Y axis | Z axis | R axis |
|--|-----------------|---|--------|---------|----------|
| Rotation angle (°) | | +/-120 | +/-140 | - | +/-360 |
| AC servo motor output (W) | | 50 | 30 | 30 | 30 |
| Repeatability ^{Note 1} (XYZ: mm) (R: °) | | +/-0.01 | | +/-0.01 | +/-0.004 |
| Maximum speed (XYZ: m/sec) (R: °/sec) | | 3.4 | | 0.7 | 1700 |
| Maximum payload (kg) | | 1.0 | | | |
| Standard cycle time: with 0.1kg payload ^{Note 2} (sec) | | 0.45 | | | |
| R-axis tolerable moment of inertia ^{Note 3} (kgm ²) | | 0.01 | | | |
| User wiring (sq x wires) | | 0.1 x 8 | | | |
| User tubing (Outer diameter) | | φ3 x 2 | | | |
| Travel limit | | 1.Soft limit, 2.Mechanical stopper (X, Y, Z axes) | | | |
| Robot cable length (m) | | Standard: 3.5 Option: 5, 10 | | | |
| Weight (kg) (Excluding robot cable) ^{Note 4} | | 6.5 | | | |
| Robot cable weight | | 1.5kg (3.5m) 2.1kg (5m) 4.2kg (10m) | | | |
| Degree of cleanliness | | CLASS 10 (0.1 μm base) | | | |
| Intake air (Nℓ/min) | | 30 | | | |

Note 1. This is the value at a constant ambient temperature.
 Note 2. When reciprocating 100mm in horizontal and 25mm in vertical directions.
 Note 3. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.
 Note 4. The total robot weight is the sum of the robot body weight and the cable weight.

Controller

| Controller | Power capacity (VA) | Operation method |
|------------|---------------------|--|
| RCX340 | 500 | Programming / I/O point trace / Remote command / Operation using RS-232C communication |

YK220XC

Right-hand side system operation range **Left-hand side system operation range**

If the robot enters the inside of R30, the Z-axis flange may be in contact with the base. So, do not perform such motion.

Z-axis flange is in contact with the base in an area inside from the inner limit of this working envelope. So, do not perform any motion in this area.

Details of A
 12: User tool installation area
 Cover
 φ55
 φ30h 7-0.021
 105+/-2 (Z-axis origin position)
 After returning to origin of Z axis, rise by 5mm
 100Z axis stroke
 Z-axis flange

Details of B
 4-M3 x 0.5 Depth 6
 User tool installation tap
 16 24
 5.3 5.3
 φ10H7 +0.015 Depth 2
 4-M3 x 0.5 Depth 6
 26 26
 5.3 5.3

Keep enough space for the maintenance work at the rear of the base.
 R27 (Min. cable bending radius) Do not move the cable.
 M3 grounding terminal
 X axis origin point is 0°+/-5° from the base front surface
 133°+/-5°
X-axis and Y-axis origin positions
 Move counterclockwise in advance from the above position when performing origin return.

D-sub connector for user cables 9 pin (Adapted to #1 to 8)
 4-M6 bolts used for installation
 4-φ7
 15 92 74 90 105
 64
 R32.5
 40.5 125
 15 92 111 500 (When the arm turns 510)
 335 183 110 28 0
 223 44 109 45
 484
 67 15
 R220 120° 140° 140° 120°
 R75 R109 R109 R75
 R220 120° 140° 140° 120°
 R75 R109 R109 R75
 67 15
 D-sub connector for user cables 9 pin (Adapted to #1 to 8)
 Cover internal intake pipe (bulkhead union φ8)
 X, Y, R axis joint section intake pipe (bulkhead union φ6)
 User tubes 2 (bulkhead union φ3)
 User tubes 1 (bulkhead union φ3)
 4-M3 x 0.5 Depth 6
 16 24
 5.3 5.3
 φ10H7 +0.015 Depth 2
 4-M3 x 0.5 Depth 6
 26 26
 5.3 5.3

Articulated robots YA
 Linear conveyor modules LCM
 Single-axis robots CX
 Motor-less single-axis actuator Robomity
 Compact single-axis robots TRANSEVO
 Single-axis robots FLIP-X
 Linear motor single-axis robots PHASER
 Cartesian robots XY-X
 SCARA robots YK-X
 Pick & place robots YP-X
CLEAN
 CONTROLLER INFORMATION
 Single-axis Cartesian SCARA

YK250XGC

Clean type: Small type



- Arm length 250mm
- Maximum payload 4kg

Ordering method

YK250XGC - 150 **S** **RCX340-4**

| Model | Z axis stroke | Tool flange | Hollow shaft | Cable length | Controller / Number of controllable axes | Safety standard | Option A (OP.A) | Option B (OP.B) | Option C (OP.C) | Option D (OP.D) | Option E (OP.E) | Absolute battery |
|-------|---------------|---------------------------------------|----------------------|--------------------------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| | 150, 150mm | No entry: None F: With tool flange | S: With hollow shaft | 3L: 3.5m 5L: 5m 10L: 10m | | | | | | | | |

Specify various controller setting items. RCX340 ▶ **P.678**

Basic specifications

| | X axis | Y axis | Z axis | R axis |
|---|--|--------|---------|----------|
| Axis specifications | | | | |
| Arm length (mm) | 100 | 150 | 150 | - |
| Rotation angle (°) | +/-129 | +/-134 | - | +/-360 |
| AC servo motor output (W) | 200 | 150 | 50 | 100 |
| Repeatability ^{Note 1} (XYZ: mm) (R: °) | +/-0.01 | | +/-0.01 | +/-0.004 |
| Maximum speed (XYZ: m/sec) (R: °/sec) | 4.5 | | 1.1 | 1020 |
| Maximum payload (kg) | 4 | | | |
| Standard cycle time: with 2kg payload (sec) ^{Note 2} | 0.50 | | | |
| R-axis tolerable moment of inertia ^{Note 3} (kgm ²) | 0.05 | | | |
| User wiring (sq × wires) | 0.2×10 | | | |
| User tubing (Outer diameter) | φ4×4 | | | |
| Travel limit | 1.Soft limit, 2.Mechanical stopper (X, Y, Z axes) | | | |
| Robot cable length (m) | Standard: 3.5 Option: 5, 10 | | | |
| Weight (kg) | 21.5 | | | |
| Degree of cleanliness | ISO CLASS 3 (ISO 14644-1) ^{Note 4} +ESD ^{Note 5} | | | |
| Intake air (Nℓ/min) | 30 ^{Note 6} | | | |

- Note 1. This is the value at a constant ambient temperature. (X,Y axes)
 Note 2. When reciprocating 25mm in vertical direction and 300mm in horizontal direction (rough-positioning arch motion).
 Note 3. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.
 Note 4. Class 10 (0.1μm) equivalent to FED-STD-209D
 Note 5. ESD (ElectroStatic Discharge) prevention is an option. Please contact our distributor.
 Note 6. The necessary intake amount varies depending on the use conditions and environment.

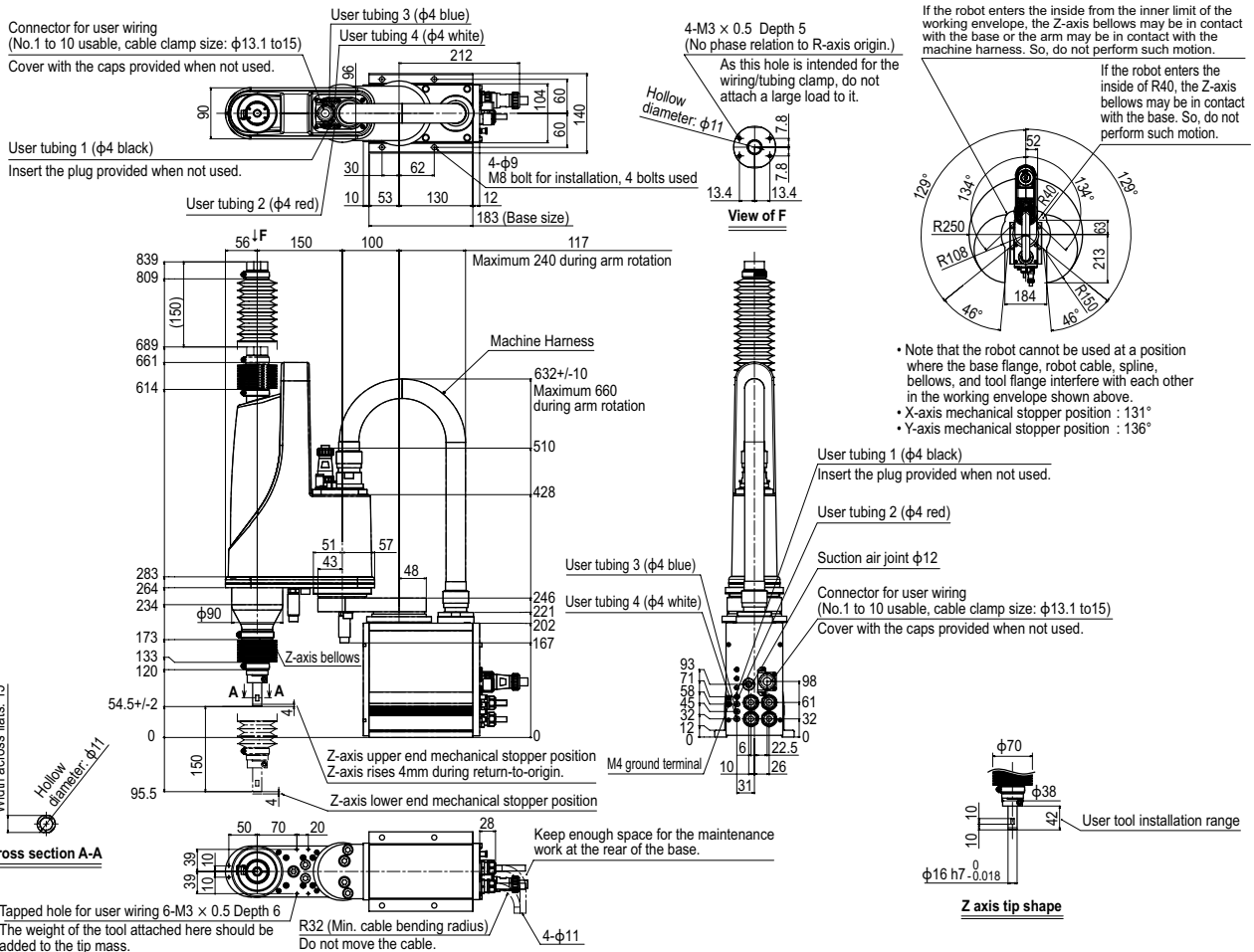
Controller

| Controller | Power capacity (VA) | Operation method |
|------------|---------------------|--|
| RCX340 | 1000 | Programming / I/O point trace / Remote command / Operation using RS-232C communication |

- Note. The movement range can be limited by changing the positions of X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.)
 See our robot manuals (installation manuals) for detailed information.
 Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

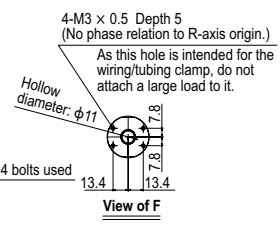
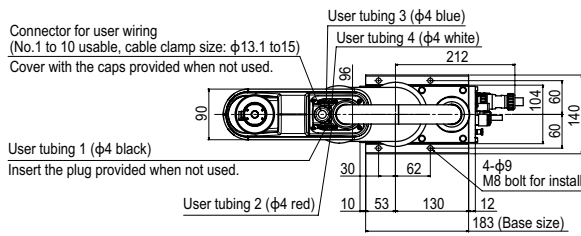
Our robot manuals (installation manuals) can be downloaded from our website at the address below:
<https://global.yamaha-motor.com/business/robot/>

YK250XGC



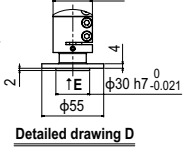
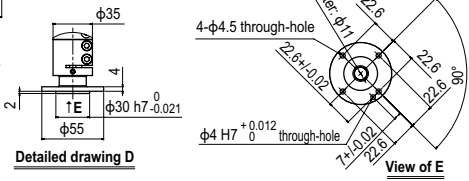
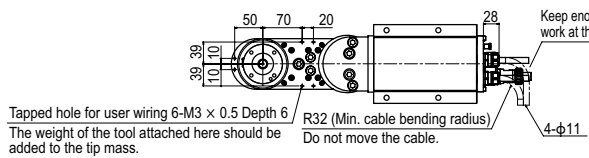
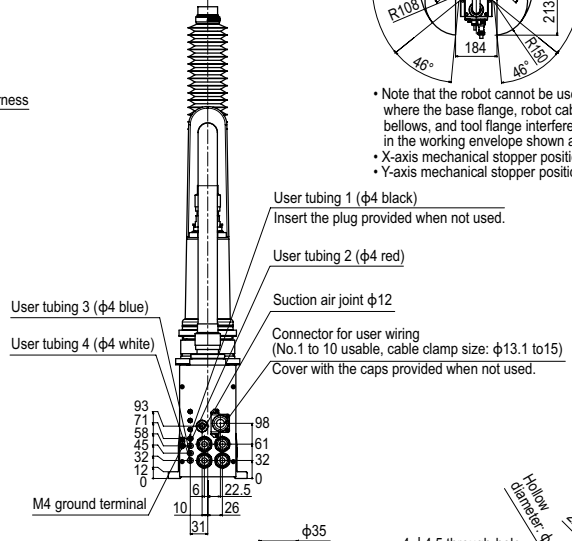
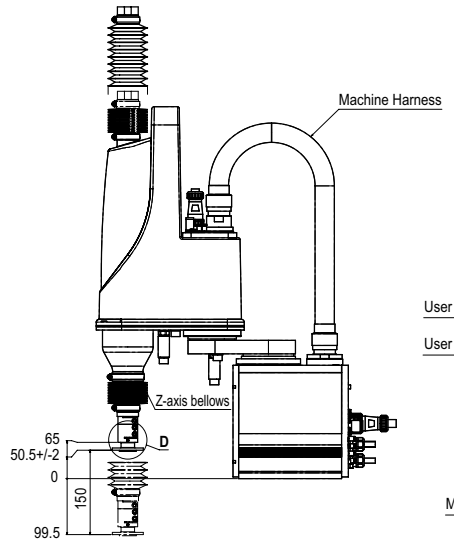
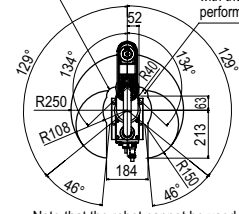
| | |
|-------------|---------------------------------|
| YA | Articulated robots |
| LCM | Linear conveyor modules |
| CX | Single-axis robots |
| Robonity | Motor-less single axis actuator |
| TRANSERO | Compact single-axis robots |
| FLIP-X | Single-axis robots |
| PHASER | Linear motor single-axis robots |
| XY-X | Cartesian robots |
| YK-X | SCARA robots |
| YP-X | Pick & place robots |
| CLEAN | CLEAN |
| CONTROLLER | CONTROLLER |
| INFORMATION | INFORMATION |
| Single-axis | Single-axis |
| Cartesian | Cartesian |
| SCARA | SCARA |

YK250XGC Tool flange mount type



If the robot enters the inside from the inner limit of the working envelope, the Z-axis bellows may be in contact with the base or the arm may be in contact with the machine harness. So, do not perform such motion.

If the robot enters the inside of R40, the Z-axis bellows may be in contact with the base. So, do not perform such motion.



YK350XGC

Clean type: Small type

- Arm length 350mm
- Maximum payload 4kg

Ordering method

YK350XGC - 150 **S** **RCX340-4**

| Model | Z axis stroke | Tool flange | Hollow shaft | Cable length | Controller / Number of controllable axes | Safety standard | Option A (OP.A) | Option B (OP.B) | Option C (OP.C) | Option D (OP.D) | Option E (OP.E) | Absolute battery |
|-------|---------------|---------------------------------------|----------------------|--------------------------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| | 150: 150mm | No entry: None F: With tool flange | S: With hollow shaft | 3L: 3.5m 5L: 5m 10L: 10m | | | | | | | | |

Specify various controller setting items. RCX340 ▶ **P.678**

Basic specifications

| | X axis | Y axis | Z axis | R axis |
|--|--|--------|---------|----------|
| Axis specifications | | | | |
| Arm length (mm) | 200 | 150 | 150 | - |
| Rotation angle (°) | +/-129 | +/-134 | - | +/-360 |
| AC servo motor output (W) | 200 | 150 | 50 | 100 |
| Repeatability ^{Note 1} (XYZ: mm) (R: °) | +/-0.01 | | +/-0.01 | +/-0.004 |
| Maximum speed (XYZ: m/sec) (R: °/sec) | 5.6 | | 1.1 | 1020 |
| Maximum payload (kg) | 4 | | | |
| Standard cycle time: with 2kg payload (sec) ^{Note 2} | 0.52 | | | |
| R-axis tolerable moment of inertia ^{Note 3} (kgm ²) | 0.05 | | | |
| User wiring (sq x wires) | 0.2x10 | | | |
| User tubing (Outer diameter) | φ4x4 | | | |
| Travel limit | 1.Soft limit, 2.Mechanical stopper (X, Y, Z axes) | | | |
| Robot cable length (m) | Standard: 3.5 Option: 5, 10 | | | |
| Weight (kg) | 22 | | | |
| Degree of cleanliness | ISO CLASS 3 (ISO 14644-1) ^{Note 4} +ESD ^{Note 5} | | | |
| Intake air (Nℓ/min) | 30 ^{Note 6} | | | |

- Note 1. This is the value at a constant ambient temperature. (X,Y axes)
 Note 2. When reciprocating 25mm in vertical direction and 300mm in horizontal direction (rough-positioning arch motion).
 Note 3. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.
 Note 4. Class 10 (0.1μm) equivalent to FED-STD-209D
 Note 5. ESD (ElectroStatic Discharge) prevention is an option. Please contact our distributor.
 Note 6. The necessary intake amount varies depending on the use conditions and environment.

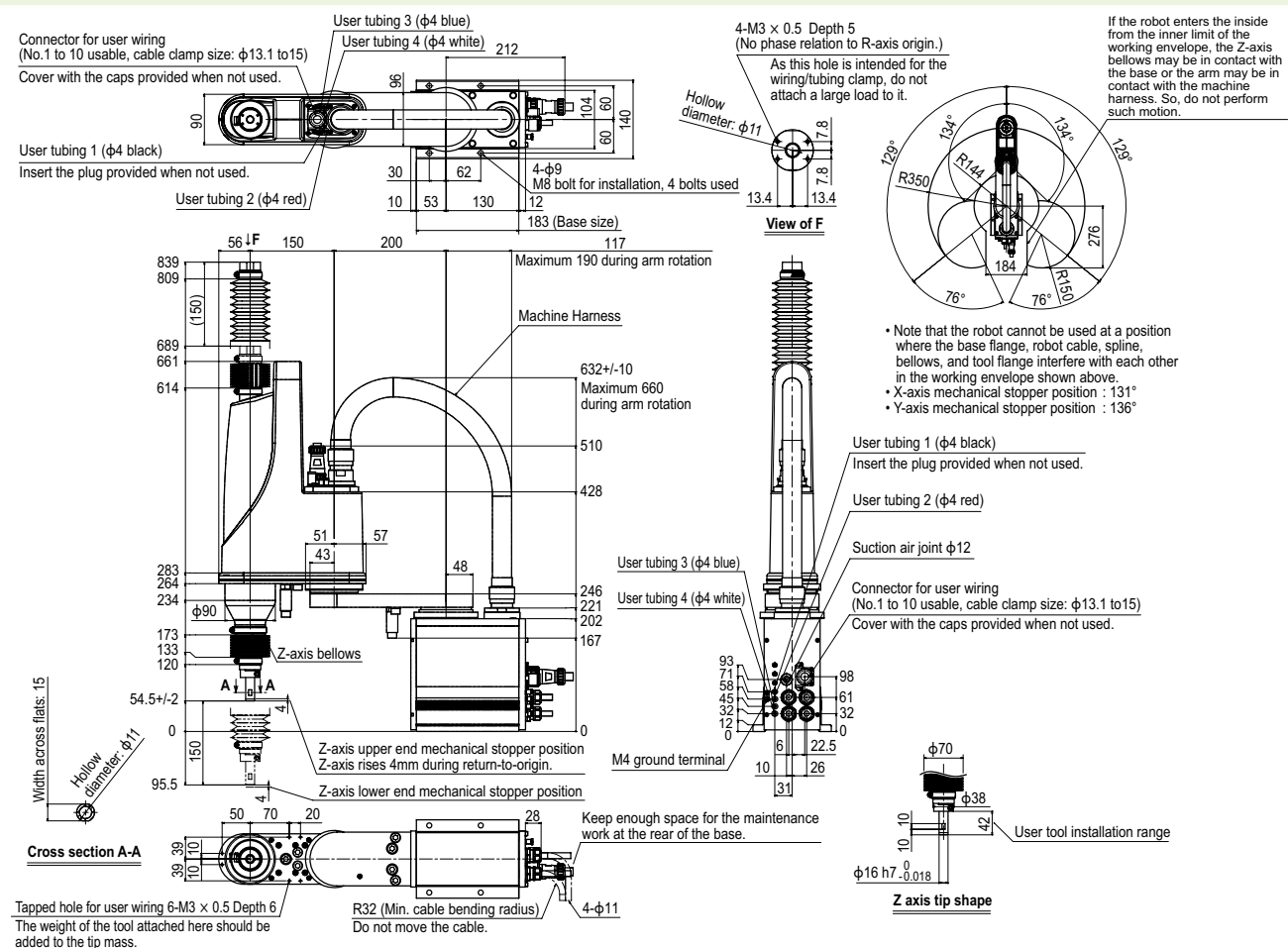
Controller

| Controller | Power capacity (VA) | Operation method |
|------------|---------------------|--|
| RCX340 | 1000 | Programming / I/O point trace / Remote command / Operation using RS-232C communication |

- Note. The movement range can be limited by changing the positions of X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.)
 See our robot manuals (installation manuals) for detailed information.
 Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

Our robot manuals (installation manuals) can be downloaded from our website at the address below:
<https://global.yamaha-motor.com/business/robot/>

YK350XGC



YK400XGC

Clean type: Small type



- Arm length 400mm
- Maximum payload 4kg

Ordering method

YK400XGC - 150 **S** **RCX340-4**

| Model | Z axis stroke | Tool flange | Hollow shaft | Cable length | Controller / Number of controllable axes | Safety standard | Option A (OP.A) | Option B (OP.B) | Option C (OP.C) | Option D (OP.D) | Option E (OP.E) | Absolute battery |
|-------|---------------|---------------------------------------|----------------------|--------------------------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| | 150: 150mm | No entry: None F: With tool flange | S: With hollow shaft | 3L: 3.5m 5L: 5m 10L: 10m | | | | | | | | |

Specify various controller setting items. RCX340 ▶ **P.678**

Basic specifications

| | X axis | Y axis | Z axis | R axis |
|---|--|--------|---------|----------|
| Axis specifications | | | | |
| Arm length (mm) | 250 | 150 | 150 | - |
| Rotation angle (°) | +/-129 | +/-144 | - | +/-360 |
| AC servo motor output (W) | 200 | 150 | 50 | 100 |
| Repeatability ^{Note 1} (XYZ: mm) (R: °) | +/-0.01 | | +/-0.01 | +/-0.004 |
| Maximum speed (XYZ: m/sec) (R: °/sec) | 6.1 | | 1.1 | 1020 |
| Maximum payload (kg) | 4 | | | |
| Standard cycle time: with 2kg payload (sec) ^{Note 2} | 0.50 | | | |
| R-axis tolerable moment of inertia ^{Note 3} (kgm ²) | 0.05 | | | |
| User wiring (sq x wires) | 0.2x10 | | | |
| User tubing (Outer diameter) | φ4x4 | | | |
| Travel limit | 1.Soft limit, 2.Mechanical stopper (X, Y, Z axes) | | | |
| Robot cable length (m) | Standard: 3.5 Option: 5, 10 | | | |
| Weight (kg) | 22.5 | | | |
| Degree of cleanliness | ISO CLASS 3 (ISO 14644-1) ^{Note 4} +ESD ^{Note 5} | | | |
| Intake air (Nl/min) | 30 ^{Note 6} | | | |

- Note 1. This is the value at a constant ambient temperature. (X,Y axes)
 Note 2. When reciprocating 25mm in vertical direction and 300mm in horizontal direction (rough-positioning arch motion).
 Note 3. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.
 Note 4. Class 10 (0.1µm) equivalent to FED-STD-209D
 Note 5. ESD (ElectroStatic Discharge) prevention is an option. Please contact our distributor.
 Note 6. The necessary intake amount varies depending on the use conditions and environment.

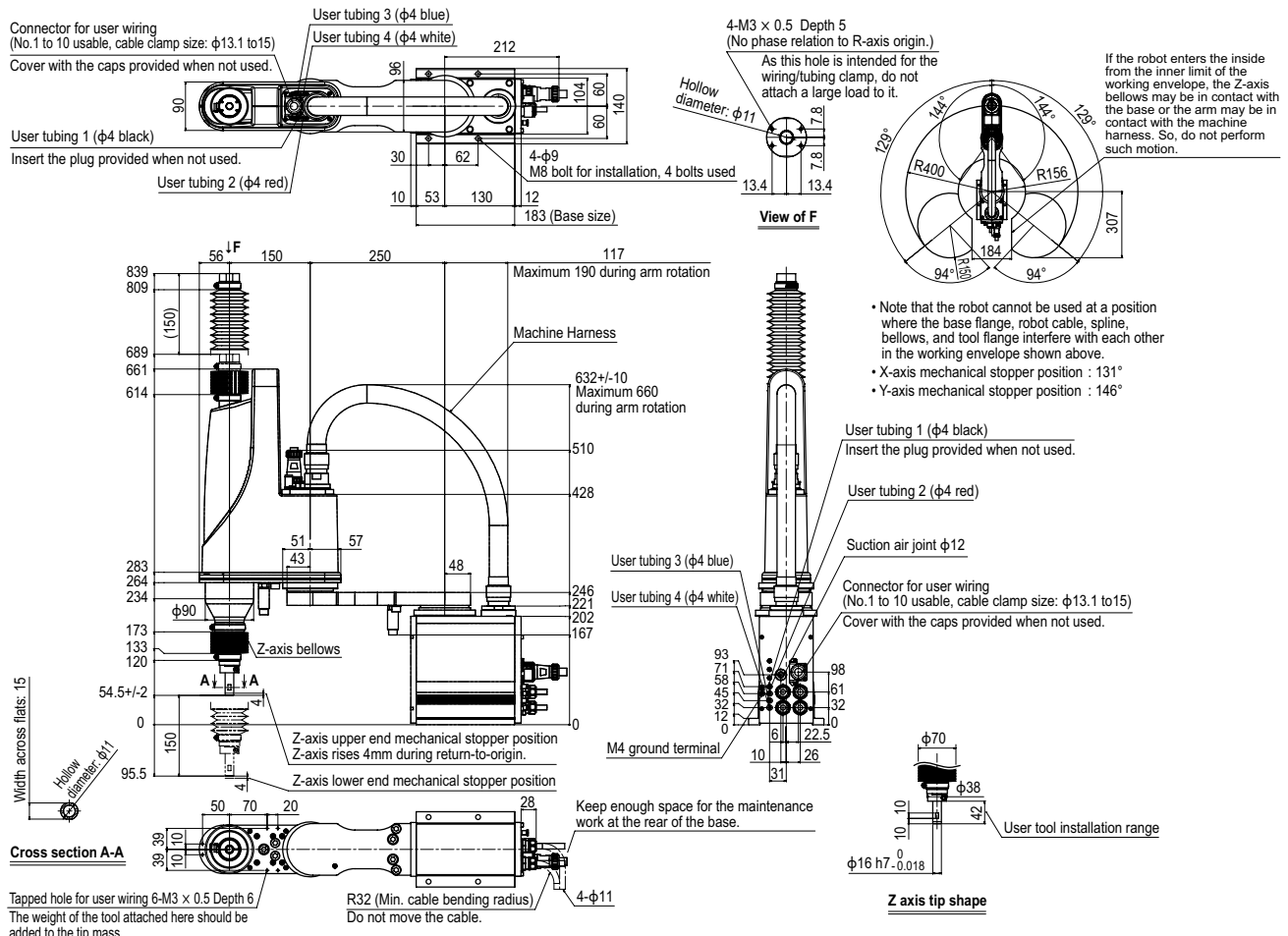
Controller

| Controller | Power capacity (VA) | Operation method |
|------------|---------------------|--|
| RCX340 | 1000 | Programming / I/O point trace / Remote command / Operation using RS-232C communication |

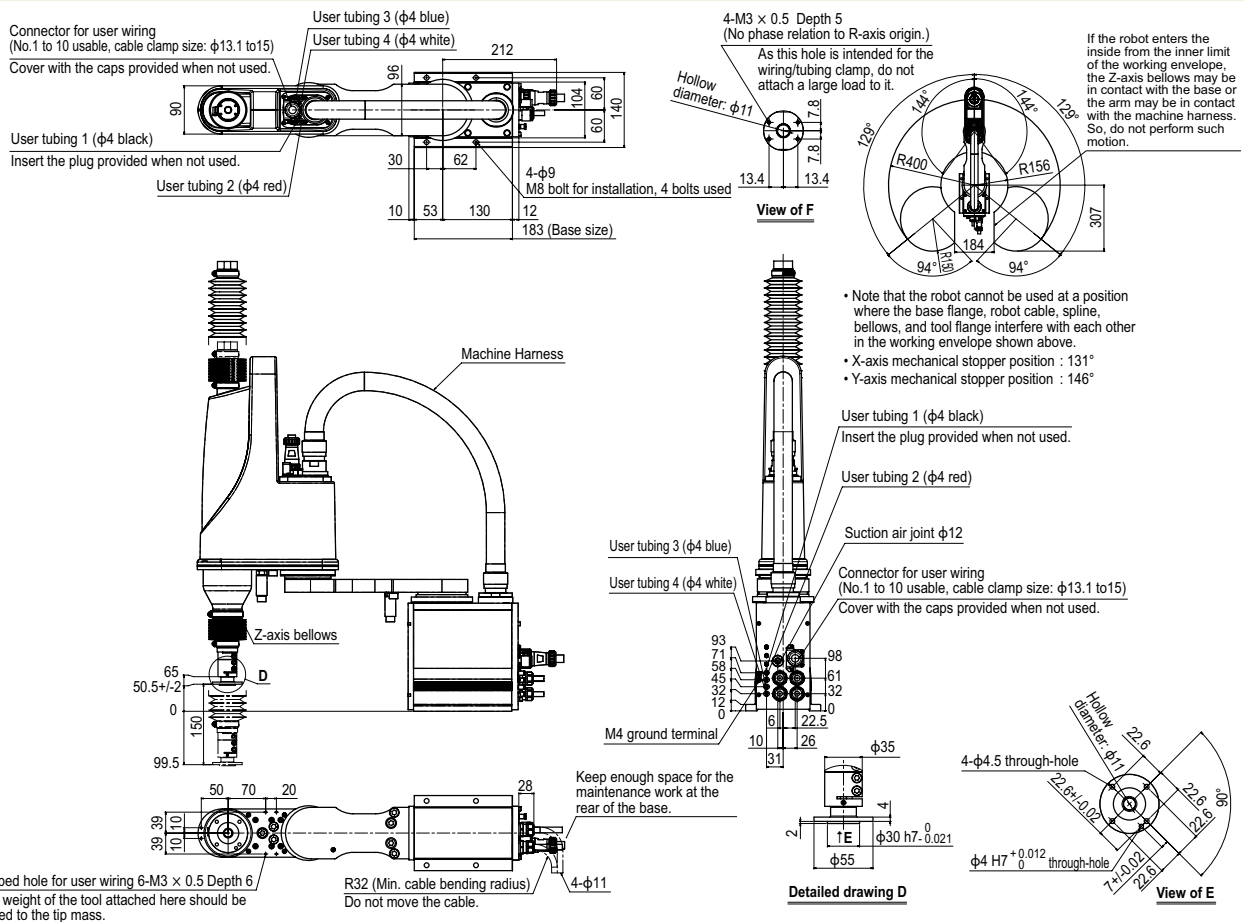
- Note. The movement range can be limited by changing the positions of X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.)
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 Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

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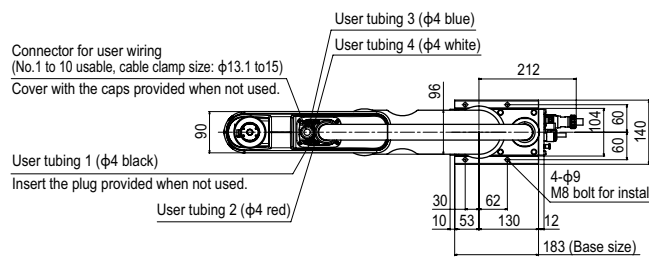
YK400XGC



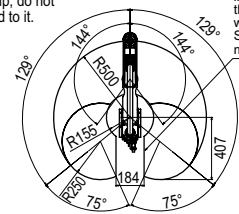
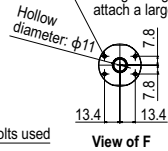
YK400XGC Tool flange mount type



YK500XGLC Tool flange mount type

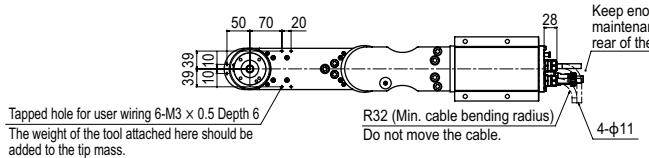
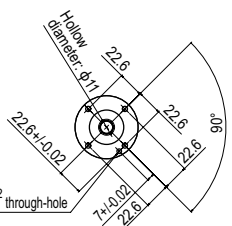
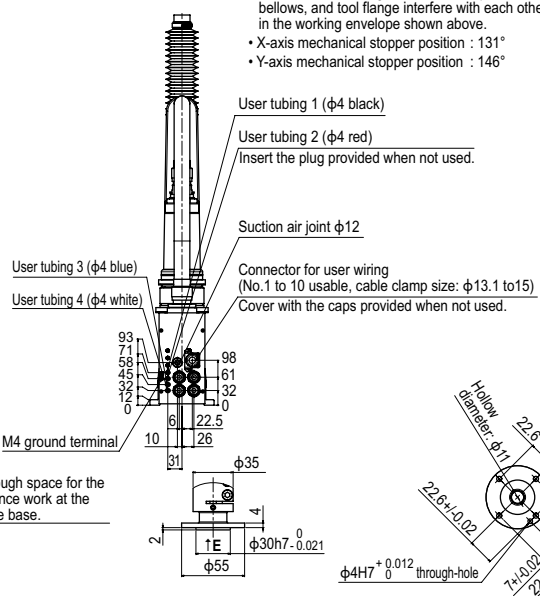
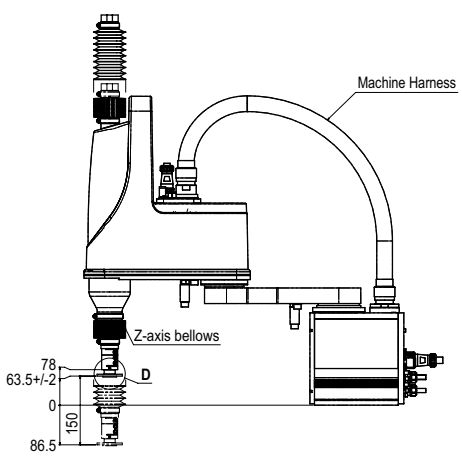


4-M3 x 0.5 Depth 5 (No phase relation to R-axis origin.)
 As this hole is intended for the wiring/tubing clamp, do not attach a large load to it.



If the robot enters the inside from the inner limit of the working envelope, the Z-axis bellows may be in contact with the base or the arm may be in contact with the machine harness. So, do not perform such motion.

- Note that the robot cannot be used at a position where the base flange, robot cable, spline, bellows, and tool flange interfere with each other in the working envelope shown above.
- X-axis mechanical stopper position : 131°
- Y-axis mechanical stopper position : 146°



Detailed drawing D

View of E

YK500XC

Clean type: Medium type



- Arm length 500mm
- Maximum payload 10kg

Ordering method

| | | | | | | | | | | |
|----------------|--------------------------|--------------------------------|---|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|
| YK500XC | | | RCX340-4 | | | | | | | |
| Model | Z axis stroke | Cable length | Controller / Number of controllable axes | Safety standard | Option A (OP.A) | Option B (OP.B) | Option C (OP.C) | Option D (OP.D) | Option E (OP.E) | Absolute battery |
| | 200: 200mm 300: 300mm | 3L: 3.5m 5L: 5m 10L: 10m | | | | | | | | |

Specify various controller setting items. RCX340 ▶ **P.678**

Basic specifications

| Axis specifications | Arm length (mm) | X axis | Y axis | Z axis | | R axis |
|--|-----------------|---|--------|---------|----------|--------|
| | | Rotation angle (°) | +/-120 | +/-142 | 200 | 300 |
| AC servo motor output (W) | | 400 | 200 | 200 | 100 | |
| Repeatability ^{Note 1} (XYZ: mm) (R: °) | | +/-0.02 | | +/-0.01 | +/-0.005 | |
| Maximum speed (XYZ: m/sec) (R: °/sec) | | 4.9 | | 1.7 | 876 | |
| Maximum payload (kg) | | 10 | | | | |
| Standard cycle time: with 2kg payload (sec) | | 0.53 | | | | |
| R-axis tolerable moment of inertia ^{Note 2} (kgm ²) | | 0.12 | | | | |
| User wiring (sq x wires) | | 0.2 x 20 | | | | |
| User tubing (Outer diameter) | | φ6 x 3 | | | | |
| Travel limit | | 1.Soft limit, 2.Mechanical stopper (X, Y, Z axes) | | | | |
| Robot cable length (m) | | Standard: 3.5 Option: 5, 10 | | | | |
| Weight (kg) | | 31 | | | | |
| Degree of cleanliness | | CLASS 10 ^{Note 3} | | | | |
| Intake air (Nl/min) | | 60 ^{Note 4} | | | | |

Note 1. This is the value at a constant ambient temperature. (X,Y axes)
 Note 2. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.
 Note 3. Per 1cf (0.1μm base), when suction blower is used.
 Note 4. The necessary intake amount varies depending on the use conditions and environment.

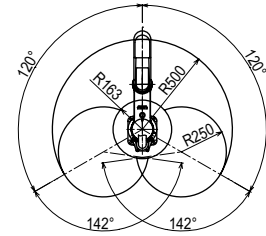
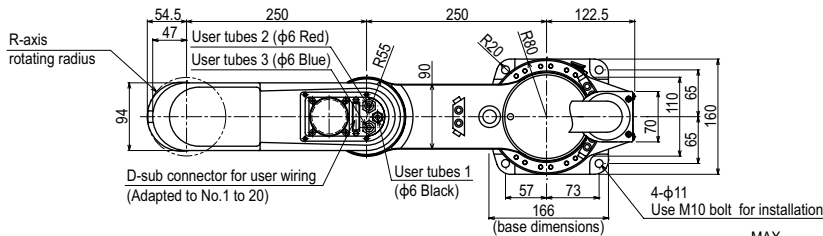
Controller

| Controller | Power capacity (VA) | Operation method |
|------------|---------------------|--|
| RCX340 | 1500 | Programming / I/O point trace / Remote command / Operation using RS-232C communication |

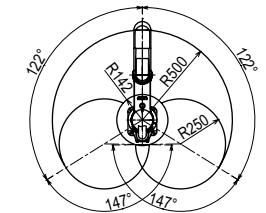
Note. The movement range can be limited by changing the positions of X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.) See our robot manuals (installation manuals) for detailed information.

Our robot manuals (installation manuals) can be downloaded from our website at the address below:
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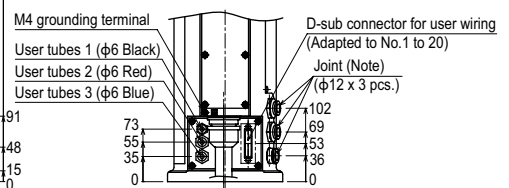
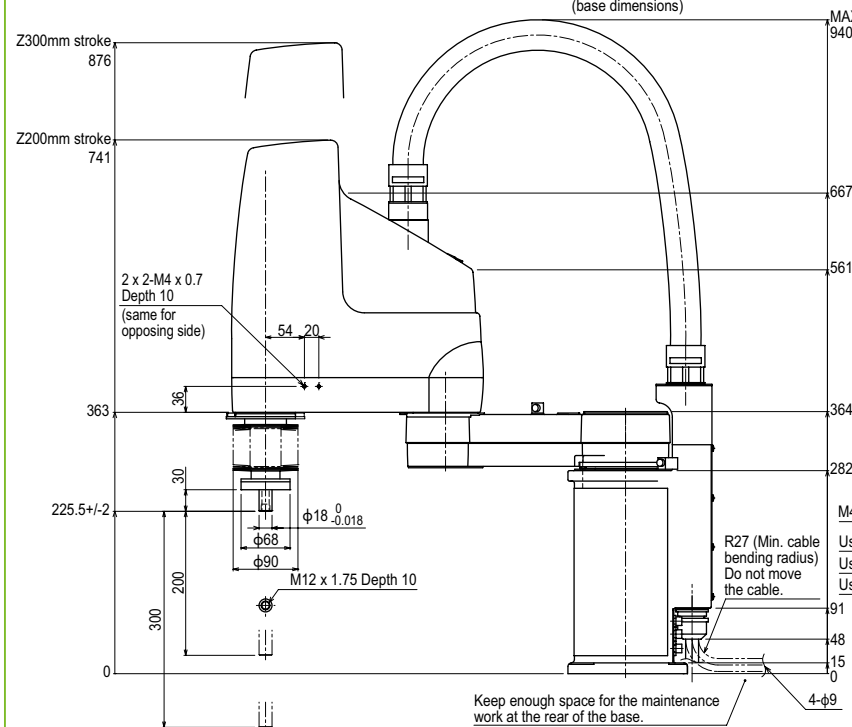
YK500XC



Working envelope



X,Y axis mechanical stopper position



Note: For details about tubing work, refer to the User's Manual.

YK600XGLC

Clean type: Medium type

- Arm length 600mm
- Maximum payload 4kg

Ordering method

YK600XGLC - 150 **S** **RCX340-4**

| Model | Z axis stroke | Tool flange | Hollow shaft | Cable length | Controller / Number of controllable axes | Safety standard | Option A (OP.A) | Option B (OP.B) | Option C (OP.C) | Option D (OP.D) | Option E (OP.E) | Absolute battery |
|-------|---------------|---------------------------------------|----------------------|--------------------------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| | 150: 150mm | No entry: None F: With tool flange | S: With hollow shaft | 3L: 3.5m 5L: 5m 10L: 10m | | | | | | | | |

Specify various controller setting items. RCX340 ▶ **P.678**

Basic specifications

| Axis specifications | Arm length (mm) | X axis | Y axis | Z axis | R axis |
|--|-----------------|--|--------|---------|----------|
| Rotation angle (°) | | +/-129 | +/-144 | - | +/-360 |
| AC servo motor output (W) | | 200 | 150 | 50 | 100 |
| Repeatability ^{Note 1} (XYZ: mm) (R: °) | | +/-0.01 | | +/-0.01 | +/-0.004 |
| Maximum speed (XYZ: m/sec) (R: °/sec) | | 4.9 | | 1.1 | 1020 |
| Maximum payload (kg) | | 4 | | | |
| Standard cycle time: with 2kg payload (sec) ^{Note 2} | | 0.71 | | | |
| R-axis tolerable moment of inertia ^{Note 3} (kgm ²) | | 0.05 | | | |
| User wiring (sq x wires) | | 0.2x10 | | | |
| User tubing (Outer diameter) | | φ4x4 | | | |
| Travel limit | | 1.Soft limit, 2.Mechanical stopper (X, Y, Z axes) | | | |
| Robot cable length (m) | | Standard: 3.5 Option: 5, 10 | | | |
| Weight (kg) | | 26 | | | |
| Degree of cleanliness | | ISO CLASS 3 (ISO 14644-1) ^{Note 4} +ESD ^{Note 5} | | | |
| Intake air (Nl/min) | | 30 ^{Note 6} | | | |

- Note 1. This is the value at a constant ambient temperature. (X,Y axes)
 Note 2. When reciprocating 25mm in vertical direction and 300mm in horizontal direction (rough-positioning arch motion).
 Note 3. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.
 Note 4. Class 10 (0.1µm) equivalent to FED-STD-209D
 Note 5. ESD (ElectroStatic Discharge) prevention is an option. Please contact our distributor.
 Note 6. The necessary intake amount varies depending on the use conditions and environment.

Controller

| Controller | Power capacity (VA) | Operation method |
|------------|---------------------|--|
| RCX340 | 1000 | Programming / I/O point trace / Remote command / Operation using RS-232C communication |

Note. The movement range can be limited by changing the positions of X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.)
 See our robot manuals (installation manuals) for detailed information.

Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

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YK600XGLC

Connector for user wiring (No.1 to 10 usable, cable clamp size: φ13.1 to 15)
 Cover with the caps provided when not used.

User tubing 1 (φ4 black)
 Insert the plug provided when not used.

User tubing 2 (φ4 red)

User tubing 3 (φ4 blue)

User tubing 4 (φ4 white)

4-M3 x 0.5 Depth 5 (No phase relation to R-axis origin.)
 As this hole is intended for the wiring/tubing clamp, do not attach a large load to it.

Hollow diameter: φ11

4-φ9 M8 bolt for installation, 4 bolts used

183 (Base size)

View of F

The arm may be in contact with the machine harness in an area inside from the inner limit of this working envelope. So, do not operate the arm in this area.

Machine Harness

Z-axis bellows

Z-axis upper end mechanical stopper position
 Z-axis rises 4mm during return-to-origin.

Z-axis lower end mechanical stopper position

Width across flats: 15

Hollow diameter: φ11

Cross section A-A

Tapped hole for user wiring 6-M3 x 0.5 Depth 6
 The weight of the tool attached here should be added to the tip mass.

R32 (Min. cable bending radius)
 Do not move the cable.

4-φ11

Keep enough space for the maintenance work at the rear of the base.

User tubing 1 (φ4 black)

User tubing 2 (φ4 red)
 Insert the plug provided when not used.

Suction air joint φ12

Connector for user wiring (No.1 to 10 usable, cable clamp size: φ13.1 to 15)
 Cover with the caps provided when not used.

M4 ground terminal

User tool installation range

Z axis tip shape

φ70

φ38

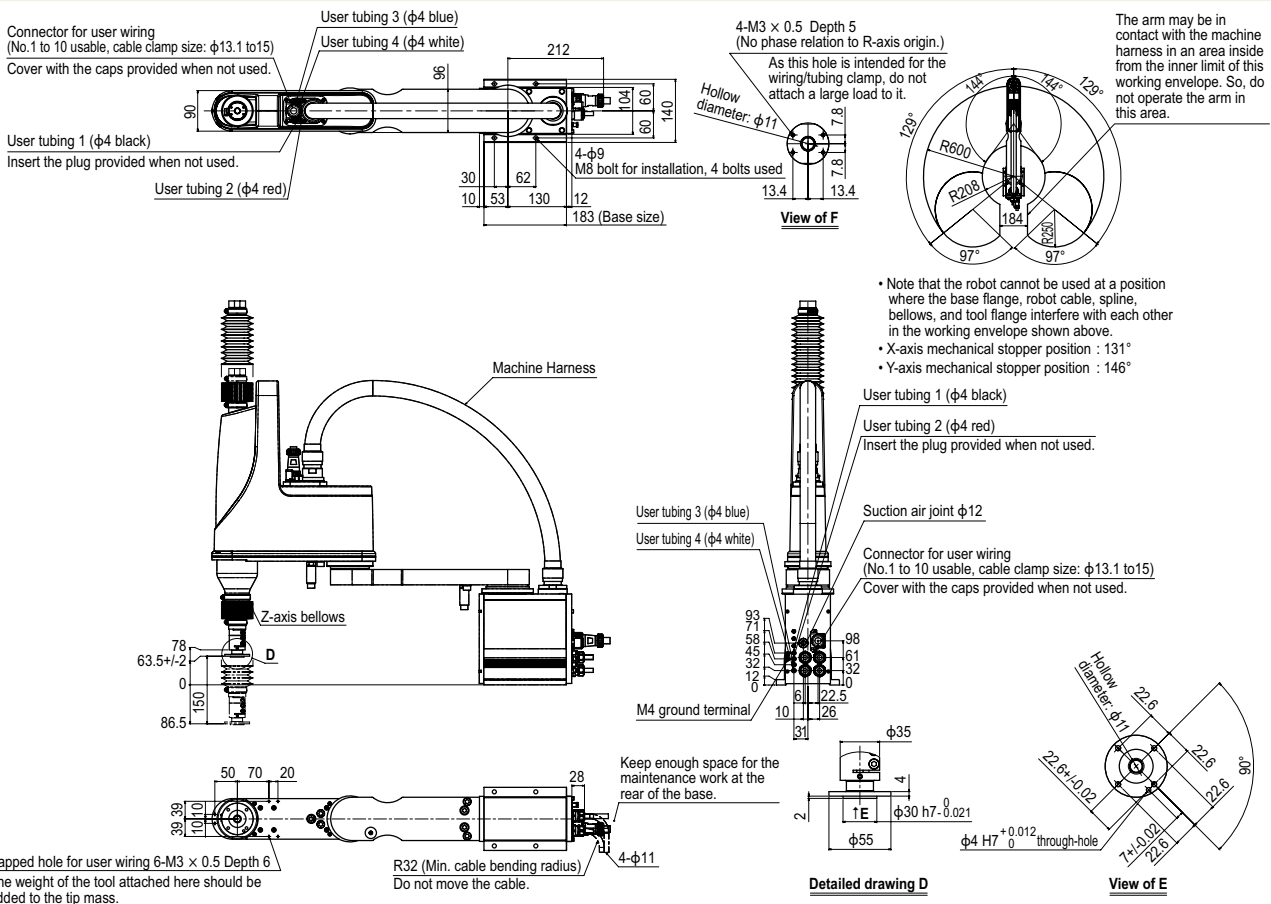
φ16 h7-0.018

Note that the robot cannot be used at a position where the base flange, robot cable, spline, bellows, and tool flange interfere with each other in the working envelope shown above.

- X-axis mechanical stopper position : 131°
- Y-axis mechanical stopper position : 146°

- Articulated robots YA
- Linear conveyor modules LCM
- Single-axis robots CX
- Motor-less single axis actuator Robonty
- Compact single-axis robots TRANSERO
- Single-axis robots FLIP-X
- Linear motor single-axis robots PHASER
- Cartesian robots XY-X
- SCARA robots YK-X
- Pick & place robots YP-X
- CLEAN
- CONTROLLER INFORMATION
- Single-axis Cartesian SCARA

YK600XGLC Tool flange mount type



YK600XC

Clean type: Medium type



- Arm length 600mm
- Maximum payload 10kg

Ordering method

| | | | | | | | | | | |
|----------------|--------------------------|--------------------------------|---|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|
| YK600XC | | | RCX340-4 | | | | | | | |
| Model | Z axis stroke | Cable length | Controller / Number of controllable axes | Safety standard | Option A (OP.A) | Option B (OP.B) | Option C (OP.C) | Option D (OP.D) | Option E (OP.E) | Absolute battery |
| | 200: 200mm 300: 300mm | 3L: 3.5m 5L: 5m 10L: 10m | | | | | | | | |

Specify various controller setting items. RCX340 ▶ **P.678**

Basic specifications

| Axis specifications | Arm length (mm) | X axis | Y axis | Z axis | R axis |
|--|-----------------|---|--------|---------|----------|
| Rotation angle (°) | | +/-120 | +/-145 | - | +/-180 |
| AC servo motor output (W) | | 400 | 200 | 200 | 100 |
| Repeatability ^{Note 1} (XYZ: mm) (R: °) | | +/-0.02 | | +/-0.01 | +/-0.005 |
| Maximum speed (XYZ: m/sec) (R: °/sec) | | 5.6 | | 1.7 | 876 |
| Maximum payload (kg) | | 10 | | | |
| Standard cycle time: with 2kg payload (sec) | | 0.56 | | | |
| R-axis tolerable moment of inertia ^{Note 2} (kgm ²) | | 0.12 | | | |
| User wiring (sq x wires) | | 0.2 x 20 | | | |
| User tubing (Outer diameter) | | φ6 x 3 | | | |
| Travel limit | | 1.Soft limit, 2.Mechanical stopper (X, Y, Z axes) | | | |
| Robot cable length (m) | | Standard: 3.5 Option: 5, 10 | | | |
| Weight (kg) | | 33 | | | |
| Degree of cleanliness | | CLASS 10 ^{Note 3} | | | |
| Intake air (Nl/min) | | 60 ^{Note 4} | | | |

Note 1. This is the value at a constant ambient temperature. (X,Y axes)
 Note 2. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.
 Note 3. Per 1cf (0.1μm base), when suction blower is used.
 Note 4. The necessary intake amount varies depending on the use conditions and environment.

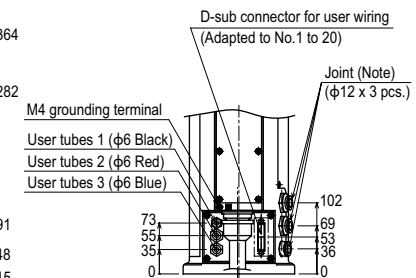
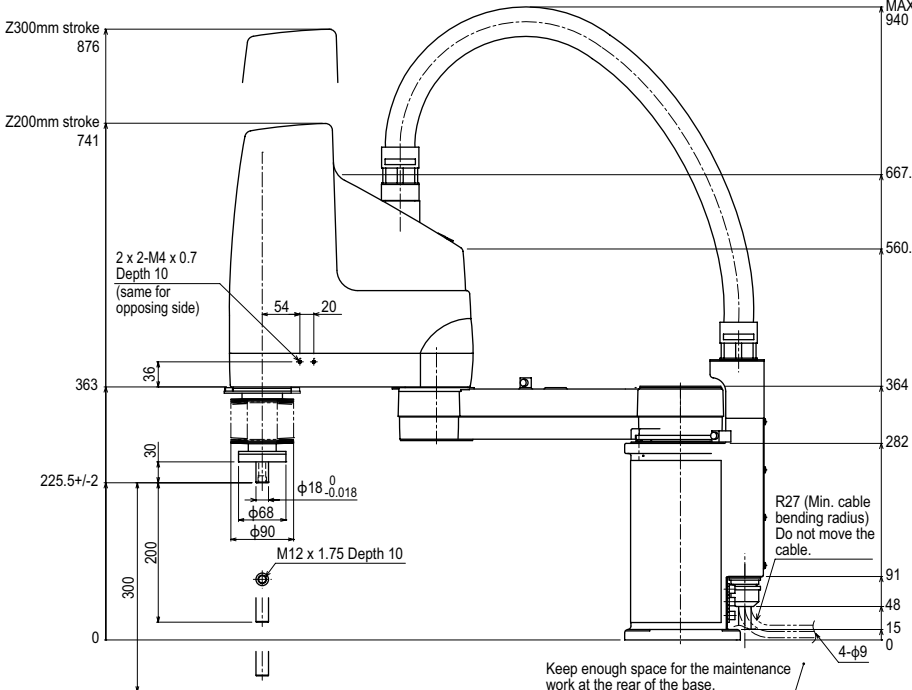
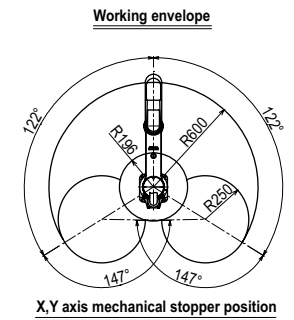
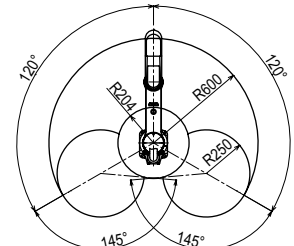
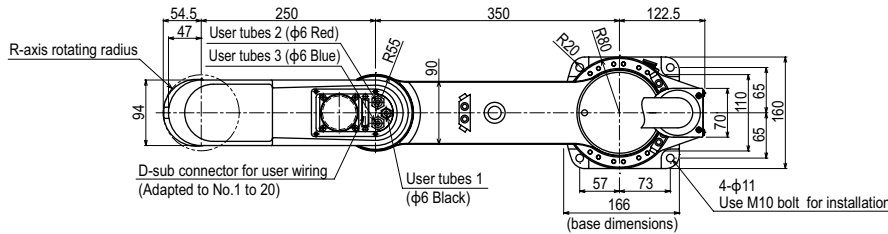
Controller

| Controller | Power capacity (VA) | Operation method |
|------------|---------------------|--|
| RCX340 | 1500 | Programming / I/O point trace / Remote command / Operation using RS-232C communication |

Note. The movement range can be limited by changing the positions of X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.)
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YK600XC



Note: For details about tubing work, refer to the User's Manual.

Articulated robots YA
 Linear conveyor modules LCM
 Single-axis robots CX
 Motor-less single-axis actuator Robotomy
 Compact single-axis robots TRANSEVO
 Single-axis robots FLIP-X
 Linear motor single-axis robots PHASER
 Cartesian robots XY-X
 SCARA robots YK-X
 Pick & place robots YP-X
 CLEAN
 CONTROLLER INFORMATION
 Single-axis Cartesian SCARA

YK700XC

Clean type: Large type



- Arm length 700mm
- Maximum payload 20kg

Ordering method

| | | | | | | | | | | | |
|----------------|--------------------------|--------------------------------|---|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|--|
| YK700XC | | | RCX340-4 | | | | | | | | |
| Model | Z axis stroke | Cable length | Controller / Number of controllable axes | Safety standard | Option A (OP.A) | Option B (OP.B) | Option C (OP.C) | Option D (OP.D) | Option E (OP.E) | Absolute battery | |
| | 200: 200mm 400: 400mm | 3L: 3.5m 5L: 5m 10L: 10m | | | | | | | | | |

Specify various controller setting items. RCX340 ▶ **P.678**

Basic specifications

| Axis specifications | Arm length (mm) | X axis | Y axis | Z axis | R axis |
|---------------------|--|---|--------|---------|----------|
| | Rotation angle (°) | +/-120 | +/-145 | - | +/-180 |
| | AC servo motor output (W) | 800 | 400 | 400 | 200 |
| | Repeatability ^{Note 1} (XYZ: mm) (R: °) | +/-0.02 | | +/-0.01 | +/-0.005 |
| | Maximum speed (XYZ: m/sec) (R: °/sec) | 6.7 | | 1.7 | 600 |
| | Maximum payload (kg) | 20 | | | |
| | Standard cycle time: with 2kg payload (sec) | 0.57 | | | |
| | R-axis tolerable moment of inertia ^{Note 2} (kgm ²) | 0.32 | | | |
| | User wiring (sq x wires) | 0.2 x 20 | | | |
| | User tubing (Outer diameter) | φ6 x 3 | | | |
| | Travel limit | 1.Soft limit, 2.Mechanical stopper (X, Y, Z axes) | | | |
| | Robot cable length (m) | Standard: 3.5 Option: 5, 10 | | | |
| | Weight (kg) | 57 | | | |
| | Degree of cleanliness | CLASS 10 ^{Note 3} | | | |
| | Intake air (Nl/min) | 60 ^{Note 4} | | | |

Note 1. This is the value at a constant ambient temperature. (X,Y axes)
 Note 2. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.
 Note 3. Per 1cf (0.1μm base), when suction blower is used.
 Note 4. The necessary intake amount varies depending on the use conditions and environment.

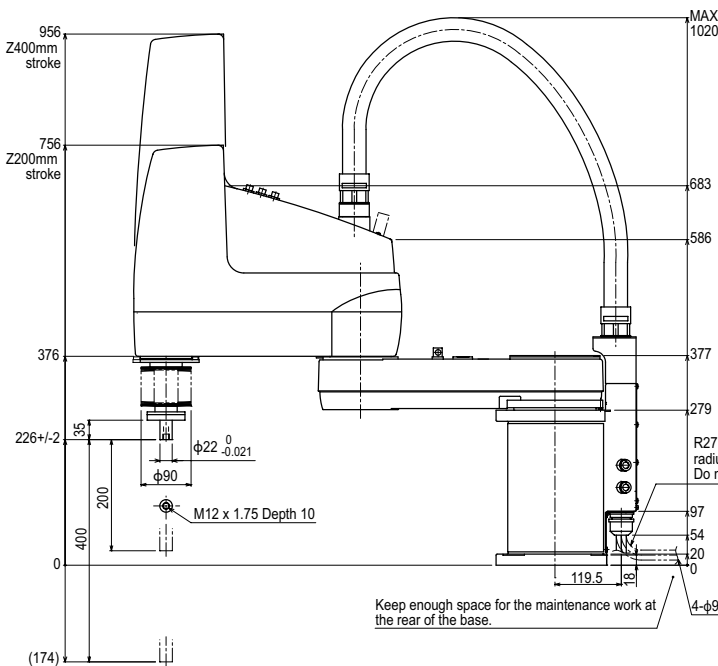
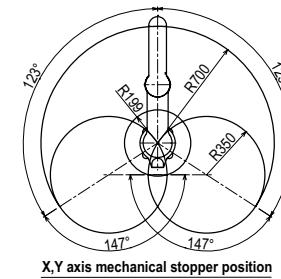
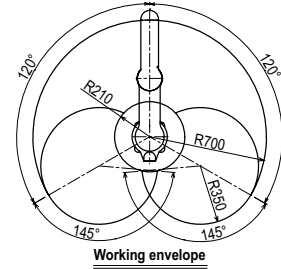
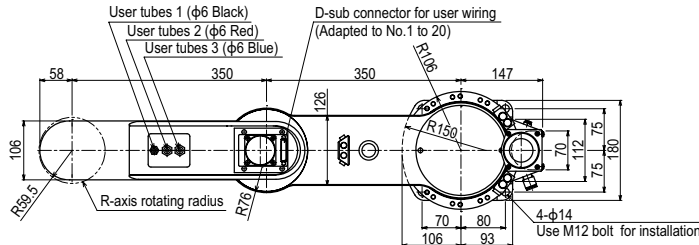
Controller

| Controller | Power capacity (VA) | Operation method |
|------------|---------------------|--|
| RCX340 | 2000 | Programming / I/O point trace / Remote command / Operation using RS-232C communication |

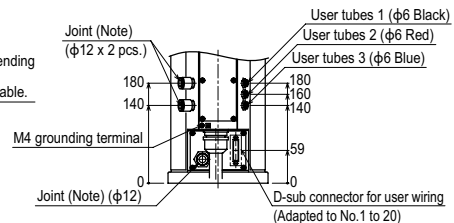
Note. The movement range can be limited by changing the positions of X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.) See our robot manuals (installation manuals) for detailed information.

Our robot manuals (installation manuals) can be downloaded from our website at the address below:
<https://global.yamaha-motor.com/business/robot/>

YK700XC



Keep enough space for the maintenance work at the rear of the base.



Note: For details about tubing work, refer to the User's Manual.

YK1000XC

Clean type: Large type



- Arm length 1000mm
- Maximum payload 20kg

Ordering method

| | | | | | | | | | | | |
|-----------------|--------------------------|--------------------------------|---|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|--|
| YK1000XC | | | RCX340-4 | | | | | | | | |
| Model | Z axis stroke | Cable length | Controller / Number of controllable axes | Safety standard | Option A (OP.A) | Option B (OP.B) | Option C (OP.C) | Option D (OP.D) | Option E (OP.E) | Absolute battery | |
| | 200: 200mm 400: 400mm | 3L: 3.5m 5L: 5m 10L: 10m | | | | | | | | | |

Specify various controller setting items. RCX340 ▶ **P.678**

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| | AC servo motor output (W) | 800 | 400 | 400 | | 200 |
| | Repeatability ^{Note 1} (XYZ: mm) (R: °) | +/-0.02 | | +/-0.01 | | +/-0.005 |
| | Maximum speed (XYZ: m/sec) (R: °/sec) | 8.0 | | 1.7 | | 600 |
| | Maximum payload (kg) | 20 | | | | |
| | Standard cycle time: with 2kg payload (sec) | 0.60 | | | | |
| | R-axis tolerable moment of inertia ^{Note 2} (kgm ²) | 0.32 | | | | |
| | User wiring (sq x wires) | 0.2 x 20 | | | | |
| | User tubing (Outer diameter) | φ6 x 3 | | | | |
| | Travel limit | 1.Soft limit, 2.Mechanical stopper (X, Y, Z axes) | | | | |
| | Robot cable length (m) | Standard: 3.5 Option: 5, 10 | | | | |
| | Weight (kg) | 59 | | | | |
| | Degree of cleanliness | CLASS 10 ^{Note 3} | | | | |
| | Intake air (Nl/min) | 60 ^{Note 4} | | | | |

Note 1. This is the value at a constant ambient temperature. (X,Y axes)
 Note 2. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.
 Note 3. Per 1cf (0.1μm base), when suction blower is used.
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Controller

| Controller | Power capacity (VA) | Operation method |
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Note. The movement range can be limited by changing the positions of X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.)
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YK1000XC

