

YK250XGP

Dust-proof & drip-proof type

- Arm length 250mm
- Maximum payload 4kg

Ordering method

YK250XGP-150

S

RCX340-4

Model	Z axis stroke	Tool flange	Hollow shaft	Cable
	150: 150mm	No entry: None F: With tool flange	S: With hollow shaft	3L: 3.5m 5L: 5m 10L: 10m

Controller / Number of controllable axes	Safety standard	Option A (OP.A)	Option B (OP.B)	Option C (OP.C)	Option D (OP.D)	Option E (OP.E)	Absolute battery

Specify various controller setting items. RCX340 ▶ **P508**

RCX240S

Controller	CE Marking	Expansion I/O	Network option	IVY System	Gripper	Battery

Specify various controller setting items. RCX240/RCX240S ▶ **P495**

Specifications

Axis specifications	Arm length	X-axis	Y-axis	Z-axis	R-axis
	Rotation angle	100 mm	150 mm	150 mm	—
		+/-129 °	+/-134 °	—	+/-360 °
AC servo motor output (W)		200	150	50	100
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Direct-coupled			
	Motor to speed reducer	Direct-coupled			
	Speed reducer to output	Direct-coupled			
Repeatability ^{Note 1}		+/-0.01 mm		+/-0.01 mm	+/-0.004 °
Maximum speed		4.5 m/sec		1.1 m/sec	1020 °/sec
Maximum payload		4 kg			
Standard cycle time: with 2kg payload ^{Note 2}		0.57 sec			
R-axis tolerable moment of inertia ^{Note 3}		0.05 kgm ²			
Protection class ^{Note 4}		Equivalent to IP65 (IEC 60529)			
User wiring		0.2 sq × 10 wires			
User tubing (Outer diameter)		φ 4 × 4			
Travel limit		1.Soft limit 2.Mechanical stopper (X,Y,Z axis)			
Robot cable length		Standard: 3.5 m Option: 5 m, 10 m			
Weight		21.5 kg			

Note 1. This is the value at a constant ambient temperature. (X,Y axes)

Note 2. When reciprocating 25mm in vertical direction and 300mm in horizontal direction (rough-positioning arch motion).

Note 3. There are limits to acceleration coefficient settings. See P.537.

Note 4. Do not use robots where the bellows section is directly exposed to water jet. Contact our distributor for information on drip-proof structure preventing liquid other than water.

Controller

Controller	Power capacity (VA)	Operation method
RCX340 RCX240S	1000	Programming / I/O point trace / Remote command / Operation using RS-232C communication

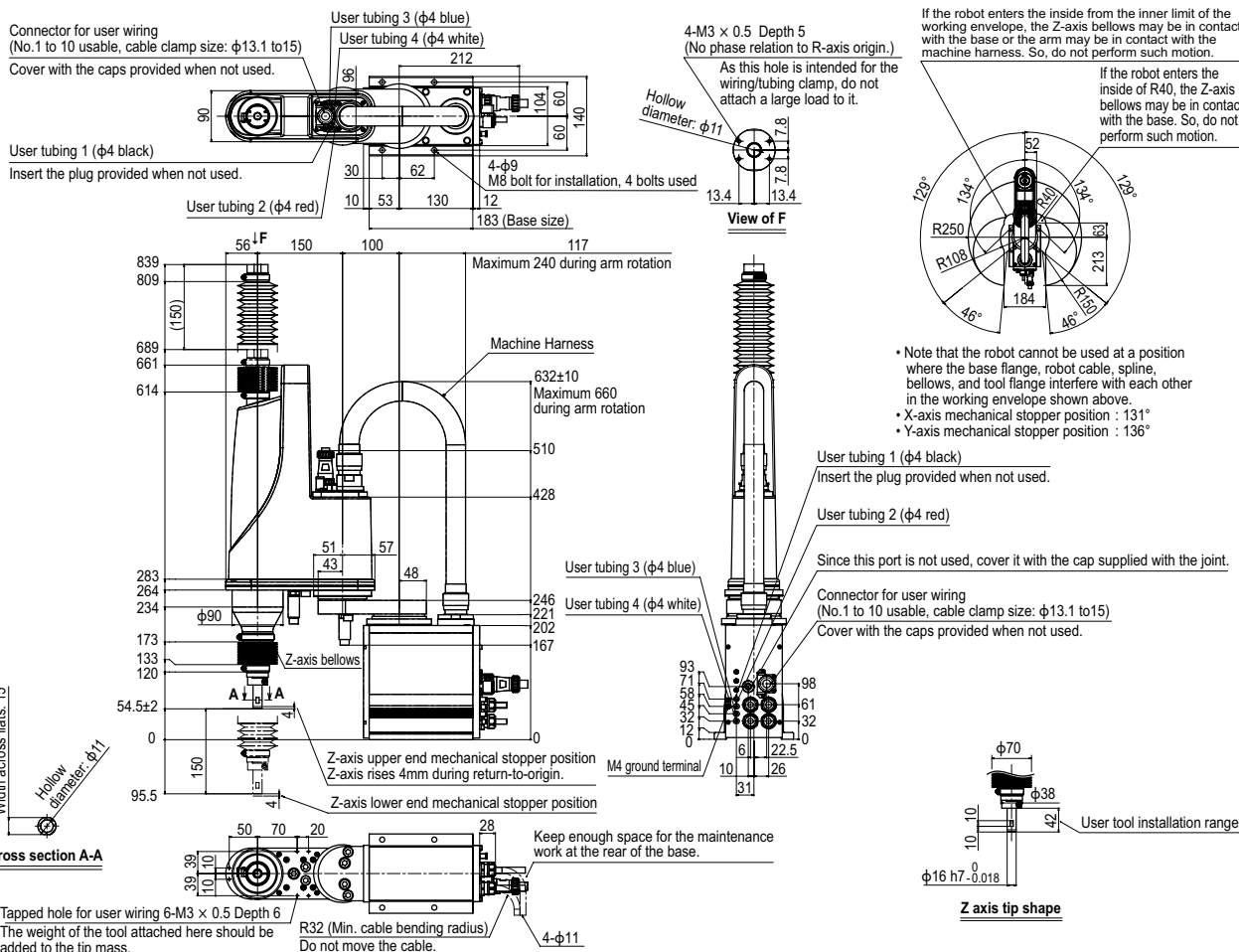
Note. "Harmonic" and "Harmonic drive" are the registered trademarks of Harmonic Drive Systems Inc.

Note. The movement range can be limited by changing the positions of X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.) See our robot manuals (installation manuals) for detailed information.

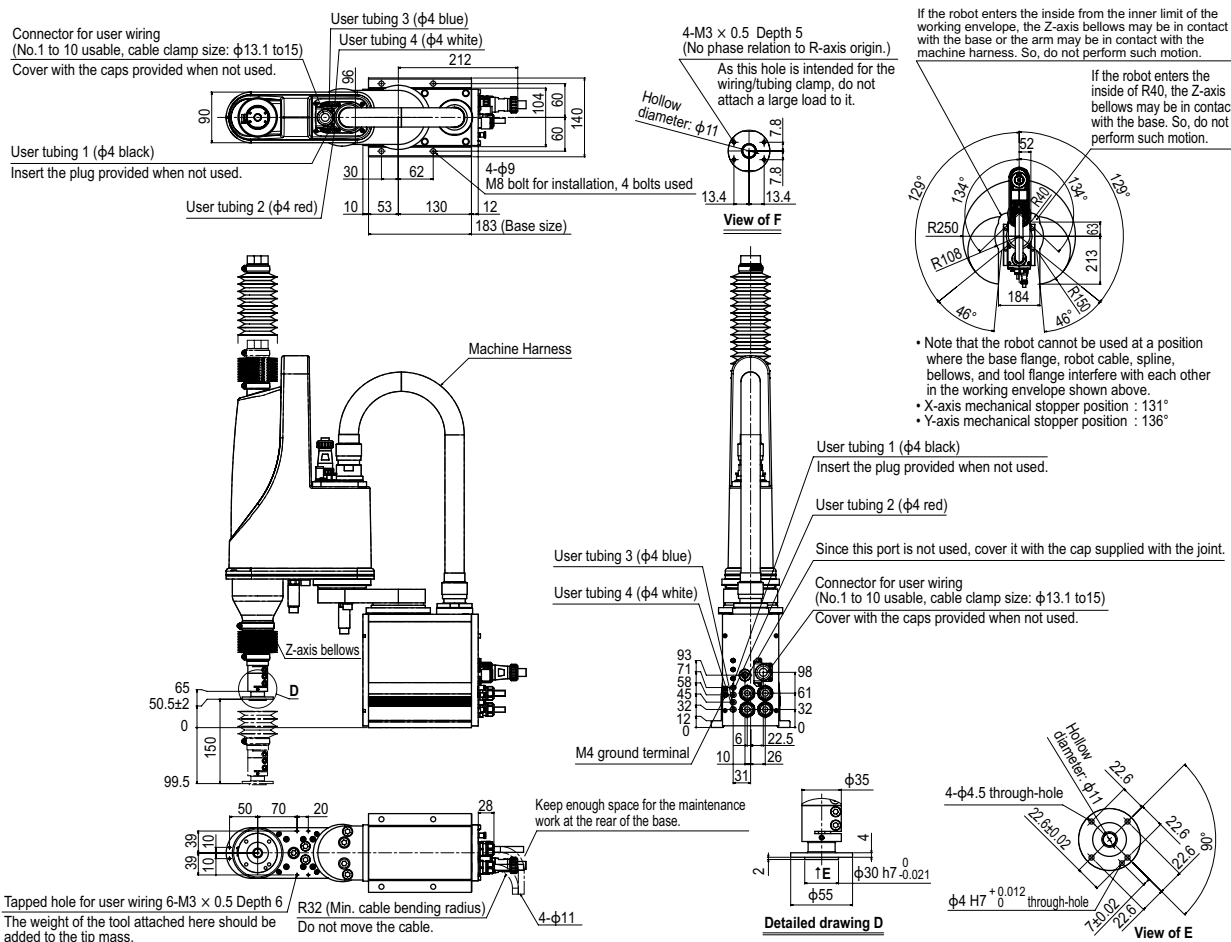
Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

Our robot manuals (installation manuals) can be downloaded from our website at the address below:
<http://global.yamaha-motor.com/business/robot/>

YK250XGP



YK250XGP Tool flange mount type



YK350XGP

Dust-proof & drip-proof type

- Arm length 350mm
- Maximum payload 4kg

Ordering method

YK350XGP - 150

S

RCX340-4

Model	Z axis stroke	Tool flange	Hollow shaft	Cable	Controller / Number of controllable axes	Safety standard	Option A (OP.A)	Option B (OP.B)	Option C (OP.C)	Option D (OP.D)	Option E (OP.E)	Absolute battery
	150: 150mm	No entry: None F: With tool flange	S: With hollow shaft	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ **P.508**

RCX240S

BB

Specify various controller setting items. RCX240/RCX240S ▶ **P.495**

Specifications

Axis specifications	Arm length	X-axis	Y-axis	Z-axis	R-axis
	Rotation angle	200 mm	150 mm	150 mm	—
		+/-129 °	+/-134 °	—	+/-360 °
AC servo motor output		200 W	150 W	50 W	100 W
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Direct-coupled			
	Motor to speed reducer	Direct-coupled			
	Speed reducer to output	Direct-coupled			
Repeatability ^{Note 1}		+/-0.01 mm		+/-0.01 mm	+/-0.004 °
Maximum speed		5.6 m/sec		1.1 m/sec	1020 °/sec
Maximum payload		4 kg			
Standard cycle time: with 2kg payload ^{Note 2}		0.57 sec			
R-axis tolerable moment of inertia ^{Note 3}		0.05 kgm ²			
Protection class ^{Note 4}		Equivalent to IP65 (IEC 60529)			
User wiring		0.2 sq x 10 wires			
User tubing (Outer diameter)		φ 4 x 4			
Travel limit		1.Soft limit 2.Mechanical stopper (X,Y,Z axis)			
Robot cable length		Standard: 3.5 m Option: 5 m, 10 m			
Weight		22 kg			

Note 1. This is the value at a constant ambient temperature. (X,Y axes)

Note 2. When reciprocating 25mm in vertical direction and 300mm in horizontal direction (rough-positioning arch motion).

Note 3. There are limits to acceleration coefficient settings. See P.537.

Note 4. Do not use robots where the bellows section is directly exposed to water jet. Contact our distributor for information on drip-proof structure preventing liquid other than water.

Controller

Controller	Power capacity (VA)	Operation method
RCX340 RCX240S	1000	Programming / I/O point trace / Remote command / Operation using RS-232C communication

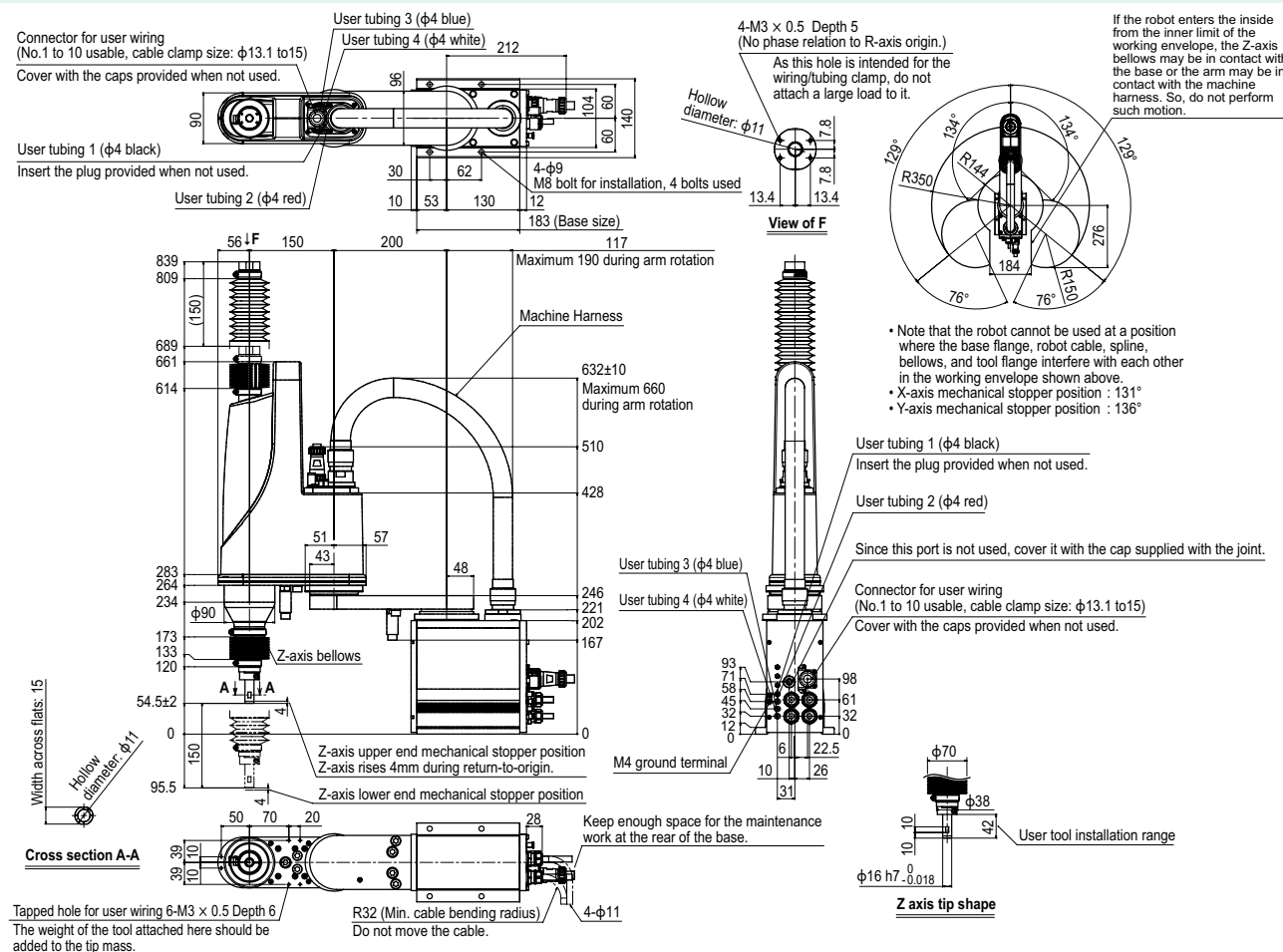
Note. "Harmonic" and "Harmonic drive" are the registered trademarks of Harmonic Drive Systems Inc.

Note. The movement range can be limited by changing the positions of X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.) See our robot manuals (installation manuals) for detailed information.

Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

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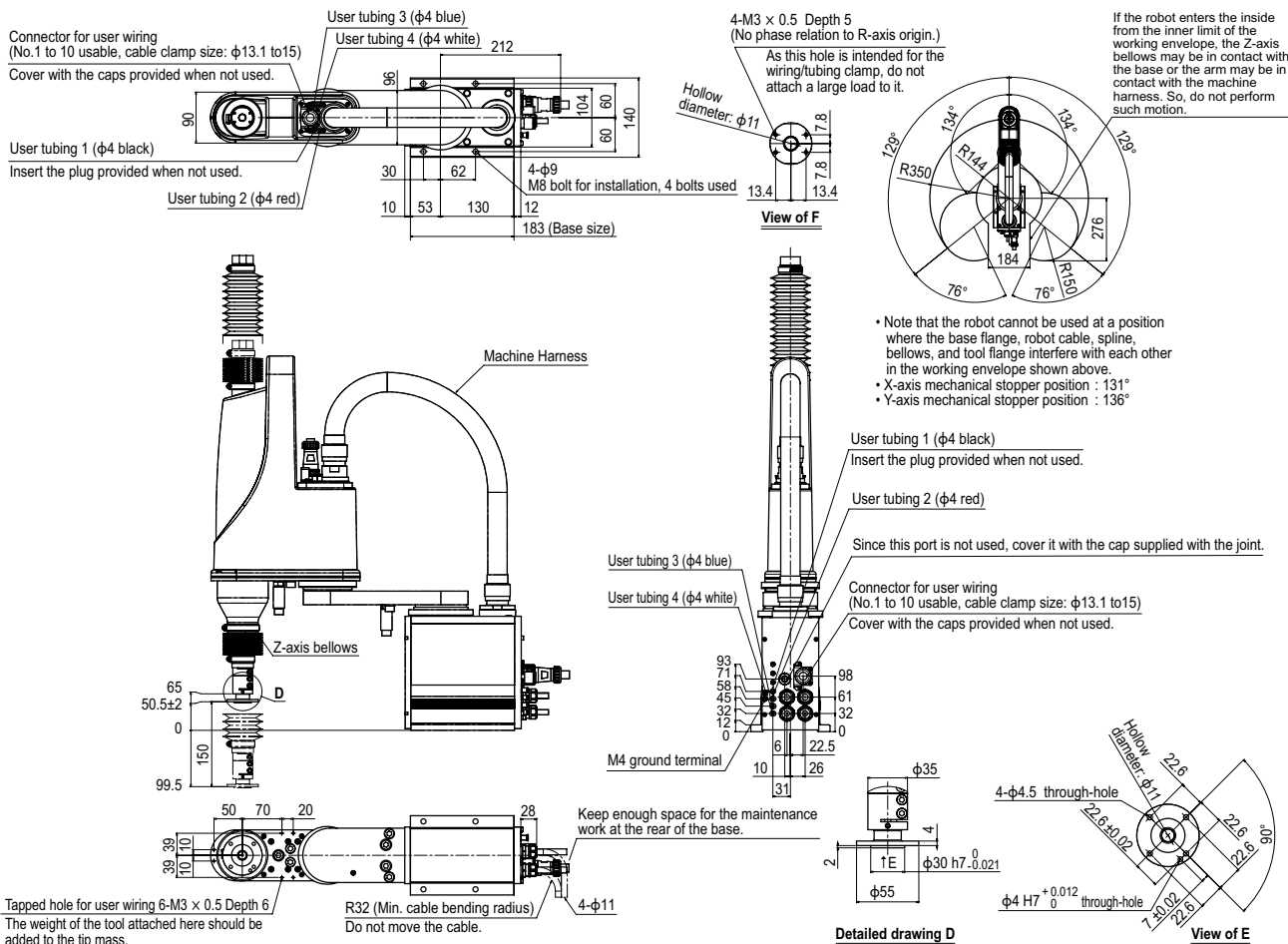
YK350XGP



Controller

RCX340 ▶ 508 RCX240S ▶ 495

YK350XGP Tool flange mount type



YK400XGP

Dust-proof & drip-proof type

- Arm length 400mm
- Maximum payload 4kg

Ordering method

YK400XGP-150 **S** **RCX340-4** **BB**

Model Z axis stroke Tool flange Hollow shaft Cable Controller / Number of controllable axes Safety standard Option A (OP.A) Option B (OP.B) Option C (OP.C) Option D (OP.D) Option E (OP.E) Absolute battery

150: 150mm No entry: None F: With tool flange S: With hollow shaft 3L: 3.5m 5L: 5m 10L: 10m

RCX240S **BB**

Controller CE Marking Expansion I/O Network option IVY System Gripper Battery

Specify various controller setting items. RCX340 ▶ **P.508**

Specify various controller setting items. RCX240/RCX240S ▶ **P.495**

Specifications

Axis specifications	Arm length	X-axis	Y-axis	Z-axis	R-axis
	Rotation angle	250 mm	150 mm	150 mm	—
		+/-129 °	+/-144 °	—	+/-360 °
AC servo motor output		200 W	150 W	50 W	100 W
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Direct-coupled			
	Motor to speed reducer	Direct-coupled			
	Speed reducer to output	Direct-coupled			
Repeatability ^{Note 1}		+/-0.01 mm	+/-0.01 mm	+/-0.004 °	
Maximum speed		6.1 m/sec	1.1 m/sec	1020 °/sec	
Maximum payload		4 kg			
Standard cycle time: with 2kg payload ^{Note 2}		0.57 sec			
R-axis tolerable moment of inertia ^{Note 3}		0.05 kgm ²			
Protection class ^{Note 4}		Equivalent to IP65 (IEC 60529)			
User wiring		0.2 sq x 10 wires			
User tubing (Outer diameter)		φ 4 x 4			
Travel limit		1. Soft limit 2. Mechanical stopper (X,Y,Z axis)			
Robot cable length		Standard: 3.5 m Option: 5 m, 10 m			
Weight		22.5 kg			

Note 1. This is the value at a constant ambient temperature. (X,Y axes)

Note 2. When reciprocating 25mm in vertical direction and 300mm in horizontal direction (rough-positioning arch motion).

Note 3. There are limits to acceleration coefficient settings. See P.538.

Note 4. Do not use robots where the bellows section is directly exposed to water jet. Contact our distributor for information on drip-proof structure preventing liquid other than water.

Controller

Controller	Power capacity (VA)	Operation method
RCX340 RCX240S	1000	Programming / I/O point trace / Remote command / Operation using RS-232C communication

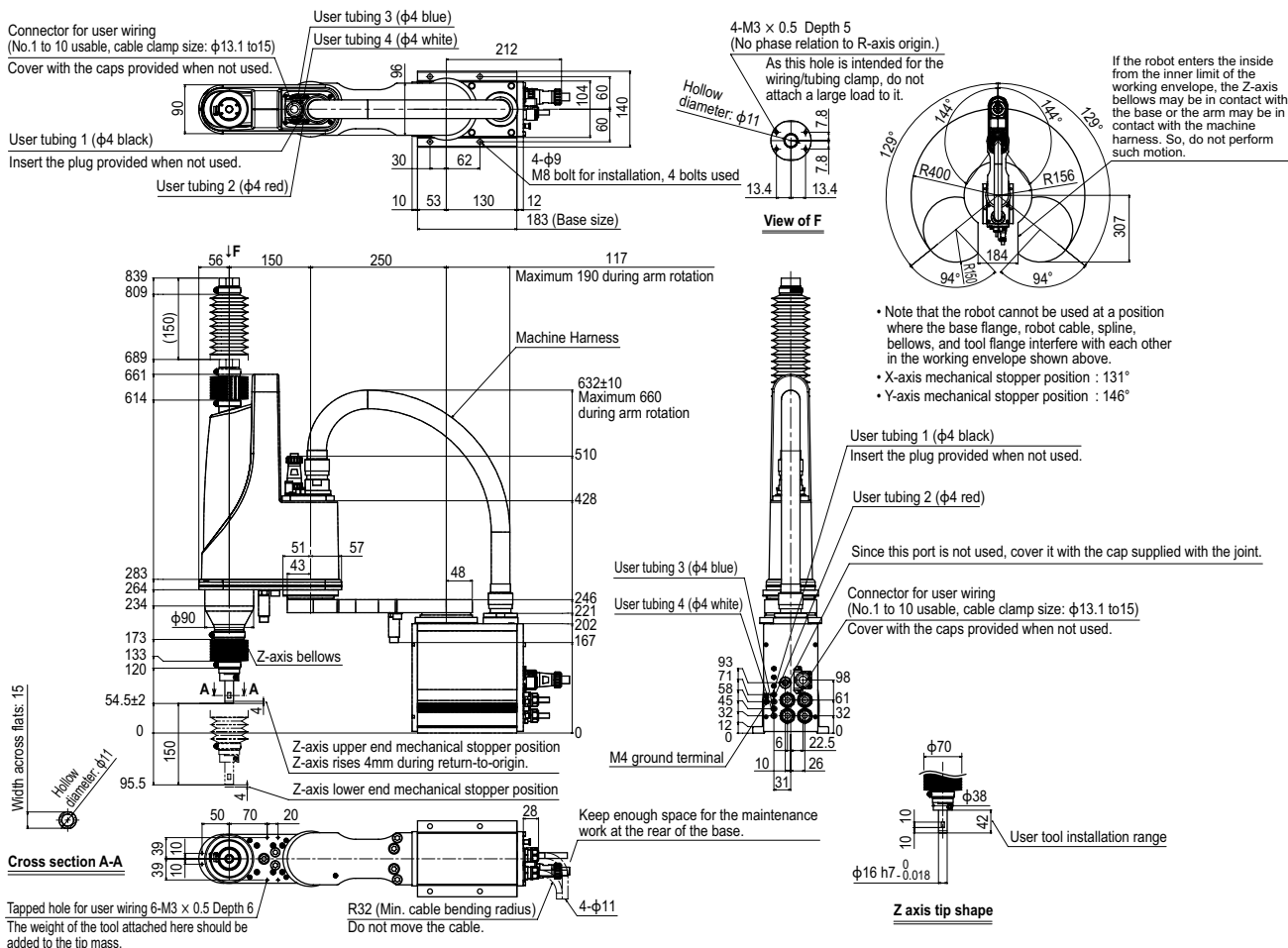
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Note. The movement range can be limited by changing the positions of X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.) See our robot manuals (installation manuals) for detailed information.

Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

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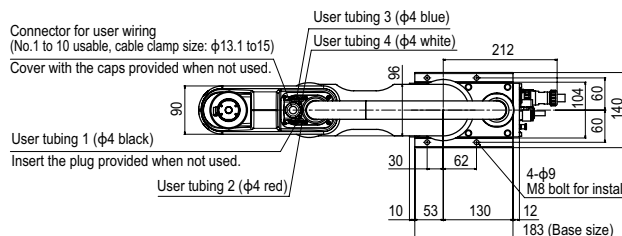
YK400XGP



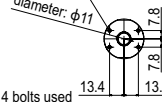
Controller

RCX340 ▶ 508 RCX240S ▶ 495

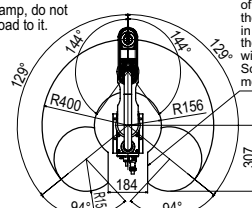
YK400XGP Tool flange mount type



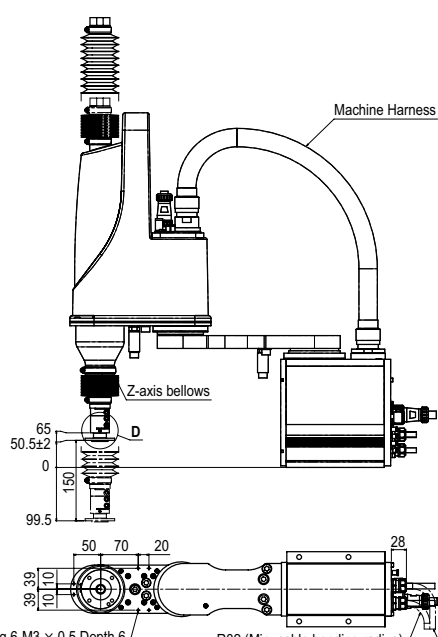
4-M3 \times 0.5 Depth 5
(No phase relation to R-axis origin.)
As this hole is intended for the wiring/tubing clamp, do not attach a large load to it.



If the robot enters the inside from the inner limit of the working envelope, the Z-axis bellows may be in contact with the base or the arm may be in contact with the machine harness. So, do not perform such motion.



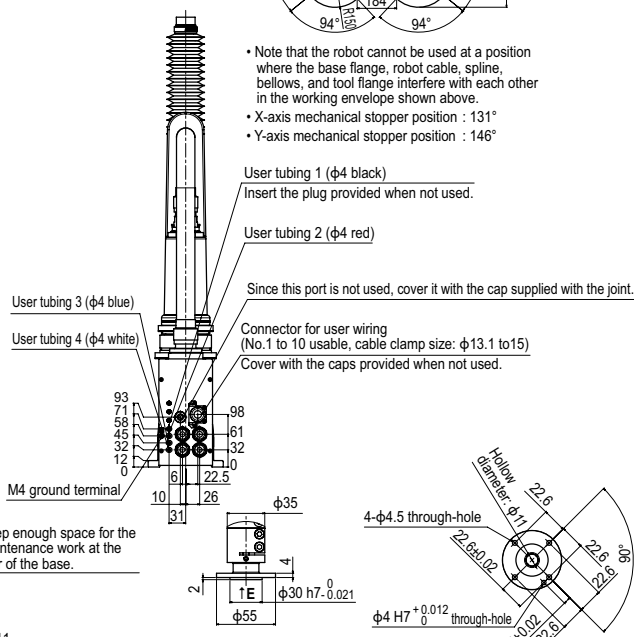
- Note that the robot cannot be used at a position where the base flange, robot cable, spline, bellows, and tool flange interfere with each other in the working envelope shown above.
- X-axis mechanical stopper position : 131°
- Y-axis mechanical stopper position : 146°



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

R32 (Min. cable bending radius)
Do not move the cable.

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



YK500XGLP

Dust-proof & drip-proof type

- Arm length 500mm
- Maximum payload 4kg

Ordering method

YK500XGLP-150 **S** **RCX340-4**

Model Z axis stroke 150: 150mm Tool flange No entry: None F: With tool flange Hollow shaft S: With hollow shaft Cable 3L: 3.5m 5L: 5m 10L: 10m

Controller / Number of controllable axes Safety standard Option A (OP.A) Option B (OP.B) Option C (OP.C) Option D (OP.D) Option E (OP.E) Absolute battery

RCX240S **BB**

Controller CE Marking Expansion I/O Network option IVY System Gripper Battery

Specify various controller setting items. RCX340 ▶ **P508**

Specify various controller setting items. RCX240/RCX240S ▶ **P495**

Specifications

Axis specifications	Arm length	X-axis	Y-axis	Z-axis	R-axis
	Rotation angle	250 mm	250 mm	150 mm	—
		+/-129 °	+/-144 °	—	+/-360 °
AC servo motor output		200 W	150 W	50 W	100 W
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Direct-coupled			
	Motor to speed reducer	Direct-coupled			
	Speed reducer to output	Direct-coupled			
Repeatability ^{Note 1}		+/-0.01 mm	+/-0.01 mm	+/-0.01 mm	+/-0.004 °
Maximum speed		5.1 m/sec	1.1 m/sec	1020 °/sec	
Maximum payload		4 kg			
Standard cycle time: with 2kg payload ^{Note 2}		0.74 sec			
R-axis tolerable moment of inertia ^{Note 3}		0.05 kgm ²			
Protection class ^{Note 4}		Equivalent to IP65 (IEC 60529)			
User wiring		0.2 sq × 10 wires			
User tubing (Outer diameter)		φ 4 × 4			
Travel limit		1.Soft limit 2.Mechanical stopper (X,Y,Z axis)			
Robot cable length		Standard: 3.5 m Option: 5 m, 10 m			
Weight		25 kg			

Note 1. This is the value at a constant ambient temperature. (X,Y axes)

Note 2. When reciprocating 25mm in vertical direction and 300mm in horizontal direction (rough-positioning arch motion).

Note 3. There are limits to acceleration coefficient settings. See P.538.

Note 4. Do not use robots where the bellows section is directly exposed to water jet. Contact our distributor for information on drip-proof structure preventing liquid other than water.

Controller

Controller	Power capacity (VA)	Operation method
RCX340 RCX240S	1000	Programming / I/O point trace / Remote command / Operation using RS-232C communication

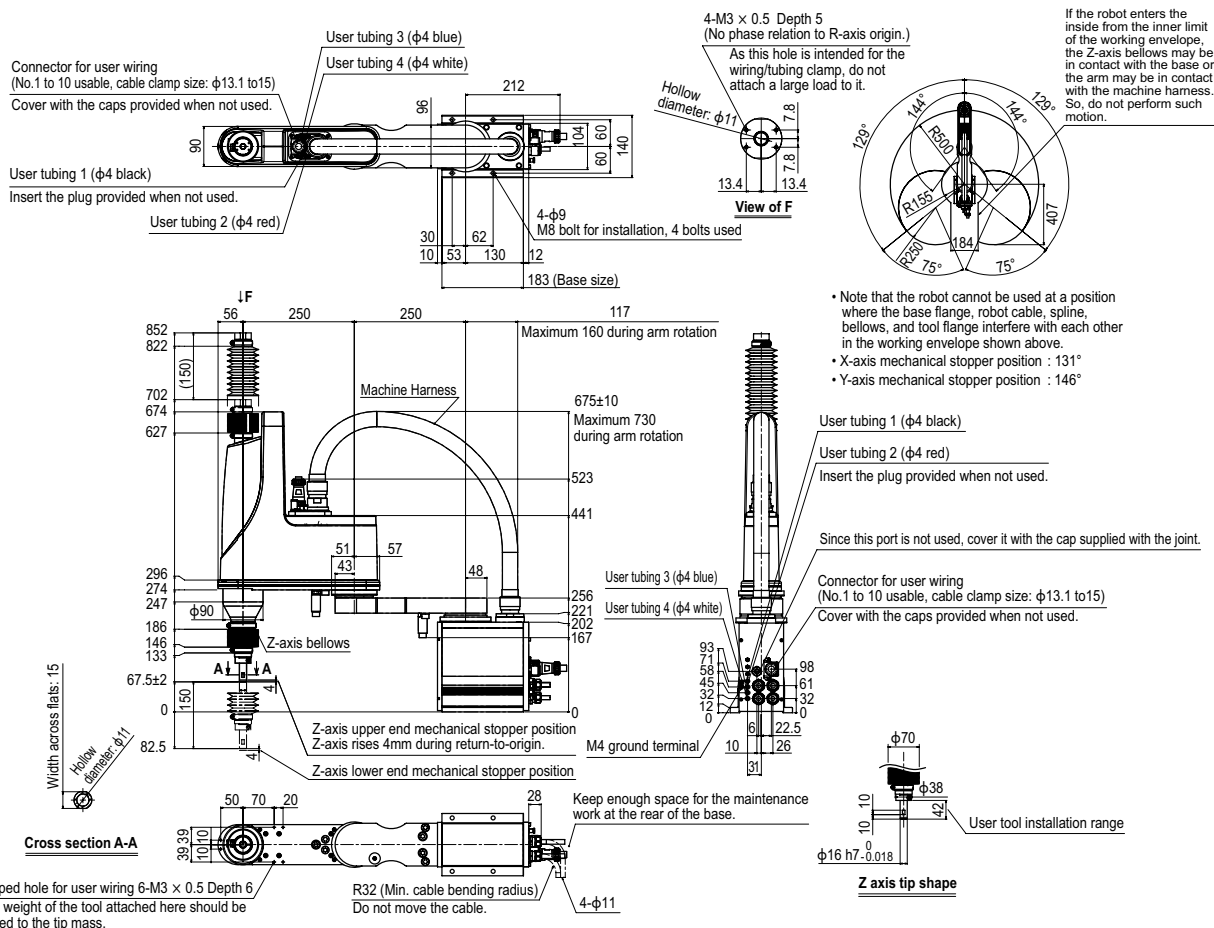
Note. "Harmonic" and "Harmonic drive" are the registered trademarks of Harmonic Drive Systems Inc.

Note. The movement range can be limited by changing the positions of X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.) See our robot manuals (installation manuals) for detailed information.

Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

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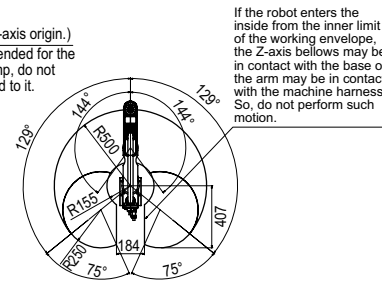
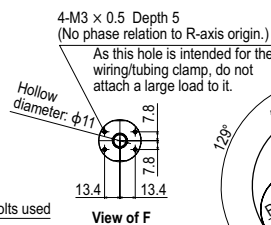
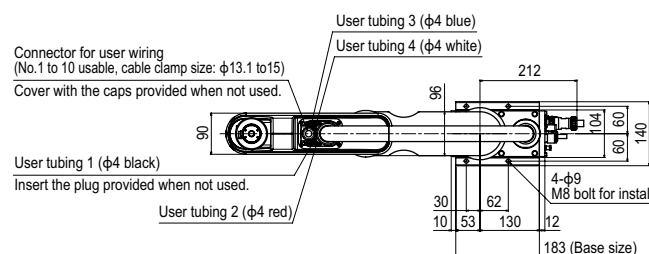
YK500XGLP



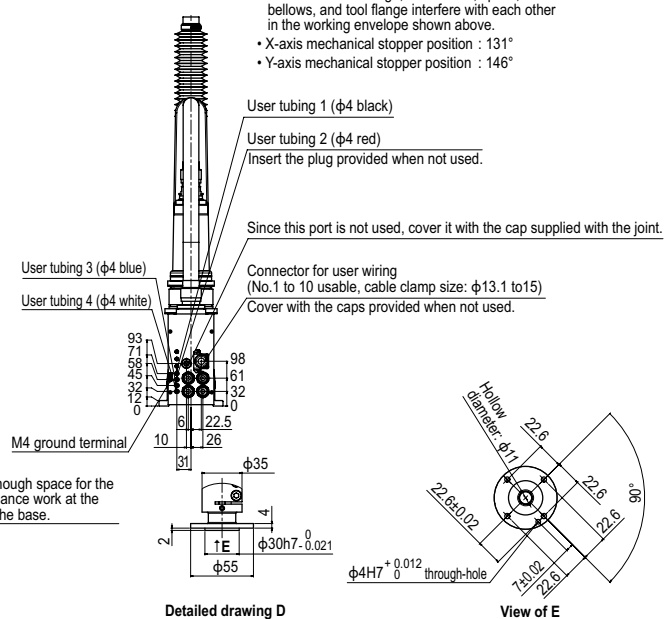
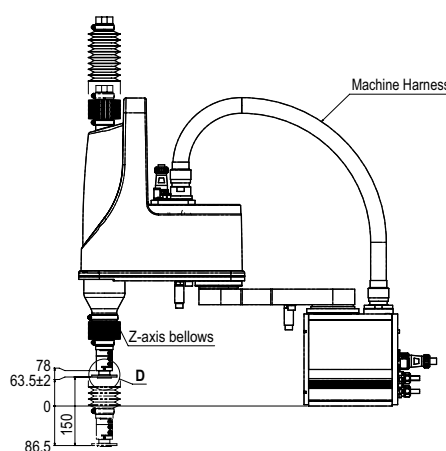
Controller

RCX340 ▶ 508 RCX240S ▶ 495

YK500XGLP Tool flange mount type



- Note that the robot cannot be used at a position where the base flange, robot cable, spline, bellows, and tool flange interfere with each other in the working envelope shown above.
- X-axis mechanical stopper position : 131°
- Y-axis mechanical stopper position : 146°



YK500XGP

Dust-proof & drip-proof type

- Arm length 500mm
- Maximum payload 8kg

Ordering method

YK500XGP **F** **RCX340-4**

Model Z axis stroke Tool flange Cable

200: 200mm 300: 300mm F: With tool flange 3L: 3.5m 5L: 5m 10L: 10m

Controller / Number of controllable axes Safety standard Option A (OP.A) Option B (OP.B) Option C (OP.C) Option D (OP.D) Option E (OP.E) Absolute battery

Specify various controller setting items. RCX340 ▶ **P.508**

RCX240 **R3** **BB**

Controller CE Marking Regenerative unit Expansion I/O Network option I-V System Gripper Battery

Specify various controller setting items. RCX240/RCX240S ▶ **P.495**

Specifications

Axis specifications	Arm length	X-axis	Y-axis	Z-axis	R-axis
	200 mm	200 mm	300 mm	200 mm	300 mm
	Rotation angle	+/-130 °	+/-145 °	—	+/-360 °
AC servo motor output		400 W	200 W	200 W	200 W
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Motor to speed reducer	Direct-coupled		
	Speed reducer to output	Direct-coupled			
Repeatability ^{Note 1}		+/-0.01 mm	+/-0.01 mm	+/-0.01 mm	+/-0.004 °
Maximum speed		7.6 m/sec	2.3 m/sec	1.7 m/sec	1700 °/sec
Maximum payload		8 kg			
Standard cycle time: with 2kg payload ^{Note 2}		0.55 sec			
R-axis tolerable moment of inertia ^{Note 3}		0.3 kgm ²			
Protection class ^{Note 4}		Equivalent to IP65 (IEC 60529)			
User wiring		0.2 sq × 20 wires			
User tubing (Outer diameter)		φ 6 × 3			
Travel limit		1.Soft limit 2.Mechanical stopper (X,Y,Z axis)			
Robot cable length		Standard: 3.5 m Option: 5 m, 10 m			
Weight		Z axis 200 mm: 32 kg Z axis 300 mm: 33 kg			

Note 1. This is the value at a constant ambient temperature. (X,Y axes)

Note 2. When reciprocating 25mm in vertical direction and 300mm in horizontal direction (rough-positioning arch motion).

Note 3. There are limits to acceleration coefficient settings. See P.539.

Note 4. Do not use robots where the bellows section is directly exposed to water jet. Contact our distributor for information on drip-proof structure preventing liquid other than water.

Controller

Controller	Power capacity (VA)	Operation method
RCX340 RCX240-R3	1700	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Note. "Harmonic" and "Harmonic drive" are the registered trademarks of Harmonic Drive Systems Inc.

Note. The movement range can be limited by changing the positions of X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.) See our robot manuals (installation manuals) for detailed information.

Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

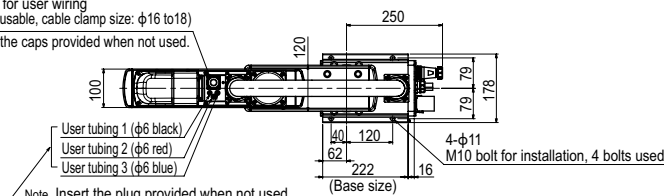
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YK500XGP

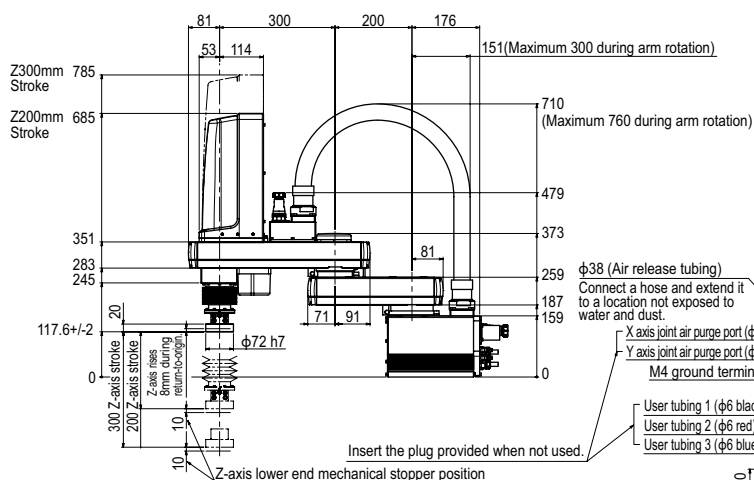
Connector for user wiring

(No.1 to 20 usable, cable clamp size: φ16 to18)

Cover with the caps provided when not used.

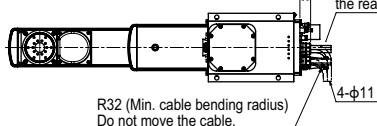


Note. Insert the plug provided when not used.

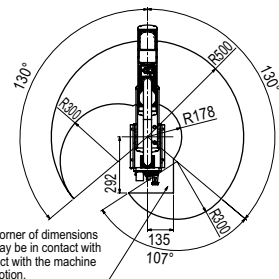


Insert the plug provided when not used.

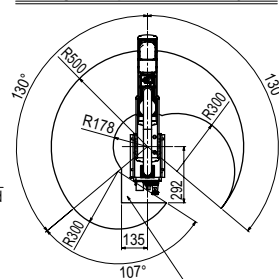
Keep enough space for the maintenance work at the rear of the base.



If the robot enters the inside of the corner of dimensions 135 and 292, the Z-axis tip 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.

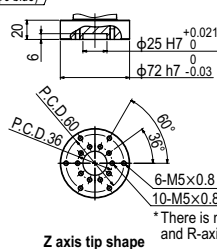


Working envelope of left-handed system



Working envelope of right-handed system

- Note that the robot cannot be used at a position where the base flange, robot cable, spline, and bellows interfere with each other in the working envelope shown above.
- X-axis mechanical stopper position : 132°
- Y-axis mechanical stopper position : 147°



*There is no phase relation between each position of M5 tapped holes and R-axis origin position.

YK600XGLP

Dust-proof & drip-proof type
● Arm length 600mm
● Maximum payload 4kg

Ordering method

YK600XGLP-150
S
RCX340-4

Model	Z axis stroke	Tool flange	Hollow shaft	Cable
	150: 150mm	No entry: None F: With tool flange	S: With hollow shaft	3L: 3.5m 5L: 5m 10L: 10m

Controller / Number of controllable axes
Safety standard
Option A (OP.A)
Option B (OP.B)
Option C (OP.C)
Option D (OP.D)
Option E (OP.E)
Absolute battery
Specify various controller setting items. RCX340 ▶ P.508
RCX240S
Controller
CE Marking
Expansion I/O
Network option
IVY System
Gripper
Battery
Specify various controller setting items. RCX240/RCX240S ▶ P.495

Specifications

			X-axis	Y-axis	Z-axis	R-axis
Axis specifications	Arm length		350 mm	250 mm	150 mm	—
	Rotation angle		+/-129 °	+/-144 °	—	+/-360 °
AC servo motor output			200 W	150 W	50 W	100 W
Deceleration mechanism	Speed reducer		Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Motor to speed reducer	Direct-coupled			
		Speed reducer to output	Direct-coupled			
Repeatability ^{Note 1}			+/-0.01 mm		+/-0.01 mm	+/-0.004 °
Maximum speed			4.9 m/sec		1.1 m/sec	1020 °/sec
Maximum payload			4 kg			
Standard cycle time: with 2kg payload ^{Note 2}			0.74 sec			
R-axis tolerable moment of inertia ^{Note 3}			0.05 kgm ²			
Protection class ^{Note 4}			Equivalent to IP65 (IEC 60529)			
User wiring (sq × wires)			0.2 × 10			
User tubing (Outer diameter)			φ 4 × 4			
Travel limit			1.Soft limit 2.Mechanical stopper (X,Y,Z axis)			
Robot cable length			Standard: 3.5 m Option: 5 m, 10 m			
Weight			26 kg			

Note 1. This is the value at a constant ambient temperature. (X,Y axes)

Note 2. When reciprocating 25mm in vertical direction and 300mm in horizontal direction (rough-positioning arch motion).

Note 3. There are limits to acceleration coefficient settings. See P.538.

Note 4. Do not use robots where the bellows section is directly exposed to water jet. Contact our distributor for information on drip-proof structure preventing liquid other than water.

Controller

Controller	Power capacity (VA)	Operation method
RCX340 RCX240S	1000	Programming / I/O point trace / Remote command / Operation using RS-232C communication

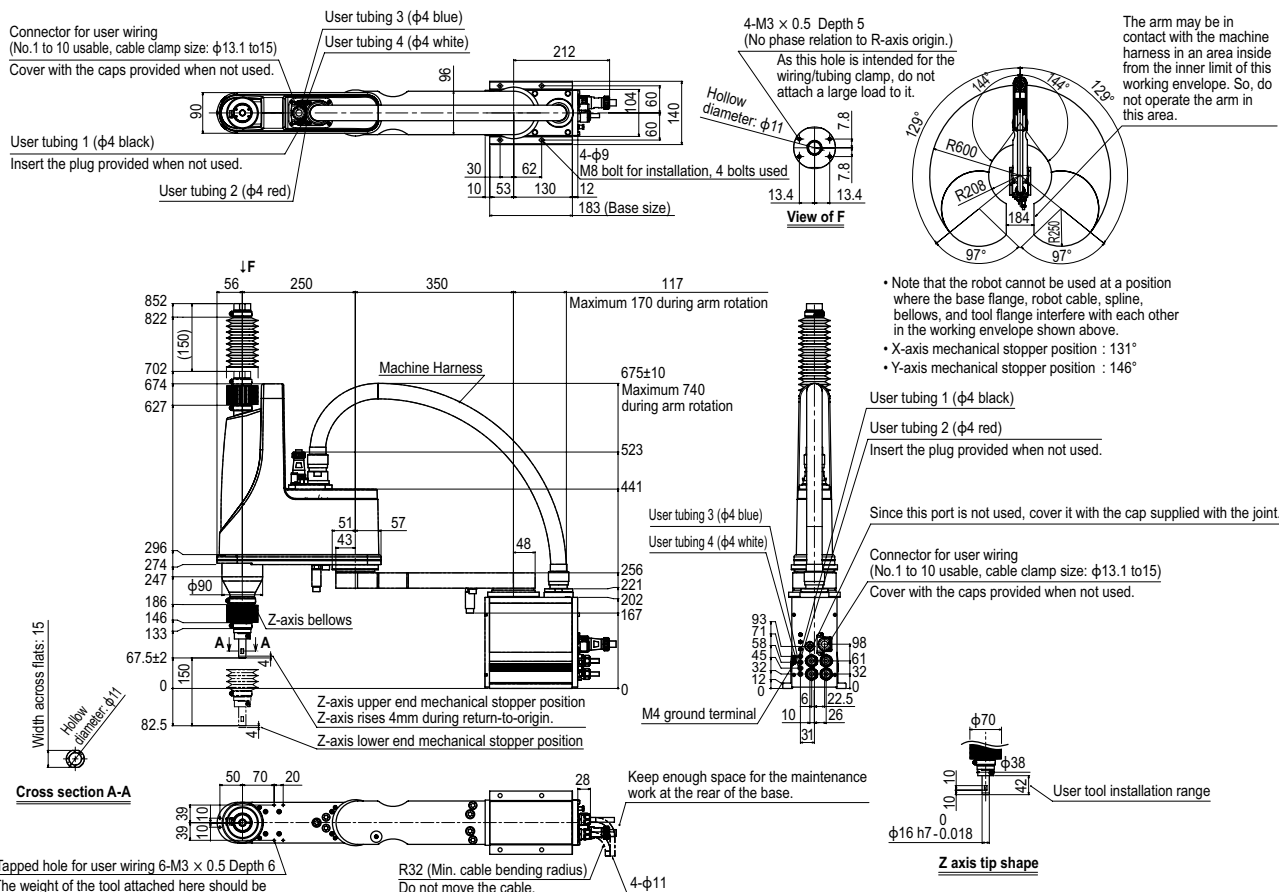
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Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

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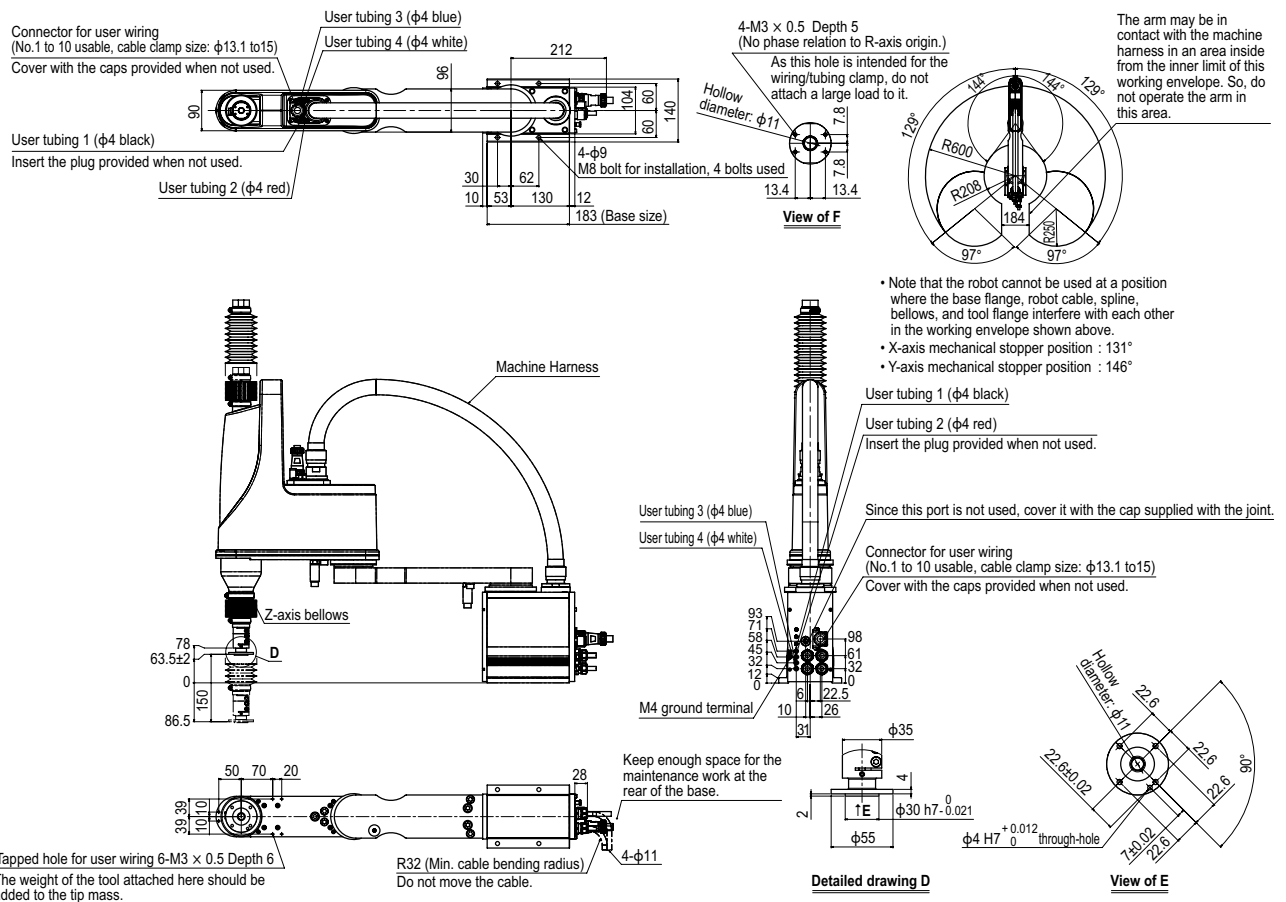
YK600XGLP



The arm may be in contact with the machine harness in an area inside from the inner limit of this working envelope. So, do not operate the arm in this area.

- Note that the robot cannot be used at a position where the base flange, robot cable, spline, bellows, and tool flange interfere with each other in the working envelope shown above.
- X-axis mechanical stopper position : 131°
- Y-axis mechanical stopper position : 146°

YK600XGLP Tool flange mount type



APPLICATION
LCM100
Compact
TRANSEVO
Single-axis robots
FLIP-X
Linear motor
PHASER
single-axis robots
Cartesian
XY-X
SCARA
robots
YK-X
Pick & place
robots
YP-X
CLEAN
CONTROLLER
INFORMATION
Orbit / Turn
type
Small /
Medium type
Large type
Wall-mount /
Invert type
Dust-proof
& drip-proof
type

YK600XGP

Dust-proof & drip-proof type

● Arm length 600mm ● Maximum payload 8kg

Ordering method

YK600XGP	F	RCX340-4									
Model	Z axis stroke 200: 200mm 300: 300mm	Tool flange F: With tool flange	Cable 3L: 3.5m 5L: 5m 10L: 10m	Controller / Number of controllable axes	Safety standard	Option A (OP.A)	Option B (OP.B)	Option C (OP.C)	Option D (OP.D)	Option E (OP.E)	Absolute battery
Specify various controller setting items. RCX340 ▶ P.508											
				RCX240		R3					BB
Specify various controller setting items. RCX240/RCX240S ▶ P.495											
Controller — CE Marking — Regenerative unit — Expansion I/O — Network option — IVY System — Gripper — Battery											

Specifications

Axis specifications	Arm length	X-axis	Y-axis	Z-axis	R-axis
	Rotation angle	300 mm	300 mm	200 mm 300 mm	—
		+/-130 °	+/-145 °	—	+/-360 °
AC servo motor output		400 W	200 W	200 W	200 W
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Direct-coupled			
	Motor to speed reducer	Direct-coupled			
	Speed reducer to output	Direct-coupled			
Repeatability	Note 1	+/-0.01 mm		+/-0.01 mm	+/-0.004 °
Maximum speed		8.4 m/sec		2.3 m/sec 1.7 m/sec	1700 °/sec
Maximum payload		8 kg			
Standard cycle time: with 2kg payload	Note 2	0.56 sec			
R-axis tolerable moment of inertia	Note 3	0.3 kgm ²			
Protection class	Note 4	Equivalent to IP65 (IEC 60529)			
User wiring (sq × wires)		0.2 × 20			
User tubing (Outer diameter)		φ 6 × 3			
Travel limit		1.Soft limit 2.Mechanical stopper (X,Y,Z axis)			
Robot cable length		Standard: 3.5 m Option: 5 m, 10 m			
Weight		Z axis 200 mm: 33 kg Z axis 300 mm: 34 kg			

Note 1. This is the value at a constant ambient temperature. (X,Y axes)
Note 2. When reciprocating 25mm in vertical direction and 300mm in horizontal direction (rough-positioning arch motion).
Note 3. There are limits to acceleration coefficient settings. See P.539.
Note 4. Do not use robots where the bellows section is directly exposed to water jet. Contact our distributor for information on drip-proof structure preventing liquid other than water.

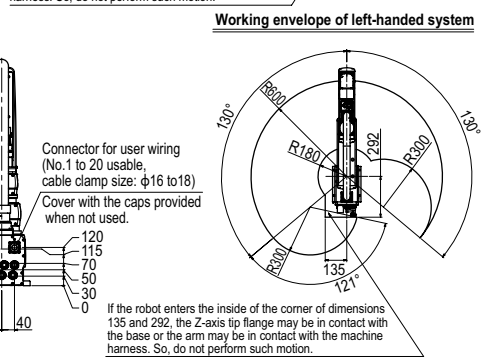
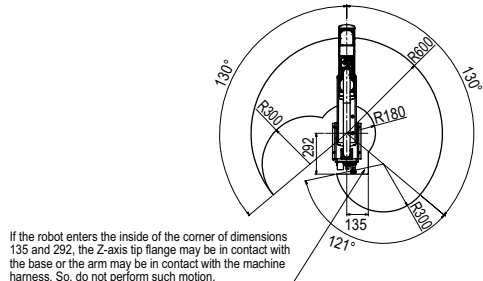
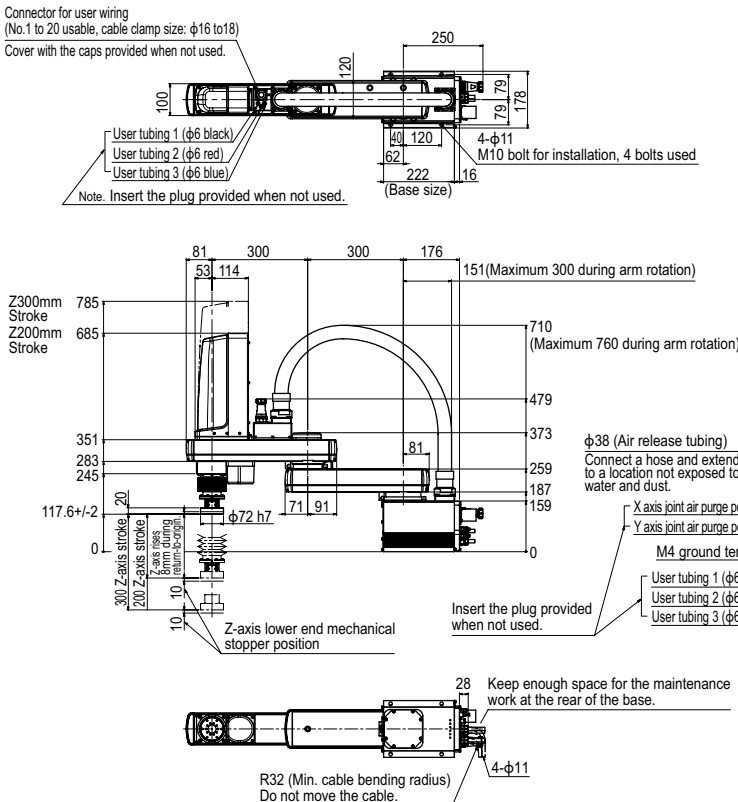
Controller

Controller	Power capacity (VA)	Operation method
RCX340 RCX240-R3	1700	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Note. "Harmonic" and "Harmonic drive" are the registered trademarks of Harmonic Drive Systems Inc.
Note. The movement range can be limited by changing the positions of X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.)
See our robot manuals (installation manuals) for detailed information.
Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

Our robot manuals (installation manuals) can be downloaded from our website at the address below:
<http://global.yamaha-motor.com/business/robot/>

YK600XGP



Note that the robot cannot be used at a position where the base flange, robot cable, spline, and bellows interfere with each other in the working envelope shown above.
• X-axis mechanical stopper position : 132°
• Y-axis mechanical stopper position : 147°

Z axis tip shape

* There is no phase relation between each position of M5 tapped holes and R-axis origin position.

YK700XGP

Dust-proof & drip-proof type

● Arm length 700mm
● Maximum payload 18kg

Ordering method

YK700XGP		F		RCX340-4								
Model	Z axis stroke 200: 200mm 400: 400mm	Tool flange F: With tool flange	Cable 3L: 3.5m 5L: 5m 10L: 10m	Controller / Number of controllable axes	Safety standard	Option A (OP.A)	Option B (OP.B)	Option C (OP.C)	Option D (OP.D)	Option E (OP.E)	Absolute battery	
				RCX240		R3					BB	
				Controller	CE Marking	Regenerative unit	Expansion I/O	Network option	IVY System	Gripper	Battery	

Specify various controller setting items. RCX340 ▶ P.508
Specify various controller setting items. RCX240/RCX240S ▶ P.495

Specifications

Axis specifications	Arm length	X-axis	Y-axis	Z-axis	R-axis
	Rotation angle	300 mm	400 mm	200 mm / 400 mm	—
AC servo motor output		750 W	400 W	400 W	200 W
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Direct-coupled			
	Motor to speed reducer	Direct-coupled			
	Speed reducer to output	Direct-coupled			
Repeatability ^{Note 1}		+/-0.02 mm		+/-0.01 mm	+/-0.004 °
Maximum speed		8.4 m/sec		2.3 m/sec / 1.7 m/sec	920 °/sec
Maximum payload		18 kg			
Standard cycle time: with 2kg payload ^{Note 2}		0.52 sec			
R-axis tolerable moment of inertia ^{Note 3}		1.0 kgm ²			
Protection class ^{Note 4}		Equivalent to IP65 (IEC 60529)			
User wiring		0.2 sq × 20 wires			
User tubing (Outer diameter)		φ 6 × 3			
Travel limit		1. Soft limit 2. Mechanical stopper (X,Y,Z axis)			
Robot cable length		Standard: 3.5 m Option: 5 m, 10 m			
Weight		Z axis 200 mm: 54 kg Z axis 400 mm: 56 kg			

Note 1. This is the value at a constant ambient temperature. (X,Y axes)

Note 2. When reciprocating 25mm in vertical direction and 300mm in horizontal direction (rough-positioning arch motion).

Note 3. There are limits to acceleration coefficient settings. See P.539.

Note 4. Do not use robots where the bellows section is directly exposed to water jet. Contact our distributor for information on drip-proof structure preventing liquid other than water.

Controller

Controller	Power capacity (VA)	Operation method
RCX340 RCX240-R3	2500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Note. "Harmonic" and "Harmonic drive" are the registered trademarks of Harmonic Drive Systems Inc.

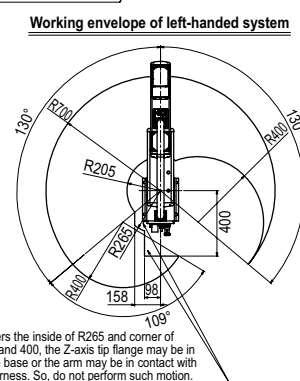
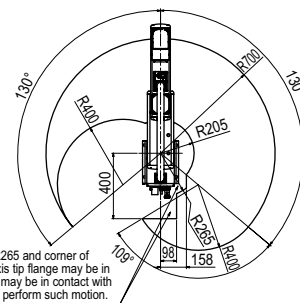
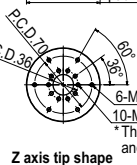
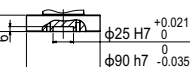
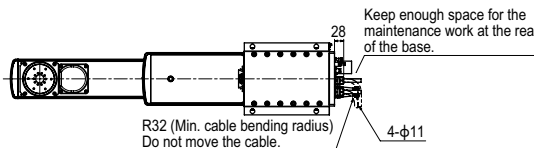
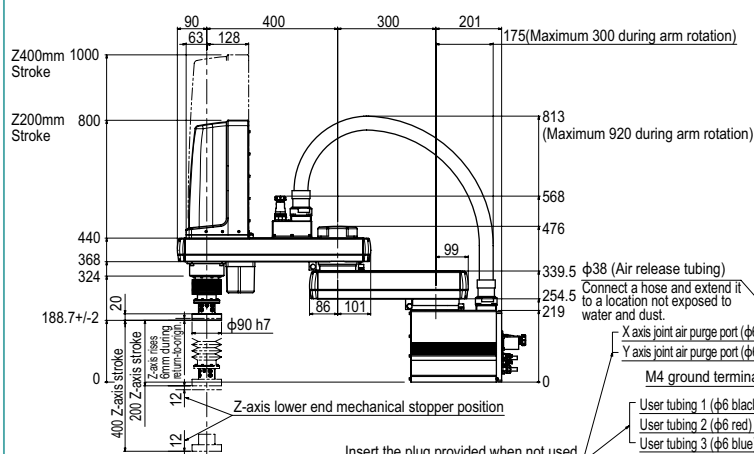
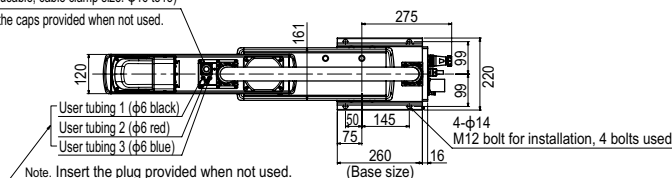
Note. The movement range can be limited by changing the positions of X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.)
See our robot manuals (installation manuals) for detailed information.

Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

Our robot manuals (installation manuals) can be downloaded from our website at the address below:
<http://global.yamaha-motor.com/business/robot/>

YK700XGP

Connector for user wiring
(No.1 to 20 usable, cable clamp size: φ16 to 18)
Cover with the caps provided when not used.



Note that the robot cannot be used at a position where the base flange, robot cable, spline, and bellows interfere with each other in the working envelope shown above.

• X-axis mechanical stopper position : 132°
• Y-axis mechanical stopper position : 152°

* There is no phase relation between each position of M5 tapped holes and R-axis origin position.

Dust-proof & drip-proof type

- Arm length 800mm
- Maximum payload 18kg

Ordering method

YK800XGP		F		RCX340-4							
Model	Z axis stroke 200: 200mm 400: 400mm	Tool flange F: With tool flange	Cable 3L: 3.5m 5L: 5m 10L: 10m	Controller / Number of controllable axes	Safety standard	Option A (OP.A)	Option B (OP.B)	Option C (OP.C)	Option D (OP.D)	Option E (OP.E)	Absolute battery
				Specify various controller setting items. RCX340 ▶ P.508							
				RCX240		R3					BB
				Controller	CE Marking	Regenerative unit	Expansion I/O	Network option	IVY System	Gripper	Battery

Specifications

			X-axis	Y-axis	Z-axis	R-axis
Axis specifications	Arm length		400 mm	400 mm	200 mm	400 mm
	Rotation angle		+/-130 °	+/-150 °	-	
AC servo motor output			750 W	400 W	400 W	200 W
Deceleration mechanism	Speed reducer		Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Motor to speed reducer	Direct-coupled			
		Speed reducer to output	Direct-coupled			
Repeatability ^{Note 1}			+/-0.02 mm		+/-0.01 mm	+/-0.004 °
Maximum speed			9.2 m/sec		2.3 m/sec	1.7 m/sec
Maximum payload			18 kg			
Standard cycle time: with 2kg payload ^{Note 2}			0.58 sec			
R-axis tolerable moment of inertia ^{Note 3}			1.0 kgm ²			
Protection class ^{Note 4}			Equivalent to IP65 (IEC 60529)			
User wiring			0.2 sq × 20 wires			
User tubing (Outer diameter)			φ 6 × 3			
Travel limit			1.Soft limit 2.Mechanical stopper (X,Y,Z axis)			
Robot cable length			Standard: 3.5 m Option: 5 m, 10 m			
Weight			Z axis 200 mm: 56 kg Z axis 400 mm: 58 kg			

Note 1. This is the value at a constant ambient temperature. (X,Y axes)

Note 2. When reciprocating 25mm in vertical direction and 300mm in horizontal direction (rough-positioning arch motion).

Note 3: There are limits to acceleration coefficient settings. See P 539.

Note 4. Do not use robots where the bellows section is directly exposed to water jet. Contact our distributor for information on drip-proof structure preventing liquid other than water.

Controller

Controller	Power capacity (VA)	Operation method
RCX340 RCX240-R3	2500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

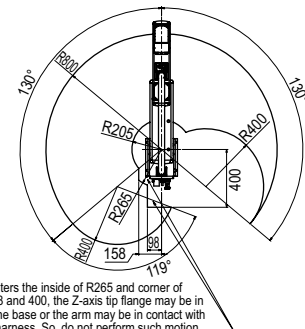
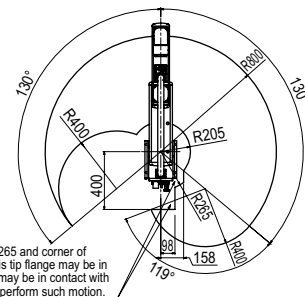
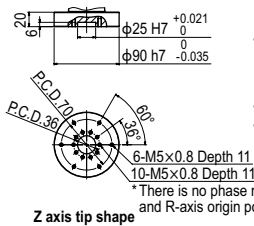
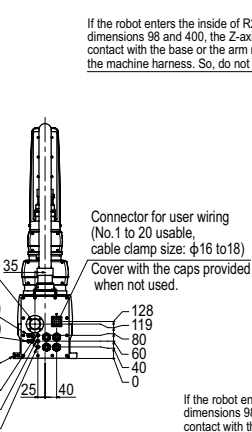
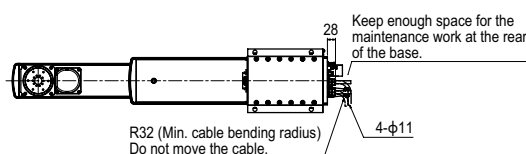
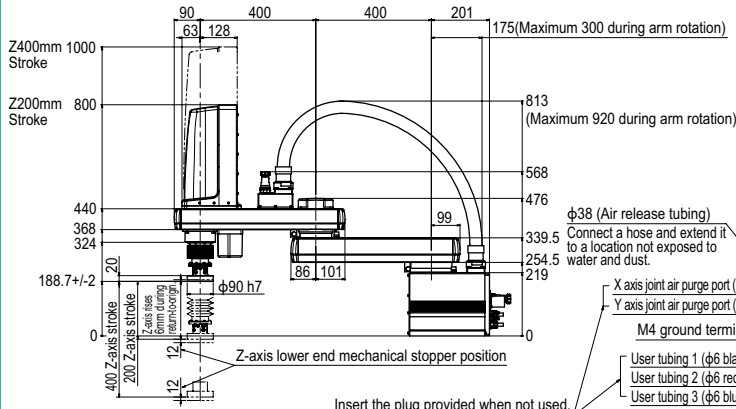
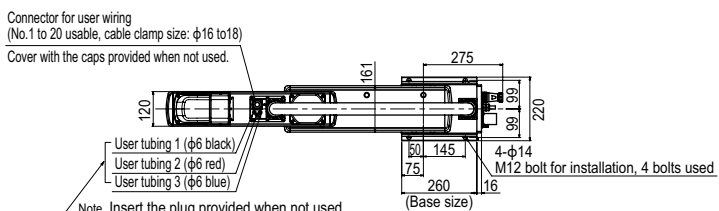
Note. "Harmonic" and "Harmonic drive" are the registered trademarks of Harmonic Drive Systems Inc.

Note: The movement range can be limited by changing the positions of X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.) See our robot manuals (installation manuals) for detailed information.

Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

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YK800XGP



Working envelope of right-handed system

- Note that the robot cannot be used at a position where the base flange, robot cable, spline, and bellows interfere with each other in the working envelope shown above.
- X-axis mechanical stopper position : 132°
- Y-axis mechanical stopper position : 152°

the relation between each position of M5 tapped holes and position.

