QJRB180-1



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Specifications and Drawings of QJRB180-1

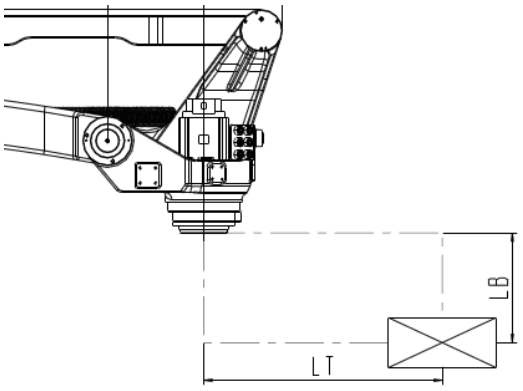
I. QJRB180-1 Robot basic specification table

QJRB180-1 Basic specification sheet			
Body shape		Four axis palletizing	
Degrees of freedom		4	
The payload		180kg	
Arm span		3153.7mm	
Repeated positioning accuracy ^2		±0.5mm	
The scope of work	1axis	±182°	
	2axis	+97° , -50°	
	3axis	overall : +122° , -22°	
		Coupling: +71° , -82°	
	4axis	±360°	
Maximum speed	1axis	2.25rad/s	128 °/s
	2axis	2.3rad/s	131 °/s
	3axis	2.3rad/s	131 °/s
	4axis	5.2rad/s	297 °/s
Maximum acceleration	1axis	45 kg.m^2	
	2axis	1400kg	
Installation environment	The 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		17.5kVA	

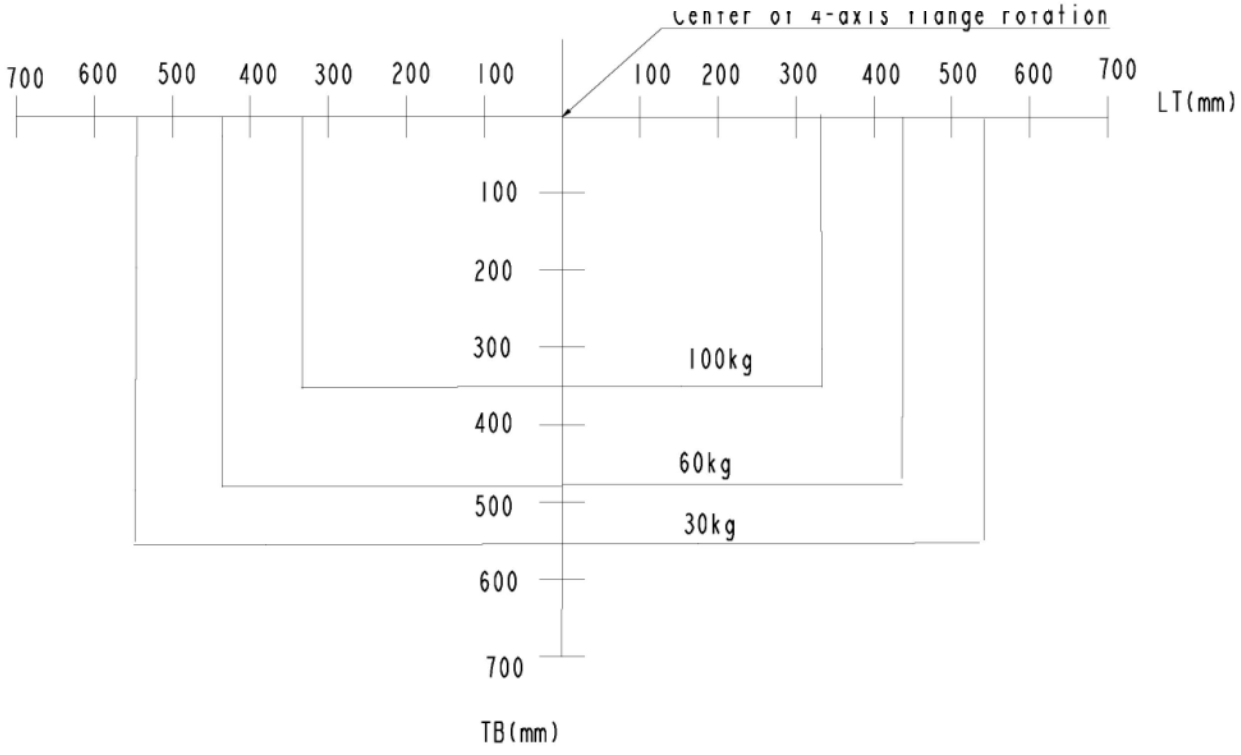
II. QJRB180-1 Robot acceleration configuration table and corresponding load diagram

1. Load upper limit 180kg state :

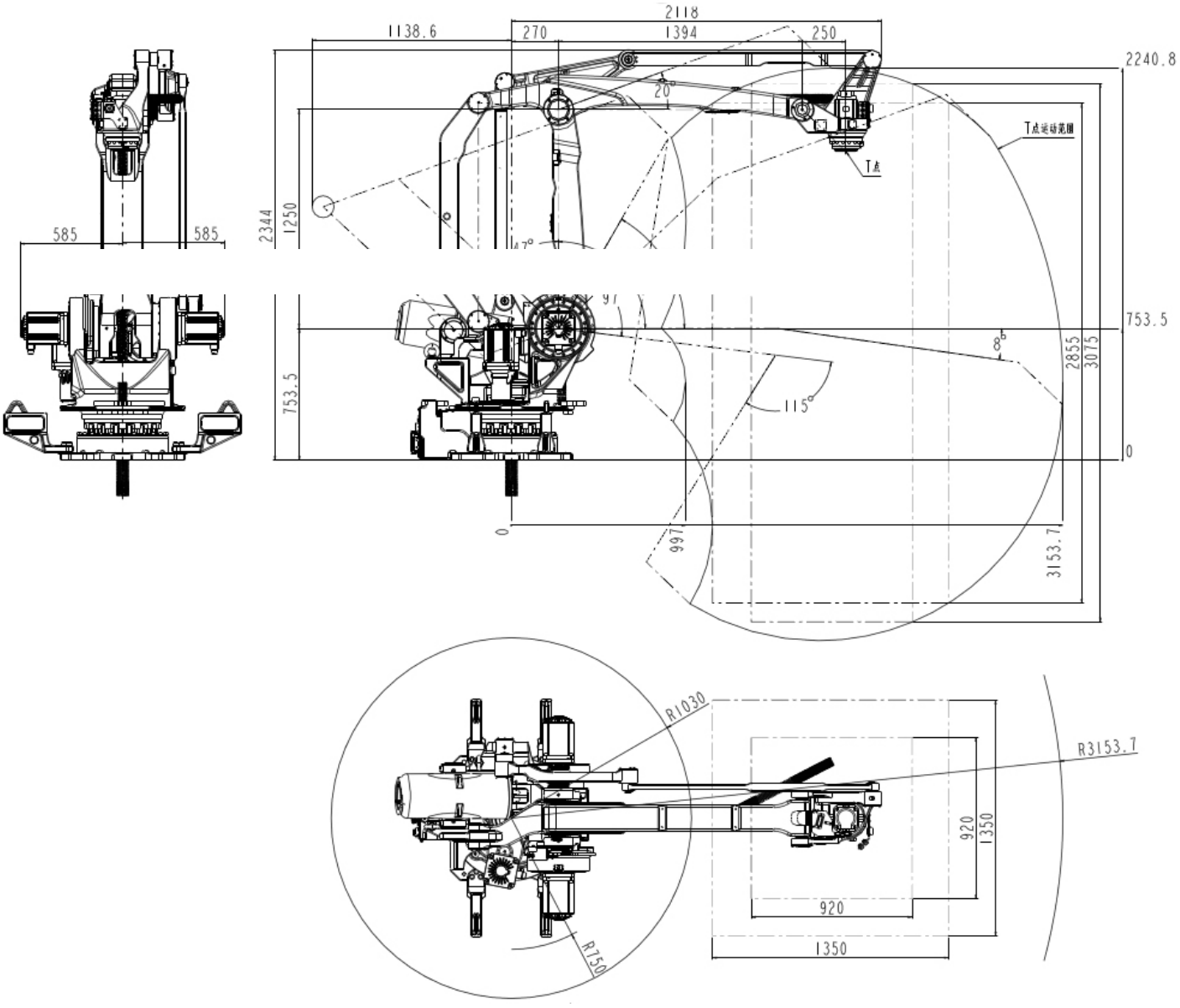
QJRB180-1 Acceleration configuration table			
Maximum acceleration	1axis	1.8 rad/s^2	103 °/s^2
	2axis	3.6 rad/s^2	206 °/s^2
	3axis	4 rad/s^2	229 °/s^2
	4axis	20 rad/s^2	1146 °/s^2
Load upper limit		180kg	



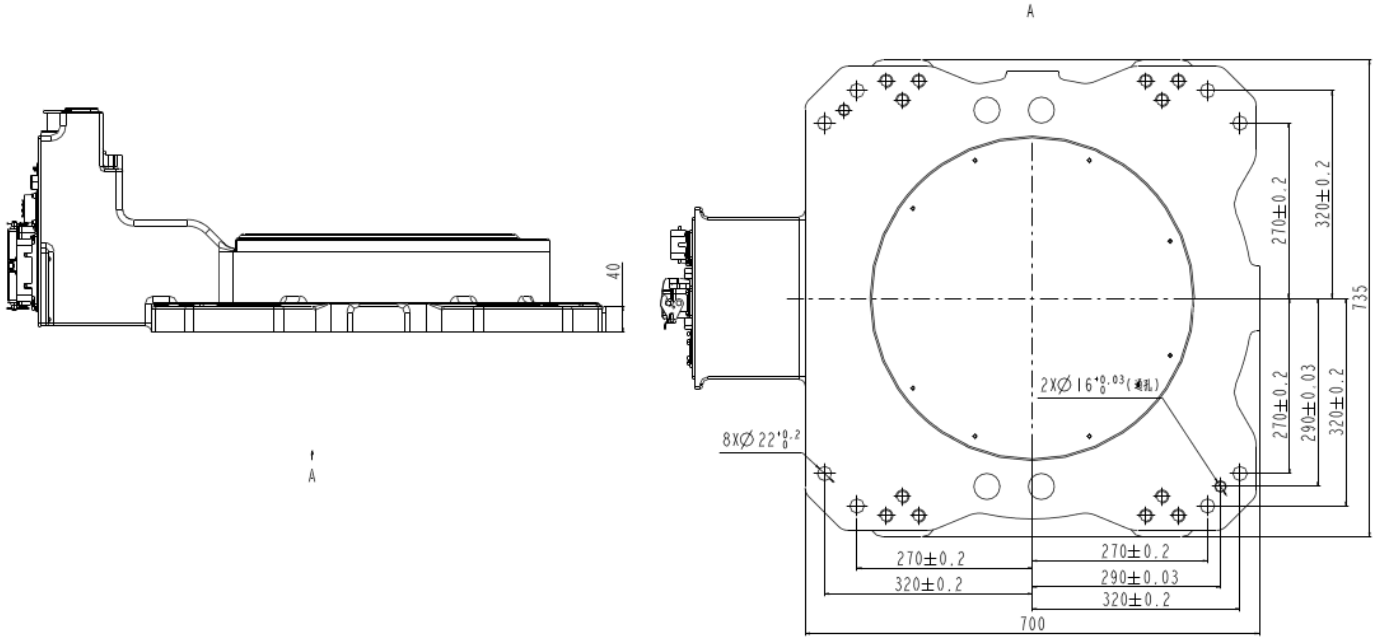
Robot Load Chart（The center of 4 axis is zero ）



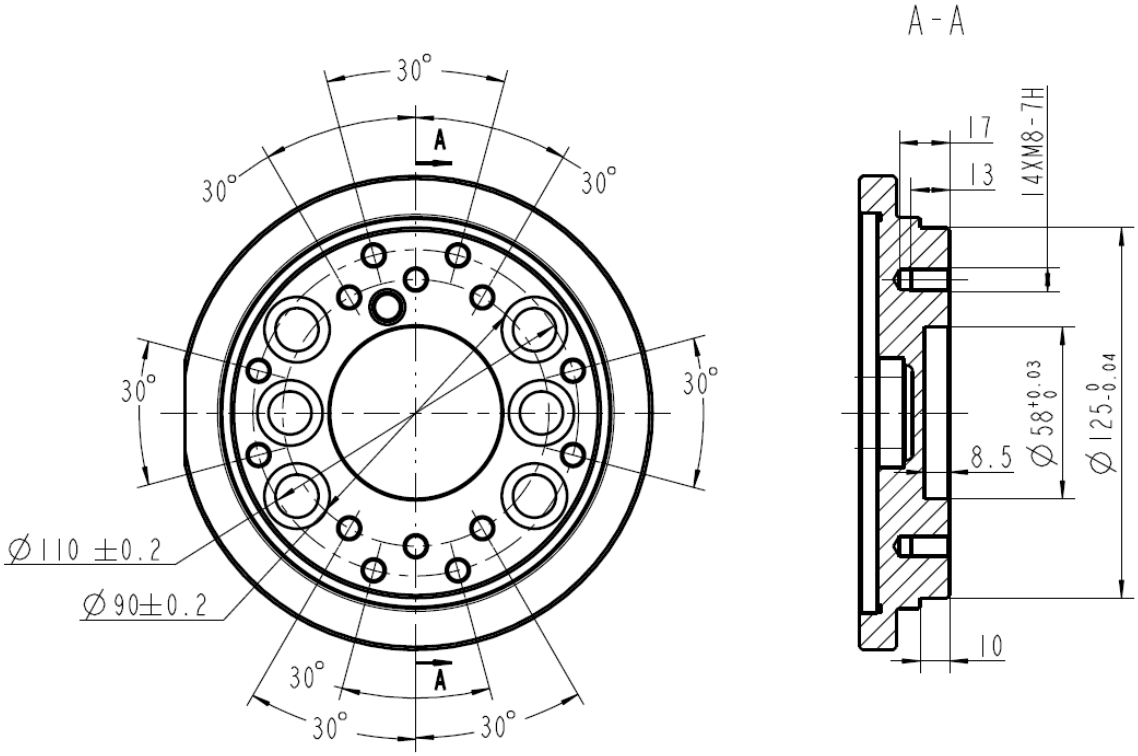
2.**QJRB180-1 Diagram of the robot's overall size and maximum motion range**



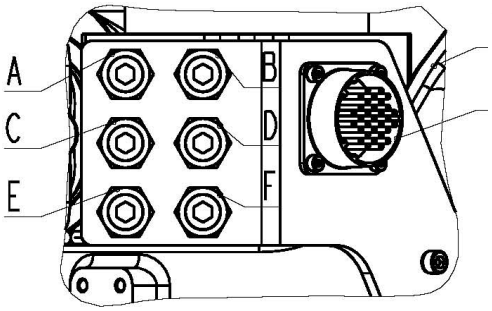
III. QJRB180-1 Robot base mounting dimension drawing



IV. QJRB180-1 Installation dimension drawing of robot end

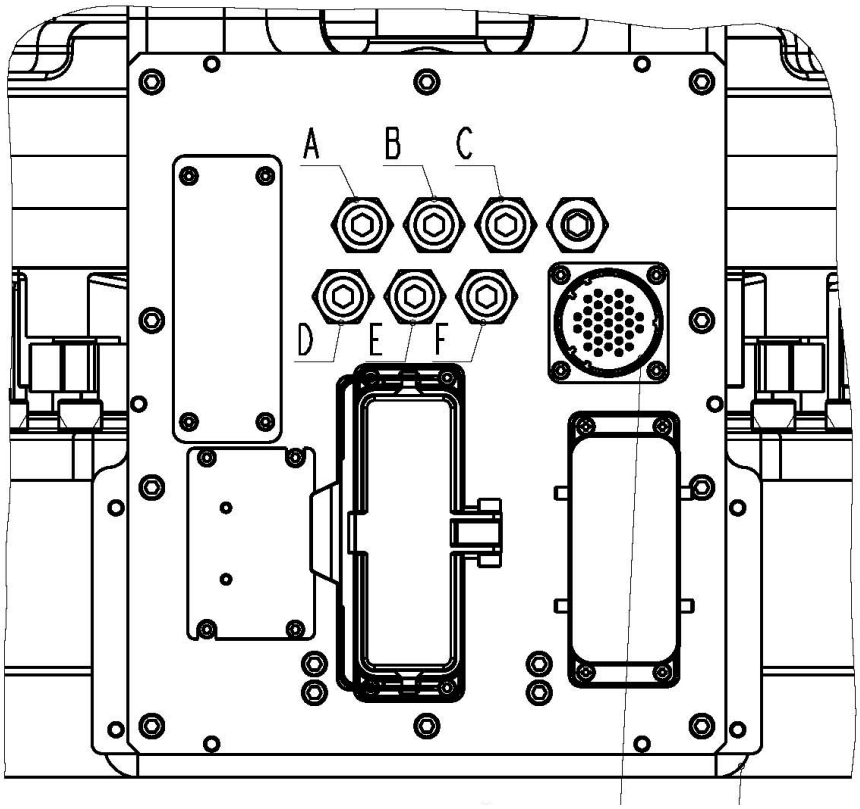


VI. Schematic diagram of robot reserved gas path and I / O interface position



Wrist

Round connector plug WY40J3IZ-3, I/O line: 0.2mm^2 ×12P.
Pairing: round connector plug WY40K3ITE-3,
Cold pressing female YK1.5-22.6-0.37AU
(0.37AU is optional according to the need)



Round connector plug WY40J3IZ-3, I/O line: 0.2mm^2 ×12P. Base
Pairing: round connector plug WY40K3ITE-3,
Cold pressing female YK1.5-22.6-0.37AU
(0.37AU is optional according to the need)

Explain:

1. Base A,B,C,D,E,F are inlets, R3/8 screw thread, with cone plug, the external diameter is Φ 10mm;
2. Wrist A,B,C,D,E,F are outlets, R3/8 screw thread, with cone plug, the external diameter is Φ 10mm;
3. The base and the wrist position circular connector plug are connected in the same position

VII. QJRB180-1 Configuration table of robot products

QJRB180-1 Configuration table of robot products	
Motor	TAMAGAWA; Gaohuachuangke
RV reducer	Domestic reducer
Controller	KEBA
Driver	Tsino dynatron

VIII. QJRB180-1 Controller cabinet

QJRB180-1 controller cabinet: Status 1	
Control hardware	QJAR
Control cabinet software	QJAR
Drive	Tsino dynatron
Power Supply	Three phase five wire AC380V(+10%,-10%)
Rated power	20.5KW
Power capacity	17.5KVA
Size of control cabinet	650x750x1150mm
Weight of control cabinet	140kg
ambient temperature	0-45℃
Maximum humidity	20%~80% RH (no condensation)
Protection level	IP54
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 15 input 21 output

QJRB180-1 controller cabinet: Status 2	
Control hardware	KEBA
Control cabinet software	KEBA
Drive	Tsino dynatron
Power Supply	Three phase five wire AC380V(+10%,-10%)
Rated power	20.5KW
Power capacity	17.5KVA
Size of control cabinet	650x750x1150mm
Weight of control cabinet	140kg
ambient temperature	0-45℃
Maximum humidity	20%~80% RH（no condensation）
Protection level	IP54
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 22 input 24 output