

# CRP-RA27-50/ CRP-RA27-80

## INDUSTRIAL ROBOT HANDLING APPLICATION



### FUNCTIONAL FEATURES

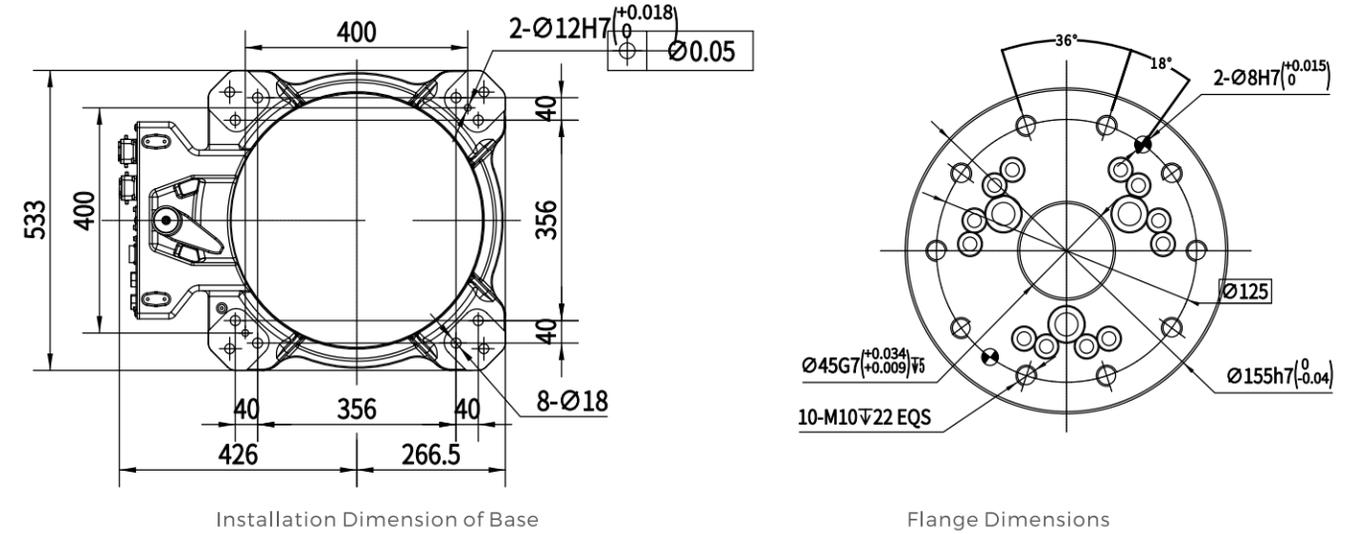
- The arm span is 2.7 meters. It has strong payload capacity, large working space and high flexibility.
- With fast running speed and high repeated positioning accuracy, it has a wide range of applications, such as loading and unloading, handling, sorting, assembly, etc.
- Equipped with safety emergency stop board which is independent of the control system, and the safety relay circuit is adopted to provide double-circuit emergency stop to ensure the reliability of emergency stop.
- The robot body adopts highly flexible special cable.
- Built-in three-phase filter can effectively improve the performance of EMC and EMI.
- The robot body is with ID10 dual-circuit gas pipe to meet the handling demand.
- The single cantilever structure is adopted to reduce the terminal weight and improve its flexibility. The selectivity range of manipulators, tools and workpiece shapes is expanded.
- Built-in cables and gas pipe. The hollow part is set at the center of the forearm and wrist. The cables and gas pipe are built in from the base of the robot to the end of the wrist, which is more convenient for users and improves work efficiency.
- High expansibility, multiple user bracket installation platforms are set on the robot body, which is convenient for users to fix cables and related auxiliary tools.

### ROBOT BODY TECHNICAL PARAMETERS

Model	CRP-RA27-50	CRP-RA27-80
Arm form	Vertical multiple joints	
Degree of freedom	6 axis	
Maximum payload	50kg	80kg
Maximum coverage	2680mm	
Maximum travel	Axis 1	-180°~180°
	Axis 2	-160°~75°
	Axis 3	-80°~165°
	Axis 4	-170°~170° (with mechanical limit), -360°~360° (without mechanical limit)
	Axis 5	-125°~125°
	Axis 6	-360°~360°
Maximum speed	Axis 1	130°/S
	Axis 2	125°/S
	Axis 3	124°/S
	Axis 4	224°/S
	Axis 5	190°/S
	Axis 6	285°/S
Allowable torque	Axis 4	231N.m
	Axis 5	231N.m
	Axis 6	135N.m
Allowable moment of inertia	Axis 4	27.34kg.m <sup>2</sup>
	Axis 5	27.34kg.m <sup>2</sup>
	Axis 6	12.30kg.m <sup>2</sup>
Repeated positioning accuracy	±0.08mm	
Robot body weight	728kg	
Installation mode	Formal, inverted, wall mounting	
Noise level	<80dB(A)	
Body interface	Reserved IO	26Pin
	Reserved gas	2*φ10mm
Installation environment	Ambient temperature	0~45°C
	Relative humidity	20%~80%RH(No condensation)
	Vibration	Under 0.5G
	Others	Robot installation must be away from: flammable or corrosive liquids or gases, electrical sources of interference
IP level	Body IP54 Wrist IP67	
Advantage features	Compact structure, high speed, high precision, high expansibility and easy operation	
Application	Cutting, mounting, handling, marking, polishing	
Matching electrical cabinet	G15A	

\* Measurement conditions:  
(1) the robot is firmly fixed on the flat ground;  
(2) Test at a distance of 3700mm from the rotation center of joint JT1. (Noise level varies according to conditions. Background noise has some influence.)

### INSTALLATION INTERFACE DIAGRAM



### MOTION RANGE DIAGRAM

