

# YP220BX 2 axes

Compactly designed super high speed 2 axes robot with belt driven X and Z axes combined

- Super high speed type with 0.45sec cycle time as standard.
- Although as compact as 109mm in overall width, the operation area size is 200mm for X axis and 100mm for Z axis.
- Highly rigid Z axis guide assures 3kg payload at the end section.

## Robot ordering method

YP220BX - 3L - RCX222 - E<sup>Note 1</sup> - N - N1<sup>Note 1</sup>

Model - Cable length - Controller - Usable for CE - Input / Output Selection 1 - Input / Output Selection 2

-3L: 3.5m (Standard)  
-5L: 5m  
-10L: 10m

Note: For the details of the controller, please refer to the catalog of Yamaha Controllers.

Note 1: It will be a customer's choice.

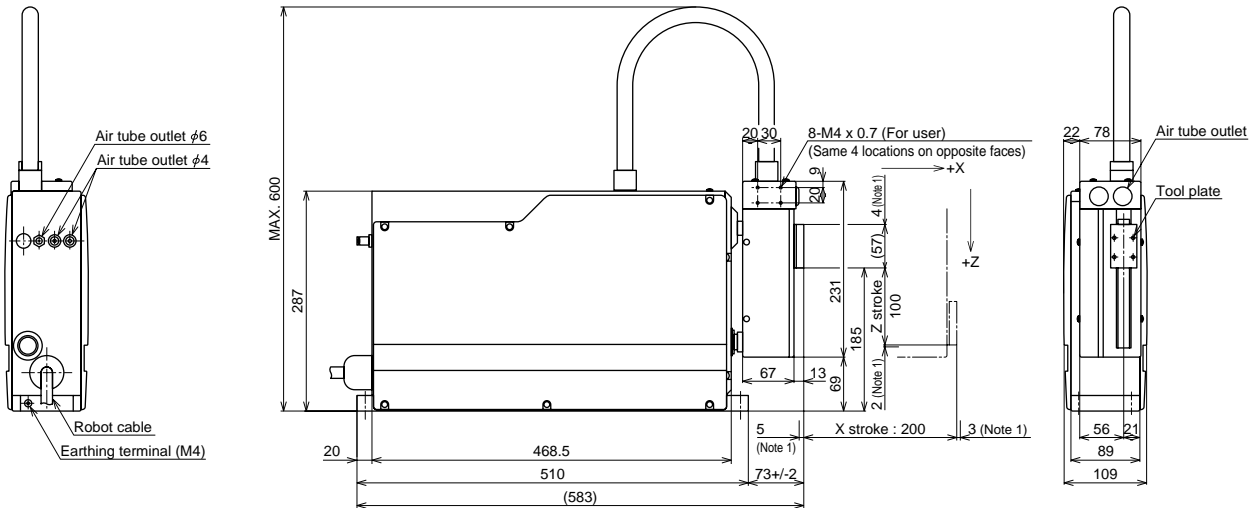
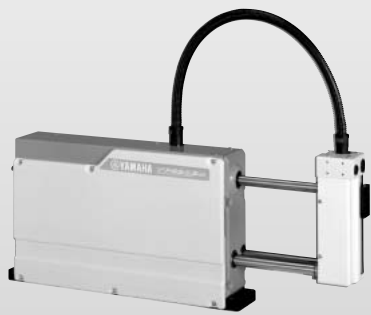
## Specification

|                                 | X axis   | Z axis                  |
|---------------------------------|--|-------------------------|
| Motor output                    | 200W   | 200W                    |
| Repeatability <sup>Note 1</sup> | +/- 0.05mm                                       | +/- 0.05mm              |
| Drive system                    | Timing belt                                      | Timing belt             |
| Deceleration ratio              | Equivalent to lead 24mm                          | Equivalent to lead 20mm |
| Maximum speed <sup>Note 2</sup> | 1440mm/sec                                       | 1200mm/sec              |
| Moving range                    | 200mm  | 100mm                   |
| Cycle time                      | 0.45sec <sup>Note 3</sup>                        |                         |
| Maximum payload                 | 3kg  |                         |
| Robot cable length              | Standard:3.5m OP:5m, 10m                         |                         |
| Controller / Power consumption  | RCX222 / 500VA, DRCX0505 / 500VA, RCX142 / 600VA |                         |
| Weight                          | 17kg   |                         |

Note 1: Positioning repeatability precision in a single swing when residual vibration is stabilized (variable depending on the load and stroke).

Note 2: When the moving stroke is short, the maximum speed may not be reached.

Note 3: Reciprocating time in vertical direction (50mm) and longitudinal direction (150mm) with the arch amount of 50 (when executing rough positioning arch motion with 1kg load)



Note 1: This is the distance as far as the mechanical stopper.

Note 2: The absolute position method is used for origin return of YP220BX. Therefore, origin positioning is required for the first time of use (at the time of installation) but not needed after that.

Details of installation section