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

HXYx 【3 axes / ZPH】

● Pole type   ● Cable carrier   ● Z-axis: Clamped table / moving base type (200W) for Pole type

■ Ordering method

HXYx	- C	- P2						RCX240		R			BB
Model	Cable	Combination	X-axis stroke 25 to 125cm	Y-axis stroke 25 to 95cm	ZR-axis ZPHL ZPHR	Z-axis stroke 25 to 65cm	Cable length 3L: 3.5m (Standard) 5L: 5m 10L: 10m	Controller	Usable for CE No entry: Standard E: CE marking	Regeneratine unit R: RGU-2	Option I/O Note 1 N, P. Standard I O 16/8 N1, P1: 40/24 N2, P2: 64/40 N3, P3: 88/56 N4, P4: 112/72	Network option No entry: None CC: CC-Link DN: DeviceNet PB: Profibus EN: Ethernet YC: YC-Link No e 2	Battery 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
Axis construction Note 1	F20	F20-BK	F14H
AC servo motor output (W)	600	600	200
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	10	20
Maximum speed Note 3 (mm/sec)	1200	600	1200
Moving range (mm)	250 to 1250	250 to 950	250 to 650
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 Y and Z strokes should be 1200mm or less.
Note 4. When the X-axis/Y-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.
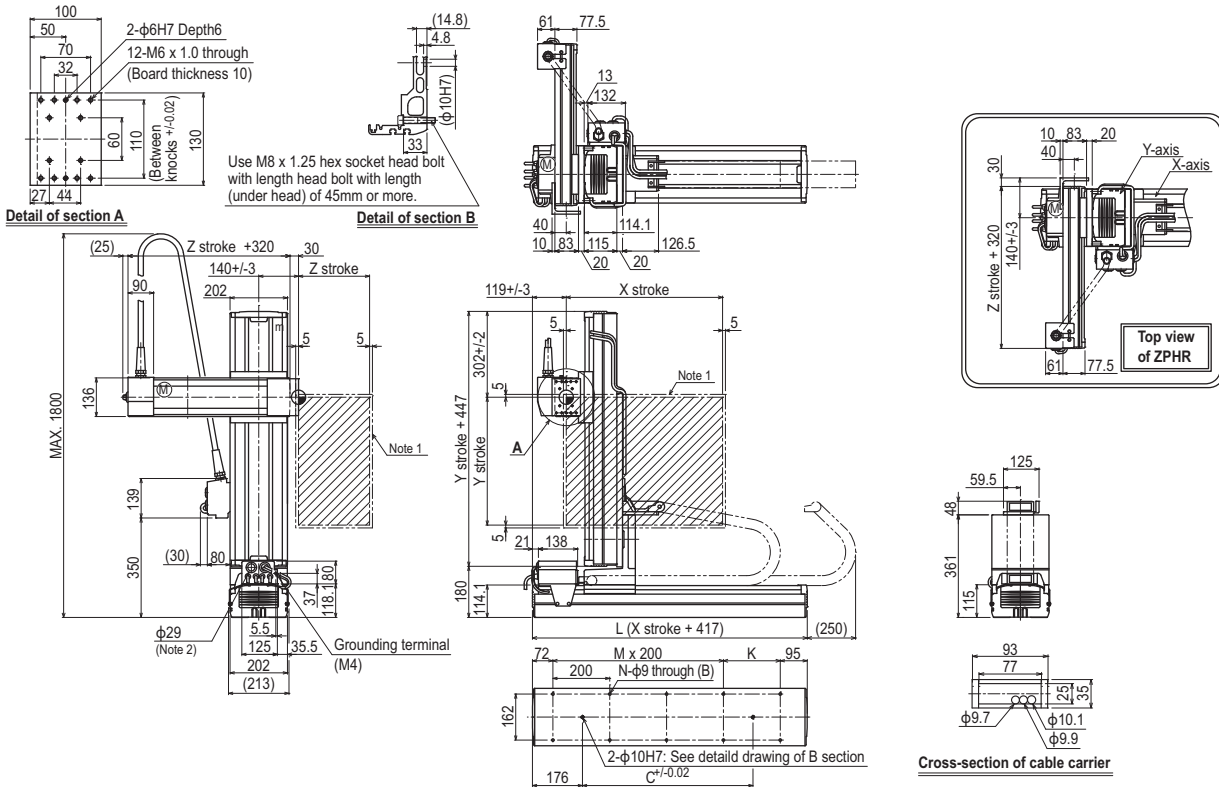
■ Maximum payload   (kg)

	Z stroke (mm)
Y stroke (mm)	250 to 650
250 to 950	15

■ Controller

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

HXYx 3 axes / ZPHL （P2）

Detail of section A

Detail of section B
Use M8 x 1.25 hex socket head bolt with length head bolt with length (under head) of 45mm or more.

Top view of ZPHR

Cross-section of cable carrier

X stroke Note 4	250	350	450	550	650	750	850	950	1050	1150	1250
L	667	767	867	967	1067	1167	1267	1367	1467	1567	1667
K	100	200	100	200	100	200	100	200	100	200	100
C	420	420	600	600	780	780	960	960	1140	1320	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 Note 4	250	350	450	550	650	750	850	950			

Z stroke	250	350	450	550	650						

Maximum speed for each stroke (mm/sec) Note 5	X-axis	1200				960	840	720	600	480
	Y-axis	600				480	420			
	Speed setting	–				80%	70%	60%	50%	40%

Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
Note 2. User cable extraction port.
Note 3. This figure shows the combination for ZPHL. For the combination for ZPHR, see the top view in the figure.
Note 4. The total of the Y and Z strokes should be 1200mm or less.
Note 5. When the X-axis/Y-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.

Controller
RCX240 ▶ 402