

- Gantry type
- Cable carrier
- Z-axis: clamped table / moving base type (200W)+R-axis

Ordering method

MXYx - C [] [] [] **ZRFH** [] [] **RCX340-4** [] [] [] [] [] [] [] []

| Model | Cable | Combination | X-axis stroke | Y-axis stroke | ZR-axis | Z-axis stroke | Cable | 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 |
|-------|-------|----------------------|---------------|---------------|---------|---------------|--------------------------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| | | G1 G2 G3 G4 | 25 to 125cm | 15 to 85cm | | 15 to 35cm | 3L: 3.5m 5L: 5m 10L: 10m | | | | | | | | |

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

Specification

| | X-axis | Y-axis | Z-axis | R-axis |
|--|-----------------------------|----------------|----------------|---------------|
| Axis construction ^{Note 1} | F17 | F14H | F10H-BK | R5 |
| AC servo motor output (W) | 400 | 200 | 200 | 50 |
| Repeatability ^{Note 2} (XYZ: mm) (R: °) | +/-0.01 | +/-0.01 | +/-0.01 | +/-0.0083 |
| Drive system | Ball screw φ20 | Ball screw φ15 | Ball screw φ15 | Harmonic gear |
| Ball screw lead ^{Note 3} (Deceleration ratio) (mm) | 20 | 20 | 10 | (1/50) |
| Maximum speed ^{Note 4} (XYZ: mm/sec) (R: °/sec) | 1200 | 1200 | 600 | 360 |
| Moving range (XYZ: mm) (R: °) | 250 to 1250 | 150 to 850 | 150 to 350 | 360 |
| Robot cable length (m) | Standard: 3.5 Option: 5, 10 | | | |

Note. The standard types are ZRFH with higher rigidity as compared with ZRF types which are conventional standard types. When you need the ZRF type, please consult YAMAHA.

Note 1. Use caution that the flange 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 (750mm for Y-axis), 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.

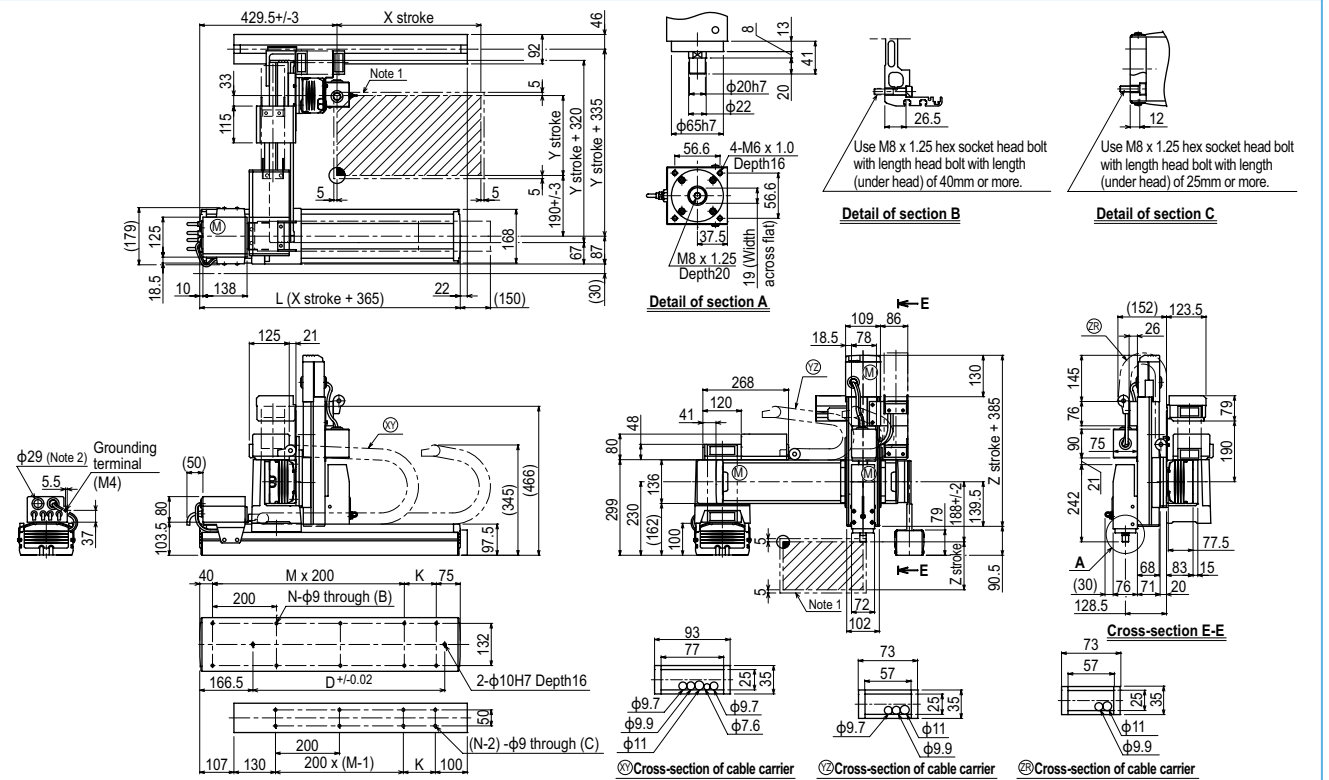
Maximum payload (kg)

| Y stroke (mm) | Z stroke (mm) | | |
|---------------|---------------|-----|-----|
| | 150 | 250 | 350 |
| 150 | 10 | 9 | 8 |
| 250 | 10 | 9 | 8 |
| 350 | 10 | 9 | 8 |
| 450 | 10 | 9 | 8 |
| 550 | 10 | 9 | 8 |
| 650 | 10 | 9 | 8 |
| 750 | 10 | 9 | 8 |
| 850 | 8 | 7 | 6 |

Controller

| Controller | Operation method |
|------------|--|
| RCX340 | Programming / I/O point trace / Remote command / Operation using RS-232C communication |

MXYx 4 axes / ZRFH G1



| X stroke | 250 | 350 | 450 | 550 | 650 | 750 | 850 | 950 | 1050 | 1150 | 1250 | |
|--|---------------|------|-----|-----|-----|------|------|------|------|------|------|------|
| | L | 615 | 715 | 815 | 915 | 1015 | 1115 | 1215 | 1315 | 1415 | 1515 | 1615 |
| K | 100 | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 | 200 | 100 | |
| D | 240 | 420 | 600 | 600 | 780 | 780 | 960 | 960 | 1140 | 1140 | 1320 | |
| M | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | |
| N | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 | 18 | |
| Y stroke | 150 | 250 | 350 | 450 | 550 | 650 | 750 | 850 | | | | |
| Z stroke | 150 | 250 | 350 | | | | | | | | | |
| Maximum speed for each stroke (mm/sec) ^{Note 3} | X-axis | 1200 | | | | | 960 | 840 | 720 | 600 | 480 | |
| | Speed setting | - | | | | | 80% | 70% | 60% | 50% | 40% | |
| Y-axis | X-axis | 1200 | | | | | 960 | 780 | | | | |
| | Speed setting | - | | | | | 80% | 65% | | | | |

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

Note 2. Use cable extraction port.

Note 3. When the X-axis stroke is longer than 850mm (750mm for Y-axis), 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.