YK500XGL

Standard type: Medium type

● Arm length 500mm　● Maximum payload 5kg

■ Ordering method

YK500XGL	-	150	-					RCX240S						BB

Model		Z axis stroke	Tool flange	Hollow shaft	Cable	Controller	Usable for CE	Expansion I/O Note 1	Network option	iVY System	Battery
		150: 150mm	No entry: None F: With tool flange	No entry: None S: With hollow shaft	3L: 3.5m 5L: 5m 10L: 10m		No entry: Standard E: CE marking	N, P: Standard I/O 16/8 N1, P1: 40/24 N2, P2: 64/40 N3, P3: 88/56 N4, P4: 112/72	No entry: None CC: CC-Link DN: DeviceNet PB: Profibus EN: Ethernet YC: YC-Link Note 2	No entry: None VY: iVY (Vision) TR: iVY+Light +Tracking LC: iVY+Light	BB: 4 pcs

Note 1. Use N to N4 when NPN is selected on the I/O board, and P to P4 when PNP is selected.
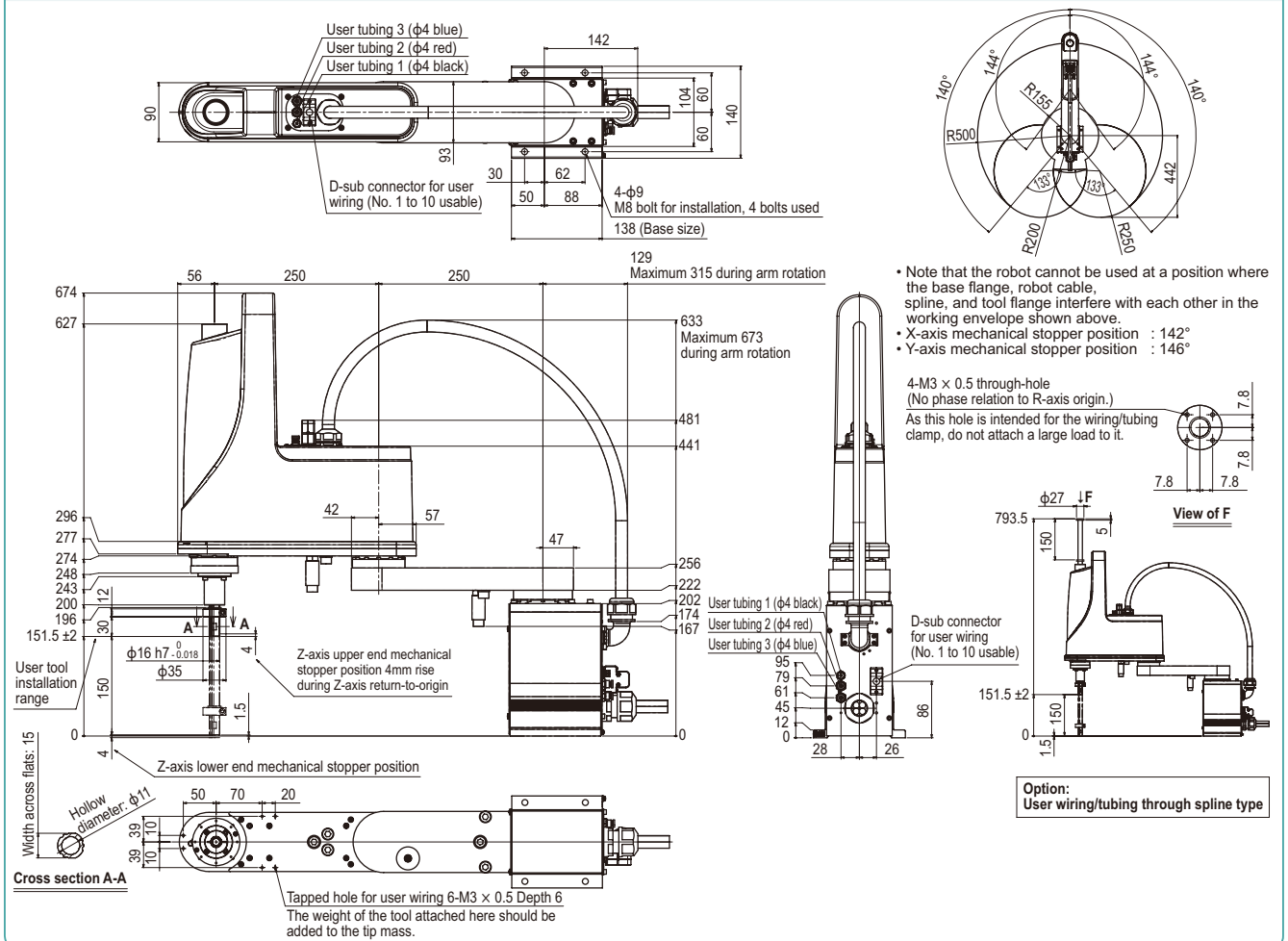Note 2. Available only for the master.

■ Specifications

		X-axis	Y-axis	Z-axis	R-axis
Axis specifications	Arm length (mm)	250	250	150	-
	Rotation angle (°)	+/-140	+/-144	-	+/-360
AC servo motor output (W)		200	150	50	100
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method — Motor to speed reducer	Direct-coupled			
	Transmission method — Speed reducer to output	Direct-coupled			
Repeatability Note 1 (XYZ: mm) (R: °)		+/-0.01		+/-0.01	+/-0.004
Maximum speed (XYZ: m/sec) (R: °/sec)		5.1		1.1	1020
Maximum payload (kg)		5			
Standard cycle time: with 2kg payload Note 2 (sec)		0.59			
R-axis tolerable moment of inertia Note 3 (kgm^2)		0.05kgm^2 (0.5kgfcms^2)			
User wiring (sq × wires)		0.2 × 10			
User tubing (Outer diameter)		φ4 × 3			
Travel limit		1.Soft limit　2.Mechanical stopper (X,Y,Z axis)			
Robot cable length (m)		Standard: 3.5　Option: 5,10			
Weight (kg)		21			

Note 1. This is the value at a constant ambient temperature. (X,Y axes)
Note 2. When reciprocating 300mm in horizontal and 25mm in vertical directions.
Note 3. There are limits to acceleration coefficient settings.

■ Controller

Controller	Power capacity (VA)	Operation method
RCX240S	1000	Programming / I/O point trace / Remote command / Operation using RS-232C communication

YK500XGL

- Note that the robot cannot be used at a position where the base flange, robot cable, spline, and tool flange interfere with each other in the working envelope shown above.
- X-axis mechanical stopper position : 142°
- Y-axis mechanical stopper position : 146°

4-M3 × 0.5 through-hole
(No phase relation to R-axis origin.)
As this hole is intended for the wiring/tubing clamp, do not attach a large load to it.

View of F

**Option:
User wiring/tubing through spline type**

YK500XGL Tool flange mount type

User tubing 3 (φ4 blue)
User tubing 2 (φ4 red)
User tubing 1 (φ4 black)

142

90

104
60
60
140

93

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

30
50   88
62

4-φ9
M8 bolt for installation, 4 bolts used

138 (Base size)

140° 144° R155 144° 140°
R500
R200 133 133 R250
442

- Note that the robot cannot be used at a position where the base flange, robot cable, spline, and tool flange interfere with each other in the working envelope shown above.
- X-axis mechanical stopper position : 142°
- Y-axis mechanical stopper position : 146°

4-M3 × 0.5 through-hole
(No phase relation to R-axis origin.)
As this hole is intended for the wiring/tubing clamp, do not attach a large load to it.

7.8
7.8
7.8   7.8

View of F

φ27   ↓F
793.5
150
5

194
162
147.5 ±2
150
0
2.5

D

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)

95
79
61
45
12
0
28   26
88

194
162
147.5 ±2
150
0
2.5

D

Option:
User wiring/tubing through spline type

50   70   20
39   39
10   10

φ35
46
2   4
↑E
φ30 h7 0/−0.021
φ55

4-φ4.5 through-hole

Hollow diameter φ11
22.6
22.6
22.6 ±0.02
22.6
7 ±0.02
22.6
90°

φ4 H7 +0.012/0 through-hole

Tapped hole for user wiring 6-M3 × 0.5 Depth 6
The weight of the tool attached here should be added to the tip mass.

Detailed drawing D

View of E