

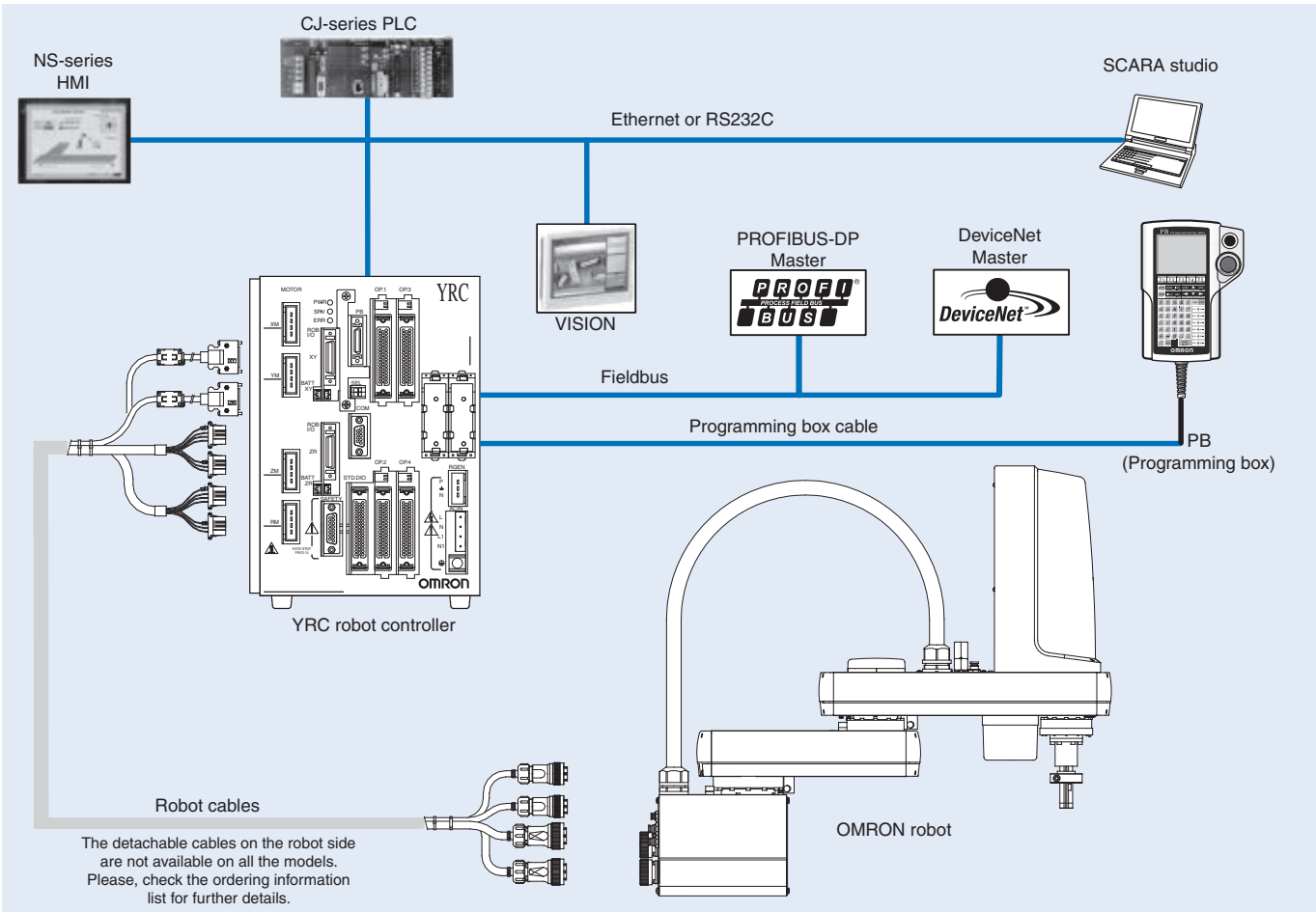
SCARA robots

SCARA robots for industrial applications:

- 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.



System configuration



YRC Robot controller

Specifications

Item	Description			
YRC	YRC robot controller			
Basic specifications	Number of controllable axes			
	4 axes maximum (Control simultaneously: 4 axes)			
	Controllable robots			
	SCARA robots			
	Maximum power consumption			
	2500 VA			
Capacity of the connected motor				
1600 W				
Dimensions (WxHxD)				
180x250x235 mm				
Weight				
6.5 kg				
Input power supply	Control power supply	Single phase AC200 to 230 V +/-10% maximum (50/60 Hz)		
	Motor power supply	Single phase AC200 to 230 V +/-10% maximum (50/60 Hz)		
Axis control	Drive method			
	AC full-digital software servo			
	Position detection method			
	Multi-turn resolver with data backup function, Magnetic linear scale			
	Operating method			
	PTP (Point to point), Linear interpolation, Circular interpolation, ARCH			
	Coordinate system			
	Joint coordinates, Cartesian coordinates			
	Position indication units			
Pulses, mm (millimeters), deg (degrees)				
Speed setting				
1% to 100% (In units of 1%. However speed is in units of 0.01% during single-axis operation by DRIVE statement)				
Acceleration setting				
1. Automatic acceleration setting based on robot model type and end mass parameter 2. Setting based on acceleration and deceleration parameter (Setting by 1% unit)				
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			
	8 tasks maximum			
Sequence program				
1 program				
Point-data input method				
Manual data input (coordinate value input), Direct teaching, Teaching playback				
Memory	Memory capacity			
	364 KB (total capacity of program and points) (available program capacity during use of maximum number of points is 84 KB)			
	Programs			
	100 program (Max.) 9.999: maximum lines per program 98 KB: maximum capacity per program			
	Points			
10.000 points: maximum 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	STD.DIO	I/O input	General input 16 points, dedicated input 10 points (NPN/PNP specifications selectable)	
		I/O output	General output 8 points, dedicated output 11 points	
	SAFETY			Emergency stop input (Relay contact), Service mode input (NPN/PNP specification is set according to STD.DIO setting)
	Brake output			Relay contact
	Origin sensor input			Connectable to DC 24 V normally-closed contact sensor
	External communications			RS232C: 1CH D-SUB9 (female) RS422: 1CH (Dedicated PB)
	Options	Slots	4	
			Optional input/output (NPN/PNP): General input 24 points / General output 16 points	
			CC-Link: Dedicated input 16 points, Dedicated output 16 points, General input 96 points, General output 96 points (4 nodes occupied)	
			DeviceNet: Dedicated input 16 points, Dedicated output 16 points, General input 96 points, General output 96 points	
			Profibus: Dedicated input 16 points, Dedicated output 16 points, General input 96 points, General output 96 points	
			Ethernet: IEEE802.3 10Mbps (10BASE-T)	
			IVY: Camera input (2ch), camera trigger input, PC connection input	
Tracking: AB phase input, lighting trigger input, lighting power supply input/output				
Lighting control: lighting trigger input, lighting power supply input/output				
Options	Programming box		PB (with enable switch)	
	Support software for PC		SCARA STUDIO	
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 5400 mAh (2700 mAh x 2)	
	Absolute data backup period		1 year (in state with no power applied)	
	Noise immunity		IEC61000-4-4 Level 3	
	Protective structure		IP10	

YRC-Optional Input/Output unit (PNP/NPN)

Item	Description
R6YACMD241 (NPN) R6YACMD242 (PNP)	Optional Input/Output unit ^{*1}
Optional Input/Output (NPN/PNP)	24 General purpose input, 16 General purpose output

*1 Please add one I/O connector (YKIOCONNECTOR) for each optional I/O unit.

YRC-DeviceNet slave unit

Item	Description				
R6YACDRT01	DeviceNet slave unit				
Applicable controllers	YRC				
Applicable DeviceNet specifications	Volume 1 Release 2.0 / Volume 2 Release 2.0				
Device Profile Name	Generic Device (device number 0)				
Number of occupied CH ^{*1}	Normal: Input/Output 24ch each, Compact: Input/Output 2ch each				
MAC ID setting	0 to 63				
Transmission speed setting	500 Kbps, 250 Kbps, 125 Kbps (set using DIP switch on board)				
DeviceNet I/O ^{*2}	<table border="1"> <tr> <td>Normal</td> <td>General input 96 points, General output 96 points, Dedicated input 16 points, Dedicated output 16 points</td> </tr> <tr> <td>Compact</td> <td>General input 16 points, General output 16 points, Dedicated input 16 points, Dedicated output 16 points</td> </tr> </table>	Normal	General input 96 points, General output 96 points, Dedicated input 16 points, Dedicated output 16 points	Compact	General input 16 points, General output 16 points, Dedicated input 16 points, Dedicated output 16 points
Normal	General input 96 points, General output 96 points, Dedicated input 16 points, Dedicated output 16 points				
Compact	General input 16 points, General output 16 points, Dedicated input 16 points, Dedicated output 16 points				
Parallel external I/O	The master module and up to four ports can be controlled regardless of the robot program by using the pseudoserialization function				
Network length	<table border="1"> <tr> <td>Overall length ^{*3}</td> <td>100 m/500 Kbps, 250 m/250 Kbps, 500 m/125 Kbps</td> </tr> <tr> <td>Branch length / Overall branch length</td> <td>6 m max./39 m max., 6 m max./78 m max., 6 m max./156 m max.</td> </tr> </table>	Overall length ^{*3}	100 m/500 Kbps, 250 m/250 Kbps, 500 m/125 Kbps	Branch length / Overall branch length	6 m max./39 m max., 6 m max./78 m max., 6 m max./156 m max.
Overall length ^{*3}	100 m/500 Kbps, 250 m/250 Kbps, 500 m/125 Kbps				
Branch length / Overall branch length	6 m max./39 m max., 6 m max./78 m max., 6 m max./156 m max.				
Monitor LED	MS (Module Status), NS (Network Status)				

*1 Use the robot parameter to select Normal or Compact.

*2 Controller I/O are updated every 10ms.

*3 These values apply when a thick cable is used. The distance is less when a fine cable is used or when thick and fine cables are mixed in use.

YRC-Profibus slave unit

Item	Description
R6YACPRT01	Profibus slave unit
Applicable controllers	YRC
Communication profile	Profibus-DP slave
Number of occupied nodes	1 node
Setting of station address	1 to 99 (set using Rotary switch on board)
Setting of communication speed	9.6 Kbps, 19.2 Kbps, 93.75 Kbps, 187.5 Kbps, 500 Kbps, 1.5 Mbps, 3 Mbps, 6 Mbps, 12 Mbps (automatic recognition)
Profibus I/O ^{*1}	General input 96 points, General output 96 points, Dedicated input 16 points, Dedicated output 16 points
Parallel external I/O	The master module and up to four ports can be controlled regardless of the robot program by using the pseudoserialization function
Overall length	100 m/3 M-6 M-12 Mbps, 200 m/1.5 Mbps, 400 m/500 Kbps, 1000 m/187.5 Kbps, 1200 m/9.6 K. 19.2 K-93.75 Kbps
Monitor LED	RUN, ERR, SD, RD, DATA-EX

*1 The shortest I/O update interval of the controller is 10 ms but the actual I/O update time varies depending on the update time with the master station.

YRC-Ethernet unit

Item	Description
R6YACETN01	Ethernet unit
Applicable controllers	YRC
Network specification	As specified for Ethernet (IEEE802.3)
Connector specification	RJ-45 connector (8-pole modular connector) 1 port
Baud rate	10 Mbps (10BASE-T)
Communication mode	Half Duplex (Half-duplex)
Network protocol	Application layer: TELNET / Transport layer: TCP / IP Network layer: IP, ICMP, ARP / Data link layer: CSMA / CD Physical layer: 10BASE-T
Number of simultaneous log inputs	1
Setting of IP address, etc.	Set from PB
Monitor LED	Run, Collision, Link, Transmit, Receive

YRC-EtherNet/IP unit

Item	Description
R6YACEIP01	EtherNet/IP unit
Applicable controllers	YRC version 1.64M or higher
Network specifications	Conforms to Ethernet (IEEE 802.3)
Applicable EtherNet/IP specifications	Volume 1: Common Industrial protocol (CIP™) 3.8 / Volume 2: EtherNet/IP Adaption Edition 1.9
Device type	Generic Device (device number 43)
Data size	48 bytes each for input/output
Transmission speed	10 Mbps/100 Mbps
Connector specifications	RJ-45 connector (8-pole modular connector) 1 port
Parallel external input	Regardless of the robot program, the master module and up to four ports can be controlled using the emulated synchronization function
Max. cable length	100 m
Monitor LED	Activity, Network status, Link, Module Status

YRC-VISION board basic specifications

Item	Description	
R6YACVI01	VISION board	
Basic specifications	Applicable controller	YRC
	Pixels	640 (H) x 480 (V) (300,000 pixels, VGA)
	Settable part types	40 part types
	Connectable cameras	Maximum 2 units *1
	Camera types	Double speed compatible analog camera
	Memory	128 MB SDRAM, 256 MB miniSD card
	External I/F	Ethernet (100BASE-TX)
Search method	Edge search (Correlative edge filter, Sobel filter)	
Image input	Trigger	S/W trigger, H/W trigger, Camera internal synch
	External trigger input	2 points
Functions	Search function	Position offset, Auto registry of point data
Setup support functions	Calibration, image storage function *2 (all images / specified image)	

*1 If connecting 2 units, then must be the same model.

*2 Requires Windows PC.

Accessories for YRC-VISION board

Item	Description
R6YACS1	CCD CAMERA
R6YACCV003	Camera cable 3.5 m
R6YACCV006	Camera cable 6 m
R6YACCV009	Camera cable 9.5 m (3.5 m + 6 m)
R6YACLE008	Lens 8 mm
R6YACLE012	Lens 12 mm
R6YACLE016	Lens 16 mm
R6YACLE025	Lens 25 mm
R6YACLR005	Close up ring 0.5 mm
R6YACLR010	Close up ring 1.0 mm
R6YACLR020	Close up ring 2.0 mm
R6YACLR050	Close up ring 5.0 mm

YRC-Tracking board basic specifications

Item	Description		
R6YACTR01	Tracking board		
Basic specifications	Applicable controller	YRC	
	Lighting control section	Number of lighting connected units	Up to 2 units
		Light adjusting system	PWM control (0 to 100%) (Cycle 60 KHz) Stroboscopic light (10 to 33000 μ s)
		Trigger	S/W trigger, H/W trigger
		External trigger input	2 points
		Lighting power input	12 VDC or 24 VDC (Supplied from outside commonly to 2 channels)
		Lighting output	When DC 12 V is supplied: Less than 30 W with 2 channels totaled When DC 24 V is supplied: Less than 60 W with 2 channels totaled
	Pulse input section	Number of encoder connected units	Up to 2 units
		Encoder power source	DC 5 V (Less than 500 mA with 2 channels totaled) (Supplied from controller)
		Applicable encoder	Line driver equivalent to 26LS31 / 26C31 (Conforming to RS422)
		Input phase	A, \bar{A} , B, \bar{B} , Z, \bar{Z}
		Maximum response frequency	2 MHz
		Counter / Step-up multiplication	0 to 65535 / Double, quadruple
	Other	Provided with broken wire detect function	

Note: The tracking board is required when using the tracking function.

Accessories for YRC-Tracking board

Item	Description
R6YACCR005	Encoder cable for tracking 10m

YRC-Lighting control board basic specifications

Item	Description	
R6YACLI01	Lighting control board	
Basic specifications	Applicable controller	YRC
	Number of lighting connected units	Up to 2 units
	Light adjusting system	PWM control (0 to 100%) (Cycle 60KHz) Stroboscopic light (10 to 33000 μ s)
	Trigger	S/W trigger, H/W trigger
	External trigger input	2 points
	Lighting power input	12VDC or 24VDC (Supplied from outside commonly to 2 channels)
	Lighting output	When DC12V is supplied: Less than 30W with 2 channels totaled When DC24V is supplied: Less than 60W with 2 channels totaled

Accessories for YRC-PB (Programming box)

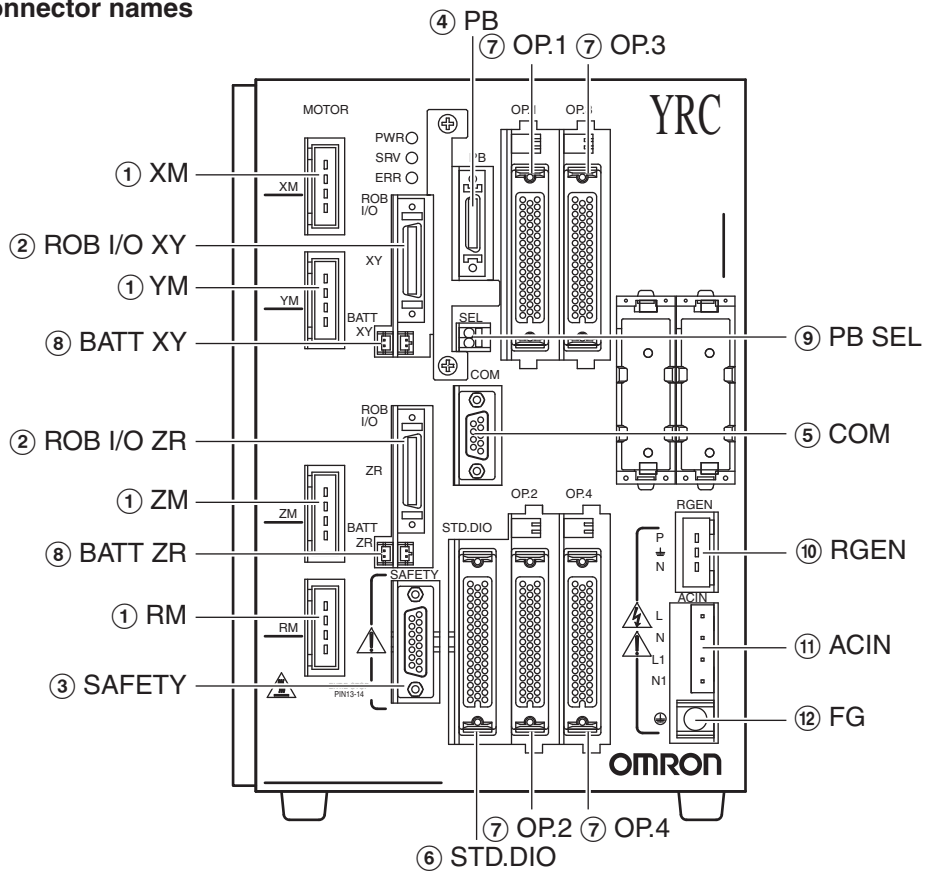
Item	Description
R6YACPB005E	Programming box cable 5m
R6YACPB012E	Programming box cable 12m

Accessories for YRC-SCARA studio software

Item	Description
R6YACSSC1	Support software SCARA Studio
R6YACCC005	Communication cable 9-9 pin
R6YACUSB005	USB communication cable

YRC-Nomenclature

Connector names

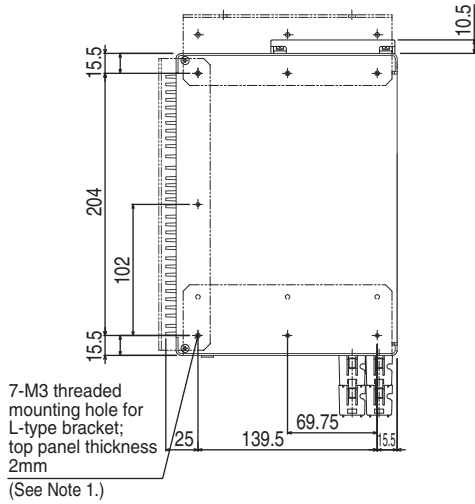


	Connector name	Function
①	XM/YM/ZM/RM	Connectors for servomotor drive
②	ROB I/O [XY/ZR]	Connectors for servomotor feedback and sensor signals
③	SAFETY	Input/output connector for safety function such as emergency stop
④	PB	Connector for PB
⑤	COM	RS-232C interface connector.
⑥	STD.DIO	Connector for dedicated input/output and standard generalpurpose input/output
⑦	OP.1 ,2, 3, 4	Conectors attached to optional expansion I/O boards
⑧	BATT [XY/ZR]	Battery connector for absolute backup
⑨	PB SEL	PB selector switch contact
⑩	RGEN [P/±/N]	Connector for regenerative unit
⑪	AC IN [L/N/L1/N1]	Terminal block for power cable. Use ring-tongue terminals to make connections.
⑫	FG	Ground terminal (⊥) . Provide Class D grounding (100 ohms or less) .

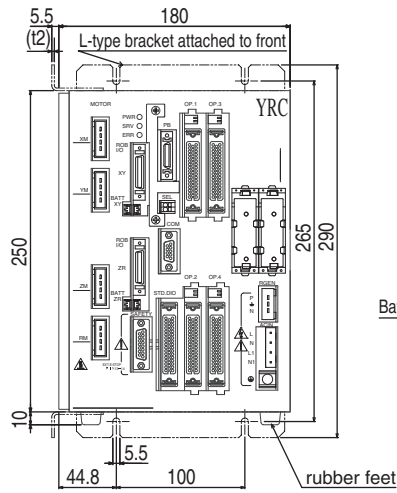
Dimensions

Standard YRC

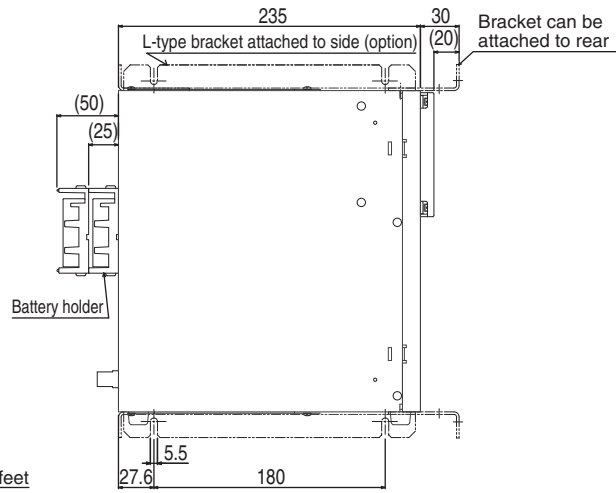
Top view



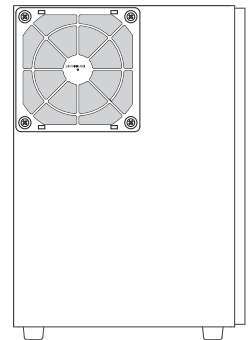
Front view



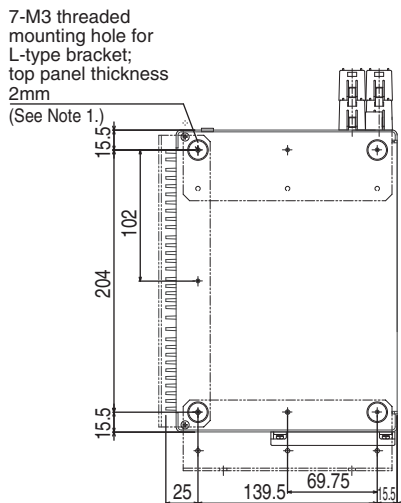
Side view



Rear view



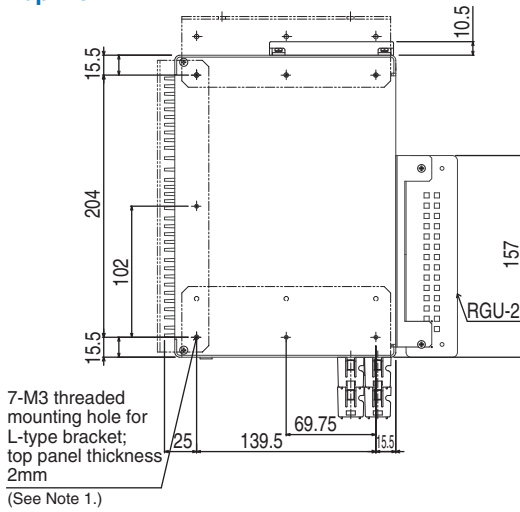
Bottom view



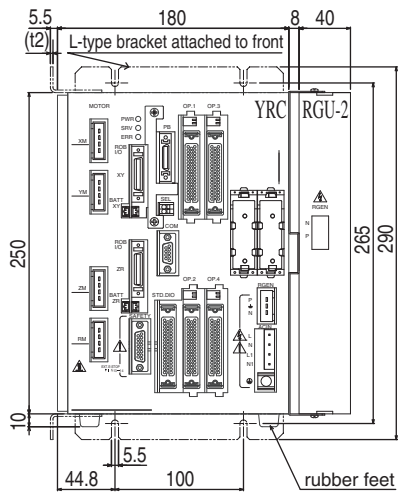
Note 1: When installing this controller using the supplied L-type brackets, remove the rubber feet on the bottom plate.

YRC with RGU2 option installed

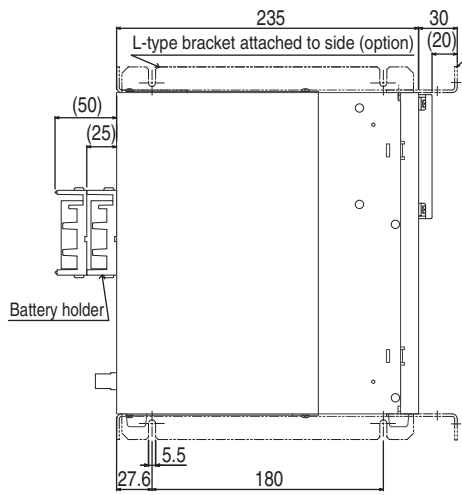
Top view



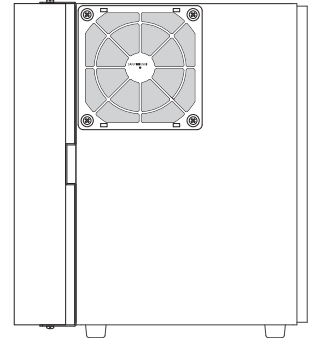
Front view



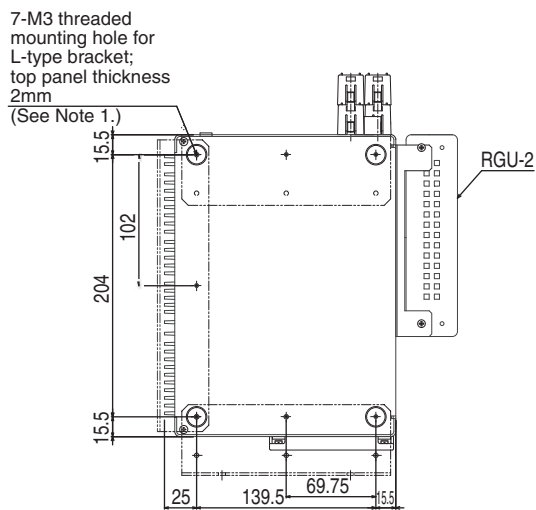
Side view



Rear view

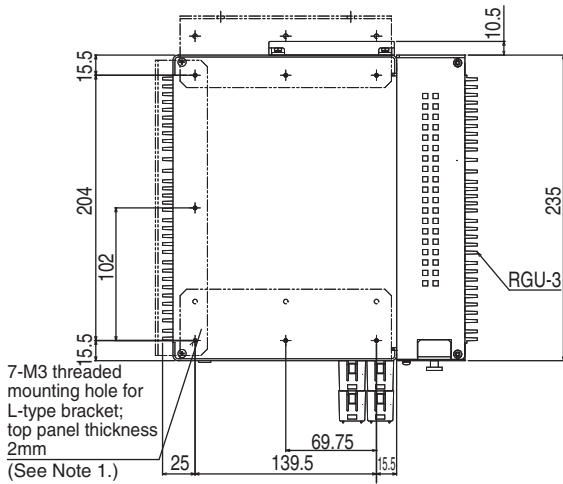


Bottom view

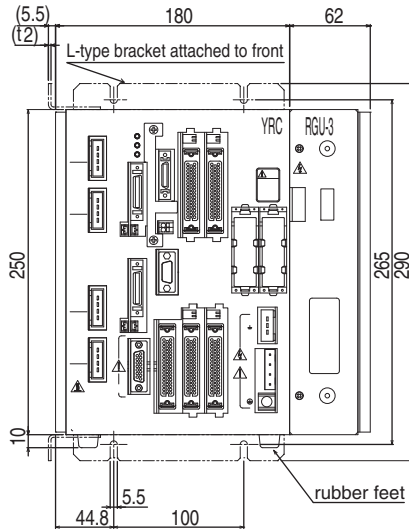


YRC with RGU3 option installed

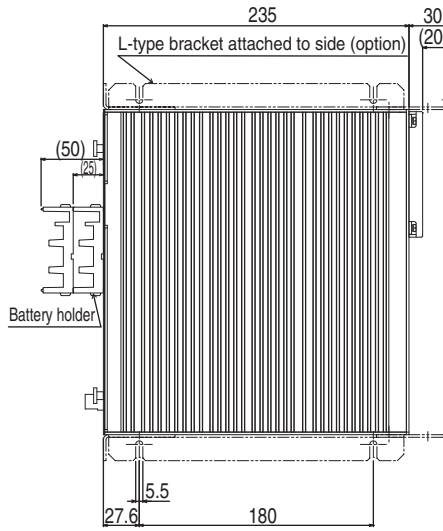
Top view



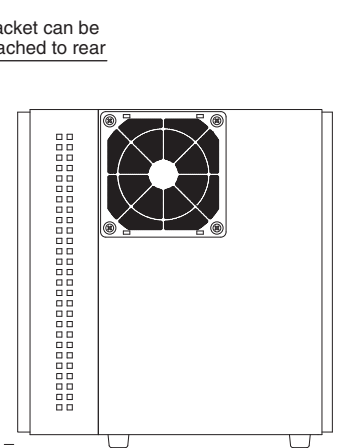
Front view



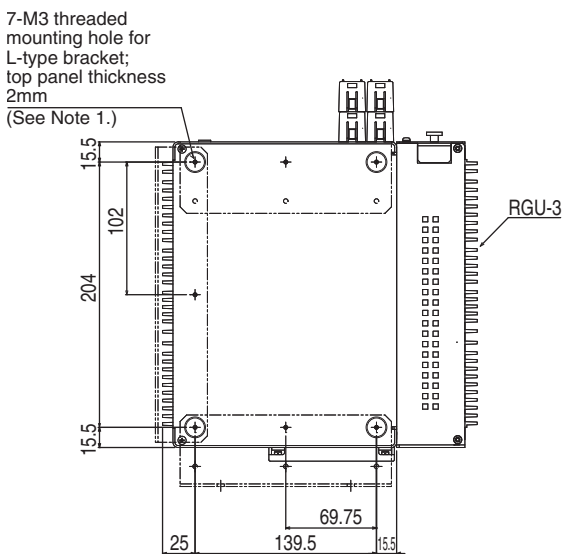
Side view



Rear view



Bottom view



R6YXG120 TINY SERIES

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	----	+/-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)		3.3		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)		Standard: 2 Option: 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)			

- *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.

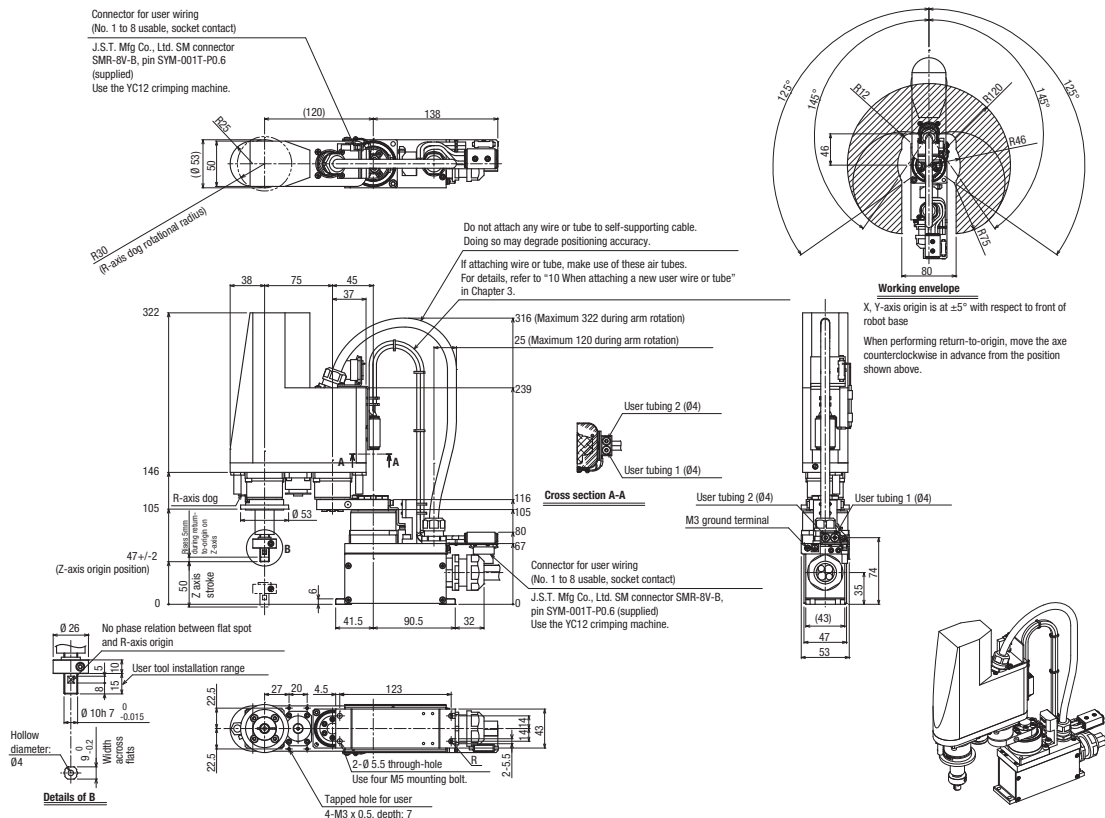
Controller

Controller	Power consumption (VA)	Operating method
YRC	300	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 120mm, Vertical Stroke: 50mm, Max. payload: 1kg.	R6YXG12050YRCR0

Dimensions



R6YXG150 TINY SERIES

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)		Standard: 2 Option: 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)			

- *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.

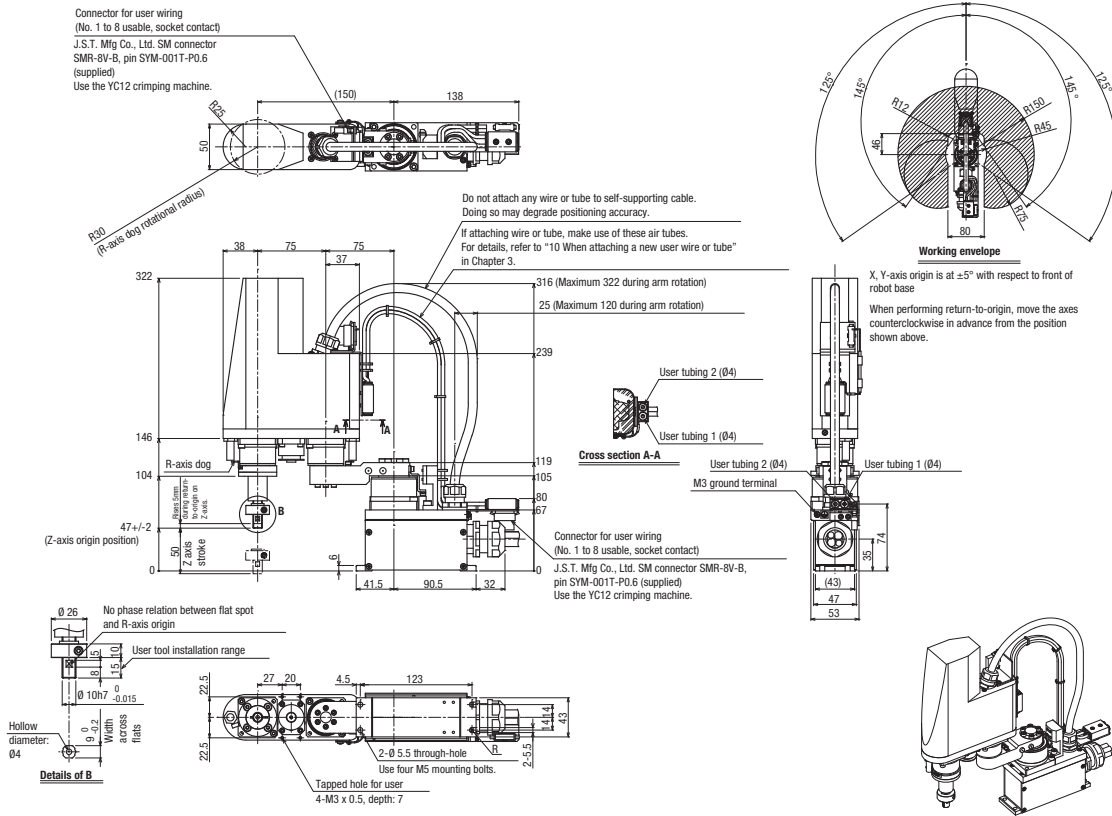
Controller

Controller	Power consumption (VA)	Operating method
YRC	300	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 150mm, Vertical Stroke: 50mm, Max. payload: 1kg.	R6YXG15050YRCR0

Dimensions



R6YXG220 TINY SERIES

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)		Standard: 3.5 Option: 5, 10			
Weight (kg) (Robot cable not included) ⁴		5.5			
Robot cable weight		1.5kg (3.5m) 2.1kg (5m) 4.2kg (10m)			

- *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.

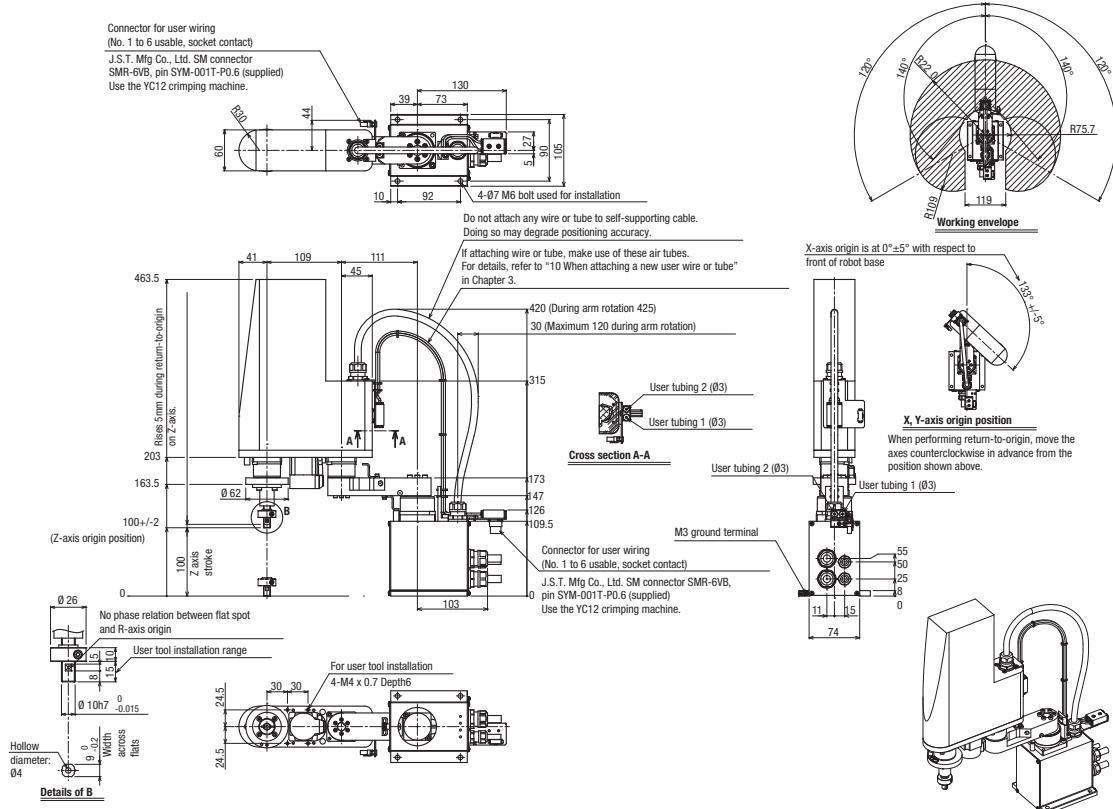
Controller

Controller	Power consumption (VA)	Operating method
YRC	500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 220mm, Vertical Stroke: 100mm, Max. payload: 1kg.	R6YXG220100YRCR0

Dimensions



R6YXGL250 XG SERIES

Specifications

		X axis	Y axis	Z axis	R axis
Reach (mm)		250			
Maximum payload (kg)		5 (4) ¹			
Repeatability ² (XYZ:mm) (R:°)		+/-0.01		+/-0.01	+/-0.004
Axis specifications	Arm length (mm)	100	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)		4.5		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)		Standard: 3.5 Option: 5, 10			
Option	Tool flange	R6YACXGLF			
	Open shaft	R6YACXGLS			
Weight (kg) (Excluding robot cable)		14.5			

- *1 Maximum payload is 4kg when tool flange and hollow shaft options are 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.

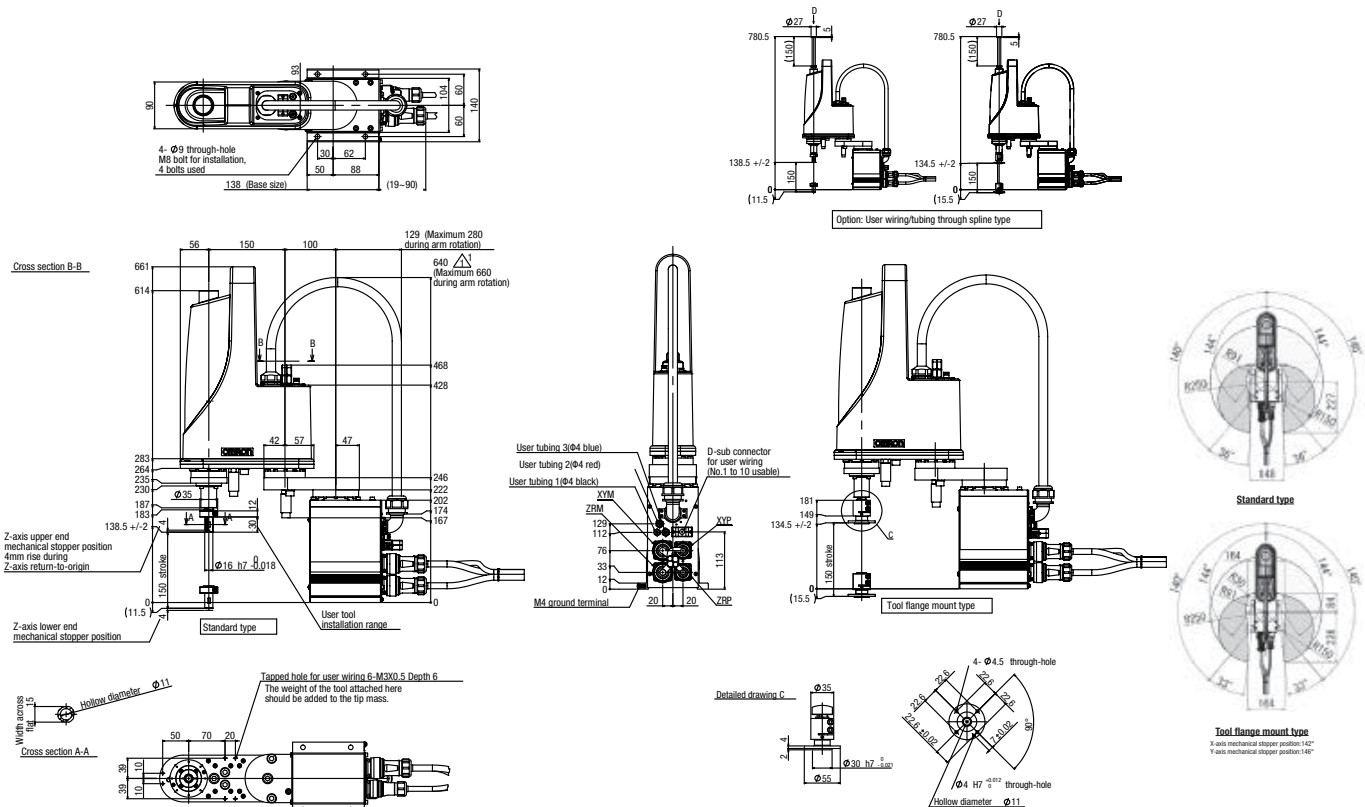
Controller

Controller	Power consumption (VA)	Operating method
YRC	1100	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 250mm, Vertical Stroke: 150mm, Max. payload: 5kg.	R6YXGL250150YRCR0

Dimensions



R6YXGL500 XG SERIES

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)		Standard: 3.5 Option: 5, 10			
Option	Tool flange	R6YACXGLF			
	Open shaft	R6YACXGLS			
Weight (kg) (Excluding robot cable)		17			

- *1 Maximum payload is 4kg when tool flange and hollow shaft options are 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.

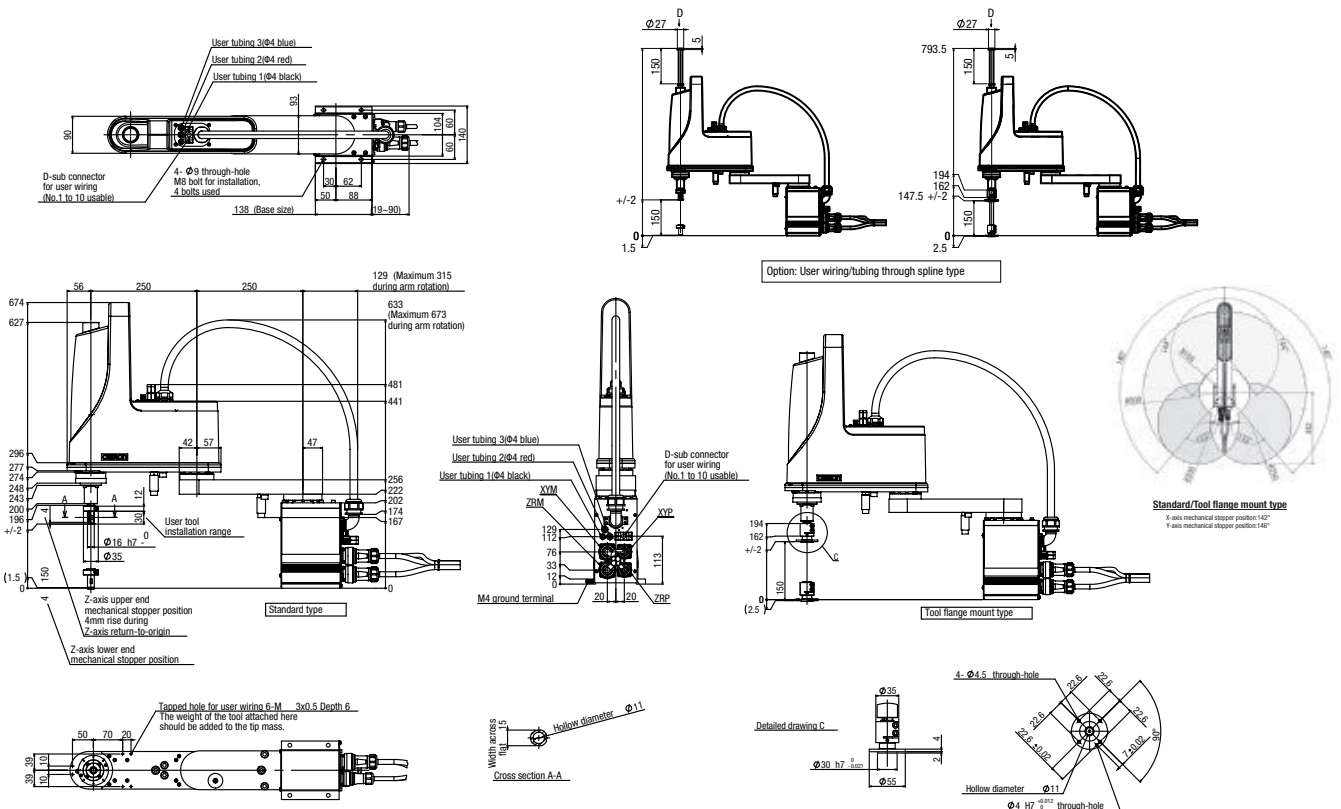
Controller

Controller	Power consumption (VA)	Operating method
YRC	1100	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 500mm, Vertical Stroke: 150mm, Max. payload: 5kg.	R6YXGL500150YRCR0

Dimensions



R6YXGL600 XG SERIES

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		+/-0.01	+/-0.004
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		1.1	1020
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)		Standard: 3.5 Option: 5, 10			
Option	Tool flange	R6YACXGLF			
	Open shaft	R6YACXGLS			
Weight (kg) (Excluding robot cable)		18			

- *1 Maximum payload is 4kg when tool flange and hollow shaft options are 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.

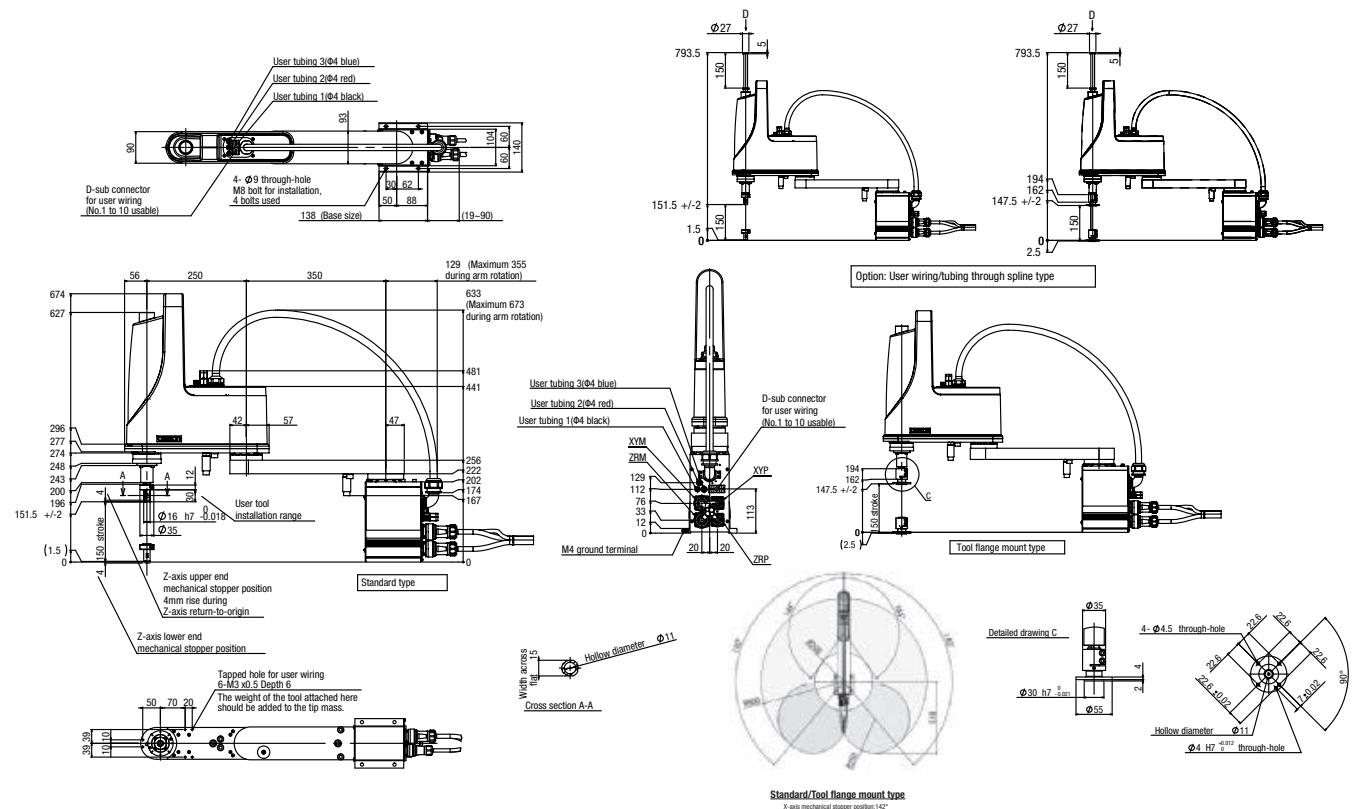
Controller

Controller	Power consumption (VA)	Operating method
YRC	1100	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 600mm, Vertical Stroke: 150mm, Max. payload: 5kg.	R6YXGL600150YRCR0

Dimensions



R6YXG600 XG SERIES

Specifications

		X axis	Y axis	Z axis	R axis
Reach (mm)		600			
Maximum payload (kg)		10			
Repeatability ^{*1} (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 ^{*2} (sec)		0.46			
R axis allowable moment inertia ^{*3} (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)		Standard: 3.5 Option: 5, 10			
Weight (kg) (Excluding robot cable)		31			

- *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.

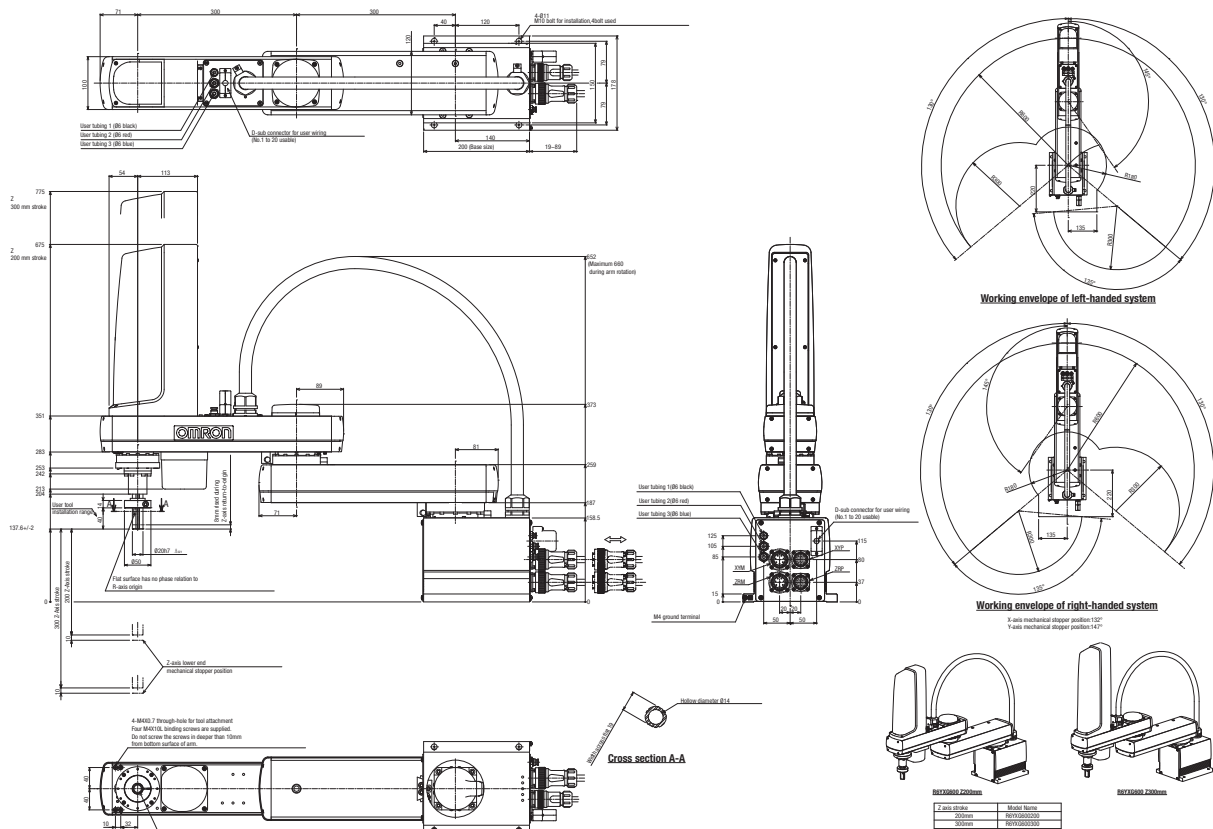
Controller

Controller	Power consumption (VA)	Operating method
YRC	1700	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 600mm, Vertical Stroke: 200mm, Max. payload: 10kg.	R6YXG600200YRCR3
SCARA Reach: 600mm, Vertical Stroke: 300mm, Max. payload: 10kg.	R6YXG600300YRCR3

Dimensions



R6YXGH600 XG SERIES

Specifications

		X axis	Y axis	Z axis	R axis
Reach (mm)		600			
Maximum payload (kg)		20			
Repeatability ¹ (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 ² (sec)		0.47			
R axis allowable moment inertia ³ (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)		Standard: 3.5 Option: 5, 10			
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.

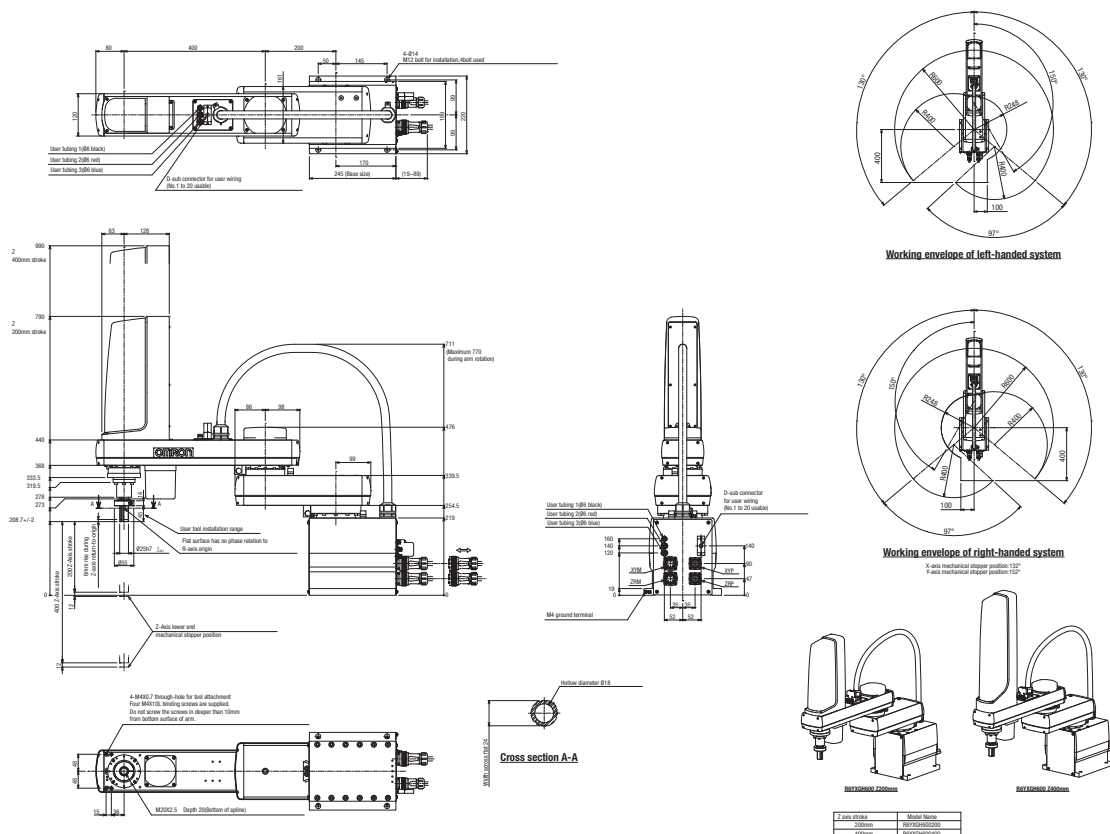
Controller

Controller	Power consumption (VA)	Operating method
YRC	2500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 600mm, Vertical Stroke: 200mm, Max. payload: 20kg.	R6YXGH600200YRCR3
SCARA Reach: 600mm, Vertical Stroke: 400mm, Max. payload: 20kg.	R6YXGH600400YRCR3

Dimensions



R6YXG700 XG SERIES

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	+/-0.004
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 ^{*2} (sec)		0.42			
R axis allowable moment inertia ^{*3} (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)		Standard: 3.5 Option: 5, 10			
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.

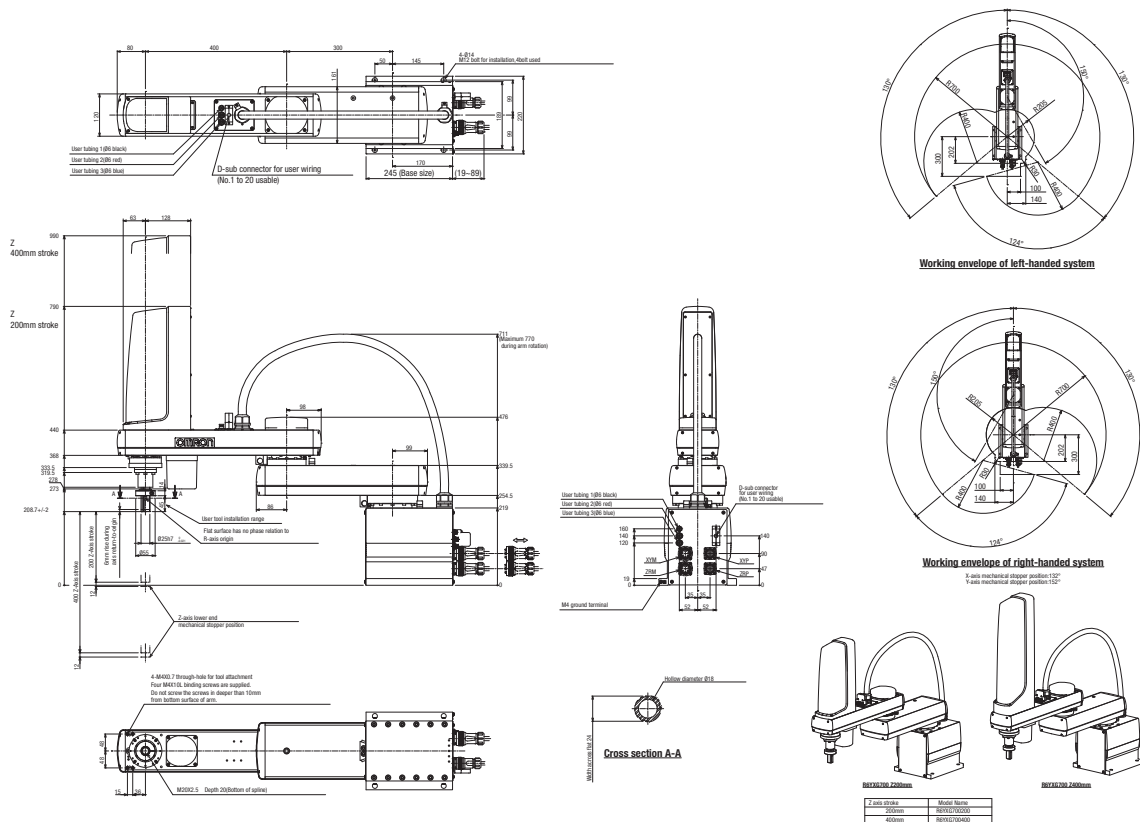
Controller

Controller	Power consumption (VA)	Operating method
YRC	2500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 700mm, Vertical Stroke: 200mm, Max. payload: 20kg.	R6YXG700200YRCR3
SCARA Reach: 700mm, Vertical Stroke: 400mm, Max. payload: 20kg.	R6YXG700400YRCR3

Dimensions



R6YXG800 XG SERIES

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	+/-0.004
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 ^{*2} (sec)		0.48			
R axis allowable moment inertia ^{*3} (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)		Standard: 3.5 Option: 5, 10			
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.

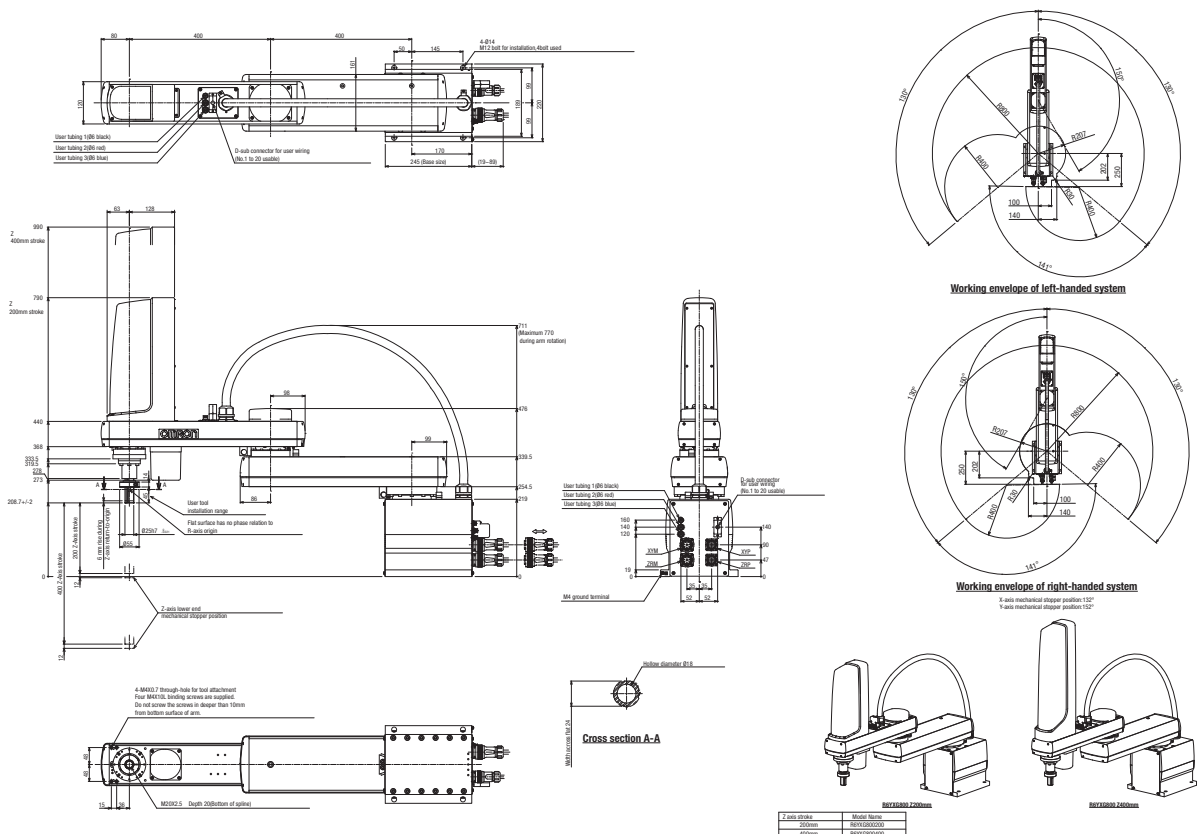
Controller

Controller	Power consumption (VA)	Operating method
YRC	2500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 800mm, Vertical Stroke: 200mm, Max. payload: 20kg.	R6YXG800200YRCR3
SCARA Reach: 800mm, Vertical Stroke: 400mm, Max. payload: 20kg.	R6YXG800400YRCR3

Dimensions



R6YXGSW500 XG SERIES R6YXGSU500 WALL-MOUNT / INVERSE TYPE

Specifications

	X axis	Y axis	Z axis		R axis	
			W type	U type	W type	U type
Reach (mm)	500					
Maximum payload (kg)	10					
Repeatability ¹ (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	Direct-coupled				
	Motor to speed reducer	Direct-coupled				
AC servo motor output (W)	400	200	200		200	
Maximum speed (XYZ:m/sec) (R:°/sec)	7.6		2.3	1.7	1700	800
Standard cycle time: with 2kg payload ² (sec)	0.45					
R axis allowable moment inertia ³ (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)	Standard: 3.5 Option: 5, 10					
Weight (kg) (Excluding robot cable)	26					

- *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.

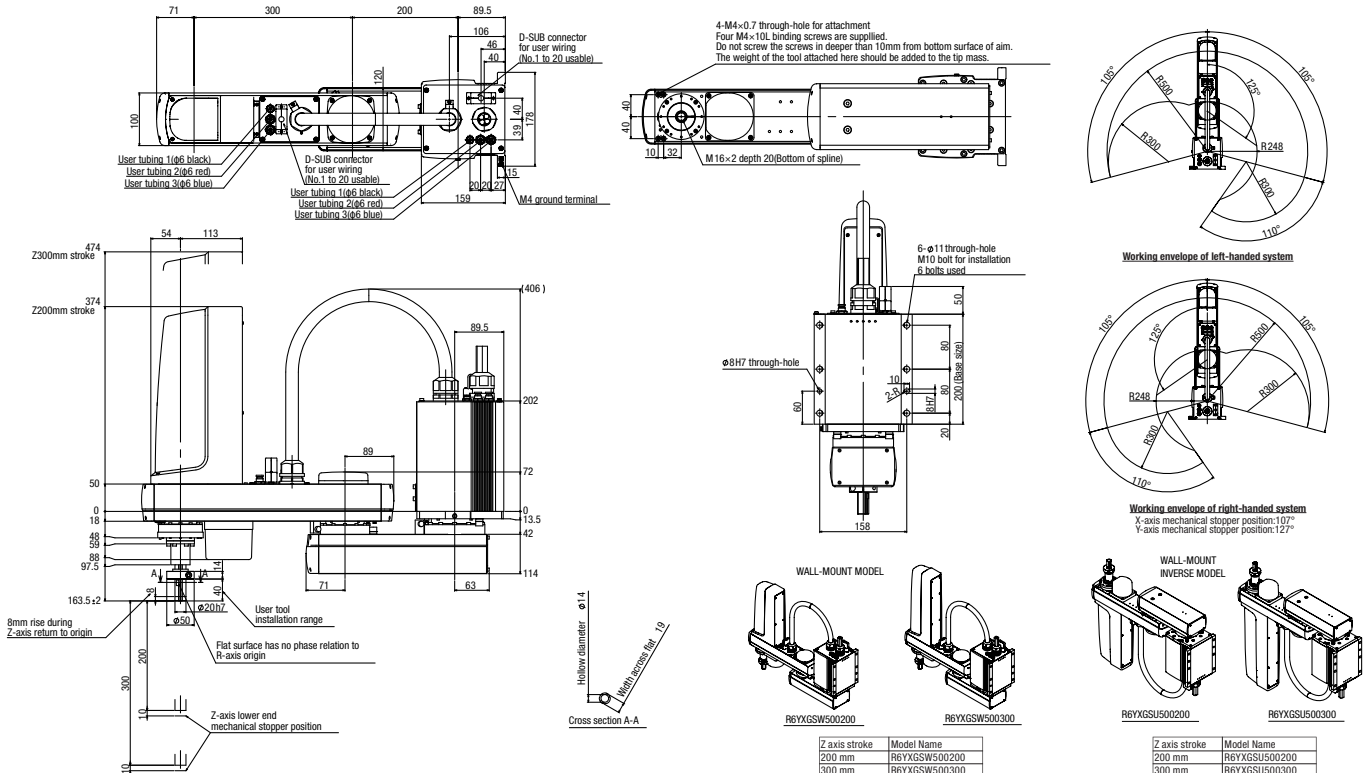
Controller

Controller	Power consumption (VA)	Operating method
YRC	2200	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Type	Description	Model
Wall-mount model	SCARA Reach: 500mm, Vertical Stroke: 200mm, Max. payload: 10kg.	R6YXGSW500200YRCR3
	SCARA Reach: 500mm, Vertical Stroke: 300mm, Max. payload: 10kg.	R6YXGSW500300YRCR3
Wall-mount inverse model	SCARA Reach: 500mm, Vertical Stroke: 200mm, Max. payload: 10kg.	R6YXGSU500200YRCR3
	SCARA Reach: 500mm, Vertical Stroke: 300mm, Max. payload: 10kg.	R6YXGSU500300YRCR3

Dimensions



R6YXGSW600 XG SERIES R6YXGSU600 WALL-MOUNT / INVERSE TYPE

Specifications

		X axis	Y axis	Z axis		R axis	
				W type	U type		
Reach (mm)		600					
Maximum payload (kg)		10					
Repeatability ^{*1} (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	Direct-coupled					
	Motor to speed reducer 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 ^{*2} (sec)		0.46					
R axis allowable moment inertia ^{*3} (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)		Standard: 3.5 Option: 5, 10					
Weight (kg) (Excluding robot cable)		27					

- *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.

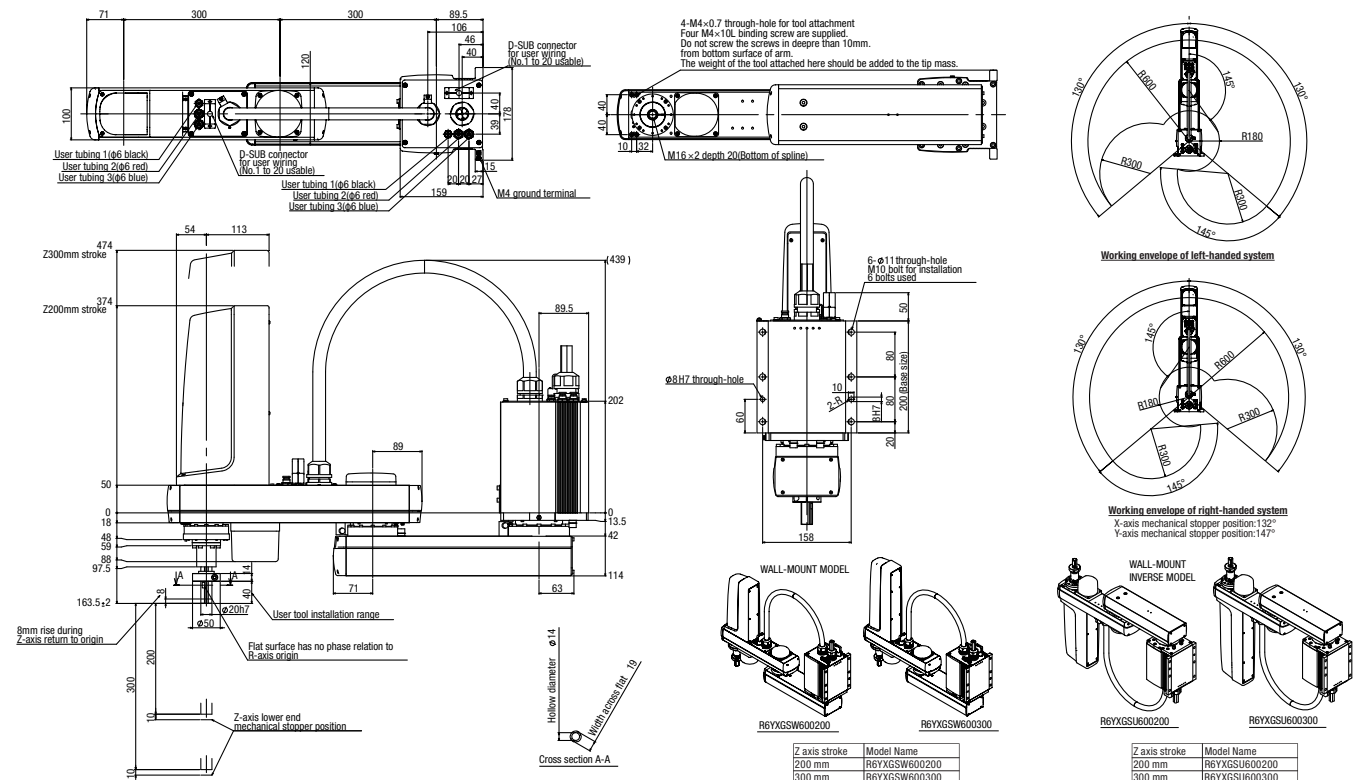
Controller

Controller	Power consumption (VA)	Operating method
YRC	2200	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Type	Description	Model
Wall-mount model	SCARA Reach: 600mm, Vertical Stroke: 200mm, Max. payload: 10kg.	R6YXGSW600200YRCR3
	SCARA Reach: 600mm, Vertical Stroke: 300mm, Max. payload: 10kg.	R6YXGSW600300YRCR3
Wall-mount inverse model	SCARA Reach: 600mm, Vertical Stroke: 200mm, Max. payload: 10kg.	R6YXGSU600200YRCR3
	SCARA Reach: 600mm, Vertical Stroke: 300mm, Max. payload: 10kg.	R6YXGSU600300YRCR3

Dimensions



R6YXGSW700 XG SERIES R6YXGSU700 WALL-MOUNT / INVERSE TYPE

Specifications

		X axis	Y axis	Z axis	R axis	
					W type	U type
Reach (mm)		700				
Maximum payload (kg)		20				
Repeatability ^{*1} (XYZ:mm) (R:°)		+/-0.02		+/-0.01		+/-0.004
Axis specifications	Arm length (mm)	300	400	200	400	
	Rotation range (°)	+/-130	+/-130	---		+/-360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw		Harmonic drive
	Transmission method	Direct-coupled				
	Motor to speed reducer	Direct-coupled				
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 ^{*2} (sec)		0.42				
R axis allowable moment inertia ^{*3} (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)		Standard: 3.5 Option: 5, 10				
Weight (kg) (Excluding robot cable)		51				

- *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.

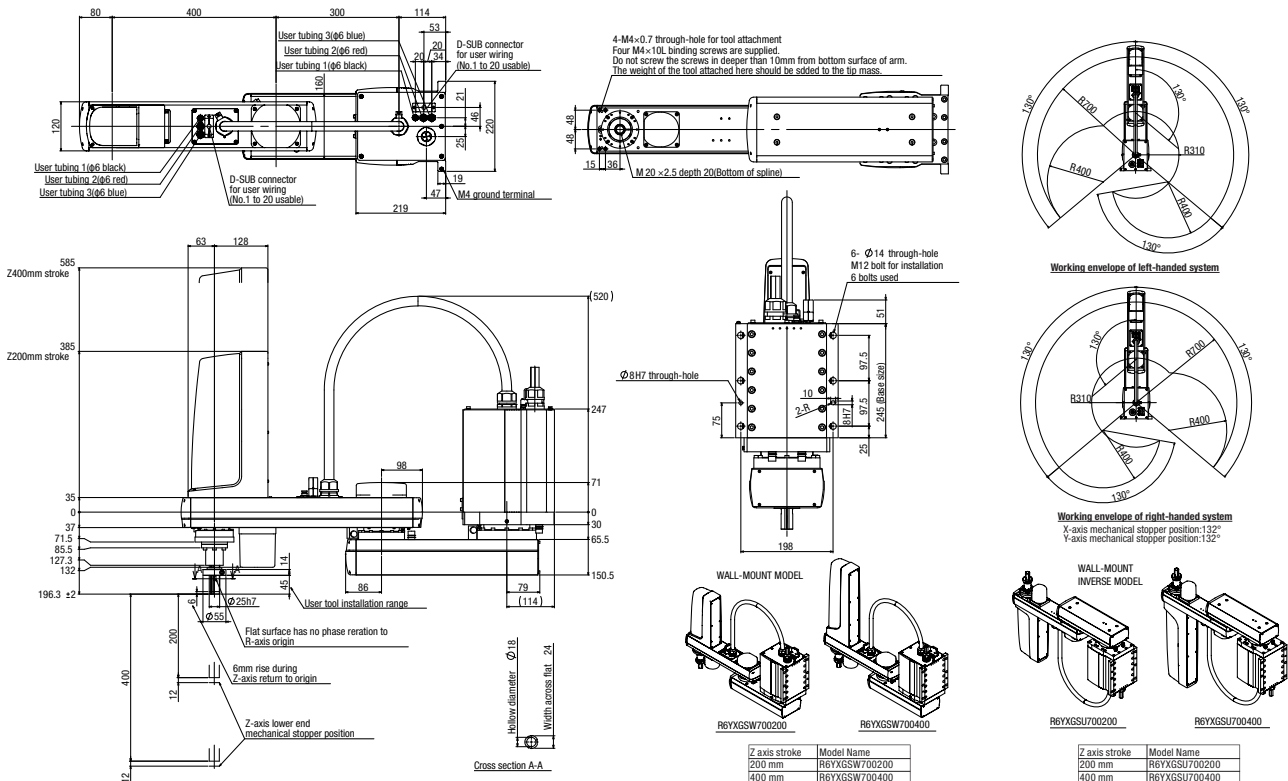
Controller

Controller	Power consumption (VA)	Operating method
YRC	2500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Type	Description	Model
Wall-mount model	SCARA Reach: 700mm, Vertical Stroke: 200mm, Max. payload: 20kg.	R6YXGSW700200YRCR3
	SCARA Reach: 700mm, Vertical Stroke: 400mm, Max. payload: 20kg.	R6YXGSW700400YRCR3
Wall-mount inverse model	SCARA Reach: 700mm, Vertical Stroke: 200mm, Max. payload: 20kg.	R6YXGSU700200YRCR3
	SCARA Reach: 700mm, Vertical Stroke: 400mm, Max. payload: 20kg.	R6YXGSU700400YRCR3

Dimensions



R6YXGSW800 XG SERIES

R6YXGSU800 WALL-MOUNT / INVERSE TYPE

Specifications

		X axis	Y axis	Z axis		R axis		
				W type	U type			
Reach (mm)		800						
Maximum payload (kg)		20						
Repeatability ^{*1} (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	Direct-coupled						
	Motor to speed reducer 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 ^{*2} (sec)		0.48						
R axis allowable moment inertia ^{*3} (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)		Standard: 3.5 Option: 5, 10						
Weight (kg) (Excluding robot cable)		53						

- *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.

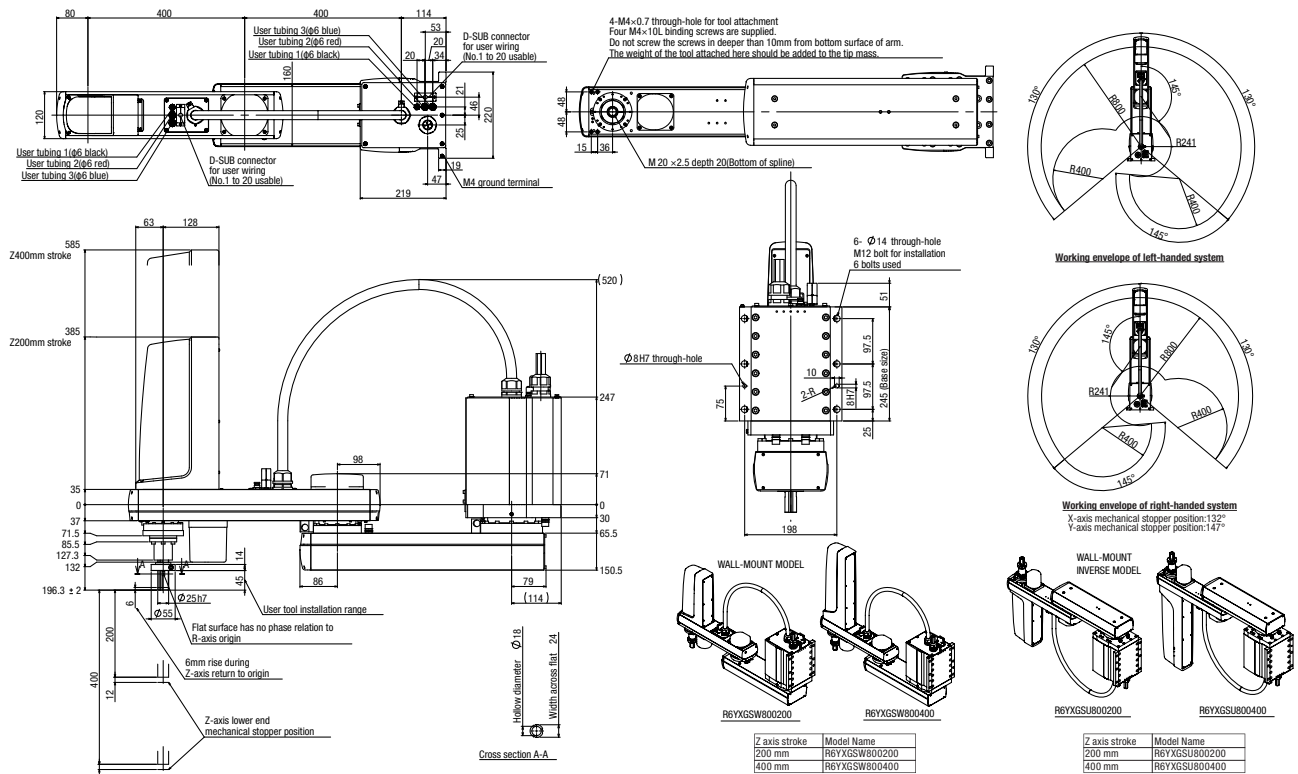
Controller

Controller	Power consumption (VA)	Operating method
YRC	2500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Type	Description	Model
Wall-mount model	SCARA Reach: 800mm, Vertical Stroke: 200mm, Max. payload: 20kg.	R6YXGSW800200YRCR3
	SCARA Reach: 800mm, Vertical Stroke: 400mm, Max. payload: 20kg.	R6YXGSW800400YRCR3
Wall-mount inverse model	SCARA Reach: 800mm, Vertical Stroke: 200mm, Max. payload: 20kg.	R6YXGSU800200YRCR3
	SCARA Reach: 800mm, Vertical Stroke: 400mm, Max. payload: 20kg.	R6YXGSU800400YRCR3

Dimensions



R6YXGSW1000 XG SERIES R6YXGSU1000 WALL-MOUNT / INVERSE TYPE

Specifications

		X axis	Y axis	Z axis		R axis	
				W type	U type		
Reach (mm)		1000					
Maximum payload (kg)		20					
Repeatability ^{*1} (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	480
Standard cycle time: with 2kg payload ^{*2} (sec)		0.49					
R axis allowable moment inertia ^{*3} (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)		Standard: 3.5 Option: 5, 10					
Weight (kg) (Excluding robot cable)		57					

*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.

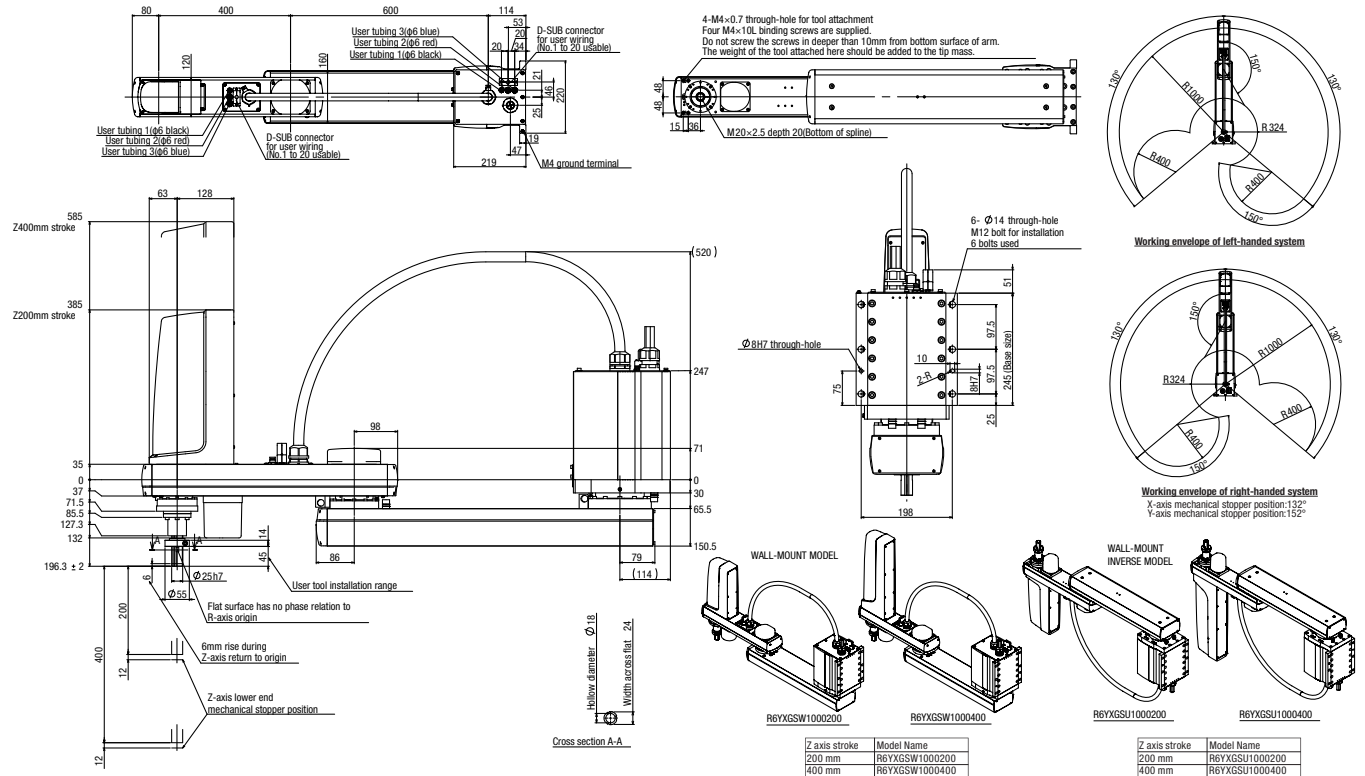
Controller

Controller	Power consumption (VA)	Operating method
YRC	2500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Type	Description	Model
Wall-mount model	SCARA Reach: 1000mm, Vertical Stroke: 200mm, Max. payload: 20kg.	R6YXGSW1000200YRCR3
	SCARA Reach: 1000mm, Vertical Stroke: 400mm, Max. payload: 20kg.	R6YXGSW1000400YRCR3
Wall-mount inverse model	SCARA Reach: 1000mm, Vertical Stroke: 200mm, Max. payload: 20kg.	R6YXGSU1000200YRCR3
	SCARA Reach: 1000mm, Vertical Stroke: 400mm, Max. payload: 20kg.	R6YXGSU1000400YRCR3

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)	350	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)	Standard: 3.5 Option: 5, 10			
Option	Tool flange			
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.

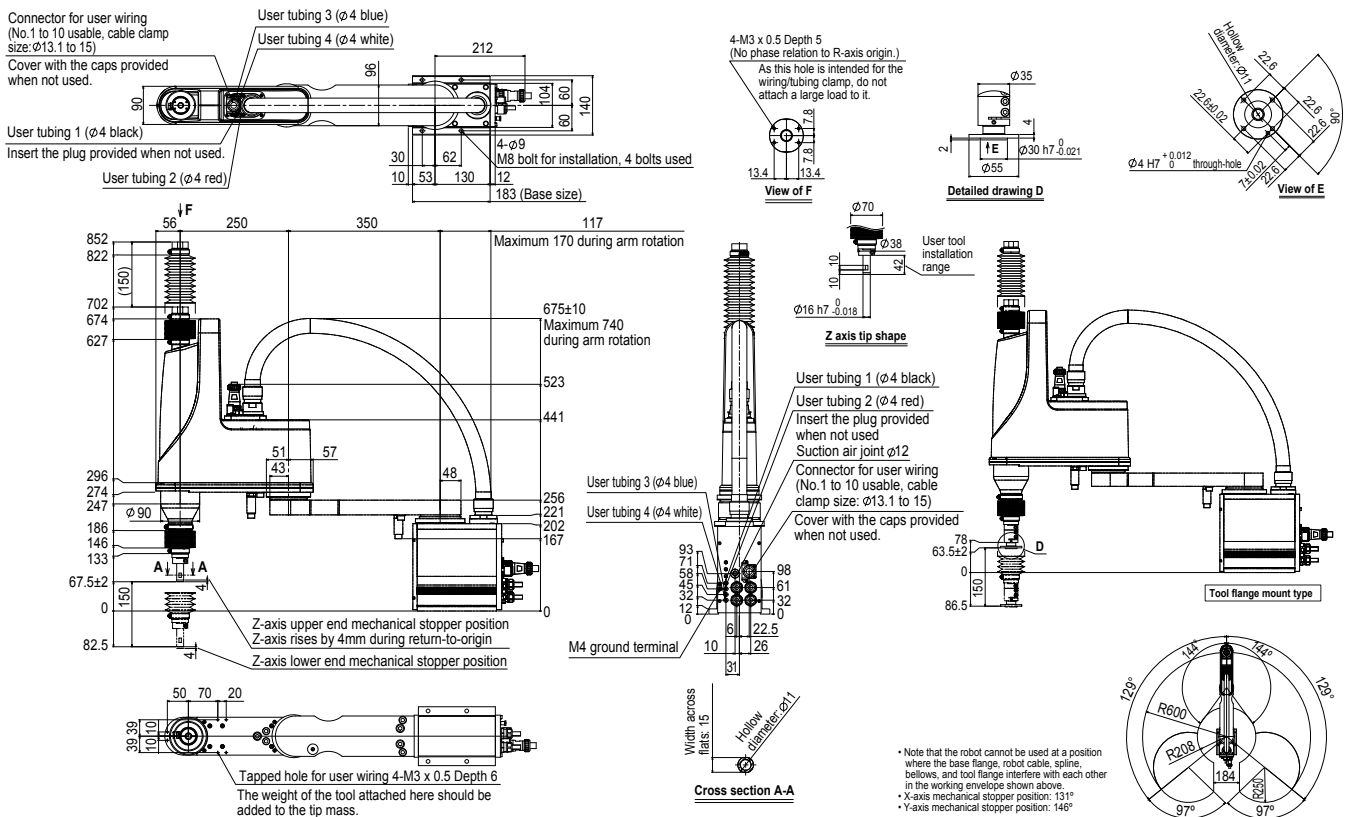
Controller

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

Ordering information

Description	Model
SCARA Reach: 600mm, Vertical Stroke: 150mm, Max. payload: 4kg.	R6YXGLC600150YRCR0

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)		Standard: 3.5 Option: 5, 10			
Option	Tool flange	R6YACXGLF			
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.

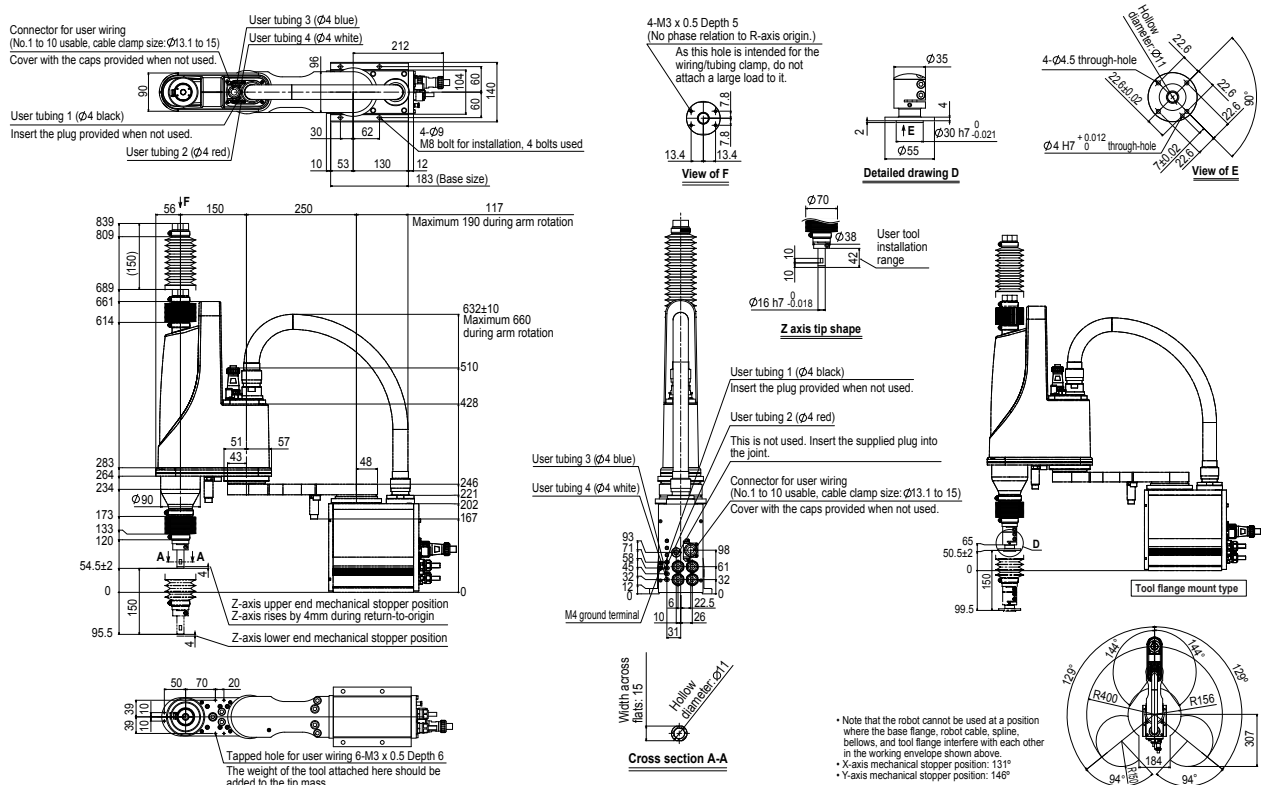
Controller

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

Ordering information

Description	Model
SCARA Reach: 400mm, Vertical Stroke: 150mm, Max. payload: 4kg, Protection class: IP65	R6YXGLP400150YRCR0

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	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)		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)		Standard: 3.5 Option: 5, 10			
Option	Tool flange	R6YACXGLF			
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.

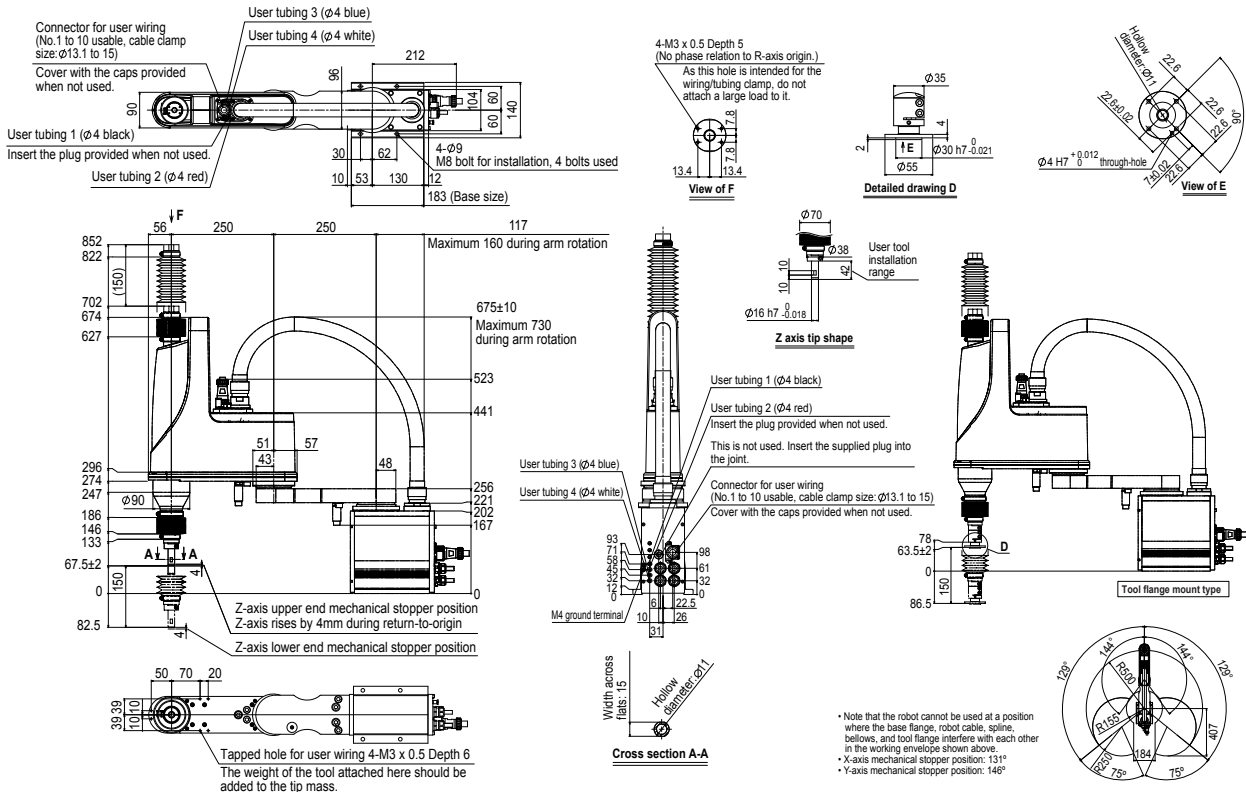
Controller

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

Ordering information

Description	Model
SCARA Reach: 500mm, Vertical Stroke: 150mm, Max. payload: 4kg, Protection class: IP65	R6YXGLP500150YRCR0

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	
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 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)		Standard: 3.5 Option: 5, 10			
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.

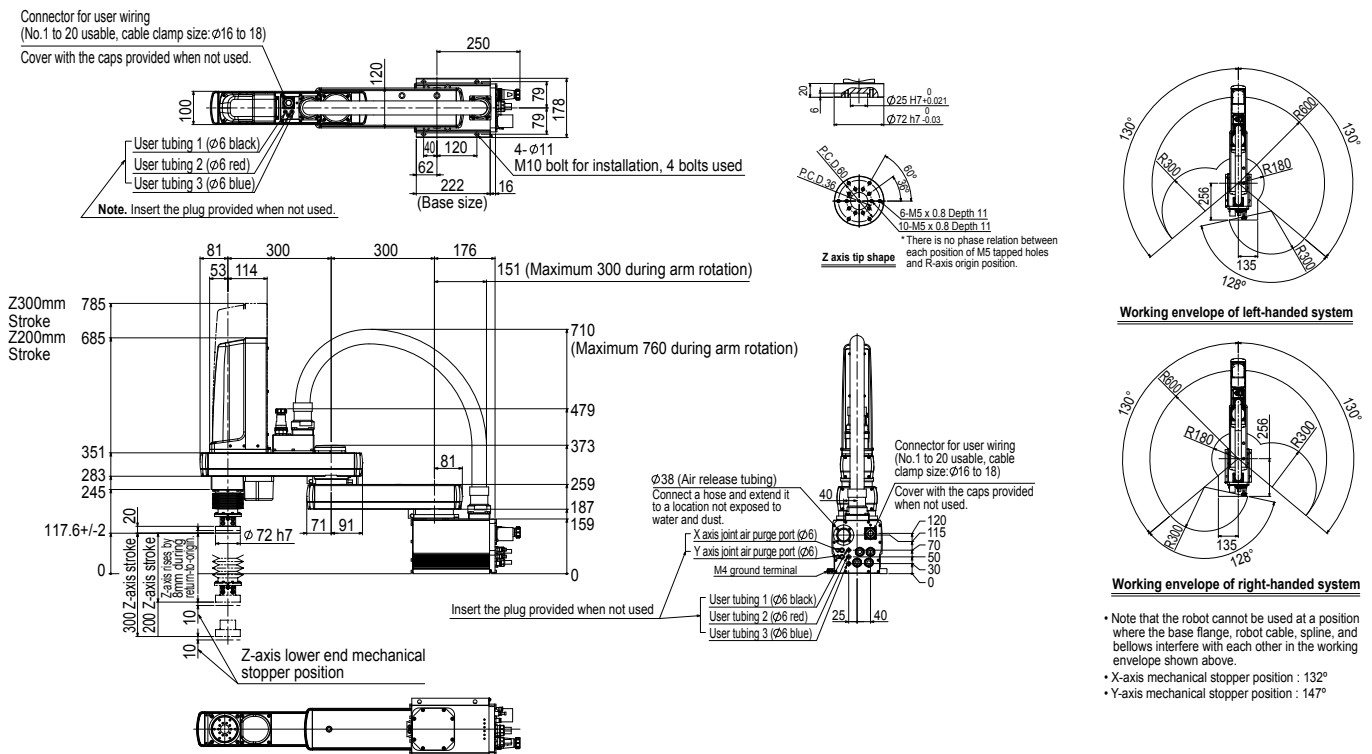
Controller

Controller	Power consumption (VA)	Operating method
YRC	1700	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 600mm, Vertical Stroke: 200mm, Max. payload: 8kg, Protection class: IP65	R6YXGP600200YRCR3
SCARA Reach: 600mm, Vertical Stroke: 300mm, Max. payload: 8kg, Protection class: IP65	R6YXGP600300YRCR3

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			
Repeatability ¹ (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 payload ² (sec)		0.57			
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)		Standard: 3.5 Option: 5, 10			
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
YRC	2500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

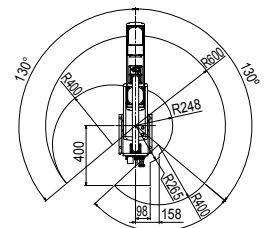
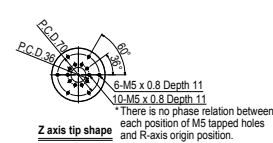
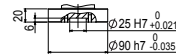
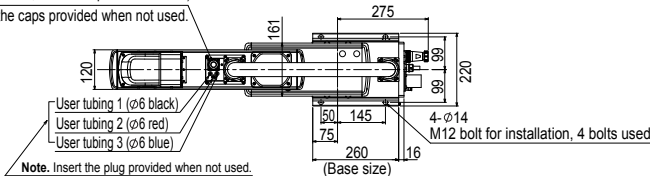
Description	Model
SCARA Reach: 600mm, Vertical Stroke: 200mm, Max. payload: 18kg, Protection class: IP65	R6YXGHP600200YRCR3
SCARA Reach: 600mm, Vertical Stroke: 400mm, Max. payload: 18kg, Protection class: IP65	R6YXGHP600400YRCR3

Dimensions

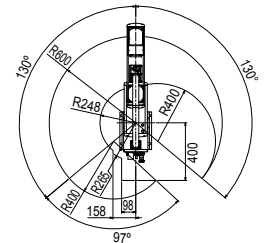
Connector for user wiring

(No.1 to 20 usable, cable clamp size: Ø16 to 18)

Cover with the caps provided when not used.

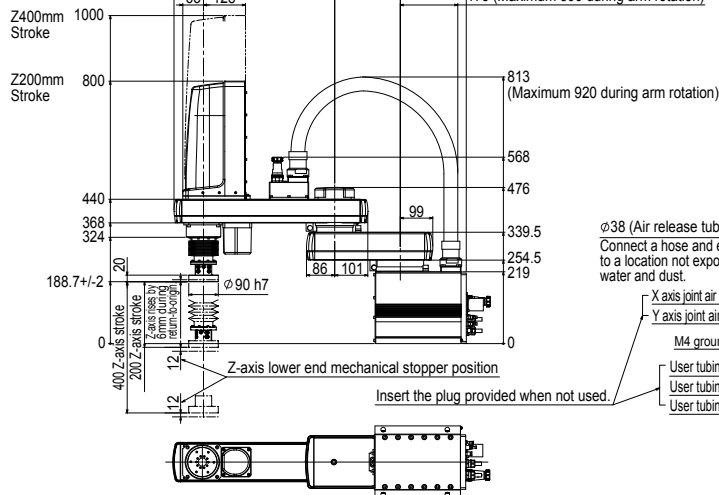


Working envelope of left-handed system



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	+/-0.004
Axis specifications	Arm length (mm)	300	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)	Standard: 3.5 Option: 5, 10			
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.

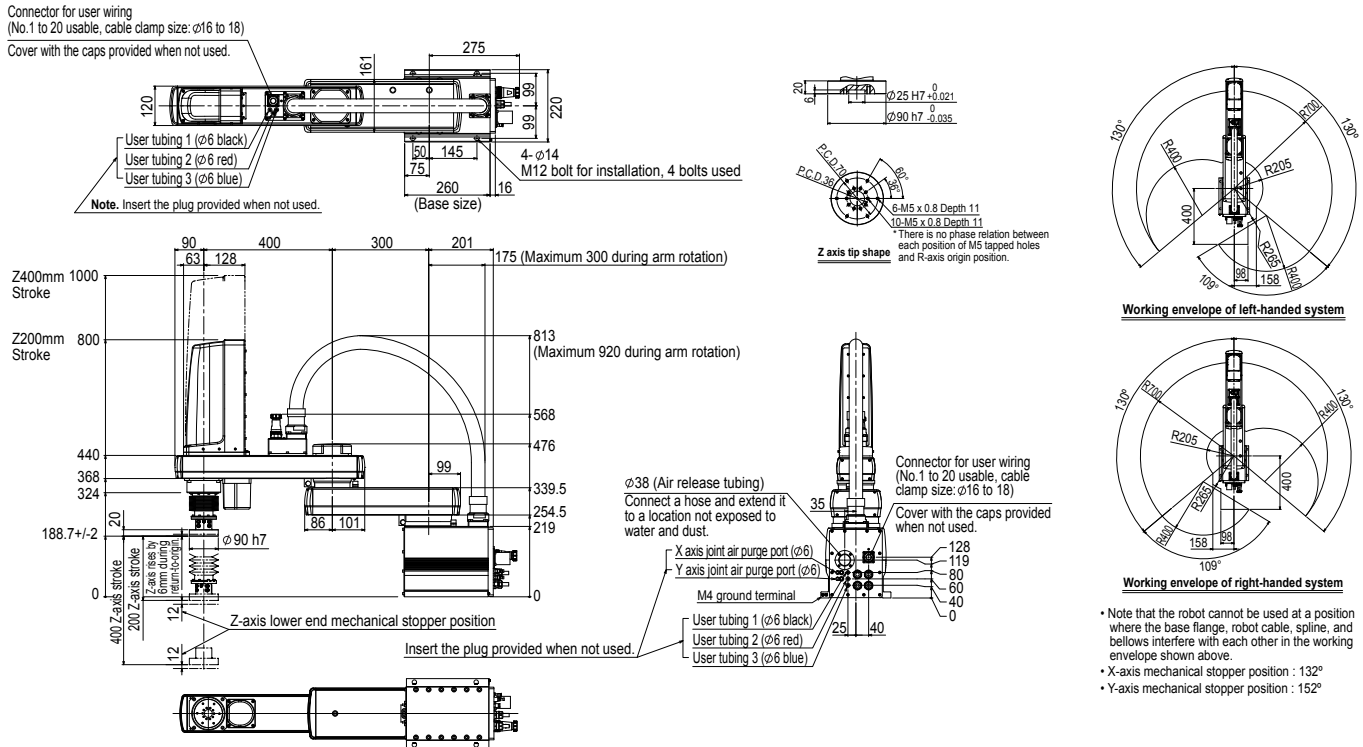
Controller

Controller	Power consumption (VA)	Operating method
YRC	2500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 700mm, Vertical Stroke: 200mm, Max. payload: 18kg, Protection class: IP65	R6YXGP700200YRCR3
SCARA Reach: 700mm, Vertical Stroke: 400mm, Max. payload: 18kg, Protection class: IP65	R6YXGP700400YRCR3

Dimensions



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	
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 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)		Standard: 3.5 Option: 5, 10			
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.

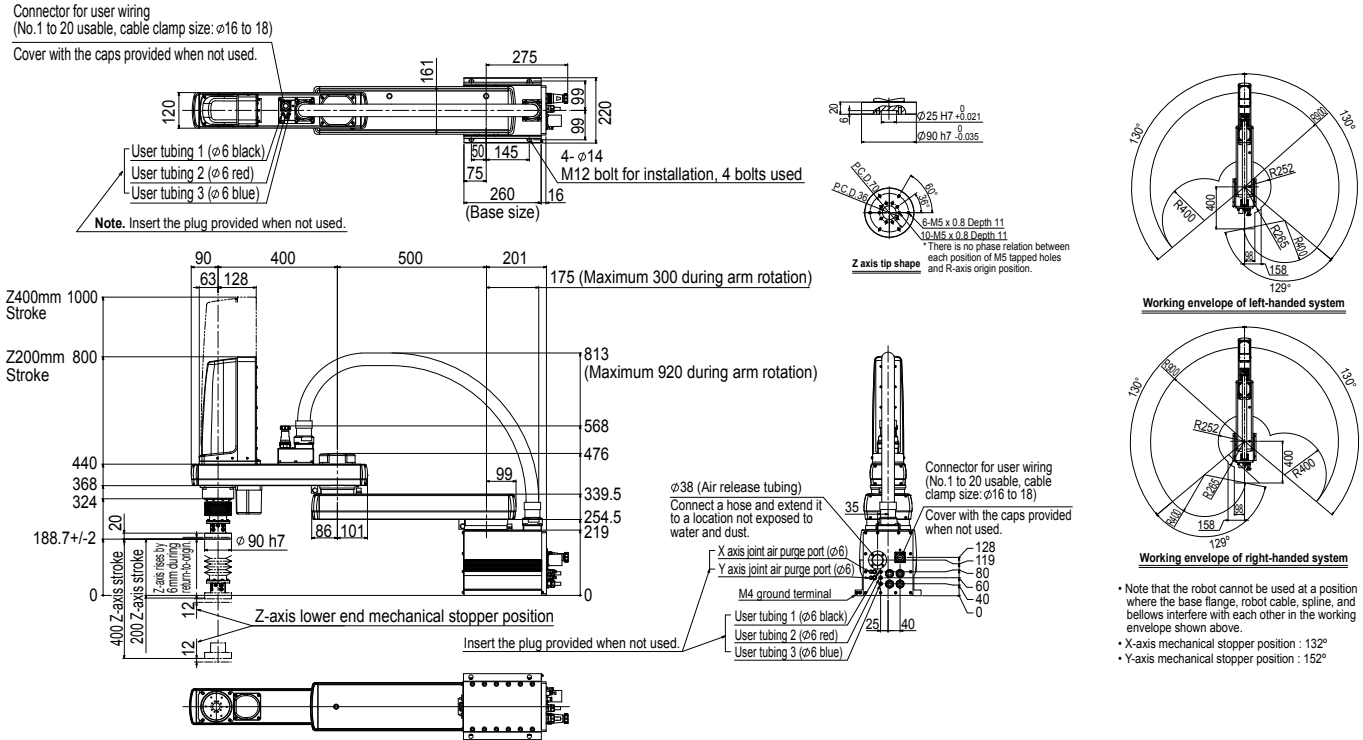
Controller

Controller	Power consumption (VA)	Operating method
YRC	2500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 900mm, Vertical Stroke: 200mm, Max. payload: 18kg, Protection class: IP65	R6YXGP900200YRCR3
SCARA Reach: 900mm, Vertical Stroke: 400mm, Max. payload: 18kg, Protection class: IP65	R6YXGP900400YRCR3

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	+/-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 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)		Standard: 3.5 Option: 5, 10			
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.

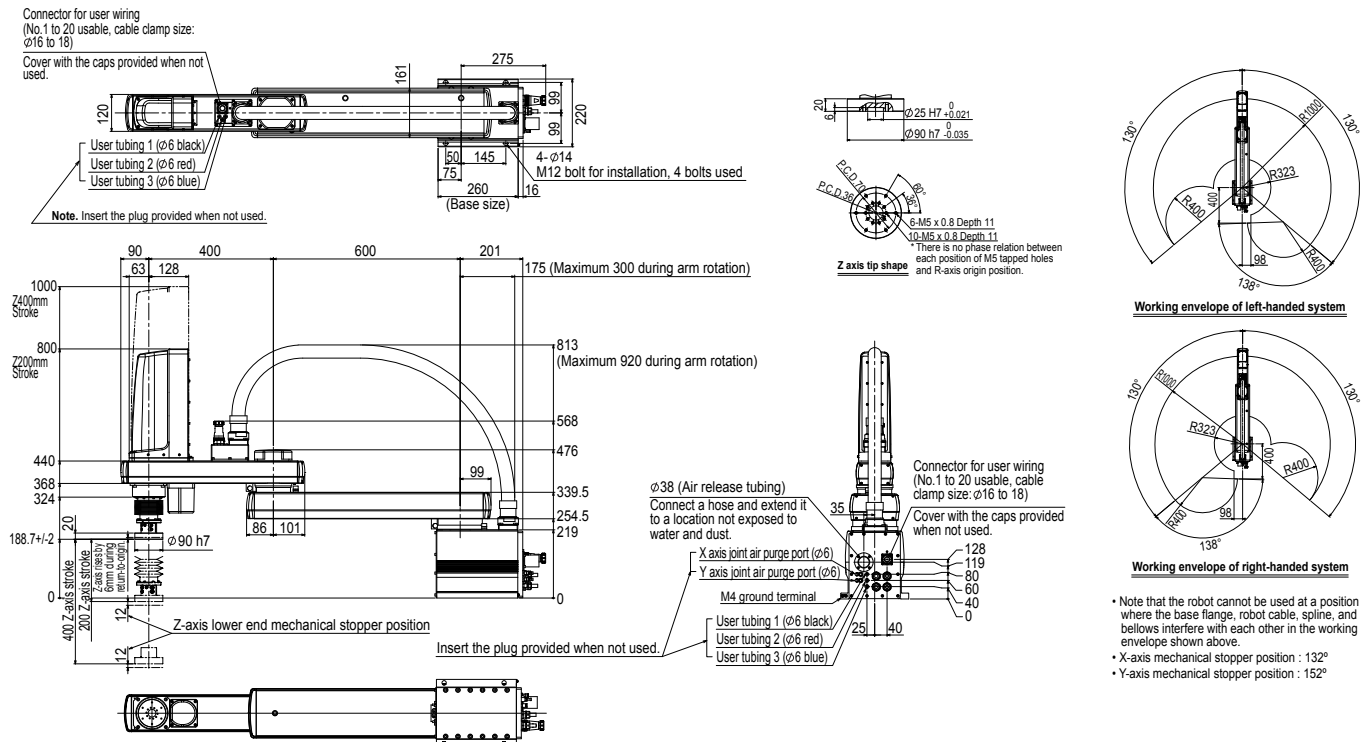
Controller

Controller	Power consumption (VA)	Operating method
YRC	2500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 1000mm, Vertical Stroke: 200mm, Max. payload: 18kg, Protection class: IP65	R6YXGP1000200YRCR3
SCARA Reach: 1000mm, Vertical Stroke: 400mm, Max. payload: 18kg, Protection class: IP65	R6YXGP1000400YRCR3

Dimensions



R6YXX1200 X SERIES

Specifications

		X axis	Y axis	Z axis	R axis
Reach (mm)		1200			
Maximum payload (kg)		50			
Repeatability ^{*1} (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 ^{*2} (sec)		0.91			
R axis allowable moment inertia ^{*3} (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)		Standard: 3.5 Option: 5, 10			
Weight (kg) (Excluding robot cable)		124			

*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.

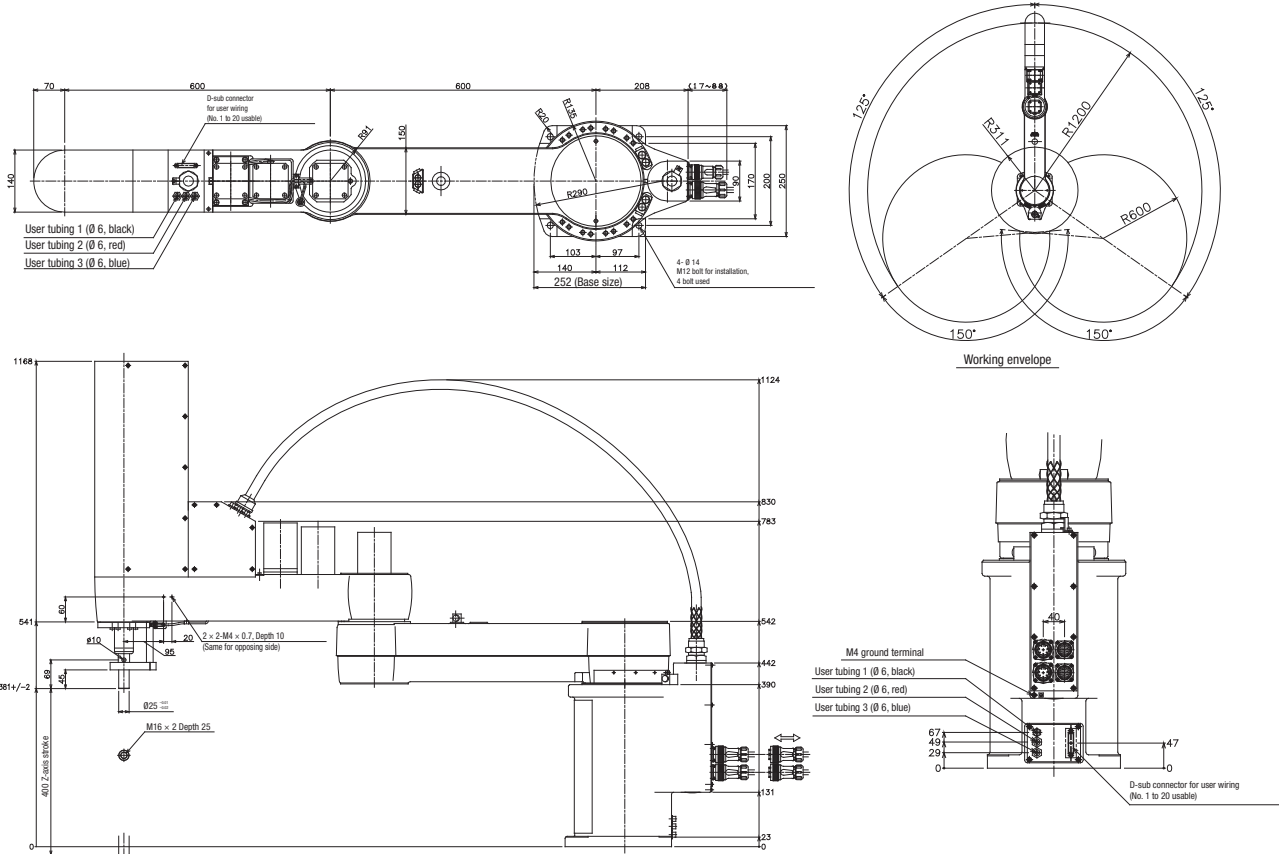
Controller

Controller	Power consumption (VA)	Operating method
YRC	2500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 1200mm, Vertical Stroke: 400mm, Max. payload: 50kg.	R6YXX1200400YRCR2

Dimensions



R6YXC220 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			
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			
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)	Standard: 3.5 Option: 5, 10			
Weight (kg) (Excluding robot cable) ^{*4}	6.5			
Robot cable weight	1.5kg (3.5m), 2.1kg (5m), 4.2kg (10m)			
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.

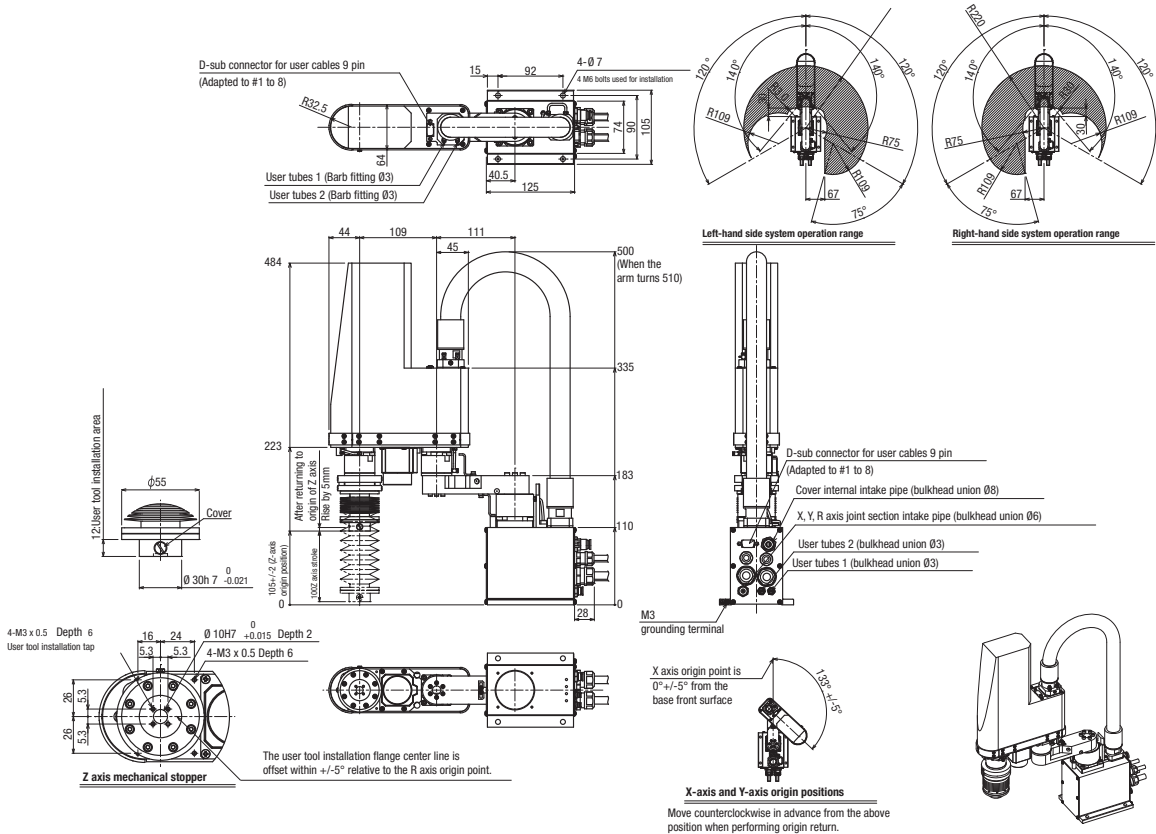
Controller

Controller	Power consumption (VA)	Operating method
YRC	500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 220mm, Vertical Stroke: 100mm, Max. payload: 1kg, Protection class: C10	R6YXC220100YRCR0

Dimensions



R6YXC500 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		+/-0.01	+/-0.005
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)	Standard: 3.5 Option: 5, 10			
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.

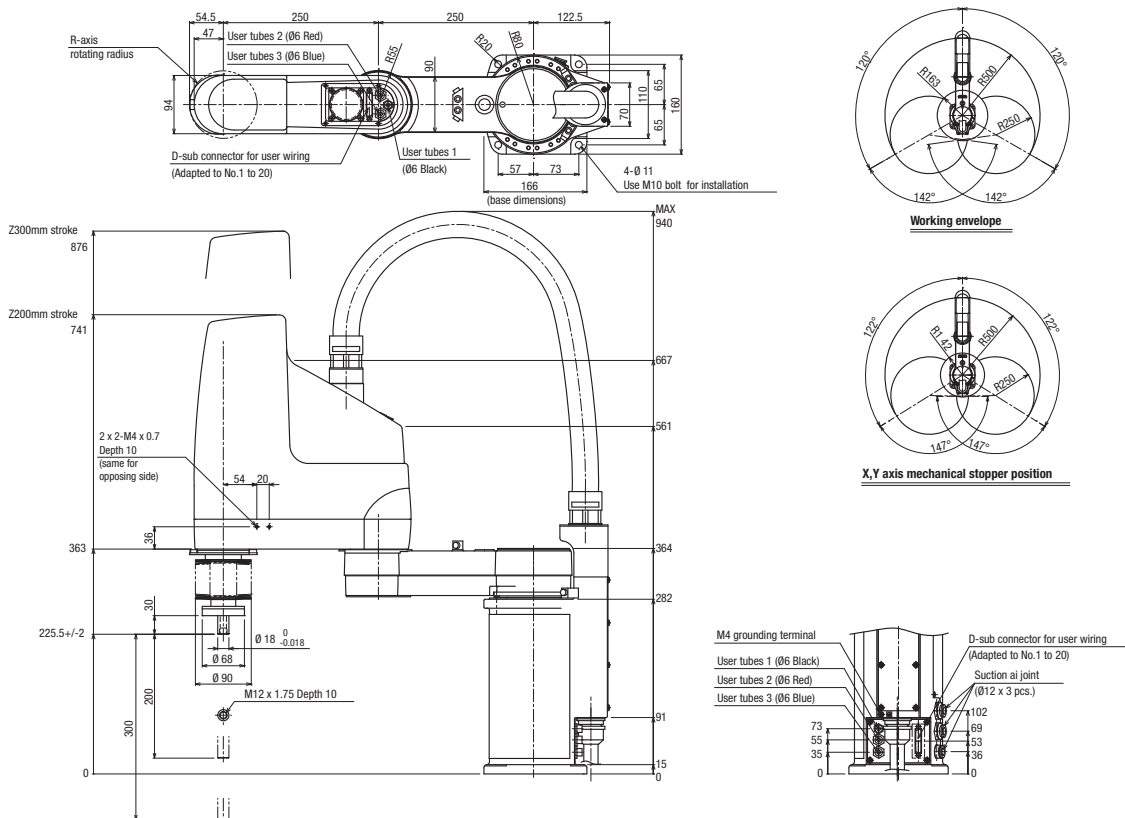
Controller

Controller	Power consumption (VA)	Operating method
YRC	1500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 500mm, Vertical Stroke: 200mm, Max. payload: 10kg, Protection class: C10	R6YXC500200YRCR2
SCARA Reach: 500mm, Vertical Stroke: 300mm, Max. payload: 10kg, Protection class: C10	R6YXC500300YRCR2

Dimensions



R6YXC600 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)	Standard: 3.5 Option: 5, 10			
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.

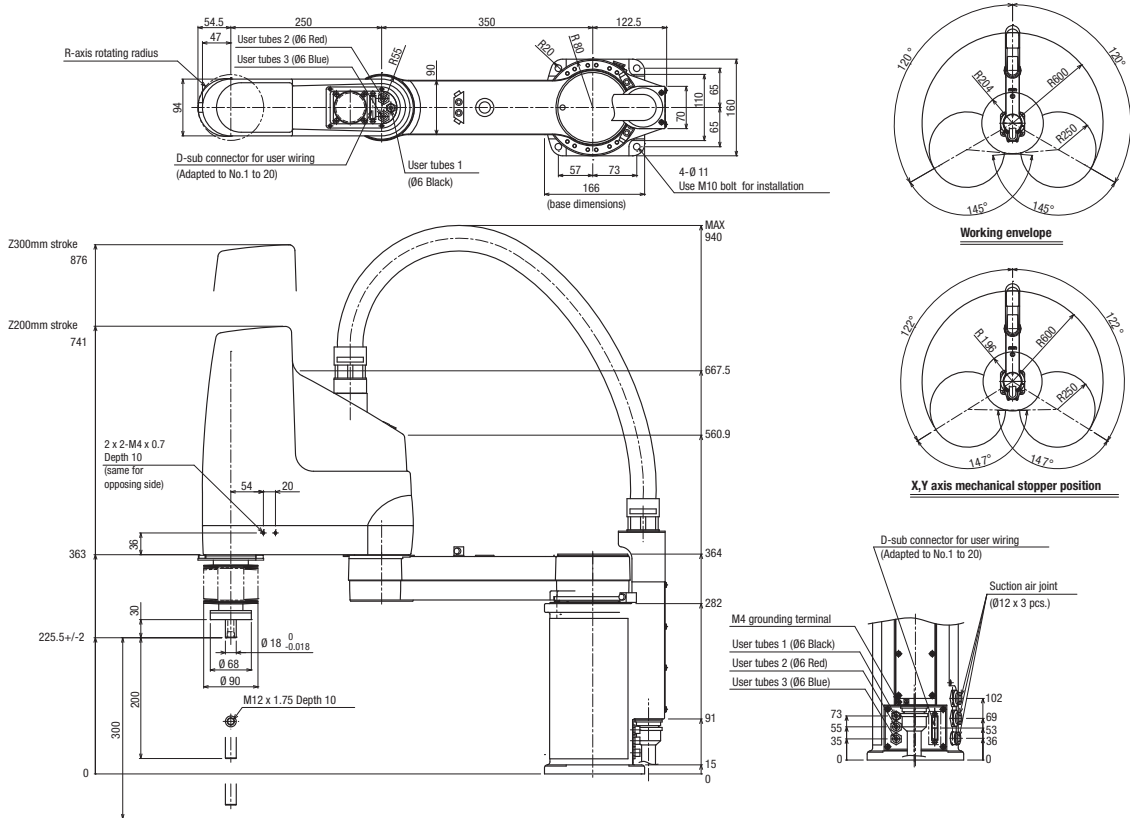
Controller

Controller	Power consumption (VA)	Operating method
YRC	1500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 600mm, Vertical Stroke: 200mm, Max. payload: 10kg, Protection class: C10	R6YXC600200YRCR2
SCARA Reach: 600mm, Vertical Stroke: 300mm, Max. payload: 10kg, Protection class: C10	R6YXC600300YRCR2

Dimensions



R6YXC700 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)	Standard: 3.5 Option: 5, 10			
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 cf (0.1micron base), when suction blower is used.
- *5 The necessary intake amount varies depending on the use conditions and environment.

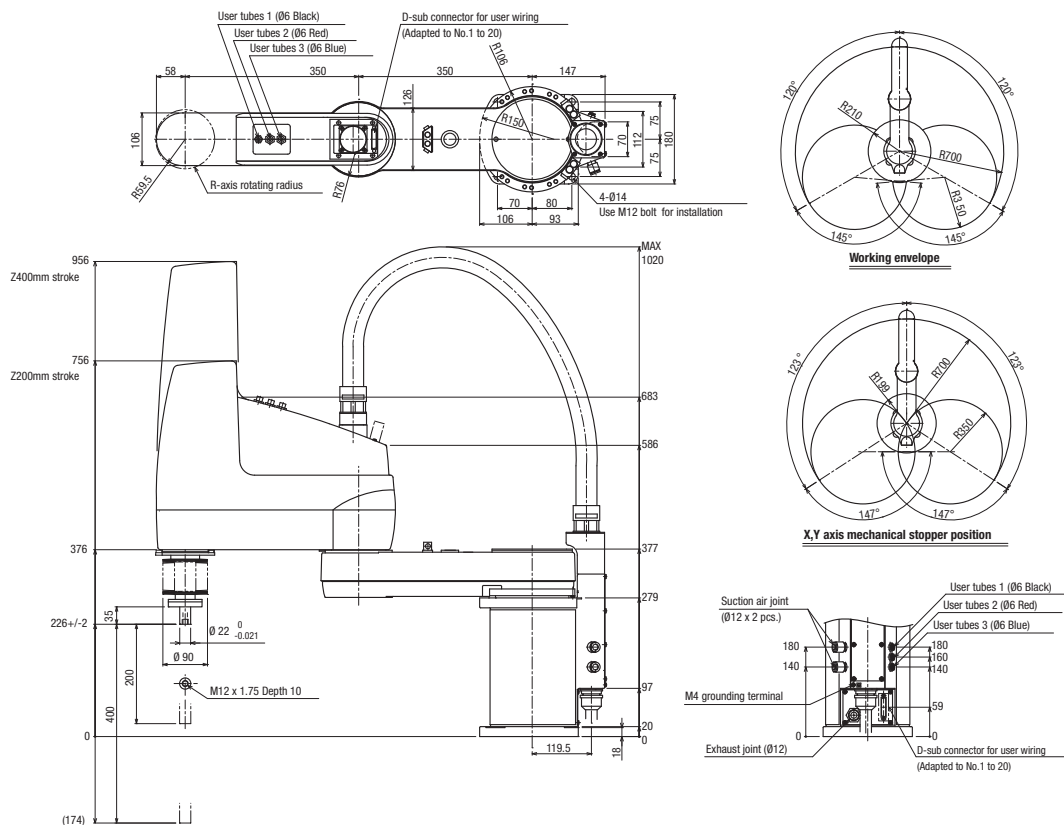
Controller

Controller	Power consumption (VA)	Operating method
YRC	2000	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 700mm, Vertical Stroke: 200mm, Max. payload: 20kg, Protection class: C10	R6YXC700200YRCR2
SCARA Reach: 700mm, Vertical Stroke: 400mm, Max. payload: 20kg, Protection class: C10	R6YXC700400YRCR2

Dimensions



R6YXC800 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	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)	Standard: 3.5 Option: 5, 10			
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 of (0.1micron base), when suction blower is used.
- *5 The necessary intake amount varies depending on the use conditions and environment.

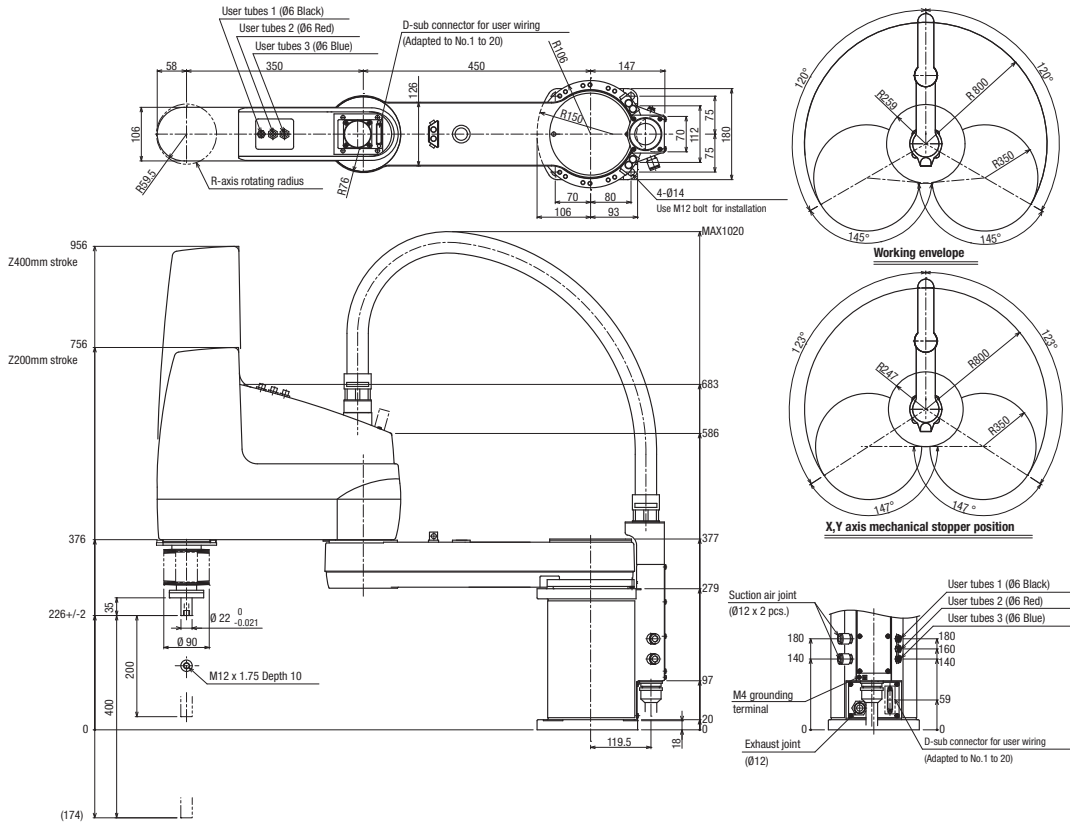
Controller

Controller	Power consumption (VA)	Operating method
YRC	2000	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Ordering information

Description	Model
SCARA Reach: 800mm, Vertical Stroke: 200mm, Max. payload: 20kg, Protection class: C10	R6YXC800200YRCR2
SCARA Reach: 800mm, Vertical Stroke: 400mm, Max. payload: 20kg, Protection class: C10	R6YXC800400YRCR2

Dimensions



SCARA Robots

Ordering information

XG series - Standard type

	Series	Reach (mm)	Z-axis stroke (mm)	Payload (kg)	Robot			RGU	Robot cable		
					Robot item code	Accessories			Length (m)	Item code	Detachable
						Tool flange	Open shaft				
R6Y	XG	120	50	1	R6YXG12050YRCR0	N.A.	N.A.	N.A.	2.0	R6YACCX002T1	N.A.
									3.5	R6YACCX003T1	N.A.
									5.0	R6YACCX005T1	N.A.
									10.0	R6YACCX010T1	N.A.
		150	50	1	R6YXG15050YRCR0	N.A.	N.A.	N.A.	2.0	R6YACCX002T1	N.A.
									3.5	R6YACCX003T1	N.A.
									5.0	R6YACCX005T1	N.A.
									10.0	R6YACCX010T1	N.A.
		180	50	1	R6YXG18050YRCR0	N.A.	N.A.	N.A.	2.0	R6YACCX002T1	N.A.
									3.5	R6YACCX003T1	N.A.
									5.0	R6YACCX005T1	N.A.
									10.0	R6YACCX010T1	N.A.
	220	100	1	R6YXG220100YRCR0	N.A.	N.A.	N.A.	3.5	R6YACCX003T2	N.A.	
								5.0	R6YACCX005T2	N.A.	
								10.0	R6YACCX010T2	N.A.	
								XGL	250	150	5
	5.0	R6YACCX005XGX	●								
	10.0	R6YACCX010XGX	●								
	350	150	5	R6YXGL350150YRCR0	R6YACXGLF	R6YACXGLS	N.A.		3.5	R6YACCX003XGX	●
									5.0	R6YACCX005XGX	●
									10.0	R6YACCX010XGX	●
	400	150	5	R6YXGL400150YRCR0	R6YACXGLF	R6YACXGLS	N.A.		3.5	R6YACCX003XGX	●
									5.0	R6YACCX005XGX	●
									10.0	R6YACCX010XGX	●
	500	150	5	R6YXGL500150YRCR0	R6YACXGLF	R6YACXGLS	N.A.		3.5	R6YACCX003XGX	●
									5.0	R6YACCX005XGX	●
									10.0	R6YACCX010XGX	●
	600	150	5	R6YXGL600150YRCR0	R6YACXGLF	R6YACXGLS	N.A.	3.5	R6YACCX003XGX	●	
5.0								R6YACCX005XGX	●		
10.0								R6YACCX010XGX	●		
XG	500	200	10	R6YXG500200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGX	●	
								5.0	R6YACCX005XGX	●	
								10.0	R6YACCX010XGX	●	
		300	10	R6YXG500300YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGX	●	
								5.0	R6YACCX005XGX	●	
								10.0	R6YACCX010XGX	●	
	600	200	10	R6YXG600200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGX	●	
								5.0	R6YACCX005XGX	●	
								10.0	R6YACCX010XGX	●	
	300	10	R6YXG600300YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGX	●		
							5.0	R6YACCX005XGX	●		
							10.0	R6YACCX010XGX	●		
XGH	600	200	20	R6YXGH600200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGX	●	
								5.0	R6YACCX005XGX	●	
								10.0	R6YACCX010XGX	●	
	400	20	R6YXGH600400YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGX	●		
							5.0	R6YACCX005XGX	●		
							10.0	R6YACCX010XGX	●		
XG	700	200	20	R6YXG700200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGX	●	
								5.0	R6YACCX005XGX	●	
								10.0	R6YACCX010XGX	●	
		400	20	R6YXG700400YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGX	●	
								5.0	R6YACCX005XGX	●	
								10.0	R6YACCX010XGX	●	
	800	200	20	R6YXG800200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGX	●	
								5.0	R6YACCX005XGX	●	
								10.0	R6YACCX010XGX	●	
		400	20	R6YXG800400YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGX	●	
								5.0	R6YACCX005XGX	●	
								10.0	R6YACCX010XGX	●	



	Series	Reach (mm)	Z-axis stroke (mm)	Payload (kg)	Robot			RGU	Robot cable		
					Robot item code	Accessories			Length (m)	Item code	Detachable
						Tool flange	Open shaft				
R6Y	XG	900	200	20	R6YXG900200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGX	●
									5.0	R6YACCX005XGX	●
									10.0	R6YACCX010XGX	●
			400	20	R6YXG900400YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGX	●
									5.0	R6YACCX005XGX	●
									10.0	R6YACCX010XGX	●
		1000	200	20	R6YXG1000200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGX	●
									5.0	R6YACCX005XGX	●
									10.0	R6YACCX010XGX	●
		400	20	R6YXG1000400YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGX	●	
								5.0	R6YACCX005XGX	●	
								10.0	R6YACCX010XGX	●	

XG series - Wall-mount type

	Series	Reach (mm)	Z-axis stroke (mm)	Payload (kg)	Robot			RGU	Robot cable		
					Robot item code	Accessories			Length (m)	Item code	Detachable
						Tool flange	Open shaft				
R6Y	XGSW	300	150	5	R6YXGSW300150YRCR0	R6YACXGLF	R6YACXGLS	N.A.	3.5	R6YACCX003XGS	N.A.
									5.0	R6YACCX005XGS	N.A.
									10.0	R6YACCX010XGS	N.A.
		400	150	5	R6YXGSW400150YRCR0	R6YACXGLF	R6YACXGLS	N.A.	3.5	R6YACCX003XGS	N.A.
									5.0	R6YACCX005XGS	N.A.
									10.0	R6YACCX010XGS	N.A.
		500	200	10	R6YXGSW500200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.
									5.0	R6YACCX005XGS	N.A.
									10.0	R6YACCX010XGS	N.A.
		300	10	R6YXGSW500300YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.	
								5.0	R6YACCX005XGS	N.A.	
								10.0	R6YACCX010XGS	N.A.	
		600	200	10	R6YXGSW600200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.
									5.0	R6YACCX005XGS	N.A.
									10.0	R6YACCX010XGS	N.A.
		300	10	R6YXGSW600300YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.	
								5.0	R6YACCX005XGS	N.A.	
								10.0	R6YACCX010XGS	N.A.	
		700	200	20	R6YXGSW700200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.
									5.0	R6YACCX005XGS	N.A.
									10.0	R6YACCX010XGS	N.A.
		400	20	R6YXGSW700400YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.	
								5.0	R6YACCX005XGS	N.A.	
								10.0	R6YACCX010XGS	N.A.	
		800	200	20	R6YXGSW800200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.
									5.0	R6YACCX005XGS	N.A.
									10.0	R6YACCX010XGS	N.A.
		400	20	R6YXGSW800400YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.	
								5.0	R6YACCX005XGS	N.A.	
								10.0	R6YACCX010XGS	N.A.	
		900	200	20	R6YXGSW900200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.
									5.0	R6YACCX005XGS	N.A.
									10.0	R6YACCX010XGS	N.A.
		400	20	R6YXGSW900400YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.	
								5.0	R6YACCX005XGS	N.A.	
								10.0	R6YACCX010XGS	N.A.	
		1000	200	20	R6YXGSW1000200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.
									5.0	R6YACCX005XGS	N.A.
									10.0	R6YACCX010XGS	N.A.
		400	20	R6YXGSW1000400YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.	
								5.0	R6YACCX005XGS	N.A.	
								10.0	R6YACCX010XGS	N.A.	

XG series - Wall-mount inverse type

	Series	Reach (mm)	Z-axis stroke (mm)	Payload (kg)	Robot			RGU	Robot cable		
					Robot item code	Accessories			Length (m)	Item code	Detachable
						Tool flange	Open shaft				
R6Y	XGSU	300	150	5	R6YXGSU300150YRCR0	R6YACXGLF	R6YACXGLS	N.A.	3.5	R6YACCX003XGS	N.A.
									5.0	R6YACCX005XGS	N.A.
									10.0	R6YACCX010XGS	N.A.
		400	150	5	R6YXGSU400150YRCR0	R6YACXGLF	R6YACXGLS	N.A.	3.5	R6YACCX003XGS	N.A.
									5.0	R6YACCX005XGS	N.A.
									10.0	R6YACCX010XGS	N.A.
		500	200	10	R6YXGSU500200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.
									5.0	R6YACCX005XGS	N.A.
			300	10	R6YXGSU500300YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.
									5.0	R6YACCX005XGS	N.A.
									10.0	R6YACCX010XGS	N.A.
									3.5	R6YACCX003XGS	N.A.
		600	200	10	R6YXGSU600200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.
									5.0	R6YACCX005XGS	N.A.
			300	10	R6YXGSU600300YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.
									5.0	R6YACCX005XGS	N.A.
									10.0	R6YACCX010XGS	N.A.
									3.5	R6YACCX003XGS	N.A.
		700	200	20	R6YXGSU700200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.
									5.0	R6YACCX005XGS	N.A.
			400	20	R6YXGSU700400YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.
									5.0	R6YACCX005XGS	N.A.
									10.0	R6YACCX010XGS	N.A.
									3.5	R6YACCX003XGS	N.A.
		800	200	20	R6YXGSU800200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.
									5.0	R6YACCX005XGS	N.A.
			400	20	R6YXGSU800400YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.
									5.0	R6YACCX005XGS	N.A.
									10.0	R6YACCX010XGS	N.A.
									3.5	R6YACCX003XGS	N.A.
900	200	20	R6YXGSU900200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.		
							5.0	R6YACCX005XGS	N.A.		
	400	20	R6YXGSU900400YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.		
							5.0	R6YACCX005XGS	N.A.		
							10.0	R6YACCX010XGS	N.A.		
							3.5	R6YACCX003XGS	N.A.		
1000	200	20	R6YXGSU1000200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.		
							5.0	R6YACCX005XGS	N.A.		
	400	20	R6YXGSU1000400YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGS	N.A.		
							5.0	R6YACCX005XGS	N.A.		
							10.0	R6YACCX010XGS	N.A.		
							3.5	R6YACCX003XGS	N.A.		

XG series - Clean type

	Series	Reach (mm)	Z-axis stroke (mm)	Payload (kg)	Robot			RGU	Robot cable		
					Robot item code	Accessories			Length (m)	Item code	Detachable
						Tool flange	Open shaft				
R6Y	XGLC	250	150	4	R6YXGLC250150YRCR0	R6YACXGLF	N.A.	N.A.	3.5	R6YACCX003XGCXGP	N.A.
									5.0	R6YACCX005XGCXGP	N.A.
									10.0	R6YACCX010XGCXGP	N.A.
		350	150	4	R6YXGLC350150YRCR0	R6YACXGLF	N.A.	N.A.	3.5	R6YACCX003XGCXGP	N.A.
									5.0	R6YACCX005XGCXGP	N.A.
									10.0	R6YACCX010XGCXGP	N.A.
		400	150	4	R6YXGLC400150YRCR0	R6YACXGLF	N.A.	N.A.	3.5	R6YACCX003XGCXGP	N.A.
									5.0	R6YACCX005XGCXGP	N.A.
									10.0	R6YACCX010XGCXGP	N.A.
		500	150	4	R6YXGLC500150YRCR0	R6YACXGLF	N.A.	N.A.	3.5	R6YACCX003XGCXGP	N.A.
									5.0	R6YACCX005XGCXGP	N.A.
									10.0	R6YACCX010XGCXGP	N.A.
		600	150	4	R6YXGLC600150YRCR0	R6YACXGLF	N.A.	N.A.	3.5	R6YACCX003XGCXGP	N.A.
									5.0	R6YACCX005XGCXGP	N.A.
									10.0	R6YACCX010XGCXGP	N.A.

XG series - Dust-proof & drip-proof type

	Series	Reach (mm)	Z-axis stroke (mm)	Payload (kg)	Robot			RGU	Robot cable			
					Robot item code	Accessories			Length (m)	Item code	Detachable	
						Tool flange	Open shaft					
R6Y	XGLP	250	150	4	R6YXGLP250150YRCR0	R6YACXGLF	N.A.	N.A.	3.5	R6YACCX003XGCXGP	N.A.	
									5.0	R6YACCX005XGCXGP	N.A.	
									10.0	R6YACCX010XGCXGP	N.A.	
		350	150	4	R6YXGLP350150YRCR0	R6YACXGLF	N.A.	N.A.	N.A.	3.5	R6YACCX003XGCXGP	N.A.
										5.0	R6YACCX005XGCXGP	N.A.
										10.0	R6YACCX010XGCXGP	N.A.
		400	150	4	R6YXGLP400150YRCR0	R6YACXGLF	N.A.	N.A.	N.A.	3.5	R6YACCX003XGCXGP	N.A.
										5.0	R6YACCX005XGCXGP	N.A.
										10.0	R6YACCX010XGCXGP	N.A.
		500	150	4	R6YXGLP500150YRCR0	R6YACXGLF	N.A.	N.A.	N.A.	3.5	R6YACCX003XGCXGP	N.A.
										5.0	R6YACCX005XGCXGP	N.A.
										10.0	R6YACCX010XGCXGP	N.A.
	600	150	4	R6YXGLP600150YRCR0	R6YACXGLF	N.A.	N.A.	N.A.	3.5	R6YACCX003XGCXGP	N.A.	
									5.0	R6YACCX005XGCXGP	N.A.	
									10.0	R6YACCX010XGCXGP	N.A.	
	XGP	500	200	8	R6YXGP500200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGCXGP	N.A.	
									5.0	R6YACCX005XGCXGP	N.A.	
									10.0	R6YACCX010XGCXGP	N.A.	
			300	8	R6YXGP500300YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGCXGP	N.A.	
									5.0	R6YACCX005XGCXGP	N.A.	
									10.0	R6YACCX010XGCXGP	N.A.	
		600	200	8	R6YXGP600200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGCXGP	N.A.	
									5.0	R6YACCX005XGCXGP	N.A.	
									10.0	R6YACCX010XGCXGP	N.A.	
300			8	R6YXGP600300YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGCXGP	N.A.		
								5.0	R6YACCX005XGCXGP	N.A.		
								10.0	R6YACCX010XGCXGP	N.A.		
XGHP	600	200	18	R6YXGHP600200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGCXGP	N.A.		
								5.0	R6YACCX005XGCXGP	N.A.		
								10.0	R6YACCX010XGCXGP	N.A.		
	400	18	R6YXGHP600400YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGCXGP	N.A.			
							5.0	R6YACCX005XGCXGP	N.A.			
							10.0	R6YACCX010XGCXGP	N.A.			
XGP	700	200	18	R6YXGP700200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGCXGP	N.A.		
								5.0	R6YACCX005XGCXGP	N.A.		
								10.0	R6YACCX010XGCXGP	N.A.		
		400	18	R6YXGP700400YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGCXGP	N.A.		
								5.0	R6YACCX005XGCXGP	N.A.		
								10.0	R6YACCX010XGCXGP	N.A.		
	800	200	18	R6YXGP800200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGCXGP	N.A.		
								5.0	R6YACCX005XGCXGP	N.A.		
								10.0	R6YACCX010XGCXGP	N.A.		
		400	18	R6YXGP800400YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGCXGP	N.A.		
								5.0	R6YACCX005XGCXGP	N.A.		
								10.0	R6YACCX010XGCXGP	N.A.		
	900	200	18	R6YXGP900200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGCXGP	N.A.		
								5.0	R6YACCX005XGCXGP	N.A.		
								10.0	R6YACCX010XGCXGP	N.A.		
		400	18	R6YXGP900400YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGCXGP	N.A.		
								5.0	R6YACCX005XGCXGP	N.A.		
								10.0	R6YACCX010XGCXGP	N.A.		
1000	200	18	R6YXGP1000200YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGCXGP	N.A.			
							5.0	R6YACCX005XGCXGP	N.A.			
							10.0	R6YACCX010XGCXGP	N.A.			
	400	18	R6YXGP1000400YRCR3	N.A.	N.A.	RGU3	3.5	R6YACCX003XGCXGP	N.A.			
							5.0	R6YACCX005XGCXGP	N.A.			
							10.0	R6YACCX010XGCXGP	N.A.			

X series - High payload

	Series	Reach (mm)	Z-axis stroke (mm)	Payload (kg)	Robot item code	RGU	Robot cable		
							Length (m)	Item code	Detachable
R6Y	XX	1200	400	50	R6YXX1200400YRCR2	RGU2	3.5	R6YACCX003XGX	●
							5.0	R6YACCX005XGX	●
							10.0	R6YACCX010XGX	●

XC series - Clean type

R6Y	Series	Reach (mm)	Z-axis stroke (mm)	Payload (kg)	Robot item code	RGU	Robot cable		
							Length (m)	Item code	Detachable
R6Y	XC	180	100	1	R6YXC180100YRCR0	N.A.	3.5	R6YACCX003XSXC	N.A.
							5.0	R6YACCX005XSXC	N.A.
							10.0	R6YACCX010XSXC	N.A.
		220	100	1	R6YXC220100YRCR0	N.A.	3.5	R6YACCX003XSXC	N.A.
							5.0	R6YACCX005XSXC	N.A.
							10.0	R6YACCX010XSXC	N.A.
		500	200	10	R6YXC500200YRCR2	RGU2	3.5	R6YACCX003XSXC	N.A.
							5.0	R6YACCX005XSXC	N.A.
							10.0	R6YACCX010XSXC	N.A.
			300	10	R6YXC500300YRCR2	RGU2	3.5	R6YACCX003XSXC	N.A.
							5.0	R6YACCX005XSXC	N.A.
							10.0	R6YACCX010XSXC	N.A.
		600	200	10	R6YXC600200YRCR2	RGU2	3.5	R6YACCX003XSXC	N.A.
							5.0	R6YACCX005XSXC	N.A.
							10.0	R6YACCX010XSXC	N.A.
			300	10	R6YXC600300YRCR2	RGU2	3.5	R6YACCX003XSXC	N.A.
							5.0	R6YACCX005XSXC	N.A.
							10.0	R6YACCX010XSXC	N.A.
		700	200	20	R6YXC700200YRCR2	RGU2	3.5	R6YACCX003XSXC	N.A.
							5.0	R6YACCX005XSXC	N.A.
							10.0	R6YACCX010XSXC	N.A.
			400	20	R6YXC700400YRCR2	RGU2	3.5	R6YACCX003XSXC	N.A.
							5.0	R6YACCX005XSXC	N.A.
							10.0	R6YACCX010XSXC	N.A.
		800	200	20	R6YXC800200YRCR2	RGU2	3.5	R6YACCX003XSXC	N.A.
							5.0	R6YACCX005XSXC	N.A.
							10.0	R6YACCX010XSXC	N.A.
400	20		R6YXC800400YRCR2	RGU2	3.5	R6YACCX003XSXC	N.A.		
					5.0	R6YACCX005XSXC	N.A.		
					10.0	R6YACCX010XSXC	N.A.		
1000	200	20	R6YXC1000200YRCR2	RGU2	3.5	R6YACCX003XSXC	N.A.		
					5.0	R6YACCX005XSXC	N.A.		
					10.0	R6YACCX010XSXC	N.A.		
	400	20	R6YXC1000400YRCR2	RGU2	3.5	R6YACCX003XSXC	N.A.		
					5.0	R6YACCX005XSXC	N.A.		
					10.0	R6YACCX010XSXC	N.A.		

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.