

CARTESIAN ROBOTS

XY-X SERIES

Articulated robots	YA
Linear conveyor modules	LCM
Single-axis robots	CX
Motor-less single axis actuator	Robonity
Compact single-axis robots	TRANSERO
Single-axis robots	FLIP-X
Linear motor single-axis robots	PHASER
Cartesian robots	XY-X
SCARA robots	YK-X
Pick & place robots	YP-X
CLEAN	
CONTROLLER	
INFORMATION	
Arm type	
Gantry type	
Moving arm type	
Pole type	
XZ type	

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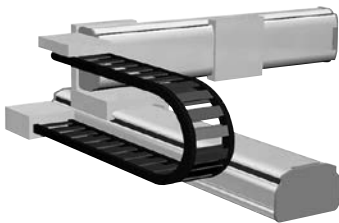
Arm & cable variations

Cable variations

Two cable types are available; cable carrier type and whipover type. (except PXYX) The cable carrier type is supplied with a user cable as standard so that cable can be added easily. The whipover type is supplied with a user cable and tube as standard set. A cable duct specially designed for clean rooms is also available. (See P.582 to P.587 for detailed information on Clean Cartesian robots.)

Cable carrier (C)

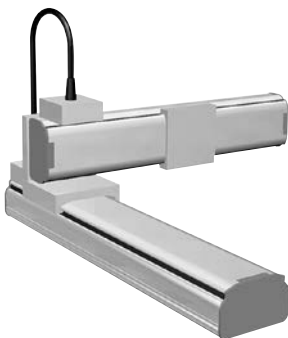
When adding cables to a cable carrier track, keep the cable occupation rate at 30% or less.



Note. User cable 10 cores, 0.3 sq.

Whipover (S)

Adding a load on whipover will result in sagging and cut. Sagging may also occur when using long strokes.



Note. User cable: 7 cores, 0.2 sq.
Note. User tube: 2 φ4 air tubes.

Arm variations

The first step for selection of Cartesian type robot models is to check for applicable models according to specific use and operation area.

Arm type

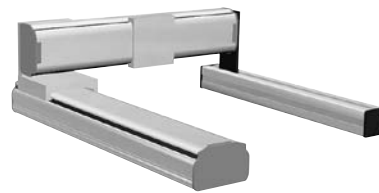
The type with moving Y-axis carriage.



P.374

Gantry type

The type with a guide railing at the end of Y-axis for support.



P.442

Moving arm type

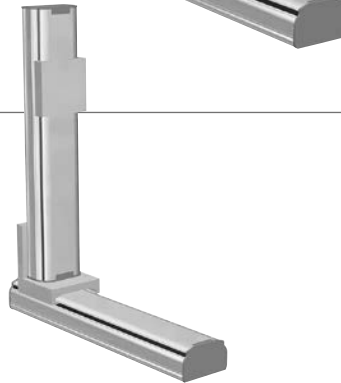
The type with a moving Y-axis arm.



P.458

Pole type

The type with vertically moving Y-axis carriage.



P.472

XZ type

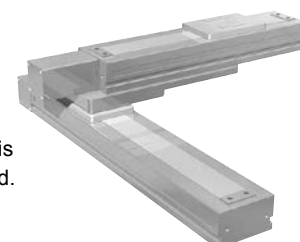
The type with combination of X-axis for horizontal movement and Z-axis for vertical movement.



P.480

Clean type

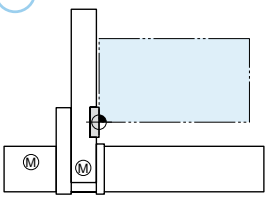
Special model for clean rooms with moving Y-axis carriage installed upward.



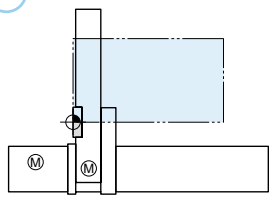
P.582

- Articulated robots YA
- Linear conveyor modules LCM
- Single-axis robots CX
- Motor-less single axis actuator Robonity
- Compact single-axis robots TRANSENO
- Single-axis robots FLIP-X
- Linear motor single-axis robots PHASER
- Cartesian robots XY-X
- SCARA robots YK-X
- Pick & place robots YP-X
- CLEAN
- CONTROLLER INFORMATION
- Arm type
- Gantry type
- Moving arm type
- Pole type
- XZ type

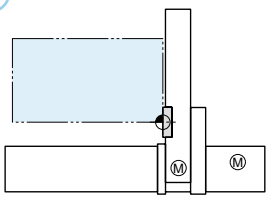
A1



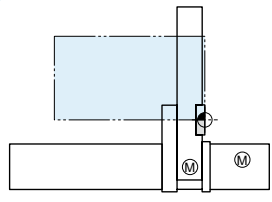
A2



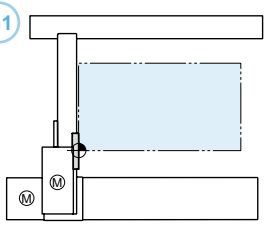
A3



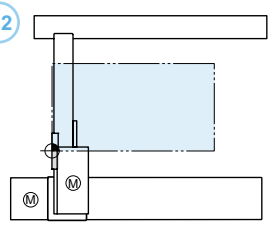
A4



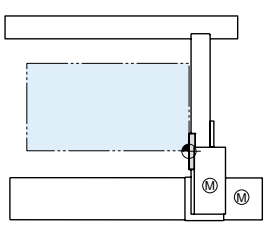
G1



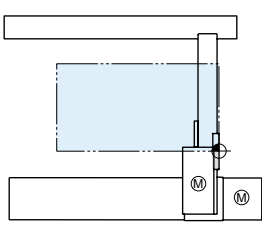
G2



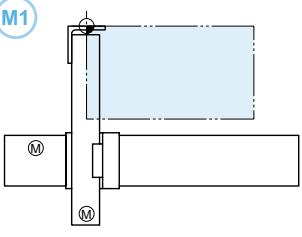
G3



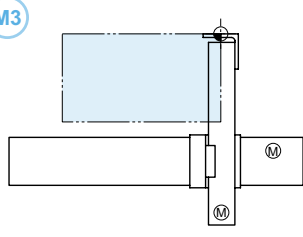
G4



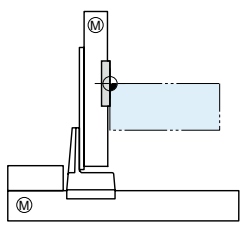
M1



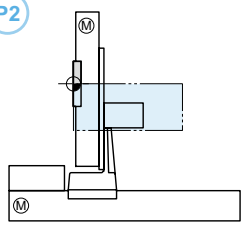
M3



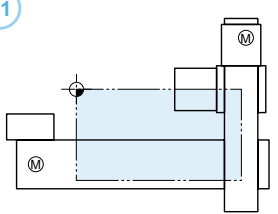
P1



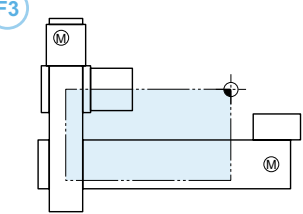
P2



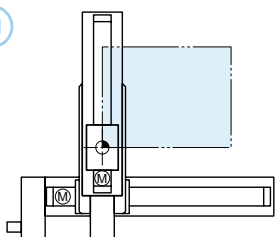
F1



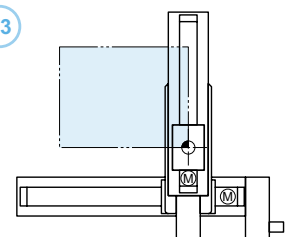
F3



T1



T3



2-axis spec selection guide

Setting method

While checking conditions in order starting from ①, proceed to the right. Select the desired model in ⑥.

① Select the arm variation

Arm type

The type with moving Y-axis carriage.

Gantry type

The type with a guide railing at the end of Y-axis for support.

Moving arm type

The type with a moving Y-axis arm.

Pole type

The type with vertically moving Y-axis carriage.

XZ type

The type with combination of X-axis for horizontal movement and Z-axis for vertical movement.

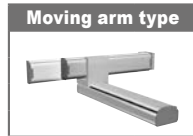
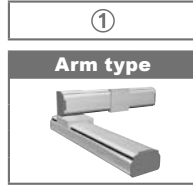
② Select a line satisfying both the Y-axis stroke and payload and move to the right.

③ Check the cable types

④ Check the X axis stroke

⑤ Select the desired speed

⑥ Decide the model



②

Payload (kg)	Y-axis stroke (mm)									
	50	100	150	200	250	300	350	400	450	500
4.5	4.5	3.5	2.5	2	1.5					

Payload (kg)	Y-axis stroke (mm)									
	150	250	350	450	550	650	750	850	950	1050
12	12	11	9	7						
	12	11	9	7						
	7	6	5	3						
	7	6	5	3						
	7	6	5	3						
	20	17	15	13	11	9				
	20	17	15	13	11	9				
	19	16	14	12	10	8				
	14	12	10	8	7					
	25	21	18	16	13	11				
	30	25	20	16						
	30	25	20	16						
	29	24	19	15						
		40	35	30						
	40	35	30							

Payload (kg)	Y-axis stroke (mm)									
	150	250	350	450	550	650	750	850	950	1050
30	30						25	20		
	29						24	19		
							50			
							50			

Payload (kg)	Y-axis stroke (mm)									
	150	250	350	450	550	650	750	850	950	1050
15	15	14	13							
	20									
	30									

Payload (kg)	Y-axis stroke (mm)									
	150	250	350	450	550	650	750	850	950	1050
8	8									
	20									
	20									
	30									
	30									

Payload (kg)	Z-axis stroke (mm)									
	150	250	350	450	550	650	750	850	950	1050
10	10									
	10									
	8									
	3									
	5									
	10									
	8									
	15									
	14	13	12							
	20									
	30									

③
Cable type
Cable carrier

④
X-axis stroke (mm)
150 to 650

⑤
Maximum speed (X-axis / Y-axis) (mm/sec)
720 / 720

⑥ Decide the model	
Model ^(Note 1)	Detailed info page
PXYx-C-A*	P374

Cable type
Cable carrier
Cable carrier
Cable carrier
Whipover
Cable carrier
Cable carrier
Whipover
Cable carrier
Cable carrier
Cable carrier
Cable carrier
Whipover
Cable carrier
Cable carrier
Cable carrier

X-axis stroke (mm)
150 to 1050
150 to 1050
150 to 2450
150 to 950
150 to 2450
150 to 1050
150 to 850
150 to 1050
150 to 3050
500 to 2000
250 to 1250
250 to 850
250 to 1250
250 to 1250
250 to 1250
1150 to 2050

Maximum speed (X-axis / Y-axis) (mm/sec)
1200 / 800
1200 / 800
1875 / 1875
1875 / 1875
1875 / 1875
1200 / 1200
1200 / 1200
1875 / 1875
1200 / 1200
1200 / 1200
1200 / 1200
1200 / 1200
1200 / 1200
1200 / 1200
1200 / 1200

Model	Detailed info page
FXyX-C-A*	P376
FXyX-C-A* (I/O)	P378
FXyBx-C-A*	P382
FXyBx-S-A*	P384
FXyBx-C-A* (I/O)	P386
SXYx-C-A*	P388
SXYx-S-A*	P390
SXYx-C-A* (I/O)	P392
SXYBx-C-A*	P406
NXY-C-A*	P414
MXyX-C-A*	P424
MXyX-S-A*	P426
MXyX-C-A* (I/O)	P428
HXYx-C-A*	P434
HXYLx-C-A*	P440

Cable type
Cable carrier
Cable carrier
Cable carrier
Cable carrier

X-axis stroke (mm)
250 to 1050
250 to 1050
250 to 1250
1150 to 2050

Maximum speed (X-axis / Y-axis) (mm/sec)
1200 / 1200
1200 / 1200
1200 / 1200
1200 / 1200

Model	Detailed info page
MXyX-C-G*	P442
MXyX-C-G* (I/O)	P444
HXYx-C-G*	P450
HXYLx-C-G*	P456

Cable type
Cable carrier
Cable carrier
Cable carrier

X-axis stroke (mm)
150 to 850
250 to 1250
250 to 1250

Maximum speed (X-axis / Y-axis) (mm/sec)
1200 / 1200
1200 / 1200
1200 / 1200

Model	Detailed info page
SXYx-C-M*	P458
MXyX-C-M*	P464
HXYx-C-M*	P470

Cable type
Whipover
Cable carrier
Whipover
Cable carrier
Whipover

X-axis stroke (mm)
150 to 850
250 to 1250
250 to 950
250 to 1250
250 to 850

Maximum speed (X-axis / Y-axis) (mm/sec)
1200 / 600
1200 / 600
1200 / 600
1200 / 600
1200 / 600

Model	Detailed info page
SXYx-S-P*	P472
MXyX-C-P*	P473
MXyX-S-P*	P474
HXYx-C-P*	P476
HXYx-S-P*	P477

Cable type
Cable carrier
Whipover
Cable carrier
Cable carrier
Cable carrier
Cable carrier
Cable carrier
Cable carrier
Cable carrier
Cable carrier
Cable carrier
Cable carrier

X-axis stroke (mm)
150 to 1050
150 to 850
150 to 1050
150 to 1050
150 to 1050
150 to 3050
150 to 3050
150 to 1050
150 to 1050
150 to 1050
250 to 1250
250 to 1250

Maximum speed (X-axis / Y-axis) (mm/sec)
1200 / 600
1200 / 600
1200 / 1200
1200 / 1000
1200 / 500
1875 / 600
1875 / 1200
1200 / 600
1200 / 600
1200 / 600
1200 / 600
1200 / 300

Model	Detailed info page
SXYx-C-F* (ZF)	P480
SXYx-S-F* (ZF)	P481
SXYx-C-F* (ZFL20)	P482
SXYx-C-F* (ZS12)	P483
SXYx-C-F* (ZS6)	P483
SXYBx-C-F* (ZF)	P484
SXYBx-C-F* (ZFL20)	P485
MXyX-C-F* (ZFL10)	P486
MXyX-C-F* (ZFH)	P487
HXYx-C-F* (ZL)	P488
HXYx-C-F* (ZH)	P489

Note 1. The figure entered at * inside the form, expresses the arm variation. See P. 364 for more information.

- Articulated robots YA
- Linear conveyor modules LCM
- Single-axis robots CX
- Motor-less single axis actuator Robomity
- Compact single-axis robots TRANSEVO
- Single-axis robots FLIP-X
- Linear motor single-axis robots PHASER
- Cartesian robots XY-X
- SCARA robots YK-X
- Pick & place robots YP-X
- CLEAN
- CONTROLLER INFORMATION
- Arm type
- Gantry type
- Moving arm type
- Pole type
- XZ type

3-axis spec selection guide

Setting method

While checking conditions in order starting from ①, proceed to the right. Select the desired model in ⑥.

① Select the arm variation

Arm type

The type with moving Y-axis carriage.

Gantry type

The type with a guide railing at the end of Y-axis for support.

Moving arm type

The type with a moving Y-axis arm.

Pole type

The type with vertically moving Y-axis carriage.

①

Arm type

②

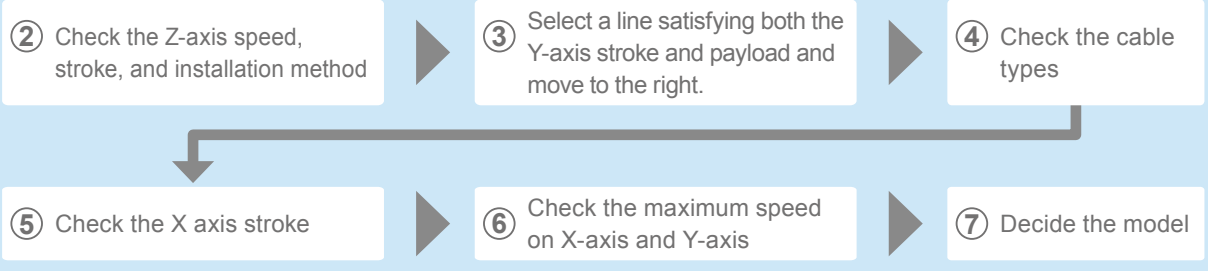
Z-axis

Speed (mm/sec)	Stroke (mm)	Installation method
1000	150	Shaft vertical type
500	150	
800	50 to 300	Clamped base · moving table type (60W)
600	150	Clamped base · moving table type (100W)
	250	
	350	
	150	Clamped base · moving table type (100W)
1200	150	Clamped base · moving table type (200W)
	250	
	350	
600	150	Clamped table · moving base type (200W)
	250	
	350	
1000	150	Shaft vertical type
500	150	
600	150	Clamped base · moving table type (100W)
	250	
	350	
1200	150	Clamped base · moving table type (200W)
	250	
	350	
600	150	Clamped table · moving base type (200W)
	250	
	350	
1000	150	Shaft vertical type
500	150	
1200	150	Clamped base · moving table type (200W)
	250	
	350	
600	150	Clamped table · moving base type (200W)
	250	
	350	
600	150	Clamped base · moving table type (200W)
	250	
	350	
1200	150	Clamped base · moving table type (200W)
	250	
	350	
600	150	Clamped table · moving base type (200W)
	250	
	450	
	550	
300	250	Clamped table · moving base type (200W)
	350	
	450	
	550	

③

Y-axis stroke (mm)

Payload (kg)	150	250	350	450	550	650	750	850	950	1050
		3								
	5				3					
	3									
	10	9	7	5	3					
	10	8	6	4	2					
	10	9	7	5	3	1				
	10	9	7	5	3					
	10	10	8	6	4	2				
	10	9	7	5	3	1				
	8			6	4	2				
	8		7	5	3	1				
	8		6	4	2	1				
	13	10	8	6	4	2				
	12	9	7	5	3	1				
	11	8	6	4	2	1				
	3									
	3									
	5									
	5									
	8	6	4	2	1					
	7	5	3	1						
	6	4	2							
	7	5	3	1						
	6	4	2							
	5	3	1							
	7	5	3	1						
	6	4	2							
	5	3	1							
	3									
	5			4	3					
	8				5	3				
	8			7	4	2				
	8		6	3	1					
	13	12	10	8	5	3				
	13	11	9	7	4	2				
	12	10	8	6	3	1				
	15			12	12	8				
	15			11	11	7				
	15			10	10	6				
	8									
	8					7				
	8					6				
	14				12	8				
	13				11	7				
	12				10	6				
	20					18				
	20					17				
	20			19	16					
	20			18	15					
	25			20	18					
	25			20	17					
	24			19	16					
	23			18	15					



④	⑤	⑥	⑦ Decide the model	
Cable type	X-axis stroke (mm)	Maximum speed (X-axis / Y-axis) (mm/sec)	Model ^(Note 1)	Detailed info page
Cable carrier	150 to 1050	1200 / 800	FXYx-C-A*-ZS12	P.379
			FXYx-C-A*-ZS6	P.379
			FXYx-C-A*-ZT6L	P.380
Cable carrier	150 to 1050	1200 / 1200	SXYx-C-A*-ZF	P.394
Whipover	150 to 850	1200 / 1200	SXYx-S-A*-ZF	P.395
Cable carrier	150 to 1050	1200 / 1200	SXYx-C-A*-ZFL20	P.396
Cable carrier	150 to 1050	1200 / 1200	SXYx-C-A*-ZFH	P.397
Cable carrier	150 to 1050	1200 / 1200	SXYx-C-A*-ZS12	P.398
Whipover	150 to 850		SXYx-S-A*-ZS12	P.398
Cable carrier	150 to 1050		SXYx-C-A*-ZS6	P.399
Whipover	150 to 850		SXYx-S-A*-ZS6	P.399
Cable carrier	150 to 3050	1875 / 1875	SXYBx-C-A*-ZF	P.408
Cable carrier	150 to 3050	1875 / 1875	SXYBx-C-A*-ZFL20	P.409
Cable carrier	150 to 3050	1875 / 1875	SXYBx-C-A*-ZFH	P.410
Cable carrier	150 to 3050	1875 / 1875	SXYBx-C-A*-ZS12	P.411
Cable carrier	150 to 3050	1875 / 1875	SXYBx-C-A*-ZS6	P.411
Cable carrier	500 to 2000	1200 / 1200	NXY-C-A*-ZFL20	P.416
Cable carrier	500 to 2000	1200 / 1200	NXY-C-A*-ZFH	P.418
Cable carrier	250 to 1250	1200 / 1200	MXYx-C-A*-ZFL10	P.429
Cable carrier	250 to 1250	1200 / 1200	MXYx-C-A*-ZFL20	P.429
Cable carrier	250 to 1250	1200 / 1200	MXYx-C-A*-ZFH	P.430
Cable carrier	250 to 1250	1200 / 1200	HXYx-C-A*-ZL	P.436
Cable carrier	250 to 1250	1200 / 1200	HXYx-C-A*-ZH	P.437

Note 1. The figure entered at * inside the form, expresses the arm variation. See P.364 for more information.

3-axis spec selection guide

- Articulated robots YA
- Linear conveyor/modules LCM
- Single-axis robots CX
- Motor-less single axis actuator Robonity
- Compact single-axis robots TRANSERO
- Single-axis robots FLIP-X
- Linear motor single-axis robots PHASER
- Cartesian robots XY-X
- SCARA robots YK-X
- Pick & place robots YP-X
- CLEAN
- CONTROLLER INFORMATION
- Arm type
- Gantry type
- Moving arm type
- Pole type
- XZ type

① Gantry type

Z-axis		
Speed (mm/sec)	Stroke (mm)	Installation method
600	150	Clamped base · moving table type (200W)
	250	
	350	
1200	150	Clamped base · moving table type (200W)
	250	
	350	
600	150	Clamped table · moving base type (200W)
	250	
	350	
600	250	Clamped base · moving table type (200W)
	350	
	450	
	550	
300	250	Clamped table · moving base type (200W)
	350	
	450	
	550	

Payload (kg)	Y-axis stroke (mm)										
	150	250	350	450	550	650	750	850	950	1050	
15	15							12			
	15							11			
	15							10			
	8										
	8										
	8										
	14							12			
	13							11			
	12							10			
	20										
20											
20											
20											
30											
30											
30											
30											

Moving arm type

Z-axis		
Speed (mm/sec)	Stroke (mm)	Installation method
600	150	Clamped base · moving table type (100W)
	250	
	350	
1200	150	Clamped base · moving table type (200W)
	250	
	350	
600	150	Clamped table · moving base type (200W)
	250	
	350	
1000	150	Shaft vertical type
500	150	Shaft vertical type
600	150	Clamped base · moving table type (200W)
	250	
	350	
1200	150	Clamped base · moving table type (200W)
	250	
	350	
600	150	Clamped table · moving base type (200W)
	250	
	350	
300	250	Clamped table · moving base type (200W)
	350	
	450	
	550	

Payload (kg)	Y-axis stroke (mm)									
	150	250	350	450	550	650	750	850	950	1050
9	8	7								
	8	7	6							
	7	6	5							
	8	8	7							
	8	7	6							
	7	6	5							
	9	8	7							
	8	7	6							
	7	6	5							
	3									
5										
12										
11										
10										
8										
12										
11										
10										
18										
18				17						
18				16						
18				15						

Pole type

Z-axis		
Speed (mm/sec)	Stroke (mm)	Installation method
1200	150	Clamped table · moving base type (200W)
	250	
	350	
1200	250	Clamped table · moving base type (200W)
	350	
	450	
	550	
	650	
1200	250	Clamped table · moving base type (200W)
	350	
	450	
	550	
	650	

Payload (kg)	Y-axis stroke (mm)									
	150	250	350	450	550	650	750	850	950	1050
10										
9										
8										
15										
15										
15										
15										
15										
15										
15										

④	⑤	⑥	⑦ Decide the model	
Cable type	X-axis stroke (mm)	Maximum speed (X-axis / Y-axis) (mm/sec)	Model ^(Note 1)	Detailed info page
Cable carrier	250 to 1050	1200 / 1200	MXYx-C-G*-ZFL10	P.445
Cable carrier	250 to 1050	1200 / 1200	MXYx-C-G*-ZFL20	P.445
Cable carrier	250 to 1050	1200 / 1200	MXYx-C-G*-ZFH	P.446
Cable carrier	250 to 1250	1200 / 1200	HXYx-C-G*-ZL	P.452
Cable carrier	250 to 1250	1200 / 1200	HXYx-C-G*-ZH	P.453

Cable type	X-axis stroke (mm)	Maximum speed (X-axis / Y-axis) (mm/sec)	Model ^(Note 1)	Detailed info page
Whipover	150 to 850	1200 / 1200	SXYx-S-M*-ZF	P.460
Whipover	150 to 850	1200 / 1200	SXYx-S-M*-ZFL20	P.461
Whipover	150 to 850	1200 / 1200	SXYx-S-M*-ZFH	P.462
Whipover	150 to 850	1200 / 1200	SXYx-S-M*-ZS12	P.463
Whipover	150 to 850	1200 / 1200	SXYx-S-M*-ZS6	P.463
Cable carrier	250 to 1250	1200 / 1200	MXYx-C-M*-ZFL10	P.466
Cable carrier	250 to 1250	1200 / 1200	MXYx-C-M*-ZFL20	P.466
Cable carrier	250 to 1250	1200 / 1200	MXYx-C-M*-ZFH	P.467
Cable carrier	250 to 1250	1200 / 1200	HXYx-C-M*-ZH	P.470

Note 1. The figure entered at * inside the form, expresses the arm variation. See P.364 for more information.

Cable type	X-axis stroke (mm)	Maximum speed (X-axis / Y-axis) (mm/sec)	Model	Detailed info page
Cable carrier	250 to 1250	1200 / 600	MXYx-C-P2-ZPMH	P.475
Cable carrier	250 to 1250	1200 / 600	HXYx-C-P2-ZPH	P.478
Whipover	250 to 850	1200 / 600	HXYx-S-P1-ZPH	P.479

Robot ordering method description

In the order format for the YAMAHA cartesian robots XY-X series, the notation (letters/numbers) for the mechanical section is shown linked to the controller section notation.

[Example]

2-axis specifications

Mechanical ▶ FXYx (Arm type)

- Cable variations ▷ Cable carrier
- Combination (Arm variations) ▷ A1
- X-axis stroke ▷ 450mm
- Y-axis stroke ▷ 350mm
- Robot cable length ▷ 3.5M

Controller ▶ RCX320

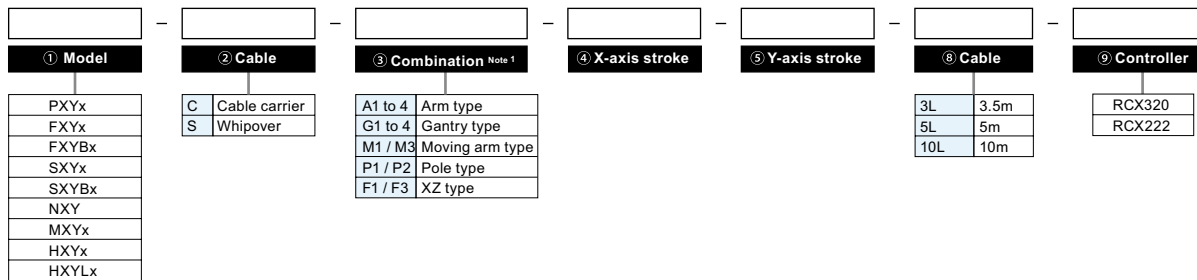
Ordering method

FXYx - C - A1 - 45 - 35 - 3L - RCX320

Mechanical section

Controller section

To find detailed controller information see the controller page. [RCX320 ▶ P.660](#), [RCX222 ▶ P.670](#)



Note 1. To find detailed information on arm variations (combinations) see P.364.

[Example]

3 / 4-axis specifications

Mechanical ▶ SXYx (Moving arm type)

- Cable variations ▷ Whipover
- Combination (Arm variations) ▷ M3
- X-axis stroke ▷ 850mm
- Y-axis stroke ▷ 150mm
- Z-axis stroke ▷ 150mm
- Robot cable length ▷ 5M

Controller ▶ RCX340

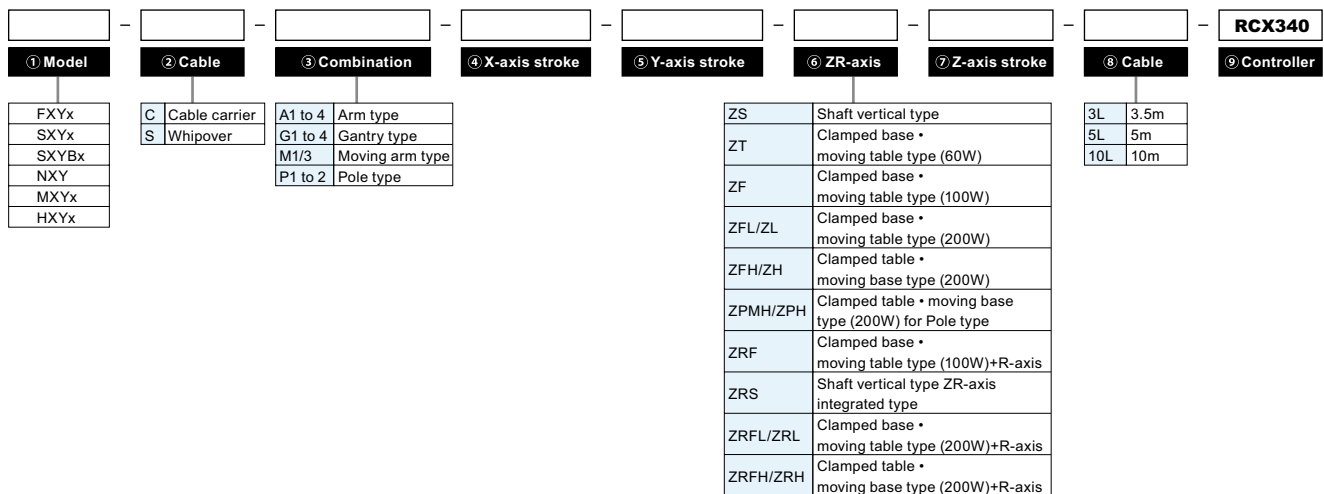
Ordering method

SXYx - S - M3 - 85 - 15 - ZFH - 15 - 5L - RCX340







Mechanical section

Controller section

To find detailed controller information see the controller page. [RCX340 ▶ P.678](#)



Robot ordering method terminology

① Model	Enter the robot unit model.
② Cable	Cable specs can be selected. To find detailed information see P.364. C: Cable carrier S: Whipover
③ Combination (Arm variations)	<p>Select the arm variation and combination method.</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 15%;"> <p>● Arm type The type with moving Y-axis carriage.</p>  </div> <div style="width: 15%;"> <p>● Gantry type The type with a guide railing at the end of Y-axis for support.</p>  </div> <div style="width: 15%;"> <p>● Moving arm type The type with a moving Y-axis arm.</p>  </div> <div style="width: 15%;"> <p>● Pole type The type with vertically moving Y-axis carriage.</p>  </div> <div style="width: 15%;"> <p>● XZ type The type with combination of X-axis for horizontal movement and Z-axis for vertical movement.</p>  </div> <div style="width: 15%;"> <p>● Clean type Special model for clean rooms with moving Y-axis carriage installed upward.</p>  </div> </div> <p>To find information on combinations see P.364.</p>
④ X-axis stroke	Select the X axis stroke. Enter in centimeters (cm). (For example enter 50 for a stroke of 500mm.)
⑤ Y-axis stroke	Select the Y axis stroke. Enter in centimeters (cm). (For example enter 50 for a stroke of 500mm.)
⑥ ZR-axis	<p>Select the Z axis installation direction. The R axis is installed with 4-axis specifications. To find more information see P.71.</p> <p>[3-axes]</p> <p>ZS : Shaft vertical type ZT : Clamped base · moving table type (60W) ZF : Clamped base · moving table type (100W) ZFL/ZL : Clamped base · moving table type (200W) ZFH/ZH : Clamped table · moving base type (200W) ZPMH/ZPH : Clamped table · moving base type (200W) for pole type</p> <p>[4-axes]</p> <p>ZRF : Clamped base · moving table type (100W)+R axis ZRS : ZR axis integrated type ZRL/ZRFL : Clamped base · moving table type (200W)+R axis ZRH/ZRFH : Clamped table · moving base type (200W)+R axis</p>
⑦ Z-axis stroke	Select the Z axis stroke. Enter in centimeters (cm). (For example enter 15 for a stroke of 150mm.)
⑧ Cable	Select the length of the robot cable connecting the robot and controller. 3L : 3.5m 5L : 5m 10L : 10m
⑨ Controller	2-axis specifications: Select either the RCX320 or RCX222. 3 / 4-axis specifications: Select the RCX340.

- YA Articulated robots
- LCM Linear conveyor modules
- CX Single-axis robots
- Robotity Motor-less single axis actuator
- TRANSEVO Compact single-axis robots
- FLIP-X Single-axis robots
- PHASER Linear motor single-axis robots
- XY-X Cartesian robots
- YK-X SCARA robots
- YP-X Pick & place robots
- CLEAN CLEAN
- CONTROLLER CONTROLLER
- INFORMATION INFORMATION
- Arm type
- Gantry type
- Moving arm type
- Pole type
- XZ type

PXYx 2 axes



● Arm type ● Cable carrier

Ordering method

PXYx - C

Model	Cable	Combination	X-axis stroke	Y-axis stroke	Cable
A1			15 to 65cm	5 to 30cm	3L: 3.5m
A2					5L: 5m
A3					10L: 10m
A4					

RCX320-2

Controller / Number of controllable axes	Safety standard	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery

Specify various controller setting items. RCX320 ▶ **P.660**

RCX222

Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Y-axis
Axis construction ^{Note 1}	—	T4H
AC servo motor output (W)	60	30
Repeatability ^{Note 2} (mm)	+/-0.02	+/-0.02
Drive system	Ball screw φ12	Ball screw φ8
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	12	12
Maximum speed ^{Note 4} (mm/sec)	720	720
Moving range (mm)	150 to 650	50 to 300
Robot cable length (m)	Standard: 3.5 Option: 5,10	

Note 1. Use caution that the flange 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 650mm, 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.

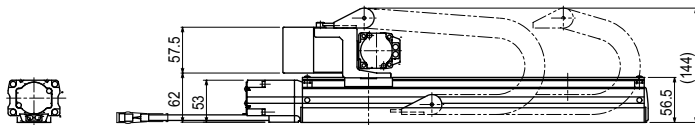
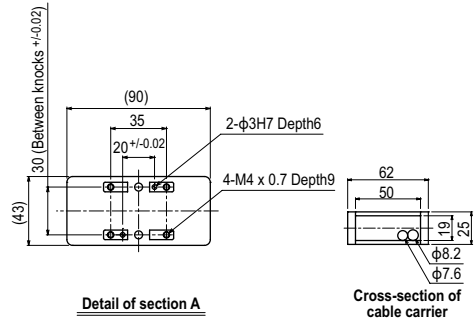
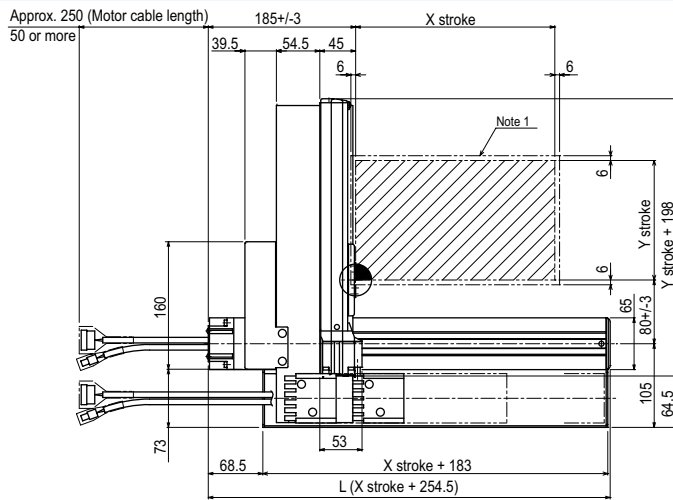
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
50	4.5
100	4.5
150	3.5
200	2.5
250	2
300	1.5

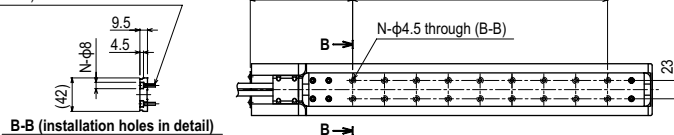
Controller

Controller	Operation method
RCX320 RCX222	Programming / I/O point trace / Remote command / Operation using RS-232C communication

PXYx 2 axes A1



Use M4 x 0.7 hex socket head bolt with length head bolt with length (under head) of 15mm or more.

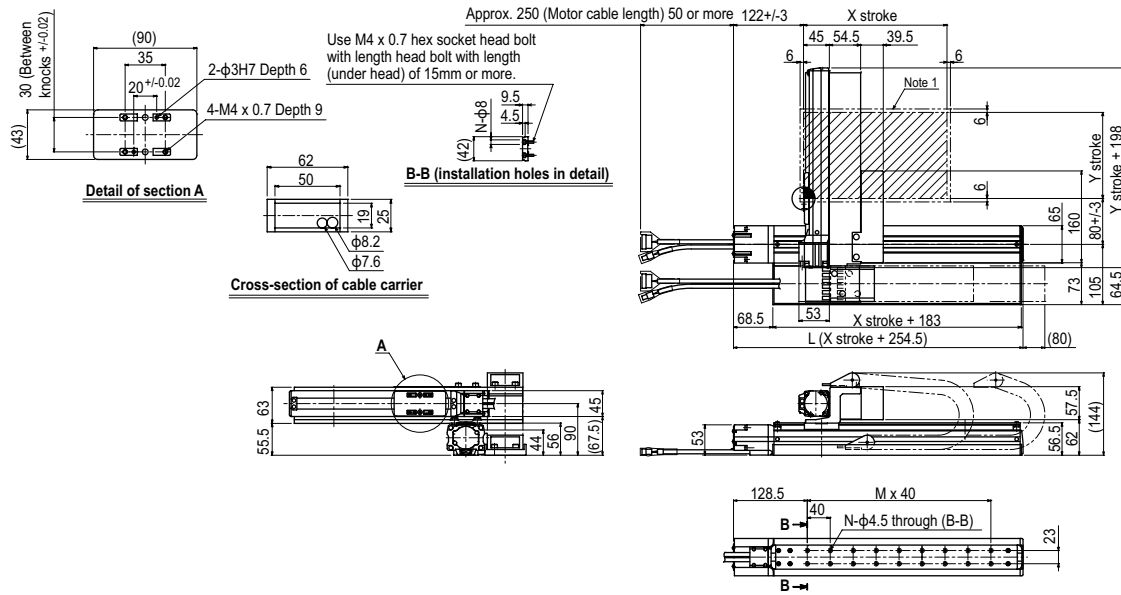


X stroke	150	250	350	450	550	650
L	404.5	504.5	604.5	704.5	804.5	904.5
M	5	8	10	13	15	18
N	12	18	22	28	32	38
Y stroke	50	100	150	200	250	300
Maximum speed for each stroke (mm/sec) ^{Note 2}	X-axis		720		600	
Speed setting			—		83%	

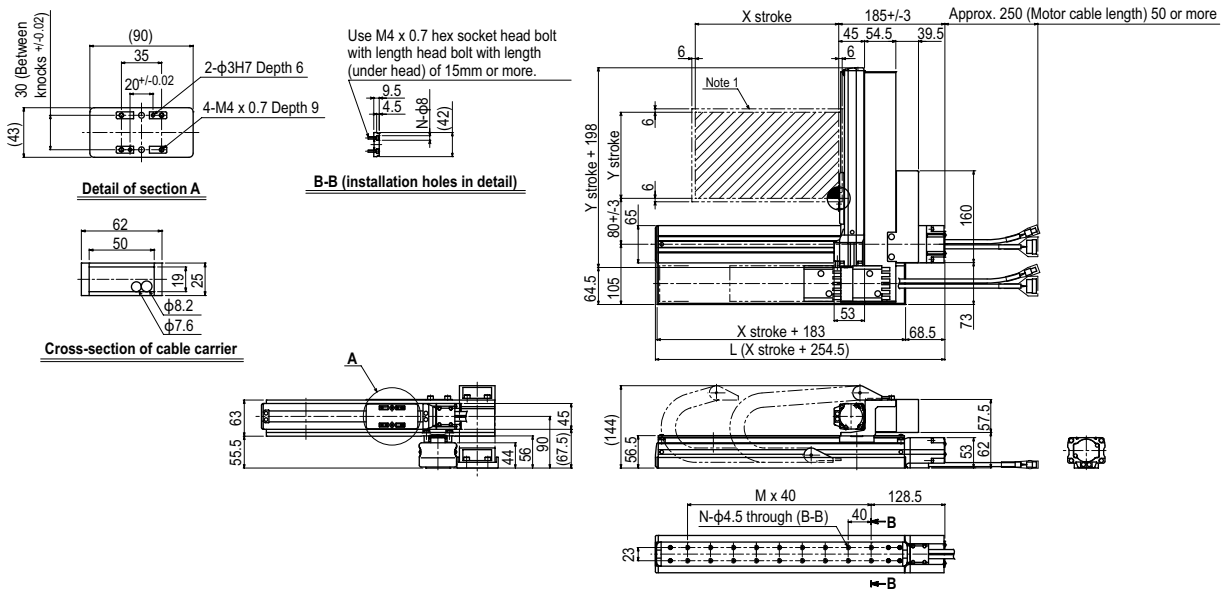
Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.

Note 2. When the X-axis stroke is longer than 650mm, 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.

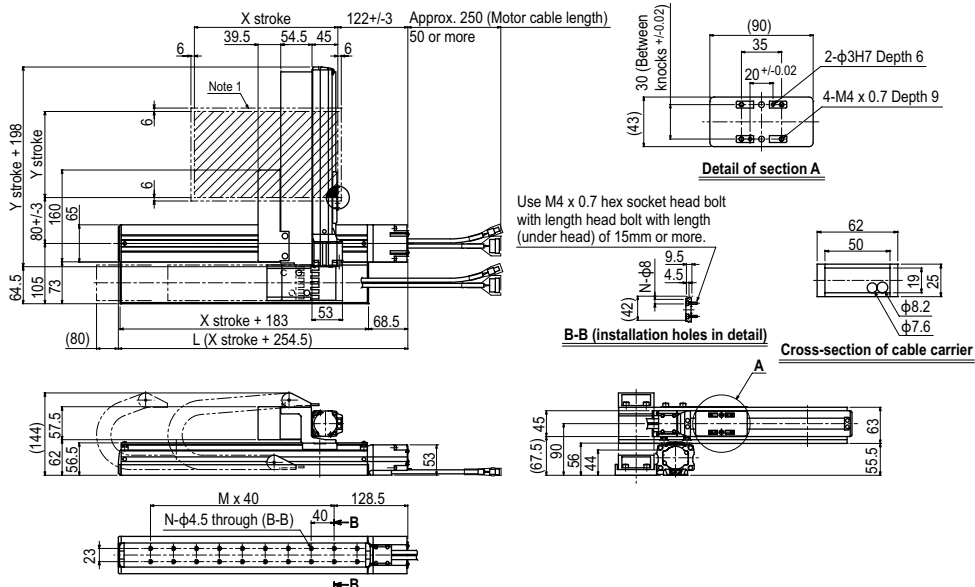
PXYx 2 axes **A2**



PXYx 2 axes **A3**



PXYx 2 axes **A4**



- Articulated robots **YA**
- Linear conveyor modules **LCM**
- Single-axis robots **CX**
- Motor-less single axis actuator **Robonity**
- Compact single-axis robots **TRANSERO**
- Single-axis robots **FLIP-X**
- Linear motor single-axis robots **PHASER**
- Cartesian robots **XY-X**
- SCARA robots **YK-X**
- Pick & place robots **YP-X**
- CLEAN**
- CONTROLLER**
- INFORMATION**
- Arm type
- Gantry type
- Moving arm type
- Pole type
- XZ type**

FXYx 2 axes

● Arm type ● Cable carrier



Ordering method

FXYx - C

Model	Cable	Combination	X-axis stroke	Y-axis stroke	Cable
A1			15 to 105cm	15 to 55cm	3L: 3.5m
A2					5L: 5m
A3					10L: 10m
A4					

RCX320-2

Controller / Number of controllable axes	Safety standard	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery

Specify various controller setting items. RCX320 ▶ **P.660**

RCX222

Controller	Usable for CE	I/O selection 1	I/O selection 2

Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Y-axis
Axis construction	—	—
AC servo motor output (W)	100	60
Repeatability ^{Note 1} (mm)	+/-0.01	+/-0.02
Drive system	Ball screw φ15	Ball screw φ12
Ball screw lead ^{Note 2} (Deceleration ratio) (mm)	20	12
Maximum speed ^{Note 3} (mm/sec)	1200	800
Moving range (mm)	150 to 1050	150 to 550
Robot cable length (m)	Standard: 3.5 Option: 5,10	

Note 1. Positioning repeatability in one direction.

Note 2. Leads not listed in the catalog are also available. Contact us for details.

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.

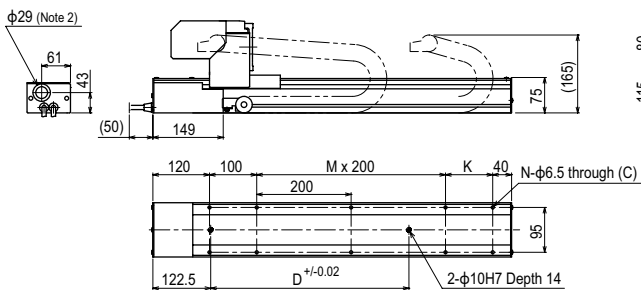
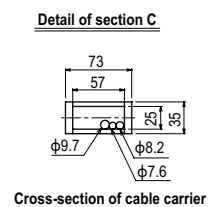
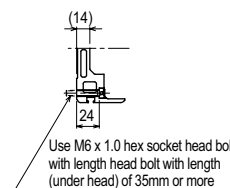
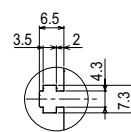
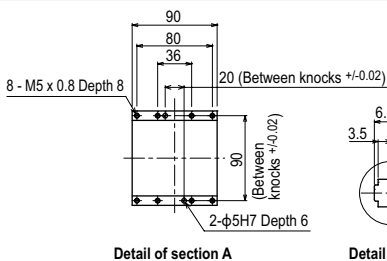
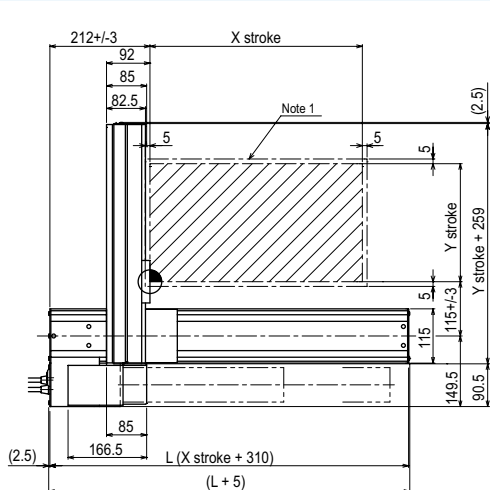
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
150	12
250	12
350	11
450	9
550	7

Controller

Controller	Operation method
RCX320	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222	

FXYx 2 axes A1



X stroke	Y stroke										
	150	250	350	450	550	650	750	850	950	1050	
L	460	560	660	760	860	960	1060	1160	1260	1360	
K	200	100	200	100	200	100	200	100	200	100	
D	240	240	420	420	600	600	780	960	960	1140	
M	0	1	1	2	2	3	3	4	4	5	
N	6	8	8	10	10	12	12	14	14	16	
Y stroke	150	250	350	450	550						
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis	1200				960	780	600	540		
	Speed setting	—				80%	65%	50%	45%		

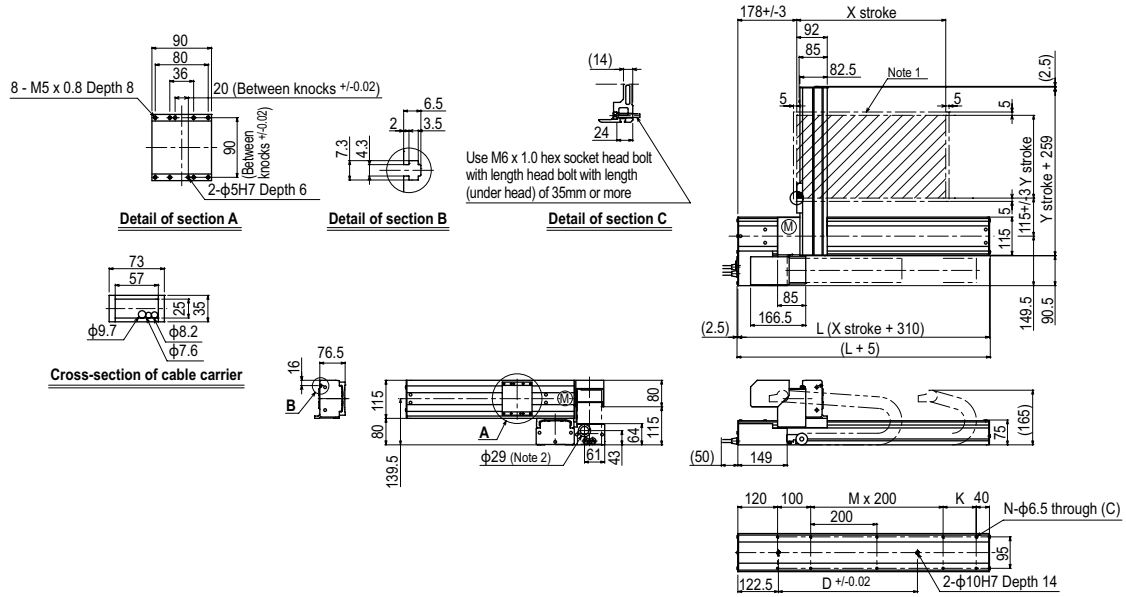
Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.

Note 2. User cable extraction port.

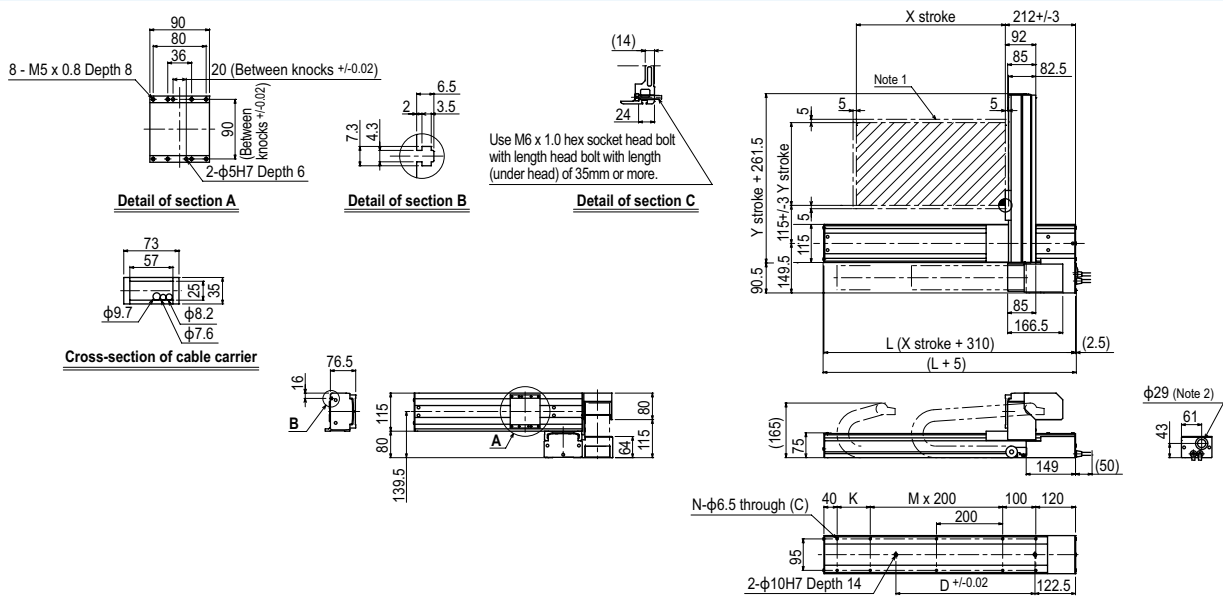
Note 3. When the X-axis stroke is longer than 750mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.

Articulated robots	YA
Linear conveyor modules	LCM
Single-axis robots	CX
Motor-less single axis actuator	Robonity
Compact single-axis robots	TRANSEVO
Single-axis robots	FLIP-X
Linear motor single-axis robots	PHASER
Cartesian robots	XY-X
SCARA robots	YK-X
Pick & place robots	YP-X
CLEAN	
CONTROLLER	
INFORMATION	
Arm type	
Gantry type	
Moving arm type	
Pole type	
XZ type	

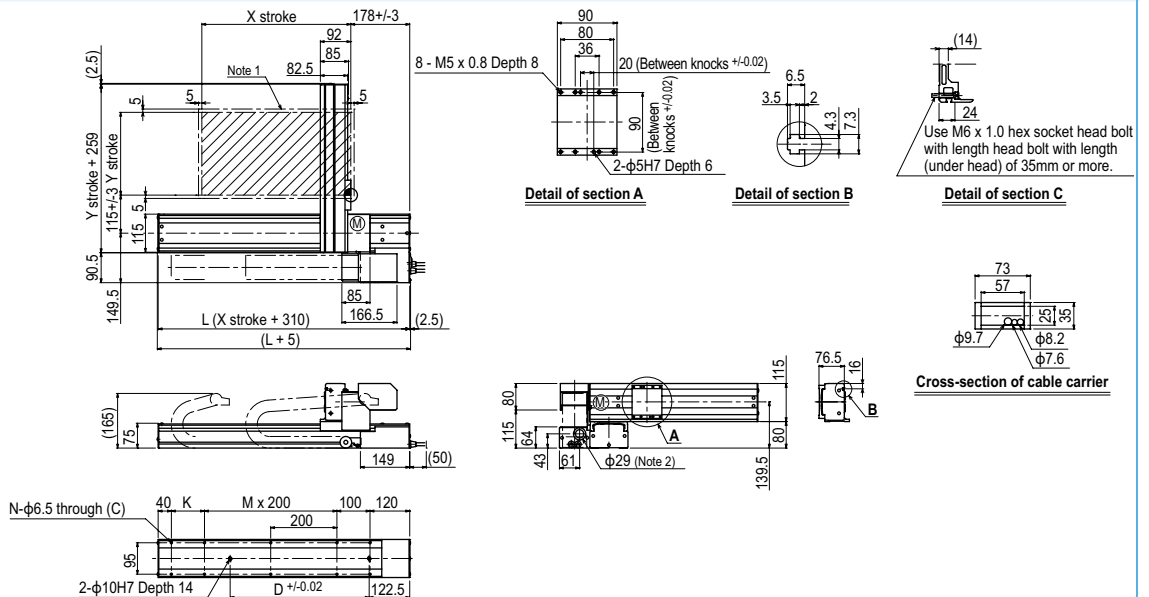
FXYx 2 axes **A2**



FXYx 2 axes **A3**

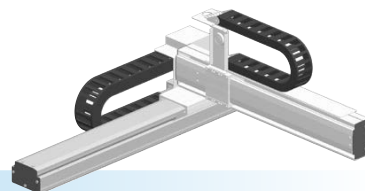


FXYx 2 axes **A4**



FXYx 2 axes / IO

- Arm type
- Cable carrier
- Type with Y-axis I/O cable carrier added



Ordering method

FXYx - C [] [] [] **IO** [] [] [] []

Model	Cable	Combination	X-axis stroke	Y-axis stroke	ZR-axis	Cable
A1			15 to 105cm	15 to 55cm		3L: 3.5m
A2						5L: 5m
A3						10L: 10m
A4						

RCX320-2 [] [] [] [] [] []

Controller / Number of controllable axes	Safety standard	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery
--	-----------------	-----------------	-----------------	---------------	------------------

Specify various controller setting items. RCX320 ▶ **P.660**

RCX222 [] [] [] [] [] []

Controller	Usable for CE	I/O selection 1	I/O selection 2
------------	---------------	-----------------	-----------------

Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Y-axis
Axis construction	-	-
AC servo motor output (W)	100	60
Repeatability ^{Note 1} (mm)	+/-0.01	+/-0.02
Drive system	Ball screw φ15	Ball screw φ12
Ball screw lead ^{Note 2} (Deceleration ratio) (mm)	20	12
Maximum speed ^{Note 3} (mm/sec)	1200	800
Moving range (mm)	150 to 1050	150 to 550
Robot cable length (m)	Standard: 3.5 Option: 5, 10	

Note 1. Positioning repeatability in one direction.
 Note 2. Leads not listed in the catalog are also available. Contact us for details.
 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.

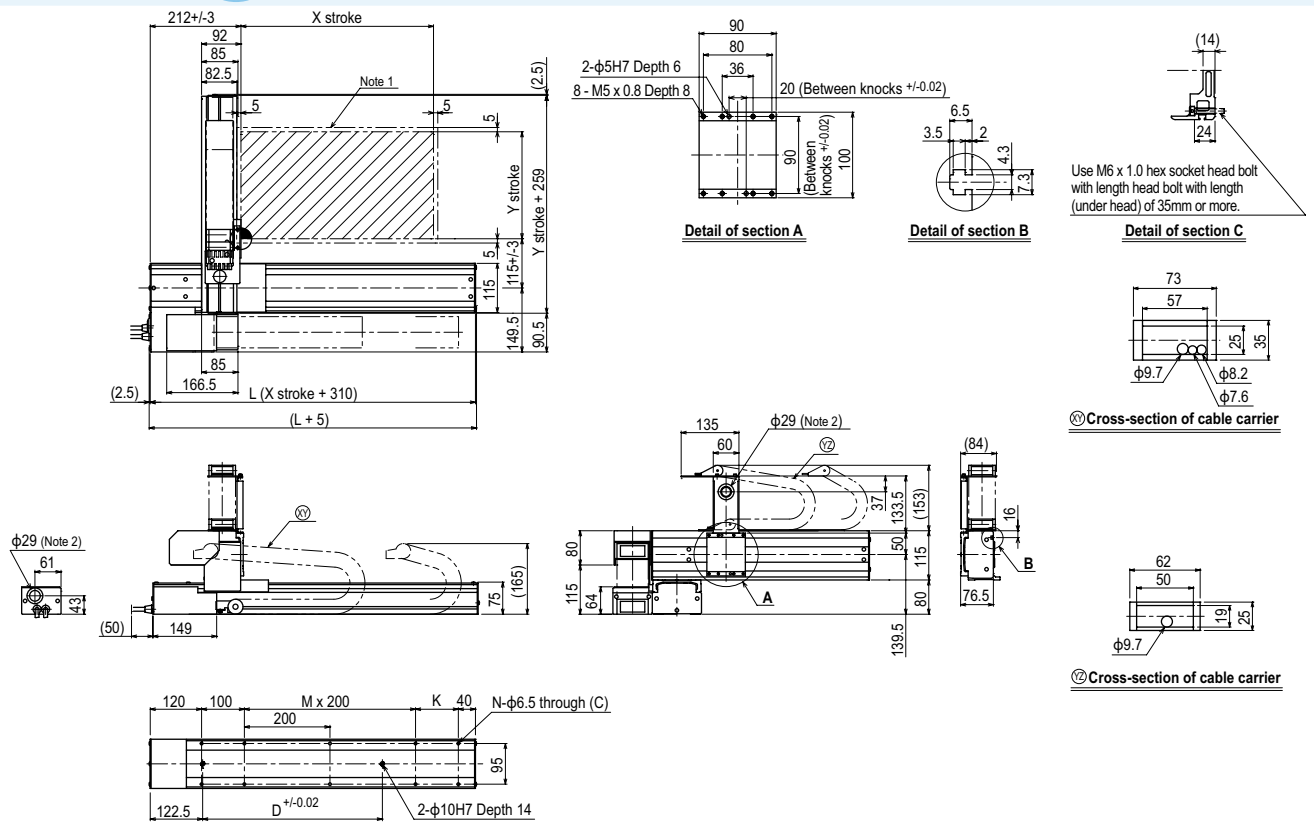
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
150	12
250	12
350	11
450	9
550	7

Controller

Controller	Operation method
RCX320	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222	

FXYx 2 axes / IO A1



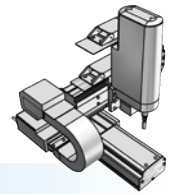
X stroke	Y stroke												
	150	250	350	450	550	650	750	850	950	1050			
L	460	560	660	760	860	960	1060	1160	1260	1360			
K	200	100	200	100	200	100	200	100	200	100			
D	240	240	420	420	600	600	780	960	960	1140			
M	0	1	1	2	2	3	3	4	4	5			
N	6	8	8	10	10	12	12	14	14	16			
Y stroke	150	250	350	450	550								
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis		1200			960		780		600		540	
Speed setting			-			80%		65%		50%		45%	

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 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.

FXYx 3 axes / ZS

● Arm type ● Cable carrier ● Z-axis shaft vertical type



Ordering method

FXYx - C [] [] [] [] **15** [] **RCX340-3** [] [] [] [] [] [] [] [] [] [] []

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
A1			15 to 105cm	15 to 55cm	ZS12		3L: 3.5m 5L: 5m 10L: 10m								
A2					ZS6										
A3															
A4															

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis: ZS12	Z-axis: ZS6
Axis construction	-	-	-	-
AC servo motor output (W)	100	60	60	
Repeatability ^{Note 1} (mm)	+/-0.01	+/-0.02	+/-0.02	
Drive system	Ball screw φ15	Ball screw φ12	Ball screw φ12	
Ball screw lead ^{Note 2} (Deceleration ratio) (mm)	20	12	12	6
Maximum speed ^{Note 3} (mm/sec)	1200	800	1000	500
Moving range (mm)	150 to 1050	150 to 550		150
Robot cable length (m)	Standard: 3.5 Option: 5,10			

Note 1. Positioning repeatability in one direction.
 Note 2. Leads not listed in the catalog are also available. Contact us for details.
 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.

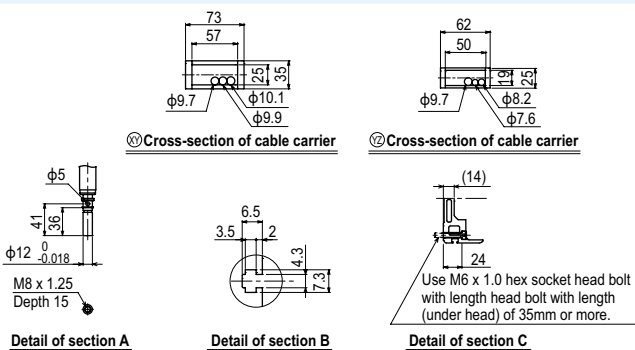
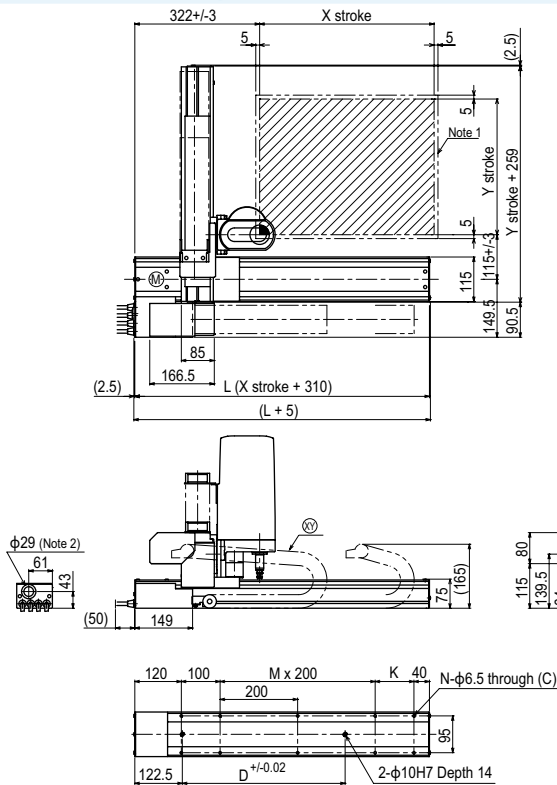
Maximum payload (kg)

Y stroke (mm)	ZS12	ZS6
150	3	5
250	3	5
350	3	5
450	3	5
550	3	3

Controller

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

FXYx 3 axes / ZS (A1)



X stroke	150	250	350	450	550	650	750	850	950	1050	
	L	460	560	660	760	860	960	1060	1160	1260	1360
K	200	100	200	100	200	100	200	100	200	100	
D	240	240	420	420	600	600	780	960	960	1140	
M	0	1	1	2	2	3	3	4	4	5	
N	6	8	8	10	10	12	12	14	14	16	
Y stroke	150	250	350	450	550						
Z stroke	150										
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis	1200					960	780	600	540	
	Speed setting	-					80%	65%	50%	45%	

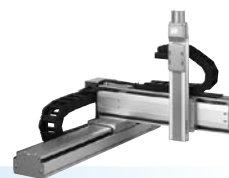
Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. User cable extraction port.

Note 3. When the X-axis stroke is longer than 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.

Articulated robots YA
 Linear conveyor modules LCM
 Single-axis robots CX
 Motor-less single-axis actuators Robomity
 Compact single-axis robots TRANSEVO
 Single-axis robots FLIP-X
 Linear motor single-axis robots PHASER
 Cartesian robots XY-X
 SCARA robots YK-X
 Pick & place robots YP-X
 CLEAN
 CONTROLLER INFORMATION
 Arm type
 Gantry type
 Moving arm type
 Pole type
 XZ type

FXYx 3 axes / ZT

- Arm type
- Cable carrier
- Z-axis: clamped base / moving table type (60W)



Ordering method

FXYx - C - **ZT6L - 12** - **RCX340-3**

Model	Cable	Combination	X-axis stroke	Y-axis stroke	ZR-axis	Lead	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
		A1	15 to 105cm	15 to 55cm			5 to 30cm	3L: 3.5m 5L: 5m 10L: 10m	Specify various controller setting items. RCX340 ▶ P.678							

Specification

	X-axis	Y-axis	Z-axis
Axis construction <small>Note 1</small>	-	-	T6L-12-BK
AC servo motor output (W)	100	60	60
Repeatability <small>Note 2</small> (mm)	+/-0.01	+/-0.02	+/-0.02
Drive system	Ball screw φ15	Ball screw φ12	Ball screw φ12
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	20	12	12
Maximum speed <small>Note 4</small> (mm/sec)	1200	800	800
Moving range (mm)	150 to 1050	150 to 550	50 to 300
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 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.

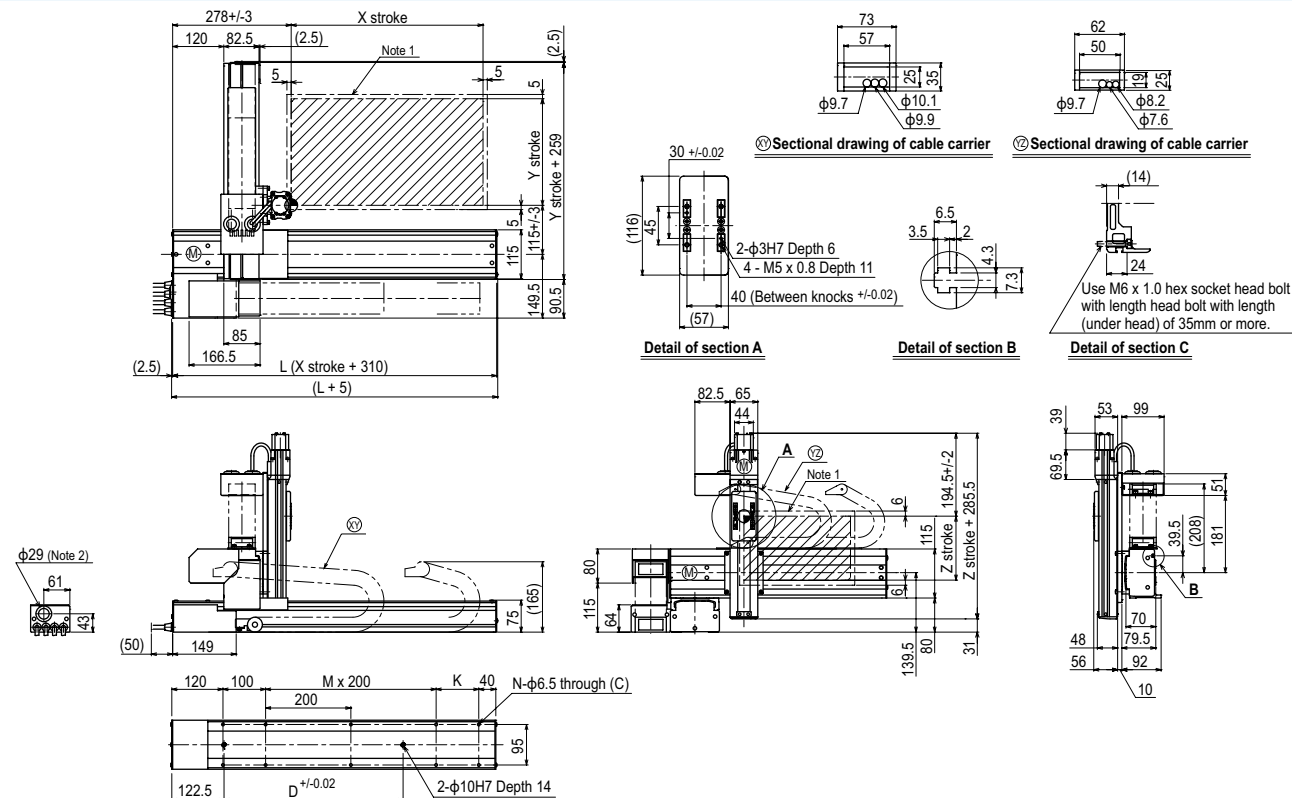
Maximum payload (kg)

Y stroke (mm)	ZT
150 to 550	3

Controller

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

FXYx 3 axes / ZT A1



X stroke	150	250	350	450	550	650	750	850	950	1050	
L	460	560	660	760	860	960	1060	1160	1260	1360	
K	200	100	200	100	200	100	200	100	200	100	
D	240	240	420	420	600	600	780	960	960	1140	
M	0	1	1	2	2	3	3	4	4	5	
N	6	8	8	10	10	12	12	14	14	16	
Y stroke	150	250	350	450	550						
Z stroke	50	100	150	200	250	300					
Maximum speed for each stroke (mm/sec) <small>Note 1</small>	X-axis		1200				960	780	600	540	
Speed setting			-				80%	65%	50%	45%	

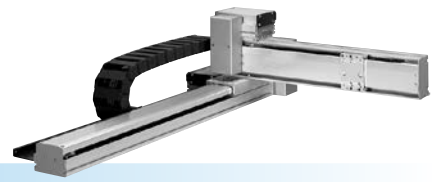
Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. User cable extraction port.

Note 3. When the X-axis stroke is longer than 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.

Articulated robots YA
Linear conveyor modules LCM
Single-axis robots CX
Motor-less single axis actuator Robonity
Compact single-axis robots TRANSEVO
Single-axis robots FLIP-X
Linear motor single-axis robots PHASER
Cartesian robots XY-X
SCARA robots YK-X
Pick & place robots YP-X
CLEAN
CONTROLLER
INFORMATION
Arm type
Gantry type
Moving arm type
Pole type
XZ type

FXyBx 2 axes

● Arm type ● Cable carrier



Ordering method

FXyBx - C

Model	Cable	Combination	X-axis stroke	Y-axis stroke	Cable
A1			15 to 245cm	15 to 55cm	3L: 3.5m
A2					5L: 5m
A3					10L: 10m
A4					

RCX320-2

Controller / Number of controllable axes	Safety standard	Option A (O.P.A)	Option B (O.P.B)	Vision System	Absolute battery
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Specify various controller setting items. RCX320 ▶ **P.660**

RCX222

Controller	Usable for CE	I/O selection 1	I/O selection 2
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Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Y-axis
Axis construction ^{Note 1}	B10	-
AC servo motor output (W)	100	100
Repeatability ^{Note 2} (mm)	+/-0.04	+/-0.04
Drive system	Timing belt	Timing belt
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	Equivalent to lead 25	Equivalent to lead 25
Maximum speed (mm/sec)	1875	1875
Moving range (mm)	150 to 2450	150 to 550
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.

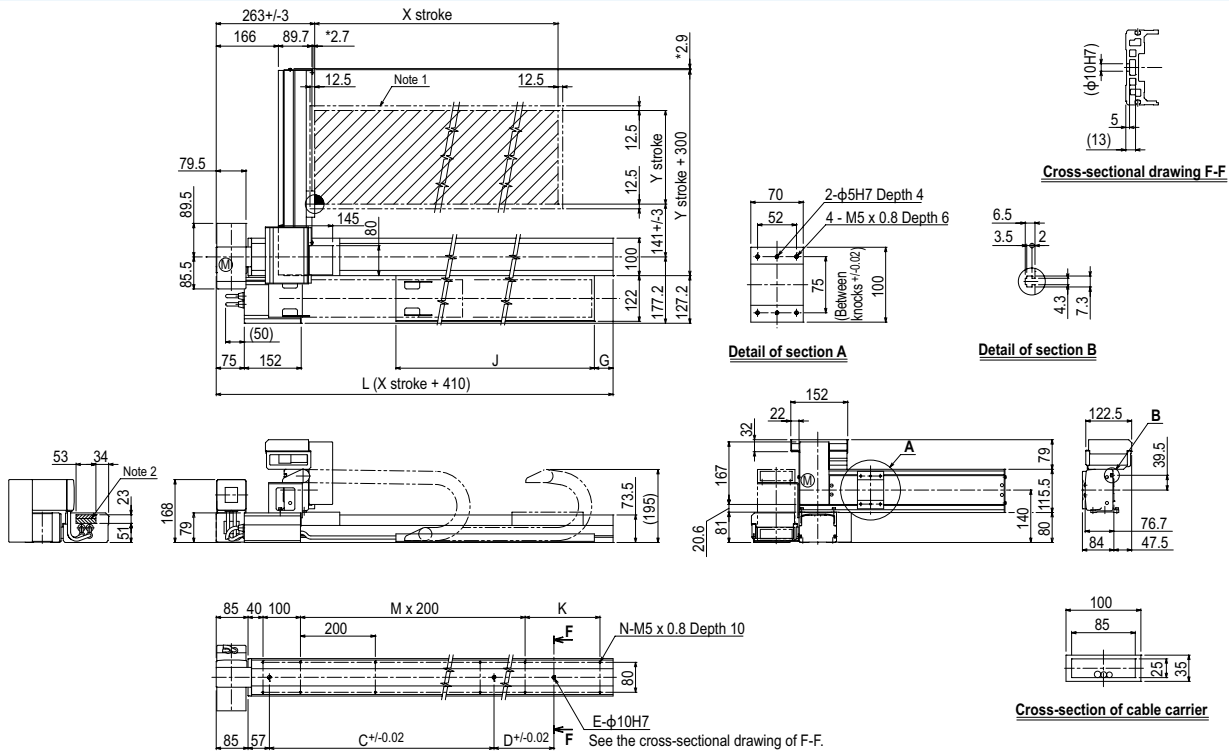
Maximum payload (kg)

Y stroke (mm)	XY axes
150	7
250	6
350	5
450	5
550	3

Controller

Controller	Operation method
RCX320	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222	

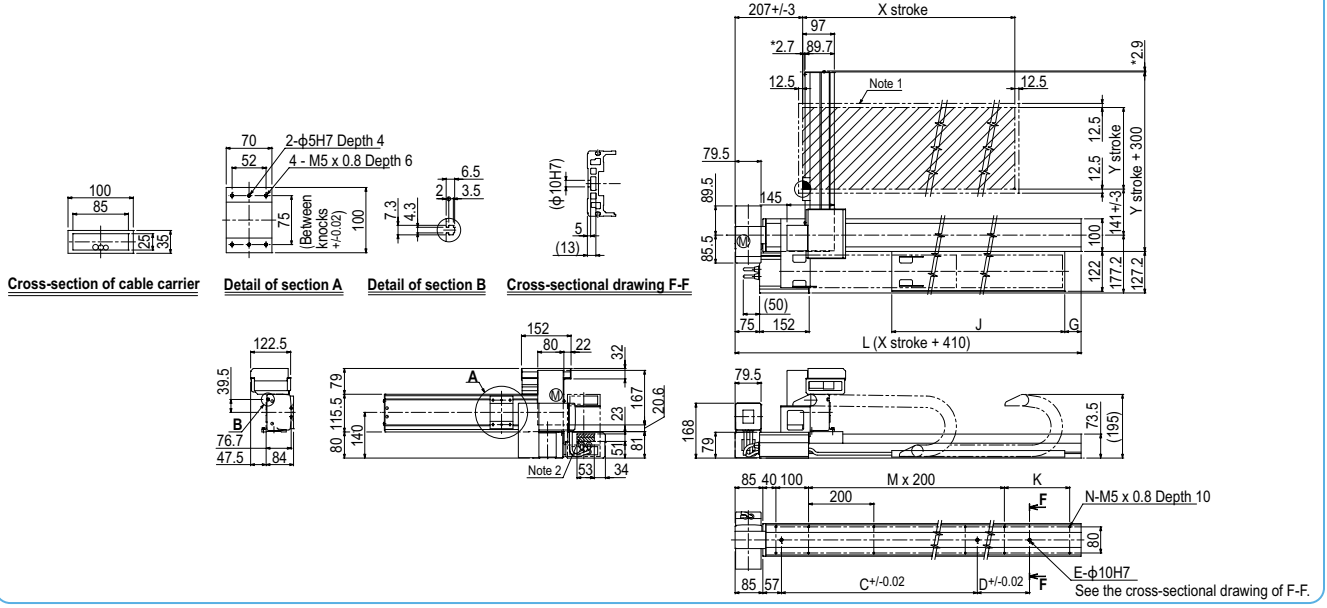
FXyBx 2 axes A1



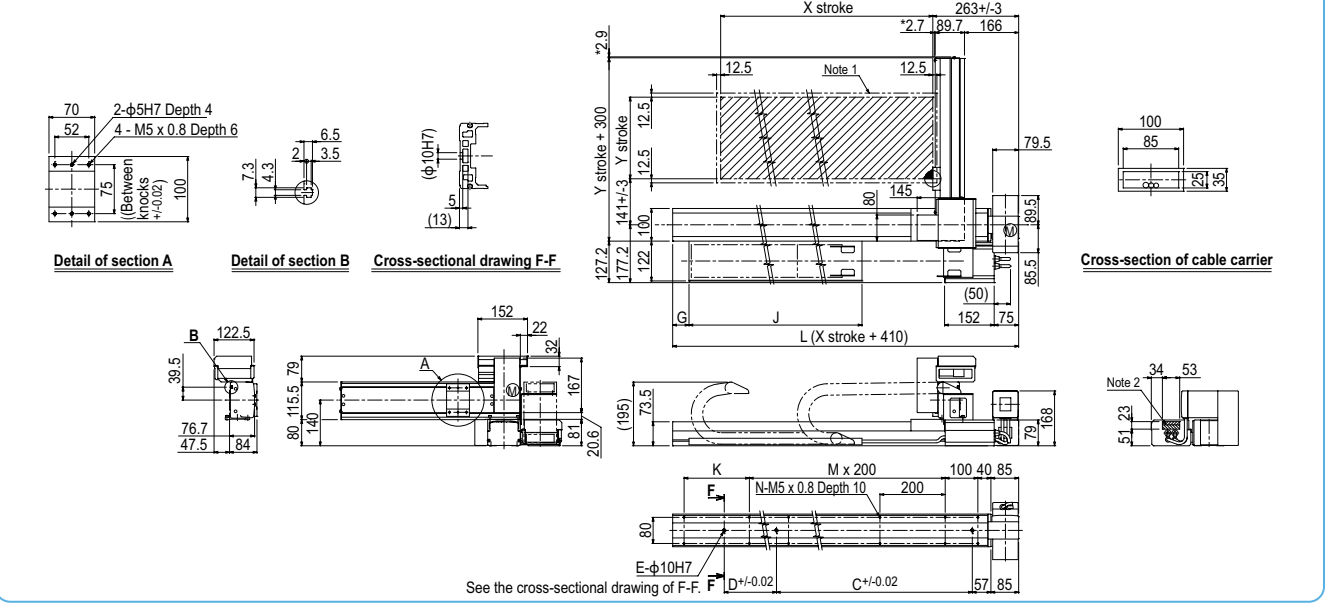
Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. The shaded position indicates an user cable extraction port.
 Note 3. The dimension marked with an asterisk (*) indicates the height of the screw.

X stroke	150	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	
L	560	660	760	860	960	1060	1160	1260	1360	1460	1560	1660	1760	1860	1960	2060	2160	2260	2360	2460	2560	2660	2760	2860	
C	240	420	600	600	780	780	960	960	1140	1140	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	
D	-	-	-	-	-	-	-	-	-	-	-	240	240	420	420	600	780	780	960	960	1140	1140	1320	1320	
E	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3
G	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	
J	330	330	430	430	530	530	630	630	730	730	830	830	930	930	1030	1030	1130	1130	1230	1230	1330	1330	1430	1430	
K	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	
N	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	
Y stroke	150	250	350	450	550																				

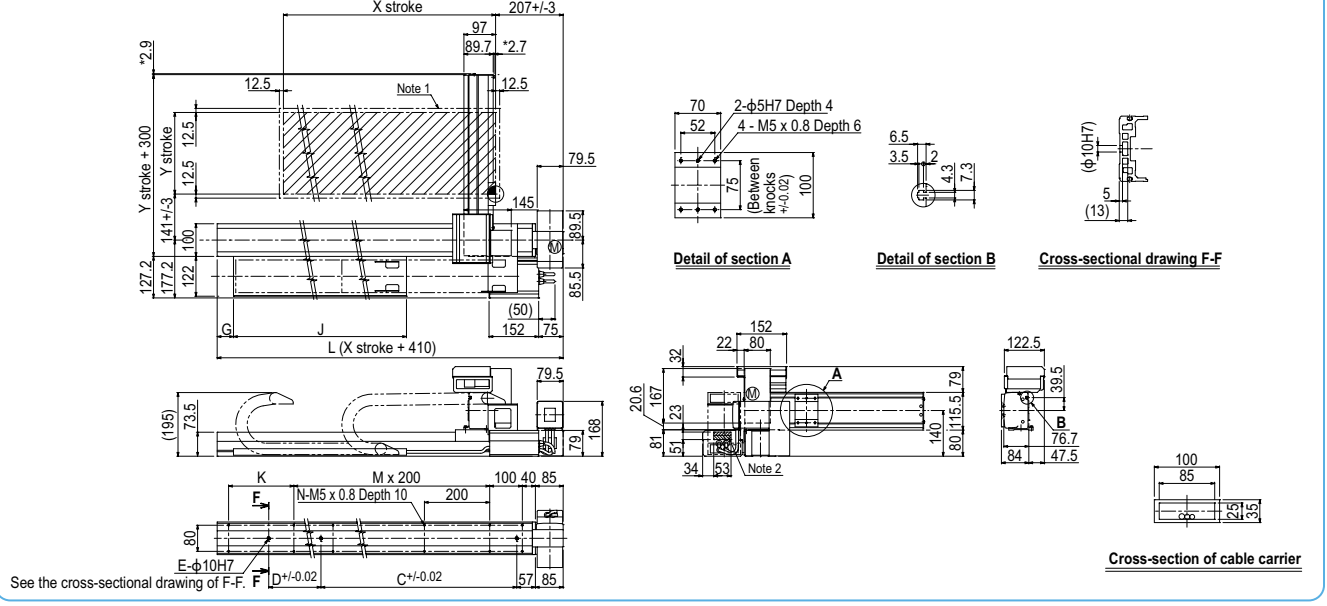
FXYBx 2 axes A2



FXYBx 2 axes A3



FXYBx 2 axes A4



- Articulated robots **YA**
- Linear conveyor modules **LCM**
- Single-axis robots **CX**
- Multi-axis single axis actuator **Robotomy**
- Compact single-axis robots **TRANSERO**
- Single-axis robots **FLIP-X**
- Linear motor single-axis robots **PHASER**
- Cartesian robots **XY-X**
- SCARA robots **YK-X**
- Pick & place robots **YP-X**
- CLEAN
- CONTROLLER
- INFORMATION
- Arm type
- Gantry type
- Moving arm type
- Pole type
- XZ type

FXyBx 2 axes

● Arm type ● Whipover

Ordering method

FXyBx - S

Model	Cable	Combination	X-axis stroke	Y-axis stroke	Cable
A1			15 to 95cm	15 to 55cm	3L: 3.5m
A2					5L: 5m
A3					10L: 10m
A4					

RCX320-2

Controller / Number of controllable axes	Safety standard	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery
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Specify various controller setting items. RCX320 ▶ P.660

RCX222

Controller	Usable for CE	I/O selection 1	I/O selection 2
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Specify various controller setting items. RCX222 ▶ P.670

Specification

	X-axis	Y-axis
Axis construction ^{Note 1}	B10	-
AC servo motor output (W)	100	100
Repeatability ^{Note 2} (mm)	+/-0.04	+/-0.04
Drive system	Timing belt	Timing belt
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	Equivalent to lead 25	Equivalent to lead 25
Maximum speed (mm/sec)	1875	1875
Moving range (mm)	150 to 950	150 to 550
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.

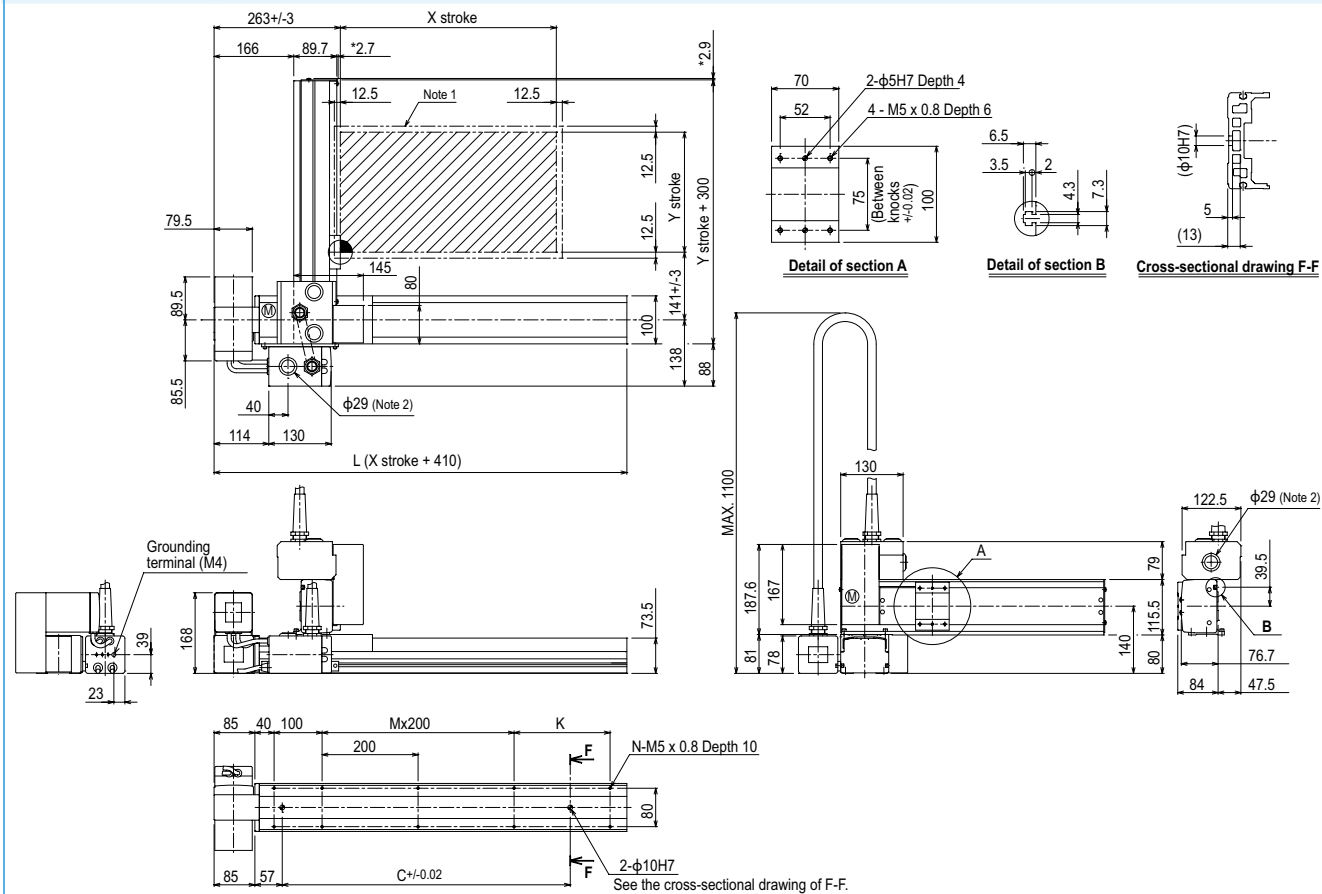
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
150	7
250	6
350	5
450	5
550	3

Controller

Controller	Operation method
RCX320	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222	

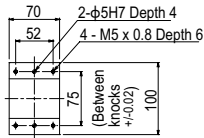
FXyBx 2 axes A1



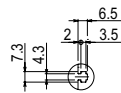
X stroke	150	250	350	450	550	650	750	850	950
L	560	660	760	860	960	1060	1160	1260	1360
C	240	420	600	600	780	780	960	960	1140
K	100	200	100	200	100	200	100	200	100
M	1	1	2	2	3	3	4	4	5
N	8	8	10	10	12	12	14	14	16
Y stroke	150	250	350	450	550				

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. The dimension marked with an asterisk (*) indicates the height of the screw.

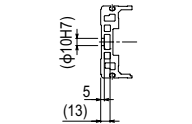
FXYBx 2 axes A2



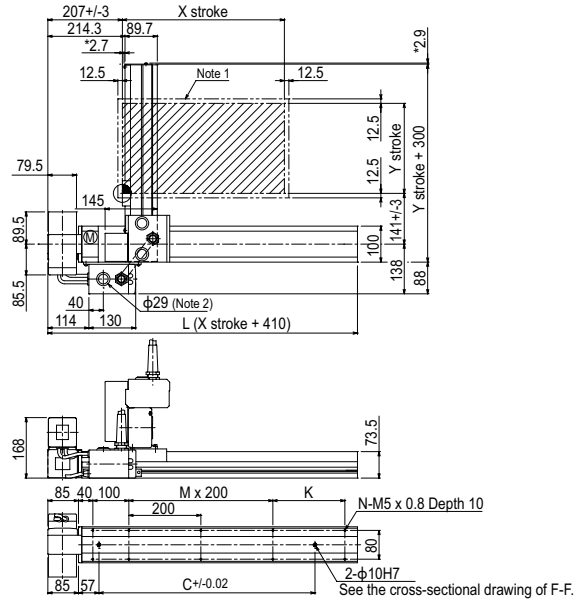
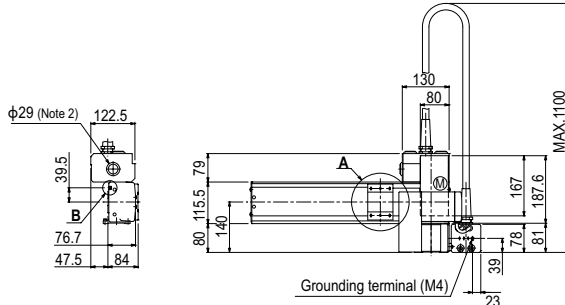
Detail of section A



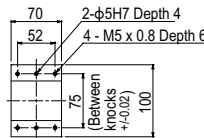
Detail of section B



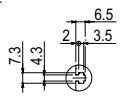
Cross-sectional drawing F-F



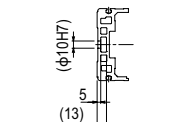
FXYBx 2 axes A3



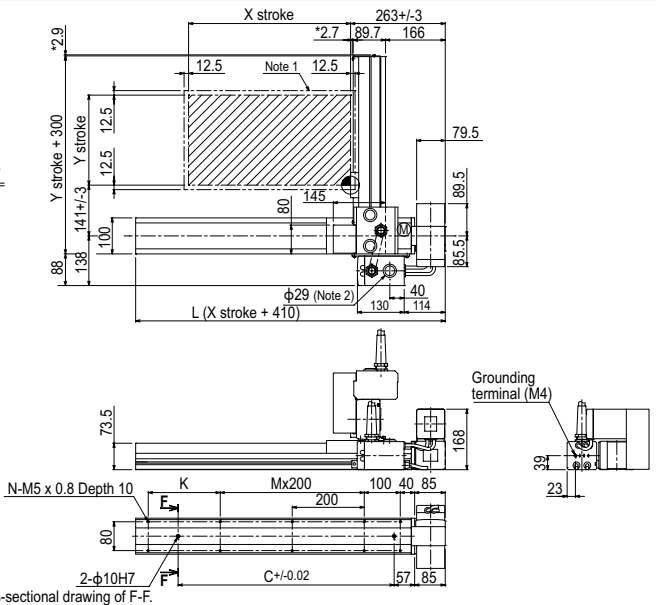
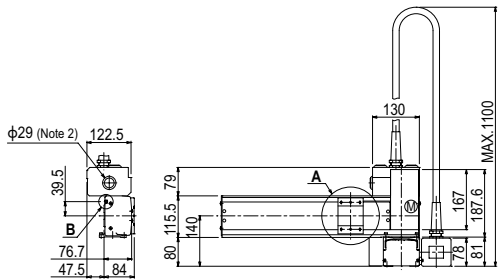
Detail of section A



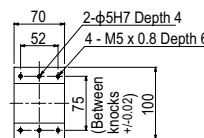
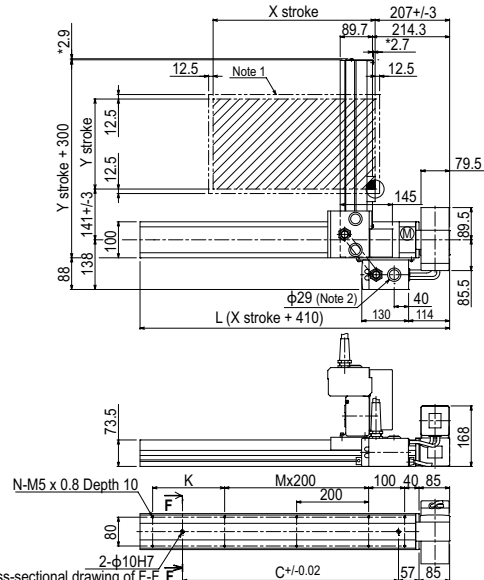
Detail of section B



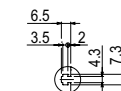
Cross-sectional drawing F-F



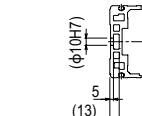
FXYBx 2 axes A4



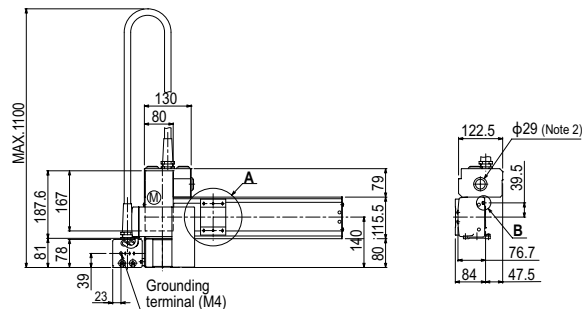
Detail of section A



Detail of section B



Cross-sectional drawing F-F

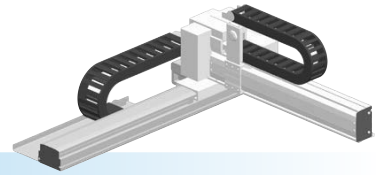


See the cross-sectional drawing of F-F.

YA	Articulated robots
LCM	Linear conveyor modules
CX	Single-axis robots
Robotity	Motor-less single axis actuator
TRANSERO	Compact single-axis robots
FLIP-X	Single-axis robots
PHASER	Linear motor single-axis robots
XY-X	Cartesian robots
YK-X	SCARA robots
YP-X	Pick & place robots
CLEAN	CLEAN
CONTROLLER	CONTROLLER
INFORMATION	INFORMATION
Arm type	Arm type
Gantry type	Gantry type
Moving arm type	Moving arm type
Pole type	Pole type
XZ type	XZ type

FXyBx 2 axes / IO

- Arm type
- Cable carrier
- Type with Y-axis I/O cable carrier added



Ordering method

FXyBx - C				IO		
Model	Cable	Combination	X-axis stroke	Y-axis stroke	ZR-axis	Cable
A1			15 to 245cm	15 to 55cm		3L: 3.5m
A2						5L: 5m
A3						10L: 10m
A4						

RCX320-2					
Controller / Number of controllable axes	Safety standard	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery

Specify various controller setting items. RCX320 ▶ **P.660**

RCX222			
Controller	Usable for CE	I/O selection 1	I/O selection 2

Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Y-axis
Axis construction <small>Note 1</small>	B10	-
AC servo motor output (W)	100	100
Repeatability <small>Note 2</small> (mm)	+/-0.04	+/-0.04
Drive system	Timing belt	Timing belt
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	Equivalent to lead 25	Equivalent to lead 25
Maximum speed (mm/sec)	1875	1875
Moving range (mm)	150 to 2450	150 to 550
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.

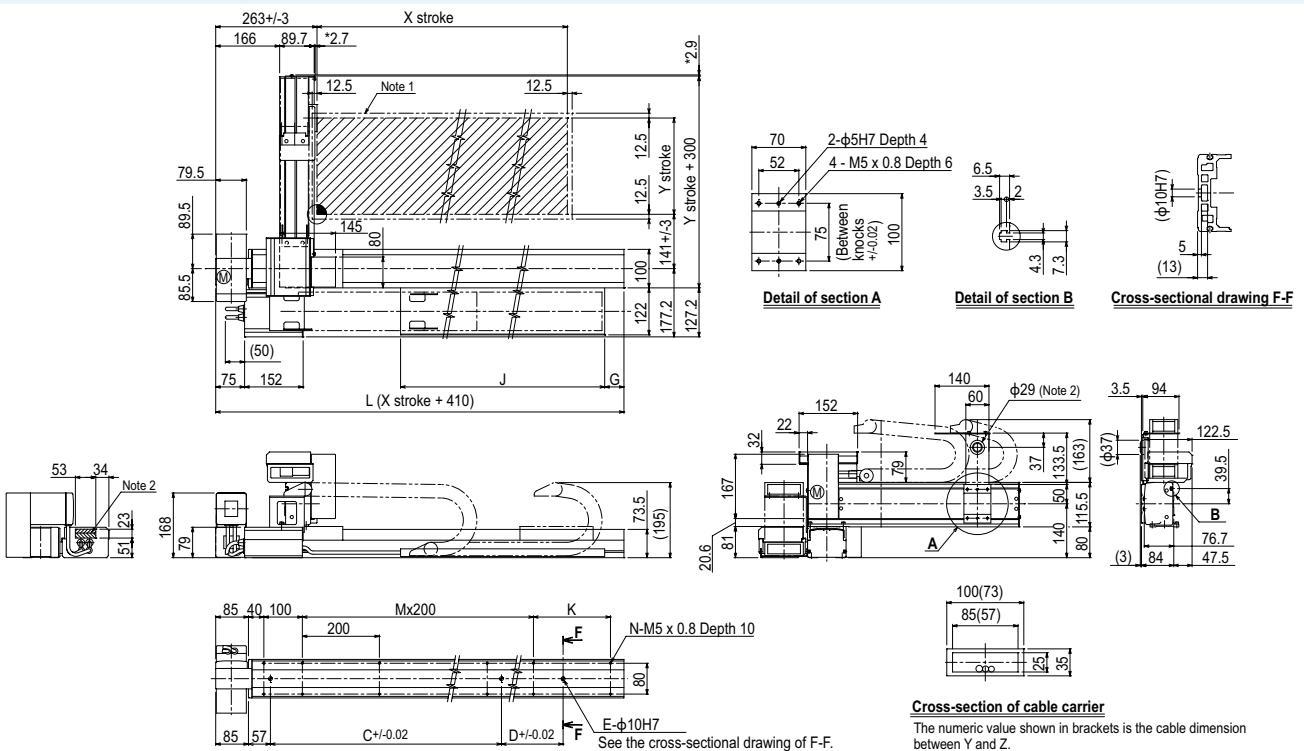
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
150	7
250	6
350	5
450	5
550	3

Controller

Controller	Operation method
RCX320	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222	

FXyBx 2 axes / IO (A1)



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. The dimension marked with an asterisk (*) indicates the height of the screw.

X stroke	150	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450
L	560	660	760	860	960	1060	1160	1260	1360	1460	1560	1660	1760	1860	1960	2060	2160	2260	2360	2460	2560	2660	2760	2860
C	240	420	600	600	780	780	960	960	1140	1140	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320
D	-	-	-	-	-	-	-	-	-	-	-	240	240	420	420	600	780	780	960	960	1140	1140	1320	1320
E	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3
G	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50
J	330	330	430	430	530	530	630	630	730	730	830	830	930	930	1030	1030	1130	1130	1230	1230	1330	1330	1430	1430
K	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200
M	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12
N	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
Y stroke	150	250	350	450	550																			

Articulated robots YA
Linear conveyor modules LCM
Single-axis robots CX
Motor-less single axis actuator Robonity
Compact single-axis robots TRANSEVO
Single-axis robots FLIP-X
Linear motor single-axis robots PHASER
Cartesian robots XY-X
SCARA robots YK-X
Pick & place robots YP-X
CLEAN
CONTROLLER
INFORMATION
Arm type
Gantry type
Moving arm type
Pole type
XZ type

SXYx 2 axes

● Arm type ● Cable carrier



Ordering method

SXYx - C

Model	Cable	Combination	X-axis stroke	Y-axis stroke	Cable
A1			15 to 105cm	15 to 65cm	3L: 3.5m
A2					5L: 5m
A3					10L: 10m
A4					

RCX320-2

Controller / Number of controllable axes	Safety standard	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery

Specify various controller setting items. RCX320 ▶ P.660

RCX222

Controller	Usable for CE	I/O selection 1	I/O selection 2

Specify various controller setting items. RCX222 ▶ P.670

Specification

	X-axis	Y-axis
Axis construction ^{Note 1}	F14H	F14
AC servo motor output (W)	200	100
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20
Maximum speed ^{Note 4} (mm/sec)	1200	1200
Moving range (mm)	150 to 1050	150 to 650
Robot cable length (m)	Standard: 3.5 Option: 5,10	

Note 1. Use caution that the flange 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 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.

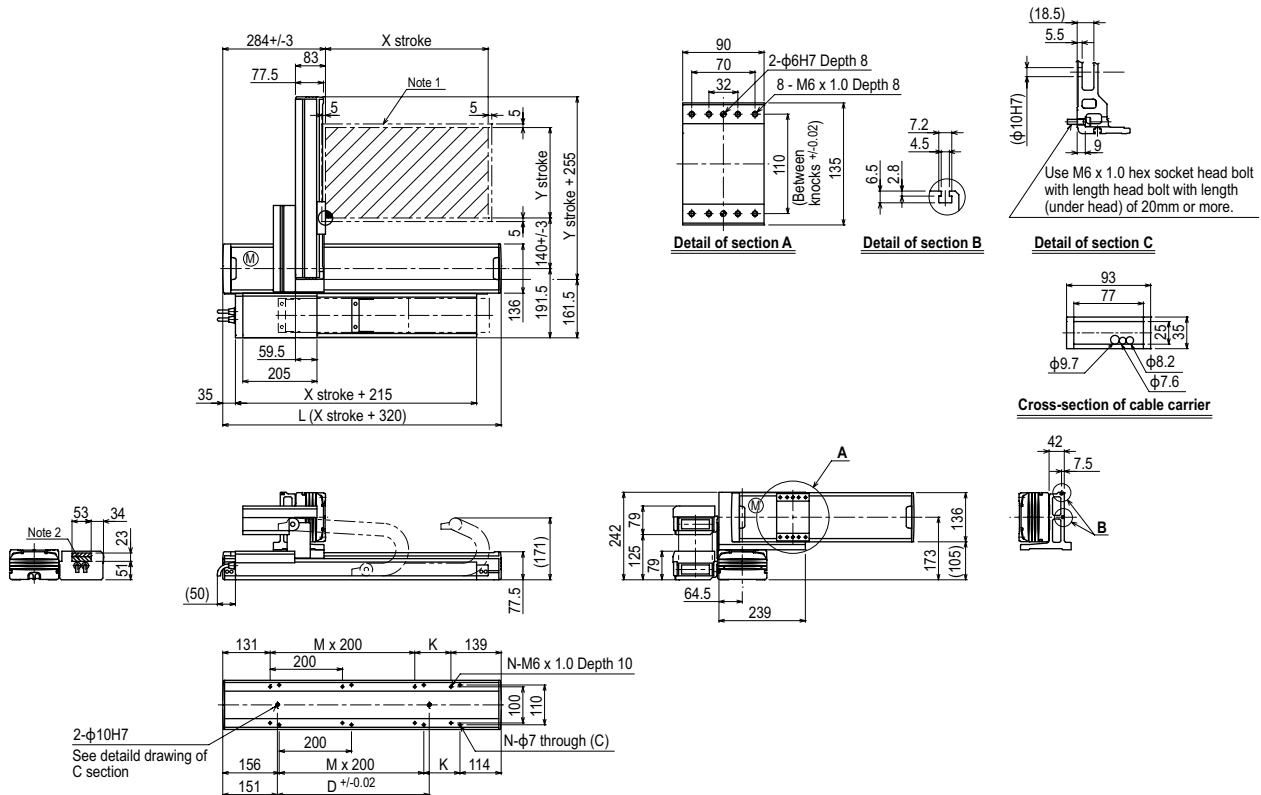
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
150	20
250	17
350	15
450	13
550	11
650	9

Controller

Controller	Operation method
RCX320	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222	

SXYx 2 axes A1

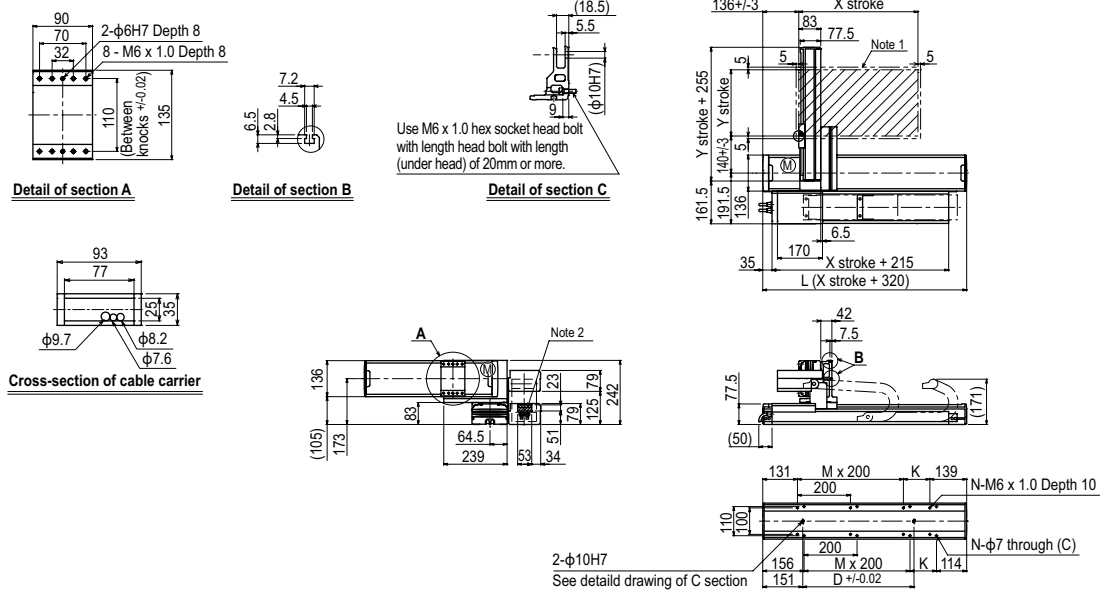


X stroke	Y stroke										
	150	250	350	450	550	650	750	850	950	1050	
L	470	570	670	770	870	970	1070	1170	1270	1370	
K	200	100	200	100	200	100	200	100	200	100	
D	240	240	420	420	600	600	780	960	960	1140	
M	0	1	1	2	2	3	3	4	4	5	
N	4	6	6	8	8	10	10	12	12	14	
Maximum speed for each stroke (mm/sec)											
X-axis	1200					960	780	600	540		
Speed setting	-					80%	65%	50%	45%		

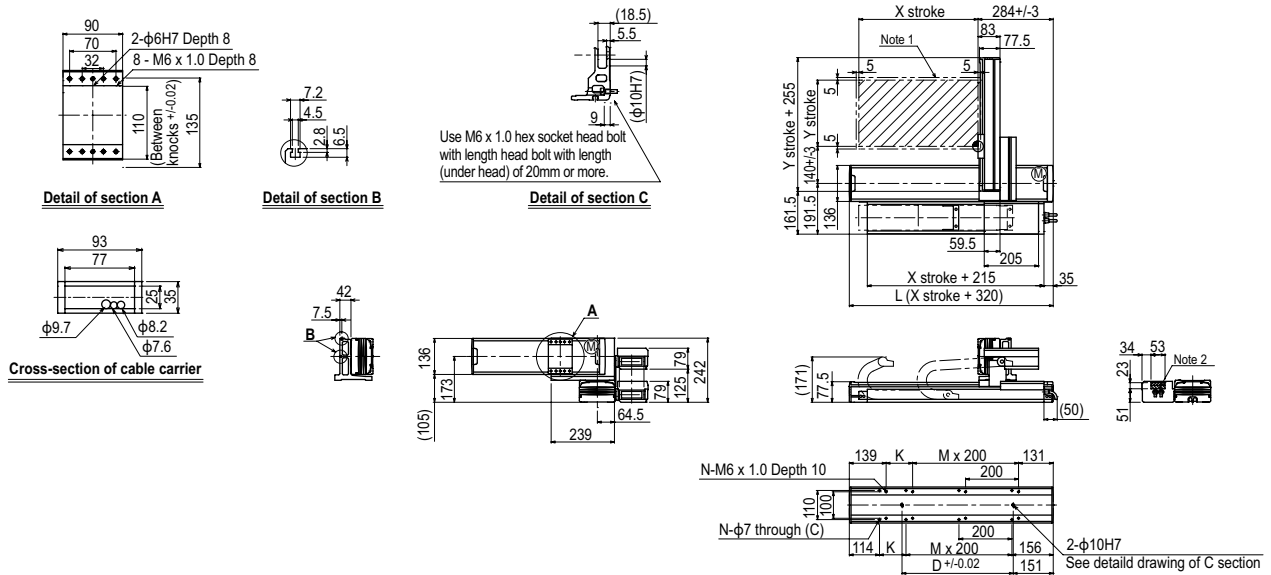
Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. The shaded position indicates a user cable extraction port.

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.

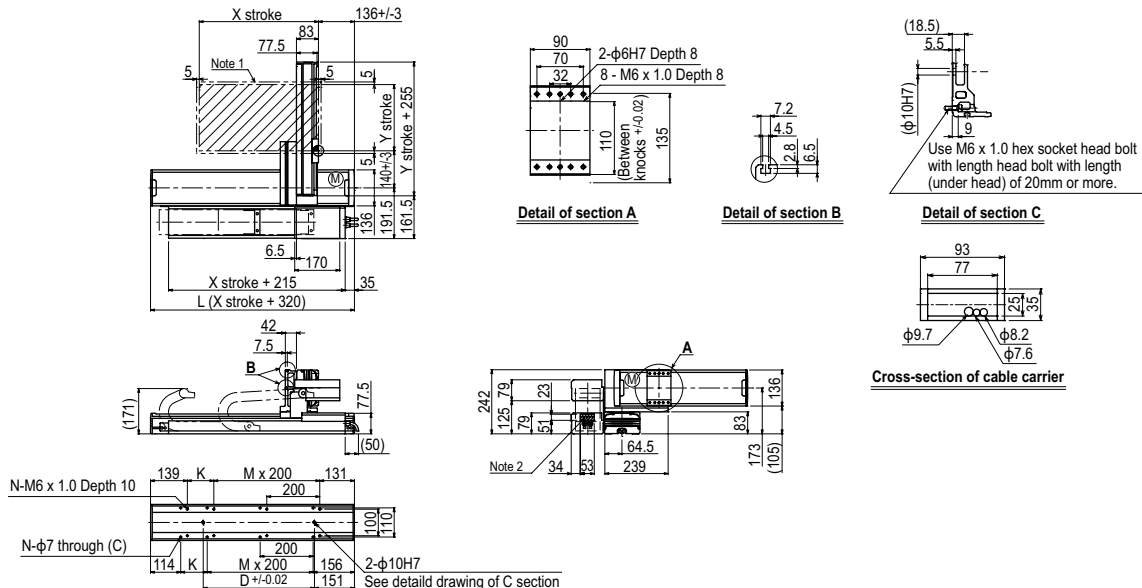
SXYx 2 axes **A2**



SXYx 2 axes **A3**



SXYx 2 axes **A4**



- Articulated robots **YA**
- Linear conveyor modules **LCM**
- Single-axis robots **CX**
- Motor-less single axis actuator **Robonity**
- Compact single-axis robots **TRANSERO**
- Single-axis robots **FLIP-X**
- Linear motor single-axis robots **PHASER**
- Cartesian robots **XY-X**
- SCARA robots **YK-X**
- Pick & place robots **YP-X**
- CLEAN
- CONTROLLER
- INFORMATION
- Arm type
- Gantry type
- Moving arm type
- Pole type
- XZ type

SXYx 2 axes

● Arm type ● Whipover

Ordering method

SXYx - S

Model	Cable	Combination	X-axis stroke	Y-axis stroke	Cable
A1			15 to 85cm	15 to 65cm	3L: 3.5m
A2					5L: 5m
A3					10L: 10m
A4					

RCX320-2

Controller / Number of controllable axes	Safety standard	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery
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Specify various controller setting items. RCX320 ▶ **P.660**

RCX222

Controller	Usable for CE	I/O selection 1	I/O selection 2
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Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Y-axis
Axis construction <small>Note 1</small>	F14H	F14
AC servo motor output (W)	200	100
Repeatability <small>Note 2</small> (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	20	20
Maximum speed <small>Note 4</small> (mm/sec)	1200	1200
Moving range (mm)	150 to 850	150 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. Leads not listed in the catalog are also available. Contact us for details.
 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.

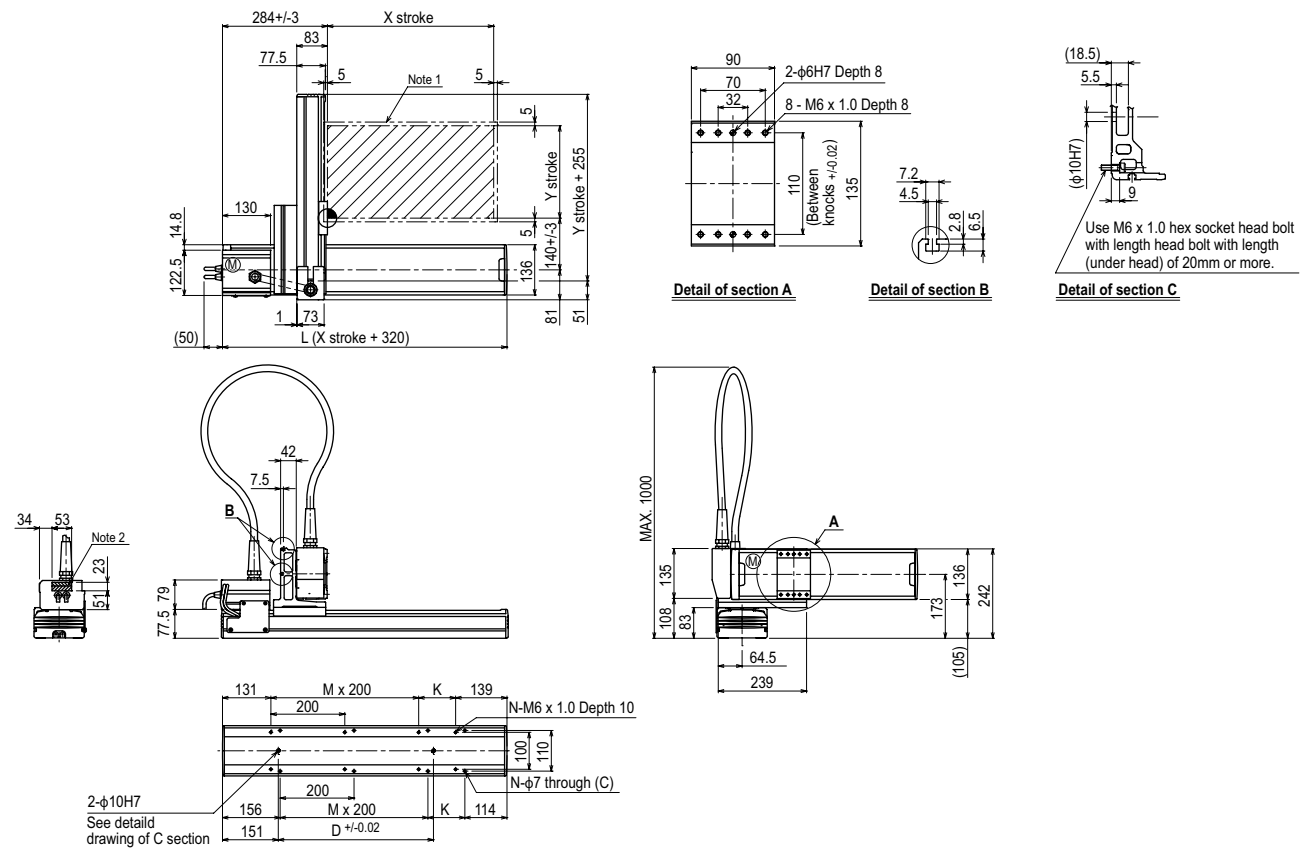
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
150	20
250	17
350	15
450	13
550	11
650	9

Controller

Controller	Operation method
RCX320	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222	

SXYx 2 axes A1

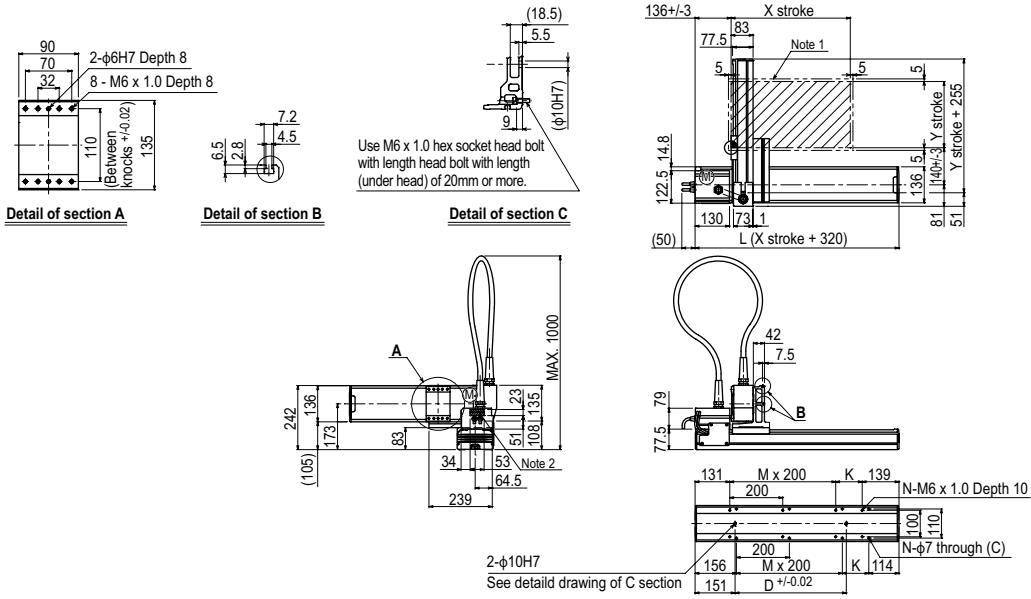


X stroke	150	250	350	450	550	650	750	850
L	470	570	670	770	870	970	1070	1170
K	200	100	200	100	200	100	200	100
D	240	240	420	420	600	600	780	960
M	0	1	1	2	2	3	3	4
N	4	6	6	8	8	10	10	12
Y stroke	150	250	350	450	550	650		
Maximum speed for each stroke (mm/sec) <small>Note 3</small>	X-axis		1200		960		780	
	Speed setting		-		80%		65%	

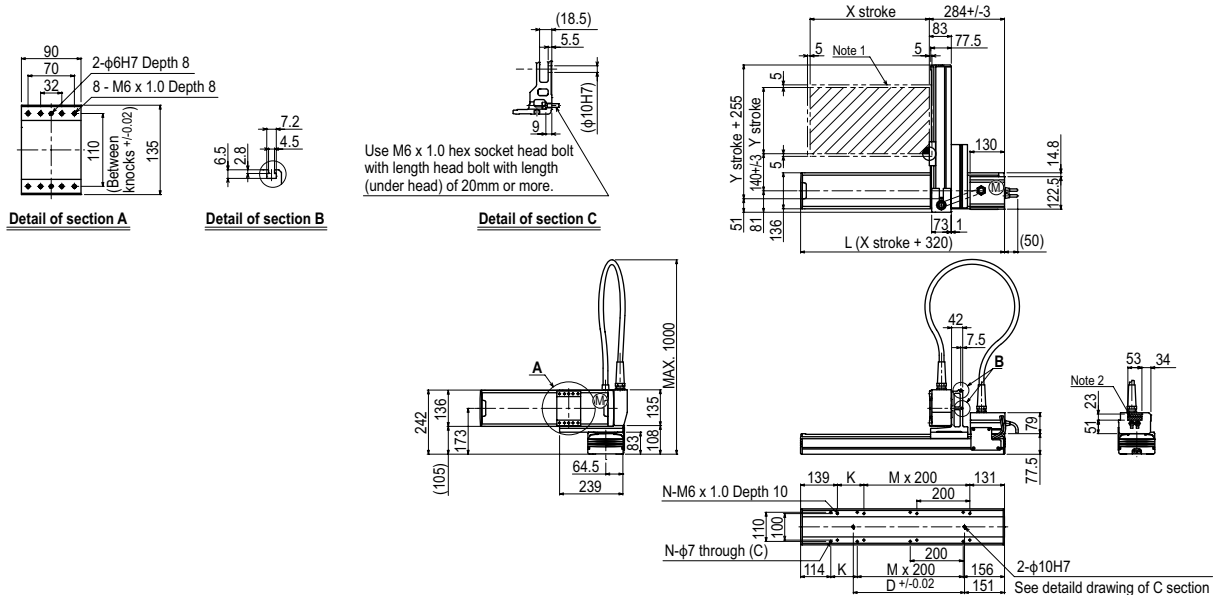
Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. The shaded position indicates a user cable extraction port.
 Note 3. When the X-axis stroke is longer than 750mm, resonance of the ball screw may occur depending on the operation 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.

- Articulated robots **YA**
- Linear conveyor modules **LCM**
- Single-axis robots **CX**
- Motor-less single-axis actuator **Robonity**
- Compact single-axis robots **TRANSERO**
- Single-axis robots **FLIP-X**
- Linear motor single-axis robots **PHASER**
- Cartesian robots **XY-X**
- SCARA robots **YK-X**
- Pick & place robots **YP-X**
- CLEAN
- CONTROLLER
- INFORMATION
- Arm type
- Gantry type
- Moving arm type
- Pole type
- XZ type

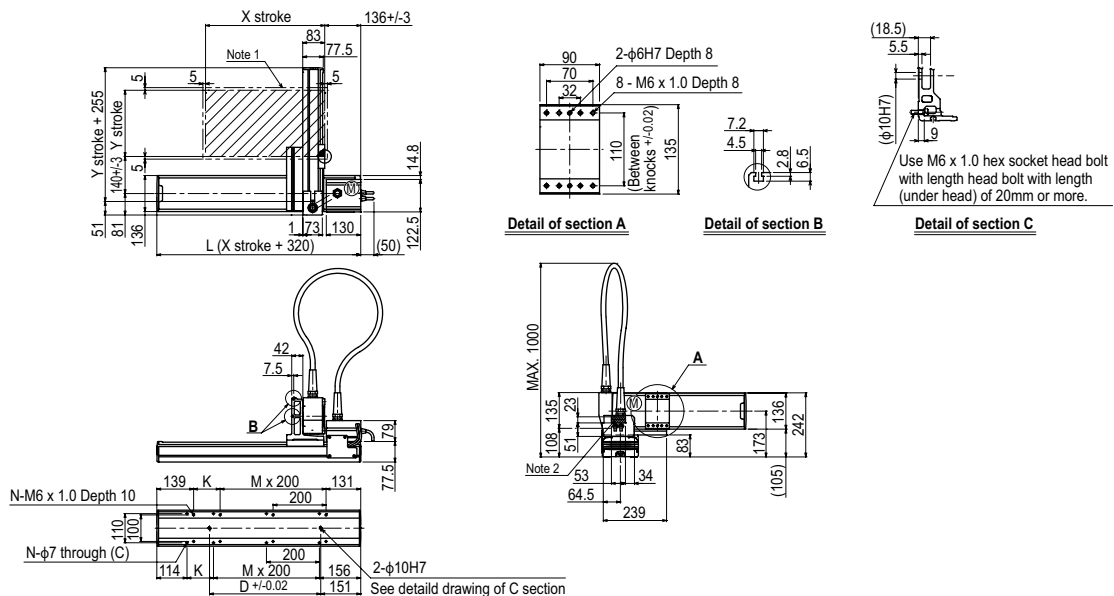
SXYx 2 axes **A2**



SXYx 2 axes **A3**

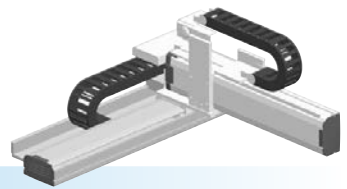


SXYx 2 axes **A4**



SXYx 2 axes / IO

● Arm type ● Cable carrier



Ordering method

SXYx - C [] [] [] **IO** [] [] [] [] []

Model [] **Cable** [] **Combination** [] **X-axis stroke** [] **Y-axis stroke** [] **ZR-axis** [] **Cable** []

RCX320-2 [] [] [] [] [] []

RCX222 [] [] [] [] [] []

Specify various controller setting items. RCX320 ▶ **P.660**
Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Y-axis
Axis construction <small>Note 1</small>	F14H	F14
AC servo motor output (W)	200	100
Repeatability <small>Note 2</small> (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	20	20
Maximum speed <small>Note 4</small> (mm/sec)	1200	1200
Moving range (mm)	150 to 1050	150 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. Leads not listed in the catalog are also available. Contact us for details.
 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.

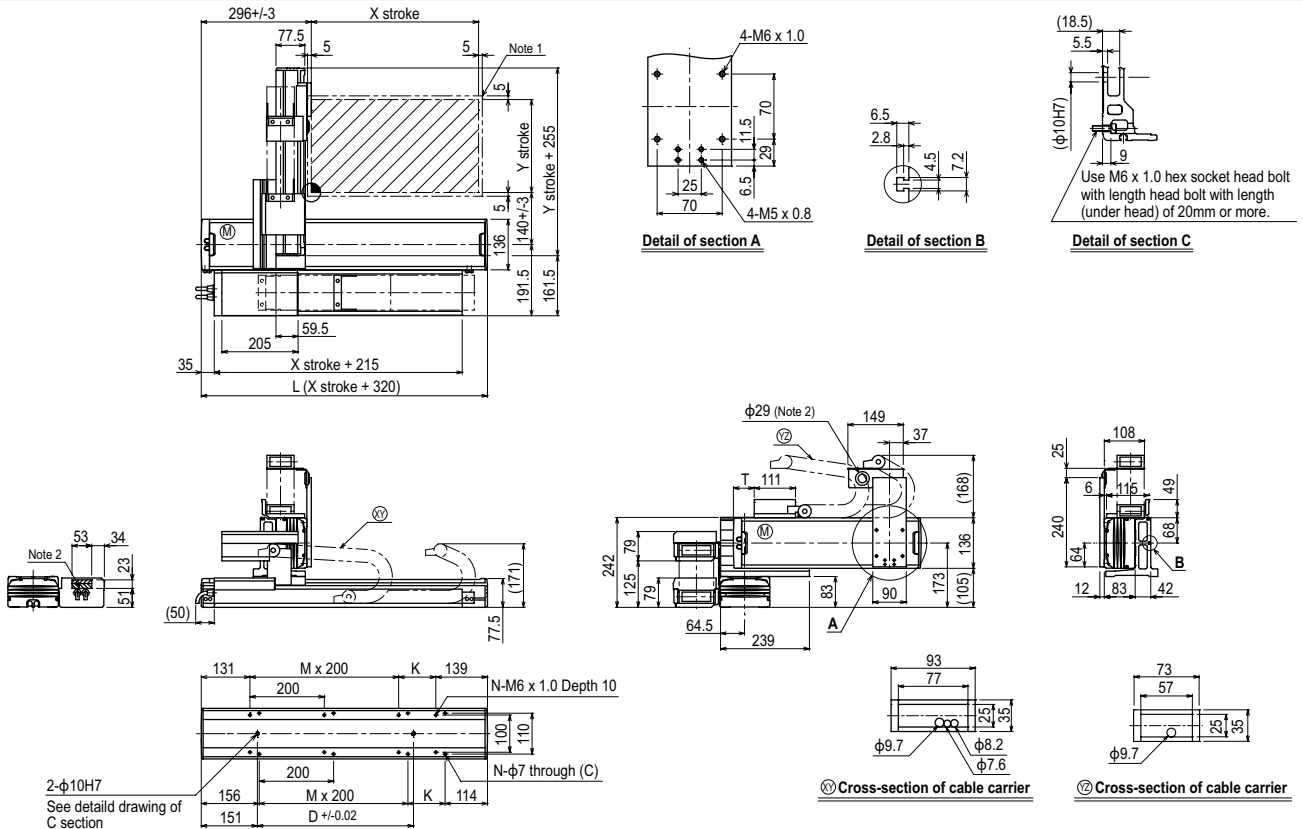
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
150	19
250	16
350	14
450	12
550	10
650	8

Controller

Controller	Operation method
RCX320	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222	

SXYx 2 axes / IO A1



X stroke	150	250	350	450	550	650	750	850	950	1050
L	470	570	670	770	870	970	1070	1170	1270	1370
K	200	100	200	100	200	100	200	100	200	100
D	240	240	420	420	600	600	780	960	960	1140
M	0	1	1	2	2	3	3	4	4	5
N	4	6	6	8	8	10	10	12	12	14
Y stroke	150	250	350	450	550	650				
T	55	110	165	220	275	330				

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 a 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.

Maximum speed for each stroke (mm/sec)	X-axis	1200	960	780	600	540
Speed setting		-	80%	65%	50%	45%

Articulated robots YA
Linear conveyor modules LCM
Single-axis robots CX
Motor-less single axis actuator Robonity
Compact single-axis robots TRANSEVO
Single-axis robots FLIP-X
Linear motor single-axis robots PHASER
Cartesian robots XY-X
SCARA robots YK-X
Pick & place robots YP-X
CLEAN
CONTROLLER
INFORMATION
Arm type
Gantry type
Moving arm type
Pole type
XZ type

SXYx 3 axes / ZF



- Arm type
- Cable carrier
- Z-axis: clamped base / moving table type (100W)

Ordering method

SXYx - C [] [] [] **ZF** [] [] [] **RCX340-3** [] [] [] [] [] [] [] [] [] [] [] []

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
A1			15 to 105cm	15 to 65cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis
Axis construction <small>Note 1</small>	F14H	F14	F10-BK
AC servo motor output (W)	200	100	100
Repeatability <small>Note 2</small> (mm)	+/-0.01	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15	Ball screw φ15
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	20	20	10
Maximum speed <small>Note 4</small> (mm/sec)	1200	1200	600
Moving range (mm)	150 to 1050	150 to 650	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. Leads not listed in the catalog are also available. Contact us for details.
 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.

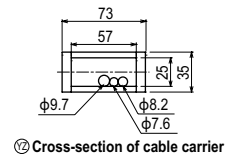
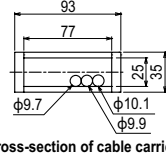
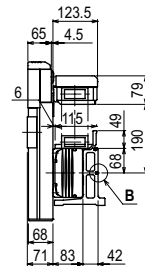
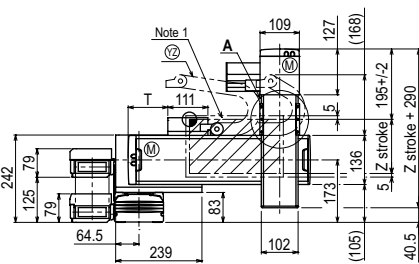
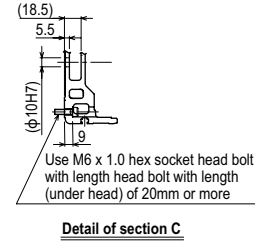
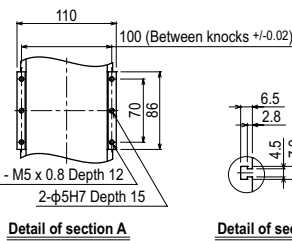
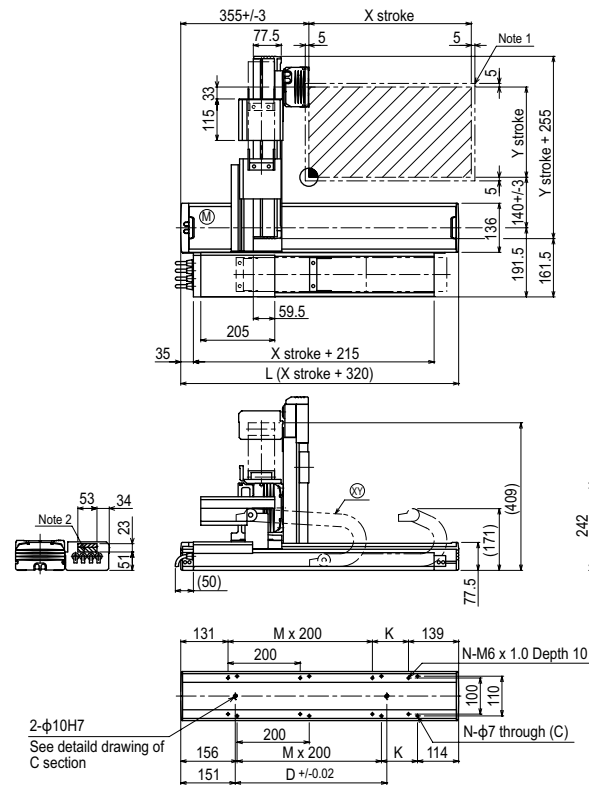
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	10	10	10
250	10	10	9
350	9	8	7
450	7	6	5
550	5	4	3
650	3	2	1

Controller

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

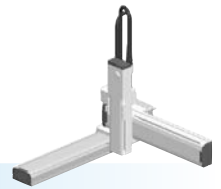
SXYx 3 axes / ZF A1



X stroke	150	250	350	450	550	650	750	850	950	1050
L	470	570	670	770	870	970	1070	1170	1270	1370
K	200	100	200	100	200	100	200	100	200	100
D	240	240	420	420	600	600	780	960	960	1140
M	0	1	1	2	2	3	3	4	4	5
N	4	6	6	8	8	10	10	12	12	14
Y stroke	150	250	350	450	550	650				
T	55	110	165	220	275	330				
Z stroke	150	250	350							
Maximum speed for each stroke (mm/sec) <small>Note 3</small>	X-axis		1200			960		780	600	540
Speed setting			-			80%		65%	50%	45%

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 a 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.



Ordering method

SXYx - S [] [] [] **ZF** [] [] **RCX340-3** [] [] [] [] [] [] [] [] [] [] [] [] [] [] []

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
A1			15 to 85cm	15 to 65cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ **P.678**

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 φ15	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	10
Maximum speed ^{Note 4} (mm/sec)	1200	1200	600
Moving range (mm)	150 to 850	150 to 650	150 to 350
Robot cable length (m)	Standard: 3.5 Option: 5,10		

Note 1. Use caution that the flange 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 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.

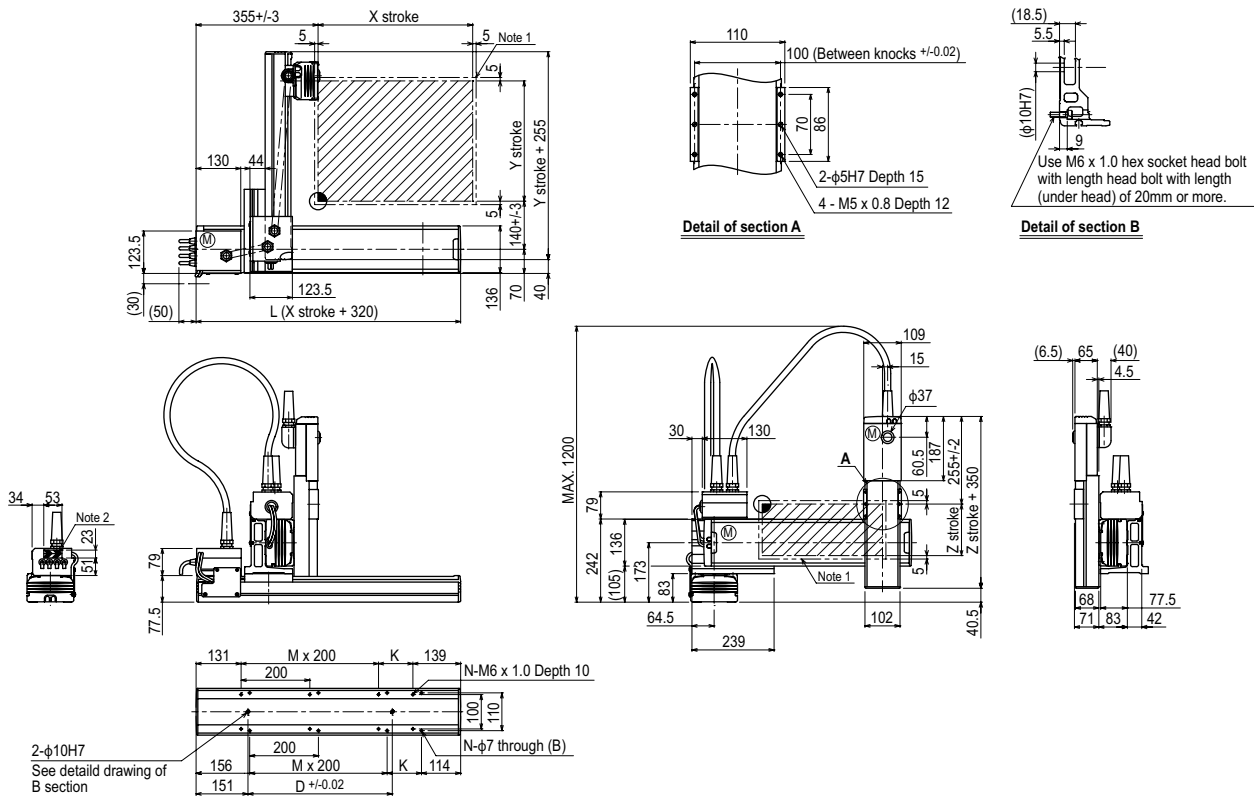
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	10	10	10
250	10	10	9
350	9	8	7
450	7	6	5
550	5	4	3
650	3	2	1

Controller

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

SXYx 3 axes / ZF (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) ^{Note 3}	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 a 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.

Articulated robots YA
 Linear conveyor modules LCM
 Single-axis robots CX
 Motor-less single-axis actuator Robomity
 Compact single-axis robots TRANSEVO
 Single-axis robots FLIP-X
 Linear motor single-axis robots PHASER
 Cartesian robots XY-X
 SCARA robots YK-X
 Pick & place robots YP-X
 CLEAN
 CONTROLLER INFORMATION
 Arm type
 Gantry type
 Moving arm type
 Pole type
 XZ type

SXYx 3 axes / ZFL20



● Arm type ● Cable carrier ● Z-axis: clamped base / moving table type (200W)

Ordering method

SXYx - C - **ZFL20** - **RCX340-3**

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
A1			15 to 105cm	15 to 65cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis
Axis construction ^{Note 1}	F14H	F14	F10H-BK
AC servo motor output (W)	200	100	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	20
Maximum speed ^{Note 4} (mm/sec)	1200	1200	1200
Moving range (mm)	150 to 1050	150 to 650	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. Leads not listed in the catalog are also available. Contact us for details.
 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.

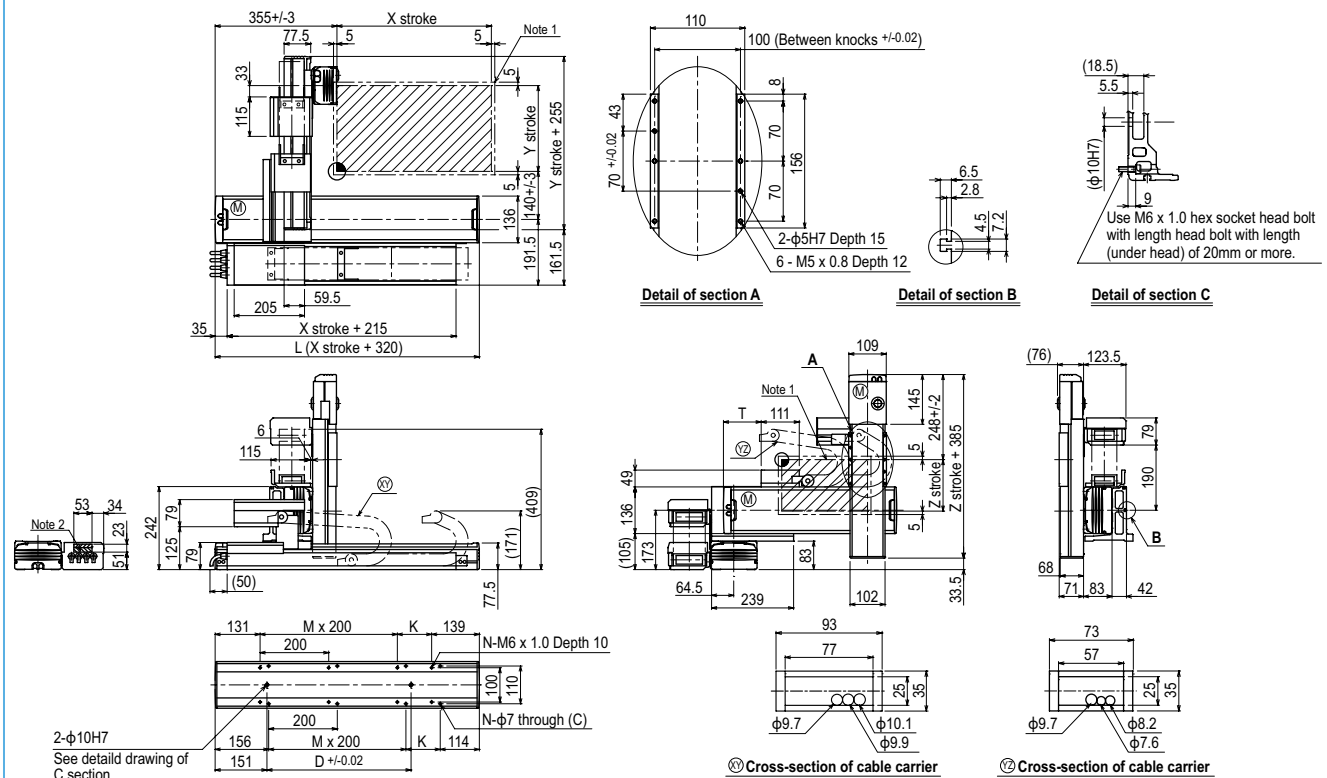
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	8	8	8
250	8	8	8
350	8	7	6
450	6	5	4
550	4	3	2
650	2	1	1

Controller

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

SXYx 3 axes / ZFL20 A1



X stroke	150	250	350	450	550	650	750	850	950	1050		
L	470	570	670	770	870	970	1070	1170	1270	1370		
K	200	100	200	100	200	100	200	100	200	100		
D	240	240	420	420	600	600	780	960	960	1140		
M	0	1	1	2	2	3	3	4	4	5		
N	4	6	6	8	8	10	10	12	12	14		
Y stroke	150	250	350	450	550	650						
T	55	110	165	220	275	330						
Z stroke	150	250	350									
Maximum speed for each stroke (mm/sec)	X-axis		1200		960		780		600		540	
Speed setting			-		80%		65%		50%		45%	

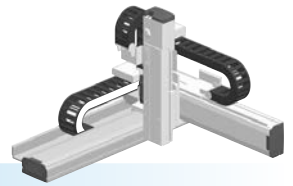
Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. The shaded position indicates a user cable extraction port.

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.

SXYx

3 axes / ZFH

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



Ordering method

SXYx - C [] [] [] **ZFH** [] [] **RCX340-3** [] [] [] [] [] [] [] [] [] []

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	
A1			15 to 105cm	15 to 65cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m									

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis
Axis construction ^{Note 1}	F14H	F14	F10H-BK
AC servo motor output (W)	200	100	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	10
Maximum speed ^{Note 4} (mm/sec)	1200	1200	600
Moving range (mm)	150 to 1050	150 to 650	150 to 350
Robot cable length (m)	Standard: 3.5 Option: 5,10		

Note 1. Use caution that the flange 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 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.

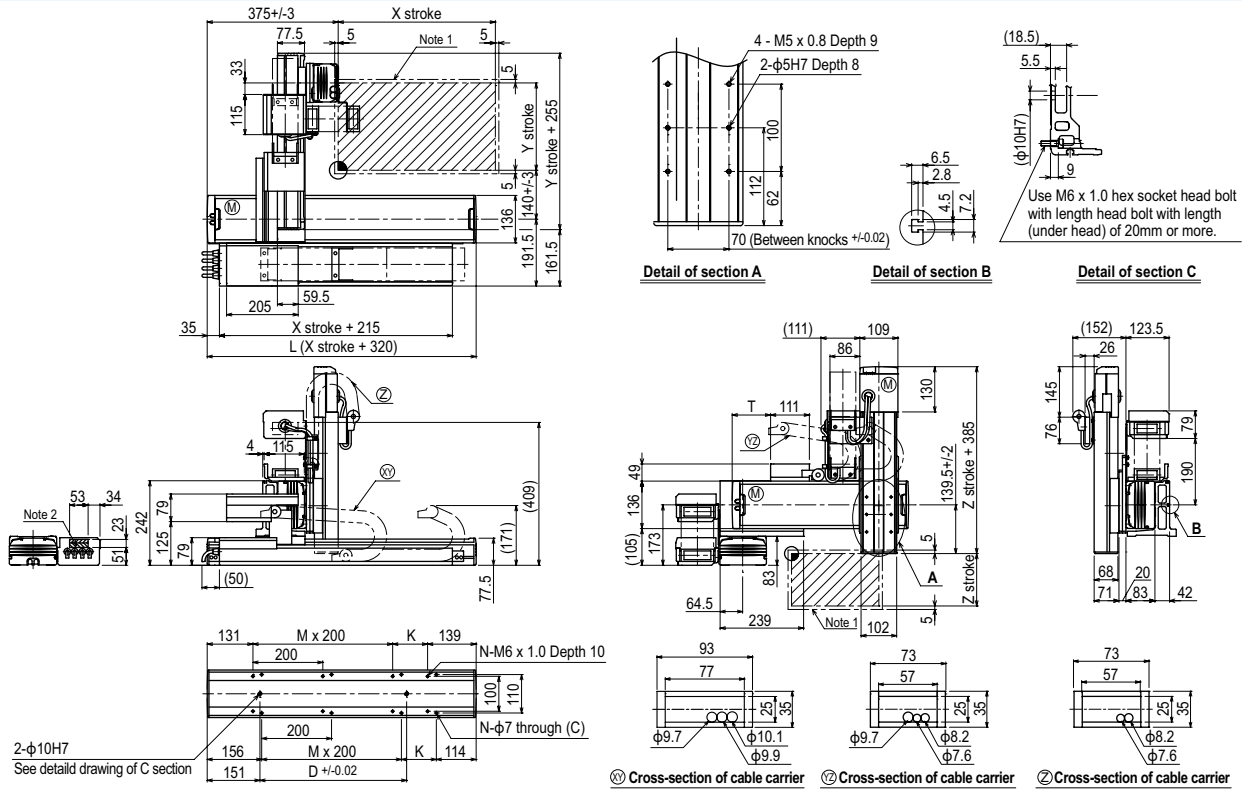
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	13	12	11
250	10	9	8
350	8	7	6
450	6	5	4
550	4	3	2
650	2	1	1

Controller

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

SXYx 3 axes / ZFH (A1)



X stroke											
	150	250	350	450	550	650	750	850	950	1050	
L	470	570	670	770	870	970	1070	1170	1270	1370	
K	200	100	200	100	200	100	200	100	200	100	
D	240	240	420	420	600	600	780	960	960	1140	
M	0	1	1	2	2	3	3	4	4	5	
N	4	6	6	8	8	10	10	12	12	14	
Y stroke	150	250	350	450	550	650					
T	55	110	165	220	275	330					
Z stroke	150	250	350								
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis		1200				960	780	600	540	
	Speed setting		-				80%	65%	50%	45%	

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.

Articulated robots
YA

Linear conveyor modules
LCM

Single-axis robots
CX

Motor-less single-axis actuator
Robomity

Compact single-axis robots
TRANSEVO

Single-axis robots
FLIP-X

Linear motor single-axis robots
PHASER

Cartesian robots
XY-X

SCARA robots
YK-X

Pick & place robots
YP-X

CLEAN

CONTROLLER INFORMATION

Arm type

Gantry type

Moving arm type

Pole type

XZ type

SXYx 3 axes / ZS

● Arm type ● Cable carrier ● Z-axis shaft vertical type



Ordering method

SXYx - C					15		RCX340-3									
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	
A1 A2 A3 A4		A1 A2 A3 A4	15 to 105cm	15 to 65cm	ZS12 ZS6		3L: 3.5m 5L: 5m 10L: 10m									

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis ZS12	Z-axis ZS6
Axis construction ^{Note 1}	F14H	F14	-	
AC servo motor output (W)	200	100	60	
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01	+/-0.02	
Drive system	Ball screw φ15	Ball screw φ15	Ball screw φ12	
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	12	6
Maximum speed ^{Note 4} (mm/sec)	1200	1200	1000	500
Moving range (mm)	150 to 1050	150 to 650	150	
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 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.

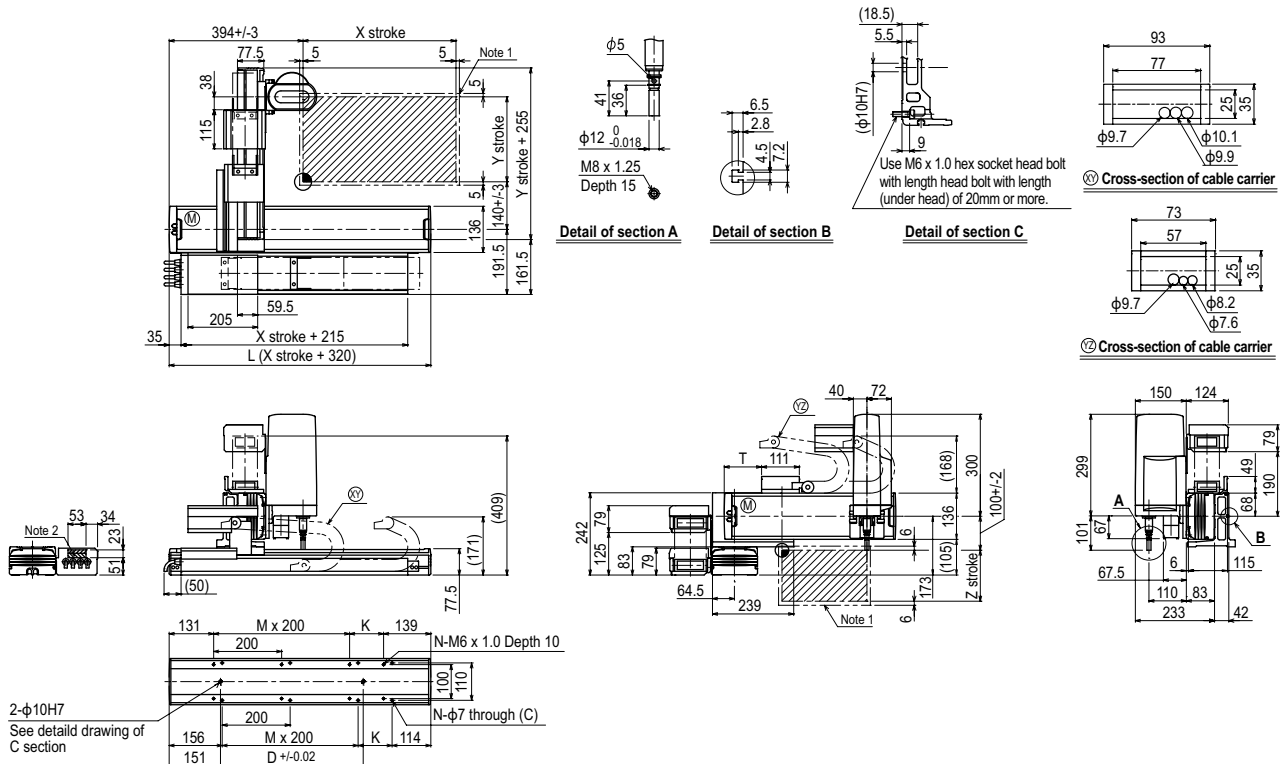
Maximum payload (kg)

Y stroke (mm)	ZS12	ZS6
150 to 650	3	5

Controller

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

SXYx 3 axes / ZS (A1)



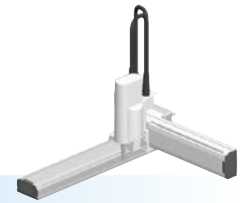
X stroke										
	150	250	350	450	550	650	750	850	950	1050
L	470	570	670	770	870	970	1070	1170	1270	1370
K	200	100	200	100	200	100	200	100	200	100
D	240	240	420	420	600	600	780	960	960	1140
M	0	1	1	2	2	3	3	4	4	5
N	4	6	6	8	8	10	10	12	12	14

Y stroke											
T		150	250	350	450	550	650				
		55	110	165	215	270	325				

Z stroke												
		150										
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis	1200					960	780	600	540		
	Speed setting	-					80%	65%	50%	45%		

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 a 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.



Ordering method

SXYx - S					15		RCX340-3								
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
A1		A1	15 to 85cm	15 to 65cm	ZS12		3L: 3.5m								
A2		A2			ZS6		5L: 5m								
A3		A3					10L: 10m								
A4		A4													

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis: ZS12	Z-axis: ZS6
Axis construction ^{Note 1}	F14H	F14	-	
AC servo motor output (W)	200	100	60	
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01	+/-0.02	
Drive system	Ball screw φ15	Ball screw φ15	Ball screw φ12	
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	12	6
Maximum speed ^{Note 4} (mm/sec)	1200	1200	1000	500
Moving range (mm)	150 to 850	150 to 650	150	
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 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.

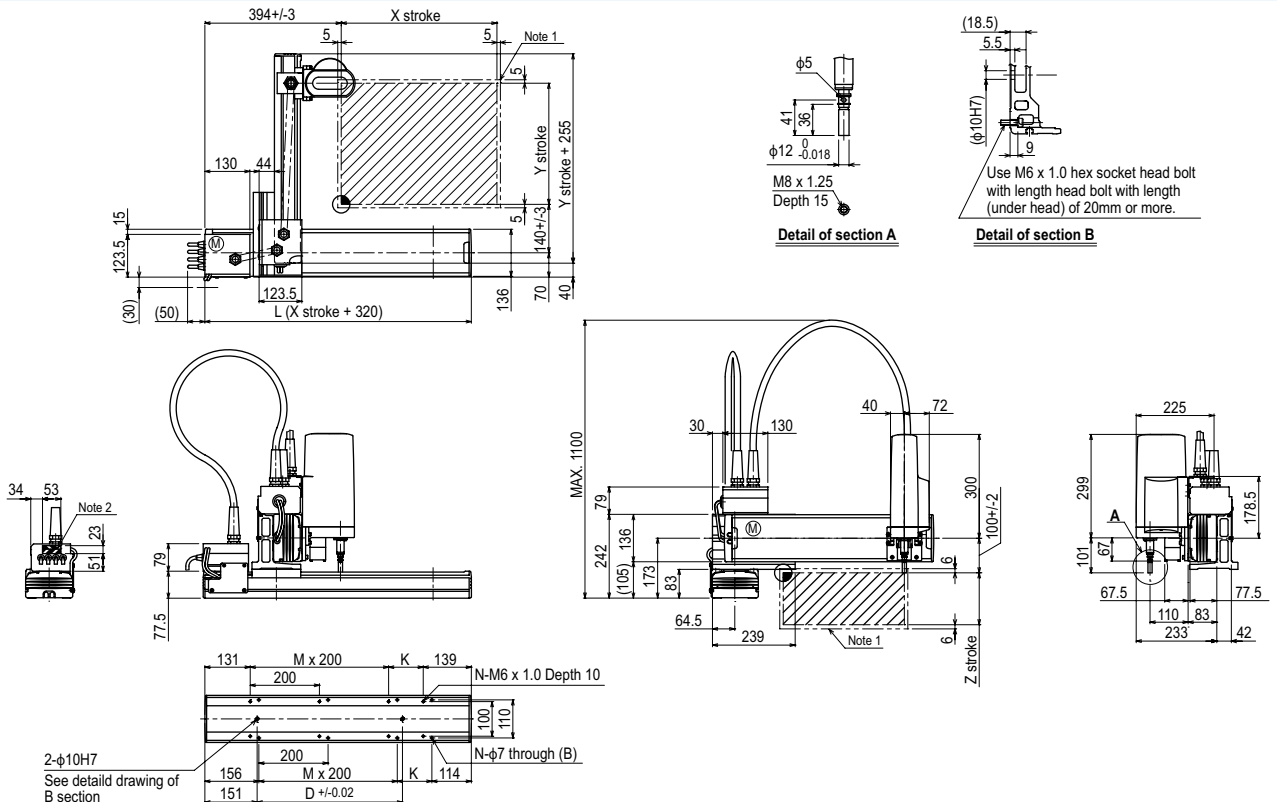
Maximum payload (kg)

Y stroke (mm)	ZS12	ZS6
150 to 650	3	5

Controller

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

SXYx 3 axes / ZS (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							
Maximum speed for each stroke (mm/sec) ^{Note 3}	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 a 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.

Articulated robots
YA

Linear conveyor modules
LCM

Single-axis robots
CX

Motor-less single axis actuator
Robomity

Compact single-axis robots
TRANSEVO

Single-axis robots
FLIP-X

Linear motor single-axis robots
PHASER

Cartesian robots
XY-X

SCARA robots
YK-X

Pick & place robots
YP-X

CLEAN

CONTROLLER INFORMATION

Arm type

Gantry type

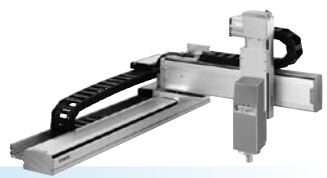
Moving arm type

Pole type

XZ type

SXYx

4 axes / ZRF



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

Ordering method

SXYx - C [] [] [] **ZRF** [] [] **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	
		A1	15 to 105cm	15 to 65cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m	Specify various controller setting items. RCX340 ▶ P.678								
		A2														
		A3														
		A4														

Specification

	X-axis	Y-axis	Z-axis	R-axis
Axis construction ^{Note 1}	F14H	F14	F10-BK	R5
AC servo motor output (W)	200	100	100	50
Repeatability ^{Note 2} (XYZ: mm) (R: °)	+/-0.01	+/-0.01	+/-0.01	+/-0.0083
Drive system	Ball screw $\phi 15$	Ball screw $\phi 15$	Ball screw $\phi 15$	Harmonic gear
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	10	(1/50)
Maximum speed ^{Note 4} (XYZ: mm/sec) (R: °/sec)	1200	1200	600	360
Moving range (XYZ: mm) (R: °)	150 to 1050	150 to 650	150 to 350	360
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 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.

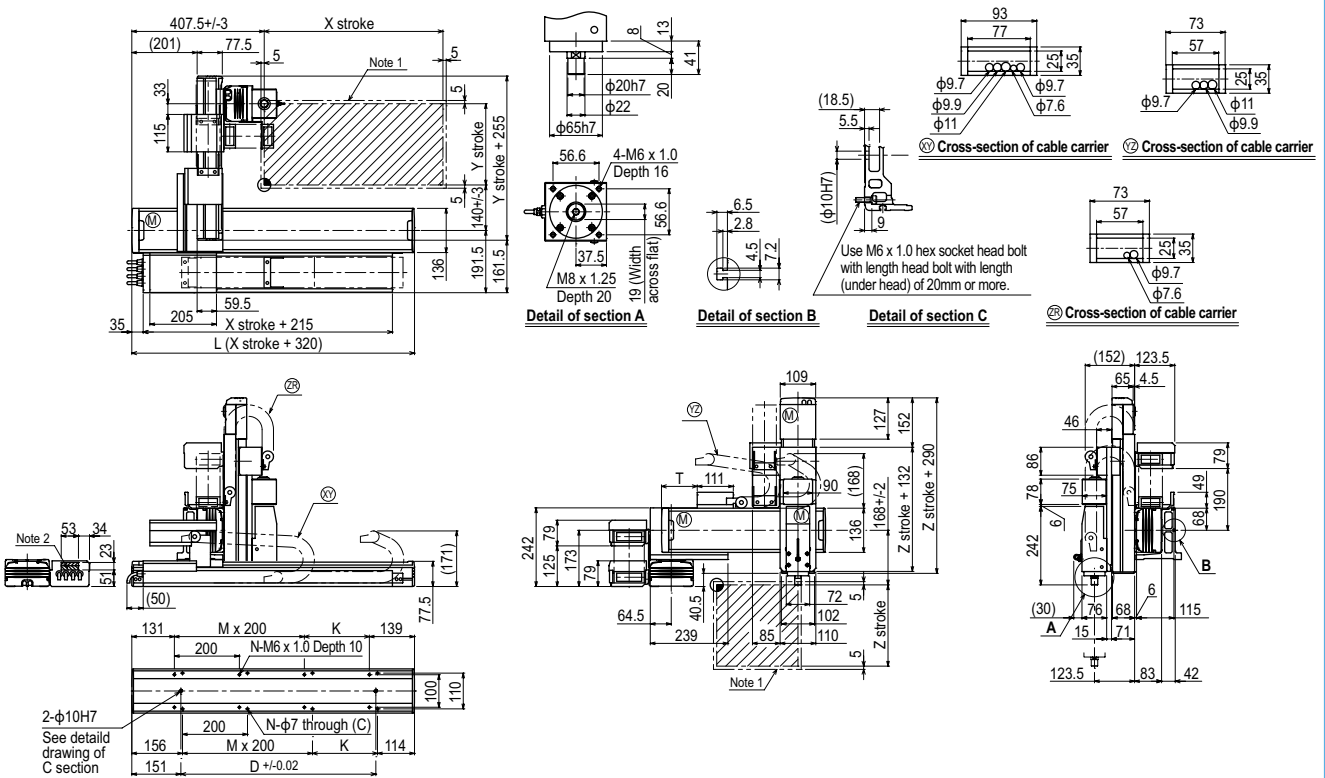
Maximum payload (kg)

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

SXYx 4 axes / ZRF (A1)



X stroke	150	250	350	450	550	650	750	850	950	1050	
	L	470	570	670	770	870	970	1070	1170	1270	1370
K	200	100	200	100	200	100	200	100	200	100	
D	240	240	420	420	600	600	780	960	960	1140	
M	0	1	1	2	2	3	3	4	4	5	
N	4	6	6	8	8	10	10	12	12	14	
Y stroke											
T	150	250	350	450	550	650					
	55	110	165	220	275	330					
Z stroke											
	150	250	350								
Maximum speed for each stroke (mm/sec)	X-axis		1200			960	780	600	540		
	Speed setting		-			80%	65%	50%	45%		

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 a 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.

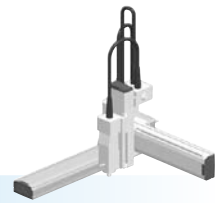
SXYx

4 axes / ZRF

● Arm type

● Whipover

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



Ordering method

SXYx - S				ZRF			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	
A1			15 to 85cm	15 to 65cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m									

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis	R-axis
Axis construction ^{Note 1}	F14H	F14	F10-BK	R5
AC servo motor output (W)	200	100	100	50
Repeatability ^{Note 2} (XYZ: mm) (R: °)	+/-0.01	+/-0.01	+/-0.01	+/-0.0083
Drive system	Ball screw φ15	Ball screw φ15	Ball screw φ15	Harmonic gear
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	10	(1/50)
Maximum speed ^{Note 4} (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 flange 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 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.

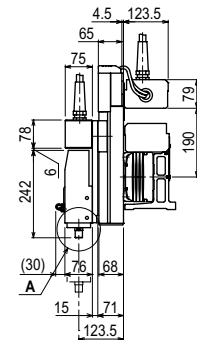
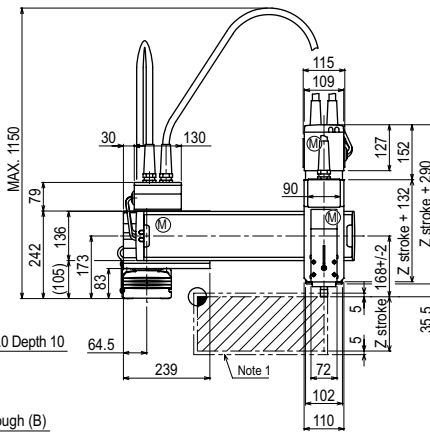
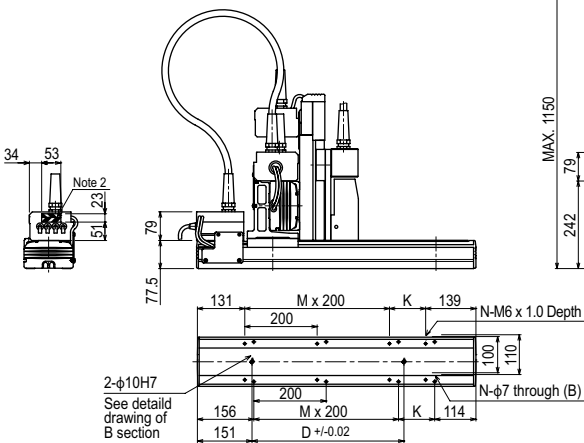
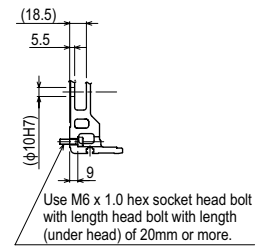
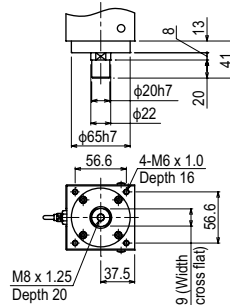
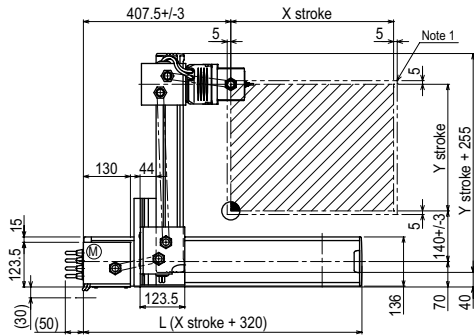
Maximum payload (kg)

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
RCX340	Programming / I/O point trace / 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) ^{Note 3}	X-axis	1200				960	780		
	Speed setting	-				80%	65%		

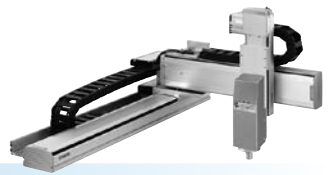
Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. The shaded position indicates a user cable extraction port.

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.

Articulated robots YA
 Linear conveyor modules LCM
 Single-axis robots CX
 Motor-less single-axis robots Robomity
 Compact single-axis robots TRANSEVO
 Single-axis robots FLIP-X
 Linear motor single-axis robots PHASER
 Cartesian robots XY-X
 SCARA robots YK-X
 Pick & place robots YP-X
 CLEAN
 CONTROLLER INFORMATION
 Arm type
 Gantry type
 Moving arm type
 Pole type
 XZ type

SXYx

4 axes / ZRFL20



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

Ordering method

SXYx - C **ZRFL20** **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
		A1 A2 A3 A4	15 to 105mm 15 to 55cm			15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis	R-axis
Axis construction <small>Note 1</small>	F14H	F14	F10H-BK	R5
AC servo motor output (W)	200	100	200	50
Repeatability <small>Note 2</small> (XYZ: mm) (R: °)	+/-0.01	+/-0.01	+/-0.01	+/-0.0083
Drive system	Ball screw φ15	Ball screw φ15	Ball screw φ15	Harmonic gear
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	20	20	20	(1/50)
Maximum speed <small>Note 4</small> (XYZ: mm/sec) (R: °/sec)	1200	1200	1200	360
Moving range (XYZ: mm) (R: °)	150 to 1050	150 to 550	150 to 350	360
Robot cable length (m)	Standard: 3.5 Option: 5, 10			

Note 1. Use caution that the flange 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 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.

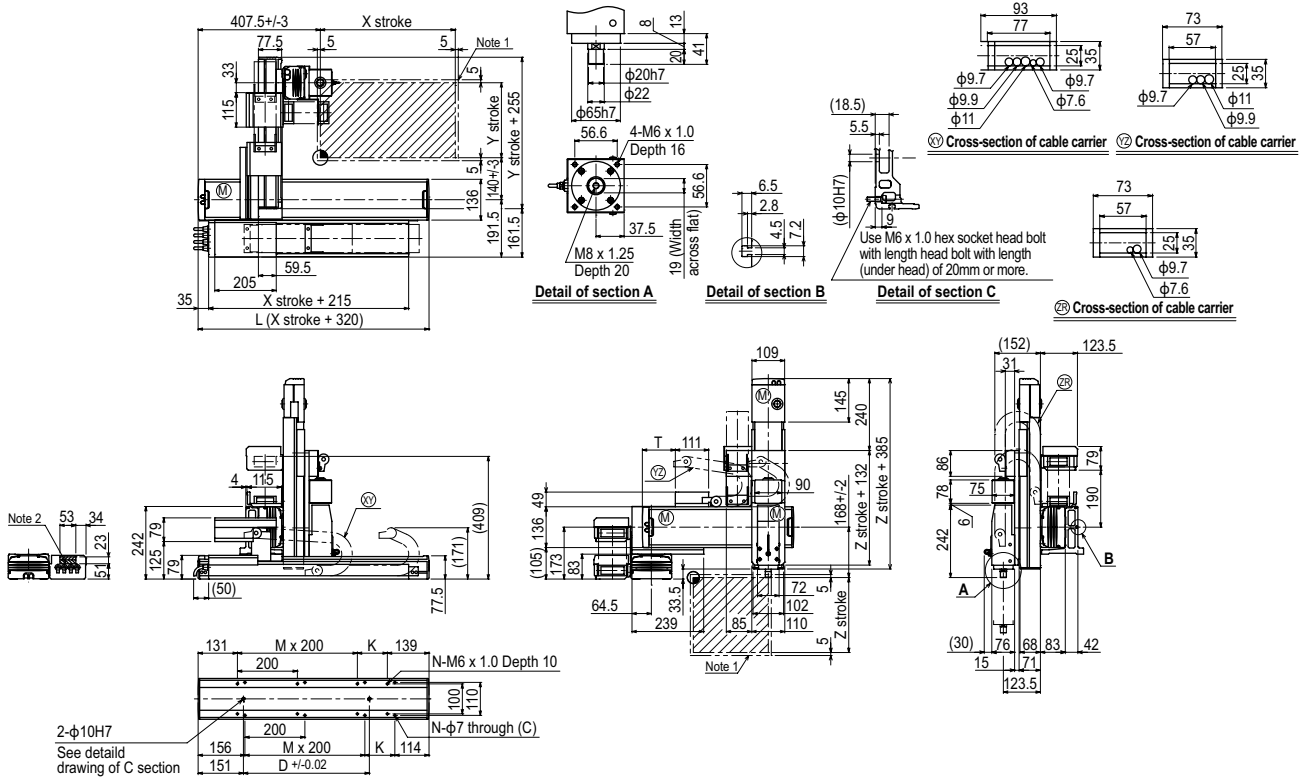
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	4	4	4
250	4	4	3
350	4	3	1
450	2	1	-
550	1	-	-

Controller

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

SXYx 4 axes / ZRFL20 A1



X stroke	150	250	350	450	550	650	750	850	950	1050
	L	470	570	670	770	870	970	1070	1170	1270
K	200	100	200	100	200	100	200	100	200	100
D	240	240	420	420	600	600	780	960	960	1140
M	0	1	1	2	2	3	3	4	4	5
N	4	6	6	8	8	10	10	12	12	14

Y stroke	150	250	350	450	550
	T	55	110	165	220

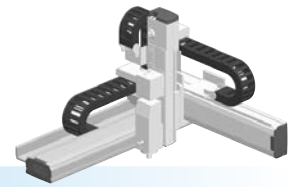
Z stroke	150	250	350			
	Maximum speed for each stroke (mm/sec) <small>Note 3</small>	X-axis	1200	960	780	600
Speed setting		-	80%	65%	50%	45%

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 a 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.

SXYx 4 axes / ZRFH

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



Ordering method

SXYx - C [] [] [] **ZRFH** [] [] **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
A1			15 to 105cm	15 to 55cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis	R-axis
Axis construction ^{Note 1}	F14H	F14	F10H-BK	R5
AC servo motor output (W)	200	100	200	50
Repeatability ^{Note 2} (XYZ: mm) (R: °)	+/-0.01	+/-0.01	+/-0.01	+/-0.0083
Drive system	Ball screw φ15	Ball screw φ15	Ball screw φ15	Harmonic gear
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	10	(1/50)
Maximum speed ^{Note 4} (XYZ: mm/sec) (R: °/sec)	1200	1200	600	360
Moving range (XYZ: mm)(R: °)	150 to 1050	150 to 550	150 to 350	360
Robot cable length (m)	Standard: 3.5 Option: 5, 10			

Note 1. Use caution that the flange 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 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.

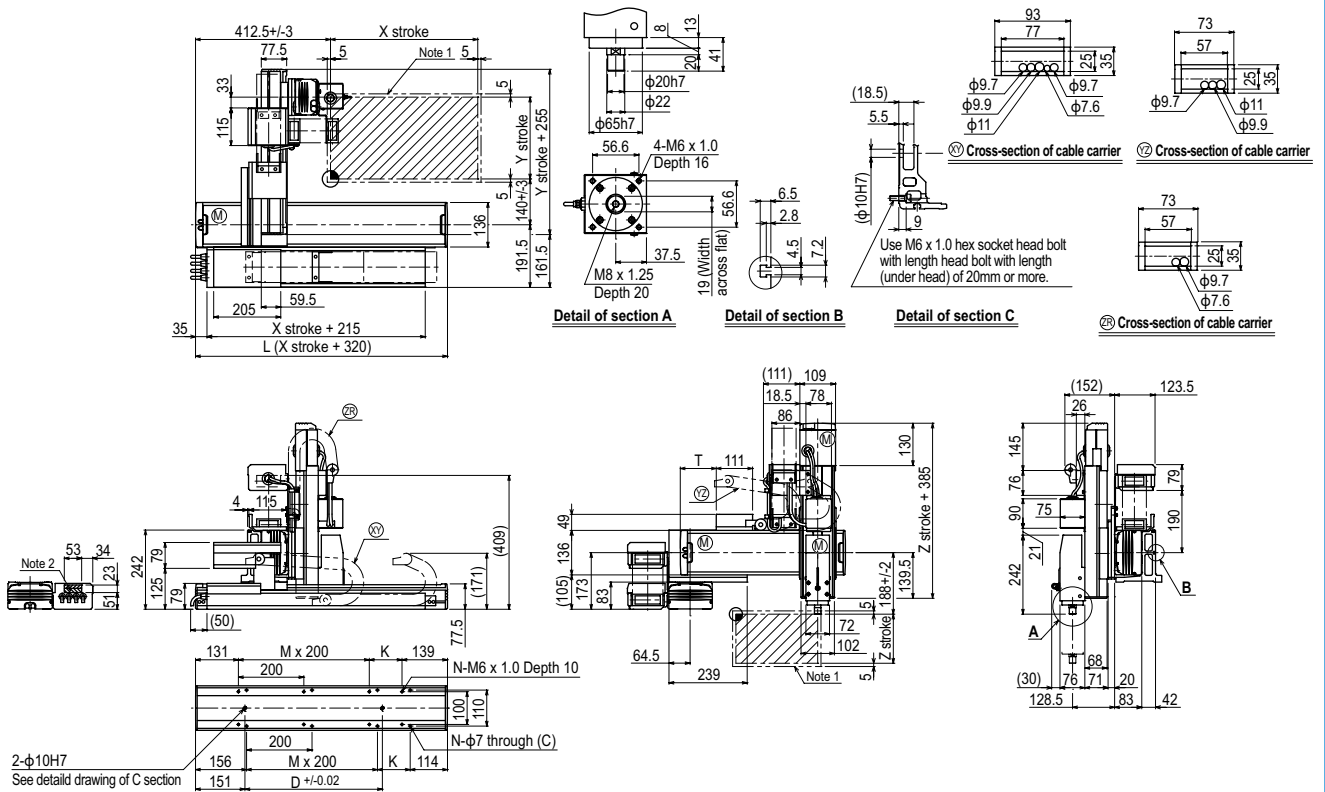
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	9	8	7
250	6	5	4
350	4	3	1
450	2	1	-
550	1	-	-

Controller

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

SXYx 4 axes / ZRFH A1



X stroke	150	250	350	450	550	650	750	850	950	1050	
	L	470	570	670	770	870	970	1070	1170	1270	1370
K	200	100	200	100	200	100	200	100	200	100	
D	240	240	420	420	600	600	780	960	960	1140	
M	0	1	1	2	2	3	3	4	4	5	
N	4	6	6	8	8	10	10	12	12	14	
Y stroke	150	250	350	450	550						
T	55	110	165	220	275						
Z stroke	150	250	350								
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis	1200				960	780	600	540		
	Speed setting	-				80%	65%	50%	45%		

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.

Articulated robots
YA

Linear conveyor modules
LCM

Single-axis robots
CX

Motor-less single-axis actuator
Robomity

Compact single-axis robots
TRANSEVO

Single-axis robots
FLIP-X

Linear motor single-axis robots
PHASER

Cartesian robots
XY-X

SCARA robots
YK-X

Pick & place robots
YP-X

CLEAN

CONTROLLER INFORMATION

Arm type

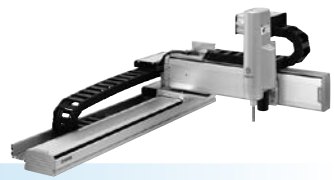
Gantry type

Moving arm type

Pole type

XZ type

SXYx 4 axes / ZRS



- Arm type
- Cable carrier
- ZR axis integrated type

Ordering method

SXYx - C [] [] [] [] **15** [] **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
A1		A1	15 to 105cm	15 to 65cm	ZRS12		3L: 3.5m								
A2		A2			ZRS6		5L: 5m								
A3		A3					10L: 10m								
A4		A4													

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis: ZRS12	Z-axis: ZRS6	R-axis
Axis construction <small>Note 1</small>	F14H	F14	-	-	-
AC servo motor output (W)	200	100	60	100	100
Repeatability <small>Note 2</small> (XYZ: mm) (R: °)	+/-0.01	+/-0.01	+/-0.02	+/-0.005	+/-0.005
Drive system	Ball screw φ15	Ball screw φ15	Ball screw φ12	Harmonic gear	
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	20	20	12	6	(1/50)
Maximum speed <small>Note 4</small> (XYZ: mm/sec) (R: °/sec)	1200	1200	1000	500	1020
Moving range (XYZ: mm) (R: °)	150 to 1050	150 to 650	150		360
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 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.

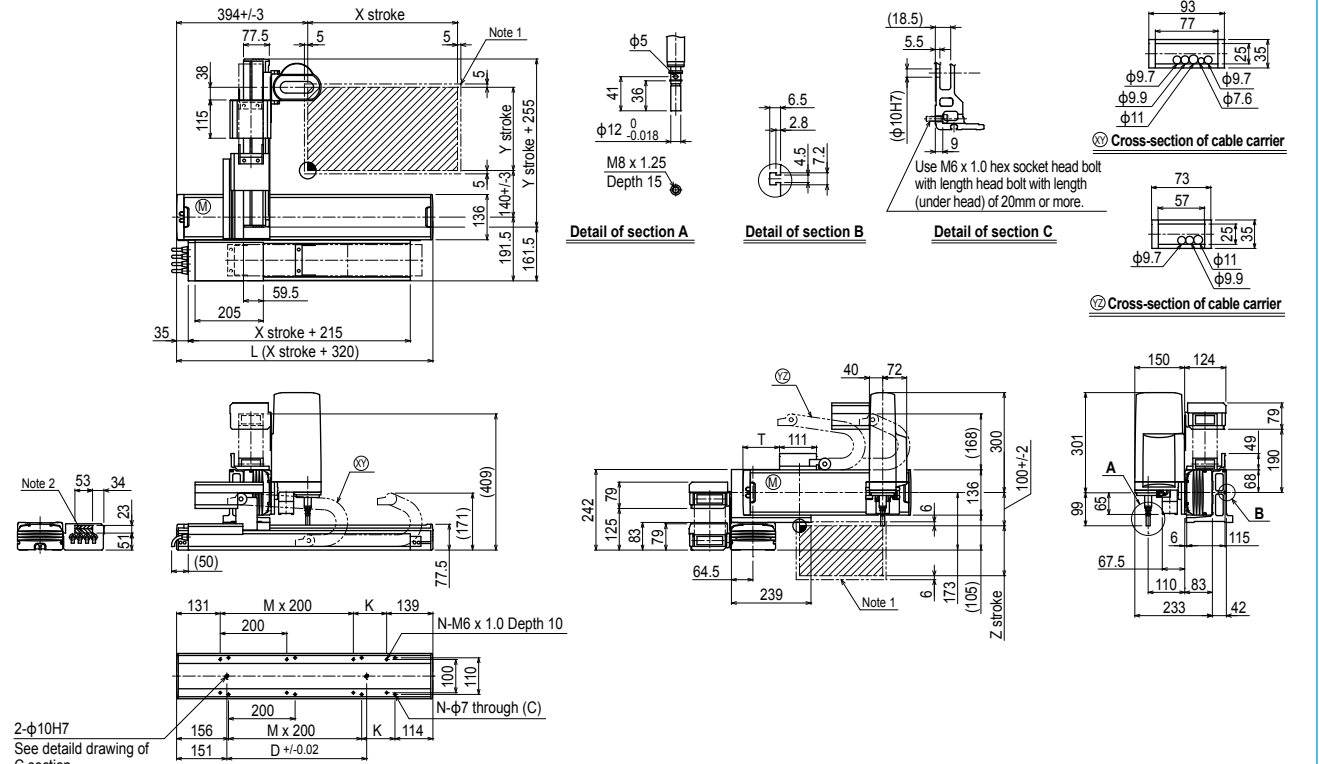
Maximum payload (kg)

Y stroke (mm)	ZRS12	ZRS6
150	3	5
250	3	5
350	3	5
450	3	5
550	3	5
650	3	4

Controller

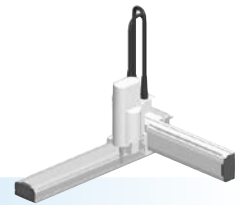
Controller	Operation method
RCX340	Programming / I/O point trace / Remote command / Operation using RS-232C communication

SXYx 4 axes / ZRS (A1)



X stroke	150	250	350	450	550	650	750	850	950	1050			
	L	470	570	670	770	870	970	1070	1170	1270	1370		
K	200	100	200	100	200	100	200	100	200	100			
D	240	240	420	420	600	600	780	960	960	1140			
M	0	1	1	2	2	3	3	4	4	5			
N	4	6	6	8	8	10	10	12	12	14			
Y stroke	150	250	350	450	550	650							
T	55	110	165	220	275	330							
Z stroke	150												
Maximum speed for each stroke (mm/sec) <small>Note 3</small>	X-axis		1200			960		780		600		540	
Speed setting			-			80%		65%		50%		45%	

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 a 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.



Ordering method

SXYx - S [] [] [] [] **15** [] **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
A1			15 to 85cm	15 to 65cm	ZRS12		3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis: ZRS12	Z-axis: ZRS6	R-axis
Axis construction ^{Note 1}	F14H	F14	-	-	-
AC servo motor output (W)	200	100	60		100
Repeatability ^{Note 2} (XYZ: mm) (R: °)	+/-0.01	+/-0.01	+/-0.02		+/-0.005
Drive system	Ball screw φ15	Ball screw φ15	Ball screw φ12		Harmonic gear
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	12	6	(1/50)
Maximum speed ^{Note 4} (XYZ: mm/sec) (R: °/sec)	1200	1200	1000	500	1020
Moving range (XYZ: mm) (R: °)	150 to 850	150 to 650	150		360
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 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.

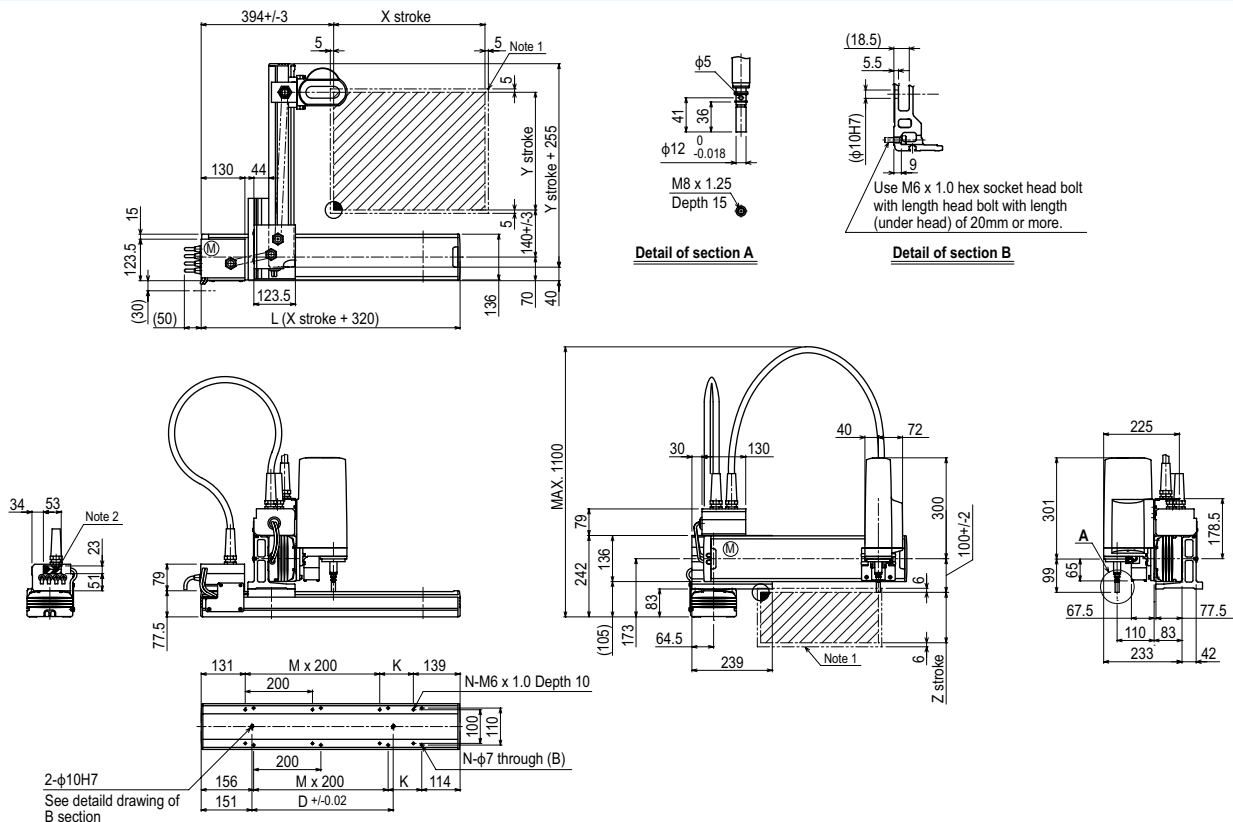
Maximum payload (kg)

Y stroke (mm)	ZRS12	ZRS6
150	3	5
250	3	5
350	3	5
450	3	5
550	3	5
650	3	4

Controller

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

SXYx 4 axes / ZRS A1



X stroke	150	250	350	450	550	650	750	850
	L	470	570	670	770	870	970	1070
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							
Maximum speed for each stroke (mm/sec) ^{Note 3}	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 a 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.

Articulated robots
YA

Linear conveyor modules
LCM

Single-axis robots
CX

Motor-less single axis actuator
Robonity

Compact single-axis robots
TRANSEVO

Single-axis robots
FLIP-X

Linear motor single-axis robots
PHASER

Cartesian robots
XY-X

SCARA robots
YK-X

Pick & place robots
YP-X

CLEAN

CONTROLLER INFORMATION

Arm type

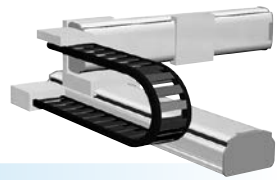
Gantry type

Moving arm type

Pole type

XZ type

SXYBx 2 axes



● Arm type ● Cable carrier

Ordering method

SXYBx - C

Model	Cable	Combination	X-axis stroke	Y-axis stroke	Cable
A1			15 to 305cm	15 to 55cm	3L: 3.5m
A2					5L: 5m
A3					10L: 10m
A4					

RCX320-2

Controller / Number of controllable axes	Safety standard	Regenerative unit	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery
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Specify various controller setting items. RCX320 ▶ **P.660**

RCX222

Controller	Usable for CE	Regenerative unit	I/O selection 1	I/O selection 2
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Specify various controller setting items. RCX222 ▶ **P.670**

Note 1. A regenerative unit is required when the maximum speed exceeds 1250mm/sec.

Specification

	X-axis	Y-axis
Axis construction <small>Note 1</small>	B14H	B14
AC servo motor output (W)	200	100
Repeatability <small>Note 2</small> (mm)	+/-0.04	+/-0.04
Drive system	Timing belt	Timing belt
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	Equivalent to lead 25	Equivalent to lead 25
Maximum speed (mm/sec)	1875	1875
Moving range (mm)	150 to 3050	150 to 550
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.

Maximum payload (kg)

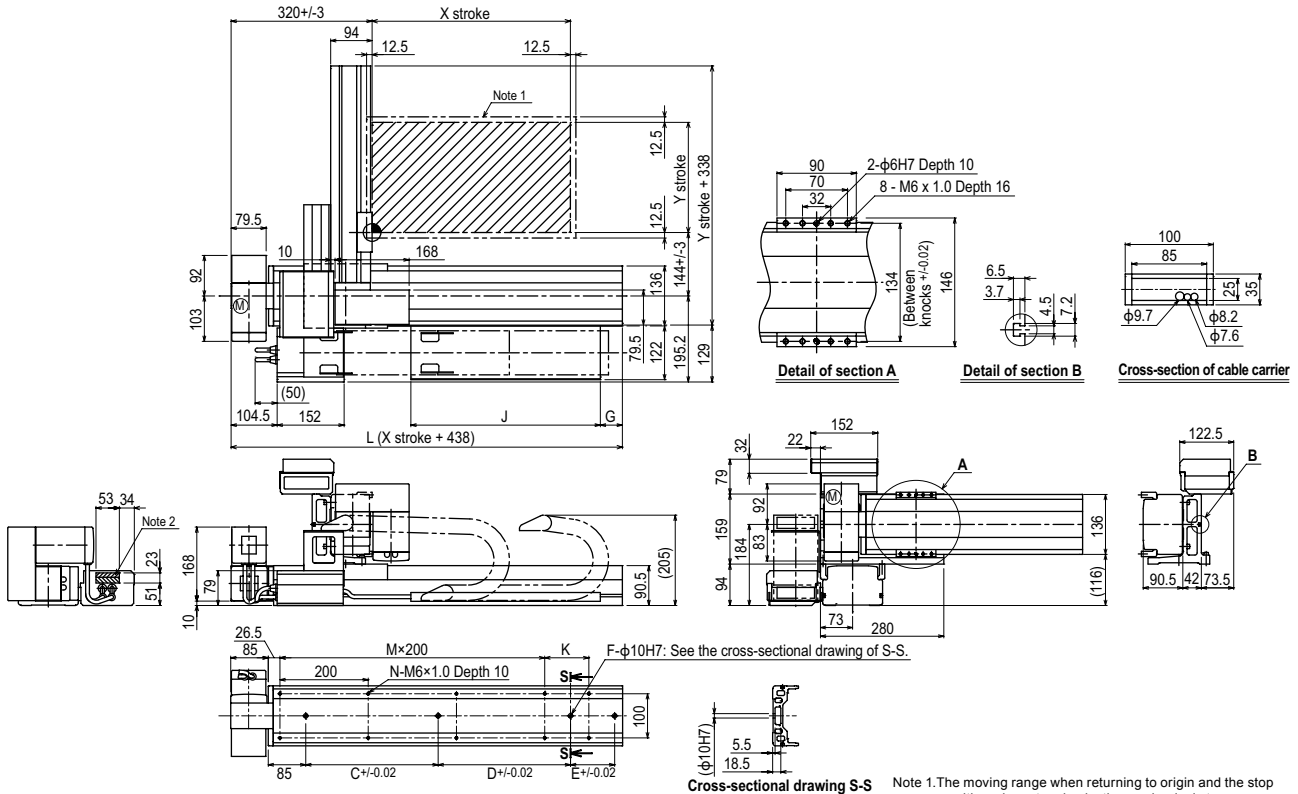
Y stroke (mm)	XY 2 axes
150	14
250	12
350	10
450	8
550	7

Controller

Controller	Operation method
RCX320	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222	

Note. A regenerative unit is required when the maximum speed exceeds 1250mm/sec.

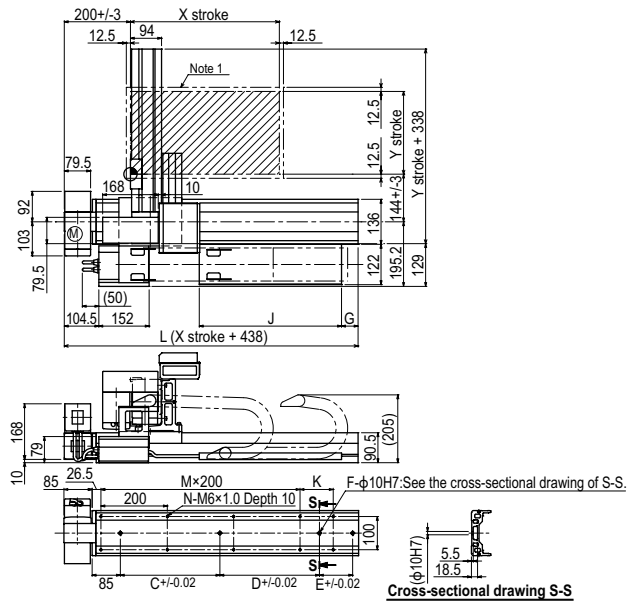
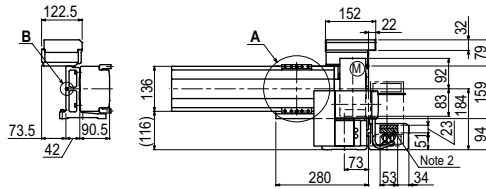
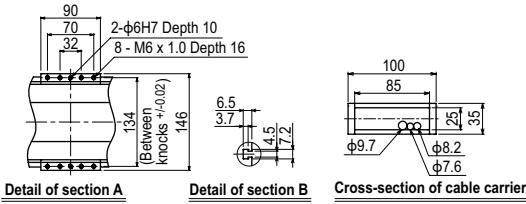
SXYBx 2 axes A1



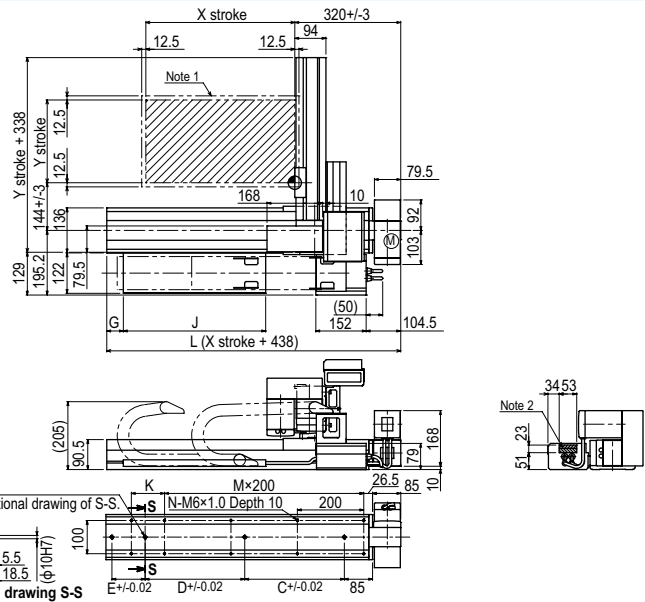
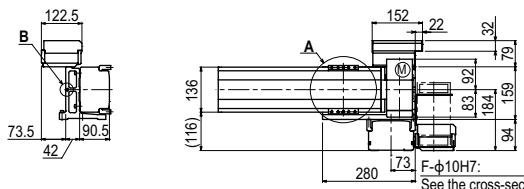
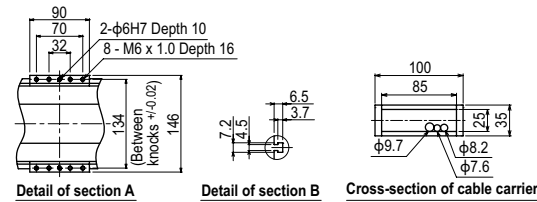
Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. The shaded position indicates an user cable extraction port.

X stroke	150	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950	3050	
L	588	688	788	888	988	1088	1188	1288	1388	1488	1588	1688	1788	1888	1988	2088	2188	2288	2388	2488	2588	2688	2788	2888	2988	3088	3188	3288	3388	3488	
K	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200
C	240	420	600	600	780	780	960	960	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140
D	-	-	-	-	-	-	-	-	-	-	240	240	240	420	600	600	780	780	960	960	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140
E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	240	240	420	420	420	600	600	780	780	960	
F	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	
G	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	
J	330	330	430	430	530	530	630	630	730	730	830	830	930	930	1030	1030	1130	1130	1230	1230	1330	1330	1430	1430	1530	1530	1630	1630	1730	1730	
Y stroke	150	250	350	450	550																										

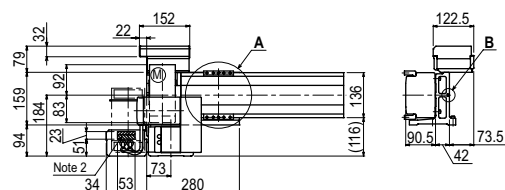
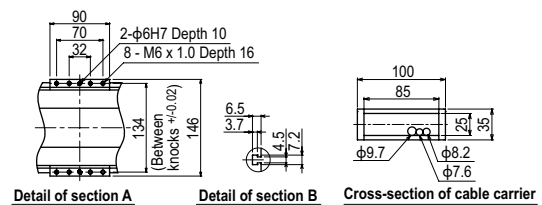
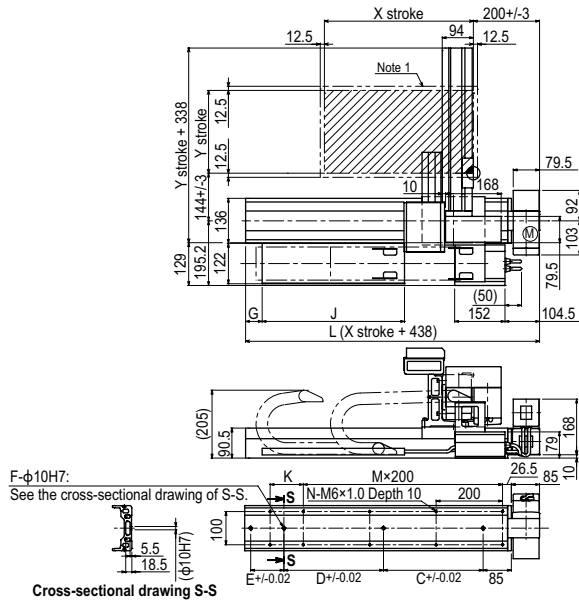
SXYBx 2 axes **A2**



SXYBx 2 axes **A3**



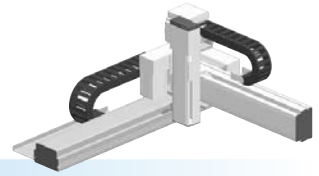
SXYBx 2 axes **A4**



- Articulated robots YA
- Linear conveyor modules LCM
- Single-axis robots CX
- Motor-less single axis actuator Robotomy
- Compact single-axis robots TRANSEVO
- Single-axis robots FLIP-X
- Linear motor PHASER
- Cartesian robots XY-X
- SCARA robots YK-X
- Pick & place robots YP-X
- CLEAN
- CONTROLLER
- INFORMATION
- Arm type
- Gantry type
- Moving arm type
- Pole type
- XZ type

SXYBx 3 axes / ZF

● Arm type ● Cable carrier ● Z-axis: clamped base / moving table type (100W)



Ordering method

SXYBx - C **ZF** **RCX340-3**

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
		A1 A2 A3 A4	15 to 305cm	15 to 55cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m	Specify various controller setting items. RCX340 ▶ P.678							

Specification

	X-axis	Y-axis	Z-axis
Axis construction <small>Note 1</small>	B14H	B14	F10-BK
AC servo motor output (W)	200	100	100
Repeatability <small>Note 2</small> (mm)	+/-0.04	+/-0.04	+/-0.01
Drive system	Timing belt	Timing belt	Ball screw φ15
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	Equivalent to lead 25	Equivalent to lead 25	10
Maximum speed (mm/sec)	1875	1875	600
Moving range (mm)	150 to 3050	150 to 550	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. Leads not listed in the catalog are also available. Contact us for details.

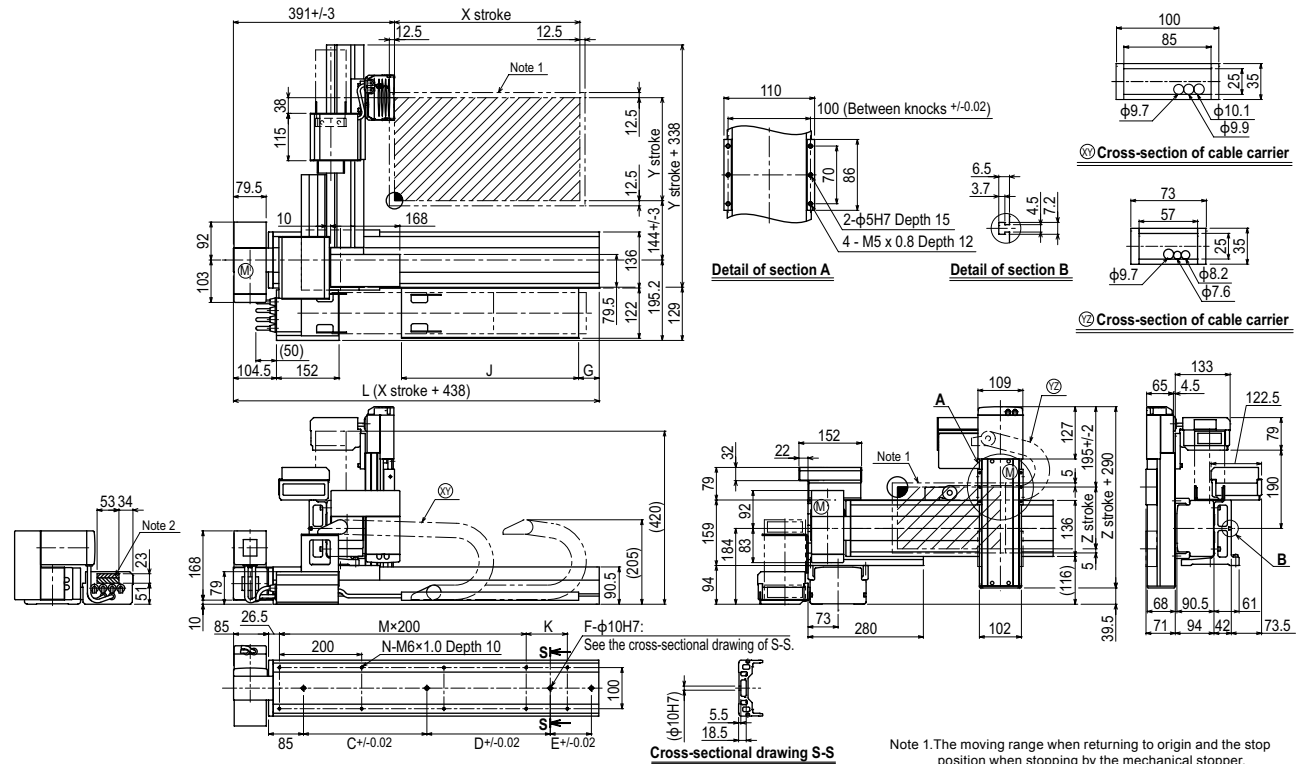
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	8	7	6
250	6	5	4
350	4	3	2
450	2	1	-
550	1	-	-

Controller

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

SXYBx 3 axes / ZF (A1)

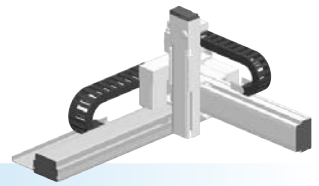


X stroke	150	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950	3050
L	588	688	788	888	988	1088	1188	1288	1388	1488	1588	1688	1788	1888	1988	2088	2188	2288	2388	2488	2588	2688	2788	2888	2988	3088	3188	3288	3388	3488
K	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100
C	240	420	600	600	780	780	960	960	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140
D	-	-	-	-	-	-	-	-	-	240	240	240	420	600	600	780	780	960	960	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140
E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	240	240	420	420	420	420	600	600	780	960
F	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36
G	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50
J	330	330	430	430	530	530	630	630	730	730	830	830	930	930	1030	1030	1130	1130	1230	1230	1330	1330	1430	1430	1530	1530	1630	1630	1730	1730
Y stroke	150	250	350	450	550																									
Z stroke	150	250	350																											

SXYBx

3 axes / ZFL20

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



Ordering method

SXYBx - C [] [] [] **ZFL20** [] [] **RCX340-3** [] [] [] [] [] [] [] [] [] [] []

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
A1			15 to 305cm	15 to 45cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m	Specify various controller setting items. RCX340 ▶ P678							

Specification

	X-axis	Y-axis	Z-axis
Axis construction ^{Note 1}	B14H	B14	F10H-BK
AC servo motor output (W)	200	100	200
Repeatability ^{Note 2} (mm)	+/-0.04	+/-0.04	+/-0.01
Drive system	Timing belt	Timing belt	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	Equivalent to lead 25	Equivalent to lead 25	20
Maximum speed (mm/sec)	1875	1875	1200
Moving range (mm)	150 to 3050	150 to 450	150 to 350
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. Leads not listed in the catalog are also available. Contact us for details.

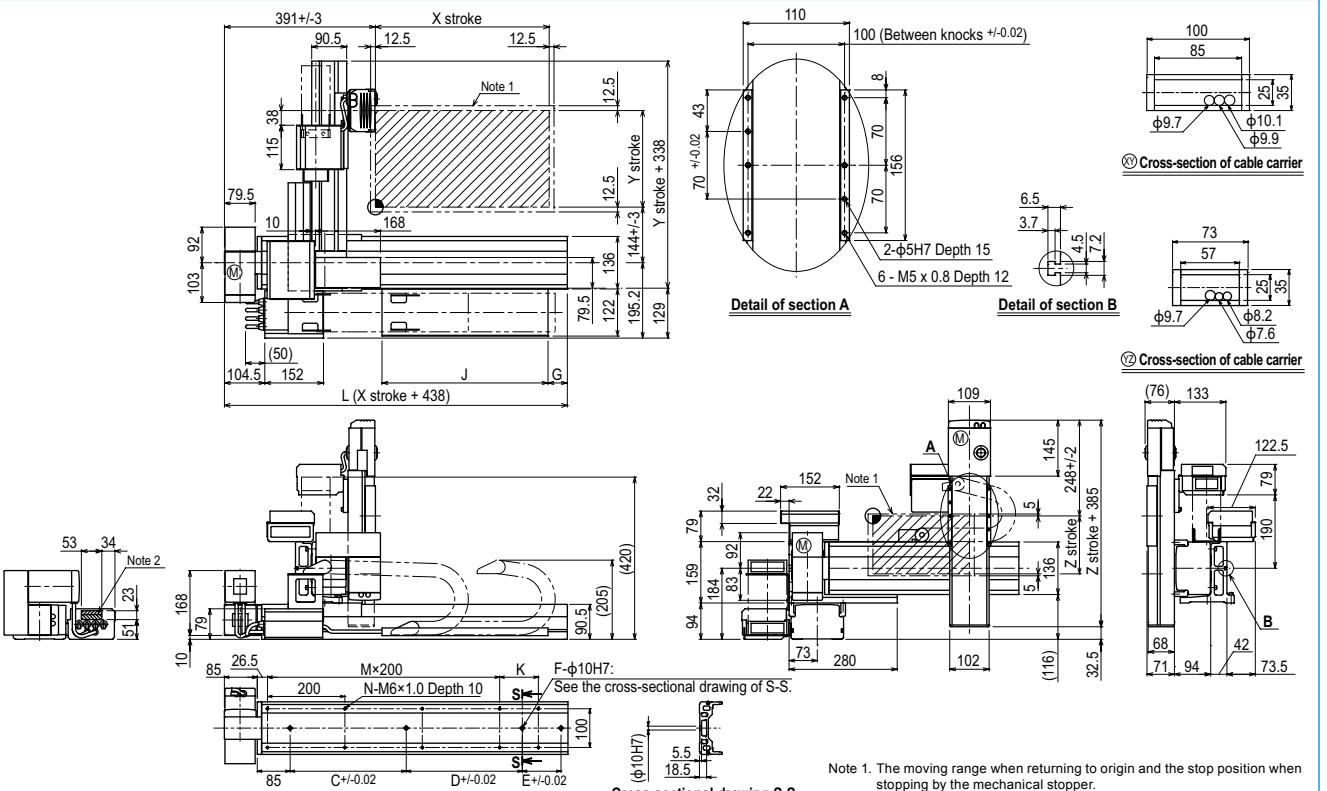
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	7	6	5
250	5	4	3
350	3	2	1
450	1	-	-

Controller

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

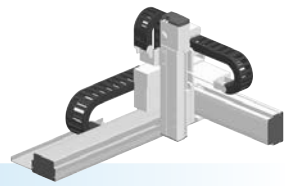
SXYBx 3 axes / ZFL20 (A1)



X stroke	150	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950	3050						
L	588	688	788	888	988	1088	1188	1288	1388	1488	1588	1688	1788	1888	1988	2088	2188	2288	2388	2488	2588	2688	2788	2888	2988	3088	3188	3288	3388	3488						
K	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100						
C	240	420	600	600	780	780	960	960	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140						
D	-	-	-	-	-	-	-	-	-	-	240	240	240	420	600	600	780	780	960	960	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140						
E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	240	240	420	420	600	600	780	960					
F	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4						
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16						
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36						
G	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50						
J	330	330	430	430	530	530	630	630	730	730	830	830	930	930	1030	1030	1130	1130	1230	1230	1330	1330	1430	1430	1530	1530	1630	1630	1730	1730						
Y stroke	150	250	350	450																																
Z stroke	150	250	350																																	

SXYBx

3 axes / ZFH



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

Ordering method

SXYBx - C [] [] [] **ZFH** [] [] **RCX340-3** [] [] [] [] [] [] [] [] [] [] [] [] [] [] [] []

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
A1		A1	15 to 305cm	15 to 45cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis
Axis construction ^{Note 1}	B14H	B14	F10H-BK
AC servo motor output (W)	200	100	200
Repeatability ^{Note 2} (mm)	+/-0.04	+/-0.04	+/-0.01
Drive system	Timing belt	Timing belt	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	Equivalent to lead 25	Equivalent to lead 25	10
Maximum speed (mm/sec)	1875	1875	600
Moving range (mm)	150 to 3050	150 to 450	150 to 350
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. Leads not listed in the catalog are also available. Contact us for details.

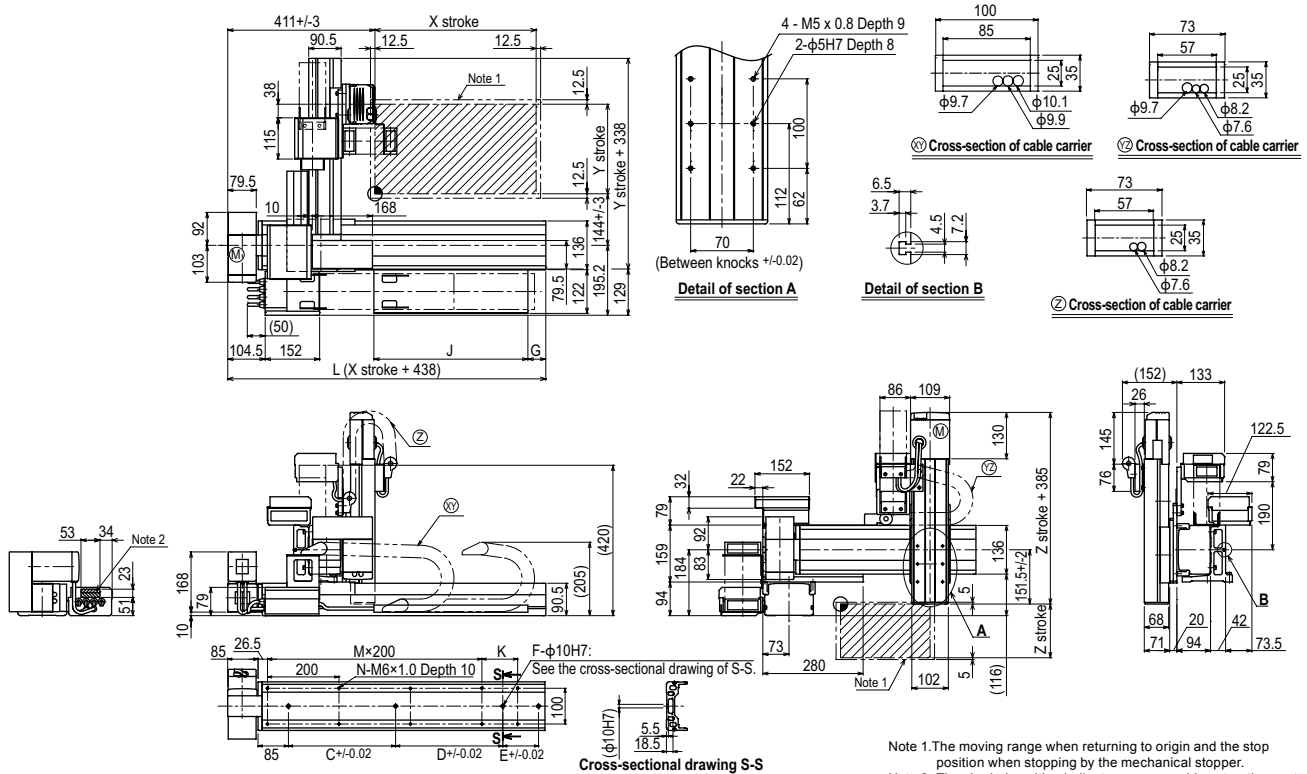
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	7	6	5
250	5	4	3
350	3	2	1
450	1	-	-

Controller

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

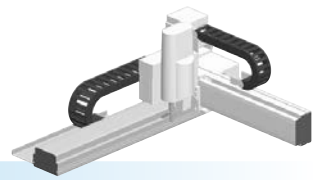
SXYBx 3 axes / ZFH (A1)



X stroke	150	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950	3050	
L	588	688	788	888	988	1088	1188	1288	1388	1488	1588	1688	1788	1888	1988	2088	2188	2288	2388	2488	2588	2688	2788	2888	2988	3088	3188	3288	3388	3488	
K	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	
C	240	420	600	600	780	780	960	960	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	
D	-	-	-	-	-	-	-	-	-	240	240	240	420	600	600	780	780	960	960	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	
E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	240	240	420	420	600	600	780	960
F	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	
G	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	
J	330	330	430	430	530	530	630	630	730	730	830	830	930	930	1030	1030	1130	1130	1230	1230	1330	1330	1430	1430	1530	1530	1630	1630	1730	1730	
Y stroke	150	250	350	450																											
Z stroke	150	250	350																												

SXYBx 3 axes / ZS

● Arm type ● Cable carrier ● Z-axis shaft vertical type



Ordering method

SXYBx - C **ZS - 15** **RCX340-3**

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
A1		A1	15 to 305cm	15 to 55cm	ZS12		3L: 3.5m 5L: 5m 10L: 10m								
A2		A2			ZS6										
A3		A3													
A4		A4													

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis: ZS12	Z-axis: ZS6
Axis construction ^{Note 1}	B14H	B14	-	
AC servo motor output (W)	200	100	60	
Repeatability ^{Note 2} (mm)	+/-0.04	+/-0.04	+/-0.02	
Drive system	Timing belt	Timing belt	Ball screw φ12	
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	Equivalent to lead 25	Equivalent to lead 25	12	6
Maximum speed (mm/sec)	1875	1875	1000	500
Moving range (mm)	150 to 3050	150 to 550	150	
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.

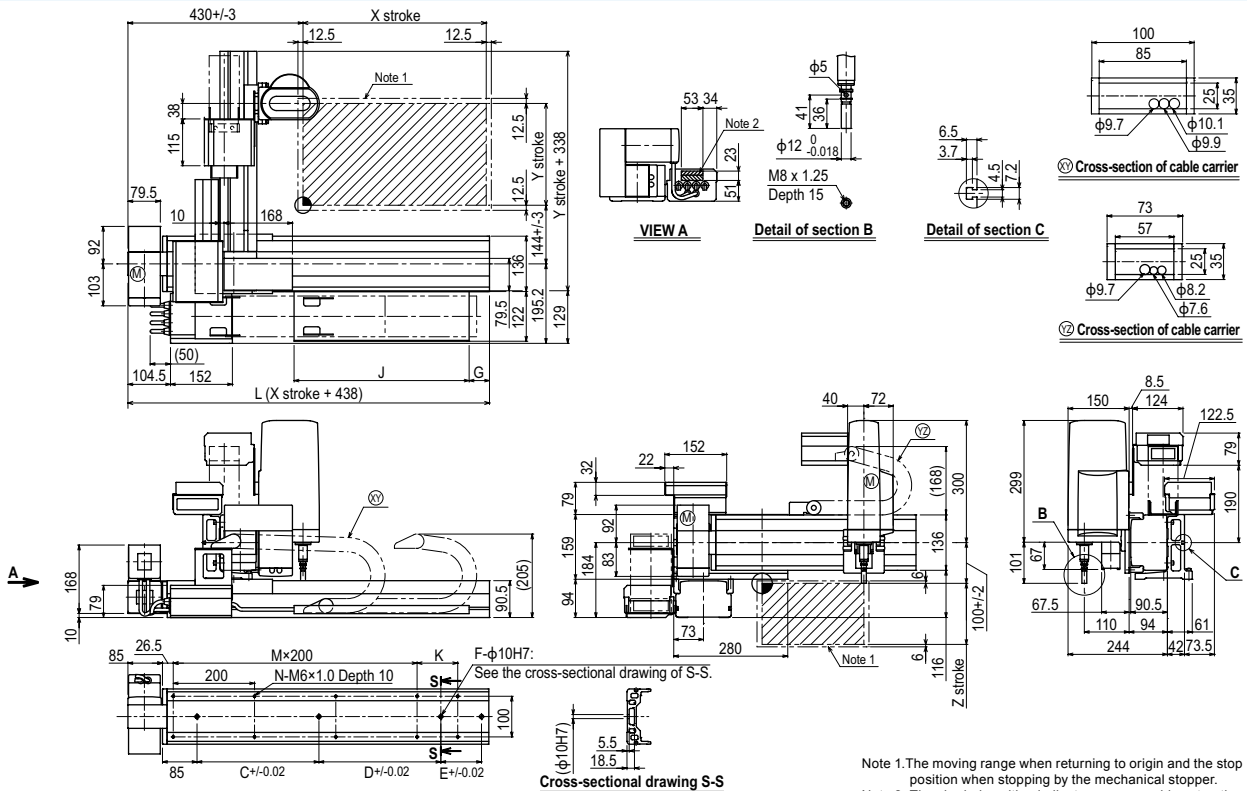
Maximum payload (kg)

Y stroke (mm)	ZS12	ZS6
150	3	5
250	3	5
350	3	5
450	3	4
550	3	3

Controller

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

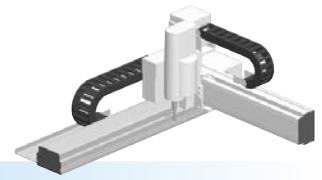
SXYBx 3 axes / ZS A1



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.

X stroke	150	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950	3050						
L	588	688	788	888	988	1088	1188	1288	1388	1488	1588	1688	1788	1888	1988	2088	2188	2288	2388	2488	2588	2688	2788	2888	2988	3088	3188	3288	3388	3488						
K	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100						
C	240	420	600	600	780	780	960	960	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140						
D	-	-	-	-	-	-	-	-	-	-	240	240	240	420	600	600	780	780	960	960	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140						
E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	240	240	420	420	600	600	780	960						
F	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4						
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16						
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36						
G	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50						
J	330	330	430	430	530	530	630	630	730	730	830	830	930	930	1030	1030	1130	1130	1230	1230	1330	1330	1430	1430	1530	1530	1630	1630	1730	1730						
Y stroke	150	250	350	450	550																															
Z stroke	150																																			

SXYBx 4 axes / ZRS



● Arm type ● Cable carrier ● ZR axis integrated type

Ordering method

SXYBx - C [] [] [] [] **15** [] **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
A1		A1	15 to 305cm	15 to 55cm	ZRS12		3L: 3.5m 5L: 5m 10L: 10m								
A2		A2			ZRS6										
A3		A3													
A4		A4													

Specify various controller setting items. RCX340 ▶ **P678**

Specification

	X-axis	Y-axis	Z-axis: ZRS12	Z-axis: ZRS6	R-axis
Axis construction ^{Note 1}	B14H	B14	-	-	-
AC servo motor output (W)	200	100	60	100	
Repeatability ^{Note 2} (XYZ: mm)(R: °)	+/-0.04	+/-0.04	+/-0.02	+/-0.005	
Drive system	Timing belt	Timing belt	Ball screw φ12	Harmonic gear	
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	Equivalent to lead 25	Equivalent to lead 25	12	6	(1/50)
Maximum speed (XYZ: mm/sec)(R: °/sec)	1875	1875	1000	500	1020
Moving range (XYZ: mm)(R: °)	150 to 3050	150 to 550	150		360
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.

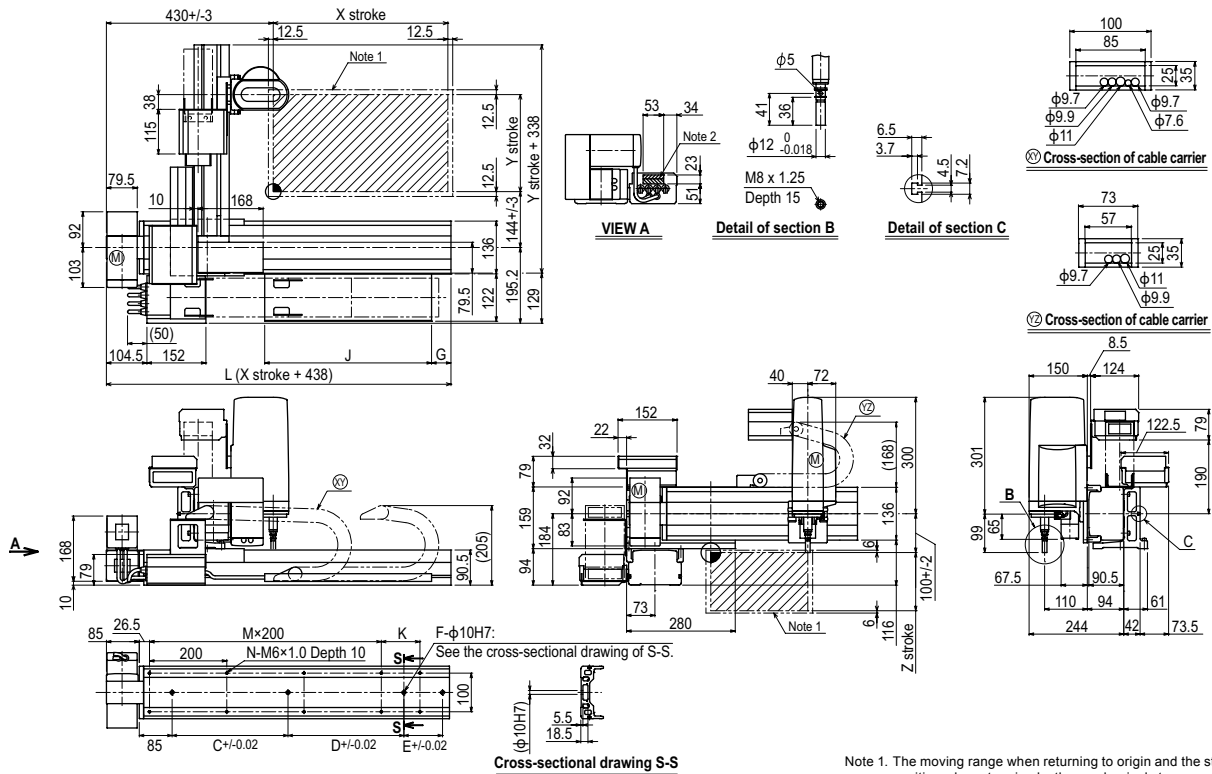
Maximum payload (kg)

Y stroke (mm)	ZRS12	ZRS6
150	3	5
250	3	5
350	3	5
450	3	3
550	2	2

Controller

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

SXYBx 4 axes / ZRS A1



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.

	150	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950	3050	
X stroke	150	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950	3050	
L	588	688	788	888	988	1088	1188	1288	1388	1488	1588	1688	1788	1888	1988	2088	2188	2288	2388	2488	2588	2688	2788	2888	2988	3088	3188	3288	3388	3488	
K	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	
C	240	420	600	600	780	780	960	960	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140
D	-	-	-	-	-	-	-	-	-	-	240	240	240	420	600	600	780	780	960	960	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140
E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	240	240	420	420	600	600	780	960
F	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	
G	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0	50	0
J	330	330	430	430	530	530	630	630	730	730	830	830	930	930	1030	1030	1130	1130	1230	1230	1330	1330	1430	1430	1530	1530	1630	1630	1730	1730	
Y stroke	150	250	350	450	550																										
Z stroke	150																														

Articulated robots YA
Linear conveyor modules LCM
Single-axis robots CX
Motor-less single axis actuator Robonity
Compact single-axis robots TRANSEVO
Single-axis robots FLIP-X
Linear motor single-axis robots PHASER
Cartesian robots XY-X
SCARA robots YK-X
Pick & place robots YP-X
CLEAN
CONTROLLER
INFORMATION
Arm type
Gantry type
Moving arm type
Pole type
XZ type

NXY 2 axes



● Arm type ● Cable carrier

Ordering method

NXY - C

Model	Cable	Combination	X-axis stroke	Y-axis stroke	Cable
A1			50 to 200cm	15 to 65cm	3L: 3.5m 5L: 5m 10L: 10m
A3					

RCX320-2 **R**

Controller / Number of controllable axes	Safety standard	Regenerative unit	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery
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Specify various controller setting items. RCX320 ▶ **P.660**

RCX222 **R**

Controller	Usable for CE	Regenerative unit	I/O selection 1	I/O selection 2
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Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Y-axis
Axis construction ^{Note 1}	N15	F14
AC servo motor output (W)	400	100
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20
Maximum speed (mm/sec)	1200	1200
Moving range (mm)	500 to 2000	150 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. Leads not listed in the catalog are also available. Contact us for details.

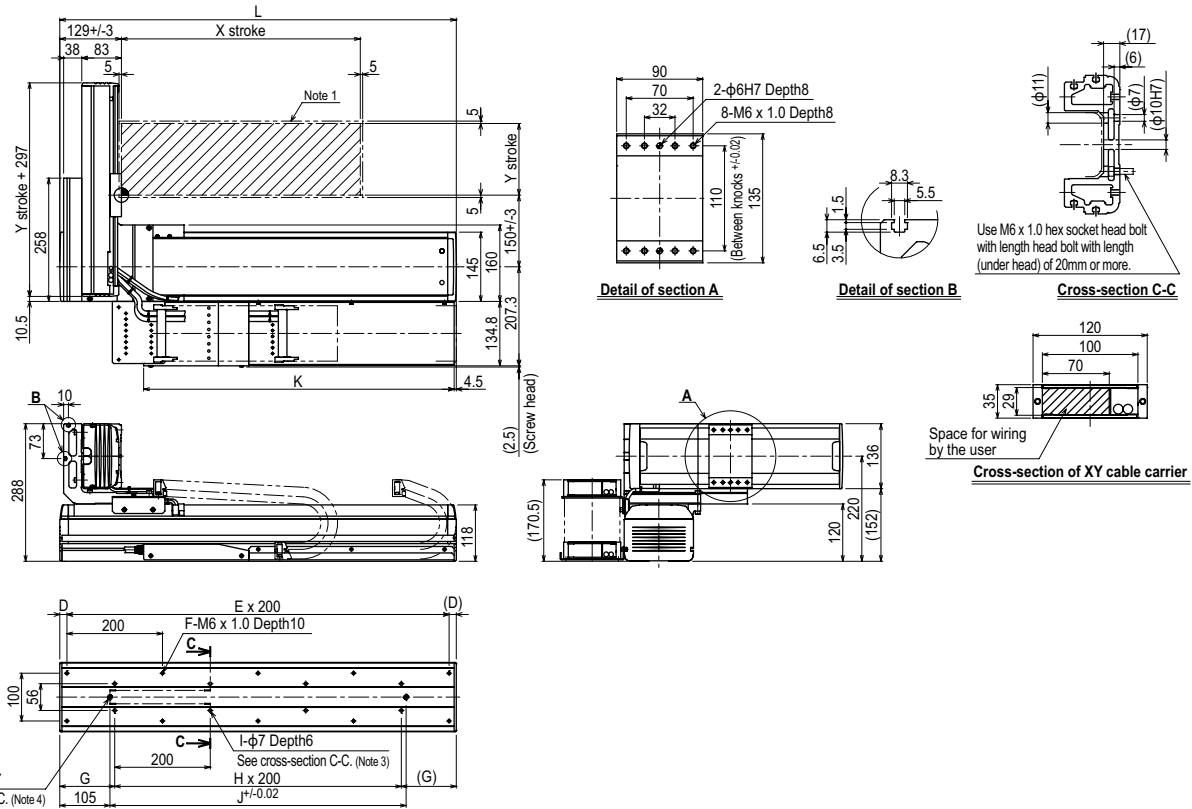
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
150	25
250	21
350	18
450	16
550	13
650	11

Controller

Controller	Operation method
RCX320-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222-R	

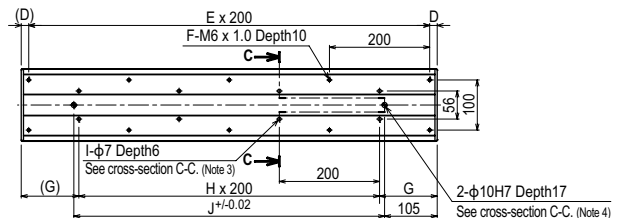
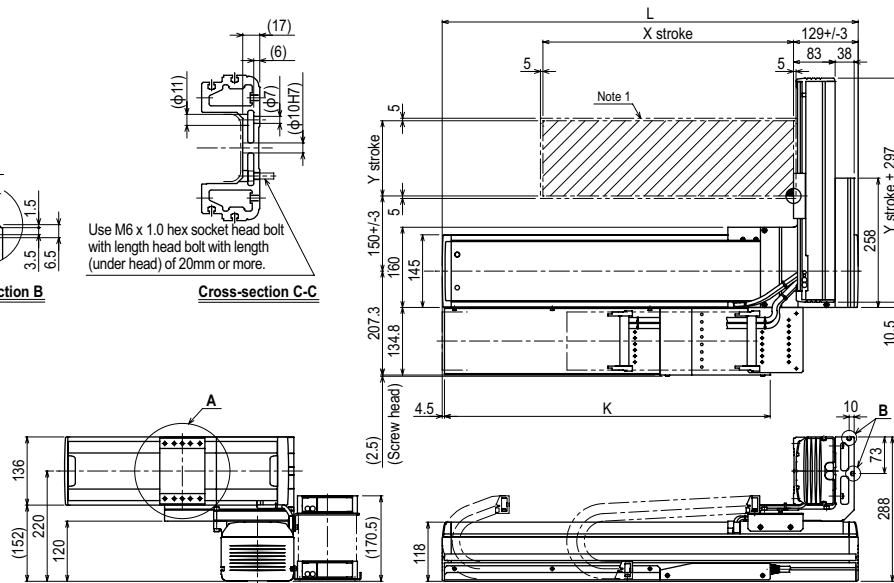
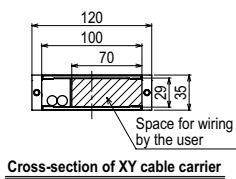
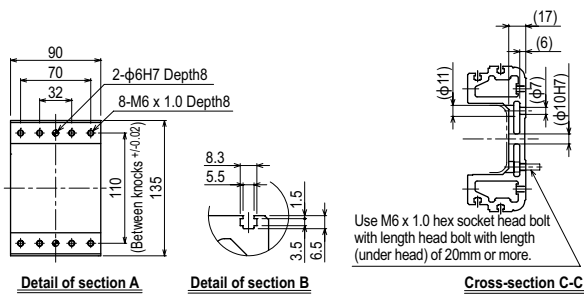
NXY 2 axes A1



X stroke	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
L	830	930	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330
D	15	65	15	65	15	65	15	65	15	65	15	65	15	65	15	65
E	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
F	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
G	115	165	115	165	115	165	115	165	115	165	115	165	115	165	115	165
H	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
I	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22
J	620	720	820	920	1020	1120	1220	1320	1420	1520	1620	1720	1820	1920	2020	2120
K	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400
Y stroke	150	250	350	450	550	650										

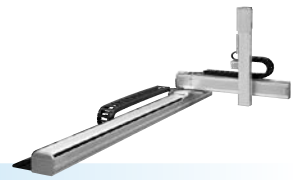
Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. The origin of the X axis is set originally as the drawing and it is possible to change it to the R side origin by changing parameters.
 Note 3. When using φ7 holes for installation, you must not use a washer, spring washer, etc. in the main unit.
 Note 4. When using a φ10H7 hole, make sure that the pin does not go into deeper than as shown in the drawing.
 Note 5. Use M4 tap of the box next to X axis for the user grounding terminal.
 Note 6. The M4 taps at both ends of the cable carriage can be used for fixing cables.

NXY 2 axes **A3**



X stroke	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
L	830	930	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330
D	15	65	15	65	15	65	15	65	15	65	15	65	15	65	15	65
E	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
F	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
G	115	165	115	165	115	165	115	165	115	165	115	165	115	165	115	165
H	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
I	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22
J	620	720	820	920	1020	1120	1220	1320	1420	1520	1620	1720	1820	1920	2020	2120
K	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400
Y stroke	150	250	350	450	550	650										

- Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. The origin of the X axis is set originally as the drawing and it is possible to change it to the R side origin by changing parameters.
 Note 3. When using φ7 holes for installation, you must not use a washer, spring washer, etc. in the main unit.
 Note 4. When using a φ10H7 hole, make sure that the pin does not go into deeper than as shown in the drawing.
 Note 5. Use M4 tap of the box next to X axis for the user grounding terminal.
 Note 6. The M4 taps at both ends of the cable carriage can be used for fixing cables.



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

Ordering method

NXY - C [] [] [] **ZFL20** [] [] **RCX340-3** [] [] [] [] [] [] [] [] [] [] [] []

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

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis
Axis construction ^{Note 1}	N15	F14	F10H-BK
AC servo motor output (W)	400	100	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	20
Maximum speed (mm/sec)	1200	1200	1200
Moving range (mm)	500 to 2000	150 to 650	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. Leads not listed in the catalog are also available. Contact us for details.

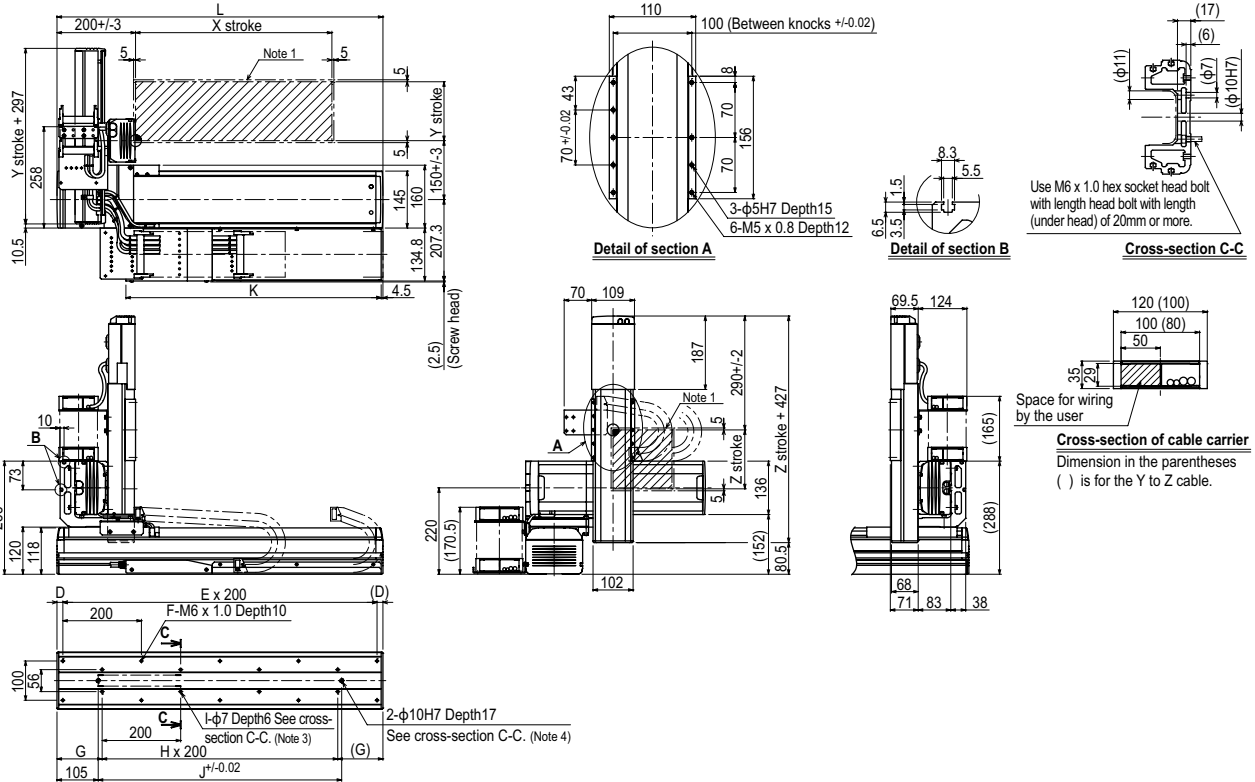
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	8	8	8
250	8	8	8
350	8	8	8
450	8	7	6
550	5	4	3
650	3	2	1

Controller

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

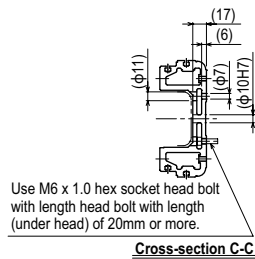
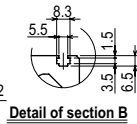
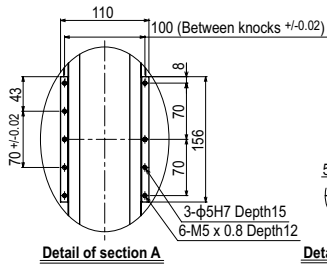
NXY 3 axes / ZFL20 (A1)



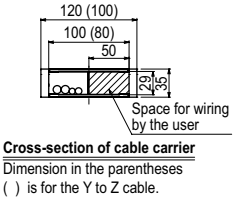
X stroke	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
L	830	930	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330
D	15	65	15	65	15	65	15	65	15	65	15	65	15	65	15	65
E	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
F	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
G	115	165	115	165	115	165	115	165	115	165	115	165	115	165	115	165
H	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
I	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22
J	620	720	820	920	1020	1120	1220	1320	1420	1520	1620	1720	1820	1920	2020	2120
K	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400
Y stroke	150	250	350	450	550	650										
Z stroke	150	250	350													

Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. The origin of the X axis is set originally as the drawing and it is possible to change it to the R side origin by changing parameters.
 Note 3. When using φ7 holes for installation, you must not use a washer, spring washer, etc. in the main unit.
 Note 4. When using a φ10H7 hole, make sure that the pin does not go into deeper than as shown in the drawing.
 Note 5. Use M4 tap of the box next to X axis for the user grounding terminal.
 Note 6. The M4 taps at both ends of the cable carriage can be used for fixing cables.

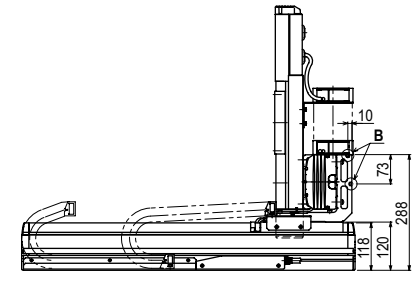
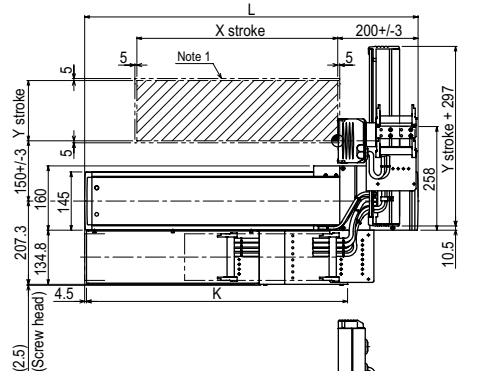
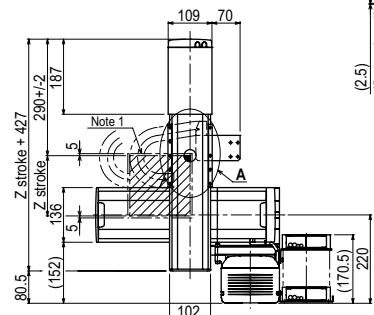
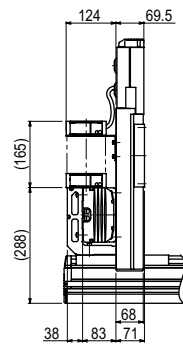
NXY 3 axes / ZFL20 **A3**



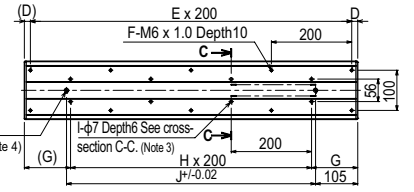
Use M6 x 1.0 hex socket head bolt with length head bolt with length (under head) of 20mm or more.



Cross-section of cable carrier
 Dimension in the parentheses () is for the Y to Z cable.



2-φ10H7 Depth17
 See cross-section C-C. (Note 4)



X stroke	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
L	830	930	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330
D	15	65	15	65	15	65	15	65	15	65	15	65	15	65	15	65
E	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
F	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
G	115	165	115	165	115	165	115	165	115	165	115	165	115	165	115	165
H	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
I	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22
J	620	720	820	920	1020	1120	1220	1320	1420	1520	1620	1720	1820	1920	2020	2120
K	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400
Y stroke	150	250	350	450	550	650										
Z stroke	150	250	350													

- Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
- Note 2. The origin of the X axis is set originally as the drawing and it is possible to change it to the R side origin by changing parameters.
- Note 3. When using φ7 holes for installation, you must not use a washer, spring washer, etc. in the main unit.
- Note 4. When using a φ10H7 hole, make sure that the pin does not go into deeper than as shown in the drawing.
- Note 5. Use M4 tap of the box next to X axis for the user grounding terminal.
- Note 6. The M4 taps at both ends of the cable carriage can be used for fixing cables.

NXY

3 axes / ZFH



● Arm type ● Cable carrier ● Z-axis clamped table: moving base type (200W)

Ordering method

NXY - C **ZFH** **RCX340-3**

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
		A1 A3	50 to 200cm	15 to 65cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ P.678

Specification

	X-axis	Y-axis	Z-axis
Axis construction ^{Note 1}	N15	F14	F10H-BK
AC servo motor output (W)	400	100	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	10
Maximum speed (mm/sec)	1200	1200	600
Moving range (mm)	500 to 2000	150 to 650	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. Leads not listed in the catalog are also available. Contact us for details.

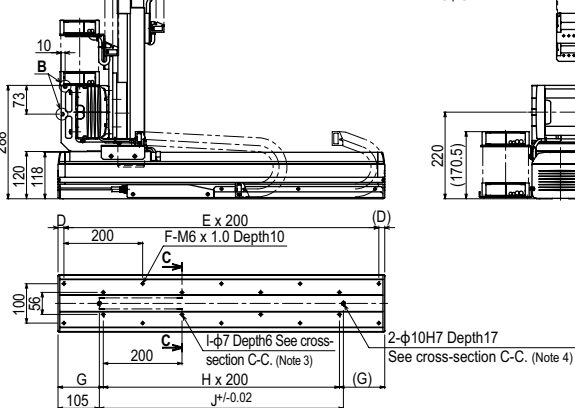
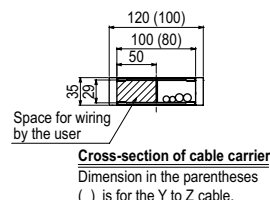
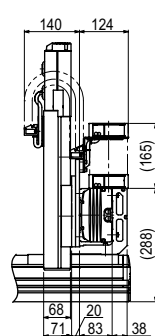
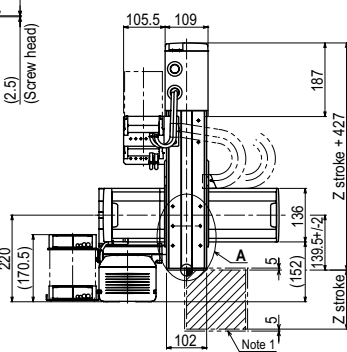
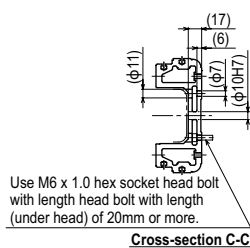
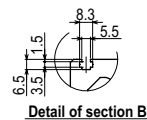
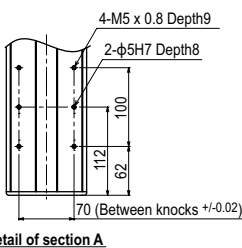
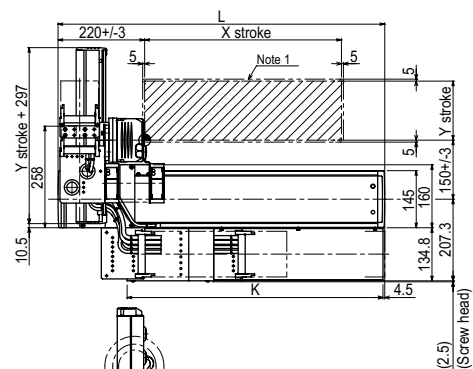
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	13	13	12
250	12	11	10
350	10	9	8
450	8	7	6
550	5	4	3
650	3	2	1

Controller

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

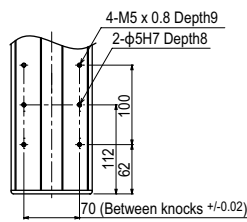
NXY 3 axes / ZFH (A1)



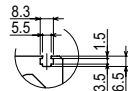
X stroke	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
L	830	930	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330
D	15	65	15	65	15	65	15	65	15	65	15	65	15	65	15	65
E	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
F	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
G	115	165	115	165	115	165	115	165	115	165	115	165	115	165	115	165
H	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
I	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22
J	620	720	820	920	1020	1120	1220	1320	1420	1520	1620	1720	1820	1920	2020	2120
K	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400
Y stroke	150	250	350	450	550	650										
Z stroke	150	250	350													

Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. The origin of the X axis is set originally as the drawing and it is possible to change it to the R side origin by changing parameters.
 Note 3. When using φ7 holes for installation, you must not use a washer, spring washer, etc. in the main unit.
 Note 4. When using a φ10H7 hole, make sure that the pin does not go into deeper than as shown in the drawing.
 Note 5. Use M4 tap of the box next to X axis for the user grounding terminal.
 Note 6. The M4 taps at both ends of the cable carriage can be used for fixing cables.

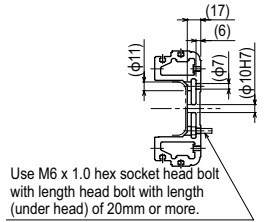
NXY 3 axes / ZFH **A3**



Detail of section A

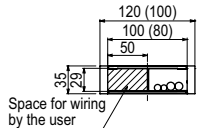


Detail of section B



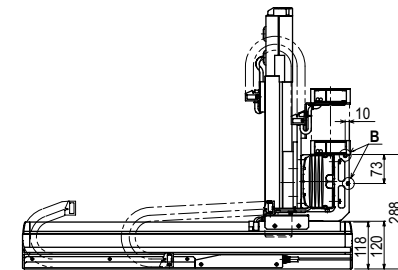
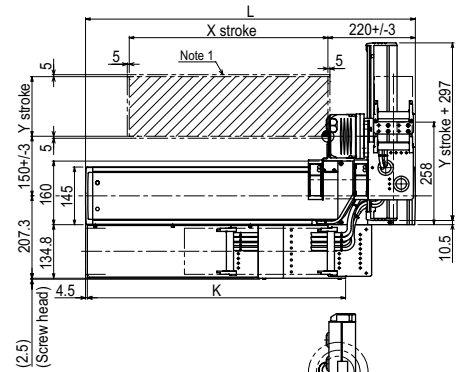
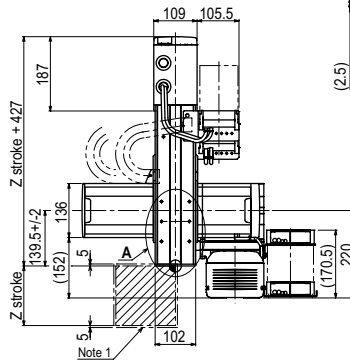
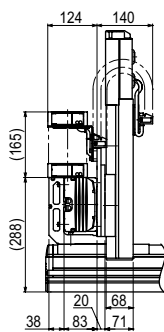
Cross-section C-C

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

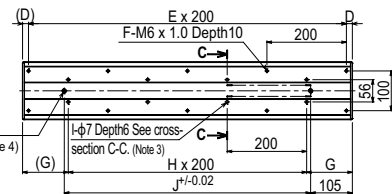


Cross-section of cable carrier
 Dimension in the parentheses () is for the Y to Z cable.

Space for wiring by the user



2-φ10H7 Depth17
 See cross-section C-C. (Note 4)



X stroke	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
L	830	930	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330
D	15	65	15	65	15	65	15	65	15	65	15	65	15	65	15	65
E	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
F	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
G	115	165	115	165	115	165	115	165	115	165	115	165	115	165	115	165
H	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
I	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22
J	620	720	820	920	1020	1120	1220	1320	1420	1520	1620	1720	1820	1920	2020	2120
K	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400
Y stroke	150	250	350	450	550	650										
Z stroke	150	250	350													

- Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
- Note 2. The origin of the X axis is set originally as the drawing and it is possible to change it to the R side origin by changing parameters.
- Note 3. When using φ7 holes for installation, you must not use a washer, spring washer, etc. in the main unit.
- Note 4. When using a φ10H7 hole, make sure that the pin does not go into deeper than as shown in the drawing.
- Note 5. Use M4 tap of the box next to X axis for the user grounding terminal.
- Note 6. The M4 taps at both ends of the cable carriage can be used for fixing cables.

NXY-W 4 axes



● Arm type ● Cable carrier ● Double Y axes specifications

Ordering method

NXY - C - WA1 **RCX340-4**

Model Cable Combination X-axis stroke Y-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

X-axis stroke: 25 to 175cm
Y-axis stroke: 15 to 65cm
Cable: 3L: 3.5m, 5L: 5m, 10L: 10m

Specify various controller setting items. RCX340 ▶ **P.678**

Note 1. When the Y-axis stroke is different between the right and left, it will be an order-made.

Specification

	X-axis	Y-axis ^{Note 1}
Axis construction ^{Note 2}	N15D	F14
AC servo motor output (W)	400	100
Repeatability ^{Note 3} (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 4} (Deceleration ratio) (mm)	20	20
Maximum speed (mm/sec)	1200	1200
Moving range (mm)	250 to 1750	150 to 650
Robot cable length (m)	Standard: 3.5 Option: 5,10	

Note 1. The same two Y axes are installed and they have same specifications. If axes of individually different stroke are desired, it will be an order-made. In that case, consult YAMAHA.
 Note 2. Use caution that the frame machining (installation holes, tap holes) differs from single-axis robots.
 Note 3. Positioning repeatability in one direction.
 Note 4. Leads not listed in the catalog are also available. Contact us for details.

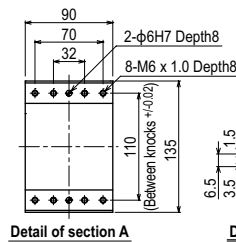
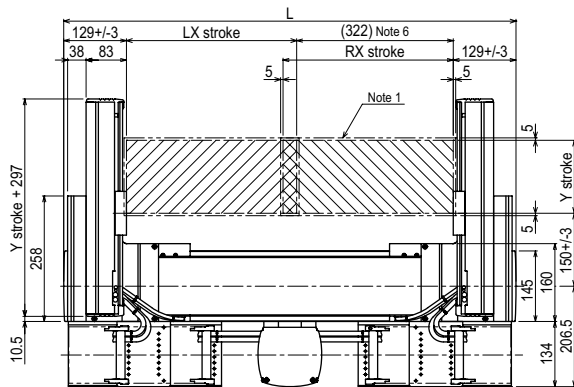
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
150	25
250	21
350	18
450	16
550	13
650	11

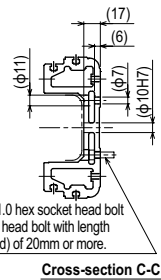
Controller

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

NXY-W 4 axes WA1

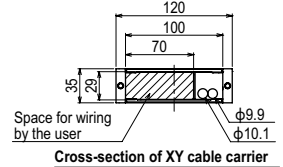
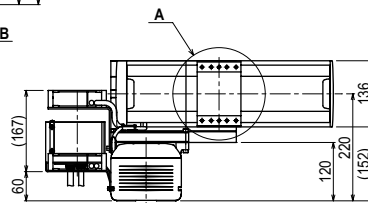
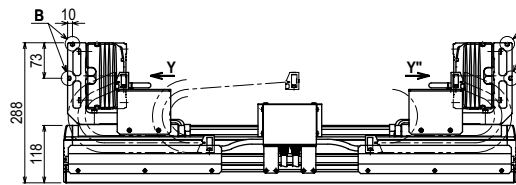


Detail of section B

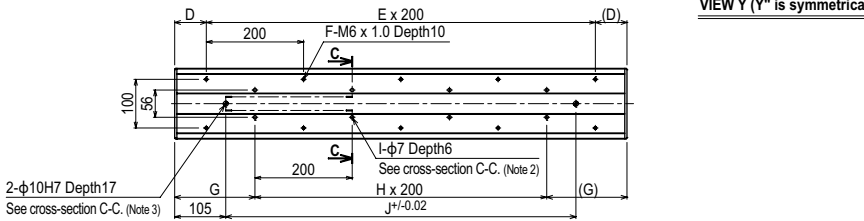


Use M6 x 1.0 hex socket head bolt with length head bolt with length (under head) of 20mm or more.

Cross-section C-C



Cross-section of XY cable carrier



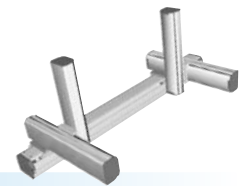
X stroke	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750
L	830	930	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330
D	15	65	15	65	15	65	15	65	15	65	15	65	15	65	15	65
E	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
F	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
G	115	165	115	165	115	165	115	165	115	165	115	165	115	165	115	165
H	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
I	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22
J	620	720	820	920	1020	1120	1220	1320	1420	1520	1620	1720	1820	1920	2020	2120
Y stroke	150	250	350	450	550	650										

Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. When using φ7 holes for installation, you must not use a washer, spring washer, etc. in the main unit.
 Note 3. When using a φ10H7 hole, make sure that the pin does not go into deeper than as shown in the drawing.
 Note 4. Use M4 tap of the box next to X axis for the user grounding terminal.
 Note 5. The M4 taps at both ends of the cable carriage can be used for fixing cables.
 Note 6. Minimum dimension between LX and RX sliders.

NXY-W

6 axes / ZFL

- Arm type
- Cable carrier
- Double Y axes specifications
- Z-axis: clamped base / moving table type (200W)



Ordering method

NXY-C-WA1 [] [] **ZFL20** [] [] **RCX340-4** [] [] [] [] [] [] [] [] [] []

Model Cable Combination X-axis stroke (25 to 175cm) Y-axis stroke (15 to 65cm^{Note 1}) ZR-axis Z-axis stroke (15 to 35cm) Cable (3L: 3.5m, 6L: 6m, 10L: 10m) 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

Specify various controller setting items. RCX340 ▶ **P.678**

Note 1. When either one or both of Y-axis or Z-axis stroke is different, it will be an order-made.

Specification

	X-axis	Y-axis ^{Note 1}	Z-axis
Axis construction ^{Note 2}	N15D	F14	F10H-BK
AC servo motor output (W)	400	100	200
Repeatability ^{Note 3} (mm)	+/-0.01	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 4} (Deceleration ratio) (mm)	20	20	20
Maximum speed (mm/sec)	1200	1200	1200
Moving range (mm)	250 to 1750	150 to 650	150 to 350
Robot cable length (m)	Standard: 3.5 Option: 5,10		

Note 1. The same two Y axes are installed and they have same specifications. If axes of individually different stroke are desired, it will be an order-made. In that case, consult YAMAHA.

Note 2. Use caution that the flame machining (installation holes, tap holes) differs from single-axis robots.

Note 3. Positioning repeatability in one direction.

Note 4. Leads not listed in the catalog are also available. Contact us for details.

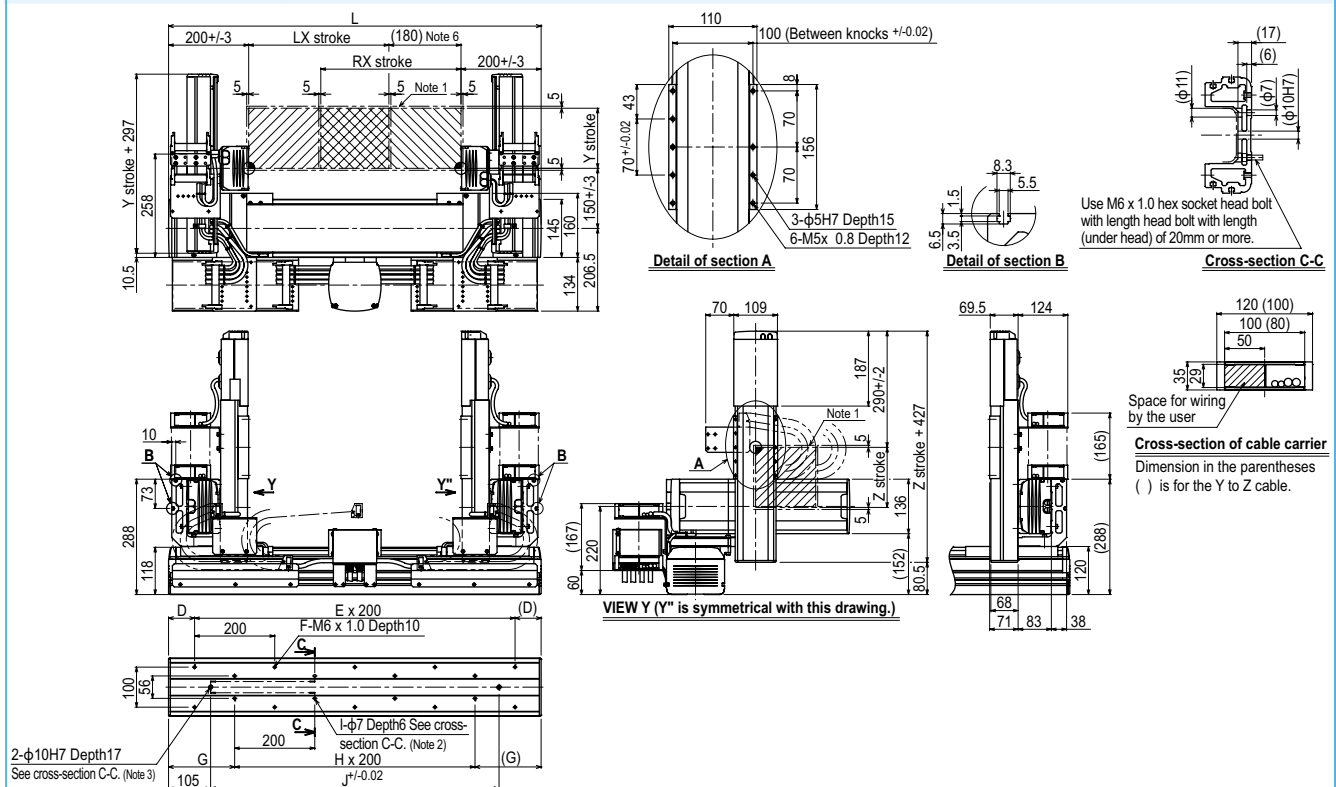
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	8	8	8
250	8	8	8
350	8	8	8
450	8	7	6
550	5	4	3
650	3	2	1

Controller

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

NXY-W 6 axes / ZFL (WA1)



X stroke	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750
L	830	930	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330
D	15	65	15	65	15	65	15	65	15	65	15	65	15	65	15	65
E	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
F	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
G	115	165	115	165	115	165	115	165	115	165	115	165	115	165	115	165
H	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
I	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22
J	620	720	820	920	1020	1120	1220	1320	1420	1520	1620	1720	1820	1920	2020	2120
Y stroke	150	250	350	450	550	650										
Z stroke	150	250	350													

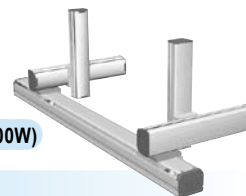
- Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
- Note 2. When using φ7 holes for installation, you must not use a washer, spring washer, etc. in the main unit.
- Note 3. When using a φ10H7 hole, make sure that the pin does not go into deeper than as shown in the drawing.
- Note 4. Use M4 tap of the box next to X axis for the user grounding terminal.
- Note 5. The M4 taps at both ends of the cable carriage can be used for fixing cables.
- Note 6. Minimum dimension between LX and RX sliders.

Controller

RCX340 ▶ 678

NXY-W

6 axes / ZFH



● Arm type ● Cable carrier ● Double Y axes specifications ● Z-axis: clamped table / moving base type (200W)

Ordering method

NXY - C - WA1 [] [] - **ZFH** [] [] - **RCX340-4** [] [] [] [] [] [] [] [] [] [] [] [] [] [] []

Model	Cable	Combination	X-axis stroke 25 to 175cm	Y-axis stroke 15 to 65cm ^{Note 1}	ZR-axis	Z-axis stroke 15 to 35cm	Cable 3L: 3.5m 5L: 5m 10L: 10m	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
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Specify various controller setting items. RCX340 ▶ **P.678**

Note 1. When either one or both of Y-axis or Z-axis stroke is different, it will be an order-made.

Specification

	X-axis	Y-axis ^{Note 1}	Z-axis
Axis construction ^{Note 2}	N15D	F14	F10H-BK
AC servo motor output (W)	400	100	200
Repeatability ^{Note 3} (mm)	+/-0.01	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 4} (Deceleration ratio) (mm)	20	20	10
Maximum speed (mm/sec)	1200	1200	600
Moving range (mm)	250 to 1750	150 to 650	150 to 350
Robot cable length (m)	Standard: 3.5 Option: 5, 10		

Note 1. The same two Y axes are installed and they have same specifications. If axes of individually different stroke are desired, it will be an order-made. In that case, consult YAMAHA.

Note 2. Use caution that the frame machining (installation holes, tap holes) differs from single-axis robots.

Note 3. Positioning repeatability in one direction.

Note 4. Leads not listed in the catalog are also available. Contact us for details.

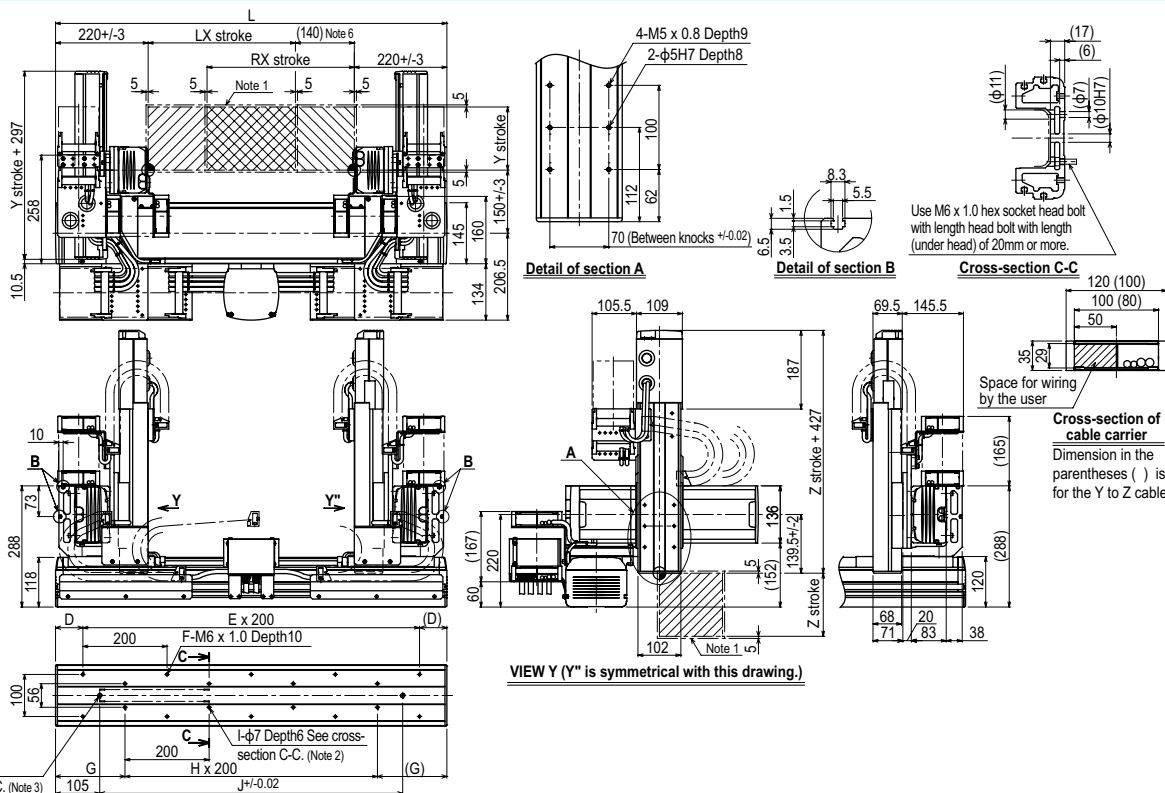
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	13	13	12
250	12	11	10
350	10	9	8
450	8	7	6
550	5	4	3
650	3	2	1

Controller

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

NXY-W 6 axes / ZFH WA1



X stroke	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750
L	830	930	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330
D	15	65	15	65	15	65	15	65	15	65	15	65	15	65	15	65
E	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
F	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24
G	115	165	115	165	115	165	115	165	115	165	115	165	115	165	115	165
H	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
I	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22
J	620	720	820	920	1020	1120	1220	1320	1420	1520	1620	1720	1820	1920	2020	2120
Y stroke	150	250	350	450	550	650										
Z stroke	150	250	350													

Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. When using φ7 holes for installation, you must not use a washer, spring washer, etc. in the main unit.
 Note 3. When using a φ10H7 hole, make sure that the pin does not go into deeper than as shown in the drawing.
 Note 4. Use M4 tap of the box next to X axis for the user grounding terminal.
 Note 5. The M4 taps at both ends of the cable carriage can be used for fixing cables.
 Note 6. Minimum dimension between LX and RX sliders.

Articulated robots YA
Linear conveyor modules LCM
Single-axis robots CX
Motor-less single axis actuator Robonity
Compact single-axis robots TRANSEVO
Single-axis robots FLIP-X
Linear motor single-axis robots PHASER
Cartesian robots XY-X
SCARA robots YK-X
Pick & place robots YP-X
CLEAN
CONTROLLER
INFORMATION
Arm type
Gantry type
Moving arm type
Pole type
XZ type

MXYx 2 axes

● Arm type ● Cable carrier



Ordering method

MXYx - C

Model	Cable	Combination	X-axis stroke	Y-axis stroke	Cable
A1			25 to 125cm	15 to 65cm	3L: 3.5m
A2					5L: 5m
A3					10L: 10m
A4					

RCX320-2 **R**

Controller / Number of controllable axes	Safety standard	Regenerative unit	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery
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Specify various controller setting items. RCX320 ▶ **P.660**

RCX222 **R**

Controller	Usable for CE	Regenerative unit	I/O selection 1	I/O selection 2
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Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Y-axis
Axis construction <small>Note 1</small>	F17	F14H
AC servo motor output (W)	400	200
Repeatability <small>Note 2</small> (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ15
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	20	20
Maximum speed <small>Note 4</small> (mm/sec)	1200	1200
Moving range (mm)	250 to 1250	150 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. Leads not listed in the catalog are also available. Contact us for details.
 Note 4. 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.

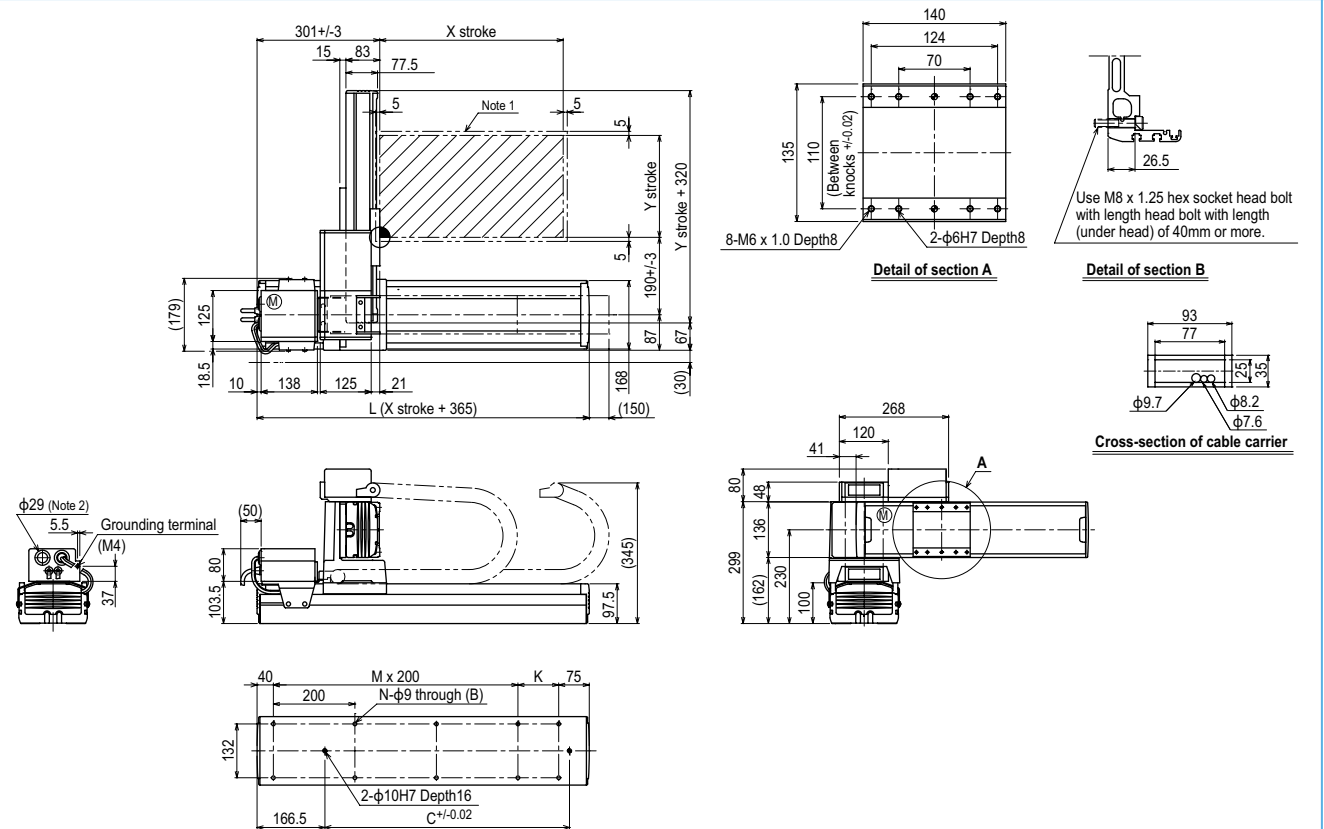
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
150	30
250	30
350	25
450	20
550	20
650	16

Controller

Controller	Operation method
RCX320-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222-R	

MXYx 2 axes A1

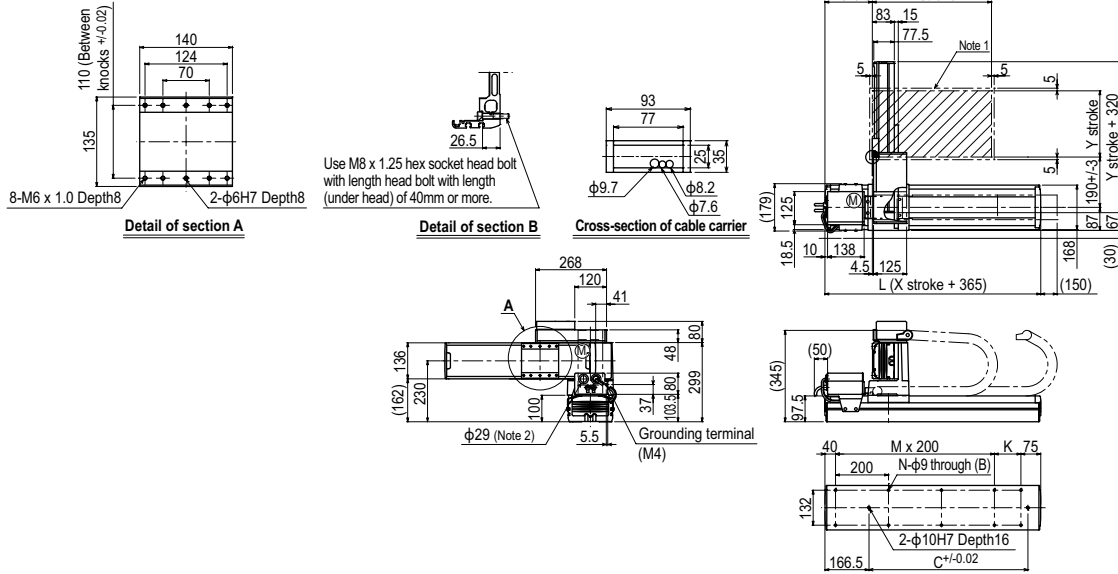


X stroke	250	350	450	550	650	750	850	950	1050	1150	1250
L	615	715	815	915	1015	1115	1215	1315	1415	1515	1615
K	100	200	100	200	100	200	100	200	100	200	100
C	240	420	600	600	780	780	960	960	1140	1140	1320
M	2	2	3	3	4	4	5	5	6	6	7
N	8	8	10	10	12	12	14	14	16	16	18
Y stroke	150	250	350	450	550	650					
Maximum speed for each stroke (mm/sec) <small>Note 3</small>	X-axis		1200				960	840	720	600	480
Speed setting			-				80%	70%	60%	50%	40%

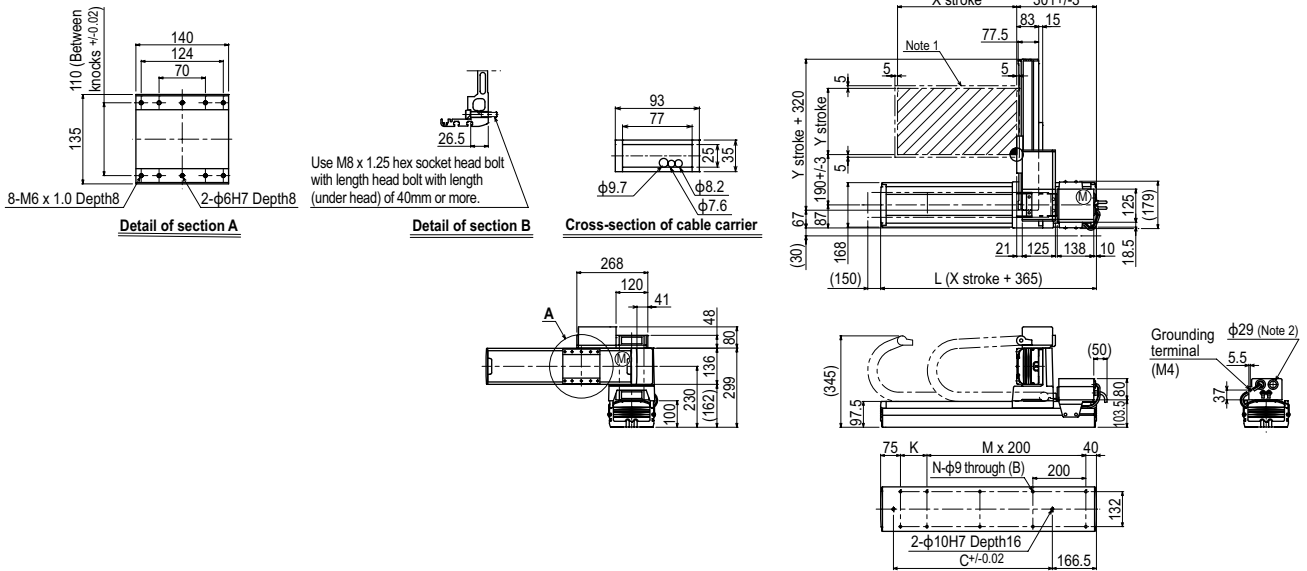
Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. User cable extraction port.

Note 3. 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.

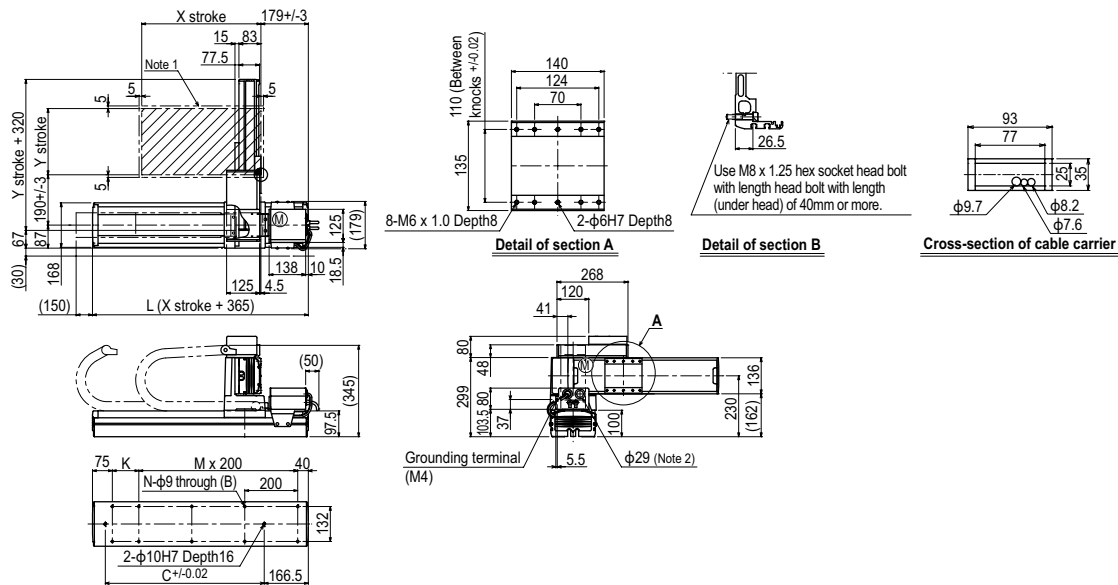
MXyX 2 axes A2



MXyX 2 axes A3



MXyX 2 axes A4



Articulated robots
YA

Linear conveyor modules
LCM

Single-axis robots
CX

Motor-less single axis actuator
Robotomy

Compact single-axis robots
TRANSEVO

Single-axis robots
FLIP-X

Linear motor single-axis robots
PHASER

Cartesian robots
XY-X

SCARA robots
YK-X

Pick & place robots
YP-X

CLEAN

CONTROLLER

INFORMATION

Arm type

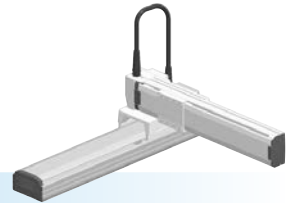
Gantry type

Moving arm type

Pole type

XZ type

MXYx 2 axes



● Arm type ● Whipover

Ordering method

MXYx - S

Model	Cable	Combination	X-axis stroke	Y-axis stroke	Cable
A1			25 to 85cm	15 to 65cm	3L: 3.5m
A2					5L: 5m
A3					10L: 10m
A4					

RCX320-2 **R**

Controller / Number of controllable axes	Safety standard	Regenerative unit	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery
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Specify various controller setting items. RCX320 ▶ **P.660**

RCX222 **R**

Controller	Usable for CE	Regenerative unit	I/O selection 1	I/O selection 2
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Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Y-axis
Axis construction <small>Note 1</small>	F17	F14H
AC servo motor output (W)	400	200
Repeatability <small>Note 2</small> (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ15
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	20	20
Maximum speed <small>Note 4</small> (mm/sec)	1200	1200
Moving range (mm)	250 to 850	150 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. Leads not listed in the catalog are also available. Contact us for details.
 Note 4. 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.

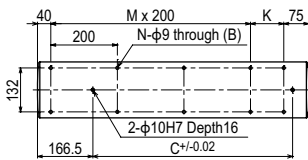
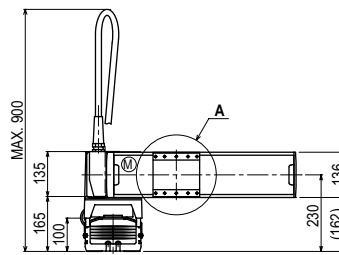
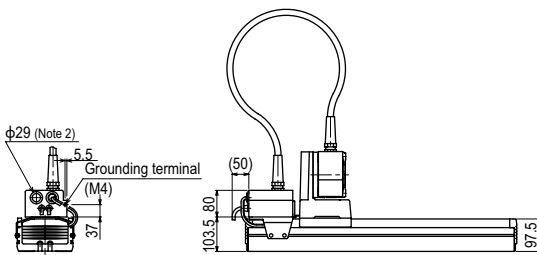
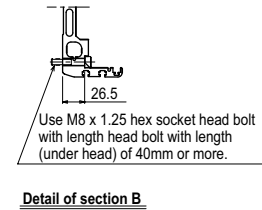
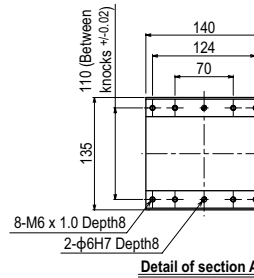
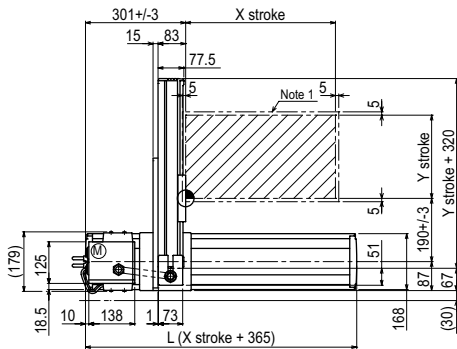
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
150	30
250	30
350	25
450	20
550	20
650	16

Controller

Controller	Operation method
RCX320-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222-R	

MXYx 2 axes A1



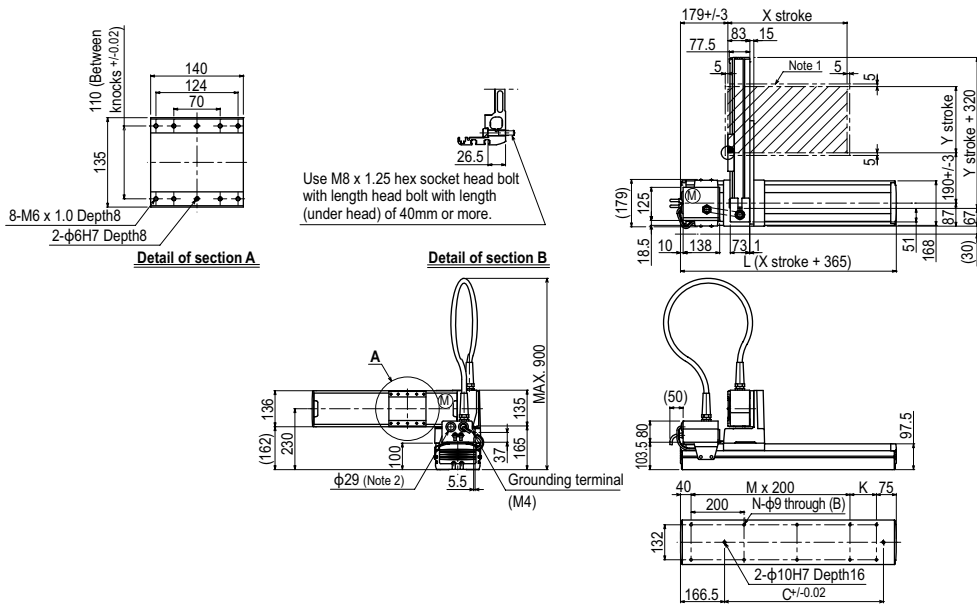
X stroke	250	350	450	550	650	750	850
L	615	715	815	915	1015	1115	1215
K	100	200	100	200	100	200	100
C	240	420	600	600	780	780	960
M	2	2	3	3	4	4	5
N	8	8	10	10	12	12	14
Y stroke	150	250	350	450	550	650	
Maximum speed for each stroke (mm/sec) <small>Note 3</small>	X-axis		1200				960
Speed setting	X-axis		-				80%

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.

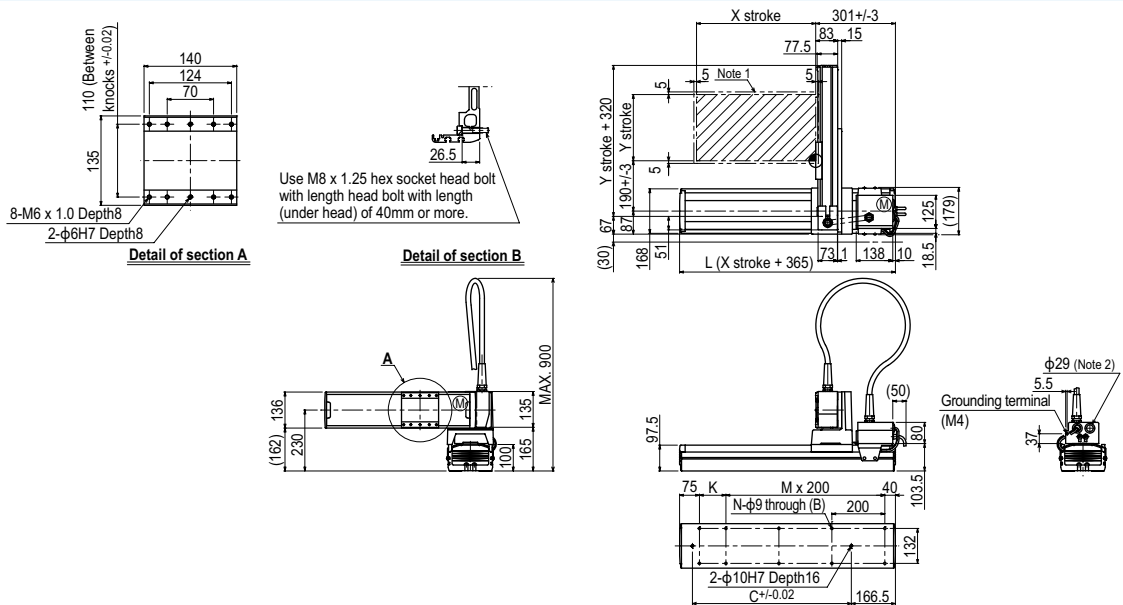
Note 3. When the X-axis stroke is longer than 850mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.

Articulated robots
YA
Linear conveyor modules
LCM
Single-axis robots
CX
Motor-less single axis actuator
Robonity
Compact single-axis robots
TRANSEVO
Single-axis robots
FLIP-X
Linear motor
PHASER
Cartesian robots
XY-X
SCARA robots
YK-X
Pick & place robots
YP-X
CLEAN
CONTROLLER
INFORMATION
Arm type
Gantry type
Moving arm type
Pole type
XZ type

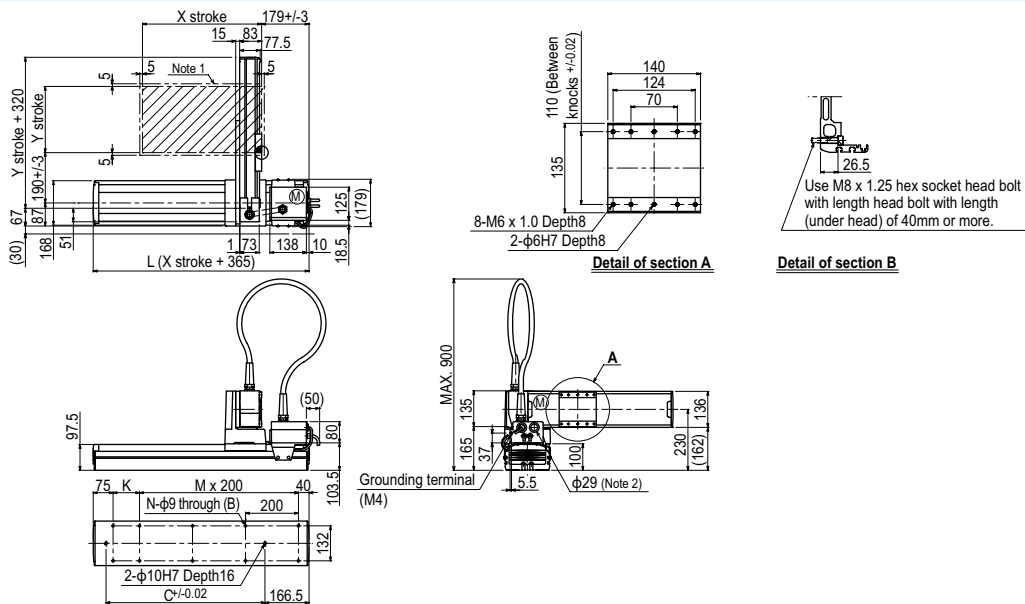
MXyX 2 axes **A2**



MXyX 2 axes **A3**

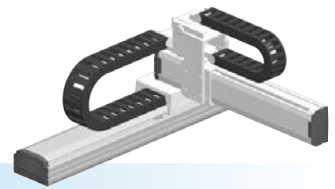


MXyX 2 axes **A4**



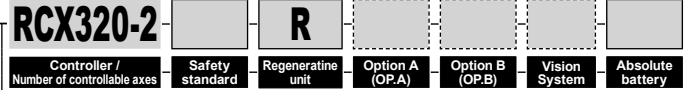
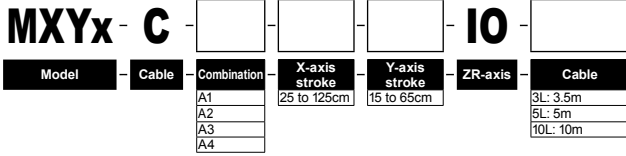
MXYx

2 axes / IO



- Arm type
- Cable carrier
- Type with Y-axis I/O cable carrier added

Ordering method



Specify various controller setting items. RCX320 ▶ **P.660**



Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Y-axis
Axis construction ^{Note 1}	F17	F14H
AC servo motor output (W)	400	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20
Maximum speed ^{Note 4} (mm/sec)	1200	1200
Moving range (mm)	250 to 1250	150 to 650
Robot cable length (m)	Standard: 3.5 Option: 5,10	

Note 1. Use caution that the flange 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, 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.

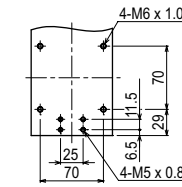
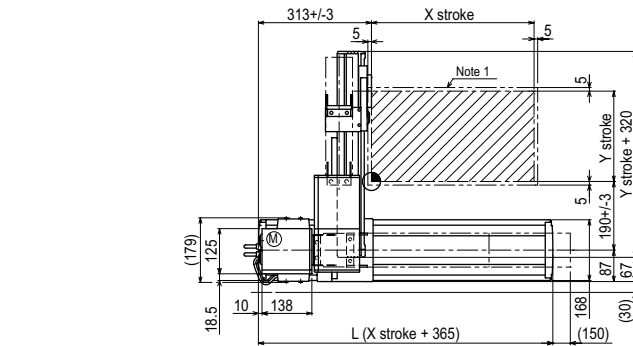
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
150	29
250	29
350	24
450	19
550	19
650	15

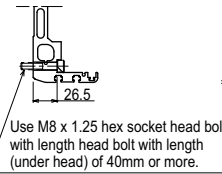
Controller

Controller	Operation method
RCX320-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222-R	

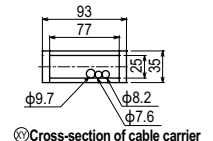
MXYx 2 axes / IO (A1)



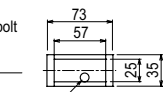
Detail of section A



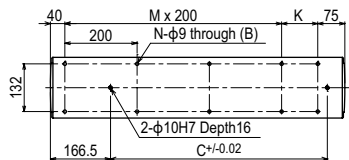
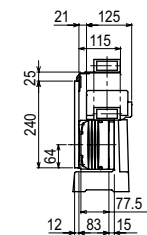
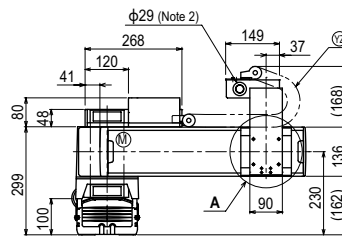
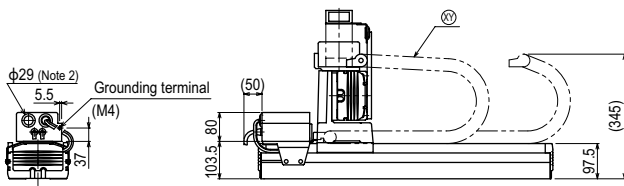
Detail of section B



① Cross-section of cable carrier



② Cross-section of cable carrier

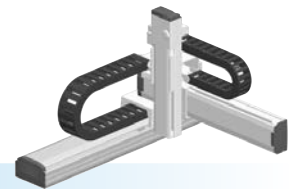


X stroke	250	350	450	550	650	750	850	950	1050	1150	1250	
L	615	715	815	915	1015	1115	1215	1315	1415	1515	1615	
K	100	200	100	200	100	200	100	200	100	200	100	
C	240	420	600	780	780	960	960	1140	1140	1320	1320	
M	2	2	3	3	4	4	5	5	6	6	7	
N	8	8	10	10	12	12	14	14	16	16	18	
Y stroke	150	250	350	450	550	650						
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis		1200				960		840	720	600	480
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. 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.

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



Ordering method

MXy_x - C **RCX340-3**

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
A1			25 to 125cm	15 to 65cm	ZFL20	15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m								
A2					ZFL10										
A3															
A4															

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis: ZFL20	Z-axis: ZFL10
Axis construction ^{Note 1}	F17	F14H	F10H-BK	
AC servo motor output (W)	400	200	200	
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01	+/-0.01	
Drive system	Ball screw φ20	Ball screw φ15	Ball screw φ15	
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	20	10
Maximum speed ^{Note 4} (mm/sec)	1200	1200	1200	600
Moving range (mm)	250 to 1250	150 to 650	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, 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)

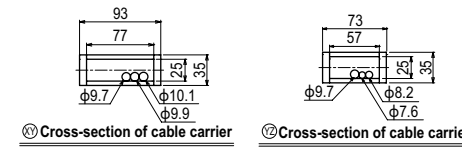
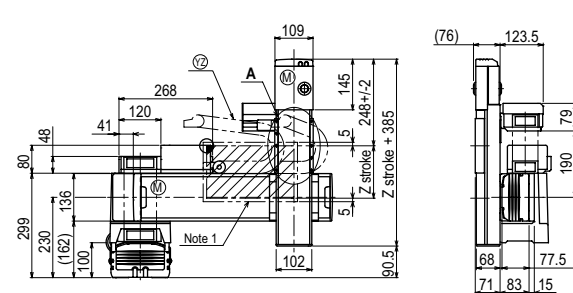
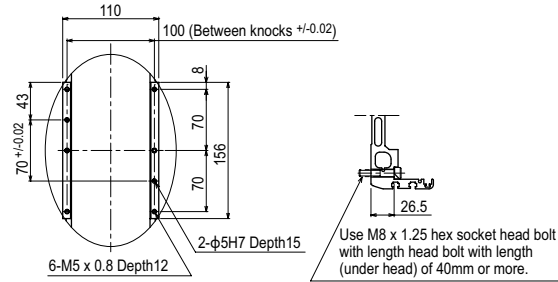
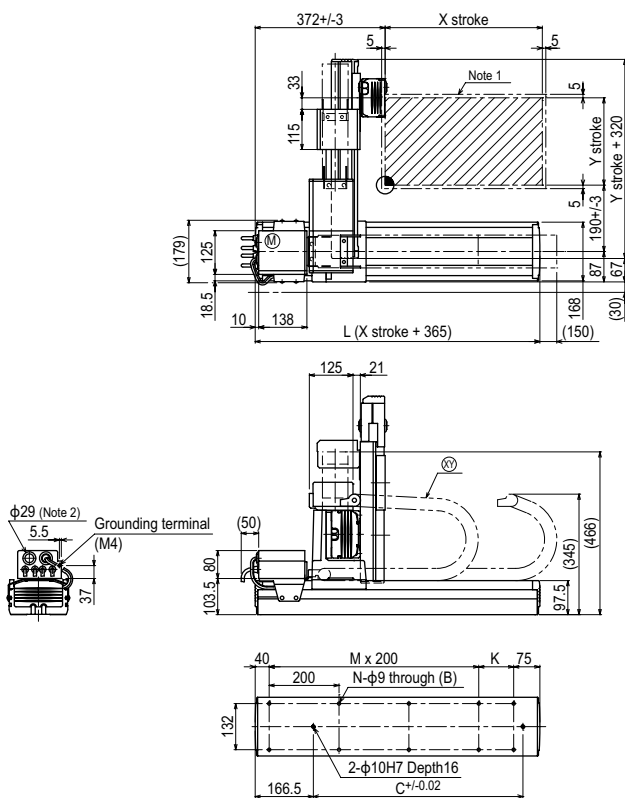
	Z stroke (mm)					
	ZFL20			ZFL10		
	150	250	350	150	250	350
150	8	8	8	15	15	15
250	8	8	8	15	15	15
350	8	8	8	15	15	15
450	8	8	8	12	11	10
550	8	8	8	12	11	10
650	8	7	6	8	7	6

Controller

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

MXy₃ axes / ZFL20/10

A1

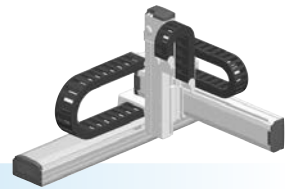


	X stroke	Y stroke														
		150	250	350	450	550	650									
L	615	715	815	915	1015	1115	1215	1315	1415	1515	1615					
K	100	200	100	200	100	200	100	200	100	200	100					
C	240	420	600	600	780	780	960	960	1140	1140	1320					
M	2	2	3	3	4	4	5	5	6	6	7					
N	8	8	10	10	12	12	14	14	16	16	18					
Y stroke		150	250	350	450	550	650									
Z stroke		150	250	350												
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis	1200					960	840	720	600	480					
	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. 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.

MXYx

3 axes / ZFH



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

Ordering method

MXYx - C - [] - [] - [] - **ZFH** - [] - [] - **RCX340-3** - [] - [] - [] - [] - [] - [] - []

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
		A1	25 to 125cm	15 to 65cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis
Axis construction ^{Note 1}	F17	F14H	F10H-BK
AC servo motor output (W)	400	200	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	10
Maximum speed ^{Note 4} (mm/sec)	1200	1200	600
Moving range (mm)	250 to 1250	150 to 650	150 to 350
Robot cable length (m)	Standard: 3.5 Option: 5,10		

Note. The standard types are ZFH 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, 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.

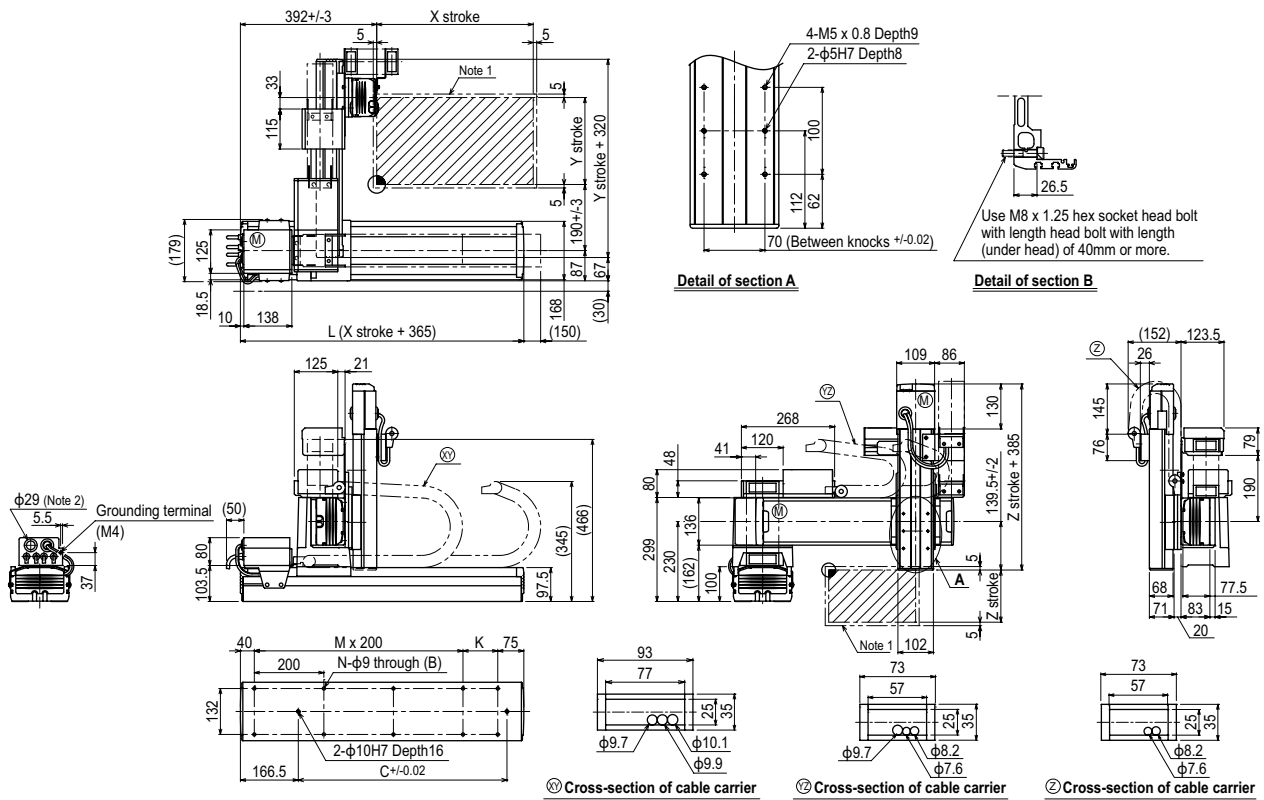
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	14	13	12
250	14	13	12
350	14	13	12
450	12	11	10
550	12	11	10
650	8	7	6

Controller

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

MXYx 3 axes / ZFH (A1)

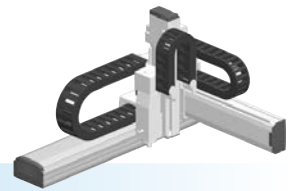


X stroke	250	350	450	550	650	750	850	950	1050	1150	1250	
L	615	715	815	915	1015	1115	1215	1315	1415	1515	1615	
K	100	200	100	200	100	200	100	200	100	200	100	
C	240	420	600	600	780	780	960	960	1140	1140	1320	
M	2	2	3	3	4	4	5	5	6	6	7	
N	8	8	10	10	12	12	14	14	16	16	18	
Y stroke	150	250	350	450	550	650						
Z stroke	150	250	350									
Maximum speed for each stroke (mm/sec) ^{Note 1}	X-axis		1200				960		840	720	600	480
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. 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.



Ordering method

MXy_x - C [] [] [] [] [] [] [] **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
A1			25 to 125cm	15 to 65cm	ZRFL20	15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m								
A2					ZRFL10										
A3															
A4															

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis: ZRFL20	Z-axis: ZRFL10	R-axis
Axis construction ^{Note 1}	F17	F14H	F10H-BK		R5
AC servo motor output (W)	400	200	200		50
Repeatability ^{Note 2} (XYZ: mm) (R: °)	+/-0.01	+/-0.01	+/-0.01		+/-0.0083
Drive system	Ball screw φ20	Ball screw φ15	Ball screw φ15		Harmonic gear
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	20	10	(1/50)
Maximum speed ^{Note 4} (XYZ: mm/sec) (R: °/sec)	1200	1200	1200	600	360
Moving range (XYZ: mm)(R: °)	250 to 1250	150 to 650	150 to 350		360
Robot cable length (m)	Standard: 3.5 Option: 5.10				

Note. The standard types are ZRFL with higher rigidity as compared with ZRF types which are conventional standard types. When you need the ZRF type, please consult YAMAHA.

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 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.

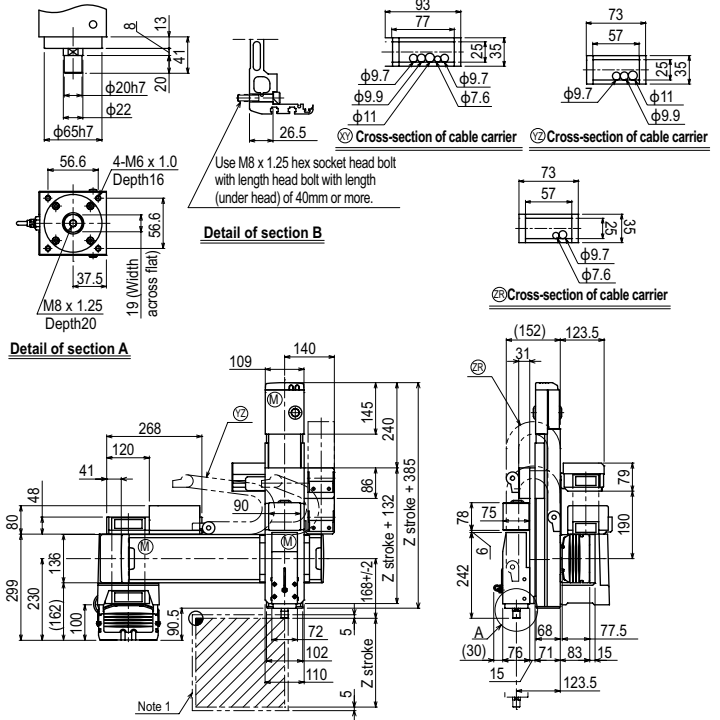
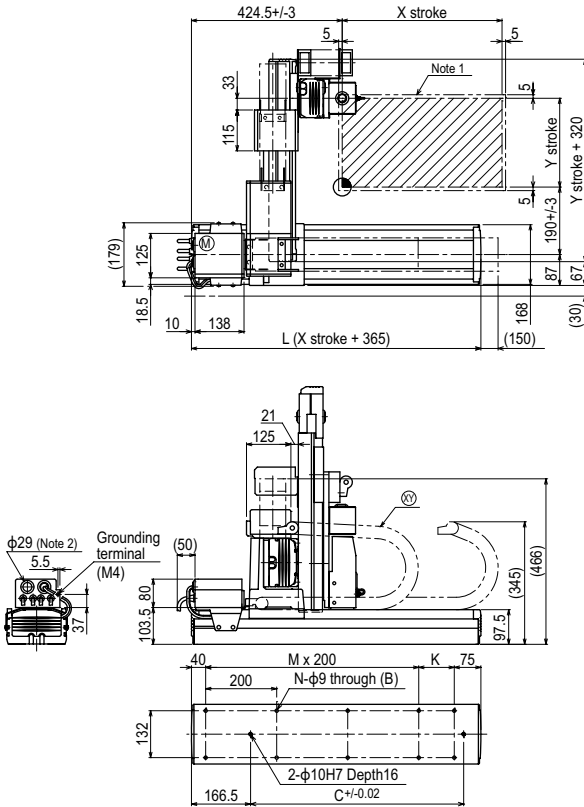
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)					
	ZRFL20			ZRFL10		
	150	250	350	150	250	350
150	4	4	4	11	11	11
250	4	4	4	11	11	11
350	4	4	4	11	11	11
450	4	4	4	8	7	6
550	4	4	4	8	7	6
650	4	4	4	4	3	2

Controller

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

MXy_x 4 axes / ZRFL20/10 (A1)



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	
C	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						
Z stroke	150	250	350									
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis	1200					960	840	720	600	480	
	Speed setting	-					80%	70%	60%	50%	40%	

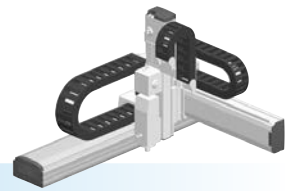
Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.

Note 2. User cable extraction port.

Note 3. 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.

MXy_x

4 axes / ZRFH



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

Ordering method

MXy_x - C [] [] [] **ZRFH** [] [] **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
		A1 A2 A3 A4	25 to 125cm	15 to 65cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis	R-axis
Axis construction <small>Note 1</small>	F17	F14H	F10H-BK	R5
AC servo motor output (W)	400	200	200	50
Repeatability <small>Note 2</small> (XYZ: mm)(R: °)	+/-0.01	+/-0.01	+/-0.01	+/-0.0083
Drive system	Ball screw φ20	Ball screw φ15	Ball screw φ15	Harmonic gear
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	20	20	10	(1/50)
Maximum speed <small>Note 4</small> (XYZ: mm/sec) (R: °/sec)	1200	1200	600	360
Moving range (XYZ: mm)(R: °)	250 to 1250	150 to 650	150 to 350	360
Robot cable length (m)	Standard: 3.5 Option: 5,10			

Note. The standard types are ZRFH with higher rigidity as compared with ZRF types which are conventional standard types. When you need the ZRF type, please consult YAMAHA.

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 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.

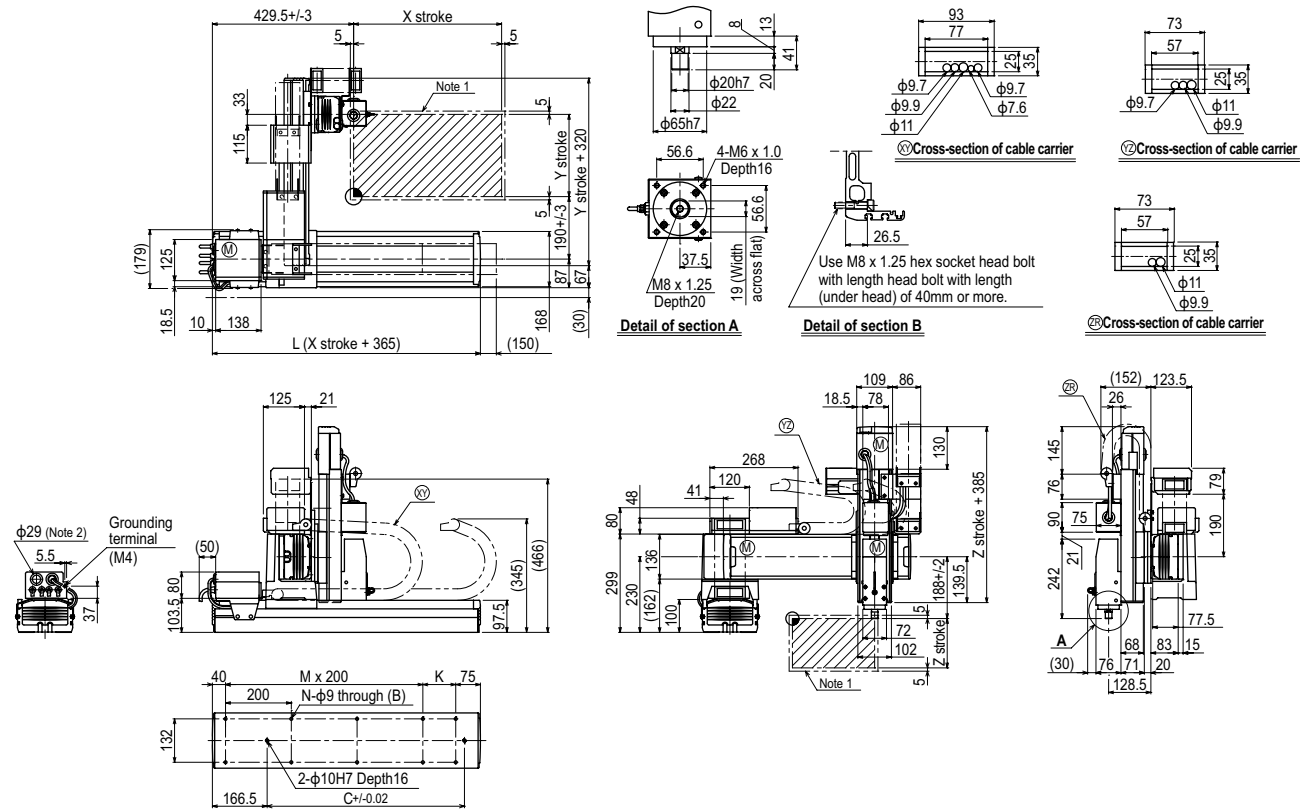
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	11	9	8
250	11	9	8
350	11	9	8
450	8	7	6
550	8	7	6
650	4	3	2

Controller

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

MXy₄ 4 axes / ZRFH (A1)



X stroke	Stroke (mm)										
	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
C	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					
Z stroke	150	250	350								
Maximum speed for each stroke (mm/sec) <small>Note 3</small>	X-axis		1200				960	840	720	600	480
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. 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.

Articulated robots YA	Linear conveyor modules LCM	Single-axis robots CX	Motor-less single axis actuator Robonity	Compact single-axis robots TRANSEVO	Single-axis robots FLIP-X	Linear motor single-axis robots PHASER	Cartesian robots XY-X	SCARA robots YK-X	Pick & place robots YP-X	CLEAN	CONTROLLER	INFORMATION	Arm type	Gantry type	Moving arm type	Pole type	XZ type
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HXYx 2 axes

● Arm type ● Cable carrier



Ordering method

HXYx - C

Model	Cable	Combination	X-axis stroke	Y-axis stroke	Cable
A1			25 to 125cm	25 to 65cm	3L: 3.5m
A2					5L: 5m
A3					10L: 10m
A4					

RCX320-2

Controller / Number of controllable axes	Safety standard	Regenerative unit	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery

Specify various controller setting items. RCX320 ▶ [P.660](#)

RCX222HP

Controller	Usable for CE	Regenerative unit	I/O selection 1	I/O selection 2

Specify various controller setting items. RCX222 ▶ [P.670](#)

Specification

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

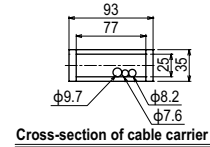
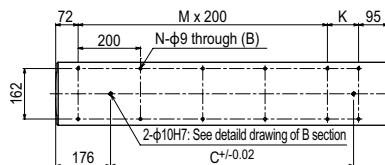
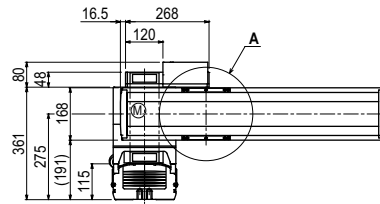
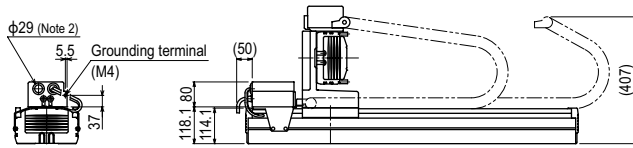
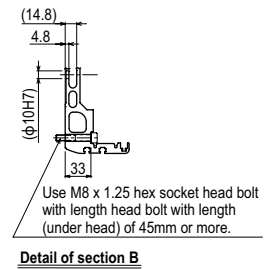
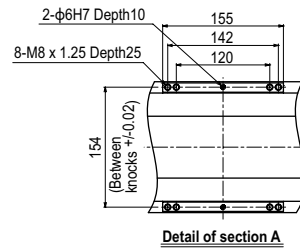
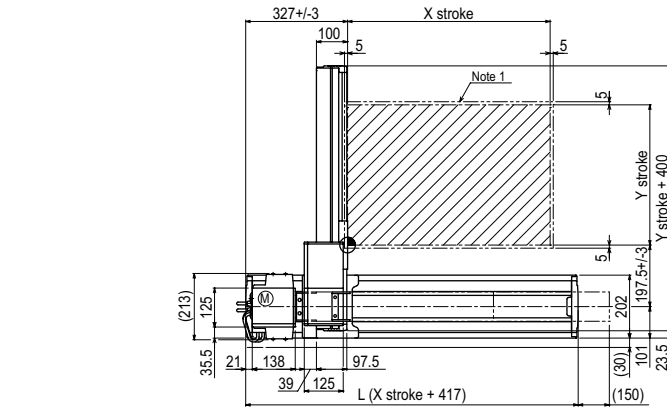
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
250	40
350	40
450	35
550	30
650	30

Controller

Controller	Operation method
RCX320-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222HP-R	

HXYx 2 axes A1

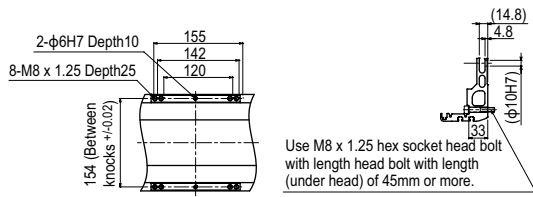


X stroke	250	350	450	550	650	750	850	950	1050	1150	1250
L	667	767	867	967	1067	1167	1267	1367	1467	1567	1667
K	100	200	100	200	100	200	100	200	100	200	100
C	420	420	600	600	780	780	960	960	1140	1320	1320
M	2	2	3	3	4	4	5	5	6	6	7
N	8	8	10	10	12	12	14	14	16	16	18
Y stroke	250	350	450	550	650						
Maximum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

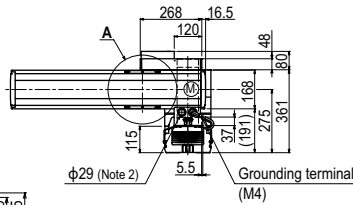
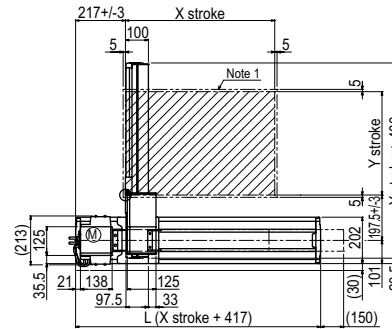
HXYx 2 axes **A2**



Detail of section A

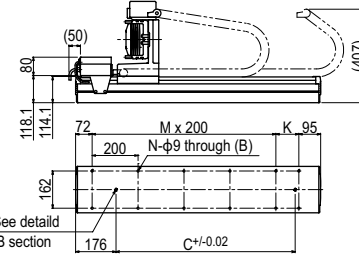
Detail of section B

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

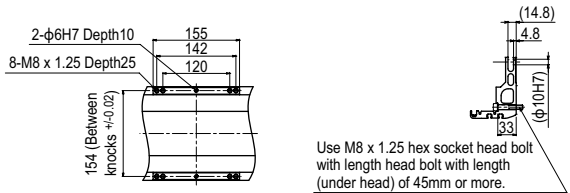


Cross-section of cable carrier

2-φ10H7: See detail drawing of B section



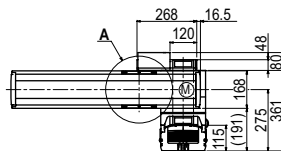
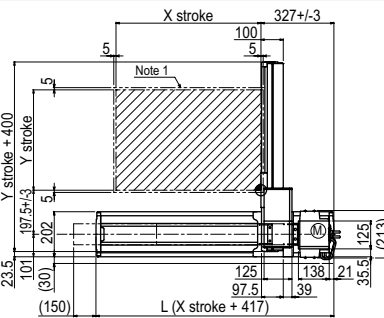
HXYx 2 axes **A3**



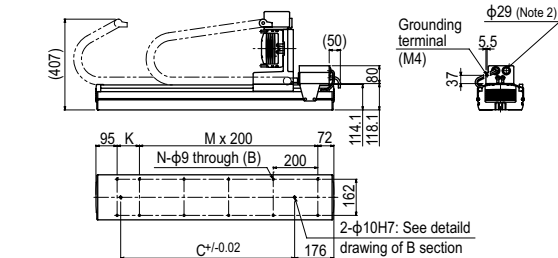
Detail of section A

Detail of section B

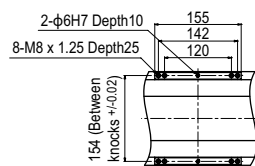
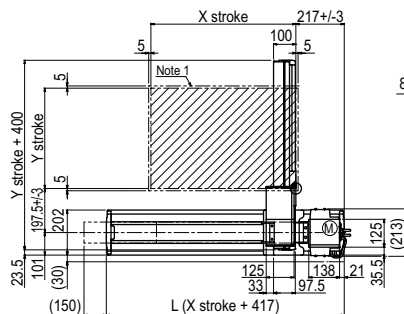
Use M8 x 1.25 hex socket head bolt with length head bolt with length (under head) of 45mm or more.



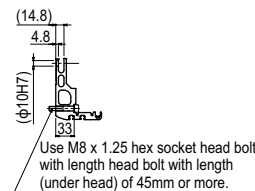
Cross-section of cable carrier



HXYx 2 axes **A4**

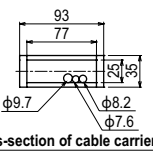
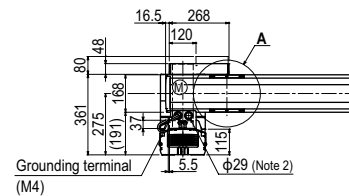
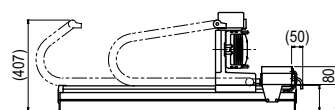


Detail of section A



Detail of section B

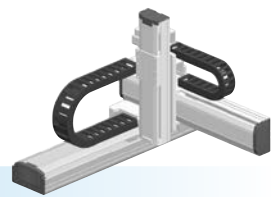
Use M8 x 1.25 hex socket head bolt with length head bolt with length (under head) of 45mm or more.



Cross-section of cable carrier

YA	Articulated robots
LCM	Linear conveyor modules
CX	Single-axis robots
Robonity	Motor-less single axis actuator
TRANSEVO	Compact single-axis robots
FLIP-X	Single-axis robots
PHASER	Linear motor single-axis robots
XY-X	Cartesian robots
YK-X	SCARA robots
YP-X	Pick & place robots
CLEAN	Clean
CONTROLLER	Controller
INFORMATION	Information
Arm type	Arm type
Gantry type	Gantry type
Moving arm type	Moving arm type
Pole type	Pole type
XZ type	XZ type

HXYx 3 axes / ZL



● Arm type ● Cable carrier ● Z-axis: clamped base / moving table type (200W)

Ordering method

HXYx - C				ZL			RCX340-3								
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
	A1 A2 A3 A4		25 to 125cm	25 to 65cm		25 to 55cm	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis
Axis construction <small>Note 1</small>	F20	F17	F14H-BK
AC servo motor output (W)	600	400	200
Repeatability <small>Note 2</small> (mm)	+/-0.01	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ20	Ball screw φ15
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	20	20	10
Maximum speed <small>Note 4</small> (mm/sec)	1200	1200	600
Moving range (mm)	250 to 1250	250 to 650	250 to 550
Robot cable length (m)	Standard: 3.5 Option: 5,10		

Note 1. Use caution that the flange 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, 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.

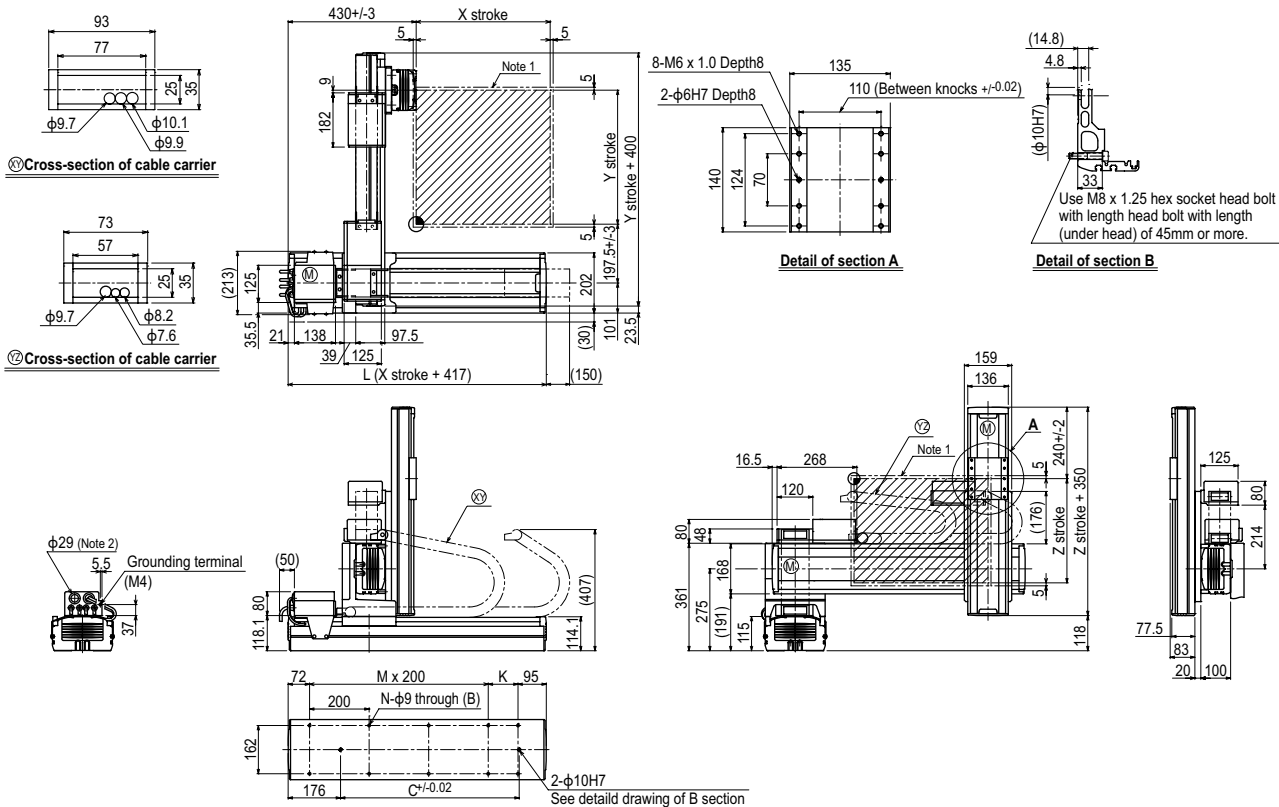
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)				
	250	350	450	550	650
250	20	20	20	20	20
350	20	20	20	20	20
450	20	20	19	18	18
550	18	17	16	15	15
650	18	17	16	15	15

Controller

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

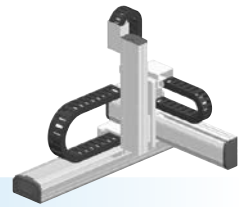
HXYx 3 axes / ZL (A1)



	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	
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		250	350	450	550	650							
Z stroke		250	350	450	550								
Maximum speed for each stroke (mm/sec) <small>Note 3</small>	X-axis	1200					960	840	720	600	480		
	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. 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.



Ordering method

HXYx - C				ZH			RCX340-3								
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
		A1 A2 A3 A4	25 to 125cm	25 to 65cm		25 to 55cm	3L: 3.5m 5L: 5m 10L: 10m	Specify various controller setting items. RCX340 ▶ P.678							

Specification

	X-axis	Y-axis	Z-axis
Axis construction ^{Note 1}	F20	F17	F14H-BK
AC servo motor output (W)	600	400	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ20	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	5
Maximum speed ^{Note 4} (mm/sec) (°/sec)	1200	1200	300
Moving range (mm)	250 to 1250	250 to 650	250 to 550
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 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.

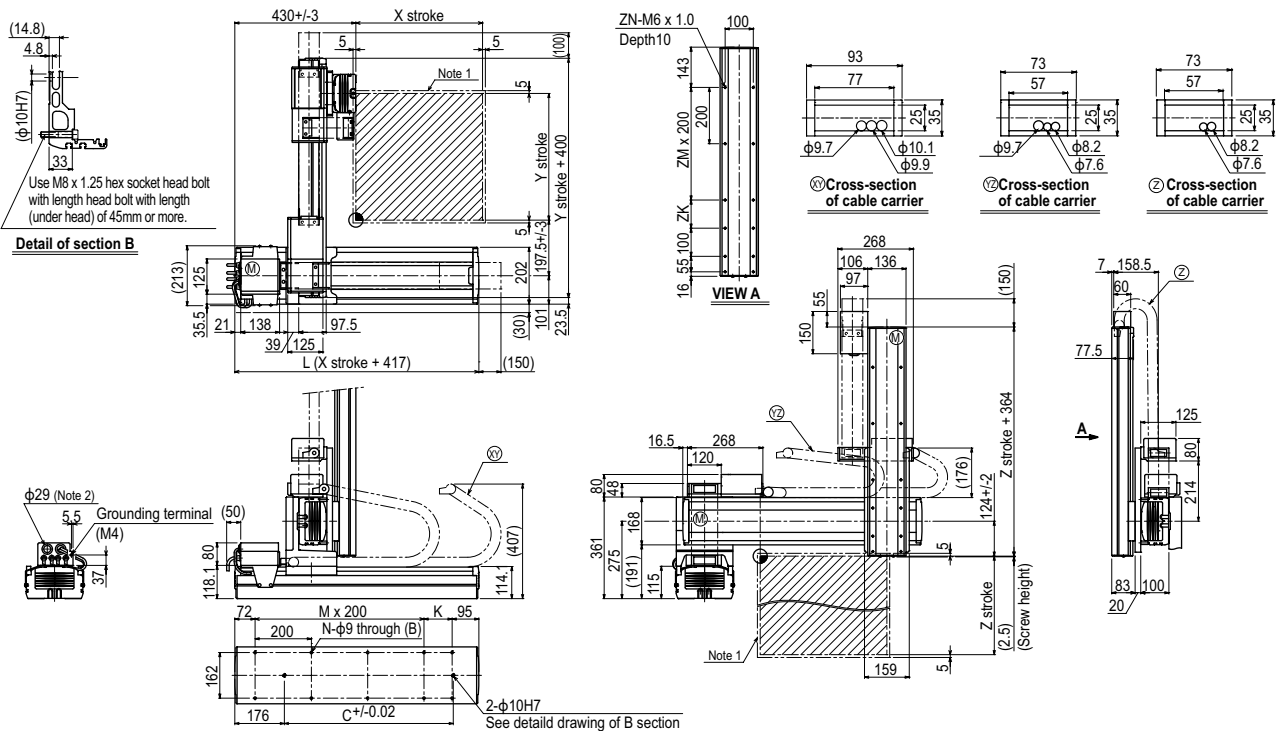
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)			
	250	350	450	550
250	25	25	24	23
350	25	25	24	23
450	20	20	19	18
550	18	17	16	15
650	18	17	16	15

Controller

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

HXYx 3 axes / ZH (A1)



X stroke	250	350	450	550	650	750	850	950	1050	1150	1250
	L	667	767	867	967	1067	1167	1267	1367	1467	1567
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

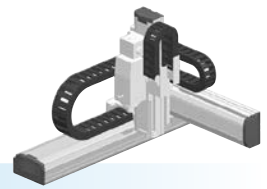
Y stroke	250	350	450	550	650

Z stroke	250	350	450	550
ZK	100	200	100	200
ZM	1	1	2	2
ZN	10	10	12	12

Maximum speed for each stroke (mm/sec)	X-axis	1200	960	840	720	600	480
	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. 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.



● Arm 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
		A1 A2 A3 A4	25 to 125cm	25 to 65cm		25 to 55cm	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis	R-axis
Axis construction <small>Note 1</small>	F20	F17	F14H-BK	R20
AC servo motor output (W)	600	400	200	200
Repeatability <small>Note 2</small> (XYZ: mm)(R: °)	+/-0.01	+/-0.01	+/-0.01	+/-0.0083
Drive system	Ball screw φ20	Ball screw φ20	Ball screw φ15	Harmonic gear
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	20	20	10	(1/50)
Maximum speed <small>Note 4</small> (XYZ: mm/sec) (R: °/sec)	1200	1200	600	360
Moving range (XYZ: mm) (R: °)	250 to 1250	250 to 650	250 to 550	360
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 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.

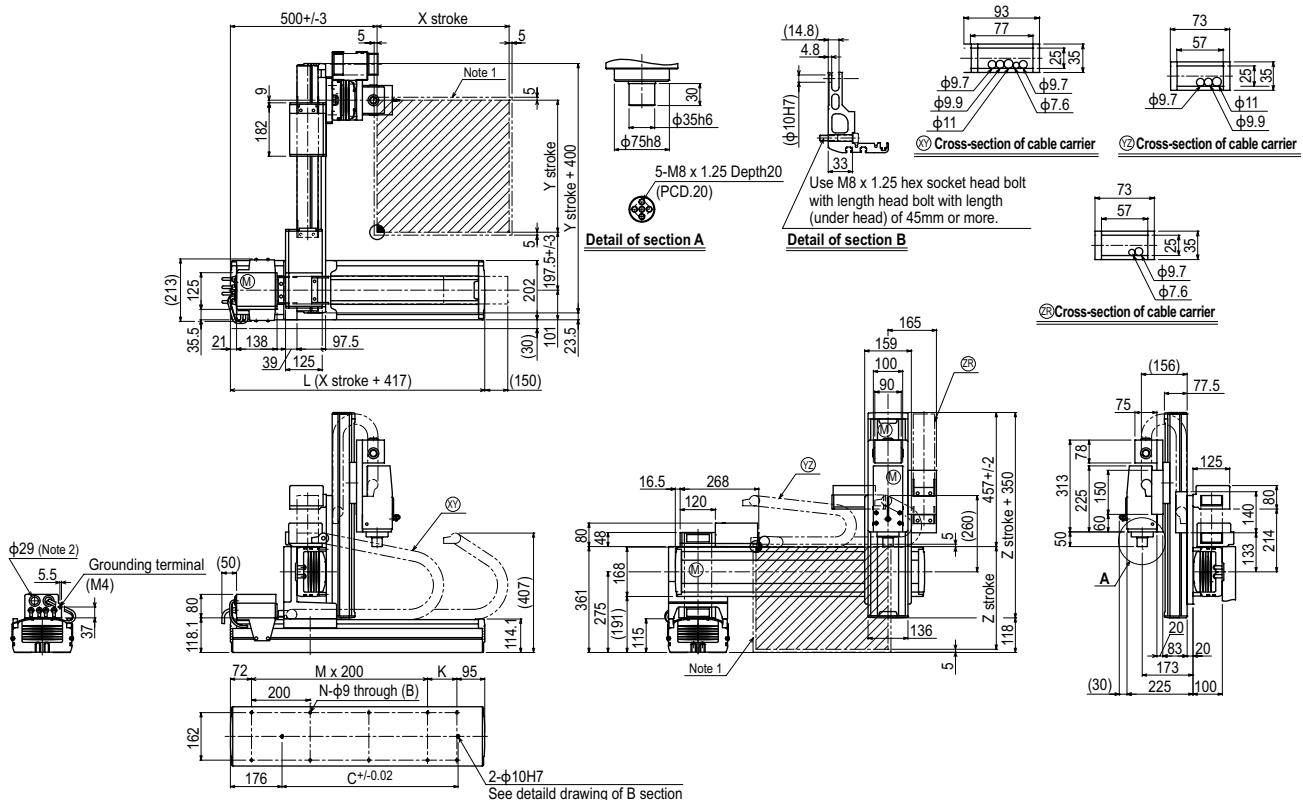
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)			
	250	350	450	550
250	12	12	12	12
350	12	12	12	12
450	12	12	12	11
550	10	9	8	7
650	10	9	8	7

Controller

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

HXYx 4 axes / ZRL (A1)



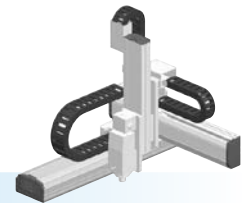
X stroke	250	350	450	550	650	750	850	950	1050	1150	1250
L	667	767	867	967	1067	1167	1267	1367	1467	1567	1667
K	100	200	100	200	100	200	100	200	100	200	100
C	420	420	600	600	780	780	960	960	1140	1320	1320
M	2	2	3	3	4	4	5	5	6	6	7
N	8	8	10	10	12	12	14	14	16	16	18
Y stroke	250	350	450	550	650						
Z stroke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

HXYx 4 axes / ZRH

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



Ordering method

HXYx - C				ZRH			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
A1		A1	25 to 125cm	25 to 65cm		25 to 55cm	3L: 3.5m 5L: 5m 10L: 10m	Specify various controller setting items. RCX340 ▶ P.678							
A2		A2													
A3		A3													
A4		A4													

Specification

	X-axis	Y-axis	Z-axis	R-axis
Axis construction ^{Note 1}	F20	F17	F14H-BK	R20
AC servo motor output (W)	600	400	200	200
Repeatability ^{Note 2} (XYZ: mm)(R: °)	+/-0.01	+/-0.01	+/-0.01	+/-0.0083
Drive system	Ball screw φ20	Ball screw φ20	Ball screw φ15	Harmonic gear
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	5	(1/50)
Maximum speed ^{Note 4} (XYZ: mm/sec) (R: °/sec)	1200	1200	300	360
Moving range (XYZ: mm) (R: °)	250 to 1250	250 to 650	250 to 550	360
Robot cable length (m)	Standard: 3.5 Option: 5, 10			

Note 1. Use caution that the flange 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, 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.

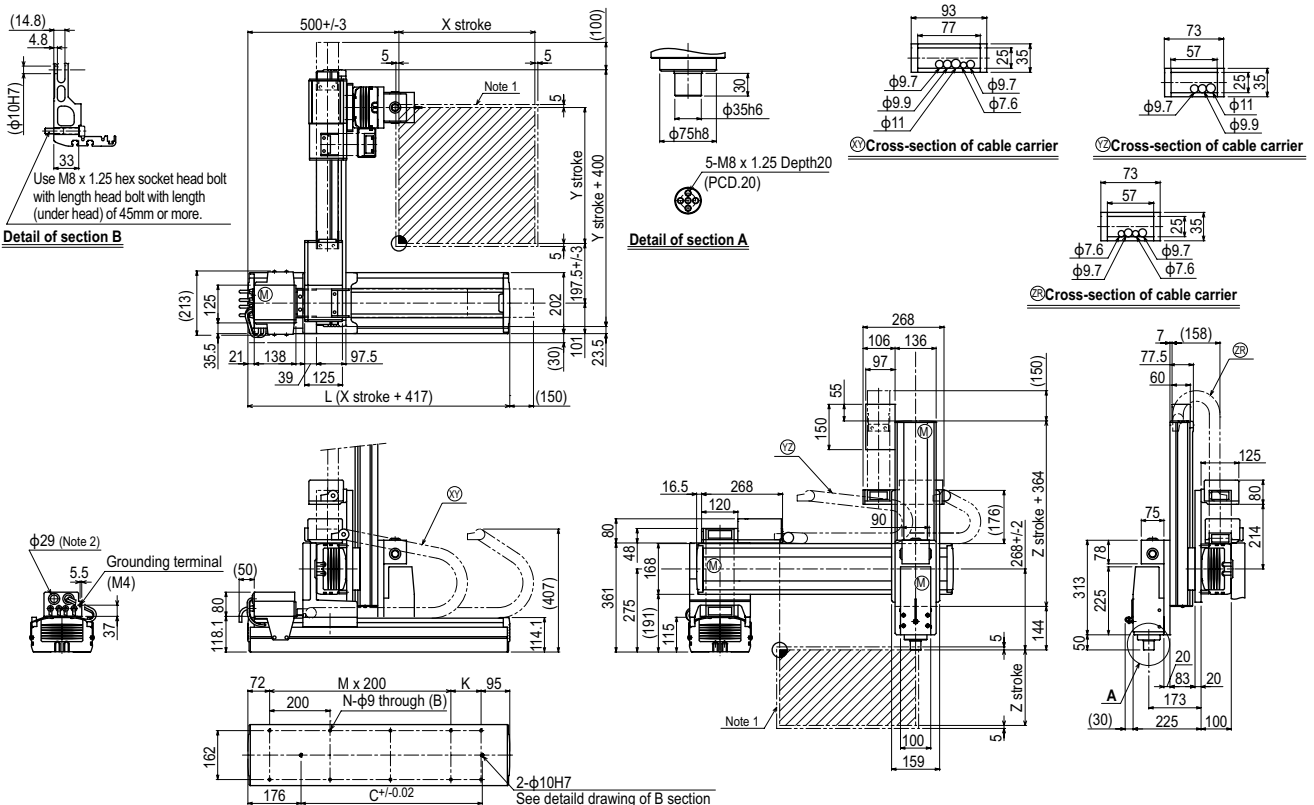
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)			
	250	350	450	550
250	12	12	12	12
350	12	12	12	12
450	12	12	12	11
550	11	10	9	8
650	11	10	9	8

Controller

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

HXYx 4 axes / ZRH A1



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	
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	250	350	450	550	650							
Z stroke	250	350	450	550								
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis	1200				960	840	720	600	480		
	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. 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.

Articulated robots
YA

Linear conveyor modules
LCM

Single-axis robots
CX

Motor-less single-axis actuator
Robomity

Compact single-axis robots
TRANSEVO

Single-axis robots
FLIP-X

Linear motor single-axis robots
PHASER

Cartesian robots
XY-X

SCARA robots
YK-X

Pick & place robots
YP-X

CLEAN

CONTROLLER INFORMATION

Arm type

Gantry type

Moving arm type

Pole type

XZ type

HXYLx 2 axes

● Arm type ● Cable carrier



Ordering method

HXYLx - C

Model	Cable	Combination	X-axis stroke	Y-axis stroke	Cable
A1			115 to 205cm	25 to 65cm	3L: 3.5m
A2					5L: 5m
A3					10L: 10m
A4					

RCX320-2 **R**

Controller / Number of controllable axes	Safety standard	Regenerative unit	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery
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Specify various controller setting items. RCX320 ▶ **P.660**

RCX222HP **R**

Controller	Usable for CE	Regenerative unit	I/O selection 1	I/O selection 2
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Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Y-axis
Axis construction <small>Note 1</small>	F20N	F17
AC servo motor output (W)	400	400
Repeatability <small>Note 2</small> (mm)	+/-0.04	+/-0.01
Drive system	Ball screw φ20	Ball screw φ20
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	20	20
Maximum speed (mm/sec)	1200	1200
Moving range (mm)	1150 to 2050	250 to 650
Robot cable length (m)	Standard: 3.5 Option: 5,10	

Note 1. Use caution that the flange 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.

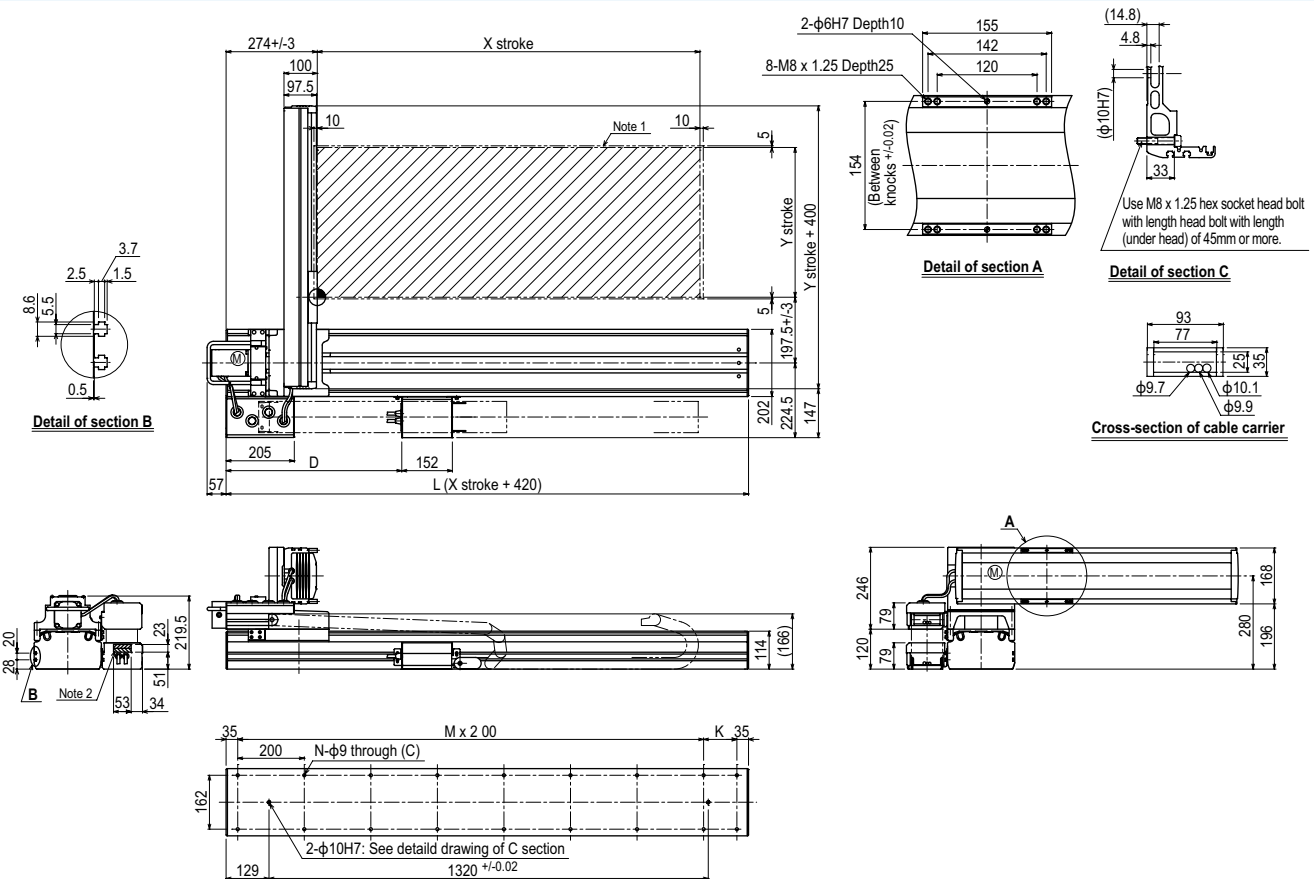
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
250	40
350	40
450	35
550	30
650	30

Controller

Controller	Operation method
RCX320-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222HP-R	

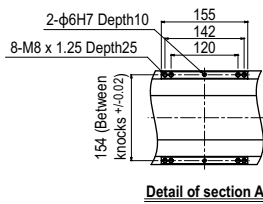
HXYLx 2 axes A1



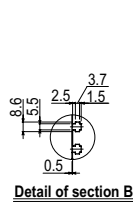
X stroke	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050
L	1570	1670	1770	1870	1970	2070	2170	2270	2370	2470
D	528	574	620	666	712	758	804	850	896	942
K	100	200	100	200	100	200	100	200	100	200
M	7	7	8	8	9	9	10	10	11	11
N	18	18	20	20	22	24	24	24	26	26
Y stroke	250	350	450	550	650					

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 a user cable extraction port.

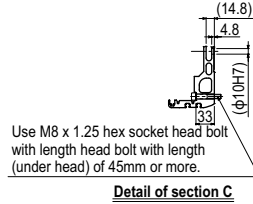
HXYLx 2 axes **A2**



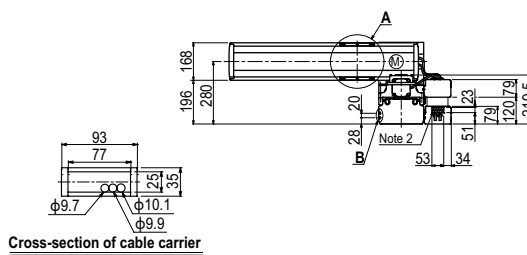
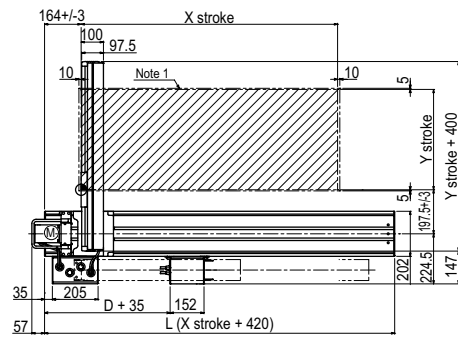
Detail of section A



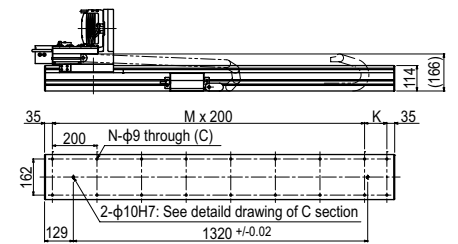
Detail of section B



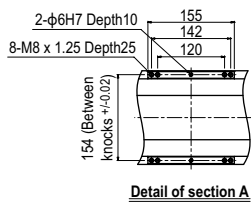
Detail of section C



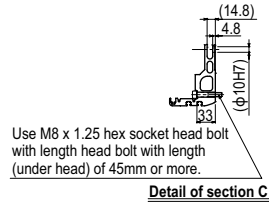
Cross-section of cable carrier



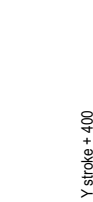
HXYLx 2 axes **A3**



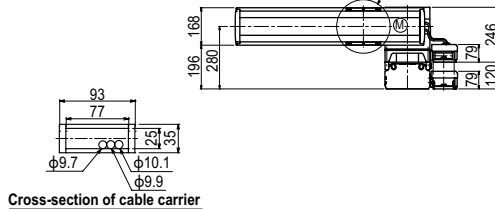
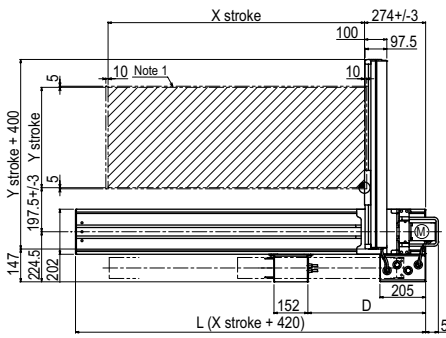
Detail of section A



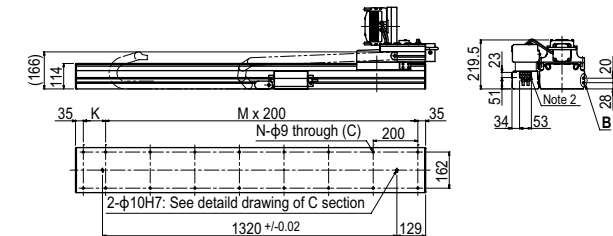
Detail of section B



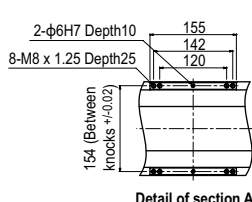
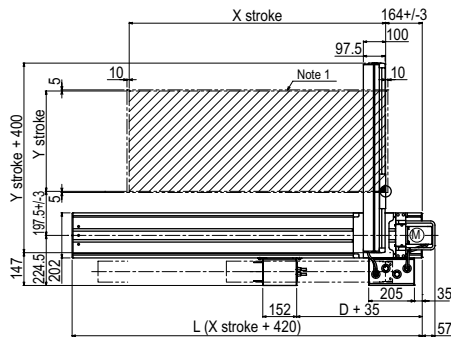
Detail of section C



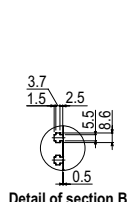
Cross-section of cable carrier



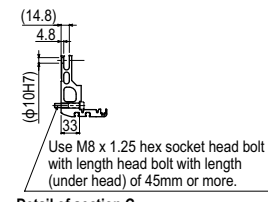
HXYLx 2 axes **A4**



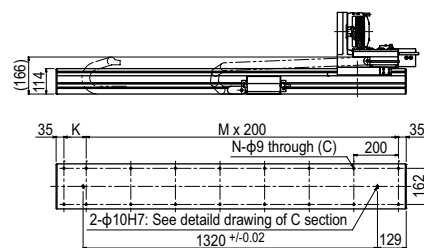
Detail of section A



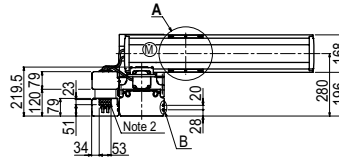
Detail of section B



Detail of section C

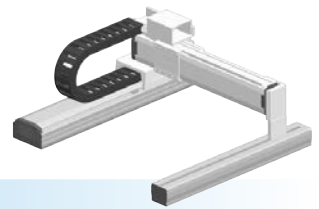


Cross-section of cable carrier



YA	Articulated robots
LCM	Linear conveyor modules
CX	Single-axis robots
Robonity	Motor-less single axis actuator
TRANSEVO	Compact single-axis robots
FLIP-X	Single-axis robots
PHASER	Linear motor single-axis robots
XY-X	Cartesian robots
YK-X	SCARA robots
YP-X	Pick & place robots
CLEAN	CLEAN
CONTROLLER	CONTROLLER
INFORMATION	INFORMATION
Arm type	Arm type
Gantry type	Gantry type
Moving arm type	Moving arm type
Pole type	Pole type
XZ type	XZ type

MXYx 2 axes



- Gantry type
- Cable carrier

Ordering method

MXYx - C

Model	Cable	Combination	X-axis stroke	Y-axis stroke	Cable
G1			25 to 125cm	15 to 85cm	3L: 3.5m
G2					5L: 5m
G3					10L: 10m
G4					

RCX320-2 **R**

Controller / Number of controllable axes	Safety standard	Regenerative unit	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery
Specify various controller setting items. RCX320 ▶ P.660						

RCX222 **R**

Controller	Usable for CE	Regenerative unit	I/O selection 1	I/O selection 2
Specify various controller setting items. RCX222 ▶ P.670				

Specification

	X-axis	Y-axis
Axis construction <small>Note 1</small>	F17	F14H
AC servo motor output (W)	400	200
Repeatability <small>Note 2</small> (mm)	+/-0.01	+/-0.01
Drive system	Ball screw ϕ 20	Ball screw ϕ 15
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	20	20
Maximum speed <small>Note 4</small> (mm/sec)	1200	1200
Moving range (mm)	250 to 1250	150 to 850
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 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.

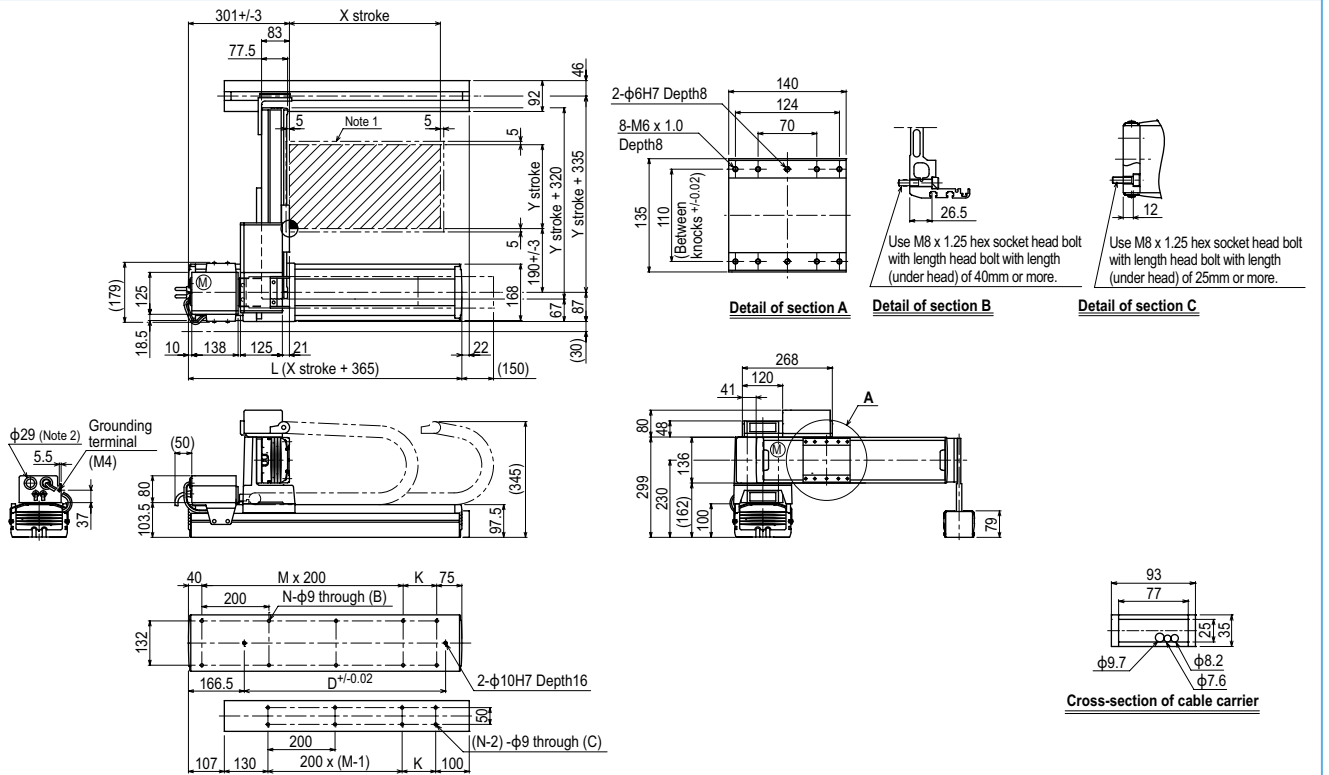
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
150	30
250	30
350	30
450	30
550	30
650	30
750	25
850	20

Controller

Controller	Operation method
RCX320-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222-R	

MXYx 2 axes G1

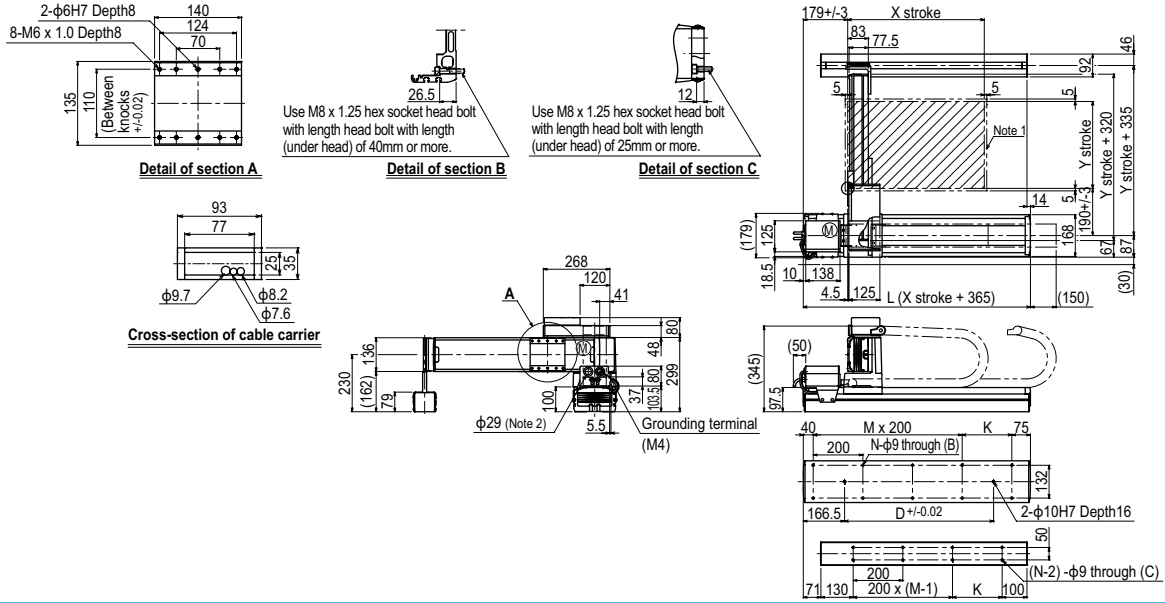


X stroke	250	350	450	550	650	750	850	950	1050	1150	1250
L	615	715	815	915	1015	1115	1215	1315	1415	1515	1615
K	100	200	100	200	100	200	100	200	100	200	100
D	240	420	600	600	780	780	960	960	1140	1140	1320
M	2	2	3	3	4	4	5	5	6	6	7
N	8	8	10	10	12	12	14	14	16	16	18
Y stroke	150	250	350	450	550	650	750	850			
Maximum speed for each stroke <small>Note 3</small> (mm/sec)	X-axis		1200		960		840	720	600	480	
	Speed setting		-		80%		70%	60%	50%	40%	
	Y-axis		1200		960		780				
	Speed setting		-		80%		65%				

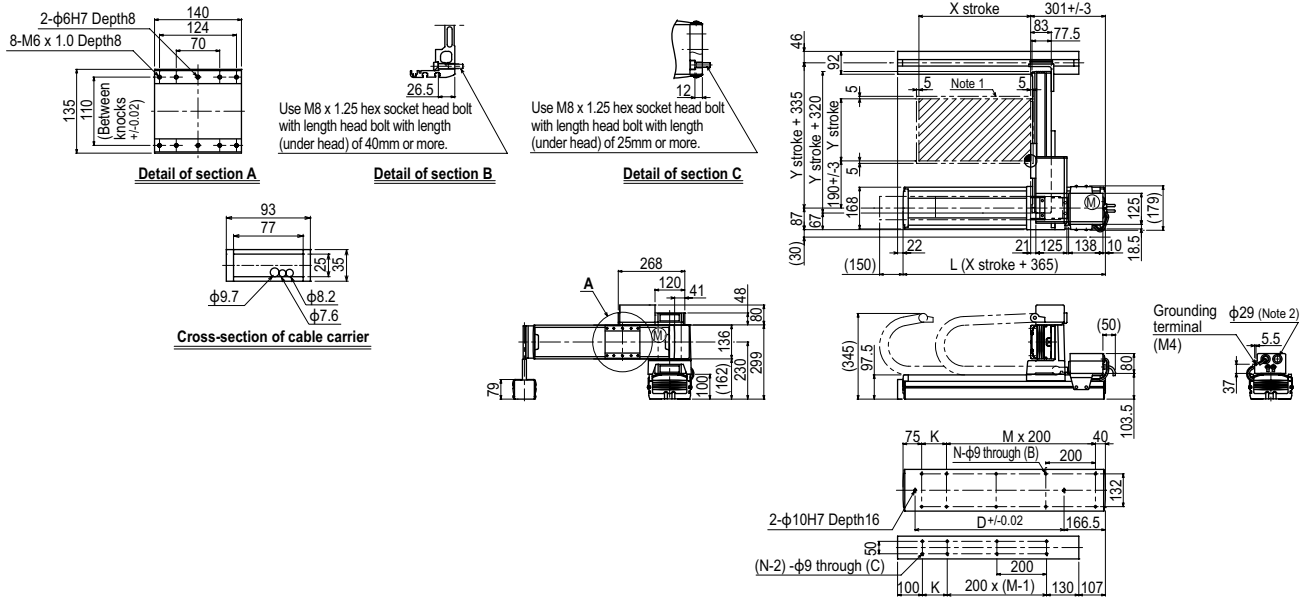
Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. User cable extraction port.

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.

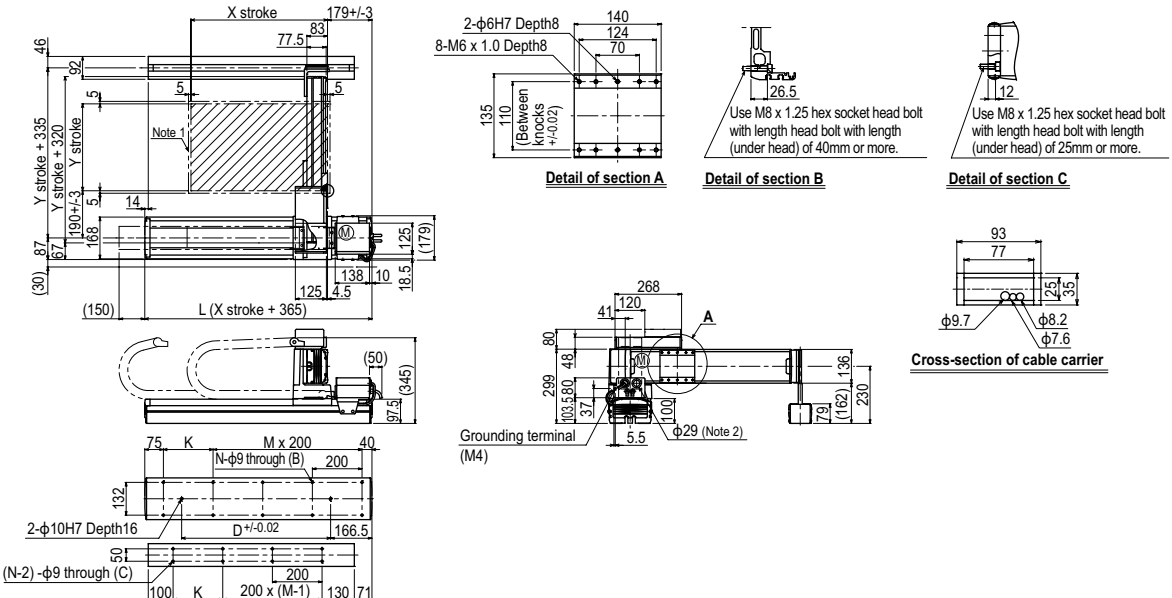
MXyX 2 axes G2



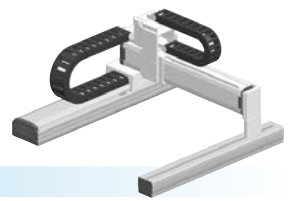
MXyX 2 axes G3



MXyX 2 axes G4



MXYx 2 axes / IO



- Gantry type
- Cable carrier
- Type with Y-axis I/O cable carrier added

Ordering method

MXYx - C [] [] [] **IO** [] [] []

Model	Cable	Combination	X-axis stroke	Y-axis stroke	ZR-axis	Cable
G1			25 to 125cm	15 to 85cm		3L: 3.5m 5L: 5m 10L: 10m
G2						
G3						
G4						

RCX320-2 [] [] [] [] [] [] [] [] [] []

Controller / Number of controllable axes	Safety standard	Regenerative unit	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery
RCX320-2						

Specify various controller setting items. RCX320 ▶ **P.660**

RCX222 [] [] [] [] [] [] [] [] [] []

Controller	Usable for CE	Regenerative unit	I/O selection 1	I/O selection 2
RCX222				

Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Y-axis
Axis construction ^{Note 1}	F17	F14H
AC servo motor output (W)	400	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20
Maximum speed ^{Note 4} (mm/sec)	1200	1200
Moving range (mm)	250 to 1250	150 to 850
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 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.

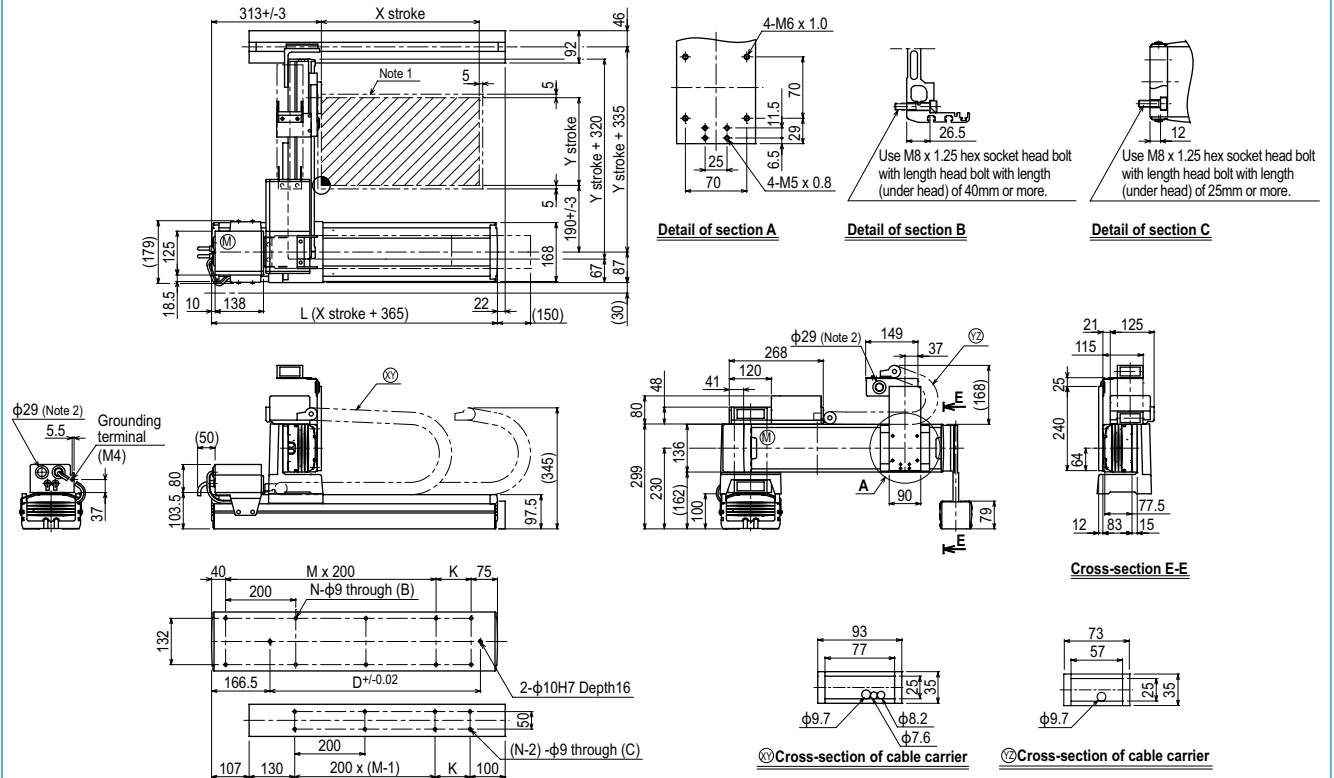
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
150	29
250	29
350	29
450	29
550	29
650	29
750	24
850	19

Controller

Controller	Operation method
RCX320-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222-R	

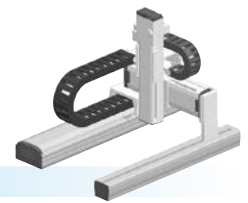
MXYx 2 axes / IO (G1)



X stroke	250	350	450	550	650	750	850	950	1050	1150	1250
	L	615	715	815	915	1015	1115	1215	1315	1415	1515
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			
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis		1200				960	840	720	600	480
	Speed setting		-				80%	70%	60%	50%	40%
	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.



Ordering method

MXy_x-C							RCX340-3									
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 G2 G3 G4		G1 G2 G3 G4	25 to 125cm	15 to 85cm	ZFL20 ZFL10	15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m	RCX340								

Specify various controller setting items. RCX340 ▶ P.678

Specification

	X-axis	Y-axis	Z-axis: ZFL20	Z-axis: ZFL10
Axis construction <small>Note 1</small>	F17	F14H-BK	F10H-BK	
AC servo motor output (W)	400	200	200	
Repeatability <small>Note 2</small> (mm)	+/-0.01	+/-0.01	+/-0.01	
Drive system	Ball screw φ20	Ball screw φ15	Ball screw φ15	
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	20	20	20	10
Maximum speed <small>Note 4</small> (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 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 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.

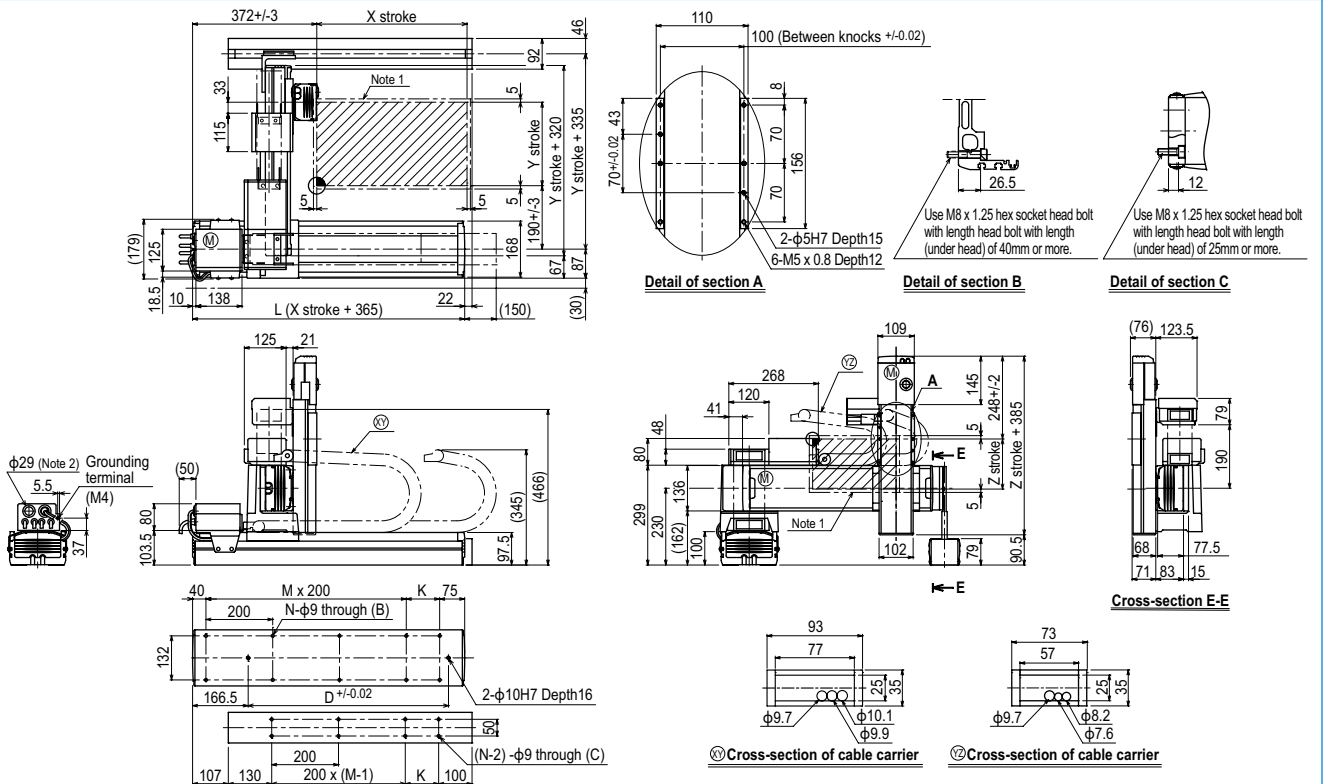
Maximum payload (kg)

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

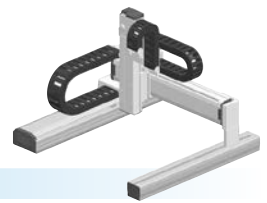
MXy₃ 3 axes / ZFL20/10 G1



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) <small>Note 3</small>	X-axis			1200								
	Speed setting			-			80%	84%	72%	60%	60%	48%
	Y-axis			1200								
	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.

Articulated robots
YA
Linear conveyor modules
LCM
Single-axis robots
CX
Motor-less single-axis robots
Robomity
Compact single-axis robots
TRANSEVO
Single-axis robots
FLIP-X
Linear motor single-axis robots
PHASER
Cartesian robots
XY-X
SCARA robots
YK-X
Pick & place robots
YP-X
CLEAN
CONTROLLER INFORMATION
Arm type
Gantry type
Moving arm type
Pole type
XZ type



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

Ordering method

MXy_x-C **ZFH** **RCX340-3**

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 G2 G3 G4	25 to 125cm	15 to 85cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis
Axis construction ^{Note 1}	F17	F14H	F10H-BK
AC servo motor output (W)	400	200	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	10
Maximum speed ^{Note 4} (mm/sec)	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 ZFH 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 flange 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.

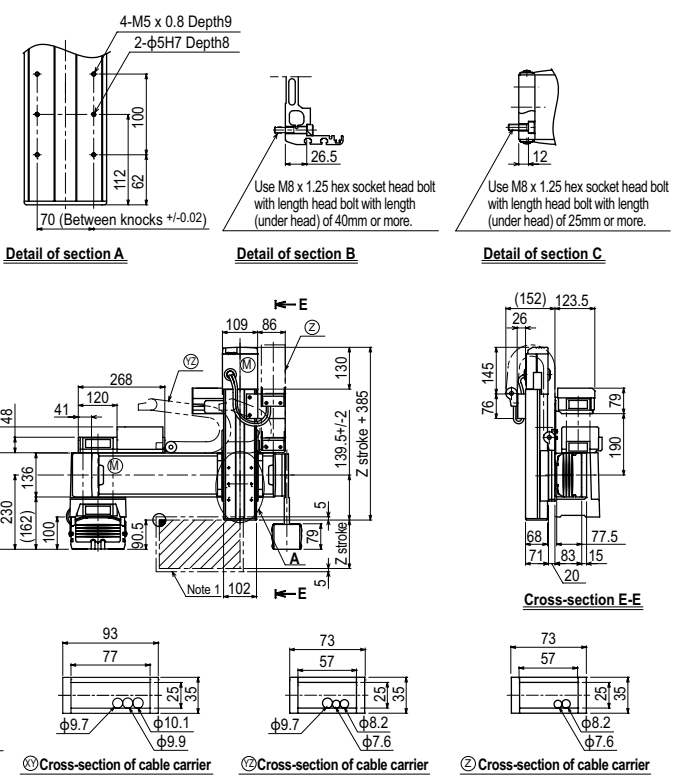
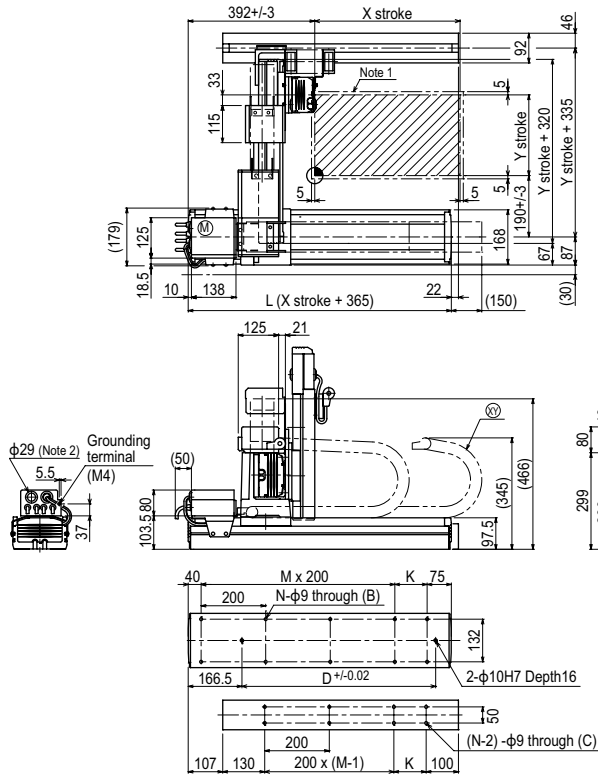
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	14	13	12
250	14	13	12
350	14	13	12
450	14	13	12
550	14	13	12
650	14	13	12
750	14	13	12
850	12	11	10

Controller

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

MXy₃ 3 axes / ZFH **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
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
	L	615	715
K	100	200	100
D	240	420	600
M	2	2	3
N	8	8	10

Z stroke	150	250	350
	L	615	715
K	100	200	100
D	240	420	600
M	2	2	3
N	8	8	10

Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis	Y-axis	Z-axis
	Speed setting		
Speed setting	80%	70%	60%
Speed setting	60%	50%	40%

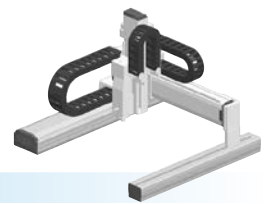
Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. User cable extraction port.

Note 3. When the X-axis stroke is longer than 850mm (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.

● Gantry type

● Cable carrier

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



Ordering method

MXy_x-C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RCX340-4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Model	Cable	Combination	X-axis stroke	Y-axis stroke	ZR-axis	Z-axis stroke	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	ZRFL20	15 to 35cm									
G2					ZRFL10										
G3															
G4															

Specify various controller setting items. RCX340 ▶ **P678**

Specification

	X-axis	Y-axis	Z-axis: ZRFL20	Z-axis: ZRFL10	R-axis
Axis construction ^{Note 1}	F17	F14H	F10H-BK		R5
AC servo motor output (W)	400	200	200		50
Repeatability ^{Note 2} (XYZ: mm)(R: °)	+/-0.01	+/-0.01	+/-0.01		+/-0.0083
Drive system	Ball screw φ20	Ball screw φ15	Ball screw φ15		Harmonic gear
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	20	10	(1/50)
Maximum speed ^{Note 4} (XYZ: mm/sec) (R: °/sec)	1200	1200	1200	600	360
Moving range (XYZ: mm)(R: °)	250 to 1250	150 to 850	150 to 350		360
Robot cable length (m)	Standard: 3.5 Option: 5,10				

Note. The standard types are ZRFL with higher rigidity as compared with ZRF types which are conventional standard types. When you need the ZRF type, please consult YAMAHA.

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 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.

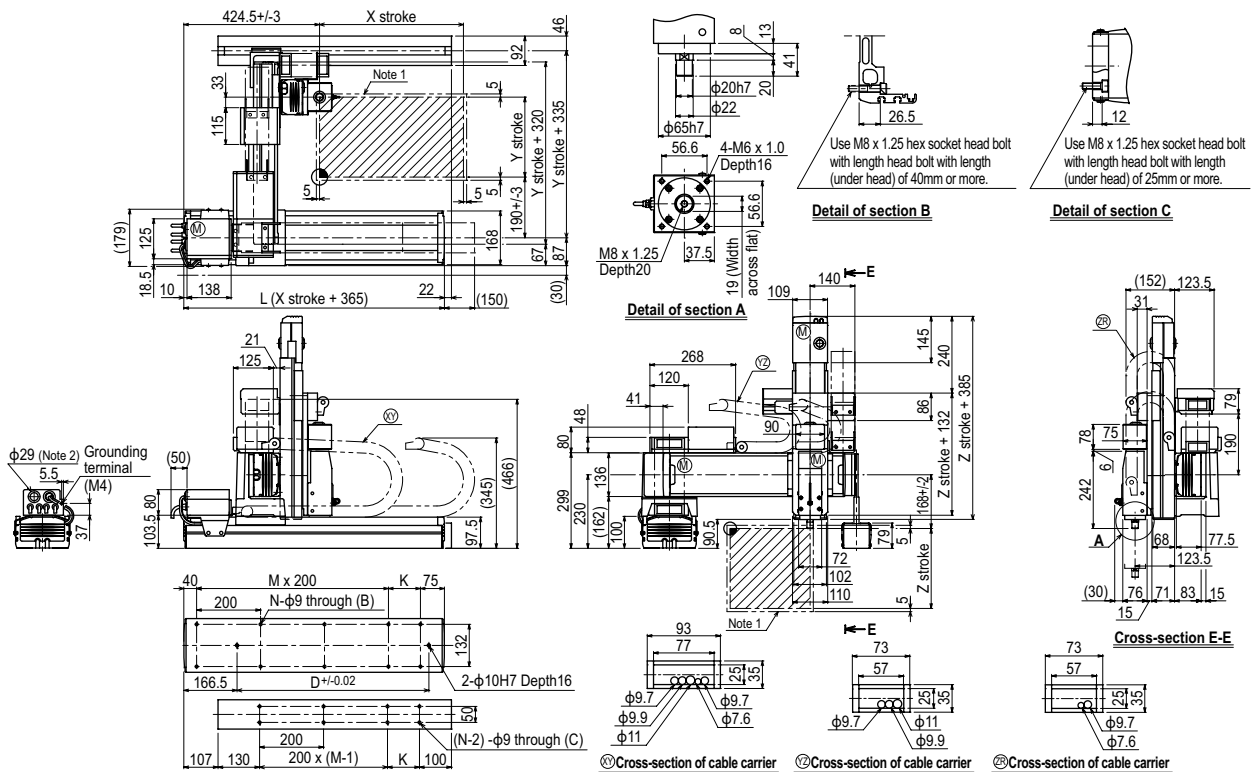
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)					
	ZRFL20			ZRFL10		
150	4	4	4	11	11	11
250	4	4	4	11	11	11
350	4	4	4	11	11	11
450	4	4	4	11	11	11
550	4	4	4	11	11	11
650	4	4	4	11	11	11
750	4	4	4	11	11	11
850	4	4	4	8	7	6

Controller

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

MXy_x 4 axes / ZRFL20/10 (G1)

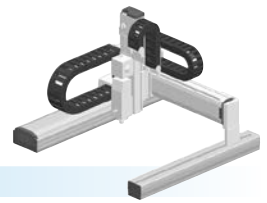


X stroke	250	350	450	550	650	750	850	950	1050	1150	1250	
	L	615	715	815	915	1015	1115	1215	1315	1415	1515	1615
K	100	200	100	200	100	200	100	200	100	200	100	
D	240	420	600	600	780	780	960	960	1140	1140	1320	
M	2	2	3	3	4	4	5	5	6	6	7	
N	8	8	10	10	12	12	14	14	16	16	18	
Y stroke	150	250	350	450	550	650	750	850				
Z stroke	150	250	350									
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis	1200					960	840	720	600	480	
	Speed setting	-					80%	70%	60%	50%	40%	
	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.



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

Ordering method

MXYx - C - **ZRFH** - **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 G2 G3 G4	25 to 125cm	15 to 85cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis	R-axis
Axis construction ^{Note 1}	F17	F14H	F10H-BK	R5
AC servo motor output (W)	400	200	200	50
Repeatability ^{Note 2} (XYZ: mm) (R: °)	+/-0.01	+/-0.01	+/-0.01	+/-0.0083
Drive system	Ball screw φ20	Ball screw φ15	Ball screw φ15	Harmonic gear
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	10	(1/50)
Maximum speed ^{Note 4} (XYZ: mm/sec) (R: °/sec)	1200	1200	600	360
Moving range (XYZ: mm) (R: °)	250 to 1250	150 to 850	150 to 350	360
Robot cable length (m)	Standard: 3.5 Option: 5, 10			

Note. The standard types are ZRFH with higher rigidity as compared with ZRF types which are conventional standard types. When you need the ZRF type, please consult YAMAHA.

Note 1. Use caution that the flange 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.

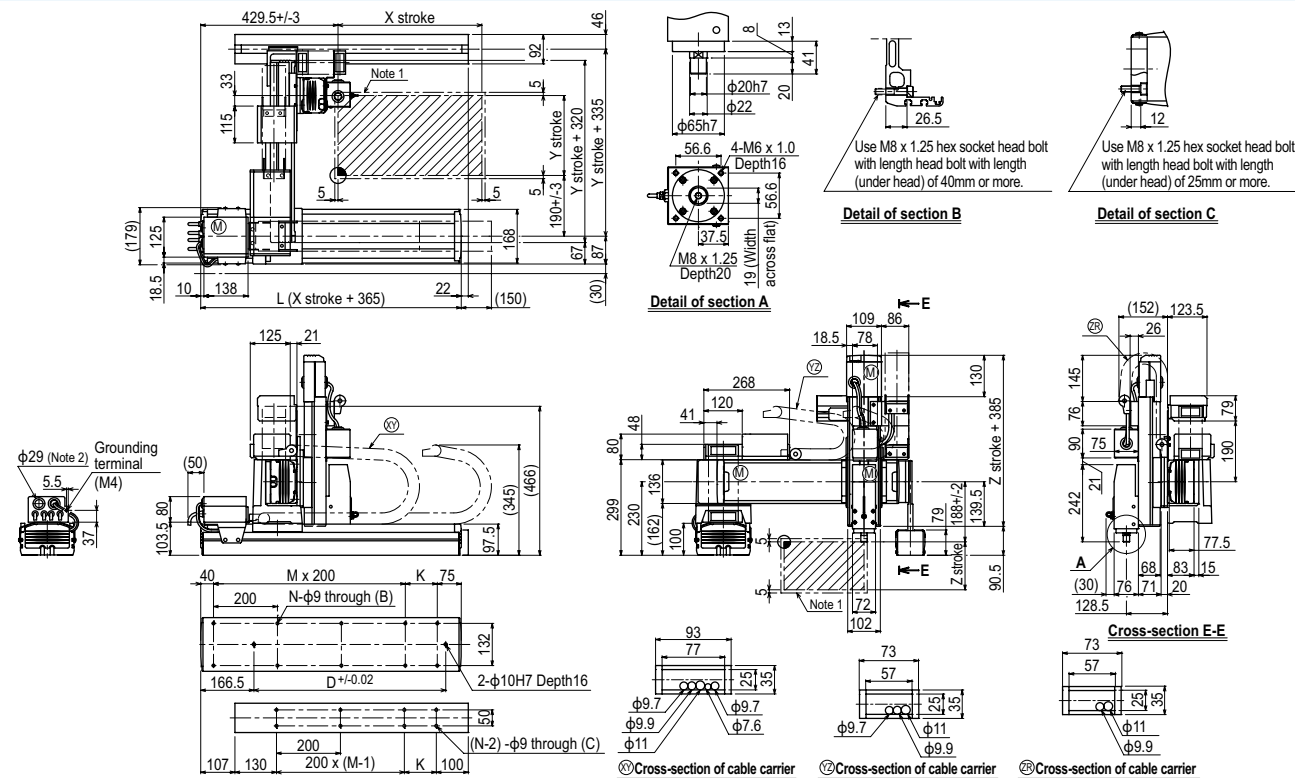
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	10	9	8
250	10	9	8
350	10	9	8
450	10	9	8
550	10	9	8
650	10	9	8
750	10	9	8
850	8	7	6

Controller

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

MXYx 4 axes / ZRFH 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) ^{Note 3}	X-axis	1200					960	840	720	600	480	
	Speed setting	-					80%	70%	60%	50%	40%	
Y-axis	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.

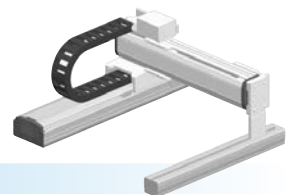
Note 2. Use cable extraction port.

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.

Articulated robots YA
Linear conveyor modules LCM
Single-axis robots CX
Motor-less single axis actuator Robonity
Compact single-axis robots TRANSEVO
Single-axis robots FLIP-X
Linear motor single-axis robots PHASER
Cartesian robots XY-X
SCARA robots YK-X
Pick & place robots YP-X
CLEAN
CONTROLLER
INFORMATION
Arm type
Gantry type
Moving arm type
Pole type
XZ type

HXYx 2 axes

- Gantry type
- Cable carrier



Ordering method

HXYx - C

Model	Cable	Combination	X-axis stroke	Y-axis stroke	Cable
G1			25 to 125cm	25 to 105cm	3L: 3.5m
G2					5L: 5m
G3					10L: 10m
G4					

RCX320-2	R				
Controller / Number of controllable axes	Safety standard	Regenerative unit	Option A (O.P.A)	Option B (O.P.B)	Vision System
Specify various controller setting items. RCX320 ▶ P.660					

RCX222HP	R		
Controller	Usable for CE	Regenerative unit	I/O selection 1
Specify various controller setting items. RCX222 ▶ P.670			

Specification

	X-axis	Y-axis
Axis construction <small>Note 1</small>	F20	F17
AC servo motor output (W)	600	400
Repeatability <small>Note 2</small> (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ20
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	20	20
Maximum speed <small>Note 4</small> (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.

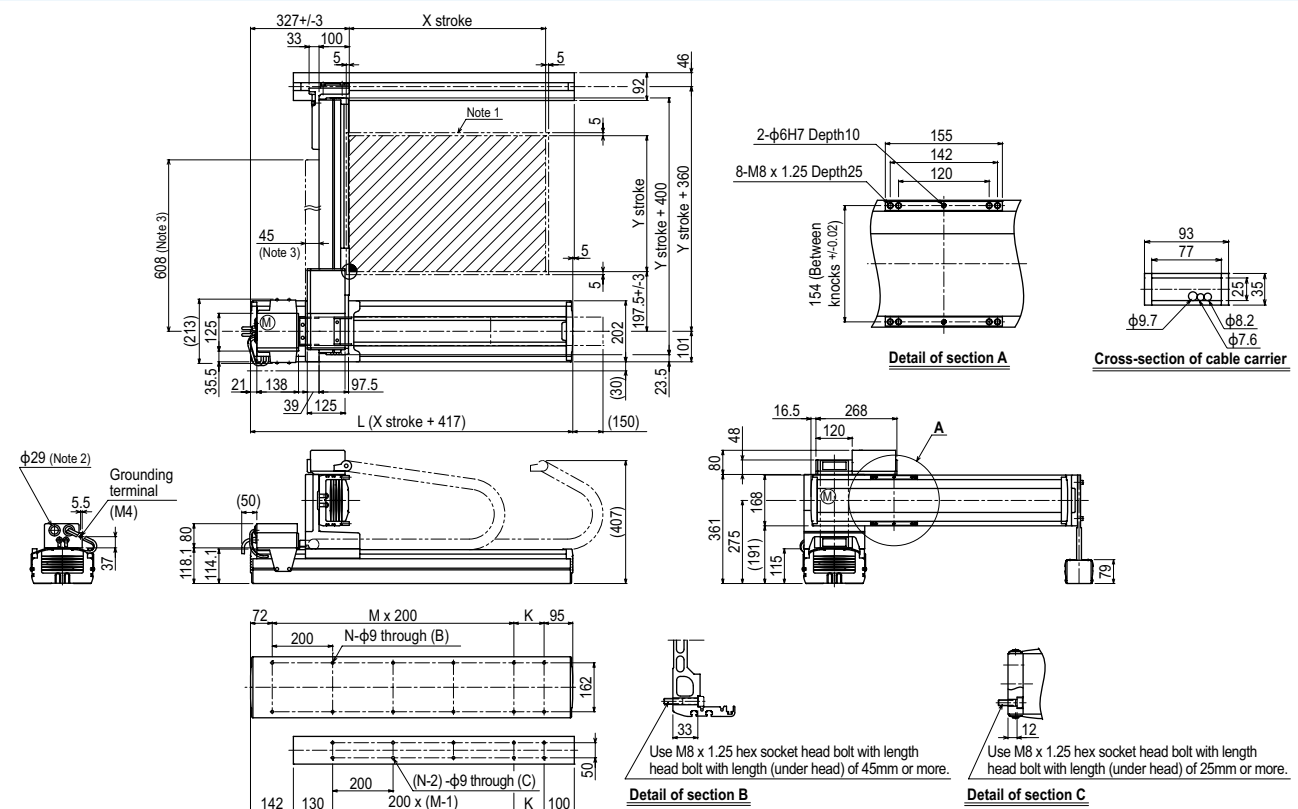
Maximum payload (kg)

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

Controller

Controller	Operation method
RCX320-R RCX222HP-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication

HXYx 2 axes G1

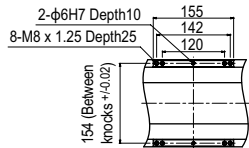


X stroke	250	350	450	550	650	750	850	950	1050	1150	1250	
L	667	767	867	967	1067	1167	1267	1367	1467	1567	1667	
K	100	200	100	200	100	200	100	200	100	200	100	
F	420	420	600	600	780	780	960	960	1140	1320	1320	
M	2	2	3	3	4	4	5	5	6	6	7	
N	8	8	10	10	12	12	14	14	16	16	18	
Y stroke	250	350	450	550	650	750	850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

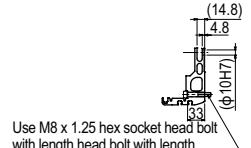
- Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. User cable extraction port.
 Note 3. Dimension of reinforced bracket (To be installed when the Y stroke is 750mm or longer)

- 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.

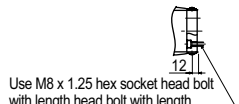
HXYx 2 axes **G2**



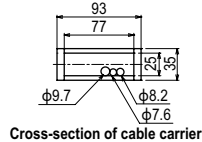
Detail of section A



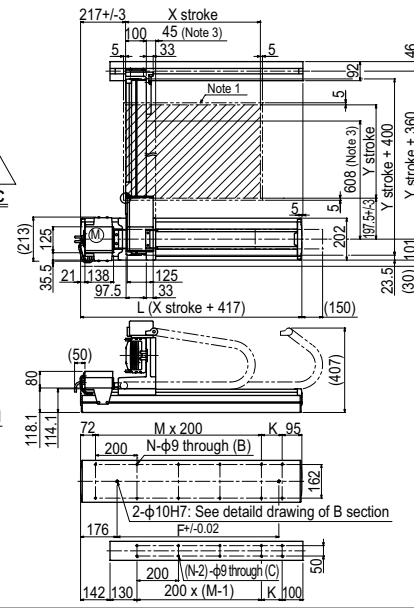
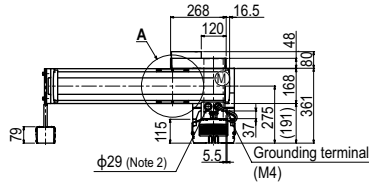
Detail of section B



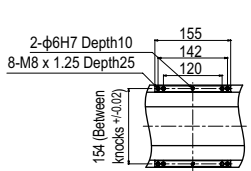
Detail of section C



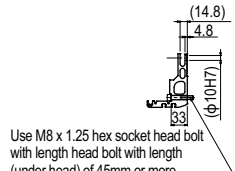
Cross-section of cable carrier



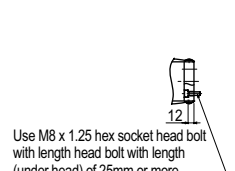
HXYx 2 axes **G3**



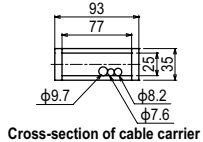
Detail of section A



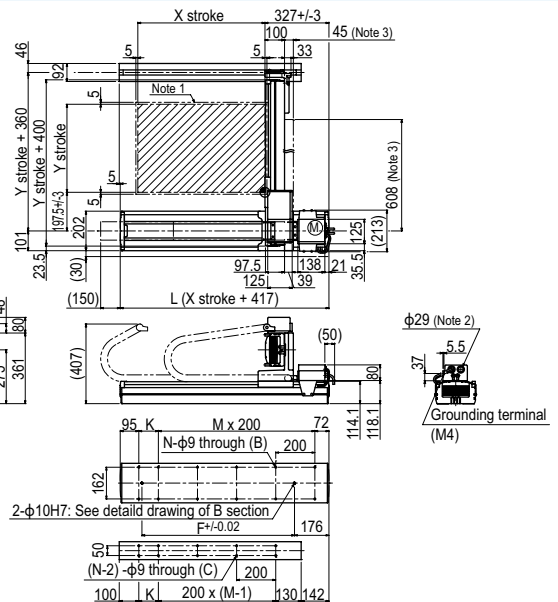
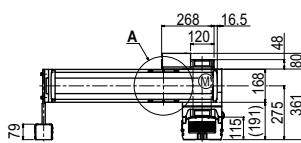
Detail of section B



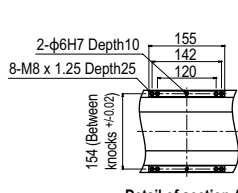
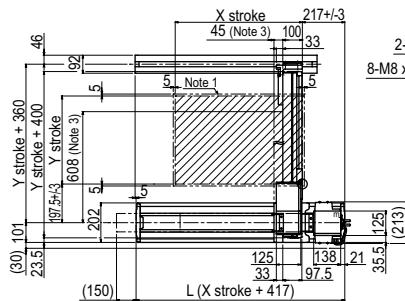
Detail of section C



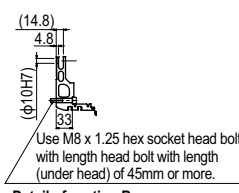
Cross-section of cable carrier



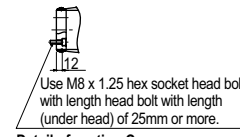
HXYx 2 axes **G4**



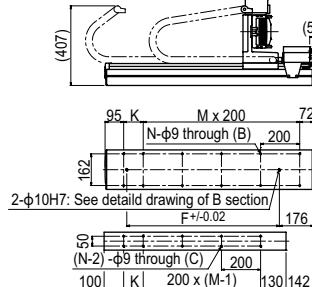
Detail of section A



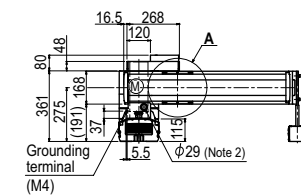
Detail of section B



Detail of section C



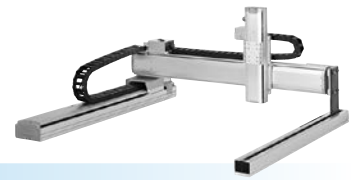
Cross-section of cable carrier



Articulated robots	YA
Linear conveyor modules	LCM
Single-axis robots	CX
Motor-less single axis actuator	Robonity
Compact single-axis robots	TRANSEVO
Single-axis robots	FLIP-X
Linear motor single-axis robots	PHASER
Cartesian robots	XY-X
SCARA robots	YK-X
Pick & place robots	YP-X
CLEAR INFORMATION BR	
INFORMATION	
Arm type	
Gantry type	
Moving arm type	
Pole type	
XZ type	

HXYx 3 axes / ZL

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



Ordering method

HXYx - C [] [] [] **ZL** [] [] **RCX340-3** [] [] [] [] [] [] [] [] [] [] [] [] [] [] []

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.678**

Specification

	X-axis	Y-axis	Z-axis
Axis construction <small>Note 1</small>	F20	F17	F14H-BK
AC servo motor output (W)	600	400	200
Repeatability <small>Note 2</small> (mm)	+/-0.01	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ20	Ball screw φ15
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	20	20	10
Maximum speed <small>Note 4</small> (mm/sec)	1200	1200	600
Moving range (mm)	250 to 1250	250 to 1050	250 to 550
Robot cable length (m)	Standard: 3.5 Option: 5,10		

- Note 1. Use caution that the flange 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.

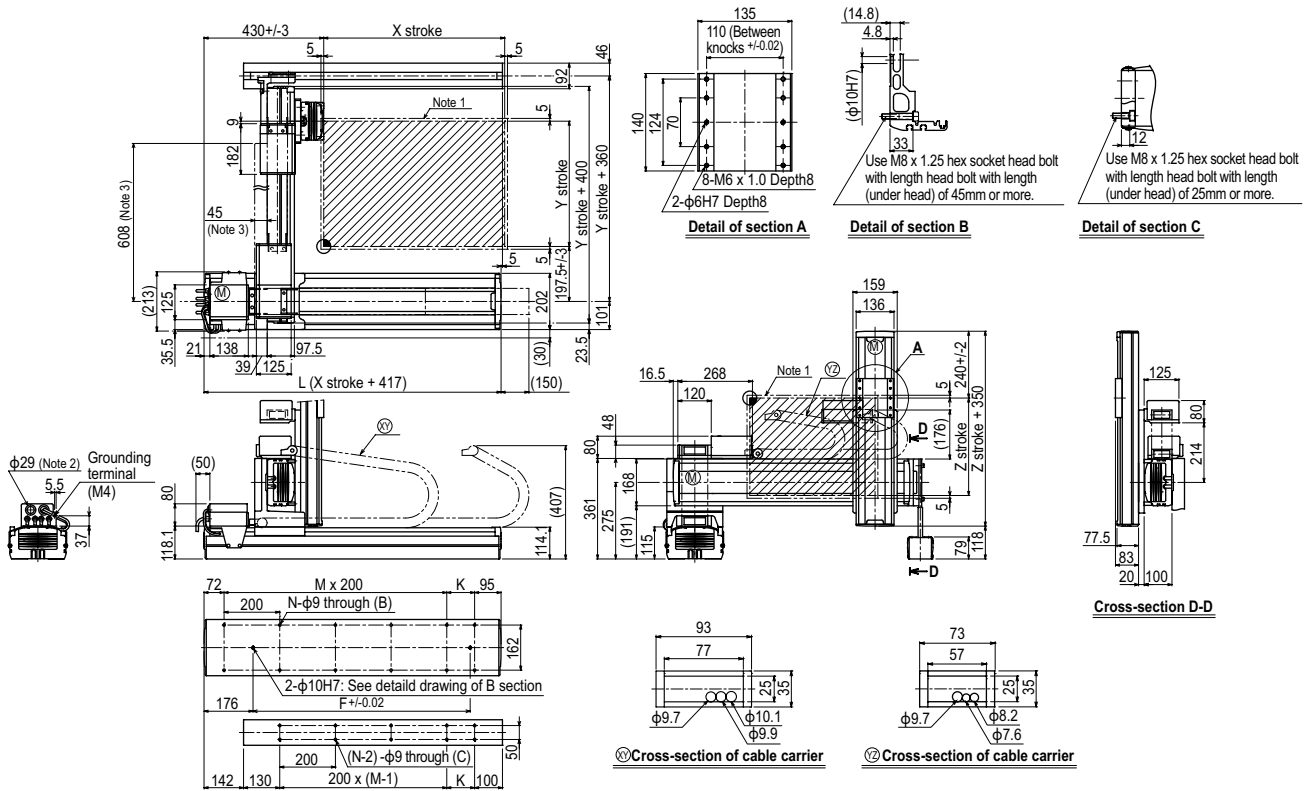
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)
250 to 1050	250 to 550
	20

Controller

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

HXYx 3 axes / ZL G1



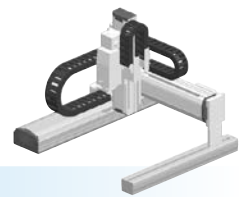
X stroke	250	350	450	550	650	750	850	950	1050	1150	1250			
L	667	767	867	967	1067	1167	1267	1367	1467	1567	1667			
K	100	200	100	200	100	200	100	200	100	200	100			
F	420	420	600	600	780	780	960	960	1140	1320	1320			
M	2	2	3	3	4	4	5	5	6	6	7			
N	8	8	10	10	12	12	14	14	16	16	18			
Y stroke	250	350	450	550	650	750	850	950	1050					
Z stroke	250	350	450	550										
Maximum speed for each stroke (mm/sec) <small>Note 4</small>	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

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.678**

Specification

	X-axis	Y-axis	Z-axis	R-axis
Axis construction <small>Note 1</small>	F20	F17	F14H-BK	R20
AC servo motor output (W)	600	400	200	200
Repeatability <small>Note 2</small> (XYZ: mm) (R: °)	+/-0.01	+/-0.01	+/-0.01	+/-0.0083
Drive system	Ball screw φ20	Ball screw φ20	Ball screw φ15	Harmonic gear
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	20	20	10	(1/50)
Maximum speed <small>Note 4</small> (XYZ: mm/sec) (R: °/sec)	1200	1200	600	360
Moving range (XYZ: mm) (R: °)	250 to 1250	250 to 1050	250 to 550	360
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.

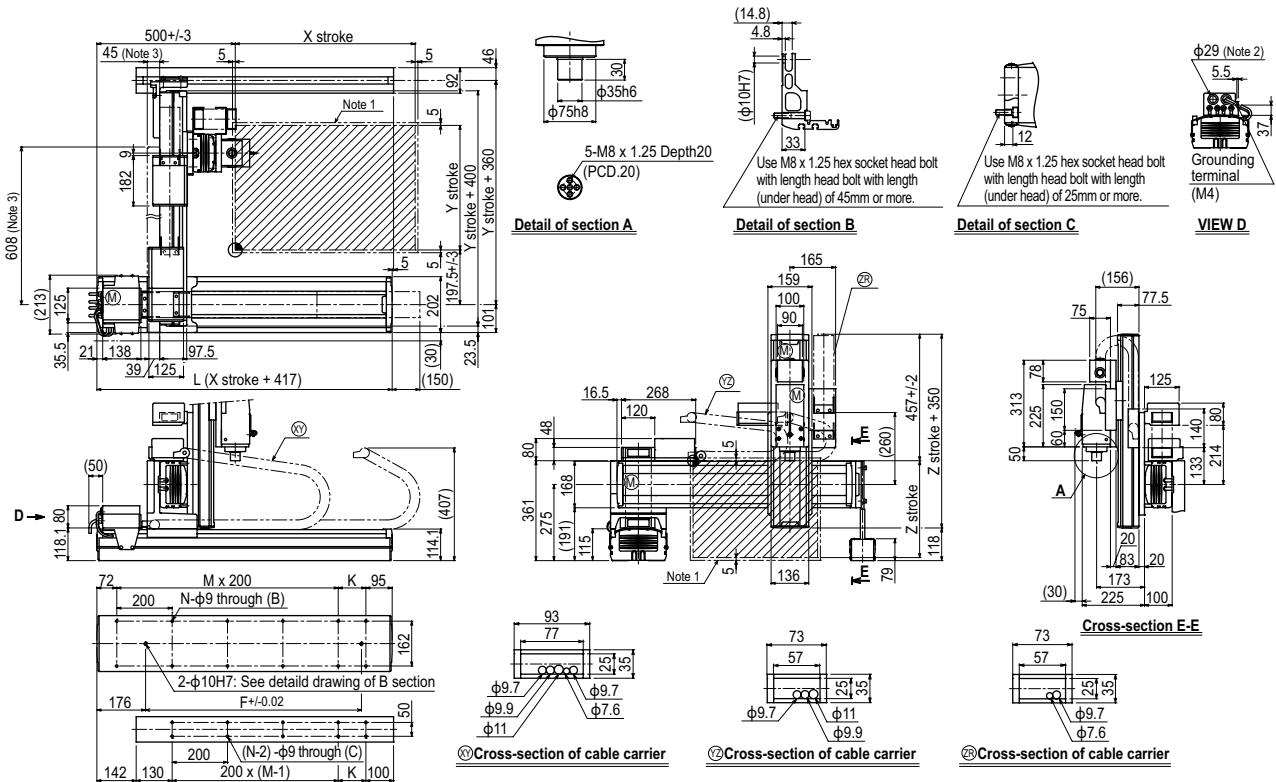
Maximum payload (kg)

Y stroke (mm)	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

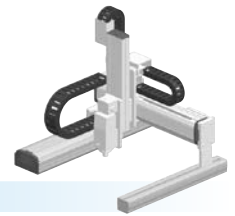
HXYx 4 axes / ZRL (G1)



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
Y stroke	250	350	450	550	650	750	850	950	1050		
Z stroke	250	350	450	550							
Maximum speed for each stroke (mm/sec) <small>Note 4</small>	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.



Ordering method

HXYx - C				ZRH			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 G2 G3 G4	25 to 125cm	25 to 105cm		25 to 55cm	3L: 3.5m 5L: 5m 10L: 10m	Specify various controller setting items. RCX340 ▶ P.678								

Specification

	X-axis	Y-axis	Z-axis	R-axis
Axis construction ^{Note 1}	F20	F17	F14H	R20
AC servo motor output (W)	600	400	200	200
Repeatability ^{Note 2} (XYZ: mm) (R: °)	+/-0.01	+/-0.01	+/-0.01	+/-0.0083
Drive system	Ball screw φ20	Ball screw φ20	Ball screw φ15	Harmonic gear
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	5	(1/50)
Maximum speed ^{Note 4} (XYZ: mm/sec) (R: °/sec)	1200	1200	300	360
Moving range (XYZ: mm) (R: °)	250 to 1250	250 to 1050	250 to 550	360
Robot cable length (m)	Standard: 3.5 Option: 5, 10			

Note 1. Use caution that the flange 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.

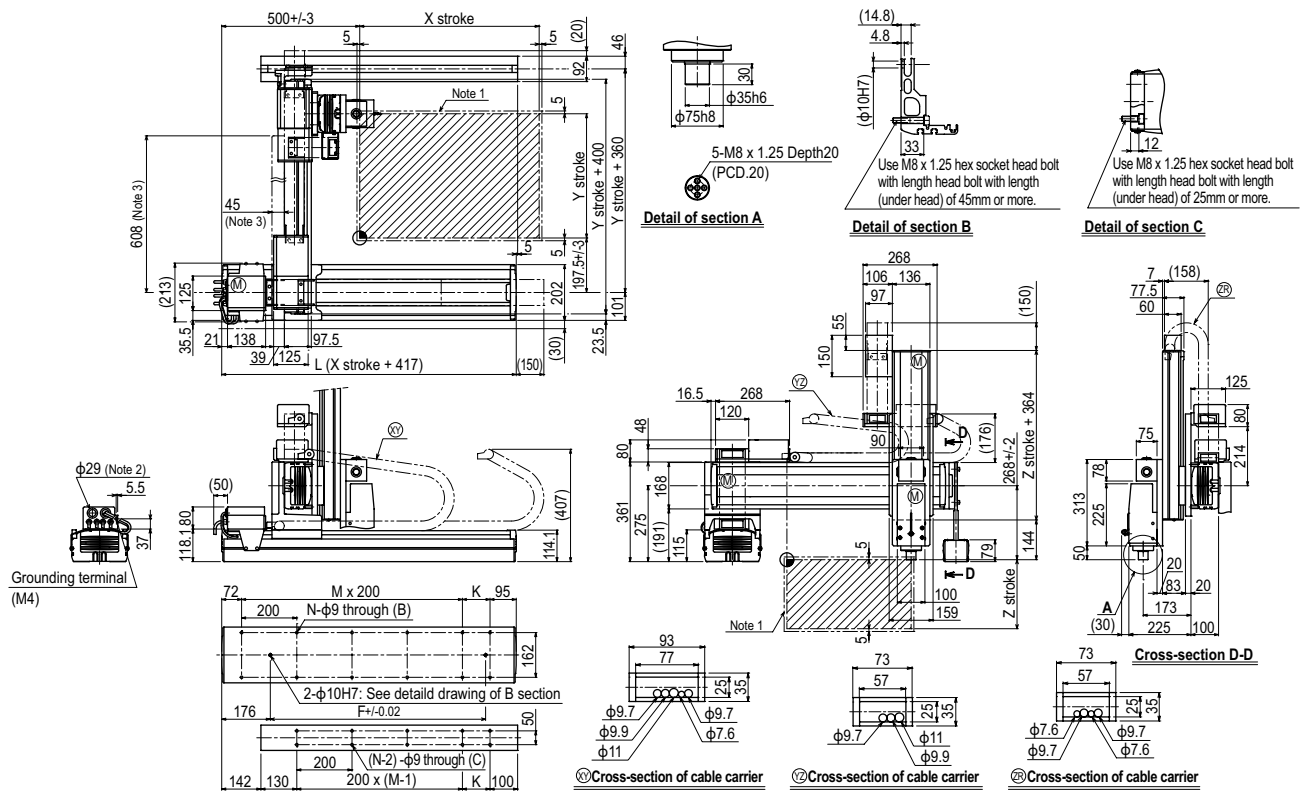
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)
250 to 1050	20

Controller

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

HXYx 4 axes / ZRH (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			
Z stroke	250	350	450	550								
Maximum speed for each stroke (mm/sec) ^{Note 4}	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.

Articulated robots
YA

Linear conveyor modules
LCM

Single-axis robots
CX

Motor-less single-axis actuator
Robomity

Compact single-axis robots
TRANSEVO

Single-axis robots
FLIP-X

Linear motor single-axis robots
PHASER

Cartesian robots
XY-X

SCARA robots
YK-X

Pick & place robots
YP-X

CLEAN

CONTROLLER INFORMATION

Arm type

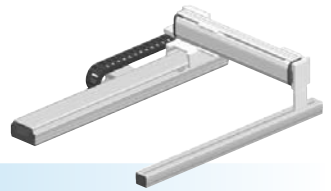
Gantry type

Moving arm type

Pole type

XZ type

HXYLx 2 axes



- Gantry type
- Cable carrier

Ordering method

HXYLx - C

Model	Cable	Combination	X-axis stroke	Y-axis stroke	Cable
G1			115 to 205cm	25 to 105cm	3L: 3.5m
G2					5L: 5m
G3					10L: 10m
G4					

RCX320-2 **R**

Controller / Number of controllable axes	Safety standard	Regenerative unit	Option A (O.P.A)	Option B (O.P.B)	Vision System	Absolute battery
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Specify various controller setting items. RCX320 ▶ **P.660**

RCX222HP **R**

Controller	Usable for CE	Regenerative unit	I/O selection 1	I/O selection 2
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Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Y-axis
Axis construction <small>Note 1</small>	F20N	F17
AC servo motor output (W)	400	400
Repeatability <small>Note 2</small> (mm)	+/-0.04	+/-0.01
Drive system	Ball screw φ20	Ball screw φ20
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	20	20
Maximum speed <small>Note 4</small> (mm/sec)	1200	1200
Moving range (mm)	1150 to 2050	250 to 1050
Robot cable length (m)	Standard: 3.5 Option: 5,10	

Note 1. Use caution that the flange 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.

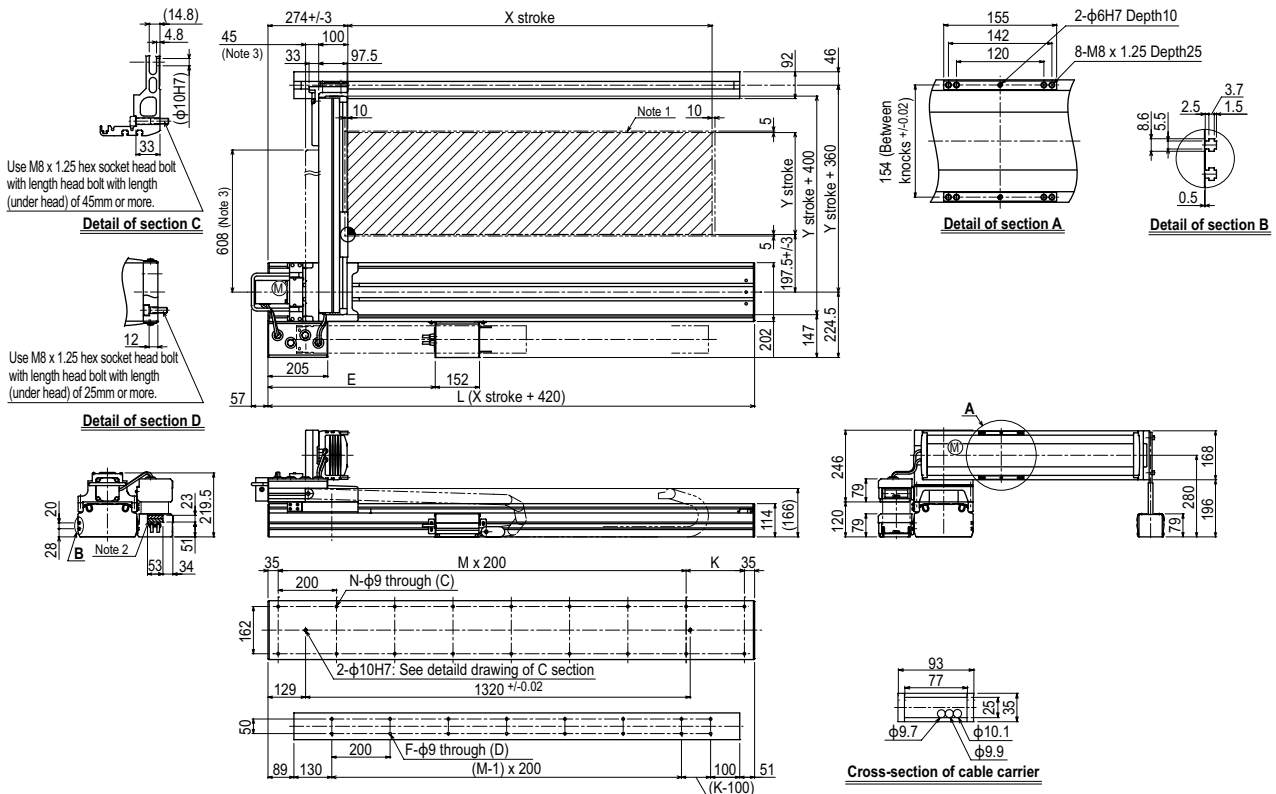
Maximum payload (kg)

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

Controller

Controller	Operation method
RCX320-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222HP-R	

HXYLx 2 axes G1

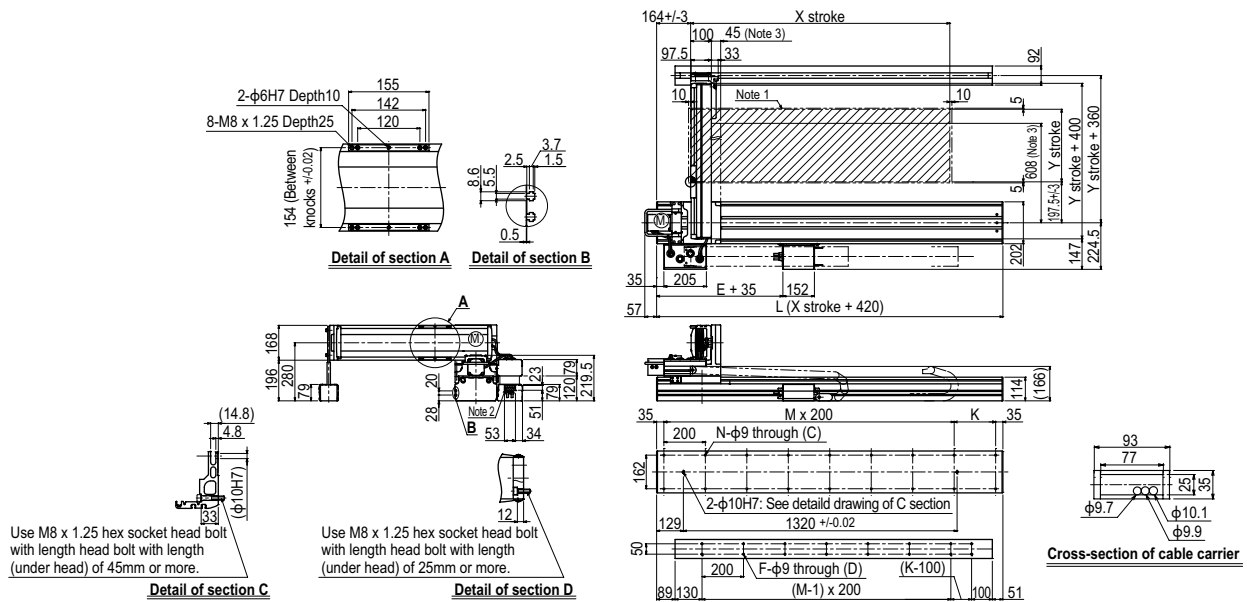


X stroke	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050
L	1570	1670	1770	1870	1970	2070	2170	2270	2370	2470
E	528	574	620	666	712	758	804	850	896	942
K	100	200	100	200	100	200	100	200	100	200
M	7	7	8	8	9	9	10	10	11	11
N	18	18	20	20	22	22	24	24	26	26
F	14	16	16	18	18	20	20	22	22	24
Y stroke	250	350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

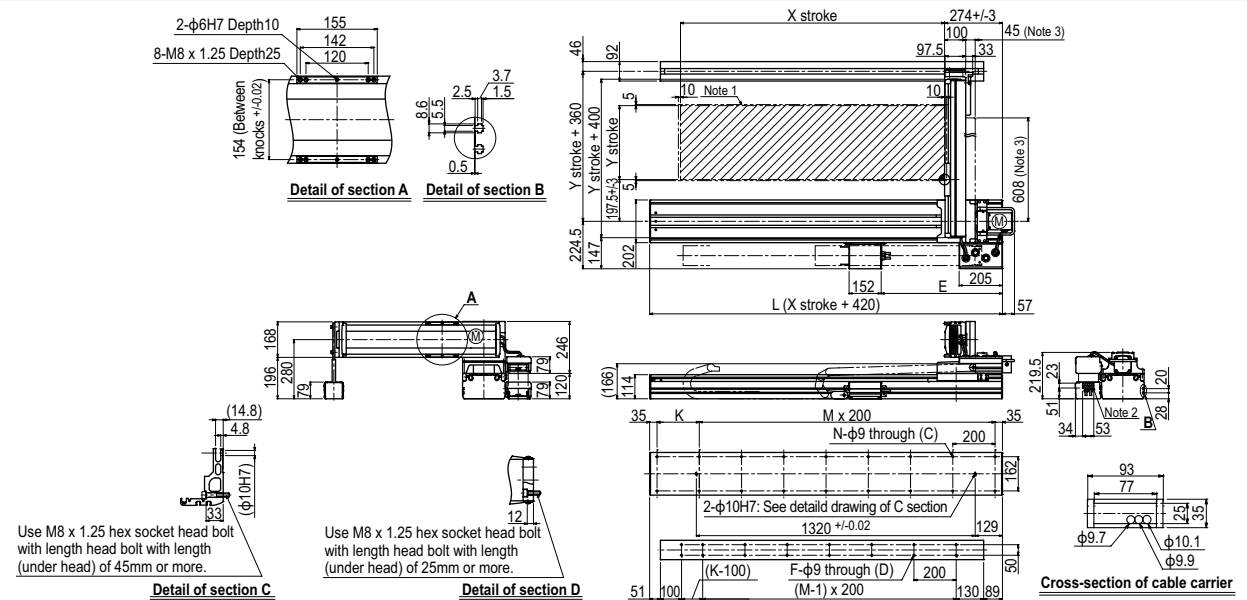
Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. User cable extraction port.
 Note 3. Dimension of reinforced bracket (To be installed when the Y stroke is 750mm or longer)

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.

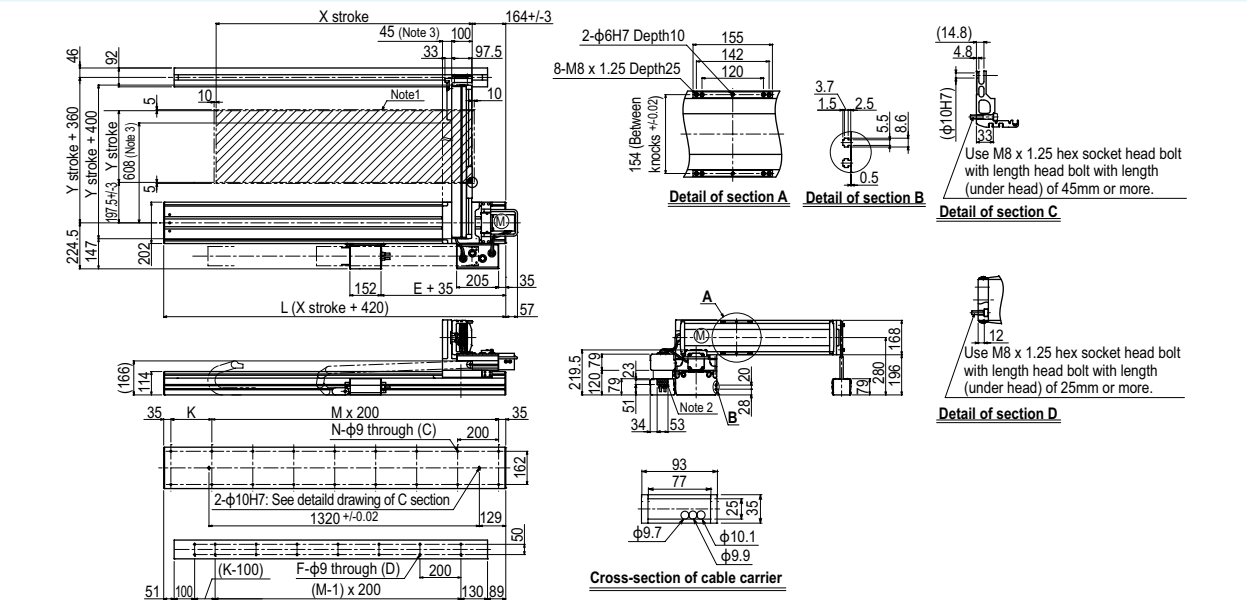
HXYLx 2 axes **G2**



HXYLx 2 axes **G3**



HXYLx 2 axes **G4**



Articulated robots	YA
Linear conveyor modules	LCM
Single-axis robots	CX
Motor-less single axis actuator	Robotomy
Compact single-axis robots	TRANSERO
Single-axis robots	FLIP-X
Linear motor single-axis robots	PHASER
Cartesian robots	XY-X
SCARA robots	YK-X
Pick & place robots	YP-X
CLEAR INFORMATION BR	
INFORMATION	
Arm type	
Gantry type	
Moving arm type	
Pole type	
XZ type	

SXYx 2 axes

● Moving arm type ● Whipover



Ordering method

SXYx - S

Model	Cable	Combination	X-axis stroke ^{Note 1}	Y-axis stroke ^{Note 1}	Cable
M1	M3		15 to 85cm	15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m

RCX320-2

Controller / Number of controllable axes	Safety standard	Option A (O.P.A)	Option B (O.P.B)	Vision System	Absolute battery
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Specify various controller setting items. RCX320 ▶ **P.660**

RCX222

Controller	Usable for CE	I/O selection 1	I/O selection 2
------------	---------------	-----------------	-----------------

Specify various controller setting items. RCX222 ▶ **P.670**

Note 1. The total of the X and Y strokes should be 1000mm or less.

Specification

	X-axis	Y-axis
Axis construction ^{Note 1}	F14H	F14
AC servo motor output (W)	200	100
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20
Maximum speed ^{Note 4} (mm/sec)	1200	1200
Moving range (mm)	150 to 850	150 to 350
Robot cable length (m)	Standard: 3.5 Option: 5,10	

Note 1. Use caution that the flange 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 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.

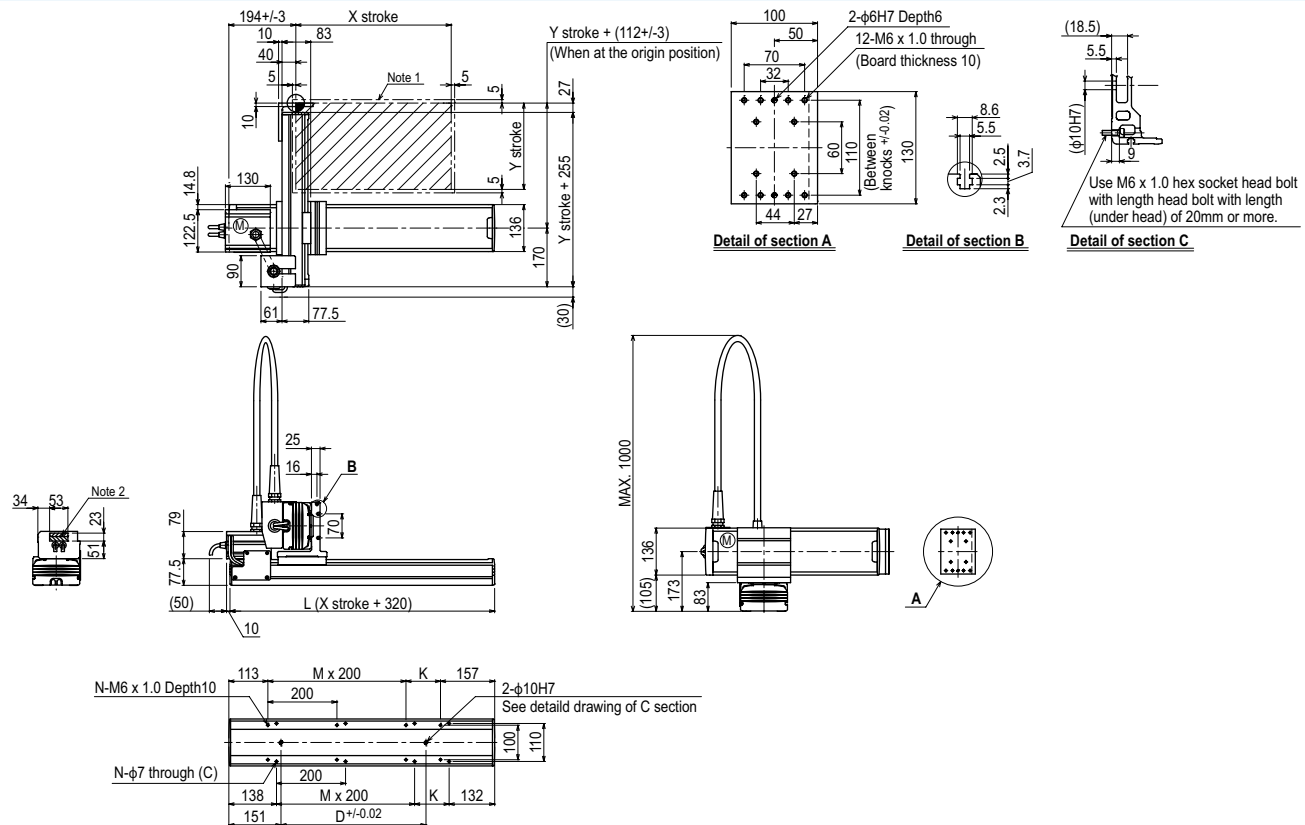
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
150	15
250	14
350	13

Controller

Controller	Operation method
RCX320	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222	

SXYx 2 axes (M1)



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

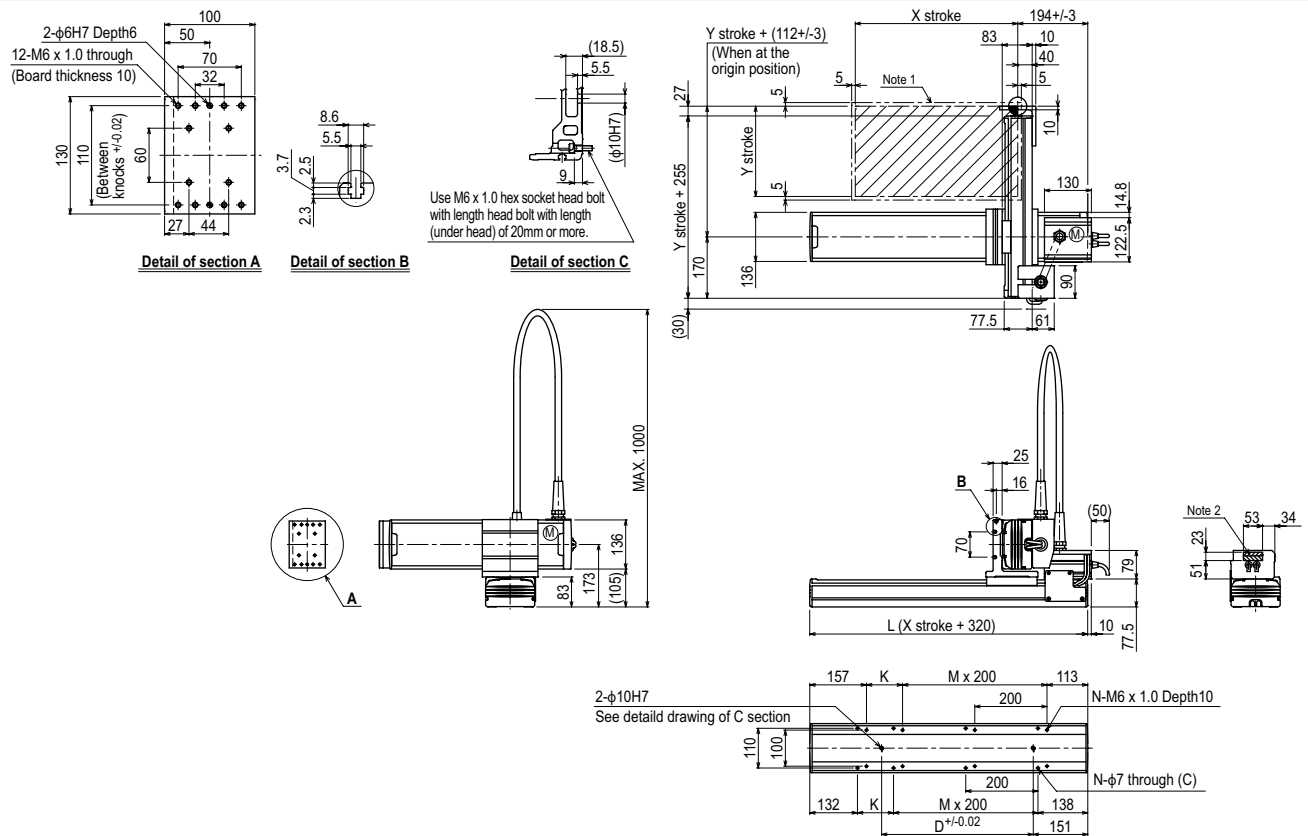
Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.

Note 2. The shaded position indicates a user cable extraction port.

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.

SXYx 2 axes M3



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					
Maximum speed for each stroke (mm/sec) ^{Note 4}	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.

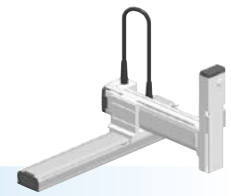
Note 2. The shaded position indicates an user cable extraction port.

Note 3. 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.

SXYx 3 axes / ZF

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



Ordering method

SXYx - S				ZF			RCX340-3								
Model	Cable	Combination	X-axis stroke Note 1	Y-axis stroke Note 1	ZR-axis	Z-axis stroke	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	
		M1 M3	15 to 85cm	15 to 35cm		15 to 35cm									

Specify various controller setting items. RCX340 ▶ **P.678**

Note 1. The total of the X and Y strokes should be 1000mm or less.

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 φ15	Ball screw φ15	Ball screw φ15
Ball screw lead Note 3 (Deceleration ratio) (mm)	20	20	10
Maximum speed Note 4 (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. Leads not listed in the catalog are also available. Contact us for details.
 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.

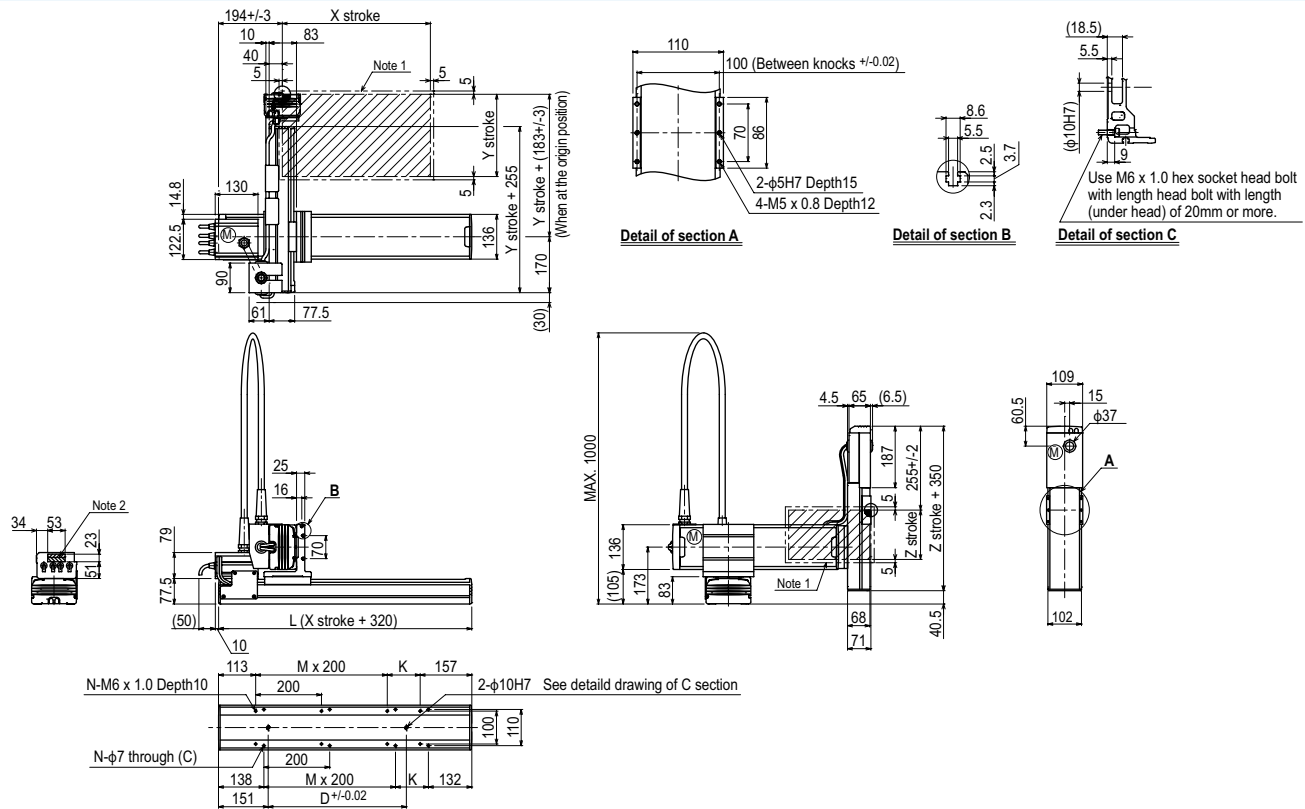
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	9	8	7
250	8	7	6
350	7	6	5

Controller

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

SXYx 3 axes / ZF M1

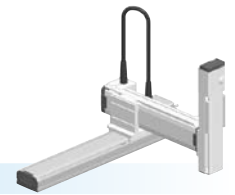


X stroke	Stroke (mm)							
	150	250	350	450	550	650	750	850
L	470	570	670	770	870	970	1070	1170
K	200	100	200	100	200	100	200	100
D	240	240	420	420	600	600	780	960
M	0	1	1	2	2	3	3	4
N	4	6	6	8	8	10	10	12
Y stroke	150 250 350							
Z stroke	150 250 350							
Maximum speed for each stroke (mm/sec)	X-axis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

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.

- Moving arm type
- Whipover
- Z-axis: clamped base / moving table type (200W)



Ordering method

SXYx - S [] [] [] **ZFL20** [] [] **RCX340-3** [] [] [] [] [] [] [] [] [] [] []

Model	Cable	Combination	X-axis stroke ^{Note 1}	Y-axis stroke ^{Note 1}	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
		M1 M3	15 to 85cm	15 to 35cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ **P678**

Note 1. The total of the X and Y strokes should be 1000mm or less.

Specification

	X-axis	Y-axis	Z-axis
Axis construction ^{Note 1}	F14H	F14	F10H-BK
AC servo motor output (W)	200	100	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	20
Maximum speed ^{Note 4} (mm/sec)	1200	1200	1200
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. Leads not listed in the catalog are also available. Contact us for details.

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.

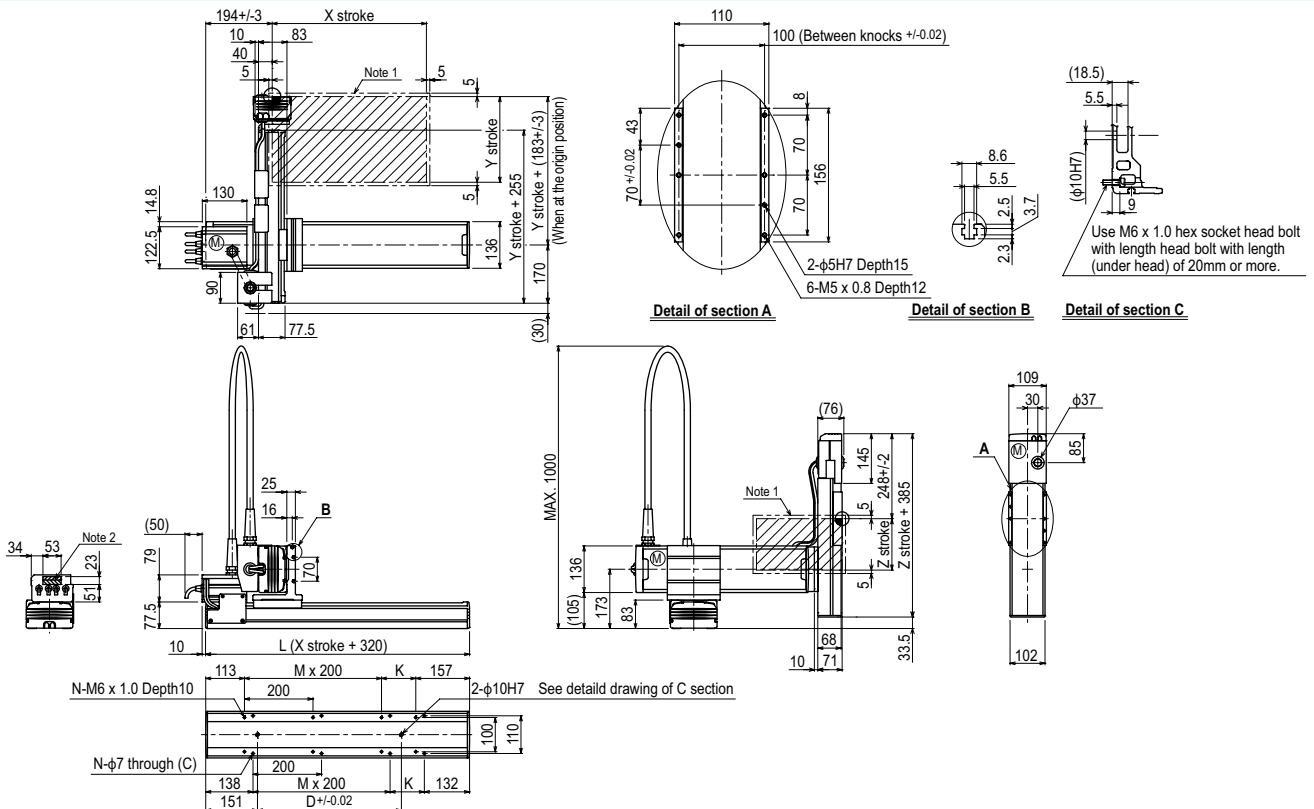
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	8	8	7
250	8	7	6
350	7	6	5

Controller

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

SXYx 3 axes / ZFL20 M1



X stroke ^{Note 3}	150	250	350	450	550	650	750	850
	L	470	570	670	770	870	970	1070
A	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 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.

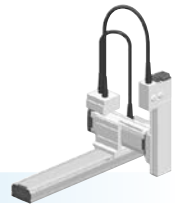
Note 2. The shaded position indicates a user cable extraction port.

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.

SXYx 3 axes / ZFH

- Moving arm type
- Whipover
- Z-axis: clamped table / moving base type (200W)



Ordering method

SXYx-S [] [] [] **ZFH** [] [] **RCX340-3** [] [] [] [] [] [] [] [] [] [] []

Model	Cable	Combination	X-axis stroke ^{Note1}	Y-axis stroke ^{Note1}	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
		M1 M3	15 to 85cm	15 to 35cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ **P.678**

Note 1. The total of the X and Y strokes should be 1000mm or less.

Specification

	X-axis	Y-axis	Z-axis
Axis construction ^{Note 1}	F14H	F14	F10H-BK
AC servo motor output (W)	200	100	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	10
Maximum speed ^{Note 4} (mm/sec) (°/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 flange 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 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.

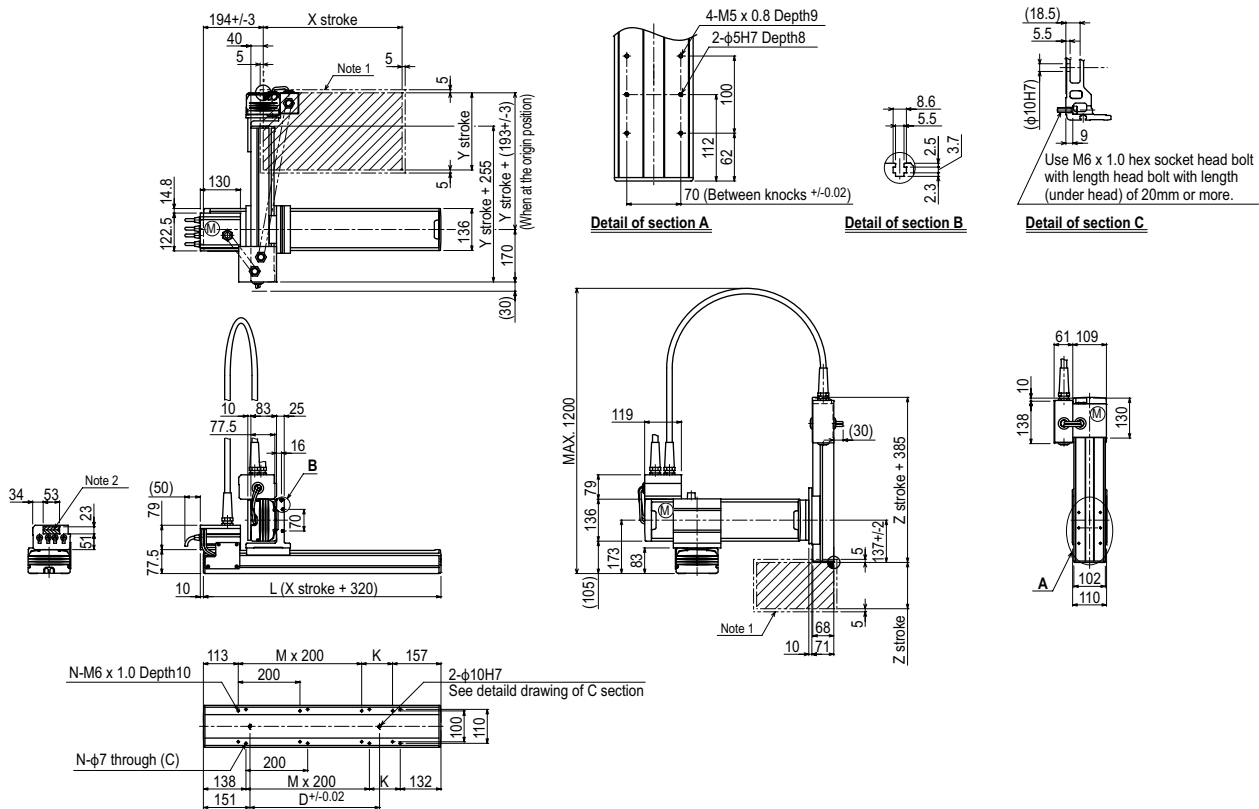
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150	9	8	7
250	8	7	6
350	7	6	5

Controller

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

SXYx 3 axes / ZFH (M1)



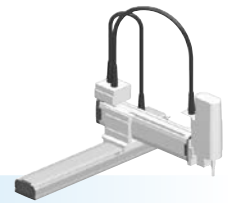
X stroke ^{Note 3}	150	250	350	450	550	650	750	850
	L	470	570	670	770	870	970	1070
K	200	100	200	100	200	100	200	100
D	240	240	420	420	600	600	780	960
M	0	1	1	2	2	3	3	4
N	4	6	6	8	8	10	10	12
Y stroke ^{Note 3}	150	250	350					
Z stroke	150	250	350					
Maximum speed for each stroke (mm/sec) ^{Note 4}	X-axis	1200			960		780	
	Speed setting	-			80%		65%	

Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. The shaded position indicates a user cable extraction port.

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.

SXYx 3 axes / ZS

- Moving arm type
- Whipover
- Z-axis shaft vertical type



Ordering method

SXYx - S [] [] [] [] - **15** [] - **RCX340-3** [] [] [] [] [] [] [] [] [] [] [] []

Model - **Cable** - **Combination** - **X-axis stroke**^{Note 1} - **Y-axis stroke**^{Note 1} - **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**

Combination
M1
M3

X-axis stroke^{Note 1}
15 to 85cm

Y-axis stroke^{Note 1}
15 to 35cm

ZR-axis
ZS12
ZS6

Z-axis stroke
3L: 3.5m
5L: 5m
10L: 10m

Controller / Number of controllable axes
Specify various controller setting items. RCX340 ▶ **P.678**

Note 1. The total of the X and Y strokes should be 1000mm or less.

Specification

	X-axis	Y-axis	Z-axis: ZS12	Z-axis: ZS6
Axis construction ^{Note 1}	F14H	F14	-	
AC servo motor output (W)	200	100	60	
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01	+/-0.02	
Drive system	Ball screw φ15	Ball screw φ15	Ball screw φ12	
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	12	6
Maximum speed ^{Note 4} (mm/sec)	1200	1200	1000	500
Moving range (mm)	150 to 850	150 to 350	150	
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 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.

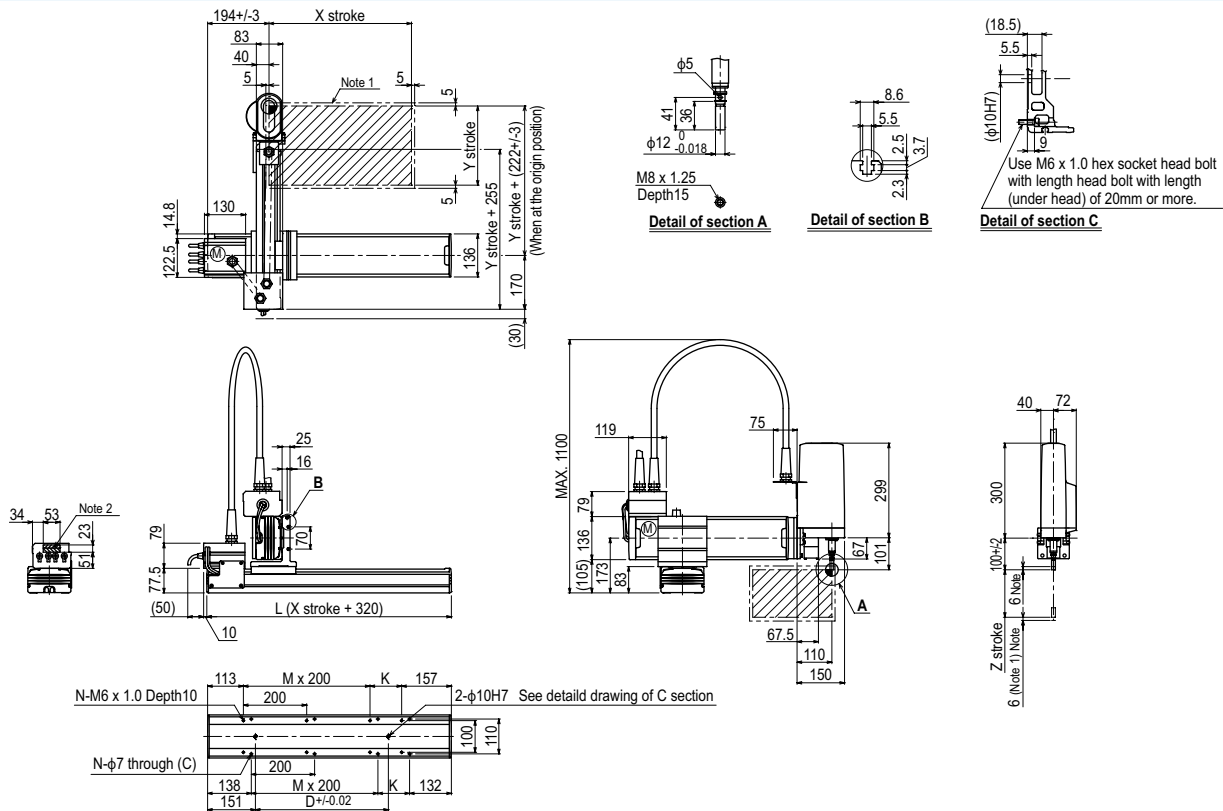
Maximum payload (kg)

Y stroke (mm)	ZS12	ZS6
150 to 350	3	5

Controller

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

SXYx 3 axes / ZS (M1)



X stroke ^{Note 3}	150	250	350	450	550	650	750	850
	L	470	570	670	770	870	970	1070
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							
Maximum speed for each stroke (mm/sec) ^{Note 4}	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.

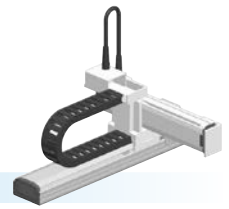
Note 2. The shaded position indicates a user cable extraction port.

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.

- Articulated robots YA
- Linear conveyor modules LCM
- Single-axis robots CX
- Motor-less single axis actuator Robomity
- Compact single-axis robots TRANSEVO
- Single-axis robots FLIP-X
- Linear motor single-axis robots PHASER
- Cartesian robots XY-X
- SCARA robots YK-X
- Pick & place robots YP-X
- CLEAN
- CONTROLLER INFORMATION
- Arm type
- Gantry type
- Moving arm type
- Pole type
- XZ type

MXYx 2 axes



● Moving arm type ● Cable carrier

Ordering method

MXYx - C

Model	Cable	Combination	X-axis stroke	Y-axis stroke	Cable
		M1 M3	25 to 125cm	15 to 55cm	3L: 3.5m 5L: 5m 10L: 10m

RCX320-2

Controller / Number of controllable axes	Safety standard	Regenerative unit	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery
		R				

Specify various controller setting items. RCX320 ▶ **P.660**

RCX222

Controller	Usable for CE	Regenerative unit	I/O selection 1	I/O selection 2
		R		

Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Y-axis
Axis construction ^{Note 1}	F17	F14H
AC servo motor output (W)	400	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20
Maximum speed ^{Note 4} (mm/sec)	1200	1200
Moving range (mm)	250 to 1250	150 to 550
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 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.

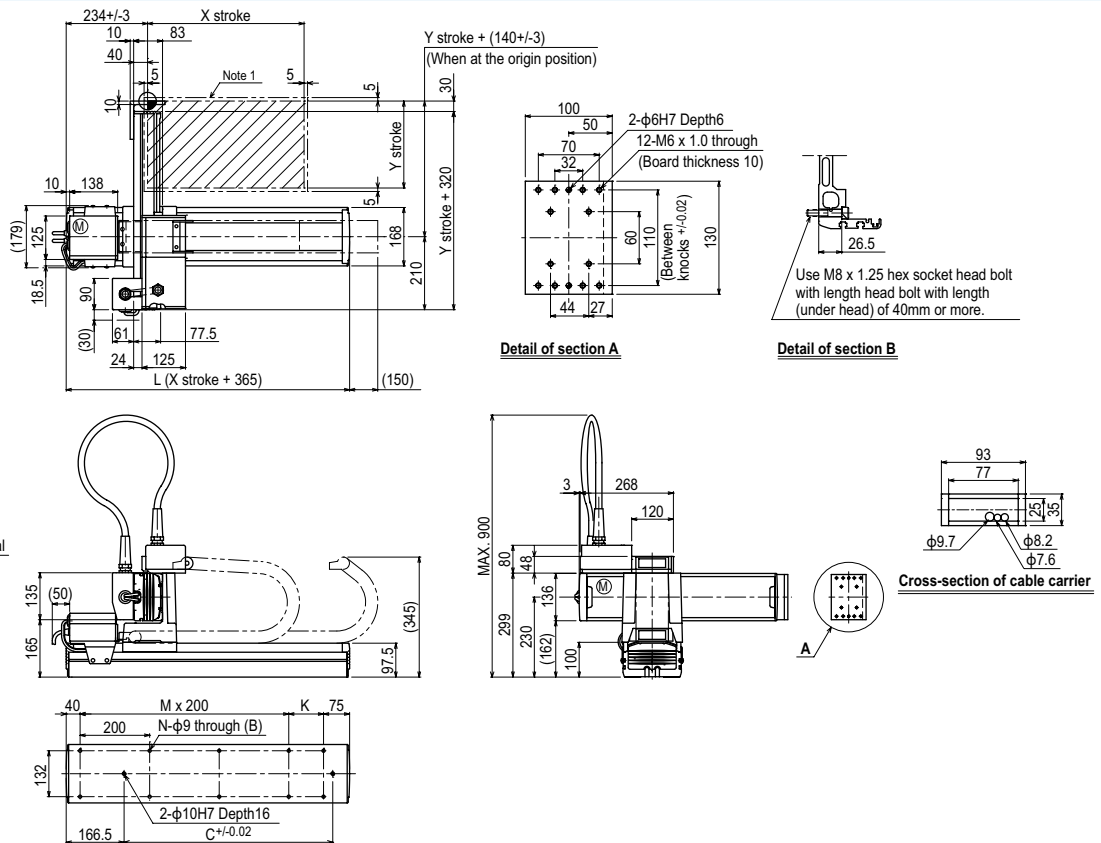
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
150 to 550	20

Controller

Controller	Operation method
RCX320-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222-R	

MXYx 2 axes M1



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							
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis		1200				960		840	720	600	480
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. 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.

- Articulated robots **YA**
- Linear conveyor modules **LCM**
- Single-axis robots **CX**
- Motor-less single axis actuator **Robonity**
- Compact single-axis robots **TRANSERO**
- Single-axis robots **FLIP-X**
- Linear motor single-axis robots **PHASER**
- Cartesian robots **XY-X**
- SCARA robots **YK-X**
- Pick & place robots **YP-X**
- CLEAN
- CONTROLLER INFORMATION
- Arm type
- Gantry type
- Moving arm type
- Pole type
- XZ type

MXYx 2 axes **M3**

Detail of section A
 100, 50, 70, 32, 2-φ6H7 Depth6, 12-M6 x 1.0 through (Board thickness 10), 60, 110, 130, 27, 44, (Between knockouts +0.02)

Detail of section B
 26.5, 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
 93, 77, φ9.7, φ8.2, φ7.6, 25, 35

Y stroke + 320
 30, Y stroke + (140+/-3) (When at the origin position), X stroke, 234+/-3, 83, 10, 40, 5, 5, Note 1, 10, 10, 168, 5, 138, 10, 125, 18.5, (179), 100, 77.5, 61, 24, (30), 125, 24, L (X stroke + 365), (150)

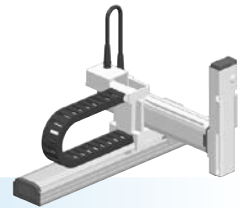
MAX. 900
 268, 3, 120, 48, 80, 100, 136, 230, 299, (162), A

Grounding terminal (M4)
 φ29 (Note 2), 5.5, 103.5, 80, 37, 135, 165, 50, 345, 97.5

75 K, **M x 200**, **40**, **200**, **2-φ10H7 Depth16**, **C+/-0.02**, **166.5**, **132**

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						
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis		1200				960	840	720	600	480
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. 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.



● Moving arm type ● Cable carrier ● Z-axis: clamped base / moving table type (200W)

Ordering method

MXYx - C							RCX340-3								
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
		M1 M3	25 to 125cm	15 to 55cm	ZFL20 ZFL10	15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ **P.678**

Specification

	X-axis	Y-axis	Z-axis: ZFL20	Z-axis: ZFL10
Axis construction ^{Note 1}	F17	F14H	F10H-BK	
AC servo motor output (W)	400	200	200	
Repeatability ^{Note 2} (mm)	±0.01		±0.01	
Drive system	Ball screw φ20	Ball screw φ15	Ball screw φ15	
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	20	10
Maximum speed ^{Note 4} (mm/sec)	1200	1200	1200	600
Moving range (mm)	250 to 1250	150 to 550	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 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 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.

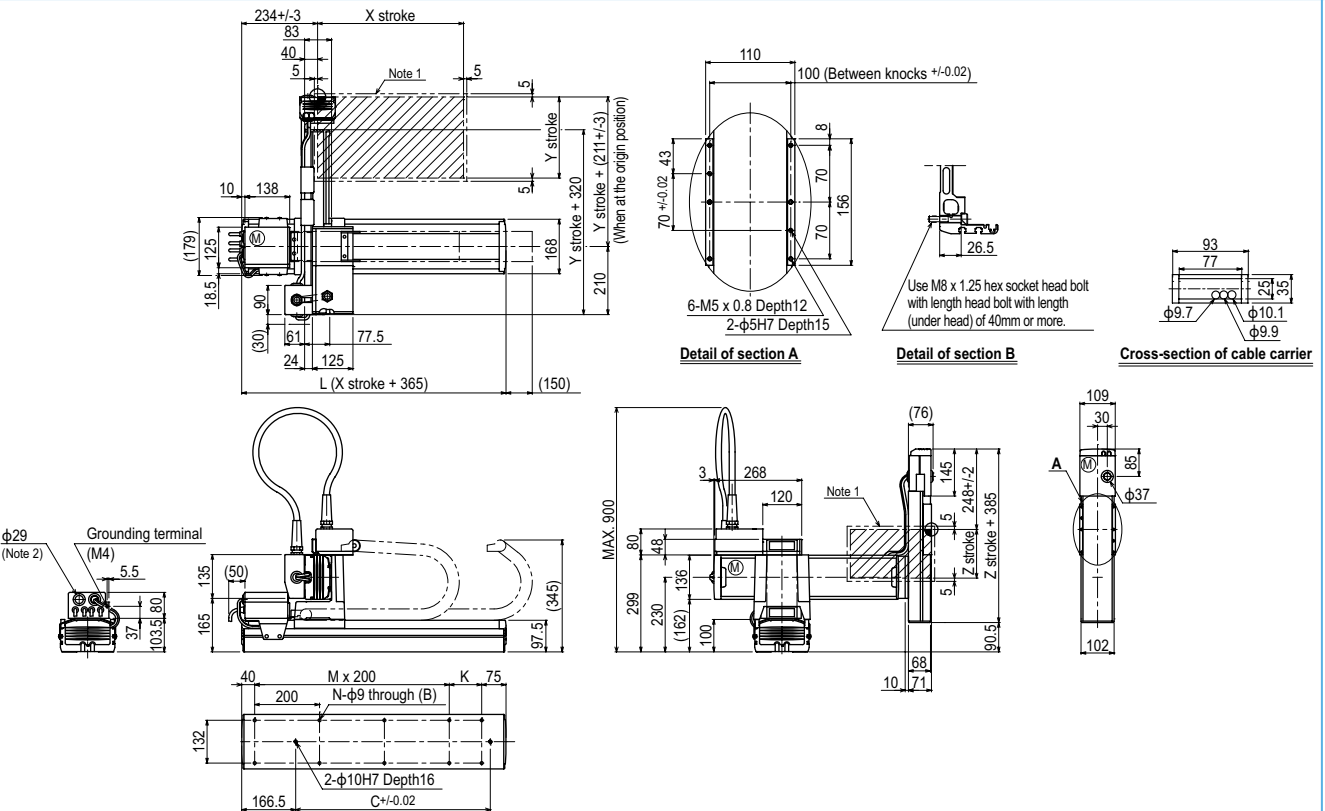
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)					
	ZFL20			ZFL10		
150	250	350	150	250	350	
150 to 550	8	8	8	12	11	10

Controller

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

MXYx 3 axes / ZFL20/10 (M1)



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
C	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						
Z stroke	150	250	350								
Maximum speed for each stroke (mm/sec) ^{Note 1}	X-axis		1200				960	840	720	600	480
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. 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.

HXYx 2 axes

● Moving arm type ● Cable carrier

Ordering method

HXYx - C

Model	Cable	Combination	X-axis stroke	Y-axis stroke	Cable
		M1 M3	25 to 125cm	25 to 65cm	3L: 3.5m 5L: 5m 10L: 10m

RCX320-2

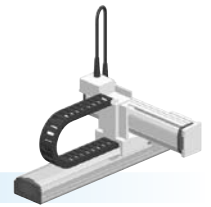
Controller / Number of controllable axes	Safety standard	Regenerative unit	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery
		R				

Specify various controller setting items. RCX320 ▶ [P.660](#)

RCX222HP

Controller	Usable for CE	Regenerative unit	I/O selection 1	I/O selection 2
		R		

Specify various controller setting items. RCX222 ▶ [P.670](#)



Specification

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

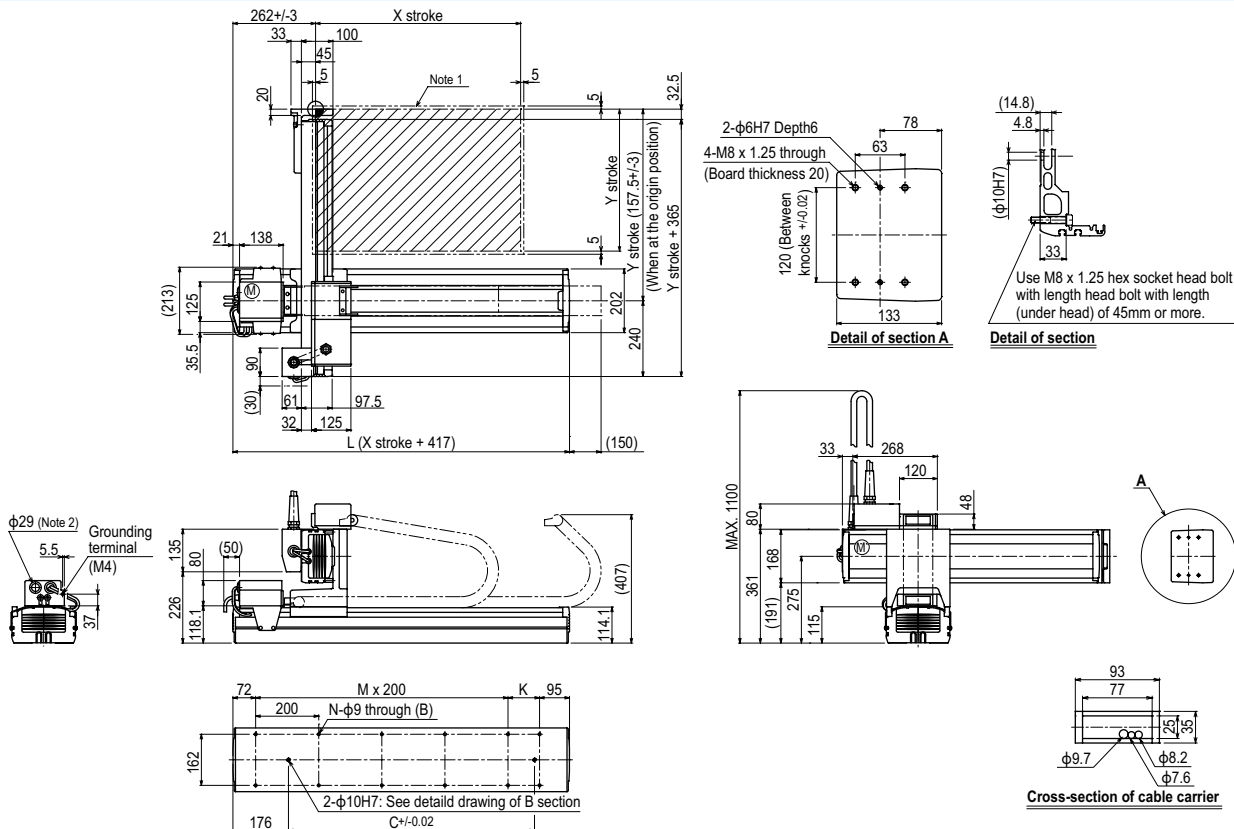
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
250 to 650	30

Controller

Controller	Operation method
RCX320-R RCX222HP-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication

HXYx 2 axes M1

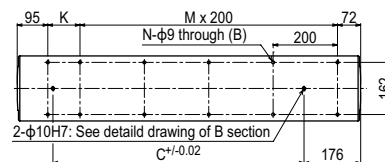
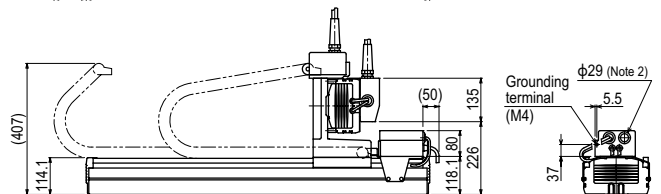
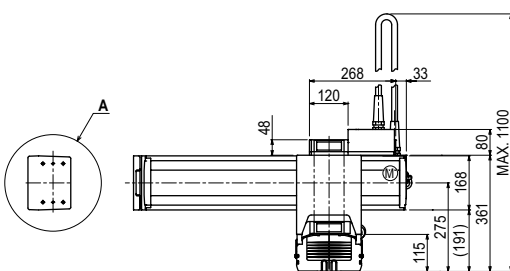
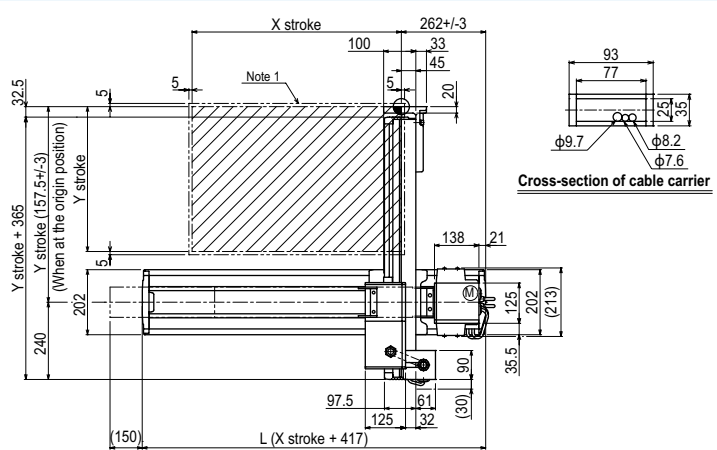
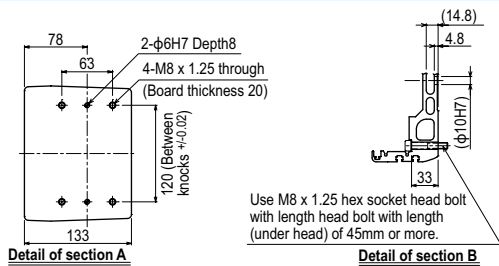


X stroke	250	350	450	550	650	750	850	950	1050	1150	1250
L	667	767	867	967	1067	1167	1267	1367	1467	1567	1667
K	100	200	100	200	100	200	100	200	100	200	100
C	420	420	600	600	780	780	960	960	1140	1320	1320
M	2	2	3	3	4	4	5	5	6	6	7
N	8	8	10	10	12	12	14	14	16	16	18
Y stroke	250	350	450	550	650						
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis		1200				960	840	720	600	480
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. 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.

HXYx 2 axes **M3**

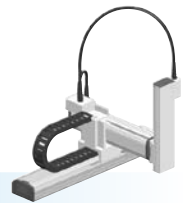


X stroke	250	350	450	550	650	750	850	950	1050	1150	1250
L	667	767	867	967	1067	1167	1267	1367	1467	1567	1667
K	100	200	100	200	100	200	100	200	100	200	100
C	420	420	600	600	780	780	960	960	1140	1320	1320
M	2	2	3	3	4	4	5	5	6	6	7
N	8	8	10	10	12	12	14	14	16	16	18
Y stroke	250	350	450	550	650						
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis		1200				960	840	720	600	480
	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. 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.

HXYx 3 axes / ZH

- Moving arm type
- Cable carrier
- Z-axis: clamped table / moving base type (200W)



Ordering method

HXYx - C [] [] [] **ZH** [] [] **RCX340-3** [] [] [] [] [] [] [] [] [] [] [] []

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
		M1 M3	25 to 125cm	25 to 65cm		25 to 55cm	3L: 3.5m 5L: 5m 10L: 10m	Specify various controller setting items. RCX340 ▶ P.678							

Specification

	X-axis	Y-axis	Z-axis
Axis construction ^{Note 1}	F20	F17	F14H-BK
AC servo motor output (W)	600	400	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ20	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20	5
Maximum speed ^{Note 4} (mm/sec)	1200	1200	300
Moving range (mm)	250 to 1250	250 to 650	250 to 550
Robot cable length (m)	Standard: 3.5 Option: 5, 10		

Note 1. Use caution that the flange 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, 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.

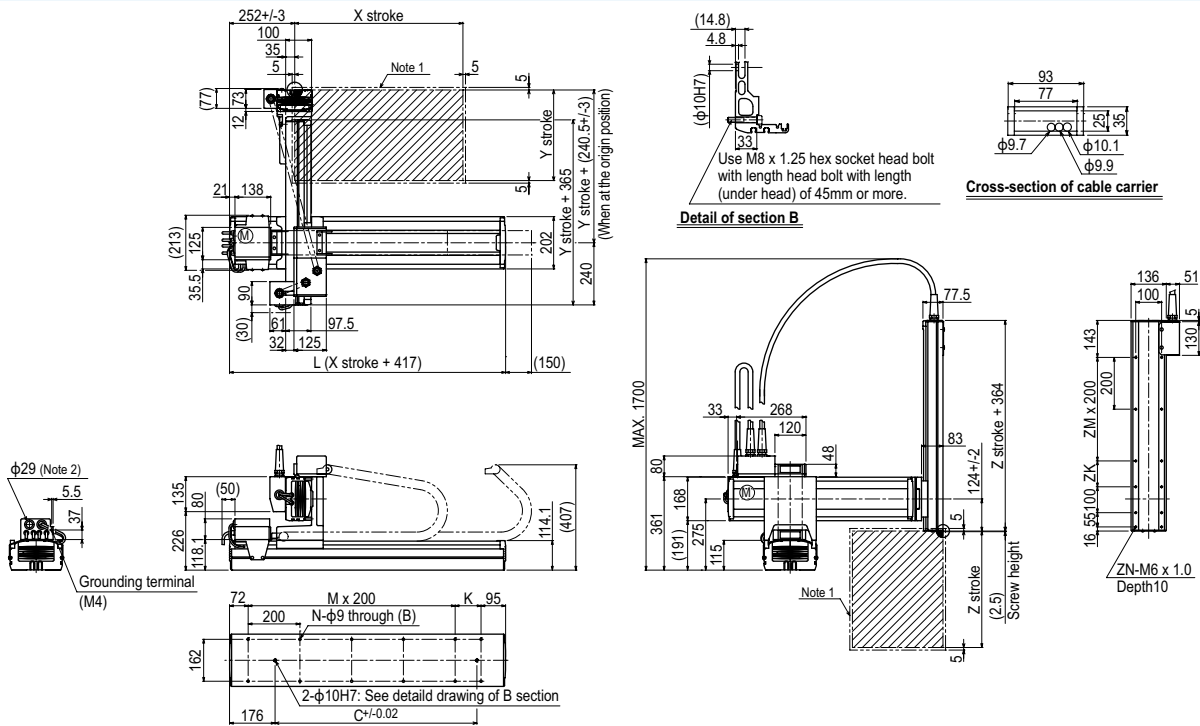
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)			
	250	350	450	550
250	18	18	18	18
350	18	18	18	18
450	18	18	18	18
550	18	17	16	15
650	18	17	16	15

Controller

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

HXYx 3 axes / ZH M1



X stroke	Y 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	
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		250	350	450	550	650						
Z stroke		250	350	450	550							
ZK		100	200	100	200							
ZM		1	1	2	2							
ZN		10	10	12	12							
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis	1200				960	840	720	600	480		
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. 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.

Articulated robots YA
Linear conveyor modules LCM
Single-axis robots CX
Motor-less single axis actuator Robonity
Compact single-axis robots TRANSEVO
Single-axis robots FLIP-X
Linear motor single-axis robots PHASER
Cartesian robots XY-X
SCARA robots YK-X
Pick & place robots YP-X
CLEAN
CONTROLLER
INFORMATION
Arm type
Gantry type
Moving arm type
Pole type
XZ type

SXYx 2 axes

● Pole type ● Whipover



Ordering method

SXYx - S - P1

Model	Cable	Combination	X-axis stroke ^{Note 1}	Y-axis stroke ^{Note 1}	Cable
			15 to 85cm	15 to 55cm	3L: 3.5m 5L: 5m 10L: 10m

RCX320-2

Controller / Number of controllable axes	Safety standard	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery
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Specify various controller setting items. RCX320 ▶ **P.660**

RCX222

Controller	Usable for CE	I/O selection 1	I/O selection 2
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Specify various controller setting items. RCX222 ▶ **P.670**

Note 1. The total of the X and Y strokes should be 1100mm or less.

Specification

	X-axis	Y-axis
Axis construction ^{Note 1}	F14H	F14-BK
AC servo motor output (W)	200	100
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	10
Maximum speed ^{Note 4} (mm/sec)	1200	600
Moving range (mm)	150 to 850	150 to 550
Robot cable length (m)	Standard: 3.5 Option: 5,10	

Note 1. Use caution that the flange 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 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.

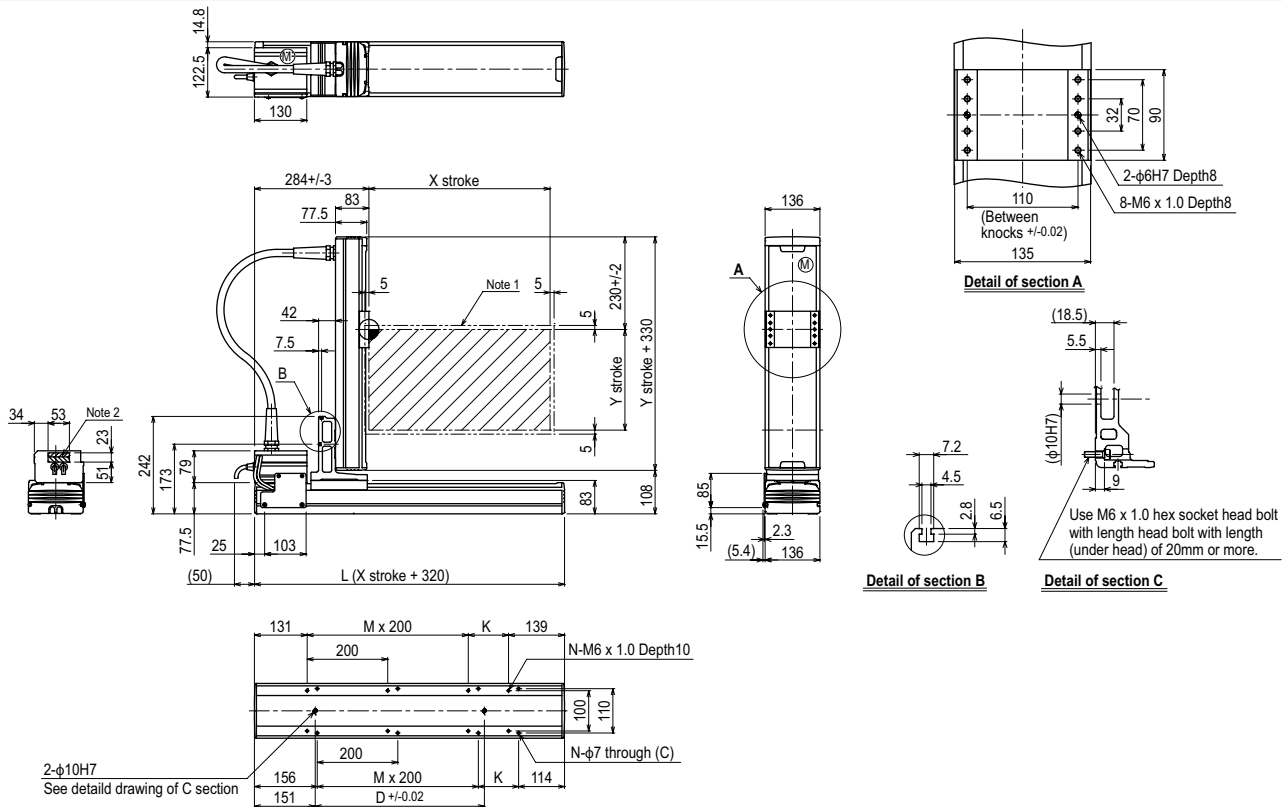
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
150 to 550	8

Controller

Controller	Operation method
RCX320 RCX222	Programming / I/O point trace / Remote command / Operation using RS-232C communication

SXYx 2 axes P1



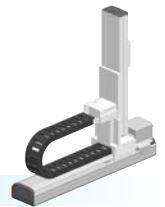
X stroke ^{Note 3}	150	250	350	450	550	650	750	850
L	470	570	670	770	870	970	1070	1170
K	200	100	200	100	200	100	200	100
D	240	240	420	420	600	600	780	780
M	0	1	1	2	2	3	3	4
N	4	6	6	8	8	10	10	12
Y stroke ^{Note 3}	150	250	350	450	550			
Maximum speed for each stroke (mm/sec) ^{Note 4}	X-axis		1200			960		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 a user cable extraction port.

Note 3. The total of the X and Y strokes should be 1100mm 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.

MXYx 2 axes

● Pole type ● Cable carrier



Ordering method

MXYx - C - P2

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
			25 to 125cm	15 to 65cm	3L: 3.5m 5L: 5m 10L: 10m	RCX320-2		R				

Specify various controller setting items. RCX320 ▶ **P.660**

Controller	Usable for CE	Regenerative unit	I/O selection 1	I/O selection 2
RCX222		R		

Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Y-axis
Axis construction ^{Note 1}	F17	F14H-BK
AC servo motor output (W)	400	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	10
Maximum speed ^{Note 4} (mm/sec)	1200	600
Moving range (mm)	250 to 1250	150 to 650
Robot cable length (m)	Standard: 3.5 Option: 5,10	

Note 1. Use caution that the flange 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, 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.

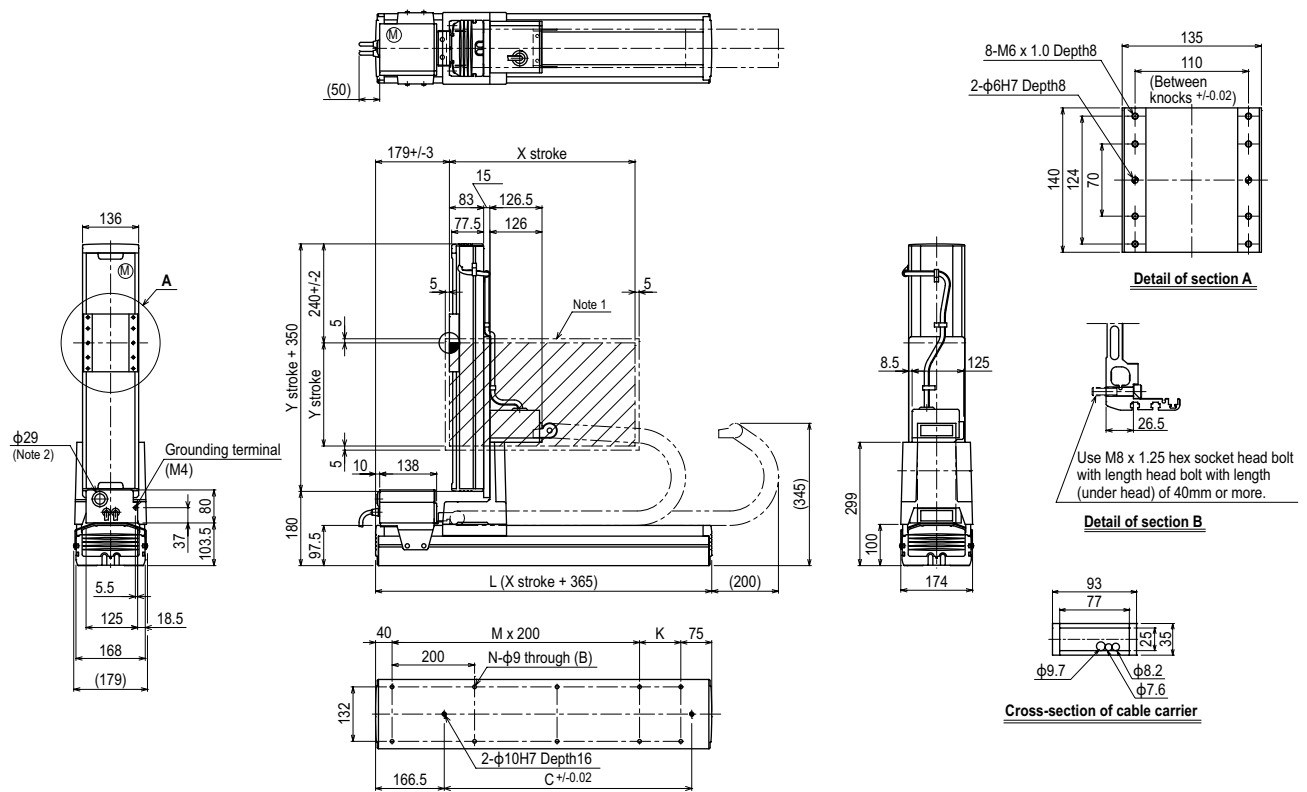
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
150 to 650	20

Controller

Controller	Operation method
RCX320-R RCX222-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication

MXYx 2 axes P2



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
C	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					
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis		1200				960	840	720	600	480
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. 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.

Articulated robots
YA

Linear conveyor modules
LCM

Single-axis robots
CX

Motor-less single-axis actuator
Robomity

Compact single-axis robots
TRANSEVO

Single-axis robots
FLIP-X

Linear motor single-axis robots
PHASER

Cartesian robots
XY-X

SCARA robots
YK-X

Pick & place robots
YP-X

CLEAN

CONTROLLER

INFORMATION

Arm type

Gantry type

Moving arm type

Pole type

XZ type

MXYx 2 axes

● Pole type ● Whipover



Ordering method

MXYx - S - P1

Model	Cable	Combination	X-axis stroke ^{Note 1}	Y-axis stroke ^{Note 1}	Cable
			25 to 95cm	15 to 65cm	3L: 3.5m 5L: 5m 10L: 10m

RCX320-2		R				
Controller / Number of controllable axes	Safety standard	Regenerative unit	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery

Specify various controller setting items. RCX320 ▶ **P.660**

RCX222		R		
Controller	Usable for CE	Regenerative unit	I/O selection 1	I/O selection 2

Specify various controller setting items. RCX222 ▶ **P.670**

Note 1. The total of the X and Y strokes should be 1100mm or less.

Specification

	X-axis	Y-axis
Axis construction ^{Note 1}	F17	F14H-BK
AC servo motor output (W)	400	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	10
Maximum speed ^{Note 4} (mm/sec)	1200	600
Moving range (mm)	250 to 950	150 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. Leads not listed in the catalog are also available. Contact us for details.
 Note 4. 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.

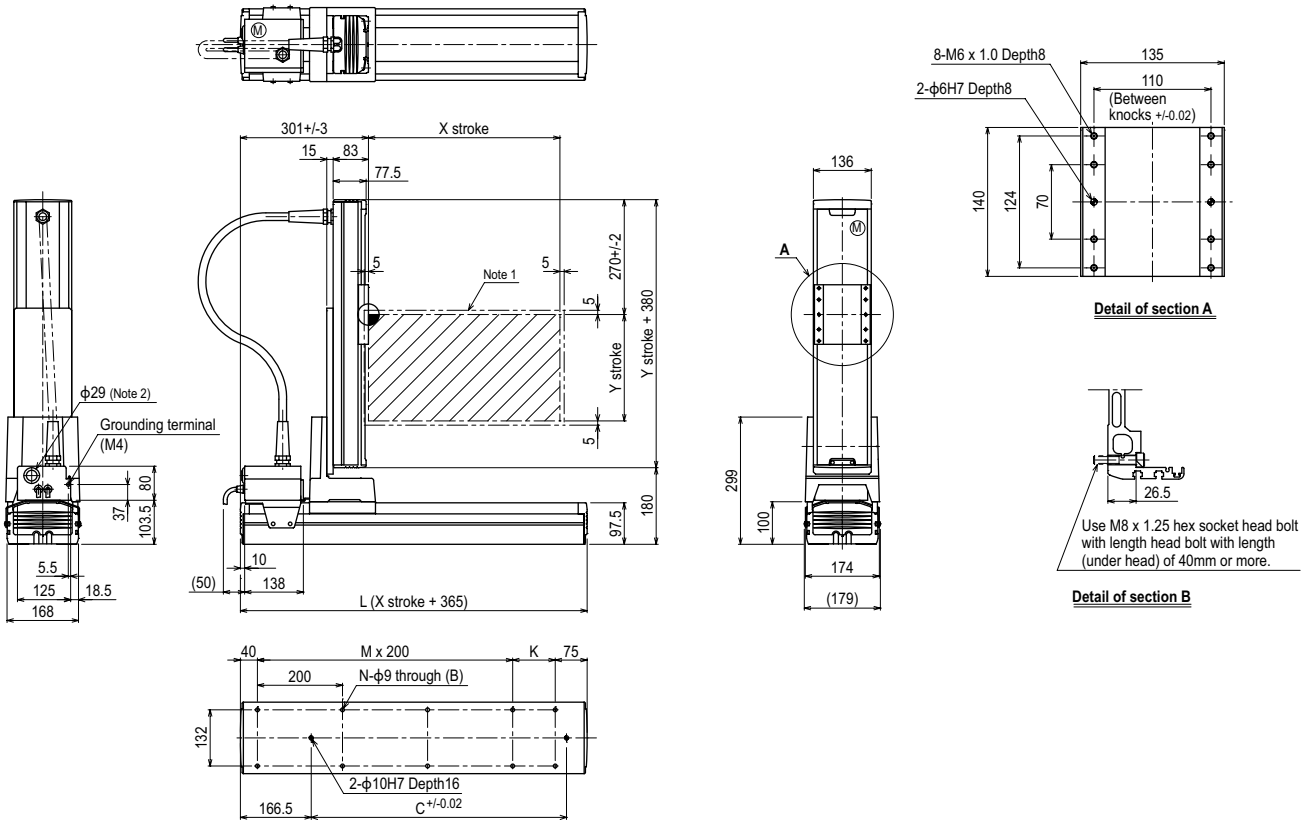
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
150 to 650	20

Controller

Controller	Operation method
RCX320-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222-R	

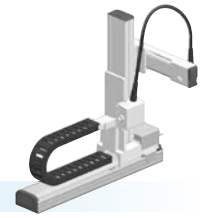
MXYx 2 axes P1



X stroke ^{Note 3}	250	350	450	550	650	750	850	950
L	615	715	815	915	1015	1115	1215	1315
K	100	200	100	200	100	200	100	200
C	240	420	600	600	780	780	960	960
M	2	2	3	3	4	4	5	5
N	8	8	10	10	12	12	14	14
Y stroke ^{Note 3}	150	250	350	450	550	650		
Maximum speed for each stroke (mm/sec) ^{Note 4}	X-axis		1200				960	840
Speed setting			-				80%	70%

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. The total of the X and Y strokes should be 1100mm or less.
 Note 4. 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.



Ordering method

MXYx - C - P2									RCX340-3								
Model	Cable	Combination	X-axis stroke 25 to 125cm	Y-axis stroke 15 to 65cm	ZR-axis ZPMHL ZPMHR	Z-axis stroke 15 to 35cm	Cable 3L: 3.5m 5L: 5m 10L: 10m	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	Specify various controller setting items. RCX340 ▶ P.678	

Specification

	X-axis	Y-axis	Z-axis
Axis construction ^{Note 1}	F17	F14H-BK	F10H-BK
AC servo motor output (W)	400	200	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	10	20
Maximum speed ^{Note 4} (mm/sec)	1200	600	1200
Moving range (mm)	250 to 1250	150 to 650	150 to 350
Robot cable length (m)	Standard: 3.5 Option: 5,10		

Note. The standard types are ZPMH with higher rigidity as compared with ZPM types which are conventional standard types. When you need the ZPM type, please consult YAMAHA.

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 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.

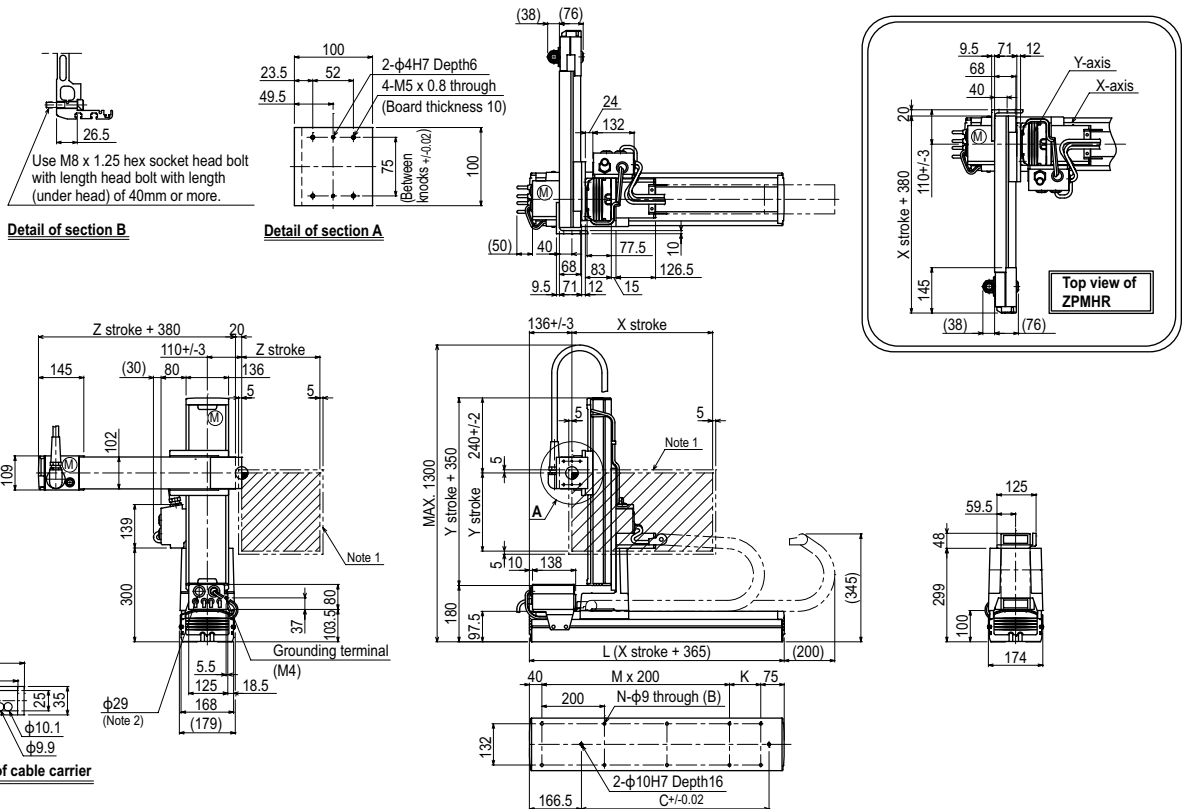
Maximum payload (kg)

Y stroke (mm)	Z stroke (mm)		
	150	250	350
150 to 650	10	9	8

Controller

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

MXYx 3 axes / ZPMHL (P2)



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	
C	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						
Z stroke	150	250	350									
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis	1200					960	840	720	600	480	
	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 ZPMHL. For the combination for ZPMHR, see the top view in the figure.

Note 4. 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.

Articulated robots
YA

Linear conveyor modules
LCM

Single-axis robots
CX

Motor-less single-axis actuators
Robotomy

Compact single-axis robots
TRANSERO

Single-axis robots
FLIP-X

Linear motor single-axis robots
PHASER

Cartesian robots
XY-X

SCARA robots
YK-X

Pick & place robots
YP-X

CLEAN

CONTROLLER INFORMATION

Arm type

Gantry type

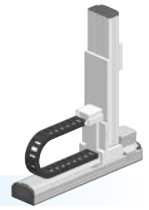
Moving arm type

Pole type

XZ type

HXYx 2 axes

● Pole type ● Cable carrier



Ordering method

HXYx - C - P2 **RCX320-2** **R**

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

Specify various controller setting items. RCX320 ▶ **P.660**

RCX222HP **R**

Controller	Usable for CE	Regenerative unit	I/O selection 1	I/O selection 2
RCX222HP		R		

Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Y-axis
Axis construction <small>Note 1</small>	F20	F20-BK
AC servo motor output (W)	600	600
Repeatability <small>Note 2</small> (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ20
Ball screw lead <small>Note 3</small> (Deceleration ratio) (mm)	20	10
Maximum speed <small>Note 4</small> (mm/sec)	1200	600
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.

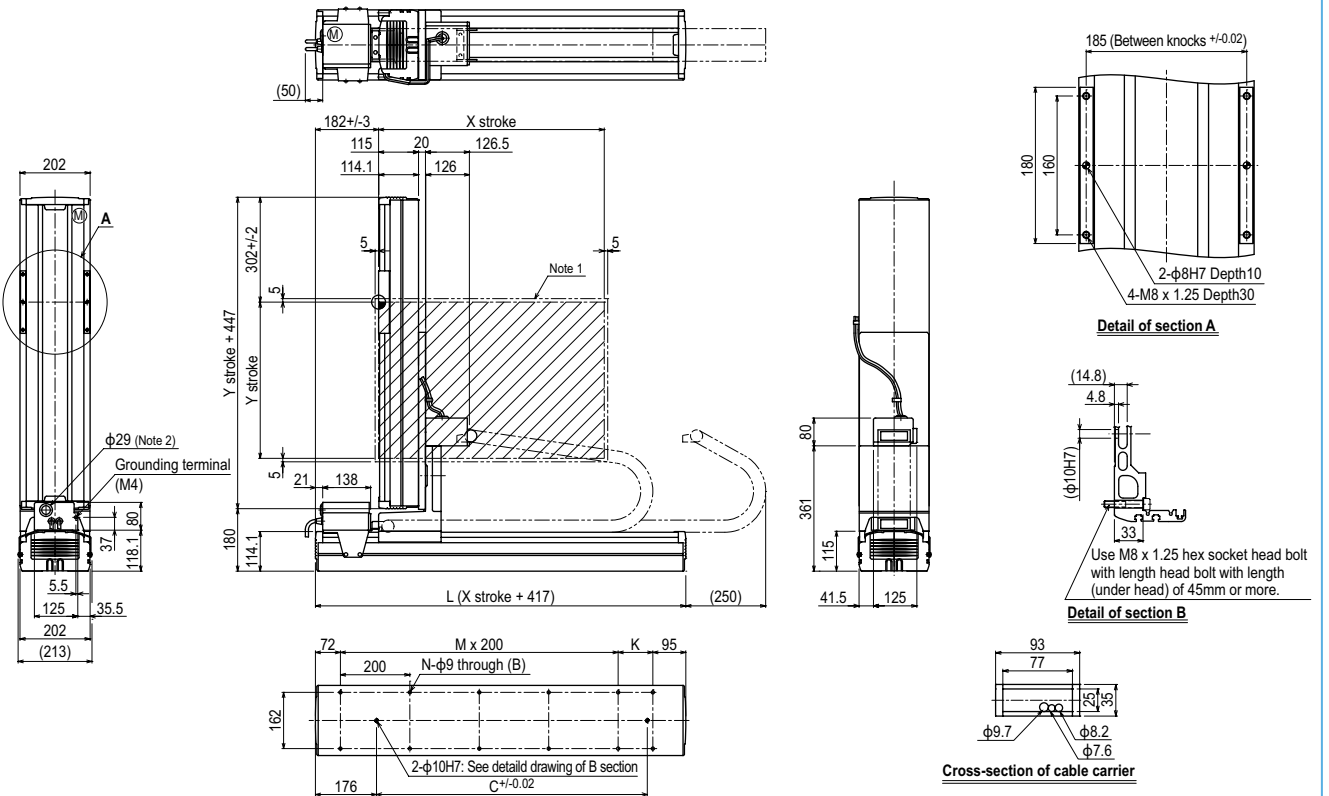
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
250 to 1050	30

Controller

Controller	Operation method
RCX320-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222HP-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication

HXYx 2 axes P2



X stroke	250	350	450	550	650	750	850	950	1050	1150	1250
	L	667	767	867	967	1067	1167	1267	1367	1467	1567
K	100	200	100	200	100	200	100	200	100	200	100
C	420	420	600	600	780	708	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) <small>Note 3</small>	X-axis		1200		960		840	720	600	480	
	Y-axis		600		480		420	360			
	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.

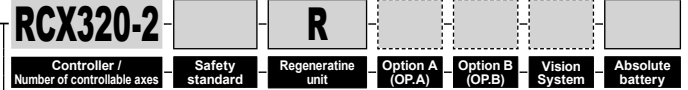
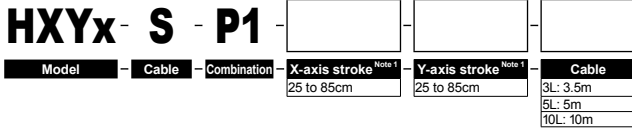
Note 3. When the X-axis/Y-axis stroke is longer than 850mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.

HXYx 2 axes

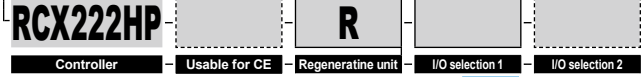
● Pole type ● Whipover



Ordering method



Specify various controller setting items. RCX320 ▶ **P.660**



Specify various controller setting items. RCX222 ▶ **P.670**

Note 1. The total of the X and Y strokes should be 1100mm or less.

Specification

	X-axis	Y-axis
Axis construction ^{Note 1}	F20	F20-BK
AC servo motor output (W)	600	600
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ20
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	10
Maximum speed ^{Note 4} (mm/sec)	1200	600
Moving range (mm)	250 to 850	250 to 850
Robot cable length (m)	Standard: 3.5 Option: 5,10	

Note 1. Use caution that the flange 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.

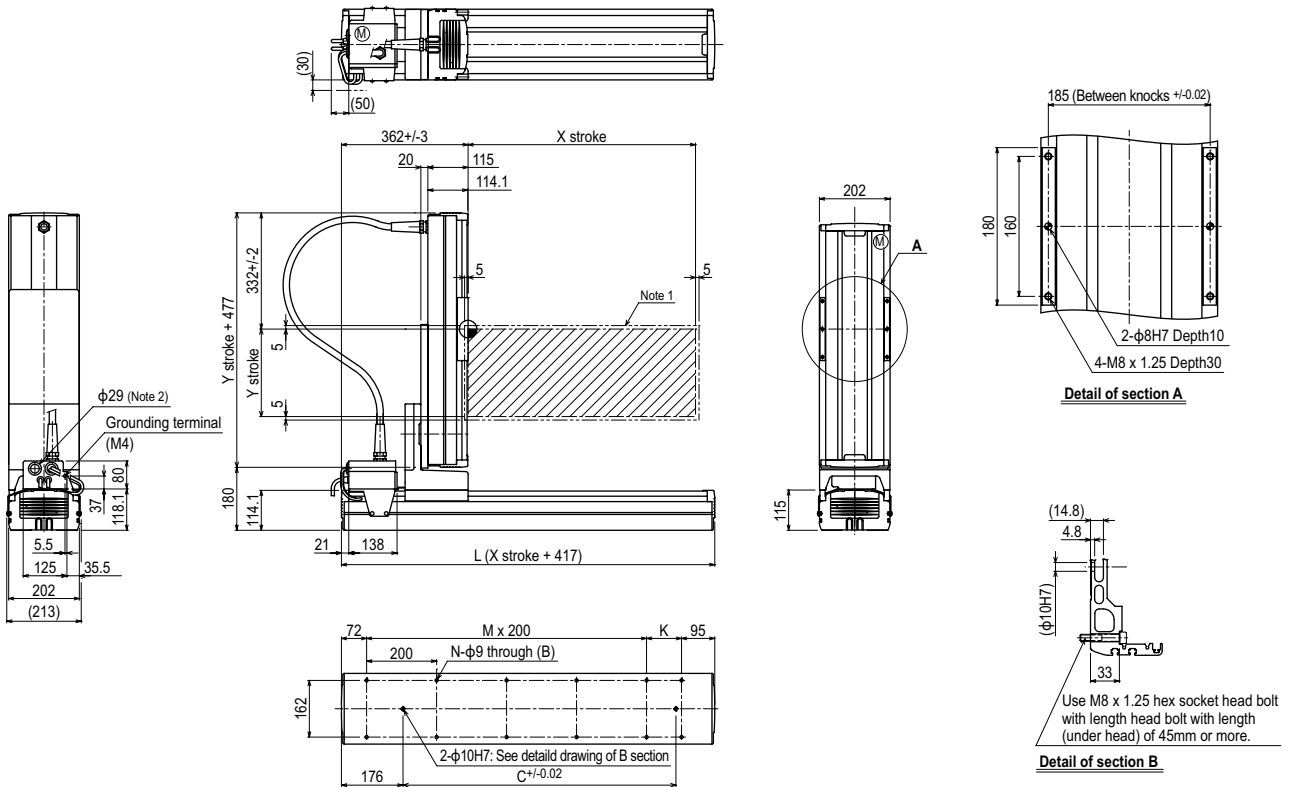
Maximum payload (kg)

Y stroke (mm)	XY 2 axes
250 to 850	30

Controller

Controller	Operation method
RCX320-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222HP-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication

HXYx 2 axes P1



X stroke ^{Note 3}	250	350	450	550	650	750	850
L	667	767	867	967	1067	1167	1267
K	100	200	100	200	100	200	100
C	420	420	600	600	780	780	960
M	2	2	3	3	4	4	5
N	8	8	10	10	12	12	14

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.

Y stroke ^{Note 3}	250	350	450	550	650	750	850
Maximum speed for each stroke (mm/sec) ^{Note 4}	X-axis		1200		960		
	Y-axis		600		480		
	Speed setting		-		80%		

Note 3. The total of the X and Y strokes should be 1100mm 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 at the left.

SXYx 2 axes / ZF

● XZ type ● Cable carrier ● Z-axis: clamped base / moving table type (100W)



Ordering method

SXYx - C **ZF**

Model	Cable	Combination	X-axis stroke	ZR-axis	Z-axis stroke	Cable	Controller / Number of controllable axes	Safety standard	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery
	F1 F3		15 to 105cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m	RCX320-2					
							Specify various controller setting items. RCX320 ▶ P.660					
							RCX222					
							Specify various controller setting items. RCX222 ▶ P.670					

Specification

	X-axis	Z-axis
Axis construction ^{Note 1}	F14	F10-BK
AC servo motor output (W)	100	100
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	10
Maximum speed ^{Note 4} (mm/sec)	1200	600
Moving range (mm)	150 to 1050	150 to 350
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. Leads not listed in the catalog are also available. Contact us for details.
 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.

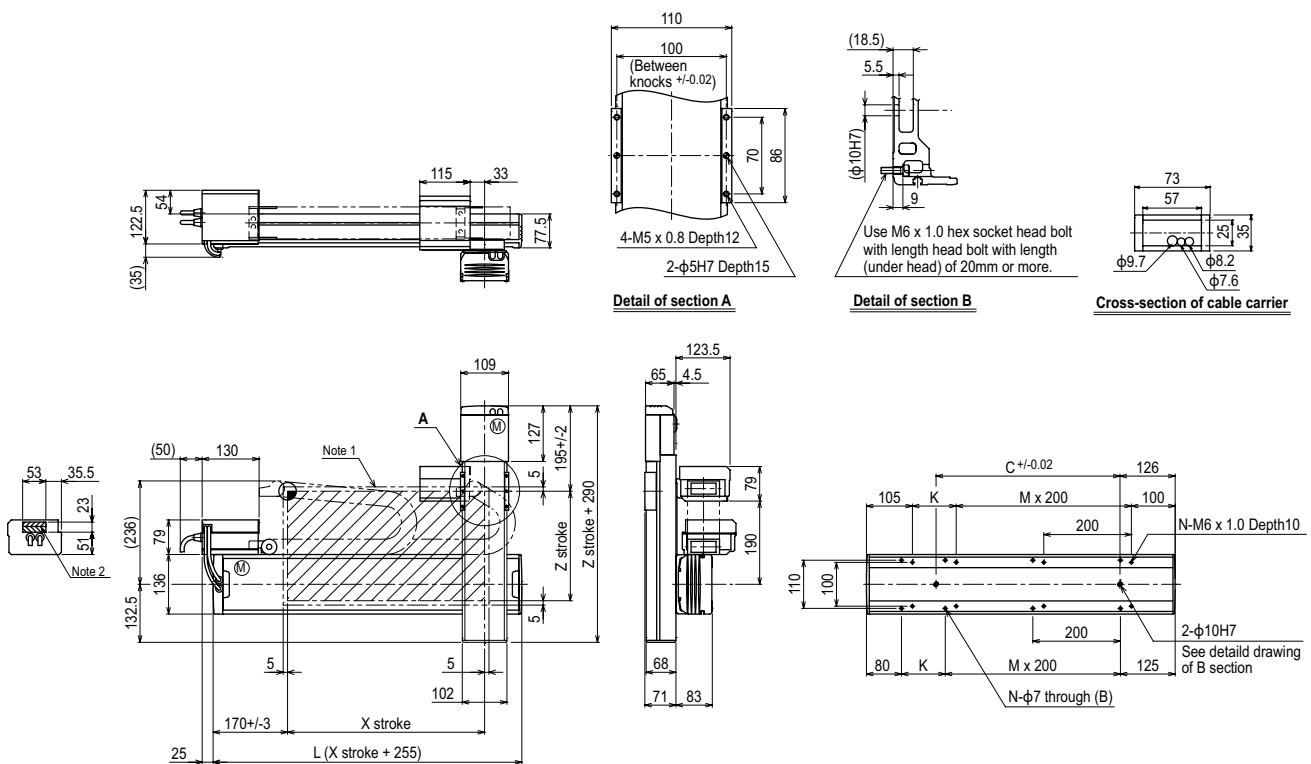
Maximum payload (kg)

X stroke (mm)	Z stroke (mm)
150 to 1050	150 to 350
	10

Controller

Controller	Operation method
RCX320	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222	

SXYx 2 axes / ZF F1



X stroke	150	250	350	450	550	650	750	850	950	1050
L	405	505	605	705	805	905	1005	1105	1205	1305
K	200	100	200	100	200	100	200	100	200	100
C	240	240	420	420	600	600	780	780	960	960
M	0	1	1	2	2	3	3	4	4	5
N	4	6	6	8	8	10	10	12	12	14
Z stroke	150	250	350							
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis		1200			960		780	600	540
Speed setting			-			80%		65%	50%	45%

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 a 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.

SXYx 2 axes / ZF

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



Ordering method

SXYx - S [] [] **ZF** [] [] []

Model	Cable	Combination	X-axis stroke	ZR-axis	Z-axis stroke	Cable
F1			15 to 85cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m

RCX320-2 [] [] [] [] [] []

Controller / Number of controllable axes Safety standard Option A (OP.A) Option B (OP.B) Vision System Absolute battery

Specify various controller setting items. RCX320 ▶ **P.660**

RCX222 [] [] [] [] [] []

Controller Usable for CE I/O selection 1 I/O selection 2

Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Z-axis
Axis construction ^{Note 1}	F14	F10-BK
AC servo motor output (W)	100	100
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	10
Maximum speed ^{Note 4} (mm/sec)	1200	600
Moving range (mm)	150 to 850	150 to 350
Robot cable length (m)	Standard: 3.5 Option: 5,10	

Note 1. Use caution that the flange 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 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.

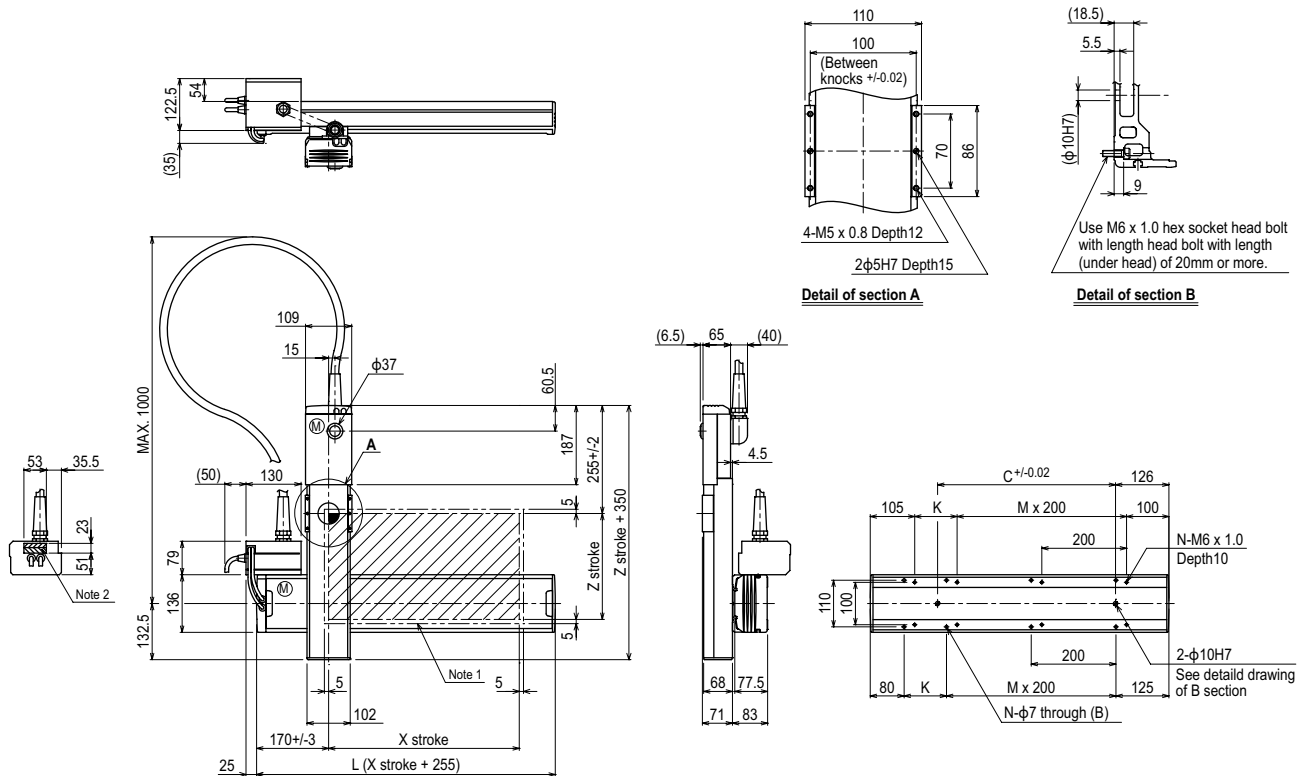
Maximum payload (kg)

X stroke (mm)	Z stroke (mm)
150 to 850	150 to 350
	10

Controller

Controller	Operation method
RCX320 RCX222	Programming / I/O point trace / Remote command / Operation using RS-232C communication

SXYx 2 axes / ZF (F1)



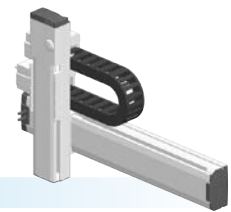
X stroke	150	250	350	450	550	650	750	850
L	405	505	605	705	805	905	1005	1105
K	200	100	200	100	200	100	200	100
C	240	240	420	420	600	600	780	780
M	0	1	1	2	2	3	3	4
N	4	6	6	8	8	10	10	12
Z stroke	150	250	350					
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis		1200				960	780
Speed setting			-				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 a 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.

Articulated robots YA
 Linear conveyor modules LCM
 Single-axis robots CX
 Motor-less single-axis actuator Robomity
 Compact single-axis robots TRANSEVO
 Single-axis robots FLIP-X
 Linear motor single-axis robots PHASER
 Cartesian robots XY-X
 SCARA robots YK-X
 Pick & place robots YP-X
 CLEAN
 CONTROLLER INFORMATION
 Arm type
 Gantry type
 Moving arm type
 Pole type
 XZ type

SXYx 2 axes / ZFL20



● XZ type ● Cable carrier ● Z-axis: clamped base / moving table type (200W)

Ordering method

SXYx - C **ZFL20** **RCX320-2** **R**

Model	Cable	Combination	X-axis stroke	ZR-axis	Z-axis stroke	Cable	Controller / Number of controllable axes	Safety standard	Regenerative unit ^{Note 1}	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery
F1			15 to 105cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m	RCX320-2						

Specify various controller setting items. RCX320 ▶ **P.660**

Controller	Usable for CE	Regenerative unit ^{Note 1}	I/O selection 1	I/O selection 2
RCX222				

Specify various controller setting items. RCX222 ▶ **P.670**

Note 1. RCX320 uses the YHX-RU regenerative unit. The RCX222 uses the RG2.

Specification

	X-axis	Z-axis
Axis construction ^{Note 1}	F14	F10H-BK
AC servo motor output (W)	100	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	20
Maximum speed ^{Note 4} (mm/sec)	1200	1200
Moving range (mm)	150 to 1050	150 to 350
Robot cable length (m)	Standard: 3.5 Option: 5,10	

Note 1. Use caution that the flange 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 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.

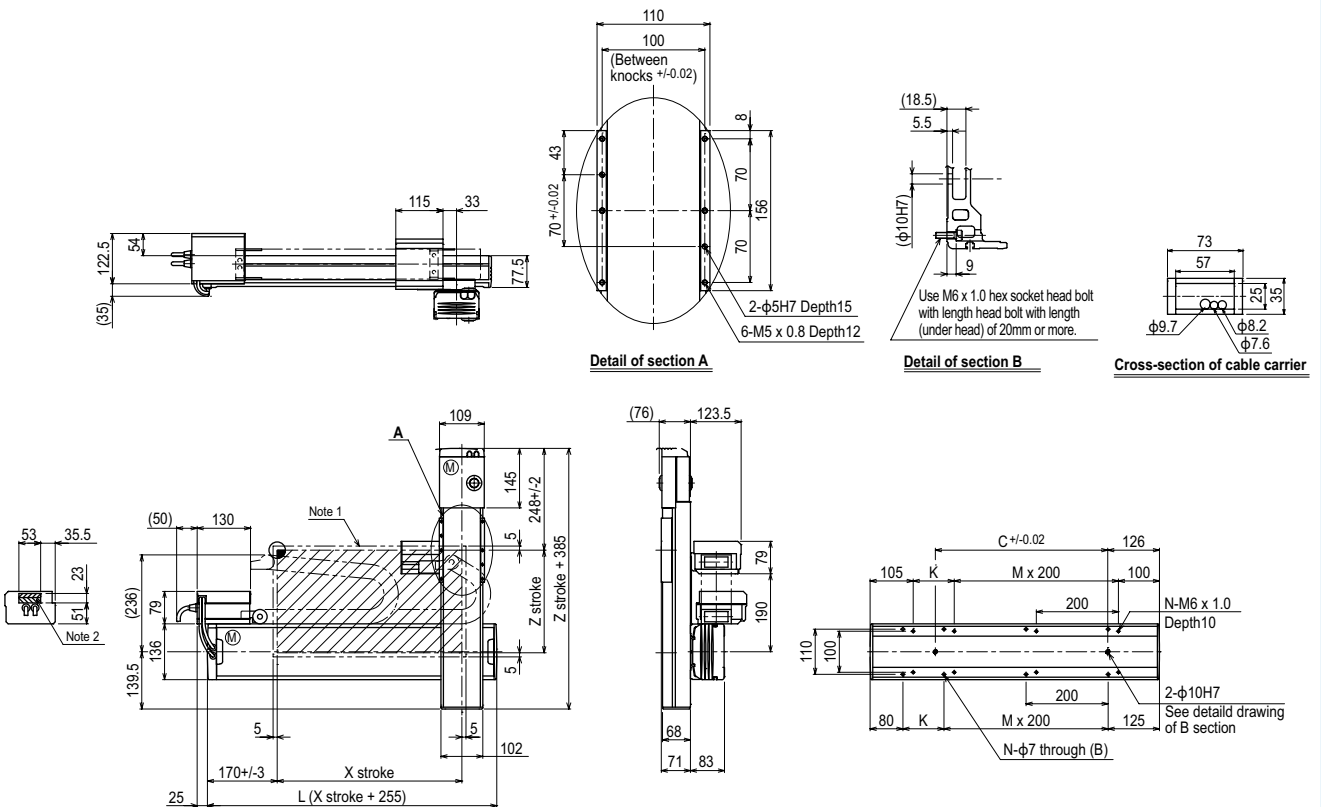
Maximum payload (kg)

X stroke (mm)	Z stroke (mm)
150 to 1050	150 to 350
	8

Controller

Controller	Operation method
RCX320-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222-R	

SXYx 2 axes / ZFL20 (F1)



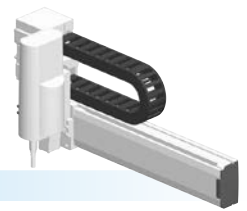
X stroke	150	250	350	450	550	650	750	850	950	1050
L	405	505	605	705	805	905	1005	1105	1205	1305
K	200	100	200	100	200	100	200	100	200	100
C	240	240	420	420	600	600	780	780	960	960
M	0	1	1	2	2	3	3	4	4	5
N	4	6	6	8	8	10	10	12	12	14
Z stroke	150	250	350							
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis		1200				960	780	600	540
Speed setting			-				80%	65%	50%	45%

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 a 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.

SXYx 2 axes / ZS

- XZ type
- Cable carrier
- Z-axis shaft vertical type



Ordering method

SXYx - C [] [] [] **15** []

Model	Cable	Combination	X-axis stroke	ZR-axis	Z-axis stroke	Cable
F1			15 to 105cm	ZS12		3L: 3.5m
F3				ZS6		5L: 5m
						10L: 10m

RCX320-2 [] [] [] [] [] []

Controller / Number of controllable axes Safety standard Option A (OP.A) Option B (OP.B) Vision System Absolute battery

Specify various controller setting items. RCX320 ▶ **P.660**

RCX222 [] [] [] [] [] []

Controller Usable for CE I/O selection 1 I/O selection 2

Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Z-axis: ZS12	Z-axis: ZS6
Axis construction ^{Note 1}	F14	-	
AC servo motor output (W)	100	60	
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.02	
Drive system	Ball screw φ15	Ball screw φ12	
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	12	6
Maximum speed ^{Note 4} (mm/sec)	1200	1000	500
Moving range (mm)	150 to 1050	150	
Robot cable length (m)	Standard: 3.5 Option: 5,10		

- Note 1. Use caution that the flange 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 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.

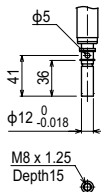
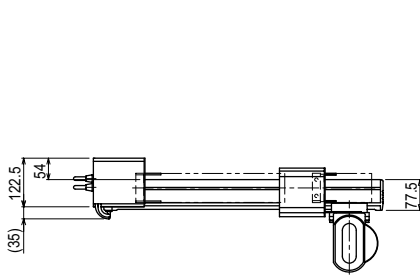
Maximum payload (kg)

Y stroke (mm)	ZS12	ZS6
150 to 1050	3	5

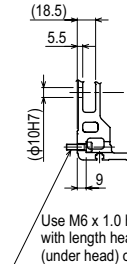
Controller

Controller	Operation method
RCX320	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222	

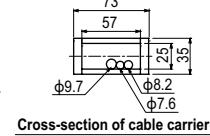
SXYx 2 axes / ZS (F1)



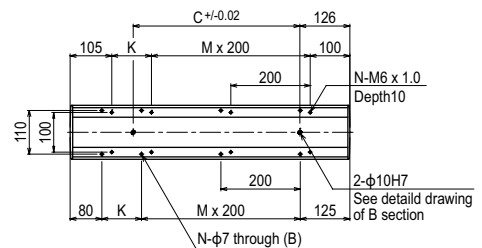
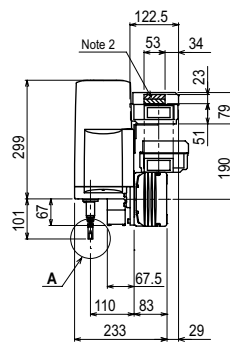
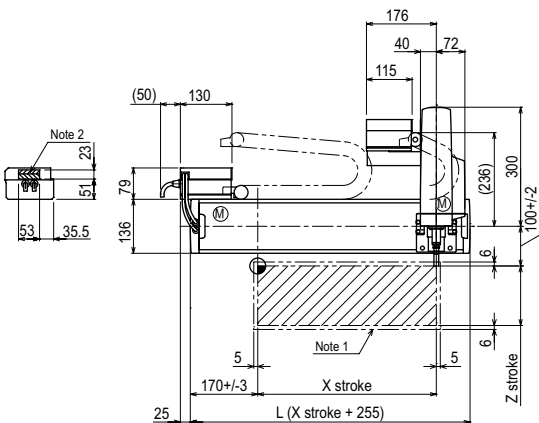
Detail of section A



Detail of section B



Cross-section of cable carrier



X stroke	150	250	350	450	550	650	750	850	950	1050
L	405	505	605	705	805	905	1005	1105	1205	1305
K	200	100	200	100	200	100	200	100	200	100
C	240	240	420	420	600	600	780	780	960	960
M	0	1	1	2	2	3	3	4	4	5
N	4	6	6	8	8	10	10	12	12	14
Z stroke	150									
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis		1200			960		780	600	540
Speed setting			-			80%		65%	50%	45%

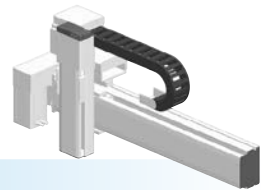
- Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
- Note 2. The shaded position indicates an user cable extraction port.

- 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.

- Articulated robots YA
- Linear conveyor modules LCM
- Single-axis robots CX
- Motor-less single axis actuator Robomity
- Compact single-axis robots TRANSEVO
- Single-axis robots FLIP-X
- Linear motor single-axis robots PHASER
- Cartesian robots XY-X
- SCARA robots YK-X
- Pick & place robots YP-X
- CLEAN
- CONTROLLER INFORMATION
- Arm type
- Gantry type
- Moving arm type
- Pole type
- XZ type

SXYBx

2 axes / ZF



- XZ type
- Cable carrier
- Z-axis: clamped base / moving table type (100W)

Ordering method

SXYBx - C [] [] **ZF** [] []

Model	Cable	Combination	X-axis stroke	ZR-axis	Z-axis stroke	Cable
F1			15 to 305cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m
F3						

RCX320-2 [] [] [] [] [] []

Controller / Number of controllable axes	Safety standard	Regenerative unit	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery
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Specify various controller setting items. RCX320 ▶ **P.660**

RCX222 [] [] [] [] [] []

Controller	Usable for CE	Regenerative unit	I/O selection 1	I/O selection 2
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Specify various controller setting items. RCX222 ▶ **P.670**

Note 1. A regenerative unit is required when the maximum speed exceeds 1250mm/sec.

Specification

	X-axis	Z-axis
Axis construction ^{Note 1}	B14H	F10-BK
AC servo motor output (W)	200	100
Repeatability ^{Note 2} (mm)	+/-0.04	+/-0.01
Drive system	Timing belt	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	Equivalent to lead 25	10
Maximum speed (mm/sec)	1875	600
Moving range (mm)	150 to 3050	150 to 350
Robot cable length (m)	Standard: 3.5 Option: 5,10	

Note 1. Use caution that the flange 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.

Maximum payload (kg)

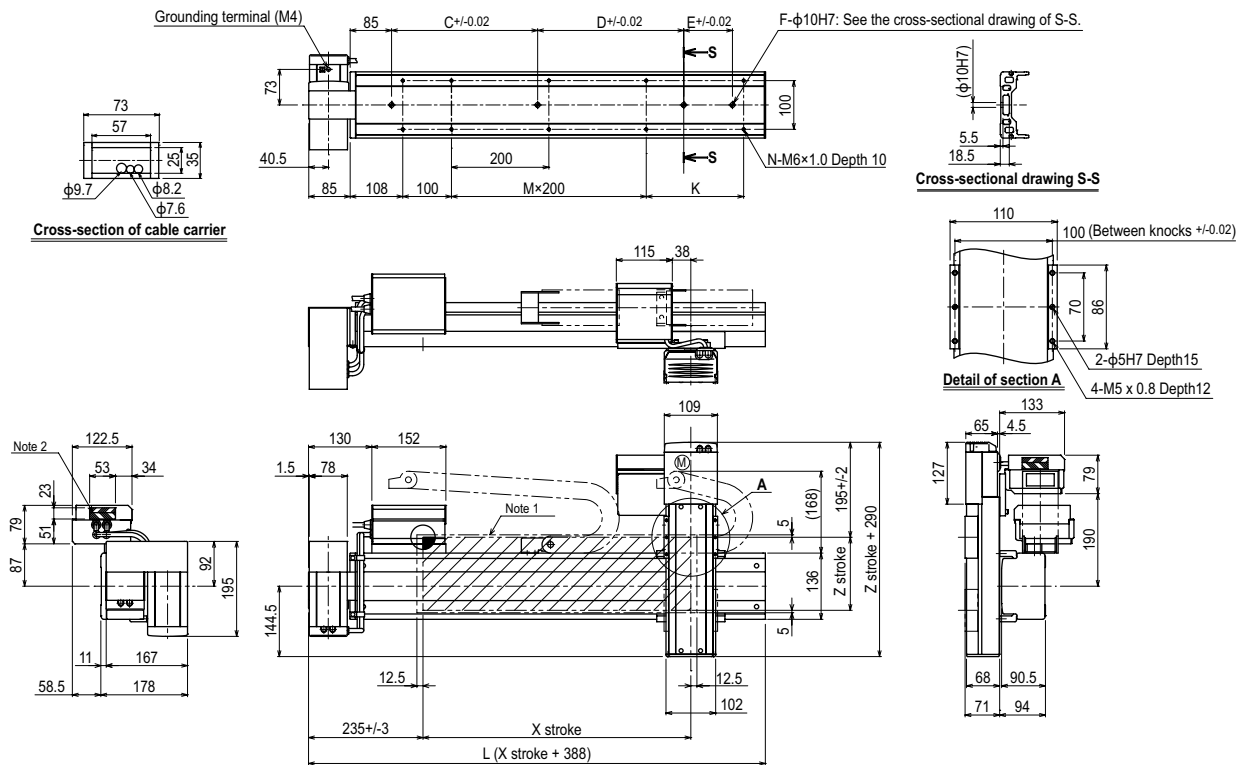
X stroke (mm)	Z stroke (mm)
150 to 3050	150 to 350
	10

Controller

Controller	Operation method
RCX320	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222	

Note. A regenerative unit is required when the maximum speed exceeds 1250mm/sec.

SXYBx 2 axes / ZF (F1)



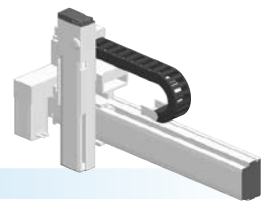
Note 1. The moving range when returning to origin and the stop position when stopping by the mechanical stopper.
 Note 2. The shaded position indicates a user cable extraction port.
 Note 3. LU specification should be used for installation of the X axis motor.

X stroke	150	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950	3050	
L	538	638	738	838	938	1038	1138	1238	1338	1438	1538	1638	1738	1838	1938	2038	2138	2238	2338	2438	2538	2638	2738	2838	2938	3038	3138	3238	3338	3438	
K	-	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200
C	240	420	420	600	600	780	780	960	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140
D	-	-	-	-	-	-	-	-	-	-	-	240	240	420	600	600	780	780	960	960	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140
E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	240	240	420	420	600	600	780	960	
F	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4
M	1	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	
Z stroke	150	250	350																												

SXYBx

2 axes / ZFL20

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



Ordering method

SXYBx - C [] [] **ZFL20** [] [] [] **RCX320-2** [] **R** [] [] [] [] [] []

Model Cable Combination X-axis stroke ZR-axis Z-axis stroke Cable

F1 15 to 305cm 3L: 3.5m
F3 15 to 35cm 5L: 5m
10L: 10m

Controller / Number of controllable axes Safety standard Regenerative unit Option A (OP.A) Option B (OP.B) Vision System Absolute battery

Specify various controller setting items. RCX320 ▶ **P.660**

RCX222 [] **R** [] [] [] [] []

Controller Usable for CE Regenerative unit I/O selection 1 I/O selection 2

Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Z-axis
Axis construction ^{Note 1}	B14H	F10H-BK
AC servo motor output (W)	200	200
Repeatability ^{Note 2} (mm)	+/-0.04	+/-0.01
Drive system	Timing belt	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	Equivalent to lead 25	20
Maximum speed (mm/sec)	1875	1200
Moving range (mm)	150 to 3050	150 to 350
Robot cable length (m)	Standard: 3.5 Option: 5, 10	

Note 1. Use caution that the flange 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.

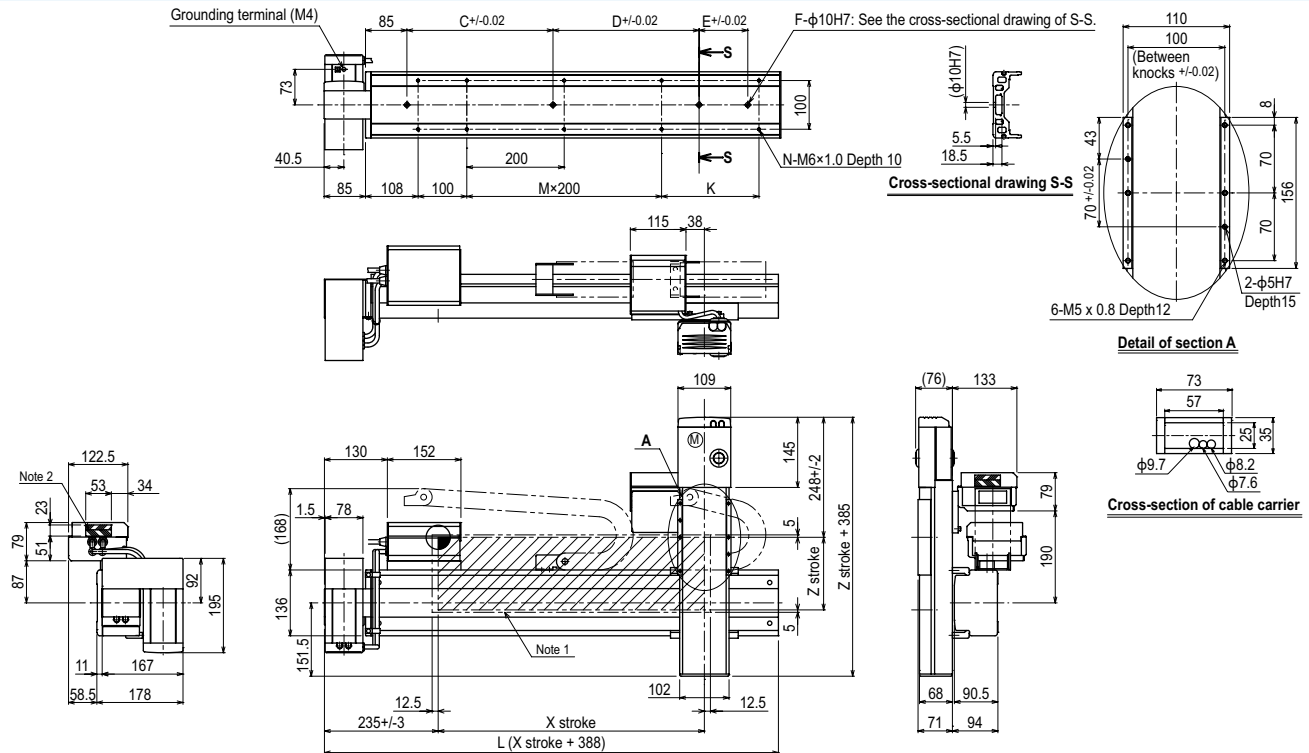
Maximum payload (kg)

X stroke (mm)	Z stroke (mm)
150 to 3050	150 to 350
	8

Controller

Controller	Operation method
RCX320-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222-R	

SXYBx 2 axes / ZFL20 (F1)



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. LU specification should be used for installation of the X axis motor.

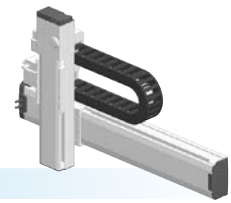
X stroke	150	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950	3050	
L	538	638	738	838	938	1038	1138	1238	1338	1438	1538	1638	1738	1838	1938	2038	2138	2238	2338	2438	2538	2638	2738	2838	2938	3038	3138	3238	3338	3438	
K	-	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200	100	200
C	240	420	420	600	600	780	780	960	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140
D	-	-	-	-	-	-	-	-	-	-	-	240	240	420	600	600	780	780	960	960	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140
E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	240	240	420	420	600	600	780	960	
F	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4
M	1	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	
N	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	
Z stroke	150	250	350																												

Controller

RCX320 ▶ 660 RCX222 ▶ 670

MXYx

2 axes / ZFL10



● XZ type ● Cable carrier ● Z-axis: clamped base / moving table type (200W)

Ordering method

MXYx - C **ZFL10** **RCX320-2** **R**

Model	Cable	Combination	X-axis stroke	ZR-axis	Z-axis stroke	Cable	Controller / Number of controllable axes	Safety standard	Regenerative unit	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery
F1			15 to 105cm		15 to 35cm	3L: 3.5m 5L: 5m 10L: 10m	RCX320-2		R				

Specify various controller setting items. RCX320 ▶ **P.660**

RCX222 **R**

Controller	Usable for CE	Regenerative unit	I/O selection 1	I/O selection 2
RCX222		R		

Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Z-axis
Axis construction ^{Note 1}	F14H	F10H-BK
AC servo motor output (W)	200	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	10
Maximum speed ^{Note 4} (mm/sec)	1200	600
Moving range (mm)	150 to 1050	150 to 350
Robot cable length (m)	Standard: 3.5 Option: 5,10	

Note 1. Use caution that the flange 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 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.

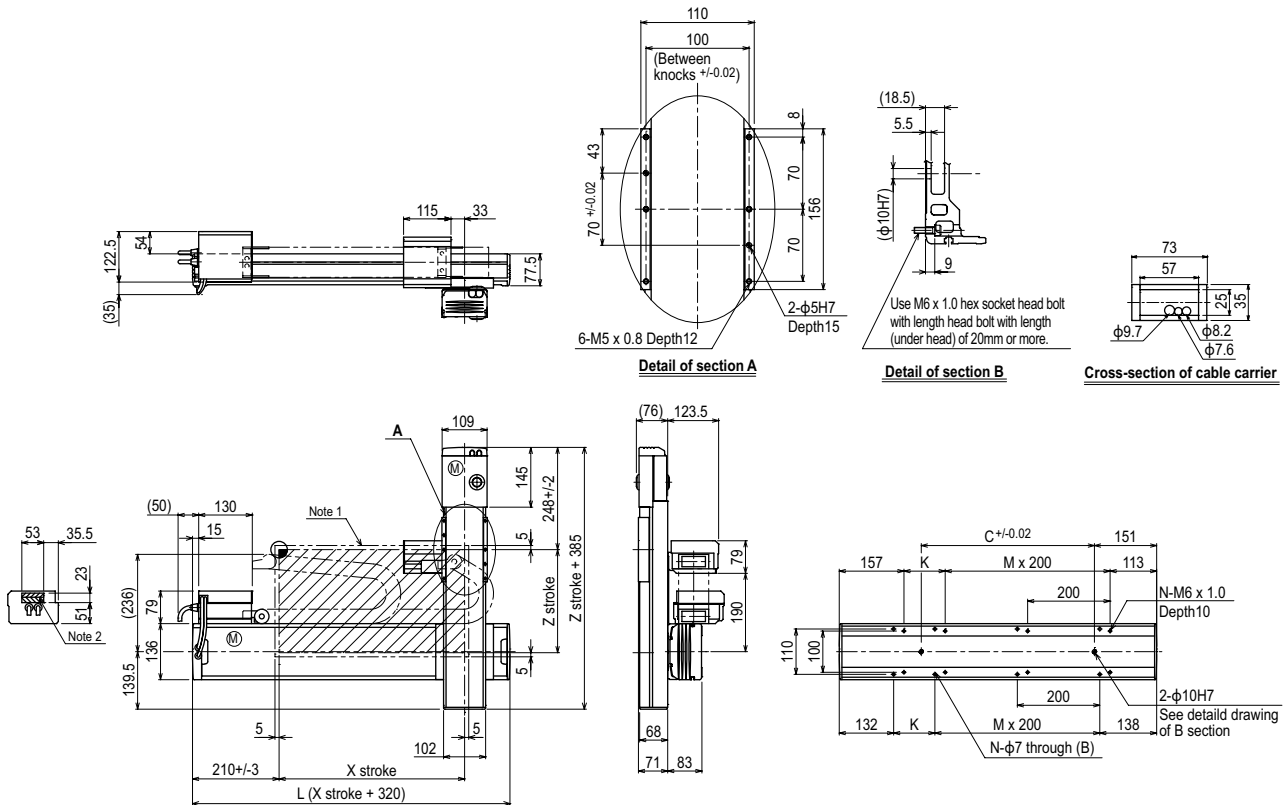
Maximum payload (kg)

X stroke (mm)	Z stroke (mm)
150 to 1050	150 to 350
	15

Controller

Controller	Operation method
RCX320-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222-R	

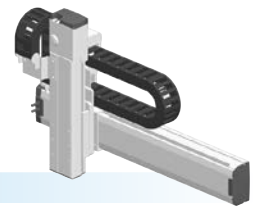
MXYx 2 axes / ZFL10 (F1)



X stroke	150	250	350	450	550	650	750	850	950	1050
L	470	570	670	770	870	970	1070	1170	1270	1370
K	200	100	200	100	200	100	200	100	200	100
C	240	240	420	420	600	600	780	960	960	1140
M	0	1	1	2	2	3	3	4	4	5
N	4	6	6	8	8	10	10	12	12	14
Z stroke	150	250	350							
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis		1200			960		780	600	540
Speed setting			-			80%		65%	50%	45%

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 a 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.



Ordering method

MXYx - C [] [] **ZFH** [] [] []

Model [] **Cable** [] **Combination** [] **X-axis stroke** [] **ZR-axis** [] **Z-axis stroke** [] **Cable** []

RCX320-2 [] [] **R** [] [] [] [] [] []

RCX222 [] [] **R** [] [] [] [] [] []

Specify various controller setting items. RCX320 ▶ **P.660**
Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Z-axis
Axis construction ^{Note 1}	F14H	F10H-BK
AC servo motor output (W)	200	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ15	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	10
Maximum speed ^{Note 4} (mm/sec)	1200	600
Moving range (mm)	150 to 1050	150 to 350
Robot cable length (m)	Standard: 3.5 Option: 5,10	

Maximum payload (kg)

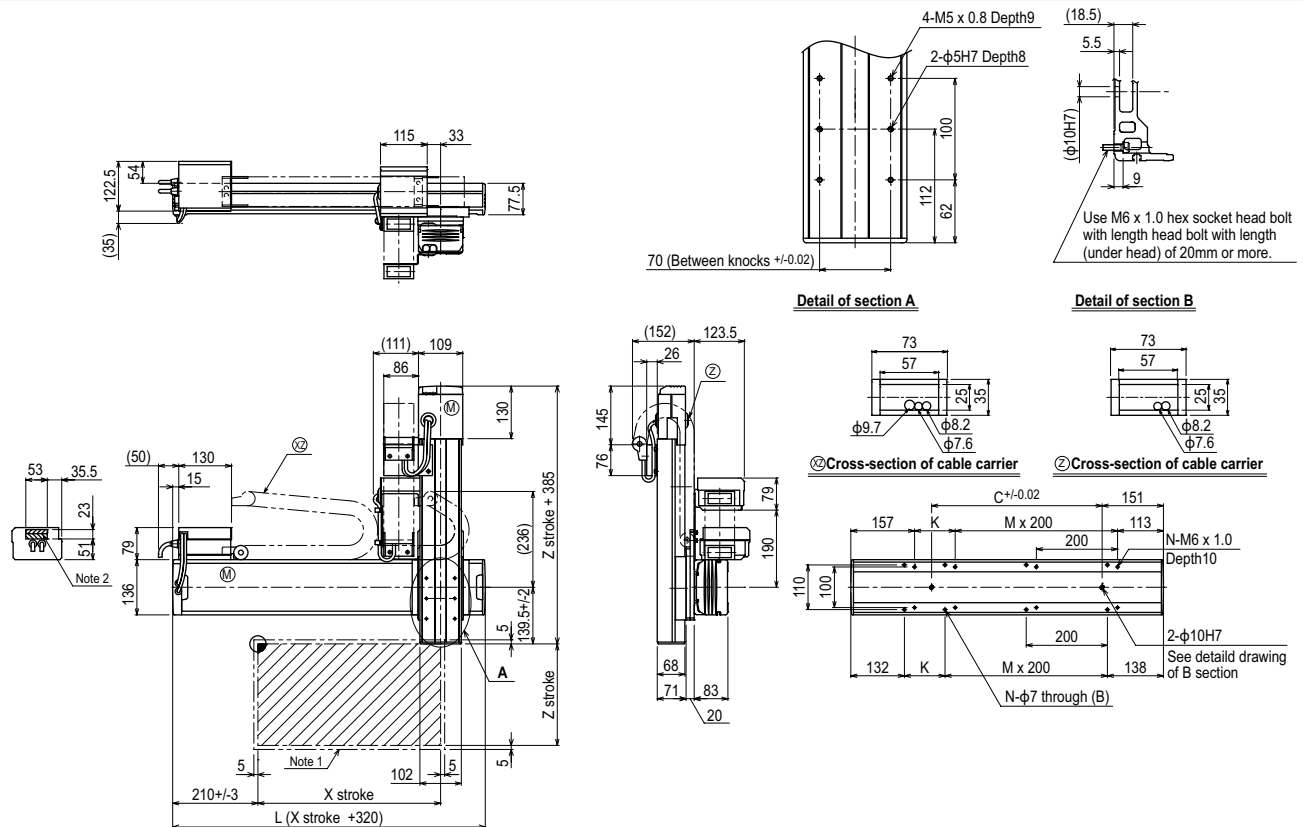
	Z stroke (mm)		
X stroke (mm)	150	250	350
150 to 1050	14	13	12

- Note 1. Use caution that the flange 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 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.

Controller

Controller	Operation method
RCX320-R RCX222-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication

MXYx 2 axes / ZFH (F1)



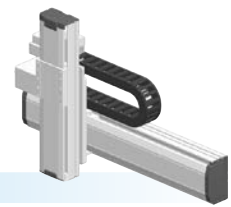
X stroke	150	250	350	450	550	650	750	850	950	1050	
L	470	570	670	770	870	970	1070	1170	1270	1370	
K	200	100	200	100	200	100	200	100	200	100	
C	240	240	420	420	600	600	780	960	960	1140	
M	0	1	1	2	2	3	3	4	4	5	
N	4	6	6	8	8	10	10	12	12	14	
Z stroke	150	250	350								
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis		1200			960		780	600	540	
Speed setting			-			80%		65%	50%	45%	

- 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 a 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.

Articulated robots YA
 Linear conveyor modules LCM
 Single-axis robots CX
 Motor-less single axis actuator Robomity
 Compact single-axis robots TRANSEVO
 Single-axis robots FLIP-X
 Linear motor single-axis robots PHASER
 Cartesian robots XY-X
 SCARA robots YK-X
 Pick & place robots YP-X
 CLEAN
 CONTROLLER
 INFORMATION
 Arm type
 Gantry type
 Moving arm type
 Pole type
 XZ type

HXYx 2 axes / ZL

● XZ type ● Cable carrier ● Z-axis: clamped base / moving table type (200W)



Ordering method

HXYx - C [] [] **ZL** [] []

Model	Cable	Combination	X-axis stroke	ZR-axis	Z-axis stroke	Cable
F1			25 to 125cm		25 to 55cm	3L: 3.5m 5L: 5m 10L: 10m

RCX320-2 [] **R** [] [] [] [] []

Controller / Number of controllable axes	Safety standard	Regenerative unit	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery
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Specify various controller setting items. RCX320 ▶ **P.660**

RCX222 [] **R** [] [] [] [] []

Controller	Usable for CE	Regenerative unit	I/O selection 1	I/O selection 2
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Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Z-axis
Axis construction ^{Note 1}	F17	F14H-BK
AC servo motor output (W)	400	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	10
Maximum speed ^{Note 4} (mm/sec)	1200	600
Moving range (mm)	250 to 1250	250 to 550
Robot cable length (m)	Standard: 3.5 Option: 5,10	

Note 1. Use caution that the flange 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, 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.

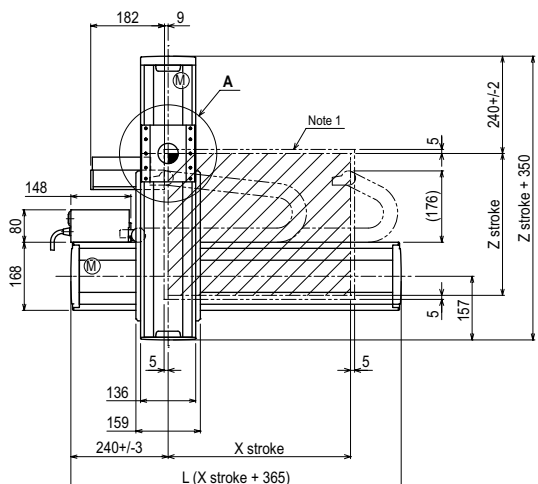
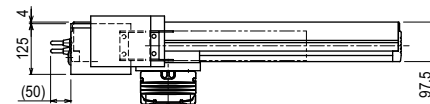
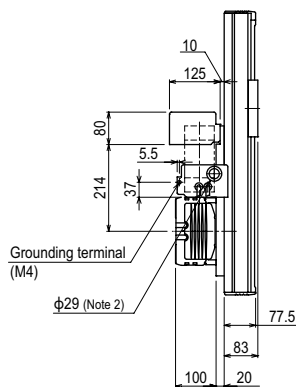
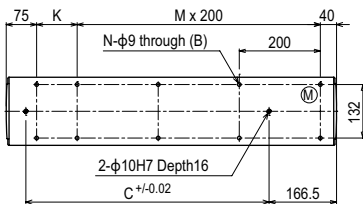
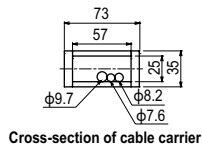
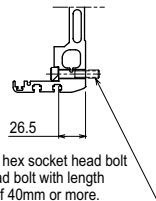
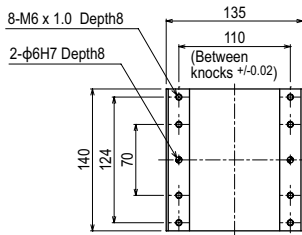
Maximum payload (kg)

X stroke (mm)	Z stroke (mm)
250 to 1250	250 to 550
	20

Controller

Controller	Operation method
RCX320-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX222-R	

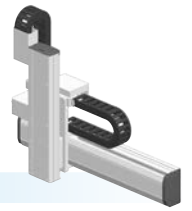
HXYx 2 axes / ZL (F1)



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
C	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
Z stroke	250	350	450	550							
Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis		1200				960	840	720	600	480
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. 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.



● XZ type ● Cable carrier ● Z-axis: clamped table / moving base type (200W)

Ordering method

HXYx - C **ZH** **RCX320-2** **R**

Model	Cable	Combination	X-axis stroke	ZR-axis	Z-axis stroke	Cable	Controller / Number of controllable axes	Safety standard	Regenerative unit	Option A (OP.A)	Option B (OP.B)	Vision System	Absolute battery
F1			25 to 125cm		25 to 55cm	3L: 3.5m 5L: 5m 10L: 10m	RCX320-2		R				

Specify various controller setting items. RCX320 ▶ **P.660**

Controller	Usable for CE	Regenerative unit	I/O selection 1	I/O selection 2
RCX222		R		

Specify various controller setting items. RCX222 ▶ **P.670**

Specification

	X-axis	Z-axis
Axis construction ^{Note 1}	F17	F14H-BK
AC servo motor output (W)	400	200
Repeatability ^{Note 2} (mm)	+/-0.01	+/-0.01
Drive system	Ball screw φ20	Ball screw φ15
Ball screw lead ^{Note 3} (Deceleration ratio) (mm)	20	5
Maximum speed ^{Note 4} (mm/sec)	1200	300
Moving range (mm)	250 to 1250	250 to 550
Robot cable length (m)	Standard: 3.5 Option: 5,10	

Note 1. Use caution that the flange 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, 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.

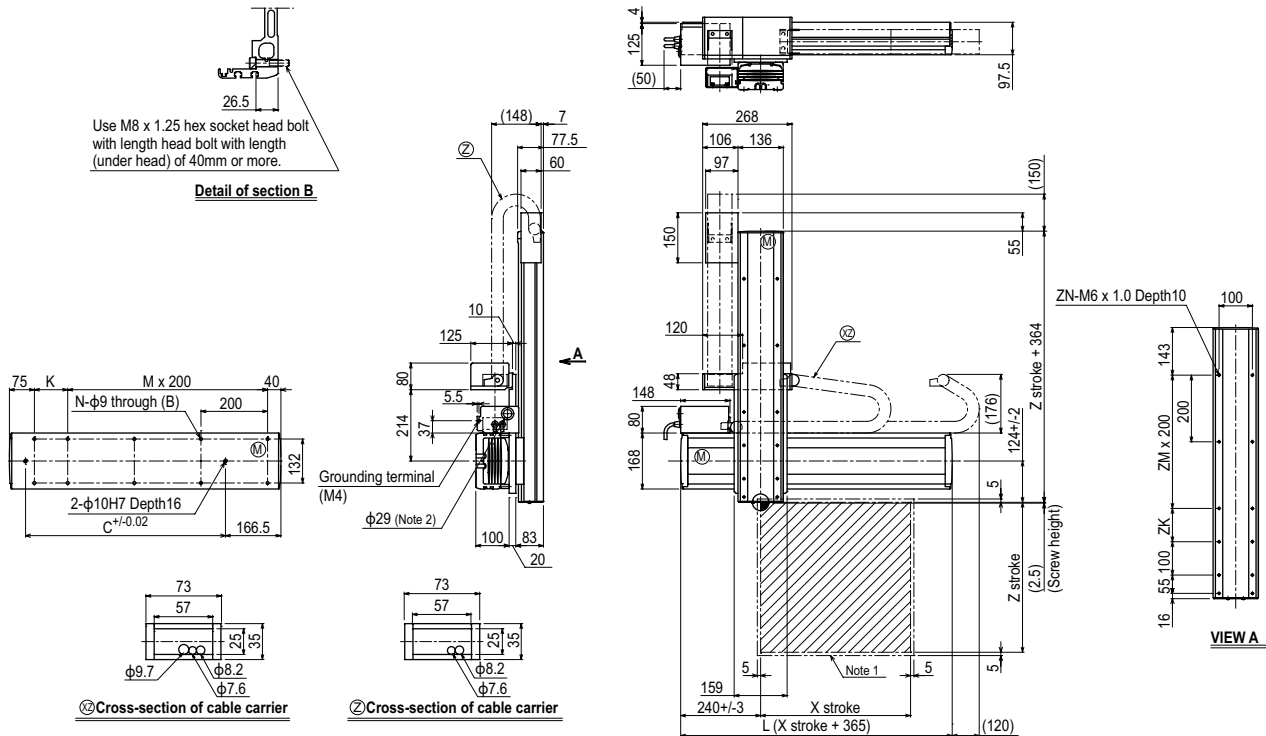
Maximum payload (kg)

X stroke (mm)	Z stroke (mm)
250 to 1250	30

Controller

Controller	Operation method
RCX320-R RCX222-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication

HXYx 2 axes / ZH (F1)



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
C	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
Z stroke	250	350	450	550							
ZK	100	200	100	200							
ZM	1	1	2	2							
ZN	10	10	12	12							

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.

Maximum speed for each stroke (mm/sec) ^{Note 3}	X-axis	1200	960	840	720	600	480
Speed setting		-	80%	70%	60%	50%	40%

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.

Articulated robots
YA

Linear conveyor modules
LCM

Single-axis robots
CX

Motor-less single axis actuator
Robomity

Compact single-axis robots
TRANSEVO

Single-axis robots
FLIP-X

Linear motor single-axis robots
PHASER

Cartesian robots
XY-X

SCARA robots
YK-X

Pick & place robots
YP-X

CLEAN CONTROLLER INFORMATION

Arm type

Gantry type

Moving arm type

Pole type

XZ type

MEMO

Articulated
robots
YA

Linear conveyor
modules
LCM

Single-axis robots
CX

Motorless single
axis actuator
Robonity

Compact
single-axis robots
TRANSEVO

Single-axis robots
FLIP-X

Linear motor
single-axis robots
PHASER

Cartesian
robots
XY-X

SCARA
robots
YK-X

Pick & place
robots
YP-X

CLEAN

CONTROLLER

INFORMATION

Arm type

Gantry type

Moving arm
type

Pole type

XZ type