

# YP-X SPECIFICATION SHEET

Type	Model	Maximum payload (kg)	Cycle time (sec) <sup>Note 1</sup>	Structure	Moving range	Detailed info page
2-axes	YP220BX	3	0.45	X-axis: Belt Z-axis: Belt	200mm 100mm	<b>P.304</b>
	YP320X	3	0.57	X-axis: Ball screw Z-axis: Belt	330mm 100mm	<b>P.305</b>
3-axes	YP220BXR	1	0.62	X-axis: Belt Z-axis: Belt	200mm 100mm	<b>P.306</b>
				R-axis: Rotation axis	+/-180°	
	YP320XR	1	0.67	X-axis: Ball screw Z-axis: Belt	330mm 100mm	<b>P.307</b>
				R-axis: Rotation axis	+/-180°	
YP330X	3	0.57	X-axis: Ball screw Y-axis: Ball screw Z-axis: Belt	330mm 150mm 100mm	<b>P.308</b>	
			X-axis: Ball screw	330mm		
			Y-axis: Ball screw	150mm		
4-axes	YP340X	1	0.67	X-axis: Ball screw Y-axis: Ball screw Z-axis: Belt R-axis: Rotation axis	330mm 150mm 100mm +/-180°	<b>P.309</b>
				X-axis: Ball screw	330mm	
				Y-axis: Ball screw	150mm	
				Z-axis: Belt	100mm	

Note 1. Cycle time is the time required for moving back and forth 150mm (arch 50) and vertically 50mm (during rough positioning motion with 1kg load).

## Robot ordering method description

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

### [Example]

#### 2-axis specifications

##### Mechanical ▶ YP220BX

- Robot cable length ▶ 3.5m

##### Controller ▶ RCX222

- Usable for CE ▶ Not required
- Input/Output selection 1 ▶ NPN
- Input/Output selection 2 ▶ None

#### Ordering method

### YP220BX-3L-RCX222-N

Mechanical section

Controller section

① Model	② Cable length	③ Controller <sup>Note 1</sup>	④ Usable for CE	⑤ Input/Output selection 1	⑥ Input/Output selection 2
YP220BX YP320X	3L 3.5m (Standard) 5L 5m 10L 10m	RCX222	No entry E CE marking	N NPN <sup>Note 2</sup> P PNP CC CC-Link DN DeviceNet PB Profibus EN Ethernet <sup>Note 2</sup> YC YC-Link <sup>Note 3</sup>	No entry None N1 OP.DIO 24/16 (NPN) <sup>Note 2</sup> P1 OP.DIO 24/17 (PNP) EN Ethernet <sup>Note 3 Note 4</sup>

Note 1. DRXC is also selectable.

Note 2. With the CE marking, it is not possible to select NPN or Ethernet.

Note 3. Available only for the master.

Note 4. Only when CC-Link or DeviceNet or Profibus was selected for I/O select 1 above. Ethernet can be selected in I/O select 2.

#### 3 / 4 axis specifications

##### Mechanical ▶ YP340X

- Robot cable length ▶ 5m

##### Controller ▶ RCX240

- Usable for CE ▶ Not required
- Expansion I/O ▶ NPN Standard I/O 16/8
- Network option ▶ CC-Link
- Battery ▶ 4 pcs

#### Ordering method

### YP340X-5L-RCX240-N-CC-BB

Mechanical section

Controller section

① Model	② Cable length	③ Controller	④ Usable for CE	⑦ Expansion I/O <sup>Note 1</sup>	⑧ Network option	⑨ Battery
YP220BXR YP320XR YP330X YP340X	3L 3.5m (Standard) 5L 5m 10L 10m	RCX240	No entry E CE marking	N Standard I/O 16/8 (NPN) N1 40/24 (NPN) N2 64/40 (NPN) N3 88/55 (NPN) N4 112/72 (NPN) P Standard I/O 16/8 (PNP) P1 40/24 (PNP) P2 64/40 (PNP) P3 88/55 (PNP) P4 112/72 (PNP)	No entry None CC CC-Link DN DeviceNet PB Profibus EN Ethernet YC YC-Link <sup>Note 1</sup>	BB

Note 1. Available only for the master.

To find detailed controller information see the controller page.

DRXC ▶ **P.387**, RCX222 ▶ **P.395**, RCX240 ▶ **P.402**

# Robot ordering method terminology

① <b>Model</b>	Enter the robot unit model.
② <b>Cable length</b>	Select the length of the robot cable connecting the robot and controller. 3L : 3.5m (Standard) 5L : 5m 10L : 10m
③ <b>Controller</b>	2-axis specifications: Select either RCX222 or DRCX. 3 / 4 axis specifications: RCX240.
④ <b>Usable for CE</b>	CE marking is selectable.
⑤ <b>Input/Output selection 1</b>	This is an RCX222 controller option. It allows selecting an expansion I/O board and network board adding to the standard I/O board.
⑥ <b>Input/Output selection 2</b>	
⑦ <b>Expansion I/O</b>	This is an RCX240 controller option. It allows selecting an expansion I/O board adding to the standard I/O board.
⑧ <b>Network option</b>	This is an RCX240 controller option. It allows selecting a network board adding to the standard I/O board.
⑨ <b>Battery</b>	Absolute data backup battery (not required if using incremental specifications).

APPLICATION

TRANSERVO  
Compact  
single-axis robots

FLIP-X  
Single-axis robots

PHASER  
Linear motor  
single-axis robots

XY-X  
Cartesian  
robots

YK-XG  
SCARA  
robots

YP-X  
Pick & place  
robots

CLEAN

CONTROLLER

INFORMATION

2-axes

3-axes

4-axes