

CRP-RA27-50

INDUSTRIAL ROBOT HANDLING APPLICATION

FUNCTIONAL FEATURES

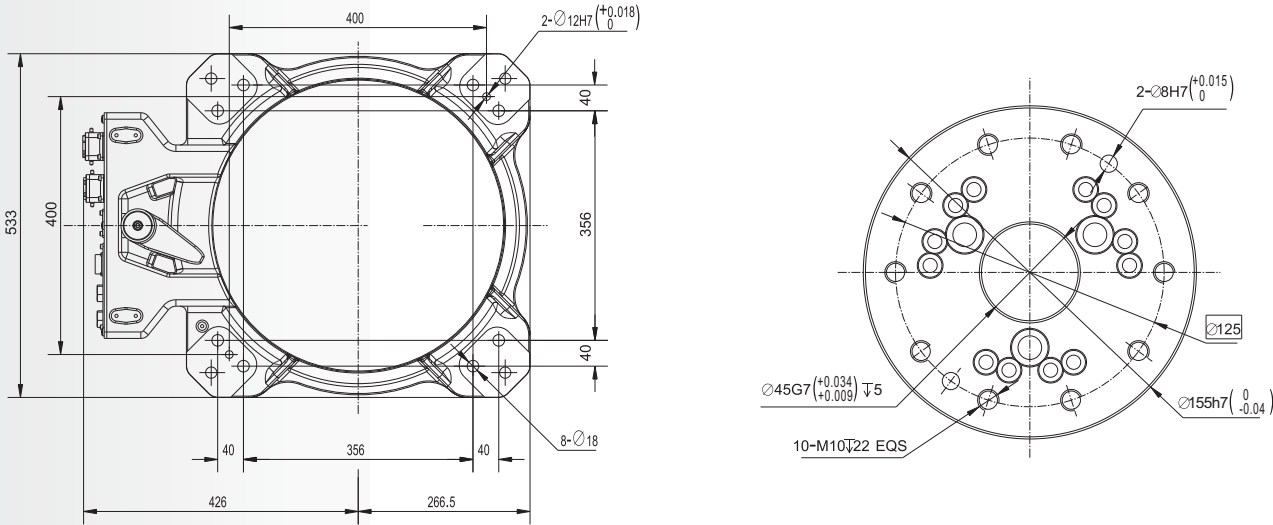
- The arm span is 2.7 meters. It has strong payload capacity, large working space and high flexibility.
- With fast running speed and high repeated positioning accuracy, it has a wide range of applications, such as loading and unloading, handling, sorting, assembly, etc.
- Equipped with safety emergency 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	
Arm form	Vertical multiple joints	
Degree of freedom	6 axis	
Maximum payload	50KG	
Repeated positioning accuracy	±0.08mm	
Maximum reaching distance	2680mm	
Robot body weight	728KG	
Installation mode	Ground	
Noise level	<80dB(A)*	
Maximum travel	axis 1	-175°~175°
	axis 2	-50°~158°
	axis 3	-80°~160°
	axis 4	-170°~170°(with mechanical limits) -360°~360°(without mechanical limits)
	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.m²
	axis 5	27.34kg.m²
	axis 6	12.30kg.m²
Installation environment	ambient temperature	0~45℃
	relative humidity	20~85%(No condensation)
	vibration	Under 0.5 G
	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, assembly, handling, marking, grinding	
Electric Cabinet Configuration	G7	

* 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 J1; (Noise level varies according to conditions. Background noise has some influence.)

INSTALLATION INTERFACE DIAGRAM



Installation Dimension of Base

Flange Dimensions

MOTION RANGE DIAGRAM

