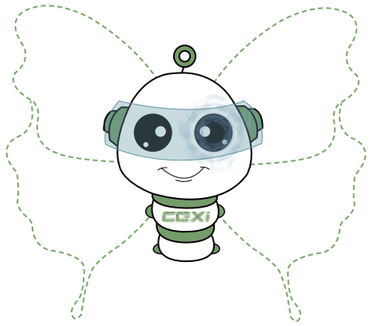


Pioneer of "Industrial Control+Process"
Intelligent Manufacturing

Vehicle specification level High speed collaborative robot

Fast speed | High precision | Strong rigidity



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Pioneer of "Industrial Control+Process" Intelligent Manufacturing



PRODUCT HIGHLIGHTS

1 FAST, STABLE AND ACCURATE BENCHMARKING INDUSTRIAL ROBOTS

High speed, high precision, high flexibility, and high intelligence.

2 SAFER AND MORE RIGOROUS PROTECTION DESIGN

The industry's first Xi black box, a fault site data recorder.
Over a hundred safety functions self-monitoring and 10 level collision force protection.
Innovative power-off protection technology ensures reliable shutdown even when the robot cable is cut off.

3 MORE LIGHTWEIGHT AND CONVENIENT USER INTERACTION

The self weight load ratio is less than 4, and the tool end has three color status lights, two function buttons, and two bus interfaces.

4 BUILDING A SMARTER INTELLIGENT MANUFACTURING ECOSYSTEM

It supports wired/wireless/4G/5G communication network and flexible access to MES and industrial Internet.

5 APPLICATION TECHNOLOGIES THAT ARE CLOSER TO THE SCENE

The robot supports 2D and 3D vision, integrates force sensors, and connects mainstream PLCs, servo systems, CNC machine tools, etc. on the market.
External expansion additional axis (EtherCAT bus) linkage is convenient, supporting conveyor belt tracking and synchronization.

6 QUALITY CONTROL STANDARDS FOR THE AUTOMOTIVE INDUSTRY

Stable and reliable operation in complex environments with a long lifespan, the robot manufacturing system complies with the IATF16949:2016 international automotive quality management standard.

CERTIFICATION SYSTEM AND SOCIAL HONORS



C SERIES
COLLABORATIVE ROBOT

Consumer grade C-series collaborative robots

Service oriented field | Cost-effective | Flexible deployment





CR3
Load：3kg
Tool end Speed：1m/s
Repeatability：±0.03mm
Working Radius：620mm

CR6
Load：6kg
Tool end Speed：2m/s
Repeatability：±0.03mm
Working Radius：924mm

Application Fields


Smart Health Care


Smart Retail


Smart Catering

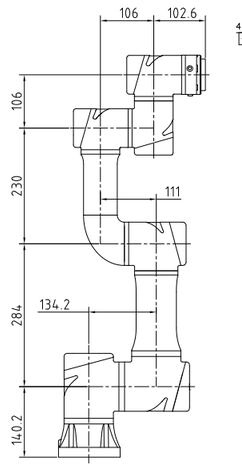
Product parameters of consumer grade collaborative robots



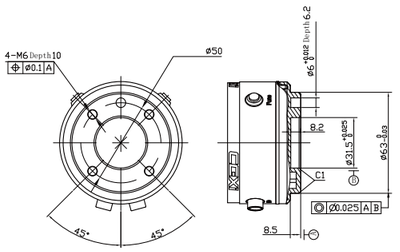


Robot arm model		CR3	CR6
Degrees of freedom		6	6
Rated load (kg)		3	6
Maximum working radius (mm)		620	924
Repeatability (mm)		± 0.03	± 0.03
Control bus/frequency		EtherCAT/1KHz	EtherCAT/1KHz
Maximum speed of the tool end (m/s)		1	2
Noise(dB)		≦60	≦60
Rated power (W)		150	200
Ambient temperature(℃)		-5~55	-5~55
Working environment humidity		5%~90%RH, No condensation	5%~90%RH, No condensation
Installation method		Any angle	Any angle
Protection grade		IP66	IP66
Weight(kg)(Excluding cables)		15	21
Tool port	I/O Port	1-24V/1APower; 2-DI; 2-DO; 2-AI	1-24V/1APower; 2-DI; 2-DO; 2-AI
	COM Port	1-24V/1APower; 1-RS485; 1-EtherCAT	1-24V/1APower; 1-RS485; 1-EtherCAT
Joint motion parameters		Maximum range of motion / Maximum speed	Maximum range of motion / Maximum speed
The first joint axis-J1		±360° / 180°/s	±360° / 180°/s
The second joint axis-J2		±360° / 180°/s	±360° / 180°/s
The third joint axis-J3		±165° / 180°/s	±165° / 180°/s
The fourth joint axis-J4		±360° / 180°/s	±360° / 180°/s
The fifth joint axis-J5		±360° / 180°/s	±360° / 180°/s
The sixth joint axis-J6		±360° / 180°/s	±360° / 180°/s

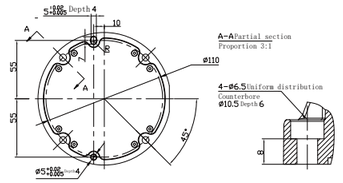
CR3 Dimension



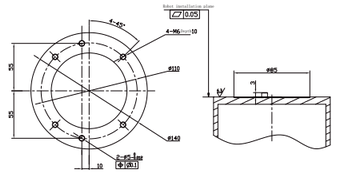
Outline dimension diagram



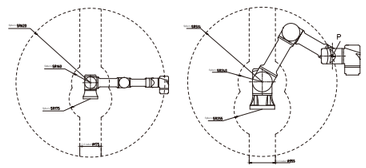
Dimensional drawing of flange at the end of the tool



Base dimension diagram

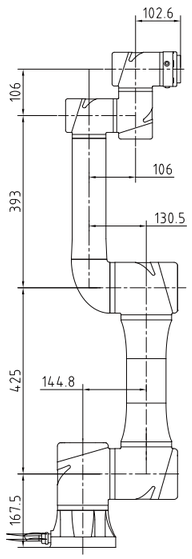


Recommended installation surface diagram

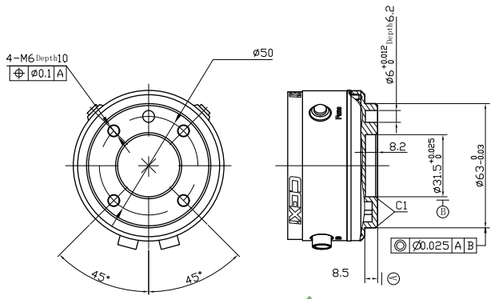


Range of motion

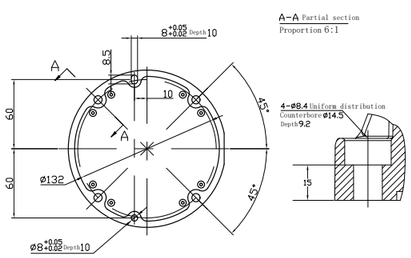
CR6 Dimension



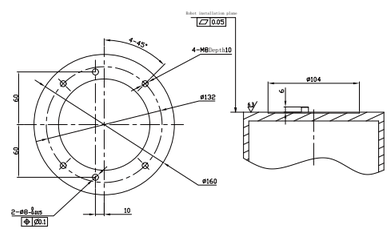
Outline dimension diagram



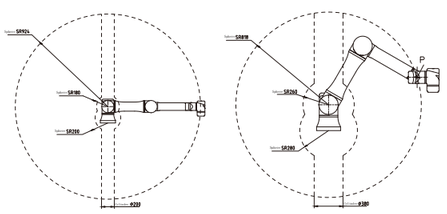
Dimensional drawing of flange at the end of the tool



Base dimension diagram



Recommended installation surface diagram

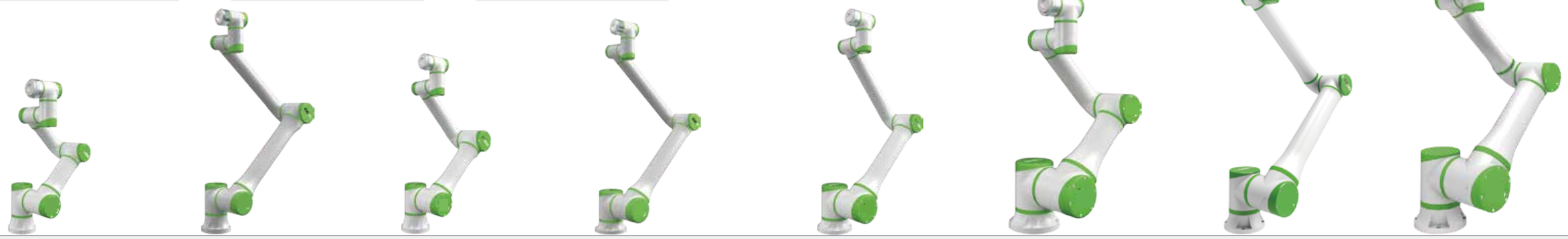


Range of motion

G SERIES COLLABORATIVE ROBOT

Industrial grade G-series collaborative robots

Fast speed | High precision | Compact



R3
Load: 3kg
Tool end Speed: 2m/s
Repeatability: ±0.02mm
Working Radius: 620mm

R4
Load: 4kg
Tool end Speed: 3m/s
Repeatability: ±0.05mm
Working Radius: 1300mm

R6
Load: 6kg
Tool end Speed: 3m/s
Repeatability: ±0.02mm
Working Radius: 917mm

R9
Load: 9kg
Tool end Speed: 3m/s
Repeatability: ±0.05mm
Working Radius: 1500mm

R12
Load: 12kg
Tool end Speed: 3m/s
Repeatability: ±0.03mm
Working Radius: 1300mm

R18
Load: 18kg
Tool end Speed: 2m/s
Repeatability: ±0.02mm
Working Radius: 900mm

R20
Load: 20kg
Tool end Speed: 4m/s
Repeatability: ±0.05mm
Working Radius: 1800mm

R30
Load: 30kg
Tool end Speed: 3m/s
Repeatability: ±0.05mm
Working Radius: 1300mm

Application Fields



Automotive components



3C Electronics



Machining

5G+ Robotics
Intelligent Robot Production Line



Smart China and the World

Product parameters for industrial grade collaborative robots









Robot arm model		R3		R4		R6		R9	
Degrees of freedom		6		6		6		6	
Rated load (kg)		3		4		6		9	
Maximum working radius (mm)		620		1300		917		1500	
Repeatability (mm)		± 0.02		± 0.05		± 0.02		± 0.05	
Control bus/frequency		EtherCAT/1KHz		EtherCAT/1KHz		EtherCAT/1KHz		EtherCAT/1KHz	
Maximum speed of the tool end (m/s)		2		3		3		3	
Noise(dB)		≦60		≦60		≦60		≦60	
Rated power (W)		150		260		260		550	
Ambient temperature(℃)		-5~55		-5~55		-5~55		-5~55	
Working environment humidity		5%~90%RH, No condensation		5%~90%RH, No condensation		5%~90%RH, No condensation		5%~90%RH, No condensation	
Installation method		Any angle		Any angle		Any angle		Any angle	
Protection grade		IP65		IP54		IP54		IP65	
Weight(kg)(Excluding cables)		15		22		21		37	
Tool port	I/O Port	1-24V/1APower; 2-DI; 2-DO; 2-AI		1-24V/1APower; 2-DI; 2-DO; 2-AI		1-24V/1APower; 2-DI; 2-DO; 2-AI		1-24V/1APower; 2-DI; 2-DO; 2-AI	
	COM Port	1-24V/1APower; 1-RS485; 1-EtherCAT		1-24V/1APower; 1-RS485; 1-EtherCAT		1-24V/1APower; 1-RS485; 1-EtherCAT		1-24V/1APower; 1-RS485; 1-EtherCAT	
Joint motion parameters		Maximum range of motion	Maximum speed	Maximum range of motion	Maximum speed	Maximum range of motion	Maximum speed	Maximum range of motion	Maximum speed
The first joint axis-J1		±360°	220°/s	±360°	210°/s	±360°	210°/s	±360°	150°/s
The second joint axis-J2		±360°	220°/s	±360°	210°/s	±360°	210°/s	±360°	150°/s
The third joint axis-J3		±165°	240°/s	±165°	210°/s	±165°	210°/s	±165°	210°/s
The fourth joint axis-J4		±360°	360°/s	±360°	360°/s	±360°	360°/s	±360°	240°/s
The fifth joint axis-J5		±360°	360°/s	±360°	360°/s	±360°	360°/s	±360°	240°/s
The sixth joint axis-J6		±360°	360°/s	±360°	360°/s	±360°	360°/s	±360°	240°/s

Smart China and the World

Product parameters for industrial grade collaborative robots



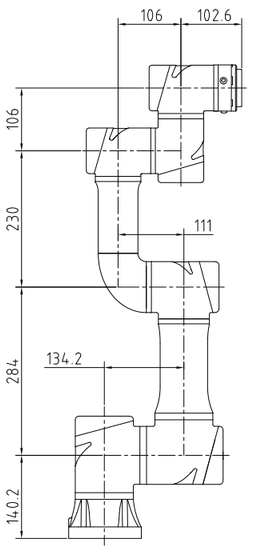




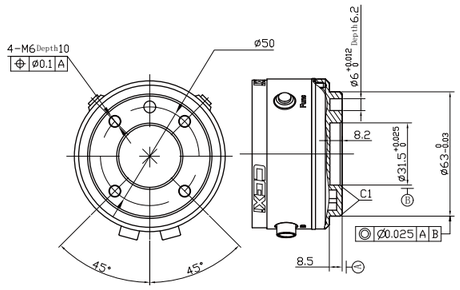


Robot arm model		R12	R18	R20	R30
Degrees of freedom		6	6	6	6
Rated load (kg)		12	18	20	30
Maximum working radius (mm)		1300	900	1800	1300
Repeatability (mm)		± 0.03	± 0.02	± 0.05	± 0.05
Control bus/frequency		EtherCAT/1KHz	EtherCAT/1KHz	EtherCAT/1KHz	EtherCAT/1KHz
Maximum speed of the tool end (m/s)		3	2	4	3
Noise(dB)		≦60	≦60	≦60	≦60
Rated power (W)		550	550	1500	1500
Ambient temperature(℃)		-5~55	-5~55	-5~55	-5~55
Working environment humidity		5%~90%RH, No condensation	5%~90%RH, No condensation	5%~90%RH, No condensation	5%~90%RH, No condensation
Installation method		Any angle	Any angle	Any angle	Any angle
Protection grade		IP65	IP65	IP65	IP65
Weight(kg)(Excluding cables)		36	35	68	64
Tool port	I/O Port	1-24V/1APower; 2-DI; 2-DO; 2-AI	1-24V/1APower; 2-DI; 2-DO; 2-AI	1-24V/1APower; 2-DI; 2-DO; 2-AI	1-24V/1APower; 2-DI; 2-DO; 2-AI
	COM Port	1-24V/1APower; 1-RS485; 1-EtherCAT	1-24V/1APower; 1-RS485; 1-EtherCAT	1-24V/1APower; 1-RS485; 1-EtherCAT	1-24V/1APower; 1-RS485; 1-EtherCAT
Joint motion parameters		Maximum range of motion / Maximum speed	Maximum range of motion / Maximum speed	Maximum range of motion / Maximum speed	Maximum range of motion / Maximum speed
The first joint axis-J1		±360° / 150°/s	±360° / 150°/s	±360° / 180°/s	±360° / 180°/s
The second joint axis-J2		±360° / 150°/s	±360° / 150°/s	±360° / 180°/s	±360° / 180°/s
The third joint axis-J3		±165° / 210°/s	±165° / 210°/s	±165° / 210°/s	±165° / 210°/s
The fourth joint axis-J4		±360° / 240°/s	±360° / 240°/s	±360° / 270°/s	±360° / 270°/s
The fifth joint axis-J5		±360° / 240°/s	±360° / 240°/s	±360° / 270°/s	±360° / 270°/s
The sixth joint axis-J6		±360° / 240°/s	±360° / 240°/s	±360° / 270°/s	±360° / 270°/s

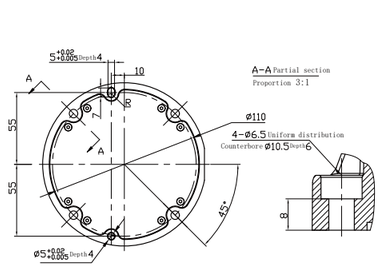
R3 Dimension



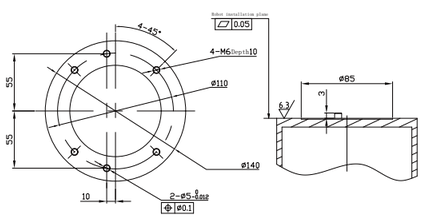
Outline dimension diagram



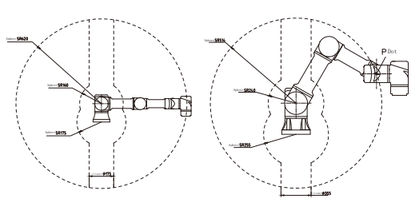
Dimensional drawing of flange at the end of the tool



Base dimension diagram

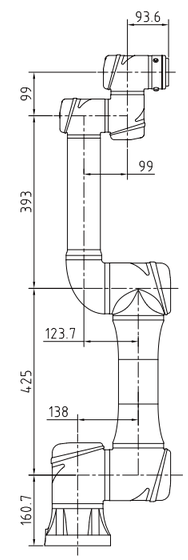


Recommended installation surface diagram

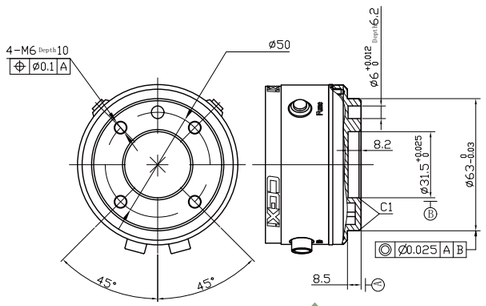


Range of motion

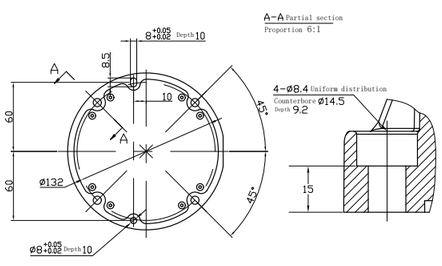
R6 Dimension



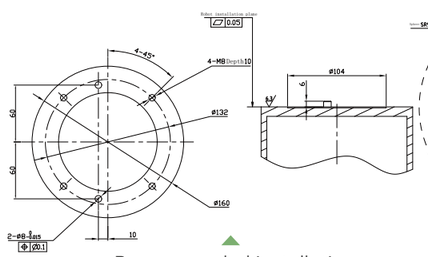
Outline dimension diagram



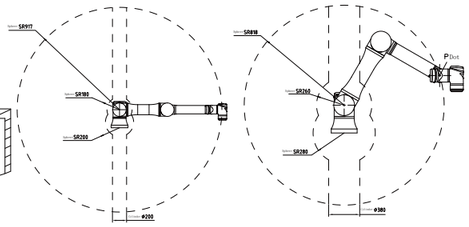
Dimensional drawing of flange at the end of the tool



Base dimension diagram

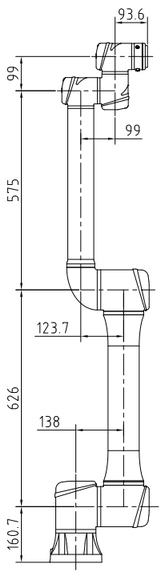


Recommended installation surface diagram

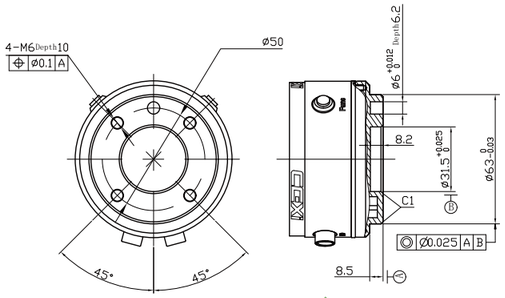


Range of motion

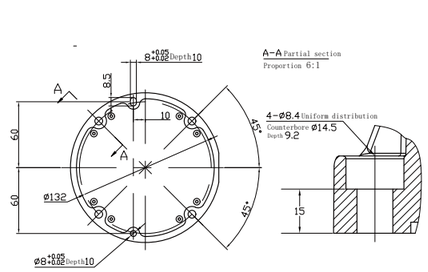
R4 Dimension



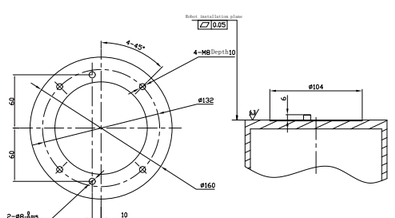
Outline dimension diagram



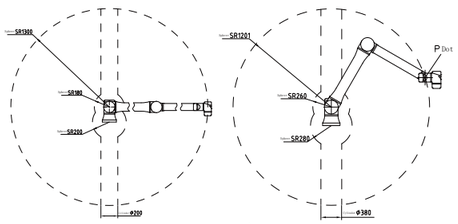
Dimensional drawing of flange at the end of the tool



Base dimension diagram

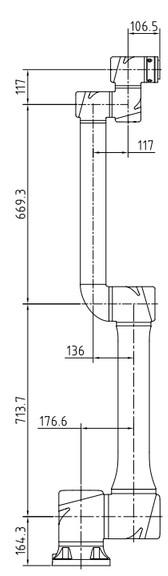


Recommended installation surface diagram

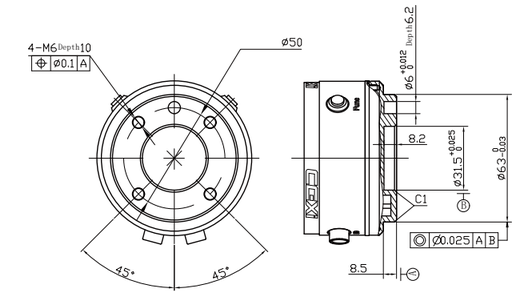


Range of motion

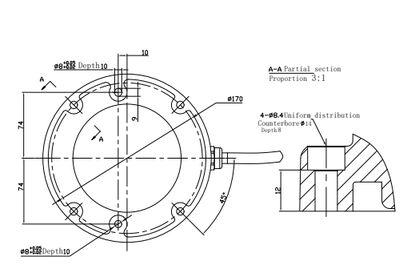
R9 Dimension



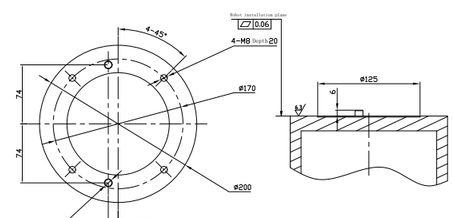
Outline dimension diagram



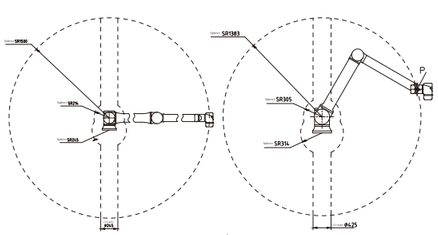
Dimensional drawing of flange at the end of the tool



Base dimension diagram

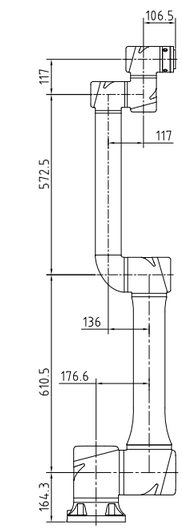


Recommended installation surface diagram

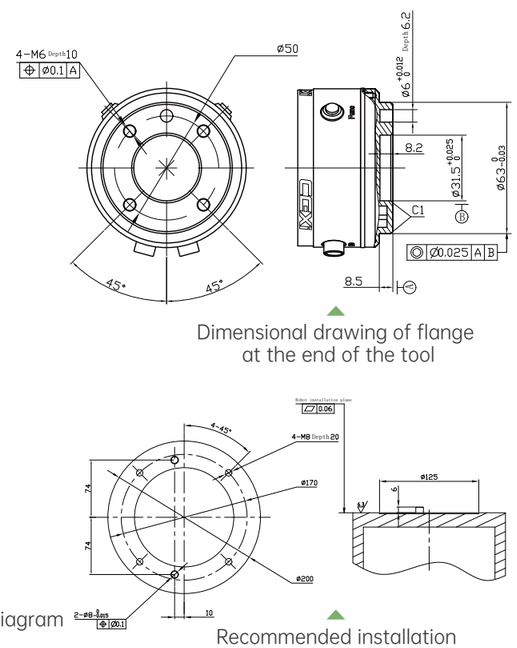


Range of motion

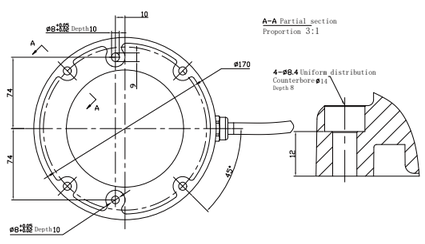
R12 Dimension



Outline dimension diagram

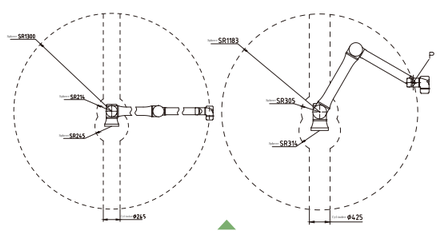


Dimensional drawing of flange at the end of the tool



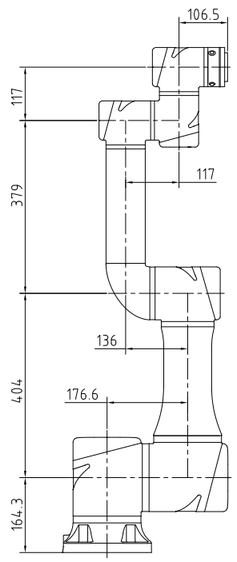
Base dimension diagram

Recommended installation surface diagram

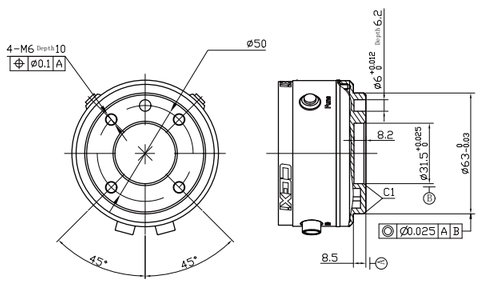


Range of motion

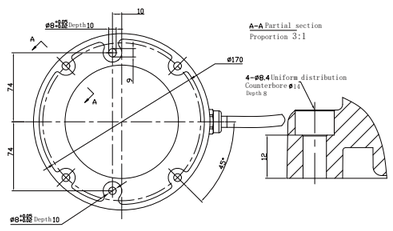
R18 Dimension



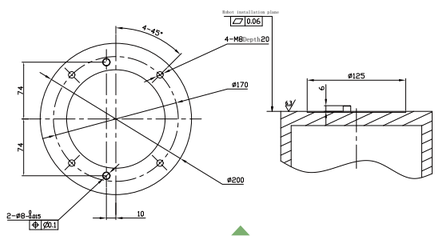
Outline dimension diagram



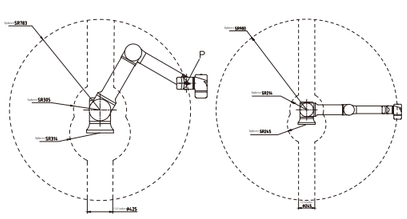
Dimensional drawing of flange at the end of the tool



Base dimension diagram

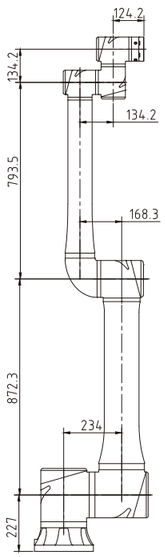


Recommended installation surface diagram

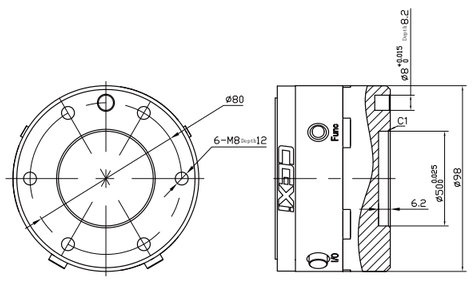


Range of motion

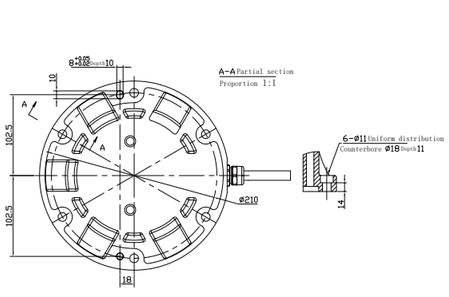
R20 Dimension



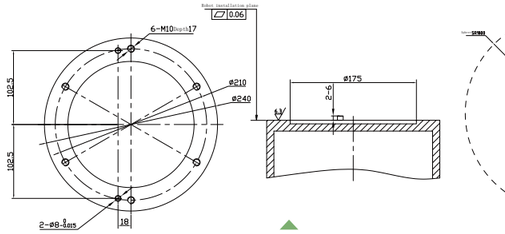
Outline dimension diagram



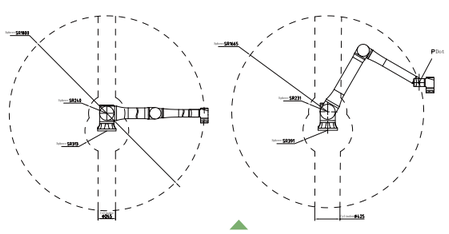
Dimensional drawing of flange at the end of the tool



Base dimension diagram

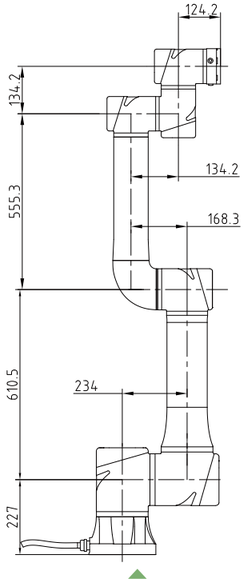


Recommended installation surface diagram

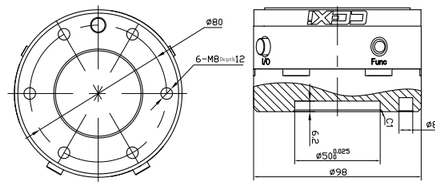


Range of motion

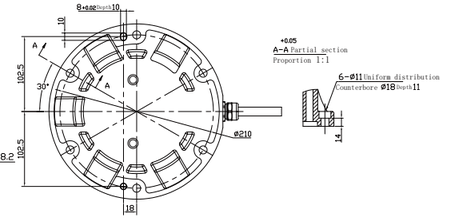
R30 Dimension



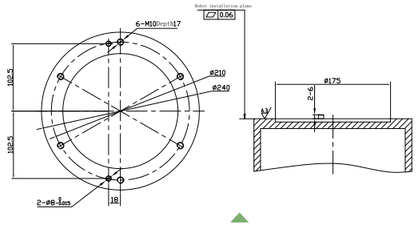
Outline dimension diagram



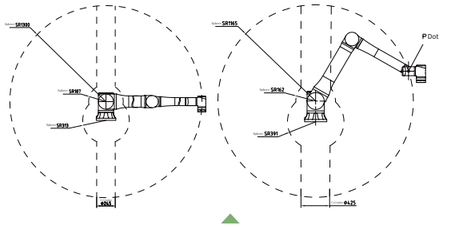
Dimensional drawing of flange at the end of the tool



Base dimension diagram



Recommended installation surface diagram



Range of motion

X SERIES
COLLABORATIVE ROBOT

X series explosion-proof collaborative robot

FAST SPEED | HIGH PRECISION | HIGH PROTECTION LEVEL | SAFE AND RELIABLE



XR6
Load: 6kg
Tool end Speed: 3m/s
Repeatability: ±0.02mm
Working Radius: 924mm

XR9
Load: 9kg
Tool end Speed: 3m/s
Repeatability: ±0.05mm
Working Radius: 1500mm

XR12
Load: 12kg
Tool end Speed: 3m/s
Repeatability: ±0.03mm
Working Radius: 1300mm

XR18
Load: 18kg
Tool end Speed: 3m/s
Repeatability: ±0.02mm
Working Radius: 900mm

XR20
Load: 20kg
Tool end Speed: 4m/s
Repeatability: ±0.05mm
Working Radius: 1800mm

Application Fields



Fuel up



Car spraying



Chemical processing

X series extreme temperature version collaborative robot

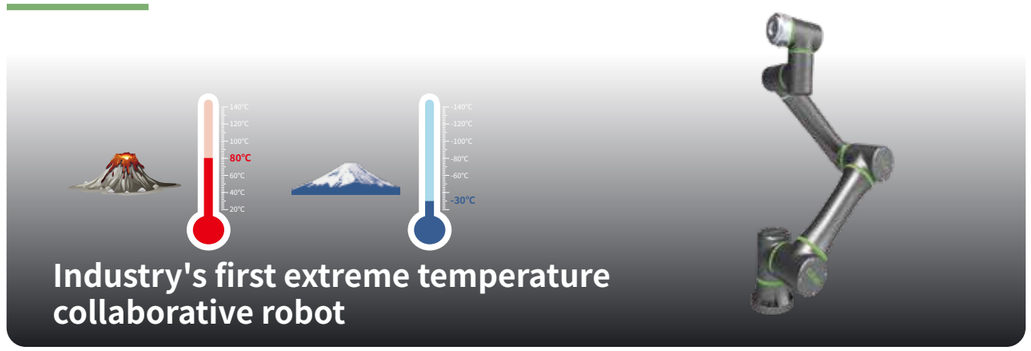


AL6
Load: 6kg
Tool end Speed: 3m/s
Repeatability: ±0.02mm
Working Radius: 924mm

AL9
Load: 9kg
Tool end Speed: 3m/s
Repeatability: ±0.05mm
Working Radius: 1500mm

AL12
Load: 12kg
Tool end Speed: 3m/s
Repeatability: ±0.03mm
Working Radius: 1300mm

Product Advantages



Smart China and the World

X series explosion-proof collaborative robot











Robot arm model		XR6		XR9		XR12		XR18		XR20	
Degrees of freedom		6		6		6		6		6	
Rated load（kg）		6		9		12		18		20	
Maximum working radius（mm）		924		1500		1300		900		1800	
Repeatability（mm）		± 0.02		± 0.05		± 0.03		± 0.02		± 0.05	
Control bus/frequency		EtherCAT/1KHz		EtherCAT/1KHz		EtherCAT/1KHz		EtherCAT/1KHz		EtherCAT/1KHz	
Maximum speed of the tool end（m/s）		3		3		3		3		4	
Noise(dB)		≦60		≦60		≦60		≦60		≦60	
Rated power（W）		260		550		550		550		1500	
Ambient temperature(℃)		-5~55		-5~55		-5~55		-5~55		-5~55	
Working environment humidity		5%~90%RH，No condensation		5%~90%RH，No condensation		5%~90%RH，No condensation		5%~90%RH，No condensation		5%~90%RH，No condensation	
Installation method		Any angle		Any angle		Any angle		Any angle		Any angle	
Protection grade		IP68		IP68		IP68		IP68		IP68	
Weight(kg)(Excluding cables)		21		37		36		35		68	
Explosion proof sign	Domestic explosion-proof mark	Ex db eb ib pxb IIC T5 Gb/Ex ib pxb tb IIIC T95℃ Db		Ex db eb ib pxb IIC T5 Gb/Ex ib pxb tb IIIC T95℃ Db		Ex db eb ib pxb IIC T5 Gb/Ex ib pxb tb IIIC T95℃ Db		Ex db eb ib pxb IIC T5 Gb/Ex ib pxb tb IIIC T95℃ Db		Ex db eb ib pxb IIC T5 Gb/Ex ib pxb tb IIIC T95℃ Db	
	European Explosion proof Mark	Ex II 2G Ex db pxb IIC T4 Gb		Ex II 2G Ex db pxb IIC T4 Gb		Ex II 2G Ex db pxb IIC T4 Gb		Ex II 2G Ex db pxb IIC T4 Gb		Ex II 2G Ex db pxb IIC T4 Gb	
Joint motion parameters		Maximum range of motion	Maximum speed	Maximum range of motion	Maximum speed	Maximum range of motion	Maximum speed	Maximum range of motion	Maximum speed	Maximum range of motion	Maximum speed
The first joint axis-J1		±360°	210°/s	±360°	150°/s	±360°	150°/s	±360°	150°/s	±360°	180°/s
The second joint axis-J2		±360°	210°/s	±360°	150°/s	±360°	150°/s	±360°	150°/s	±360°	180°/s
The third joint axis-J3		±165°	210°/s	±165°	210°/s	±165°	210°/s	±165°	210°/s	±165°	210°/s
The fourth joint axis-J4		±360°	360°/s	±360°	240°/s	±360°	240°/s	±360°	240°/s	±360°	270°/s
The fifth joint axis-J5		±360°	360°/s	±360°	240°/s	±360°	240°/s	±360°	240°/s	±360°	270°/s
The sixth joint axis-J6		±360°	360°/s	±360°	240°/s	±360°	240°/s	±360°	240°/s	±360°	270°/s

Smart China and the World

X series extreme temperature version collaborative robot

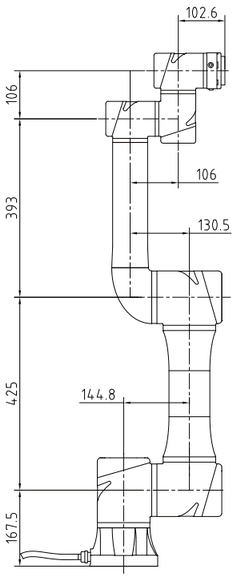




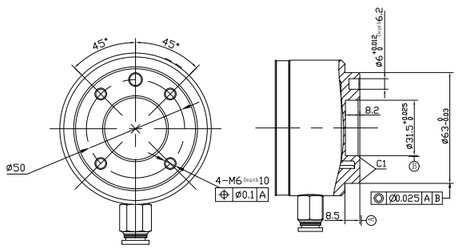


Robot arm model		AL6		AL9		AL12	
Degrees of freedom		6		6		6	
Rated load（kg）		6		9		12	
Maximum working radius（mm）		924		1500		1300	
Repeatability（mm）		± 0.02		± 0.05		± 0.03	
Control bus/frequency		EtherCAT/1KHz		EtherCAT/1KHz		EtherCAT/1KHz	
Maximum speed of the tool end（m/s）		3		3		3	
Noise(dB)		≦60		≦60		≦60	
Rated power（W）		260		550		550	
Ambient temperature(℃)		-30~80		-30~80		-30~80	
Working environment humidity		5%~90%RH，No condensation		5%~90%RH，No condensation		5%~90%RH，No condensation	
Installation method		Any angle		Any angle		Any angle	
Protection grade		IP68		IP68		IP68	
Weight(kg)(Excluding cables)		21		37		36	
Tool port	I/O Port	1-24V/1APower；2-DI；2-DO；2-AI		1-24V/1APower；2-DI；2-DO；2-AI		1-24V/1APower；2-DI；2-DO；2-AI	
	COM Port	1-24V/1APower；1-RS485；1-EtherCAT		1-24V/1APower；1-RS485；1-EtherCAT		1-24V/1APower；1-RS485；1-EtherCAT	
Joint motion parameters		Maximum range of motion	Maximum speed	Maximum range of motion	Maximum speed	Maximum range of motion	Maximum speed
The first joint axis-J1		±360°	210°/s	±360°	150°/s	±360°	150°/s
The second joint axis-J2		±360°	210°/s	±360°	150°/s	±360°	150°/s
The third joint axis-J3		±165°	210°/s	±165°	210°/s	±165°	210°/s
The fourth joint axis-J4		±360°	360°/s	±360°	240°/s	±360°	240°/s
The fifth joint axis-J5		±360°	360°/s	±360°	240°/s	±360°	240°/s
The sixth joint axis-J6		±360°	360°/s	±360°	240°/s	±360°	240°/s

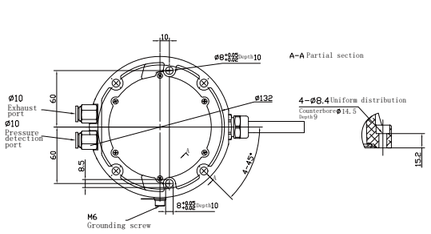
XR6 Dimension



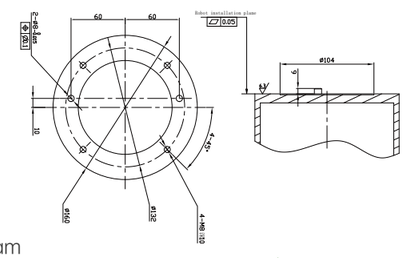
Outline dimension diagram



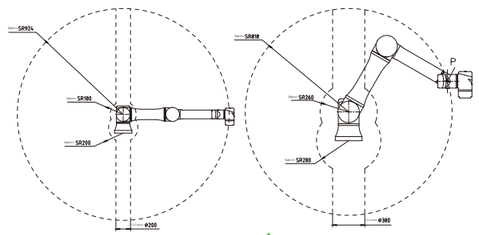
Dimensional drawing of flange at the end of the tool



Base dimension diagram

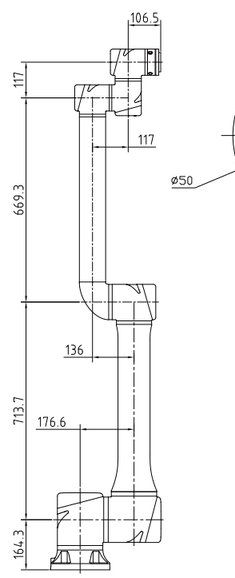


Recommended installation surface diagram

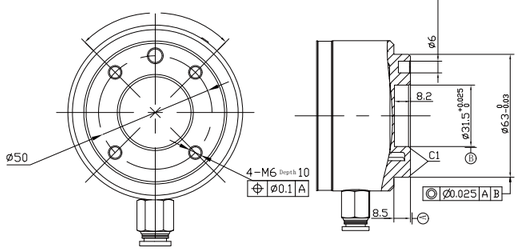


Range of motion

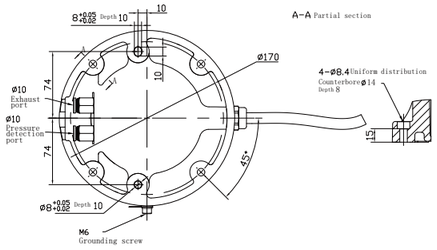
XR9 Dimension



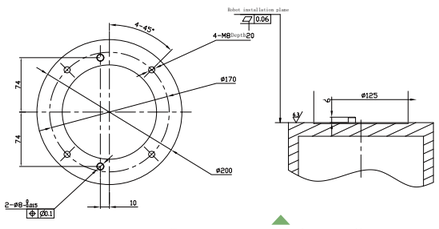
Outline dimension diagram



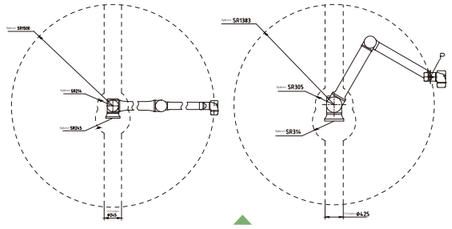
Dimensional drawing of flange at the end of the tool



Base dimension diagram

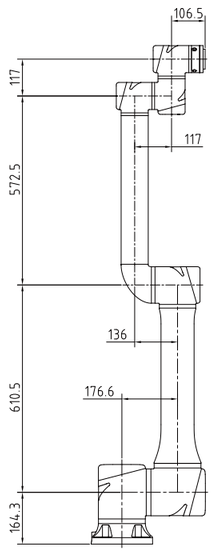


Recommended installation surface diagram

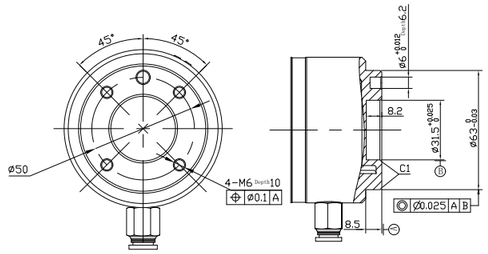


Range of motion

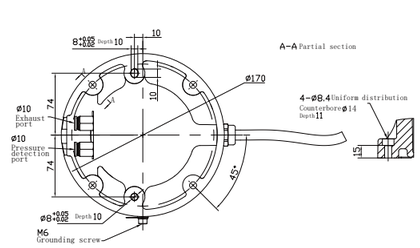
XR12 Dimension



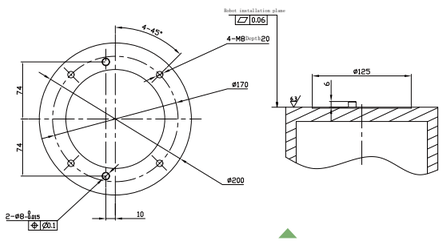
Outline dimension diagram



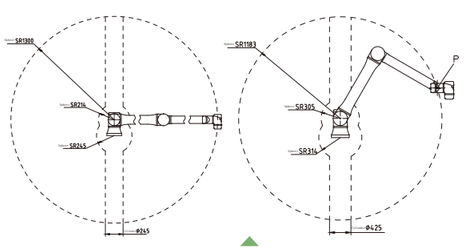
Dimensional drawing of flange at the end of the tool



Base dimension diagram

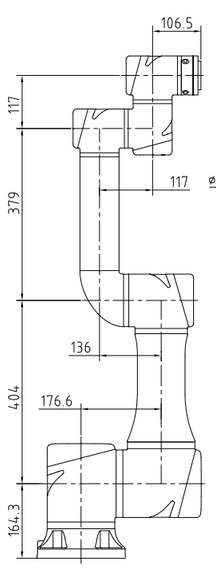


Recommended installation surface diagram

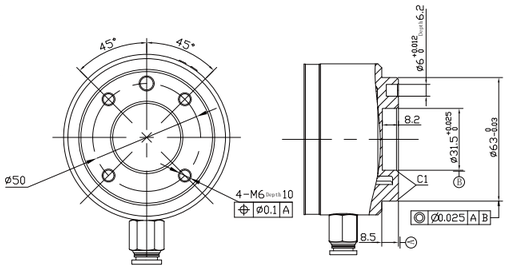


Range of motion

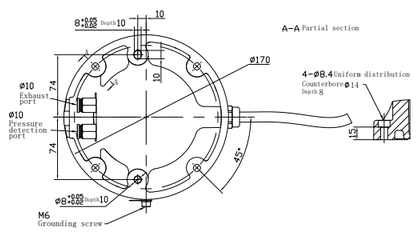
XR18 Dimension



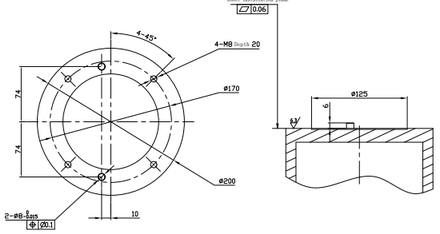
Outline dimension diagram



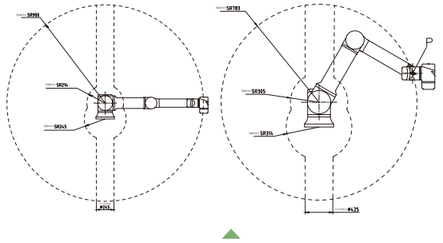
Dimensional drawing of flange at the end of the tool



Base dimension diagram

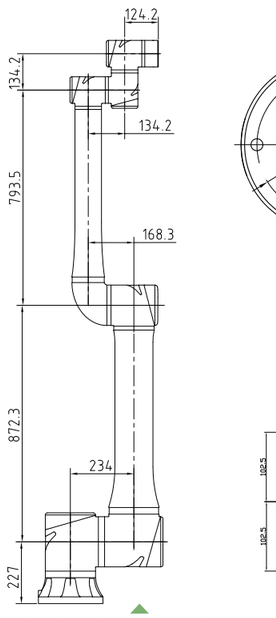


Recommended installation surface diagram

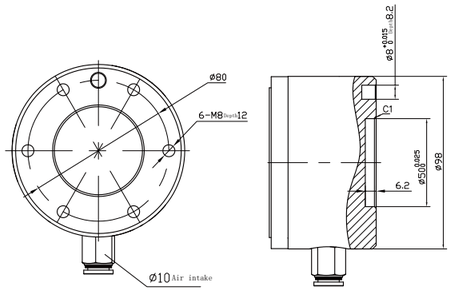


Range of motion

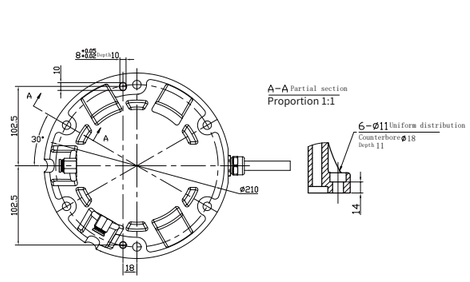
XR20 Dimension



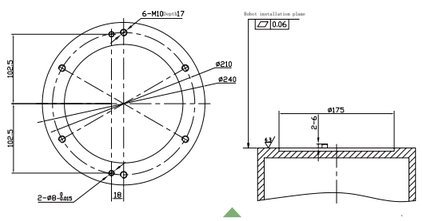
Outline dimension diagram



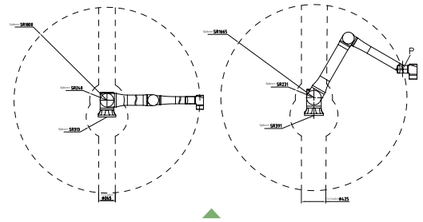
Dimensional drawing of flange at the end of the tool



Base dimension diagram

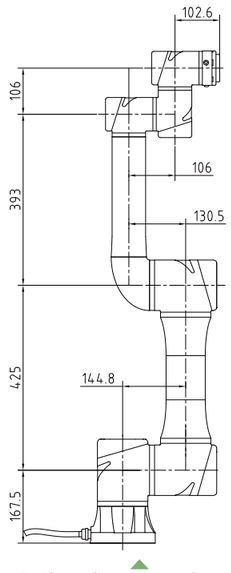


Recommended installation surface diagram

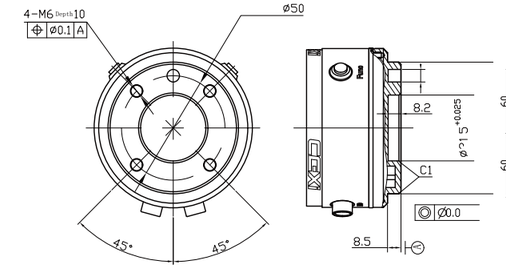


Range of motion

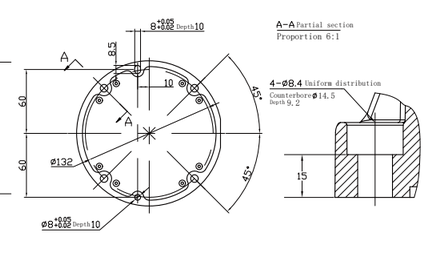
AL6 Dimension



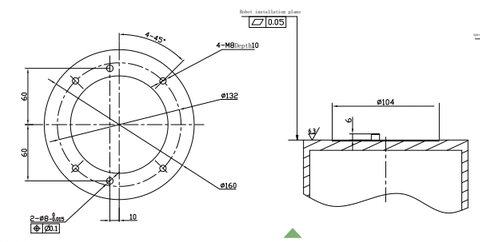
Outline dimension diagram



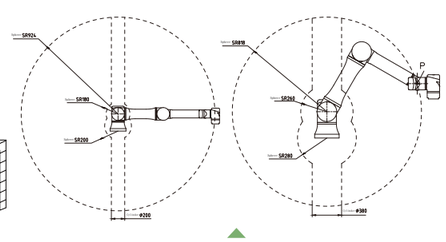
Dimensional drawing of flange at the end of the tool



Base dimension diagram

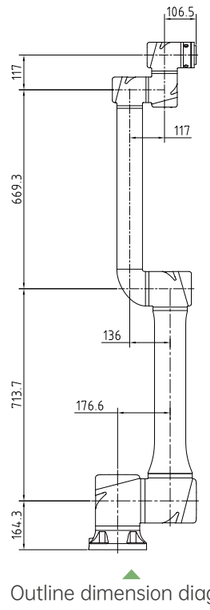


Recommended installation surface diagram

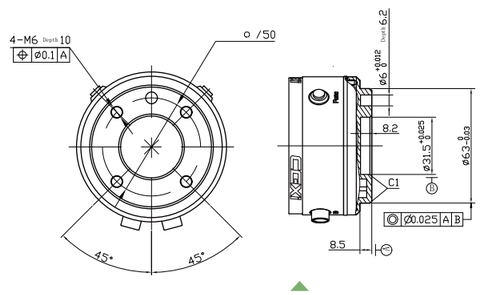


Range of motion

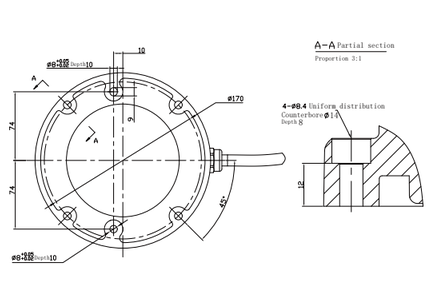
AL9 Dimension



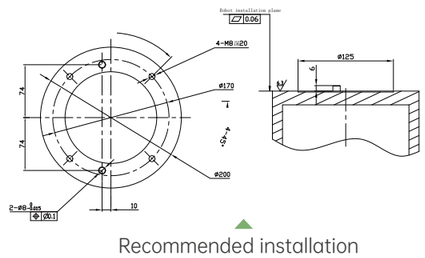
Outline dimension diagram



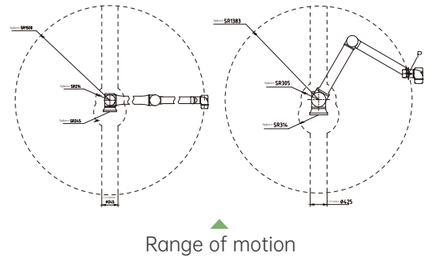
Dimensional drawing of flange at the end of the tool



Base dimension diagram

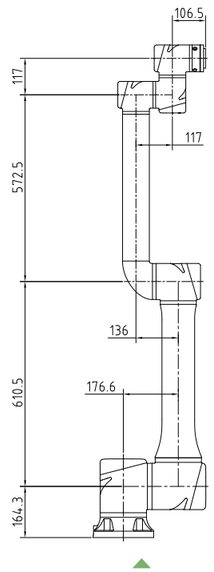


Recommended installation surface diagram

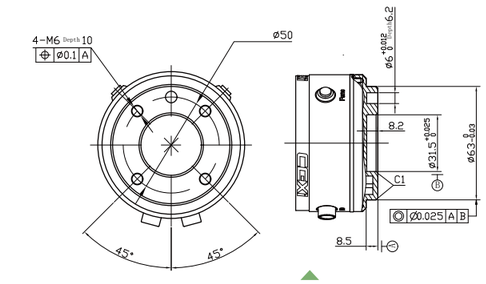


Range of motion

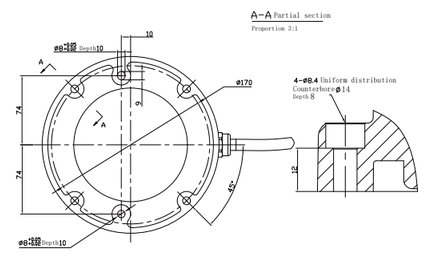
AL12 Dimension



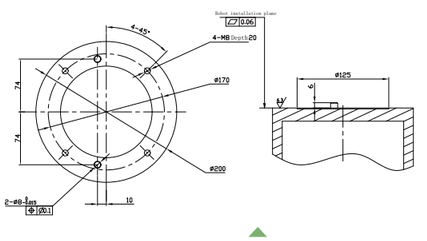
Outline dimension diagram



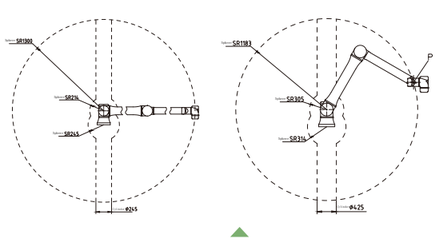
Dimensional drawing of flange at the end of the tool



Base dimension diagram



Recommended installation surface diagram



Range of motion

MK-Controller-MK-302S-W



Small size, light weight, flexible deployment

Rich software and hardware interfaces, easy to expand functions, and extremely cost-effective

Specification parameters					
External dimensions	235mm*177mm*47mm（L*H*W）				
Weight	1.75kg				
Panel communication interface	Highway	EtherNet*2:Support TCP/IP Modbus-TCP agreement			
		RS485*2，Support custom protocols、Modbus-RTU/ASCII agreement			
		EtherCAT * 1			
	Others	Emergency stop input	1	Safely stop input	1
		Remote boot input	1	Remote shutdown input	1
		Configurable digital input	8	Configurable digital output	8
		Differential encoder input	1（Provide 5V/150mA power supply）		
Power	Matching power box				
Protection grade	IP44				
Ambient Temperature	-5℃~55℃				
Working Humidity	5%-90%RH，No condensation				

Control cabinet-K20-002S-W



Hard real-time operating system, high-speed EtherCAT bus Microsecond level peripheral response speed

Accurate dynamic model identification

Smooth transition algorithm for trajectory control with acceleration and dynamic trajectory change

Extended additional axis linkage control

Specification parameters					
External dimensions	429mm*437mm*190mm（L*H*W）				
Weight	13.6kg				
External communication interface of the panel	EtherNet*2，10/100M adaptive SupportModbus TCPCommunication protocol				
Internal communication interface of cabinet	Highway	RS232*1，Support customization or Modbus RTU/ASCII agreement			
		RS485*2，Support customization or Modbus RTU/ASCII agreement			
		Interface*1，100M Network interface，Supports EtherCAT devices			
	Others	Emergency stop input	2	Safely stop input	2
		Remote boot input	1	Remote shutdown input	1
		Digital input	8	Digital output	8
		Configurable digital input	8	Configurable digital output	8
		Analog input	3	Analog output	1
		Differential encoder input	2（Provide 5V/150mA power supply）		
Power	AC 200V~240V，50-60Hz（±5%）				
Protection grade	IP44				
Ambient Temperature	-5℃~55℃				
Working Humidity	5%-90%RH，No condensation				

Explosion proof electrical control cabinet



High protection level explosion-proof light alarm

Rich external expansion interfaces suitable for gas and dust explosion-proof environments in Zone I and Zone II

Specification parameters					
External dimensions	550mm*400mm*1600mm（L*H*W）				
Weight	283kg				
Controller communication interface	Highway	EtherNet*2，Supports TCP/IP Modbus TCP protocol			
		RS232*1，Support custom protocols、Modbus-RTU/ASCII protocols			
		RS485*2，Support custom protocols、Modbus-RTU/ASCII protocols			
		EtherCAT * 1			
	Others	Emergency stop input	1	Safely stop input	1
		Remote boot input	1	Remote shutdown input	1
		Digital input	8	Digital output	8
		Configurable digital input	8	Configurable digital output	8
		Analog input	3	Analog output	1
		Differential encoder input	2（Provide 5V/150mA power supply）		
Power	AC 200V~240V，50-60Hz（±5%）				
Protection grade	IP65				
Ambient Temperature	-5℃~55℃				
Working Humidity	5%-90%RH，No condensation				



High protection level positive pressure explosion-proof with small volume and easy deployment

Rich external expansion interfaces suitable for gas and dust explosion-proof environments in Zone I and Zone II

Specification parameters					
External dimensions	830mm*450mm*350mm（L*H*W）				
Weight	55kg				
Controller communication interface	Highway	EtherNet*2，Supports TCP/IP Modbus TCP protocol			
		RS485*2，Support custom protocols、Modbus-RTU/ASCII protocols			
		EtherCAT * 1			
	Others	Emergency stop input	1	Safely stop input	1
		Remote boot input	1	Remote shutdown input	1
		Configurable digital input	8	Configurable digital output	8
		Differential encoder input	2（Provide 5V/150mA power supply）		
Power	AC 200V~240V，50-60Hz（±5%）				
Protection grade	IP65				
Ambient Temperature	-5℃~55℃				
Working Humidity	5%-90%RH，No condensation				

Teach Pendant





Specification parameters	
External dimensions	289mm*256mm（L*W）
Weight	1.5kg
Length	5m
Protection grade	IP44
Ambient Temperature	-5℃~55℃
Working environment humidity	5%-90%RH，No condensation

ECOLOGICAL PARTNERS

HIKVISION 海康威视 · KEYENCE 基恩士 · MECH MIND · ALSONTECH · Transfer 迁移科技
柔触 · 因时机器人 INSPIRE-ROBOTS · 钧舵机器人 JODELL ROBOTICS · BrainCo · ZIMMER group
HIKROBOT 海康机器人 · SEER 仙工智能 · Geek+ · Standard Robots 斯坦德机器人 · YOUIBOT 优艾智合
MEGMEET · CHL Rob 华航唯实 · Link-touch 蓝点触控 · Danikor · igus

APPLICATION INDUSTRY





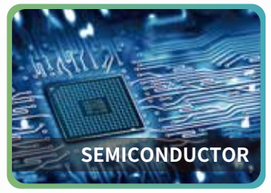




































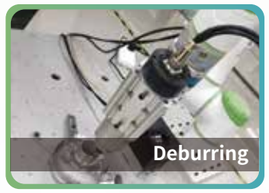
APPLICATION SCENARIO



















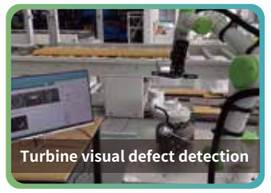






















Application Cases

AUTOMOTIVE AND 3C SECTORS

SCREW LOCK PAYMENT

High speed, high precision, high stability

The tightening cycle is 1.4 seconds per piece, and the daily production of a single machine can exceed 10000 pieces, with a failure rate of<0.05%.

Model: G6 Collaborative Robot

- Screw model: M 1 ~ M 6
- Nail delivery method: suction nail or blow nail
- Locking angle: any angle
- Production process: Defect detection alarm, recording of tightening force and other process data, uploading to the cloud
- Suitable fields: 3C or home appliances



Robot spraying worker at car 4S store

Intelligent upgrade tool for automotive after-sales service market

Model: G12 Collaborative Robot

- Simulate the actual manual painting process and techniques through the AI algorithm, fully automated dynamic sheet metal spraying operation
- High flexibility to quickly adjust parameters according to different vehicle models and spraying requirements adjustment and path planning
- Suitable fields: automotive, metal processing



Precision Welder Mobile Welding Robot

Welding is as simple as playing with a phone

Model: G6 Collaborative Robot

- Proficient in flat welding, vertical welding, corner welding, fillet welding, intermittent welding, spot welding, and breakpoint continu ation welding.
- No welding experience is required to get started, simply drag and drop to complete welding tasks
- Suitable fields: ships, steel structures, metal processing



Car wheel hub powder coating

Drag teaching, track reproduction

Model: G6 Collaborative Robot

- Ordinary workers can also quickly get started, greatly reducing the difficulty of debugging and deployment
- Joint ecological partners provide spray application packages, and customers can configure parameters as needed
- Suitable fields: automotive, mechanical processing, home appliances



Turbine visual defect detection

Automatic detection, efficient and stable

Model: G6 Collaborative Robot

- Collaborative robots drive cameras and control shooting angles
- Perform point by point testing on the area to be tested
- Real time image analysis based on algorithm libraries
- Suitable fields: automotive, mechanical manufacturing



High speed sand core polishing

Fast, stable, and highly accurate

Model: G6 Collaborative Robot

- Equipped with EtherCAT communication, the seven axis linkage control positioner does not require an external PLC
- Foolish operation, one set of equipment is suitable for polishing multiple sand cores
- Suitable fields: automotive, mechanical processing



AI Visual Inspection Workstation

Light deployment, fast delivery

Model: G6 Collaborative Robot

- AI visual appearance detection based on deep learning
- Sales delivery is short, smooth, and fast, supporting fast algorithm validation
- Suitable fields: automotive, 3C electronics



Machining

1-on-3 machine tool loading and unloading

Flexible material rack, fast switching production

Model: G6、G12 Collaborative Robot

- Based on flexible material rack 3D visual loading assistance, there is no need for complex material flow lines
- Quickly replace the gripper to adapt to various materials
- Suitable fields: automotive, mechanical processing



Hot forging spray

Extremely harsh working environment

Model: G6 Collaborative Robot

- High and low temperature impact, spray release agent during 1200 °C hot forging process
- Strong electromagnetic and voltage pulsation interference, frequent start stop of 40kw high current medium frequency heating machine
- The actual load is 7 kg, exceeding the rated load
  Suitable fields: spraying, mechanical processing



Double arm riveting

Automatic rivets, efficient and stable

Model: G6 Collaborative Robot

- The average speed of riveting can reach 1.8 seconds per piece, and the success rate of riveting process is as high as 99.5%
- One click switching, compatible with multiple product riveting production processes
- Suitable fields: 3C electronics, mechanical processing, home appliances



Three proof paint spraying

The flexibility of spraying far exceeds that of traditional three-axis mechanisms

Model: G6 Collaborative Robot

- Compact structure, flexible movement, and effortless operation in narrow enclosed spaces
- Breaking through the problem of limited motion space in traditional three-axis mechanism solutions
- Suitable fields: 3C electronics, automotive, mechanical processing



Welding workstation

Faster light, more skillful hands

Model: G6 Collaborative Robot

- Maintain the same posture, teach with three points, complete 360 ° arc welding, and improve welding efficiency
- Suitable fields: Welding of small batch and multi variety components for household appliances



Wireless non programming spray coating

Ordinary workers can use it

Model: G12 Collaborative Robot

- The spraying trajectory can be taught through VR, which greatly reduces the operating threshold without programming
- Grating automatic recognition of incoming workpiece types, suitable for small batch and multi variety production
- Suitable fields: automotive, mechanical processing



Straight seam welding of air conditioning condensation tank

Smooth operation and precise trajectory

Model: G6 Collaborative Robot

- Visual perception feature recognition algorithm to achieve autonomous recognition and offset correction of weld seams,Ensure welding quality
- Compatible with multiple workpiece specifications to meet diverse production needs, even novices can operate welding,Pick up the robot
- Suitable fields: welding, metal processing



Other fields

Fine carving machine loading and unloading

Flexibility and ease within a spherical space

Model: G4 Collaborative Robot

- Repeated positioning accuracy of 2 threads, stable loading and unloading
- The robot end integrates grasping, detection, compression, and air blowing systems
- Suitable field: Precision carving machine



Loading and unloading of lifting robots

Flexible installation, lightweight and reliable

Model: G6 Collaborative Robot

- Solved the problems of limited space and restricted personnel activities, while also improving production，Assembly efficiency
- Installation, debugging, and operation can be completed within 2 hours Applicable fields: scenes with strict land occupation requirements for
- loading and unloading materials



Fully automatic assembly machine for rubber hoses

Double arm collaboration in a narrow space of "formal attire+inversion"

Model: G6 Collaborative Robot

- The robot can move freely in a spherical space, whether it is in a formal or inverted position,It can be easily deployed
- Efficient assembly with dual arm cooperation, high flexibility,compatible with different hoses and joints model
- Applicable fields: 3C electronics, precision machining



Chip packaging visual feeding machine

Model: G6 Collaborative Robot

- The work cycle time is 2.1 seconds, the production efficiency is improved by 100%, and the cost is recovered in six months
- Suitable fields: semiconductors, chips

High speed, high precision



Stacking workstation

0 code design, 10 minutes to switch production

Model: G12 Collaborative Robot

- Built in palletizing process package, easy to operate
- Flexible installation, capable of lifting and matching columns and lifting shafts
- Suitable fields: logistics and warehousing, beauty and daily necessities



Intelligent surgical shadowless lamp

Strong rigidity, low noise and no radiation

Model: G6 Collaborative Robot

- Intelligent voice control, automatic adjustment of light source height and focus point
- High rigidity, has passed the second-class certification test for medical devices in Jiangsu Province
- Suitable field: Medical devices



Cloth hook

Easy to operate and more user-friendly

Model: G6 Collaborative Robot

- The gripper design, combined with flexible force control, breaks through the technical bottleneck of difficult fabric grasping
- Suitable for small-scale and multi variety production, helping customers upgrade their fabric hanging systems
- Suitable field: Textile



Intelligent wearable device testing machine

High speed, high precision

Model: G6 Collaborative Robot

- 1 robot for loading and unloading 4 airtight special machines
- The production cycle has been increased from the maximum speed of 12 seconds by our competitors to 9 seconds, resulting in a significant improvement in production efficiency
- The pre project testing ran for 2000 hours without any faults and passed the acceptance smoothly
- Suitable fields: 3C, precision device loading and unloading

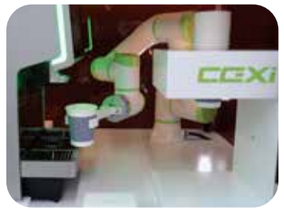


Coffee Robot

No one is guarding, the pattern is embroidered

Model: G3 Collaborative Robot

- No personnel are required to be on duty
- Upload pictures or handwritten signatures to increase interactive fun
- Suitable fields: New retail, catering



AI robot scientist

AGV composite robot, intelligent and capable

Model: G3 Collaborative Robot

- Handing over the biochemical laboratory work to robots for automated and batch production of samples handle
- The G6 has only 1/4 the power of traditional industrial robots and a longer battery life
- Suitable fields: Biochemical laboratory, scientific research



Screen printing machine cutting workstation

One click start, a good partner for screen printing machines

Model: G4 Collaborative Robot

- Replacing traditional manual labor to complete tasks such as substrate cutting and fixed-point handling, with high efficiency increase by 30%
- During the screen printing process, the collaborative robot is interlocked with the screen printing machine signal, ensuring safety and peace of mind
- Suitable field: Screen printing machine

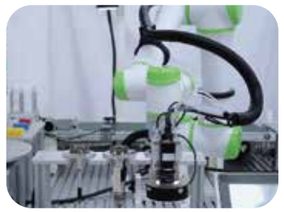


6-in-1 Education Practice Platform

Using collaborative robots as the core teaching and training tools

Model: G6 Collaborative Robot

- Typical applications include robot handling, palletizing, sorting, polishing, and assembly using scenarios
- Integrating multidisciplinary expertise in mechanical, electrical, software programming, communication, and other fields, including the robot body and integrated systems
- Suitable fields: university laboratories, training institutions



Loading and unloading of textile printing machine

Going to Japan to solve the problem of flexible loading and unloading of textiles

Model: G6 Collaborative Robot

- Professional gripper design combined with flexible force control has broken through the technical bottleneck of difficult grasping of easily damaged fabrics
- One machine with multiple uses, capable of gripping fabrics of different sizes and thicknesses
- Suitable field: Textile



Noodle making robot

Unmanned noodle shops a new trend in catering

Model: G6 Collaborative Robot

- Complete the entire process of picking and cooking noodles in one go
- Stable product taste, increased personalized service, and improved service quality
- Suitable fields: catering, new retail

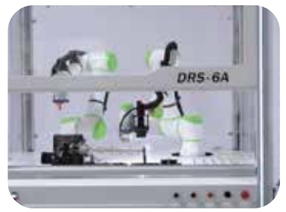


Wax Model Tree Workstation

Dual arm collaboration intelligent and flexible

Model: G6 Collaborative Robot

- Replacing traditional manual tree grouping methods significantly improves tree grouping efficiency
- Effectively improve welding consistency and meet customers' high-quality production needs
- Suitable field: precision casting



Cooperative Partner

一汽-大众 FAW-VOLKSWAGEN
红旗
上汽通用汽车 SAIC-GM
小鹏
长城汽车
Audi
MAGNA
ZF
FORVIA Inspiring mobility
中国中车 CRRC
LUXSHARE ICT 立讯精密
Amway 安利
Panasonic 松下电器
YTL
HUAWEI
SIEMENS
SUPOR 苏泊尔
Coca-Cola 可口可乐
伊利
中国移动 China Mobile
CAIP 常熟汽饰
L'ORÉAL PROFESSIONNEL PARIS
FuRen
CMI
Dream Maker
新贝 NCVI
alhua TECHNOLOGY
EduBot 海渡教育集团
蒙牛
LYC 中国·洛轴
北京理工大学 BEIJING INSTITUTE OF TECHNOLOGY
JIANGNAN UNIVERSITY

OUR SERVICES



Training Services

Robotics
Industry case sharing
Online/offline seminars



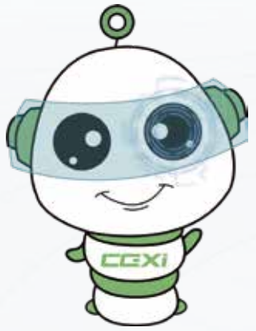
Integration Services

Risk assessment of the plan
On site assistance in implementation
Regular follow-up satisfaction



After-sale Service

Lifetime maintenance
24-hour response
Free software upgrade



NOURISH THE WORLD
VIRTUE DOES NOT LEAVE