APPLICATION

TRANSERVO
Compact single-axis robots

FLIP-X
Single-axis robots

PHASER
Linear motor single-axis robots

XY-X
Cartesian robots

YK-XG
SCARA robots

YP-X
Pick & place robots

CLEAN

CONTROLLER

INFORMATION

Arm type

Gantry type

Moving arm type

Pole type

XZ type

SXYx 3 axes / ZF

● Moving arm type   ● Whipover   ● Z-axis: clamped base / moving table type (100W)

■ Ordering method

SXYx - S ☐ ☐ ☐ ZF ☐ ☐ 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 Note 1	Network option	Battery
		M1	15 to 85cm	15 to 35cm		15 to 35cm	3L: 3.5m (Standard)		No entry: Standard	N, P: Standard I/O 16/8	No entry: None	BB: 4 pcs
		M3					5L: 5m		E: CE marking	N1, P1: 40/24	CC: CC-Link	
							10L: 10m			N2, P2: 64/40	DN: DeviceNet	
										N3, P3: 88/56	PB: Profibus	
										N4, P4: 112/72	EN: Ethernet	
											YC: YC-Link Note 2	

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
Axis construction Note 1	F14H	F14	F10-BK
AC servo motor output (W)	200	100	100
Repeatability Note 2 (mm)	+/-0.01	+/-0 01	+/-0.01
Drive system	Ball screw (Class C7)	Ball screw (Class C7)	Ball screw (Class C7)
Ball screw lead (Deceleration ratio) (mm)	20	20	10
Maximum speed Note 3 (mm/sec)	1200	1200	600
Moving range (mm)	150 to 850	150 to 350	150 to 350
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. The total of the X and Y strokes should be 1000mm or less.
Note 4. 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	9	8	7
250	8	7	6
350	7	6	5

■ Controller

Controller	Operation method
RCX240	Programming / /O point trace / Remote command / Operation using RS-232C communication

SXYx 3 axes / ZF M1

Detail of section A
2-φ5H7 Depth15
4-M5 x 0.8 Depth12

Detail of section B

Detail of section C
Use M6 x 1.0 hex socket head bolt with length head bolt with length (under head) of 20mm or more.

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.

L (X stroke + 320)
N-M6 x 1.0 Depth10
2-φ10H7 See detaill drawing of C section
N-φ7 through (C)

X stroke Note 3	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 Note 3	150	250	350

Z stroke	150	250	350

Maximum speed for each stroke (mm/sec) Note 4	X-axis	1200						960	780
	Speed setting	–						80%	65%

Note 3. The total of the X and Y strokes should be 1000mm or less.
Note 4. 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.