

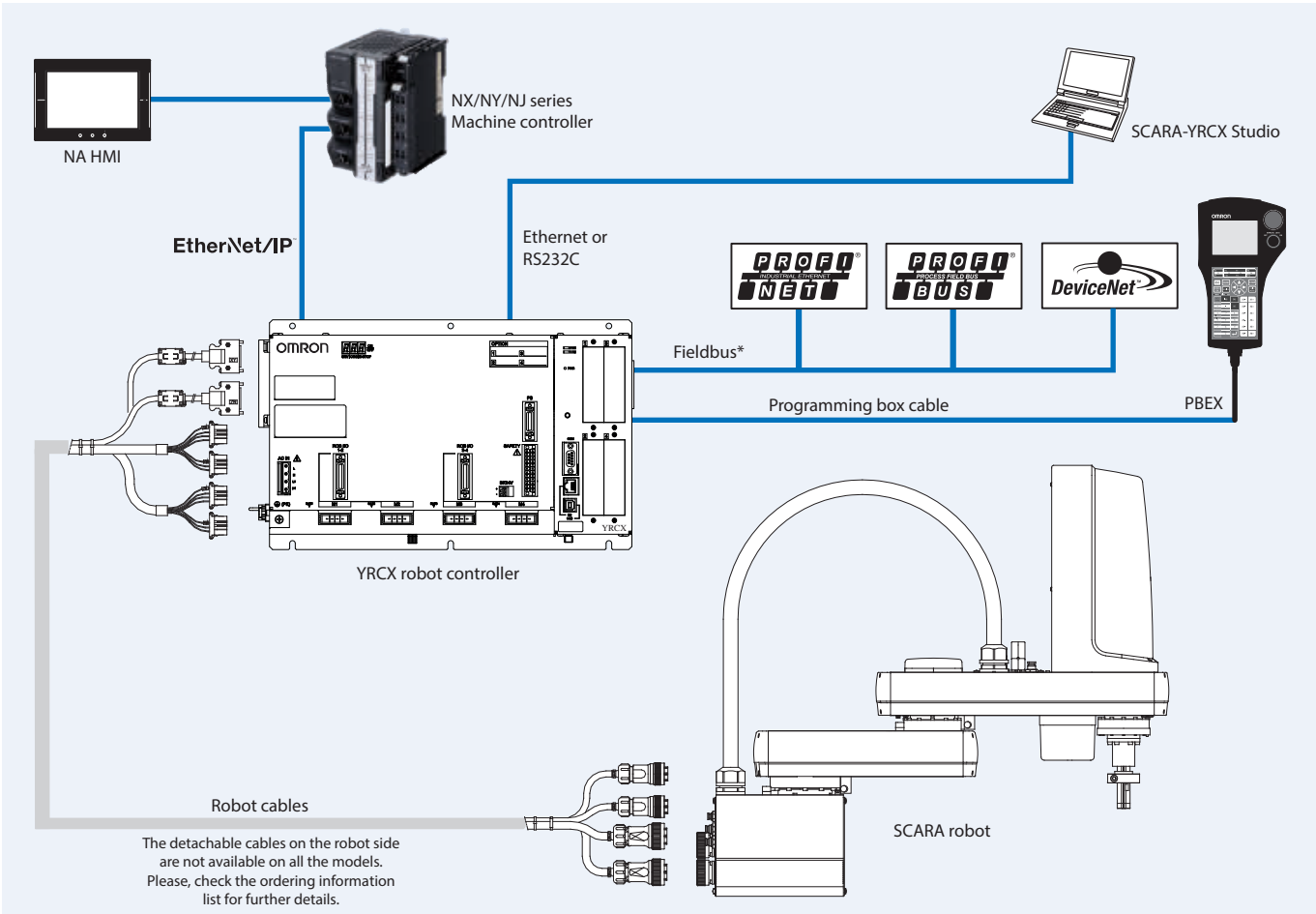
SCARA robots

The flexible picking system

- Higher reliability (no belts in XG series, no electronic parts in movement)
- Higher precision and speed
- Minimum maintenance
- Easier to use
- Higher rigidity
- Very compact design
- Multiple connectivity options
- Integrated vision and conveyor tracking functions



System configuration



* Be careful not to mix field networks (EtherNet/IP, DeviceNet, PROFIBUS, PROFINET).

Robot Controller

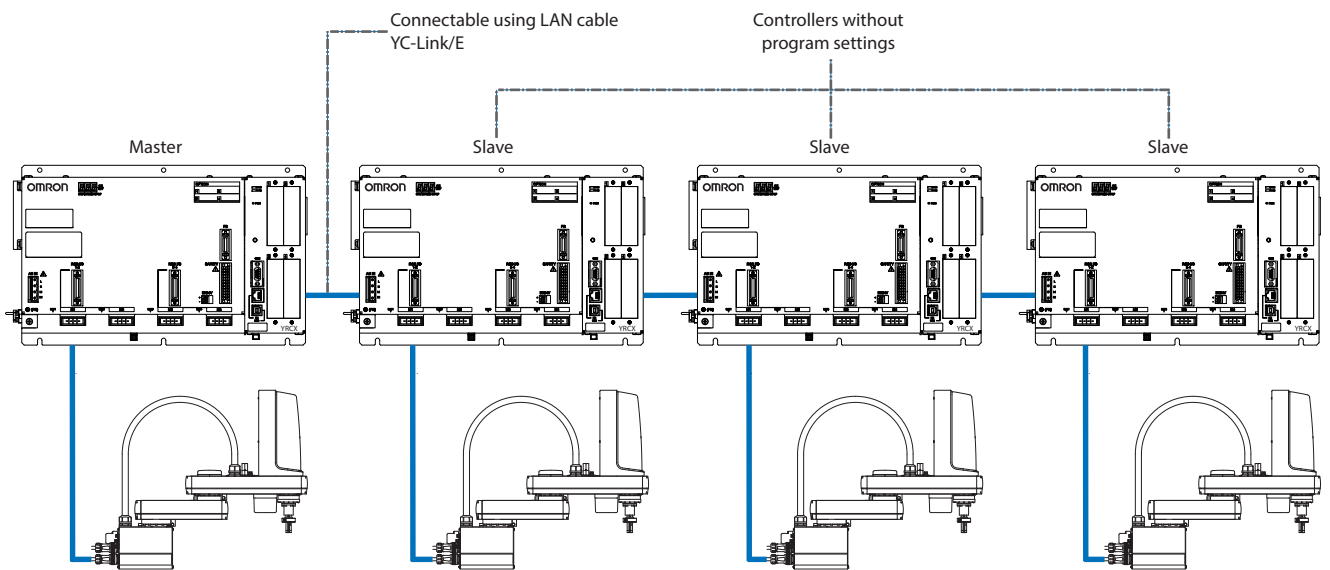
Specifications

Robot controller model		YRCX		
Basic specifications	Number of controllable axes	4 axes maximum (Control simultaneously: 4 axes) Expandable up to 16 axes (4 robots) using YC-Link/E		
	Controllable robots	SCARA robots		
	Maximum power consumption	2500 VA		
	Capacity of the connected motor	1600 W or less (in total for 4 axes)		
	Dimensions (WxHxD)	355x195x130 mm		
	Weight	6.2 kg		
	Power supply voltage	Single phase 200 to 230 VAC, +/-10% maximum, 50/60 Hz		
Axis control	Drive method	AC full-digital software servo		
	Position detection method	Resolver or magnetic linear scale		
	Control method	PTP motion (point to point), ARCH motion, linear interpolation, circular interpolation		
	Coordinate system	Joint coordinates, Cartesian coordinates		
	Position display units	Pulses, mm (millimeters), deg (degrees)		
	Speed setting	1% to 100% (1% steps. This setting can be made even by programming)		
	Acceleration setting	1. Automatic acceleration setting based on robot model type and type weight parameter 2. Setting based on acceleration and deceleration rate parameters (1% steps) * Can be changed by programming 3. Zone control		
	Resolution	16384 P/rev, 1 micron		
	Origin search method	Incremental, absolute, semi-absolute		
Program	Program language	PSEUDO-BASIC (Conforming to JIS B8439 SLIM Language)		
	Multitasks	16 tasks maximum		
	Sequence program	1 program		
	Point-data input method	Manual data input (coordinate data input), direct teaching, teaching playback, offline teaching (data input from external unit)		
Memory	Memory capacity	2.1 MB (total capacity of program and points) (available program capacity during use of maximum number of points is 300 KB)		
	Programs	100 programs (max. number of programs) 9999 lines (max. lines per program)		
	Points	30000 points (max. number of points)		
	Memory Backup battery	Lithium metallic battery (service life 4 years at a 0°C to 40°C)		
	Internal flash memory	512 KB (ALL data only)		
External input/output	SAFETY	Input	Emergency stop ready input, 2 systems Auto mode input, 2 systems (enabled only when the global specifications are used.)	
		Output	Emergency stop contact output, 2 systems Enable contact output, 2 systems (enabled only when the PBEX is used.) Motor power ready output, 2 systems	
	Brake output	Transistor output (PNP open collector)		
	Origin sensor input	Connectable to 24 VDC normally-closed contact sensor		
	External communications	RS-232C: 1CH D-SUB9 (female) RS-422: 1CH (Dedicated to PBEX) Ethernet: 1CH (IEEE802.3u/IEEE802.3) 100Mbps/10Mbps (100BASE-TX/10BASE-T) Applicable to Auto Negotiation USB: 1CH (B type)		
	Dedicated input/output board included with the YRCX controller	PNP Dedicated input 8 points, Dedicated output 9 points General input 16 points, General output 16 points		
	Option boards	No. of slots	4	
		General input/output	Optional input/output (NPN/PNP selectable) General input 24 points, General output 16 points	
		Dedicated input/output	Optional input/output (NPN/PNP selectable) Dedicated input 8 points, Dedicated output 9 points General input 16 points, General output 16 points	
		DeviceNet	DeviceNet slave Dedicated input 16 points, Dedicated output 16 points, General input 96 points, General output 96 points	
		PROFIBUS	PROFIBUS slave Dedicated input 16 points, Dedicated output 16 points, General input 96 points, General output 96 points	
		PROFINET	PROFINET, I/O device, 2 ports, conformance class B Dedicated input 16 points, Dedicated output 16 points, General input 96 points, General output 96 points	
		EtherNet/IP	EtherNet/IP adapter, 2 ports Dedicated input 16 points, Dedicated output 16 points, General input 96 points, General output 96 points	
		Ethernet	Built-in port	
	Tracking	Tracking board AB phase input, up to 2 encoders		
Options	Programming box	PBEX (with enable switch)		
	Support software for PC	SCARA-YRCX Studio		

Robot controller model		YRCX
General specifications	Operating temperature	0°C to 40°C
	Storage temperature	-10°C to 65°C
	Operating humidity	35% to 85% RH (non-condensing)
	Absolute backup battery	Lithium metallic battery 3.6 V 2750 mAh / axis
	Absolute data backup period	1 year (in state with no power applied)
	Noise immunity	IEC61000-4-4 Level 3
	Protective structure	IP20

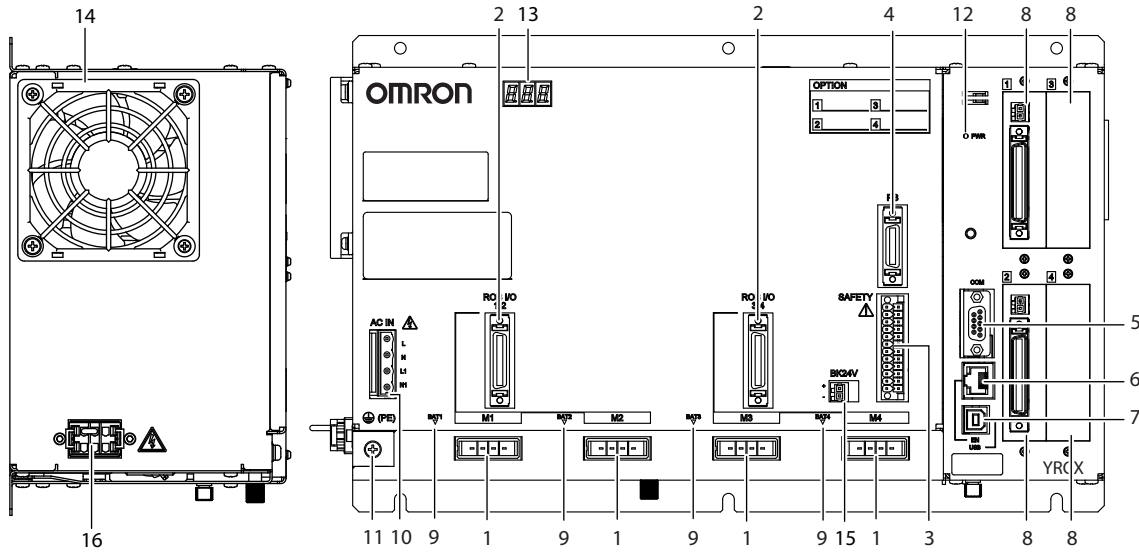
YC-Link/E connection

- Up to four robots can be managed with one master YRCX.
- Simultaneous start and arrival of each robot can be controlled freely.
- All programs and settings are managed using the master.



Nomenclature

YRCX controller

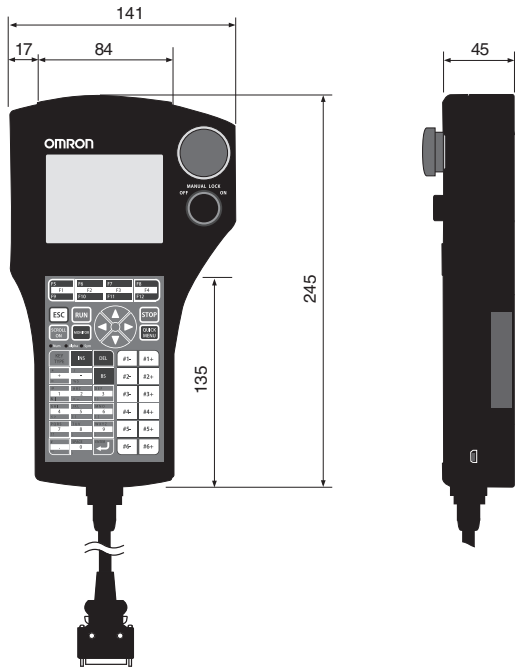


No.	Connector name	Function
1	M1/M2/M3/M4	Connectors used to drive the servo motor
2	ROB I/O [1-2/3-4]	Connectors used for servo motor feedback and sensor signals
3	SAFETY	Safety input/output connector for emergency stoppages, etc.
4	PB	Connector used to connect the programming box (PBEX)
5	COM	RS-232C interface connector
6	EN	Ethernet connection connector
7	USB	USB connection connector
8	OP [1/2/3/4]	Ports for option boards installation. Up to four option boards can be installed
9	BATT [1/2/3/4]	Battery connector for absolute backup
10	AC IN [L/N/L1/N1]	Control power supply and main power supply (motor drive power supply)
11	PE	Ground terminal (D class grounding work is required)
12	PWR LED	Lights up when the power is turned ON
13	7SEG LED	Indicates the controller or robot status
14	FAN	Ensures that the temperature inside the controller is kept at a fixed level. When installing the controller, keep a space of 50 mm or more from the left side panel so that the fan opening is not closed
15	BK24V	External 24V-input power connector for the brake ^{*1}
16	RGEN	Regenerative unit connector for expansion. For the standard specifications, connect the thermal sensor shorting connector

*1 When two or more axes use the brake.

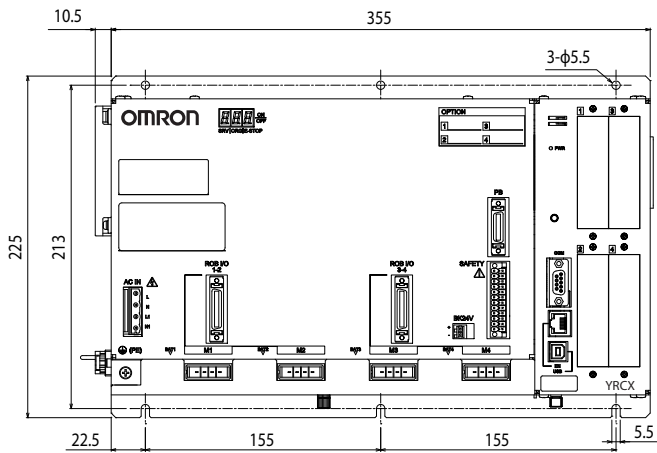
Dimensions

Programming box (PBEX)

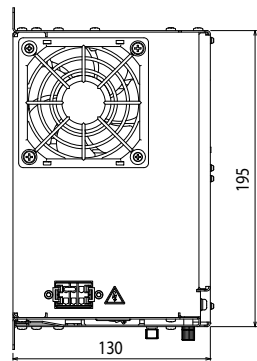


YRCX controller

Front view



Rear view



R6YXE(T/S)400 XE SERIES - SMALL TYPE

Specifications

		X axis	Y axis	Z axis	R axis
Reach (mm)		400			
Maximum payload (kg)		4			
Repeatability ^{*1} (XYZ:mm) (R:°)		±0.01	±0.01	±0.01	±0.01
Axis specifications	Arm length (mm)	225	175	150	----
	Rotation range (°)	±132	±150	----	±360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission mechanism	Motor to speed reducer	Direct-coupled		Timing belt
		Speed reducer to output	Direct-coupled		
AC servo motor output (W)		200	100	100	100
Maximum speed (XYZ:m/sec) (R:°/sec)		6		1.1	2600
Standard cycle time: with 2 kg payload ^{*2} (sec)		0.41			
R axis allowable moment inertia ^{*3} (kgm ²)		0.05			
User wiring (sq x pcs)		0.2 x 10			
User tubing (Outer diameter)		Ø4 x 3			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Option	Open shaft	R6YACXGLS			
	Brake release	R6YACXEBRAKEUNIT			
Weight (kg)		17			

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

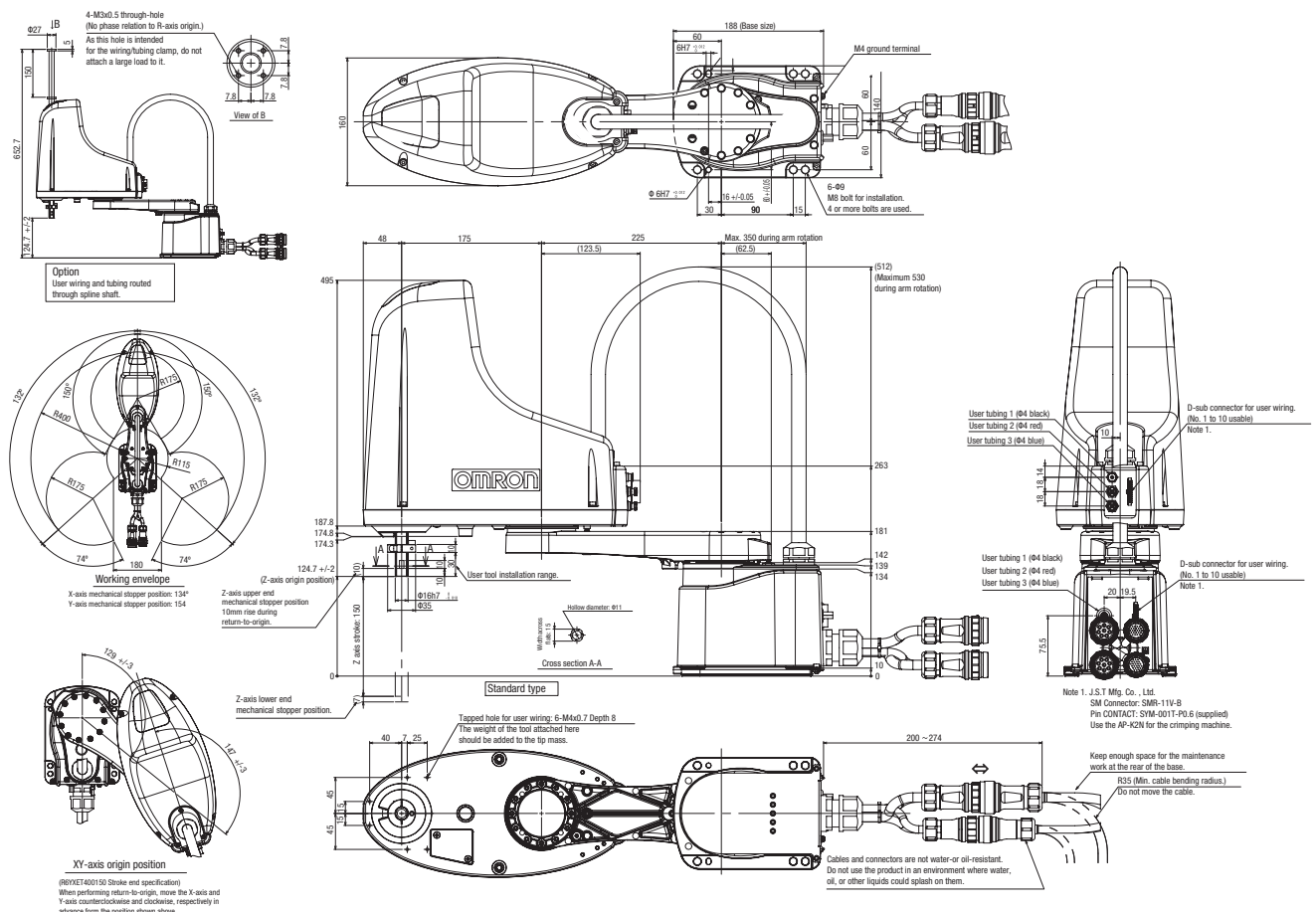
*2 When reciprocating 300 mm in horizontal and 25 mm in vertical directions and performing the coarse positioning arch operation.

*3 The acceleration coefficient is set automatically in accordance with the tip weight and offset amount for R-axis moment of inertia settings.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXE510 XE SERIES - MEDIUM TYPE

Specifications

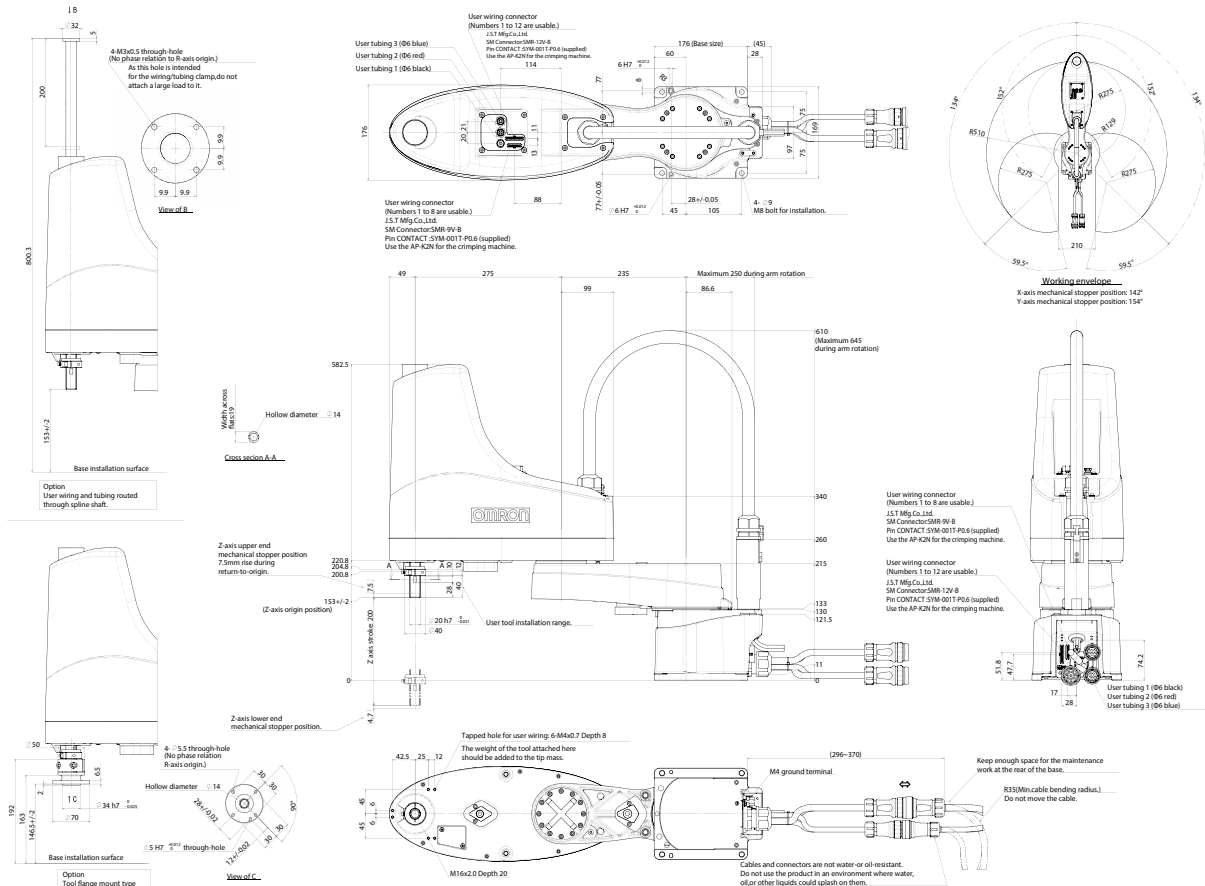
		X axis	Y axis	Z axis	R axis
Reach (mm)		510			
Maximum payload (kg)		10 (9) ¹			
Repeatability ² (XYZ:mm) (R:°)		±0.01	±0.01	±0.01	±0.01
Axis specifications	Arm length (mm)	235	275	200	----
	Rotation range (°)	±134	±152	----	±360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission mechanism	Motor to speed reducer	Direct-coupled		Timing belt
		Speed reducer to output	Direct-coupled		
AC servo motor output (W)		400	200	200	200
Maximum speed (XYZ:m/sec) (R:°/sec)		7.8		2	2600
Standard cycle time: with 2 kg payload ³ (sec)		0.38			
R axis allowable moment inertia ⁴ (kgm ²)		0.3			
User wiring (sq x pcs)		0.2 x 20			
User tubing (Outer diameter)		Ø6 x 3			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Option	Tool flange	R6YACXGLF			
	Open shaft	R6YACXGLS			
	Hollow cap	R6YACXEHOLLOWCAP			
	Brake release	R6YACXEBRAKEUNIT			
Weight (kg)		25			

- *1 Maximum payload is 9 kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X, Y axes)
- *3 When reciprocating 300 mm in horizontal and 25 mm in vertical directions and performing the coarse positioning arch operation.
- *4 The acceleration coefficient is set automatically in accordance with the tip weight and offset amount for R-axis moment of inertia settings.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1700	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXE610 XE SERIES - MEDIUM TYPE

Specifications

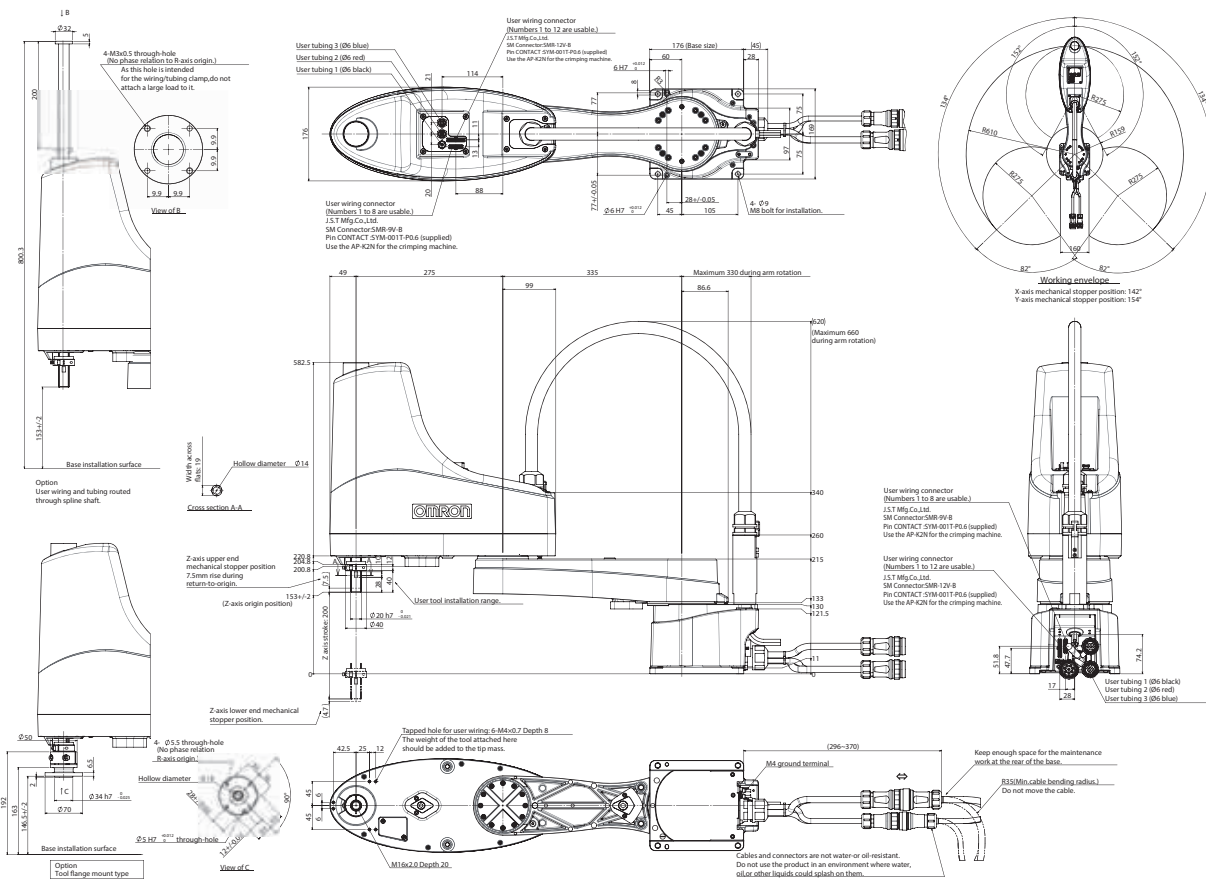
		X axis	Y axis	Z axis	R axis
Reach (mm)		610			
Maximum payload (kg)		10 (9) ^{*1}			
Repeatability² (XYZ:mm) (R:°)		±0.01	±0.01	±0.01	±0.01
Axis specifications	Arm length (mm)	335	275	200	----
	Rotation range (°)	±134	±152	----	±360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission mechanism	Motor to speed reducer	Direct-coupled		Timing belt
		Speed reducer to output	Direct-coupled		
AC servo motor output (W)		400	200	200	200
Maximum speed (XYZ:m/sec) (R:°/sec)		8.6		2	2600
Standard cycle time: with 2 kg payload^{*3} (sec)		0.39			
R axis allowable moment inertia^{*4} (kgm²)		0.3			
User wiring (sq x pcs)		0.2 x 20			
User tubing (Outer diameter)		Ø6 x 3			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Option	Tool flange	R6YACXGLF			
	Open shaft	R6YACXGLS			
	Hollow cap	R6YACXEHOLLOWCAP			
	Brake release	R6YACXE BRAKEUNIT			
Weight (kg)		25			

*1 Maximum payload is 9 kg when tool flange option is installed.
 *2 This is the value at a constant ambient temperature. (X,Y axes)
 *3 When reciprocating 300 mm in horizontal and 25 mm in vertical directions and performing the coarse positioning arch operation.
 *4 The acceleration coefficient is set automatically in accordance with the tip weight and offset amount for R-axis moment of inertia settings.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1700	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXE710 XE SERIES - MEDIUM TYPE

Specifications

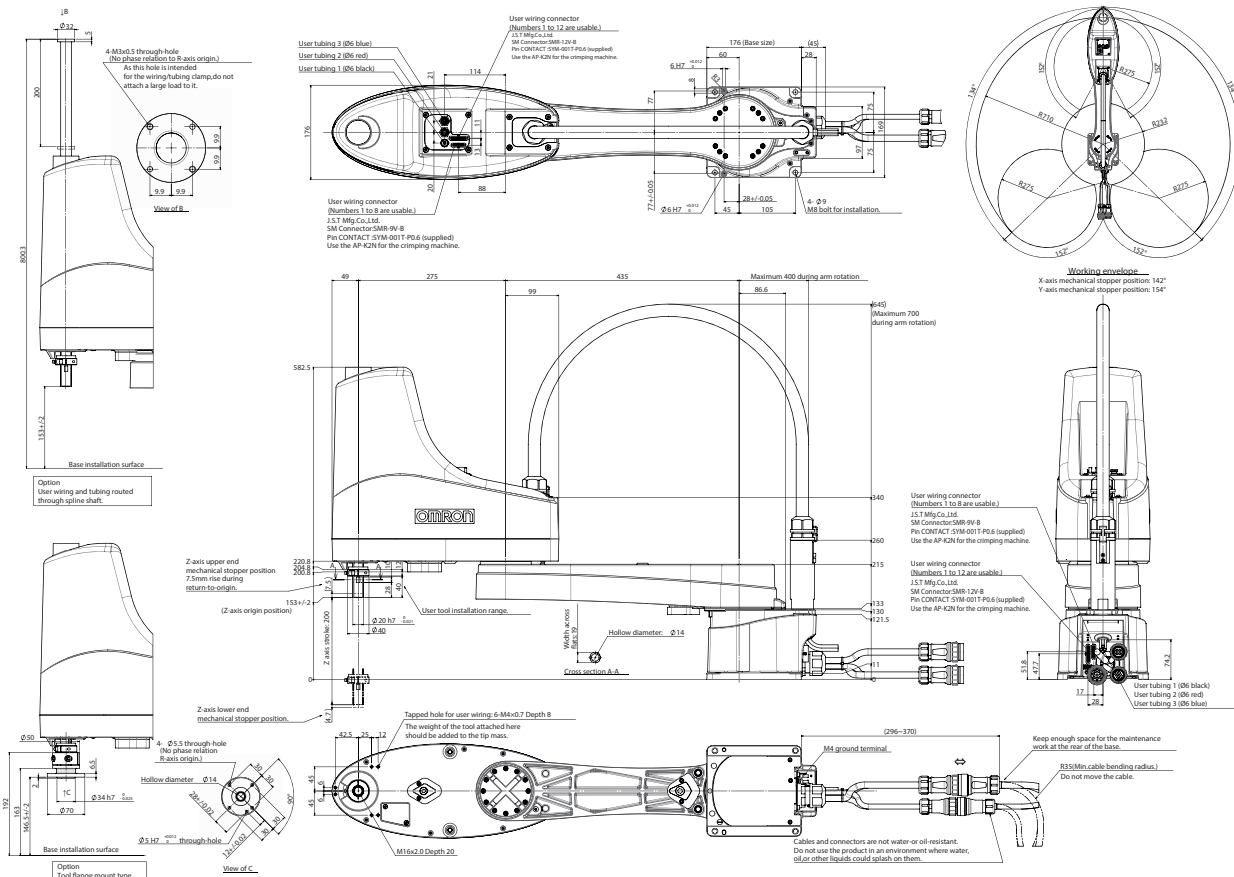
		X axis	Y axis	Z axis	R axis
Reach (mm)		710			
Maximum payload (kg)		10 (9) ¹			
Repeatability ² (XYZ:mm) (R:°)		±0.02	±0.02	±0.01	±0.01
Axis specifications	Arm length (mm)	435	275	200	----
	Rotation range (°)	±134	±152	----	±360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission mechanism	Motor to speed reducer	Direct-coupled		Timing belt
		Speed reducer to output	Direct-coupled		
AC servo motor output (W)		400	200	200	200
Maximum speed (XYZ:m/sec) (R:°/sec)		9.5		2	2600
Standard cycle time: with 2 kg payload ³ (sec)		0.42			
R axis allowable moment inertia ⁴ (kgm ²)		0.3			
User wiring (sq x pcs)		0.2 x 20			
User tubing (Outer diameter)		Ø6 x 3			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Option	Tool flange	R6YACXGLF			
	Open shaft	R6YACXGLS			
	Hollow cap	R6YACXEHOLLOWCAP			
	Brake release	R6YACXEBRAKEUNIT			
Weight (kg)		26			

- *1 Maximum payload is 9 kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X, Y axes)
- *3 When reciprocating 300 mm in horizontal and 25 mm in vertical directions and performing the coarse positioning arch operation.
- *4 The acceleration coefficient is set automatically in accordance with the tip weight and offset amount for R-axis moment of inertia settings.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1700	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXG120 XG SERIES - TINY TYPE

Specifications

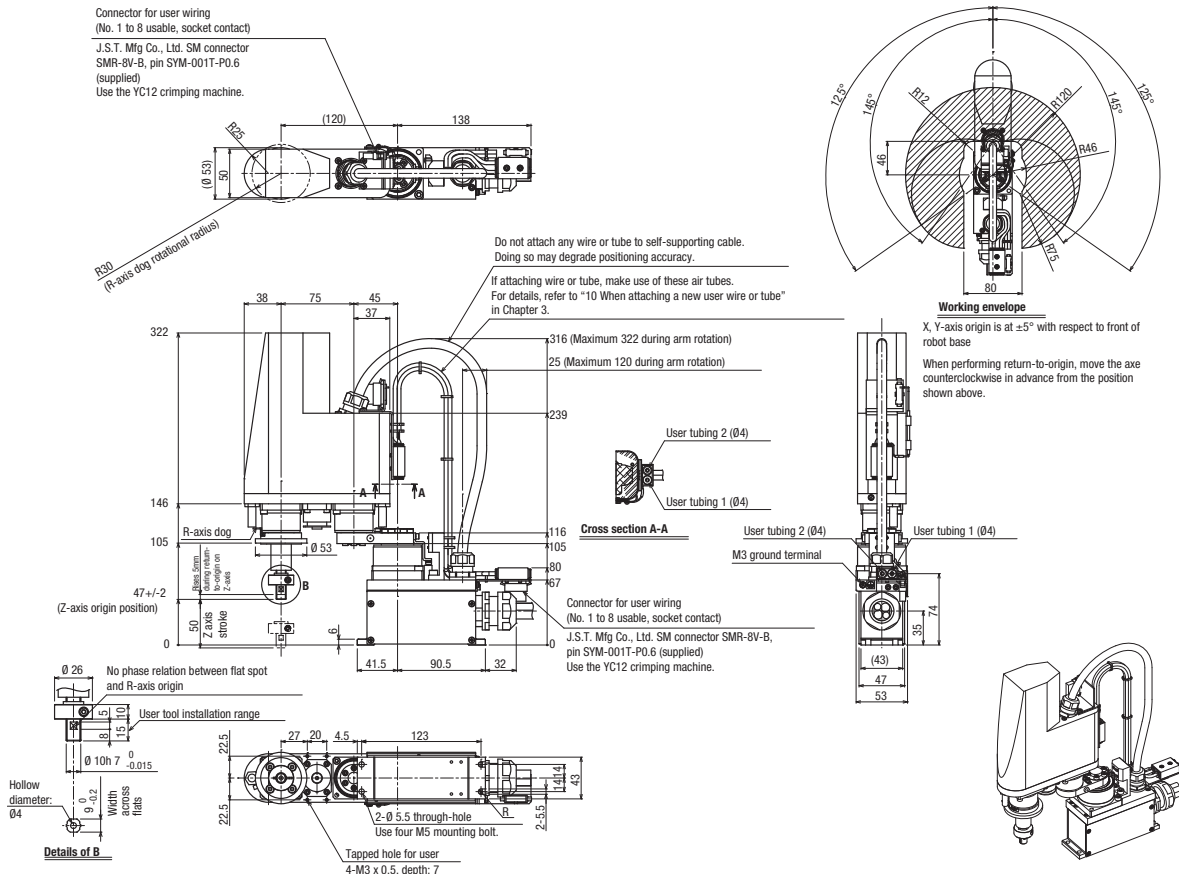
	X axis	Y axis	Z axis	R axis
Reach (mm)	120			
Maximum payload (kg)	1			
Repeatability ¹ (XYZ:mm) (R:°)	+/-0.005		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	45	75	50
	Rotation range (°)	+/-125	+/-145	----
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw
	Transmission method	Motor to speed reducer	Direct-coupled	
		Speed reducer to output	Direct-coupled	
AC servo motor output (W)	30	30	30	30
Maximum speed (XYZ:m/sec) (R:°/sec)	3.3		0.9	1700
Standard cycle time: with 0.1kg payload ² (sec)	0.33			
R axis allowable moment inertia ³ (kgm ²)	0.01			
User wiring (sq x pcs)	0.1 x 8			
User tubing (Outer diameter)	Ø4 x 2			
Movement limit setting	1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)	2, 3.5, 5, 10			
Weight (kg) (Robot cable not included) ⁴	3.9			
Robot cable weight	0.9kg (2m) 1.5kg (3.5m) 2.1kg (5m) 4.2kg (10m)			
Min. cable bending radius	R27			

- *1 This is the value at a constant ambient temperature. (X,Y axes)
- *2 When moving 25mm in vertical direction and 100mm in horizontal direction reciprocally.
- *3 There are limits to the setting of the acceleration coefficient.
- *4 The overall weight of the robot is the total of the robot itself and the robot cable.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	300	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXG150 XG SERIES - TINY TYPE

Specifications

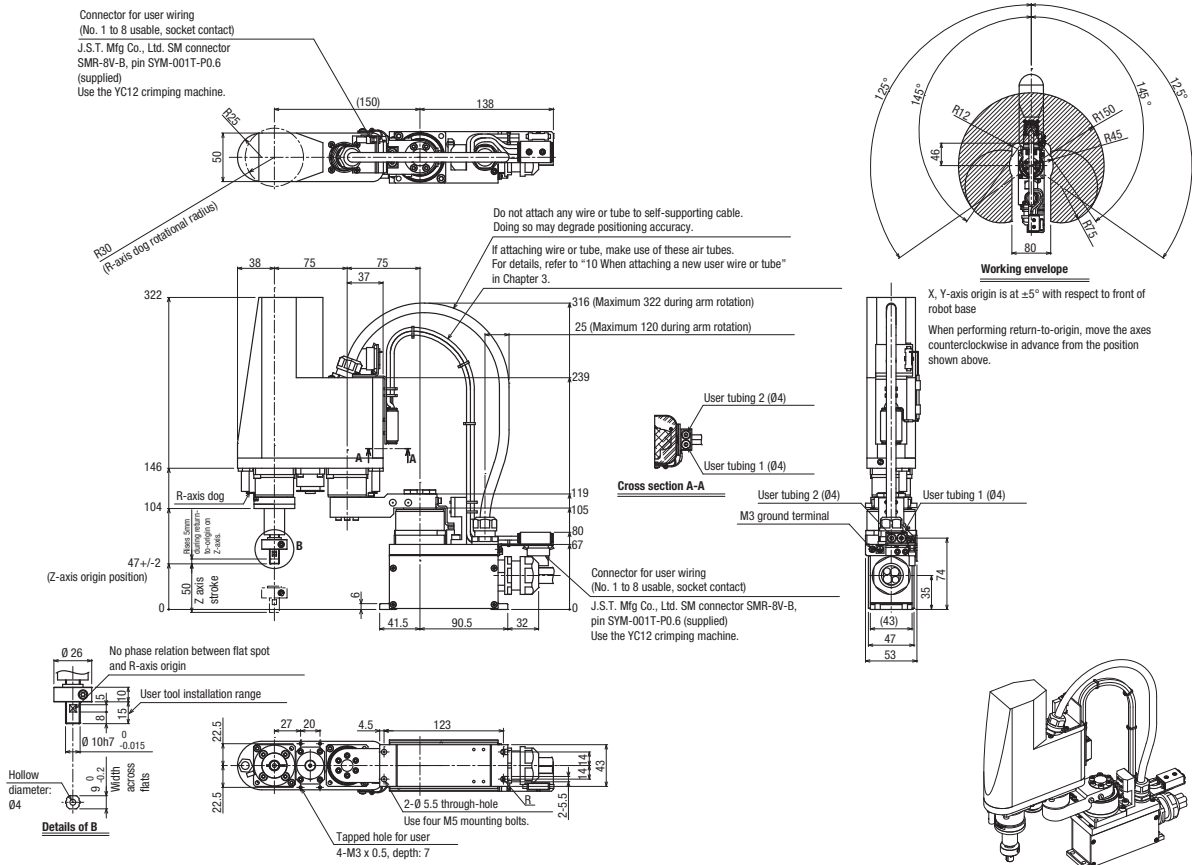
		X axis	Y axis	Z axis	R axis
Reach (mm)		150			
Maximum payload (kg)		1			
Repeatability ¹ (XYZ:mm) (R:°)		+/-0.005		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	75	75	50	----
	Rotation range (°)	+/-125	+/-145	----	+/-360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Motor to speed reducer	Direct-coupled		
		Speed reducer to output	Direct-coupled		
AC servo motor output (W)		30	30	30	30
Maximum speed (XYZ:m/sec) (R:°/sec)		3.4		0.9	1700
Standard cycle time: with 0.1kg payload ² (sec)		0.33			
R axis allowable moment inertia ³ (kgm ²)		0.01			
User wiring (sq x pcs)		0.1 x 8			
User tubing (Outer diameter)		Ø4 x 2			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		2, 3.5, 5, 10			
Weight (kg) (Robot cable not included) ⁴		4			
Robot cable weight		0.9kg (2m) 1.5kg (3.5m) 2.1kg (5m) 4.2kg (10m)			
Min. cable bending radius		R27			

- *1 This is the value at a constant ambient temperature. (X,Y axes)
- *2 When moving 25mm in vertical direction and 100mm in horizontal direction reciprocally.
- *3 There are limits to the setting of the acceleration coefficient.
- *4 The overall weight of the robot is the total of the robot itself and the robot cable.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	300	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXG180 XG SERIES - TINY TYPE

Specifications

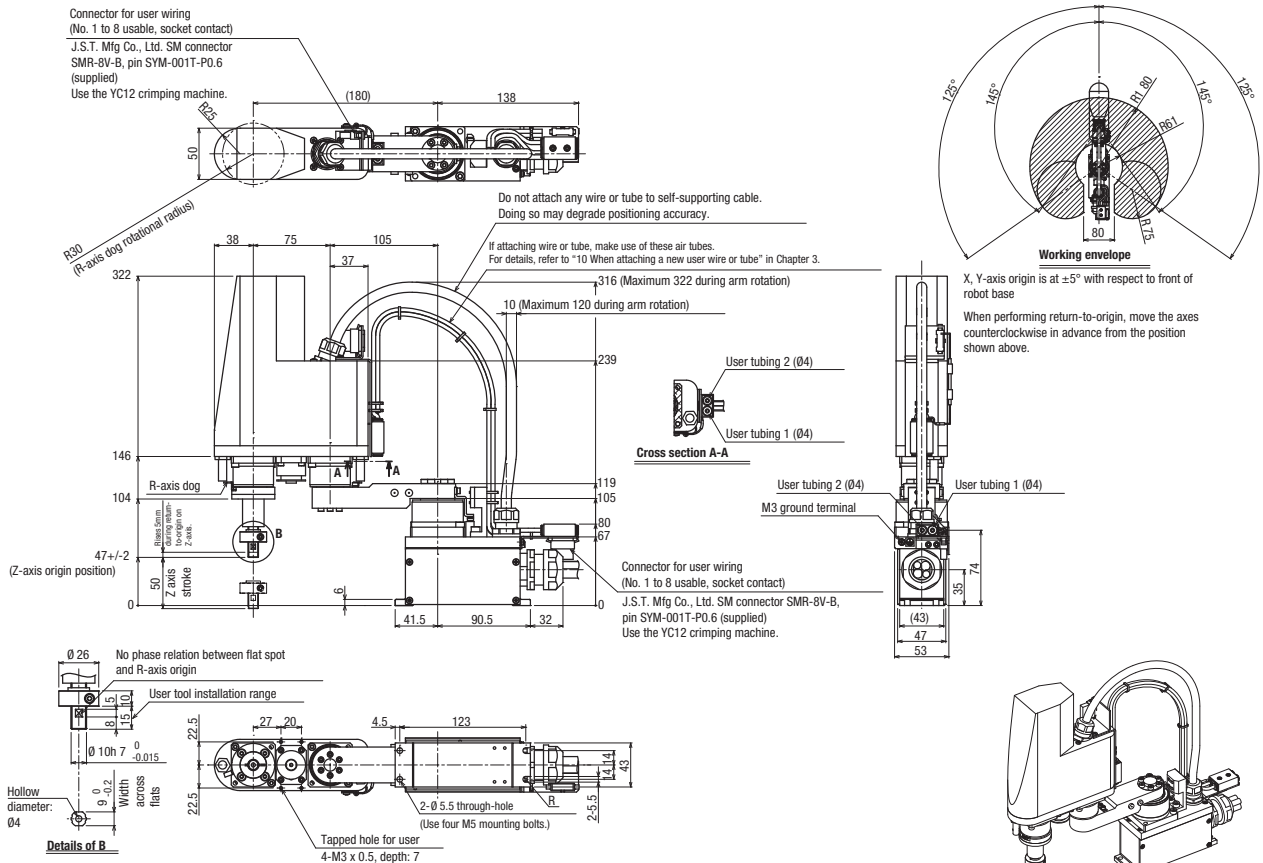
	X axis	Y axis	Z axis	R axis
Reach (mm)	180			
Maximum payload (kg)	1			
Repeatability ¹ (XYZ:mm) (R:°)	+/-0.005		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	105	75	50
	Rotation range (°)	+/-125	+/-145	----
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw
	Transmission method	Motor to speed reducer	Direct-coupled	
		Speed reducer to output	Direct-coupled	
AC servo motor output (W)	30	30	30	30
Maximum speed (XYZ:m/sec) (R:°/sec)	3.3		0.9	1700
Standard cycle time: with 0.1kg payload ² (sec)	0.33			
R axis allowable moment inertia ³ (kgm ²)	0.01			
User wiring (sq x pcs)	0.1 x 8			
User tubing (Outer diameter)	Ø4 x 2			
Movement limit setting	1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)	2, 3.5, 5, 10			
Weight (kg) (Robot cable not included) ⁴	4.1			
Robot cable weight	0.9kg (2m) 1.5kg (3.5m) 2.1kg (5m) 4.2kg (10m)			
Min. cable bending radius	R27			

- *1 This is the value at a constant ambient temperature. (X,Y axes)
- *2 When moving 25mm in vertical direction and 100mm in horizontal direction reciprocally.
- *3 There are limits to the setting of the acceleration coefficient.
- *4 The overall weight of the robot is the total of the robot itself and the robot cable.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXG220 XG SERIES - TINY TYPE

Specifications

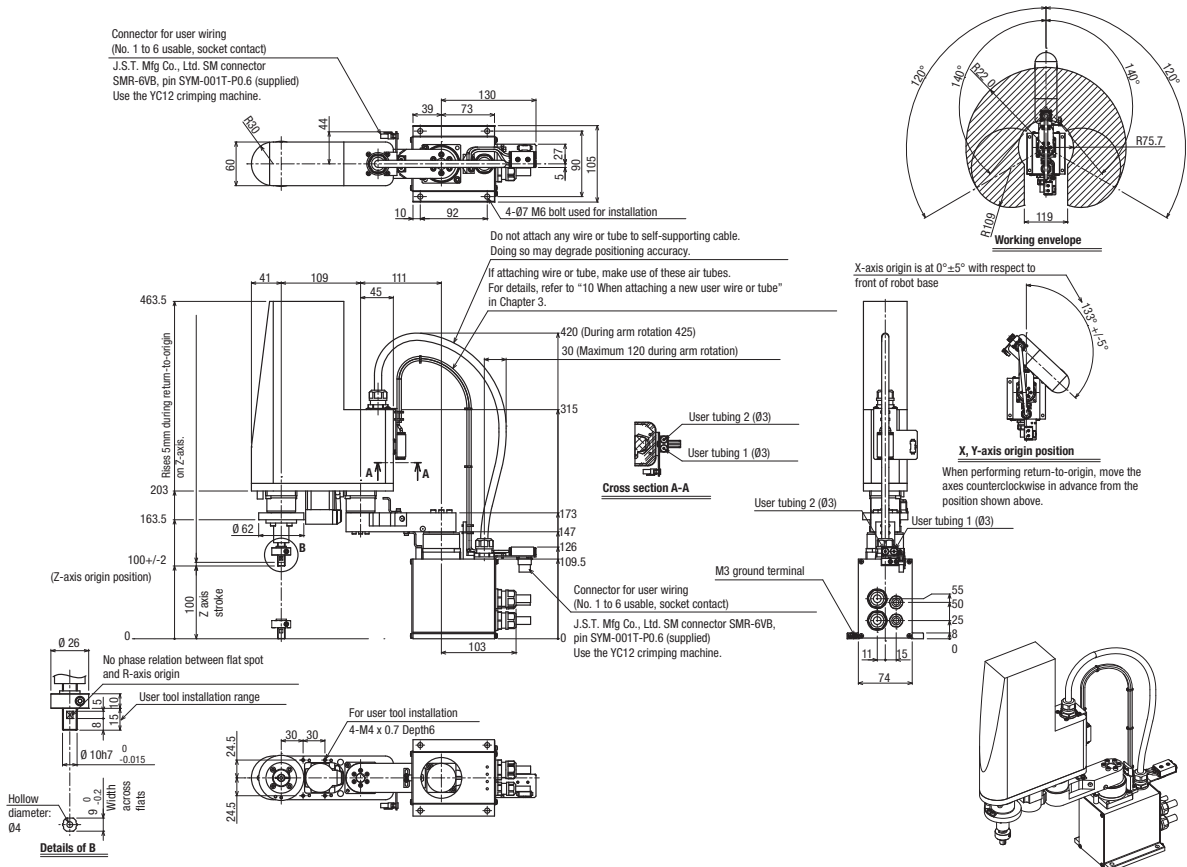
		X axis	Y axis	Z axis	R axis
Reach (mm)		220			
Maximum payload (kg)		1			
Repeatability ^{*1} (XYZ:mm) (R:°)		+/-0.01			
Axis specifications	Arm length (mm)	111	109	100	----
	Rotation range (°)	+/-120	+/-140	----	+/-360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Motor to speed reducer	Direct-coupled		
		Speed reducer to output	Direct-coupled		
AC servo motor output (W)		50	30	30	30
Maximum speed (XYZ:m/sec) (R:°/sec)		3.4		0.7	1700
Standard cycle time: with 0.1kg payload ^{*2} (sec)		0.42			
R axis allowable moment inertia ^{*3} (kgm ²)		0.01			
User wiring (sq x pcs)		0.1 x 6			
User tubing (Outer diameter)		Ø3 x 2			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Weight (kg) (Robot cable not included) ^{*4}		5.5			
Robot cable weight		1.5kg (3.5m) 2.1kg (5m) 4.2kg (10m)			
Min. cable bending radius		R27			

- *1 This is the value at a constant ambient temperature. (X,Y axes)
- *2 When moving 25mm in vertical direction and 100mm in horizontal direction reciprocally.
- *3 There are limits to the setting of the acceleration coefficient.
- *4 The overall weight of the robot is the total of the robot itself and the robot cable.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGL350 XG SERIES - SMALL TYPE

Specifications

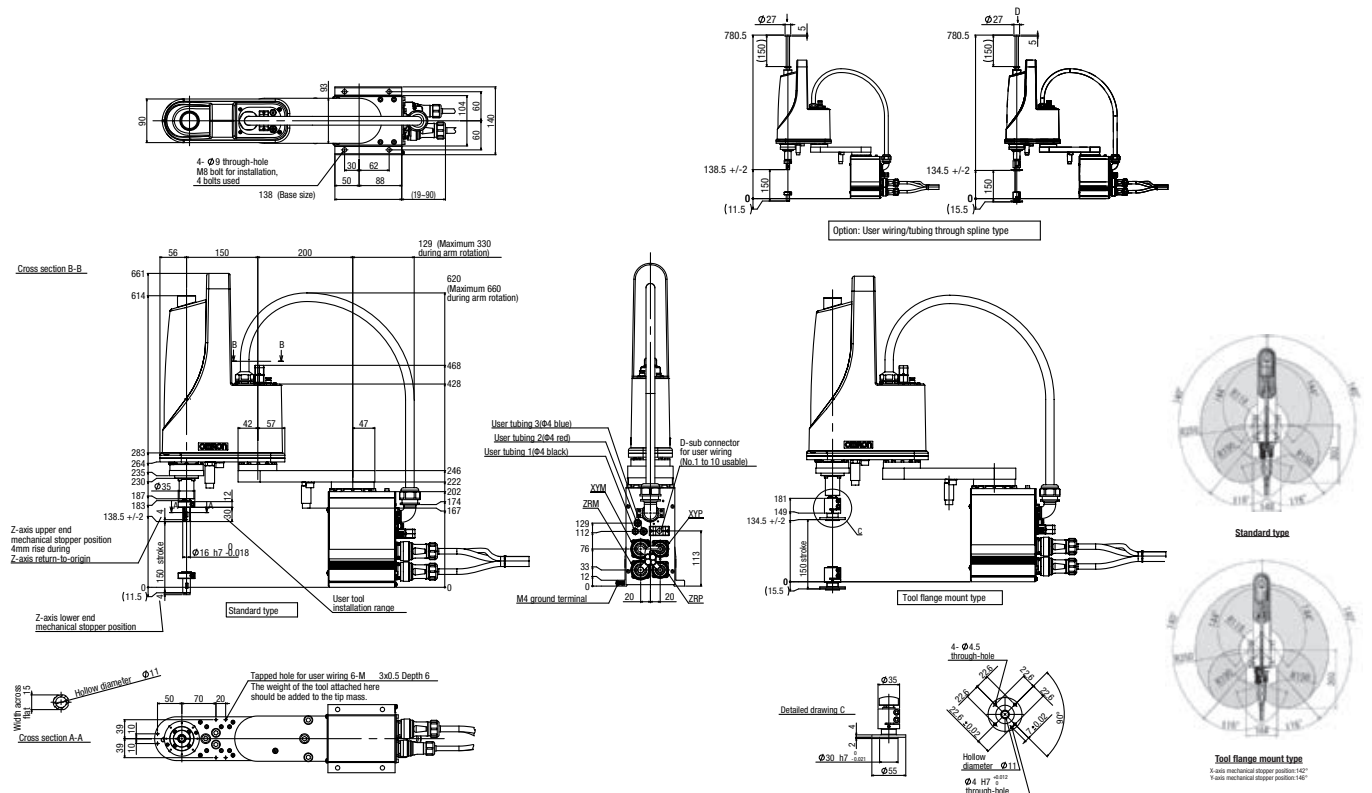
		X axis	Y axis	Z axis	R axis
Reach (mm)		350			
Maximum payload (kg)		5 (4) ^{*1}			
Repeatability ^{*2} (XYZ:mm) (R:°)		+/-0.01		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	200	150	150	----
	Rotation range (°)	+/-140	+/-144	----	+/-360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Motor to speed reducer	Direct-coupled		
		Speed reducer to output	Direct-coupled		
AC servo motor output (W)		200	150	50	100
Maximum speed (XYZ:m/sec) (R:°/sec)		5.6		1.1	1020
Standard cycle time: with 2kg payload ^{*3} (sec)		0.49			
R axis allowable moment inertia ^{*4} (kgm ²)		0.05			
User wiring (sq x pcs)		0.2 x 10			
User tubing (Outer diameter)		Ø4 x 3			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Option	Tool flange	R6YACXGLF			
	Open shaft	R6YACXGLS			
Weight (kg) (Excluding robot cable)		15			

- *1 Maximum payload is 4kg when tool flange option is installed..
- *2 This is the value at a constant ambient temperature. (X,Y axes)
- *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGL400 XG SERIES - SMALL TYPE

Specifications

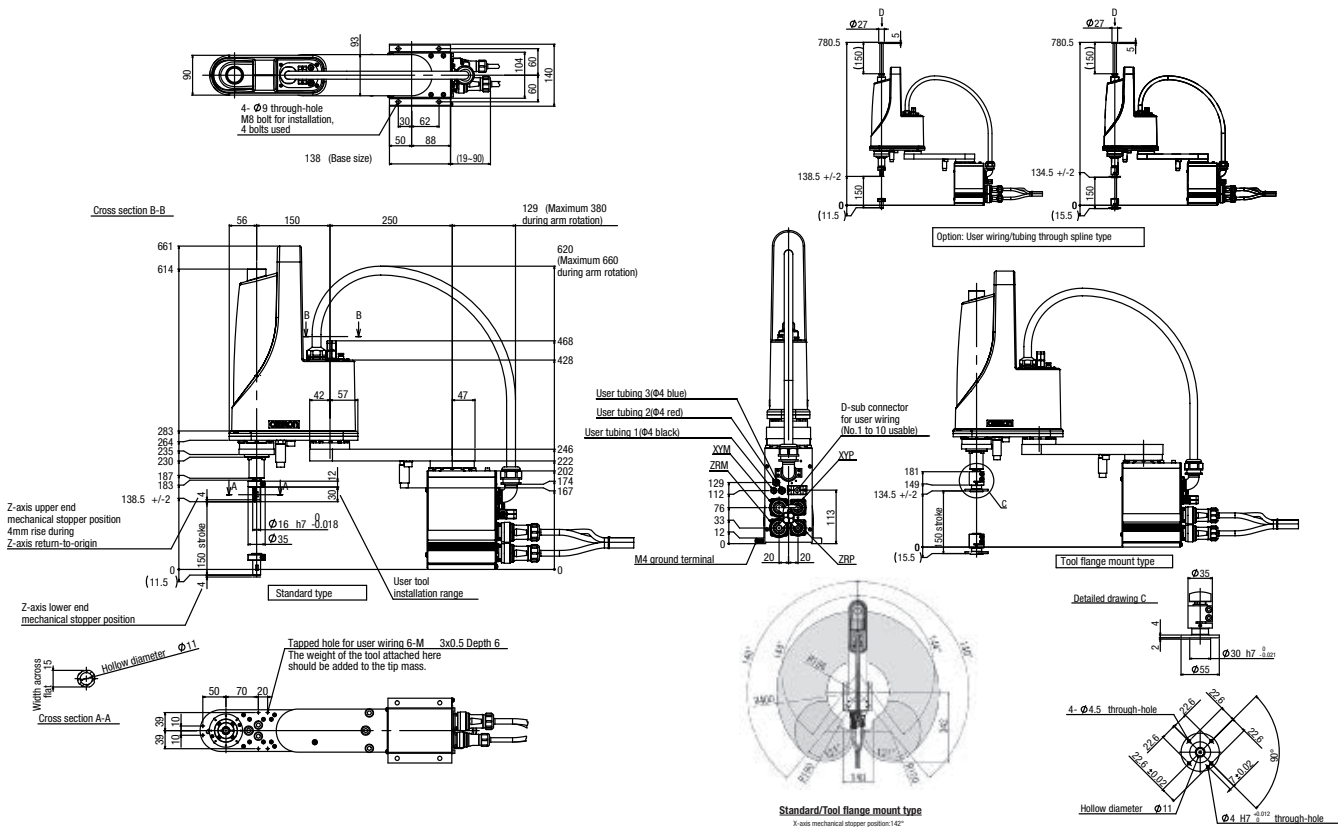
			X axis	Y axis	Z axis	R axis
Reach (mm)			400			
Maximum payload (kg)			5 (4) ¹			
Repeatability ² (XYZ:mm) (R:°)			±0.01		±0.01	±0.004
Axis specifications	Arm length (mm)		250	150	150	----
	Rotation range (°)		±140	±144	----	±360
Deceleration mechanism	Speed reducer		Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Motor to speed reducer	Direct-coupled			
		Speed reducer to output	Direct-coupled			
AC servo motor output (W)			200	150	50	100
Maximum speed (XYZ:m/sec) (R:°/sec)			6.1		1.1	1020
Standard cycle time: with 2kg payload ³ (sec)			0.49			
R axis allowable moment inertia ⁴ (kgm ²)			0.05			
User wiring (sq x pcs)			0.2 x 10			
User tubing (Outer diameter)			Ø4 x 3			
Movement limit setting			1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)			3.5, 5, 10			
Min. cable bending radius			R27			
Option	Tool flange		R6YACXGLF			
	Open shaft		R6YACXGLS			
Weight (kg) (Excluding robot cable)			15.5			

- *1 Maximum payload is 4kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X,Y axes)
- *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGL500 XG SERIES - MEDIUM TYPE

Specifications

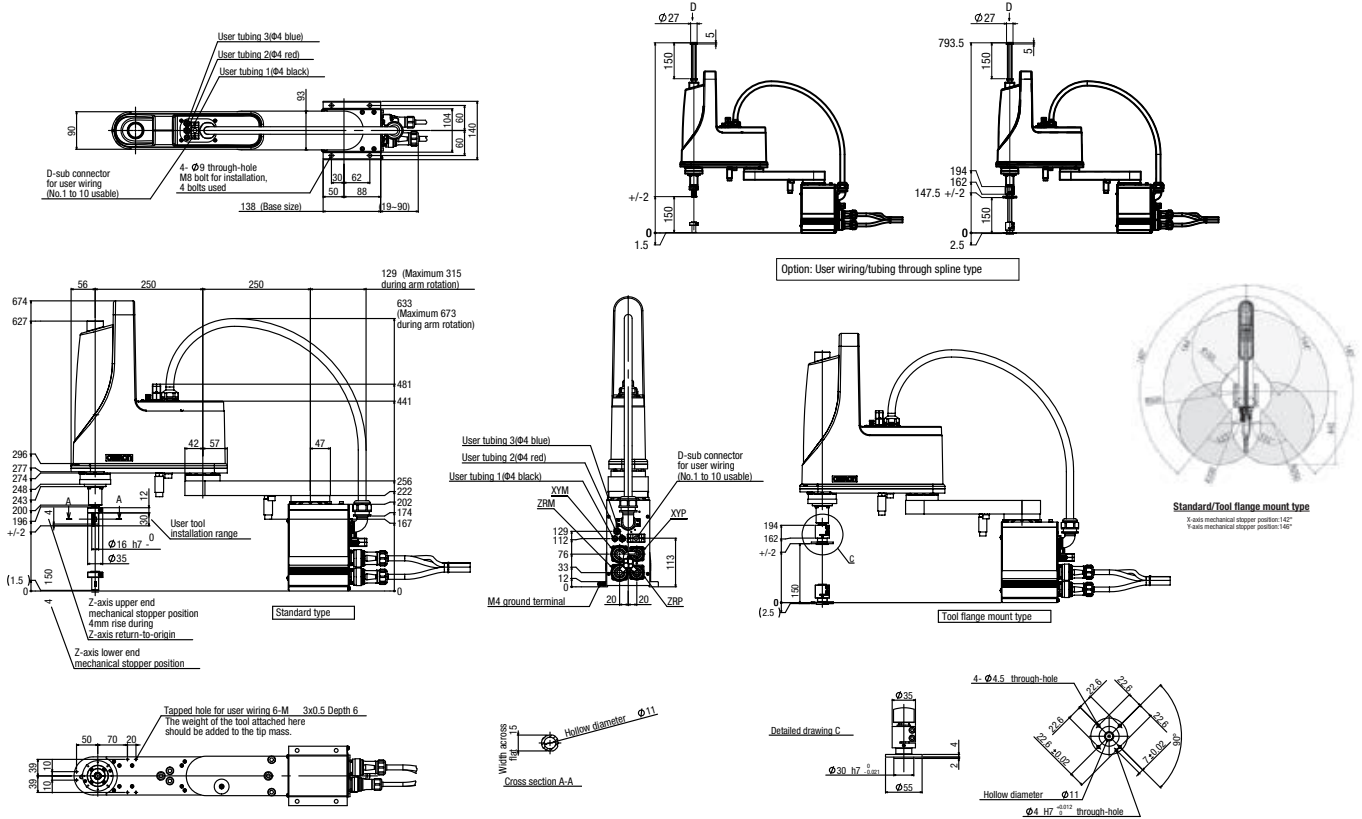
		X axis	Y axis	Z axis	R axis
Reach (mm)		500			
Maximum payload (kg)		5 (4) ^{*1}			
Repeatability ^{*2} (XYZ:mm) (R:°)		±0.01		±0.01	±0.004
Axis specifications	Arm length (mm)	250	250	150	----
	Rotation range (°)	±140	±144	----	±360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Motor to speed reducer	Direct-coupled		
		Speed reducer to output	Direct-coupled		
AC servo motor output (W)		200	150	50	100
Maximum speed (XYZ:m/sec) (R:°/sec)		5.1		1.1	1020
Standard cycle time: with 2kg payload ^{*3} (sec)		0.59			
R axis allowable moment inertia ^{*4} (kgm ²)		0.05			
User wiring (sq x pcs)		0.2 x 10			
User tubing (Outer diameter)		Ø4 x 3			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Option	Tool flange	R6YACXGLF			
	Open shaft	R6YACXGLS			
Weight (kg) (Excluding robot cable)		17			

*1 Maximum payload is 4kg when tool flange option is installed.
 *2 This is the value at a constant ambient temperature. (X, Y axes)
 *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
 *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXG500 XG SERIES - MEDIUM TYPE

Specifications

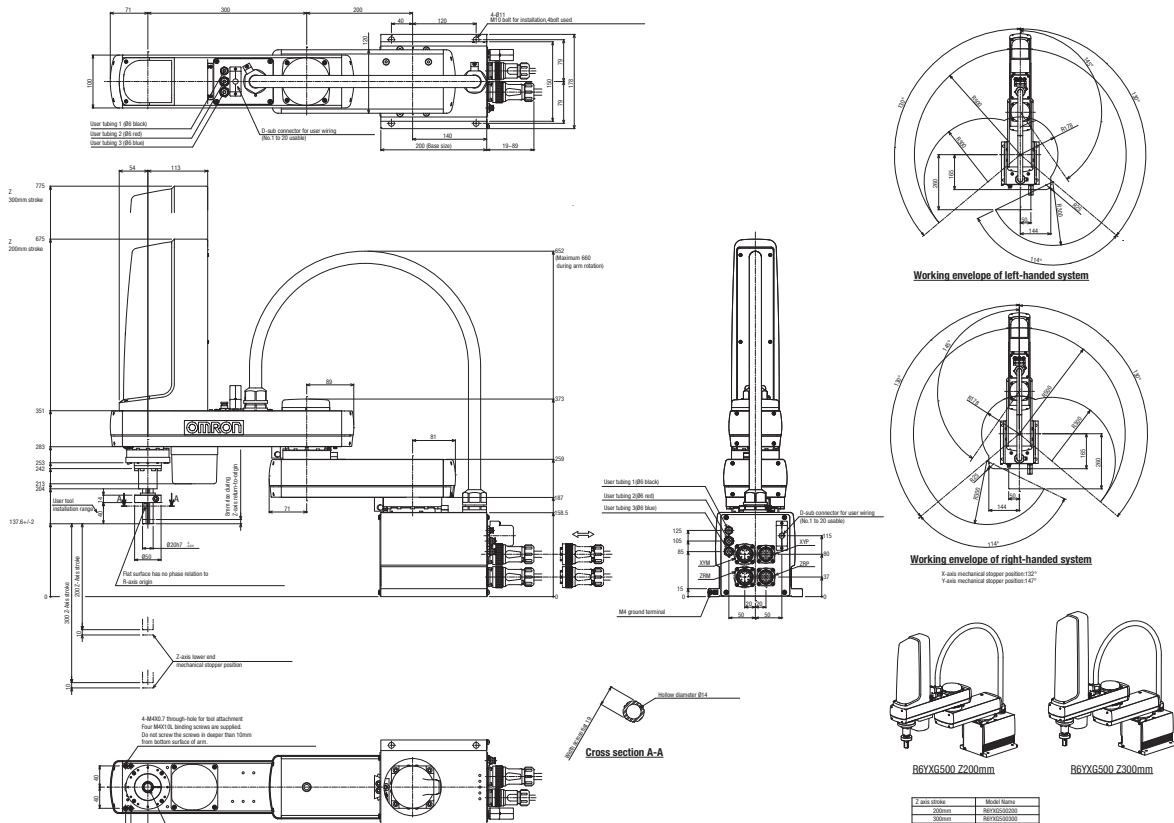
		X axis	Y axis	Z axis	R axis
Reach (mm)		500			
Maximum payload (kg)		10 (9) ^{*1}			
Repeatability ^{*2} (XYZ:mm) (R:°)		+/-0.01		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	200	300	200	300
	Rotation range (°)	+/-130	+/-145	----	+/-360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Motor to speed reducer	Direct-coupled		
		Speed reducer to output	Direct-coupled		
AC servo motor output (W)		400	200	200	200
Maximum speed (XYZ:m/sec) (R:°/sec)		7.6		2.3	1.7
Standard cycle time: with 2kg payload ^{*3} (sec)		0.45			
R axis allowable moment inertia ^{*4} (kgm ²)		0.30			
User wiring (sq x pcs)		0.2 x 20			
User tubing (Outer diameter)		Ø6 x 3			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Option	Tool flange	R6YACXGLF			
Weight (kg) (Excluding robot cable)		30			

- *1 Maximum payload is 9kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X,Y axes)
- *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGL600 XG SERIES - MEDIUM TYPE

Specifications

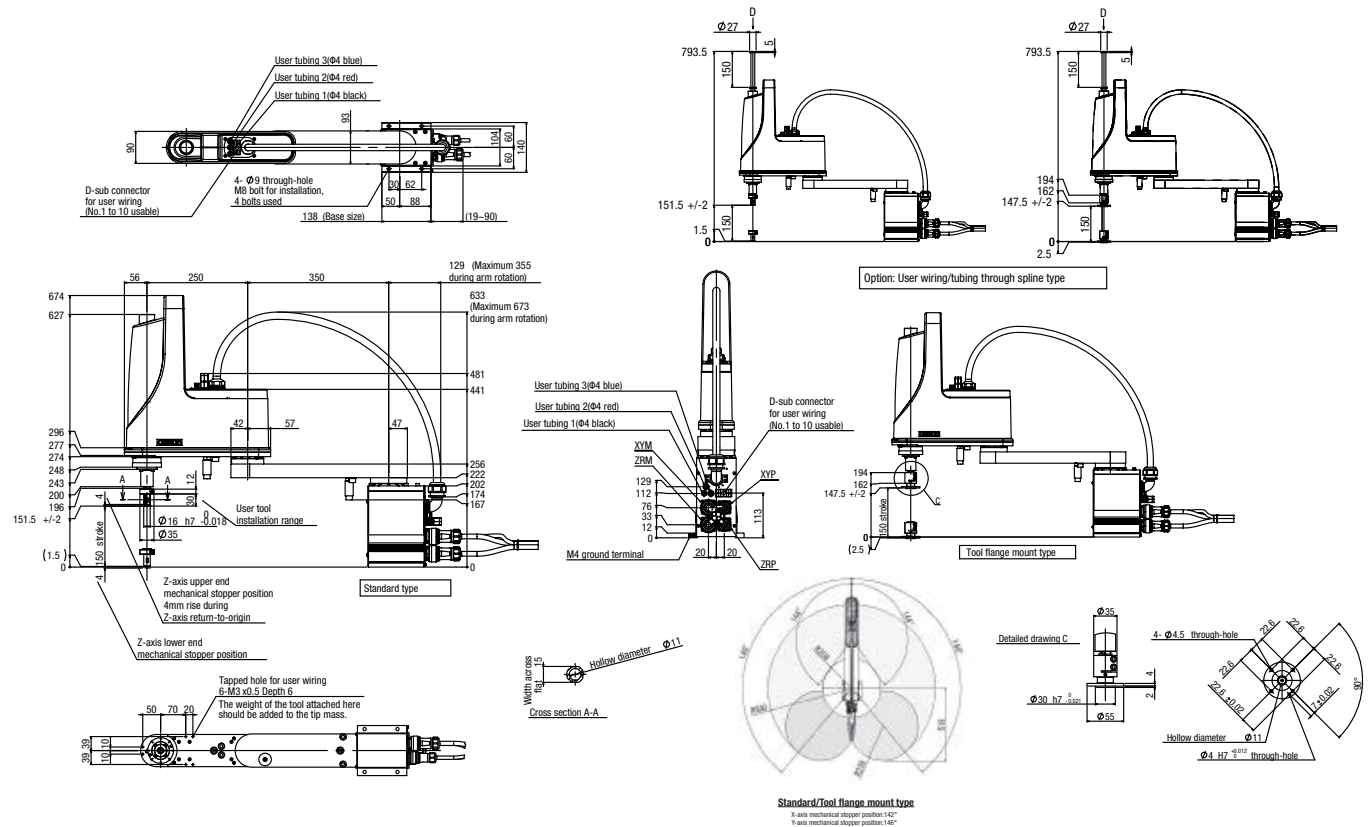
		X axis	Y axis	Z axis	R axis
Reach (mm)		600			
Maximum payload (kg)		5 (4) ^{*1}			
Repeatability ^{*2} (XYZ:mm) (R:°)		+/-0.01			
Axis specifications	Arm length (mm)	350	250	150	----
	Rotation range (°)	+/-140	+/-144	----	+/-360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Motor to speed reducer	Direct-coupled		
		Speed reducer to output	Direct-coupled		
AC servo motor output (W)		200	150	50	100
Maximum speed (XYZ:m/sec) (R:°/sec)		4.9			
Standard cycle time: with 2kg payload ^{*3} (sec)		0.63			
R axis allowable moment inertia ^{*4} (kgm ²)		0.05			
User wiring (sq x pcs)		0.2 x 10			
User tubing (Outer diameter)		Ø4 x 3			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Option	Tool flange	R6YACXGLF			
	Open shaft	R6YACXGLS			
Weight (kg) (Excluding robot cable)		18			

- *1 Maximum payload is 4kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X, Y, Z axes)
- *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXG600 XG SERIES - MEDIUM TYPE

Specifications

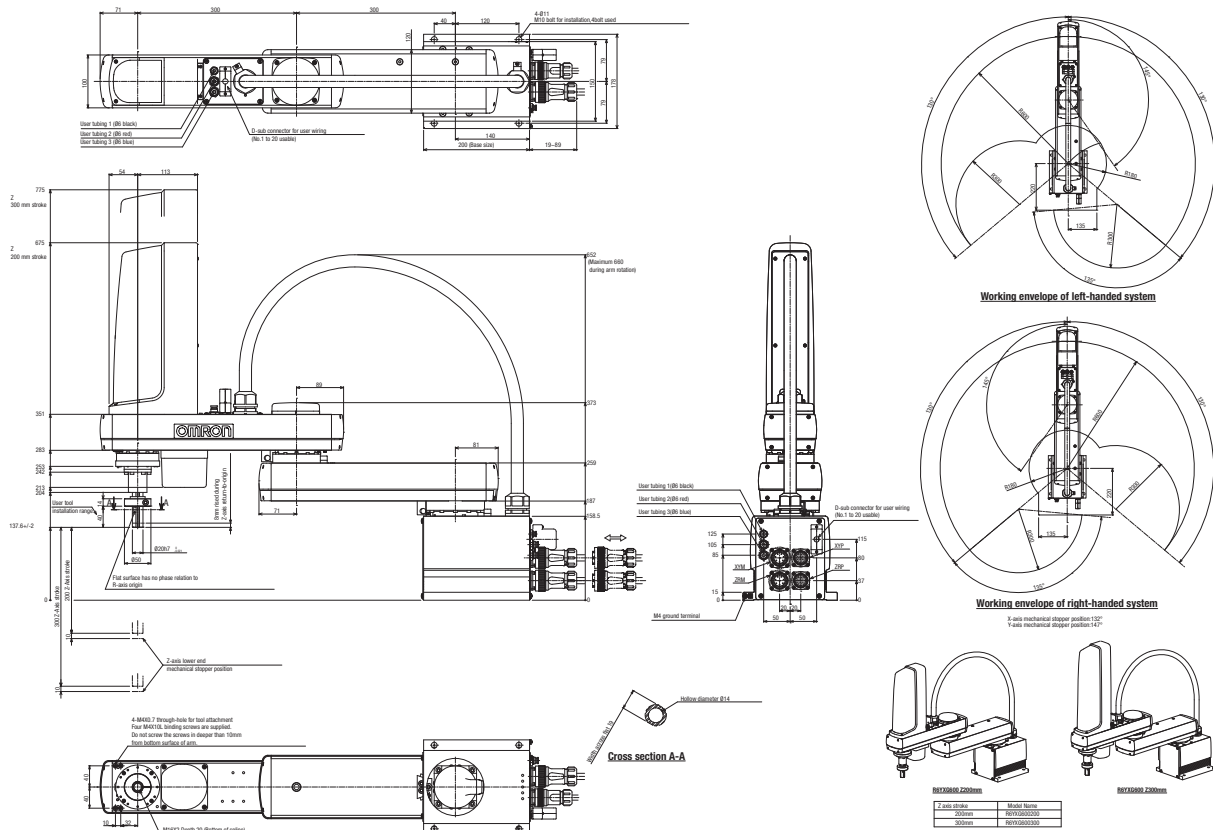
			X axis	Y axis	Z axis	R axis
Reach (mm)			600			
Maximum payload (kg)			10 (9) ^{*1}			
Repeatability ^{*2} (XYZ:mm) (R:°)			+/-0.01		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	300	300	200	300	----
	Rotation range (°)	+/-130	+/-145	----	----	+/-360
Deceleration mechanism	Speed reducer	Harmonic drive		Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Motor to speed reducer	Direct-coupled			
		Speed reducer to output	Direct-coupled			
AC servo motor output (W)			400	200	200	200
Maximum speed (XYZ:m/sec) (R:°/sec)			8.4		2.3	1.7
Standard cycle time: with 2kg payload ^{*3} (sec)			0.46			
R axis allowable moment inertia ^{*4} (kgm ²)			0.30			
User wiring (sq x pcs)			0.2 x 20			
User tubing (Outer diameter)			Ø6 x 3			
Movement limit setting			1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)			3.5, 5, 10			
Min. cable bending radius			R27			
Option	Tool flange		R6YACXGLF			
Weight (kg) (Excluding robot cable)			31			

- *1 Maximum payload is 9kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X,Y axes)
- *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1700	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGH600 XG SERIES - MEDIUM TYPE

Specifications

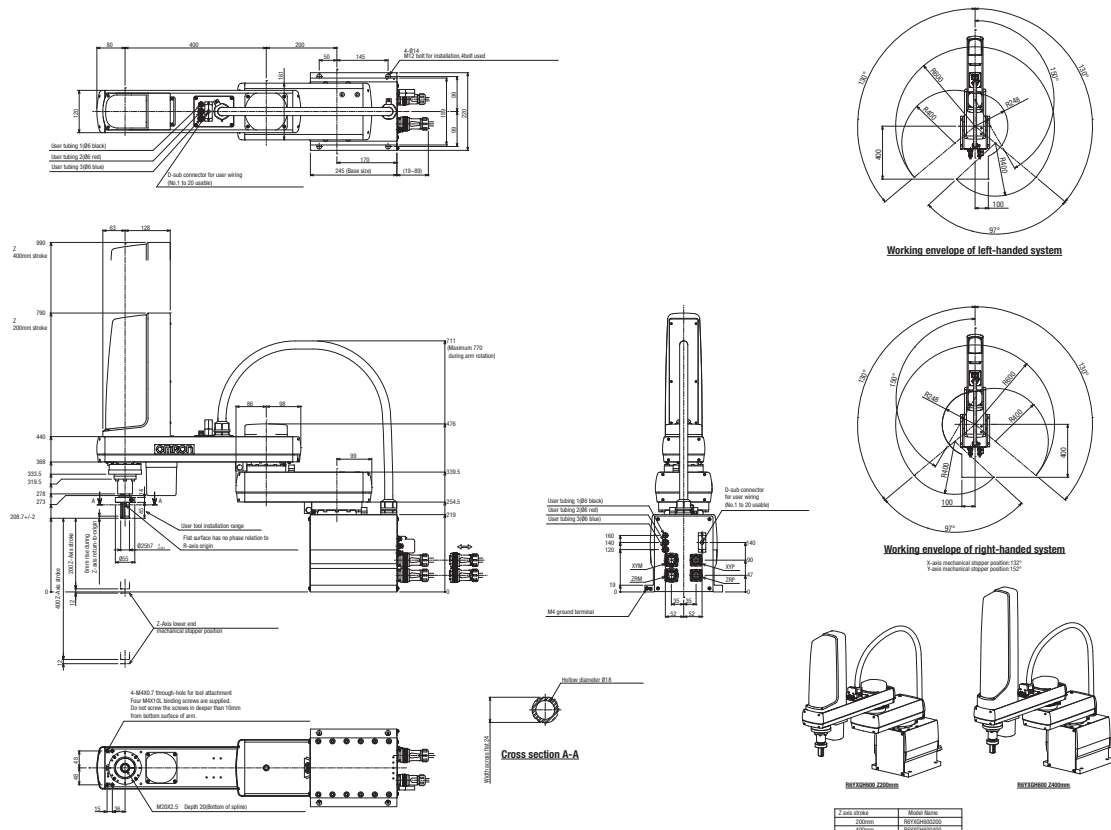
		X axis	Y axis	Z axis	R axis
Reach (mm)		600			
Maximum payload (kg)		20 (19) ^{*1}			
Repeatability^{*2} (XYZ:mm) (R:°)		+/-0.02		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	200	400	200	400
	Rotation range (°)	+/-130	+/-150	----	+/-360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Motor to speed reducer	Direct-coupled		
		Speed reducer to output	Direct-coupled		
AC servo motor output (W)		750	400	400	200
Maximum speed (XYZ:m/sec) (R:°/sec)		7.7		2.3	1.7
Standard cycle time: with 2kg payload^{*3} (sec)		0.47			
R axis allowable moment inertia^{*4} (kgm²)		1			
User wiring (sq x pcs)		0.2 x 20			
User tubing (Outer diameter)		Ø6 x 3			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Option	Tool flange	R6YACXGLF			
Weight (kg) (Excluding robot cable)		Z axis 200mm: 48, Z axis 400mm: 50			

- *1 Maximum payload is 19kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X,Y axes)
- *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	2500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGL700 XG SERIES - LARGE TYPE

Specifications

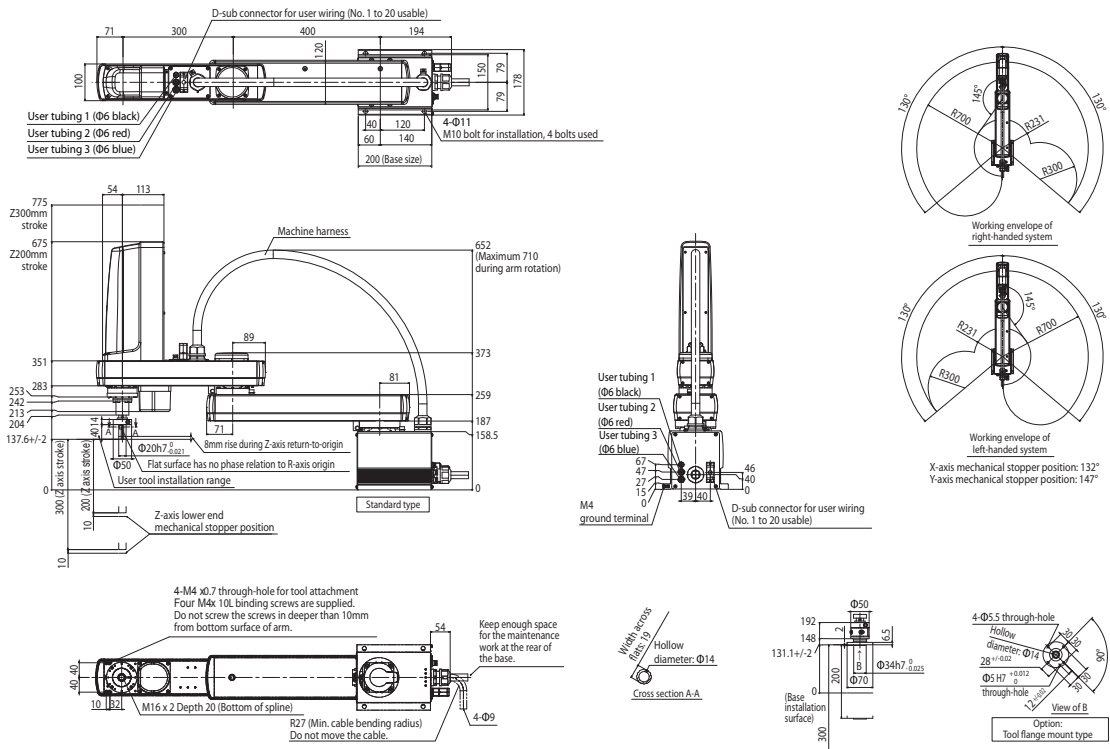
		X axis	Y axis	Z axis	R axis
Reach (mm)		700			
Maximum payload (kg)		10 (9) ^{*1}			
Repeatability ^{*2} (XYZ:mm) (R:°)		+/-0.01		+/-0.01	+/-0.005
Axis specifications	Arm length (mm)	400	300	200	300
	Rotation range (°)	+/-130	+/-145	----	+/-360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Motor to speed reducer	Direct-coupled		
		Speed reducer to output	Direct-coupled		
AC servo motor output (W)		400	200	200	200
Maximum speed (XYZ:m/sec) (R:°/sec)		9.2		2.3	1.7
Standard cycle time: with 2kg payload ^{*3} (sec)		0.50			
R axis allowable moment inertia ^{*4} (kgm ²)		0.30			
User wiring (sq x pcs)		0.2 x 20			
User tubing (Outer diameter)		Ø6 x 3			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Option	Tool flange	R6YACXGLF			
Weight (kg)		32			

- *1 Maximum payload is 9kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X,Y axes)
- *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1700	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXG700 XG SERIES - LARGE TYPE

Specifications

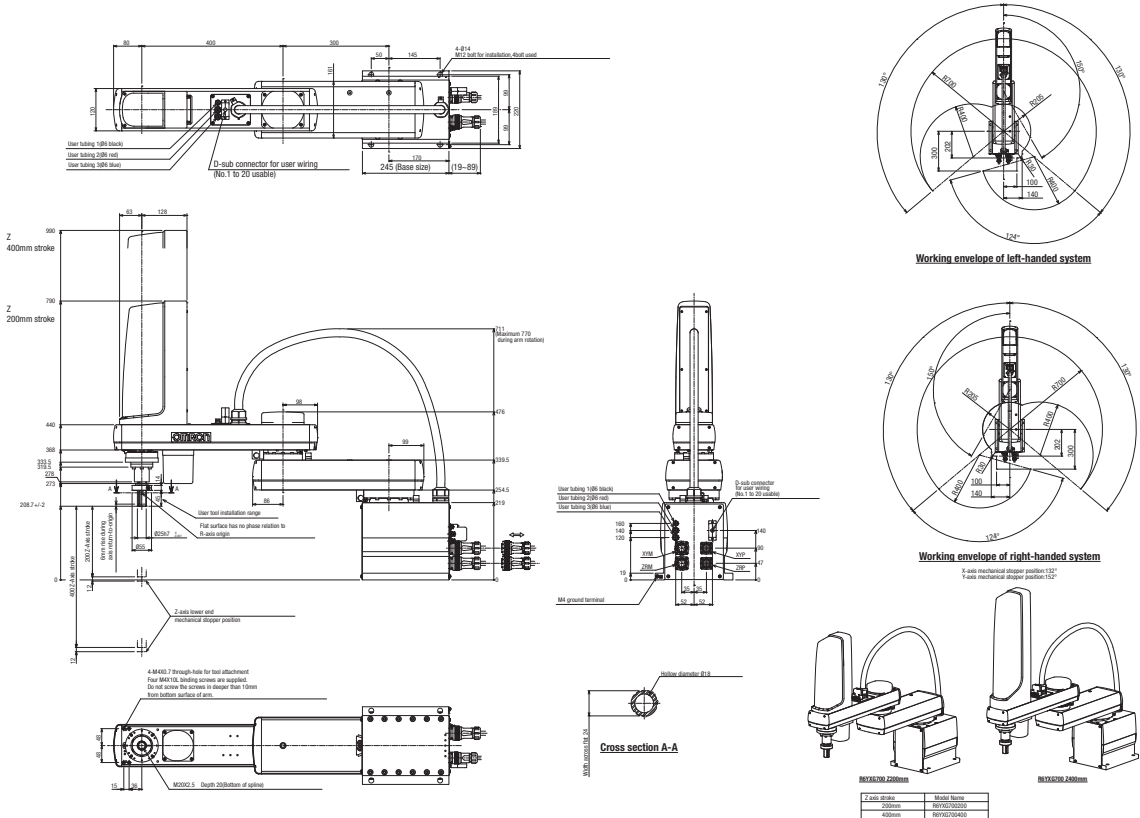
		X axis	Y axis	Z axis	R axis
Reach (mm)		700			
Maximum payload (kg)		20 (19) ¹			
Repeatability ² (XYZ:mm) (R:°)		+/-0.02		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	300	400	200	400
	Rotation range (°)	+/-130	+/-150	----	+/-360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Motor to speed reducer	Direct-coupled		
		Speed reducer to output	Direct-coupled		
AC servo motor output (W)		750	400	400	200
Maximum speed (XYZ:m/sec) (R:°/sec)		8.4		2.3	1.7
Standard cycle time: with 2kg payload ³ (sec)		0.42			
R axis allowable moment inertia ⁴ (kgm ²)		1			
User wiring (sq x pcs)		0.2 x 20			
User tubing (Outer diameter)		Ø6 x 3			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Option	Tool flange	R6YACXGLF			
Weight (kg) (Excluding robot cable)		Z axis 200mm: 50, Z axis 400mm: 52			

- *1 Maximum payload is 19kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X,Y axes)
- *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	2500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXG800 XG SERIES - LARGE TYPE

Specifications

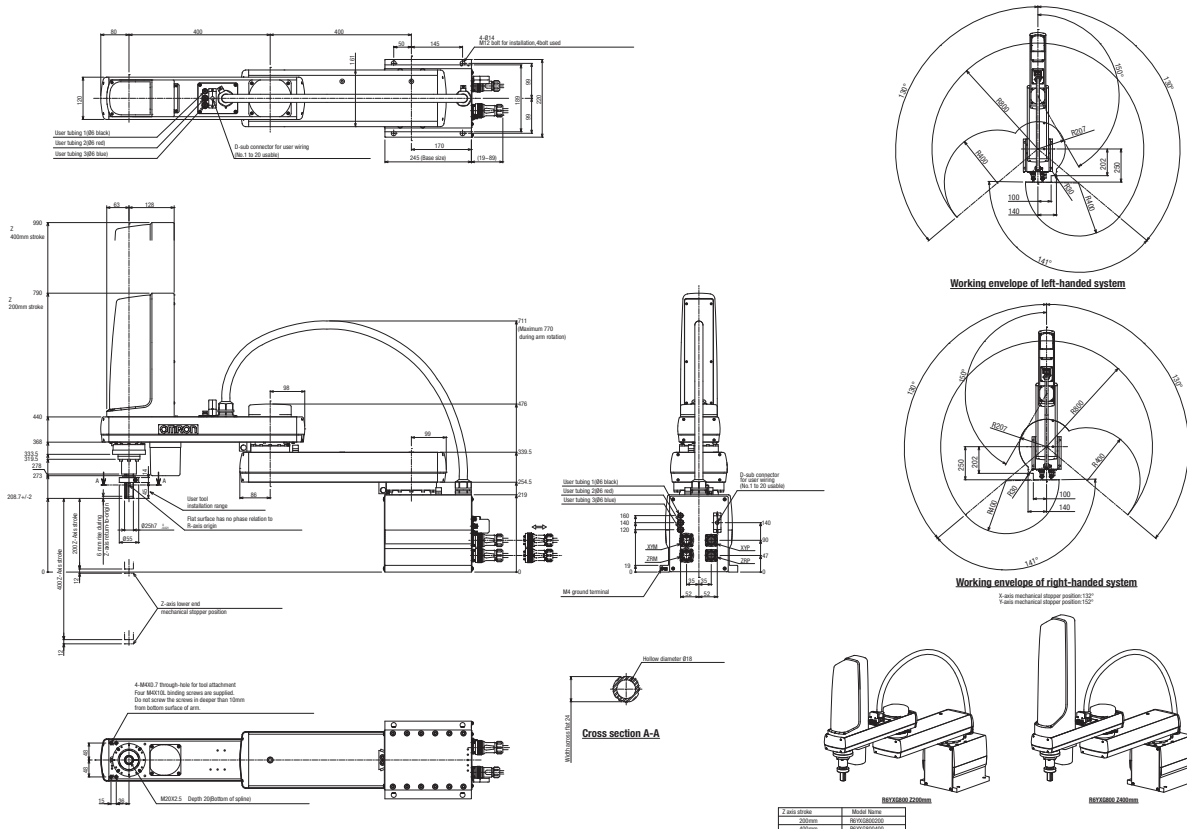
		X axis	Y axis	Z axis	R axis
Reach (mm)		800			
Maximum payload (kg)		20 (19) ¹			
Repeatability ² (XYZ:mm) (R:°)		+/-0.02		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	400	400	200	400
	Rotation range (°)	+/-130	+/-150	----	+/-360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Motor to speed reducer	Direct-coupled		
		Speed reducer to output	Direct-coupled		
AC servo motor output (W)		750	400	400	200
Maximum speed (XYZ:m/sec) (R:°/sec)		9.2		2.3	1.7
Standard cycle time: with 2kg payload ³ (sec)		0.48			
R axis allowable moment inertia ⁴ (kgm ²)		1			
User wiring (sq x pcs)		0.2 x 20			
User tubing (Outer diameter)		Ø6 x 3			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Option	Tool flange	R6YACXGLF			
Weight (kg) (Excluding robot cable)		Z axis 200mm: 52, Z axis 400mm: 54			

- *1 Maximum payload is 19kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X,Y axes)
- *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	2500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXG900 XG SERIES - LARGE TYPE

Specifications

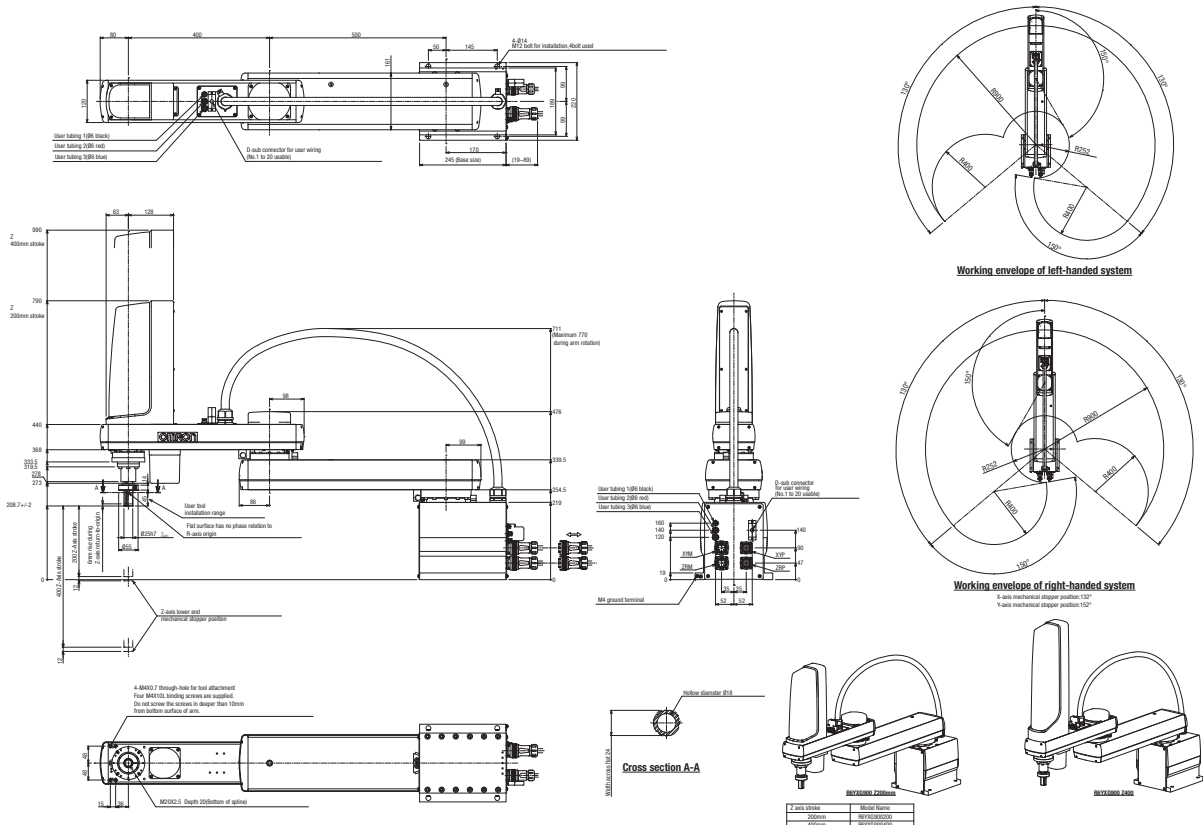
		X axis	Y axis	Z axis	R axis
Reach (mm)		900			
Maximum payload (kg)		20 (19) ¹			
Repeatability ² (XYZ:mm) (R:°)		+/-0.02		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	500	400	200	400
	Rotation range (°)	+/-130	+/-150	----	+/-360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Motor to speed reducer	Direct-coupled		
		Speed reducer to output	Direct-coupled		
AC servo motor output (W)		750	400	400	200
Maximum speed (XYZ:m/sec) (R:°/sec)		9.9		2.3	1.7
Standard cycle time: with 2kg payload ³ (sec)		0.49			
R axis allowable moment inertia ⁴ (kgm ²)		1			
User wiring (sq x pcs)		0.2 x 20			
User tubing (Outer diameter)		Ø6 x 3			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Option		R6YACXGLF			
Weight (kg) (Excluding robot cable)		Z axis 200mm: 54, Z axis 400mm: 56			

- *1 Maximum payload is 19kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X, Y axes)
- *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	2500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXG1000 XG SERIES - LARGE TYPE

Specifications

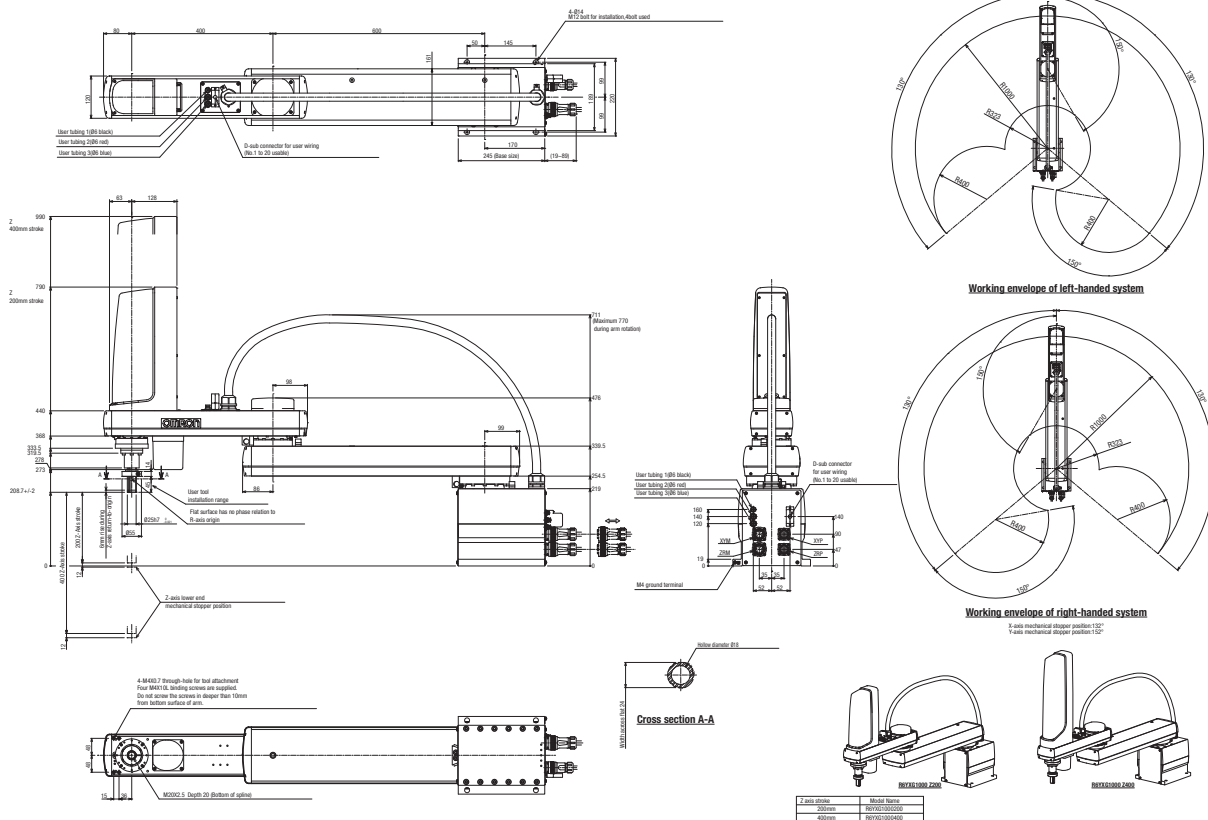
		X axis	Y axis	Z axis	R axis
Reach (mm)		1000			
Maximum payload (kg)		20 (19) ¹			
Repeatability ² (XYZ:mm) (R:°)		+/-0.02		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	600	400	200	400
	Rotation range (°)	+/-130	+/-150	----	+/-360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Motor to speed reducer	Direct-coupled		
		Speed reducer to output	Direct-coupled		
AC servo motor output (W)		750	400	400	200
Maximum speed (XYZ:m/sec) (R:°/sec)		10.6		2.3	1.7
Standard cycle time: with 2kg payload ³ (sec)		0.49			
R axis allowable moment inertia ⁴ (kgm ²)		1			
User wiring (sq x pcs)		0.2 x 20			
User tubing (Outer diameter)		Ø6 x 3			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Option	Tool flange	R6YACXGLF			
Weight (kg) (Excluding robot cable)		Z axis 200mm: 56, Z axis 400mm: 58			

- *1 Maximum payload is 19kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X,Y axes)
- *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *4 There are limits to the setting of the acceleration coefficient

Controller

Controller	Power consumption (VA)	Operating method
YRCX	2500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGS(W/U)300 XG SERIES - WALL MOUNT/WALL MOUNT INVERSE TYPE

Specifications

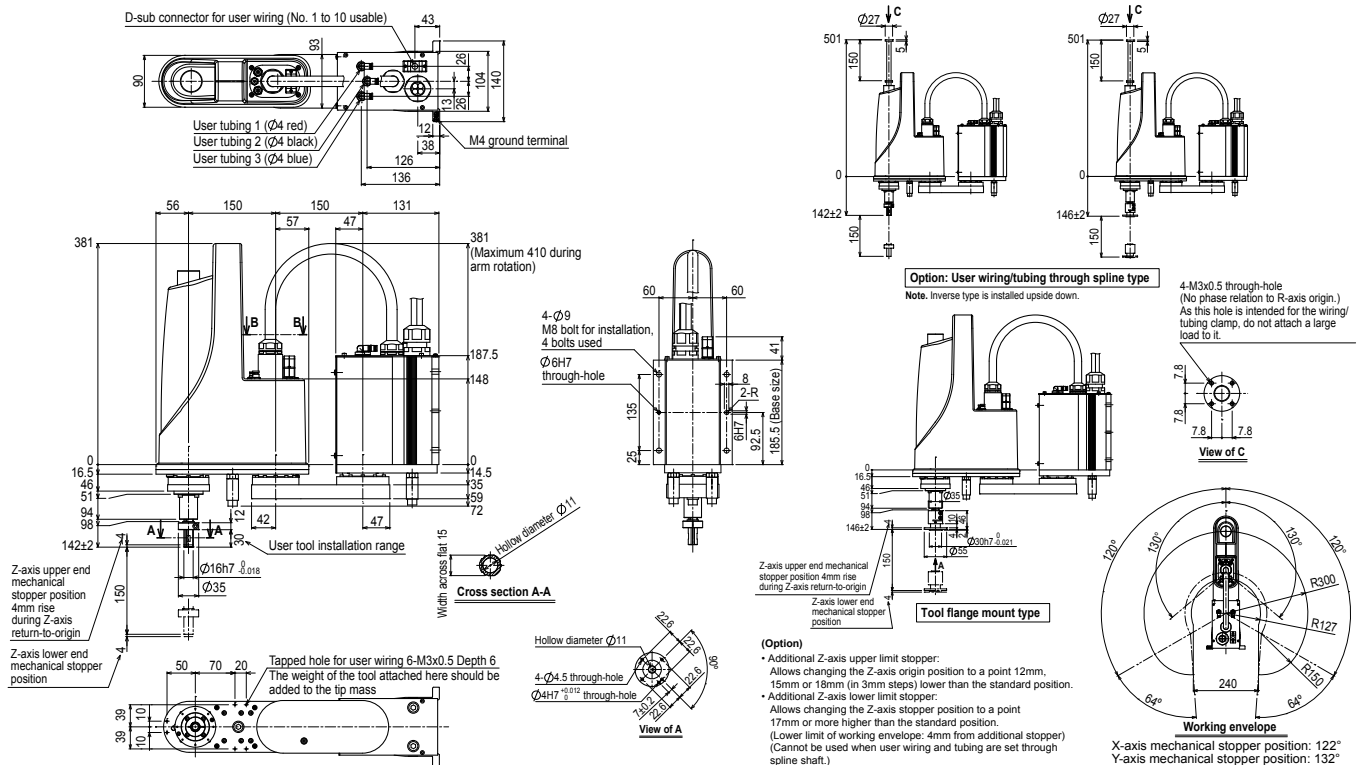
		X axis	Y axis	Z axis	R axis	
				W type		U type
Reach (mm)		300				
Maximum payload (kg)		5 (4) ¹				
Repeatability ² (XYZ:mm) (R:°)		+/-0.01		+/-0.01	+/-0.004	
Axis specifications	Arm length (mm)	150	150	150	----	
	Rotation range (°)	+/-120	+/-130	----	+/-360	
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive	
	Transmission method	Direct-coupled				
	Motor to speed reducer	Direct-coupled				
	Speed reducer to output	Direct-coupled				
AC servo motor output (W)		200	150	50	100	
Maximum speed (XYZ:m/sec) (R:°/sec)		4.4		1.0	1020	720
Standard cycle time: with 2kg payload ³ (sec)		0.49				
R axis allowable moment inertia ⁴ (kgm ²)		0.05				
User wiring (sq x pcs)		0.2 x 10				
User tubing (Outer diameter)		Ø4 x 3				
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)				
Robot cable length (m)		3.5, 5, 10				
Min. cable bending radius		R27				
Option	Tool flange	R6YACXGLF				
	Open shaft	R6YACXGLS				
Weight (kg) (Excluding robot cable)		15.5				

- *1 Maximum payload is 4kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X,Y axes)
- *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGS(W/U)400 XG SERIES - WALL MOUNT/WALL MOUNT INVERSE TYPE

Specifications

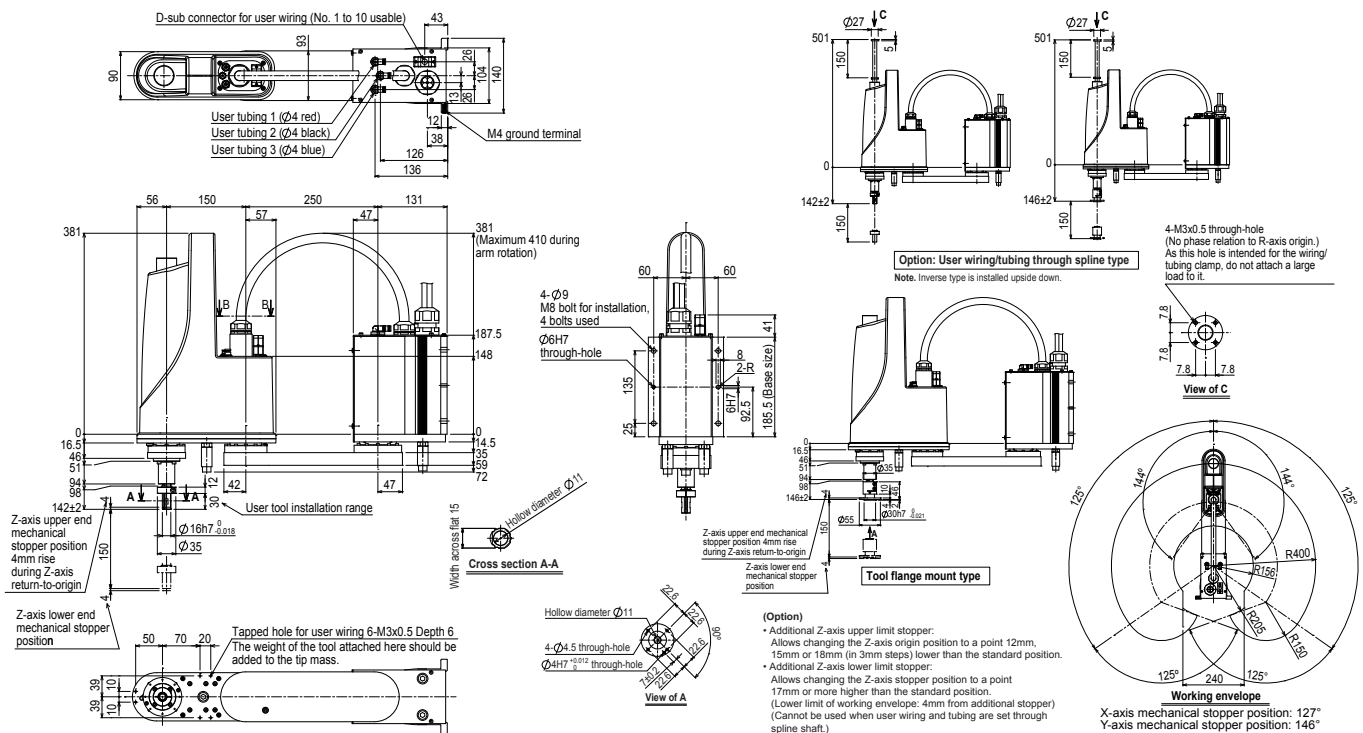
			X axis	Y axis	Z axis	R axis		
						W type	U type	
Reach (mm)			400					
Maximum payload (kg)			5 (4) ¹					
Repeatability ² (XYZ:mm) (R:°)			+/-0.01		+/-0.01	+/-0.004		
Axis specifications	Arm length (mm)	250		150	150	----		
	Rotation range (°)	+/-125		+/-144		+/-360		
Deceleration mechanism	Speed reducer	Harmonic drive		Harmonic drive	Ball screw	Harmonic drive		
	Transmission method	Motor to speed reducer	Direct-coupled					
		Speed reducer to output	Direct-coupled					
AC servo motor output (W)			200	150	50	100		
Maximum speed (XYZ:m/sec) (R:°/sec)			6.1		1.1	1020	720	
Standard cycle time: with 2kg payload ³ (sec)			0.49					
R axis allowable moment inertia ⁴ (kgm ²)			0.05					
User wiring (sq x pcs)			0.2 x 10					
User tubing (Outer diameter)			Ø4 x 3					
Movement limit setting			1.Soft limit 2.Mechanical stopper (X, Y, Z axis)					
Robot cable length (m)			3.5, 5, 10					
Min. cable bending radius			R27					
Option	Tool flange	R6YACXGLF						
	Open shaft	R6YACXGLS						
Weight (kg) (Excluding robot cable)			16					

- *1 Maximum payload is 4kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X,Y axes)
- *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGS(W/U)500 XG SERIES - WALL MOUNT/WALL MOUNT INVERSE TYPE

Specifications

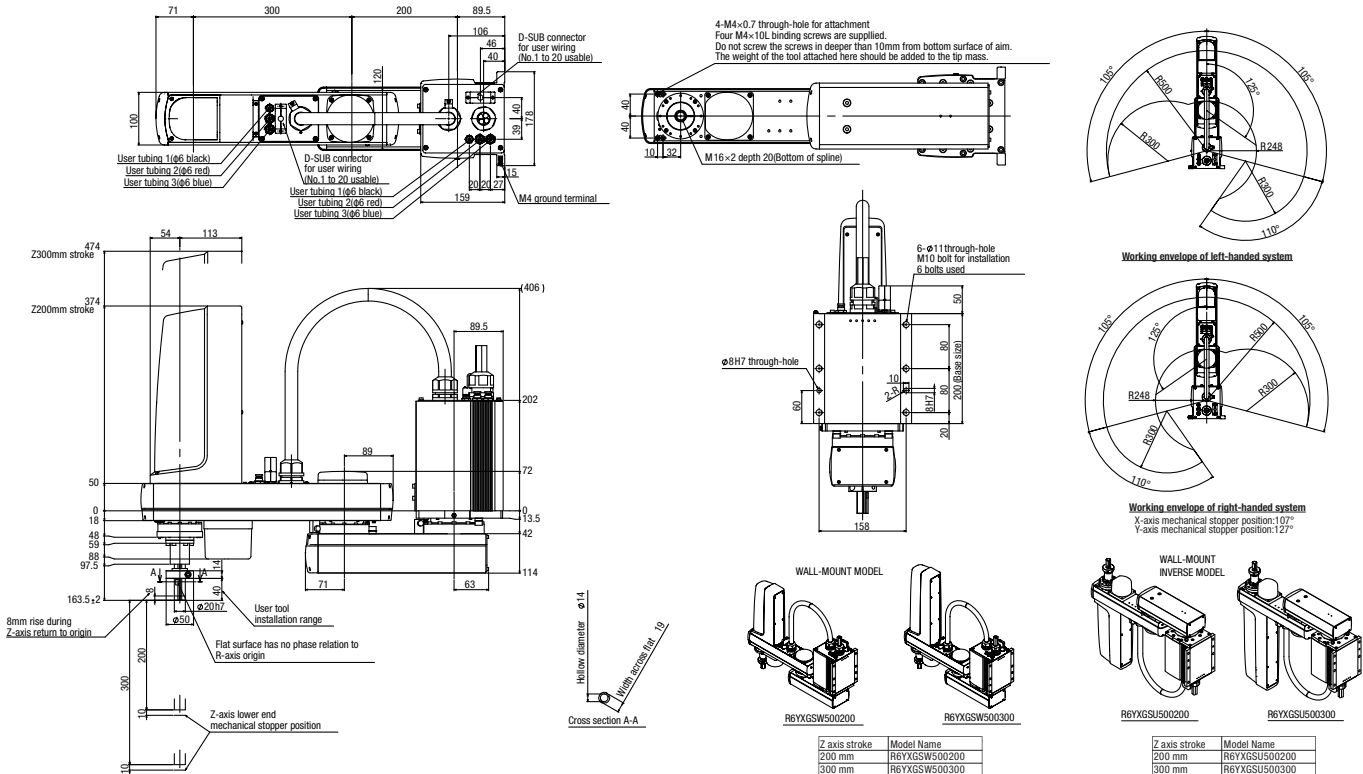
		X axis	Y axis	Z axis	R axis	
				W type		U type
Reach (mm)		500				
Maximum payload (kg)		10 (9) ¹				
Repeatability² (XYZ:mm) (R:°)		+/-0.01		+/-0.01		+/-0.004
Axis specifications	Arm length (mm)	200	300	200	300	----
	Rotation range (°)	+/-105		+/-125		+/-360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw		Harmonic drive
	Transmission method	Motor to speed reducer Direct-coupled				
		Speed reducer to output Direct-coupled				
AC servo motor output (W)		400	200	200	200	
Maximum speed (XYZ:m/sec) (R:°/sec)		7.6		2.3		1.7
Standard cycle time: with 2kg payload³ (sec)		0.45				
R axis allowable moment inertia⁴ (kgm²)		0.3				
User wiring (sq x pcs)		0.2 x 20				
User tubing (Outer diameter)		Ø6 x 3				
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)				
Robot cable length (m)		3.5, 5, 10				
Min. cable bending radius		R27				
Option	Tool flange	R6YACXGLF				
Weight (kg) (Excluding robot cable)		26				

- *1 Maximum payload is 9kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X,Y axes)
- *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1700	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGS(W/U)600 XG SERIES - WALL MOUNT/WALL MOUNT INVERSE TYPE

Specifications

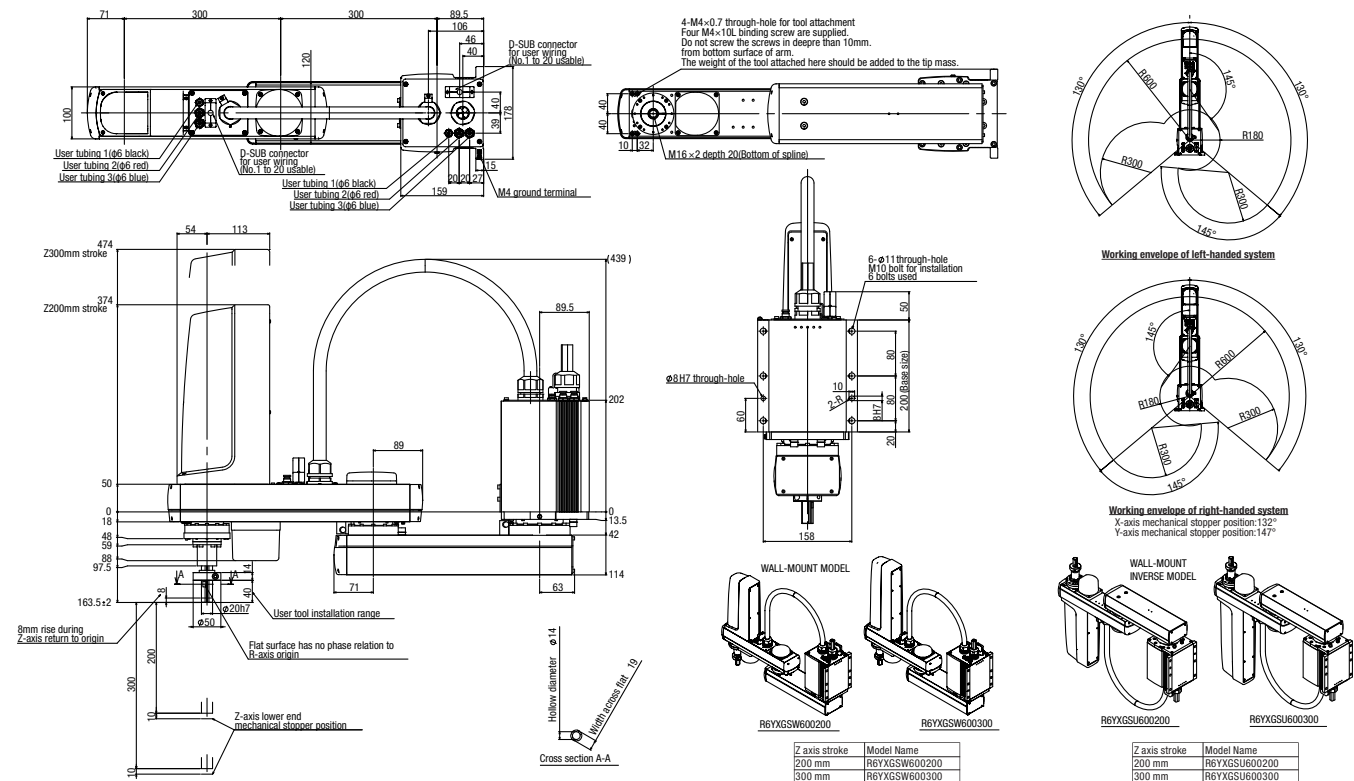
			X axis	Y axis	Z axis	R axis		
						W type	U type	
Reach (mm)			600					
Maximum payload (kg)			10 (9) ^{*1}					
Repeatability ^{*2} (XYZ:mm) (R:°)			+/-0.01		+/-0.01	+/-0.004		
Axis specifications	Arm length (mm)		300	300	200	300	----	
	Rotation range (°)		+/-130	+/-145	----	----	+/-360	
Deceleration 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					
AC servo motor output (W)			400	200	200	200		
Maximum speed (XYZ:m/sec) (R:°/sec)			8.4		2.3	1.7	1700 800	
Standard cycle time: with 2kg payload ^{*3} (sec)			0.46					
R axis allowable moment inertia ^{*4} (kgm ²)			0.3					
User wiring (sq x pcs)			0.2 x 20					
User tubing (Outer diameter)			Ø6 x 3					
Movement limit setting			1.Soft limit 2.Mechanical stopper (X, Y, Z axis)					
Robot cable length (m)			3.5, 5, 10					
Min. cable bending radius			R27					
Option	Tool flange		R6YACXGLF					
Weight (kg) (Excluding robot cable)			27					

- *1 Maximum payload is 9kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X,Y axes)
- *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1700	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGS(W/U)700 XG SERIES - WALL MOUNT/WALL MOUNT INVERSE TYPE

Specifications

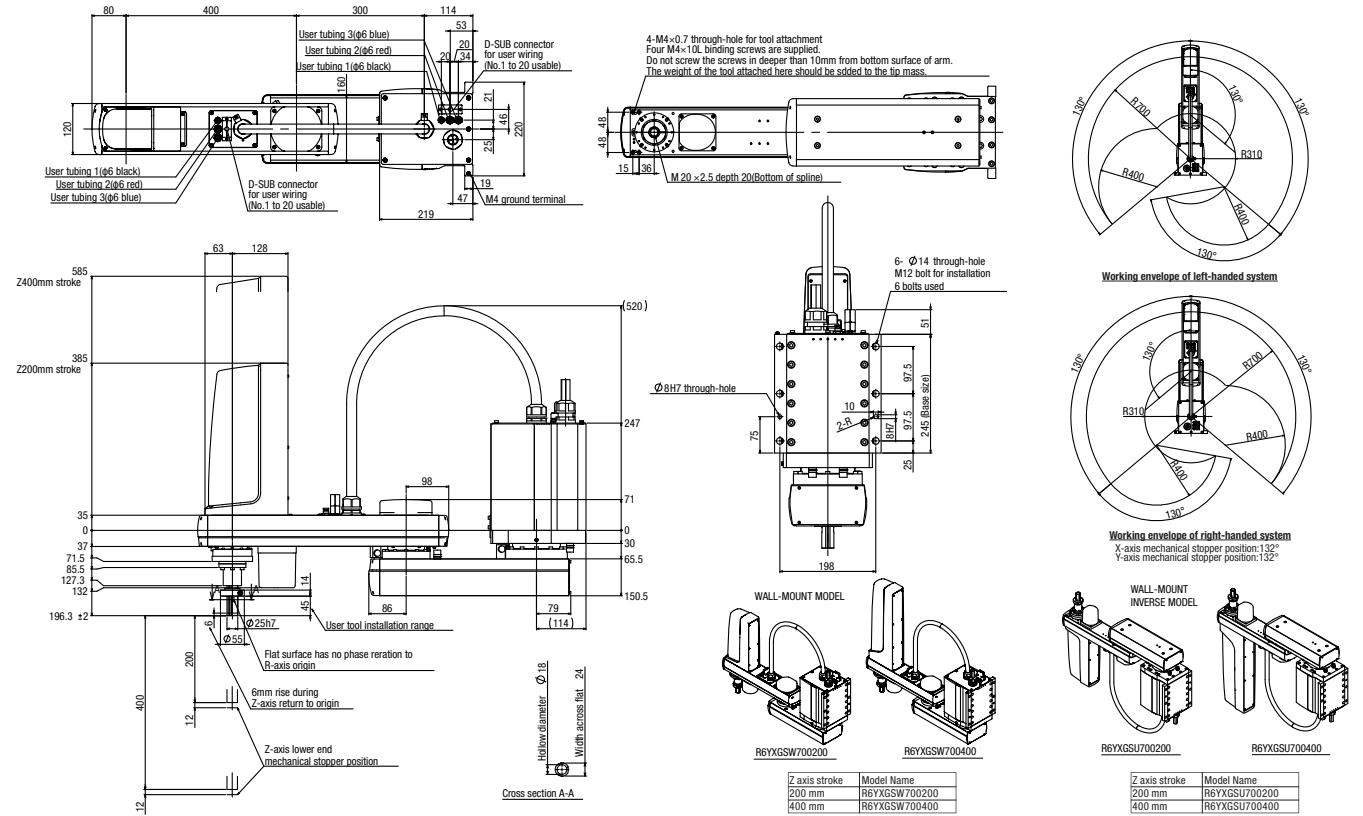
		X axis	Y axis	Z axis	R axis	
				W type		U type
Reach (mm)		700				
Maximum payload (kg)		20 (19) ^{*1}				
Repeatability ^{*2} (XYZ:mm) (R:°)		+/-0.02		+/-0.01		+/-0.004
Axis specifications	Arm length (mm)	300	400	200	400	
	Rotation range (°)	+/-130		----		+/-360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw		Harmonic drive
	Transmission method	Motor to speed reducer Speed reducer to output				
AC servo motor output (W)		750	400	400	200	
Maximum speed (XYZ:m/sec) (R:°/sec)		8.4		2.3	1.7	920 480
Standard cycle time: with 2kg payload ^{*3} (sec)		0.42				
R axis allowable moment inertia ^{*4} (kgm ²)		1.0				
User wiring (sq x pcs)		0.2 x 20				
User tubing (Outer diameter)		Ø6 x 3				
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)				
Robot cable length (m)		3.5, 5, 10				
Min. cable bending radius		R27				
Option	Tool flange	R6YACXGLF				
Weight (kg) (Excluding robot cable)		51				

*1 Maximum payload is 19kg when tool flange option is installed.
 *2 This is the value at a constant ambient temperature. (X,Y axes)
 *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
 *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	2500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGS(W/U)800 XG SERIES - WALL MOUNT/WALL MOUNT INVERSE TYPE

Specifications

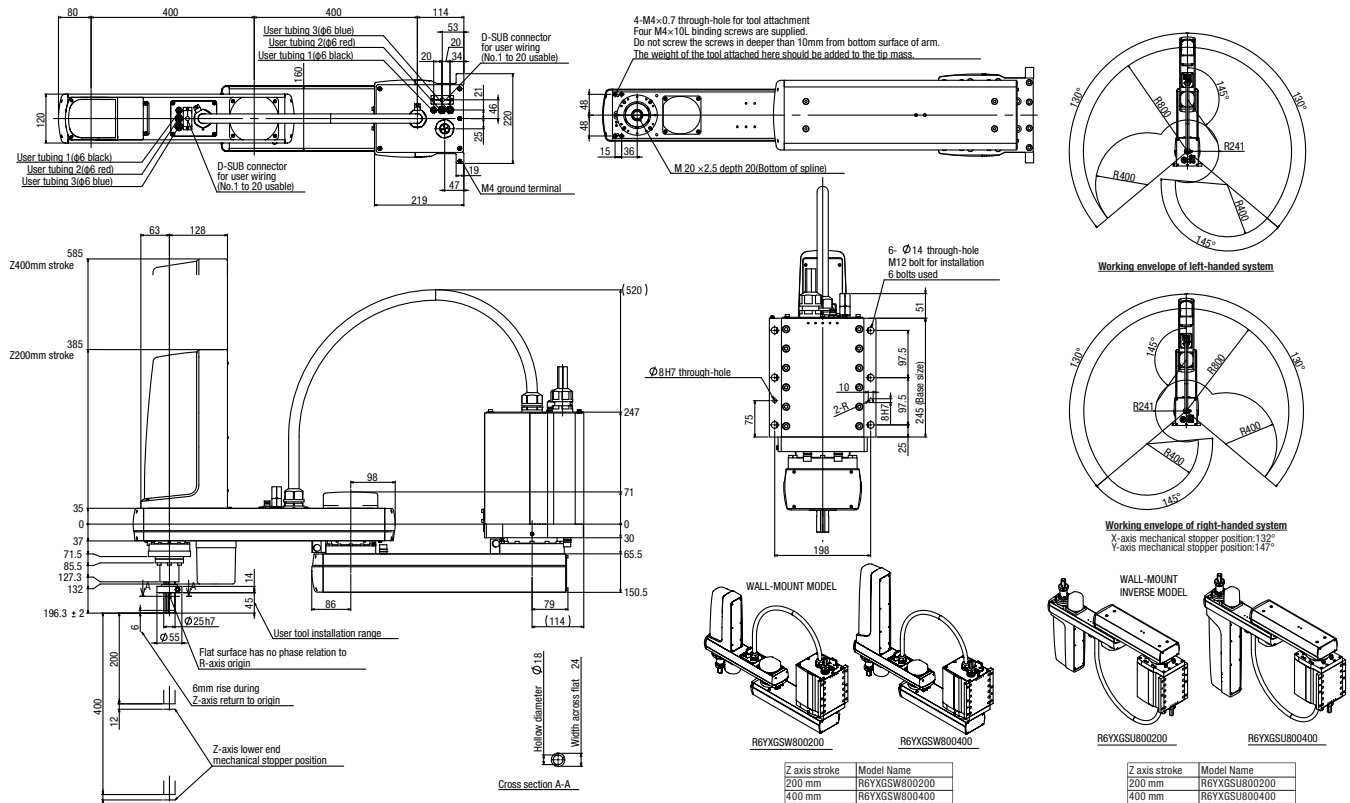
			X axis	Y axis	Z axis	R axis		
						W type	U type	
Reach (mm)			800					
Maximum payload (kg)			20 (19) ^{*1}					
Repeatability ^{*2} (XYZ:mm) (R:°)			+/-0.02		+/-0.01	+/-0.004		
Axis specifications	Arm length (mm)		400	400	200	400		
	Rotation range (°)		+/-130	+/-145	----		+/-360	
Deceleration mechanism	Speed reducer		Harmonic drive	Harmonic drive	Ball screw		Harmonic drive	
	Transmission method	Motor to speed reducer	Direct-coupled					
		Speed reducer to output	Direct-coupled					
AC servo motor output (W)			750	400	400	200		
Maximum speed (XYZ:m/sec) (R:°/sec)			9.2		2.3	1.7	920 480	
Standard cycle time: with 2kg payload ^{*3} (sec)			0.48					
R axis allowable moment inertia ^{*4} (kgm ²)			1.0					
User wiring (sq x pcs)			0.2 x 20					
User tubing (Outer diameter)			Ø6 x 3					
Movement limit setting			1.Soft limit 2.Mechanical stopper (X, Y, Z axis)					
Robot cable length (m)			3.5, 5, 10					
Min. cable bending radius			R27					
Option	Tool flange		R6YACXGLF					
Weight (kg) (Excluding robot cable)			53					

- *1 Maximum payload is 19kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X,Y axes)
- *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	2500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGS(W/U)900 XG SERIES - WALL MOUNT/WALL MOUNT INVERSE TYPE

Specifications

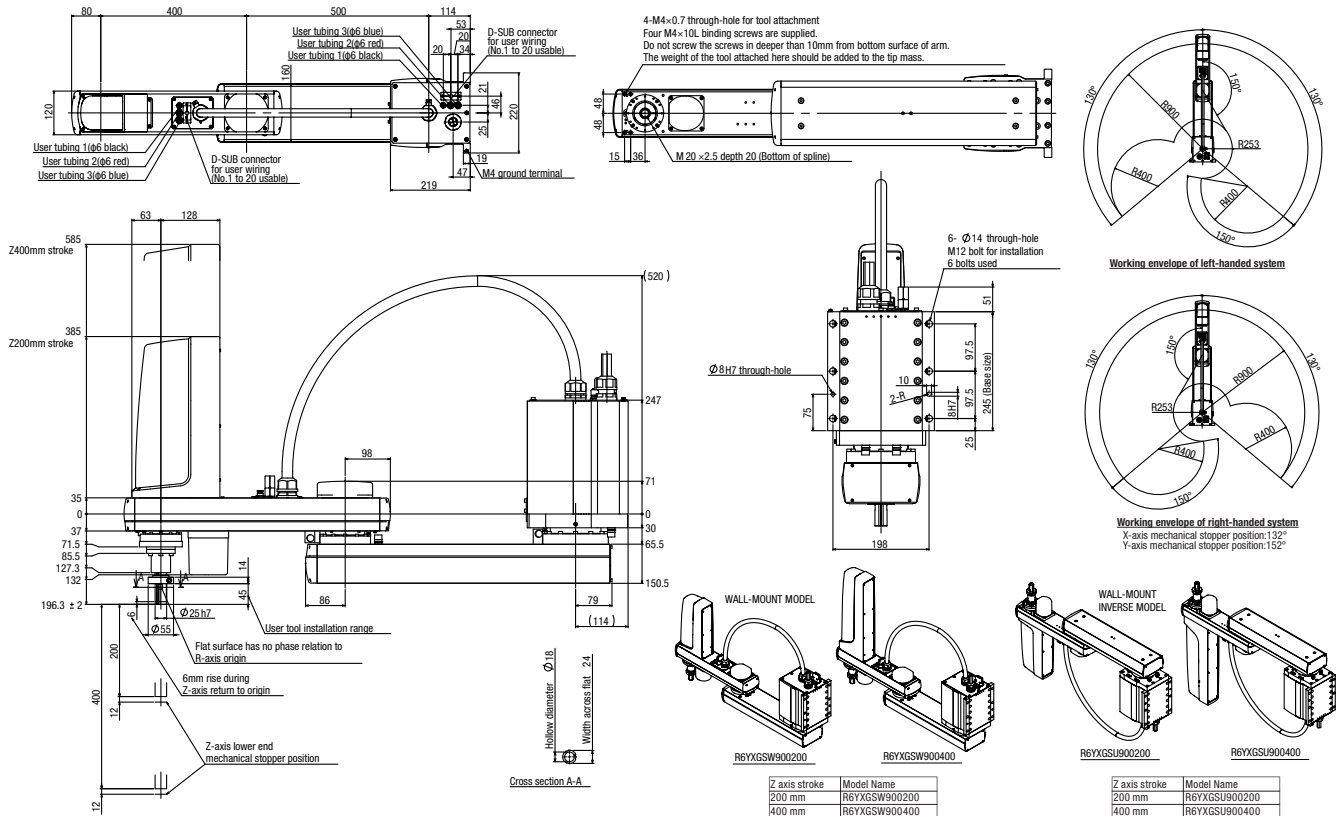
		X axis	Y axis	Z axis	R axis	
				W type		U type
Reach (mm)		900				
Maximum payload (kg)		20 (19) ^{*1}				
Repeatability ^{*2} (XYZ:mm) (R:°)		+/-0.02		+/-0.01		+/-0.004
Axis specifications	Arm length (mm)	500	400	200	400	
	Rotation range (°)	+/-130	+/-150	----		+/-360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw		Harmonic drive
	Transmission method	Direct-coupled				
	Motor to speed reducer	Direct-coupled				
	Speed reducer to output	Direct-coupled				
AC servo motor output (W)		750	400	400		200
Maximum speed (XYZ:m/sec) (R:°/sec)		9.9		2.3		1.7
Standard cycle time: with 2kg payload ^{*3} (sec)		0.49				
R axis allowable moment inertia ^{*4} (kgm ²)		1.0				
User wiring (sq x pcs)		0.2 x 20				
User tubing (Outer diameter)		Ø6 x 3				
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)				
Robot cable length (m)		3.5, 5, 10				
Min. cable bending radius		R27				
Option	Tool flange	R6YACXGLF				
Weight (kg) (Excluding robot cable)		55				

- *1 Maximum payload is 19kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X,Y axes)
- *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	2500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGS(W/U)1000 XG SERIES - WALL MOUNT/WALL MOUNT INVERSE TYPE

Specifications

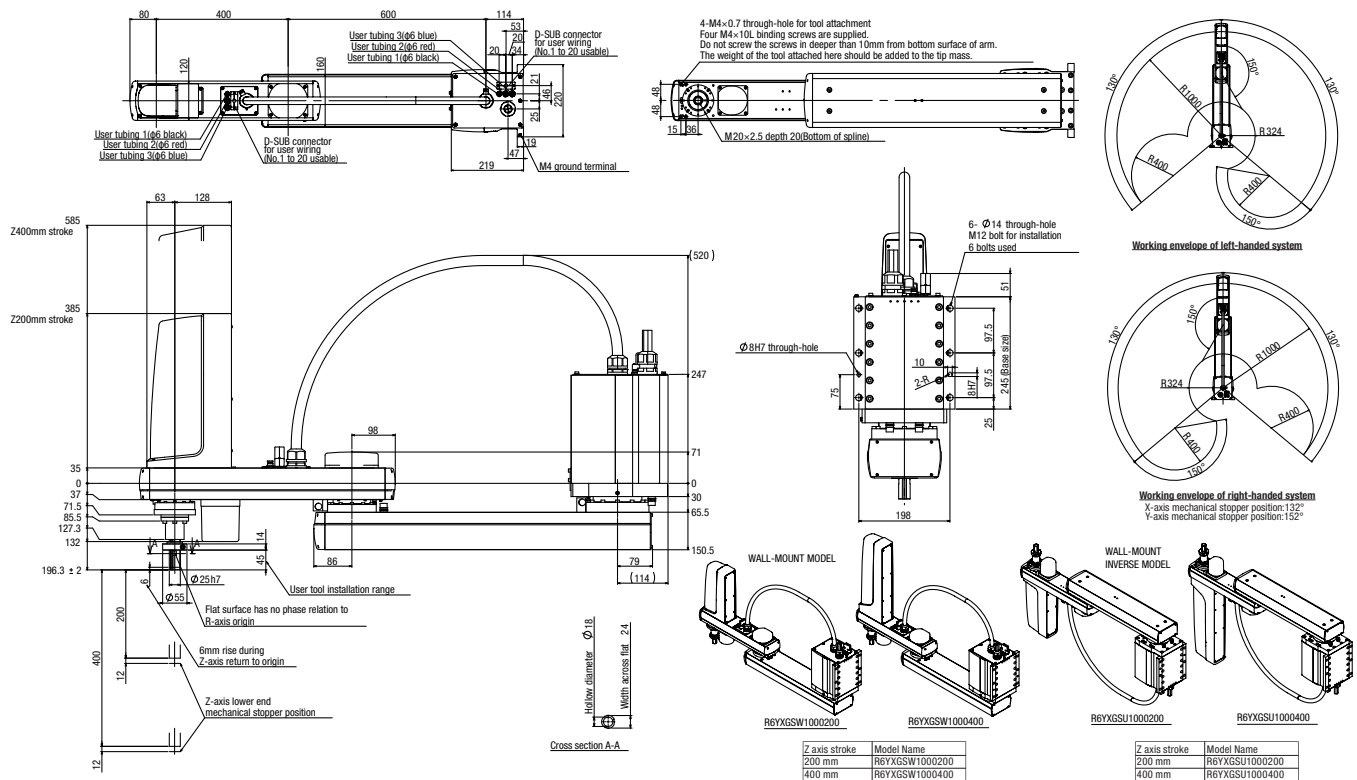
	X axis	Y axis	Z axis	R axis	
				W type	U type
Reach (mm)	1000				
Maximum payload (kg)	20 (19) ^{*1}				
Repeatability ^{*2} (XYZ:mm) (R:°)	+/-0.02		+/-0.01		+/-0.004
Axis specifications	Arm length (mm)	600	400	200	400
	Rotation range (°)	+/-130	+/-150	----	+/-360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Motor to speed reducer	Direct-coupled		
		Speed reducer to output	Direct-coupled		
AC servo motor output (W)	750	400	400		200
Maximum speed (XYZ:m/sec) (R:°/sec)	10.6		2.3	1.7	920
Standard cycle time: with 2kg payload ^{*3} (sec)	0.49				
R axis allowable moment inertia ^{*4} (kgm ²)	1.0				
User wiring (sq x pcs)	0.2 x 20				
User tubing (Outer diameter)	Ø6 x 3				
Movement limit setting	1.Soft limit 2.Mechanical stopper (X, Y, Z axis)				
Robot cable length (m)	3.5, 5, 10				
Min. cable bending radius	R27				
Option	Tool flange				
Weight (kg) (Excluding robot cable)	R6YACXGLF				
	57				

- *1 Maximum payload is 19kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X,Y axes)
- *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	2500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGLC250 XG SERIES - CLEAN TYPE

Specifications

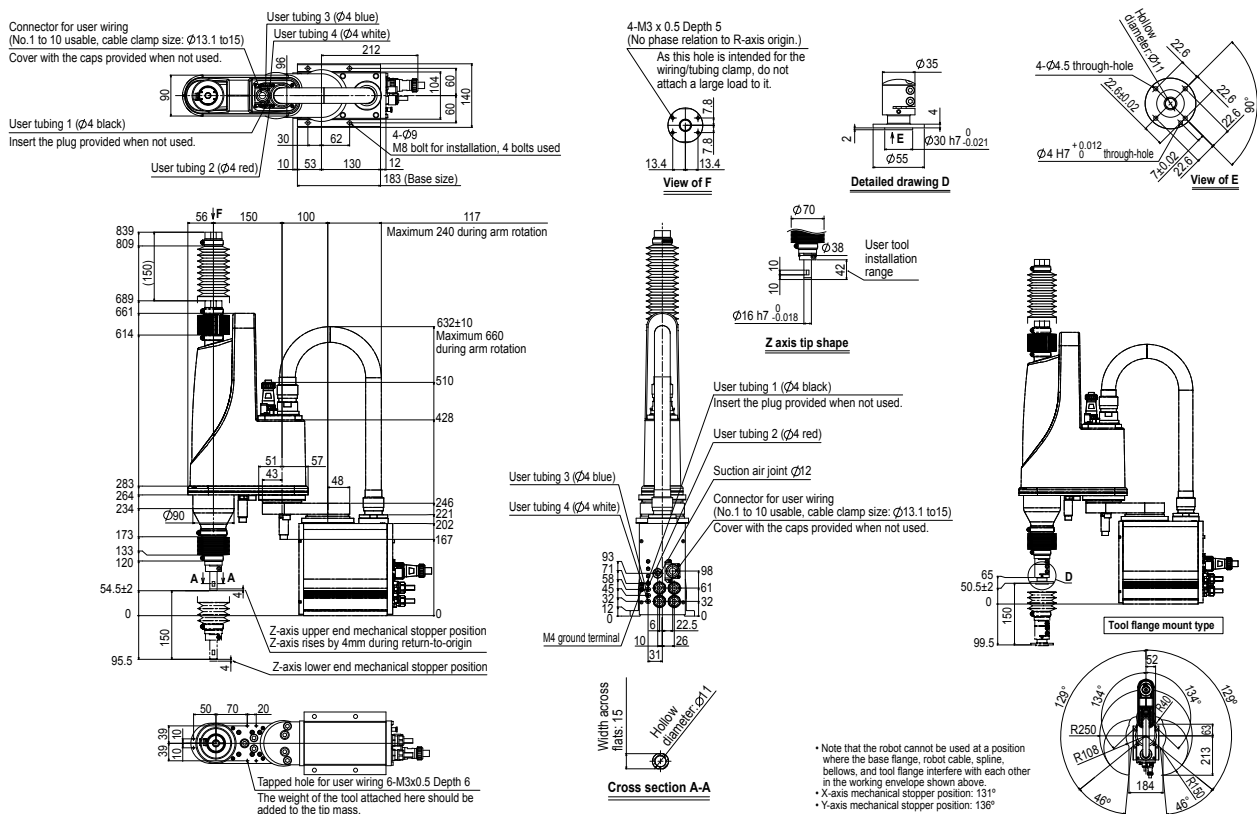
		X axis	Y axis	Z axis	R axis
Reach (mm)		250			
Maximum payload (kg)		4			
Repeatability ¹ (XYZ:mm) (R:°)		+/-0.01		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	100	150	150	----
	Rotation range (°)	+/-129	+/-134	----	+/-360
AC servo motor output (W)		200	150	50	100
Maximum speed (XYZ:m/sec) (R:°/sec)		4.5		1.1	1020
Standard cycle time: with 2kg payload ² (sec)		0.57			
R axis allowable moment inertia ³ (kgm ²)		0.05			
User wiring (sq x pcs)		0.2 x 10			
User tubing (Outer diameter)		Ø4 x 4			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Option	Tool flange	R6YACXGLF			
	Open shaft	R6YACXGLS			
Weight (kg) (Excluding robot cable)		17.5			
Degree of cleanliness		Class ISO 3 (ISO 14644-1) ⁴ + ESD ⁵			
Intake air (N l/min)		30 ⁶			

- *1 This is the value at a constant ambient temperature. (X,Y axes)
- *2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *3 There are limits to the setting of the acceleration coefficient.
- *4 Class 10 (0.1 µm) equivalent to FED-STD-209D.
- *5 ESD (ElectroStatic Discharge) prevention is an option. Please, contact your OMRON representative for more details.
- *6 The necessary intake amount varies depending on the use conditions and environment.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGLC350 XG SERIES - CLEAN TYPE

Specifications

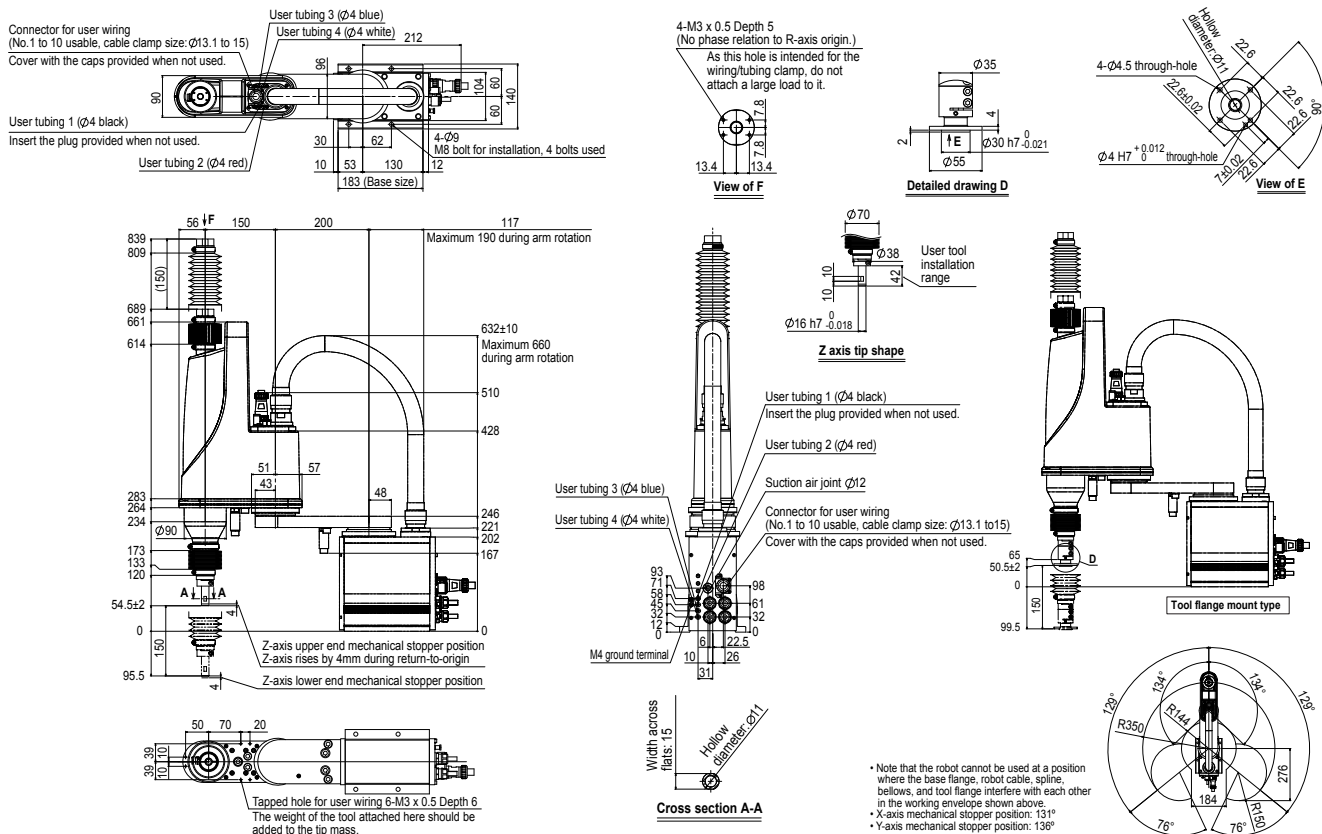
	X axis	Y axis	Z axis	R axis
Reach (mm)	350			
Maximum payload (kg)	4			
Repeatability ¹ (XYZ:mm) (R:°)	+/-0.01		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	150	150	----
	Rotation range (°)	+/-129	+/-134	----
AC servo motor output (W)	200	150	50	100
Maximum speed (XYZ:m/sec) (R:°/sec)	5.6		1.1	1020
Standard cycle time: with 2kg payload ² (sec)	0.57			
R axis allowable moment inertia ³ (kgm ²)	0.05			
User wiring (sq x pcs)	0.2 x 10			
User tubing (Outer diameter)	Ø4 x 4			
Movement limit setting	1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)	3.5, 5, 10			
Min. cable bending radius	R27			
Option	Tool flange	R6YACXGLF		
	Open shaft	R6YACXGLS		
Weight (kg) (Excluding robot cable)	18			
Degree of cleanliness	Class ISO 3 (ISO 14644-1) ⁴ + ESD ⁵			
Intake air (N l/min)	30 ⁶			

- *1 This is the value at a constant ambient temperature. (X,Y axes)
- *2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *3 There are limits to the setting of the acceleration coefficient.
- *4 Class 10 (0.1 µm) equivalent to FED-STD-209D.
- *5 ESD (ElectroStatic Discharge) prevention is an option. Please, contact your OMRON representative for more details.
- *6 The necessary intake amount varies depending on the use conditions and environment.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGLC400 XG SERIES - CLEAN TYPE

Specifications

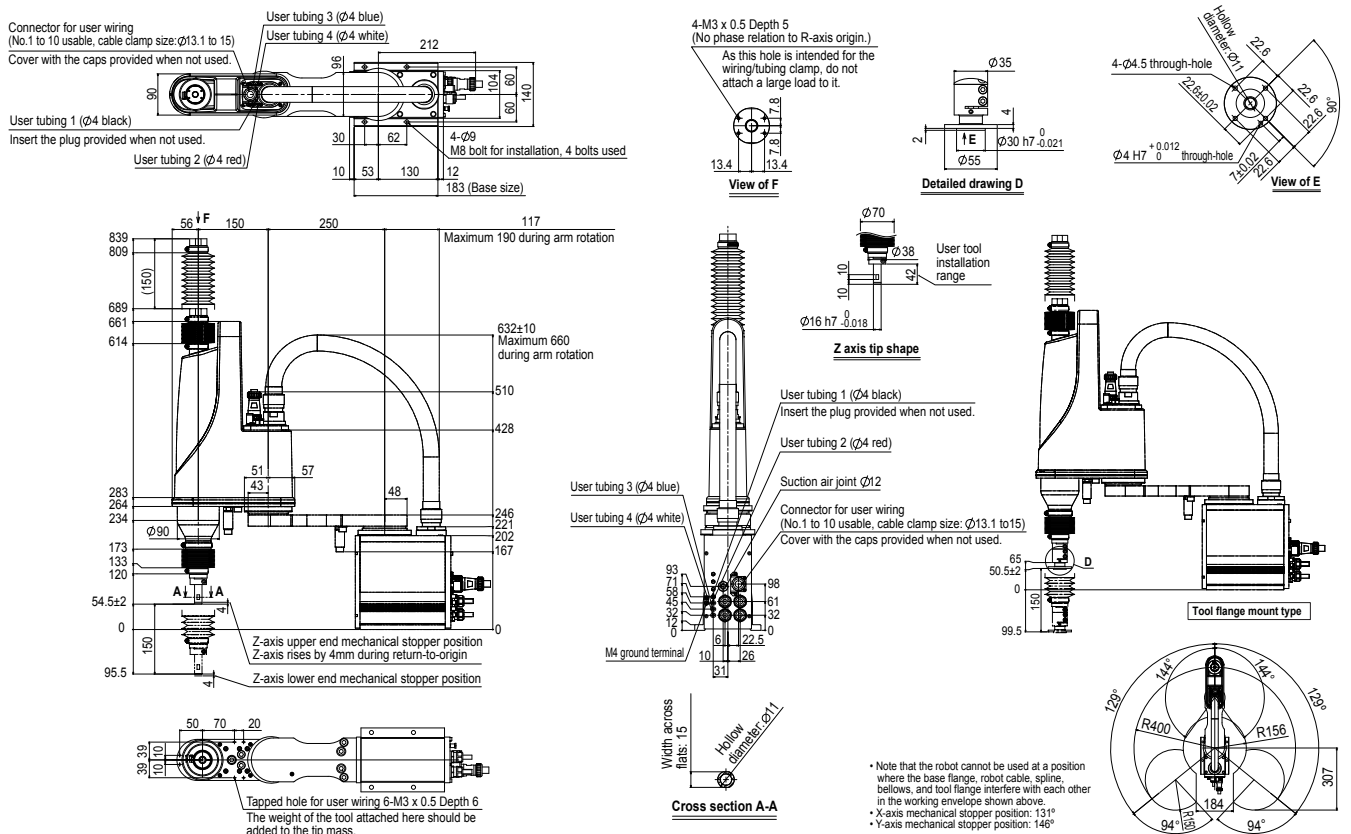
	X axis	Y axis	Z axis	R axis
Reach (mm)	400			
Maximum payload (kg)	4			
Repeatability ¹ (XYZ:mm) (R:°)	+/-0.01		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	150	150	----
	Rotation range (°)	+/-129	+/-144	----
AC servo motor output (W)	200	150	50	100
Maximum speed (XYZ:m/sec) (R:°/sec)	6.1		1.1	1020
Standard cycle time: with 2kg payload ² (sec)	0.57			
R axis allowable moment inertia ³ (kgm ²)	0.05			
User wiring (sq x pcs)	0.2 x 10			
User tubing (Outer diameter)	Ø4 x 4			
Movement limit setting	1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)	3.5, 5, 10			
Min. cable bending radius	R27			
Option	Tool flange	R6YACXGLF		
	Open shaft	R6YACXGLS		
Weight (kg) (Excluding robot cable)	18.5			
Degree of cleanliness	Class ISO 3 (ISO 14644-1) ⁴ + ESD ⁵			
Intake air (N l/min)	30 ⁶			

- *1 This is the value at a constant ambient temperature. (X,Y axes)
- *2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *3 There are limits to the setting of the acceleration coefficient.
- *4 Class 10 (0.1 µm) equivalent to FED-STD-209D.
- *5 ESD (ElectroStatic Discharge) prevention is an option. Please, contact your OMRON representative for more details.
- *6 The necessary intake amount varies depending on the use conditions and environment.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGLC500 XG SERIES - CLEAN TYPE

Specifications

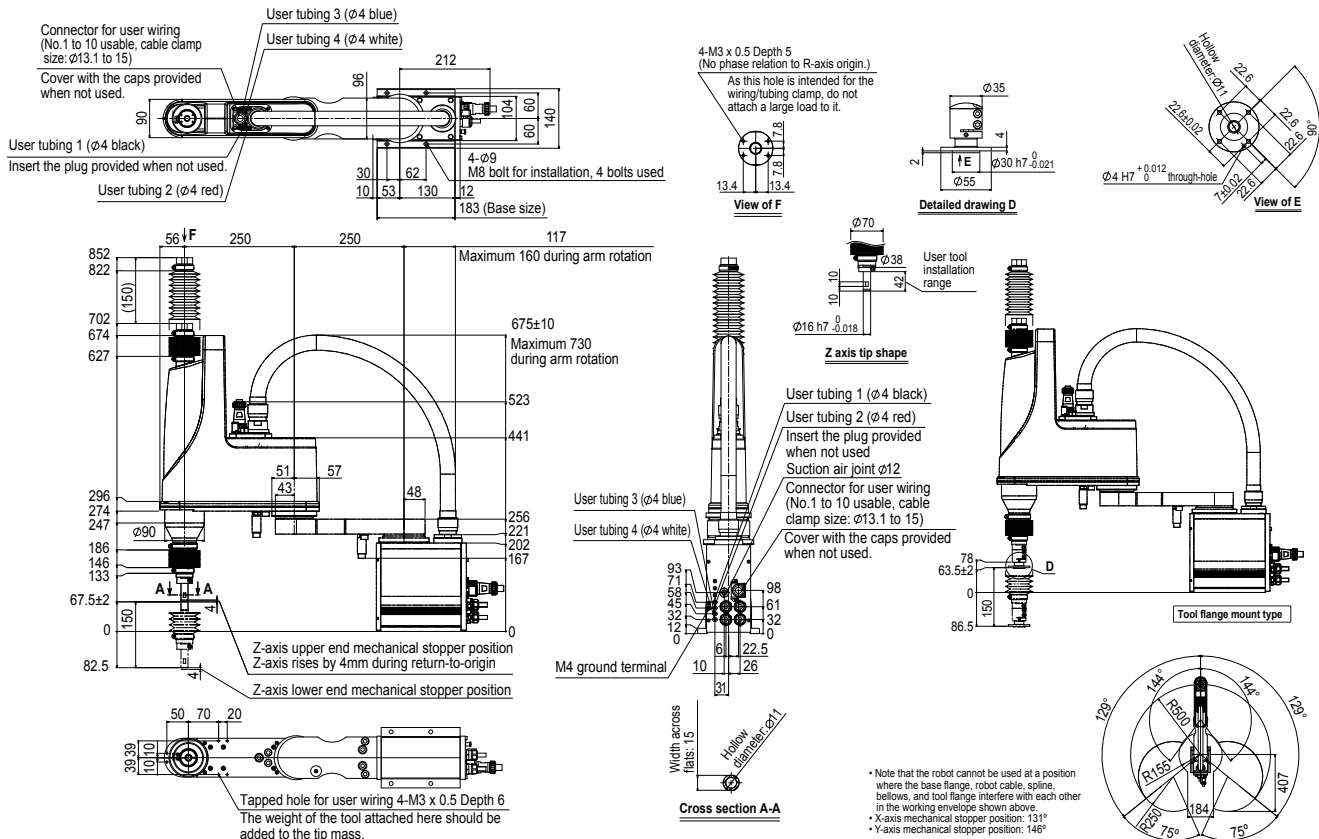
	X axis	Y axis	Z axis	R axis
Reach (mm)	500			
Maximum payload (kg)	4			
Repeatability ¹ (XYZ:mm) (R:°)	+/-0.01		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	250	150	----
	Rotation range (°)	+/-129	+/-144	----
AC servo motor output (W)	200	150	50	100
Maximum speed (XYZ:m/sec) (R:°/sec)	5.1		1.1	1020
Standard cycle time: with 2kg payload ² (sec)	0.74			
R axis allowable moment inertia ³ (kgm ²)	0.05			
User wiring (sq x pcs)	0.2 x 10			
User tubing (Outer diameter)	Ø4 x 4			
Movement limit setting	1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)	3.5, 5, 10			
Min. cable bending radius	R27			
Option	Tool flange	R6YACXGLF		
	Open shaft	R6YACXGLS		
Weight (kg) (Excluding robot cable)	21			
Degree of cleanliness	Class ISO 3 (ISO 14644-1) ⁴ + ESD ⁵			
Intake air (N l/min)	30 ⁶			

- *1 This is the value at a constant ambient temperature. (X,Y axes)
- *2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *3 There are limits to the setting of the acceleration coefficient.
- *4 Class 10 (0.1 µm) equivalent to FED-STD-209D.
- *5 ESD (ElectroStatic Discharge) prevention is an option. Please, contact your OMRON representative for more details.
- *6 The necessary intake amount varies depending on the use conditions and environment.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGLC600 XG SERIES - CLEAN TYPE

Specifications

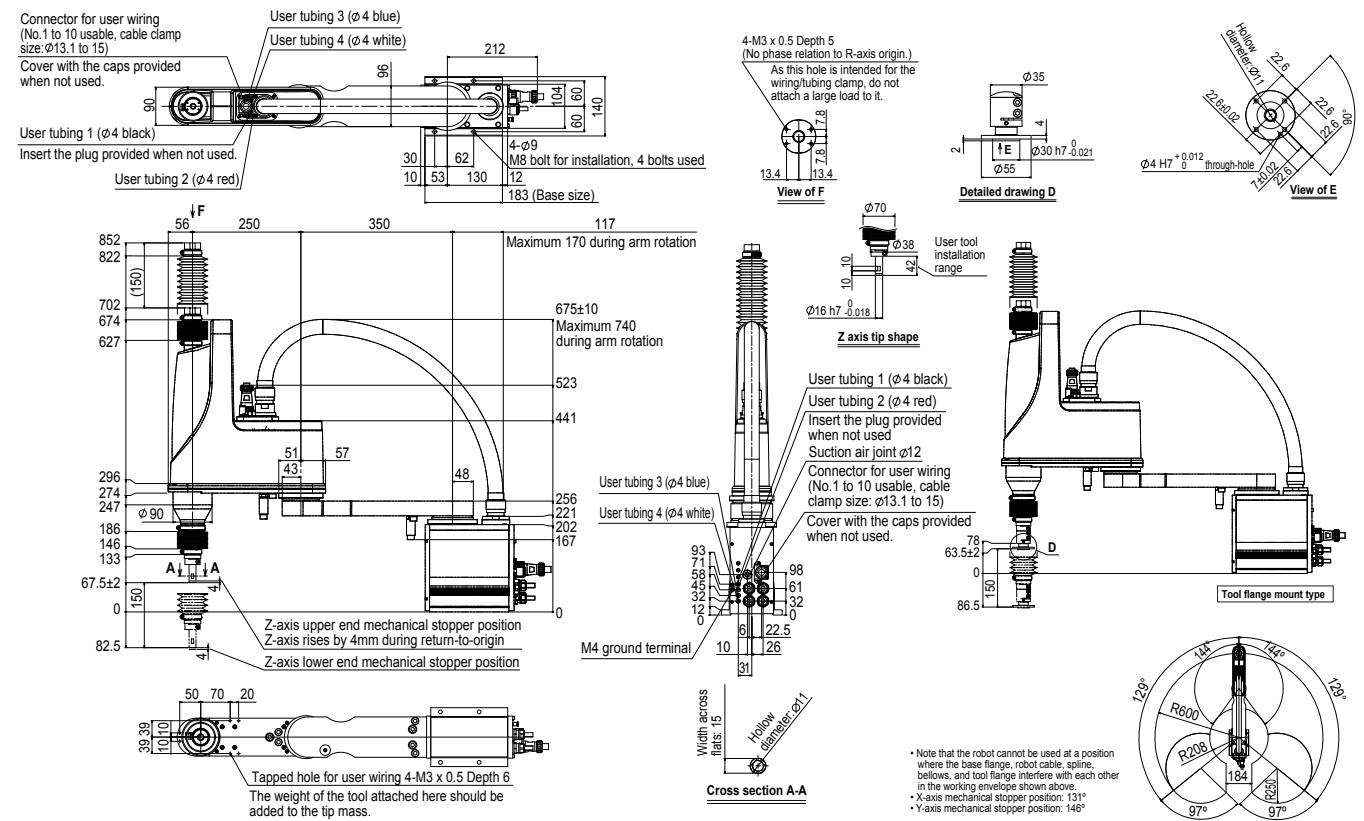
	X axis	Y axis	Z axis	R axis
Reach (mm)	600			
Maximum payload (kg)	4			
Repeatability ¹ (XYZ:mm) (R:°)	+/-0.01		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	250	150	----
	Rotation range (°)	+/-129	+/-144	----
AC servo motor output (W)	200	150	50	100
Maximum speed (XYZ:m/sec) (R:°/sec)	4.9		1.1	1020
Standard cycle time: with 2kg payload ² (sec)	0.74			
R axis allowable moment inertia ³ (kgm ²)	0.05			
User wiring (sq x pcs)	0.2 x 10			
User tubing (Outer diameter)	Ø4 x 4			
Movement limit setting	1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)	3.5, 5, 10			
Min. cable bending radius	R27			
Option	Tool flange	R6YACXGLF		
	Open shaft	R6YACXGLS		
Weight (kg) (Excluding robot cable)	22			
Degree of cleanliness	Class ISO 3 (ISO 14644-1) ⁴ + ESD ⁵			
Intake air (N l/min)	30 ⁶			

- *1 This is the value at a constant ambient temperature. (X,Y axes)
- *2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *3 There are limits to the setting of the acceleration coefficient.
- *4 Class 10 (0.1 µm) equivalent to FED-STD-209D.
- *5 ESD (ElectroStatic Discharge) prevention is an option. Please, contact your OMRON representative for more details.
- *6 The necessary intake amount varies depending on the use conditions and environment.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGLP250 XG SERIES - DUST-PROOF & DRIP-PROOF TYPE

Specifications

		X axis	Y axis	Z axis	R axis
Reach (mm)		250			
Maximum payload (kg)		4			
Repeatability¹ (XYZ:mm) (R:°)		+/-0.01		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	100	150	150	----
	Rotation range (°)	+/-129	+/-134	----	+/-360
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		
AC servo motor output (W)		200	150	50	100
Maximum speed (XYZ:m/sec) (R:°/sec)		4.5		1.1	1020
Standard cycle time: with 2kg payload² (sec)		0.57			
R axis allowable moment inertia³ (kgm²)		0.05			
Protection class⁴		Equivalent to IP65 (IEC 60529)			
User wiring (sq x pcs)		0.2 x 10			
User tubing (Outer diameter)		Ø4 x 4			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Option	Tool flange	R6YACXGLF			
	Open shaft	R6YACXGLS			
Weight (kg) (Excluding robot cable)		17.5			

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

*2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.

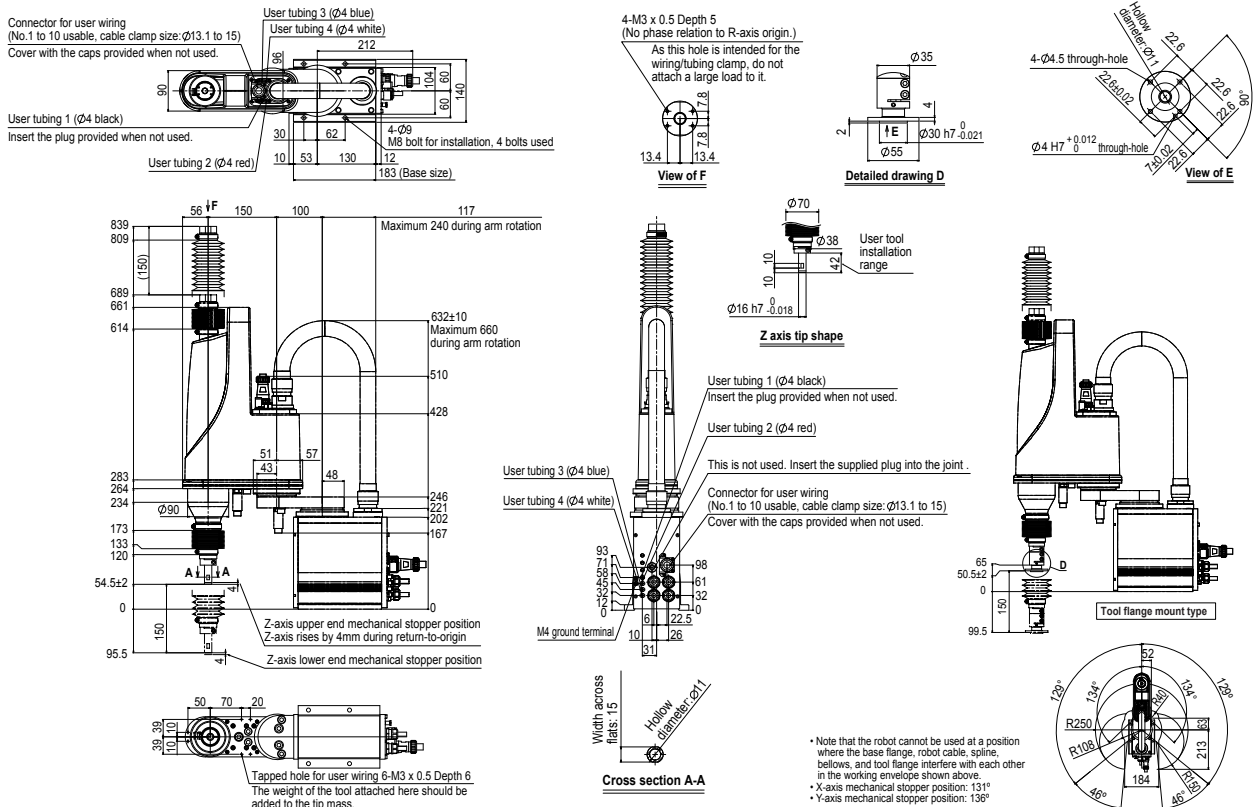
*3 There are limits to the setting of the acceleration coefficient.

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

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGLP350 XG SERIES - DUST-PROOF & DRIP-PROOF TYPE

Specifications

		X axis	Y axis	Z axis	R axis
Reach (mm)		350			
Maximum payload (kg)		4			
Repeatability ¹ (XYZ:mm) (R:°)		+/-0.01		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	200	150	150	----
	Rotation range (°)	+/-129	+/-134	----	+/-360
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		
AC servo motor output (W)		200	150	50	100
Maximum speed (XYZ:m/sec) (R:°/sec)		5.6		1.1	1020
Standard cycle time: with 2kg payload ² (sec)		0.57			
R axis allowable moment inertia ³ (kgm ²)		0.05			
Protection class ⁴		Equivalent to IP65 (IEC 60529)			
User wiring (sq x pcs)		0.2 x 10			
User tubing (Outer diameter)		Ø4 x 4			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Option	Tool flange	R6YACXGLF			
	Open shaft	R6YACXGLS			
Weight (kg) (Excluding robot cable)		18			

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

*2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.

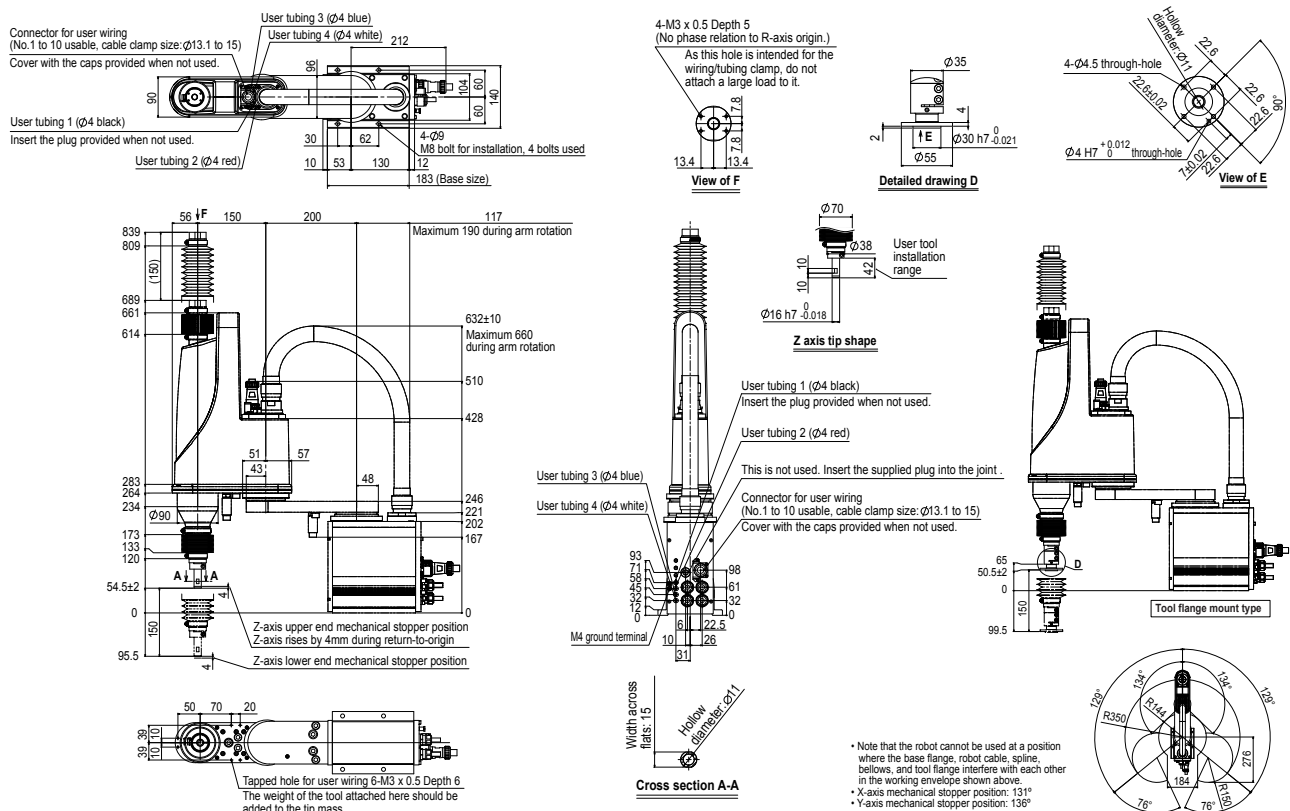
*3 There are limits to the setting of the acceleration coefficient.

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

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGLP400 XG SERIES - DUST-PROOF & DRIP-PROOF TYPE

Specifications

		X axis	Y axis	Z axis	R axis
Reach (mm)		400			
Maximum payload (kg)		4			
Repeatability ¹ (XYZ:mm) (R:°)		+/-0.01		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	250	150	150	----
	Rotation range (°)	+/-129	+/-144	----	+/-360
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		
AC servo motor output (W)		200	150	50	100
Maximum speed (XYZ:m/sec) (R:°/sec)		6.1		1.1	1020
Standard cycle time: with 2kg payload ² (sec)		0.57			
R axis allowable moment inertia ³ (kgm ²)		0.05			
Protection class ⁴		Equivalent to IP65 (IEC 60529)			
User wiring (sq x pcs)		0.2 x 10			
User tubing (Outer diameter)		Ø4 x 4			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Option	Tool flange	R6YACXGLF			
	Open shaft	R6YACXGLS			
Weight (kg) (Excluding robot cable)		18.5			

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

*2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.

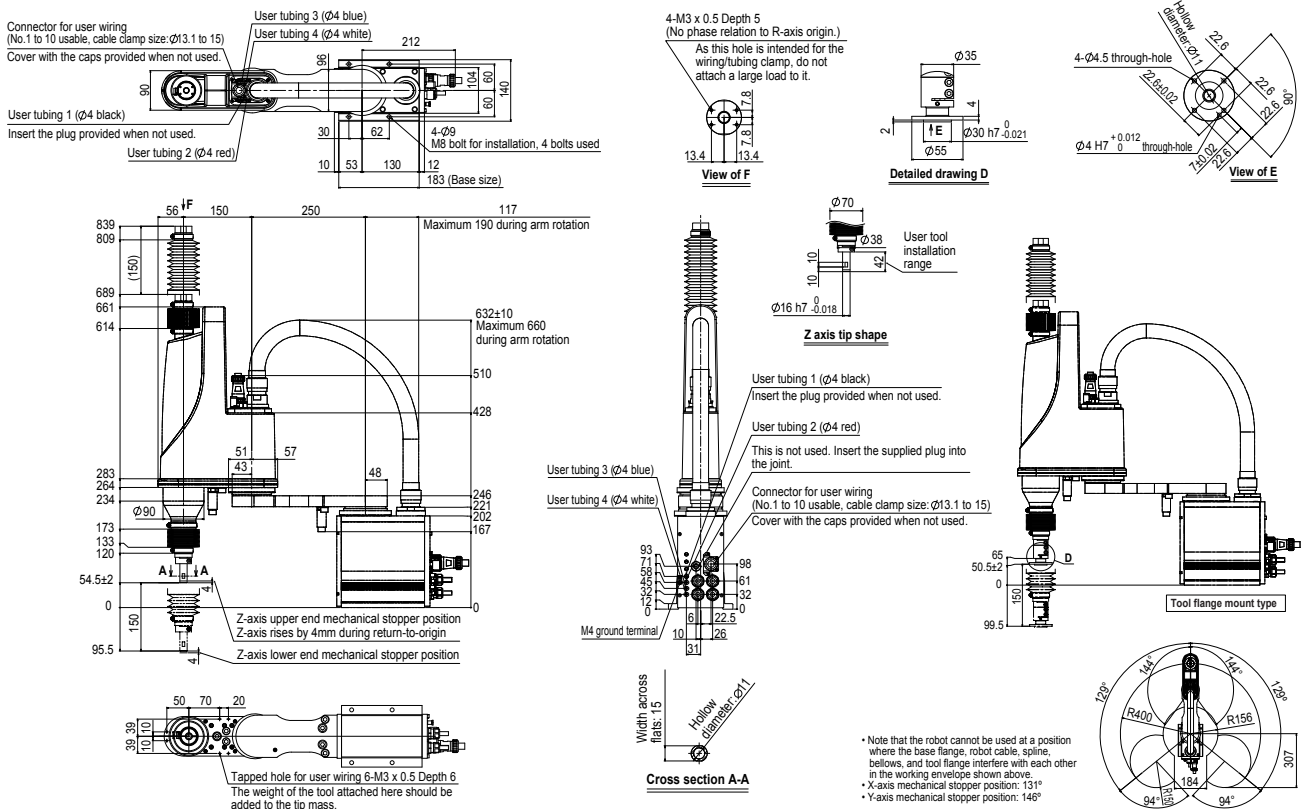
*3 There are limits to the setting of the acceleration coefficient.

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

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGLP500 XG SERIES - DUST-PROOF & DRIP-PROOF TYPE

Specifications

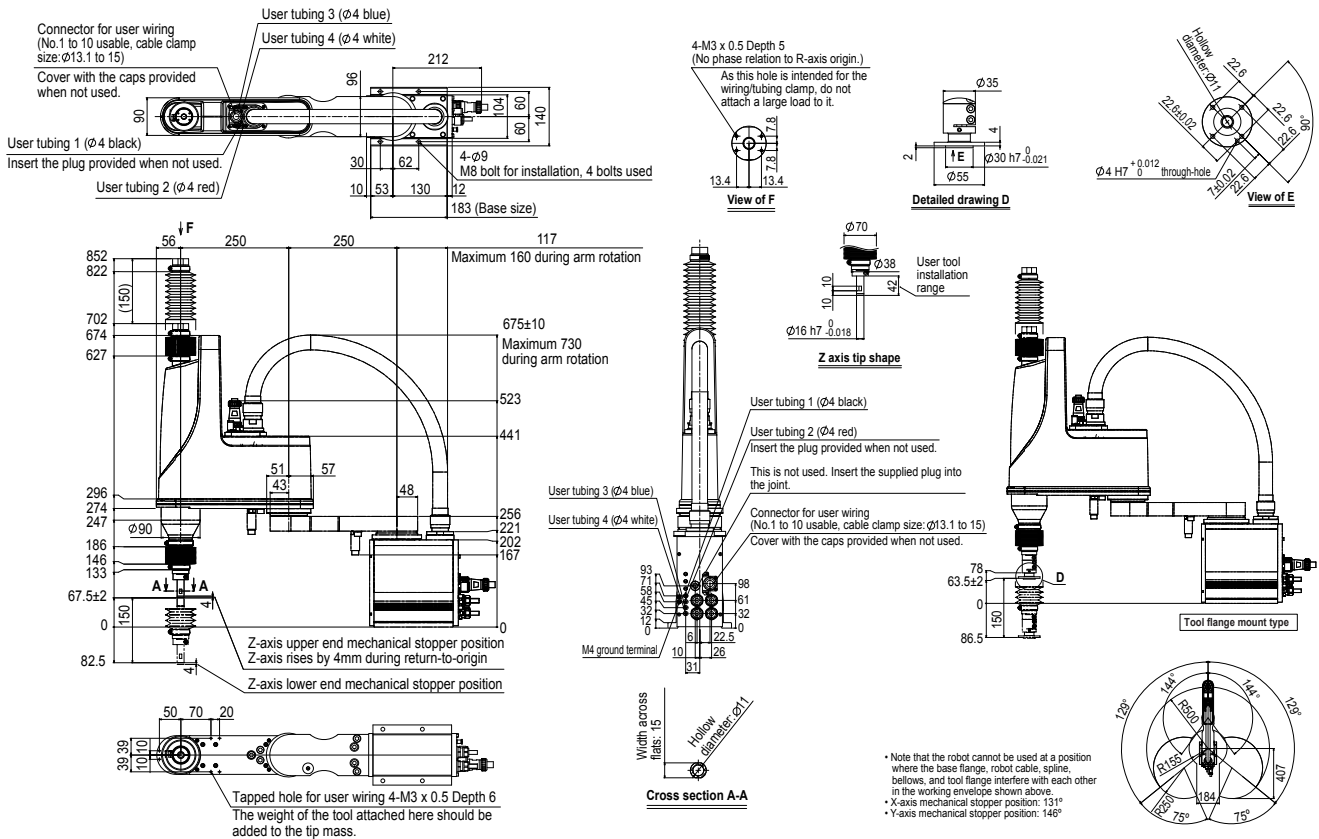
	X axis	Y axis	Z axis	R axis
Reach (mm)	500			
Maximum payload (kg)	4			
Repeatability ¹ (XYZ:mm) (R:°)	+/-0.01		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	250	150	----
	Rotation range (°)	+/-129	+/-144	----
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw
	Transmission method	Motor to speed reducer	Direct-coupled	
		Speed reducer to output	Direct-coupled	
AC servo motor output (W)	200	150	50	100
Maximum speed (XYZ:m/sec) (R:°/sec)	5.1		1.1	1020
Standard cycle time: with 2kg payload ² (sec)	0.74			
R axis allowable moment inertia ³ (kgm ²)	0.05			
Protection class ⁴	Equivalent to IP65 (IEC 60529)			
User wiring (sq x pcs)	0.2 x 10			
User tubing (Outer diameter)	Ø4 x 4			
Movement limit setting	1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)	3.5, 5, 10			
Min. cable bending radius	R27			
Option	Tool flange	R6YACXGLF		
	Open shaft	R6YACXGLS		
Weight (kg) (Excluding robot cable)	21			

*1 This is the value at a constant ambient temperature. (X,Y axes)
 *2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
 *3 There are limits to the setting of the acceleration coefficient.
 *4 Do not use robots where the bellows section is directly exposed to water jet. Contact your OMRON representative for information on drip-proof structure preventing liquid other than water.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGP500 XG SERIES - DUST-PROOF & DRIP-PROOF TYPE

Specifications

		X axis	Y axis	Z axis	R axis
Reach (mm)		500			
Maximum payload (kg)		8			
Repeatability ¹ (XYZ:mm) (R:°)		±0.01		±0.01	±0.004
Axis specifications	Arm length (mm)	200	300	200	300
	Rotation range (°)	±130	±145	----	±360
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		
AC servo motor output (W)		400	200	200	200
Maximum speed (XYZ:m/sec) (R:°/sec)		7.6		2.3	1.7
Standard cycle time: with 2kg payload ² (sec)		0.55			
R axis allowable moment inertia ³ (kgm ²)		0.3			
Protection class ⁴		Equivalent to IP65 (IEC 60529)			
User wiring (sq x pcs)		0.2 x 20			
User tubing (Outer diameter)		Ø6 x 3			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Weight (kg) (Excluding robot cable)		Z axis 200mm: 28, Z axis 300mm: 29			

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

*2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.

*3 There are limits to the setting of the acceleration coefficient.

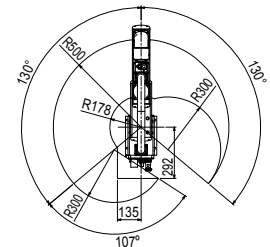
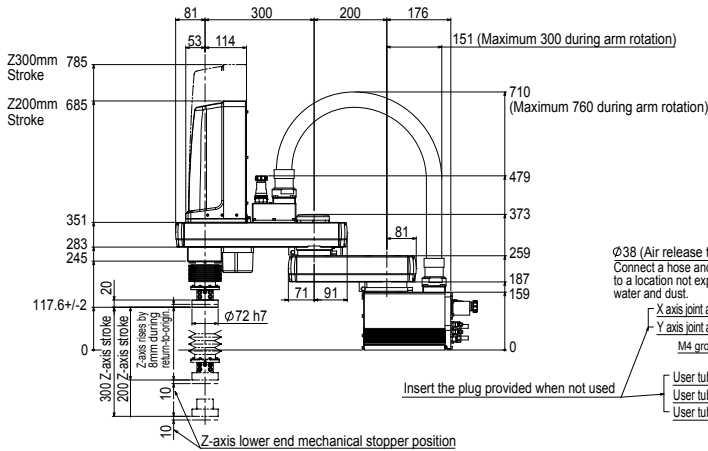
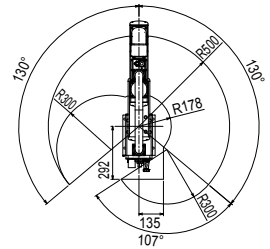
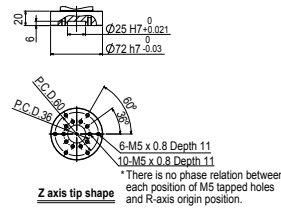
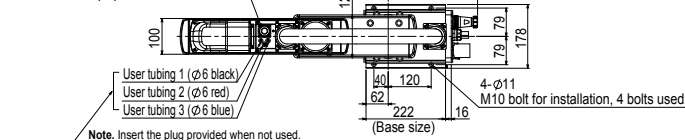
*4 Do not use robots where the bellows section is directly exposed to water jet. Contact your OMRON representative for information on drip-proof structure preventing liquid other than water.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1700	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions

Connector for user wiring
(No.1 to 20 usable, cable clamp size: Ø16 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 : 147°

R6YXGLP600 XG SERIES - DUST-PROOF & DRIP-PROOF TYPE

Specifications

			X axis	Y axis	Z axis	R axis
Reach (mm)			600			
Maximum payload (kg)			4			
Repeatability^{*1} (XYZ:mm) (R:°)			+/-0.01		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)		350	250	150	----
	Rotation range (°)		+/-129	+/-144	----	+/-360
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			
AC servo motor output (W)			200	150	50	100
Maximum speed (XYZ:m/sec) (R:°/sec)			4.9		1.1	1020
Standard cycle time: with 2kg payload^{*2} (sec)			0.74			
R axis allowable moment inertia^{*3} (kgm²)			0.05			
Protection class^{*4}			Equivalent to IP65 (IEC 60529)			
User wiring (sq x pcs)			0.2 x 10			
User tubing (Outer diameter)			Ø4 x 4			
Movement limit setting			1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)			3.5, 5, 10			
Min. cable bending radius			R27			
Option	Tool flange		R6YACXGLF			
	Open shaft		R6YACXGLS			
Weight (kg) (Excluding robot cable)			22			

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

*2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.

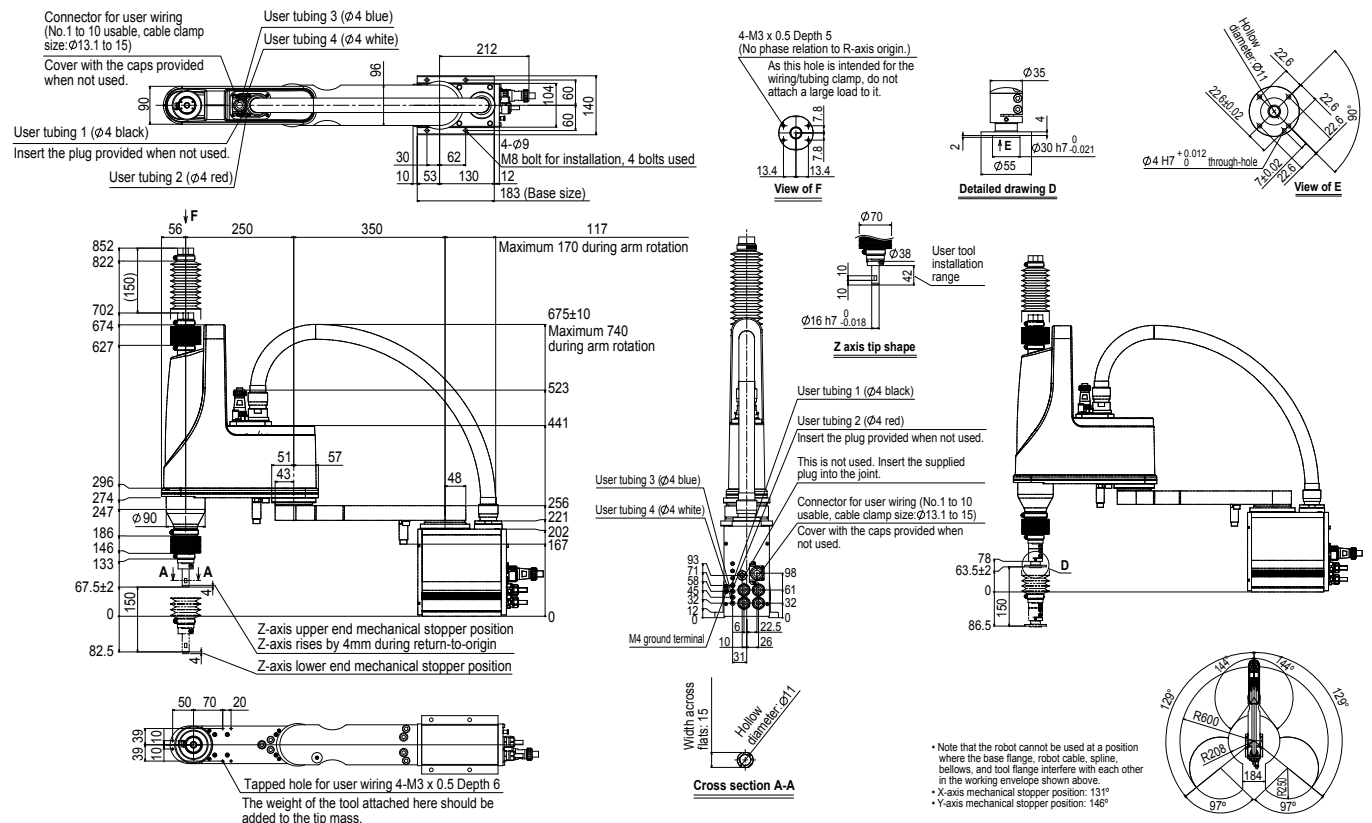
*3 There are limits to the setting of the acceleration coefficient.

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

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGP600 XG SERIES - DUST-PROOF & DRIP-PROOF TYPE

Specifications

	X axis	Y axis	Z axis	R axis
Reach (mm)	600			
Maximum payload (kg)	8			
Repeatability ¹ (XYZ:mm) (R:°)	+/-0.01		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	300	200	300
	Rotation range (°)	+/-130	+/-145	----
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw
	Transmission method	Motor to speed reducer	Direct-coupled	
		Speed reducer to output	Direct-coupled	
AC servo motor output (W)	400	200	200	200
Maximum speed (XYZ:m/sec) (R:°/sec)	8.4		2.3	1.7
Standard cycle time: with 2kg payload ² (sec)	0.56			
R axis allowable moment inertia ³ (kgm ²)	0.3			
Protection class ⁴	Equivalent to IP65 (IEC 60529)			
User wiring (sq x pcs)	0.2 x 20			
User tubing (Outer diameter)	Ø6 x 3			
Movement limit setting	1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)	3.5, 5, 10			
Min. cable bending radius	R27			
Weight (kg) (Excluding robot cable)	Z axis 200mm: 29, Z axis 300mm: 30			

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

*2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.

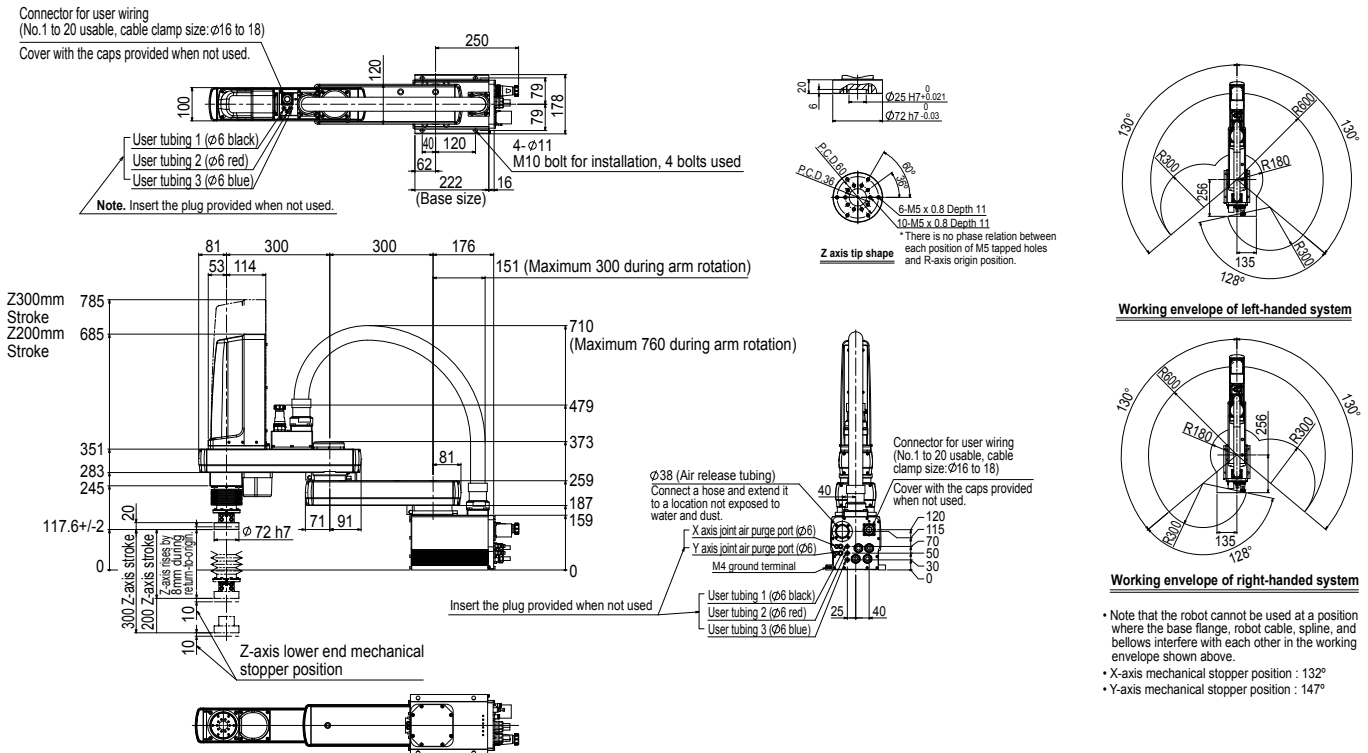
*3 There are limits to the setting of the acceleration coefficient.

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

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1700	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGHP600 XG SERIES - DUST-PROOF & DRIP-PROOF TYPE

Specifications

		X axis	Y axis	Z axis	R axis
Reach (mm)		600			
Maximum payload (kg)		18			
Repeatability¹ (XYZ:mm) (R:°)		±0.02		±0.01	
Axis specifications	Arm length (mm)	200	400	200	400
	Rotation range (°)	±130	±150	----	±360
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		
AC servo motor output (W)		750	400	400	200
Maximum speed (XYZ:m/sec) (R:°/sec)		7.7		2.3	1.7
Standard cycle time: with 2kg payload² (sec)		0.57			
R axis allowable moment inertia³ (kgm²)		1.0			
Protection class⁴		Equivalent to IP65 (IEC 60529)			
User wiring (sq x pcs)		0.2 x 20			
User tubing (Outer diameter)		Ø6 x 3			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Weight (kg) (Excluding robot cable)		Z axis 200mm: 48, Z axis 400mm: 50			

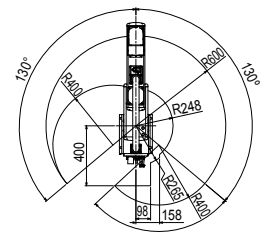
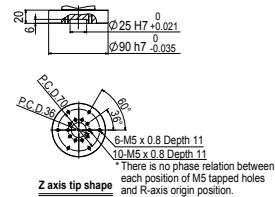
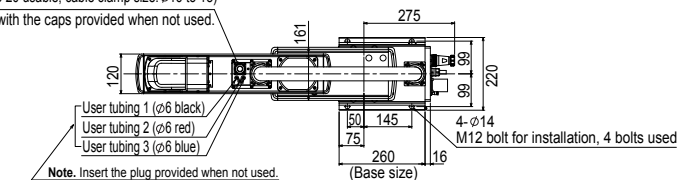
- *1 This is the value at a constant ambient temperature. (X,Y axes)
- *2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *3 There are limits to the setting of the acceleration coefficient.
- *4 Do not use robots where the bellows section is directly exposed to water jet. Contact your OMRON representative for information on drip-proof structure preventing liquid other than water.

Controller

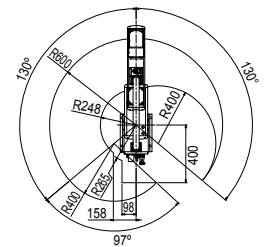
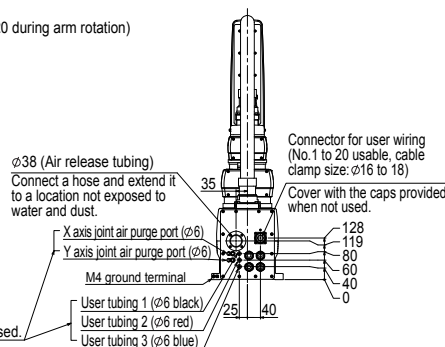
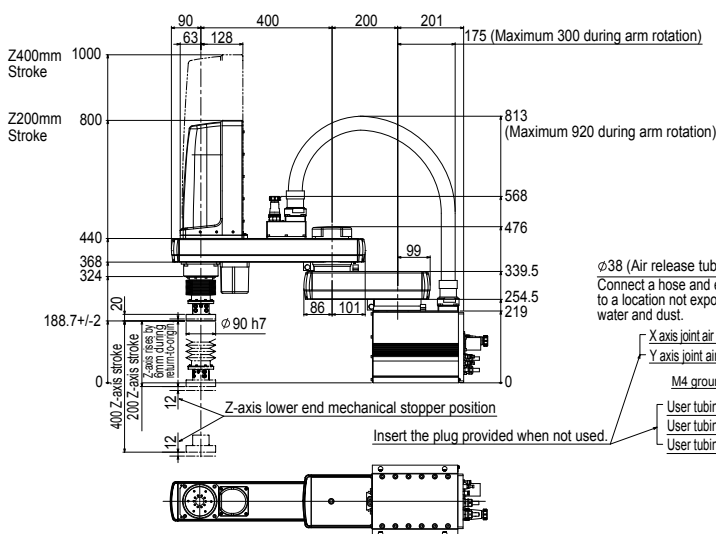
Controller	Power consumption (VA)	Operating method
YRCX	2500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions

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



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 : 152°

R6YXGP700 XG SERIES - DUST-PROOF & DRIP-PROOF TYPE

Specifications

	X axis	Y axis	Z axis	R axis
Reach (mm)	700			
Maximum payload (kg)	18			
Repeatability ¹ (XYZ:mm) (R:°)	+/-0.02		+/-0.01	
Axis specifications	Arm length (mm)	400	200	400
	Rotation range (°)	+/-130	+/-150	----
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw
	Transmission method	Motor to speed reducer	Direct-coupled	
		Speed reducer to output	Direct-coupled	
AC servo motor output (W)	750	400	400	200
Maximum speed (XYZ:m/sec) (R:°/sec)	8.4		2.3	1.7
Standard cycle time: with 2kg payload ² (sec)	0.52			
R axis allowable moment inertia ³ (kgm ²)	1.0			
Protection class ⁴	Equivalent to IP65 (IEC 60529)			
User wiring (sq x pcs)	0.2 x 20			
User tubing (Outer diameter)	Ø6 x 3			
Movement limit setting	1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)	3.5, 5, 10			
Min. cable bending radius	R27			
Weight (kg) (Excluding robot cable)	Z axis 200mm: 50, Z axis 400mm: 52			

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

*2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.

*3 There are limits to the setting of the acceleration coefficient.

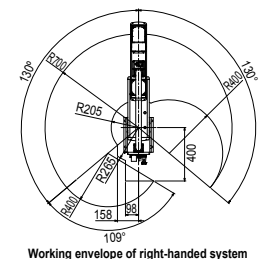
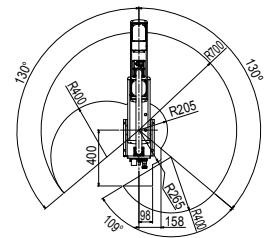
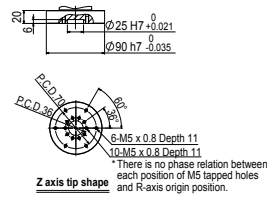
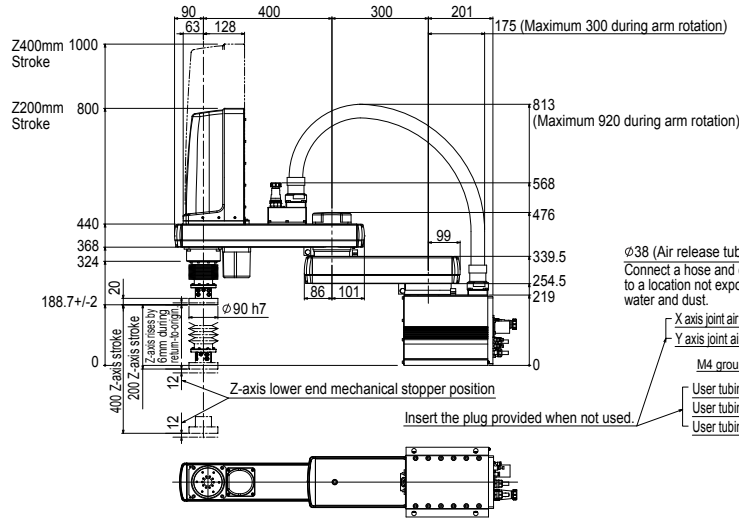
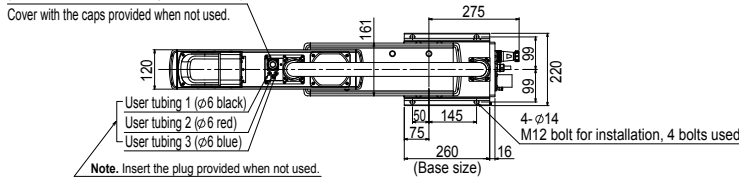
*4 Do not use robots where the bellows section is directly exposed to water jet. Contact your OMRON representative for information on drip-proof structure preventing liquid other than water.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	2500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions

Connector for user wiring
(No.1 to 20 usable, cable clamp size: Ø16 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°

R6YXGP800 XG SERIES - DUST-PROOF & DRIP-PROOF TYPE

Specifications

		X axis	Y axis	Z axis	R axis
Reach (mm)		800			
Maximum payload (kg)		18			
Repeatability ¹ (XYZ:mm) (R:°)		+/-0.02		+/-0.01	
Axis specifications	Arm length (mm)	400	400	200	400
	Rotation range (°)	+/-130	+/-150	----	+/-360
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		
AC servo motor output (W)		750	400	400	200
Maximum speed (XYZ:m/sec) (R:°/sec)		9.2		2.3	1.7
Standard cycle time: with 2kg payload ² (sec)		0.58			
R axis allowable moment inertia ³ (kgm ²)		1.0			
Protection class ⁴		Equivalent to IP65 (IEC 60529)			
User wiring (sq x pcs)		0.2 x 20			
User tubing (Outer diameter)		Ø6 x 3			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Weight (kg) (Excluding robot cable)		Z axis 200mm: 52, Z axis 400mm: 54			

- *1 This is the value at a constant ambient temperature. (X,Y axes)
- *2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *3 There are limits to the setting of the acceleration coefficient.
- *4 Do not use robots where the bellows section is directly exposed to water jet. Contact your OMRON representative for information on drip-proof structure preventing liquid other than water.

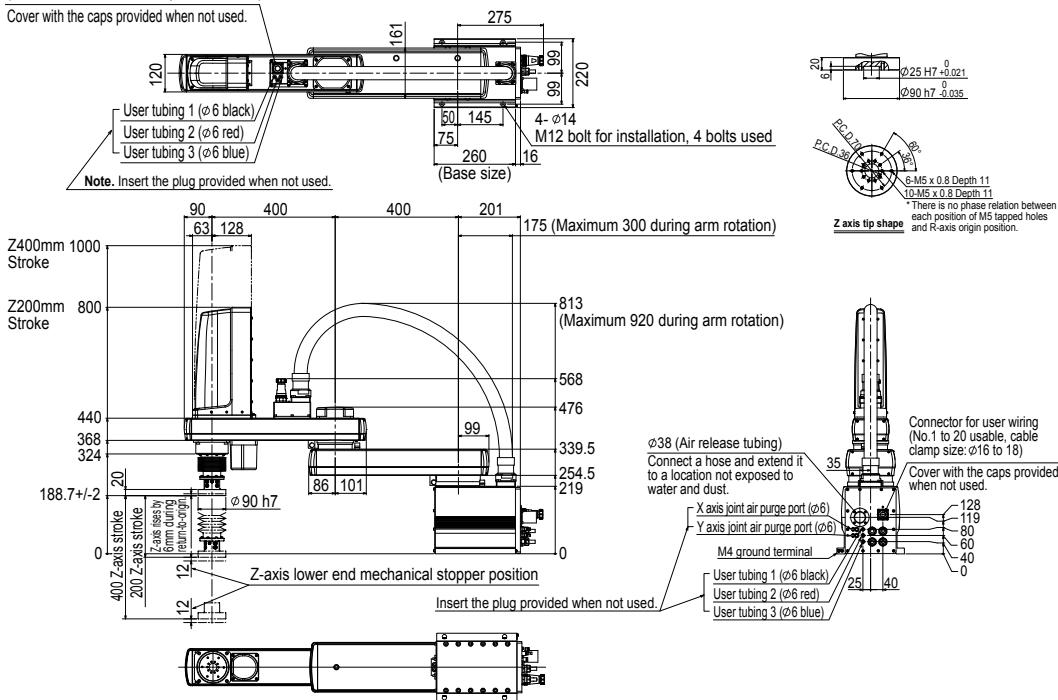
Controller

Controller	Power consumption (VA)	Operating method
YRCX	2500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions

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°

R6YXGP900 XG SERIES - DUST-PROOF & DRIP-PROOF TYPE

Specifications

	X axis	Y axis	Z axis	R axis
Reach (mm)	900			
Maximum payload (kg)	18			
Repeatability ¹ (XYZ:mm) (R:°)	+/-0.02		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	500	200	400
	Rotation range (°)	+/-130	+/-150	----
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw
	Transmission method	Motor to speed reducer	Direct-coupled	
		Speed reducer to output	Direct-coupled	
AC servo motor output (W)	750	400	400	200
Maximum speed (XYZ:m/sec) (R:°/sec)	9.9		2.3	1.7
Standard cycle time: with 2kg payload ² (sec)	0.59			
R axis allowable moment inertia ³ (kgm ²)	1.0			
Protection class ⁴	Equivalent to IP65 (IEC 60529)			
User wiring (sq x pcs)	0.2 x 20			
User tubing (Outer diameter)	Ø6 x 3			
Movement limit setting	1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)	3.5, 5, 10			
Min. cable bending radius	R27			
Weight (kg) (Excluding robot cable)	Z axis 200mm: 54, Z axis 400mm: 56			

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

*2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.

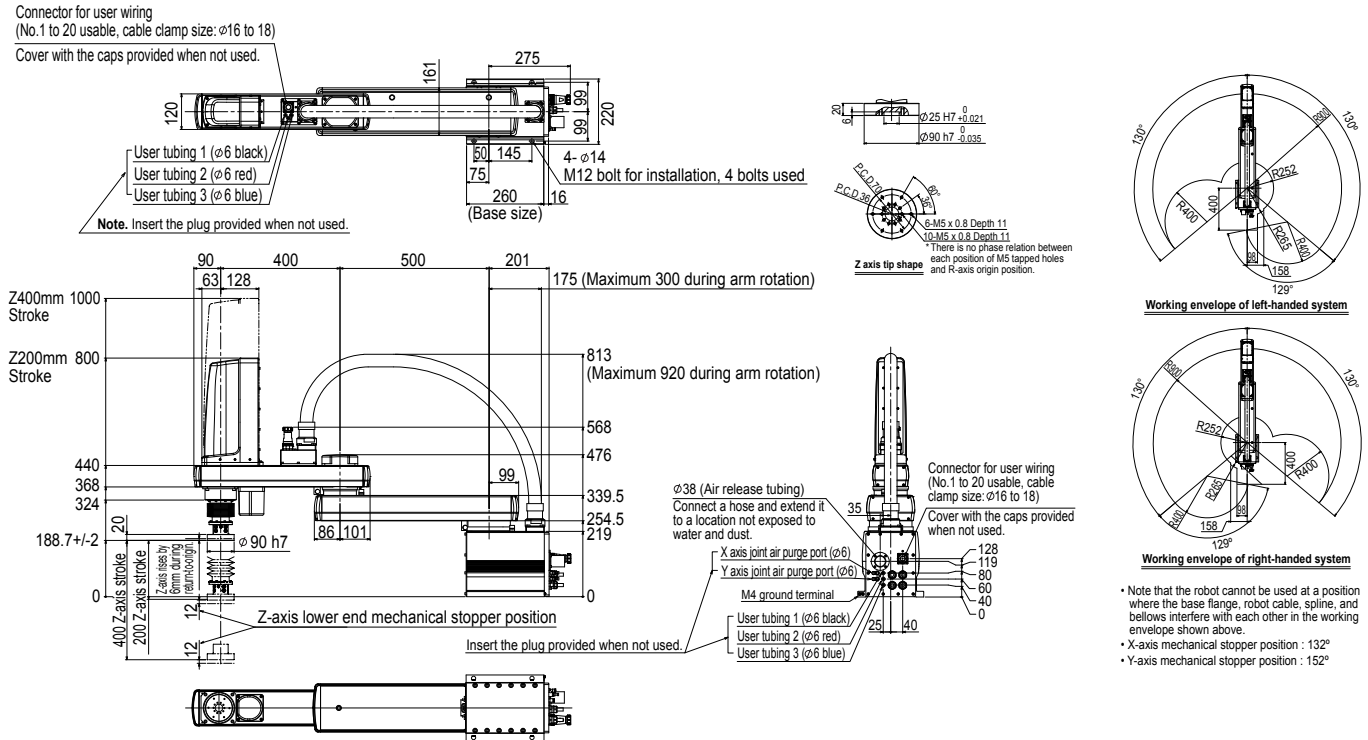
*3 There are limits to the setting of the acceleration coefficient.

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

Controller

Controller	Power consumption (VA)	Operating method
YRCX	2500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXGP1000 XG SERIES - DUST-PROOF & DRIP-PROOF TYPE

Specifications

		X axis	Y axis	Z axis	R axis
Reach (mm)		1000			
Maximum payload (kg)		18			
Repeatability ¹ (XYZ:mm) (R:°)		+/-0.02		+/-0.01	
Axis specifications	Arm length (mm)	600	400	200	400
	Rotation range (°)	+/-130	+/-150	----	+/-360
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		
AC servo motor output (W)		750	400	400	200
Maximum speed (XYZ:m/sec) (R:°/sec)		10.6		2.3	1.7
Standard cycle time: with 2kg payload ² (sec)		0.59			
R axis allowable moment inertia ³ (kgm ²)		1.0			
Protection class ⁴		Equivalent to IP65 (IEC 60529)			
User wiring (sq x pcs)		0.2 x 20			
User tubing (Outer diameter)		Ø6 x 3			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Weight (kg) (Excluding robot cable)		Z axis 200mm: 56, Z axis 400mm: 58			

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

*2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.

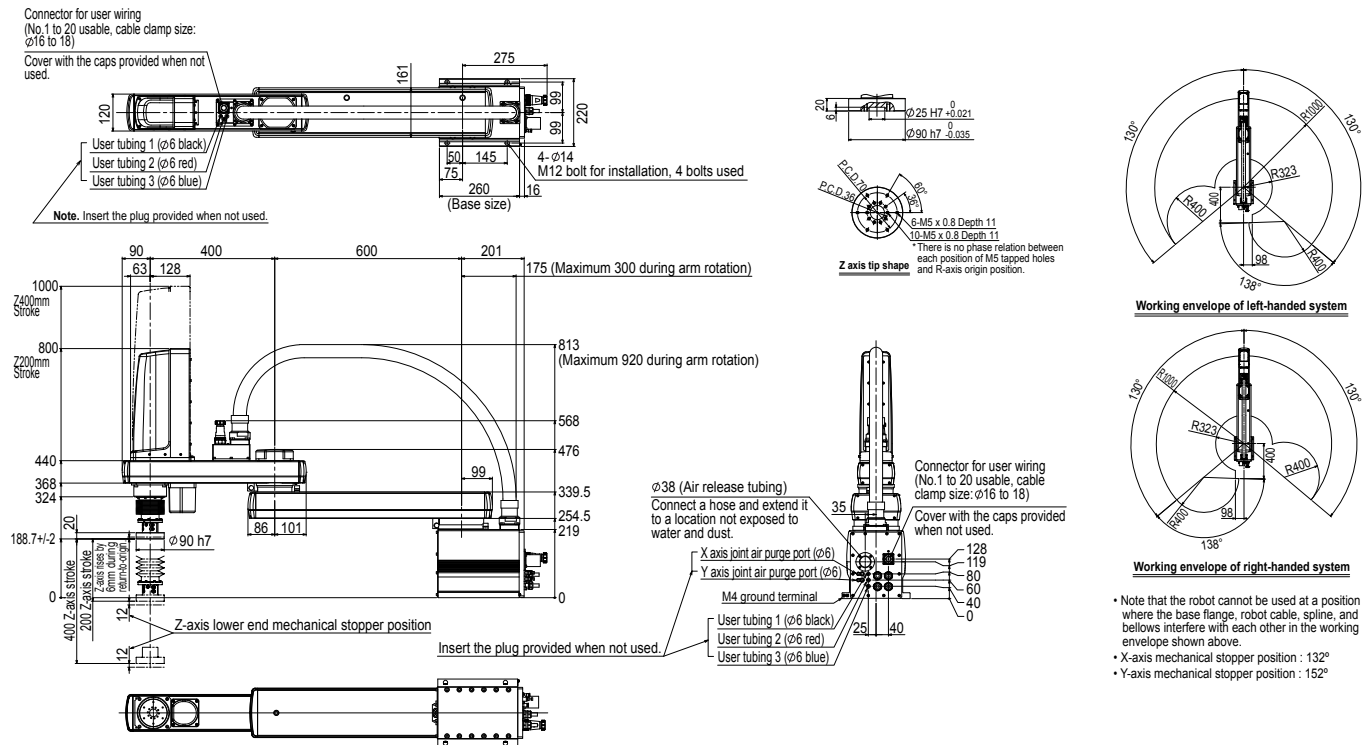
*3 There are limits to the setting of the acceleration coefficient.

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

Controller

Controller	Power consumption (VA)	Operating method
YRCX	2500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXX1200 X SERIES - HIGH PAYLOAD TYPE

Specifications

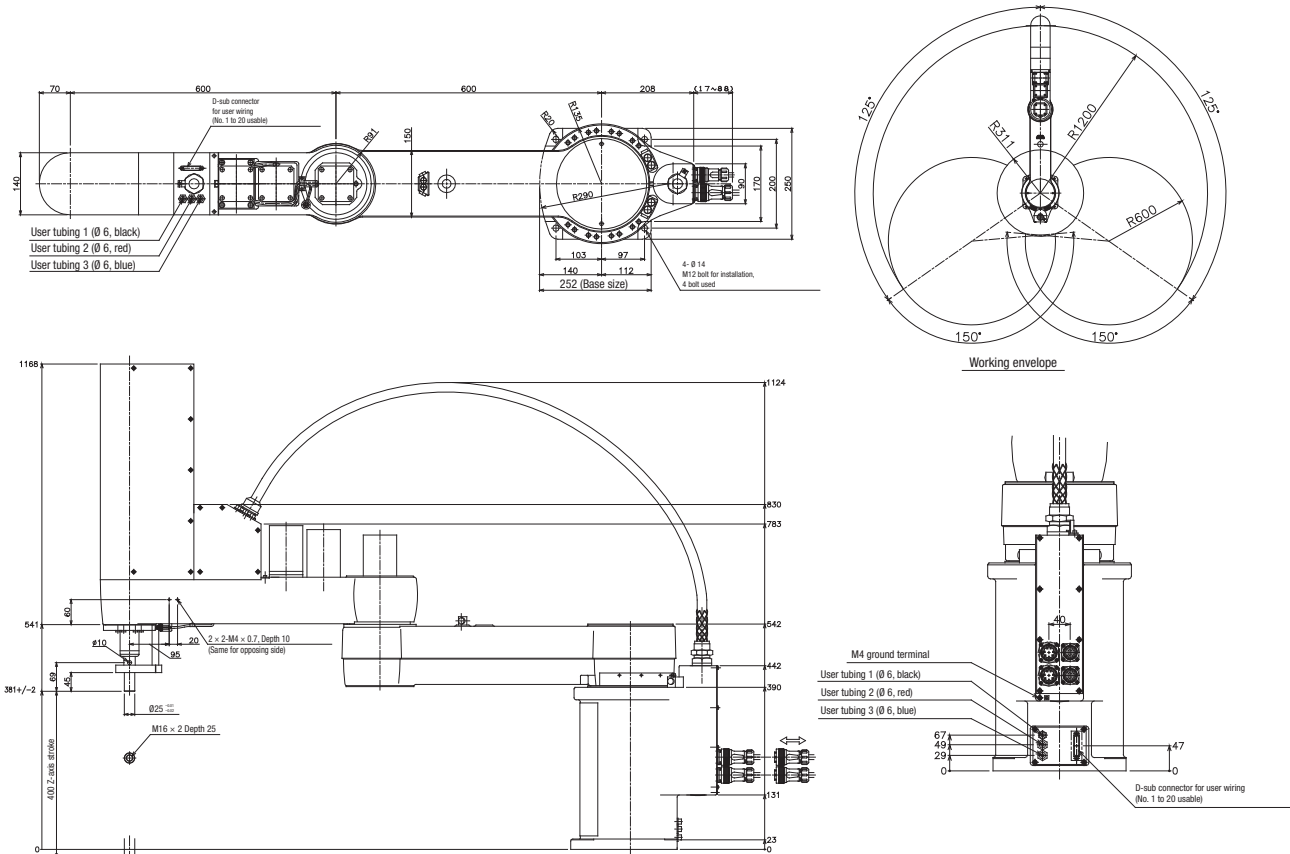
		X axis	Y axis	Z axis	R axis
Reach (mm)		1200			
Maximum payload (kg)		50 (49) ¹			
Repeatability ² (XYZ:mm) (R:°)		±0.05		±0.02	±0.005
Axis specifications	Arm length (mm)	600	600	400	----
	Rotation range (°)	±125	±150	----	±360
Deceleration mechanism	Speed reducer	Planetary gear	Planetary gear	Ball screw	Harmonic drive
	Transmission method	Motor to speed reducer	Direct-coupled	Timing belt transmission	Timing belt transmission
		Speed reducer to output	Direct-coupled		
AC servo motor output (W)		900	800	600	400
Maximum speed (XYZ:m/sec) (R:°/sec)		7.4		0.75	600
Standard cycle time: with 2kg payload ³ (sec)		0.91			
R axis allowable moment inertia ⁴ (kgm ²)		2.45			
User wiring (sq x pcs)		0.2 x 20			
User tubing (Outer diameter)		Ø6 x 3			
Movement limit setting		1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)		3.5, 5, 10			
Min. cable bending radius		R27			
Option	Tool flange	R6YACXGLF			
Weight (kg) (Excluding robot cable)		124			

- *1 Maximum payload is 49kg when tool flange option is installed.
- *2 This is the value at a constant ambient temperature. (X,Y axes)
- *3 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *4 There are limits to the setting of the acceleration coefficient.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	2500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXC180 XC SERIES - CLEAN TYPE

Specifications

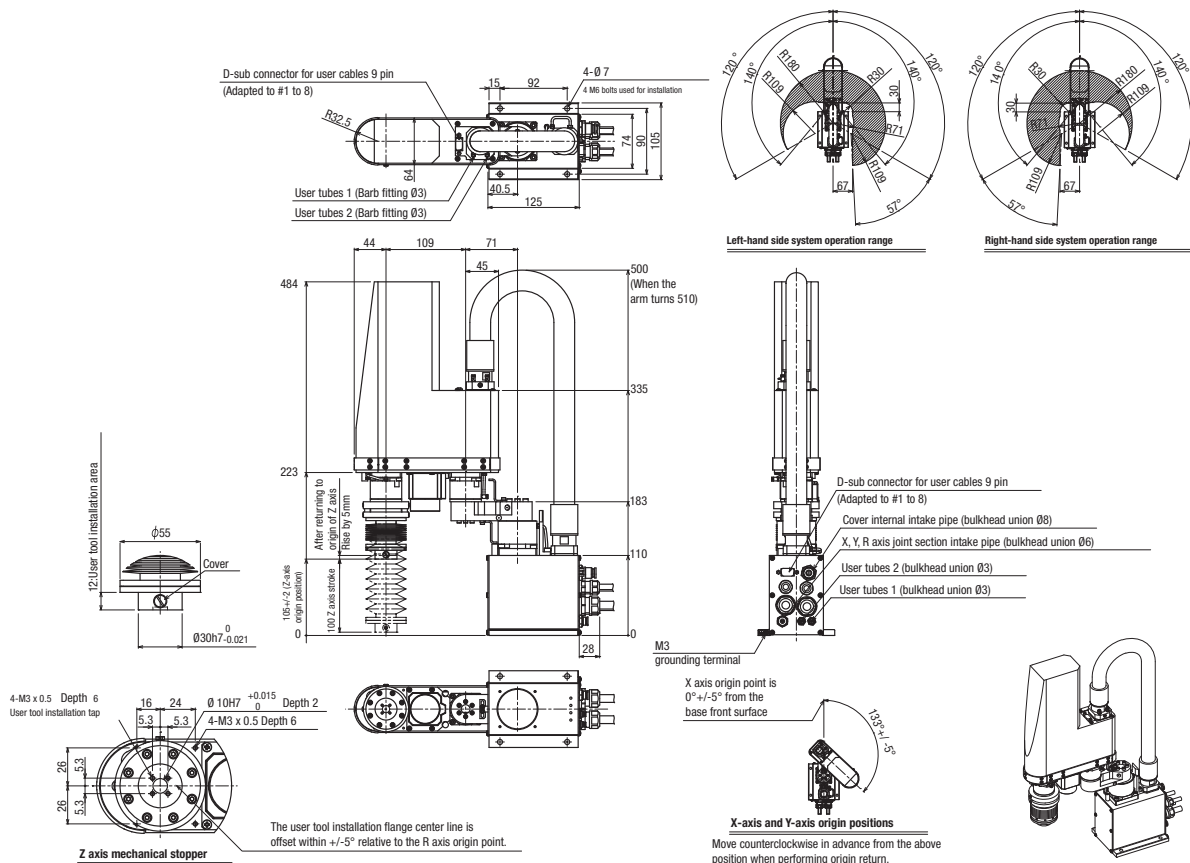
	X axis	Y axis	Z axis	R axis
Reach (mm)	180			
Maximum payload (kg)	1			
Repeatability ¹ (XYZ:mm) (R:°)	+/-0.01		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	71	109	100
	Rotation range (°)	+/-120	+/-140	----
AC servo motor output (W)	50	30	30	30
Maximum speed (XYZ:m/sec) (R:°/sec)	3.3		0.7	1700
Standard cycle time: with 0.1kg payload ² (sec)	0.42			
R axis allowable moment inertia ³ (kgm ²)	0.01			
User wiring (sq x pcs)	0.1 x 8			
User tubing (Outer diameter)	Ø3 x 2			
Movement limit setting	1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)	3.5, 5, 10			
Weight (kg) (Excluding robot cable) ⁴	6.5			
Robot cable weight	1.5kg (3.5m), 2.1kg (5m), 4.2kg (10m)			
Min. cable bending radius	R27			
Degree of cleanliness	CLASS 10 (0.1 micron base)			
Intake air (N l/min)	30			

- *1 This is the value at a constant ambient temperature. (X, Y axes)
- *2 When moving 25mm in vertical direction and 100mm in horizontal direction reciprocally.
- *3 There are limits to the setting of the acceleration coefficient.
- *4 The total robot weight is the sum of the robot body weight and the cable weight.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXC220 XC SERIES - CLEAN TYPE

Specifications

	X axis	Y axis	Z axis	R axis
Reach (mm)	220			
Maximum payload (kg)	1			
Repeatability ^{*1} (XYZ:mm) (R:°)	+/-0.01		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	109	100	----
	Rotation range (°)	+/-120	+/-140	----
AC servo motor output (W)	50	30	30	30
Maximum speed (XYZ:m/sec) (R:°/sec)	3.4		0.7	1700
Standard cycle time: with 0.1kg payload ^{*2} (sec)	0.45			
R axis allowable moment inertia ^{*3} (kgm ²)	0.01			
User wiring (sq x pcs)	0.1 x 8			
User tubing (Outer diameter)	Ø3 x 2			
Movement limit setting	1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)	3.5, 5, 10			
Weight (kg) (Excluding robot cable) ^{*4}	6.5			
Robot cable weight	1.5kg (3.5m), 2.1kg (5m), 4.2kg (10m)			
Min. cable bending radius	R27			
Degree of cleanliness	CLASS 10 (0.1 micron base)			
Intake air (N l/min)	30			

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

*2 When moving 25mm in vertical direction and 100mm in horizontal direction reciprocally.

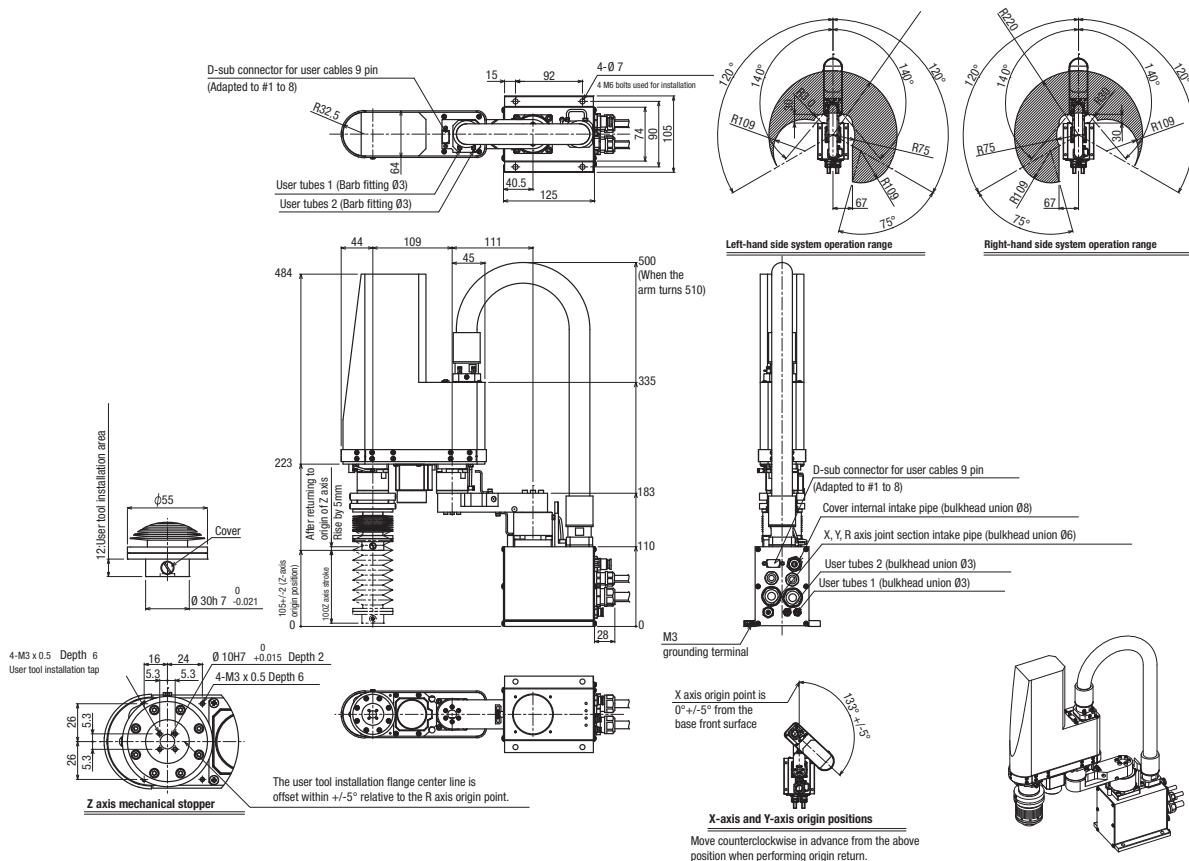
*3 There are limits to the setting of the acceleration coefficient.

*4 The total robot weight is the sum of the robot body weight and the cable weight.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXC500 XC SERIES - CLEAN TYPE

Specifications

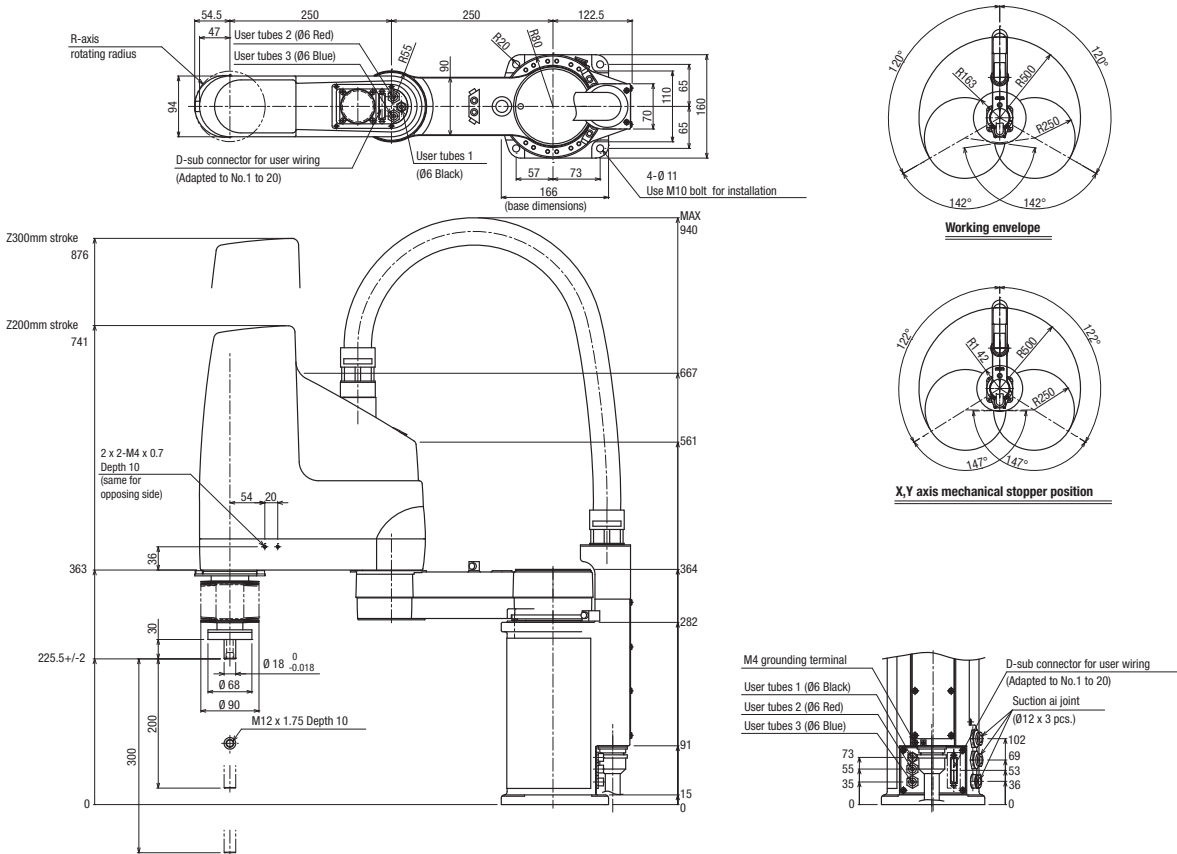
	X axis	Y axis	Z axis	R axis
Reach (mm)	500			
Maximum payload (kg)	10			
Repeatability ^{*1} (XYZ:mm) (R:°)	+/-0.02			
Axis specifications	Arm length (mm)	250	200	300
	Rotation range (°)	+/-120	+/-142	----
AC servo motor output (W)	400	200	200	100
Maximum speed (XYZ:m/sec) (R:°/sec)	4.9		1.7	876
Standard cycle time: with 2kg payload ^{*2} (sec)	0.53			
R axis allowable moment inertia ^{*3} (kgm ²)	0.12			
User wiring (sq x pcs)	0.2 x 20			
User tubing (Outer diameter)	Ø6 x 3			
Movement limit setting	1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)	3.5, 5, 10			
Min. cable bending radius	R27			
Weight (kg)	31			
Degree of cleanliness	CLASS 10 ⁻⁴			
Intake air (N l/min)	60 ^{*5}			

*1 This is the value at a constant ambient temperature. (X,Y axes)
 *2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
 *3 There are limits to the setting of the acceleration coefficient.
 *4 Per 1 cf (0.1micron base), when suction blower is used.
 *5 The necessary intake amount varies depending on the use conditions and environment.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXC600 XC SERIES - CLEAN TYPE

Specifications

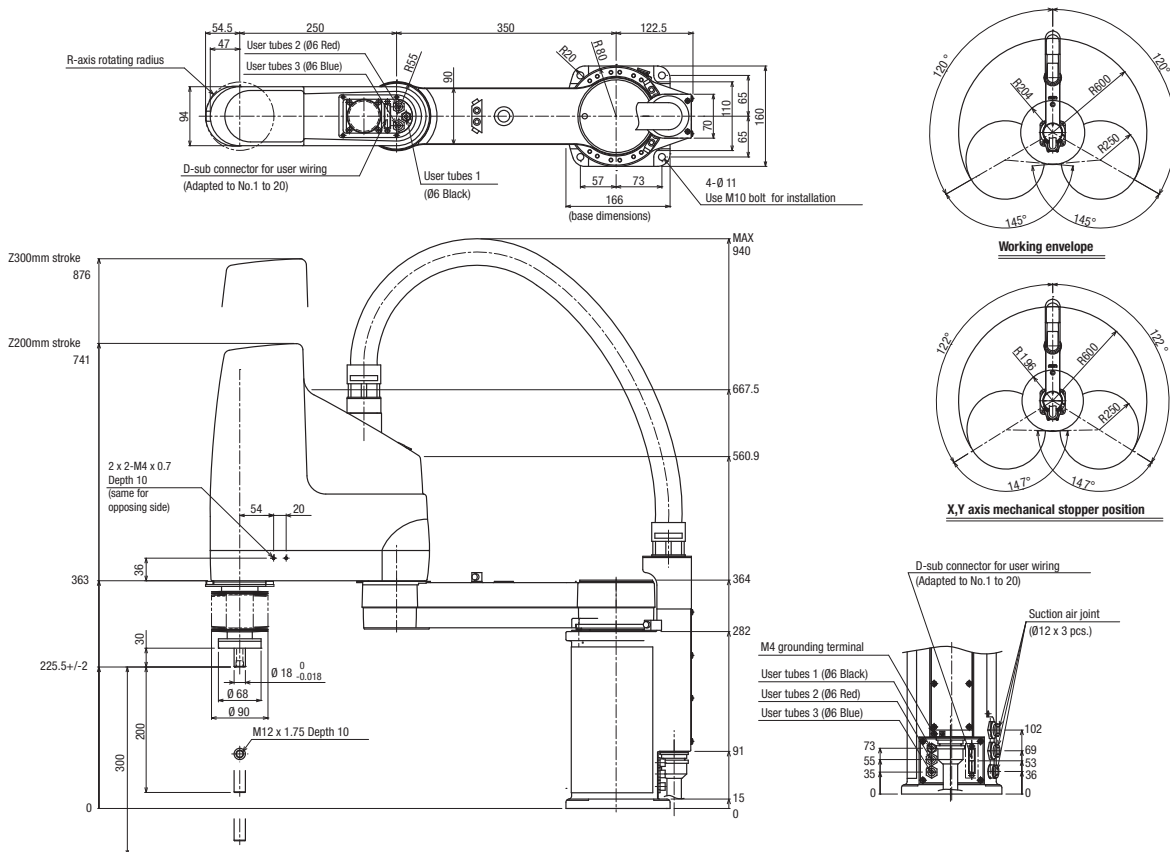
	X axis	Y axis	Z axis	R axis
Reach (mm)	600			
Maximum payload (kg)	10			
Repeatability ¹ (XYZ:mm) (R:°)	+/-0.02		+/-0.01	+/-0.005
Axis specifications	Arm length (mm)	350	200	300
	Rotation range (°)	+/-120	+/-145	----
AC servo motor output (W)	400	200	200	100
Maximum speed (XYZ:m/sec) (R:°/sec)	5.6		1.7	876
Standard cycle time: with 2kg payload ² (sec)	0.56			
R axis allowable moment inertia ³ (kgm ²)	0.12			
User wiring (sq x pcs)	0.2 x 20			
User tubing (Outer diameter)	Ø6 x 3			
Movement limit setting	1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)	3.5, 5, 10			
Min. cable bending radius	R27			
Weight (kg)	33			
Degree of cleanliness	CLASS 10 ⁻⁴			
Intake air (N l/min)	60 ⁵			

- *1 This is the value at a constant ambient temperature. (X,Y axes)
- *2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *3 There are limits to the setting of the acceleration coefficient.
- *4 Per 1 cf (0.1micron base), when suction blower is used.
- *5 The necessary intake amount varies depending on the use conditions and environment.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	1500	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXC700 XC SERIES - CLEAN TYPE

Specifications

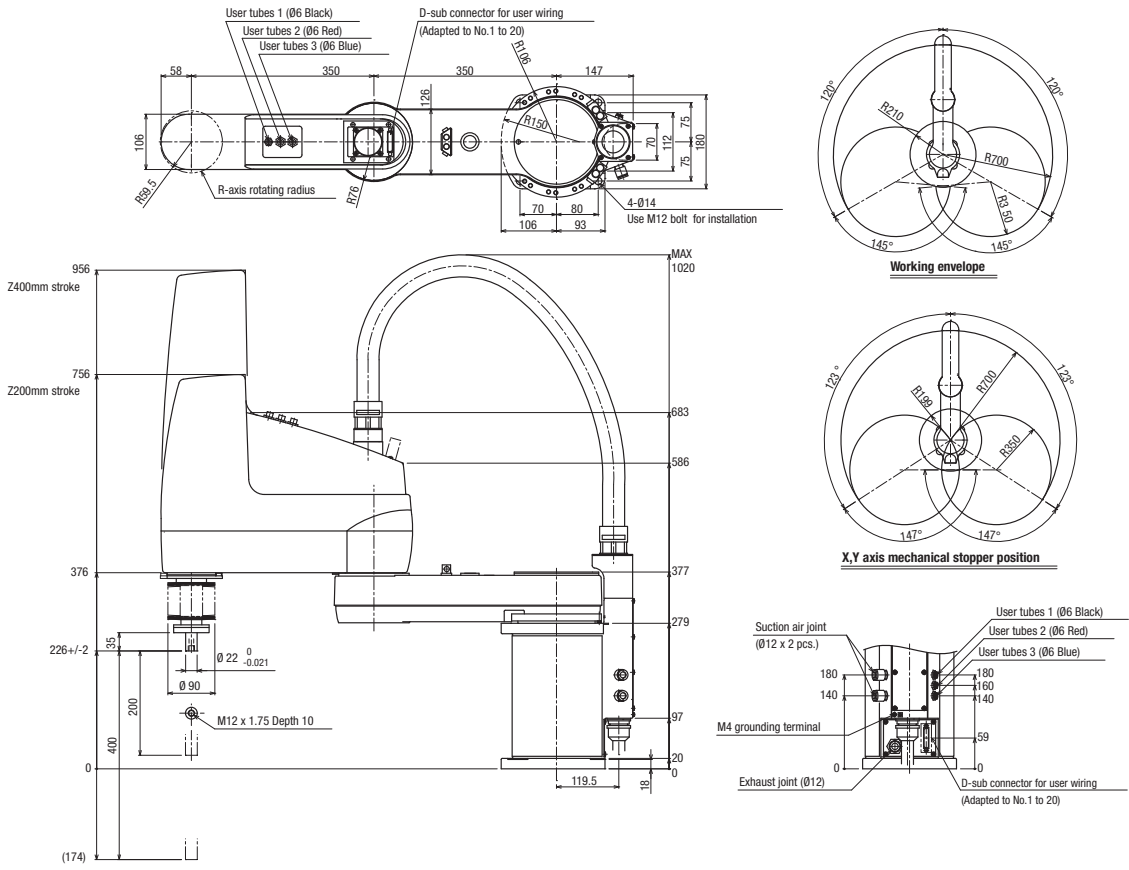
	X axis	Y axis	Z axis	R axis
Reach (mm)	700			
Maximum payload (kg)	20			
Repeatability ¹ (XYZ:mm) (R:°)	+/-0.02		+/-0.01	+/-0.005
Axis specifications	Arm length (mm)	350	200	400
	Rotation range (°)	+/-120	+/-145	----
AC servo motor output (W)	800	400	400	200
Maximum speed (XYZ:m/sec) (R:°/sec)	6.7		1.7	600
Standard cycle time: with 2kg payload ² (sec)	0.57			
R axis allowable moment inertia ³ (kgm ²)	0.32			
User wiring (sq x pcs)	0.2 x 20			
User tubing (Outer diameter)	Ø6 x 3			
Movement limit setting	1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)	3.5, 5, 10			
Min. cable bending radius	R27			
Weight (kg)	57			
Degree of cleanliness	CLASS 10 ⁻⁴			
Intake air (N l/min)	60 ⁵			

*1 This is the value at a constant ambient temperature. (X,Y axes)
 *2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
 *3 There are limits to the setting of the acceleration coefficient.
 *4 Per 1 of (0.1micron base), when suction blower is used.
 *5 The necessary intake amount varies depending on the use conditions and environment.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	2000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXC800 XC SERIES - CLEAN TYPE

Specifications

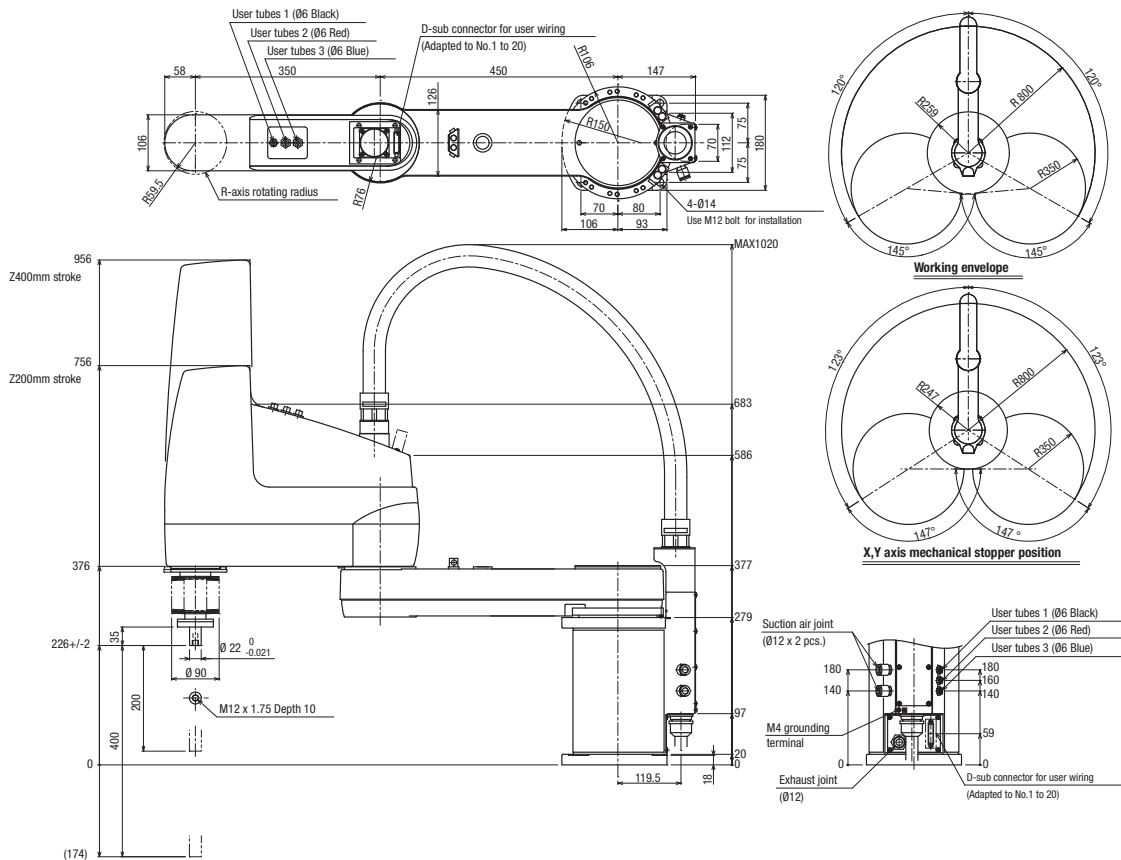
	X axis	Y axis	Z axis	R axis
Reach (mm)	800			
Maximum payload (kg)	20			
Repeatability ¹ (XYZ:mm) (R:°)	+/-0.02		+/-0.01	+/-0.005
Axis specifications	Arm length (mm)	450	350	200 400
	Rotation range (°)	+/-120	+/-145	----
AC servo motor output (W)	800	400	400	200
Maximum speed (XYZ:m/sec) (R:°/sec)	7.3		1.7	600
Standard cycle time: with 2kg payload ² (sec)	0.57			
R axis allowable moment inertia ³ (kgm ²)	0.32			
User wiring (sq x pcs)	0.2 x 20			
User tubing (Outer diameter)	Ø6 x 3			
Movement limit setting	1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)	3.5, 5, 10			
Min. cable bending radius	R27			
Weight (kg)	58			
Degree of cleanliness	CLASS 10 ⁴			
Intake air (N l/min)	60 ⁵			

- *1 This is the value at a constant ambient temperature. (X,Y axes)
- *2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
- *3 There are limits to the setting of the acceleration coefficient.
- *4 Per 1 cf (0.1micron base), when suction blower is used.
- *5 The necessary intake amount varies depending on the use conditions and environment.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	2000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



R6YXC1000 XC SERIES - CLEAN TYPE

Specifications

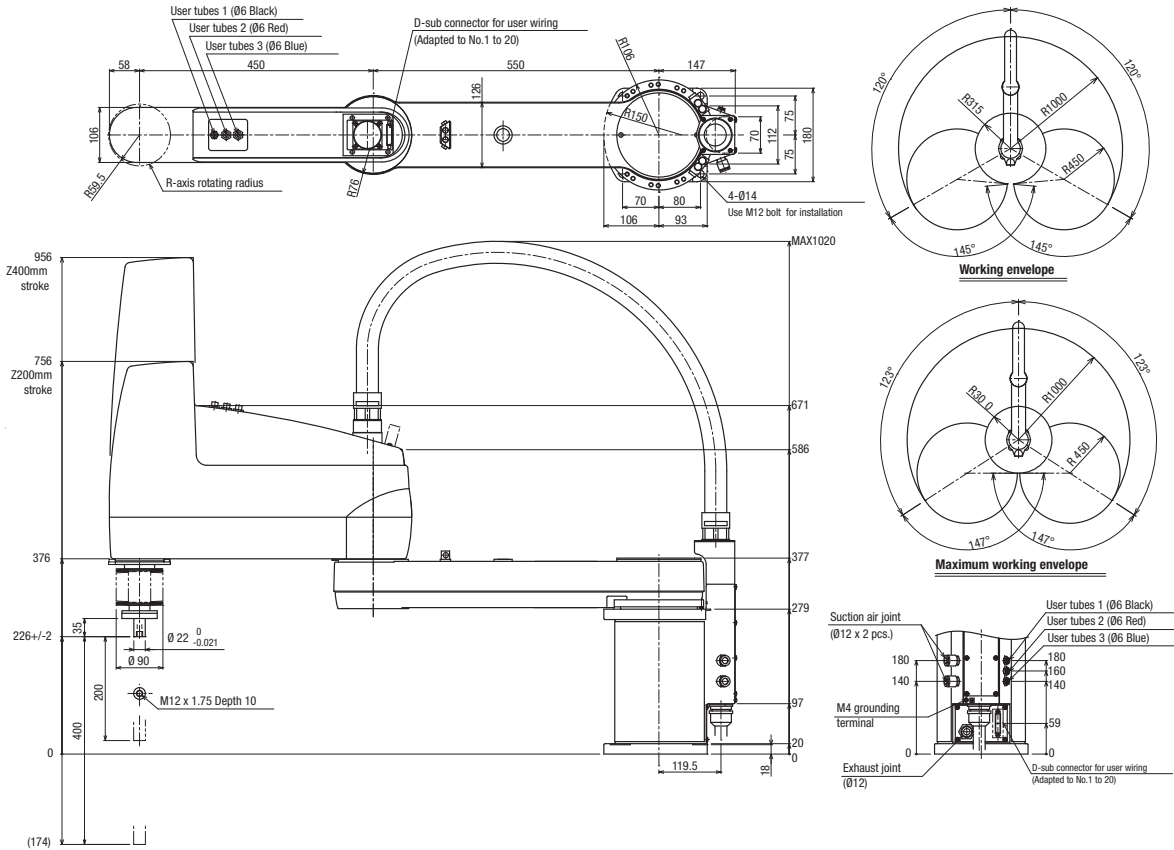
	X axis	Y axis	Z axis	R axis
Reach (mm)	1000			
Maximum payload (kg)	20			
Repeatability ¹ (XYZ:mm) (R:°)	+/-0.02		+/-0.01	+/-0.005
Axis specifications	Arm length (mm)	550	200	400
	Rotation range (°)	+/-120	+/-145	----
AC servo motor output (W)	800	400	400	200
Maximum speed (XYZ:m/sec) (R:°/sec)	8		1.7	600
Standard cycle time: with 2kg payload ² (sec)	0.6			
R axis allowable moment inertia ³ (kgm ²)	0.32			
User wiring (sq x pcs)	0.2 x 20			
User tubing (Outer diameter)	Ø6 x 3			
Movement limit setting	1.Soft limit 2.Mechanical stopper (X, Y, Z axis)			
Robot cable length (m)	3.5, 5, 10			
Min. cable bending radius	R27			
Weight (kg)	59			
Degree of cleanliness	CLASS 10 ⁻⁴			
Intake air (N l/min)	60 ⁵			

*1 This is the value at a constant ambient temperature. (X,Y axes)
 *2 When moving 25mm in vertical direction and 300mm in horizontal direction reciprocally.
 *3 There are limits to the setting of the acceleration coefficient.
 *4 Per 1 of (0.1micron base), when suction blower is used.
 *5 The necessary intake amount varies depending on the use conditions and environment.

Controller

Controller	Power consumption (VA)	Operating method
YRCX	2000	Programming / I/O point trace / Remote command / Operation using RS-232C or Ethernet communications

Dimensions



SCARA Robots

Ordering information

SCARA Robots

XE series - Standard type

Robot					Robot controller	Arm 1/2 Return-to-origin	Robot + controller item code	Accessories			
Series	Reach (mm)	Z-axis stroke (mm)	Payload (kg)	Tool flange				Open shaft	Hollow cap	Brake release	
R6Y	XE	400	150	4	YRCX	Stroke end method	R6YXET400150YRCX	Not applicable	R6YACXGLS	Not applicable	R6YACXE BRAKEUNIT
						Sensor method	R6YXES400150YRCX	Not applicable	R6YACXGLS		
		510	200	10		Sensor method	R6YXE510200YRCX	R6YACXGLF	R6YACXGLS	R6YACXE	
		610	200	10		Sensor method	R6YXE610200YRCX	R6YACXGLF	R6YACXGLS	HOLLOWCAP	
		710	200	10		Sensor method	R6YXE710200YRCX	R6YACXGLF	R6YACXGLS		

XG series - Standard type

Robot					Robot controller	Robot + controller item code	Accessories		
Series	Reach (mm)	Z-axis stroke (mm)	Payload (kg)	Tool flange			Open shaft		
R6Y	XG	120	50	1	YRCX	R6YXG12050YRCX	Not applicable	Not applicable	
		150	50	1		R6YXG15050YRCX	Not applicable	Not applicable	
		180	50	1		R6YXG18050YRCX	Not applicable	Not applicable	
		220	100	1		R6YXG220100YRCX	Not applicable	Not applicable	
	XGL	250	150	5		R6YXGL250150YRCX	R6YACXGLF	R6YACXGLS	
		350	150	5		R6YXGL350150YRCX	R6YACXGLF	R6YACXGLS	
		400	150	5		R6YXGL400150YRCX	R6YACXGLF	R6YACXGLS	
		500	150	5		R6YXGL500150YRCX	R6YACXGLF	R6YACXGLS	
	XG	500	200	10		R6YXG500200YRCX	R6YACXGLF	Not applicable	
			300						R6YXG500300YRCX
	XGL	600	150	5		R6YXGL600150YRCX	R6YACXGLF	R6YACXGLS	
			200	10		R6YXG600200YRCX	R6YACXGLF	Not applicable	
	XG	600	300			R6YXG600300YRCX			
			XGH	600		200	20	R6YXGH600200YRCX	R6YACXGLF
	400						R6YXGH600400YRCX		
	XGL	700		200		10	R6YXGL700200YRCX	R6YACXGLF	Not applicable
				300					
	XG	700	200	20		R6YXG700200YRCX	R6YACXGLF	Not applicable	
			400						R6YXG700400YRCX
		800	200	20		R6YXG800200YRCX	R6YACXGLF	Not applicable	
				400					
		900	200	20		R6YXG900200YRCX	R6YACXGLF	Not applicable	
				400					
	1000	200	20	R6YXG1000200YRCX		R6YACXGLF	Not applicable		
		400				R6YXG1000400YRCX			

XG series - Wall-mount type

Robot					Robot controller	Robot + controller item code	Accessories	
Series	Reach (mm)	Z-axis stroke (mm)	Payload (kg)	Tool flange			Open shaft	
R6Y	XGSW	300	150	5	YRCX	R6YXGSW300150YRCX	R6YACXGLF	R6YACXGLS
		400	150	5		R6YXGSW400150YRCX	R6YACXGLF	R6YACXGLS
				10		R6YXGSW400200YRCX	R6YACXGLF	Not applicable
		500	200	10		R6YXGSW500200YRCX	R6YACXGLF	Not applicable
				300				
		600	200	10		R6YXGSW600200YRCX	R6YACXGLF	Not applicable
				300				
		700	200	20		R6YXGSW700200YRCX	R6YACXGLF	Not applicable
				400				
		800	200	20		R6YXGSW800200YRCX	R6YACXGLF	Not applicable
				400				
		900	200	20		R6YXGSW900200YRCX	R6YACXGLF	Not applicable
				400				
		1000	200	20		R6YXGSW1000200YRCX	R6YACXGLF	Not applicable
				400				

XG series - Wall-mount inverse type

Robot				Robot controller	Robot + controller item code	Accessories		
Series	Reach (mm)	Z-axis stroke (mm)	Payload (kg)			Tool flange	Open shaft	
R6Y	XGSU	300	150	5	YRCX	R6YXGSU300150YRCX	R6YACXGLF	R6YACXGLS
		400	150	5		R6YXGSU400150YRCX	R6YACXGLF	R6YACXGLS
		500	200	10		R6YXGSU500200YRCX	R6YACXGLF	Not applicable
				300		R6YXGSU500300YRCX		
		600	200	10		R6YXGSU600200YRCX	R6YACXGLF	Not applicable
				300		R6YXGSU600300YRCX		
		700	200	20		R6YXGSU700200YRCX	R6YACXGLF	Not applicable
				400		R6YXGSU700400YRCX		
		800	200	20		R6YXGSU800200YRCX	R6YACXGLF	Not applicable
				400		R6YXGSU800400YRCX		
		900	200	20		R6YXGSU900200YRCX	R6YACXGLF	Not applicable
				400		R6YXGSU900400YRCX		
		1000	200	20		R6YXGSU1000200YRCX	R6YACXGLF	Not applicable
				400		R6YXGSU1000400YRCX		

XG series - Clean type

Robot				Robot controller	Robot + controller item code	Accessories		
Series	Reach (mm)	Z-axis stroke (mm)	Payload (kg)			Tool flange	Open shaft	
R6Y	XGLC	250	150	4	YRCX	R6YXGLC250150YRCX	R6YACXGLF	R6YACXGLS
		350	150	4		R6YXGLC350150YRCX	R6YACXGLF	R6YACXGLS
		400	150	4		R6YXGLC400150YRCX	R6YACXGLF	R6YACXGLS
		500	150	4		R6YXGLC500150YRCX	R6YACXGLF	R6YACXGLS
		600	150	4		R6YXGLC600150YRCX	R6YACXGLF	R6YACXGLS

XG series - Dust-proof & drip-proof type

Robot				Robot controller	Robot + controller item code	Accessories		
Series	Reach (mm)	Z-axis stroke (mm)	Payload (kg)			Tool flange	Open shaft	
R6Y	XGLP	250	150	4	YRCX	R6YXGLP250150YRCX	R6YACXGLF	R6YACXGLS
		350	150	4		R6YXGLP350150YRCX	R6YACXGLF	R6YACXGLS
		400	150	4		R6YXGLP400150YRCX	R6YACXGLF	R6YACXGLS
		500	150	4		R6YXGLP500150YRCX	R6YACXGLF	R6YACXGLS
	XGP	500	200	8		R6YXGP500200YRCX	Equipped by default	Equipped by default
			300		R6YXGP500300YRCX			
	XGLP	600	150	4		R6YXGLP600150YRCX	R6YACXGLF	R6YACXGLS
	XGP	600	200	8		R6YXGP600200YRCX	Equipped by default	Equipped by default
			300		R6YXGP600300YRCX			
	XGHP	600	200	18		R6YXGHP600200YRCX	Equipped by default	Equipped by default
			400		R6YXGHP600400YRCX			
	XGP	700	200	18		R6YXGP700200YRCX	Equipped by default	Equipped by default
			400		R6YXGP700400YRCX			
		800	200	18		R6YXGP800200YRCX	Equipped by default	Equipped by default
				400		R6YXGP800400YRCX		
		900	200	18		R6YXGP900200YRCX	Equipped by default	Equipped by default
	400				R6YXGP900400YRCX			
	1000	200	18		R6YXGP1000200YRCX	Equipped by default	Equipped by default	
			400		R6YXGP1000400YRCX			

X series - High payload type

Robot				Robot controller	Robot + controller item code	Accessories		
Series	Reach (mm)	Z-axis stroke (mm)	Payload (kg)			Tool flange	Open shaft	
R6Y	XX	1200	400	50	YRCX	R6YXX1200400YRCX	R6YACXGLF	Not applicable

XC series - Clean type

Robot				Robot controller	Robot + controller item code	Accessories		
Series	Reach (mm)	Z-axis stroke (mm)	Payload (kg)			Tool flange	Open shaft	
R6Y	XC	180	100	1	YRCX	R6YXC180100YRCX	Not applicable	Not applicable
		220	100	1		R6YXC220100YRCX	Not applicable	Not applicable
		500	200	10		R6YXC500200YRCX	Not applicable	Not applicable
				300		R6YXC500300YRCX		
		600	200	10		R6YXC600200YRCX	Not applicable	Not applicable
				300		R6YXC600300YRCX		
		700	200	20		R6YXC700200YRCX	Not applicable	Not applicable
				400		R6YXC700400YRCX		
		800	200	20		R6YXC800200YRCX	Not applicable	Not applicable
				400		R6YXC800400YRCX		
		1000	200	20		R6YXC1000200YRCX	Not applicable	Not applicable
				400		R6YXC1000400YRCX		

SCARA robot cables

SCARA robot series	Applicable robots	Robot cable		
		Length (m)	Item code	Detachable
XG series - Standard type	R6YXG120/150/180	2.0	R6YACCX002T1	Not applicable
		3.5	R6YACCX003T1	Not applicable
		5.0	R6YACCX005T1	Not applicable
		10.0	R6YACCX010T1	Not applicable
XG series - Standard type	R6YXG220	3.5	R6YACCX003T2	●
		5.0	R6YACCX005T2	●
		10.0	R6YACCX010T2	●
XE series - Standard type XG series - Standard type X series - High payload type	R6YXE400/510/610/710	3.5	R6YACCX003XGX	●
	R6YXGL250/350/400/500/600	5.0	R6YACCX005XGX	●
	R6YXG500/600/700/800/900/1000	10.0	R6YACCX010XGX	●
	R6YXGH600 R6YXX1200			
XG series - Standard type XG series - Wall mount type XG series - Wall-mount inverse type	R6YXGL700	3.5	R6YACCX003XGS	Not applicable
	R6YXGSW300/400/500/600/700/800/900/1000	5.0	R6YACCX005XGS	Not applicable
	R6YXGSU300/400/500/600/700/800/900/1000	10.0	R6YACCX010XGS	Not applicable
XG series - Clean type XG series - Dust-proof & dip-proof type	R6YXGLC250/350/400/500/600	3.5	R6YACCX003XGCXGP	●
	R6YXGLP250/350/400/500/600	5.0	R6YACCX005XGCXGP	●
	R6YXGP500/600/700/800/900/1000	10.0	R6YACCX010XGCXGP	●
	R6YXGHP600			
XC series - Clean type	R6YXC180/220/500/600/700/800/1000	3.5	R6YACCX003XSXC	Not applicable
		5.0	R6YACCX005XSXC	Not applicable
		10.0	R6YACCX010XSXC	Not applicable

YRCX Robot Controller options

Type	Specifications	Model	
Optional input/output	8 dedicated input, 9 dedicated output	NPN R6YACSD241X ¹	
	16 general purpose input, 16 general purpose output	PNP R6YACSD242X ^{1,2}	
	24 general purpose input, 16 general purpose output	NPN	R6YACMD241X
		PNP	R6YACMD242X
Communications ³	EtherNet/IP	R6YACEIP01X	
	DeviceNet slave	R6YACDRT01X	
	PROFIBUS slave	R6YACPRT01X	
	PROFINET slave	R6YACPNT01X	
	YC-Link/E master	R6YACYCM01X ⁴	
	YC-Link/E slave	R6YACYCS01X ⁴	
Conveyor tracking	Tracking board	R6YACTR01X ⁵	
	Encoder cable for tracking	10 m R6YACCR005	
Programming box	PBEX	5 m R6YACPB005EX	
		12 m R6YACPB012EX	
Communications cable	Communications cable 9-9 pin	5 m R6YACCC005	
	USB communications cable	5 m R6YACUSB005	
Drive boards	X axis	Max. current: 5 A R6YACDBX05X	
		Max. current: 10 A R6YACDBX10X	
		Max. current: 20 A R6YACDBX20X	
	Y axis	Max. current: 5 A R6YACDBY05X	
		Max. current: 10 A R6YACDBY10X	
		Max. current: 20 A R6YACDBY20X	

*1 Only one option board can be selected. This board should be inserted on slot 1.
 *2 Provided by default with the YRCX Robot Controller.
 *3 Be careful not to mix field networks (EtherNet/IP, DeviceNet, PROFIBUS, PROFINET).
 *4 Select only one master or slave board for YC-Link/E.
 *5 Only one tracking board can be selected.

Software

Specifications	Model
SCARA-YRCX Studio	Software
	Please download it from following URL: https://industrial.omron.eu/en/products/x-series#downloads
	License dongle R6YACSSC1X ¹

*1 One license per computer.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.
 To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.