YK400XG

**APPLICATION**
- Compact single-axis robots
- TRANSERVO Single-axis robots
- FLIP-X Linear motor single-axis robots
- PHASER Cartesian robots
- XY-X SCARA robots
- YX-X Pick & place robots
- YP-X

**Controller**
- RCX340
- RCX240
- RCX240S

**Specifications**
- **Axis specifications**
  - X-axis: 250 mm
  - Y-axis: 150 mm
  - Z-axis: 150 mm
- **Rotation angle**
  - +/-140°
  - +/-144°
  - +/-360°
- **AC servo motor output**
  - 200 W
  - 50 W
  - 100 W
- **Deceleration mechanism**
  - Speed reducer: Harmonic drive
  - Transmission method: Direct-coupled
  - Repeatability: +/-0.001 mm
  - Maximum speed: 6.1 m/sec
  - Travel limit: 1.5 m/sec
  - Maximum payload: 5 kg (Standard specification)
- **Standard cycle time**
  - 0.49 sec
  - 0.5 kg/m
  - 0.8 kg/m
- **Speed reducer to output**
  - 4 × 3
- **Motor to speed reducer**
  - 4 × 3
- **Transmission**
  - Direct-coupled
- **Controller**
  - Power capacity: 1000 VA
  - Operation method: Remote command / Communication using RS-232C

**Note:**
- Harmonic and Harmonic drive are the registered trademarks of Harmonic Drive Systems Inc.
- See our robot manuals (installation manuals) for detailed information.
- Our robot manuals (installation manuals) can be downloaded from our website at the address below: http://global.yamahamotor.com/business/robot/
YK400XG Tool flange mount type

If the robot enters the inside of the corner of R190 and dimension 148, the tool flange may be in contact with the base or the arm may be in contact with the machine harness. So, do not perform such motion.

- Note that the robot cannot be used at a position where the base flange or robot cable interferes with the tool flange in the working envelope shown above.
- X-axis mechanical stopper position: 142°
- Y-axis mechanical stopper position: 145°

4-M3 x 0.5 through-hole (No phase relation to R-axis origin)

As the hole is intended for the wiring/tubing clamp, do not attach a large load to it.

The weight of the tool attached here should be added to the tip mass.

Keep enough space for the maintenance work at the rear of the base.

4-M4 through-hole

M4 ground terminal

User tubing 1 (Φ4 black)

User tubing 2 (Φ4 red)

User tubing 3 (Φ4 blue)

D-sub connector for user wiring (No. 1 to 10 usable)

Tapped hole for user wiring 5-M3 x 0.5 Depth 6

R27 (Min. cable bending radius)

Do not move the cable.

If the robot enters the inside of the corner of R190 and dimension 148, the tool flange may be in contact with the base or the arm may be in contact with the machine harness. So, do not perform such motion.

4-M3 x 0.5 through-hole (No phase relation to R-axis origin)

As the hole is intended for the wiring/tubing clamp, do not attach a large load to it.

The weight of the tool attached here should be added to the tip mass.

Keep enough space for the maintenance work at the rear of the base.

4-M4 through-hole

M4 ground terminal

User tubing 1 (Φ4 black)

User tubing 2 (Φ4 red)

User tubing 3 (Φ4 blue)

D-sub connector for user wiring (No. 1 to 10 usable)

Tapped hole for user wiring 5-M3 x 0.5 Depth 6

R27 (Min. cable bending radius)

Do not move the cable.

If the robot enters the inside of the corner of R190 and dimension 148, the tool flange may be in contact with the base or the arm may be in contact with the machine harness. So, do not perform such motion.

4-M3 x 0.5 through-hole (No phase relation to R-axis origin)

As the hole is intended for the wiring/tubing clamp, do not attach a large load to it.

The weight of the tool attached here should be added to the tip mass.

Keep enough space for the maintenance work at the rear of the base.