

# SXYx

4 axes / ZRF

● Arm type ● Whipover

● Z-axis: clamped base / moving table type (100W)+R-axis

## Ordering method

**SXYx - S** [ ] [ ] [ ] **ZRF** [ ] [ ] **RCX240** [ ] [ ] [ ] **BB**

Model	Cable	Combination	X-axis stroke	Y-axis stroke	ZR-axis	Z-axis stroke	Cable length	Controller	Usable for CE	Option I/O <sup>Note 1</sup>	Network option	Battery
		A1 A2 A3 A4	15 to 85cm	15 to 65cm		15 to 35cm	3L: 3.5m (Standard) 5L: 5m 10L: 10m		No entry: Standard E: CE marking	N: P: Standard I/O 168 N1, P1: 40/24 N2, P2: 64/40 N3, P3: 88/56 N4, P4: 112/72	No entry: None CC: CC-Link DN: DeviceNet PB: Profibus EN: Ethernet YC: YC-Link <sup>Note 2</sup>	BB: 4 pcs

Note 1. N to N4 if NPN was selected, or P to P4 if PNP was selected for the I/O board.  
Note 2. Available only for the master.

## Specification

	X-axis	Y-axis	Z-axis	R-axis
Axis construction <sup>Note 1</sup>	F14H	F14	F10-BK	R5
AC servo motor output (W)	200	100	100	50
Repeatability <sup>Note 2</sup> (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 <sup>Note 3</sup> (XYZ: mm/sec) (R: °/sec)	1200	1200	600	360
Moving range (XYZ: mm) (R: °)	150 to 850	150 to 650	150 to 350	360
Robot cable length (m)	Standard: 3.5 Option: 5,10			

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. 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.

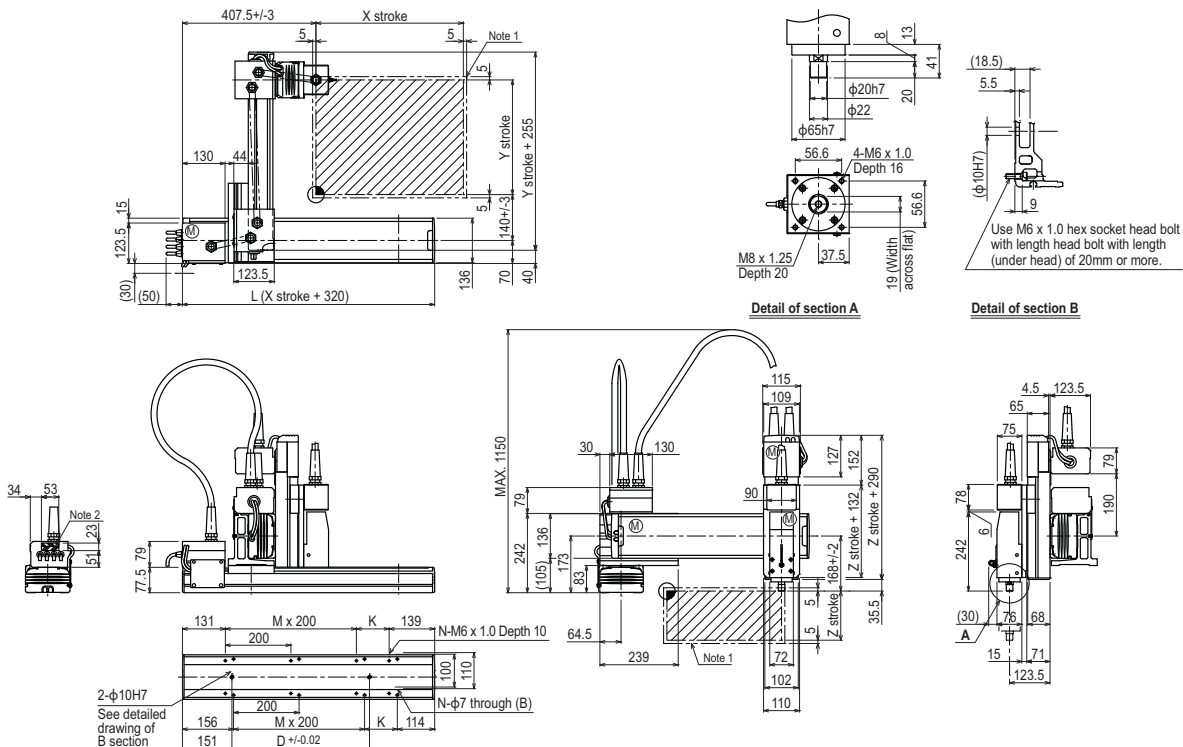
## Maximum payload (kg)

Y stroke (mm)	Z 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
RCX240	Programming / I/O point trace / (BCD) Remote command / Operation using RS-232C communication

## SXYx 4 axes / ZRF A1



X stroke	150	250	350	450	550	650	750	850
L	470	570	670	770	870	970	1070	1170
K	200	100	200	100	200	100	200	100
D	240	240	420	420	600	600	780	960
M	0	1	1	2	2	3	3	4
N	4	6	6	8	8	10	10	12
Y stroke	150	250	350	450	550	650		
Z stroke	150	250	350					
Maximum speed for each stroke (mm/sec) <sup>Note 3</sup>	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. 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.