QJAR

QJRB30-1



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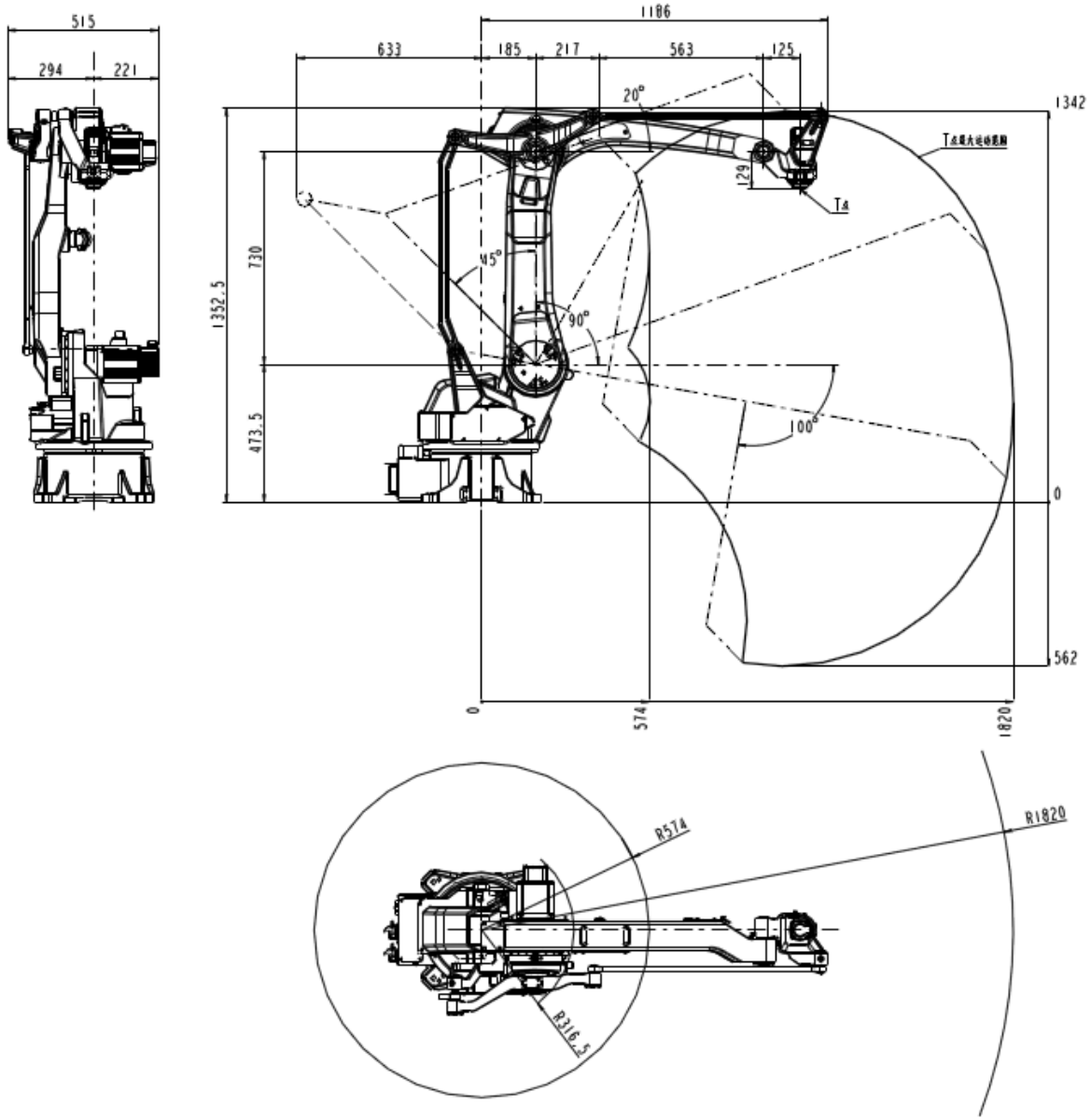
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Specifications and Drawings of QJRB30-1

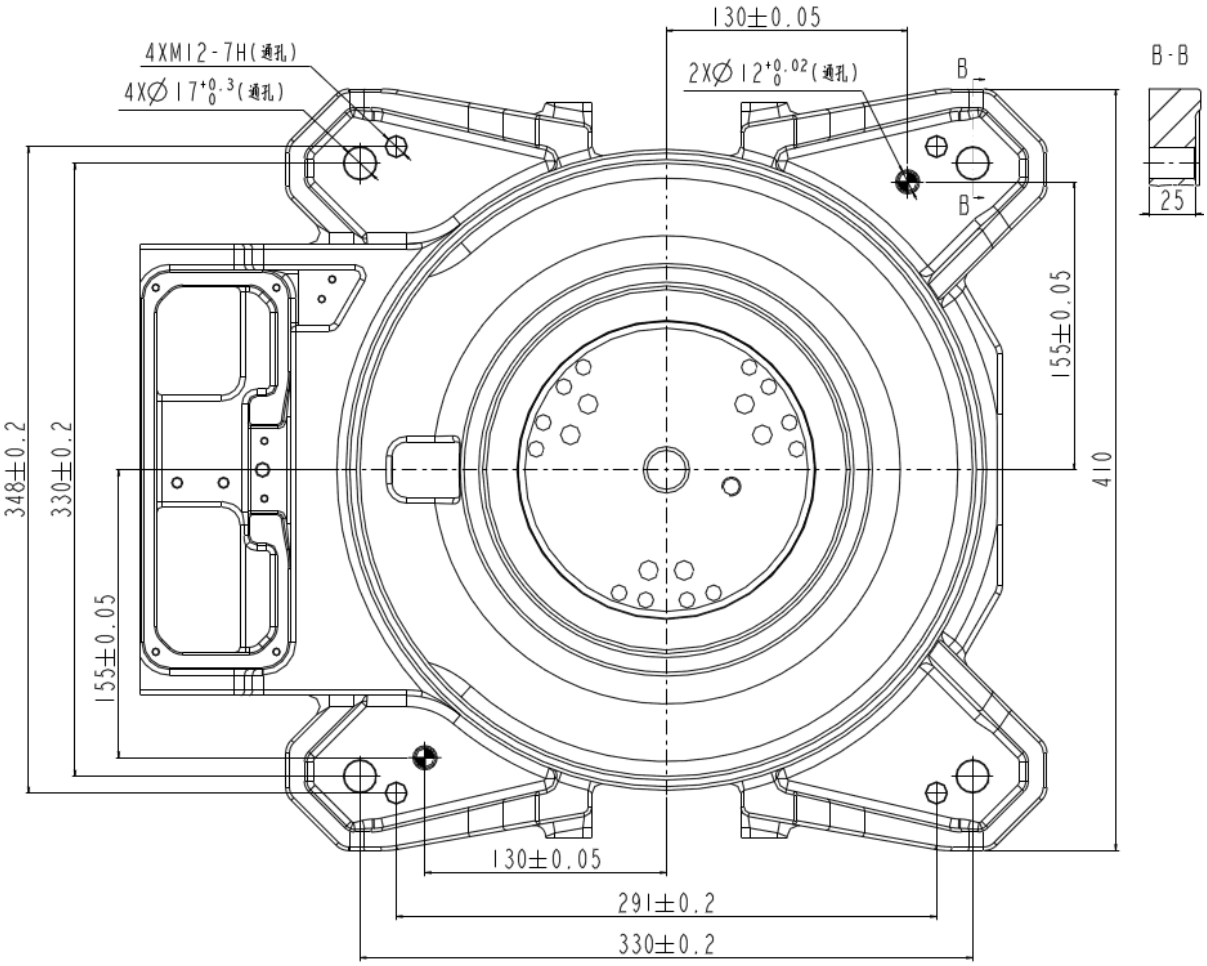
I. QJRB30-1 Robot basic specification table

QJRB30-1 Basic specification sheet			
Body shape		Vertical multiarticular	
Degrees of freedom		4	
The payload		30kg	
Arm span		1820mm	
Repeated positioning accuracy ^2		±0.05mm	
Mechanical limit range	1 axis	±168°	
	2 axis	+105° , -50°	
	3 axis	Global: + 105 °, - 25 °	
		Coupling: + 77 °, - 200 °	
	4 axis	±360°	
Maximum speed	1 axis	3 rad/s	171 °/s
	2 axis	3 rad/s	171 °/s
	3 axis	3.7 rad/s	211 °/s
	4 axis	6.2 rad/s	355 °/s
Maximum acceleration	1 axis	9 rad/s2	515 °/s^2
	2 axis	15 rad/s2	859 °/s^2
	3 axis	22 rad/s2	1260 °/s^2
	4 axis	28 rad/s2	1604 °/s^2
Allowable torque	4 axis	64.68 N.m	
Inertia moment	4 axis	1.45 kg.m2	
Body weight		205 kg	
Installation environment	temperature	0~45 ℃	
	humidity	20%~80% RH(No condensation)	
	vibration	<4.9m/s2 (0.5G)	
	other	Avoid flammable, corrosive gases and liquids; Avoid contact with water, oil, dust, etc. Keep away from electrical noise sources.	
Power capacity		3.0kVA	

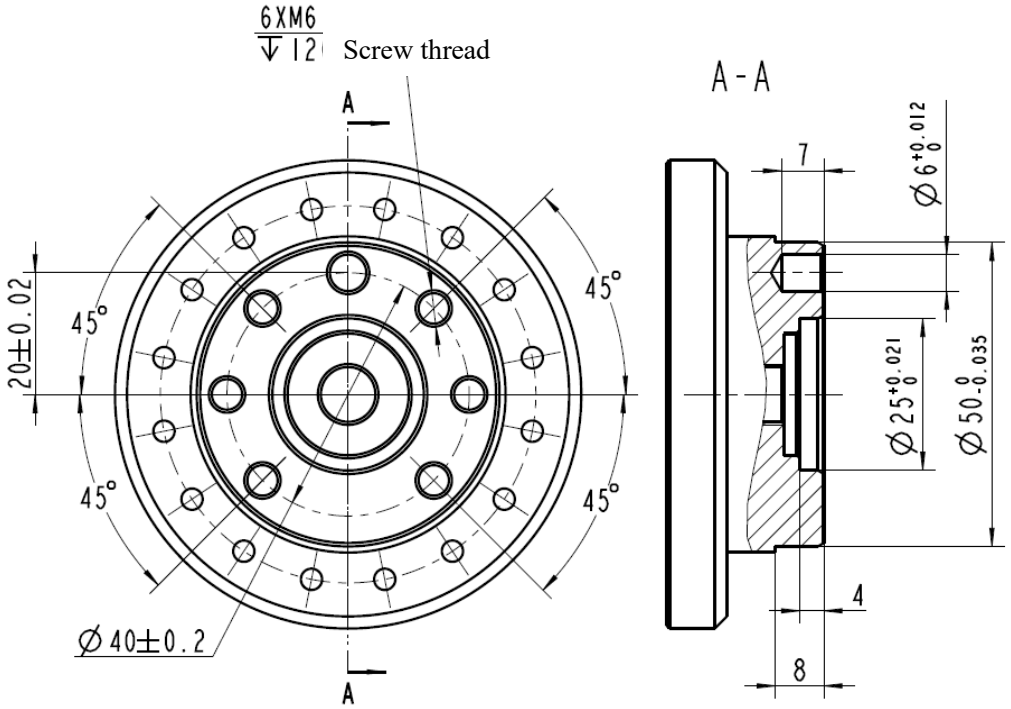
II. QJRB30-1 Diagram Of The Robot's Overall Size And Maximum Motion Range



III. QJRB30-1 Robot Base Mounting Dimension Drawing

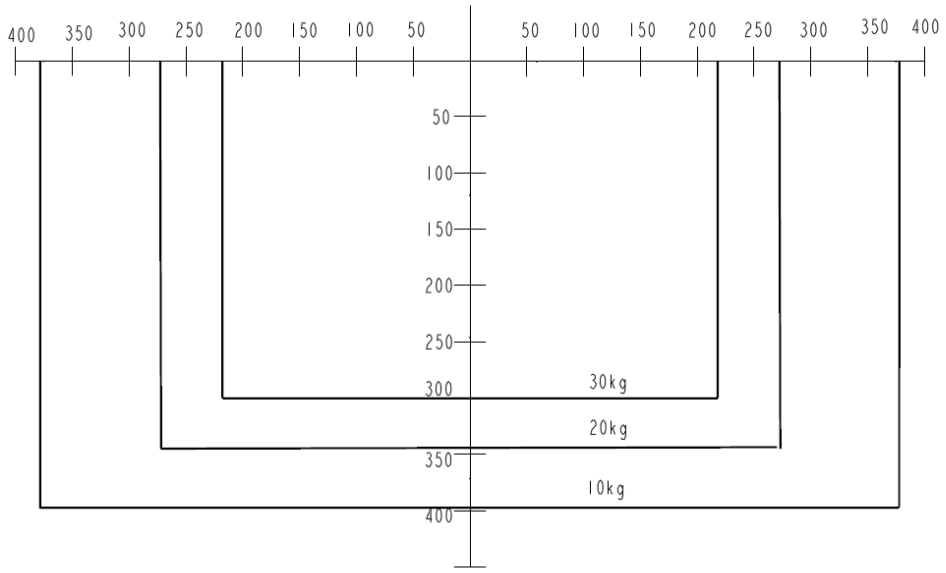


IV. QJRB30-1 Installation Dimension Drawing Of Robot End



V. QJRB30-1 load capacity diagram

The center of 4 axis is zero



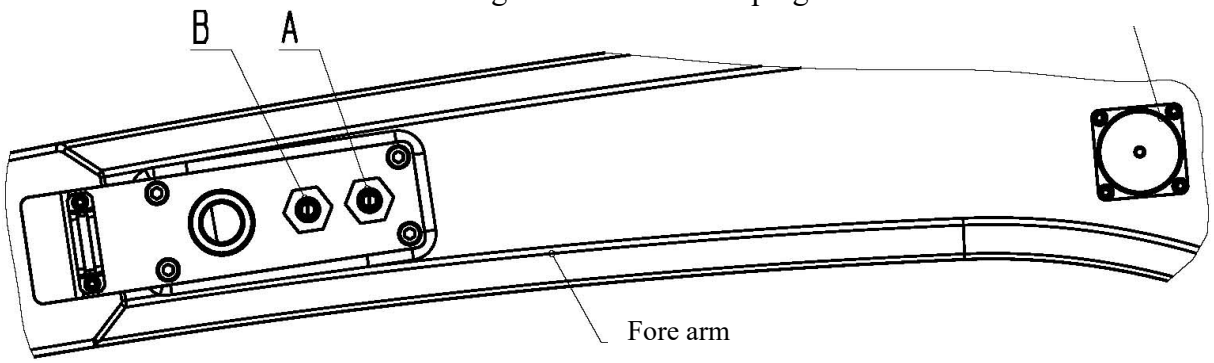
Axial offset of 3-axis(mm)

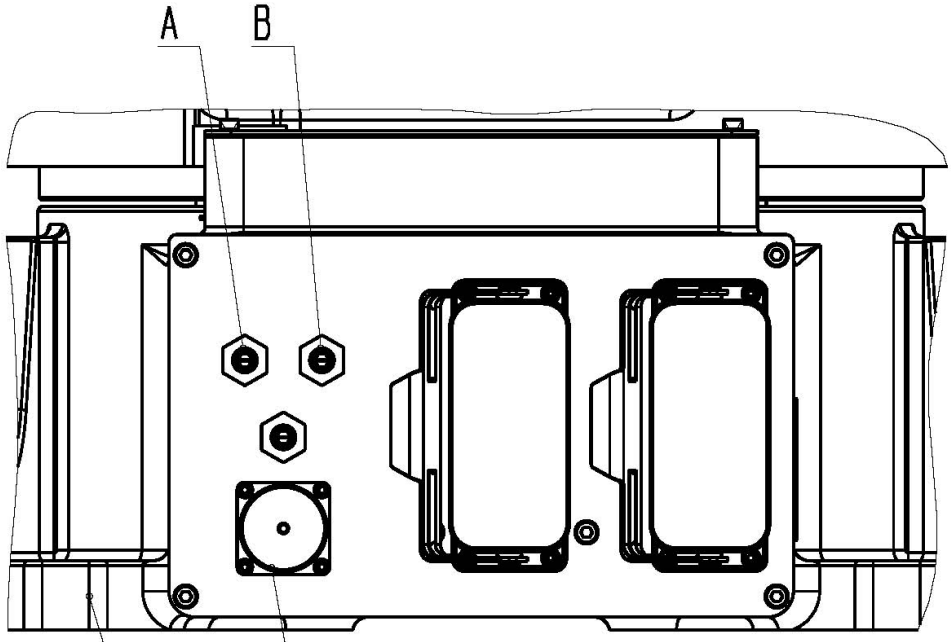
Axial offset of 4-axis(mm)

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

1. Protection level IP30 status：

Round connector plug WF28JI2Z, I/O line: 0.3mm² ×12C
Pairing: Round connector plug WF28KI2TE

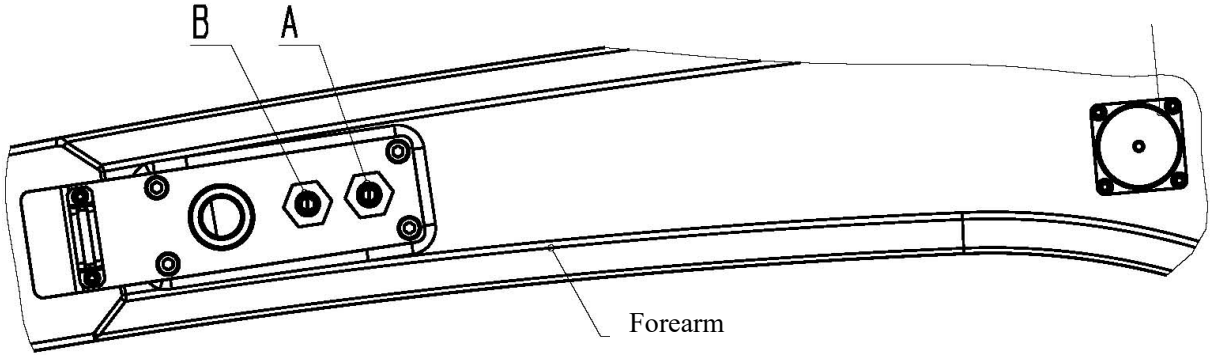


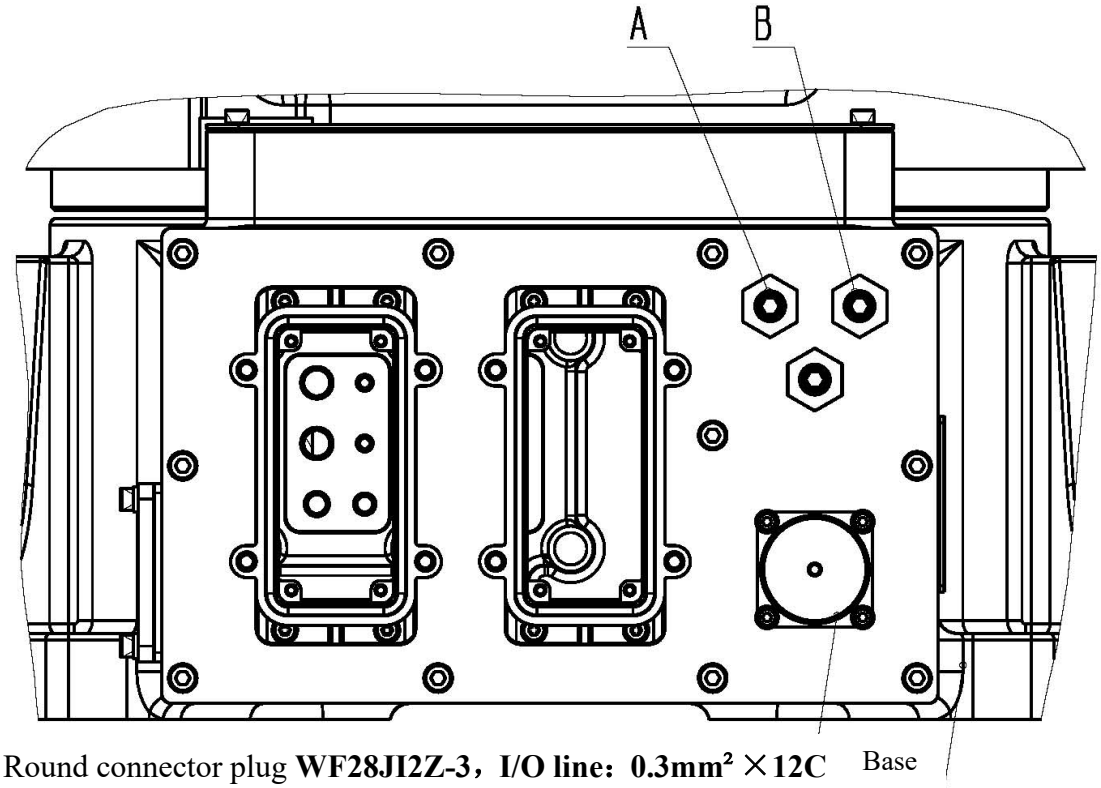


Round connector plug **WF28JI2Z-3，I/O line：0.3mm² ×12C**
Pairing: Round connector plug **WF28K12TE-3**，
10A cold pressing female **YK1.5-20.4-1.OAU**
（1.OAU is optional according to the need）
explain:
1、Base A、B are air inlet, RI/8 screw thread, with cone plug, the external diameter is φ8mm
2、Fore arm A、B are air outlet, RI/8 screw thread, with cone plug, the external diameter is φ8mm
3、The base and the fore arm position circular connector plug are connected in the same position

2. Protection level IP65 status：

Round connector plug WF28JI2ZEF, I/O line: 0.3mm² ×12C
Pairing: Round connector plug WF28KI2TE





Round connector plug **WF28JI2Z-3，I/O line：0.3mm² ×12C**
Pairing: Round connector plug **WF28K12TE-3**，
10A cold pressing female **YK1.5-20.4-1.OAU**
（1.OAU is optional according to the need）
explain:
3、Base A、B are air inlet, RI/8 screw thread, with cone plug, the external diameter is φ8mm
4、Fore arm A、B are air outlet, RI/8 screw thread, with cone plug, the external diameter is φ8mm
3、The base and the fore arm position circular connector plug are connected in the same position

VII. QJRB30-1 Configuration table of robot products

QJRB30-1 Configuration table of robot products	
Motor	TAMAGAWA/Gaohuachuangke
RV Reducer	Nabtesco/Chinese reducer
Harmonic reducer	Shimpo
Controller	KEBA/QJAR
Drive	Tsino dynatron

VIII. QJRB30-1 Controller cabinet

QJRB30-1 controller cabinet	
Control hardware	QJAR controller
Control cabinet software	QJAR operating system
Power Supply	Three phase four wire AC380V(+10%,-10%)
Rated power	5.4KW
Power capacity	3.2KVA
Size of control cabinet	580x600x960mm
Weight of control cabinet	120kg
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 21output

QJRB30-1 controller cabinet	
Control hardware	KEBA controller
Control cabinet software	KEBA operating system
Power Supply	Three phase four wire AC380V(+10%,-10%)
Rated power	4.7KW
Power capacity	3.0KVA
Size of control cabinet	580x600x960mm
Weight of control cabinet	100kg
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 26 input 32 output