

# HXYx 2 axes / ZL

XY type Cable carrier

## Ordering method

|                 |              |                    |                      |                |                      |   |                    |                                     |                                    |   |  |
|-----------------|--------------|--------------------|----------------------|----------------|----------------------|---|--------------------|-------------------------------------|------------------------------------|---|--|
| <b>HXYx - C</b> |              |                    | <b>ZL</b>            |                |                      | <b>RCX222</b>                             |                    | <b>R</b>                            |                                    |   |  |
| <b>Model</b>    | <b>Cable</b> | <b>Combination</b> | <b>X-axis stroke</b> | <b>ZR-axis</b> | <b>Z-axis stroke</b> | <b>Cable length</b>                       | <b>Controller</b>  | <b>Usable for CE</b>                | <b>Regenerative unit</b>           | <b>Input/Output selection 1</b>   | <b>Input/Output selection 2</b>  |
| F1              |              |                    | 25 to 125cm          |                | 25 to 55cm           | 3L: 3.5m (Standard)<br>5L: 5m<br>10L: 10m | RCX222<br>DRCX2010 | No entry: Standard<br>E: CE marking | R: RG2 (RCX222)<br>R: RGU-2 (DRCX) | N: NPN<br>P: PNP<br>CC: CC-Link<br>DN: DeviceNet<br>PB: Profibus<br>EN: Ethernet<br>YC: YC-Link | No entry: None<br>N1: OPDIO24/16 (NPN)<br>P1: OPDIO24/17 (PNP)<br>EN: Ethernet |

Note 1. NPN and Ethernet cannot be selected if using CE marking.  
Note 2. Available only for the master.  
Note 3. Only when CC or DN or PB was selected for I/O select 1 above. EN can be selected in I/O select 2.

## Specification

|  | X-axis                     | Z-axis                |
|--|----------------------------|-----------------------|
| <b>Axis construction</b>                         | F17                        | F14H-BK               |
| <b>AC servo motor output (W)</b>                 | 400                        | 200                   |
| <b>Repeatability (mm)</b>                        | +/-0.01                    | +/-0.01               |
| <b>Drive system</b>                              | Ball screw (Class C7)      | Ball screw (Class C7) |
| <b>Ball screw lead (Deceleration ratio) (mm)</b> | 20                         | 10                    |
| <b>Maximum speed (mm/sec)</b>                    | 1200                       | 600                   |
| <b>Moving range (mm)</b>                         | 250 to 1250                | 250 to 550            |
| <b>Robot cable length (m)</b>                    | 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 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.

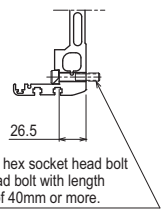
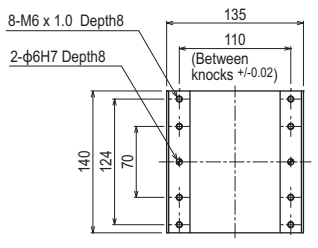
## Maximum payload (kg)

| X stroke (mm) | Z stroke (mm) |
|---------------|---------------|
| 250 to 1250   | 20            |

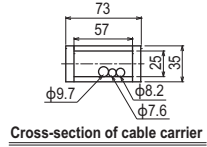
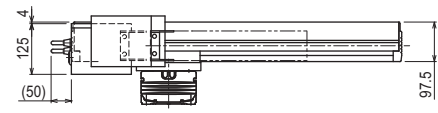
## Controller

| Controller | Operation method   |
|------------|--|
| RCX222-R   | Programming / I/O point trace / Remote command / Operation using RS-232C communication |
| DRCX2010-R | Operation using RS-232C communication  |

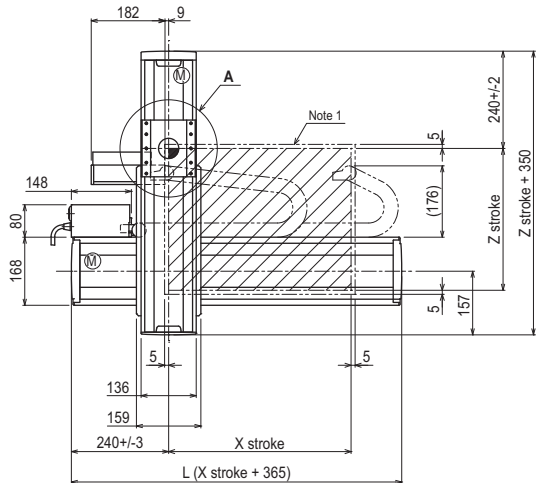
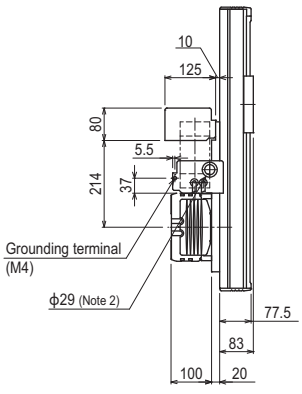
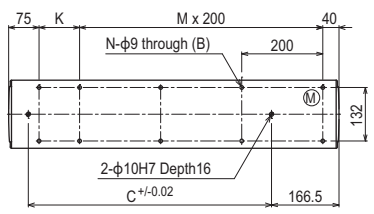
## HXYx 2 axes / ZL (F1)



Use M8 x 1.25 hex socket head bolt with length head bolt with length (under head) of 40mm or more.



Cross-section of cable carrier



| X stroke                                      | 250           | 350 | 450  | 550 | 650  | 750  | 850  | 950  | 1050 | 1150 | 1250 |
|---|---------------|-----|------|-----|------|------|------|------|------|------|------|
| <b>L</b>                                      | 615           | 715 | 815  | 915 | 1015 | 1115 | 1215 | 1315 | 1415 | 1515 | 1615 |
| <b>K</b>                                      | 100           | 200 | 100  | 200 | 100  | 200  | 100  | 200  | 100  | 200  | 100  |
| <b>C</b>                                      | 240           | 420 | 600  | 600 | 780  | 780  | 960  | 960  | 1140 | 1140 | 1320 |
| <b>M</b>                                      | 2             | 2   | 3    | 3   | 4    | 4    | 5    | 5    | 6    | 6    | 7    |
| <b>N</b>                                      | 8             | 8   | 10   | 10  | 12   | 12   | 14   | 14   | 16   | 16   | 18   |
| <b>Z stroke</b>                               | 250           | 350 | 450  | 550 |      |      |      |      |      |      |      |
| <b>Maximum speed for each stroke (mm/sec)</b> | <b>X-axis</b> |     | 1200 |     |      |      | 960  | 840  | 720  | 600  | 480  |
| <b>Speed setting</b>                          |               |     | -    |     |      |      | 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. When the X-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.