QJAR

QJR50-1



HASKOM Automation
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Specifications and Drawings of QJR50-1

I. QJR50-1 Robot basic specification table

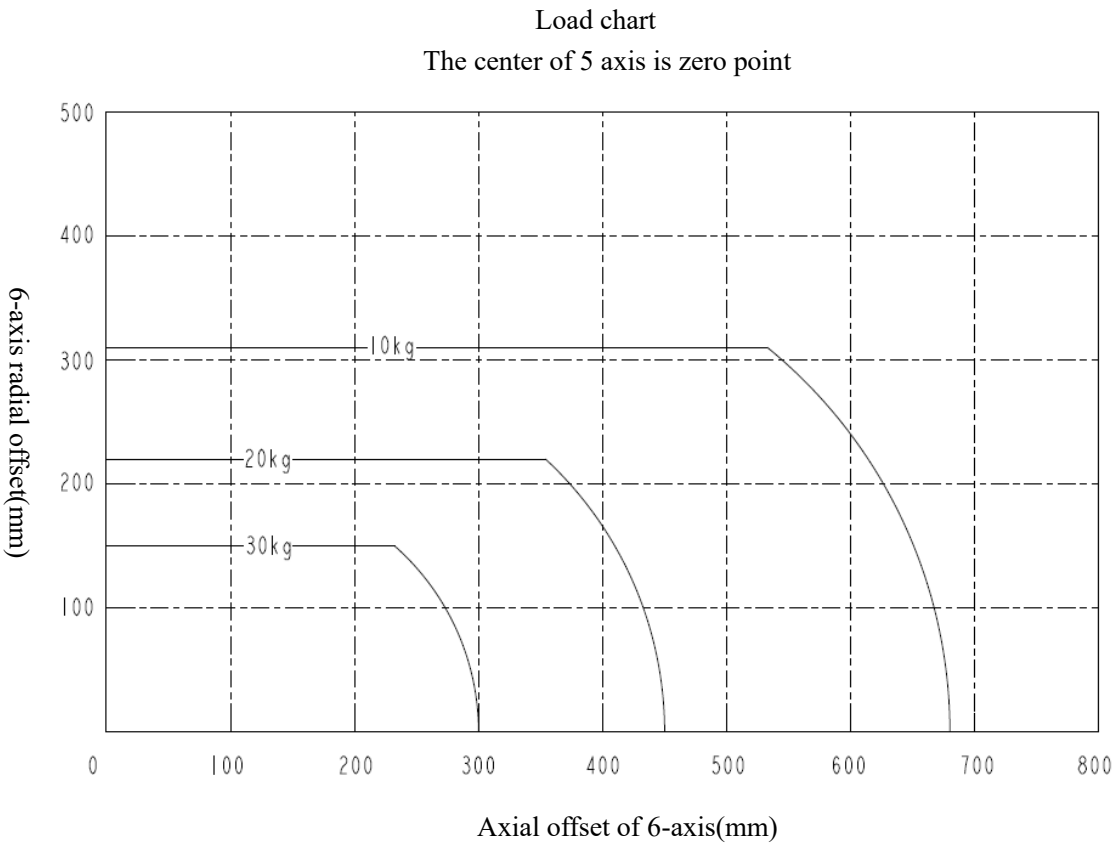
QJR50-1 Basic specification sheet			
Body shape		Vertical multiarticular	
Degrees of freedom		6	
The payload		50kg	
Arm span		2012.4mm	
Repeated positioning accuracy ^2		±0.07mm	
Mechanical limit range	1axis	±180°	
	2axis	+135° , -90°	
	3axis	+82° , -205°	
	4axis	±360°	
	5axis	±120°	
	6axis	±360°	
Maximum speed	1axis	2.7 rad/s	154 °/ s
	2axis	2.1 rad/s	120 °/ s
	3axis	2.7 rad/s	154 °/ s
	4axis	4.36rad/s	249 °/ s
	5axis	4.36 rad/s	249 °/ s
	6axis	6.1 rad/s	349 °/ s
Allow the torque	4axis	245 N.m	
	5axis	245 N.m	
	6axis	147 N.m	
Inertia moment	4axis	12.5 kg.m^2	
	5axis	12.5 kg.m^2	
	6axis	4.5 kg.m^2	
Body weight		580 kg	
Installation environment	temperature	0~45 ℃	
	humidity	20%~80% RH(No condensation)	
	vibration	<4.9m/s^2 (0.5G)	
	other	Avoid flammable, corrosive gases and liquids; Avoid contact with water, oil, dust, etc. Keep away from electrical noise sources.	
The power capacity		10kVA	

II. QJR50-1 Acceleration configuration table and corresponding load diagram of robot

1. Load limit 30kg state :

QJR50-1 Acceleration configuration table			
Maximum acceleration	1axis	6.5 rad/s²	372°/s²
	2axis	3.5 rad/s²	200°/s²
	3axis	4 rad/s²	229°/s²
	4axis	16 rad/s²	916 °/s²
	5axis	14.5 rad/s²	830 °/s²
	6axis	16 rad/s²	916 °/s²
Load limit		50kg	

2.



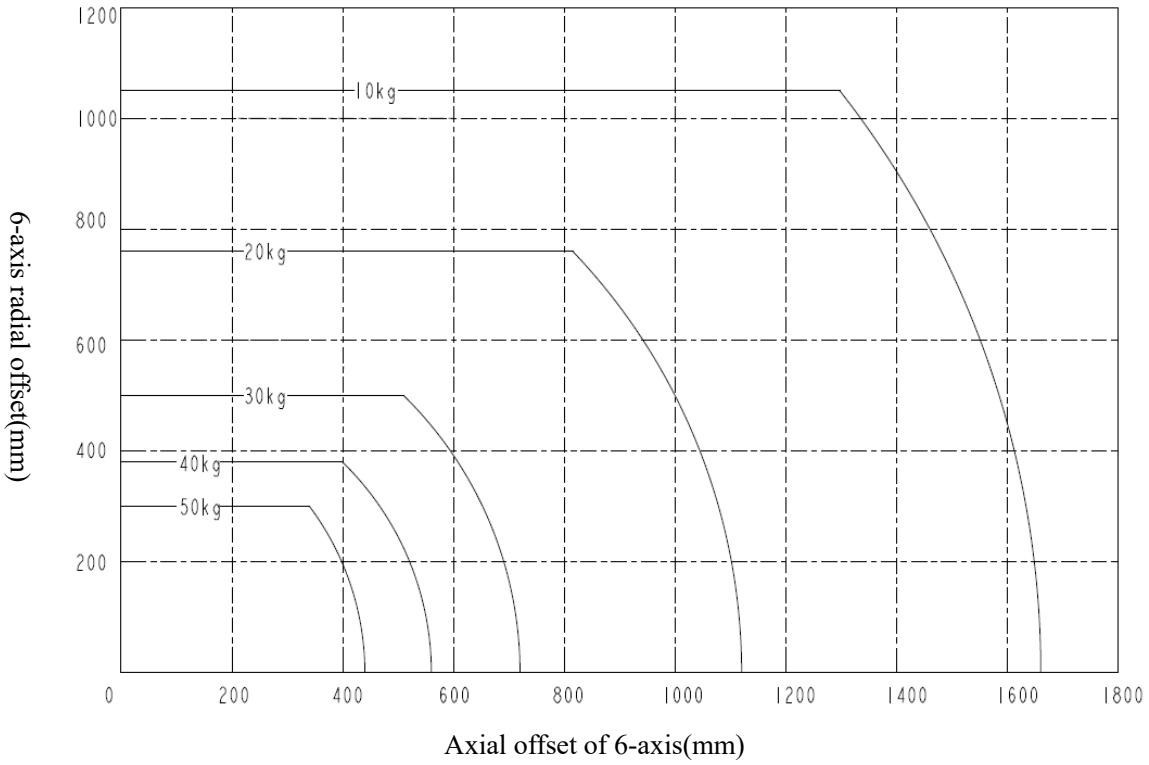
Load limit 50kg state :

QJR50-1 Acceleration configuration table			
Maximum acceleration	1axis	6.5 rad/s²	372°/s²
	2axis	3.5 rad/s²	200°/s²
	3axis	4 rad/s²	229°/s²
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	6axis	16 rad/s²	916 °/s²
Load limit		50kg	

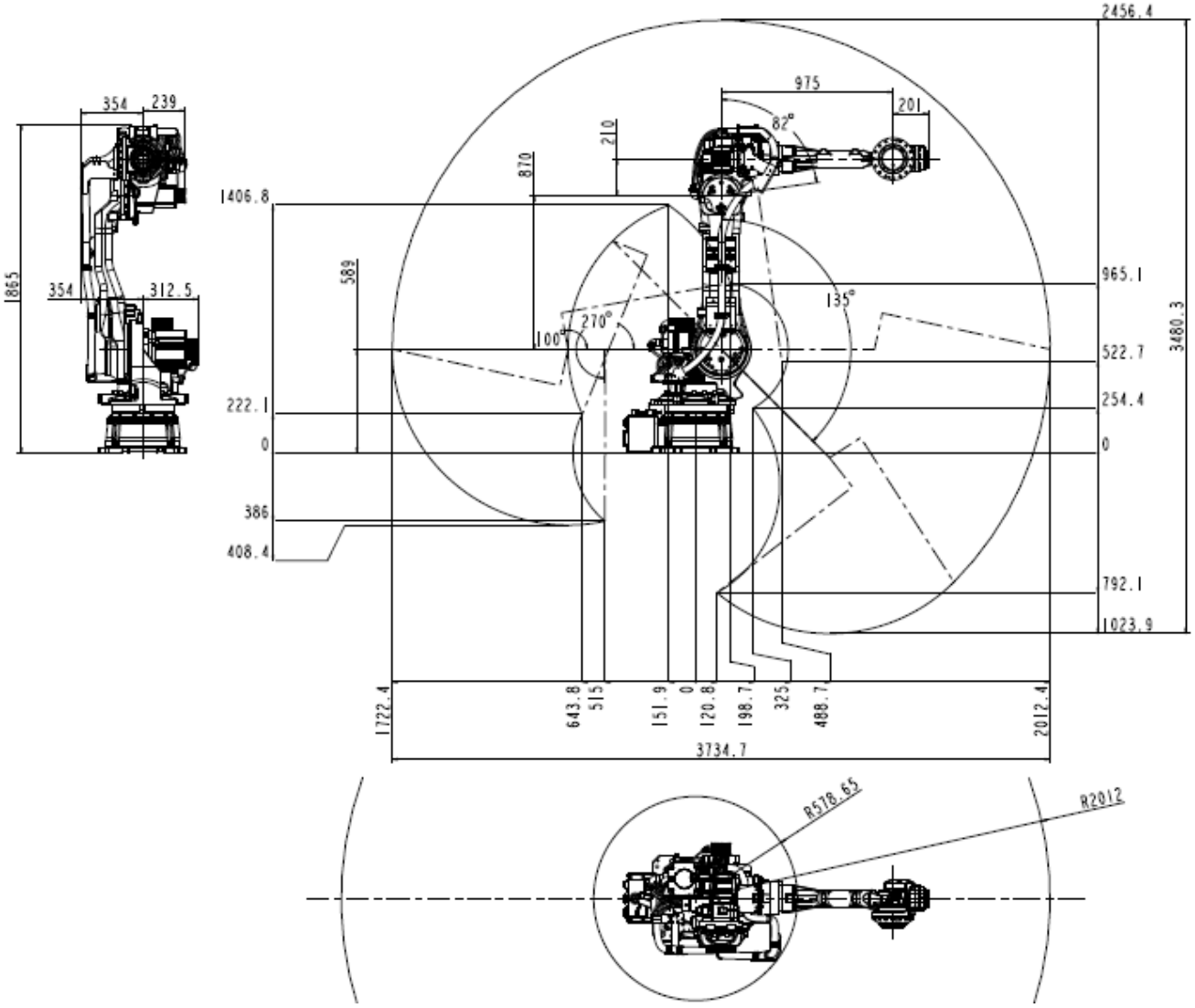
III.

Load chart

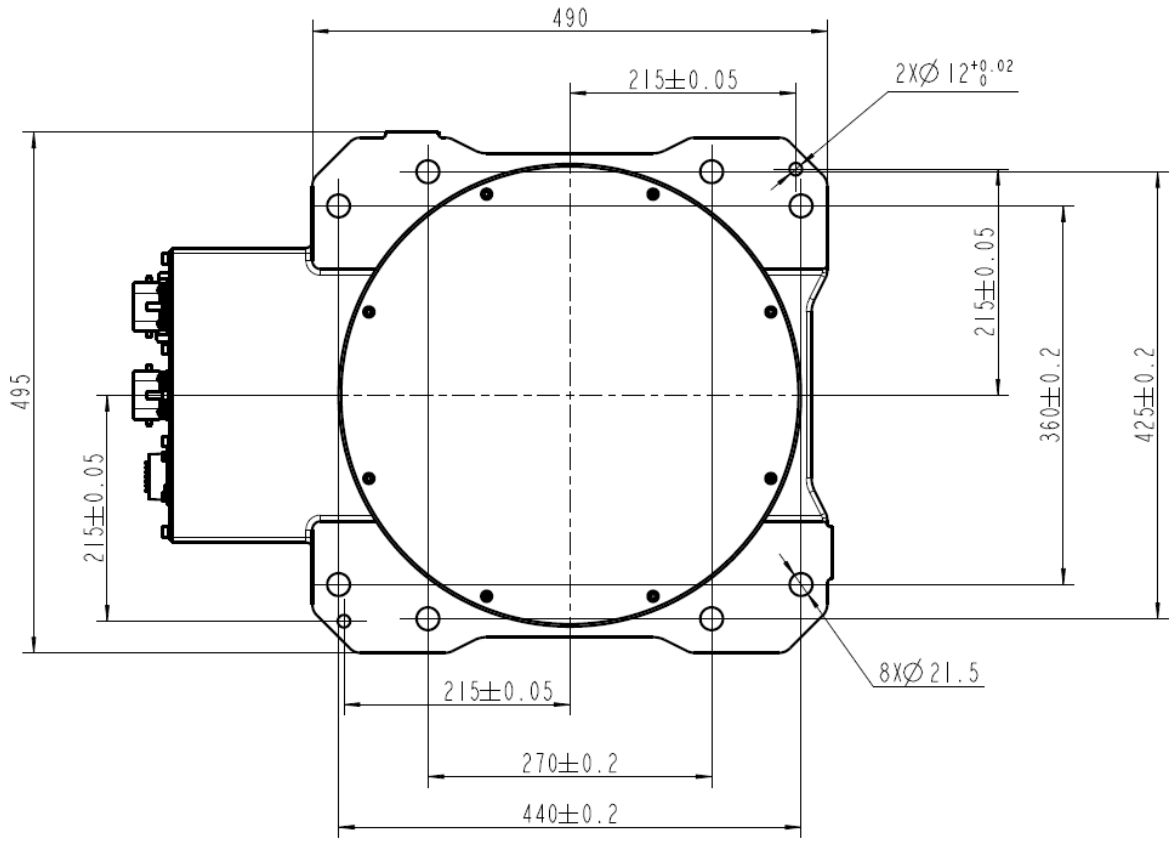
The center of 5 axis is zero point



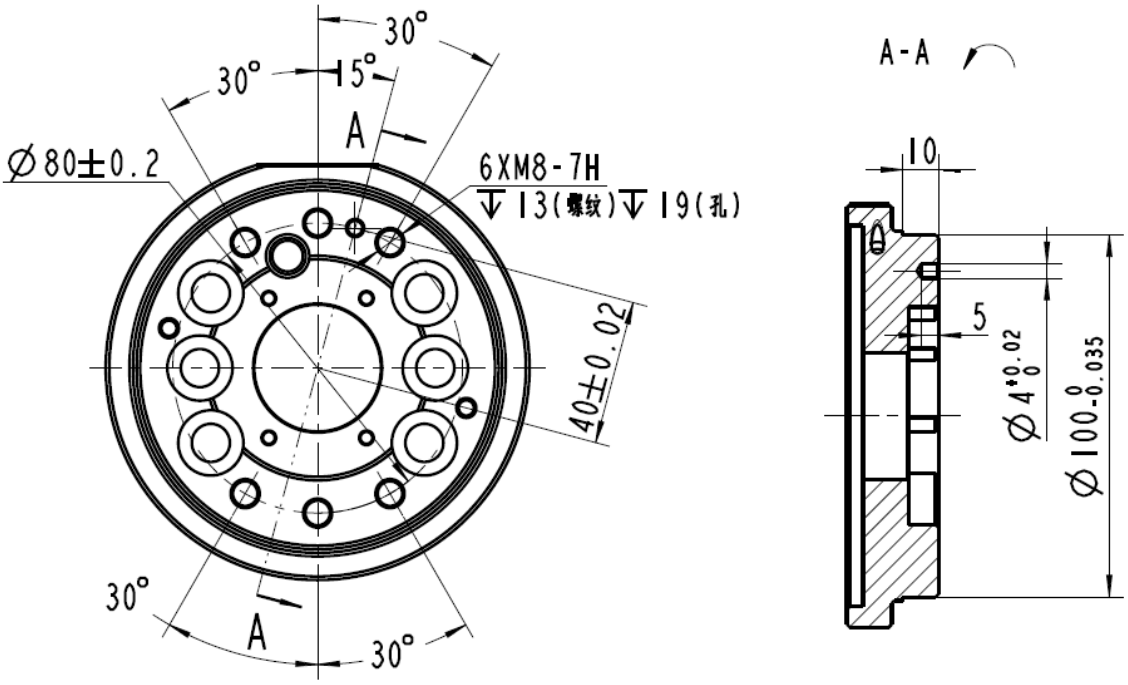
QJR50-1 Diagram of the robot's overall size and maximum motion range



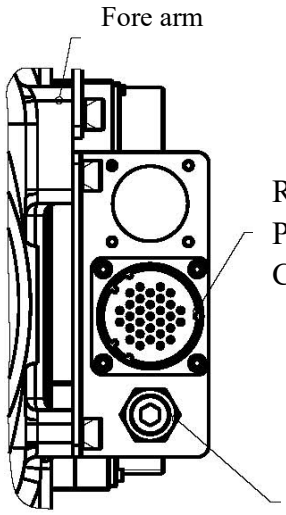
IV. QJR50-1 Robot base mounting dimension drawing



V. QJR50-1 Installation dimension drawing of robot end



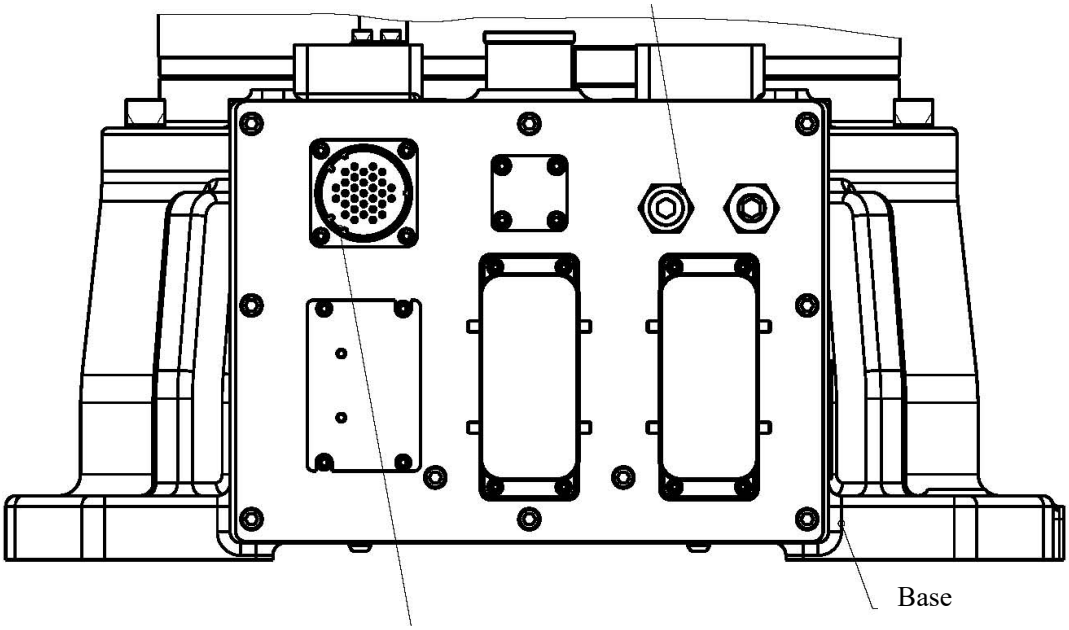
VI. Schematic diagram of robot reserved gas path and I / O interface position



Round connector plug WY40J3IZ-3, I/O line: 0.2mm² ×12P
Pairing: Round connector plug WY40K3ITE-3
Cold pressing female **YK1.5-22.6-0.37AU**
（0.37AU is optional according to the need）

Air outlet：R3/8 screw thread, with cone plug, the external diameter is Φ10mm

Air inlet：R3/8 screw thread, with cone plug, the external diameter is Φ10mm



Round connector plug WY40J3IZ-3, I/O line: 0.2mm² ×12P
Pairing: Round connector plug WY40K3ITE-3
Cold pressing female **YK1.5-22.6-0.37AU**
（0.37AU is optional according to the need）
explain:
The base and the fore arm position circular connector plug are connected in the same position

VII. QJR50-1 Configuration table of robot products

QJR50-1 Configuration table of robot products	
Motor	Gaohuachuangke
RV reducer	Domestic reducer
Controller	QJAR
Drive	Tsino Dynatron

VIII. QJR50-1 Controller cabinet

QJR50-1 controller cabinet	
Control hardware	QJAR controller
Control cabinet software	QJAR system
Power Supply	Three phase five wire AC380V(+10%,-10%)
Rated power	16.5KW
Power capacity	10KVA
Size of control cabinet	650x750x1150mm
Weight of control cabinet	120kg
ambient temperature	0-45℃
Maximum humidity	20%~80% RH（no condensation）
Protection level	IP21
operation panel	On the control cabinet
Programming unit	Color touch screen teaching box
Security	Emergency stop, automatic mode stop, remote mode stop
Input and output	Digital IO 23 input 29 output ,analog signal 2 input 4 output