

YK550X

Standard Type

Arm length 550mm/Maximum payload 5kg

Robot ordering method

YK550X - 200 - 3L - RCX142 - E - R3 - N1 - CC - S

| | | | | | | | | |
|------------------------------------------------------|----------------------|-----------------------------|-------------------|--------------------------------------|----------------------------------|----------------------|----------------|----------------|
| Model | Z axis stroke | Cable length | Controller | CE | Regenerative control/RCU3 | Expansion I/O | Network | Battery |
| YK550X:High rigidity type YK550XH:High speed type | 200:200mm | 3L:3.5m 5L:5m 10L:10m | | Blank:Standard E:CE specification | | | | |

Controller type: Refer to the Controller Catalog for further details.

Basic specifications

| Model | | YK550X | |
|---------------------------------------|---------------------------|---------------------------------------------------|--------|
| Axis specifications | X axis | Arm length | 300mm |
| | | Rotation range | ± 90° |
| | Y axis | Arm length | 250mm |
| | | Rotation range | ± 145° |
| Z axis | Stroke | 200mm | |
| R axis | Rotation range | ± 180° | |
| Motor | X axis | 800W | |
| | Y axis | 200W | |
| | Z axis | 200W | |
| | R axis | 100W | |
| Maximum speed | X, Y combined | 6.7m / s | |
| | Z axis | 2.3m / s | |
| | R axis High rigidity type | 540°/s | |
| | R axis High speed type | 1700°/s | |
| Repeatability*1 | X, Y axis | ± 0.02mm | |
| | Z axis | ± 0.01mm | |
| | R axis | ± 0.005° | |
| Max. payload | | 5kg | |
| Standard cycle time(with 2kg payload) | | 0.38sec | |
| R axis allowable moment inertia*2 | R axis High rigidity type | 0.10kgm ² (1.0kgfcm ²) | |
| | R axis High speed type | 0.05kgm ² (0.5kgfcm ²) | |
| User wiring | | 0.2sq × 20 cables | |
| User tubing | | ø6 × 2 | |
| Movement limit setting | | 1. Soft limit, 2. Mechanical limit (X, Y, Z axes) | |
| Robot cable | | Standard 3.5m Option: 5m, 10m | |
| Controller, Power supply capacity | | RCX142-R3, 1700VA | |
| Weight | | 46kg | |



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*1: At constant ambient temperature. (X, Y axes) *2: There are limits to acceleration coefficient settings.

YK550X

Z axis mechanical stopper

ø18.2
14.0_{±0.025}
30.10
ø16h7_{0.018}
M12X1.75 Depth 20

Working envelope

Origin position
90° 145° 145° 90°
R172 R550 R250

Wiring Diagram

User tubing 2 (ø6 blue)
User tubing 1 (ø6 black)
D-sub connector for user wiring (No.1-No.20 usable)

MAX.940
812
670
M4 ground terminal
15
492
446
381
326±2
200
Fan position
M4 ground terminal
164
104
44
16
0

41 240 300 201 159
R57 R110
250
82 70
Fan inlet
Fan outlet 140
4-ø12 User M10 bolt for installation
D-sub connector for user wiring (No.1 to No.20 usable)

(When Y-axis maximum working envelope is set to 940mm.)

2-M4X0.7 Depth 6 (Same on opposite side)