

CRP-RA15-12-J

CRP-RA18-20-J

CRP-RA20-12-J

The laser welding robot consists of the robot body and the electrical cabinet, and is shipped with the laser welding software package. It is primarily used for applications such as laser welding, laser cutting, and laser cladding.



Characteristics of robot performance

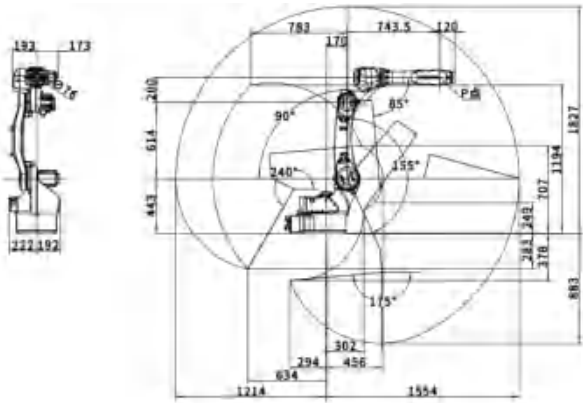
- A specialized interface for laser welding, featuring controllable power, wire feeding, soft start and stop, pre-laser emission and decay, wire sticking detection, pre-wire extraction, and wire replenishment, etc.
- Rigid, high precision, low jitter.
- It can control the wire feeding of servo or stepper motors.
- Using a vertical teaching pendant, the efficiency of robot programming is higher.
- Compact electrical cabinet, small in size, can be integrated into the laser host.
- Single-phase 220V input power supply, easy and quick to connect.
- Built-in UPS, supports power regeneration after outage.

Contains

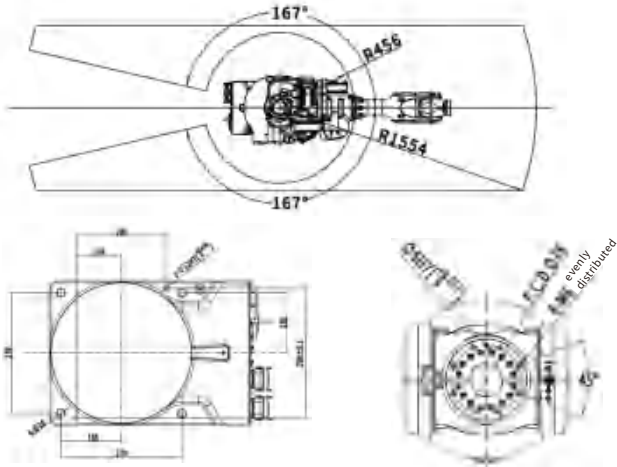
- Entity: RA15-12-J/RA18-20-J/RA20-12-J
- Electrical cabinet: G5A
- Teaching Pendant: E-type Teaching Pendant, cable length 6 meters
- Operation box:2(with 5-meter cable)
- Control cabinet and main body interconnection cable 5 meters
- Welding wire drum and stand
- Optional two external axes

Model		CRP-RA15-12-J	CRP-RA18-20-J	CRP-RA20-12-J	
Degree of freedom		6 axes	6 axes	6 axes	
Maximum payload		12kg	20kg	12kg	
Maximum coverage		1554mm	1821mm	2015mm	
Repeated positioning accuracy		±0.05mm	±0.05mm	±0.08mm	
Maximum travel	J1	Formal/inverted mounting -167°~167°,wall mounting -30°~30°	Formal/inverted mounting -165°~165°,wall mounting -30°~30°	Formal/inverted mounting -170°~170°,wall mounting -30°~30°	
	J2	-30°~175°	-30°~175°	-50°~170°	
	J3	-80°~150°	-80°~150°	-80°~145°	
	J4	-190°~190°	-190°~190°	-190°~190°	
	J5	-135°~135°	-130°~130°	-135°~135°	
	J6	-360°~360°	-360°~360°	-360°~360°	
Maximum speed	J1	169°/S	160°/S	170°/S	
	J2	169°/S	160°/S	170°/S	
	J3	169°/S	169°/S	200°/S	
	J4	301°/S	301°/S	350°/S	
	J5	220°/S	342°/S	350°/S	
	J6	743°/S	708°/S	540°/S	
Arm load capacity	Allowable torque	J4	20N.m	55N.m	40N.m
		J5	20N.m	55N.m	40N.m
		J6	11N.m	24N.m	13N.m
	Allowable moment of inertia	J4	0.5kg.m²	2.1kg.m²	1.3kg.m²
		J5	0.5kg.m²	2.1kg.m²	1.3kg.m²
		J6	0.16kg.m²	0.9kg.m²	0.43kg.m²
Installation environment		Temperature:0~45℃ Humidity:20%~80%RH(no condensation)			
Body interface		16Pin			
		2*φ8mm			
Body weight		170kg	288kg	262kg	
Installation mode		Formal, inverted, wall mounting			
IP level		Body IP 54 ,Wrist IP67			

CRP-RA15-12-J



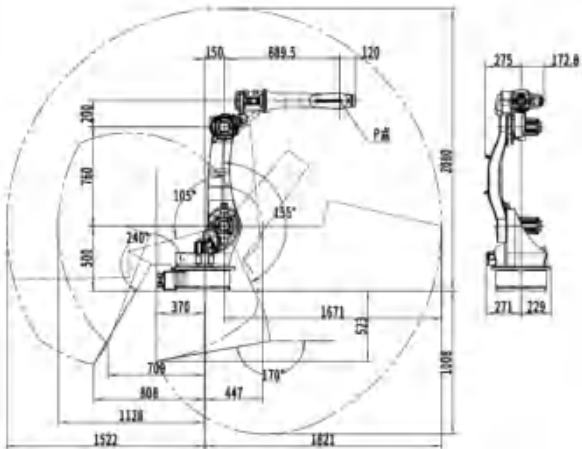
MOTION RANGE DIAGRAM



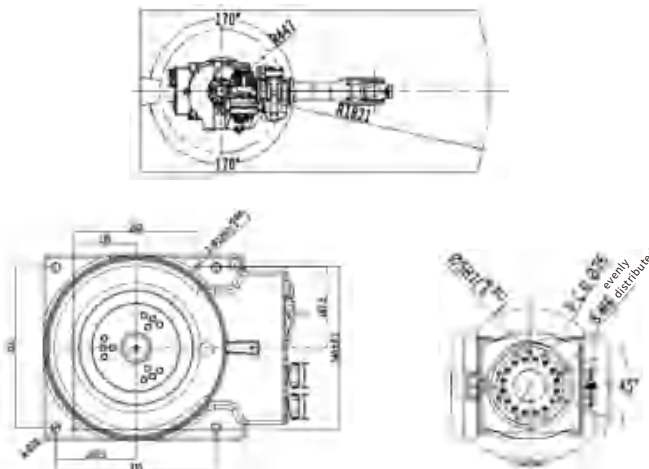
Installation Dimension of Base

Flange Dimensions

CRP-RA18-20-J



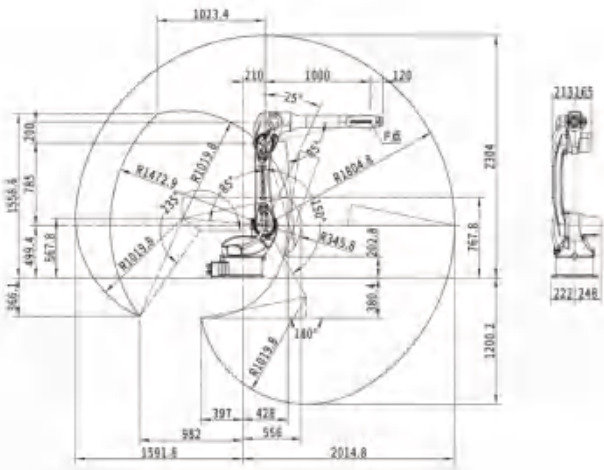
MOTION RANGE DIAGRAM



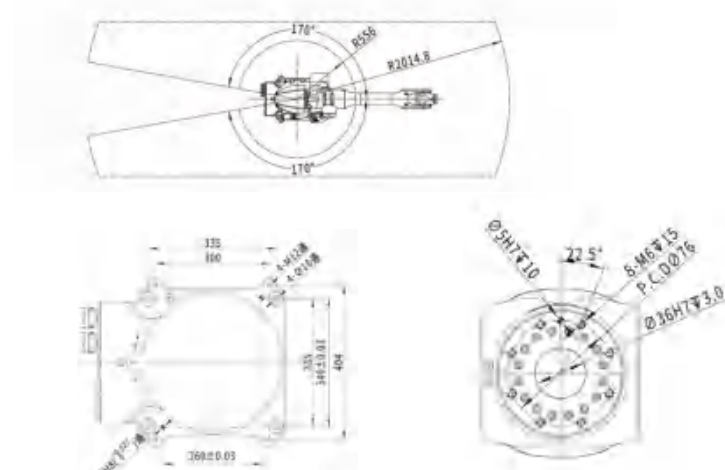
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Flange Dimensions

CRP-RA20-12-J



MOTION RANGE DIAGRAM



Installation Dimension of Base

Flange Dimensions