

CRP-RA15A-12

INDUSTRIAL ROBOT HANDLING APPLICATION



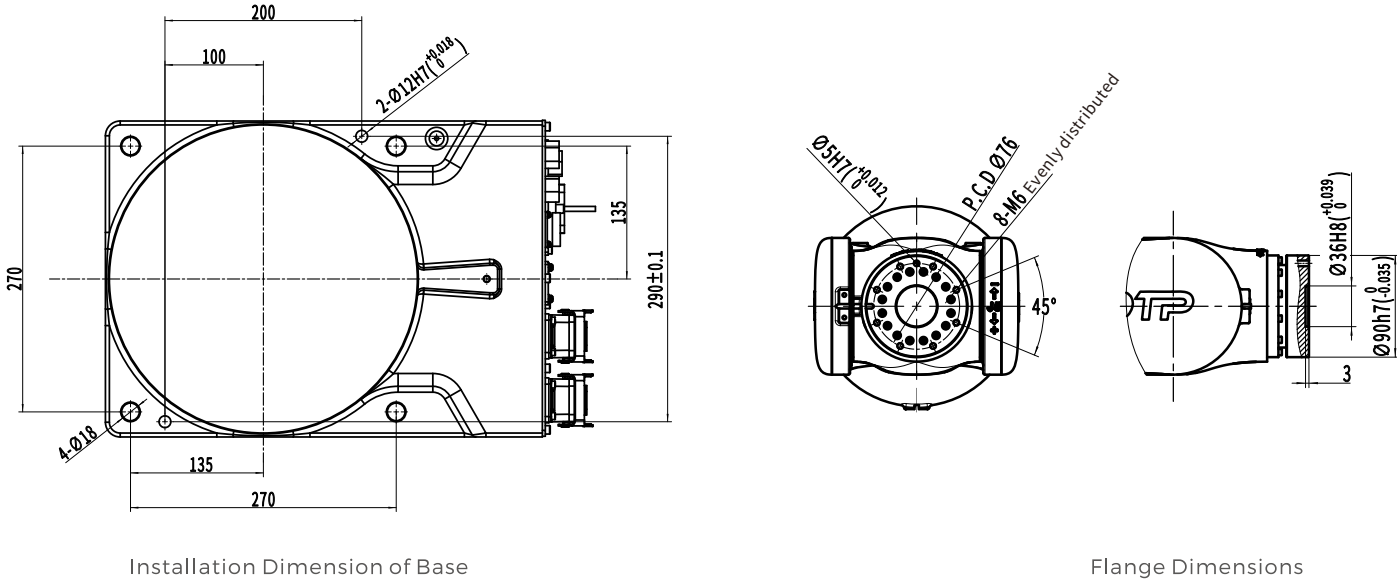
ROBOT BODY TECHNICAL PARAMETERS

Model		CRP-RA15A-12
Arm form		Vertical multiple joints
Degree of freedom		6 axis
Maximum payload		12kg
Maximum coverage		1554mm
Maximum travel	Axis 1	Formal/inverted-167°~167°,wall mounting-30°~30°
	Axis 2	-155°~90°
	Axis 3	-85°~155°
	Axis 4	-190°~190°
	Axis 5	-135°~135°
	Axis 6	-360°~360°
Maximum speed	Axis 1	169°/S
	Axis 2	169°/S
	Axis 3	169°/S
	Axis 4	301°/S
	Axis 5	220°/S
	Axis 6	743°/S
Allowable torque	Axis 4	20N.m
	Axis 5	20N.m
	Axis 6	11N.m
Allowable moment of inertia	Axis 4	0.5kg.m²
	Axis 5	0.5kg.m²
	Axis 6	0.16kg.m²
Repeated positioning accuracy		±0.05mm
Robot body weight		170kg
Installation mode		Formal/inverted/wall mounting
Body interface	Reserved IO	16Pin
	Reserved gas	2*φ8mm
Installation environment	Ambient temperature	0~45℃
	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		Handling, cutting, mounting, marking, welding, polishing
Matching electrical cabinet		G9A

FUNCTIONAL FEATURES

- The robot features a compact, lightweight design with a slim wrist for versatile scenario deployment.
- **High-performance configuration:** A high-speed motor ensures high rigidity and fast cycle times; the leak-proof structure reaches IP67 protection rating for harsh environments.
 - **Flexible accessory integration:** Mounting holes on J2/J3/J4 axes fit solenoid valves and other parts; J3 axis is equipped with 10 ports and dual-circuit gas pipes for handling tasks.
 - **Precise, stable drive system:** Advanced PID algorithm, plus observer dynamic compensation and flux weakening functions, delivers precise control, high stability and fast operation.
 - **Intelligent control algorithm:** Integrating kinematics and dynamics, it enables automatic programming, ensures mechanical part service life under maximum load, and achieves high-speed response with extended service life.
 - **Safety & precision features:** Collision detection protects the robot and peripherals; gravity compensation boosts positioning accuracy to expand application scenarios.
 - **Reliable safety & anti-interference:** Independent emergency stop board + dual-circuit safety relay ensure reliable emergency stop; built-in three-phase filter suppresses internal/external electromagnetic interference.

INSTALLATION INTERFACE DIAGRAM



Installation Dimension of Base

Flange Dimensions

WORKING RANGE DIAGRAM

