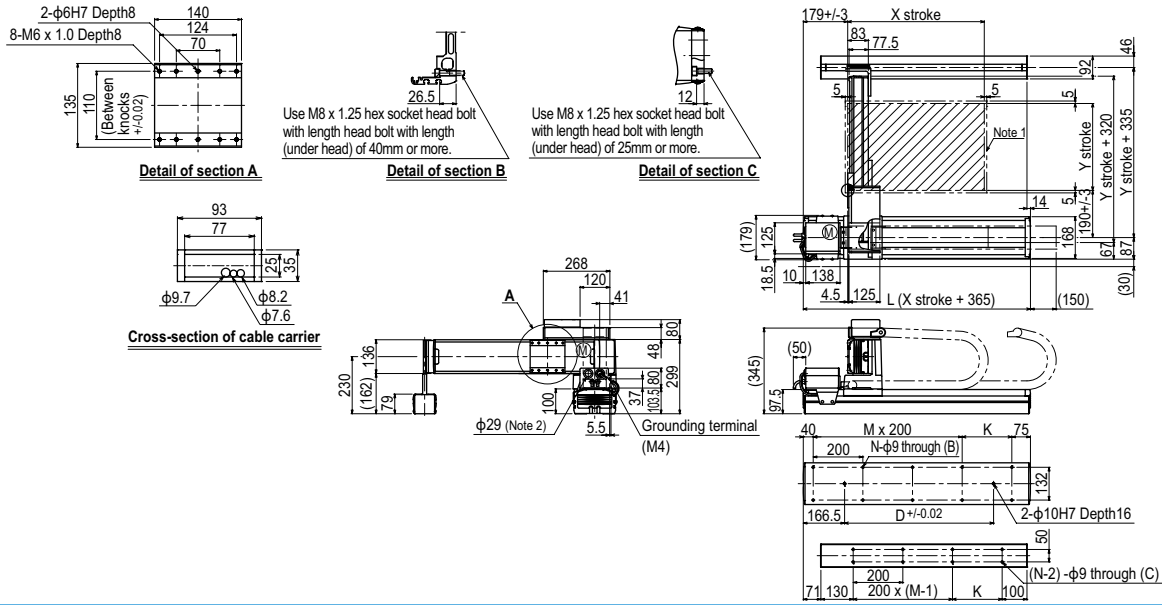
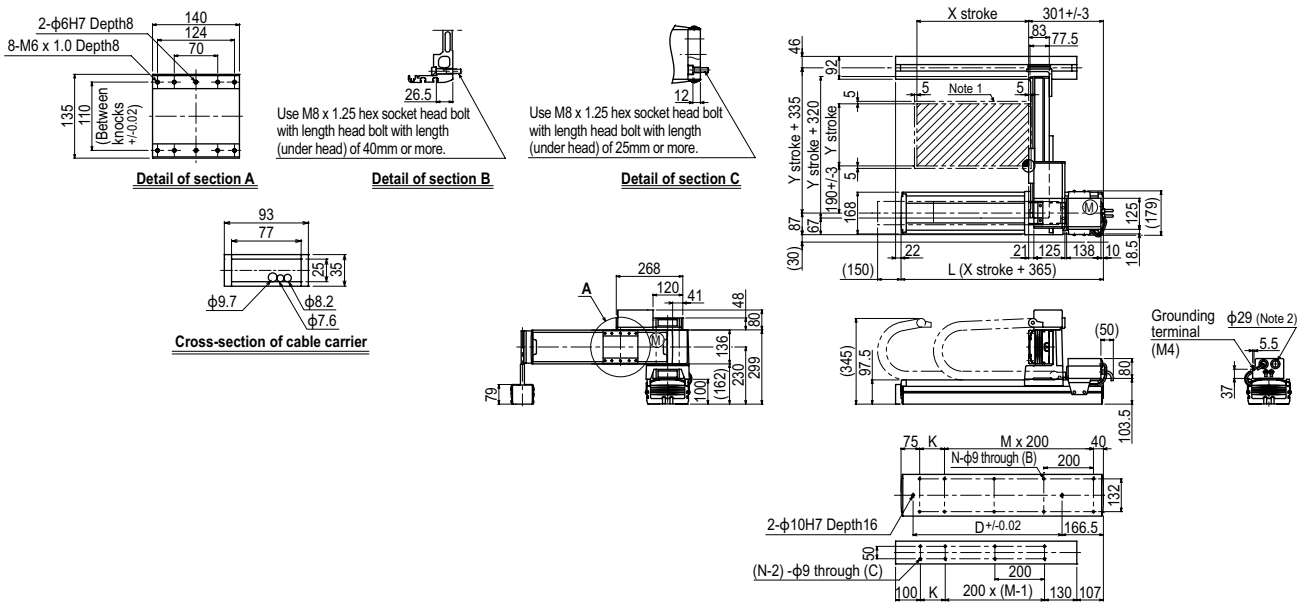




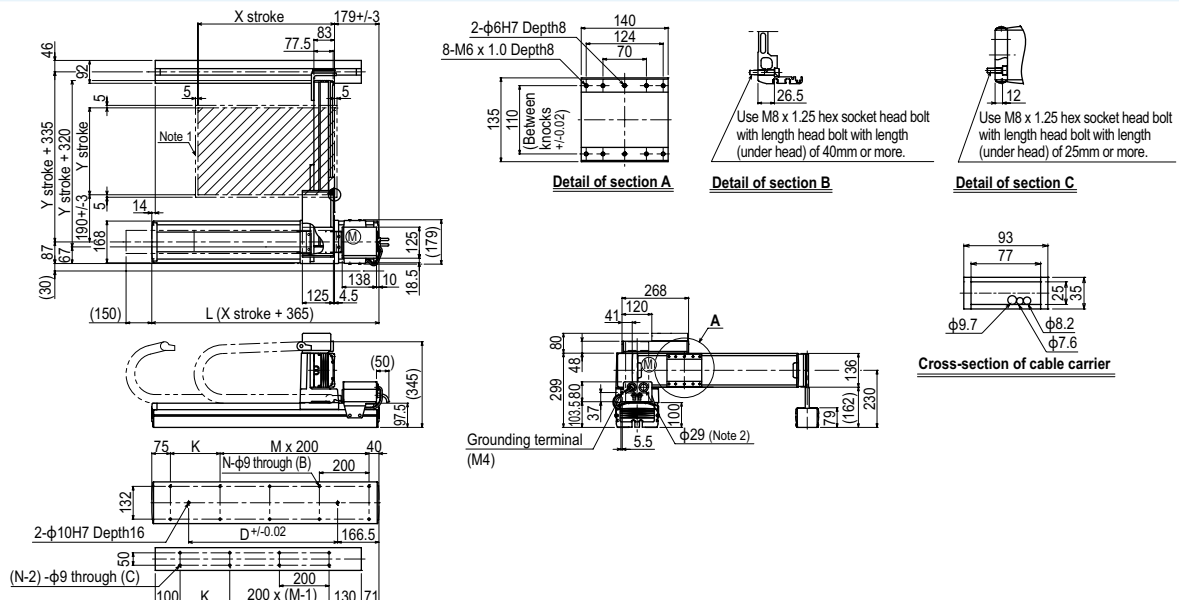
MXyX 2 axes G2



MXyX 2 axes G3

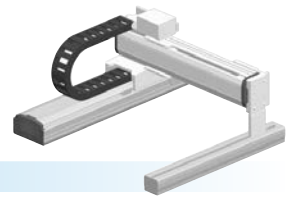


MXyX 2 axes G4





# HXYx 2 axes



- Gantry type
- Cable carrier

## Ordering method

**HXYx - C** [ ] [ ] [ ] [ ] **RCX320-2** [ ] **R** [ ] [ ] [ ] [ ] [ ] [ ]

Model	Cable	Combination	X-axis stroke	Y-axis stroke	Cable	Controller / Number of controllable axes	Safety standard	Regenerative unit	Option A (O.P.A)	Option B (O.P.B)	Vision System	Absolute battery
		G1	25 to 125cm	25 to 105cm	3L: 3.5m	RCX320-2						
		G2			5L: 5m							
		G3			10L: 10m							
		G4										

Specify various controller setting items. RCX320 ▶ **P.626**

## Specification

	X-axis	Y-axis
Axis construction <sup>Note 1</sup>	F20	F17
AC servo motor output (W)	600	400
Repeatability <sup>Note 2</sup> (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ20
Ball screw lead <sup>Note 3</sup> (Deceleration ratio) (mm)	20	20
Maximum speed <sup>Note 4</sup> (mm/sec)	1200	1200
Moving range (mm)	250 to 1250	250 to 1050
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. Leads not listed in the catalog are also available. Contact us for details.  
 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.

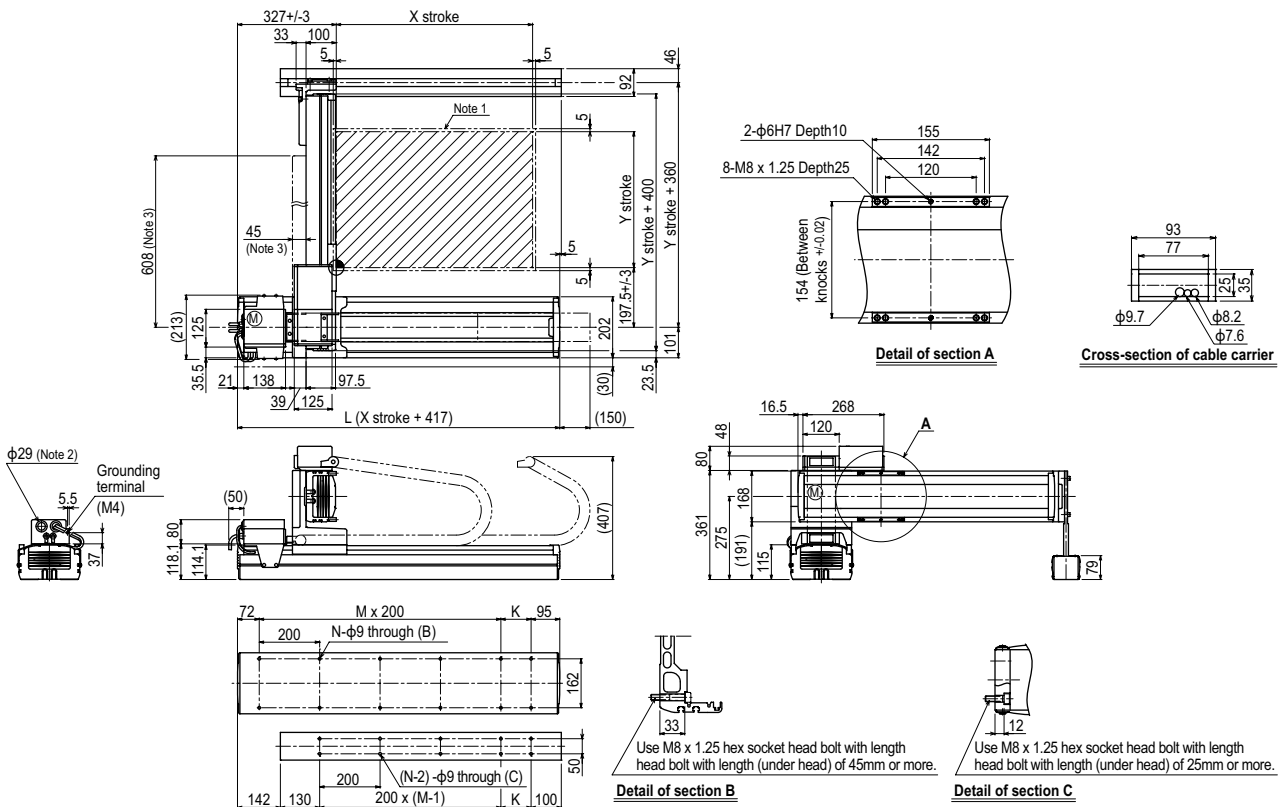
## Maximum payload (kg)

Y stroke (mm)	XY 2 axes
250 to 1050	50

## Controller

Controller	Operation method
RCX320-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication

## HXYx 2 axes G1

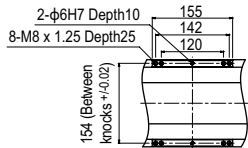


X stroke	250	350	450	550	650	750	850	950	1050	1150	1250
L	667	767	867	967	1067	1167	1267	1367	1467	1567	1667
K	100	200	100	200	100	200	100	200	100	200	100
F	420	420	600	600	780	780	960	960	1140	1320	1320
M	2	2	3	3	4	4	5	5	6	6	7
N	8	8	10	10	12	12	14	14	16	16	18
Y stroke	250	350	450	550	650	750	850	950	1050		
Maximum speed for each stroke (mm/sec) <sup>Note 4</sup>	X-axis		1200				960	840	720	600	480
	Y-axis		1200				960	840	720		
Speed setting			-				80%	70%	60%	50%	40%

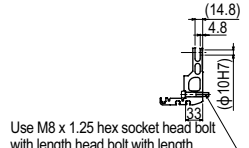
Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.  
 Note 2. User cable extraction port.  
 Note 3. Dimension of reinforced bracket (To be installed when the Y stroke is 750mm or longer)

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 at the left.

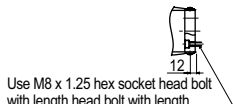
HXYx 2 axes **G2**



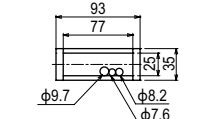
Detail of section A



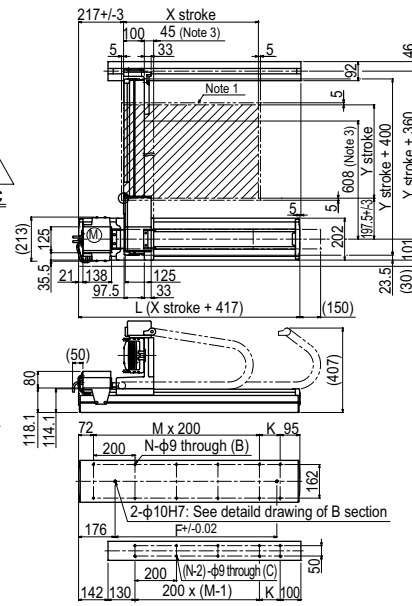
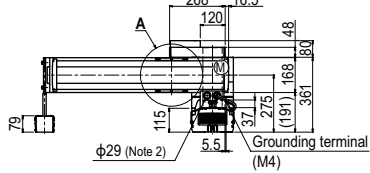
Detail of section B



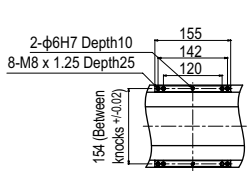
Detail of section C



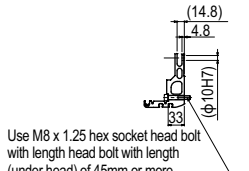
Cross-section of cable carrier



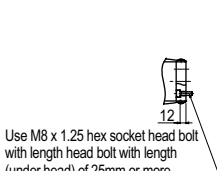
HXYx 2 axes **G3**



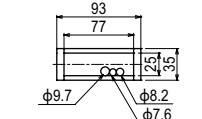
Detail of section A



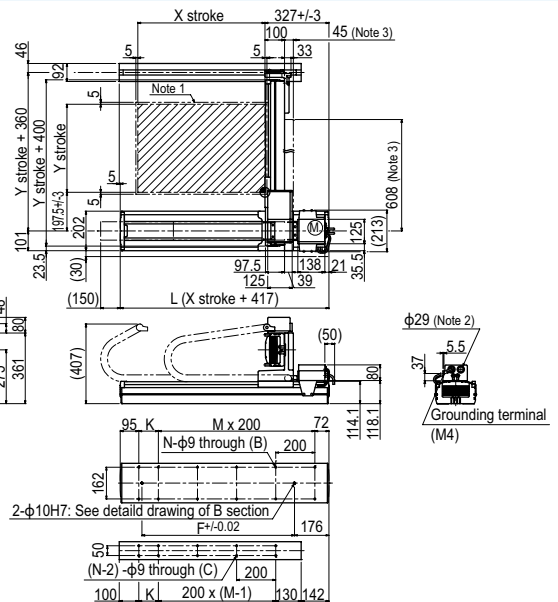
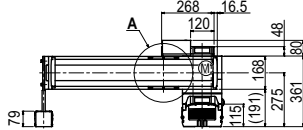
Detail of section B



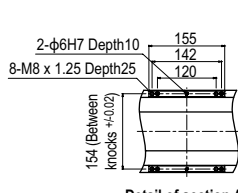
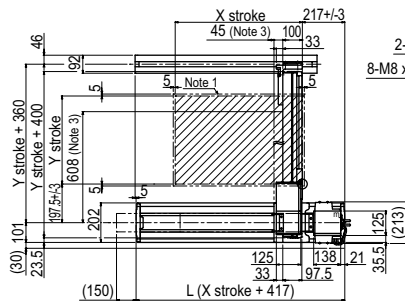
Detail of section C



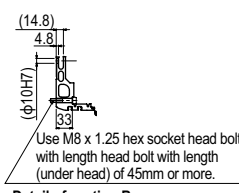
Cross-section of cable carrier



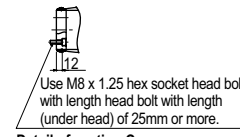
HXYx 2 axes **G4**



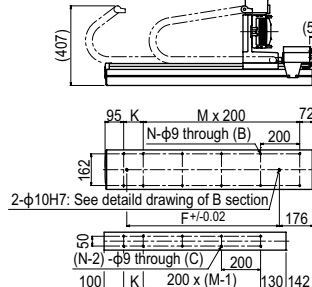
Detail of section A



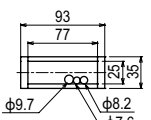
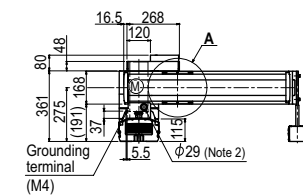
Detail of section B



Detail of section C

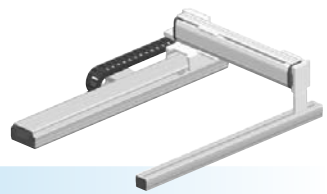


Cross-section of cable carrier



Cross-section of cable carrier

# HXYLx 2 axes



- Gantry type
- Cable carrier

## Ordering method

**HXYLx - C**         **RCX320-2**   **R**              

Model	Cable	Combination	X-axis stroke	Y-axis stroke	Cable	Controller / Number of controllable axes	Safety standard	Regenerative unit	Option A (O.P.A)	Option B (O.P.B)	Vision System	Absolute battery
	G1		115 to 205cm	25 to 105cm	3L: 3.5m	RCX320-2						
	G2				5L: 5m							
	G3				10L: 10m							
	G4											

**Specify various controller setting items. RCX320 ▶ P.626**

## Specification

	X-axis	Y-axis
<b>Axis construction</b> <small>Note 1</small>	F20N	F17
<b>AC servo motor output (W)</b>	400	400
<b>Repeatability</b> <small>Note 2</small> (mm)	+/-0.04	+/-0.01
<b>Drive system</b>	Ball screw φ20	Ball screw φ20
<b>Ball screw lead</b> <small>Note 3</small> (Deceleration ratio) (mm)	20	20
<b>Maximum speed</b> <small>Note 4</small> (mm/sec)	1200	1200
<b>Moving range (mm)</b>	1150 to 2050	250 to 1050
<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. Leads not listed in the catalog are also available. Contact us for details.  
 Note 4. When the 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.

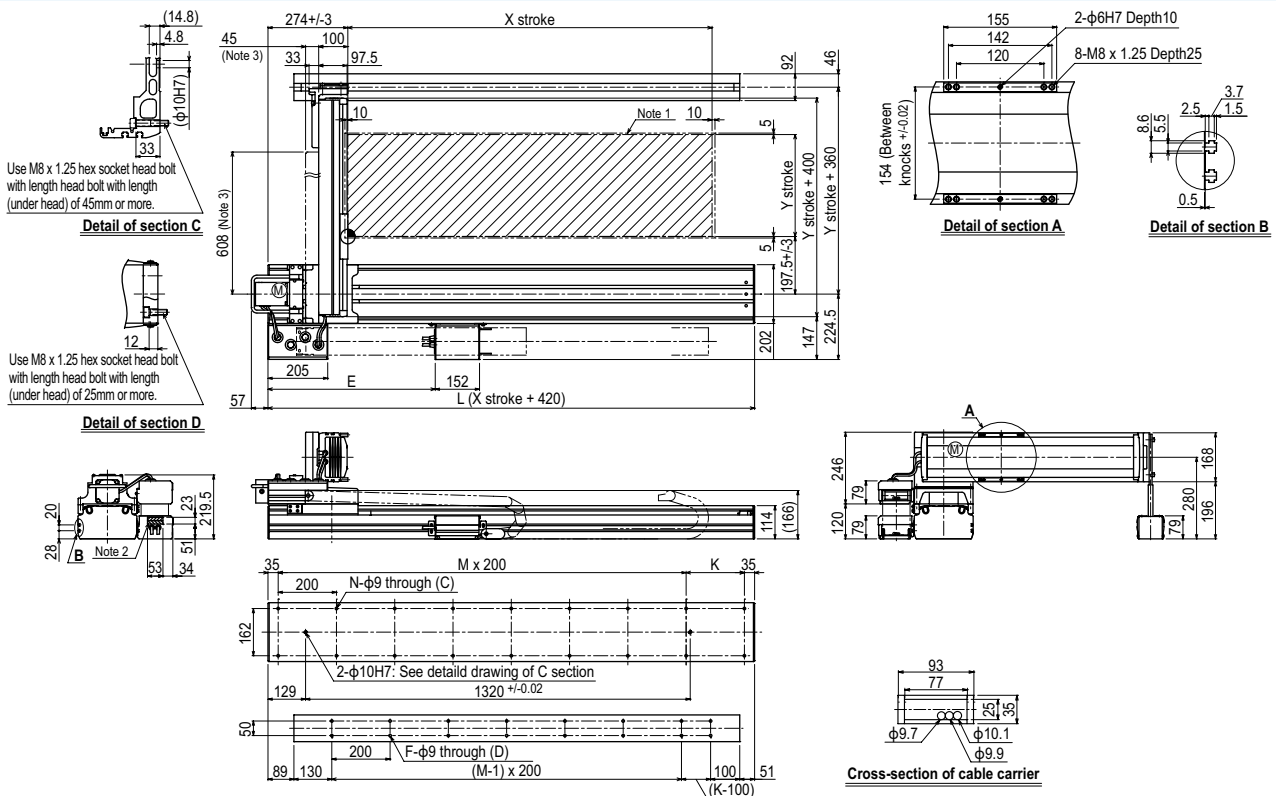
## Maximum payload (kg)

Y stroke (mm)	XY 2 axes
<b>250 to 1050</b>	50

## Controller

Controller	Operation method
RCX320-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication

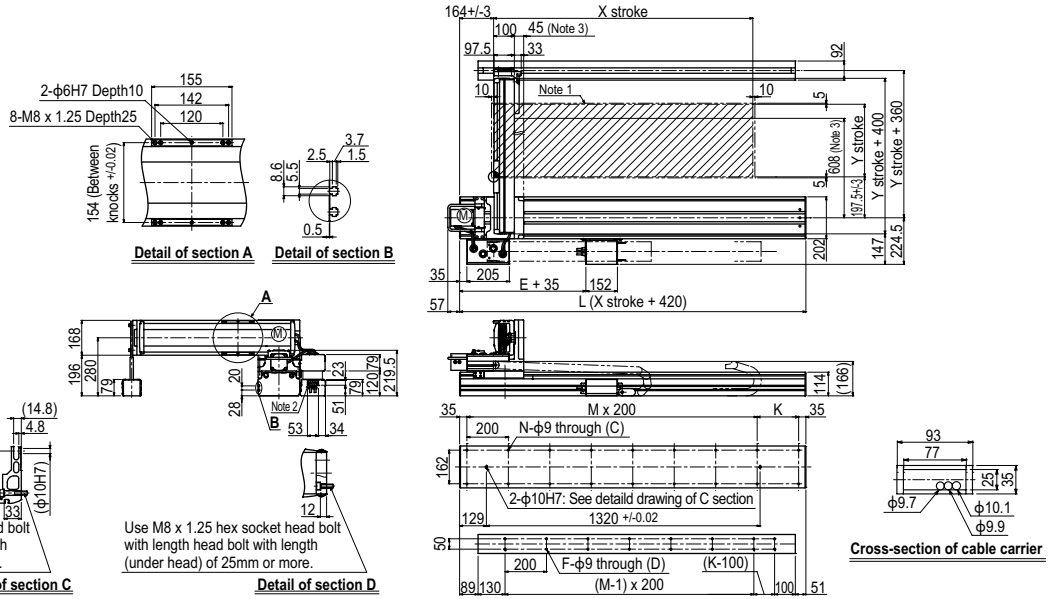
## HXYLx 2 axes G1



X stroke	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050
<b>L</b>	1570	1670	1770	1870	1970	2070	2170	2270	2370	2470
<b>E</b>	528	574	620	666	712	758	804	850	896	942
<b>K</b>	100	200	100	200	100	200	100	200	100	200
<b>M</b>	7	7	8	8	9	9	10	10	11	11
<b>N</b>	18	18	20	20	22	22	24	24	26	26
<b>F</b>	14	16	16	18	18	20	20	22	22	24
<b>Y stroke</b>	<b>250</b>	<b>350</b>	<b>450</b>	<b>550</b>	<b>650</b>	<b>750</b>	<b>850</b>	<b>950</b>	<b>1050</b>	
<b>Maximum speed for each stroke (mm/sec)</b> <small>Note 4</small>	<b>Y-axis</b>		1200				960		840	720
<b>Speed setting</b>			-				80%		70%	60%

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. Dimension of reinforced bracket (To be installed when the Y stroke is 750mm or longer).  
 Note 4. When the 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.

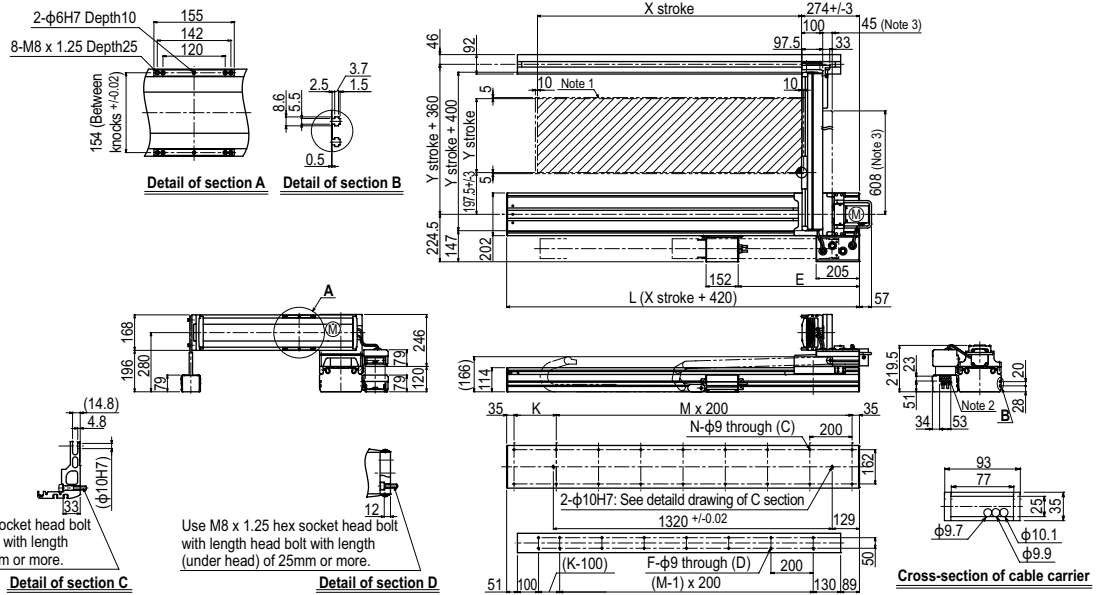
HXYLx 2 axes **G2**



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

Use M8 x 1.25 hex socket head bolt with length head bolt with length (under head) of 25mm or more.

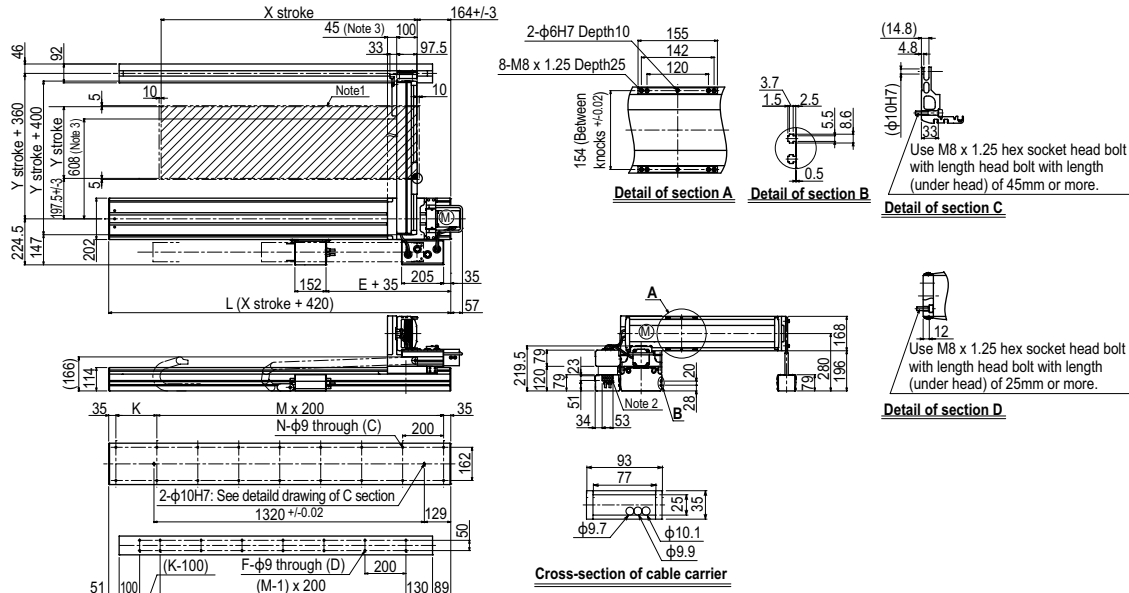
HXYLx 2 axes **G3**



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

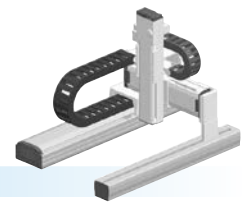
Use M8 x 1.25 hex socket head bolt with length head bolt with length (under head) of 25mm or more.

HXYLx 2 axes **G4**



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

Use M8 x 1.25 hex socket head bolt with length head bolt with length (under head) of 25mm or more.



### Ordering method

<b>MXy<sub>x</sub>-C</b>							<b>RCX340-3</b>									
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	
G1			25 to 125cm	15 to 85cm	ZFL20	15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m									

Specify various controller setting items. RCX340 ▶ **P.636**

### Specification

	X-axis	Y-axis	Z-axis: ZFL20	Z-axis: ZFL10
Axis construction <sup>Note 1</sup>	F17	F14H-BK	F10H-BK	
AC servo motor output (W)	400	200	200	
Repeatability <sup>Note 2</sup> (mm)	+/-0.01	+/-0.01	+/-0.01	
Drive system	Ball screw φ20	Ball screw φ15	Ball screw φ15	
Ball screw lead <sup>Note 3</sup> (Deceleration ratio) (mm)	20	20	20	10
Maximum speed <sup>Note 4</sup> (mm/sec)	1200	1200	1200	600
Moving range (mm)	250 to 1250	150 to 850	150 to 350	
Robot cable length (m)	Standard: 3.5 Option: 5,10			

Note. The standard types are ZFL with higher rigidity as compared with ZF types which are conventional standard types. When you need the ZF type, please consult YAMAHA.  
 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. Leads not listed in the catalog are also available. Contact us for details.  
 Note 4. When the X-axis stroke is longer than 850mm (750mm for Y-axis), 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.

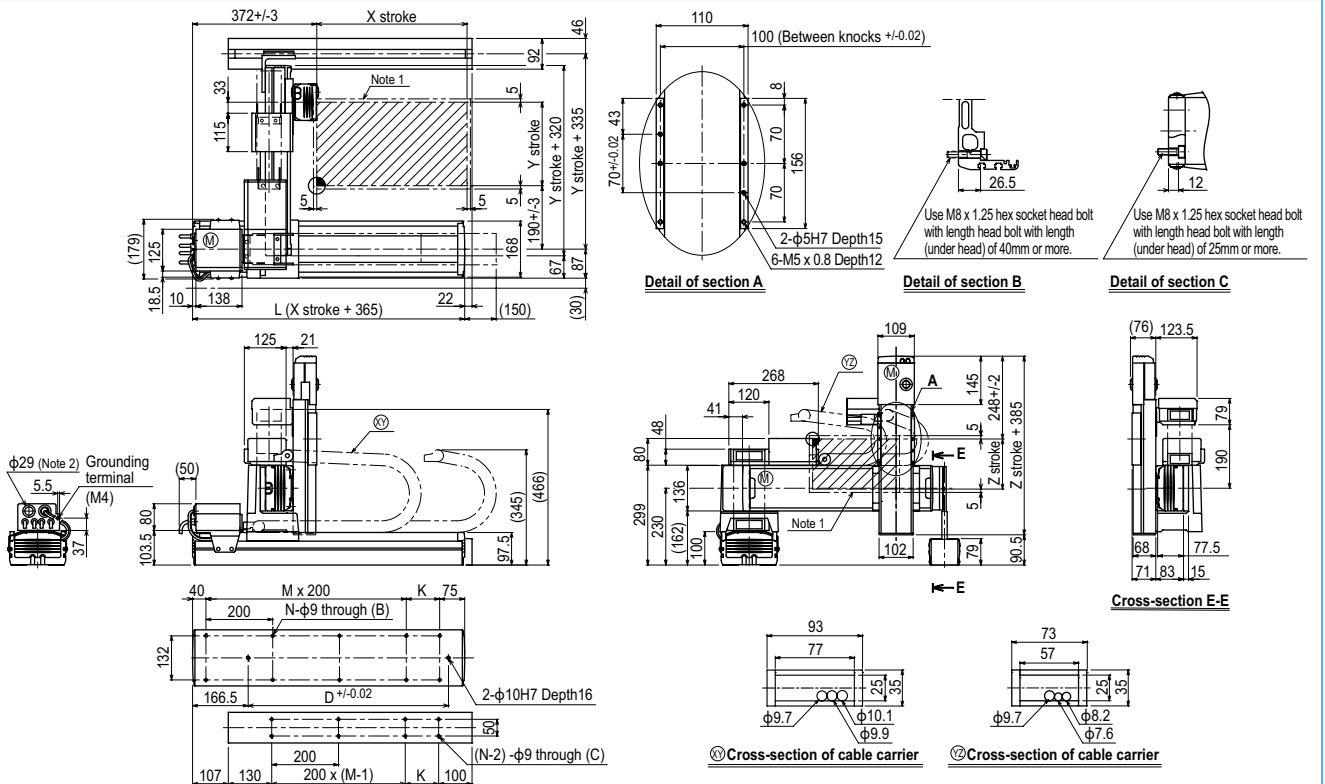
### Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)					
	ZFL20			ZFL10		
150	8	8	8	15	15	15
250	8	8	8	15	15	15
350	8	8	8	15	15	15
450	8	8	8	15	15	15
550	8	8	8	15	15	15
650	8	8	8	15	15	15
750	8	8	8	15	15	15
850	8	8	8	12	11	10

### Controller

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

### MXy<sub>3</sub> 3 axes / ZFL20/10 G1



X stroke	250	350	450	550	650	750	850	950	1050	1150	1250
L	615	715	815	915	1015	1115	1215	1315	1415	1515	1615
K	100	200	100	200	100	200	100	200	100	200	100
D	240	420	600	600	780	780	960	960	1140	1140	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	150	250	350	450	550	650	750	850			
Z stroke	150	250	350								
Maximum speed for each stroke (mm/sec) <sup>Note 3</sup>	X-axis	1200					960	840	720	600	480
	Speed setting	-					80%	70%	60%	50%	40%
Speed setting	Y-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. User cable extraction port.  
 Note 3. When the X-axis stroke is longer than 850mm (750mm for Y-axis), 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.

Linear conveyor modules  
 LCMR200  
 Single-axis robots  
 GX  
 Linear conveyor modules  
 LCM100  
 SCARA robots  
 YK-X  
 Single-axis robots  
 Robomity  
 Linear motor single-axis robots  
 PHASER  
 Single-axis robots  
 FLIP-X  
 Compact single-axis robots  
 TRANSERO  
 Cartesian robots  
 XX-X  
 Pick & place robots  
 YP-X  
 CLEAN  
 CONTROLLER INFORMATION  
 Arm type  
 Gantry type  
 Moving arm type  
 Pole type  
 XZ type



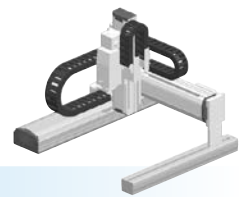






# HXYx

4 axes / ZRL



- Gantry type
- Cable carrier
- Z-axis: clamped base / moving table type (200W)+R-axis

## Ordering method

**HXYx - C** - [ ] - [ ] - [ ] - **ZRL** - [ ] - [ ] - **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
		G1	25 to 125cm	25 to 105cm		25 to 55cm	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ **P.636**

## Specification

	X-axis	Y-axis	Z-axis	R-axis
<b>Axis construction</b> <sup>Note 1</sup>	F20	F17	F14H-BK	R20
<b>AC servo motor output (W)</b>	600	400	200	200
<b>Repeatability</b> <sup>Note 2</sup> (XYZ: mm) (R: °)	+/-0.01	+/-0.01	+/-0.01	+/-0.0083
<b>Drive system</b>	Ball screw φ20	Ball screw φ20	Ball screw φ15	Harmonic gear
<b>Ball screw lead</b> <sup>Note 3</sup> (Deceleration ratio) (mm)	20	20	10	(1/50)
<b>Maximum speed</b> <sup>Note 4</sup> (XYZ: mm/sec) (R: °/sec)	1200	1200	600	360
<b>Moving range (XYZ: mm) (R: °)</b>	250 to 1250	250 to 1050	250 to 550	360
<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. Leads not listed in the catalog are also available. Contact us for details.  
 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.

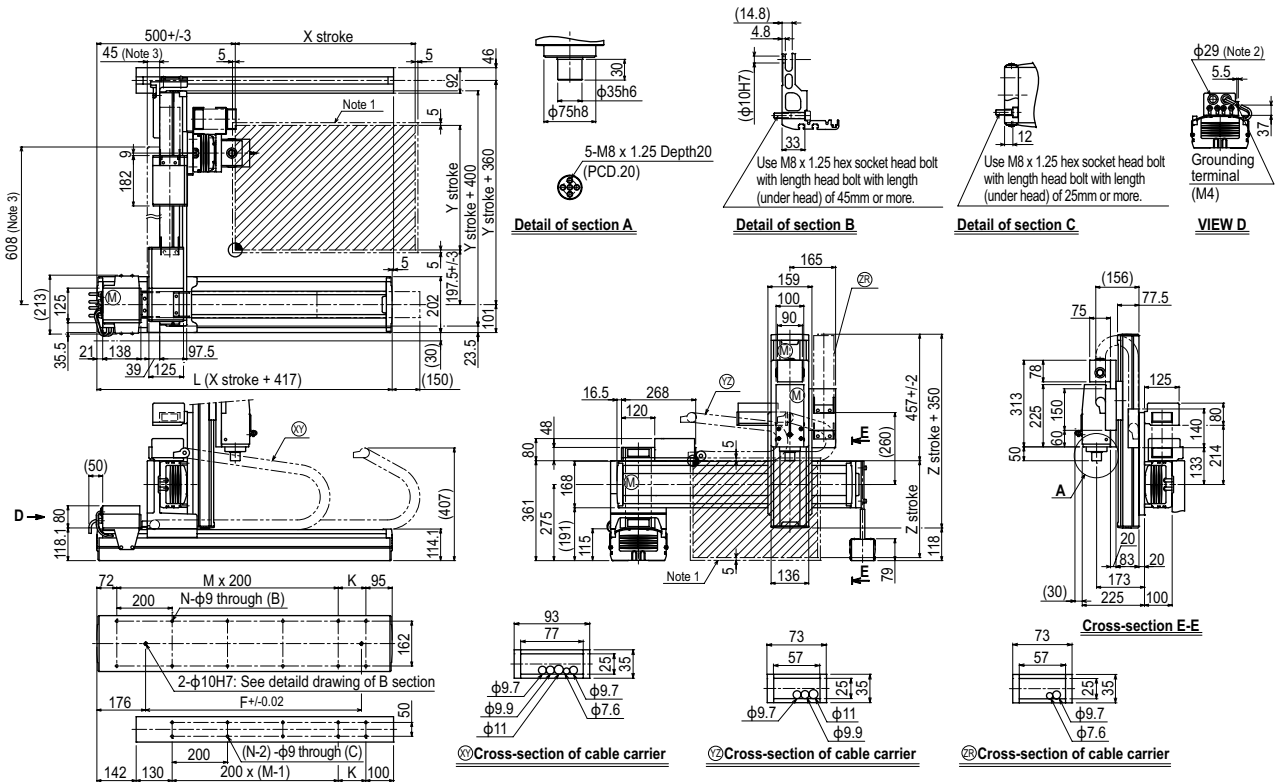
## Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)
250 to 1050	250 to 550
	12

## Controller

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

## HXYx 4 axes / ZRL (G1)



X stroke	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
F	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
<b>Y stroke</b>	<b>250</b>	<b>350</b>	<b>450</b>	<b>550</b>	<b>650</b>	<b>750</b>	<b>850</b>	<b>950</b>	<b>1050</b>		
<b>Z stroke</b>	<b>250</b>	<b>350</b>	<b>450</b>	<b>550</b>							
<b>Maximum speed for each stroke (mm/sec)</b> <sup>Note 4</sup>	<b>X-axis</b>		1200		960		840	720	600	480	
	<b>Y-axis</b>		1200		960		840	720			
	<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. Dimension of reinforced bracket (To be installed when the Y stroke is 750mm or longer)

- 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 at the left.



