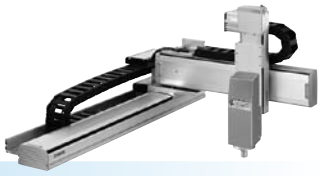
SXYx 4 axes / ZRF

Arm type | Cable carrier | Z-axis: clamped base / moving table type (100W)+R-axis



Ordering method

SXYx - C					ZRF			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
		A1 A2 A3 A4	15 to 105cm	15 to 65cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ P.494

RCX240S						BB
Controller	CE Marking	Expansion I/O	Network option	iVY System	Gripper	Battery

Specify various controller setting items. RCX240/RCX240S ▶ P.481

Specification

	X-axis	Y-axis	Z-axis	R-axis
Axis construction Note 1	F14H	F14	F10-BK	R5
AC servo motor output (W)	200	100	100	50
Repeatability Note 2 (XYZ: mm) (R: °)	+/-0.01	+/-0.01	+/-0.01	+/-0.0083
Drive system	Ball screw (Class C7)	Ball screw (Class C7)	Ball screw (Class C7)	Harmonic gear
Ball screw lead (Deceleration ratio) (mm)	20	20	10	(1/50)
Maximum speed Note 3 (XYZ: mm/sec) (R: °/sec)	1200	1200	600	360
Moving range (XYZ: mm) (R: °)	150 to 1050	150 to 650	150 to 350	360
Robot cable length (m)	Standard: 3.5 Option: 5,10			

Note 1. Use caution that the flame machining (installation holes, tap holes) differs from single-axis robots'.
Note 2. Positioning repeatability in one direction.
Note 3. When the X-axis 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.

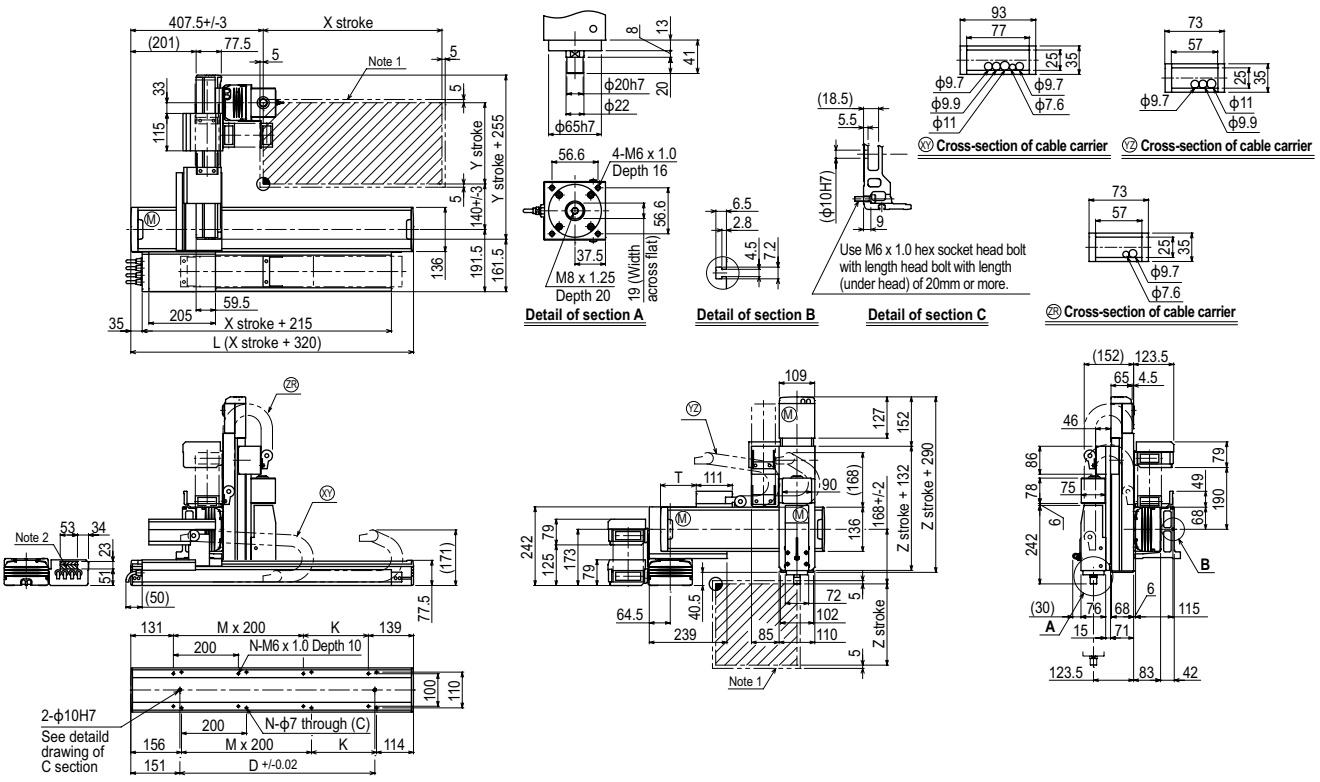
Maximum payload (kg)

	Z stroke (mm)		
Y stroke (mm)	150	250	350
150	6	6	6
250	6	5	4
350	4	3	2
450	3	2	1
550	2	1	–
650	1	–	–

Controller

Controller	Operation method
RCX340 RCX240S	Programming / I/O point trace / Remote command / Operation using RS-232C communication

SXYx 4 axes / ZRF A1



X stroke	150	250	350	450	550	650	750	850	950	1050
L	470	570	670	770	870	970	1070	1170	1270	1370
K	200	100	200	100	200	100	200	100	200	100
D	240	240	420	420	600	600	780	960	960	1140
M	0	1	1	2	2	3	3	4	4	5
N	4	6	6	8	8	10	10	12	12	14

Y stroke	150	250	350	450	550	650
T	55	110	165	220	275	330

Z stroke	150	250	350

Maximum speed for each stroke (mm/sec) Note 3								
X-axis	1200				960	780	600	540
Speed setting	–				80%	65%	50%	45%

Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
Note 2. The shaded position indicates an user cable extraction port.
Note 3. When the X-axis 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.