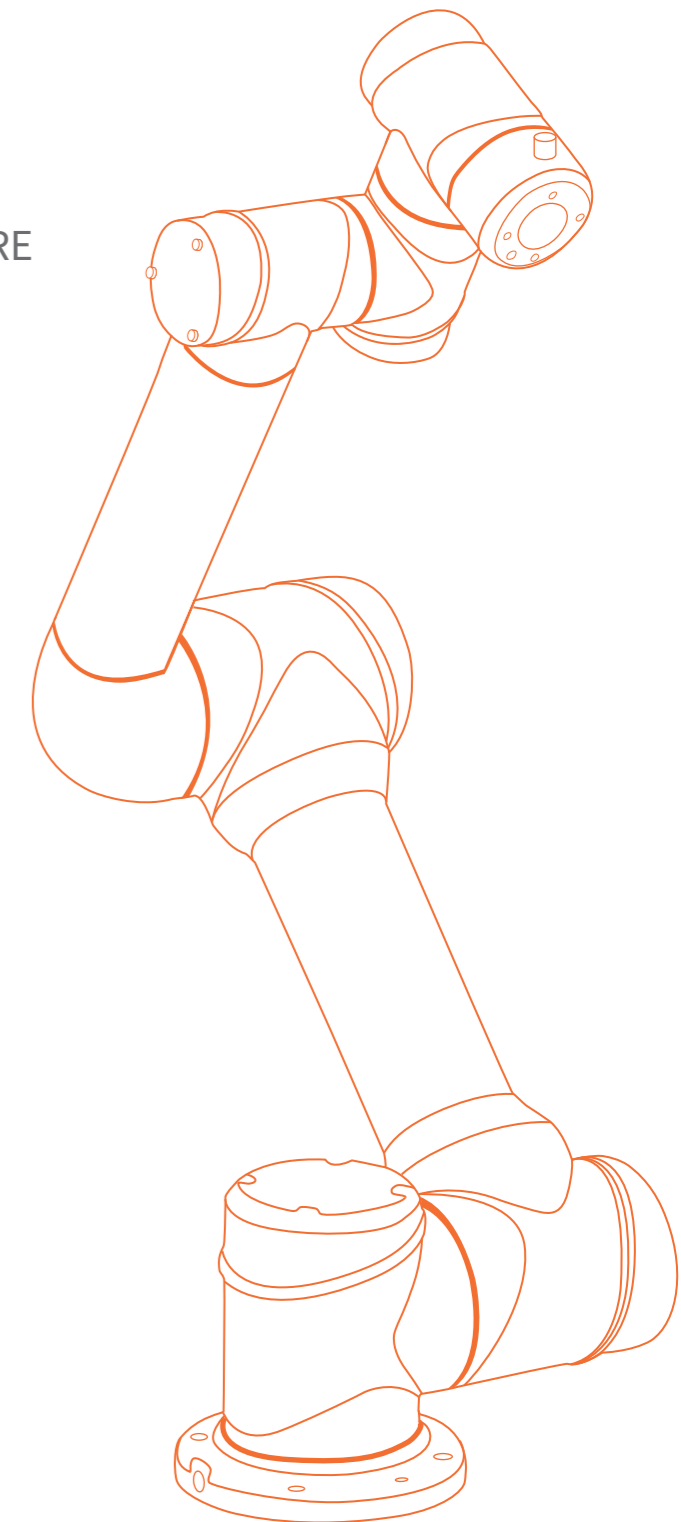




COLLABORATIVE ROBOT

INTELLIGENCE CHANGES THE WORLD
COLLABORATION CREATES THE FUTURE



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COLLABORATION

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CREATES THE FUTURE

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COLLABORATION CREATES THE FUTURE**



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Determined to become an
outstanding collaborative robot
 enterprise in China and even the world



01 COMPANY PROFILE

Provider of Collaborative Robots

Established in 2015, AUBO Robotics is a national high-tech enterprise specialized in the research & development, production and sale of collaborative robots.

As a global leading provider of collaborative robots, AUBO has developed products with complete intellectual property rights, realizing full localization of core parts. AUBO collaborative robots have successively passed the certification of EN ISO 13849-1:2015(PL=d, CAT 3) , CE, UL, KCs, SEMI S2, etc. Featured by safety, stability and simple programming, the products are widely applied in the fields such as 3C, automobile, hardware and household appliances, sanitary appliances for kitchens and bathrooms, medical health, scientific research and education, catering, new retail, chemical products for daily use, and logistics.

Looking forward to the future, with the body of collaborative robots as the core and ecological products as the link, AUBO will provide customers with “plug and play” one-stop solutions, build an ecological innovation system of the robot industry, and collaborate the upstream and downstream enterprises to boost the development of the collaborative robot industry.



Setter and promoter of industrial standards



Localization of core parts



One-stop collaborative robot ecosystem



Headquarters: Beijing



Production Base: Changzhou, Jiangsu

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DEVELOPMENT HISTORY



Intellectual Property

(as at the date of March 2022)

100

Effectively authorized patents

35

Authorized patents for inventions

58

Authorized patents for utility models

42

Software copyrights

7

Appearance patents

QUALIFICATION HONOR

As a pioneer in the field of collaborative robot, AUBO has always focused on the needs in the field of collaborative robots, constantly improved its ability of innovation, promoted the application of scientific research results, and won a number of honors.

- National High-Tech Enterprise
- The best-selling cobot of the year (2017/2018/2019/2020/2021) in China*
- IEEE Global Most Potential Collaborative Robot Enterprise
- The First Prize of Award for Scientific and Technological Progress in Machinery Industry
- National Pilot Unit for Standardization of High-End Equipment Manufacturing Industry (2/98)
- Drafting Unit of National Standard for Collaborative Robots (GB/T36008-2018)
- Secretariat Unit of the Working Group on Collaborative Robots of the National Automation Standards Commission
- Member of Expert Group on the International Standard for Robot Modularization ISO-TC299/WG10

*Data source: from MIR

AUBO ROBOTICS

R&D AND INNOVATION

Technical innovation is the core competitiveness of the enterprise. AUBO has always followed the road of being independent and controllable, and R&D and innovation. It has built an excellent technical innovation team, and established a normative product development process system. At present, more than 70% of team members are medium- and high-level technical and management talents.



Ni, Guangnan Chief Scientist

Academician of Chinese Academy of Engineering

Wei, Hongxing Chairman

Member of the Institute of Electrical and Electronic Engineers (IEEE)

Member of Association for Computing Machinery (ACM)

Member of National Subcommittee for Robots and Robotic Devices

Head of Working Group on National Standards for Robot Modularization

Undertaken many projects in the field of robotics under National 863 and Natural Fund Programs

Won 5 provincial and ministerial level awards and Beijing New Star in Science and Technology

More than 100 papers, 2 monographs and 2 teaching materials

Setter of National Standard for Collaborative Robots

Relying on outstanding strength in technical R&D and distinctive status in the industry, AUBO has participated in the formulation of 21 national and industrial standards for robots, including 3 national standards it organized to formulate. AUBO has undertaken 6 projects under the National Key R&D Program, including 2 projects it organized to declare.

Titles of national standards it organized to formulate

《Design Specification of Industrial Robots for Human-Computer Collaboration》GB/T 39402-2020

《Universal Module Interface for Industrial Robots》GB/T 38560-2020

《Code for Detection of Multidimensional Force / Torque Sensor for Robot》20203656-T-604

Names of projects under the National Key Research & Development Program it organized to declare

《R&D and Integration Verification of Integrated Joints for Collaborative Robots》

《Application Demonstration of Collaborative Robot System for Typical Auto Parts Assembly》

3

Organized to formulate 3 national standards

18

Participated in the formulation of 18 national and industrial standards

2

Organized 2 projects under the National Key R&D Program of the Ministry of Science and Technology

4

Participated in 4 projects under the National Key R&D Program of the Ministry of Science and Technology

PRODUCTION CAPACITY

AUBO Production Base is located in Changzhou City, covers an area of 12,000m², and has an annual production capacity of 10,000 sets. In virtue of vertical integrated production capacity and complete supporting systems of the industry chain, AUBO can deliver high-quality products on schedule to meet customers' needs.

Production, process, quality, and supply chain integration of collaborative robots

PRODUCT GUARANTEE

AUBO is committed to providing safe and reliable collaborative robot products for customers. The products have passed the certification of EN ISO 13849-1:2015(PL=d, CAT 3) , CE, UL, KCs, SEMI S2, etc., guaranteeing the safety and reliability of the products throughout the life cycle.

The First Enterprise Passing Security Certification of PL=d, CAT 3 in China

01 Incoming Inspection

27 testing sections
Support for three-dimensional measurements
Full-size, full-function and total-quantity test coverage of key materials

02 Testing of Components

354 testing standards
126 kinds of testing equipment and tools

03 Testing of whole machine assembly

163 testing items
76 kinds of testing equipment and tools

04 Inspection of Finished Products

58 testing sections
21 kinds of testing equipment
Vibration test, high-temperature aging test, Dynalog repeatability test, noise test, and Leica laser calibration



Collaborative robots testing hall



The first intelligent and flexible production line of collaborative robots in China



EN ISO 13849-1:2015(PL=d, CAT 3)



CE



UL



KCs



CR



SEMI S2





COLLABORATIVE ROBOT **ADVANTAGES**



Flexible Deployment

- Light, compact and small footprint.
- It takes only half a day in average to deploy the arm to execute new tasks.



Flexible Production

- With quick changeover of multiple function scenarios, human-machine collaboration, dual-machine collaboration and multi-machine collaboration, etc. can be adopted to realize flexible production.



Simple Programming

- It is available to master the programming method in half an hour, and complete simple programming in 1 hour.
- Dragging teaching and visualized programming to make the operation simple and efficient, you can operate robots easily without being proficient in programming language.



Wide Application

- The products have been applied in batches in the fields such as 3C, automobile, hardware and household appliances, sanitary appliances for kitchens and bathrooms, medical health, scientific research and education, catering, new retail, chemical products for daily use, and logistics.



Safety and Stability

- The products have passed the certification of EN ISO 13849-1:2015(PL=d, CAT 3), CE, UL, KCs, SEMI S2, etc.
- Level-10 collision detection and sensor safety testing are supported.
- The terminal does not drop in case of power failure, so the products are safe and stable.
- 16 safe I/O interfaces are provided, so the safety function does not lose in case of single failure.



System Opening

- Connection of multi-language environments, multiple communication protocols, and deep integration with third-party plug-ins.
- Communication protocols: TCP/IP, Modbus-RTU/TCP, Profinet.
- Interface and openness: SDK (supporting the development of C/C++/C#/Lua/Python), API.
- Supporting Linux, Windows and Robot Operating System (ROS).



Modularization

- It's available to realize fast dismantlement and replacement within 15 minutes.
- The repair and maintenance are quicker and more convenient.



High Return on Investment

- Key and core components are 100% manufactured in China.
- The investment cost can be recovered within 6~12 months on average.



High Precision

- Millisecond-level system response ensures repeatability.
- The repeatability can be up to $\pm 0.02\text{mm}$.

SERIES COLLABORATIVE ROBOT

AUBO i series collaborative robots with payload capacity of 3 to 20KG, which can cover different applications in each industry, and quickly adapt to the needs of application scenarios in various industries by means of abundant configuration options. They are ideal choices for improving the production efficiency and implementing the low-cost operation.

FEATURES AND BENEFITS

- 01 Safer** The products have passed the certification of EN ISO 13849-1:2015(PL=d, CAT 3), CE, UL, KCs, SEMI S2, etc., all core parts are localized, and level-10 collision detection and sensor safety testing are supported, so no safety protection is required.
- 02 More open** The open system platform supports multiple communication methods: SDK and API, and can establish communication with multiple peripheral equipment such as end-of-arm tooling, vision and mobile robots.
- 03 More precise** With repeatability of $\pm 0.02\text{mm}$, high-precision work can be completed continuously for a long time, thus greatly enhancing the production yield.
- 04 Simpler** Robots can be operated by many methods including dragging teaching, coordinate positioning, path planning and offline programming. The visual interface is simple and easy to learn.
- 05 Wider** The whole series products with payload capacity of 3 to 20KG, which can cover different applications in each industry and have a wide range of applications.

Applicable Fields

3C, automobile, hardware and household appliances, sanitary appliances for kitchens and bathrooms, medical health, scientific research and education, catering, new retail, chemical products for daily use, and logistics.



AUBO-i3

Payload: 3kg
Weight: 16kg
Repeatability: $\pm 0.02\text{mm}$
Reach: 625mm

AUBO-i5/i7

Payload: 5kg/7kg
Weight: 24kg
Repeatability: $\pm 0.02\text{mm}$
Reach: 886.5mm/786.5mm

AUBO-i10/i12

Payload: 10kg/12kg
Weight: 38.5kg/40kg
Repeatability: $\pm 0.03\text{mm}$
Reach: 1350mm/1250mm

AUBO-i16

Payload: 16kg
Weight: 38kg
Repeatability: $\pm 0.03\text{mm}$
Reach: 967.5mm

AUBO-i20

Payload: 20kg
Weight: 63kg
Repeatability: $\pm 0.1\text{mm}$
Reach: 1650mm

C SERIES COLLABORATIVE ROBOT

Aubo C series collaborative robots are developed based on the application characteristics of the industries such as service and new retail. The products have payload capacity of 3KG and 5KG, which can meet the needs in the fields of service and new retail, and have an extremely high return on investment.

FEATURES AND BENEFITS

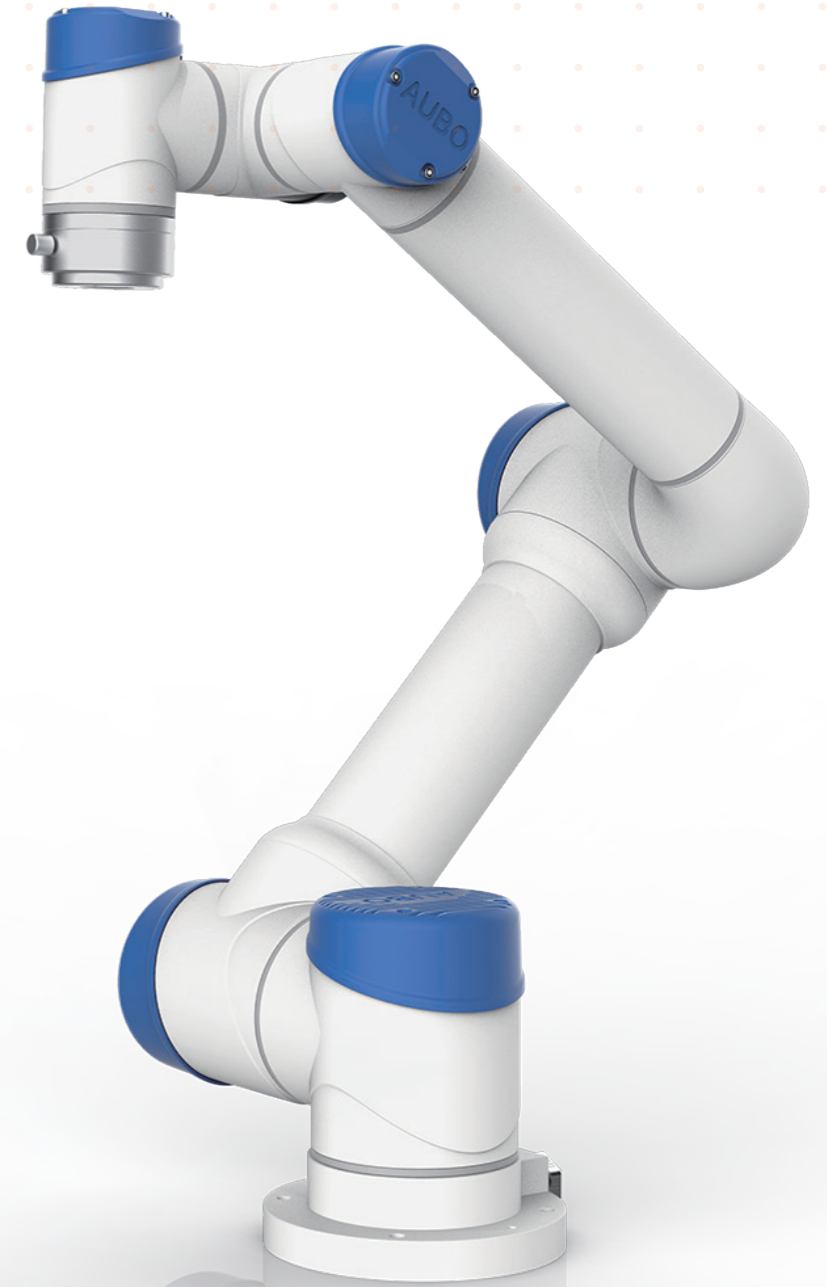
- Low cost input, high return on investment, and payback period of 3 to 9 months averagely
- Small footprint and fast deployment, suitable for installation in narrow spaces
- Super-simple workflow graphic interface, rich and friendly script programming to achieve quick and skilled operation
- Modular design of integrated joints, convenient disassembly and installation, and higher maintenance efficiency
- Small changes to the surrounding environment to achieve high-efficiency and low-cost operation
- Standardized intelligent interface, open programming language, and extremely high extendibility
- Independent collocation of different accessories to achieve rich and diverse functions

Applicable Fields



AUBO-C3

Payload: 3kg
Weight: 16kg
Repeatability: ± 0.1 mm
Reach: 625mm
















AUBO-C5

Payload: 5kg
Weight: 24kg
Repeatability: ± 0.1 mm
Reach: 886.5mm

RECOMMENDED INDUSTRIES

AUBO collaborative robots are designed for a variety of industrial processes and can be operated with simple training.

 3C	 Automobile	 Hardware and Household Appliances	 Machining	 Sanitary Appliances for Kitchens and Bathrooms
 Chemical Products for Daily Use	 New Retail	 Catering	 Medical Health	 Agriculture
 Logistics	 Scientific Research and Education	 Others		

















TYPICAL PROCESS

Industrial	Pick & Place Injection Molding	Assembly Gluing	Bagging & Palletizing Inspection	Screwing Soldering	Polishing & grinding
New-retail	Ice Cream Maker	Beverage Maker	Liquor Maker	Catering Robot	Smart Kitchen
Medical Health	Massage Robot	Auxiliary Puncture	Scanning	Moxibustion	
Mobile Robot	Logistics Sorting	Pick & Place	Inspection	Patrol Robot	
Scientific Research and Education	Intelligent Production Line	Scientific Research and Development	Discipline Construction	Education Platform	

APPLICATION CASES

INDUSTRIAL FIELD



 3D Scanning and inspection	 Inspection of parts	 mobile phone camera detection	 Appearance inspection of auto parts
 Inspection of circuit boards	 Instrument assembly	 Assembly and screwing of white household appliances	 Rubber assembly of auto electronic control systems
 Intelligent assembly of auto parts	 Welding	 Gluing of vehicle windows	 Stacking of packing boxes
 Vacuum cup stretching line	 Frame coating	 Machine Tending	 Machine Tending

APPLICATION CASES



NEW RETAIL / SERVICES



Latte art robot



Smart restaurant



Milk tea workstation



HEALTHCARE



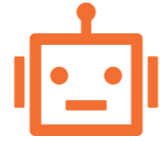
Massage robot



Tooth implantation robot



Reagent testing



MOBILE COBOT



Inspection robot



Intelligent archives



5G Patrol robot



RESEARCH AND EDUCATION



Robot with digital twin technology



Music box assembly line



Education and training platform



OTHER FIELDS



Agricultural picking



High-voltage distribution cabinet operation



Hygiene & cleaning

AUBO ROBOTICS

www.aubo-robotics.cn

APPLICATION CASES

Automobile

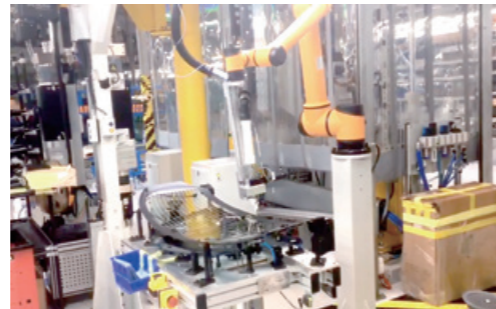
Automobile Glass Gluing & Sealing

This is the window glass gluing & sealing project customized for a well-known automobile company. Industrial robots or manual gluing is adopted on the traditional production lines. Due to safety restrictions, traditional industrial robots need to be separated from workers by guardrails, and the utilization rate of the production line is limited. It is difficult for manual gluing to control the accuracy and quality.

Quick deployment and small footprint with human-machine collaboration. Uniform gluing speed and glue type control precision of $\pm 0.5\text{mm}$.

Continuous Efficient Operation

Since being put into use in August 2019, the cobot has been running efficiently in good condition for 16 hours a day, and can completely replace manual labor.



Automobile

Engine Screwing

This is the engine assembly line renovation project of a well-known automobile company. Previously, the screw locking operation was mainly completed by manual labor. Manual operation is labor-intensive, assembly quality is not consistent enough, and it is difficult to improve the yield of finished products. The workshop space is relatively narrow, and the volume and freedom are highly limited. In addition, the screwing has a fixed sequence, the screws are divided into 5 categories and more than 100 sub-models, requiring visual identification of common features. Precise screw torque and high positioning repeatability are required.

The terminal screwing device adopts a screw gun with controllable torque, and it has compact structure and high torque control accuracy. The “eye-to-hand” vision system is selected, and the vision sensor is independently fixed on the bracket to ensure high positioning repeatability.

Reduced Manpower and Increased Productivity

Since operation in April 2019, the production efficiency has been increased by 18%, the product yield has been increased by 12%, the number of personnel has been reduced by 50%, and the labor cost has been reduced by 30%.



3C

Mobile Phone Camera Testing

This is the camera function testing process of a well-known mobile phone manufacturer. Previously, the testing operation was performed by manual labor. The testing environment is divided into indoor and outdoor, and a variety of products, statuses and angles are involved, which are difficult to control for manual labor. The testing is cumbersome and labor-intensive, needs long continuous operation time.

AUBO adopts the mobile cobot solution (AGV + collaborative robot) to work in the live-action studio according to the specified shooting angles.

Stable and Efficient

24-hour operation is possible, and more comparative data can be captured in the same time period, so the efficiency is significantly improved.



Machining

Machine Tending

This is the machining production line renovation project of a well-known company. The company mainly produces precision machinery parts, such as various industrial sewing machine parts, power tool parts and auto parts. With the growth of business volume, manual operation can no longer meet the production demands.

There are a wide range of products, and one person can only handle 2 machines for original production equipment, cannot accurately complete all tasks. Problems such as on-site environment and equipment noise have led to a series of common problems in traditional manufacturing industry, such as labor shortage and increasing labor cost.

Flexible Deployment

The reach of the collaborative robot used in this solution can be up to 1350mm, and the customer can directly deploy on the original factory without changing the layout of the production line. Flexible pick & place of parts is achieved in the narrow working space, and one robot is working for 2 machines. In the original production process, one person can operate up to 2 machines at the same time. After the deployment of collaborative robots, two persons can handle 12 machines at the same time. In this way, the production scale has tripled, while the personnel have not undergone major changes.



APPLICATION CASES

Medical Health

Massage Robot

Traditional Chinese Medical Massage has always been one of the first choices for people to carry out cervical and lumbar care or pain management. But the shortage of professional massagist has been a major problem in the industry. AUBO developed the massage therapy robot together with our partner, committed to providing safe, temperature-controlled, efficient and standard services in the full process of massage.

The end of the cobot is equipped with a force sensor, a 3D vision, a massage head and a thermal imaging, when the robot arm walks the massage track on the human body, it can ensure the safe and stable operation of the robot without hurting the human body accidentally. And there are different types of strengths that can be switched automatically during the massage according to customers' force preference.

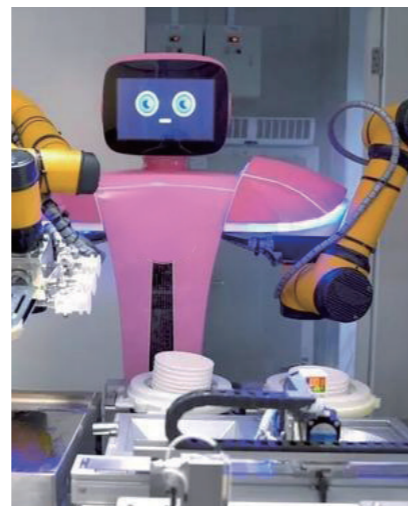


New-retail

Dual-Arm Hamburger Robot

In smart catering industry, AUBO has started business operation officially by cooperating with many restaurants at present. In addition to hamburger robots, the application of robots in restaurants includes stir-fry robots, soup rice robots, drinks robots, frying robots, dessert robots and meals-delivery robots, etc.

In this case, two sets of AUBO i3 cobots are installed inversely, which can be compatible with two collaborative robots to make hamburgers at the same time. After a customer places an order by scanning the QR code, the upper computer sends a signal to the cobots to start the making of hamburger. One cobot mainly grabs bread pieces from the material silo and sends them to the heating furnace, and cooperates with the sauce machine to pour the sauce onto the heated bread pieces; the other cobot takes vegetables and returns the tray. Then, the cobots complete the combination of the upper and lower pieces of bread. After packing, the cobot places the packed hamburger onto the conveyor belt. The customer can scan the QR code to open the pickup window. Here, the purchase process is completed.



Mobile Robot

Semiconductor Handling

This is the logistics automation renovation project in the packaging and testing workshop of a semiconductor industry. At present, the industry is mainly based on manual labor. Manual handling has problems such as large vibration, being easy to cause particle pollution, discontinuous operation, wrong handling and poor consistency. The workshop has a high level of cleanliness, a complex layout, a narrow space and a wide variety of equipment with discrete production processes and complex technological processes. The industry order demands are flexible, and it is impossible to form a simple and effective flow-line production.

The mobile cobot and the intelligent dispatching logistics control system help the factory realize an intelligent unmanned production workshop. The mobile cobot is based on the hybrid positioning and natural navigation technology of the laser natural navigation. The indoor positioning repeatability of $\pm 5\text{mm}$ can be achieved without environment modification while the dust-free operation meets the standard. Equipped with a 360°-scanning dual safety lidar, obstacles can be identified intelligently and avoided actively, ensuring safe, high-speed and smooth operation. Target positions such as cartridge holder and tray can be positioned and captured accurately through AI algorithm, 3D visual positioning, force sensor and collaborative robot.



24-hour Operation and Labor Liberation

The solution realizes the die bond among various processes, and 24-hour continuous operation is possible so as to liberate labor, solve information flow conversion, and realize workshop production visualization and production process operation control.

Electric Power Industry

Distribution Room Inspection

This is the automatic distribution room inspection project of a power industry user. At present, the industry is mainly based on manual inspection. The automation equipment in the distribution room operates all the year round, so the failure rate is high. The inspection frequency is high, the work is cumbersome, and the manual inspection burden is heavy. The switch on the low-voltage side of the distribution room cannot be remotely controlled, and automation cannot be achieved through the equipment in the cabinet.

In cooperation with China Unicom, a dedicated 5G channel ensures safe and stable operation of the robots. The big data image recognition intelligently distinguishes equipment fault signals, and provides intelligent safety monitoring for the robot manipulation equipment to prevent misoperation and faults. The inspection robot can independently complete more than ten functions such as equipment inspection, device panel control, faulty part replacement, device restart, and switch opening & closing. The historical alarm records in the device can be viewed to make up for the shortcomings of the inability to collect alarm information when the equipment in the station malfunctions.

Unmanned Operation

The inspection robot has the characteristics of low cost, high reliability, high safety and strong universality, and can be maturely applied to most scenarios in which unmanned equipment operation is required, such as distribution rooms, computer rooms and industrial enterprises.



GLOBAL SERVICES

Around the global headquarters and manufacturing bases, AUBO has established sales centers in the eastern region, southern region and northern region, etc. of China, and overseas after-sales service centers in the USA and Germany, etc. Now, AUBO has more than 200 distributor partners from more than 50 countries in the world, and can provide efficient and convenient professional services for you.



Integrated Services
To provide technology evaluation, accessory selection and debugging services.



Training Services
To provide product usage trainings to distributors free of charge regularly, and cultivate professional robot engineers for customers.



Communication Platforms
To realize real-time technology answers and resource sharing by technical forum and hotline.



Maintenance
To provide lifetime repair and customized maintenance of robots, and provide software upgrading package to customers and instruct them how to install.



Model	i3	i5	i7	i10	i12	i16	i20	C3	C5
Robot Degrees of Freedom	6	6	6	6	6	6	6	6	6
Weight (kg)	16	24	24	38.5	40	38	63	625	886.5
Reach (mm)	625	886.5	786.5	1350	1250	967.5	1650	3	5
Mounting Surface Diameter (mm)	Ø140	Ø172	Ø172	Ø220	Ø220	Ø220	Ø260	16	24
Payload (kg)	3	5	7	10	12	16	20	Ø140	Ø172
Repeatability (mm)	±0.02	±0.02	±0.02	±0.03	±0.03	±0.03	±0.1	±0.1	±0.1
Linear Velocity (m/s)	≤1.9	≤3.4	≤3.0	≤4.0	≤3.8	≤3.0	≤2.6	≤1.9	≤2.8
Average Power (W)	150	200	200	500	500	600	1000	150	200
Peak Power (W)	1000	2000	2000	2000	2000	2000	3000	600	600
Ambient Temperature (°)	0-50	0-50	0-50	0-50	0-50	0-50	0-50	0-50	0-50
Ambient Humidity	90% RH (Non-condensing)	90% RH (Non-condensing)	90% RH (Non-condensing)	90% RH (Non-condensing)	90% RH (Non-condensing)	90% RH (Non-condensing)	90% RH (Non-condensing)	90% RH (Non-condensing)	90% RH (Non-condensing)
Installation Orientation	Any ceiling, Floor, Wall	Any ceiling, Floor, Wall	Any ceiling, Floor, Wall	Any ceiling, Floor, Wall	Any ceiling, Floor, Wall	Any ceiling, Floor, Wall	Any ceiling, Floor, Wall	Any ceiling, Floor, Wall	Any ceiling, Floor, Wall
IP Classification	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54

Axis Movement	Working Range (°)		Maximum Speed (°/s)		Working Range (°)		Maximum Speed (°/s)		Working Range (°)		Maximum Speed (°/s)		Working Range (°)		Maximum Speed (°/s)		Working Range (°)		Maximum Speed (°/s)	
	joint 1	±360	178	±360	223	±360	223	±360	178	±360	178	±360	178	±360	93	±175	178	±175	147	
joint 2	±360	178	±360	223	±360	223	±360	178	±360	178	±360	178	±360	93	±175	178	±175	147		
joint 3	±360	178	±360	223	±360	223	±360	223	±360	267	±360	267	±360	178	±175	178	±175	147		
joint 4	±360	237	±360	237	±360	237	±360	178	±360	178	±360	178	±360	178	±175	178	±175	178		
joint 5	±360	237	±360	237	±360	237	±360	237	±360	178	±360	178	±360	178	±175	178	±175	178		
joint 6	±360	237	±360	237	±360	237	±360	237	±360	178	±360	178	±360	178	±175	178	±175	178		

*Limited by the application scenario, part of the joints may not achieve ±360°.

Category	Control Box	Control Box (AGV)	Control Box I/O/Tool I/O	Control Box	Tool End
Control Box Model	AUBO-CB-M	AUBO-CB-AGV	AUBO-CB-AGV-P	I/O Port	Digital In
Dimensions	390mm*370mm*265mm/410mm*390mm*285mm (i20)	370mm*295mm*225mm	357mm*200mm*207mm	Digital Out	16 (general) /16 (safe)
Weight	15kg/16kg (i20)	10.5kg	8.75kg	Analog In	4
Cabling Connecting the Robot	5m (customizable, up to 8m)	5m	-	Analog Out	4
Cabling Connecting the Teach Pendant	4m	4m	-	I/O Power	Output Voltage
Cabling Connecting the Power	5m	5m	-	Output Current	24V
Cabling Connecting AGV Control Box and AGV Power Box	-	-	0.65m		0V/12V/24V
Communication	100-240VAC,50-60Hz		100-240VAC,50-60Hz		
Interface	Ethernet, ModBus-RTU/TCP, Profinet (Optional)				
Power Supply	SDK (Support C/C++/C#/Lua/Python) 、Support ROS、API				
IP Classification	IP43				



Teach Pendant	Model	AUBO-TP	AUBO-TP-C
Dimensions		355mm*235mm*54mm	
Weight		1.57kg	
IP Classification		IP43	
Colour		Orange + Black	Blue + White

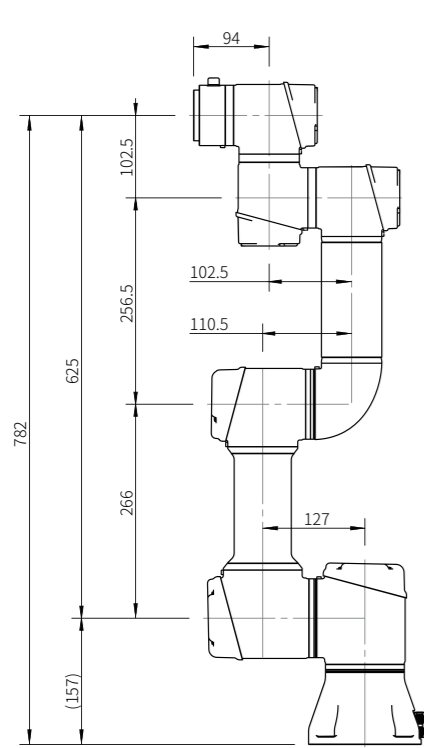


Teach Pendant

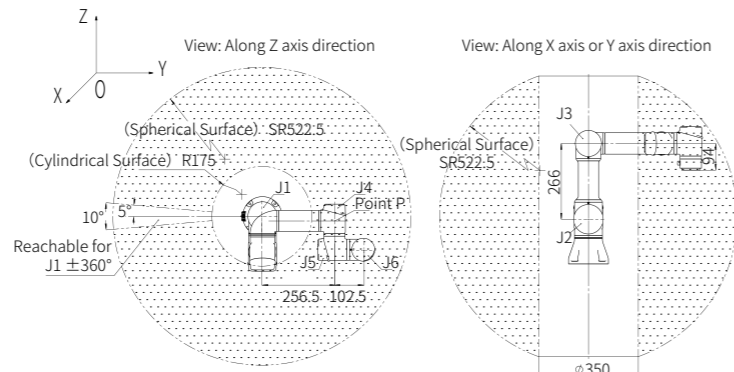
TECHNICAL DETAILS COMPARISON

i3/C3

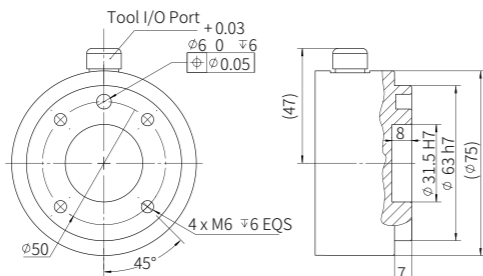
DIMENSIONAL DRAWINGS



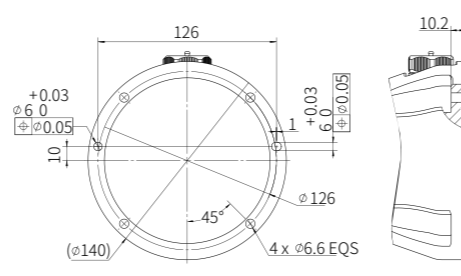
AUBO-i3/C3 Dimensions Drawing



AUBO-i3/C3 Moving Range of Point P



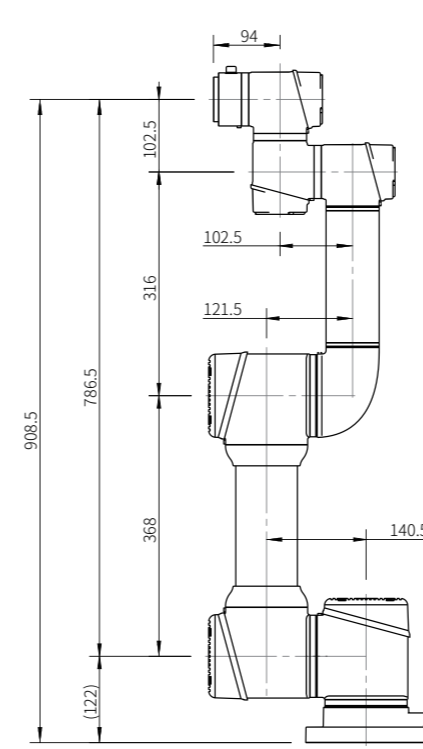
AUBO-i3/C3 Tool End Flange



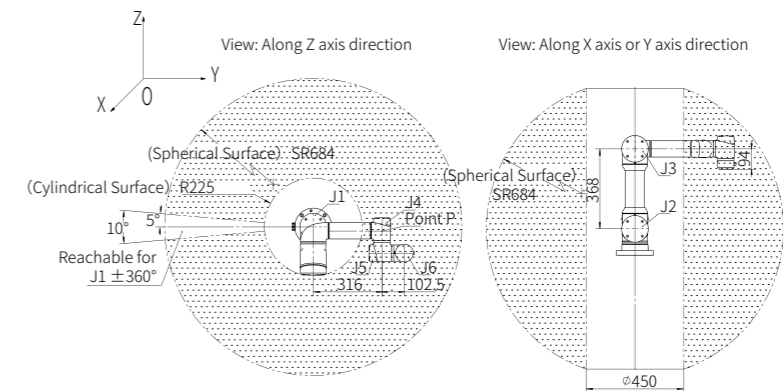
AUBO-i3/C3 Top View of Base

DIMENSIONAL DRAWINGS

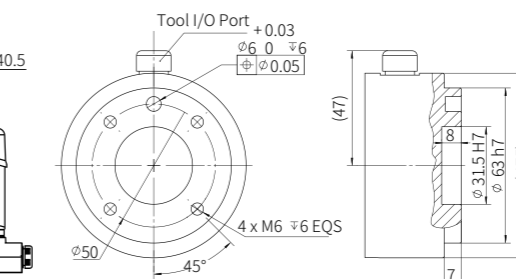
i7



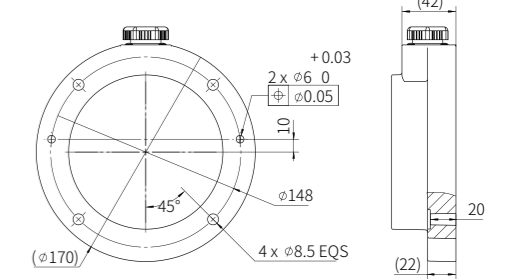
AUBO-i7 Dimensions Drawing



AUBO-i7 Moving Range of Point P

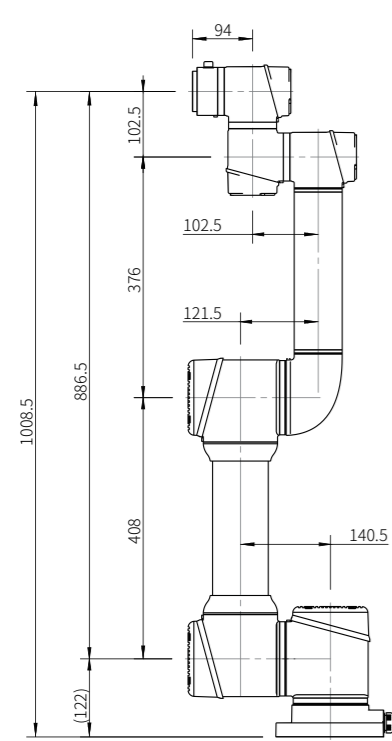


AUBO-i7 Tool End Flange

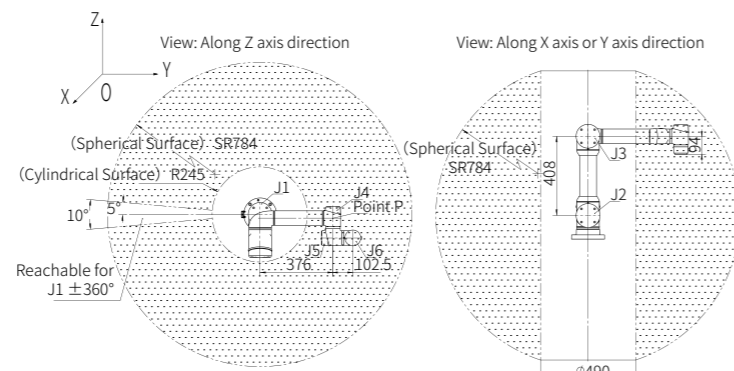


AUBO-i7 Top View of Base

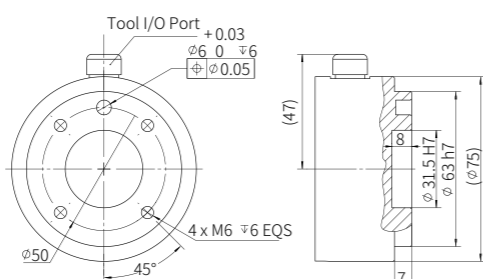
i5/C5



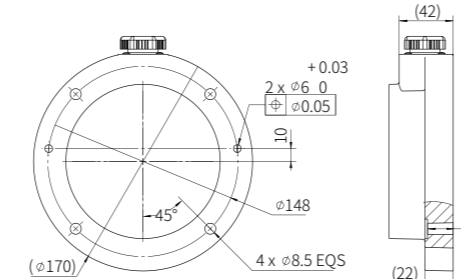
AUBO-i5/C5 Dimensions Drawing



AUBO-i5/C5 Moving Range of Point P

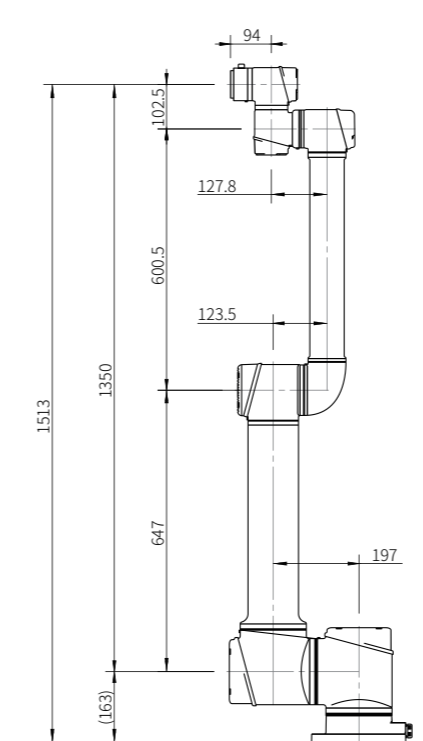


AUBO-i5/C5 Tool End Flange

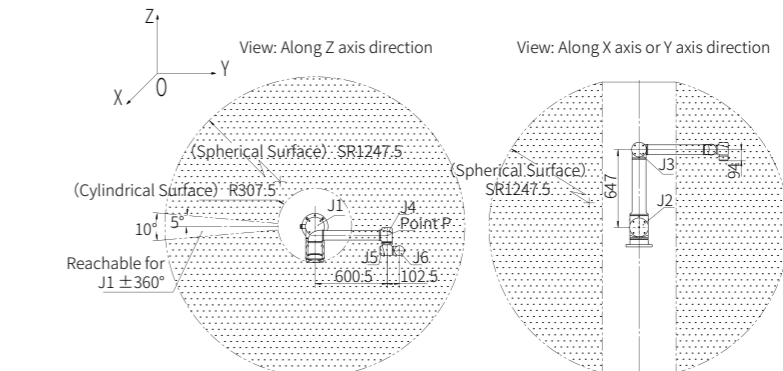


AUBO-i5/C5 Top View of Base

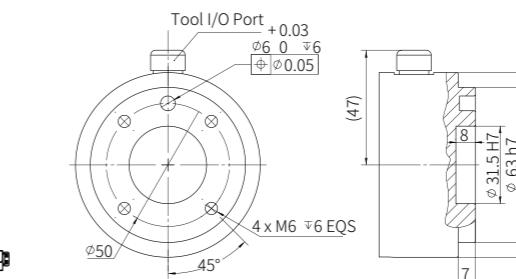
i10



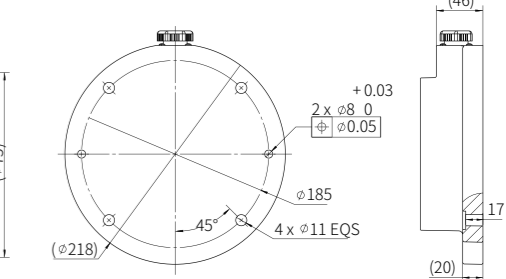
AUBO-i10 Dimensions Drawing



AUBO-i10 Moving Range of Point P



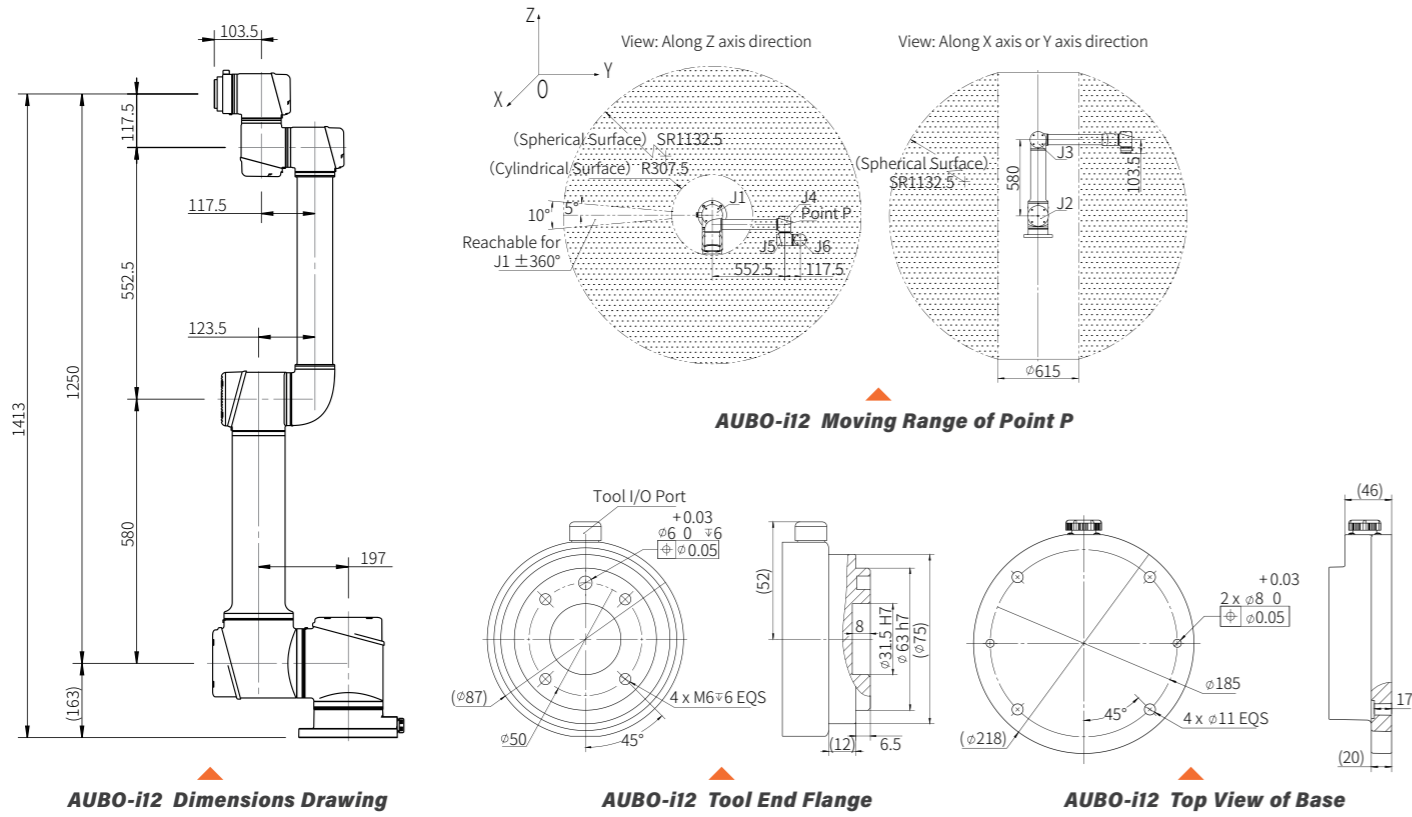
AUBO-i10 Tool End Flange



AUBO-i10 Top View of Base

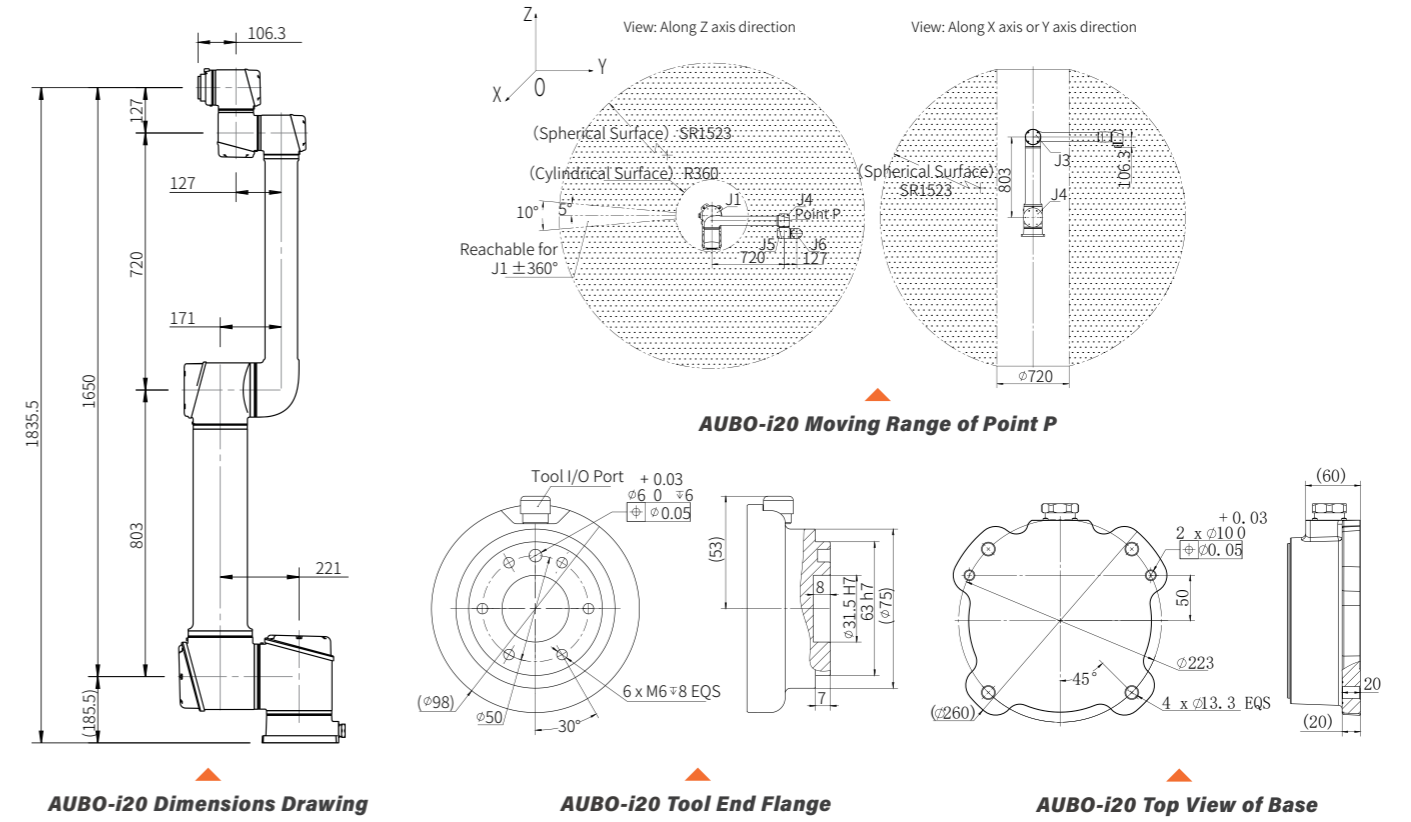
i12

DIMENSIONAL DRAWINGS



DIMENSIONAL DRAWINGS

i20



i16

