

CROBOTP

CRP COLLABORATIVE ROBOT

10 SECOND PROGRAMMING, FULL FEATURED,
GOOD TOOL FOR WELDING



CRP-RC18-05-W

CRP-RC13-10-W

CRP-RC09-05-W

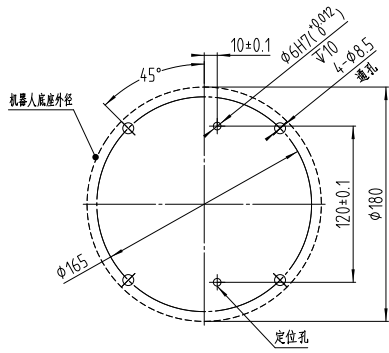
Collaborative Robot Product Introduction

CRP-RC18-05-W CRP-RC13-10-W CRP-RC09-05-W

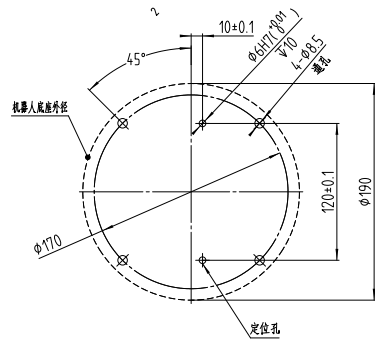


Model	CRP-RC18-05-W	CRP-RC13-10-W	CRP-RC09-05-W
Number of axes	6	6	6
End load	5kg	10kg	5kg
Robot Arm Span	1801mm	1320mm	906mm
Repeatability	±0.04mm	±0.03mm	±0.02mm
Maximum angle of each axis	J1	-360°~360°	-360°~360°
	J2	-360°~360°	-360°~360°
	J3	-75°~255°	-75°~255°
	J4	-210°~210°	-210°~210°
	J5	-360°~360°	-360°~360°
	J6	-210°~210°	-210°~210°
Maximum joint speed	J1	107°/S	107°/S
	J2	88°/S	107°/S
	J3	200°/S	200°/S
	J4	250°/S	250°/S
	J5	250°/S	250°/S
	J6	250°/S	250°/S
End button	2	Drag and drop, record points	
End I/O ports	4	4-channel digital input/output	
Breathing light	1		
towing device	1set	8 programming buttons:X/A, Arc, MOVL MOVC, RES, Weave, Program, Shift	
Joystick	1	any direction	
Usage Environment	Temperature: 0~45°C, Humidity: 20%RH~85%RH (non-condensing)		
Body weight	48kg	37.8kg	22.5kg
Installation method	Formal/Inverted/Wall Mounted		
IP Level	IP54		

Base installation diagram

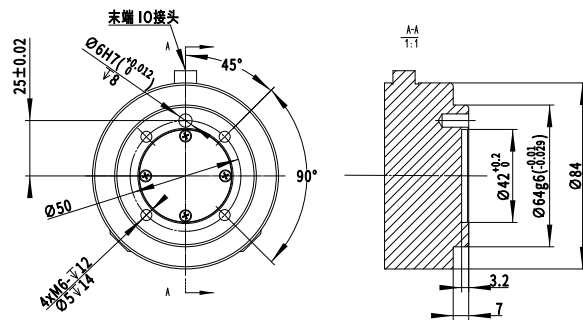


CRP-RC09-05-W

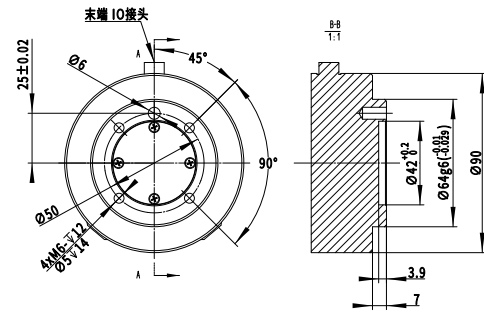


CRP-RC13-10-W/CRP-RC18-05-W

Flange installation diagram

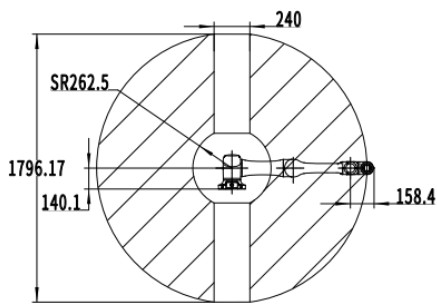


CRP-RC09-05-W/CRP-RC18-05-W

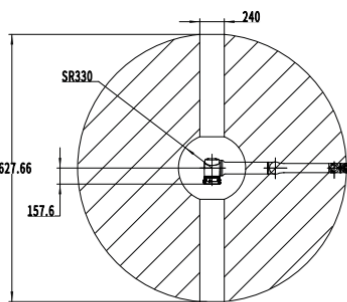


CRP-RC13-10-W

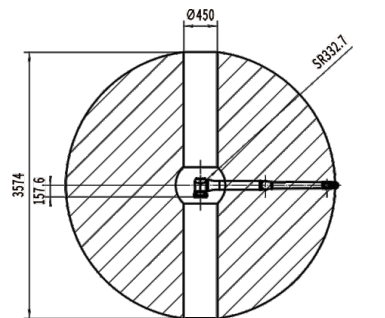
Range of motion diagram



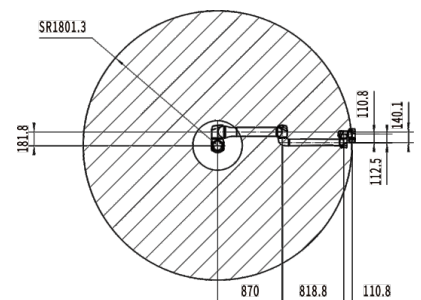
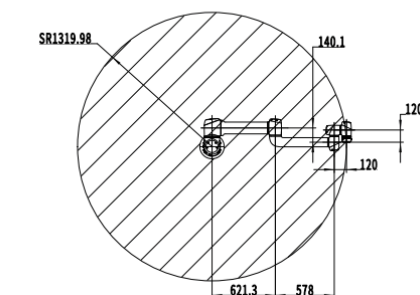
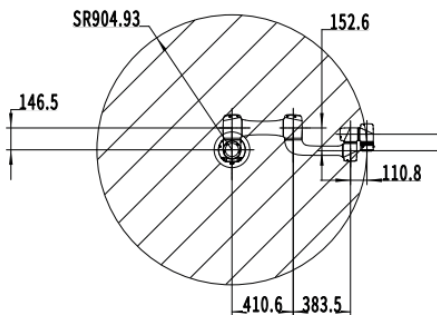
CRP-RC09-05-W



CRP-RC13-10-W

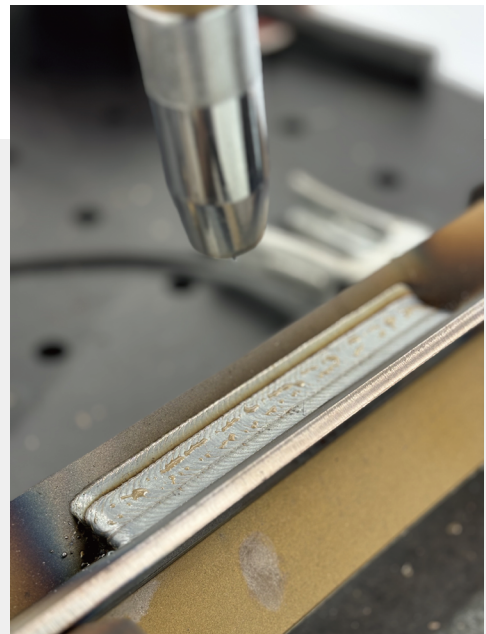


CRP-RC18-05-W



Easy to operate

- Support drag, can be quickly dragged to a large distance around the welding point
- Uniquely designed end manipulator for fast programming without instruction:
 - 1 Use the rocker to operate the welding torch in six directions to the exact welding point;
 - 2 Record the position point, movement mode, welding instruction and swing instruction directly on the end operator;
 - 3 Fast speed adjustment; Welding and swing parameter adjustment;
 - 4 The display displays key information, such as speed, pose, command, welding and swing parameters;
- Welding gun can be quickly disassembled, only one screw can be quickly installed and disassembled, easy to move the machine to a small space;
- Optional magnetic base, can be installed on the workpiece;



Full featured:

- Welding software package
- Swing function
- Multilayer multichannel function *
- Location finding function *
- Arc tracking function *

Major advantage



With UPS, support power failure regeneration



Support gravity compensation, tool load identification



Support collision detection, stop immediately when hit, man-machine collaboration

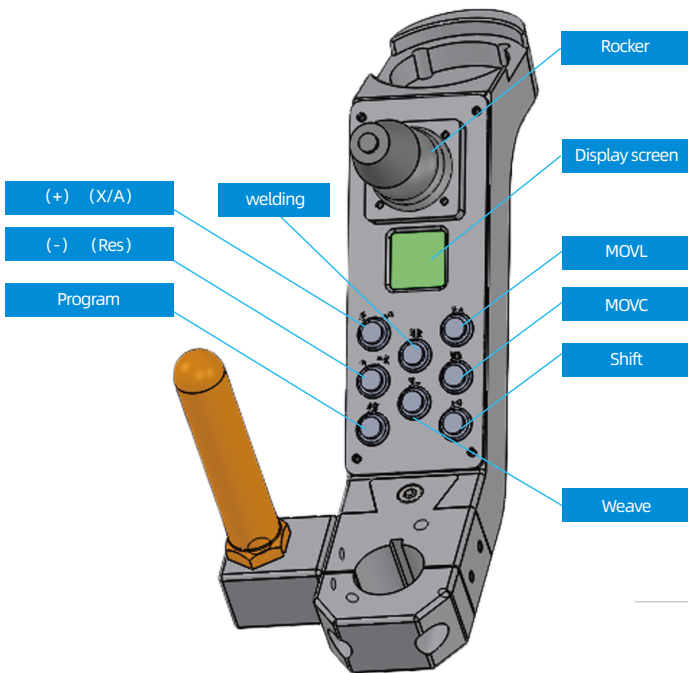


Dual encoder design, more secure



Arc tracking function

THE WORLD'S ORIGINAL TOWING DEVICE



- Pull rod installation position is free, can be left and right hand, suitable for left and right hand operation
- Rocker can be controlled, up and down, left and right, front and back (twisting), the speed (press the upper end)
- The display displays: speed, XYZ/ABC action, welding and swing parameters

Function of 8 buttons:

- | | |
|--------------------------|---|
| 1 Toggle button | Click to toggle ABC or XYZ action, and can also be used to add welding/swing parameters |
| 2 Recovery button | Long press, the robot can be restored to the previous point of the attitude, to prevent the front and rear gun attitude is not the same, and can be used to reduce welding/swing parameters |
| 3 Program button | Click more than 2S to create a new program, and combine with the upper file to clear the current program |
| 4 Welding button | Click to insert welding instructions |
| 5 Swing button | Click to insert the swing command |
| 6 Line button | Click to insert a line movement |
| 7 Arc button | Click to insert an arc motion |
| 8 Up button | Click to enable this function on the robot, and at the same time, clear the alarm and modify the previous bit |

* In addition to the 8 buttons, the reasonable position is installed: pull button, program start button

CRP-X3 Robot Control Cabinet

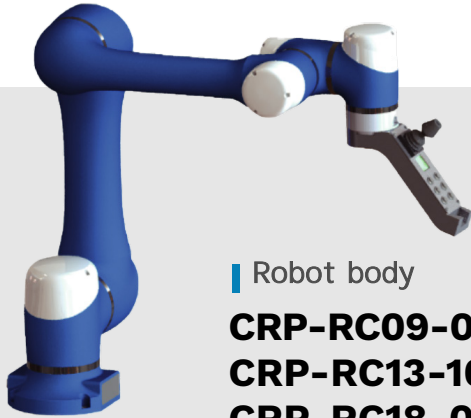
Technical Specifications



Electrical cabinet series	CRP-X3-ZMC900E	
Teach pendant	Touchscreen, emergency stop button, mode selection switch, safety switch, shortcut keypad. C-type teach pendant, standard 6-meter cable, 8-inch TFT-LCD touchscreen, 290 (W) x 220 (H) x 110 (D) mm, 1.3 kg.	
Size and weight	178 (width) x 343 (height) x 495 (depth) mm, approximately 13 kg	
Protective structure	IP51	
Cooling method	Forced air cooling	
Environmental parameters	Storage temperature: -10-65, Operating temperature: 0-45, Relative humidity: 20-85% (non-condensing), Altitude: ≤2000M Corrosion: No corrosive gases or liquids Usage environment: Indoor, ventilated, non-enclosed	
Power supply	Single-phase AC 110V~242V, 50/60HZ	
Connecting cable	The standard power cord is 2 meters long, and the standard interconnect cable is 5 meters long.	
Grounding	Protective grounding (PE) is required.	
System Configuration	The core includes 4+1 64-bit Arm® Cortex®-A55 cores with a clock speed of 2GHz; and 3 Cortex-R5F cores with a clock speed of 800MHz. It features 4GB LPDDR4, 8GB eMMC, and 32KB FRAM onboard.	
Hardware interface	16-channel user isolation quantity input, active low.	
	16 user-isolated NPN digital outputs, 300mA load capacity [excluding DO12, DO13, DO14, and DO15]	
	Two-channel quadrature encoding or two-channel pulse counting, DI10 multiplexed as A+, DI11 multiplexed as A-, DI12 multiplexed as B+, DI13 multiplexed as B-, DI14 multiplexed as C+, DI15 multiplexed as C-	
	DO12, DO13, DO14, and DO15 can be reused as PWM outputs, ranging from 0.1Hz to 50kHz, with a 250mA load. The cabinet door panel includes one standard USB 3.0 host port. The cabinet door panel features one 100Mbps Ethernet port and one Gigabit Ethernet port (configurable as EtherCAT Master 2), and includes one built-in RS485 port and one CAN 2.0 port.	
Robot safety	External emergency stop, servo main power failure	
EMC Testing Standards	IEC 61000-6-2:2016	
Communication protocol operation mode	Standard configuration: Modbus RTU master/slave, Modbus TCP master/slave, EtherCAT master	
Operating mode	Teaching, reproduction, remote operation, point-to-point, linear interpolation, circular interpolation, and portal motion.	
Instruction system	Motion, logic, technology, computation	
coordinate system	Joint coordinates, Cartesian coordinates, user coordinates, tool coordinates, world coordinates	
Software function package	Arc welding/spot welding/laser welding/swinging arc/arc tracking/expert database /servo collision/welding torch collision/Chinese programming	Number of Standard configuration: 6 axes (external axes are optional); control axes maximum expansion to 6 axes with external axes).
Supported device models	RC series collaborative robots	

Collaborative welding robots

SET 1



Robot body
CRP-RC09-05-W
CRP-RC13-10-W
CRP-RC18-05-W



Electrical cabinet
X3

Configuration

- Name: Collaborative welding robot
- Model : CRP-RC09-05-W CRP-RC13-10-W CRP-RC18-05-W

Included

Body	CRP-RC09-05-W/CRP-RC13-10-W/CRP-RC18-05-W
Electrical cabinet	X3
Towing device	1
Teach pendant	Landscape teaching pendant, cable length 6 meters
Other	5-meter interconnection cable between the electrical cabinet and the main unit

Collaborative welding robots

SET 2



Robot body

CRP-RC09-05-W
CRP-RC13-10-W
CRP-RC18-05-W



Electrical cabinet
X3

Configuration

- Name: Collaborative welding robot
- Model : CRP-RC09-05-W CRP-RC13-10-W CRP-RC18-05-W

Included

Body	CRP-RC09-05-W/CRP-RC13-10-W/CRP-RC18-05-W	
Electrical cabinet	X3	Welding torch Choose between 500A air-cooled and 500A water-cooled models. CRP-RC09-05-W: 3m/4m option. CRP-RC13-10-W: 3m/4m option. CRP-RC18-05-W: 3.5m/4m option. Standard Japanese interface, European interface optional.
Towing device	1	
Teach pendant	Landscape teaching pendant, cable length 6 meters	
Other	5-meter interconnection cable between the electrical cabinet and the main unit	It can be adapted to various welding machines via wiring (digital connection).

Collaborative welding robots

SET 3



Robot body
CRP-RC09-05-W
CRP-RC13-10-W
CRP-RC18-05-W



Electrical cabinet
X3

Configuration

- Name: Collaborative welding robot
- Model : CRP-RC09-05-W CRP-RC13-10-W CRP-RC18-05-W

Included

Body	CRP-RC09-05-W/CRP-RC13-10-W/CRP-RC18-05-W	
Electrical cabinet	X3	Welding torch Choose between 500A air-cooled and 500A water-cooled models. CRP-RC09-05-W: 3m/4m option. CRP-RC13-10-W: 3m/4m option. CRP-RC18-05-W: 3.5m/4m option. Standard Japanese interface, European interface optional. Welder Select DS350-L/DS500-P/Plus 350DR/Plus 500PR; other compatible welding machines should be noted in the remarks. The wire feeder will automatically match the corresponding welding machine.
Towing device	1	
Teach pendant	Landscape teaching pendant, cable length 6 meters	
Other	5-meter interconnection cable between the electrical cabinet and the main unit	
Welding wire spool	1 meter wire feeding tube	
Optional magnetic base, water tank		Positive and negative electrode welding cables

Collaborative welding robots

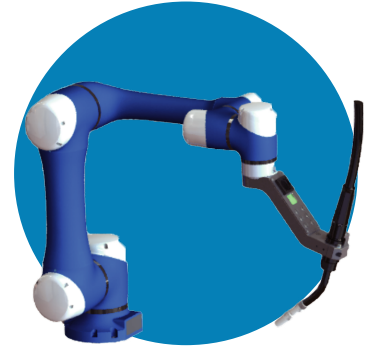
SET 4



| Complete machine



| Electrical cabinet
X3



| Robot body
CRP-RC09-05-W
CRP-RC13-10-W
CRP-RC18-05-W

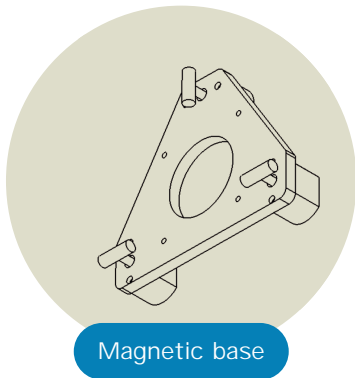
Configuration

- Name: Collaborative welding robot
- Model : CRP-RC09-05-W CRP-RC13-10-W CRP-RC18-05-W

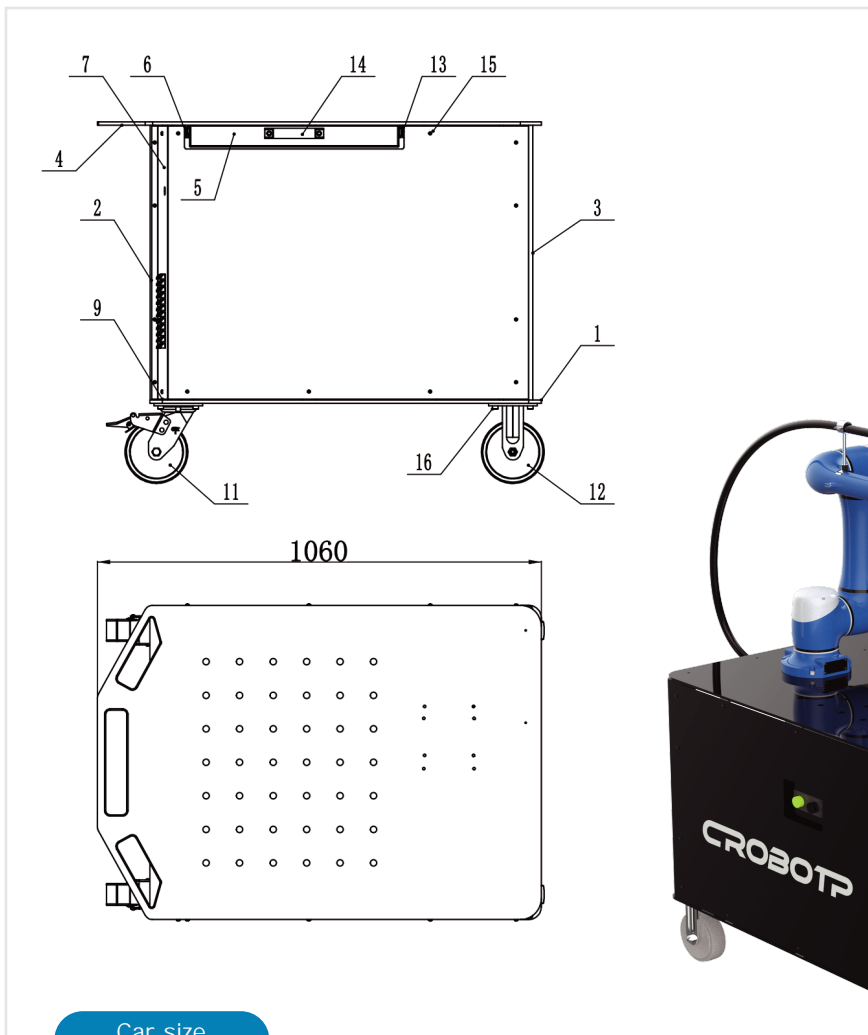
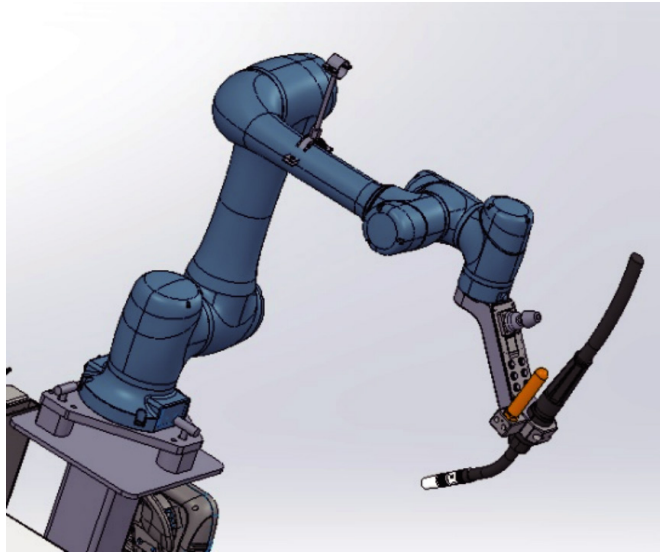
Included

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Towing device	1	
Teach pendant	Landscape teaching pendant , cable length 6 meters	Welder Select DS350-L/DS500-P/Plus 350DR /Plus 500PR; other compatible welding machines should be noted in the remarks. The wire feeder will automatically match the corresponding welding machine.
Other	5-meter interconnection cable between the electrical cabinet and the main unit	
Welding wire spool	Wire feeder bracket, wire spool and wire feed tube mounting bracket, wire feed tube, etc.	Positive and negative electrode welding cables
	Optional magnetic base, water tank	

Collaborative welding robots



Magnetic base



Car size



high quality good service
MAKE GOOD ROBOTS FOR CLIENTS



Chengdu CRP Robot Technology CO. Ltd. (hereinafter referred to as "CRP") was established in 2012, located in Longtan New Economy Function Zone, Chenghua District, Chengdu, China. It is a national high-tech enterprise focused on the research and development, production, sales and service of industrial robots and core components. It is the only industrial robot enterprise leading the preparation of five national standards in southwest China. CRP has been awarded as one of the 100 key new economy cultivation enterprises for three consecutive years, and it is also certified as National SRDI (Specialized, Refinement, Differential, and Innovation) Small Giant enterprise and Gazella Company.

CRP robot has realized the independent research and development of fully electronic control hardware and software body design of industrial robots, and is widely used in welding, machine tool loading and unloading, bending and polishing and other functional fields. It is widely used in machining, power energy, 3C electronics, automobile manufacturing and other industries, and its products are exported to more than 20 countries and regions overseas. Through the independent construction of Sichuan enterprise technology center

innovation platform, accelerate the pace of technology research and innovation, has obtained more than 200 effective intellectual property rights, some technical backbone won the "Sichuan enterprise technology innovation outstanding contribution figure", "Chengdu May Day Labor Medal", "Chengdu intelligent manufacturing ecosystem leading talent", "Chenghua talent" and other titles.



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Due to continuous product improvement, product design and specifications are subject to change without prior notice.
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